



Certified: --

B-4-22

FILED WITH THE CLERK OF THE NASSAU
COUNTY LEGISLATURE MARCH 22, 2022 11:44AM

NIFS ID: CLPW22000007

Capital: **X**

Contract ID #: **CHPW20000012**

NIFS Entry Date: **03/10/2022**

Department: Public Works

Service: **2020 General Requirements H66302W-Amendment No. 2**

Term: **Thirty-six (36) months from Contract Execution date of 08-24-2020**

Contract Delayed:

Slip Type: Amendment		
CRP:		
Time Extension:		
Addl. Funds: X		
Blanket Resolution:		
Revenue:	Federal Aid:	State Aid:
Vendor Submitted an Unsolicited Solicitation:		

1) Mandated Program:	No
2) Comptroller Approval Form Attached:	Yes
3) CSEA Agmt. & 32 Compliance Attached:	No
4) Significant Adverse Information Identified? (if yes, attach memo):	No
5) Insurance Required	Yes

Vendor/Municipality Info:	
Name: Pratt Brothers	ID#: 161620294
Main Address: 45 South 4th Street Bay Shore, NY 11706	
Main Contact: Joseph Williams	
Main Phone: (631) 667-6800	

Department:
Contact Name: Gijo Varghese
Address: 1194 Prospect Avenue Westbury, NY 11590
Phone: (516) 571-6926
Email: gvarghese@nassaucountyny.gov, lsamuel@nassaucountyny.gov, DPWcontractadmin@nassaucountyny.gov, mlisa@nassaucountyny.gov,ldionisio@nassaucountyny.gov, Ekobel@nassaucountyny.gov

Contract Summary

Purpose: This is an amendment to an agreement with Pratt Brothers for additional funding require to repair the damage caused by Hurricane/Tropical Storm Ida to the County's drainage infrastructure. The magnitude of this work was not anticipated in the current contract cap for our General Requirements contract. As such, the additional funding from Amendment No. 2 is needed for drainage related projects anticipated to start in the current year including but not limited to 233 East Shore Road in Great Neck, Bayview Avenue at Maple Street in Great Neck, Skunks Misery Road in Glen Cove, 89 Oyster Bay Road, 3 Cove Neck Road, Cow Neck Road in Port Washington North, 217 Plainview Road, and Harbor Hill Road. In addition, the Sands Point Seawall at Falaise Mansion immediate temporary corrective measures, Parks infrastructure improvements, Parks path resurfacing, and Massapequa Preserve Pedestrian Bridge rehabilitation are anticipated to commence in the current year. Therefore, this Department is requesting approval

of the following Amendment that is necessary for Pratt Brother's Inc. to perform additional "on-call" construction services including the ability to respond to storm related infrastructure damage.
Method of Procurement: The contractor was selected through an open competitive bidding process with formal sealed bids. This bid contract was advertised in Newsday, the NYS Contract Reporter and in eProcure.
Procurement History: The bid was advertised in Newsday (1/15/2020), eProcure (1/15/2020-2/18/2020) and NYSCR (1/15/2020-2/18/2020). Two bids were received, Pratt Brothers was awarded the contract as the lowest responsible bidder.
Description of General Provisions: This is an amendment for additional funds for a general requirements contract for civil/site reconstruction projects throughout the County, including but not limited to repair of damaged or deteriorated pavement, curbs and sidewalks, drainage systems, bridges, structural systems (seawalls, retaining walls, etc.), fencing and park facilities. This is a unit price contract.
Impact on Funding / Price Analysis: Amendment No. 2 will increase the maximum amount by \$4,000,000. The new maximum amount is \$24,000,000. Funding (\$1,320,000) being encumbered as part of Amendment No. 2 will come from approved and available funds from Capital Project Numbers 41869-093 (\$1,000,000) and 66302-IDA003 (\$320,000).
Change in Contract from Prior Procurement: The Maximum Amount in the Original Agreement is \$16,000,000. Amendment No. 1 increased the maximum amount by \$4,000,000 for a total maximum amount of \$20,000,000. The Maximum Amount of the Amended Agreement shall be increased by \$4,000,000 in Amendment No. 2. Under the Amended Agreement, the total Maximum Amount the County shall pay the Contractor shall not exceed \$24,000,000 for the current Term of contract. The term remains the same - three (3) years from execution (8/24/20) with a one (1) year option to renew.
Recommendation: Approve as Submitted.

Advisement Information

Fund	Control	Responsibility Center	Object	Index Code	Sub Object	Budget Code	Line	Amount
CAP			00	PWCAPCAP	00004	PWCAPCAP 00004 66302 IDA003	25	\$320,000.00
Project Number		66302						
Project Detail		IDA003						
CAP			00	PWCAPCAP	00004	PWCAPCAP 00004 41869 093	26	\$1,000,000.00
Project Number		41869						
Project Detail		093						
						TOTAL	\$1,320,000.00	

Additional Info	
Blanket Encumbrance	
Transaction	109
Renewal	
% Increase	
% Decrease	

Funding Source	Amount
Revenue Contract:	
County	\$0.00
Federal	\$0.00
State	\$0.00
Capital	\$1,320,000.00
Other	\$0.00
Total	\$1,320,000.00

Routing Slip

Department			
NIFS Entry	Loretta Dionisio	03/10/2022 12:01PM	Approved
NIFS Final Approval	Ken Arnold	03/13/2022 08:08PM	Approved
Final Approval	Ken Arnold	03/13/2022 08:08PM	Approved
DPW			
Capital Fund Approval	Ken Arnold	03/13/2022 08:09PM	Approved
Final Approval	Ken Arnold	03/13/2022 08:09PM	Approved
OMB			
NIFS Approval	Nadiya Gumieniak	03/14/2022 11:48AM	Approved
NIFA Approval	Christopher Nolan	03/15/2022 04:27PM	Approved
Final Approval	Christopher Nolan	03/15/2022 04:27PM	Approved
County Attorney			
RE & Insurance Verification	Andrew Amato	03/14/2022 09:53AM	Approved
Approval as to Form	Nick Sarandis	03/14/2022 10:37AM	Approved
NIFS Approval	Daniel Gregware	03/14/2022 01:51PM	Approved
Final Approval	Daniel Gregware	03/14/2022 01:51PM	Approved
Compliance & Vertical DCE			
Procurement Compliance Approval	Robert Cleary	03/16/2022 04:41PM	Approved
DCE Compliance Approval	Robert Cleary	03/16/2022 04:41PM	Approved
Vertical DCE Approval	Edward Powers	03/17/2022 08:56AM	Approved
Final Approval	Edward Powers	03/17/2022 08:56AM	Approved

Legislative Affairs Review			
Final Approval	Christopher Leimone	03/22/2022 10:18AM	Approved
Legislature			
Final Approval			In Progress
Comptroller			
Intake Approval			Pending
Claims Approval			Pending
Legal Approval			Pending
Accounting / NIFS Approval			Pending
Deputy Approval			Pending
Final Approval			Pending
NIFA			
NIFA Approval			Pending

B04-22

RULES RESOLUTION NO -2022

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE A CONTRACT AMENDMENT BETWEEN THE COUNTY OF NASSAU, ACTING ON BEHALF OF THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS AND PRATT BROTHERS, INC.

WHEREAS, pursuant to County contract number H66302W, for 2020 GENERAL REQUIREMENTS CONTRACT FOR VARIOUS CIVIL/SITE CONSTRUCTION, HIGHWAYS, DRAINAGE, BRIDGES, SITE, PARKING LOTS AND PARKS RELATED SPECIALIZED ITEMS, NASSAU COUNTY, NEW YORK (“Contract”) between the County and

PRATT BROTHERS, INC., (“Contractor”), the Contractor performed services as more particularly described in the contract documents a copy of which is on file with the Clerk of the Legislature; and

WHEREAS, the County and the Contractor desire to increase the maximum amount of the Original Contract by four million dollars (\$4,000,000), such that the total Maximum Amount the County shall pay the Contractor shall not exceed twenty four million dollars (\$24,000,000), during the four (4) years (the “Amended Maximum Amount”) for Services under the Amended Agreement.

and

WHEREAS the funding for this Contract amendment is from capital funds approved by the Nassau County Legislature; now, therefore, be it

RESOLVED, that the Rules Committee of the Nassau County Legislature based upon the representations of the Department and the recommendation of the Commissioner of the Department, authorizes the County Executive to award and execute the said contract amendment with the vendor.

AMENDMENT NUMBER TWO

This AMENDMENT (together with any appendices or exhibits attached hereto, this "Amendment"), dated as of the date this amendment is executed by Nassau County (the "Effective Date") between (i) Nassau County, a municipal corporation having its principal office at 1550 Franklin Avenue, Mineola, New York 11501 (the "County"), acting on behalf of the Department of Public Works having its principal office at 1194 Prospect Avenue, Westbury, New York 11590 and (ii) Pratt Brothers, Inc., 45 South Fourth Street, Bay Shore, New York 11706 (the "Contractor").

W I T N E S S E T H:

WHEREAS, pursuant to County Contract Number H66302W between the County and the Firm, executed on behalf of the County on August 24, 2020 (the "Original Agreement") and Amendment Number One executed on August 31, 2021, the Firm performed "on-call" construction services consisting of the furnishing of labor, materials, tools, equipment and incidentals as specified for the rehabilitation and/or installation, modification and/or removal of pavement, drainage systems, bridges, parking lots, and other related specialized work and/or emergency work at various locations to be selected in Nassau County, which services are more fully described in the Original Agreement (the services contemplated by the Original Agreement, the "Services");

WHEREAS, the term of the Original Agreement was for three (3) years, with the Department's option to extend the term of the Contract for an additional one (1) year period for a total Contract term of four (4) years (the "Term");

WHEREAS, the maximum amount that the County agreed to reimburse the Firm for Services under the Original Agreement and Amendment Number One, including during the period of any extension options that may be exercised by the Commissioner of the Department, as full compensation for the Services, was twenty million dollars (\$20,000,000) (the "Maximum Amount");

WHEREAS, the Contractor has provided Services in a professional and responsible manner;

WHEREAS, the County's need for the Contractor's Services has substantially increased in 2021; and

WHEREAS, the County and the Contractor desire to modify the Maximum Amount of the Agreement to increase the amount of funds available to compensate the Contractor for the providing Services by an additional four million (\$4,000,000) as provided herein ("Amendment Number Two"); and

NOW, THEREFORE, in consideration of the premises and mutual covenants contained in this Amendment, the parties agree as follows:

1. Maximum Amount. The Maximum Amount shall be increased by four million dollars (\$4,000,000). This additional funding to be available for Services for the balance of the Agreement Term. Accordingly, the total Maximum Amount the County shall pay the Contractor shall not exceed twenty four million dollars (\$24,000,000), during the four (4) years (the "Amended Maximum Amount") for Services under the Amended Agreement.

2. Full Force and Effect. All the terms and conditions of the Original Agreement not expressly amended by this Amendment Number Two shall remain in full force and effect and govern the relationship of the parties for the term of the Amended Agreement or as otherwise provided the Original Agreement.

3. Compliance with Law.

(a) Prohibition of Gifts. In accordance with County Executive Order 2-2018, the Contractor shall not offer, give, or agree to give anything of value to any County employee, agent, consultant, construction manager, or other person or firm representing the County (a "County Representative"), including members of a County Representative's immediate family, in connection with the performance by such County Representative of duties involving transactions with the Contractor on behalf of the County, whether such duties are related to this Agreement or any other County contract or matter. As used herein, "anything of value" shall include, but not be limited to, meals, holiday gifts, holiday baskets, gift cards, tickets to golf outings, tickets to sporting events, currency of any kind, or any other gifts, gratuities, favorable opportunities or preferences. For purposes of this subsection, an immediate family member shall include a spouse, child, parent, or sibling. The Contractor shall include the provisions of this subsection in each subcontract entered into under this Agreement.

(b) Disclosure of Conflicts of Interest. In accordance with County Executive Order 2-2018, the Contractor has disclosed as part of its response to the County's Business History Form, or other disclosure form(s), any and all instances where the Contractor employs any spouse, child, or parent of a County employee of the agency or department that contracted or procured the goods and/or services described under this Agreement. The Contractor shall have a continuing obligation, as circumstances arise, to update this disclosure throughout the term of this Agreement.

(c) Vendor Code of Ethics. By executing this Agreement, the Contractor hereby certifies and covenants that:

- (i) The Contractor has been provided a copy of the Nassau County Vendor Code of Ethics issued on June 5, 2019, as may be amended from time to time (the "Vendor Code of Ethics"), and will comply with all of its provisions;
- (ii) All of the Contractor's Participating Employees, as such term is defined in the Vendor Code of Ethics (the "Participating

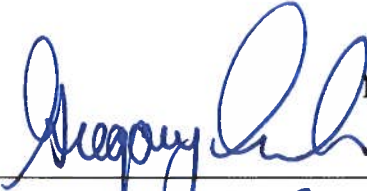
Employees”), have been provided a copy of the Vendor Code of Ethics prior to their participation in the underlying procurement;

- (iii) All Participating Employees have completed the acknowledgment required by the Vendor Code of Ethics;
- (iv) The Contractor will retain all of the signed Participating Employee acknowledgements for the period it is required to retain other records pertinent to performance under this Agreement;
- (v) The Contractor will continue to distribute the Vendor Code of Ethics, obtain signed Participating Employee acknowledgments as new Participating Employees are added or changed during the term of this Agreement, and retain such signed acknowledgments for the period the Contractor is required to retain other records pertinent to performance under this Agreement; and

The Contractor has obtained the certifications required by the Vendor Code of Ethics from any subcontractors or other lower tier participants who have participated in procurements for work performed under this Agreement.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

By:  _____ Pratt Brothers, Inc.
Name: Gregory Couch
Title: Project Manager
Date: 3/9/22

County of Nassau

By: _____
Name: _____
Title: Deputy County Executive
Date: _____

PLEASE EXECUTE IN BLUE INK

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the 9th day of March in the year 2022 before me personally came Gregory Couch to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Suffolk; that he or she is the Project Manager of Pratt Brothers Inc., the corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto by authority of the board of directors of said corporation.

NOTARY PUBLIC

Carol A. Miller

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the ____ day of _____ in the year 20__ before me personally came _____ to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of _____; that he or she is County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.

NOTARY PUBLIC

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the ____ day of _____ in the year 20__ before me personally came _____ to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of _____; that he or she is County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.

NOTARY PUBLIC

NIFA Nassau County Interim Finance Authority

Contract Approval Request Form (As of January 1, 2015)

1. Vendor: Pratt Brothers

2. Amount requiring NIFA approval: \$4,000,000.00

Amount to be encumbered: \$1,320,000.00

Slip Type: Amendment

If new contract - \$ amount should be full amount of contract

If advisement - NIFA only needs to review if it is increasing funds above the amount previously approved by NIFA

If amendment - \$ amount should be full amount of amendment only

3. Contract Term: Thirty-six (36) months from Contract Execution date of 08-24-2020

Has work or services on this contract commenced? Yes

If yes, please explain: This is an Amendment to an existing contract.

4. Funding Source:

General Fund (GEN)

Capital Improvement Fund (CAP)

X

Grant Fund (GRT)

Other

Federal %

0

State %

0

County %

100

Is the cash available for the full amount of the contract?

No

If not, will it require a future borrowing?

Yes

Has the County Legislature approved the borrowing?

No

Has NIFA approved the borrowing for this contract?

No

5. Provide a brief description (4 to 5 sentences) of the item for which this approval is requested:

This is an amendment to an agreement with Pratt Brothers for additional funding require to repair the damage caused by Hurricane/Tropical Storm Ida to the County's drainage infrastructure. The magnitude of this work was not anticipated in the current contract cap for our General Requirements contract. As such, the additional funding from Amendment No. 2 is needed for drainage related projects anticipated to start in the current year including but not limited to 233 East Shore Road in Great Neck, Bayview Avenue at Maple Street in Great Neck, Skunks Misery Road in Glen Cove, 89 Oyster Bay Road, 3 Cove Neck Road, Cow Neck Road in Port Washington North, 217 Plainview Road, and Harbor Hill Road. In addition, the Sands Point Seawall at Falaise Mansion immediate temporary corrective measures, Parks infrastructure improvements, Parks path resurfacing, and Massapequa Preserve Pedestrian Bridge rehabilitation are anticipated to commence in the current year. Therefore, this Department is requesting approval of the following Amendment that is necessary for Pratt Brother's Inc. to perform additional "on-call" construction services including the ability to respond to storm related infrastructure damage.

6. Has the item requested herein followed all proper procedures and thereby approved by the:

Nassau County Attorney as to form

Yes

Nassau County Committee and/or Legislature

Date of approval(s) and citation to the resolution where approval for this item was provided:

7. Identify all contracts (with dollar amounts) with this or an affiliated party within the prior 12 months:

Contract ID	Posting Date	Amount Added in Prior 12 Months

AUTHORIZATION

To the best of my knowledge, I hereby certify that the information contained in this Contract Approval Request Form and any additional information submitted in connection with this request is true and accurate and that all expenditures that will be made in reliance on this authorization are in conformance with the Nassau County Approved Budget and not in conflict with the Nassau County Multi-Year Financial Plan. I understand that NIFA will rely upon this information in its official deliberations.

CNOLAN

03/15/2022

Authenticated User

Date

COMPTROLLER'S OFFICE

To the best of my knowledge, I hereby certify that the information listed is true and accurate and is in conformance with the Nassau County Approved Budget and not in conflict with the Nassau County Multi-Year Financial Plan.

Regarding funding, please check the correct response:

I certify that the funds are available to be encumbered pending NIFA approval of this contract.

If this is a capital project:

I certify that the bonding for this contract has been approved by NIFA.

Budget is available and funds have been encumbered but the project requires NIFA bonding authorization.

Authenticated User

Date

NIFA

Amount being approved by NIFA:

Payment is not guaranteed for any work commenced prior to this approval.

Authenticated User

Date

NOTE: All contract submissions MUST include the County's own routing slip, current NIFS printouts for all relevant accounts and relevant Nassau County Legislature communication documents and relevant supplemental information pertaining to the item requested herein.

NIFA Contract Approval Request Form MUST be filled out in its entirety before being submitted to NIFA for review.

NIFA reserves the right to request additional information as needed.

Jack Schnirman
Comptroller



OFFICE OF THE COMPTROLLER
240 Old Country Road
Mineola, New York 11501

COMPTROLLER APPROVAL FORM FOR PERSONAL, PROFESSIONAL OR HUMAN SERVICES CONTRACTS

Attach this form along with all personal, professional or human services contracts, contract renewals, extensions and amendments.

CONTRACTOR NAME: _____

CONTRACTOR ADDRESS: _____

FEDERAL TAX ID #: _____

Instructions: Please check the appropriate box ("☑") after one of the following roman numerals, and provide all the requested information.

I. ☐ The contract was awarded to the lowest, responsible bidder after advertisement for sealed bids. The contract was awarded after a request for sealed bids was published in _____ [newspaper] on _____ [date]. The sealed bids were publicly opened on _____ [date]. _____ [#] of sealed bids were received and opened.

II. ☐ The contractor was selected pursuant to a Request for Proposals.

The Contract was entered into after a written request for proposals was issued on _____ [date]. Potential proposers were made aware of the availability of the RFP by advertisement in _____ [newspaper], posting on industry websites, via email to interested parties and by publication on the County procurement website. Proposals were due on _____ [date]. _____ [state #] proposals were received and evaluated. The evaluation committee consisted of: _____

_____ (list # of persons on committee and their respective departments). The proposals were scored and ranked. As a result of the scoring and ranking, the highest-ranking proposer was selected.

III. ☐ This is a renewal, extension or amendment of an existing contract.

The contract was originally executed by Nassau County on _____[date]. This is a renewal or extension pursuant to the contract, or an amendment within the scope of the contract or RFP (copies of the relevant pages are attached). The original contract was entered into after _____

_____[describe procurement method, i.e., RFP, three proposals evaluated, etc.] Attach a copy of the most recent evaluation of the contractor's performance for any contract to be renewed or extended. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to continue to contract with the county.

IV. ☐ Pursuant to Executive Order No. 1 of 1993, as amended, at least three proposals were solicited and received. The attached memorandum from the department head describes the proposals received, along with the cost of each proposal.

- ☐ **A.** The contract has been awarded to the proposer offering the lowest cost proposal; **OR:**
- ☐ **B.** The attached memorandum contains a detailed explanation as to the reason(s) why the contract was awarded to other than the lowest-cost proposer. The attachment includes a specific delineation of the unique skills and experience, the specific reasons why a proposal is deemed superior, and/or why the proposer has been judged to be able to perform more quickly than other proposers.

V. ☐ Pursuant to Executive Order No. 1 of 1993 as amended, the attached memorandum from the department head explains why the department did not obtain at least three proposals.

- ☐ **A.** There are only one or two providers of the services sought or less than three providers submitted proposals. The memorandum describes how the contractor was determined to be the sole source provider of the personal service needed or explains why only two proposals could be obtained. If two proposals were obtained, the memorandum explains that the contract was awarded to the lowest cost proposer, or why the selected proposer offered the higher quality proposal, the proposer's unique and special experience, skill, or expertise, or its availability to perform in the most immediate and timely manner.
- ☐ **B.** The memorandum explains that the contractor's selection was dictated by the terms of a federal or New York State grant, by legislation or by a court order. (Copies of the relevant documents are attached).
- ☐ **C.** Pursuant to General Municipal Law Section 104, the department is purchasing the services required through a New York State Office of General Services contract no. _____, and the attached memorandum explains how the purchase is within the scope of the terms of that contract.

- ☐ **D.** Pursuant to General Municipal Law Section 119-o, the department is purchasing the services required through an inter-municipal agreement.

VI. ☐ This is a human services contract with a not-for-profit agency for which a competitive process has not been initiated. Attached is a memorandum that explains the reasons for entering into this contract without conducting a competitive process, and details when the department intends to initiate a competitive process for the future award of these services. For any such contract, where the vendor has previously provided services to the county, attach a copy of the most recent evaluation of the vendor's performance. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to contract with the county.

In certain limited circumstances, conducting a competitive process and/or completing performance evaluations may not be possible because of the nature of the human services program, or because of a compelling need to continue services through the same provider. In those circumstances, attach an explanation of why a competitive process and/or performance evaluation is inapplicable.

VII. ☐ This is a public works contract for the provision of architectural, engineering or surveying services. The attached memorandum provides details of the department's compliance with Board of Supervisors' Resolution No. 928 of 1993, including its receipt and evaluation of annual Statements of Qualifications & Performance Data, and its negotiations with the most highly qualified firms.

Instructions with respect to Sections VIII, IX and X: All Departments must check the box for VIII. Then, check the box for either IX or X, as applicable.

VIII. ☐ Participation of Minority Group Members and Women in Nassau County Contracts. The selected contractor has agreed that it has an obligation to utilize best efforts to hire MWBE sub-contractors. Proof of the contractual utilization of best efforts as outlined in Exhibit "EE" may be requested at any time, from time to time, by the Comptroller's Office prior to the approval of claim vouchers.

IX. ☐ Department MWBE responsibilities. To ensure compliance with MWBE requirements as outlined in Exhibit "EE", Department will require vendor to submit list of sub-contractor requirements prior to submission of the first claim voucher, for services under this contract being submitted to the Comptroller.

X. ☐ Vendor will not require any sub-contractors.

In addition, if this is a contract with an individual or with an entity that has only one or two employees: ☐ a review of the criteria set forth by the Internal Revenue Service, *Revenue Ruling No. 87-41*, 1987-1 C.B. 296, attached as Appendix A to the Comptroller's Memorandum, dated February 13, 2004, concerning independent contractors and employees indicates that the contractor would not be considered an employee for federal tax purposes.



Department Head Signature

Date

NOTE: Any information requested above, or in the exhibit below, may be included in the county's "staff summary" form in lieu of a separate memorandum.

Certificate of No Change Form



All fields must be filled.

A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.

A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges.

I, Joseph M. Williams, Jr, P.E. state that I have read and understand all the items contained in the disclosure documents listed below and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that Nassau County will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

Vendor Disclosures

This refers to the vendor integrity and disclosure forms submitted for the vendor doing business with the County.

Name of Submitting Entity: Pratt Brothers Inc.

Vendor's Address: 45 South Fourth Street Bay Shore NY US 11706

Vendor's EIN or TIN: 161620294

Forms Submitted: _____

Political Campaign Contribution Disclosure Form:
10/14/2021 12:32:24 PM

Lobbyist Registration and Disclosure Form:
10/14/2021 12:34:17 PM

Business History Form certified:
10/14/2021 12:39:22 PM

Consultant's, Contractor's, and Vendor's Disclosure Form:
10/14/2021 04:03:40 PM

Principal Questionnaire(s)

This refers to the most recent principal questionnaire submissions.

Principal Name	Date Certified
Joseph M. Williams, Jr., P.E. [JWILLIAMS@PRATTBROTHERS.COM]	10/14/2021 12:42:31 PM
James J Pratt III [JPRATT@PRATTBROTHERS.COM]	10/14/2021 03:33:52 PM
Thomas Pratt [TPRATT@PRATTBROTHERS.COM]	10/14/2021 03:49:09 PM
Edward McCoy Jr [EMCCOY@PRATTBROTHERS.COM]	10/15/2021 10:49:55 AM

I, Joseph M. Williams, Jr, P.E. hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I further certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES."

Joseph M. Williams, Jr., P.E. JWILLIAMS@PRATTBROTHERS.COM

Name

Sr. Vice President

Title

Pratt Brothers, Inc.

Name of Submitting Entity

10/15/2021 11:24:51 AM

Date



COUNTY OF NASSAU

POLITICAL CAMPAIGN CONTRIBUTION DISCLOSURE FORM

1. Has the vendor or any corporate officers of the vendor provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES ☒ NO ☐ If yes, to what campaign committee?

Laura Curran
Jack Schnirman
J. Saladino
Town of Oyster Bay Republican Committee
Nassau County Republican Committee
Plainview Republican Committee

2. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees identified above were made freely and without duress, threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Joseph M. Williams, Jr., P.E. [JWILLIAMS@PRATTBROTHERS.COM]

Dated: 10/14/2021 12:32:24 PM

Vendor: Pratt Brothers, Inc.

Title: Sr. Vice President



COUNTY OF NASSAU

LOBBYIST REGISTRATION AND DISCLOSURE FORM

1. Name, address and telephone number of lobbyist(s)/lobbying organization. The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

None

2. List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

None

3. Name, address and telephone number of client(s) by whom, or on whose behalf, the lobbyist is retained, employed or designated:

None

4. Describe lobbying activity conducted, or to be conducted, in Nassau County, and identify client(s) for each activity listed. See the last page for a complete description of lobbying activities.

None

5. The name of persons, organizations or governmental entities before whom the lobbyist expects to lobby:

None

6. If such lobbyist is retained or employed pursuant to a written agreement of retainer or employment, you must attach a copy of such document; and if agreement of retainer or employment is oral, attach a written statement of the substance thereof. If the written agreement of retainer or employment does not contain a signed authorization from the client by whom you have been authorized to lobby. separately attach such a written authorization from the client.

7. Has the lobbyist/lobbying organization or any of its corporate officers provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES ☐ NO ☒ If yes, to what campaign committee? If none, you must so state:

I understand that copies of this form will be sent to the Nassau County Department of Information Technology ("IT") to be posted on the County's website.

I also understand that upon termination of retainer, employment or designation I must give written notice to the County Attorney within thirty (30) days of termination.

VERIFICATION: The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees listed above were made freely and without duress, threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Joseph M. Williams, Jr., P.E. [JWILLIAMS@PRATTBROTHERS.COM]

Dated: 10/14/2021 12:34:17 PM

Vendor: Pratt Brothers, Inc.

Title: Sr. Vice President

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including but not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

The term "lobbying" or "lobbying activities" does not include: Persons engaged in drafting legislation, rules, regulations or rates; persons advising clients and rendering opinions on proposed legislation, rules, regulations or rates, where such professional services are not otherwise connected with legislative or executive action on such legislation or administrative action on such rules, regulations or rates; newspapers and other periodicals and radio and television stations and owners and employees thereof, provided that their activities in connection with proposed legislation, rules, regulations or rates are limited to the publication or broadcast of news items, editorials or other comment, or paid advertisements; persons who participate as witnesses, attorneys or other representatives in public rule-making or rate-making proceedings of a County agency, with respect to all participation by such persons which is part of the public record thereof and all preparation by such persons for such participation; persons who attempt to influence a County agency in an adjudicatory proceeding, as defined by § 102 of the New York State Administrative Procedure Act.

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Edward P McCoy Jr
Date of birth: _____
Home address: _____
City: _____ State/Province/Territory: NY Zip/Postal Code: _____
Country: US

Business Address: 45 S. 4th St.
City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706
Country: US
Telephone: 631-667-6800

Other present address(es): _____
City: _____ State/Province/Territory: _____ Zip/Postal Code: _____
Country: _____
Telephone: _____

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	_____	Treasurer	_____
Chairman of Board	_____	Shareholder	_____
Chief Exec. Officer	_____	Secretary	_____
Chief Financial Officer	_____	Partner	_____
Vice President	<u>01/01/2011</u>		
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES ☐ NO ☒ If Yes, provide details.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

- a. Been debarred by any government agency from entering into contracts with that agency?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES ☐ NO ☒ If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

I, Edward McCoy Jr , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Edward McCoy Jr , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Pratt Brothers, Inc.

Name of submitting business

Electronically signed and certified at the date and time indicated by:

Edward McCoy Jr [

Vice President

Title

10/15/2021 10:49:55 AM

Date

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: James J Pratt, III
Date of birth: [REDACTED]
Home address: [REDACTED]
City: [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
Country: US

Business Address: Pratt Brothers Inc.
City: 45 South Fourth Street State/Province/Territory: NY Zip/Postal Code: 11706
Country: US
Telephone: 631-667-6800

Other present address(es):
City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706
Country: US
Telephone: 6316676800

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	<u>07/18/2002</u>	Treasurer	<u>07/18/2002</u>
Chairman of Board	<u></u>	Shareholder	<u>07/18/2002</u>
Chief Exec. Officer	<u></u>	Secretary	<u></u>
Chief Financial Officer	<u></u>	Partner	<u></u>
Vice President	<u></u>		
(Other)	<u></u>		

3. Do you have an equity interest in the business submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

[REDACTED]

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

As required by bank and bonding company

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

Scatt Materials Corp.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES ☒ NO ☐ If Yes, provide details.

Asphalt pickup contracts - Scatt Materials Corp.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

- a. Been debarred by any government agency from entering into contracts with that agency?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES ☐ NO ☒ If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

- a. Is there any felony charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Is there any misdemeanor charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Is there any administrative charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

I, James J Pratt III , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, James J Pratt III , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Pratt Brothers Inc

Name of submitting business

Electronically signed and certified at the date and time indicated by:

James J Pratt III [REDACTED]

President/Treasurer

Title

10/14/2021 03:33:52 PM

Date

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Joseph M. Williams, Jr., P.E.

Date of birth: [REDACTED]

Home address: [REDACTED]

City: [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]

Country: US

Business Address: 45 South Fourth Street

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

Telephone: (631) 667-6800

Other present address(es):

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

Telephone: 6316676800

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	_____	Treasurer	_____
Chairman of Board	_____	Shareholder	_____
Chief Exec. Officer	_____	Secretary	_____
Chief Financial Officer	_____	Partner	_____
Vice President	<u>07/18/2002</u>		
(Other)			

Type	Description	Start Date
Other	Sr. Vice President	01/01/2011

3. Do you have an equity interest in the business submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES ☐ NO ☒ If Yes, provide details.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES ☐ NO ☒ If Yes, provide details.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

- a. Been debarred by any government agency from entering into contracts with that agency?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES ☐ NO ☒ If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

- a. Is there any felony charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Is there any misdemeanor charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Is there any administrative charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

I, Joseph M. Williams Jr., PE. , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Joseph M. Williams Jr., PE. , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Pratt Brothers, Inc

Name of submitting business

Electronically signed and certified at the date and time indicated by:

Joseph M. Williams, Jr., P.E. [REDACTED]

Sr. Vice President

Title

10/14/2021 12:42:31 PM

Date

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Thomas Pratt
Date of birth: [REDACTED]
Home address: [REDACTED]
City: [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
Country: US

Business Address: 45 South Fourth Street
City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706
Country: US
Telephone: 631-667-6800

Other present address(es):
City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706
Country: US
Telephone: [REDACTED]

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	_____	Treasurer	_____
Chairman of Board	_____	Shareholder	<u>07/18/2002</u>
Chief Exec. Officer	_____	Secretary	<u>07/18/2002</u>
Chief Financial Officer	_____	Partner	_____
Vice President	<u>07/18/2002</u>		
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

[REDACTED]

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

As required by bank and bonding company

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES ☒ NO ☐ If Yes, provide details.

Scatt Materials Corp.

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES ☒ NO ☐ If Yes, provide details.

Asphalt pickup contracts - Scatt Materials, Corp.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

- a. Been debarred by any government agency from entering into contracts with that agency?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES ☐ NO ☒ If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

- a. Is there any felony charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- b. Is there any misdemeanor charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- c. Is there any administrative charge pending against you?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

- f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES ☐ NO ☒ If yes, provide an explanation of the circumstances and corrective action taken.

I, Thomas Pratt , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Thomas Pratt , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Pratt Brothers Inc

Name of submitting business

Electronically signed and certified at the date and time indicated by:

Thomas Pratt

Vice President/Secretary

Title

10/14/2021 03:49:09 PM

Date

Business History Form

The contract shall be awarded to the responsible proposer who, at the discretion of the County, taking into consideration the reliability of the proposer and the capacity of the proposer to perform the services required by the County, offers the best value to the County and who will best promote the public interest.

In addition to the submission of proposals, each proposer shall complete and submit this questionnaire. The questionnaire shall be filled out by the owner of a sole proprietorship or by an authorized representative of the firm, corporation or partnership submitting the Proposal.

NOTE: All questions require a response, even if response is "none" or "not-applicable." No blanks.

(USE ADDITIONAL SHEETS IF NECESSARY TO FULLY ANSWER THE FOLLOWING QUESTIONS).

Date: 01/26/2022

1) Proposer's Legal Name: Pratt Brothers Inc.

2) Address of Place of Business: 45 South Fourth Street

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

3) Mailing Address (if different): 45 South Fourth Street

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

Phone: (631) 667-6800

Does the business own or rent its facilities? Rent If other, please provide details:

4) Dun and Bradstreet number: 176421117

5) Federal I.D. Number: 16-1620294

6) The proposer is a: Corporation (Describe) _____

7) Does this business share office space, staff, or equipment expenses with any other business?

YES ☒ NO ☐ If yes, please provide details:

Shares with Guy Pratt, Inc.

8) Does this business control one or more other businesses?

YES ☐ NO ☒ If yes, please provide details:

9) Does this business have one or more affiliates, and/or is it a subsidiary of, or controlled by, any other business?

YES ☒ NO ☐ If yes, please provide details:

Scatt Materials, Corp.

James J. Pratt, III and Thomas Pratt, stockholders in Pratt Brothers Inc., are also stockholders in Scatt Materials Corp.

Scatt Materials is an asphalt hot mix manufacturer. Scatt Materials may supply some of the hot mix materials which is required for the construction in our projects.

- 10) Has the proposer ever had a bond or surety cancelled or forfeited, or a contract with Nassau County or any other government entity terminated?

YES ☐ NO ☒ If yes, state the name of bonding agency, (if a bond), date, amount of bond and reason for such cancellation or forfeiture: or details regarding the termination (if a contract).

- 11) Has the proposer, during the past seven years, been declared bankrupt?

YES ☐ NO ☒ If yes, state date, court jurisdiction, amount of liabilities and amount of assets

- 12) In the past five years, has this business and/or any of its owners and/or officers and/or any affiliated business, been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency? And/or, in the past 5 years, have any owner and/or officer of any affiliated business been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, where such investigation was related to activities performed at, for, or on behalf of an affiliated business.

YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

- 13) In the past 5 years, has this business and/or any of its owners and/or officers and/or any affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies? And/or, in the past 5 years, has any owner and/or officer of an affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies, for matters pertaining to that individual's position at or relationship to an affiliated business.

YES ☒ NO ☐ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

Not an investigation, but we had an OSHA inspection on our Belmont worksite on 8/12/21. To date we have not received a citation or violation from OSHA. They indicated there was a ladder in our excavation that wasn't vertical and we took corrective action to remedy their concern.

- 14) Has any current or former director, owner or officer or managerial employee of this business had, either before or during such person's employment, or since such employment if the charges pertained to events that allegedly occurred during the time of employment by the submitting business, and allegedly related to the conduct of that business:

a) Any felony charge pending?

YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

b) Any misdemeanor charge pending?

YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

c) In the past 10 years, you been convicted, after trial or by plea, of any felony and/or any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

d) In the past 5 years, been convicted, after trial or by plea, of a misdemeanor? YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

e) In the past 5 years, been found in violation of any administrative, statutory, or regulatory provisions? YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

- 15) In the past (5) years, has this business or any of its owners or officers, or any other affiliated business had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held? YES ☐ NO ☒ If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

- 16) For the past (5) tax years, has this business failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges? YES ☐ NO ☒ If yes, provide details for each such year. Provide a detailed response to all questions checked 'YES'. If you need more space, photocopy the appropriate page and attach it to the questionnaire.

17 Conflict of Interest:

- a) Please disclose any conflicts of interest as outlined below. NOTE: If no conflicts exist, please expressly state "No conflict exists."
(i) Any material financial relationships that your firm or any firm employee has that may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

NO CONFLICT EXISTS

- (ii) Any family relationship that any employee of your firm has with any County public servant that may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

NO CONFLICT EXISTS

(iii) Any other matter that your firm believes may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

NO CONFLICT EXISTS

- b) Please describe any procedures your firm has, or would adopt, to assure the County that a conflict of interest would not exist for your firm in the future.

All employees are required to disclose any current and future conflicts

- A. Include a resume or detailed description of the Proposer's professional qualifications, demonstrating extensive experience in your profession. Any prior similar experiences, and the results of these experiences, must be identified.

Have you previously uploaded the below information under in the Document Vault?

YES ☐ NO ☒

Is the proposer an individual?

YES ☐ NO ☒ Should the proposer be other than an individual, the Proposal MUST include:

- i) Date of formation;

07/18/2002

- ii) Name, addresses, and position of all persons having a financial interest in the company, including shareholders, members, general or limited partner. If none, explain.

SEE ATTACHED SHAREHOLDERS WITH PERCENTAGE OWNED

First Name	James
Last Name	Pratt
MI	J
Suffix	III
Address	
City	
State/Province/Territory	NY
Zip/Postal Code	
Country	US
Position	President/Treasurer

First Name	Thomas
Last Name	Pratt
MI	
Suffix	
Address	
City	
State/Province/Territory	NY
Zip/Postal Code	
Country	US
Position	Vice President/Secretary

1 File(s) Uploaded: Business History Form Shareholders.docx

iii) Name, address and position of all officers and directors of the company. If none, explain.

First Name Edward
Last Name McCoy
MI P Suffix Jr.
Address [REDACTED]
City [REDACTED] State/Province/Territory NY Zip/Postal Code [REDACTED]
Country US
Position Vice President

First Name James
Last Name Pratt
MI J Suffix III
Address [REDACTED]
City [REDACTED] State/Province/Territory NY Zip/Postal Code [REDACTED]
Country US
Position President/Treasurer

First Name Thomas
Last Name Pratt
MI [REDACTED] Suffix [REDACTED]
Address [REDACTED]
City [REDACTED] State/Province/Territory NY Zip/Postal Code [REDACTED]
Country US
Position Vice President/Secretary

First Name Joseph
Last Name Williams
MI M Suffix Jr.
Address [REDACTED]
City [REDACTED] State/Province/Territory NY Zip/Postal Code [REDACTED]
Country US
Position Sr Vice President

iv) State of incorporation (if applicable);

NY

v) The number of employees in the firm;

49

vi) Annual revenue of firm;

[REDACTED]

vii) Summary of relevant accomplishments

MAJOR PROJECTS COMPLETED IS ATTACHED

3 File(s) Uploaded: PB MAJOR PROJECTS COMPLETED.pdf, PB MAJOR PROJECTS COMPLETED.

viii) Copies of all state and local licenses and permits.

B. Indicate number of years in business.

19

C. Provide any other information which would be appropriate and helpful in determining the Proposer's capacity and reliability to perform these services.

Work on previous NCDPW contracts

D. Provide names and addresses for no fewer than three references for whom the Proposer has provided similar services or who are qualified to evaluate the Proposer's capability to perform this work.

Company	Village of Garden City		
Contact Person	Domenick Stanco		
Address	351 Stewart Avenue		
City	Garden City	State/Province/Territory	NY
Country	US		
Telephone	(516)	[REDACTED]	
Fax #	(516)	[REDACTED]	
E-Mail Address	[REDACTED]		

Company	Suffolk County DPW		
Contact Person	William Hillman, P.E.		
Address	335 Yaphank Avenue		
City	Yaphank	State/Province/Territory	NY
Country	US		
Telephone	(631)	[REDACTED]	
Fax #	(631)	[REDACTED]	
E-Mail Address	[REDACTED]		

Company	Village of Mineola		
Contact Person	Thomas Rini		
Address	155 Washington Avenue		
City	Mineola	State/Province/Territory	NY
Country	US		
Telephone	(516)	[REDACTED]	
Fax #	(516)	[REDACTED]	
E-Mail Address	[REDACTED]		

I, Joseph M. Williams, Jr., P.E. , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Joseph M. Williams, Jr., P.E. , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Name of submitting business: Pratt Brothers Inc

Electronically signed and certified at the date and time indicated by:

Joseph M. Williams, Jr., P.E. 

Sr. Vice President

Title

01/26/2022 12:11:07 PM

Date



PRATT BROTHERS, INC.

GENERAL CONTRACTING • HEAVY CONSTRUCTION

45 S. Fourth Street • Bay Shore, NY 11706-1210 • Phone: 631-667-6800 • Fax: 631-289-3843

Shareholders

James J. Pratt, III – President/Treasurer – xx%

Thomas Pratt – Vice President/Secretary – xx%

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
07-135 Southern State Parkway Suffolk County D260416	New York State DOT	New York State DOT James Eldor	\$ 10,433,621.00	9/15/2009	94%	New York State DOT James Eldor
08-290 County Road 16 Reconstruction, Ronkonkoma No. 5511	Suffolk County DPW James Peterman (631) 852-4003	Lockwood, Kessler and Bartlett (516) 938-0600	\$ 22,641,805.00	7/31/2011	64%	Suffolk County DPW Justin Hipperling (631) 852-4006
09-077 Milling Requirements - Queens HW2CR09C	City of New York DDC	City of New York DDC	\$ 4,979,762.40	4/30/2011	81%	City of New York Yuliya Ruvinova (718) 322-5053
10-268 Culvert Replacement on Valley Stream Road	Village of Valley Stream Tony Cella (516) 592-5105	Village of Valley Stream	\$ 1,448,380.60	12/31/2011	63%	Village of Valley Stream Tony Cella (516) 592-5105
10-208 Milling Requirements - Queens HW2CR11C	City of New York DDC	City of New York DDC	\$ 1,971,345.18	8/31/2011	70%	City of New York Patrick Larkin (718) 391-1958
10-300 CR19 Patchogue Holbrook Rd Traffic Calming 3302/5014	Suffolk County DPW	Suffolk County DPW In-House	\$ 1,201,304.47	11/15/2011	66%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-289 Sunset Plaza Shopping Center	Deer Park Associates LLC Len Abrams (631) 667-9575	Sidney B Bowne & Son	\$ 548,035.15	12/31/2011	100%	Deer Park Associates LLC Len Abrams (631) 667-9575
09-155 Calverton National Cemetery Expansion 805CM2036	Calverton National Cemetery GC&P Fabcon	Carter Van Dyke (212) 345-5053	\$ 11,770,011.69	12/31/2011	66%	GC&P Fabcon LLC John Schleer (908) 782-0526
11-011 Sysco Warehouse Central Islip	Sysco Food Services Aurora Contractors Barney Riley (631) 981-3785	Vollmuth & Brush (631) 363-2683	\$ 5,445,493.96	6/30/2012	85%	Aurora Contractors Barney Reilly (631) 981-3785
11-059 CR31 & 104 Intersection Reconstr. Hampton Bays CP5572	Suffolk County DPW William Hillman P.E. (631) 852-4006	Suffolk County DPW In-House	\$ 1,072,863.65	2/17/2012	71%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-093 Village of Port Jefferson 2011 Road Improvements	Village of Port Jefferson Robert Juliano	Dvirka & Bartilucci Ken Pritchard	\$ 2,761,192.92	7/15/2012	77%	Dvirka & Bartilucci Ed Kozik (516) 364-9890
11-413 Solar Array Project @ Cohalan Court Complex Central Islip	Enxco Development Co. Eldor Contracting Corp. Keith Feldman	Enxco Development Co.	\$ 569,373.28	12/31/2012	100%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
11-285 Milling Requirements - Queens HW2CR12C	City of New York DDC Patrick Larkin (718) 391-1958	City of New York DDC	\$ 3,328,891.23	9/30/2012	88%	City of New York DDC Patrick Larkin (718) 391-1958

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
11-335 Solar Array Project @ Riverhead County Complex	Enxco Development Co. Eldor Contracting Corp. Keith Feldman	Enxco Development Co.	\$ 627,901.15	12/31/2012	93%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
12-104 New Entrance Roadway For School of Medicine	Hofstra University Richard S Leddy	Cameron Eng & Assoc. Jack Ozyman (516) 827-4900	\$ 504,205.00	9/30/2012	60%	Hofstra University Richard S. Leddy (516) 463-5258
12-174 Home Depot Parking Lot Commack	Home Depot	Home Depot	\$ 796,600.90	12/31/2012	100%	Opal Construction Chris Cavoto (631) 242-7440
09-239 Nassau County DPW Highway & Drainage Req. H66302S	Nassau County DPW	Nassau County DPW	\$ 1,252,924.00	12/31/2011	85%	Nassau County DPW (516) 571-6655
11-359 Suffolk County DPW Storm Water Pollution Remedption Phase 3 CP8239	Suffolk County DPW	Suffolk County DPW In-House	\$ 1,294,862.00	12/16/2013	90%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-393 Suffolk County DPW Wicks Road Improvement CP5539	Suffolk County DPW	Nelson & Pope	\$ 5,693,653.00	12/31/2013	66%	Suffolk County DPW Justin Hipperling (631) 852-4006
12014 Suffolk County DPW CR39 North Road Improvements CP5528	Suffolk County DPW	Suffolk County DPW In-House	\$ 3,779,594.00	12/31/2013	77%	Suffolk County DPW Justin Hipperling (631) 852-4006
12-018 Canon Headquarters Phase II - Sitework	Canon USA	Turner Construction	\$ 5,563,069.00	11/30/2013	56%	Turner Construction Chris Deschler (212) 229-6000
12-158 Mall at Bay Plaza Site Work - Bronx, NY	Prestige Properties & Dev.	Stantec Consulting Services Inc. (212) 366-5600	\$ 1,799,983.00	11/30/2013	98%	Aurora Contractors Jonathan McGowan (631) 981-3785
12-166 Home Depot Parking Lot Long Island City-Milling/Paving	Home Depot	Home Depot	\$ 493,600.00	12/31/2013	100%	Opal Construction Chris Cavoto (631) 242-7440
13-033 Sheridan Blvd. Drainage Mineola H6005001G	Nassau County DPW	Nassau County DPW	\$ 718,259.00	12/31/2013	98%	Nassau County DPW Shila Shah Gavnoudias (516) 571-9600
12-426 Reconstruction of Sound Avenue, CR48 Greenport - 5526	Suffolk County DPW Justin Hipperling P.E. (631) 852-4006	Suffolk County DPW In-House	\$ 3,791,800.00	12/31/2014	86%	Suffolk County DPW Justin Hipperling (631) 852-4006

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
13-055 Lowes of Commack Site Work	Aurora Contractors Barney Riley (631) 981-3785	Rosenbaum Design Group	\$ 3,092,479.00	12/31/2014	80%	Aurora Contractors Barney Reilly (631) 981-3785
13-049 Clearspan Building Project	Brookhaven Rail Terminal	Brookhaven Rail Terminal	\$ 1,684,905.00	12/31/2014	65%	Brookhave Rail Term. Andy Kaufman (631) 924-8800
13-089 Forcemain and Pump Station - Huntington Sta.	Avalon Bay Communities	Nelson & Pope	\$ 1,023,793.00	12/31/2014	30%	Avalon Bay Communities Matthew Gendron (617) 645-3937
13-183 Asphalt Paving Huntington Station	Avalon Bay Communities	Nelson & Pope	\$ 1,288,545.00	6/30/2014	95%	Avalon Bay Communities Matthew Gendron (617) 645-3937
13-219 Stony Brook Medical Center East Parking Field Paving	State of New York Dormatory Authority	H2M Architects & Engineers	\$ 670,176.00	12/31/2014	100%	Watral Bros. Inc. Jake Watral (631) 586-8300
13-261 Museum of American Armor Site Work - Old Bethpage	Museum of American Armor BDG Construction	BDG Construction Corp	\$ 1,285,390.00	8/29/2014	78%	BDG Construction Anthony Galu (516) 624-1979
13-283 2013 Road Improvements Nassau Avenue	Village of Freeport	Village of Freeport In-House	\$ 1,407,428.00	12/31/2014	73%	Village of Freeport Robert Fisenne P.E. (516) 377-2233
14-306 Green Acres Mall Valley Stream - Parking Field Pavement & Rehab	Green Acres Mall Opal Construction	Savik & Murray LLP	\$ 889,154.46	12/31/2014	95%	Opal Construction Chris Cavoto (631) 242-7440
13-035 Reconstruction of Rte 347 & 112 D262168	New York State DOT Scalamandre	New York State DOT	\$ 5,634,311.00	12/31/2015	98%	P. Scalamandre & Sons Tom Hayes (516) 868-3000
13-297 Village of Mineola 2013 Road Improvements	Village of Mineola	Dvirka & Bartilucci Christopher Clement (516)364-9890	\$ 1,654,509.00	12/31/2015	85%	Village of Mineola Thomas Rini (516) 746-0753
14-034 Bridge Rehabilitation Various Locations	Suffolk County DPW	Suffolk County DPW	\$ 1,848,219.00	12/31/2015	75%	Suffolk County DPW Justin Hipperling (631) 852-4006
14-084 Lake Success Redevelopment 1 Dakota Drive	We're Associates, Inc.	We're Associates Inc. Gary R Woska	\$ 2,321,333.00	7/27/2015	55%	We're Associates, Inc. Philip Arnold (516) 931-5322
14-220 2014 Road Improvements	Village of Garden City	Village of Garden City In-House	\$ 4,746,069.00	12/31/2015	70%	Village of Garden City Domenick Stanco (516) 465-4017

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
14-294 Ritz Carlton Residences Off Site Sanitary Sewer Connections SLRC1080018	LRC Construction LLC	H2M Architects Engs	\$ 525,000.00	7/27/2015	61%	LRC Construction LLC Steve Feinstein (914) 773-7700
15-241 3&5 Dakota Parking Lots	We're Associates Inc.	We're Associates Inc. Gary R Woska	\$ 609,457.00	12/31/2015	85%	We're Associates Philip Arnold (516) 931-5322
14-132 The Meadows at Yaphank Yaphank Woods Blvd. Road Improvements	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 1,835,000.00	4/30/2016	100%	AVR Realty Tom Perna (914) 965-3990
14-142 Stony Brook University Toll Drive Residence Phase I	Aurora Contractors Inc. State University of New York at Stony Brook	KSQ Architects, P.C. (914) 682-3700	\$ 1,980,789.00	12/31/2016	87%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
14-378 Stony Brook University Toll Drive Residence Phase II	Aurora Contractors Inc. State University of New York at Stony Brook	KSQ Architects, P.C. (914) 682-3700	\$ 2,146,774.00	12/31/2016	70%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
15-017 Dormitories #A04B007 Sitework	NYRA Belmont EW Howell Travis Salvo	Dolph Rotfeld Eng. (914) 631-8600	\$ 538,413.00	9/28/2016	87%	EW Howell Travis Salvo (516) 921-7100
15-107 William Floyd Parkway Yaphank Woods Blvd.	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 4,061,494.00	12/31/2016	76%	AVR Realty Tom Perna (914) 965-3990
15-149 Leavenworth Solar Farm Shoreham	Borrego Solar Systems Inc Eldor Contracting Corp. Keith Feldman	VHB Engineering (631) 234-3444	\$ 1,082,426.00	9/28/2016	88%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
15-315 2015 Road Improvements	Village of Floral Park Valente Contracting Corp.	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 1,297,048.00	12/31/2016	95%	Valente Contracting Corp John Valente (516) 746-7933
15-305 The Meadows at Yaphank Yaphank Woods Blvd. Phase 1A Sitework	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 978,895.00	12/31/2016	100%	AVR Realty Tom Perna (914) 965-3990
15-181 Lake Success Redevelopment 3 Dakota -P.Lot & Ramp	We're Associates Inc. Philip Arnold (516) 931-5322	We're Associates Inc. Gary R Woska	\$ 1,423,116.00	4/30/2016	65%	We're Associates Inc. Philip Arnold (516) 931-5322
15-255 2015 Road Improvements	Village of Mineola Valente Contracting Corp.	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 742,821.00	9/28/2016	100%	Valente Contracting Corp John Valente (516) 746-7933
16-130 LIE Welcome Center Dix Hills	NYSDOT P. Scalamandre & Sons	Stantec Consulting Services Inc. (212) 366-5600	\$ 1,578,526.00	11/30/2016	100%	P. Scalamandre & Sons Tom Hayes (516) 868-3000

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
16-152 2016 Road Improvements	Village of New Hyde Park	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 2,127,958.00	12/31/2016	77%	Village of New Hyde Park Tom Gannon (516) 354-0064
16-218 2016 Road Improvements	Village of Garden City	Village of Garden City In-House	\$ 1,447,250.00	12/31/2016	65%	Village of Garden City Domenick Stanco (516) 465-4017
16-308 2016 Road Improvements	Village of Mineola Valente Contracting Corp.	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 725,790.00	12/31/2016	100%	Valente Contracting Corp John Valente (516) 746-7933
15-221 Green Acres Commons Valley Stream	Green Acres Adjacent LLC Aurora Contractors Inc. Barney Reilly	SPG3 Architects Bruce Keller	\$ 6,523,195.00	7/31/2017	90%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
15-243 Green Acres Commons Valley Stream - Paving	Green Acres Adjacent LLC Aurora Contractors Inc. Barney Reilly	SPG3 Architects Bruce Keller	\$ 1,560,664.00	7/31/2017	93%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
16-034 1933 & 1963 Union Blvd. Sitework	South Side Hospital Schulmann Industries Inc. Harry Haralambous	Sidney B. Bowne & Son (516) 746-2350	\$ 1,735,825.00	9/30/2017	55%	Schulmann Industries Inc Harry Haralambous (631) 499-7974
16-160 Roslyn Schools Paving	Roslyn UF School District Watral Brothers Inc.	VHB Engineering (631) 234-3444	\$ 589,403.00	9/30/2017	98%	Watral Brothers Inc. Jake Watral (631) 586-8300
16-358 Culverts 1 & 2 Holtsville Terminal	Northville Industries Corp.	U.N.I Engineering Inc. Edward J. Sapp	\$ 786,034.00	12/26/2017	41%	Northville Industries Corp. (631) 475-5060
17-273 Parking Lot Construction Union Blvd., Bay Shore	Northwell Health Inc. Schulman Industries Harry Haralambous	Sidney B. Bowne & Son (516) 746-2350	\$ 548,425.00	12/31/2017	70%	Northwell Health Inc. Schulman Industries Harry Haralambous (631) 499-7974
15-261 Avalon at Great Neck Site Work	Avalon Bay Communities Scott Fradenburg 516-501-6020	VHB Engineering (631) 234-3444	\$ 1,501,001.19	1/31/2018	93%	Avalon Bay Communities Scott Fradenburg 516-501-6020
16-048 Avalon Rockville Centre II Sitework	Avalon Bay Communities Scott Fradenburg 516-501-6020	Nelson & Pope (631) 427-5665	\$ 1,373,303.43	1/31/2018	95%	Avalon Bay Communities Scott Fradenburg 516-501-6020
16-286 Common Area 2 Sitework The Meadows at Yaphank	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 679,748.50	12/31/2018	100%	AVR Realty Tom Perna (914) 965-3990
17-103 Shoreham Solar Commons - Sitework	Shoreham Solar Commons LLC Keith Feldmann - Eldor (631) 218-0100	TRC Engineers Inc. (516) 671-3407	\$ 2,854,197.00	11/30/2018	90%	Eldor Contracting Corp. Keith Feldmann (631) 218-0100
17-189 Village of Garden City 2017 Road Improvements	Village of Garden City Valente Contracting Corp. John Valente	Village of Garden City In-House	\$ 1,049,622.00	12/31/2018	96%	Valente Contracting Corp John Valente (516) 746-7933

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
17-237 Northwell Lynbrook Site Work	Talisen Construction Corp. Joseph Rigazio (212) 244-4581	Sidney B. Bowne & Son (516) 746-2350	\$ 908,330.81	6/30/2018	59%	Talisen Construction Corp. Joseph Rigazio (212) 244-4581
17-347 Sky Drive Farmingdale Sitework	BDG Farmingdale LLC Mike Christiano (516) 624-1948	Bohler Engineering Joseph Deal (631) 738-1200	\$ 4,327,684.00	12/31/2018	70%	BDG Farmingdale LLC Mike Christiano (516) 624-1948
17-029 Hofstra University Zarb School of Business	Hofstra University J&A Concrete Tony Martins	Cameron Engineering (516) 827-4900	\$ 1,020,658.00	1/31/2019	93%	J&A Concrete Tony Martins (631) 567-5959
17-043 AVR Yaphank Constr. LIE Svc Rd-Westbound Ramp	AVR Realty Tom Perna (914) 965-3990	Vollmuth & Brush George Brush (631) 363-2683	\$ 3,782,086.80	9/27/2019	76%	Tom Perna (914) 965-3990
17-075 AVR Yaphank Constr. LIE Svc Rd-Eastbound Ramp	AVR Realty Tom Perna (914) 965-3990	Greenman Pedersen Inc. (631) 587-5060	\$ 2,013,282.41	9/27/2019	67%	Tom Perna (914) 965-3990
17-231 SBU Innovation & Discovery Center	State University of NY Aurora Contractors Barney Riley	Mitchell - Giurgola Architects, LLP	\$ 1,973,064.00	7/31/2019	86%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
17-241 Village of Valley Stream 2017 Road Improvements	Village of Valley Stream Robert Fumagalli (516) 592-5105	Lucchesi Engineering PC Michael Mark (516) 942-3772	\$ 1,617,502.61	9/27/2019	60%	Robert Fumagalli (516) 592-5105
17-375 Hempstead Force Main Contract S3P311-09S	Village of Hempstead P. Scalamandre & Sons	Cameron Engineering (516) 827-4900	\$ 624,361.98	7/31/2019	100%	P. Scalamandre & Sons Thomas Hayes (516) 868-3000
17-405 Improvements to CR93 Ocean Ave @ Rosevale CP 5535/5014	Suffolk County DPW Justin Hipperling (631) 852-4006	Suffolk County DPW In-House	\$ 1,731,041.63	12/13/2019	66%	Suffolk County DPW Justin Hipperling (631) 852-4006
18-070 Simply Self Storage Hauppauge - Site Work	Simply Self Storage Axis Construction Corp.	Barnett Bonacci & Van Weele, PC (631) 435-1111	\$ 640,424.04	7/31/2019	80%	Axis Construction Corp. Vincent Buffolino (631) 243-5970
18-112 Nat Grid - The Gateway to Brightwater -Site Work/Paving	National Grid Schulman Industries Chirs Pirraglia	National Grid In-House	\$ 777,963.70	8/31/2019	90%	Schulman Industries Chris Pirraglia (631) 499-7974
18-328 Riverhead Solar Project	Riverhead Solar Farm LLC Rosendin Electric Inc. Rich Shaffer	Blymer Engineers (510) 521-3773	\$ 3,165,184.35	8/31/2019	95%	Rosendin Electric Inc. Rick Shaffer (657) 276-0600
18-338 Cornerstone at Hauppauge On-site Paving	Cornerstone Hauppauge LLC Bartone & Pellerito Constr Anthony Bartone	Nelson & Pope (631) 427-5665	\$ 914,318.00	12/31/2019	80%	Bartone & Pellerito Constr Anthony Bartone (516) 249-2022

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
18-450 Town of Hempstead PW 32-18 Uniondale & Roosevelt	Town of Hempstead Valente Contracting Corp. John Valente	Town of Hempstead In-House	\$ 635,699.34	12/31/2019	80%	Valente Contracting Corp John Valente (516) 746-7933
19-095 Sunken Meadow State Park Resilience & Restor - Paving	State of NY Parks & Rec. G&M Earthmoving	Louis Berger & Assoc PC (212) 612-7900	\$ 912,815.00	12/15/2019	0%	G&M Earth Moving Anthony Ragueso anthony@gmearthmoving.com
19-297 Cove Neck Seawall Repair H61587-58G	Nassau County DPW Metro Paving Inc.	Nassau County DPW In-House	\$ 530,785.42	3/1/2020	100%	Metro Paving Inc. Ryan Kellerman (631)756-8038

COUNTY OF NASSAU

CONSULTANT'S, CONTRACTOR'S AND VENDOR'S DISCLOSURE FORM

1. Name of the Entity: Pratt Brothers Inc.

Address: 45 South Fourth Street

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

2. Entity's Vendor Identification Number: 16-1620294

3. Type of Business: Closely Held Corp (specify) _____

4. List names and addresses of all principals; that is, all individuals serving on the Board of Directors or comparable body, all partners and limited partners, all corporate officers, all parties of Joint Ventures, and all members and officers of limited liability companies (attach additional sheets if necessary):

First Name Joseph
 Last Name Williams
 MI M Suffix Jr.
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position Sr Vice President

First Name James
 Last Name Pratt
 MI J Suffix III
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position President/Treasurer

First Name Thomas
 Last Name Pratt
 MI _____ Suffix _____
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position Vice President/Secretary

First Name Edward
 Last Name McCoy
 MI P Suffix Jr.
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US

Position Vice President

5. List names and addresses of all shareholders, members, or partners of the firm. If the shareholder is not an individual, list the individual shareholders/partners/members. If a Publicly held Corporation, include a copy of the 10K in lieu of completing this section.

If none, explain.

First Name James
Last Name Pratt
MI J Suffix III
Address [REDACTED]
City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
Country
Position President/Treasurer

First Name Thomas
Last Name Pratt
MI Suffix
Address [REDACTED]
City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
Country
Position Vice President/Secretary

6. List all affiliated and related companies and their relationship to the firm entered on line 1. above (if none, enter "None"). Attach a separate disclosure form for each affiliated or subsidiary company that may take part in the performance of this contract. Such disclosure shall be updated to include affiliated or subsidiary companies not previously disclosed that participate in the performance of the contract.

Scatt Materials Corp.

8 File(s) uploaded Scatt Vendor Disclosure 10.14.21.pdf, Scatt Vendor Disclosure Form 12.3.20.pdf, Scatt Vendor Disclosure Form 2.13.20.pdf, Scatt Vendor Disclosure Form 2.21.20.pdf, Scatt Vendor Disclosure Form 2.28.20.pdf, Scatt Vendor Disclosure Form 5.19.21.pdf, Scatt Vendor Disclosure Form 9.13.19.pdf, Scatt Vendor Disclosure Form Feb 2020.pdf

7. List all lobbyists whose services were utilized at any stage in this matter (i.e., pre-bid, bid, post-bid, etc.). If none, enter "None." The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

Are there lobbyists involved in this matter?

YES ☐ NO ☒

(a) Name, title, business address and telephone number of lobbyist(s):

(b) Describe lobbying activity of each lobbyist. See below for a complete description of lobbying activities.

(c) List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

8. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

Electronically signed and certified at the date and time indicated by:

Joseph M. Williams, Jr., P.E.



Dated: 10/14/2021 04:03:40 PM

Title: Sr. Vice President

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions, department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission, with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

COUNTY OF NASSAU

CONSULTANT'S, CONTRACTOR'S AND VENDOR'S DISCLOSURE FORM

1. Name of the Entity: Scatt Materials Corp.

Address: 44 South Fourth Street

City: Bay Shore State/Province/Territory: NY Zip/Postal Code: 11706

Country: US

2. Entity's Vendor Identification Number: 11-2607021

3. Type of Business: Closely Held Corp (specify) _____

4. List names and addresses of all principals; that is, all individuals serving on the Board of Directors or comparable body, all partners and limited partners, all corporate officers, all parties of Joint Ventures, and all members and officers of limited liability companies (attach additional sheets if necessary):

First Name Thomas
 Last Name Pratt
 MI _____ Suffix _____
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position President

First Name James
 Last Name Haney
 MI _____ Suffix _____
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position Vice President

First Name James
 Last Name Haney
 MI _____ Suffix _____
 Address [REDACTED]
 City [REDACTED] State/Province/Territory: NY Zip/Postal Code: [REDACTED]
 Country US
 Position Secretary

5. List names and addresses of all shareholders, members, or partners of the firm. If the shareholder is not an individual, list the individual shareholders/partners/members. If a Publicly held Corporation, include a copy of the 10K in lieu of completing this section.

If none, explain.

James J. Pratt, III - Stockholder
Thomas Pratt - Stockholder
James Haney - Stockholder
Chris Haney - Stockholder

Keith Haney - Stockholder
David Shakesby - Stockholder
Jake Watral - Stockholder
Thomas Watral - Stockholder

Robert Watral - Stockholder

No shareholders, members, or partners have been attached to this form.

6. List all affiliated and related companies and their relationship to the firm entered on line 1. above (if none, enter "None"). Attach a separate disclosure form for each affiliated or subsidiary company that may take part in the performance of this contract. Such disclosure shall be updated to include affiliated or subsidiary companies not previously disclosed that participate in the performance of the contract.

Pratt Brothers, Inc - James J. Pratt, III and Thomas Pratt share ownership as Scatt Materials Corp. will supply asphalt to Pratt Brothers, Inc.

7. List all lobbyists whose services were utilized at any stage in this matter (i.e., pre-bid, bid, post-bid, etc.). If none, enter "None." The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

Are there lobbyists involved in this matter?

YES ☐ NO ☒

(a) Name, title, business address and telephone number of lobbyist(s):

(b) Describe lobbying activity of each lobbyist. See below for a complete description of lobbying activities.

(c) List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

8. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

Electronically signed and certified at the date and time indicated by:

Thomas Pratt [REDACTED]

Dated: 10/14/2021 03:46:15 PM

Title: President

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions, department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission, with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/29/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER National Insurance Brokerage of New York, Inc. 175 Oval Drive Islandia NY 11749		CONTACT NAME: Kathleen Hofmann PHONE (A/C, No, Ext): (631) 273-4242 E-MAIL ADDRESS: khofmann@nibony.com FAX (A/C, No): (631) 273-8990													
INSURED Pratt Brothers Inc 45 South 4th Street Bay Shore NY 11706		INSURER(S) AFFORDING COVERAGE <table border="1"><tr><td>INSURER A: American Southern Home Insurance Compar</td><td>10235</td></tr><tr><td>INSURER B: American Family Home Insurance Company</td><td>19275</td></tr><tr><td>INSURER C: Berkley Insurance Company</td><td>32603</td></tr><tr><td>INSURER D: Travelers Indemnity CO</td><td>25658</td></tr><tr><td>INSURER E: Evanston Insurance Company</td><td>35378</td></tr><tr><td>INSURER F:</td><td></td></tr></table>		INSURER A: American Southern Home Insurance Compar	10235	INSURER B: American Family Home Insurance Company	19275	INSURER C: Berkley Insurance Company	32603	INSURER D: Travelers Indemnity CO	25658	INSURER E: Evanston Insurance Company	35378	INSURER F:	
INSURER A: American Southern Home Insurance Compar	10235														
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INSURER C: Berkley Insurance Company	32603														
INSURER D: Travelers Indemnity CO	25658														
INSURER E: Evanston Insurance Company	35378														
INSURER F:															

COVERAGES **CERTIFICATE NUMBER: Master 21-22** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			88A6GL0000310-03	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR		DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000				
	<input checked="" type="checkbox"/> Contractual Liability		MED EXP (Any one person) \$ 5,000				
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		PERSONAL & ADV INJURY \$ 1,000,000				
	OTHER:						GENERAL AGGREGATE \$ 2,000,000
							PRODUCTS - COMPIOP AGG \$ 2,000,000
							\$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY			88A5CA0000779	4/1/2021	4/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO		BODILY INJURY (Per person) \$				
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS	BODILY INJURY (Per accident) \$				
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS	PROPERTY DAMAGE (Per accident) \$				
							PIP-Basic \$ 50,000
C	<input checked="" type="checkbox"/> UMBRELLA LIAB			MKC11100029-01	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB	<input checked="" type="checkbox"/> OCCUR	AGGREGATE \$ 5,000,000				
	<input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	<input type="checkbox"/> CLAIMS-MADE	\$				
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	<input type="checkbox"/> Y/N					PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> N/A					E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
D	Excess Umbrella			ZUP81N12504-20NF	4/1/2021	4/1/2022	\$4,000,000 Limit
E	Pollution Liability			MKLVIENV102049	9/05/2020	9/5/2021	\$2,000,000/\$1,000,000 \$5,000 DED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
The following are included as additional insured A.T.I.M.A with respect to General Liability as required by written contract/written agreement per the policy terms, conditions and exclusions: County of Nassau Department of Public Works, Town of Hempstead, Town of North Hempstead, Town of Oyster Bay, City of Glen Cove & City of Long Beach.

CERTIFICATE HOLDER County of Nassau Department of Public Works 1194 Prospect Avenue Westbury, NY 11590	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Frank Cormio/KATHYH
---	---

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/29/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER National Insurance Brokerage of New York, Inc. 175 Oval Drive Islandia NY 11749		CONTACT NAME: Kathleen Hofmann PHONE (A/C, No, Ext): (631) 273-4242 FAX (A/C, No): (631) 273-8990 E-MAIL ADDRESS: khofmann@nibony.com															
INSURED Pratt Brothers Inc 45 South 4th Street Bay Shore NY 11706		<table border="1"><thead><tr><th>INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr></thead><tbody><tr><td>INSURER A: American Southern Home Insurance Compar</td><td>10235</td></tr><tr><td>INSURER B: American Family Home Insurance Company</td><td>19275</td></tr><tr><td>INSURER C: Berkley Insurance Company</td><td>32603</td></tr><tr><td>INSURER D: Travelers Indemnity CO</td><td>25658</td></tr><tr><td>INSURER E: Evanston Insurance Company</td><td>35378</td></tr><tr><td>INSURER F:</td><td></td></tr></tbody></table>		INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: American Southern Home Insurance Compar	10235	INSURER B: American Family Home Insurance Company	19275	INSURER C: Berkley Insurance Company	32603	INSURER D: Travelers Indemnity CO	25658	INSURER E: Evanston Insurance Company	35378	INSURER F:	
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INSURER D: Travelers Indemnity CO	25658																
INSURER E: Evanston Insurance Company	35378																
INSURER F:																	

COVERAGES

CERTIFICATE NUMBER: Master 21-22

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			88A6GL0000310-03	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR		DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000				
	<input checked="" type="checkbox"/> Contractual Liability		MED EXP (Any one person) \$ 5,000				
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		PERSONAL & ADV INJURY \$ 1,000,000				
	OTHER:						GENERAL AGGREGATE \$ 2,000,000
							PRODUCTS - COMP/OP AGG \$ 2,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY			88A5CA0000779	4/1/2021	4/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input type="checkbox"/> ANY AUTO		BODILY INJURY (Per person) \$				
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS	BODILY INJURY (Per accident) \$				
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS	PROPERTY DAMAGE (Per accident) \$				
							PIP-Basic \$ 50,000
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR			MKC11100029-01	4/1/2021	4/1/2022	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE		AGGREGATE \$ 5,000,000				
	<input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000						
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
D	Excess Umbrella			ZUP81N12504-20NF	4/1/2021	4/1/2022	\$4,000,000 Limit
E	Pollution Liability			MKLVIENV102049	9/05/2020	9/5/2021	\$2,000,000/\$1,000,000 \$5,000 DED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The following are included as additional insured A.T.I.M.A with respect to General Liability as required by written contract/written agreement per the policy terms, conditions and exclusions: County of Nassau Department of Public Works & Town of Hempstead.

CERTIFICATE HOLDER**CANCELLATION**

County of Nassau Department of Public Works 1194 Prospect Avenue Westbury, NY 11590	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Frank Cormio/KATHYH

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AMERICAN SOUTHERN HOME INSURANCE COMPANY

Administration Office: 555 College Road East, Princeton, NJ 08543-5241
800.305.4954
Statutory Office: 1301 Riverplace Blvd., Suite 1300 - Jacksonville, FL 32207
(a stock insurance company)

COMMON POLICY DECLARATIONS

POLICY NUMBER: 88A6GL0000592-01

PRIOR POLICY NUMBER: 88A6GL0000592-00

COMPANY NAME American Southern Home Insurance Company 555 College Road East Princeton, NJ 08543-5241 (800) 305-4954	PRODUCER NAME McKee Risk Management, Inc. 610 Freedom Business Center Drive Suite 300 King of Prussia, PA 19406
NAMED INSURED: County of Nassau Dept. of Public Works	
MAILING ADDRESS: 1194 Prospect Avenue Westbury, NY 11590	
POLICY PERIOD: FROM <u>04/01/2021</u> TO <u>04/01/2022</u> AT 12:01 A.M. STANDARD TIME AT YOUR MAILING ADDRESS SHOWN ABOVE.	
BUSINESS DESCRIPTION	OCP

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

THIS POLICY CONSISTS OF THE FOLLOWING COVERAGE PARTS FOR WHICH A PREMIUM IS INDICATED. THIS PREMIUM MAY BE SUBJECT TO ADJUSTMENT.	
	PREMIUM
COMMERCIAL GENERAL LIABILITY COVERAGE PART	\$1,500.00
TERRORISM - CERTIFIED ACTS (GENERAL LIABILITY)	\$0.00
TOTAL:	\$1,500.00

Copyright, American Alternative Insurance Corporation, 1998
Includes copyrighted material of Insurance Services Office, Inc., with its permission.
Copyright, Insurance Services Office, Inc., 1993

POLICY NUMBER: 88A6GL0000592-01

FORMS APPLICABLE TO ALL COVERAGE PARTS (SHOW NUMBERS):

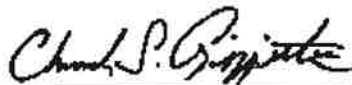
See Schedule of Forms and Endorsements.

Countersigned

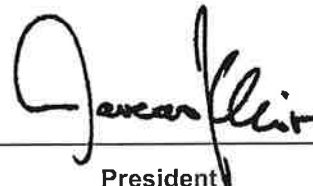
By:

(Date)

(Authorized Representative)



Secretary



President

LISTING OF FORMS AND ENDORSEMENTS FORMING A PART OF THIS POLICY

POLICY NUMBER: 88A6GL0000592-01

NUMBER

TITLE

COMMON

AM CL 100 (11-09)	Common Policy Declarations
TERRNOTICE09 (12-20)	Policyholder Disclosure Notice of Terrorism Insurance Coverage
IL 00 23 (07-02)	Nuclear Energy Liability Exclusion Endorsement (Broad Form)
IL 09 52 (01-15)	Cap on Losses from Certified Acts of Terrorism
IL 09 85 (12-20)	Disclosure Pursuant To Terrorism Risk Insurance Act
ASH VL 101 (11-09)	Signature Endorsement

GENERAL LIABILITY

AM GL 103 (06-10)	Owners and Contractors Protective Liability Coverage Part Declarations
CG 00 09 (04-13)	Owners And Contractors Protective Liability Coverage Form - Coverage For Operations Of Designated Contractor
CG 01 05 (12-01)	New York Changes - Premium Audit
CG 21 70 (01-15)	Cap on Losses From Certified Acts of Terrorism
CG 21 71 (01-15)	Exclusion Of Other Acts Of Terrorism Committed Outside The United States; Cap on Losses From Certified Acts of Terrorism
CG 26 04 (04-17)	New York Changes - Owners And Contractors Protective Liability Coverage Form
CG 26 36 (12-93)	New York Changes - Transfer Of Duties When A Limit Of Insurance Is Used Up
CG 28 67 (01-14)	New York Changes - Cancellation And Nonrenewal
CG 29 51 (12-07)	Employment-Related Practices Exclusion
CG 31 66 (12-04)	Exclusion - Exterior Insulation and Finish Systems
GL2004 (05-97)	Asbestos Exclusion
GL2005 (11-03)	Lead Contamination Exclusion
GL 21 06 (02-09)	Exclusion - Punitive Or Exemplary Damages

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Office of the County Executive
Att: Edward Powers, Deputy County Executive

FROM: Department of Public Works

DATE: February 11, 2022

SUBJECT: Approval of Contract Amendment No. 2
General Requirements Contract H66302W
Encumbrance No. CHPW20000012

Hurricane/Tropical Storm Ida caused damage to the County's drainage infrastructure. The magnitude of this work was not anticipated in the current contract cap for our General Requirements contract. As such, the additional funding from Amendment No. 2 is needed for Ida, drainage and storm related projects anticipated to be completed in the current year including but not limited to 233 East Shore Road in Great Neck, Bayview Avenue at Maple Street in Great Neck, Skunks Misery Road in Glen Cove, 89 Oyster Bay Road, 3 Cove Neck Road, Cow Neck Road in Port Washington North, 217 Plainview Road, and Harbor Hill Road. In addition, the Sands Point Seawall at Falaise Mansion immediate temporary corrective measures, Parks infrastructure improvements, Parks path resurfacing, and Massapequa Preserve Pedestrian Bridge rehabilitation are anticipated to commence in the current year. Therefore, this Department is requesting approval of the following Amendment that is necessary for Pratt Brother's Inc. to perform additional "on-call" construction services including the ability to respond to storm related infrastructure damage. The Department is working with FEMA to get the work associated with Ida reimbursed to the maximum extent allowable. To perform the aforementioned "on-call" constructions, the Maximum Amount shall be increased by four million dollars (\$4,000,000). Accordingly, the total Maximum Amount the County shall pay the Contractor for the services during the four (4) years shall be increased to twenty-four million dollars (\$24,000,000).

GENERAL REQUIREMENTS CONTRACT No. H66302W
ADDITIONAL FUNDING: Increase Maximum Amount by \$4,000,000.00

The work to be performed under this contract Amendment will consist of the furnishing of labor, materials, tools, equipment and incidentals as specified for emergency repair work including but not limited to repair of damaged or deteriorated pavement, drainage systems, structural systems (seawalls, retaining walls, etc.), bridges, curb and sidewalk, fencing and park facilities at various locations in Nassau County. Any remaining balance from the current year will carry over to the remainder of the contract. Any remaining funds will be disencumbered at the end of the contract.

If you approve or disapprove of the above request and how we propose to proceed, please signify below and return the memo to this office for appropriate action.



Kenneth G. Arnold
Commissioner

KGA:TG:jd

c: Roseann D'Alleva, Deputy Commissioner of Public Works
Thomas George, Deputy Commissioner of Public Works
Loretta Dionisio, Assistant to Deputy Commissioner
Christopher Paggi, Chief Civil Engineer
Richard Iadevaio, Jr., Superintendent of Highway and Drainage Construction
Anthony Marino, Deputy Superintendent of Buildings
Gijo Varghese, Civil Engineer III

APPROVED: 
Edward Powers Date
Deputy County Executive

DISAPPROVED:

Edward Powers Date
Deputy County Executive

S:\SAN\Support Staff\Author\Varghese, Gijo\H66302W Massapequa Preserve Bridge Additional Funding \$4,000,000.00.Gv.Doc



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Office of the County Executive
Att: Edward W. Powers, Deputy County Executive

FROM: Department of Public Works

DATE: March 7, 2022

SUBJECT: Christopher Morley Park Large Game Court Area Improvements
Requirements Contract No. H66302W
Encumbrance No. CHPW20000012
Request to Encumber Funding

This Department is requesting approval of the amount of one million dollars (\$1,000,000.00) to be encumbered from Capital Project No. 41869-093 into Requirements Contract No. H66302W.

The requested encumbrance of funds into Requirements Contract No. H66302W is necessary for Pratt Brothers, Inc., to construct improvements to the large game court area in Christopher Morley Park including milling and paving of four (4) basketball courts and two (2) volleyball courts which will be converted to two (2) pickleball courts and applying a color coating to the court surfaces. The work will also include new painted lines (all courts including two [2] handball courts) to define game location, and the installation of pickleball nets and posts and replacement of basketball backboards, rims, nets, and posts. Also, the existing miniature golf course will be removed, and a new pavilion area will be constructed with installation of a gazebo and stamped and colored concrete. Additional work includes installation of new concrete curb, fence renovation/replacement and installation of new plantings, benches, and trash receptacles. This work will improve the condition of the existing court's playing surfaces along with enhancing the whole large game court area. Any remaining funds will be disencumbered at the end of the contract.

If you approve or disapprove of the above request and how we propose to proceed, please signify below and return the memo to this office for appropriate action.



Kenneth G. Arnold
Commissioner

KGA:TMG:ac

c: Thomas M. George, Deputy Commissioner
Christopher Paggi, Chief Civil Engineer
Richard Iadevaio, Jr., Superintendent of Highway and Drainage Construction
Anthony Marino, Deputy Superintendent of Buildings
John O'Dougherty, Project Manager IV
Gijo Varghese, Civil Engineer III

APPROVED:


Edward W. Powers
Deputy County Executive

03/07/2022
Date

DISAPPROVED:

Edward W. Powers
Deputy County Executive

Date



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Office of the County Executive
Att: Edward W. Powers, Deputy County Executive

FROM: Department of Public Works


DATE: February 28, 2022

SUBJECT: Shore Road and Glenwood Road Emergency Repair
Requirements Contract H66302W
Encumbrance No. CHPW20000012
Request to Encumber Funding

This Department is requesting approval of the amount of \$320,000.00 to be encumbered from Capital Project 66302-IDA003 into Requirements Contract H66302W.

The requested encumbrance of funds into Requirements Contract H66302W is necessary for an emergency repair of the existing damaged/collapsed bulkhead, roadway and sidewalk in the vicinity of the intersection of Shore Road and Glenwood Road in Glenwood Landing performed by Pratt Brothers, Inc. The existing infrastructure damage was caused by runoff from heavy rain on September 1-2, 2021, from Hurricane/Tropical Storm Ida. Immediate work included stabilization of existing bulkhead, roadway and sidewalk. Further stabilization work at the bulkhead included installation of gabions and fill material. Restoration work include repairs to the concrete panels, sidewalk, mow strip and fencing. This emergency repair was necessary due to the potential public safety hazard that the collapsed bulkhead, roadway and sidewalk posed. Any remaining funds will be disencumbered at the end of the contract.

If you approve or disapprove of the above request and how we propose to proceed, please signify below and return the memo to this office for appropriate action.


Kenneth G. Arnold
Commissioner

KGA:TMG:ac

c: Thomas M. George, Deputy Commissioner
Christopher Paggi, Chief Civil Engineer
Richard Iadevaio, Jr., Superintendent of Highway and Drainage Construction
Anthony Marino, Deputy Superintendent of Buildings
John O'Dougherty, Project Manager IV
Gijo Varghese, Civil Engineer III
Devin Velasquez, Civil Engineer II

APPROVED:


Edward W. Powers 02/28/2022
Deputy County Executive Date

DISAPPROVED:

Edward W. Powers Date
Deputy County Executive



REQUEST TO INITIATE

RTI Number 21-0239

REQUEST FOR QUALIFICATIONS/REQUEST FOR PROPOSAL/REQUEST FOR BID CONTRACT

PART I: Approval by the Deputy County Executive for Operations must be obtained prior to ANY RFQ/RFP/RFBC

☐ RFQ ☐ RFP ☐ RFBC ☐ In-House or Requirements Work Order

Requirements H66302W - Pratt

Encumbrance CHPW20000012

Project Title: Christopher Morley Park Large Game Court Area Improvements, Village of North Hills

Department: Public Works Project Manager: John O'Dougherty Date: 09-22-2021

Service Requested: Improvements to the large game court area including milling and paving of four (4) basketball courts and two (2) volleyball courts which will be converted to two (2) pickleball courts and applying a color coating to the court surfaces. The work will also include new painted lines (all courts including two handball courts) to define game location, and the installation of pickleball nets and posts and replacement of basketball backboards, rims, nets and posts. Also, the existing miniature golf course will be removed, and a new pavilion area will be constructed with installation of a gazebo and stamped and colored concrete. Additional work includes installation of new concrete curb, fence renovation/replacement and installation of new plantings, benches and trash receptacles.

Justification: To improve the condition of the existing court's playing surfaces as well as site improvements to whole court area.

Requested by: Civil/Site Construction Management Unit

Department/Agency/Office

Note:

Recommend adding to

Project Cost for this Phase/Contract: (Plan/Design/Construction/CM/Equipment) \$1,000,000.00

Existing Line 1

Circle appropriate phase

Funding Source 41869-Q20

Total Project Cost: \$1,150,000.00

Date Start Work: ASAP

Duration: 60 days

Includes, design, construction and CM

Phase being requested

Phase being requested

Capital Funding Approval: YES ☐ NO ☐

Roseann Delleva

09/24/21

SIGNATURE

DATE

Funding Allocation (Capital Project):

See Attached Sheet if multiyear ☐

NIFS Entered:

SIGNATURE

DATE

AIM Entered:

SIGNATURE

DATE

Funding Code: 41869- 093

use this on all encumbrances

Timesheet Code: 21-0239

use this on timesheets

State Environmental Quality Review Act (SEQRA):

Type II Action ☒ or, Environmental Assessment Form Required ☐

Supplemental Environmental Documentation

Department Head Approval:

YES ☒ NO ☐

SIGNATURE

DCE/Ops Approval:

YES ☒ NO ☐

SIGNATURE 09/27/2021

PART II: To be submitted to Chief Deputy County Executive after Qualifications/Proposals/Contracts are received from Responding vendors.

Vendor	Quote	Comment	See Attached Sheet <input type="checkbox"/>
1. _____	_____	_____	
2. _____	_____	_____	
3. _____	_____	_____	
4. _____	_____	_____	

DCE/Ops Approval:

YES

NO

Signature _____

Version January 2014

REQUEST TO INITIATE

RTI Number 21-0275

REQUEST FOR QUALIFICATIONS/REQUEST FOR PROPOSAL/REQUEST FOR BID CONTRACT

PART I: Approval by the Deputy County Executive for Operations must be obtained prior to ANY RFQ/RFP/RFBC

☐ RFQ ☐ RFP ☐ RFBC ☐ In-House or Requirements Work Order

Requirements H66302W - Pratt

Encumbrance: CHPW20000012

Project Title: Shore Road and Glenwood Road, Glenwood Landing - Emergency RepairDepartment: Public Works Project Manager: John O'Dougherty Date: 10-29-2021

Service Requested: Emergency repair of the existing damaged/collapsed bulkhead, roadway and sidewalk in the vicinity of the intersection of Shore Rd. and Glenwood Rd. due to runoff from heavy rain on 9/1-9/2/21 from Hurricane/ T.S. Ida. Immediate work included stabilization of existing bulkhead, roadway and sidewalk. Further stabilization work at the bulkhead included installation of gabions and fill material. Restoration work included repairs to the concrete panels, sidewalk, mow strip and fencing.

Justification: This emergency repair was necessary due to the potential public safety hazard that the collapsed bulkhead, roadway and sidewalk posed.

Requested by: Civil/Site Construction Management Unit

Department/Agency/Office

Note:

Project Cost for this Phase/Contract: (Plan/Design/Construction/CM/Equipment) \$320,000.00

Circle appropriate phase

Recommend using

Existing Line 5

Funding Source: 66302-Q20Total Project Cost: \$368,000.00Includes, design, construction and CMDate Start Work: 09-08-21 due to emergency

Phase being requested

Duration: 30 days

Phase being requested

Capital Funding Approval: YES ☐ NO ☐Rossann Dallava11/12/21

SIGNATURE

DATE

Funding Allocation (Capital Project): _____

See Attached Sheet if multiyear ☐

NIFS Entered: _____

SIGNATURE

DATE

AIM Entered: _____

SIGNATURE

DATE

Funding Code: 66302-ida003

use this on all encumbrances

Timesheet Code: _____

use this on timesheets

State Environmental Quality Review Act (SEQRA):

Type II Action ☐ or, Environmental Assessment Form Required ☐

Supplemental Environmental Documentation _____

Department Head Approval:

YES ☐ NO ☐

DCE/Ops Approval:

YES ☐ NO ☐

[Signature]
SIGNATURE

[Signature]
SIGNATURE

PART II: To be submitted to Chief Deputy County Executive after Qualifications/Proposals/Contracts are received from Responding vendors.

Vendor	Quote	Comment	See Attached Sheet <input type="checkbox"/>
1. _____	_____	_____	
2. _____	_____	_____	
3. _____	_____	_____	
4. _____	_____	_____	

DCE/Ops Approval:

YES NO

Signature _____

Version January 2014

U.S. DEPARTMENT OF JUSTICE
OFFICE OF JUSTICE PROGRAMS
OFFICE OF THE COMPTROLLER

**Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions
(Sub-Recipient)**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 28 CFR Part 67, Section 67.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Joseph M. Williams, Jr., P.E.

Name and Title of Authorized Representative

m/d/yy

Signature

10/19/2021

Date

Pratt Brothers, Inc.

Name of Organization

45 South Fourth Street, Bay Shore, NY 11706

Address of Organization

**B-24-21**

Certified: 06-OCT-21 -- SALFANO

NIFS ID:CLPW21000015 Department: Public Works**Capital: X**

SERVICE: 2020 General Req H66302W-Amendment No. 1-B24-21

Contract ID #:CHPW20000012 NIFS Entry Date: 25-MAY-21 Term: from to

Amendment
Time Extension:
Addl. Funds:X
Blanket Resolution:
RES#

1) Mandated Program:	N
2) Comptroller Approval Form Attached:	Y
3) CSEA Agmt. § 32 Compliance Attached:	N
4) Material Adverse Information Identified? (if yes, attach memo):	N
5) Insurance Required	Y

Vendor Info:	
Name: Pratt Brothers, Inc.	Vendor ID#: 16-1620294
Address: 45 South Fourth Street Bay Shore, NY 11706-1210	Contact Person: James Pratt
	Phone: 631-667-6800

Department:
Contact Name: John O'Dougherty
Address: NCDPW 1194 Prospect Avenue Westbury, NY 11590 Phone: 516-571-6818

Routing Slip

Department	NIFS Entry: X	26-MAY-21 -- LDIONISIO
Department	NIFS Approval: X	26-MAY-21 -- RD'ALLEVA
DPW	Capital Fund Approved: X	26-MAY-21 -- RDALLEVA
OMB	NIFA Approval: X	26-MAY-21 -- CNOLAN
OMB	NIFS Approval: X	26-MAY-21 -- NGUMIENIAK
County Atty.	Insurance Verification: X	28-MAY-21 -- NSARANDIS
County Atty.	Approval to Form: X	27-MAY-21 -- DGRIPPO
CPO	Approval: X	28-MAY-21 -- KOHAGEN

DCEC	Approval: X	28-MAY-21 -- JCHIARA
Dep. CE	Approval: X	28-MAY-21 -- BSCHNEIDER
Leg. Affairs	Approval/Review: X	03-JUN-21 -- JSCHANTZ
Legislature	Approval: X	14-JUN-21 -- CALBERT
Comptroller	Deputy: X	23-JUL-21 -- JSCHOEN
NIFA	NIFA Approval: X	18-AUG-21 -- MWORSHAM

Contract Summary

Purpose: This is an amendment to an agreement with Pratt Brothers for additional funding for work including, but not limited to, repair of damaged or deteriorated pavement, curbs and sidewalks, drainage systems, bridges, structural systems (seawalls, retaining walls, etc.), fencing, and park facilities.
Method of Procurement: The contractor was selected through an open competitive bidding process with formal sealed bids.
Procurement History: The bid was advertised in Newsday (1/15/2020),eProcure (1/15/2020-2/18/2020) and NYSCR (1/15/2020-2/18/2020). Two bids were received, Pratt Brothers was awarded the contract as the lowest responsible bidder.
Description of General Provisions: This is an amendment for additional funds for a general requirements contract for civil/site reconstruction projects throughout the County, including but not limited to repair of damaged or deteriorated pavement, curbs and sidewalks, drainage systems, bridges, structural systems, fencing and park facilities.
Impact on Funding / Price Analysis: This amendment will increase the maximum amount by \$4,000,000. The new maximum amount is \$20,000,000. There is an initial encumbrance of \$1,500,000. The terms remains the same - 3 years from execution (8/24/20) with a 1 year option to renew. Capital projects - #41869 and #66302
Change in Contract from Prior Procurement: None
Recommendation: (approve as submitted) Approve as submitted.

Advisement Information

BUDGET CODES		FUNDING SOURCE	AMOUNT	LINE	INDEX/OBJECT CODE	AMOUNT
Fund:	CAP	Revenue		1	PWCAPCAP/41869-Q20/00004	\$ 500,000.00
Control:	50	Contract:		5	PWCAPCAP/66302-Q20/00004	\$ 1,000,000.00
Resp:	CAP	County	\$ 0.00			\$ 0.00
Object:	00004	Federal	\$ 0.00			\$ 0.00
Transaction:	107	State	\$ 0.00			\$ 0.00
Project #:	41869, 66302	Capital	\$ 1,500,000.00			\$ 0.00
Detail:	Q20	Other	\$ 0.00			\$ 0.00
		TOTAL	\$ 1,500,000.00		TOTAL	\$ 1,500,000.00
RENEWAL						
% Increase						
% Decrease						

**B-24-21**

Certified:

NIFS ID:CLPW21000015 Department: Public Works**Capital: X**

SERVICE: 2020 General Req H66302W-Amendment No. 1-B24-21

Contract ID #:CHPW20000012 NIFS Entry Date: 25-MAY-21 Term: from to

Amendment
Time Extension:
Addl. Funds:X
Blanket Resolution:
RES#

1) Mandated Program:	N
2) Comptroller Approval Form Attached:	Y
3) CSEA Agmt. § 32 Compliance Attached:	N
4) Material Adverse Information Identified? (if yes, attach memo):	N
5) Insurance Required	Y

Vendor Info:	
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Address: 45 South Fourth Street Bay Shore, NY 11706-1210	Contact Person: James Pratt
	Phone: 631-667-6800

Department:
Contact Name: John O'Dougherty
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Recommendation: (approve as submitted) Approve as submitted.

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Project #:	41869, 66302	State	\$ 0.00			\$ 0.00
Detail:	Q20	Capital	\$ 1,500,000.00			\$ 0.00
		Other	\$ 0.00			\$ 0.00
		TOTAL	\$ 1,500,000.00		TOTAL	\$ 1,500,000.00

RENEWAL	
% Increase	
% Decrease	

B24-21

RULES RESOLUTION NO -2021

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE A CONTRACT AMENDMENT BETWEEN THE COUNTY OF NASSAU, ACTING ON BEHALF OF THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS AND PRATT BROTHERS, INC.

WHEREAS, pursuant to County contract number H66302W, for 2020 GENERAL REQUIREMENTS CONTRACT FOR VARIOUS CIVIL/SITE CONSTRUCTION, HIGHWAYS, DRAINAGE, BRIDGES, SITE, PARKING LOTS AND PARKS RELATED SPECIALIZED ITEMS, NASSAU COUNTY, NEW YORK (“Contract”) between the County and

PRATT BROTHERS, INC., (“Contractor”), the Contractor performed services as more particularly described in the contract documents a copy of which is on file with the Clerk of the Legislature; and

WHEREAS, the County and the Contractor desire to increase the maximum amount of the Original Contract by four million dollars (\$4,000,000), such that the total Maximum Amount the County shall pay the Contractor shall not exceed twenty million dollars (\$20,000,000), during the four (4) years (the “Amended Maximum Amount”) for Services under the Amended Agreement.

and

WHEREAS the funding for this Contract amendment is from capital funds approved by the Nassau County Legislature; now, therefore, be it

RESOLVED, that the Rules Committee of the Nassau County Legislature based upon the representations of the Department and the recommendation of the Commissioner of the Department, authorizes the County Executive to award and execute the said contract amendment with the vendor.

AMENDMENT NUMBER ONE

This AMENDMENT (together with any appendices or exhibits attached hereto, this "Amendment"), dated as of the date this amendment is executed by Nassau County (the "Effective Date") between (i) Nassau County, a municipal corporation having its principal office at 1550 Franklin Avenue, Mineola, New York 11501 (the "County"), acting on behalf of the Department of Public Works having its principal office at 1194 Prospect Avenue, Westbury, New York 11590 and (ii) Pratt Brothers, Inc., 45 South Fourth Street, Bay Shore, New York 11706 (the "Contractor").

W I T N E S S E T H:

WHEREAS, pursuant to County Contract Number H66302W between the County and the Firm, executed on behalf of the County on August 24, 2020 (the "Original Agreement"), the Firm performed "on-call" construction services consisting of the furnishing of labor, materials, tools, equipment and incidentals as specified for the rehabilitation and/or installation, modification and/or removal of pavement, drainage systems, bridges, parking lots, and other related specialized work and/or emergency work at various locations to be selected in Nassau County, which services are more fully described in the Original Agreement (the services contemplated by the Original Agreement, the "Services");

WHEREAS, the term of the Original Agreement was for three (3) years, with the Department's option to extend the term of the Contract for an additional one (1) year period for a total Contract term of four (4) years (the "Term");

WHEREAS, the maximum amount that the County agreed to reimburse the Firm for Services under the Original Agreement, including during the period of any extension options that may be exercised by the Commissioner of the Department, as full compensation for the Services, was sixteen million dollars (\$16,000,000) (the "Maximum Amount"), at four million dollars (\$4,000,000) per year;

WHEREAS, the Contractor has provided Services in a professional and responsible manner;

WHEREAS, the County's need for the Contractor's Services has substantially increased in 2021; and

WHEREAS, the County and the Contractor desire to modify the Maximum Amount of the Agreement to, commencing July 1, 2021, increase the amount of funds available to compensate the Contractor for the providing Services by an additional four million (\$4,000,000.00) as provided herein ("Amendment Number One"); and

NOW, THEREFORE, in consideration of the premises and mutual covenants contained in this Amendment, the parties agree as follows:

1. Maximum Amount. The Maximum Amount shall be increased by four million dollars (\$4,000,000). This additional funding to be available for Services commencing on July 1, 2021 and for the balance of the Agreement Term. Accordingly, the total Maximum Amount the County shall pay the Contractor shall not exceed twenty million dollars (\$20,000,000), during the four (4) years (the "Amended Maximum Amount") for Services under the Amended Agreement.

2. Full Force and Effect. All the terms and conditions of the Original Agreement not expressly amended by this Amendment Number One shall remain in full force and effect and govern the relationship of the parties for the term of the Amended Agreement or as otherwise provided the Original Agreement.

3. Compliance with Law.

(a) Prohibition of Gifts. In accordance with County Executive Order 2-2018, the Contractor shall not offer, give, or agree to give anything of value to any County employee, agent, consultant, construction manager, or other person or firm representing the County (a "County Representative"), including members of a County Representative's immediate family, in connection with the performance by such County Representative of duties involving transactions with the Contractor on behalf of the County, whether such duties are related to this Agreement or any other County contract or matter. As used herein, "anything of value" shall include, but not be limited to, meals, holiday gifts, holiday baskets, gift cards, tickets to golf outings, tickets to sporting events, currency of any kind, or any other gifts, gratuities, favorable opportunities or preferences. For purposes of this subsection, an immediate family member shall include a spouse, child, parent, or sibling. The Contractor shall include the provisions of this subsection in each subcontract entered into under this Agreement.

(b) Disclosure of Conflicts of Interest. In accordance with County Executive Order 2-2018, the Contractor has disclosed as part of its response to the County's Business History Form, or other disclosure form(s), any and all instances where the Contractor employs any spouse, child, or parent of a County employee of the agency or department that contracted or procured the goods and/or services described under this Agreement. The Contractor shall have a continuing obligation, as circumstances arise, to update this disclosure throughout the term of this Agreement.

(c) Vendor Code of Ethics. By executing this Agreement, the Contractor hereby certifies and covenants that:

- (i) The Contractor has been provided a copy of the Nassau County Vendor Code of Ethics issued on June 5, 2019, as may be amended from time to time (the "Vendor Code of Ethics"), and will comply with all of its provisions;

- (ii) All of the Contractor's Participating Employees, as such term is defined in the Vendor Code of Ethics (the "Participating Employees"), have been provided a copy of the Vendor Code of Ethics prior to their participation in the underlying procurement;
- (iii) All Participating Employees have completed the acknowledgment required by the Vendor Code of Ethics;
- (iv) The Contractor will retain all of the signed Participating Employee acknowledgements for the period it is required to retain other records pertinent to performance under this Agreement;
- (v) The Contractor will continue to distribute the Vendor Code of Ethics, obtain signed Participating Employee acknowledgments as new Participating Employees are added or changed during the term of this Agreement, and retain such signed acknowledgments for the period the Contractor is required to retain other records pertinent to performance under this Agreement; and

The Contractor has obtained the certifications required by the Vendor Code of Ethics from any subcontractors or other lower tier participants who have participated in procurements for work performed under this Agreement.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

Pratt Brothers, Inc.

By: 

Name: Edward McCoy Jr.

Title: Vice President

Date: 5/24/2021

County of Nassau

By: 

Name: BRIAN J. SCHUETZEN

Title: Deputy County Executive

Date: AUGUST 31, 2021

PLEASE EXECUTE IN BLUE INK


STATE OF NEW YORK)

)ss.:

COUNTY OF NASSAU)

On the 24 day of May in the year 2021 before me personally came Edward P. McCoy Jr. to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Suffolk; that he or she is the Vice President of Pratt Brothers, Inc., the corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto by authority of the board of directors of said corporation.

NOTARY PUBLIC


CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

STATE OF NEW YORK)

)ss.:

COUNTY OF NASSAU)

On the 31 day of Aug in the year 2021 before me personally came Brian Schneider to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Nassau; that he or she is County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.


NOTARY PUBLIC

LAURA J VIGLIOTTI
NOTARY PUBLIC STATE OF NEW YORK
LIC. #01V16190782
COMM. EXP. 08/04/2024
COMMISSIONED IN NASS COUNTY

STATE OF NEW YORK)

)ss.:

COUNTY OF NASSAU)

On the ____ day of _____ in the year 2018 before me personally came _____ to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of _____; that he or she is County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.

NOTARY PUBLIC

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo

TO: Office of the County Executive
Att: Brian J. Schneider, Deputy County Executive

FROM: Department of Public Works

DATE: May 21, 2021

SUBJECT: Approval of Contract Amendment No. 1
General Requirements Contract H66302W
Encumbrance No. CHPW20000012

As the original encumbrance for the current year is programmed/expended and there may be no available funding for work including but not limited to repair of damaged or deteriorated pavement, curb and sidewalk, drainage systems, bridges, structural systems (seawalls, retaining walls, etc.), fencing, park facilities and/or emergency related works. The Department is requesting approval of the following Amendment that is necessary for Pratt Brothers, Inc. to perform additional "on-call" construction services.

GENERAL REQUIREMENTS CONTRACT No. H66302W
ADDITIONAL FUNDING: Increase Maximum Amount by \$4,000,000.00

The work to be performed under this contract Amendment will consist of the furnishing of labor, materials, tools, equipment and incidentals as specified for the rehabilitation and/or installation, modification and/or removal of pavement, drainage systems, bridges, parking lots, and other related specialized work and/or emergency work at various locations to be selected in Nassau County. Any remaining balance from the current year will carry over to the remainder of the contract. Any remaining funds will be disencumbered at the end of the contract.

If you approve or disapprove of the above request and how we propose to proceed, please signify below and return the memo to this office for appropriate action.



Kenneth G. Arnold
Commissioner of Public Works

KGA:RM:pl

c: Rakhal Maitra, Deputy Commissioner of Public Works
Roseann D'Alleva, Deputy Commissioner of Public Works
Loretta Dionisio, Assistant to Deputy Commissioner
Richard Iadevaio, Jr., Superintendent of Highway and Drainage Construction
Anthony Marino, Deputy Superintendent of Buildings
John O'Dougherty, Project Manager III
Saji Varughese, Project Manager II

APPROVED:



Brian J. Schneider
Deputy County Executive

5/24/2021
Date

DISAPPROVED:

Brian J. Schneider
Deputy County Executive

Date



REQUEST FOR QUALIFICATIONS/REQUEST FOR PROPOSAL/REQUEST FOR BID CONTRACT**PART I: Approval by the Deputy County Executive for Operations must be obtained prior to ANY RFQ/RFP/RFBC**

☐ RFQ ☐ RFP ☐ RFBC ☐ In-House or Requirements Work Order
Requirements H66302W - Pratt
Encumbrance No. CHPW20000012

Project Title: General Requirements Contract H66302W – Amendment No. 1 – Add funding to existing encumbranceDepartment: Public Works Project Manager: John O'Dougherty Date: 05-24-2021Service Requested: As part of Amendment No.1 \$4,000,000 CAP increase, additional funding required for the rehabilitation and/or installation, modification and/or removal of pavement, drainage systems, bridges, parking lots, and other related specialized work and/or emergency work at various locations in Nassau County.Justification: The requested funding encumbrance is needed as the original encumbrance for the current year is programmed/expended and there may no available funding for work to repair damaged or deteriorated various County facilities. Add: \$1,000,000 to existing Line 1 (41869-Q20), \$1,000,000 to existing Line 5 (66302-Q20)Project Cost for this Phase/Contract: (Plan/**Design/Construction**/CM/Equipment) ~~\$2,000,000.00~~ 1,500,000
Circle appropriate phaseTotal Project Cost: \$2,300,000.00
Includes, design, **construction and CM**Date Start Work: ASAP
Phase being requestedDuration: 36 months (from 08-24-2020)
Phase being requestedCapital Funding Approval: YES ☐ NO ☐ Roseann DALLEVA 05/24/21
SIGNATURE DATEFunding Allocation (Capital Project): _____
See Attached Sheet if multiyear ☐NIFS Entered: _____ DATE _____ AIM Entered: _____ DATE _____
SIGNATURE SIGNATUREFunding Code: 41869-Q20 = \$1.0m ^{\$500,000k} 66302 q20 = \$1.0m Timesheet Code: _____
use this on all encumbrances use this on timesheets

State Environmental Quality Review Act (SEQRA):

Type II Action ☒ or, Environmental Assessment Form Required ☐
Supplemental Environmental Documentation _____Department Head Approval: YES ☒ NO ☐DCE/Ops Approval: YES ☒ NO ☐

[Signature]
 SIGNATURE
[Signature] 05/25/2021
 SIGNATURE

PART II: To be submitted to Chief Deputy County Executive after Qualifications/Proposals/Contracts are received from responding vendors.

Vendor	Quote	Comment	See Attached Sheet <input type="checkbox"/>
1. _____	_____	_____	
2. _____	_____	_____	
3. _____	_____	_____	
4. _____	_____	_____	

DCE/Ops Approval: YES NO Signature _____
Version January 2014

B15-20

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
WESTBURY, NEW YORK



2020 GENERAL REQUIREMENTS
CONTRACT FOR
VARIOUS CIVIL/SITE RECONSTRUCTION,
HIGHWAYS, DRAINAGE, BRIDGES,
SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK

CONTRACT NO. H66302W

Kenneth G. Arnold, P.E.
Commissioner

Laura Curran
County Executive

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NO TEXT ON THIS PAGE

NOTICE TO BIDDERS

Sealed Proposals, invited by the County of Nassau, will be received by the County Executive of Nassau County, in the office of the Clerk of the Nassau County Legislature, Room 117, in the Theodore Roosevelt Executive and Legislative Building, 1550 Franklin Avenue, Mineola, New York, on **Tuesday, February 18th, 2020 until 10:30 AM**, at which time the Proposals where accompanied with and presented separate from the required Bid Security will be publicly opened and read aloud, in the Meeting Room of the Nassau County Legislature, and the contract awarded as soon thereafter as practicable for:

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

2020 GENERAL REQUIREMENTS CONTRACT FOR VARIOUS CIVIL/SITE RECONSTRUCTION, HIGHWAYS, DRAINAGE, BRIDGES, SITE, PARKING LOT AND RELATED SPECIALIZED ITEMS NASSAU COUNTY, NEW YORK

CONTRACT NO. H66302W

The work covered by this contract involves furnishing labor, materials, tools, equipment and incidentals as specified for the rehabilitation and /or installation, modification and /or removal of pavement, drainage systems, bridges, parking lots, and other related specialized work and /or emergency work at various locations to be selected in Nassau County during a thirty-six (36) month period.

The Contractor's attention is drawn to the Special Conditions.

No interpretation of the meaning of the Drawings, Specifications or other Contract Documents will be made to any Bidder orally. Prospective bidders must request in writing such interpretation from the Commissioner and such interpretation will be given in writing in the form of written addenda, to all prospective bidders, in accordance with the Instructions to Bidders, Item G.

This Contract will be subject to Nassau County Local Laws No. 14-2002, "Participation by Minority Group Members and Women in Nassau County Contracts," which requires submission of a Utilization plan prior to the award of a County contract, No. 2-2016, "Participation of Service-Disabled Veterans in County Contracts," and No. 9-2002, as amended by No. 3-2015, which require that firms entering into contracts with Nassau County must participate in registered and approved apprenticeship training programs unless such requirement are supplanted by requirements specified in the bidding instructions. At the time of bid submission, the Contractor shall submit, as part of its bid, documents in compliance with Title 51 of the Nassau County Miscellaneous Laws demonstrating participation in approved apprenticeship training programs that are appropriate for the type and scope of work to be performed pursuant to the Contract. Such apprenticeship training programs appropriate for the scope of this Contract shall include, but are not limited to the following: Laborers, Electricians, Carpenter, Operating Engineer or any other trade appropriate for the type of work proposed. The apprenticeship training programs shall be registered with, and approved by, the New York State Commissioner of Labor in accordance with Article 23 of the New York State Labor Law. Note that if the Contractor does not comply with these requirements, the Commissioner may declare the Contractor's bid proposal non-responsive and award the Contract to the next lowest responsible Bidder.

SUBCONTRACTOR LISTS - In accordance with GML § 101, for projects (1) to which a project labor agreement applies, (Labor Law Section 222) and, additionally, (2) on a public work contract for which separate specifications have not been prepared, each Bidder shall submit with its bid a separate sealed list on the forms provided with the proposal forms that names each subcontractor (for the following enumerated work, if applicable) that the Bidder intends to use to perform work on the contract, and the agreed-upon amount to be paid to each, for: (1) plumbing and gas fitting, (2) steam heating, hot water heating, ventilating and air conditioning apparatus and (3) electric wiring and standard illuminating fixtures. Notwithstanding the forgoing, all subcontractors must be approved by the Commissioner in writing prior to such subcontractor's performance of any work.

Instructions to Bidders, Form of Bid Bond, Proposal, Form of Agreement, Specifications and the Plans, herein called the "Contract Documents," may be examined at the Permit Office of the Department of Public Works, first floor, 1194 Prospect Avenue, Westbury, Nassau County, New York, 11590-2723, Phone No. (516) 571-6840, from 9:00 AM on January 17th, 2020 until 3:45 PM on February 14th, 2020 (closed from 12:00 Noon to 1:00 P.M., and all day on January 20th and February 12th, 2020). Copies of the Contract Documents will be available at the time and place indicated, for review prior to purchase. Furthermore, for review only, a downloadable set of the technical specifications can be found on the County solicitation board at no charge for all registered users at:

<https://apps.nassaucountyny.gov/eProc/index.php>. The downloadable set only provides technical specifications and does not contain all the forms necessary for bidding.

In order to ensure that you are submitting bids based on the plans and specifications provided by the Department, please be advised that the Department will only accept bids from bidders who are on the "List of Bidders" who purchased the plans and specifications from the Department.

Questions must be submitted no later than 4:45 P.M. on February 5th, 2020. All questions should be directed to Jose Viteri at jviteri@nassaucountyny.gov.

A non-refundable fee of \$300.00 by check or money order, payable to the Nassau County Treasurer, will be required for each set of Contract Documents requested. Prospective bidders requesting Contract Documents by mail must remit an additional, non-refundable, fee of \$30.00 per set to cover handling and first-class mailing. **ONLY BID PROPOSALS PURCHASED IN THIS MANNER WILL BE ACCEPTED/CONSIDERED.**

Vendors doing business with Nassau County, including those responding to this solicitation, must register with the County. Vendors may register at <https://www.nassaucountyny.gov/3153/e-Services> by clicking on the "Vendor Portal Registration". In addition, any vendor submitting an offer for this solicitation should submit the required vendor disclosures in the Vendor Portal as well.

Security for Bid as set forth herein must be presented with the Bid

"FAILURE TO PROVIDE THE REQUIRED SECURITY WILL RENDER THE BIDDER NON-RESPONSIVE AND THE BID WILL NOT BE ACCEPTED, OPENED OR READ ALOUD. IN ADDITION, IF THE BID REQUIRES SUBMISSION OF SUBCONTRACTOR INFORMATION, FAILURE TO PROVIDE THE REQUIRED INFORMATION AT THE TIME OF BID OPENING MAY RENDER THE BIDDER NON-RESPONSIVE".

Dated at Mineola, LI
January 15, 2020

Nassau County DPW

By Order of Laura Curran, County Executive
By: Michael C. Pulitzer, Clerk of the Legislature

4 of 660

Contract No. H66302W

INSTRUCTIONS TO BIDDERS

A. RECEIPT AND OPENING OF BIDS

The County of Nassau, State of New York, invites bids on the forms attached hereto, all blanks of which must be properly completed. Bids together with Bid Security will be received by the Clerk of the Legislature of Nassau County, Room 117, in the Theodore Roosevelt Executive and Legislative Building, 1550 Franklin Avenue, Mineola, New York until 10:30 A.M., on the date noted in the Notice to Bidders, and Bids accompanied with Bid Security will be opened and read aloud in the Legislative Chambers Theodore Roosevelt Executive and Legislative Building.

B. BIDDER'S OBLIGATIONS

1. Bidders shall be responsible at the time of bidding for completing all certifications required by these Contract Documents. Failure to comply with this requirement may cause the bidder to be considered non-responsive and therefore not eligible for award.
2. Bidders are cautioned not to submit proposals without having carefully examined the entire site of the proposed work and the adjacent premises, and the various means of approach to the site and shall make all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing, and operating the necessary plant, and for delivering and handling the material at the site, and to inform themselves thoroughly as to all the difficulties involved in the completion of all work under this contract in accordance with its requirements.
3. Bidders shall examine the Drawings and Specifications and exercise their own judgment as to the nature and amount of the whole of the work to be done and, for the bid prices, shall assume all risk of variance by whomsoever made in any computation or statement of amounts or quantities necessary to fully complete the work in strict compliance with the Contract Documents.
4. The Contractor shall assume all risks and responsibility and shall complete the work in whatever material and under whatever conditions he may encounter or create, without extra cost to the County.
5. The County may have acquired for its own use certain information relating to the probable profiles of the ground,

INSTRUCTIONS TO BIDDERS

conditions below ground and water surfaces to be encountered at the site of the proposed work some of which may be shown on the plans. If such information is shown or given, the County makes no representation or warranty as to its existence or accuracy. The Bidder will be permitted to see and examine any information in the possession of the County for whatever value he considers it worth. The Bidder shall satisfy himself as to the nature of all subsurface conditions, by making any and all investigations he may deem necessary.

6. No plea of ignorance or misunderstanding of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of a Contractor to fulfill in every detail all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation, or for an extension of time.

7. Bidders are warned that the estimates of the quantities of the various items of work and materials as set forth in the proposal form are approximate only and are given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and, if so, no action for damages or for loss of profits shall accrue to the Contractor by reason thereof.

- 8 Bidders are cautioned that, where the work performed under this Contract involves a trade or occupation licensed in the County of Nassau by the Towns of Hempstead, Oyster Bay or North Hempstead or by the Cities of Glen Cove or Long Beach, the Contractor shall be required to have such a license.

C. DEFINITIONS

The Bidder's attention is directed to that Article of the Agreement and/or General Conditions which defines various words and expressions used therein.

D. FORM, PREPARATION AND PRESENTATION OF PROPOSALS

1. For particulars as to the quantity and quality of the supplies, materials, and equipment to be furnished and the

INSTRUCTIONS TO BIDDERS

nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents which may be obtained or examined at the Permit Office of the Department of Public Works.

2. Each bid shall be submitted upon the prescribed proposal form. All blank spaces for bid prices must be filled in, in ink, in both words and figures, with the unit or total sum, or both, for which the proposal is made. If proposals contain any omission, erasures, alterations, additions or items not called for in the itemized proposal or contain irregularities of any kind, such may constitute cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the proposal, the unit price, as expressed in written words, shall govern. Each proposal shall specify the correct total sum of the bid. This total sum shall be the correct sum of all items indicated on the proposal form. The correct total sum shall be used to determine the lowest bidder. In the case of a proposal containing unit price items, the correct total sum shall be arrived at by the correct computation, to the hundredth of a dollar (\$0.00), of all items contained in the proposal at the unit prices bid, and correctly adding the amount bid for each item. If a bidder incorrectly computes the total sum, the Commissioner will, in all cases, cause the proposal to be corrected, up or down, in accordance with the precedence and procedure specified above, and the corrected total sum will be used to determine the ranking of the bidder. IN NO CASE IS THE AGREEMENT TO BE FILLED OUT OR SIGNED BY THE BIDDER.

E. SUBMISSION OF BIDS

1. The bid must be signed and verified, and be presented on the prescribed form in a sealed envelope on or before the time at the place mentioned in the Notice to Bidders, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. (If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed as specified in the Notice to Bidders, preferably by certified mail). Bid Security shall also be presented with the BID and shall be **OF THE BID BOND FORM PROVIDED** and presented in a sealed envelope, marked "Bid Security," and submitted separate from the BID. Said sealed envelope shall bear the contract number of the BID it is presented with and then **"attached to the OUTSIDE of the envelope containing the BID."**

INSTRUCTIONS TO BIDDERS

2. SUBCONTRACTOR LISTS - In accordance with GML § 101, for projects (1) to which a project labor agreement applies, (Labor Law Section 222) and, additionally, (2) on a public work contract, for which separate specifications have **NOT** been prepared, each Bidder shall submit with its bid a separate sealed list on the forms provided with the proposal forms that names each subcontractor (for the following enumerated work, if applicable) that the Bidder intends to use to perform work on the contract, and the agreed-upon amount to be paid to each, for: (1) plumbing and gas fitting, (2) steam heating, hot water heating, ventilating and air conditioning apparatus and (3) electric wiring and standard illuminating fixtures. Notwithstanding the foregoing, all subcontractors must be approved by the Commissioner in writing prior to such subcontractor's performance of any work.

F. BIDDING PROTEST PROCEDURE

1. If a Bid Protest is contemplated, the County of Nassau must be notified immediately, in writing. The notification must contain facts in support of the protest, and directed to the Office of the Clerk of the Nassau County Legislature and copied to the Department of Public Works.

Michael C. Pulitzer
Clerk of the Legislature
1550 Franklin Avenue
Mineola, NY 11501

Kenneth G. Arnold, P.E.
Office of the Commissioner
1194 Prospect Avenue
Westbury, NY 11590

2. A written decision relative to the Bid Protest will be sent, to the person protesting, prior to accepting bids or awarding of contract. If the decision is not acceptable, or you feel that further action is warranted, then you may pursue available legal remedies.

G. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Drawings, Specifications or other Contract Documents will be made to any Bidder orally. Prospective bidders must request in writing such interpretation from the Commissioner and such interpretation will be given in writing. To be given consideration, such request must be received at least seven working days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by certified mail, with return receipt

INSTRUCTIONS TO BIDDERS

requested, to all prospective bidders (at the respective address furnished for such purposes) not later than five (5) working days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Document.

H. BID SECURITY

1. The proposal **must** be accompanied either by a **certified check** of a Bank or Trust Company with its principal place of business in New York State in an amount of **\$400,000.00, made payable to the County of Nassau as assurance that the bid is made in good faith; or a BID BOND in an amount of four-hundred thousand dollars (\$400,000.00). BIDDER MUST USE THE BID BOND FORM PROVIDED HEREIN.** The American Institute of Architects or similar substitute forms **OR FORMS IDENTICAL TO THAT PROVIDED HEREIN** will **NOT** be accepted (see Form of Bid Bond immediately following the Instruction to Bidders). **The BID BOND must be affixed to the OUTSIDE of the envelope containing the BID as indicated earlier in the INSTRUCTIONS TO BIDDERS. FAILURE TO PROVIDE SUCH BID BOND OR CERTIFIED CHECK WITH THE BID WILL RENDER THE BIDDER NON-RESPONSIVE AND THE BID WILL NOT BE ACCEPTED, OPENED OR READ ALOUD.**
2. If after opening the BID, the Bid Security is found to be less than the required \$400,000.00, the BID will at that point be determined to be non-responsive and the BID will be rejected.
3. All Bonds shall be issued by a Surety Company authorized to do business in the State of New York as evidenced by either the Surety Company's most recent Certificate of Solvency under Section 1111 of the New York Insurance Law, a copy of which shall be attached to the Bond **OR** issued by a Surety Company listed in the most recent copy of the Department of Treasury's Listing of Approved Sureties (Department Circular 570). The amount of such Bond shall not exceed the limits set by the aforesaid Certificate of Solvency or Treasury Department Circular.
4. Within three days after the opening of bids, the bid security of all but the three lowest bidders will be returned. The bid security of the remaining bidders will be returned within two days after the execution of the Contract.

INSTRUCTIONS TO BIDDERS

5. If the Bidder to whom the Contract is awarded refuses or neglects to execute it, or fails to furnish the required security and insurance, within ten (10) days of the date of the Notice of Award, the amount of his bid security shall be forfeited and shall be retained by the County as liquidated damages. No plea of mistake in a bid shall be available to the Bidder for the recovery of his bid security or as a defense to any action based on the neglect or refusal to execute a contract.

I. QUALIFICATIONS AND RESPONSIBILITY OF BIDDERS

QUALIFICATIONS: A form for qualification of bidders, giving evidence of sufficient facilities, equipment, and experience to insure completion of the work is provided with the proposal and must be properly filled in, sworn to and submitted as part of the proposal although additional information may be sought as provided in the RESPONSIBILITY section below.

RESPONSIBILITY: The COUNTY, in determining the responsibility of the apparent lowest bidder, may require, and the apparent lowest responsible bidder shall provide, such information as the COUNTY deems necessary in order to ascertain the pecuniary and financial responsibility, accountability, operational responsibility, reliability, skill, capacity, ability, judgment, integrity and moral worth of the apparent lowest responsible bidder. In the event that the apparent lowest bidder shall be rejected or fails to furnish the requested information and thereby is disqualified and/or otherwise determined to be not responsible, the next lowest bidder shall become the apparent lowest responsible bidder.

Procurement shall only be conducted with responsible vendors who have the technical and financial competence to perform as well as an exemplary record of integrity. Before selecting a vendor, Nassau County intends to review the federal and state lists of vendors excluded from procurement. Contracts shall not be awarded to debarred, suspended, or ineligible vendors. Accordingly, responses must include a completed NYS Vendor Responsibility Questionnaire and notarized certification, along with verification that a completed NYS Vendor Responsibility Questionnaire has been filed with the NYS Office of the State Comptroller. <http://www.osc.state.ny.us/vendrep/>.

INSTRUCTIONS TO BIDDERS

1. The COUNTY may require the apparent lowest responsible bidder, in addition to other information, to furnish the following items:
 - a. Description of its experience with projects of similar comparative size, complexity, and cost within recent years, together with documentary evidence of such projects; demonstration of Contractor's ability and capacity to perform a substantial portion of the Project with its own forces.
 - b. Description of the bidder's proposed approach to the project; with a breakdown of the major construction activities; the sequence they will be performed; and their durations.
 - c. Documentation from previous projects regarding: timeliness of performance; quality of work; extension requests; labor disputes; litigation and/or arbitration arising from such work, including fines and penalties imposed and payment thereof; liens filed; history of claims for extra work; contract defaults; together with explanations of same.
 - d. Identification and description of any projects within the previous five years that the apparent lowest bidder was determined by a municipality not to be a responsible bidder, the reasons given by such municipality therefore, together with an explanation thereof.
 - e. An adequate demonstration of financial responsibility, which may include, in the COUNTY'S discretion, a Certified Financial Statement prepared by a Certified Public Accountant, to assure that the apparent lowest bidder possesses adequate resource and availability of credit and the means and ability to procure insurance and bonds required for the project.
 - f. Disclosure of any suspensions or revocations of any professional license of any director, officer, owner, or managerial employee of the apparent lowest bidder, to the extent that any work to be performed is within the field of such licensed profession.

INSTRUCTIONS TO BIDDERS

- g. Disclosure of any and all Occupational Safety and Health Act (OSHA) violations within the previous three years, as well as all notices of OSHA violations filed against the apparent lowest bidder in the same three year Period, together with a description and explanation of remediation or other steps taken regarding such violations and notices of violation.
- h. Disclosure of any and all violations within the previous five years pertaining to unlawful intimidation or discrimination against any employee by reason of race, creed, color, disability, sex or natural origin and/or violations of an employee's civil rights or equal employment opportunities.
- i. Certification and list of equipment owned and/or leased by the apparent lowest bidder that will be utilized on the project, together with maintenance records and such assurances regarding safety thereof as the County considers appropriate.
- j. Disclosure of any litigation (including copies of Pleadings) in which the apparent lowest bidder has been named as a Defendant or third party defendant in an action involving a claim for personal injury or wrongful death arising from performance of work related to any project in which it has been engaged within the previous five years.
- k. Disclosure of violations of the Prevailing Wage and Supplement payment Requirements of the Labor Law, and any other Labor Law provisions, including, but not limited to, child labor violations, failure to pay wages, or unemployment insurance tax delinquencies within the past five years.
- l. Disclosure of violations of the Workers' Compensation Law, including, but not limited to the failure to provide proof of Workers' Compensation or Disability coverage and/or any lapses thereof.
- m. Disclosure of any criminal convictions or criminal indictments, involving the apparent lowest bidder, its officers, directors, owners and/or managerial employees, within the past five years.
- n. Disclosure of any violations within the past five years

INSTRUCTIONS TO BIDDERS

or pending charges concerning federal, state, or municipal environmental and/or health laws, codes, rules and/or regulations.

- o. Identify all work to be subcontracted along with its value and when requested by the County identifying the firm(s) to which the work will be Subcontracted. All Subcontractors are subject to the approval of the County. The approval of the Subcontractors by the County, as provided in the general conditions, may be subject to the same evaluation of responsibility.
2. Prior to a final determination that the apparent lowest bidder is not responsible, the County shall notify the party of the same, in writing, relaying the initial determination of non-responsibility. The apparent lowest bidder will have ten (10) calendar days to make an appeal, in writing, to the Commissioner. If such an appeal is made, the Commissioner, per established procedure, will convene a Standing Committee to hear the bidder's appeal. The Committee will render a final decision in the matter. Failure by the bidder to make an appeal within the ten (10) calendar day period will render the initial determination of non-responsibility final.
3. In the event the amount of the lowest bid appears disproportionately low when compared with the estimates undertaken by or on behalf of the COUNTY and/or compared to other bids submitted, the COUNTY reserves the right to inquire further of the apparent lowest bidder to determine whether the bid contains mathematical errors, omissions and/or erroneous assumptions, and whether the apparent lowest bidder has the capability to perform and complete the contract for the bid amount.

NOTWITHSTANDING THE ABOVE, THE COUNTY RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS AS ELSEWHERE PROVIDED HEREIN.

J. SECURITY FOR FAITHFUL PERFORMANCE

The successful bidder shall execute both a Performance Bond and a Labor and Material Payment Bond on forms as hereto attached, (See form of Performance Bond and Form of Labor and Material Payment Bond Immediately following the section entitled "Agreement".) each in the amount of one hundred percent (100%) of the contract price, to remain in effect for the duration of the contract, which includes the

INSTRUCTIONS TO BIDDERS

Maintenance/Guarantee period. Such bonds to be executed by a surety company authorized to do business in the State of New York and acceptable to the County Comptroller; or bonds secured by collateral, or securities approved by the County Comptroller, and approved as to form and manner of execution by the County Attorney. The Attorney-in-fact who sign contract bonds, must file with such bonds a certified copy of the power of attorney to sign these bonds.

All Bonds shall be issued by a Surety Company authorized to do business in the State of New York as evidenced by either the Surety Company's most recent Certificate of Solvency under Section 1111 of the New York Insurance Law, a copy which must be attached to the Bond **OR** issued by a Surety Company listed in the most recent copy of the Department of Treasury's Listing of Approved Sureties (Department Circular 570). The amount of said Bond shall not exceed the limits set by the aforesaid Certificate of Solvency or Treasury Department Circular.

K. INSURANCE REQUIREMENTS

The successful bidder will be required to provide the types of insurance specified in the Agreement, General Conditions and Supplementary Conditions.

L. REJECTION OF BIDS

1. The County reserves the right to reject any bid if the evidence submitted in the statement of the Bidder's qualifications or if investigation of such Bidder fails to satisfy the County that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.
2. Conditional bids will not be accepted. The County reserves the right to reject any and all bids and to accept the bid which it deems most favorable to the interest of the County, after all bids have been examined and canvassed.

M. BASIS OF AWARD

The Contract will be awarded, if at all, to the lowest responsive responsible bidder, as determined by the County Executive and by terms and conditions of the Contracts.

INSTRUCTIONS TO BIDDERS

N. STAGING AND STORAGE AREAS

Where appropriate and available, the County will permit the successful bidder to utilize County-owned property in accordance with Specific Conditions as a staging and storage area. Bidders are advised to contact the office of Contracts and Permits to determine if such arrangements are available for the specific contract being bid.

O. CONTRACT PROCESSING FEE

In accordance with the provisions of Ordinance No. 201-2001, passed by the Legislature and approved by the County Executive (original on file with the Clerk of the Legislature), the successful bidder upon signing contracts will be required to pay the following fee schedule service charge for the administration of the contract by the County of Nassau:

<u>Value of Contract</u>	<u>Administrative Fee</u>
\$0 - \$5000	\$0
\$5001 - \$50,000	\$160
\$50,001 - \$100,000	\$266
Over \$100,000	\$533

All checks are to be made payable to the Nassau County Treasurer.

P. STATE LAWS

1. Foreign Contractors must comply with provisions of Articles 9a, 16 and 16a of the Tax Law, as amended, prior to submission of the proposal for the performance of the work. The Certificate of the New York State Department of Taxation and Finance (TP-310) to the effect that all taxes have been paid by the foreign Contractor shall be conclusive proof of the payment of taxes. The term "foreign Contractor" as used herein means, in the case of an individual, a person who is a legal resident of another state or foreign country; in the case of a firm or co-partnership, one having one or more partners who is a legal resident of another state or foreign country; and, in the case of a corporation, one having its principal place of business in another state or country.
2. The attention of all prospective bidders is specifically called to the provisions of Section 25, subdivision 5, sections 70 and 71 of the Lien Law, as amended, in relation

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to funds being received by a Contractor for a public improvement declared to constitute trust funds in the hands of such Contractor to be applied first to the payment of certain claims.

3. The Contractor and each and every subcontractor performing work at the site of the project to which this Contract relates, shall comply with all applicable provisions of the Labor Law, as amended, of the State of New York and particularly Article 8 thereof. Attention is called to certain provisions of the Labor Law as set forth in the Agreement or General Conditions which are hereby referred to and made a part thereof.

Q. STORM WATER POLLUTION PREVENTION

Bidders on Nassau County Projects are advised that the Federal Clean Water Act (Public Law 92-500) as amended has promulgated Storm Water management regulations which in part require a Storm Water discharge permit for certain categories of industrial activities (GP-0-12-001) or a Storm Water discharge permit for construction activities (GP-0-15-002) where discharge is to surface waters of the State and land disturbance is greater than 1 acre. Compliance is being implemented by the New York State Department of Environmental Conservation (NYSDEC) under the State Pollution Discharge Elimination System (SPDES) permitting program. Nassau County's coverage under either SPDES permit for Storm Water discharges stipulates development and/or implementation of site pollution prevention plans which will have a direct effect on contractor, subcontractor, and other site worker activities. Generally site workers, including contractors, subcontractors, etc., must become familiar with and abide by the County's Storm Water Pollution Prevention Plan (SWPPP) which describes work strategies to be employed to prevent Storm Water contamination.

Accordingly, the low bid contractor(s) will be required to sign a certification form (provided in the Agreement Section herein) at the time of their contract execution. This form states that all personnel to be employed at the site will be advised of the existence of a SWPPP, and will comply with the terms and conditions of the plan as administered by the County and their duly authorized representatives. Additionally, the contractor responsible for implementing the SWPPP shall provide, at his own expense, a full-time competent personnel, trained in construction site sediment and erosion control as

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approved by the Commissioner, who shall have the full authority to provide material and labor in the prosecution and completion of such work.

Subsequent to award of the contract, at the close of the pre-construction meeting, the contractors must make their supervisory personnel available for instruction by Nassau County in pollution prevention by utilizing the best practical construction activities management practices. Instructional materials may be provided during the brief instructional session.

R. THE CONTRACT IS ALSO MADE SUBJECT TO:

1. GENERAL BUSINESS LAW, Section 322-a
2. GENERAL MUNICIPAL LAW, Section 103-d
3. LABOR LAW, Article 8 and Article 10
4. COUNTY EXECUTIVE ORDER 2-2018 and NASSAU COUNTY VENDOR CODE OF ETHICS
5. ADMINISTRATIVE CODE OF NASSAU COUNTY, Sections 22-4.2 and 22-4.3
6. No Contractor, Subcontractor, nor any person acting on its behalf should in any manner discriminate because of race, creed, color, religion, sex, national origin, age, marital status, and or disability, against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates.
7. Contracts receiving Federal Aid are referred to Section T., entitled, CONTRACTS WITH FEDERAL AID, of these instructions.
8. With reference to the foregoing and all other statutory citations contained in the bid documents, it is the Contractor's responsibility to appraise himself of the latest amendments.
9. Each and every provision of any law, rule or regulation required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise, any such provision is not inserted or is not correctly inserted, then upon the application of either

INSTRUCTIONS TO BIDDERS

party, the Contract shall be amended to make such insertion.

10. All required USEPA, NYSDEC and USACE permit requirements, including, but not limited to: USEPA CWA Section 402 Permit (via SPDES Permit and Storm Water Pollution Prevention Plan (SWPPP)), USACE CWA Section 404 permit (via Nationwide Permit), DEC freshwater wetlands permit, dewatering permit, and well permit, if applicable.

S. SALES TAX AND COMPENSATING USE TAX

Under the Laws of New York State all materials and supplies sold to a Contractor and which are to become an integral, component part of a structure, building or real property owned by an exempt organization such as the County of Nassau are exempt from the payment of New York State Sales or Compensatory Use Taxes. Therefore, the Contractor should not include any amount in its bid price to cover Sales Taxes.

T. RESPONSIBLE CONTRACTORS

1. The Owner will award contracts only to responsible contractors who possess the ability to perform successfully under the terms and conditions of the Contract. Consideration will be given to such matters as contractor integrity, record of past performance, and accessibility to financial and technical resources. A prospective contractor must affirmatively demonstrate his or her responsibility and, when necessary, the responsibility of proposed subcontractors. Within 30 days after the Department has granted preliminary approval of proposed subcontractor(s), contractor shall provide all required vendor integrity and disclosure documents for preliminarily approved subcontractor(s). A determination of non-responsibility will be made by the County if information obtained indicates clearly that the prospective contractor is not responsible. If the County has doubts about the productive capacity or financial strength of a prospective contractor which cannot be resolved affirmatively, the County will determine that the prospective contractor is non-responsible. A determination and findings supporting the decision will be written for the file.
2. A prospective contractor must:
 - a. Have adequate financial resources or the ability to obtain such resources as required during performance of

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the contract.

- b. Be capable of furnishing the supplies/services specified in accordance with the required delivery schedule. Upon request, the prospective contractor must furnish "acceptable evidence" of his ability to perform, such as firm commitments by sub-contractors, equipment supplies and facilities, and show his ability to obtain the necessary personnel.
 - c. Not have an unsatisfactory record of performance.
 - d. Not have an unsatisfactory record of integrity and business ethics.
 - e. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
3. Debarred or Ineligible Bidders. No firm that is currently ineligible or debarred from the award of a direct Federal contract may be awarded a contract or a subcontract under a project supported by Federal funds. The contractor must include with his bid or proposal a certification that he is not on a current list of debarred or ineligible contractors for Federal contracts.

U. CONTRACTS WITH FEDERAL AID

- 1. A Pre-Award Conference to determine the lowest responsible bidder's ability to fulfill the requirements of Executive Orders No. 11,246 and No. 11,375 is mandatory for all contracts exceeding \$1,000,000.00. The Bidder will be informed during the Pre-Award Conference, the date, time and place set for a Pre-Construction Conference required by New York State.
- 2. Are subject to the provisions of Article 18 of the General Municipal Law of the State of New York, as amended; Sections 22-4.2 and 22-4.3 of the Administrative Code of Nassau County, 41 CFR (Code of Federal Regulations) 60 including Parts 60-1.4, 60-250.4 and 60-741.4.
- 3. No Contractor, Subcontractor, nor any person acting on its behalf should in any manner discriminate because of race, creed, color, religion, sex, national origin, age, marital status or disability, against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates.

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V. FRINGE BENEFIT SUPPLEMENTS

The successful bidder will be required to comply with the Labor Law provisions contained in this Agreement.

W. APPRENTICESHIP TRAINING PROGRAMS

The successful bidder will be required to comply with Title 51 Apprenticeship Training Programs for County Contracts included below.

X. PARTICIPATION BY MINORITY GROUP MEMBERS AND WOMEN IN NASSAU COUNTY CONTRACTS

The successful bidder be required to comply with Title 53, Nassau County Local Law No. 14-2002, entitled "Participation by Minority group members and Women in Nassau County Contracts," which requires the successful bidder to submit a utilization plan prior to the award of a County contract, as such contract is defined in Title 53. The Utilization plan shall identify certified minority or women owned business enterprises that have committed to perform work in connection with the proposed contract as well as any such enterprises which the contractor intends to use in connection with contractor's performance of the proposed County contract. The Utilization plan shall specifically contain a list, including the name, address and telephone number, of each certified enterprise with which the contractor intends to subcontract. The development of the Utilization Plan shall be documented in the "Best Efforts" Form included herein.

Y. PARTICIPATION BY SERVICE DISABLED VETERANS IN COUNTY CONTRACTS

The successful bidder will be required to comply Title 82, Nassau County Local Law No. 2-2016, entitled, "Participation of Service Disabled Veterans in County Contracts," which requires greater participation by New York State certified service-disabled veteran-owned businesses in Nassau County contracts. Compliance with Title 82 shall be documented in the "Best Efforts" Form included herein.

INSTRUCTIONS TO BIDDERS

TITLE 51

APPRENTICESHIP TRAINING PROGRAMS FOR COUNTY CONTRACTS

- | | |
|------------|------------------------------|
| Section 1. | Legislative Intent. |
| 2. | Definitions. |
| 3. | Requirements and Exceptions. |
| 4. | Enforcement. |
| 5. | Severability. |
| 6. | Applicability |

1. **Legislative intent and purpose.** The County of Nassau hereby establishes a policy to promote apprenticeship training as authorized by Section 816-b of the NEW YORK LABOR LAW.

2. **Definitions.** As used in this local law, the following terms shall have the meanings indicated:

A. "Certificate of Completion" shall mean a certificate issued by the New York State Department of Labor which recognizes an employee's successful completion of an apprenticeship program.

B. "Construction contract" shall mean any contract to which the County of Nassau shall be a signatory which involves the construction, reconstruction, improvement, rehabilitation, installation, alteration, renovation, demolition or otherwise providing for any building, facility of physical structure of any kind with a value in excess of \$500,000.

C. "Contractor or subcontractor" shall mean a contractor or subcontractor which directly employs labor under a construction contract for which an apprenticeship program has been approved by the New York State Commissioner of Labor in accordance with Article 23 of the NEW YORK LABOR LAW.

D. "Sponsor" shall mean any organization or entity operating an apprenticeship program with the New York State Department of Labor and in whose name the program is registered.

3. **Requirements and Exceptions.**

A. The County of Nassau hereby requires any contractor, prior to entering into a construction contract with the County of Nassau, or any subcontractor entering into a contract with a contractor who has a construction contract with the County of Nassau, to have apprenticeship agreements appropriate for the type and scope of work to be performed, which have been registered with, and approved by the New York State Commissioner of Labor in accordance

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with Article 23 of the NEW YORK LABOR LAW, as evidenced by valid Certificates of Completion which are specifically identified as pertaining to the trade(s) and/or job title(s) called for within the construction contract, anything in Section 103 of the NEW YORK GENERAL MUNICIPAL LAW to the contrary notwithstanding.

- B. Prior to entering a construction agreement with the County of Nassau, a contractor must submit to the County, Certificates of Completion showing that they, or their sponsor, graduated at least on apprentice from a state approved and registered apprenticeship program, in the trade and/or job title called for within the construction contract, within a time period immediately preceding the bid date of such project, the length of said time period to be calculated by adding twenty-four months to the specific trade's program length as set forth in the New York State Prevailing Wage Schedule, subject to the exception found in paragraph (H) of this section. If a contractor is a signatory to a sponsor, the contractor must submit to the County a letter from the sponsor verifying its signatory status.
- C. It shall be a contractor's responsibility to submit the required Certificates of Completion as part of any bid submitted in connection with a construction contract and to provide to the County department or agency administering the construction contract the identity of apprentices who have graduated from their apprenticeship program.
- D. If a contractor utilizes a subcontractor on a construction contract, the contractor shall submit Certificates of Completion showing that the subcontractor or the subcontractor's sponsor graduated at least one apprentice from a state approved and registered apprenticeship program, in the trade and/or job title called for within the construction contract, within a time period immediately preceding the bid date of such project, the length of said time period to be calculated by adding twenty-four months to the specific trade's program length as set forth in the New York State Prevailing Wage Schedule, subject to the exception found in paragraph (H) of this section. The contractor must submit these certificates at a time designated by the department or agency administering the construction contract, but in any event, these forms must be received by the County prior to subcontractor beginning work under the contract. If the subcontractor is a signatory to a sponsor, the contractor must submit to the County a letter

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from the sponsor verifying the signatory status.

- E. It shall be the responsibility of the County department or agency administering a construction contract to verify that a contractor or subcontractor is a participant in a state approved and registered apprenticeship program and to include the submitted Certificates of Completion as an attachment to the final contract, work order or other document memorializing the award of work to the contractor.
- F. It shall be the responsibility of the County department of agency administering a construction contract to designate an individual within that department or agency who shall be responsible for specifically identifying within a construction contract the trade(s) and/or job title(s) necessary to perform the construction contract and verifying the validity of Certificates of Completion and including same as an attachment to the final contract, work order or other document memorializing the award of work to the contractor or subcontractor.
- G. In the event a County department or agency other than the Department of Public Works is administering a construction contract, that department or agency shall notify the Department of Public Works of said contract and the Department of Public Works will assist the department or agency to achieve compliance with the apprenticeship requirements set forth in this chapter.
- H. For the purpose of this title only, the length of program for the trade of laborer shall be two years.

4. **Enforcement.** The County Department of Public Works is hereby authorized, empowered and directed to promulgate such rules and regulations that are lawful, necessary and appropriate for the implementation and enforcement of any provisions of this local law.

5. **Severability.** If any clause, sentence, paragraph, subdivision, section or part of this local law or the application thereof, to any person, individual, corporation, firm, partnership, entity or circumstance, shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional such order or judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this local law or in its application to the person, individual, corporation, firm, partnership, entity, or circumstance, directly involved in the controversy in which such judgment or order shall be rendered.

INSTRUCTIONS TO BIDDERS

6. **Applicability.** This local law shall apply to construction contracts advertised for bids on or after the effective date.

(Added by Local Law No. 9-2002, in effect August 8, 2002, amended Local Law No. 3-2013 and Local Law 3-2015 effective June 19, 2015.)

FORM OF BID BOND

IMPORTANT The bidder shall instruct the Surety Company to **USE THIS FORM PROVIDED** as the use of **ANY OTHER FORM** may cause rejection of the bid.

KNOW ALL MEN BY THESE PRESENTS,

that we, the undersigned Pratt Brothers, Inc.

as Principal; and Philadelphia Indemnity Insurance Company as surety, who is Licensed to do business in the State of New York, are hereby firmly bound unto the County of Nassau in the penal sum of

Four Hundred Thousand dollars (\$ 400,000.00) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this 13th day of February, 2020

The conditions of the above obligation is such that whereas the Principal has submitted to the County of Nassau a certain Bid attached hereto and hereby made a part hereof, to enter into a contract in writing for the work under Contract No. H66302W for the

2020 General Requirements Contract for Various Civil/Site Construction - Highways, Drainage, Bridges, Site, Parking Lots and Related Specialized Items

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said proposal except by mutual consent of the County of Nassau within a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's proposal, if the Principal shall,

- a. when notified by the County, execute all necessary counterparts of the contract as set forth in the contract documents in accordance with the proposal as accepted; and
- b. furnish bonds and other security as specified in the contract documents for the faithful performance and proper fulfillment of such contract, which bonds or other security shall be satisfactory in all respects to the County; and
- c. in all respects, comply with the provisions set forth in the invitation to bid; or if the County of Nassau shall reject the aforesaid proposal for a reason other than the Principal's failure to satisfy the County that he has the necessary skill, experience and liquid assets required for the contract as stated in the documents aforesaid, then this obligation shall be null and void; otherwise to remain in full force and effect.

Provided, however, that this bond is subject to the following additional conditions and limitations.

- a. In the event that the Principal fails to submit a financial statement when required by the County or in the event that an examination of the Principal indicates to the County that the Principal does not meet the financial requirements required by the County, the undersigned will, upon demand, pay to the County of Nassau, as liquidated damages for the Principal's failure to meet such requirements, a sum equal to the amount that would have been required by a certified check if the same were delivered in accordance with the provisions of the contract documents and specifications herein stated.
- b. In case the Principal shall default in the performance of any provision the undersigned will upon demand pay to the County of Nassau the full amount of the damages sustained by the County of Nassau by reason of such default, except however, it is expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of time within which the County of Nassau may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Pratt Brothers, Inc.
Contractor

by


Joseph M. Williams Jr., P.E.
Senior Vice President

(L.S.)

(Corporate seal of
Contractor
Title if a corporation)

by _____ (L.S.)

Title

by _____ (L.S.)

Title

Philadelphia Indemnity Insurance Company

Surety

by  _____ (L.S.)

Title of Officer Joseph Tantillo Attorney-In-Fact

Attest:  _____ (L.S.)

Title of Officer

(Corporate seal
of Surety)

(Acknowledgment by Contractor if a corporation)

STATE OF New York)

ss.:
COUNTY OF Suffolk)

On this 14th day of February, 20 20, before me personally came Joseph M. Williams Jr., P.E. to me known, who, being by me duly sworn, did depose and say for himself, that he resides in Nesconset, NY that he is the Senior Vice President of the Pratt Brothers, Inc. the corporation described in, and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Carol A. Miller
Notary Public

(Acknowledgment by Contractor if a partnership)

STATE OF _____)

ss.:
COUNTY OF _____)

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 20 22

On this _____ day of _____, 20____, before me personally came _____ to me to be a member of the firm described in and which executed the foregoing bond or obligation, and he acknowledged to me that he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Notary Public

(Acknowledgment by Contractor if an individual.)

STATE OF _____)

ss.:
COUNTY OF _____)

On this _____ day of _____, 20____, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged that he executed the same.

Notary Public

(Acknowledgment by Surety Company)

STATE OF New York)

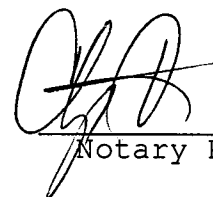
ss.:

COUNTY OF Suffolk)

On this 13th day of February, 2020, before me personally came Joseph Tantillo to me Known, who being by me duly sworn, did depose and say that he resides in Ronkonkoma, NY

that he is the Attorney-In-Fact of the Philadelphia Indemnity Insurance Company, the corporation described in and which executed the within instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York, and the said Christopher P Catera further said that he is acquainted with Joseph Tantillo and knows him to be the Attorney-In-Fact of said company; that the signature of the said Joseph Tantillo subscribed to the within instrument is in the genuine handwriting of the said Joseph Tantillo and was subscribed thereto by like order of the Board of Directors, and in the presence of him, the said Christopher P Catera.

Christopher P Catera
Notary Public, State of New York
No. 01CA6176842, Suffolk County
Commission Expires, Nov 5, 2023


Notary Public

POWER OF ATTORNEY

ATTENTION: Insert the "Power of Attorney" after this page in with your bid submission.

NO TEXT ON THIS PAGE

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100
Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Joseph Tantillo and Christopher Catera of Coverage's Unlimited, Inc.**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed **\$50,000,000.00**.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED: That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 27TH DAY OF OCTOBER, 2017.

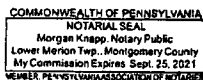
(Seal)



Robert D. O'Leary Jr.

Robert D. O'Leary Jr., President & CEO
Philadelphia Indemnity Insurance Company

On this 27th day of October, 2017, before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.



(Notary Seal)

Notary Public:

Morgan Knapp

residing at:

Bala Cynwyd, PA

My commission expires:

September 25, 2021

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and this Power of Attorney issued pursuant thereto on this 27th day of October, 2017 are true and correct and are still in full force and effect. I do further certify that Robert D. O'Leary Jr., who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY,

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 13th day of February, 20 20.



Edward Sayago

Edward Sayago, Corporate Secretary
PHILADELPHIA INDEMNITY INSURANCE COMPANY

FINANCIAL STATEMENT

ATTENTION: Insert the "Financial Statement" after this page in with your bid submission.

NO TEXT ON THIS PAGE

PHILADELPHIA INDEMNITY INSURANCE COMPANY
Statutory Statements of Admitted Assets, Liabilities and Capital and Surplus
(in thousands, except par value and share amounts)

Admitted Assets

	As of December 31,	
	2018	2017
Bonds (fair value \$7,036,118 and \$6,911,411)	\$ 7,018,246	\$ 5,708,174
Preferred stocks (fair value \$46,324 and \$50,134)	46,213	48,537
Common stocks (cost \$14,897 and \$31,965)	14,853	53,817
Mortgage loans	473,067	400,590
Real estate	1,514	3,294
Other invested assets (cost \$211,099 and \$234,382)	219,251	240,475
Derivatives	157	-
Receivables for securities sold	1,109	399
Cash, cash equivalents and short-term investments	65,668	140,468
Cash and invested assets	7,840,078	7,575,754
Premiums receivable, agents' balances and other receivables	968,504	831,770
Reinsurance recoverable on paid losses	34,694	33,955
Accrued investment income	82,576	86,998
Receivable from affiliates	5,480	6,611
Federal income taxes receivable	-	4,869
Net deferred tax asset	121,266	113,125
Other assets	5,586	89
Total admitted assets	\$ 9,058,184	\$ 8,653,171

Liabilities and Capital and Surplus

Liabilities:

Net unpaid losses and loss adjustment expenses	\$ 4,581,608	\$ 4,263,696
Net unearned premiums	1,616,043	1,533,201
Reinsurance payable on paid loss and loss adjustment expenses	30,374	23,933
Ceded reinsurance premiums payable	89,591	80,592
Commissions payable, contingent commissions and other similar charges	234,551	225,361
Federal income taxes payable	3,141	-
Funds held	61,944	83,909
Accrued expenses and other liabilities	37,562	33,890
Payable to affiliates	13,148	10,761
Provision for reinsurance	-	1
Payable for purchased securities	20,741	81,458
Total liabilities	\$ 6,688,703	\$ 6,336,802

Capital:

Common stock, par value of \$10 per share; 1,000,000 shares authorized, 450,000 shares issued and outstanding	4,500	4,500
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Surplus:

Gross paid-in and contributed surplus	386,071	386,071
Unassigned surplus	1,978,910	1,925,798
Total surplus	2,364,981	2,311,869
Total capital and surplus	2,369,481	2,316,369
Total liabilities and capital and surplus	\$ 9,058,184	\$ 8,653,171

The undersigned, being duly sworn, says: That she is the Executive Vice President and Chief Financial Officer of Philadelphia Indemnity Insurance Company; that said Company is a corporation duly organized in the state of Pennsylvania, and licensed and engaged in the State of Pennsylvania and has duly complied with all the requirements of the laws of the said State applicable of the said Company and is duly qualified to act as Surety under such laws; that said Company has also complied with and is duly qualified to act as Surety under the Act of Congress. And that to the best of her knowledge and belief the above statement is a full, true and correct statement of

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Attest: Kimberly A. Kessleski, Notary Public
Lower Merion Twp., Montgomery County
My Commission Expires Dec. 18, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Sworn to before me this 21st day of May 2019.

Karen Gilmer-Pauciello, EVP & CFO

Kimberly Kessleski, Notary

CERTIFICATE OF SOLVENCY

ATTENTION: Insert the "Certificate of Solvency" after this page in with your bid submission.

NO TEXT ON THIS PAGE

CERTIFICATE OF SOLVENCY UNDER SECTION 1111 OF THE NEW YORK
INSURANCE LAW

STATE OF NEW YORK
DEPARTMENT OF FINANCIAL SERVICES

It is hereby certified that

PHILADELPHIA INDEMNITY INSURANCE COMPANY

Bala Cynwyd, Pennsylvania

a corporation organized under the laws of the State of Pennsylvania and duly authorized to transact the business of insurance in this State, is qualified to become surety or guarantor on all bonds, undertakings, recognizances, guaranties and other obligations required or permitted by law; and that the said corporation is possessed of a capital and surplus including gross paid-in and contributed surplus and unassigned funds (surplus) aggregating the sum of \$2,316,369,191 (Capital \$4,500,000) as is shown by its sworn financial statement for Year-End as of December 31, 2017, on file in this Department, prior to audit.

The said corporation cannot lawfully expose itself to loss on any one risk or hazard to an amount exceeding 10% of its surplus to policyholders, unless it shall be protected in excess of that amount in the manner provided in Section 4118 of the Insurance Law of this State.



In Witness Whereof, I have here-
unto set my hand and affixed the
official seal of this Department
at the City of Albany, this
5th day of April, 2018

Maria T. Vullo
Superintendent

By *Jacqueline Catalfamo*

Jacqueline Catalfamo
Special Deputy Superintendent

PROPOSAL
To the County of Nassau
**2020 GENERAL REQUIREMENTS CONTRACT FOR
VARIOUS CIVIL/SITE RECONSTRUCTION, HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK**

Contract No. H66302W

TO THE COUNTY OF NASSAU:

Pursuant to and in compliance with your Advertisement for Bids and the Instructions to Bidders relating thereto, the undersigned hereby proposes to furnish all plant, labor, materials, supplies, equipment and other facilities necessary or proper for or incidental to the above Contract, as required by and in strict accordance with the plans and specifications for the amount named in the proposal hereinafter described.

In making this proposal the Bidder hereby declares that the Addenda which has been issued by the County of Nassau and has been received by him, that all provisions thereof have been complied with in preparing his bids.

Name of Bidder: Pratt Brothers, Inc.
(Individual, Firm or Corporation, as case may be)

Bidder's Address: 45 South Fourth Street, Bay Shore, NY 11706

Telephone: 631-667-6800 Date: February 13, 2020

FAX Tele: 631-289-6119 E-Mail: jwilliams@prattbrothers.com

NOTE: IF BIDDER IS A FIRM, FILL IN THE FOLLOWING BLANKS:

Name of Partners

Residence of Partners

NOTE: IF BIDDER IS A CORPORATION, FILL IN THE FOLLOWING BLANKS:

Organized under the laws of the State of: New York

Name of President: James J. Pratt, III

President's Domicile: 92 Huntington Road, Garden City, NY 11530

Name of Vice Pres: Thomas Pratt

Vice Pres's Domicile: 61 Woodland Drive, Oyster Bay Cove, NY 11771

Corporate Officer: Joseph M. Williams, Jr., P.E. Title: Sr. Vice President

Corporate Officer's Domicile: 19 Burgundy Lane, Nesconset, NY 11767

Corporate Officer: Edward P. McCoy, Jr. Title: Vice President

Corporate Officer's Domicile: 26 Bayview Avenue, Blue Point, NY 11715

NO TEXT ON THIS PAGE

The Following Paragraphs are Applicable to the Contract

THE BIDDER AFFIRMS AND DECLARES:

1. That the above bidder is of lawful age and the only one interested in this bid; and that no other person, firm or corporation, except those herein named, has any interest in this bid or in the Contract proposed to be entered into.
2. That this bid is made without any understanding, agreement or in connection with any other person, firm or corporation, making a bid for the same work, and is in all respects fair and without collusion or fraud.
3. That said bidder is not in arrears to the County of Nassau upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the County of Nassau.
4. That no officer nor employee of the County of Nassau, or person whose salary is payable in whole or in part from the County Treasury is, shall be, or become interested directly, or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this bid, or in the performance of the contract, or in the supplies, materials, equipment and work or labor to which it relates, or in any portion of the profits thereof.
5. That he has carefully examined the site of the work and that, from his own investigations, has satisfied himself as to the nature and location of the work, the character, quality and quantity of existing materials, all difficulties likely to be encountered, the kind and extent of equipment, other facilities needed for the performance of the work, the general and local conditions, and all other items which may, in any way, affect the work or its performance.
6. The bidder also declares that he has carefully examined and fully understands all the component parts of this Contract, that he will execute the Contract and will completely perform it in strict accordance with its terms for the following prices.
7. Where the work performed under this Contract involves a trade or occupation licensed in the County of Nassau by the Towns of Hempstead, Oyster Bay or North Hempstead or by the Cities Glen Cove or Long Beach, the contractor shall be required to have such a license.

INFORMATION FOR BIDDERS

I. Rejection of Bids.

A. The Commissioner may recommend a reject of bid if:

1. The Bidder fails to furnish any of the information required by the bid documents; or if
2. The bidder misstates or conceals any material fact in the bid, or in the sworn written statement; or if
3. The bid does not strictly conform to law or the requirements of this contract; or if
4. The bid is conditional; or if
5. A determination that the bidder is not responsible is made in accordance with law; or if
6. The bid, in the opinion of the Commissioner, contains unbalanced bid prices, unless the bidder can show that the prices are not unbalanced for the probably required quantity of such items.

B. Rejection of all bids and waiver of informalities.

The Commissioner, however, reserves the right to recommend to reject all bids whenever he deems it in the best interest of the County, and also the right to waive any informalities in a bid.

II. Unit Price Contracts, Comparison of Bids.

Bids on Unit Price Contracts will be compared on the basis of a total bid price, arrived at by taking the sum of the Approximate Quantities of such item multiplied by the corresponding Unit Price, and including any Lump Sum Bid on individual items, in accordance with the items set forth in the bid proposal.

Bidders are warned that the Approximate Quantities of the various items of work and material is estimated only, and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be more or less than estimated.

III. Lump Sum Contracts, Comparison of Bids.

Bids on lump Sum Contracts will be compared on the basis of the Lump Sum Price bid adjusted for alternate prices bid, if any.

IV. Apprenticeship Training Program

For all contracts in excess of \$500,000 attach here verification letter regarding your firm's having an approved State of New York Apprenticeship Training Program.

Item Number	Estimate of Quantities	Items with unit bid price written in words		Brought Forward	Amount Bid
1S	10.00	Each	, Job Information Signs	Unit Bid Price	
		FOR	ONE HUNDRED DOLLARS NO CENTS	100.000	1,000.00
1X	2,000.00	Sq. Yards	, Clearing and Grubbing		
		FOR	THREE DOLLARS NO CENTS	3.000	6,000.00
2	200.00	Cu. Yards	, Unclassified Excavation		
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS	125.000	25,000.00
3	200.00	Cu. Yards	, Trench, Culvert & Bridge Excavation		
		FOR	ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000	30,000.00
4A	100.00	Sq. Yards	, Cement Concrete Breaking (Pavement)		
		FOR	TWENTY DOLLARS NO CENTS	20.000	2,000.00
				Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
9R	50.00	Cu. Yards , Topsoil (Rehandled) FOR FORTY DOLLARS NO CENTS _____ _____ _____	40.000	2,000.00
10A	100.00	Sq. Feet , Temporary Sheeting and Bracing FOR TEN DOLLARS NO CENTS _____ _____ _____	10.000	1,000.00
10A-1	100.00	Sq. Feet , Excavation Protection System FOR TEN DOLLARS NO CENTS _____ _____ _____	10.000	1,000.00
10B	100.00	Sq. Feet , Temporary Sheeting and Bracing Ordered Left in Place FOR TWELVE DOLLARS NO CENTS _____ _____ _____	12.000	1,200.00
10C-1	100.00	Sq. Feet , Permanent Corrugated Metal Sheeting & Bracing FOR FIFTY DOLLARS NO CENTS _____ _____ _____	50.000	5,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020 15:34:25				Unit Bid Price	Amount Bid	
10C-2	100.00	Sq. Feet	, Permanent Steel Sheet Piling & Bracing			75.000	7,500.00	
		FOR <u>SEVENTY FIVE DOLLARS NO CENTS</u>						
10C-2X	100.00	Sq. Feet	, Steel Sheet Piling & Bracing			50.000	5,000.00	
		FOR <u>FIFTY DOLLARS NO CENTS</u>						
10C-3	100.00	Sq. Feet	, Permanent Timber Sheet Piling & Bracing			50.000	5,000.00	
		FOR <u>FIFTY DOLLARS NO CENTS</u>						
12A-4-12	100.00	Lin. Feet	, Reinforced Concrete Pipe Class IV 12" Diameter			0.010	1.00	
		FOR <u>ZERO DOLLARS ONE CENT</u>						
12A-4-15	100.00	Lin. Feet	, Reinforced Concrete Pipe Class IV 15" Diameter			0.010	1.00	
		FOR <u>ZERO DOLLARS ONE CENT</u>						
		Carry Forward						

Item Number	Estimate of Quantities	Items with unit bid price written in words			Brought Forward	
		Lin. Feet			Unit Bid Price	Amount Bid
12A-4-48	50.00	Lin. Feet	, Reinforced Concrete Pipe Class IV 48" Diameter			
		FOR	ZERO DOLLARS ONE CENT		0.010	0.50
12B-12	5.00	Each	, Reinforced Concrete Pipe End Section 12" Diameter			
		FOR	ZERO DOLLARS ONE CENT		0.010	0.05
12B-15	5.00	Each	, Reinforced Concrete Pipe End Section 15" Diameter			
		FOR	ZERO DOLLARS ONE CENT		0.010	0.05
12B-18	5.00	Each	, Reinforced Concrete Pipe End Section 18" Diameter			
		FOR	ZERO DOLLARS ONE CENT		0.010	0.05
12B-24	5.00	Each	, Reinforced Concrete Pipe End Section 24" Diameter			
		FOR	ZERO DOLLARS ONE CENT		0.010	0.05
					Carry Forward	

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
12B-30	5.00	Each , Reinforced Concrete Pipe End Section 30" Diameter FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010
12B-36	5.00	Each , Reinforced Concrete Pipe End Section 36" Diameter FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.05
12B-42	5.00	Each , Reinforced Concrete pipe End Section 42" Diameter FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.05
12B-48	5.00	Each , Reinforced Concrete Pipe End Section 48" Diameter FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.05
12C-14X23	50.00	Lin. Feet , 14" x 23" Reinforced Elliptical Concrete Pipe Class IV FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010
PER Lin. Feet			0.50
Carry Forward			

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020 @ 15:34:25	Brought Forward	
			Unit Bid Price	Amount Bid
12C-19X30	50.00	Lin. Feet , 19" x 30" Reinforced Elliptical Concrete Pipe Class IV FOR <u>ZERO DOLLARS ONE CENT</u>	0.010	0.50
12C-22X34	40.00	Lin. Feet , 22" x 34" Reinforced Elliptical Concrete Pipe Class IV FOR <u>ZERO DOLLARS ONE CENT</u>	0.010	0.40
12C-24X38	30.00	Lin. Feet , 24" x 38" Reinforced Elliptical Concrete Pipe Class IV FOR <u>ZERO DOLLARS ONE CENT</u>	0.010	0.30
12C-29X45	20.00	Lin. Feet , 29" x 45" Reinforced Elliptical Concrete Pipe Class IV FOR <u>ZERO DOLLARS ONE CENT</u>	0.010	0.20
12D-12	50.00	Lin. Feet , Perforated Reinforced Concrete Pipe 12" Diameter FOR <u>ZERO DOLLARS ONE CENT</u>	0.010	0.50
Carry Forward				

CPIN	Page 10	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
12D-15	50.00	Lin. Feet , Perforated Reinforced Concrete Pipe 15" Diameter FOR ZERO DOLLARS ONE CENT _____ _____ _____	0.010	0.50
12D-18	50.00	Lin. Feet , Perforated Reinforced Concrete Pipe 18" Diameter FOR ZERO DOLLARS ONE CENT _____ _____ _____	0.010	0.50
12D-24	50.00	Lin. Feet , Perforated Reinforced Concrete Pipe 24" Diameter FOR ZERO DOLLARS ONE CENT _____ _____ _____	0.010	0.50
12D-30	50.00	Lin. Feet , Perforated Reinforced Concrete Pipe 30" Diameter FOR ZERO DOLLARS ONE CENT _____ _____ _____	0.010	0.50
12DIP-12	50.00	Lin. Feet , Ductile Iron Culvert Pipe 12" Diameter FOR FIFTY DOLLARS NO CENTS _____ _____ _____	50.000	2,500.00
		PER Lin. Feet	Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
12F-12	50.00	Lin. Feet , 12" Round Corrugated Metal Pipe (Smooth Flow) FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010	0.50
12F-15	50.00	Lin. Feet , 15" Round Corrugated Metal Pipe (Smooth Flow) FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010	0.50
12F-18	50.00	Lin. Feet , 18" Round Corrugated Metal Pipe (Smooth Flow) FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010	0.50
12F-24	50.00	Lin. Feet , 24" Round Corrugated Metal Pipe (Smooth Flow) FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010	0.50
12F-30	50.00	Lin. Feet , 30" Round Corrugated Metal Pipe (Smooth Flow) FOR <u>ZERO DOLLARS ONE CENT</u> _____ _____ _____	0.010	0.50
CARRY FORWARD			CARRY FORWARD	

CPIN	Page 13	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
12G	50.00	Lin. Feet , Relaying Pipe FOR TWENTY DOLLARS NO CENTS	20.000	1,000.00
12H	500.00	Lin. Feet , Cleaning Existing Drainage System FOR TEN DOLLARS NO CENTS	10.000	5,000.00
12HP	500.00	Lin. Feet , Cleaning Existing Culverts and Associated Storm Drainage FOR TEN DOLLARS NO CENTS	10.000	5,000.00
12P-12	50.00	Lin. Feet , Smooth Interior Corrugated Polyethylene Drainage Pipe 12" Diameter FOR TEN DOLLARS NO CENTS	10.000	500.00
12P-15	50.00	Lin. Feet , Smooth Interior Corrugated Polyethylene Drainage Pipe 15" Diameter FOR TWELVE DOLLARS NO CENTS	12.000	600.00
		PER Lin. Feet	Carry Forward	

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
12P-18	50.00	Lin. Feet FOR <u>FOURTEEN DOLLARS NO CENTS</u> _____ _____ _____	14.000 700.00
12P-24	50.00	Lin. Feet FOR <u>TWENTY DOLLARS NO CENTS</u> _____ _____ _____	20.000 1,000.00
12P-36	50.00	Lin. Feet FOR <u>THIRTY SIX DOLLARS NO CENTS</u> _____ _____ _____	36.000 1,800.00
12S40 -6	50.00	Lin. Feet FOR <u>TWELVE DOLLARS NO CENTS</u> _____ _____ _____	12.000 600.00
12S40 -8	50.00	Lin. Feet FOR <u>FIFTY DOLLARS NO CENTS</u> _____ _____ _____	50.000 2,500.00
Carry Forward			

Item Number	Estimate of Quantities	Items with unit bid price written in words			Brought Forward	
					Unit Bid Price	Amount Bid
13A	30.00	Cu. Yards	Catch Basins		2,000.000	60,000.00
			FOR TWO THOUSAND DOLLARS NO CENTS			
				PER Cu. Yards		
13B	30.00	Cu. Yards	Manholes		1,500.000	45,000.00
			FOR ONE THOUSAND FIVE HUNDRED DOLLARS NO CENTS			
				PER Cu. Yards		
13BP-4	50.00	Lin. Feet	Precast Manholes 4' Diameter		300.000	15,000.00
			FOR THREE HUNDRED DOLLARS NO CENTS			
				PER Lin. Feet		
13BP-5	50.00	Lin. Feet	Precast Manholes 5' Diameter		400.000	20,000.00
			FOR FOUR HUNDRED DOLLARS NO CENTS			
				PER Lin. Feet		
13BP-6	50.00	Lin. Feet	Precast Manholes 6' Diameter		500.000	25,000.00
			FOR FIVE HUNDRED DOLLARS NO CENTS			
				PER Lin. Feet		
					Carry Forward	

Items with unit bid price written in words				Brought Forward
Item Number	Estimate of Quantities			Unit Bid Price
13BX-4	2.00	Each	, Treatment Structure, 4' Diameter	Amount Bid
		FOR	FIFTEEN THOUSAND DOLLARS NO CENTS	15,000.000
				30,000.00
			PER Each	
13BX-6	2.00	Each	, Treatment Structure, 6' Diameter	Amount Bid
		FOR	TWENTY FIVE THOUSAND DOLLARS NO CENTS	25,000.000
				50,000.00
			PER Each	
13BX-8	2.00	Each	, Treatment Structure, 8' Diameter	Amount Bid
		FOR	FIFTY THOUSAND DOLLARS NO CENTS	50,000.000
				100,000.00
			PER Each	
13BX-10	2.00	Each	, Treatment Structure, 10' Diameter	Amount Bid
		FOR	SEVENTY FIVE THOUSAND DOLLARS NO CENTS	75,000.000
				150,000.00
			PER Each	
13BX-12	2.00	Each	, Treatment Structure, 12' Diameter	Amount Bid
		FOR	ONE HUNDRED THOUSAND DOLLARS NO CENTS	100,000.000
				200,000.00
			PER Each	
				Carry Forward

Items with unit bid price written in words			Brought Forward		
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid	
13C	5.00	Each			
		FOR ONE HUNDRED DOLLARS NO CENTS	100.000	500.00	
		PER Each			
14	15.00	Each			
		FOR ONE THOUSAND DOLLARS NO CENTS	1,000.000	15,000.00	
		PER Each			
15	20.00	Each			
		FOR FOUR HUNDRED DOLLARS NO CENTS	400.000	8,000.00	
		PER Each			
15X	20.00	Each			
		FOR FIVE THOUSAND DOLLARS NO CENTS	5,000.000	100,000.00	
		PER Each			
16A	30.00	Each			
		FOR ZERO DOLLARS ONE CENT	0.010	0.30	
		PER Each			
Carry Forward					

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	
			Unit Bid Price	Amount Bid
16B	20.00	Each , Altering Manholes (Slab Top With Frame Head) FOR ZERO DOLLARS ONE CENT	0.010	0.20
16C	20.00	Each , Altering Manholes (Top Slab With Ring Head) FOR ONE THOUSAND DOLLARS NO CENTS	1,000.000	20,000.00
16SS-1	20.00	Each , Change Elevations of Sanitary Sewer Manholes Minor Adjustment FOR SEVEN HUNDRED FIFTY DOLLARS NO CENTS	750.000	15,000.00
16SS-2	20.00	Each , Change Elevations of Sanitary Sewer Manholes Major Adjustment FOR ZERO DOLLARS ONE CENT	0.010	0.20
16SS-3	20.00	Each , Change Elevations of Drainage Manholes and Drop Inlets Minor Adjustme FOR SEVEN HUNDRED FIFTY DOLLARS NO CENTS	750.000	15,000.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
16SS-4	20.00	Each , Change Elevations of Drainage Manholes and Drop Inlets Major Adjustme FOR ZERO DOLLARS ONE CENT	0.010	0.20
16XMH	10.00	Each , Adjusting Manholes Extensions FOR TWO HUNDRED FIFTY DOLLARS NO CENTS	250.000	2,500.00
17A-A	25.00	Cu. Yards , Class A Concrete for Structures (0 - 25 Cu. Yards) FOR TWO THOUSAND FIVE HUNDRED DOLLARS NO CENTS	2,500.000	62,500.00
17A-B	50.00	Cu. Yards , Class A Concrete for Structures (26 - 50 Cu. Yards) FOR ONE THOUSAND TWO HUNDRED DOLLARS NO CENTS	1,200.000	60,000.00
17A-C	50.00	Cu. Yards , Class A Concrete for Structures (51 - 100 Cu. Yards) FOR ONE THOUSAND ONE HUNDRED DOLLARS NO CENTS	1,100.000	55,000.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
17A-D	50.00	Cu. Yards , Class A Concrete for Structures (101 Cu. Yards and Over) FOR <u>ONE THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	1,000.000	50,000.00
17D	20.00	Cu. Yards , Class D Concrete for Structures FOR <u>TWO THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	2,000.000	40,000.00
17DP	10.00	Cu. Yards , Class DP Concrete for Structures FOR <u>TWO THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	2,000.000	20,000.00
17E	10.00	Cu. Yards , Class E Concrete for Structures FOR <u>TWO THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	2,000.000	20,000.00
17F-A	25.00	Cu. Yards , Class F High Early Strength Concrete (0 - 25 Cu. Yards) FOR <u>ONE THOUSAND ONE HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	1,100.000	27,500.00
PER Cu. Yards			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
17F-B	50.00	Cu. Yards , Class F High Early Strength Concrete (26 - 50 Cu. Yards) FOR <u>NINE HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	900.000	45,000.00
17F-C	50.00	Cu. Yards , Class F High Early Strength Concrete (51 - 100 Cu. Yards) FOR <u>EIGHT HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	800.000	40,000.00
17F-D	50.00	Cu. Yards , Class F High Early Strength Concrete (100 Cu. Yards and Over) FOR <u>SEVEN HUNDRED FIFTY DOLLARS NO CENTS</u> _____ _____ _____	750.000	37,500.00
17H	10.00	Cu. Yards , Class H Concrete for Structures (Pumped) FOR <u>TWO THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	2,000.000	20,000.00
17HP	10.00	Cu. Yards , Class HP Concrete for Structures (Pumped) FOR <u>TWO THOUSAND DOLLARS NO CENTS</u> _____ _____ _____	2,000.000	20,000.00
			Carry Forward	

CPIN		Page 22	Date	Cont H66302W	Brought Forward	
Item Number	Estimate of Quantities	Items with unit bid price written in words			Unit Bid Price	Amount Bid
17M	10.00	Cu. Yards	, Class A Concrete for Structures (Monolithic Bridge Slabs with Integral Wea			
		FOR ONE THOUSAND TWO HUNDRED DOLLARS NO CENTS			1,200.000	12,000.00
				</		

Items with unit bid price written in words				Brought Forward	
Item Number	Estimate of Quantities			Unit Bid Price	Amount Bid
27MS	100.00	Sq. Feet	, Concrete Mowing Strip 16" to 36" wide	10.000	1,000.00
		FOR	TEN DOLLARS NO CENTS		
27SP	50.00	Sq. Feet	, Cement Concrete Pavement Structures Parks		
		FOR	TWENTY DOLLARS NO CENTS	20.000	1,000.00
28	100.00	Sq. Feet	, Cement Concrete Driveways and Driveway Aprons		
		FOR	TWENTY DOLLARS NO CENTS	20.000	2,000.00
29	100.00	Sq. Feet	, Driveway Restoration		
		FOR	SIX DOLLARS NO CENTS	6.000	600.00
30	100.00	Sq. Yards	, Metal Reinforcement for Concrete Pavement		
		FOR	THIRTY DOLLARS NO CENTS	30.000	3,000.00
				Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
31	100.00	Lin. Feet , Transverse Joint Supports FOR THIRTY DOLLARS NO CENTS	30.000	3,000.00
32A	50.00	Each , Longitudinal Joint Ties (Pavement) FOR TEN DOLLARS NO CENTS	10.000	500.00
32B	50.00	Each , Longitudinal Joint Ties (Curbing) FOR TEN DOLLARS NO CENTS	10.000	500.00
32X	100.00	Each , Joint Ties (Grout Type) FOR TWENTY DOLLARS NO CENTS	20.000	2,000.00
32X-1	100.00	Each , Load Transfer Device for Cement Concrete Pavement Repairs FOR FIFTY DOLLARS NO CENTS	50.000	5,000.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
33	500.00	Pounds FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00
		PER Pounds		
33X	200.00	Pounds FOR TEN DOLLARS NO CENTS	10.000	2,000.00
		PER Pounds		
34	1,000.00	Pounds FOR TEN DOLLARS NO CENTS	10.000	10,000.00
		PER Pounds		
35	50.00	Lin. Feet FOR TWENTY DOLLARS NO CENTS	20.000	1,000.00
		PER Lin. Feet		
35T	50.00	Lin. Feet FOR FORTY FIVE DOLLARS NO CENTS	45.000	2,250.00
		PER Lin. Feet		
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
36C	500.00	Tons FOR ONE HUNDRED FIFTY DOLLARS NO CENTS _____ _____ _____	150.000	75,000.00
36CX	500.00	Tons FOR ZERO DOLLARS ONE CENT _____ _____ _____	0.010	5.00
36D-A	500.00	Tons FOR TWO HUNDRED FIFTY DOLLARS NO CENTS _____ _____ _____	250.000	125,000.00
36D-B	500.00	Tons FOR TWO HUNDRED DOLLARS NO CENTS _____ _____ _____	200.000	100,000.00
36D-C	500.00	Tons FOR ONE HUNDRED SEVENTY FIVE DOLLARS NO CENTS _____ _____ _____	175.000	87,500.00
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020 15:34:25		Brought Forward
36D-D	500.00	Tons	Asphalt Concrete Top & Binder Type 1A (101 Tons and Over)	Unit Bid Price
		FOR	ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000
				75,000.00
36PAP	50.00	Sq. Yards	Pervious Asphalt Pavement	
		FOR	FIFTY DOLLARS NO CENTS	50.000
				2,500.00
36T	20.00	Tons	Temporary Pavement	
		FOR	SEVENTY DOLLARS NO CENTS	70.000
				1,400.00
37	100.00	Sq. Feet	Brick Pavers on Bituminous Setting Bed	
		FOR	TWENTY DOLLARS NO CENTS	20.000
				2,000.00
37C	100.00	Sq. Feet	Brick Pavers on Cement Concrete Setting Bed	
		FOR	TWENTY DOLLARS NO CENTS	20.000
				2,000.00
Carry Forward				

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
39-4	100.00	Sq. Feet , Paving Stones on Aggregate Base 4" Thick FOR EIGHTEEN DOLLARS NO CENTS	18.000
		PER Sq. Feet	1,800.00
39-8	50.00	Sq. Feet , Paving Stones on Aggregate Base 8" Thick FOR TWENTY DOLLARS NO CENTS	20.000
		PER Sq. Feet	1,000.00
40-4	50.00	Sq. Feet , New Stone Block Pavement on Aggregate Base 4" Thick FOR TWENTY FIVE DOLLARS NO CENTS	25.000
		PER Sq. Feet	1,250.00
40-8	50.00	Sq. Feet , New Stone Block Pavement on Aggregate Base 8" Thick FOR TWENTY SIX DOLLARS NO CENTS	26.000
		PER Sq. Feet	1,300.00
40R	100.00	Sq. Feet , Reset Existing Stone Block Pavement FOR TWELVE DOLLARS NO CENTS	12.000
		PER Sq. Feet	1,200.00
Carry Forward			

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
40RP	40.00	Each , Relocating Traffic Signs FOR TWO HUNDRED FIFTY DOLLARS NO CENTS	250.000	10,000.00
42-1	50.00	Lin. Feet , Concrete Median Barrier FOR ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000	7,500.00
42-2	5.00	Each , Concrete Median Barrier End Section FOR FIVE HUNDRED DOLLARS NO CENTS	500.000	2,500.00
42-3	50.00	Lin. Feet , Half Section Concrete Barrier FOR ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS	125.000	6,250.00
42-4	5.00	Each , Half Section Concrete Barrier End Section FOR FIVE HUNDRED DOLLARS NO CENTS	500.000	2,500.00
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Brought Forward	
		Lin. Feet		PER	Lin. Feet	Unit Bid Price	Amount Bid
57	100.00	Lin. Feet	, Modify Roof Drains			20.000	2,000.00
		FOR	TWENTY DOLLARS NO CENTS				
58A	100.00	Lin. Feet	, Sawcutting Existing Non-Roadway Asphalt			5.000	500.00
		FOR	FIVE DOLLARS NO CENTS				
58RPC	100.00	Lin. Feet	, Sawcutting Existing Roadway Pavement & Concrete			30.000	3,000.00
		FOR	THIRTY DOLLARS NO CENTS				
59	10.00	Each	, Alter Water Service Boxes			150.000	1,500.00
		FOR	ONE HUNDRED FIFTY DOLLARS NO CENTS				
60	10.00	Each	, Alter Water Service Connections			300.000	3,000.00
		FOR	THREE HUNDRED DOLLARS NO CENTS				
						Carry Forward	

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
60A	10.00	Each , Adjust Water Service Box Elevations FOR ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS	125.000
		PER Each	1,250.00
60B	10.00	Each , Relocate Curb Cock and Water Service Boxes FOR ZERO DOLLARS ONE CENT	0.010
		PER Each	0.10
61	10.00	Each , Relocate Water Meter Pits FOR ZERO DOLLARS ONE CENT	0.010
		PER Each	0.10
61S	5.00	Lin. Feet , Relocate Existing Water Mains Complete FOR FIVE HUNDRED DOLLARS NO CENTS	500.000
		PER Lin. Feet	2,500.00
62	5.00	Each , Relocate Buried Electrical Service Connection FOR ONE HUNDRED DOLLARS NO CENTS	100.000
		PER Each	500.00
Carry Forward			

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
63	50.00	Lin. Feet , Alter Sanitary Sewer House Service Connections FOR <u>ONE HUNDRED FIFTY DOLLARS NO CENTS</u> _____ _____ _____	150.000	7,500.00
63A	5.00	Each , Adjust Sanitary Sewer Cleanouts FOR <u>TWO HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	200.000	1,000.00
63SS	20.00	Lin. Feet , Extension of Sanitary Sewer House Service Connections FOR <u>ONE HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	100.000	2,000.00
63SS-3	20.00	Lin. Feet , Alter Existing Sanitary Sewer Service Connections Under Widened Road FOR <u>ONE HUNDRED DOLLARS NO CENTS</u> _____ _____ _____	100.000	2,000.00
64	100.00	Lin. Feet , Reset Existing Fence FOR <u>THIRTY DOLLARS NO CENTS</u> _____ _____ _____	30.000	3,000.00
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Brought Forward	
		Lin. Feet		PER	Lin. Feet	Unit Bid Price	Amount Bid
69	100.00	Lin. Feet	, Treated Timber Test Piles				
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS			125.000	12,500.00
70	100.00	Lin. Feet	, Precast Concrete Test Piles				
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS			125.000	12,500.00
71	100.00	Lin. Feet	, Steel Bearing Test Piles				
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS			125.000	12,500.00
72	100.00	Lin. Feet	, Untreated Timber Piles				
		FOR	NINETY DOLLARS NO CENTS			90.000	9,000.00
73	100.00	Lin. Feet	, Treated Timber Piles				
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS			125.000	12,500.00
						Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Unit Bid Price	Amount Bid
74	100.00	Lin. Feet	, Precast Concrete Piles			100.000	10,000.00
		FOR	ONE HUNDRED DOLLARS NO CENTS				
75	100.00	Lin. Feet	, Steel Bearing Piles			100.000	10,000.00
		FOR	ONE HUNDRED DOLLARS NO CENTS				
76	100.00	Lin. Feet	, Cast In Place Concrete Piles			125.000	12,500.00
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS				
77	100.00	Lin. Feet	, Tubular Cast In Place Concrete Piles			200.000	20,000.00
		FOR	TWO HUNDRED DOLLARS NO CENTS				
79UP	200.00	Sq. Feet	, Unit Pavers			16.000	3,200.00
		FOR	SIXTEEN DOLLARS NO CENTS				
		Carry Forward					

Items with unit bid price written in words			Brought Forward		
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid	
81	500.00	Pounds, Structural Steel FOR FORTY DOLLARS NO CENTS	40.000	20,000.00	
82	100.00	Feet, Shear Connection FOR SIXTEEN DOLLARS NO CENTS	16.000	1,600.00	
83	500.00	Pounds, Spiral Bar Shear Connectors FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00	
84	100.00	Each, Stud Shear Connectors FOR ELEVEN DOLLARS NO CENTS	11.000	1,100.00	
95	100.00	Lin. Feet, Metal Protection Plate for Curbs FOR THIRTY SIX DOLLARS NO CENTS	36.000	3,600.00	
			Carry Forward		

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
96	100.00	Cu. Yards , Dry Rip Rap FOR ONE HUNDRED FIFTY SIX DOLLARS NO CENTS	156.000	15,600.00
97	100.00	Cu. Yards , Grouted Rip Rap FOR ONE HUNDRED SEVENTY FIVE DOLLARS NO CENTS	175.000	17,500.00
99-8	150.00	Lin. Feet , Precast Concrete Leaching Basin 8' Diameter FOR THREE HUNDRED FIFTY DOLLARS NO CENTS	350.000	52,500.00
99-10	150.00	Lin. Feet , Precast Concrete Leaching Basin 10' Diameter FOR FIVE HUNDRED DOLLARS NO CENTS	500.000	75,000.00
100	150.00	Lin. Feet , Precast Concrete Diffusion Well 10' Diameter FOR SEVEN HUNDRED DOLLARS NO CENTS	700.000	105,000.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
102D	50.00	Days FOR TWO HUNDRED FIFTY DOLLARS NO CENTS _____ _____ _____	250.000	12,500.00
102PVMS	50.00	Days FOR FIVE HUNDRED DOLLARS NO CENTS _____ _____ _____	500.000	25,000.00
102X	100.00	Days FOR NINE HUNDRED DOLLARS NO CENTS _____ _____ _____	900.000	90,000.00
102Y	50.00	Nights FOR ONE THOUSAND THREE HUNDRED DOLLARS NO CENTS _____ _____ _____	1,300.000	65,000.00
104PA-4X	200.00	Lin. Feet FOR THIRTEEN DOLLARS NO CENTS _____ _____ _____	13.000	2,600.00
			Carry Forward	

CPIN	Page 42	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
104PA-6X	200.00	Lin. Feet , Polyolefin Coated Chain Link Fencing 6' High (Top & Bottom Tension Wire) FOR FIFTEEN DOLLARS NO CENTS 	15.000	3,000.00
104PA-8X	200.00	PER Lin. Feet Lin. Feet , Polyolefin Coated Chain Link Fencing 8' High (Top & Bottom Tension Wire) FOR SEVENTEEN DOLLARS NO CENTS 	17.000	3,400.00
104PA-10X	200.00	PER Lin. Feet Lin. Feet , Polyolefin Coated Chain Link Fencing 10' High (Top & Bottom Tension Wire) FOR NINETEEN DOLLARS NO CENTS 	19.000	3,800.00
104PA-12X	200.00	PER Lin. Feet Lin. Feet , Polyolefin Coated Chain Link Fencing 12' High (Top & Bottom Tension Wire) FOR TWENTY ONE DOLLARS NO CENTS 	21.000	4,200.00
104PB-4X	200.00	PER Lin. Feet Lin. Feet , Polyolefin Coated Chain Link Fencing 4' High (Top Rail & Bottom Tension Wire) FOR SEVENTEEN DOLLARS NO CENTS 	17.000	3,400.00
		PER Lin. Feet	Carry Forward	

Items with unit bid price written in words				Brought Forward	
Item Number	Estimate of Quantities			Unit Bid Price	Amount Bid
104PB-6X	500.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 6' High (Top Rail & Bottom Tension	28.000	14,000.00
		FOR	TWENTY EIGHT DOLLARS NO CENTS		
104PB-8X	200.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 8' High (Top Rail & Bottom Tension	29.000	5,800.00
		FOR	TWENTY NINE DOLLARS NO CENTS		
104PB-10X	200.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 10' High (Top Rail & Bottom Tension	30.000	6,000.00
		FOR	THIRTY DOLLARS NO CENTS		
104PB-12X	200.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 12' High (Top Rail & Bottom Tension	31.000	6,200.00
		FOR	THIRTY ONE DOLLARS NO CENTS		
104PC-4-1X	200.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 4' High 1" Mesh (Top & Bottom Rail	22.000	4,400.00
		FOR	TWENTY TWO DOLLARS NO CENTS		
				Carry Forward	

Items with unit bid price written in words				Brought Forward	
Item Number	Estimate of Quantities	Lin. Feet	PER Lin. Feet	Unit Bid Price	Amount Bid
104PC-4X	200.00	FOR TWENTY ONE DOLLARS NO CENTS		21.000	4,200.00
104PC-6X	500.00	FOR THIRTY SIX DOLLARS NO CENTS		36.000	18,000.00
104PC-8X	200.00	FOR THIRTY EIGHT DOLLARS NO CENTS		38.000	7,600.00
104PC-10X	200.00	FOR FIFTY DOLLARS NO CENTS		50.000	10,000.00
104PC-12X	200.00	FOR SIXTY DOLLARS NO CENTS		60.000	12,000.00
Carry Forward					

Item Number	Estimate of Quantities	Items with unit bid price written in words			Brought Forward	
		Lin. Feet			Unit Bid Price	Amount Bid
104PD-6X	200.00	Lin. Feet	, Polyolefin Coated Chain Link Fencing 6' High with Concrete Curb			
		FOR	FIFTY DOLLARS NO CENTS		50.000	10,000.00
				PER Lin. Feet		
104R-4	100.00	Lin. Feet	, Renovate 4' High Chain Link Fence			
		FOR	EIGHT DOLLARS NO CENTS		8.000	800.00
				PER Lin. Feet		
104R-4-1	100.00	Lin. Feet	, Renovate 4' High Chain Link Fence 1" Mesh			
		FOR	TEN DOLLARS NO CENTS		10.000	1,000.00
				PER Lin. Feet		
104R-6	100.00	Lin. Feet	, Renovate 6' High Chain Link Fence			
		FOR	TWELVE DOLLARS NO CENTS		12.000	1,200.00
				PER Lin. Feet		
104R-8	100.00	Lin. Feet	, Renovate 8' High Chain Link Fence			
		FOR	THIRTEEN DOLLARS NO CENTS		13.000	1,300.00
				PER Lin. Feet		
					Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words		Brought Forward	
				Unit Bid Price	Amount Bid
104R-10	100.00	Lin. Feet	, Renovate 10' High Chain Link Fence	15.000	1,500.00
		FOR	FIFTEEN DOLLARS NO CENTS		
104R-12	100.00	Lin. Feet	, Renovate 12' High Chain Link Fence	17.000	1,700.00
		FOR	SEVENTEEN DOLLARS NO CENTS		
104RR-4	100.00	Each	, Remove and Replace 4' High Chain Link Fence Posts	0.010	1.00
		FOR	ZERO DOLLARS ONE CENT		
104RR-6	100.00	Each	, Remove and Replace 6' High Chain Link Fence Posts	30.000	3,000.00
		FOR	THIRTY DOLLARS NO CENTS		
104RR-8	100.00	Each	, Remove and Replace 8' High Chain Link Fence Posts	0.010	1.00
		FOR	ZERO DOLLARS ONE CENT		
				Carry Forward	

CPIN	Page 47	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
104RR-10	100.00	Each , Remove and Replace 10' High Chain Link Fence Posts FOR ZERO DOLLARS ONE CENT	0.010	1.00
104RR-12	100.00	Each , Remove and Replace 12' High Chain Link Fence Posts FOR ZERO DOLLARS ONE CENT	0.010	1.00
104RR-R	100.00	Lin. Feet , Remove and Replace Chain Link Fence Rails FOR TWENTY TWO DOLLARS NO CENTS	22.000	2,200.00
104VCA-4	200.00	Lin. Feet , Vinyl Clad Chain Link Fence 4' High (Top & Bottom Tension Wire) FOR TWELVE DOLLARS NO CENTS	12.000	2,400.00
104VCA-6	200.00	Lin. Feet , Vinyl Clad Chain Link Fence 6' High (Top & Bottom Tension Wire) FOR SIXTY DOLLARS NO CENTS	60.000	12,000.00
		Carry Forward		

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
104VCA-8	200.00	Lin. Feet , Vinyl Clad Chain Link Fence 8' High (Top & Bottom Tension Wire) FOR <u>SIXTEEN DOLLARS NO CENTS</u> _____ _____ _____	16.000	3,200.00
104VCA-10	200.00	Lin. Feet , Vinyl Clad Chain Link Fence 10' High (Top & Bottom Tension Wire) FOR <u>EIGHTEEN DOLLARS NO CENTS</u> _____ _____ _____	18.000	3,600.00
104VCA-12	200.00	Lin. Feet , Vinyl Clad Chain Link Fence 12' High (Top & Bottom Tension Wire) FOR <u>TWENTY DOLLARS NO CENTS</u> _____ _____ _____	20.000	4,000.00
104VCB-4	200.00	Lin. Feet , Vinyl Clad Chain Link Fencing 4' High (Top Rail & Bottom Tension Wire) FOR <u>SIXTEEN DOLLARS NO CENTS</u> _____ _____ _____	16.000	3,200.00
104VCB-6	200.00	Lin. Feet , Vinyl Clad Chain Link Fencing 6' High (Top Rail & Bottom Tension Wire) FOR <u>TWENTY SEVEN DOLLARS NO CENTS</u> _____ _____ _____	27.000	5,400.00
			Carry Forward	

Items with unit bid price written in words				Brought Forward
Item Number	Estimate of Quantities	Lin. Feet	Unit Bid Price	Amount Bid
104VCB-8	200.00	Lin. Feet FOR TWENTY EIGHT DOLLARS NO CENTS _____ _____ _____	28.000	5,600.00
104VCB-10	200.00	Lin. Feet FOR TWENTY NINE DOLLARS NO CENTS _____ _____ _____	29.000	5,800.00
104VCB-12	200.00	Lin. Feet FOR THIRTY DOLLARS NO CENTS _____ _____ _____	30.000	6,000.00
104VCC-4	200.00	Lin. Feet FOR TWENTY DOLLARS NO CENTS _____ _____ _____	20.000	4,000.00
104VCC-4-1	500.00	Lin. Feet FOR TWENTY ONE DOLLARS NO CENTS _____ _____ _____	21.000	10,500.00
Carry Forward				

Items with unit bid price written in words				Brought Forward
Item Number	Estimate of Quantities			Unit Bid Price
104VCC-6	500.00	Lin. Feet	, Vinyl Clad Chain Link Fencing 6' High (Top & Bottom Rails)	
		FOR	THIRTY DOLLARS NO CENTS	30.000
				15,000.00
104VCC-8	200.00	Lin. Feet	, Vinyl Clad Chain Link Fencing 8' High (Top & Bottom Rails)	
		FOR	THIRTY ONE DOLLARS NO CENTS	31.000
				6,200.00
104VCC-10	200.00	Lin. Feet	, Vinyl Clad Chain Link Fencing 10' High (Top & Bottom Rails)	
		FOR	THIRTY TWO DOLLARS NO CENTS	32.000
				6,400.00
104VCC-12	200.00	Lin. Feet	, Vinyl Clad Chain Link Fencing 12' High (Top & Bottom Rails)	
		FOR	THIRTY THREE DOLLARS NO CENTS	33.000
				6,600.00
104VCD-6	200.00	Lin. Feet	, Vinyl Clad Chain Link Fencing With Concrete Curb - 6' High	
		FOR	FORTY TWO DOLLARS NO CENTS	42.000
				8,400.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020 15:34:25				Brought Forward	
		Lin. Feet	Middle Rail Brace Rail and Bottom Rail	PER	Lin. Feet	Unit Bid Price	Amount Bid
104XR	200.00	Lin. Feet	FOR TWENTY DOLLARS NO CENTS			20.000	4,000.00
104XSF	200.00	Sq. Feet	, Remove Existing Fence	PER	Lin. Feet		
		FOR TWENTY DOLLARS NO CENTS				20.000	4,000.00
105-2	100.00	Lin. Feet	, Two (2) Rail Split Rail Fence	PER	Sq. Feet		
		FOR TEN DOLLARS NO CENTS				10.000	1,000.00
105-3	100.00	Lin. Feet	, Three (3) Rail Split Rail Fence	PER	Lin. Feet		
		FOR TWELVE DOLLARS NO CENTS				12.000	1,200.00
105SFS-6	100.00	Lin. Feet	, 6' Stockade Fence	PER	Lin. Feet		
		FOR TWENTY SIX DOLLARS NO CENTS				26.000	2,600.00
						Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
105SFS-8	100.00	Lin. Feet , 8' Stockade Fence FOR THIRTY DOLLARS NO CENTS	30.000	3,000.00
106P	500.00	Lin. Feet , Post Painting FOR TWO DOLLARS NO CENTS	2.000	1,000.00
106P-DG	200.00	Sq. Feet , Polyolefin Coated Chain Link Double Gate FOR FORTY DOLLARS NO CENTS	40.000	8,000.00
106P-SG	200.00	Sq. Feet , Polyolefin Coated Chain Link Single Gate FOR FIFTY DOLLARS NO CENTS	50.000	10,000.00
106SVBG	100.00	Lin. Feet , Self Swing Vehicle Barrier Gates FOR TWENTY FIVE DOLLARS NO CENTS	25.000	2,500.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
106VC-CG	200.00	Sq. Feet , 16'-0" to 22'-0" Wide Vinyl Clad Chain Link Cantilever Slide Gates (6' to 8' FOR FORTY DOLLARS NO CENTS	40.000	8,000.00
		PER Sq. Feet		
106VC-DG	200.00	Sq. Feet , Vinyl Clad Chain Link Double Gates FOR FORTY FIVE DOLLARS NO CENTS	45.000	9,000.00
		PER Sq. Feet		
106VC-SG	200.00	Sq. Feet , Vinyl Clad Chain Link Single Gates FOR FIFTY DOLLARS NO CENTS	50.000	10,000.00
		PER Sq. Feet		
107	1,000.00	Lin. Feet , Cleaning Filling & Sealing Existing Joints & Cracks in Asphalt Pavement FOR THREE DOLLARS NO CENTS	3.000	3,000.00
		PER Lin. Feet		
110	50.00	Cu. Feet , Masonry Pipe Plugs FOR TEN DOLLARS NO CENTS	10.000	500.00
		PER Cu. Feet		
Carry Forward				

Items with unit bid price written in words				Brought Forward
Item Number	Estimate of Quantities			Unit Bid Price
111	500.00	Sq. Yards	, Removal and Replacement of Pavements	Amount Bid
		FOR	ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS	125.000
				62,500.00
111M	100.00	Sq. Yards	, Cold Planing and Removal and Replacement of Pavements	
		FOR	NINETY DOLLARS NO CENTS	90.000
				9,000.00
111P	100.00	Sq. Yards	, Removal and Replacement of Existing Paths	
		FOR	FIFTY DOLLARS NO CENTS	50.000
				5,000.00
112	100.00	Each	, Adjusting Manholes	
		FOR	ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000
				15,000.00
113	50.00	Each	, Adjustment of Surface Inlets	
		FOR	THREE HUNDRED DOLLARS NO CENTS	300.000
				15,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words				Unit Bid Price	Amount Bid	
117	100.00	Lin. Feet	, Temporary Fence 4' High				4.000	400.00
		FOR	FOUR DOLLARS NO CENTS					
117T-6	500.00	Lin. Feet	, Temporary Fence 6' High				10.000	5,000.00
		FOR	TEN DOLLARS NO CENTS					
117T-8	100.00	Lin. Feet	, Temporary Fence 8' High				12.000	1,200.00
		FOR	TWELVE DOLLARS NO CENTS					
117TP-6	100.00	Lin. Feet	, Temporary Fence with Privacy Screen 6' High				12.000	1,200.00
		FOR	TWELVE DOLLARS NO CENTS					
117TP-8	100.00	Lin. Feet	, Temporary Fence with Privacy Screen 8' High				14.000	1,400.00
		FOR	FOURTEEN DOLLARS NO CENTS					
							Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
125	10.00	Ounces , Chemical Admixture for Concrete FOR <u>TEN DOLLARS NO CENTS</u> _____ _____	10.000	100.00
126A	100.00	Lin. Feet , New Stone Block Curb FOR <u>TWENTY FIVE DOLLARS NO CENTS</u> _____ _____	25.000	2,500.00
126B	100.00	Lin. Feet , Reset Existing Stone Block Curb FOR <u>TWENTY DOLLARS NO CENTS</u> _____ _____	20.000	2,000.00
127	5.00	Each , Relocate Existing Hydrants FOR <u>FIVE THOUSAND DOLLARS NO CENTS</u> _____ _____	5,000.000	25,000.00
128	100.00	Sq. Yards , Furnishing and Applying Soil Sterilant FOR <u>TWO DOLLARS NO CENTS</u> _____ _____	2.000	200.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
129	100.00	Cu. Yards , Cement Concrete for Pavement Repairs (Calcium Chloride) FOR ONE THOUSAND SIX HUNDRED DOLLARS NO CENTS	1,600.000	160,000.00
132	50.00	Each , Plowable Raised Reflectorized Pavement Markers FOR SEVENTY FIVE DOLLARS NO CENTS	75.000	3,750.00
133	100.00	Lin. Feet , Clean & Fill Joints and Cracks FOR FIVE DOLLARS NO CENTS	5.000	500.00
133A	100.00	Lin. Feet , Cleaning & Resealing of Longitudinal Joints in Portland Cement Concrete FOR FIVE DOLLARS NO CENTS	5.000	500.00
133B	100.00	Lin. Feet , Sealing of Transverse Joints in Portland Cement Concrete Pavement FOR FIVE DOLLARS NO CENTS	5.000	500.00
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Brought Forward	
		Lin. Feet				Unit Bid Price	Amount Bid
134	100.00	Lin. Feet	, Sawing & Sealing Bituminous Concrete Overlays				
		FOR FIVE DOLLARS NO CENTS				5.000	500.00
136S	10.00	Days	, Survey and Stakeout (Per Day)				
		FOR FOUR THOUSAND DOLLARS NO CENTS				4,000.000	40,000.00
137	500.00	Lin. Feet	, Remove Existing Traffic Markings				
		FOR FIVE DOLLARS NO CENTS				5.000	2,500.00
138	100.00	Sq. Yards	, Asphalt Joint Repairs				
		FOR TWENTY FIVE DOLLARS NO CENTS				25.000	2,500.00
139	100.00	Sq. Yards	, Saw Cutting Longitudinal or Transverse Grooves in Existing Roadway Pav				
		FOR SIX DOLLARS NO CENTS				6.000	600.00
						Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Unit Bid Price	Amount Bid
140	100.00	Lin. Feet	, Temporary Pavement Delineation				
		FOR	FOUR DOLLARS NO CENTS			4.000	400.00
141	100.00	Lin. Feet	, Silt Fence				
		FOR	TEN DOLLARS NO CENTS			10.000	1,000.00
141A	100.00	Lin. Feet	, Hay Bales/Straw Bales				
		FOR	EIGHT DOLLARS NO CENTS			8.000	800.00
141B	50.00	Each	, Silt Protection for Surface Inlets Drainage Structures				
		FOR	ONE HUNDRED FIFTY DOLLARS NO CENTS			150.000	7,500.00
141C	50.00	Each	, Silt Protection for Curb Inlet Drainage Structures				
		FOR	ONE HUNDRED DOLLARS NO CENTS			100.000	5,000.00
			PER				
			Each				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
142CLK	100.00	Lin. Feet FOR TEN DOLLARS NO CENTS _____ _____ _____	10.000	1,000.00
143	100.00	Lin. Feet FOR TWENTY DOLLARS NO CENTS _____ _____ _____	20.000	2,000.00
144	100.00	Sq. Yards FOR FIVE DOLLARS NO CENTS _____ _____ _____	5.000	500.00
150	100.00	Lin. Feet FOR SIXTY DOLLARS NO CENTS _____ _____ _____	60.000	6,000.00
151	100.00	Lin. Feet FOR SIXTY FIVE DOLLARS NO CENTS _____ _____ _____	65.000	6,500.00
Carry Forward				

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
152	5.00	Each , Box Beam Guide Rail End Assembly FOR ZERO DOLLARS ONE CENT	0.010
153A	2.00	Each , Box Beam Median Barrier End Assembly - Type A FOR ZERO DOLLARS ONE CENT	0.02
153B	2.00	Each , Box Beam Median Barrier End Assembly - Type B FOR ZERO DOLLARS ONE CENT	0.02
158A	500.00	Sq. Feet , Geotextile Cloth FOR THREE DOLLARS NO CENTS	3.000
158B	500.00	Sq. Yards , Soil Stabilization Fabric FOR THREE DOLLARS NO CENTS	3.000
Carry Forward			1,500.00

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020 15:34:25	Unit Bid Price	Amount Bid
175	500.00	Sq. Yards , Stabilized Mixed in Place Recycled Base Course FOR TWELVE DOLLARS NO CENTS	12.000	6,000.00
175AE	2,000.00	Gallons , Asphalt Emulsion FOR THREE DOLLARS NO CENTS	3.000	6,000.00
176	500.00	Sq. Yards , Milled in Place Recycled Base Course FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00
178W	1,000.00	Lin. Feet , Pavement Markings, Painting & Striping (White) FOR TWO DOLLARS NO CENTS	2.000	2,000.00
178Y	1,000.00	Lin. Feet , Pavement Markings, Painting & Striping (Yellow) FOR TWO DOLLARS NO CENTS	2.000	2,000.00
Carry Forward				

CPIN	Page 65	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
179A	200.00	Lin. Feet , Steel Edging FOR <u>TEN DOLLARS NO CENTS</u> _____ _____ _____	10.000	2,000.00
179B	200.00	Lin. Feet , Reset Existing Steel Edging FOR <u>FIVE DOLLARS NO CENTS</u> _____ _____ _____	5.000	1,000.00
180	25.00	Lin. Feet , Trench Drains FOR <u>SEVENTY FIVE DOLLARS NO CENTS</u> _____ _____ _____	75.000	1,875.00
185A	50.00	Lin. Feet , Relocate Residential Sprinkler System FOR <u>TEN DOLLARS NO CENTS</u> _____ _____ _____	10.000	500.00
185N	50.00	Lin. Feet , New Sprinkler System FOR <u>TWENTY DOLLARS NO CENTS</u> _____ _____ _____	20.000	1,000.00
		PER Lin. Feet	Carry Forward	

Items with unit bid price written in words

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	
			Unit Bid Price	Amount Bid
200	50.00	Lin. Feet , Heavy Post, Plastic and Synthetic Blocked Out Galvanized Corrugated St FOR FORTY DOLLARS NO CENTS	40.000	2,000.00
201	10.00	Lin. Feet , Heavy Post, Plastic and Synthetic Blocked Out Galvanized Corrugated St FOR SIXTY DOLLARS NO CENTS	60.000	600.00
202	5.00	Each , Anchorage Units for Heavy Post Blocked Out Corrugated Beam Guide Ra FOR ZERO DOLLARS ONE CENT	0.010	0.05
202.19	10.00	Cu. Yards , Removal of Substructures FOR TWO THOUSAND DOLLARS NO CENTS	2,000.000	20,000.00
203	5.00	Each , Anchorage Units for Heavy Post Blocked Out Corrugated Beam Guide Ra FOR ZERO DOLLARS ONE CENT	0.010	0.05
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
204	1.00	Each , Anchorage Units for Heavy Post Blocked Out Corrugated Beam Median B FOR ZERO DOLLARS ONE CENT	0.010	0.01
204.01	100.00	Cu. Yards , Flowable Fill - Controlled Low Strength Material (CLSM) FOR TWO HUNDRED FIFTY DOLLARS NO CENTS	250.000	25,000.00
205	1.00	Each , Heavy Post Blocked Out Corrugated Beam Guide Railing Connection to 2 FOR ZERO DOLLARS ONE CENT	0.010	0.01
206	10.00	Lin. Feet , Heavy Post Blocked Out Corrugated Beam Guide Railing Connection to T FOR ZERO DOLLARS ONE CENT	0.010	0.10
207	2.00	Each , Heavy Post Blocked Out Corrugated Beam Guide Railing Connection to V FOR ZERO DOLLARS ONE CENT	0.010	0.02
Carry Forward				

Item Number		Estimate of Quantities	Items with unit bid price written in words				Forward	
208		50.00	Lin. Feet	, Reconstruction of Heavy Post Blocked-Out Corrugated Beam Guide Rail			Unit Bid Price	Amount Bid
			FOR	ONE HUNDRED DOLLARS NO CENTS			100.000	5,000.00
209		50.00	Lin. Feet	, Reconstruction of Median Barrier				
			FOR	EIGHTY DOLLARS NO CENTS			80.000	4,000.00
210E		10.00	Each	, ET - 2000 Energy Absorbing Safety End Treatment				
			FOR	TWO THOUSAND FIVE HUNDRED DOLLARS NO CENTS			2,500.000	25,000.00
210.3411		50.00	Lin. Feet	, Removal and Disposal of Caulking ACM (BV14)				
			FOR	TWENTY FIVE DOLLARS NO CENTS			25.000	1,250.00
216		200.00	Lin. Feet	, Removal of Existing Guide Rail				
			FOR	TWENTY FIVE DOLLARS NO CENTS			25.000	5,000.00

CPIN		Page 69	Date	Cont H66302W	Brought Forward
Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid	
220	100.00	Lin. Feet , Corrugated Beam Guide Railing FOR SEVENTY FIVE DOLLARS NO CENTS	75.000	7,500.00	
221	5.00	Each , Anchorage Units for Corrugated Beam Guide Railing PER Lin. Feet FOR ZERO DOLLARS ONE CENT	0.010	0.05	
222	5.00	Each , Anchorage Units for Corrugated Beam Guide Railing (Driveway) PER Each FOR ZERO DOLLARS ONE CENT	0.010	0.05	
360	10.00	Each , Pruning Existing Deciduous Trees PER Each FOR ONE HUNDRED THIRTY DOLLARS NO CENTS	130.000	1,300.00	
361A	10.00	Each , Planting Trees & Shrubs - Deciduous Major PER Each FOR FIVE HUNDRED DOLLARS NO CENTS	500.000	5,000.00	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	
			Unit Bid Price	Amount Bid
361B	10.00	Each Planting Trees & Shrubs - Deciduous Minor FOR FOUR HUNDRED DOLLARS NO CENTS	400.000	4,000.00
361C	10.00	Each Planting Trees & Shrubs - Deciduous Shrubs FOR SEVENTY FIVE DOLLARS NO CENTS	75.000	750.00
361D	10.00	Each Planting Trees & Shrubs - Evergreen Trees FOR THREE HUNDRED FIFTY DOLLARS NO CENTS	350.000	3,500.00
361E	10.00	Each Planting Trees & Shrubs - Evergreen Shrubs Upright FOR ONE HUNDRED FIFTEEN DOLLARS NO CENTS	115.000	1,150.00
361F	10.00	Each Planting Trees & Shrubs - Evergreen Shrubs Spreading FOR SEVENTY FIVE DOLLARS NO CENTS	75.000	750.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
364-D	10.00	Each , Tree Pruning D (24" - < 36" Caliper) FOR FOUR HUNDRED DOLLARS NO CENTS	400.000	4,000.00
364-E	10.00	Each , Tree Pruning E (36" - < 48" Caliper) FOR FIVE HUNDRED DOLLARS NO CENTS	500.000	5,000.00
365	100.00	Sq. Feet , Sodding FOR FIVE DOLLARS NO CENTS	5.000	500.00
367	100.00	Acres , Hydro Seeding FOR ZERO DOLLARS ONE CENT	0.010	1.00
368	250.00	Sq. Yards , Topsoil and Grass Seed FOR TWELVE DOLLARS NO CENTS	12.000	3,000.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
371	10.00	Bales FOR SEVENTY FIVE DOLLARS NO CENTS _____ _____ _____	75.000	750.00
372-A	20.00	Each FOR THREE HUNDRED DOLLARS NO CENTS _____ _____ _____	300.000	6,000.00
372-B	20.00	Each FOR FOUR HUNDRED DOLLARS NO CENTS _____ _____ _____	400.000	8,000.00
372-C	20.00	Each FOR SIX HUNDRED DOLLARS NO CENTS _____ _____ _____	600.000	12,000.00
372-D	20.00	Each FOR SEVEN HUNDRED FIFTY DOLLARS NO CENTS _____ _____ _____	750.000	15,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
372-E	20.00	Each , Tree Removal E (36" - < 48" Caliper) FOR <u>EIGHT HUNDRED DOLLARS NO CENTS</u>	800.000	16,000.00
373A	20.00	Each , Stump Removal A (4" - < 6" Caliper) FOR <u>SEVENTY FIVE DOLLARS NO CENTS</u>	75.000	1,500.00
373B	20.00	Each , Stump Removal B (6" - < 12" Caliper) FOR <u>SEVENTY FIVE DOLLARS NO CENTS</u>	75.000	1,500.00
373C	20.00	Each , Stump Removal C (12" - < 24" Caliper) FOR <u>ONE HUNDRED DOLLARS NO CENTS</u>	100.000	2,000.00
373D	20.00	Each , Stump Removal D (24" - < 36" Caliper) FOR <u>ONE HUNDRED TWENTY FIVE DOLLARS NO CENTS</u>	125.000	2,500.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
373E	20.00	Each , Stump Removal E (36" - < 48" Caliper)	130.000	2,600.00
		FOR ONE HUNDRED THIRTY DOLLARS NO CENTS		
		PER Each		
374-A	20.00	Each , Stump Grinding A (4" - < 6" Caliper)	75.000	1,500.00
		FOR SEVENTY FIVE DOLLARS NO CENTS		
		PER Each		
374-B	20.00	Each , Stump Grinding B (6" - < 12" Caliper)	75.000	1,500.00
		FOR SEVENTY FIVE DOLLARS NO CENTS		
		PER Each		
374-C	20.00	Each , Stump Grinding C (12" - < 24" Caliper)	100.000	2,000.00
		FOR ONE HUNDRED DOLLARS NO CENTS		
		PER Each		
374-D	20.00	Each , Stump Grinding D (24" - < 36" Caliper)	100.000	2,000.00
		FOR ONE HUNDRED DOLLARS NO CENTS		
		PER Each		
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
374-E	20.00	Each , Stump Grinding E (36" - < 48" Caliper) FOR ONE HUNDRED DOLLARS NO CENTS	100.000	2,000.00
378	10.00	Lin. Feet , Mechanical Barrier Root Control System 24" Deep FOR TWENTY FIVE DOLLARS NO CENTS	25.000	250.00
411-A1	5.00	Each , Furnish and Install Concrete Foundation, Type A1 FOR ONE THOUSAND DOLLARS NO CENTS	1,000.000	5,000.00
412-G	10.00	Each , Furnish and Install a Pushbutton Post Assembly FOR SEVEN HUNDRED FIFTY DOLLARS NO CENTS	750.000	7,500.00
412P-8	5.00	Each , Furnish and Install 8 Foot Aluminum Signal Post FOR EIGHT HUNDRED DOLLARS NO CENTS	800.000	4,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
412P-10	5.00	Each , Furnish and Install 10 Foot Aluminum Signal Post FOR <u>NINE HUNDRED DOLLARS NO CENTS</u>	900.000	4,500.00
412P-12	2.00	Each , Furnish and Install 12 Foot Aluminum Signal Post FOR <u>ONE THOUSAND TWO HUNDRED DOLLARS NO CENTS</u>	1,200.000	2,400.00
415-2	300.00	Lin. Feet , Furnish and Install 2-Conductor, # 14 Cable on Span Wire, In Conduit or F FOR <u>ONE DOLLAR NO CENTS</u>	1.000	300.00
415-3	300.00	Lin. Feet , Furnish and Install 3-Conductor, # 14 Cable on Span Wire, In Conduit or F FOR <u>ONE DOLLAR FORTY CENTS</u>	1.400	420.00
415-5	200.00	Lin. Feet , Furnish and Install 5 -Conductor, # 14 Cable on Span Wire, In Conduit, or FOR <u>ONE DOLLAR SEVENTY FIVE CENTS</u>	1.750	350.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
415-7	100.00	Lin. Feet , Furnish and Install 7-Conductor, # 14 Cable on Span Wire, In Conduit or F FOR TWO DOLLARS NO CENTS	2.000	200.00
		PER Lin. Feet		
419S-075	50.00	Lin. Feet , Furnish and Install 3/4" Steel Conduit FOR FIVE DOLLARS NO CENTS	5.000	250.00
		PER Lin. Feet		
419S-1	200.00	Lin. Feet , Furnish and Install 1-1/4" (1.25") Steel Conduit FOR SIXTEEN DOLLARS NO CENTS	16.000	3,200.00
		PER Lin. Feet		
419S-2	100.00	Lin. Feet , Furnish and Install 2" Steel Conduit FOR TWENTY FOUR DOLLARS NO CENTS	24.000	2,400.00
		PER Lin. Feet		
419S-3	50.00	Lin. Feet , Furnish and Install 3" Steel Conduit FOR FORTY DOLLARS NO CENTS	40.000	2,000.00
		PER Lin. Feet		
Carry Forward			Carry Forward	

Items with unit bid price written in words				Brought Forward	
Item Number	Estimate of Quantities			Unit Bid Price	Amount Bid
420-1	5.00	Each	, Furnish and Install Standard Pullbox FOR TWO THOUSAND DOLLARS NO CENTS	2,000.000	10,000.00
420-3	2.00	Each	, Furnish and Install Split Pullbox FOR TWO THOUSAND TWO HUNDRED DOLLARS NO CENTS	2,200.000	4,400.00
420R	5.00	Each	, Regrade a Pullbox Frame and Cover FOR THREE HUNDRED FIFTY DOLLARS NO CENTS	350.000	1,750.00
422L	1,000.00	Lin./ Feet	, Furnish and Install Loop Wire FOR FIVE DOLLARS NO CENTS	5.000	5,000.00
422LS	500.00	Lin. Feet	, Furnish and Install Loop Saw Cut FOR TWENTY FIVE DOLLARS NO CENTS	25.000	12,500.00
				Carry Forward	

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
424-4	5.00	Each , Remove Any Post FOR TWO HUNDRED FORTY DOLLARS NO CENTS	240.000
424-8	5.00	Each , Remove Pedestrian Station Post, Foundation & Pushbutton FOR TWO HUNDRED TWENTY DOLLARS NO CENTS	1,200.00
424-11A	5.00	Each , Remove Signal Face (Vehicle) FOR ONE HUNDRED TEN DOLLARS NO CENTS	220.000
424-11B	5.00	Each , Remove Signal Face (Pedestrian) FOR ONE HUNDRED TEN DOLLARS NO CENTS	110.000
424-14	500.00	Lin. Feet , Remove Cable FOR ONE DOLLAR NO CENTS	550.00
		PER Lin. Feet	1.000
			500.00
			Carry Forward

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
424-21	5.00	Each , Remove Single Lane Magnetic Detector FOR ONE HUNDRED DOLLARS NO CENTS	100.000	500.00
		PER Each		
424-22	5.00	Each , Remove Single Lane Magnetic Housing FOR ONE HUNDRED DOLLARS NO CENTS	100.000	500.00
		PER Each		
424-23	5.00	Each , Abandon Foundation FOR SEVENTY FIVE DOLLARS NO CENTS	75.000	375.00
		PER Each		
424-24	5.00	Each , Remove Auxiliary Pole FOR THREE HUNDRED SIXTY DOLLARS NO CENTS	360.000	1,800.00
		PER Each		
424-25	10.00	Each , Remove Pullbox FOR ONE HUNDRED DOLLARS NO CENTS	100.000	1,000.00
		PER Each		
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	
			Unit Bid Price	Amount Bid
424-26	5.00	Each , Remove Multi - Lane Magnetic Vehicle Detector FOR ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000	750.00
424-27	5.00	Each , Remove Pushbutton & Sign Assembly FOR ONE HUNDRED DOLLARS NO CENTS	100.000	500.00
426L	5.00	Each , Furnish and Install a L.E.D. Countdown Pedestrian Signal FOR ONE HUNDRED DOLLARS NO CENTS	100.000	500.00
427-2	5.00	Each , Furnish and Install a Pushbutton Sign Assembly FOR ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000	750.00
450	50.00	Each , Furnish and Install Post Mounted Signs FOR TWO HUNDRED DOLLARS NO CENTS	200.000	10,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words			Brought Forward	
					Unit Bid Price	Amount Bid
451	30.00	Each	, Furnish and Install Post Mounted Handicap Parking Signs			
			FOR TWO HUNDRED FIFTY DOLLARS NO CENTS			7,500.00
502	10.00	Sq. Feet	, Highway Sealing and Surface Coating (Latex)			
			FOR TEN DOLLARS NO CENTS			100.00
502A	200.00	Lin. Feet	, 2" I.D. PVC Electrical Conduit			
			FOR TWELVE DOLLARS NO CENTS			2,400.00
502B	150.00	Lin. Feet	, 3" I.D. PVC Electrical Conduit			
			FOR SIXTEEN DOLLARS NO CENTS			2,400.00
502C	100.00	Lin. Feet	, 4" I.D. PVC Electrical Conduit			
			FOR EIGHTEEN DOLLARS NO CENTS			1,800.00
					Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	
			Unit Bid Price	Amount Bid
502J	10.00	Cu. Feet , Electrical Junction Boxes FOR <u>FOUR HUNDRED TEN DOLLARS NO CENTS</u> _____ _____	410.000	4,100.00
511	20.00	Bags , Pneumatically Placed Concrete FOR <u>ONE HUNDRED FIFTY DOLLARS NO CENTS</u> _____ _____	150.000	3,000.00
512	50.00	Sq. Feet , Repairing Structural Slabs FOR <u>SEVENTY FIVE DOLLARS NO CENTS</u> _____ _____	75.000	3,750.00
513	50.00	Cu. Yards , Sand Bags In Place FOR <u>FIFTY DOLLARS NO CENTS</u> _____ _____	50.000	2,500.00
514	10.00	Gallons , Epoxy Protective Coating FOR <u>FIVE HUNDRED DOLLARS NO CENTS</u> _____ _____	500.000	5,000.00
			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words		Brought Forward	
				Unit Bid Price	Amount Bid
515	100.00	Sq. Yards , Sawcutting Grooves in Existing Asphalt or Concrete Pavement FOR TWELVE DOLLARS NO CENTS		12.000	1,200.00
516	50.00	Pounds , Lime Cement Pavement Grouting FOR TWELVE DOLLARS NO CENTS	PER Sq. Yards	12.000	600.00
517	10.00	Each , Drilling Holes for Lime Cement Grouting FOR TWENTY FIVE DOLLARS NO CENTS	PER Pounds	25.000	250.00
522	20.00	Each , Triangular Guide Rail Delineator FOR FIFTY DOLLARS NO CENTS	PER Each	50.000	1,000.00
525A	200.00	Lin. Feet , Full Depth Pavement Cleaning & Resealing Transverse Joints in Portland C FOR FIVE DOLLARS NO CENTS	PER Lin. Feet	5.000	1,000.00
				Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Unit Bid Price	Amount Bid	
525B	200.00	Lin. Feet	, Full Depth Pavement Cleaning & Resealing Transverse Joints in Portland C				4.000	800.00
		FOR	FOUR DOLLARS NO CENTS					
			PER Lin. Feet					
525C	200.00	Lin. Feet	, Full Depth Pavement Cleaning & Resealing Transverse Joints in Portland C				2.000	400.00
		FOR	TWO DOLLARS NO CENTS					
			PER Lin. Feet					
525D	200.00	Lin. Feet	, Full Depth Pavement Cleaning & Resealing Transverse Joints in Portland C				2.000	400.00
		FOR	TWO DOLLARS NO CENTS					
			PER Lin. Feet					
526A	100.00	Lin. Feet	, Cleaning & Resealing Longitudinal Concrete Joints in Portland Cement C				5.000	500.00
		FOR	FIVE DOLLARS NO CENTS					
			PER Lin. Feet					
526B	1,000.00	Lin. Feet	, Cleaning & Resealing Longitudinal Concrete Joints in Portland Cement C				4.000	4,000.00
		FOR	FOUR DOLLARS NO CENTS					
			PER Lin. Feet					
							Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words				Unit Bid Price	Amount Bid	
526C	1,000.00	Lin. Feet	, Cleaning & Resealing Longitudinal Concrete Joints in Portland Cement Cr					
		FOR	TWO DOLLARS NO CENTS				2.000	2,000.00
			PER Lin. Feet					
526D	1,000.00	Lin. Feet	, Cleaning & Resealing Longitudinal Concrete Joints in Portland Cement Cr					
		FOR	TWO DOLLARS NO CENTS				2.000	2,000.00
			PER Lin. Feet					
527A	500.00	Lin. Feet	, Cleaning, Filling & Sealing Existing Joints and Cracks in Asphalt Pavemer					
		FOR	FIVE DOLLARS NO CENTS				5.000	2,500.00
			PER Lin. Feet					
527B	1,000.00	Lin. Feet	, Cleaning, Filling & Sealing Existing Joints and Cracks in Asphalt Pavemer					
		FOR	FOUR DOLLARS NO CENTS				4.000	4,000.00
			PER Lin. Feet					
527C	500.00	Lin. Feet	, Cleaning, Filling & Sealing Existing Joints and Cracks in Asphalt Pavemer					
		FOR	TWO DOLLARS NO CENTS				2.000	1,000.00
			PER Lin. Feet					
Carry Forward								

Item Number	Estimate of Quantities	Items with unit bid price written in words 02/14/2020@15:34:25			Brought Forward	
		Lin. Feet			Unit Bid Price	Amount Bid
527D	1,000.00	FOR	, Cleaning, Filling & Sealing Existing Joints and Cracks in Asphalt Pavement TWO DOLLARS NO CENTS			2,000.00
540	50.00	Each	, Steel Bollards SEVEN HUNDRED FIFTY DOLLARS NO CENTS			37,500.00
556.03	50.00	Each	, Stud Shear Connectors for Bridges TEN DOLLARS NO CENTS			500.00
557.01012403	5.00	Sq. Yards	, Accelerated Superstructure Concrete 24 Hours for Structural Slab Bridge THREE THOUSAND TWO HUNDRED DOLLARS NO CENTS			16,000.00
557.2001	10.00	Sq. Yards	, Structural Approach Slab with Integral Wearing Surface - Type 1 Friction FIVE HUNDRED SIXTY DOLLARS NO CENTS			5,600.00
Carry Forward						

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
558.02	100.00	Sq. Yards, Longitudinal Sawcut Grooving of Structural Slab Surface FOR FIFTEEN DOLLARS NO CENTS	15.000	1,500.00
559.16960011	100.00	Sq. Feet, Protective Sealing of Structural Concrete by Coating Type FOR FOUR DOLLARS NO CENTS	4.000	400.00
559.90010011	50.00	Sq. Yards, Anti - Graffiti Protection Coating FOR TWO DOLLARS FIFTY CENTS	2.500	125.00
560.08	100.00	Lin. Feet, Tuck Pointing FOR TWENTY FIVE DOLLARS NO CENTS	25.000	2,500.00
560.16010008	5.00	Lin. Feet, Remove, Store and Reset Existing Stone Coping FOR TWO THOUSAND DOLLARS NO CENTS	2,000.000	10,000.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
560.18000008	50.00	Lin. Feet FOR FORTY FIVE DOLLARS NO CENTS _____ _____ _____	45.000	2,250.00
560.18100011	5.00	Sq. Feet FOR TWO THOUSAND DOLLARS NO CENTS _____ _____ _____	2,000.000	10,000.00
564.20010008	500.00	Pounds FOR FOUR DOLLARS FIFTY CENTS _____ _____ _____	4.500	2,250.00
564.75010004	2.00	Each FOR NINE THOUSAND SIX HUNDRED DOLLARS NO CENTS _____ _____ _____	9,600.000	19,200.00
564.75020004	2.00	Each FOR SIXTY NINE THOUSAND DOLLARS NO CENTS _____ _____ _____	69,000.000	138,000.00
Carry Forward				

Items with unit bid price written in words				Brought Forward
Item Number	Estimate of Quantities			Unit Bid Price
564.75030004	2.00	Each	, Structural Steel Repair, Type III	
		FOR	TWELVE THOUSAND DOLLARS NO CENTS	12,000.000
			PER Each	24,000.00
564.75040004	2.00	Each	, Structural Steel Repair, Type IV	
		FOR	TWENTY TWO THOUSAND DOLLARS NO CENTS	22,000.000
			PER Each	44,000.00
565.2023	2.00	Each	, Type E.B. Fixed Bearing (112 to 168K)	
		FOR	FIVE THOUSAND DOLLARS NO CENTS	5,000.000
			PER Each	10,000.00
565.2033	2.00	Each	, Type E.B. Expansion Bearing (112 to 168K)	
		FOR	FIVE THOUSAND DOLLARS NO CENTS	5,000.000
			PER Each	10,000.00
565.43020015	2.00	Each	, Bridge Bearing Restoration Type 1	
		FOR	SIXTEEN THOUSAND NINE HUNDRED DOLLARS NO CENTS	16,900.000
			PER Each	33,800.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
568.51	10.00	Lin. Feet , Steel Bridge Railing (Four Rail) FOR FOUR HUNDRED THIRTY DOLLARS NO CENTS	430.000	4,300.00
568.70	10.00	Lin. Feet , Transition Bridge Railing FOR NINE HUNDRED SEVENTY SIX DOLLARS NO CENTS	976.000	9,760.00
571.03	1,000.00	Pounds , Removal of Hazardous Paint Removal Waste Containing Lead FOR TEN DOLLARS NO CENTS	10.000	10,000.00
574.020001	100.00	Sq. Feet , Structural Steel Painting: Overcoating FOR SIXTY FIVE DOLLARS NO CENTS	65.000	6,500.00
574.030001	100.00	Sq. Feet , Structural Steel Painting: Localized FOR THREE HUNDRED DOLLARS NO CENTS	300.000	30,000.00
Carry Forward				

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
580.01	20.00	Cu. Yards , Removal of Structural Concrete FOR FIVE THOUSAND SIX HUNDRED DOLLARS NO CENTS	5,600.000	112,000.00
580.04	2,000.00	Sq. Feet , Removal of Concrete Approach Slab FOR NINETY SIX DOLLARS NO CENTS	96.000	192,000.00
585.01	1.00	Each , Structural Lifting Operation Type A FOR TWENTY TWO THOUSAND FIVE HUNDRED DOLLARS NO CENTS	22,500.000	22,500.00
586.0201	10.00	Each , Drilling and Grouting Bolts or Reinforcing Bars FOR NINETY FOUR DOLLARS NO CENTS	94.000	940.00
589.01	1,000.00	Pounds , Removal of Existing Steel FOR FIVE DOLLARS NO CENTS	5.000	5,000.00
Carry Forward				

Item Number	Estimate of Quantities	Items with unit bid price written in words	Unit Bid Price	Amount Bid
594.01	100.00	Cu. Feet Timber & Lumber FOR ONE HUNDRED FORTY EIGHT DOLLARS NO CENTS	148.000	14,800.00
		PER Cu. Feet		
594.02	100.00	Cu. Feet Stress Greded Timber and Lumber FOR ONE HUNDRED NINETY SIX DOLLARS NO CENTS	196.000	19,600.00
		PER Cu. Feet		
594.03	1,000.00	Cu. Feet Treated Timber & Lumber FOR ONE HUNDRED SIXTY NINE DOLLARS NO CENTS	169.000	169,000.00
		PER Cu. Feet		
685.07200110	1,000.00	Lin. Feet White Epoxy ReflectORIZED Pavement Stripes - 20 Mills (Wet Night Visibility) FOR FIVE DOLLARS NO CENTS	5.000	5,000.00
		PER Lin. Feet		
685.07200210	100.00	Each White Epoxy ReflectORIZED Pavement Letters - 20 Mills (Wet Night Visibility) FOR ONE HUNDRED FIFTY DOLLARS NO CENTS	150.000	15,000.00
		PER Each		
		Carry Forward		

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
685.07200310	100.00	Each , White Epoxy ReflectORIZED Pavement Symbols - 20 Mils (Wet Night Visible) FOR TWO HUNDRED DOLLARS NO CENTS	200.000	20,000.00
685.07200410	500.00	Lin. Feet , White Epoxy ReflectORIZED Pavement Stripes (Cross Hatching) - 20 Mils (Visible) FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00
685.07200510	500.00	Lin. Feet , White Epoxy ReflectORIZED Pavement Stripes (Special Markings) - 20 Mils (Visible) FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00
685.07200610	1,000.00	Lin. Feet , Yellow Epoxy ReflectORIZED Pavement Stripes - 20 Mils (Wet Night Visible) FOR FIVE DOLLARS NO CENTS	5.000	5,000.00
685.07200710	500.00	Lin. Feet , Yellow Epoxy ReflectORIZED Pavement Stripes (Cross Hatching) - 20 Mils (Visible) FOR EIGHT DOLLARS NO CENTS	8.000	4,000.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
685.07200810	100.00	Each , Yellow Epoxy ReflectORIZED Pavement Yield Line Symbols - Small - 20 Mil FOR TWO HUNDRED DOLLARS NO CENTS	200.000	20,000.00
685.07200910	100.00	Each , White Epoxy ReflectORIZED Pavement Yield Line Symbols - Large - 20 Mills FOR TWO HUNDRED DOLLARS NO CENTS	200.000	20,000.00
723	250.00	Sq. Feet , Ornamental Steel Picket Fence (4'-0" to 8'-0" High) FOR FIFTEEN DOLLARS NO CENTS	15.000	3,750.00
724	100.00	Sq. Feet , 4'-0" Wide Single Swing Ornamental Steel Picket Gates (4'-0" to 8'-0" High) FOR TWELVE DOLLARS NO CENTS	12.000	1,200.00
725	100.00	Sq. Feet , 10'-0" Wide Double Swing Ornamental Steel Picket Gates (4'-0" to 8'-0") FOR FOURTEEN DOLLARS NO CENTS	14.000	1,400.00
Carry Forward			Carry Forward	

Item Number	Estimate of Quantities	Items with unit bid price written in words	Brought Forward	Unit Bid Price	Amount Bid
726	500.00	Sq. Feet , Ornamental Steel Picket Cantelever Slide Gates n 4'-0" to 8'-0"heights (16' FOR SIXTEEN DOLLARS NO CENTS		16.000	8,000.00
727	250.00	Sq. Feet , Straight Picket PVC Fence (4'-0" to 6'-0 High) FOR EIGHT DOLLARS NO CENTS		8.000	2,000.00
728	100.00	Sq. Feet , 4'-0 Wide Single Swing Straight Picket PVC Gates (4'-0" to 6'-0" High) FOR THIRTEEN DOLLARS NO CENTS		13.000	1,300.00
729	100.00	Sq. Feet , 10'-0" Wide Double Swing Straight Picket PVC Gates (4'-0" to 6'-0" High) FOR THIRTEEN DOLLARS NO CENTS		13.000	1,300.00
730	250.00	Sq. Feet , Straight Solid Panel PVC Fence (4'-0" to 8'-0" High) FOR EIGHT DOLLARS NO CENTS		8.000	2,000.00
Carry Forward					

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
731	100.00	Sq. Feet , 4'-0" Wide Single Swing Straight Solid Panel PVC Gates (4'-0" to 8'-0" High) FOR THIRTEEN DOLLARS NO CENTS	13.000
		PER Sq. Feet	1,300.00
732	100.00	Sq. Feet , 10'-0" Wide Double Swing Straight Solid Panel PVC Gates (4'-0" to 8'-0" High) FOR THIRTEEN DOLLARS NO CENTS	13.000
		PER Sq. Feet	1,300.00
733	15.00	Each , 35 Foot High Aluminum Flagpole- Internal Halyard FOR ONE THOUSAND DOLLARS NO CENTS	1,000.000
		PER Each	15,000.00
744	1.00	Lump Sum , Force Account Work FOR ONE HUNDRED THOUSAND DOLLARS NO CENTS	100,000.000
		PER Lump Sum	100,000.00
762	250.00	Pounds , Integral Color Pigment for Cement Concrete FOR FIFTEEN DOLLARS NO CENTS	15.000
		PER Pounds	3,750.00
Carry Forward			

Item Number	Estimate of Quantities	Items with unit bid price written in words JAN 14 2020 15:34:25	Brought Forward	
			Unit Bid Price	Amount Bid
763	1,000.00	Sq. Feet , Imprinting on Cement Concrete Pavement or Sidewalk FOR <u>EIGHT DOLLARS NO CENTS</u> _____ _____	8.000	8,000.00
764	500.00	Sq. Feet , Colored and Imprinted Asphalt FOR <u>TWENTY DOLLARS NO CENTS</u> _____ _____	20.000	10,000.00
765	10.00	Each , Furnish and Install Concrete Parking Bumper FOR <u>ONE HUNDRED DOLLARS NO CENTS</u> _____ _____	100.000	1,000.00
766	100.00	Sq. Feet , Retaining Wall System FOR <u>THIRTY DOLLARS NO CENTS</u> _____ _____	30.000	3,000.00
767	100.00	Lin. Feet , Furnish. Install & Maintain Turbidity Curtain FOR <u>TWELVE DOLLARS NO CENTS</u> _____ _____	12.000	1,200.00
			Carry Forward	

Items with unit bid price written in words			Brought Forward
Item Number	Estimate of Quantities		Unit Bid Price
768	100.00	Lin. Feet FURNISH AND INSTALL ARMORLESS BRIDGE JOINT SYSTEM FOR TWO HUNDRED DOLLARS NO CENTS	200.000
		PER Lin. Feet	20,000.00
769A	10.00	Each Type "A" Catch Basin Insert - Filter Type (Combination Inlet) FOR ONE THOUSAND TWO HUNDRED FIFTY DOLLARS NO CENTS	1,250.000
		PER Each	12,500.00
769B	10.00	Each Type "B" Catch Basin Insert - Filter Type (Curb Inlet Only) FOR ONE THOUSAND FOUR HUNDRED DOLLARS NO CENTS	1,400.000
		PER Each	14,000.00
770A	10.00	Each Type "A" Catch Basin Insert - Sediment Control Type (Combination Inlet) FOR ONE THOUSAND ONE HUNDRED DOLLARS NO CENTS	1,100.000
		PER Each	11,000.00
770B	10.00	Each Type "B" Catch Basin Insert - Sediment Control Type (Curb Inlet Only) FOR ONE THOUSAND TWO HUNDRED FIFTY DOLLARS NO CENTS	1,250.000
		PER Each	12,500.00
Carry Forward			

Items with unit bid price written in words			Brought Forward	
Item Number	Estimate of Quantities		Unit Bid Price	Amount Bid
771A	10.00	Each , Type "A" Catch Basin Insert - Sediment Control Type with Pathogen Filter FOR ONE THOUSAND FOUR HUNDRED DOLLARS NO CENTS	1,400.000	14,000.00
771B	10.00	Each , Type "A" Catch Basin Insert - Sediment Control Type with Pathogen Filter FOR ONE THOUSAND FIVE HUNDRED FIFTY DOLLARS NO CENTS	1,550.000	15,500.00
		PLEASE BE SURE A BID IS ENTERED FOR EACH ITEM EXCEPT AS DIRECTED FOR OPTIONAL ITEMS		
		TOTAL OR GROSS SUM WRITTEN IN WORDS FIVE MILLION FOUR HUNDRED EIGHTY THOUSAND SIX HUNDRED SEVENTY DOLLARS EIGHTY THREE CENTS	\$	\$5,480,670.83

LAURA CURRAN
NASSAU COUNTY EXECUTIVE



KENNETH G. ARNOLD, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

VENDOR PORTAL ACKNOWLEDGMENT

Vendor Name: Pratt Brothers, Inc.
Contract Title: General Requirements Contract
Contract Number: H66302W

Vendors doing business with Nassau County, including those responding to this solicitation, must register with the County's Vendor Portal in order to submit the mandatory vendor disclosure forms required for an award pursuant to this solicitation. Vendors may register at www.nassaucountyny.gov by clicking the "Vendor Portal Registration" button at the bottom of the webpage. Failure to do so may result in a delay of contract award.

The undersigned hereby acknowledges that he/she has registered and has submitted the required disclosures on the Nassau County Vendor Portal.

Signature

A handwritten signature in black ink, appearing to read "Joseph M. Williams, Jr.", is written over a horizontal line.

February 13, 2020
Date

Joseph M. Williams, Jr., P.E., Sr. Vice President
Print Name

If you attempted to register via the Portal but were unable to do so, please explain here:

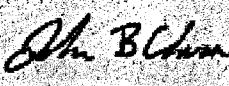

LAURA CURRAN
NASSAU COUNTY EXECUTIVE

NASSAU COUNTY



Vendor Code of Ethics



POLICY/PROCEDURE TITLE: Nassau County Vendor Code of Ethics	DATE ISSUED: June 5 th , 2019
DEPARTMENT ISSUING: Executive – Compliance	AUTHORIZED and SIGNED BY:  Deputy County Executive For Compliance  County Executive

POLICY: The Office of the Nassau County Executive recognizes the importance of the vendor community in helping the County provide necessary services for the residents of Nassau County. It is the policy of the County Executive to ensure that all vendors doing business with Nassau County operate under the highest standards of legal and ethical conduct.

PURPOSE: To set forth a Code of Conduct for vendors to ensure that Nassau County Vendors are conducting their business with integrity, ethics, and compliance with all applicable laws and regulations.

SCOPE: All vendors doing business or seeking to do business with Nassau County as specified in the Code.



Vendor Code of Ethics

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Vendor Code of Ethics

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Vendor Code of Ethics

Chapter 1: DEFINITIONS

As used in this Code, the following terms have the following meanings:

Adverse Job-Related Action includes any material alteration to existing terms, conditions, and privileges of employment, such as dismissal, demotion, suspension, compulsory leave, disciplinary action, creation of a hostile work environment, negative performance evaluation, any action resulting in loss of staff, office space or equipment or other benefit, reduction in compensation, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected employee.

Contact means any oral or written communication with any Nassau County Employee, other than the Designated Point(s) of Contact, where it could be reasonably inferred that such contact was intended to influence, or could reasonably be expected to influence, the subject of a County procurement.

Designated Point(s) of Contact means the individual(s) designated by the County to be a Vendor's only contact with Nassau County following the public advertisement of a solicitation or the issuance of a request for a bid, proposal, or quote for small purchase, until the award of a resulting contract and, where applicable, approval by the County Legislature. This timeframe, further defined in the State Procurement Lobbying Law, is also known as the Restricted Period.

Nassau County Employee means any officer, official or employee of Nassau County.

Family Member means (i) a Nassau County Employee's Spouse, Domestic Partner, Child, Sibling or Parent; (ii) a person who is a direct descendant (or the spouse of a direct descendant) of a Sibling of the Nassau County Employee or a Sibling of the Nassau County Employee's Spouse or Domestic Partner; or (iii) a person living in the same household as a Nassau County Employee.

Gift means the transfer, without equivalent consideration, of anything of benefit, tangible or intangible, having more than nominal value, including, but not limited to, cash, loans, forbearance,



Vendor Code of Ethics

services, travel, gratuities of any kind, favors, money, meals, refreshments, entertainment, hospitality, admittance to private clubs, use of time-shares, personal use of the Vendor's facilities, promises, tickets to entertainment or sporting events, weekend trips, golf outings, loans of equipment, or other thing or benefit. A Gift need not be intended to influence or reward any individual or entity.

Nassau County Code of Ethics means Nassau County Charter Section 2218, and the rules and regulations promulgated thereunder as may be amended or modified.

Participating Employee means any Vendor employee who engages in any (written or oral communication of a non-clerical or non-administrative nature with Nassau County or with a Nassau County Employee(s) as part of or in connection with the procurement.

Participating Nassau County Employee means any Nassau County Employee who the Vendor knows, has reason to know, or can reasonably anticipate is involved in a specific procurement, in either a direct or decision-making capacity, but not in a clerical capacity. This includes but is not limited to the Designated Point of Contact, the project manager, the project manager's staff to the extent that they are involved in the procurement, members of selection committees, technical experts and negotiating teams.

Primary Contracting Party means a Vendor who intends to directly enter into or has a contract with Nassau County.

Retaliatory Action is defined as any Adverse Job-Related Action taken by, or at the direction or request of, a Vendor or a Vendors' Employees as a result of any individual's (i) good-faith report with respect to a violation or potential violation of this Code or the law; or (ii) cooperation in any investigation of unlawful conduct or misconduct conducted by Nassau County or by federal, state, or local law enforcement officials.

State Procurement Lobbying Law means New York State Finance Law Sections 139-j and 139-k, and the rules and regulations promulgated thereunder as may be amended or modified.

Vendor means any individual or entity seeking to or doing business



Vendor Code of Ethics

with Nassau County within the scope of this Code, including, without limitation, contractors, consultants, suppliers, manufacturers seeking to act as the primary contracting party, officers and employees of the foregoing, as well as any subcontractors, subconsultants and suppliers at all lower tiers.

Chapter 2: LIMITATIONS AND REPORTING OF CONTACTS WITH NASSAU COUNTY

Section 2.01 Designated Point(s) of Contact

Each procurement solicitation issued by Nassau County will identify the Designated Point(s) of Contact for that solicitation as required by the State Procurement Lobbying Law. Once the Designated Point(s) of Contact is/are established, the Vendor and any person or entity acting on the Vendor's behalf, including without limitation, those providing compensated or uncompensated lobbying, advocacy, consulting or other services should ensure that its contacts with Nassau County are in compliance with the requirements of the State Procurement Lobbying Law.

Chapter 3: GIFTS OR CONTINGENT FEES

Section 3.01 Zero Tolerance

No Vendor may offer or give any Gift, directly or indirectly, to a Nassau County Employee. Similarly, no Vendor may offer or give any Gift, directly or indirectly, to any Family Member of a Nassau County employee where such Gift is made because of the Vendor's relationship with the Nassau County Employee. Additionally, no Vendor may accept a gift from a Nassau County Employee.

This Zero-Tolerance Policy applies regardless of actual intentions. In other words, even if a Gift does not, or is not intended to, influence an action or decision by a Nassau County Employee, it is prohibited by this Code.

Section 3.02 Personal Relationships

Notwithstanding the foregoing, if a Vendor has a pre-existing family or personal relationship with the Employee, a Gift that is wholly unconnected with the Employee's duties on behalf of Nassau County is



Vendor Code of Ethics

not necessarily prohibited.

In determining whether the giving of an item was motivated by personal rather than business concerns, the following factors are considered:

(a) the history of the relationship between the donor and the recipient, including but not limited to the mutuality of gift giving;

(b) whether the item was paid for by the donor.

The giving of an item shall not be considered to be motivated by a family or personal relationship if the donor seeks to charge or deduct the value of the item as a business expense or seeks reimbursement from a client.

However, regardless of the family or personal relationship between a Vendor and an employee, a Gift is strictly forbidden where it is being given under circumstances where it can reasonably be inferred that it was intended to influence the employee in the performance of his or her official duties.

Section 3.03 Contingent Fees

The Vendor will not employ or retain any individual or entity for the purpose of soliciting or securing a Nassau County contract upon any agreement or understanding for a commission, percentage, brokerage, or fee that is contingent or dependent upon the outcome of the procurement.

Chapter 4: NEGOTIATIONS FOR FUTURE EMPLOYMENT

Section 4.01 Restrictions During the Procurement Process

Vendors shall not discuss future employment with Participating Nassau County Employees or their Family Members from the date the procurement is advertised or solicited through 30 days following the date that the procurement is awarded, even if a Participating Nassau County Employee contacts the Vendor regarding employment. Questions regarding whether a particular Nassau County employee is a Participating Nassau County Employee for a specific



Vendor Code of Ethics

procurement should be directed to the Designated Point of Contact for the procurement.

Section 4.02 Restrictions Post Award

Vendors are prohibited from offering or discussing an employment opportunity with a Nassau County Employee or his or her Family Members before whom the Vendor has or expects to have a pending specific matter including, but not limited to, negotiations, performance evaluation, task order selection, approval of a voucher or invoice, or approval of or agreement to a contract amendment, change order, or deviation or waiver until:

- (i) 30 days from the time the matter before the Employee is closed; or
- (ii) 30 days from the time the Employee has no further involvement with the matter because of recusal or reassignment.

Chapter 5: CONFLICT OF INTEREST

Section 5.01 Financial Interest

Neither the Vendor, nor any director, officer, principal, owner, or partner thereof, as the case may be, may have a 10% or greater interest, nor shall the Vendor, nor any director, officer, principal, owner, or partner thereof, acquire a 10% or greater interest, either directly or indirectly, in any company or firm that would conflict in any manner or degree with the performance of the Nassau County contract.

The Vendor will not permit an employee having a 10% or greater interest, either directly or indirectly, in any company or firm that would conflict in any manner or degree with the performance of the Nassau County contract to be employed in the performance of the Nassau County contract.

Section 5.02 Personal Business Dealings

Neither the Vendor, nor any director, officer, principal, owner, or partner thereof, may have a non-County business dealing with a

Participating Nassau County Employee where it can be reasonably inferred that the purpose of the business dealing, at least in part, is to influence the Participating Nassau County Employee's action on a pending County matter.

Section 5.03 Disclosure and Cooperation

The Vendor shall disclose immediately to the County any real or potential conflict of interest of which it becomes aware. This obligation is ongoing and shall last through the completion of performance of the contract. The Vendor shall provide to Nassau County, at the County's request and upon such forms as may be furnished by Nassau County, a disclosure of organizational, financial, contractual or other affiliations with any organization or entity that has interests that may be substantially affected by the procurement solicitation or award. The Vendor shall fully cooperate in any inquiry or investigation undertaken by Nassau County to determine whether any such affiliations present a conflict of interest, or whether any other provision of this Code has been violated. The Vendor shall fully cooperate with audits, investigations, examinations and reviews by the Nassau County Inspector General conducted pursuant to section 187 of the Nassau County Charter.

Section 5.04 Confidential Information

At no time shall any Vendor who obtains confidential or proprietary Nassau County information in the course of doing or seeking to do business with the County disclose any such information to any person not authorized by Nassau County to receive such information or use such information for any personal gain except as necessary to fulfill its contractual obligations to Nassau County.

If the Vendor receives from any source confidential or proprietary Nassau County information prior to the award of a resulting contract and, where applicable, approval by the County Legislature, without the explicit approval of the Designated Point of Contact, the Vendor shall immediately so notify the Designated Point of Contact.

Nassau County confidential or proprietary information includes, but is not limited to, internal cost estimates and proposals submitted by other Vendors.



Vendor Code of Ethics



Section 5.05 Prohibition Regarding Bidding by Participants in Procurement Development

No Vendor who participates in the development of a scope of work, solicitation documents, assessment criteria, contractual instruments or technical specifications may participate as a bidder, sub-bidder, proposer or sub-proposer on that particular procurement or perform any work on that particular procurement or any other procurement that would constitute an organizational conflict of interest or would give that Vendor an unfair advantage over other bidders or proposers on that procurement. This prohibition may be waived in writing by the County Chief Procurement Officer upon a showing of good cause.

Chapter 6: FORMER NASSAU COUNTY EMPLOYEES

Section 6.01 Appearance Before Former Agency-Two Year Bar

Except as provided for in Section 2218(8) of the Nassau County Code of Ethics, the Vendor will not permit a former Nassau County Employee to appear or practice before any Nassau County agency, either prior to award or in the performance of a Nassau County contract, for a period of two years after termination of the Nassau County Employee's services with the County.

Section 6.02 Appearance Before Former Agency-Life Time Bar

Except as provided for in Section 2218(8) of the Nassau County Code of Ethics, the Vendor will not permit a former Nassau County Employee to appear, practice, communicate or otherwise render services before the agency that employed the officer or employee or any other agency of Nassau County, either prior to award or in the performance of an agency's contract in relation to any case, proceeding, application or transaction with respect to which such former officer or employee was directly concerned and in which he or she personally participated, or which was under his or her active consideration during the period of his or her employment. This provision is a lifetime bar on projects that the former Nassau County Employee previously worked on while employed by the County.



Vendor Code of Ethics

Chapter 7: NON-COLLUSION

Section 7.01 Independent Bid Assessment

The Vendor will calculate the price(s) contained in any bid or proposal independently, without collusion, consultation, communication, or agreement with any competing Vendor for the purpose of restricting competition.

Section 7.02 Non-Communication of Bid

Unless otherwise required by law, the price(s) which the Vendor quotes in its bid or proposal will not knowingly be disclosed by the Vendor, directly or indirectly, to any competing Vendor prior to the closing date for bids or proposals.

Section 7.03 Bid Submission

The Vendor will not make any attempt to induce any other individual or entity to submit or not to submit a bid or proposal.

Chapter 8: DISTRIBUTION AND CERTIFICATION

Section 8.01 Distribution of Vendor Code of Ethics and Vendor's Participating Employee Acknowledgements

As a condition of being considered for the award of any contract above the County's small purchase threshold of \$10,000, the Vendor will be required to distribute copies of the Nassau County Vendor Code of Ethics to all Participating Employees prior to any of those employee's participation in the procurement. The Code may be distributed either in hard copy or electronically as a separate PDF.

Additionally, as a condition of being considered for the award of any contract above the County's small purchase threshold, the Vendor will be required to obtain an acknowledgement from each of its Participating Employees ("Participating Employee Acknowledgements") that they have received, read, understand, and will comply with the Nassau County Vendor Code of Ethics.



Vendor Code of Ethics

The Vendor's responsibility for distributing copies of the Nassau County Vendor Code of Ethics and obtaining such signed Participating Employee Acknowledgements is ongoing until completion of performance of the contract and shall be retained for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County.

Receipt and retention of Participating Employee Acknowledgments by the Vendor shall be subject to audit by Nassau County.

Section 8.02 Vendor Certifications

The vendor by signing the final contract thereby certifies and attests to the following:

- (a) The Vendor has been provided with a copy of the Nassau County Vendor Code of Ethics and will comply with all of the provisions of the Code;
- (b) All of its Participating Employees during the course of procurement or contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to any of those employees' participation in the procurement;
- (c) All Participating Employees have completed the acknowledgement required by Section 8.01 of this Code;
- (d) The Vendor will retain all of the signed Participating Employee Acknowledgements for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County;
- (e) The Vendor will continue to distribute the Nassau County Vendor Code of Ethics, obtain signed Participating Employee Acknowledgements as new Participating Employees are added or changed during the contract period, and retain all of the signed acknowledgements for the same period as the Vendor is required to retain other contract documents in accordance with their contract with the County.



Vendor Code of Ethics

Section 8.03 Subcontractor Certifications

As a condition of being considered for the award of any contract above the County's small purchase threshold, the Vendor will obtain certifications executed by authorized officials from all of its lower tier subcontractors, subconsultants and suppliers (as well as from any other subcontractors, subconsultants and suppliers from whom that Vendor is soliciting or has received proposals for work on a Nassau County contract) whose employees have communicated or may communicate with Nassau County Employees. This obligation is ongoing and shall last through the completion of performance of the contract. Receipt and retention of lower tier certifications by the Vendor shall be subject to audit by Nassau County.

Chapter 9: PENALTIES

Section 9.01 Responsibility Determination

For violation of any provision of the Nassau County Vendor Code of Ethics, Nassau County may avail itself of every remedy in law or equity, or as agreed to by parties in any contract, including but not limited to declaring the Vendor non-responsible or in material breach of the contract.

Section 9.02 Civil/Criminal Penalties

Additionally, violation of the Nassau County Vendor Code of Ethics or a provision thereof may subject the Vendor to criminal or civil penalties under State or Federal law.

Chapter 10: REPORTING OBLIGATION

Section 10.01 Reporting Gift Requests

Notwithstanding the provisions of Chapter 4 above, the Vendor is obligated to immediately report to Nassau County's Inspector General and the County Chief Procurement Officer, any and all requests made to the Vendor by any Nassau County Employee for a Gift.

Section 10.02 Reporting Material Changes

The Vendor is under a continuing obligation to report any change in circumstances that materially affects any prior report to Nassau County to Department of Chief Contracting Officer, including but not limited to disclosure of conflicts of interest and representations made in the Contractor Responsibility Form.

Section 10.03 Reporting Violations and Overpayments

The Vendor is obligated to timely report in writing to Nassau County's Inspector General, in connection with the award, performance or closeout of the Nassau County contract or subcontract, any credible evidence of significant overpayments on the contract or that a principal, employee, agent or subcontractor has committed a



Vendor Code of Ethics

violation of law involving fraud, conflict of interest, bribery or gratuities.

Chapter 11: PROHIBITION ON RETALIATION

Section 11.01 Prohibition

To facilitate the reporting obligations under Chapter 10, this code strictly forbids all Vendors and Vendors' Employees from taking any Retaliatory Action against individuals who make such reports.



Vendor Code of Ethics

CERTIFICATION REGARDING DISTRIBUTION OF NASSAU COUNTY VENDOR CODE OF ETHICS

Bid/Proposal No.: H66302W

Project Description: General Requirements Contract

The prospective lower tier participant _____ (subcontractor, subconsultant, or supplier name) hereby certifies, by submission of this bid or proposal to Pratt Brothers, Inc. [prime contractor] in connection with the Nassau County bid or proposal number referenced above, to the best of its knowledge and belief, that all officers and personnel who have communicated or may communicate with Nassau County employees during the course of the procurement and through the completion of performance of the contract have been provided with a copy of the Nassau County Vendor Code of Ethics prior to each of these employee's participating in the procurement.

Executed this 13th day of February, 20 20.

By [Signature] Signature of Authorized Official

Joseph M. Williams, Jr., P.E., Sr. Vice President Name and Title of Authorized Official



Vendor Code of Ethics

PARTICIPATING EMPLOYEE ACKNOWLEDGEMENT REGARDING NASSAU COUNTY VENDOR CODE OF ETHICS

Company: Pratt Brothers, Inc.

Bid/Proposal No.: H66302W

I, Joseph M. Williams, Jr., P.E., acknowledge that I have received and read the Nassau County Vendor Code of Ethics on February 13, 2020 and that I understand it and will comply with this Code in my participation in procurements between Pratt Brothers, Inc. (Vendor name) and Nassau County.

Executed this 13th day of February, 2020.

By  Signature of Employee

Joseph M. Williams, Jr., P.E., Sr. Vice President Name and Title of Employee

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NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS

WICKS EXEMPT LIST OF SUBCONTRACTORS

CONTRACT NO.

NOTE: This form is required for "Single-Contract" projects exempt from the Wicks law. Failure to submit this form correctly may render the bidder non responsive.

Contractor's Name and Address	Project Description (Project Title, Facility Name and Address):		Bid Date:	Total Contract Amt:	
Federal ID No.:					
Indicate ANY work to be self-performed by the contractor in the following categories (check all that apply): <input type="checkbox"/> Plumbing and Gas Fitting <input type="checkbox"/> Steam Heating, Hot Water Heating, Ventilating and AC Apparatus <input type="checkbox"/> Electric Wiring and Standard Illuminating Fixtures					
If ALL contract work is to be self-performed, i.e. no subcontractors will be used, please check this box <input type="checkbox"/> skip to bottom of form, and sign it as required.					
Subcontractor's Name, Address and Federal ID No.	Check (✓) only one.			General Description of Work	Subcontractor's Contract Amt.
	Plumbing and Gas Fitting	Steam Heating, Hot Water Heating, Ventilating and AC Apparatus	Electric Wiring and Standard Illuminating Fixtures		
Federal ID No.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Federal ID No.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Federal ID No.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
This form must be filled out completely and legibly, signed by a company authorized representative and included in a separate, sealed envelope within the bid envelope. Use and additional page if needed. Failure to complete this form accurately and in its entirety, may result in a non responsive bid determination.					
Company Authorized Signature:				Title: _____ Date: _____	

U.S. DEPARTMENT OF JUSTICE
OFFICE OF JUSTICE PROGRAMS
OFFICE OF THE COMPTROLLER

**Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions
(Sub-Recipient)**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 28 CFR Part 67, Section 67.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Joseph M. Williams, Jr., P.E., Sr. Vice President

Name and Title of Authorized Representative

m/d/yy

Signature

2/13/2020

Date

Pratt Brothers, Inc.

Name of Organization

45 South Fourth Street, Bay Shore, NY 11706

Address of Organization

U.S. GPO: 1989 OJP FORM 4061/1 (REV. 2/89) Previous editions are obsolete

Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposes," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of reports in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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MacBride Fair Employment Principles

NONDISCRIMINATION IN EMPLOYMENT IN NORTHERN IRELAND: MACBRIDE FAIR EMPLOYMENT PRINCIPLES

In accordance with Chapter 807 of the Laws of 1992 the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either: (answer yes or no to one or both of the following, as applicable),

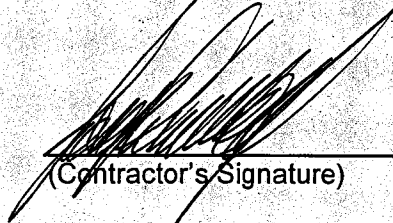
(1) have business operations in Northern Ireland,

Yes ___ No ☒

if yes:

(2) shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of their compliance with such Principles.

Yes ___ No ___


(Contractor's Signature)

Joseph M. Williams Jr., P.E.

Senior Vice President

Pratt Brothers, Inc.

(Name of Business)

NO TEXT ON THIS PAGE

1/1/1971 10:00 AM

IRAN DIVESTMENT ACT – CERTIFICATION

Pursuant to New York State Finance Law §165-a, Iran Divestment Act of 2012, the Office of General Services is required to post on its web site <http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf> a list of persons who have been determined to engage in investment activities in Iran ("the List"), as defined in that Act. Under Public Authorities Law § 2879-c, Iranian Energy Sector Divestment, the Authority, may not enter into or award a Contract unless it obtains a certification from a Bidder, who shall check the box and make the certification in Subparagraph a, below, that they are not on the List. If that certification cannot be made, the Authority may consider entering into a Contract, on a case by case basis if the Bidder checks the box and makes the certification in Subparagraph b, below, that their Iran investment is ceasing.

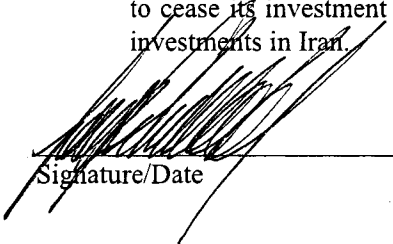
For purposes of this provision, a person engages in investment activities in Iran if: (A) the person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or (B) the person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran.

The Certification is as follows:

X

a. **Certification that the Bidder is not on the List:** Each person, where person means natural person, corporation, company, limited liability company, business association, partnership society, trust, or any other nongovernmental entity, organization, or group, and each person signing on behalf of any other party, certifies, and in the case of a joint bid or proposal or partnership each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each person is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the State Finance Law, or,

b. **Certification that the Bidder's investment in Iran is ceasing:** The person cannot make the certification in Subparagraph a, above, but asks the Authority to consider them for award of the Contract by certifying, under penalty of perjury, that the person's investment activities in Iran were made before April 12, 2012; the person's investment activities in Iran have not been expanded or renewed after April 12, 2012; and the person has adopted, publicized and is implementing a formal plan to cease its investment activities in Iran and to refrain from engaging in any new investments in Iran.


Signature/Date

2/13/2020 Joseph M. Williams, Jr., P.E., Sr. Vice President
Print Name and Position

NO TEXT ON THIS PAGE

CONTRACTOR CERTIFICATION STATEMENT REGARDING
STORM WATER POLLUTION AT THE WORK SITE

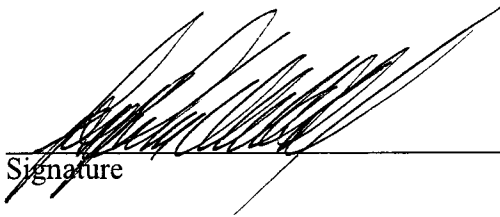
I certify under penalty of the law that I understand and agree to comply with the terms and conditions of the pollution prevention plan for the construction site identified in such plans as a condition of authorization to discharge storm water. I also understand the operator (Nassau County) must comply with the terms and conditions of the New York State Pollution Discharge Elimination System ("SPDES") general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Finally, I understand my contractual obligations in the matter as outlined in the contract documents.

CONTRACTOR'S NAME: Pratt Brothers, Inc.

TELEPHONE NUMBER: 631-667-6800

WORK SITE OR FACILITY NAME: Contract H66302W

WORK SITE OR FACILITY ADDRESS OR
OTHER IDENTIFYING DESCRIPTION: _____



Signature

2/13/2020

Date

Joseph M. Williams, Jr., P.E., Sr. Vice President

Print Name and Title of Signer

NO TEXT ON THIS PAGE

PROPOSAL: For all work in accordance with the drawings and specifications:

Pratt Brothers, Inc.

(Individual, Firm or Corporation, as case may be)

Individual's Social Security Number _____

Firm or Corporation's Federal ID Number 16-1620294

Firm or Corporation's Municipal License ID Number _____

Municipal Licensing Agency _____

By: [Signature] Date: February 13, 2020

(Print) Joseph M. Williams, Jr., P.E. Title: Sr. Vice President

WHERE BIDDER IS A CORPORATION, ADD:

ATTEST: [Signature]
Secretary

(CORPORATE)
(SEAL)

NO TEXT ON THIS PAGE

QUALIFICATION STATEMENT

Note: All blanks in the form are to be filled in. Where blanks are not applicable to your firm, so indicate in each instance.

1. How many years has your firm been in the business under your present business name? 17

2. How many years experience in the construction work of a similar type as this contract has your firm had;

a. as a Prime Contractor 17

b. as a Subcontractor 17

3. List below the construction projects your firm has under way as of this date:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
--------------------	------------------	----------------------	---

SEE ATTACHED QUALIFICATION STATEMENT

(use additional blank sheets if additional space is necessary)

4. List the projects which your firm as a firm has performed in the past few years which you feel will qualify you for this work:

Contract Amount	Class of work	Percent Completed	Name and Address of Owner or Contracting Officer
--------------------	------------------	----------------------	---

SEE ATTACHED QUALIFICATION STATEMENT

(use additional blank sheets if additional space is necessary)

5. Have you:

a. ever failed to complete any work awarded to You? NO
If so; identify the project, the owner, the contract amount, the circumstances and date of all such failures to complete.

b. ever been defaulted on a contract? NO
If so; identify the project, the owner, the contract amount, the circumstances and the date of all default actions

NO TEXT ON THIS PAGE

c. ever been declared a non-responsible bidder by any municipality or public agency? NO
If so; identify the project, the owner, the contract amount, the circumstances and the date of all such declarations

d. ever been barred from bidding municipal or public contracts? NO
If so; identify the municipality or public agency, the circumstances, date and term of disbarment for all debarments.

(use additional blank sheets if additional space is necessary)

6. Has any officer, partner or principal of your firm ever been on officer, partner or principal of some other firm:

a. that failed to complete a construction contract? NO
If so, state name of individual and identify the name of firm, the project, the owner, the contract amount, the circumstances and the date of all such failures to complete for all principals of the firm.

b. that has ever been defaulted on a contract? NO
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all default actions for all principals of the firm.

c. that has ever been declared a non-responsible bidder by any municipality or public agency? NO
If so; state the name of the individual and identify the name of the firm, the project, the owner, the contract amount, the circumstances and the date of all such declarations for all principals of the firm.

NO TEXT ON THIS PAGE

d. that has ever been barred from bidding municipal or public contracts? No

If so; state the name of the individual and identify the name of the firm, the municipality or public agency, the circumstances, date and term of debarment for all debarments for all principals of the firm.

(use additional blank sheets if additional space is necessary)

7. Has any officer or partner of your firm ever failed to complete a construction contract handled in his name? NO

If so, state name of individual, name of owner and reason therefor:

8. Disclose any and all violations of the Prevailing Wage and Supplemental Payment Requirements of the Labor Law of New York State.

NONE

9. Disclose any and all other Labor Law Violations, including, but not limited to, child labor violations, failure to pay wages, or unemployment insurance tax delinquencies within the past five years.

NONE

10. In what other lines of business are you financially interested?

Manufacturer of asphalt aggregate and asphalt pavement materials.

NO TEXT ON THIS PAGE

11. What is the construction experience of the principal individuals of your firm?

Individual's Name	Present Position or Office	Years of Construction Experience	Magnitude and type of work	In what Capacity
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SEE ATTACHED QUALIFICATION STATEMENT

(use additional blank sheets if additional space is necessary)

12. List below the equipment that you own that is available for the proposed work, giving present location where it may be inspected:

Item	Description, Size Capacity, Year, etc.	Years of Service	Present Location
------	---	---------------------	---------------------

SEE ATTACHED QUALIFICATION STATEMENT

(use additional blank sheets if additional space is necessary)

NOTE: Should the equipment be moved from the above mentioned location, the submitted hereby agrees upon request of the County to state the new location where same may be found.

13. If any of the above equipment is covered by chattel mortgage, conditional bill of sale, lien, or like encumbrance, state the complete details as to nature and amount of encumbrance, the name and address of the holder, etc.

N/A

(use additional blank sheets if additional space is necessary)

NO TEXT ON THIS PAGE

14. In what manner have you inspected this proposed work?
Explain in detail.

Complete site inspection and plan take off of all quantities and materials

(use additional blank sheets if additional space is necessary)

15. Explain your plan and lay-out for performing the proposed work.

As per plans and specifications.

16. If a contract is awarded or a permit is issued, to your firm, who will have the personal supervision of the work? Attach resume.

James J. Pratt, III, President

17. Insurance carried by your firm:

Type	Company	Limits of Coverage	Term
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SEE ATTACHED QUALIFICATION STATEMENT

NO TEXT ON THIS PAGE

18. The undersigned hereby declares: That the foregoing information contained in this bid is a true statement, including, but not limited to, the financial condition of the individual firm herein first named as of the date herein given; the undersigned has read that portion of the Instructions to the Bidders entitled **"Qualifications and Responsibility of Bidders"** and that the bidder acknowledges its affirmative obligation to transmit with this statement any matters relevant and material to those contractor qualifications and responsibility standards; that this statement is for the express purpose of inducing the party to whom it is submitted to award the submitted a contract or issuance of a permit; that any depository, vendor or other agency herein named is authorized to supply such party with any information necessary to verify this statement; and that it understands and agrees that any material misrepresentation or omission of material fact may be deemed grounds for disqualification of the bidder as "not responsible," and may also subject the bidder to future debarment, penalties, and sanctions, to the extent permitted by law.

NO TEXT ON THIS PAGE

NOTE: The bids shall be sworn to by the person signing them, in one of the following forms:

(Form of affidavit where Bidder is a corporation)

STATE OF NEW YORK)
 Suffolk) ss.:
COUNTY OF NASSAU)

Joseph M. Williams, Jr., P.E. Being duly sworn, deposes and says:
That he resides at 19 Burgundy Lane Street,
in the City of Nesconset, NY that he is the Sr. Vice President of
Pratt Brothers, Inc.
the corporation described in and which executed the foregoing
instrument; that he knows the seal of said corporation; that the seal
affixed to the said instrument is such corporate seal and was affixed
by order of the Board of Directors of said corporation; that he signed
his name thereto by like order; and that he has knowledge of the
several matters therein stated and they are in all respects true.
Subscribed and sworn to before me
this 13th day of February, 2020.

Carol A. Miller
Notary

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

(Form of Affidavit where Bidder is a firm)

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

_____ Being duly sworn, deposes and says:
That he is a member of
the firm described in and which executed the foregoing bid; that he
duly subscribed the name of the firm hereunto on behalf of the firm;
and that the several matters therein stated are in all respects true.
Subscribed and sworn to before me
this _____ day of _____, 20____.

Notary

(Form of Affidavit where Bidder is an individual)

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

_____ Being duly sworn, deposes and says:
That he is the person described in and who executed the foregoing bid
and that the several matters therein stated are in all respects true.
Subscribed and sworn to before me
this _____ day of _____, 20____.

Notary



PRATT BROTHERS, INC.
45 SOUTH FOURTH STREET
BAY SHORE, NY 11706
(631) 667-6800

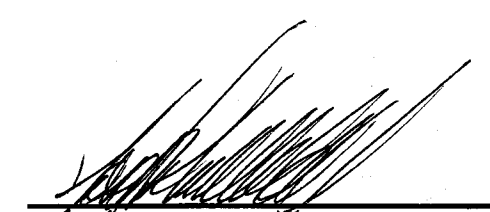
QUALIFICATION STATEMENT

PRATT BROTHERS, INC.

AS OF

DECEMBER 31, 2018

PRATT BROTHERS, INC.



JOSEPH M. WILLIAMS, JR., P.E., SR. VICE PRESIDENT

QUALIFICATION STATEMENT

1. How many years has your firm been in the business under your present business name?

17

2. How many years experience in the construction work of a similar type as this contract, has your firm had?

- a) as a Prime Contractor 17
b) as a Subcontractor 17

3. List below the construction projects your firm has under way as of this date.

Contract Amount	Class of Work	Percent Completed	Name and Address of Owner or Contracting Officer
-----------------	---------------	-------------------	--

Please See Enclosure 1

4. List the projects your firm as a firm has performed in the past few years which you feel will qualify you for this work.

Contract Amount	Class of Work	Percent Completed	Name and Address of Owner or Contracting Officer
-----------------	---------------	-------------------	--

Please See Enclosure 2

5. Have you:

- a) ever failed to complete any work awarded to you?

No

- b) ever been defaulted on a contract?

No

c) ever declared a non-responsible bidder by any municipality or public agency?

No

d) ever been barred from bidding municipal or public contracts?

No

6. Has any officer or partner or principal of your firm ever been an officer or partner or principal of some other firm:

a) that failed to complete a construction contract?

No

b) that has ever been defaulted on a contract?

No

c) that has ever been declared a non-responsible bidder by any municipality or public agency?

No

d) that has ever been barred from bidding municipal or public contracts?

No

7. Has any officer or partner of your firm ever failed to complete a construction contract handled in this name?

No

8. Disclose any and all violations of the Prevailing Wage and Supplemental Payment Requirements of the Labor Law of New York State.

None

9. Disclose any and all other Labor Law Violations, including, but not limited to, child labor violations, failure to pay wages, or unemployment insurance tax delinquencies within the past five years.

None

10. In what other lines of business are you financially interested?

Manufacturer of Asphalt Pavement Materials
Manufacturer of Asphalt Aggregate Materials

11. What is the construction experience of the principal individuals of your firm?

Individual's Name	Present Position or Office	Years of Construction Experience	Magnitude and Type of Work	In What Capacity
----------------------	----------------------------------	--	----------------------------------	------------------------

Please See Enclosure 3

12. List below the equipment that you own that is available for the proposed work, giving present location where it may be inspected.

Item	Description, Size Capacity, Year, Etc.	Years of Service	Present Location
------	---	---------------------	---------------------

Please See Enclosure 4

14. In what manner have you inspected this proposed work? Explain in detail.

Complete Site Inspection
Complete plan take off of all quantities and materials

15. Explain your plan and lay-out for performing the proposed work.

To be submitted at the pre-construction meeting.

16. If a contract is awarded or a permit is issued to your firm, who will have the personal supervision of the work?

James J. Pratt, III

17. Insurance carried by your firm.

Please See Enclosure 5

18. Current financial statement.

Please See Enclosure 7

19. The undersigned hereby declares: That the foregoing information contained in this bid is a true statement, including, but not limited to, the financial condition of the individual firm herein first named as of the date herein given; the undersigned has read that portion of the Instructions to the Bidders entitled "**Qualifications and Responsibility of Bidders**" and that the bidder acknowledges its affirmative obligation to transmit with this statement any matters relevant and material to those contractor qualifications and responsibility standards; that this statement is for the express purpose of inducing the party to whom it is submitted to award the submitted a contract or issuance of a permit; that any depository, vendor or other agency herein named is authorized to supply such party with any information necessary to verify this statement; and that it understands and agrees that any material misrepresentation or omission of material fact may be deemed grounds for disqualification of the bidder as "not responsible," and may also subject the bidder to future debarment, penalties, and sanctions, to the extent permitted by law.

NOTE: The bids shall be sworn to by the person signing them, in the following form:

(Form of affidavit where Bidder is a corporation)

STATE OF **NEW YORK**)
) ss.:
COUNTY OF **SUFFOLK**)

Joseph M. Williams, Jr., P.E being duly sworn, deposes and says:
that he resides at 19 Burgundy Lane in the City of Nesconset, New York
that he is the Sr. Vice President of Pratt Brothers, Inc.
the corporation described in and which executed the foregoing
instrument; that he knows the seal of said corporation; that the seal affixed
to the said instrument is such corporate seal and was affixed by order of
the Board of Directors of said corporation; that he signed his name
thereto by like order; and that he has knowledge of the several matters
therein stated and they are in all respects true.

Subscribed and sworn to before me this 13th day of February, 20 20

Carol A. Miller
Notary

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 20 22

ENCLOSURE 1

Current Ongoing Projects

CURRENT ONGOING PROJECTS As of December 31, 2018

JOB NO.	AGENCY/OWNER	CONTRACT NAME/NUMBER	PRIME/ SUB	DESIGN ENGINEER/ ARCHITECT	TOTAL AMOUNT CONTRACT	% UNCOMPLETED SUB	UNCOMPLETED AMOUNT	% INCOMPLETE
17-029	Hofstra University J&A Concrete Jonathan Martins	Zarb School of Business	Sub	Cameron Engineering (516) 827-4900	\$ 1,020,658.00	7%	47,200.00	5%
17-043	AVR Realty Tom Perna (914) 965-3990	AVR Yaphank Const. LIE Service Road Westbound Ramps	Prime	Vollmuth & Brush George Brush (631) 363-2683	\$ 3,782,086.80	24%	45,587.80	3%
17-075	AVR Realty Tom Perna (914) 965-3990	AVR Yaphank Const. LIE Service Road Eastbound Ramps	Prime	Greenman Pedersen Inc. (631) 587-5060	\$ 2,013,283.40	33%	25,596.58	3%
17-109	Nassau County DPW Hemanth George Mathew (516) 571-3741	Resurfacing Requirements Contract H6158702Q	Prime	Nassau County DPW In-House	\$ 6,289,217.34	15%	2,413,902.95	38%
17-111	Suffolk County DPW Paul McMahon	Storm Water Remediation Improvement - Mud Creek 5-17.3.30(CP 8239.310)	Prime	Suffolk County DPW In-House	\$ 359,700.00	18%	15,026.20	4%
17-199	Nassau County DPW Hemanth George Mathew (516) 571-3741	Resurfacing Phase 55 Town of Hempstead H61587-55GR	Prime	Nassau County DPW In-House	\$ 4,348,565.00	25%	611,981.18	14%
17-231	State University of NY Aurora Contractors Barney Reilly	Stony Brook University Innovation & Discovery Center	Sub	Mitchell - Giurgola Architects, LLP	\$ 1,941,645.00	14%	218,605.00	11%
17-241	Village of Valley Stream Robert Fumagalli (516) 592-5105	2017 Road Improvements	Prime	Lucchesi Engineering PC Michael Mark (516) 942-3772	\$ 1,686,334.00	42%	68,831.39	4%
17-375	Nassau County DPW P. Scalamandre & Sons	Hempstead Force Main Village of Hempstead Contract S3P311-09S	Sub	Cameron Engineering (516) 827-4900	\$ 392,085.50	0%	32,463.34	65%
17-405	Suffolk County DPW Paul McMahon	Improvement to CR93 Ocean Ave @ Rosevale CP 5535/5014	Prime	Suffolk County DPW In-House	\$ 1,951,159.00	24%	1,951,159.00	100%
18-018	Marriot Residence Inn Augusewicz Contracting	Residence Inn Garden City, NY Site Work/Paving	Sub	VHB Engineering (631) 813-2545	\$ 258,805.00	0%	142,190.00	55%

CURRENT ONGOING PROJECTS

As of December 31, 2018

JOB NO.	AGENCY/OWNER	CONTRACT NAME/NUMBER	PRIME/ SUB	DESIGN ENGINEER/ ARCHITECT	TOTAL AMOUNT CONTRACT	% UNCOMPLETED SUB	% UNCOMPLETED AMOUNT	% INCOMPLETE
18-070	Simply Self Storage Axis Construction Corp.	Simply Self Storage Hauppauge Site Work	Sub	Barnett Bonacci & Van Weele, PC (631) 435-1111	\$ 592,486.00	20%	107,798.75	18%
18-112	National Grid Shulman Industries Chris Pirraglia	National Grid Bay Shore The Gateway to Brightwaters Sitework/Paving	Sub	National Grid In-House	\$ 751,777.70	10%	334,964.06	45%
18-138	Target Bush Construction John Maloney	Target Copiague Remodel Sitework/Paving	Sub	Gausman & Moore	\$ 229,388.93	30%	34,888.93	15%
18-144	Town of Oyster Bay	Requirements Contract HGR17-162	Prime	Town of Oyster Bay In-House	\$ 1,000,000.00	5%	392,418.29	39%
18-196	AVR Realty Co. Tom Perna (914) 965-3990	Yaphank Woods Blvd Extension Phase 3	Sub	Vollmuth & Brush George Brush (631) 363-2683	\$ 594,179.70	5%	187,449.14	32%
18-208	Suffolk County DPW Paul McMahon	Storm Water Remediation Improvement - Peconic La 5-17.3.30(CP 5072.315)	Prime	Suffolk County DPW In-House	\$ 118,075.00	0%	112,000.00	95%
18-218	Suffolk County DPW Paul McMahon	Storm Water Remediation Improvement - Medford 5-17.3.30(CP 5014.362)	Prime	Suffolk County DPW In-House	\$ 170,158.00	7%	12,567.25	7%
18-302	Village of Garden City Valente Contracting Corp. John Valente	Village of Garden City 2018 Road Improvements	Sub	Village of Garden City In-House	\$ 1,032,483.00	0%	258,235.92	25%
18-328	Riverhead Solar Farm LLC Rosendin Electric Inc. Rich Shaffer	Riverhead Solar Project	Sub	Blymer Engineers 510-521-3773	\$ 2,338,806.00	5%	831,883.25	36%
18-338	Cornerstone Hauppauge LLC	Cornerstone at Hauppauge On-site Paving	Sub	Nelson & Pope (631) 427-5665	\$ 886,000.00	20%	886,000.00	100%
18-354	AVR Yaphank Constr. Co. AVR Realty Co. Tom Perna	AVR Yaphank Common Area 2 Blvd West	Sub	Vollmuth & Brush George Brush (631) 363-2683	\$ 53,940.00	80%	53,940.00	100%

CURRENT ONGOING PROJECTS As of December 31, 2018

JOB NO.	AGENCY/OWNER	CONTRACT NAME/NUMBER	PRIME/ SUB	DESIGN ENGINEER/ ARCHITECT	TOTAL AMOUNT CONTRACT	% SUB	UNCOMPLETED AMOUNT	% INCOMPLETE
18-358	Village of New Hyde Park	2018 Road Improvements	Prime	D&B Engineers Mehmet Adkag	\$ 479,557.00	28%	32,169.59	7%
18-366	Elecnor Hawkeye LLC Juan Sanchez (631) 447-3100	Riverhead Solar Substation 199	Sub	VHB Engineering (631) 813-2545	\$ 460,895.00	40%	424,775.00	92%
18-430	AVR Yaphank Constr. Co. AVR Realty Co. Tom Perna	Site Work ALR/ILR Assisted Living Parking Lot - Paving	Sub	Vollmuth & Brush George Brush (631) 363-2683	\$ 170,200.46	0%	55,443.50	33%
18-446	AVR Yaphank Constr. Co. AVR Realty Co. Tom Perna	The Meadows at Yaphank Hotel - Site Work	Sub	Bohler Engineering (631) 738-1200	\$ 426,928.65	0%	107,089.50	25%
9,404,166.62								

New Work 2019

18-304	G&C Fab-Con LLC Matt Creter	Calverton Nation Cemetery Gravesite Expansion & Site Improvements 805PC2048	Sub	Gordon 703-263-1900	\$ 5,889,065.00		5,889,065.00	100%
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ENCLOSURE 2

Major Completed Projects

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH/ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
07-135 Southern State Parkway Suffolk County D260416	New York State DOT	New York State DOT James Eldor	\$10,433,621.00	9/15/2009	94%	New York State DOT James Eldor
08-290 County Road 16 Reconstruction, Ronkonkoma No. 5511	Suffolk County DPW James Peterman (631) 852-4003	Lockwood, Kessler and Bartlett (516) 938-0600	\$22,641,805.00	7/31/2011	64%	Suffolk County DPW Justin Hipperling (631) 852-4006
09-077 Milling Requirements - Queens HW2CR09C	City of New York DDC	City of New York DDC	\$ 4,979,762.40	4/30/2011	81%	City of New York Yuliya Ruvinova (718) 322-5053
10-268 Culvert Replacement on Valley Stream Road	Village of Valley Stream Tony Cella (516) 592-5105	Village of Valley Stream	\$ 1,448,380.60	12/31/2011	63%	Village of Valley Stream Tony Cella (516) 592-5105
10-208 Milling Requirements - Queens HW2CR11C	City of New York DDC	City of New York DDC	\$ 1,971,345.18	8/31/2011	70%	City of New York Patrick Larkin (718) 391-1958
10-300 CR19 Patchogue Holbrook Rd Traffic Calming 3302/5014	Suffolk County DPW	Suffolk County DPW In-House	\$ 1,201,304.47	11/15/2011	66%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-289 Sunset Plaza Shopping Center	Deer Park Associates LLC Len Abrams (631) 667-9575	Sidney B Bowne & Son	\$ 548,035.15	12/31/2011	100%	Deer Park Associates LLC Len Abrams (631) 667-9575
09-155 Calverton National Cemetery Expansion 805CM2036	Calverton National Cemetery GC&P Fabcon	Carter Van Dyke (212) 345-5053	\$11,770,011.69	12/31/2011	66%	GC&P Fabcon LLC John Schleer (908) 782-0526
11-011 Sysco Warehouse Central Islip	Sysco Food Services Aurora Contractors Barney Riley (631) 981-3785	Vollmuth & Brush (631) 363-2683	\$ 5,445,493.96	6/30/2012	85%	Aurora Contractors Barney Reilly (631) 981-3785
11-059 CR31 & 104 Intersection Reconstr. Hampton Bays CP5572	Suffolk County DPW William Hillman P.E. (631) 852-4006	Suffolk County DPW In-House	\$ 1,072,863.65	2/17/2012	71%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-093 Village of Port Jefferson 2011 Road Improvements	Village of Port Jefferson Robert Juliano	Dvirka & Bartilucci Ken Pritchard	\$ 2,761,192.92	7/15/2012	77%	Dvirka & Bartilucci Ed Kozik (516) 364-9890
11-413 Solar Array Project @ Cohalan Court Complex Central Islip	Enxco Development Co. Eldor Contracting Corp. Keith Feldman	Enxco Development Co.	\$ 569,373.28	12/31/2012	100%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
11-285 Milling Requirements - Queens HW2CR12C	City of New York DDC Patrick Larkin (718) 391-1958	City of New York DDC	\$ 3,328,891.23	9/30/2012	88%	City of New York DDC Patrick Larkin (718) 391-1958

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
11-335 Solar Array Project @ Riverhead County Complex	Enxco Development Co. Eldor Contracting Corp. Keith Feldman	Enxco Development Co.	\$ 627,901.15	12/31/2012	93%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
12-104 New Entrance Roadway For School of Medicine	Hofstra University Richard S Leddy (516) 827-4900	Cameron Eng & Assoc. Jack Ozyman (516) 827-4900	\$ 504,205.00	9/30/2012	60%	Hofstra University Richard S. Leddy (516) 463-5258
12-174 Home Depot Parking Lot Commack	Home Depot	Home Depot	\$ 796,600.90	12/31/2012	100%	Opal Construction Chris Cavoto (631) 242-7440
09-239 Nassau County DPW Highway & Drainage Req. H66302S	Nassau County DPW	Nassau County DPW	\$ 1,252,924.00	12/31/2011	85%	Nassau County DPW (516) 571-6655
11-359 Suffolk County DPW Storm Water Pollution Remediation Phase 3 CP8239	Suffolk County DPW	Suffolk County DPW In-House	\$ 1,294,862.00	12/16/2013	90%	Suffolk County DPW Justin Hipperling (631) 852-4006
11-393 Suffolk County DPW Wicks Road Improvement CP5539	Suffolk County DPW	Nelson & Pope	\$ 5,693,653.00	12/31/2013	66%	Suffolk County DPW Justin Hipperling (631) 852-4006
12-014 Suffolk County DPW CR39 North Road Improvements CP5528	Suffolk County DPW	Suffolk County DPW In-House	\$ 3,779,594.00	12/31/2013	77%	Suffolk County DPW Justin Hipperling (631) 852-4006
12-018 Canon Headquarters Phase II - Sitework	Canon USA	Turner Construction	\$ 5,563,069.00	11/30/2013	56%	Turner Construction Chris Deschler (212) 229-6000
12-158 Mall at Bay Plaza Site Work - Bronx, NY	Prestige Properties & Dev. Services Inc. (212) 366-5600	Stantec Consulting Services Inc. (212) 366-5600	\$ 1,799,983.00	11/30/2013	98%	Aurora Contractors Jonathan McGowan (631) 981-3785
12-166 Home Depot Parking Lot Long Island City-Milling/Paving	Home Depot	Home Depot	\$ 493,600.00	12/31/2013	100%	Opal Construction Chris Cavoto (631) 242-7440
13-033 Sheridan Blvd. Drainage Mineola H6005001G	Nassau County DPW	Nassau County DPW	\$ 718,259.00	12/31/2013	98%	Nassau County DPW Shila Shah Gavnoudias (516) 571-9600
12-426 Reconstruction of Sound Avenue, CR48 Greenport - 5526	Suffolk County DPW Justin Hipperling P.E. (631) 852-4006	Suffolk County DPW In-House	\$ 3,791,800.00	12/31/2014	86%	Suffolk County DPW Justin Hipperling (631) 852-4006

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
13-055 Lowes of Commack Site Work	Aurora Contractors Barney Riley (631) 981-3785	Rosenbaum Design Group	\$ 3,092,479.00	12/31/2014	80%	Aurora Contractors Barney Reilly (631) 981-3785
13-049 Clearspan Building Project	Brookhaven Rail Terminal	Brookhaven Rail Terminal	\$ 1,684,905.00	12/31/2014	65%	Brookhaven Rail Term. Andy Kaufman (631) 924-8800
13-089 Foremain and Pump Station - Huntington Sta.	Avalon Bay Communities	Nelson & Pope	\$ 1,023,793.00	12/31/2014	30%	Avalon Bay Communities Matthew Gendron (617) 645-3937
13-183 Asphalt Paving Huntington Station	Avalon Bay Communities	Nelson & Pope	\$ 1,288,545.00	6/30/2014	95%	Avalon Bay Communities Matthew Gendron (617) 645-3937
13-219 Stony Brook Medical Center East Parking Field Paving	State of New York Dormitory Authority	H2M Architects & Engineers	\$ 670,176.00	12/31/2014	100%	Watral Bros. Inc. Jake Watral (631) 586-8300
13-261 Museum of American Armor Site Work - Old Bethpage	Museum of American Armor BDG Construction	BDG Construction Corp	\$ 1,285,390.00	8/29/2014	78%	BDG Construction Anthony Galu (516) 624-1979
13-283 2013 Road Improvements Nassau Avenue	Village of Freeport	Village of Freeport In-House	\$ 1,407,428.00	12/31/2014	73%	Village of Freeport Robert Fisenne P.E. (516) 377-2233
14-306 Green Acres Mall Valley Stream - Parking Field Pavement & Rehab	Green Acres Mall Opal Construction	Savik & Murray LLP	\$ 889,154.46	12/31/2014	95%	Opal Construction Chris Cavoto (631) 242-7440
13-035 Reconstruction of Rte 347 & 112 D262168	New York State DOT Scalamandre	New York State DOT	\$ 5,634,311.00	12/31/2015	98%	P. Scalamandre & Sons Tom Hayes (516) 868-3000
13-297 Village of Mineola 2013 Road Improvements	Village of Mineola	Dvirka & Bartilucci Christopher Clement (516)364-9890	\$ 1,654,509.00	12/31/2015	85%	Village of Mineola Thomas Rini (516) 746-0753
14-034 Bridge Rehabilitation Various Locations	Suffolk County DPW	Suffolk County DPW	\$ 1,848,219.00	12/31/2015	75%	Suffolk County DPW Justin Hipperling (631) 852-4006
14-084 Lake Success Redevelopment 1 Dakota Drive	We're Associates, Inc.	We're Associates Inc. Gary R Woska	\$ 2,321,333.00	7/27/2015	55%	We're Associates, Inc. Philip Arnold (516) 931-5322
14-220 2014 Road Improvements	Village of Garden City	Village of Garden City In-House	\$ 4,746,069.00	12/31/2015	70%	Village of Garden City Domenick Stanco (516) 465-4017

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
14-294 Ritz Carlton Residences Off Site Sanitary Sewer Connections SLRC1080018	LRC Construction LLC	H2M Architects Engs	\$ 525,000.00	7/27/2015	61%	LRC Construction LLC Steve Feinstein (914) 773-7700
15-241 3&5 Dakota Parking Lots	We're Associates Inc.	We're Associates Inc. Gary R Woska	\$ 609,457.00	12/31/2015	85%	We're Associates Philip Arnold (516) 931-5322
14-132 The Meadows at Yaphank Yaphank Woods Blvd. Road Improvements	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 1,835,000.00	4/30/2016	100%	AVR Realty Tom Perna (914) 965-3990
14-142 Stony Brook University Toll Drive Residence Phase I	Aurora Contractors Inc. State University of New York at Stony Brook	KSQ Architects, P.C. (914) 682-3700	\$ 1,980,789.00	12/31/2016	87%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
14-378 Stony Brook University Toll Drive Residence Phase II	Aurora Contractors Inc. State University of New York at Stony Brook	KSQ Architects, P.C. (914) 682-3700	\$ 2,146,774.00	12/31/2016	70%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
15-017 Dormitories #A04B007 Sitework	NYRA Belmont EW Howell Travis Salvo	Dolph Rotfeld Eng. (914) 631-8600	\$ 538,413.00	9/28/2016	87%	EW Howell Travis Salvo (516) 921-7100
15-107 William Floyd Parkway Yaphank Woods Blvd.	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 4,061,494.00	12/31/2016	76%	AVR Realty Tom Perna (914) 965-3990
15-149 Leavenworth Solar Farm Shoreham	Borrego Solar Systems Inc Eldor Contracting Corp. Keith Feldman	VHB Engineering (631) 234-3444	\$ 1,082,426.00	9/28/2016	88%	Eldor Contracting Corp. Keith Feldman (631) 218-0100
15-315 2015 Road Improvements	Village of Floral Park Valente Contracting Corp.	Dvirka & Barilucci Christopher Clement (516) 364-9890	\$ 1,297,048.00	12/31/2016	95%	Valente Contracting Corp John Valente (516) 746-7933
15-305 The Meadows at Yaphank Yaphank Woods Blvd. Phase 1A Sitework	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 978,895.00	12/31/2016	100%	AVR Realty Tom Perna (914) 965-3990
15-181 Lake Success Redevelopment 3 Dakota -P.Lot & Ramp	We're Associates Inc. Philip Arnold (516) 931-5322	We're Associates Inc. Gary R Woska	\$ 1,423,116.00	4/30/2016	65%	We're Associates Inc. Philip Arnold (516) 931-5322
15-255 2015 Road Improvements	Village of Mineola Valente Contracting Corp.	Dvirka & Barilucci Christopher Clement (516) 364-9890	\$ 742,821.00	9/28/2016	100%	Valente Contracting Corp John Valente (516) 746-7933
16-130 LIE Welcome Center Dix Hills	NYSDOT P. Scalamandre & Sons	Stanec Consulting Services Inc. (212) 366-5600	\$ 1,578,526.00	11/30/2016	100%	P. Scalamandre & Sons Tom Hayes (516) 868-3000

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH/JENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
16-152 2016 Road Improvements	Village of New Hyde Park	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 2,127,958.00	12/31/2016	77%	Village of New Hyde Park Tom Gannon (516) 354-0064
16-218 2016 Road Improvements	Village of Garden City	Village of Garden City In-House	\$ 1,447,250.00	12/31/2016	65%	Village of Garden City Domenick Slanco (516) 465-4017
16-308 2016 Road Improvements	Village of Mineola Valente Contracting Corp.	Dvirka & Bartilucci Christopher Clement (516) 364-9890	\$ 725,790.00	12/31/2016	100%	Valente Contracting Corp John Valente (516) 746-7933
15-221 Green Acres Commons Valley Stream	Green Acres Adjacent LLC Aurora Contractors Inc. Barney Reilly	SPG3 Architects Bruce Keller	\$ 6,523,195.00	7/31/2017	90%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
15-243 Green Acres Commons Valley Stream - Paving	Green Acres Adjacent LLC Aurora Contractors Inc. Barney Reilly	SPG3 Architects Bruce Keller	\$ 1,560,664.00	7/31/2017	93%	Aurora Contractors Frank Vero, Jr. (631) 981-3785
16-034 1933 & 1963 Union Blvd. Sitework	South Side Hospital Schulmann Industries Inc. Harry Haralambous	Sidney B. Bowne & Son (516) 746-2350	\$ 1,735,825.00	9/30/2017	55%	Schulmann Industries Inc Harry Haralambous (631) 499-7974
16-160 Roslyn Schools Paving	Roslyn UF School District Watral Brothers Inc.	VHB Engineering (631) 234-3444	\$ 589,403.00	9/30/2017	98%	Watral Brothers Inc. Jake Watral (631) 586-8300
16-358 Culverts 1 & 2 Holtville Terminal	Northville Industries Corp.	U.N.I Engineering Inc. Edward J. Sapp	\$ 786,034.00	12/26/2017	41%	Northville Industries Corp. (631) 475-5060
17-273 Parking Lot Construction Union Blvd., Bay Shore	Northwell Health Inc. Schulman Industries Harry Haralambous	Sidney B. Bowne & Son (516) 746-2350	\$ 548,425.00	12/31/2017	70%	Northwell Health Inc. Schulman Industries Harry Haralambous (631) 499-7974
15-261 Avalon at Great Neck Site Work	Avalon Bay Communities Scott Fradenburg 516-501-6020	VHB Engineering (631) 234-3444	\$ 1,501,001.19	1/31/2018	93%	Avalon Bay Communities Scott Fradenburg 516-501-6020
16-048 Avalon Rockville Centre II Sitework	Avalon Bay Communities Scott Fradenburg 516-501-6020	Nelson & Pope (631) 427-5665	\$ 1,373,303.43	1/31/2018	95%	Avalon Bay Communities Scott Fradenburg 516-501-6020
16-286 Common Area 2 Sitework The Meadows at Yaphank	Rose Breslin Assoc. LLC c/o AVR Realty	Vollmuth & Brush Jeffrey Vollmuth, P.E. (631) 363-2683	\$ 679,748.50	12/31/2018	100%	AVR Realty Tom Perna (914) 965-3990
17-103 Shoreham Solar Commons - Sitework	Shoreham Solar Commons LLC Keith Feldmann - Eldor (631) 218-0100	TRC Engineers Inc. (516) 671-3407	\$ 2,854,197.00	11/30/2018	90%	Eldor Contracting Corp. Keith Feldmann (631) 218-0100
17-189 Village of Garden City 2017 Road Improvements	Village of Garden City Valente Contracting Corp. John Valente	Village of Garden City In-House	\$ 1,049,622.00	12/31/2018	96%	Valente Contracting Corp John Valente (516) 746-7933

MAJOR PROJECTS COMPLETED

PROJECT	OWNER	ARCH./ENG.	CONTRACT AMOUNT	DATE COMPLETED	% OF OUR WORK	CONTACT
17-237 Northwell Lynbrook Site Work	Talisen Construction Corp. Joseph Rigazio (212) 244-4581	Sidney B. Bowne & Son (516) 746-2350	\$ 908,330.81	6/30/2018	59%	Talisen Construction Corp Joseph Rigazio (212) 244-4581
17-347 Sky Drive Farmingdale Sitework	BDG Farmingdale LLC Mike Christiano (516) 624-1948	Bohler Engineering Joseph Deal (631) 738-1200	4,327,684.00	12/31/2018	70%	BDG Farmingdale LLC Mike Christiano (516) 624-1948

ENCLOSURE 3

Construction Experience of the Principals

CONSTRUCTION EXPERIENCE OF PRINCIPALS & SUPERVISORY PERSONNEL

As of December 31, 2018

Principal's Name	Title	Years of Construction Experience	With Whom & In What Capacity
James J. Pratt, III* 92 Huntington Road Garden City, NY 11530	President/Treasurer Vice President/Treasurer General Superintendent Safety Officer	38	Pratt Brothers, Inc. President/Treasurer Guy Pratt, Inc. Vice President/Treasurer General Superintendent Safety Officer Lehigh University BS - Civil Engineering
Thomas D. Pratt* 61 Woodland Drive Oyster Bay Cove, NY 11771	Vice President/Secretary Operations Manager	32	Pratt Brothers, Inc. Vice President/Secretary Scatt Materials Corp. Operations Manager New Hampshire College BS - C.I.S.
Supervisory Personnel Joseph M. Williams, Jr. P.E.* 19 Burgundy Lane Nesconset, NY 11767	Sr. Vice President Chief Estimator Chief Engineer Vice President Chief Estimator Chief Engineer	34	Pratt Brothers, Inc. Sr. Vice President Chief Estimator/Engineer Guy Pratt Inc. Vice President Chief Estimator/Engineer Manhattan College BE - Chemical Engineering
Edward P. McCoy, Jr.* 26 Bayview Avenue Blue Point, NY 11715	Vice President	17	Pratt Brothers, Inc. Vice President Project Manager Guy Pratt, Inc. Project Manager Boston University BS - Bio-Medical Engineering

*Corporate Officer

CONSTRUCTION EXPERIENCE OF PRINCIPALS & SUPERVISORY PERSONNEL

As of December 31, 2018

Name	Title	Years of Construction Experience	With Whom & In What Capacity
Gregory Couch	Project Manager	34	Pratt Brothers, Inc. Project Manager
			Bi-County Construction Corp. President
			Villanova University BS- Civil Engineering
			Polytechnic University MSM - Construction Mgmt
James J. Pratt IV	Project Manager	6	Pratt Brothers, Inc. Project Manager
			REI Drilling Project Manager Staff Geologist
			Washington and Lee University BS - Geology
Joseph Hrbek	Superintendent	38	Pratt Brothers, Inc. Superintendent
			Guy Pratt, Inc. Superintendent
			H.T. Schneider Superintendent
			Liza Industries Project Engineer

CONSTRUCTION EXPERIENCE OF PRINCIPALS & SUPERVISORY PERSONNEL

As of December 31, 2018

Name	Title	Years of Construction Experience	With Whom & In What Capacity
Robert Voelkel	Superintendent	41	Pratt Brothers Inc. Superintendent
			Bi-County Construction Vice President Job Superintendent
			Debruin Engineering Engineer In Charge
William Zimmerman	Superintendent	42	Pratt Brothers Inc. Superintendent
	Superintendent		Kings Park Industries Superintendent Operating Engineer
Matt Kingston	Asphalt Superintendent	12	Pratt Brothers, Inc. Asphalt Superintendent Operating Engineer
			Guy Pratt, Inc. Operating Engineer
Thomas Crawford	Shop Steward General Foreman	33	Pratt Brothers, Inc. General Foreman
			Guy Pratt, Inc. Laborer

CONSTRUCTION EXPERIENCE OF PRINCIPALS & SUPERVISORY PERSONNEL

As of December 31, 2018

Name	Title	Years of Construction Experience	With Whom & In What Capacity
Arnold Hoffmann III	Asphalt Foreman	20	Pratt Brothers, Inc. Asphalt Foreman Asphalt Raker
			Guy Pratt Inc. Laborer
Eleanor DeBlasi	Estimator/Engineer	35	Pratt Brothers, Inc. Estimator
			Bi-County Construction Estimator
			Lizza Industries Estimator
			Polytechnic University B.S. Civil Engineering

ENCLOSURE 4

Equipment List

EQUIPMENT LIST

(As of December 31, 2018)

LOADERS

- CAT IT-28
- Komatsu WA 320 Tool Carrier
- Komatsu WA-380
- Komatsu WA-430 Tool Carrier
- CAT 950F
- CAT 950F Tool Carrier
- Komatsu 470
- CAT 970 F
- Komatsu WA-480-6
- Komatsu WA380-8

BACKHOES

RUBBER TIRED BACKHOE/LOADERS

- CAT Backhoe Loader 430F2
- CAT 430E Backhoe Loader
- CAT 430E Backhoe Loader
- CAT 430D Backhoe Loader
- CAT 430D Backhoe Loader
- Case 590SM Backhoe Loader
- 490 Dynahoe w/Drill Rig

HYDRAULIC EXCAVATORS – TRACK

- CAT 303 Mini Excavator
- Komatsu PC270
- CAT 325CL
- Komatsu PC290LC-10
- CAT PC400LC-7
- Komatsu PC170-11

HYDRAULIC EXCAVATORS – RUBBER TIRED

- Liebherr Excavator 904C
- Liebherr Excavator 904C
- CAT 320F

BULLDOZERS

- Komatsu D37PX-22 Dozer
- CAT D5M-LGP
- CAT D6N LGP
- CAT D6T LGP
- Dresser TD 25G Tilt Blade

EQUIPMENT LIST

(As of December 31, 2018)

CRANES

- 18 Ton Hydraulic Crane

TRUCKS

- Flat Truck
- Ford F550 Dump Truck
- Mack 20CY Dump Truck
- Peterbilt 20CY Dump Truck
- Kenworth Tractor
- Peterbilt Tractor (3)
- MAC Dump Trailer (3)
- 50 Ton Low Bed Trailer
- Red River Asphalt Trailer (3)
- Flow-Boy Asphalt Trailer (3)
- Attenuator Trailer
- 25 Ton Tag-A-Long Trailer (2)

SCRAPERS

- 260E Elevating Scraper (Water Wagon)

ROLLERS

- CAT Vibratory Soil compactor-CS563
- Dynapac Vibratory Soil Compactor-CA252B
- Hyster 350D Roller
- Hyster 350D Roller
- Dynapac CC-102 Double Drum Vibratory Roller
- I/R Vibratory Roller DD24
- I/R Roller DD110HF Double Drum Vibratory Asphalt Roller
- HAMM HD14 Roller
- HAMM HD20 Vibratory Roller

GRADERS

- Komatsu GD655 Galion Grader

TRAILER

- Tag Trailer – Skid Steer (5)
- Marathon Tack Coat Trailer

EQUIPMENT LIST

(As of December 31, 2018)

ASPHALT PAVING MACHINES

- Power Ray 4-Ton Hot Asphalt Storage Rig
- CAT AP1055F Asphalt Spreader

MILLING MACHINE

- Wirtgen W200 Milling Machine

MISCELLANEOUS

- IR-85/185 Leroi/Joy 185/Kaeser 210 Compressors (3)
- Kaeser 400 Compressor/EZ Drill
- Read RD90 Screen-All
- Dewatering System
- CAT 247 Skid Steer Loader - Track
- CAT 272D Skid Steer Loader - Rubber
- CAT 289D Skid Steer Loader - Track
- Cold Planer PC206 (skid steers) – 3 ea.
- Amsig Led Flip Disk Variable Message Board w/Modems (5)
- Asphalt Zipper Road Reclaiming Attachment
- 10,000 L.F. Concrete Road Barrier
- 200 Steel Road Plates
- Powerscreen Trommel

ENCLOSURE 5

Insurance



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/4/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER National Insurance Brokerage of New York, Inc. 175 Oval Drive Islandia NY 11749		CONTACT NAME: Kathleen Hofmann PHONE (A/C No. Ext): (631) 273-4242 FAX (A/C No): (631) 273-8990 E-MAIL ADDRESS: khofmann@nibony.com	
INSURED Pratt Brothers, Inc. 608 Union Avenue Holtsville NY 11742		INSURER(S) AFFORDING COVERAGE INSURER A: American Southern Home Insurance Compar INSURER B: American Family Home Insurance Company INSURER C: Berkley Insurance Company INSURER D: Travelers Indemnity CO INSURER E: Evanston Insurance Company INSURER F:	

COVERAGES**CERTIFICATE NUMBER:** Master 19-20 W/ Pollution**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			88A6GL0000310	4/1/2019	4/1/2020	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
							MED EXP (Any one person) \$ 5,000
							PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$ 2,000,000
	OTHER:						\$
	AUTOMOBILE LIABILITY			88A5CA0000469	4/1/2019	4/1/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
							PIP-Basic \$ 50,000
C	<input checked="" type="checkbox"/> UMBRELLA LIAB			MKC1110029	4/1/2019	4/1/2020	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$ 5,000,000
	DED <input checked="" type="checkbox"/>	RETENTION \$ 10,000					\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y/N	<input type="checkbox"/> N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
D	Excess Umbrella			ZUP81N12504-19NF	4/1/2019	4/1/2020	\$4,000,000 Limit
E	Pollution Liability			MKLVIENV100542	9/05/2018	9/5/2019	\$2,000,000/\$1,000,000 \$5,000 DED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

Evidence of Insurance

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Frank Cormio/STEPHK

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ENCLOSURE 6

Apprenticeship Training Programs

LABORERS LOCAL UNION NO. 1298 JOINT APPRENTICESHIP TRAINING FUND

NASSAU & SUFFOLK COUNTIES

1161 LOCUST AVENUE
BOHEMIA, N.Y. 11716
Telephone: (631) 218-1376
Fax: (631) 218-1379

© 1994

FUND ADMINISTRATOR
ANNALISA C. DEFALCO ESQ.

TRAINING DIRECTOR
STEVEN M. AURIGEMA

BOARD OF TRUSTEES

GEORGE F. TRUICKO JR.
GEORGE S. TRUICKO
FRANK DAMIANO JR.
JAMES WINSHIP
FRANK ALBERTO
GREGORY W. COUCH
JASON GOLDEN
MARC HERBST

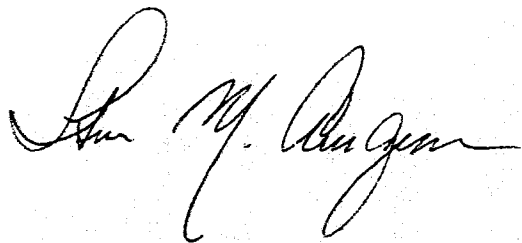
Re: Road and Heavy Construction Laborers Local #1298
Local 1298 Joint Apprenticeship Training Program
NYS SPONSOR CODE # 01764
NYS ATP CODE # 18514

TO WHOM IT MAY CONCERN;

This letter will serve to confirm that Local 1298 Joint Apprenticeship Training Program currently conducts a fully registered and approved New York State "Apprenticeship Training Program for Skilled Construction Craft Laborers" ("ATP"). The ATP is co-sponsored by Local 1298 and all employers/signatory contractors, including but not limited to Pratt Brothers Contracting Inc., to the Local 1298 Working Agreement Covering Wages and Working Conditions, dated June 1, 2012 to May 31, 2022.

Any additional questions should be directed to my attention.

Fraternaly yours,



Steven M. Aurigema
Training Director
Joint Apprenticeship Training Fund



SCHOOL (631) 286-8677
FAX (631) 286-8683

APPRENTICESHIP AND TRAINING - JOURNEYMEN - RETRAINING SCHOOL
INTERNATIONAL UNION OF OPERATING ENGINEERS
LOCAL UNIONS 138, 138A, 138B Nassau & Suffolk Counties

247-C

UNION - P.O. BOX 206, FARMINGDALE, N.Y. 11735-0206

SCHOOL - 575 HORSEBLOCK ROAD, BROOKHAVEN, N.Y. 11719

Re: Local 138 Apprenticeship School (the "Apprenticeship School")
NYS Sponsor # 00422
NYS ATP Code # 18318
Pratt Brothers, Inc.

To Whom It May Concern,

This letter serves to confirm that the **Apprenticeship School** currently conducts a fully registered and approved New York State Training (ATP). The ATP is co-sponsored by Local 138 and all employers/signatories, including but not limited to Pratt Brothers, Inc., to the Local 138 Agreement Covering Working Conditions, dated June 1, 2019 to May 31, 2023. The ATP complies with all provisions of Suffolk and Nassau County Law.

Any further inquiries should be directed to the undersigned's attention.

Sincerely,

JOHN DUFFY
BUSINESS MANAGER & TREASURER
CHAIRMAN BOARD OF TRUSTEES
LOCAL 138 APPRENTICESHIP TRAINING FUND

ENCLOSURE 7

Financial Statement

PRATT BROTHERS, INC.
BALANCE SHEETS
December 31, 2018 and 2017

	<u>2018</u>	<u>2017</u>
ASSETS		
Current Assets		
Cash	\$ 1,797,860	\$ 850,539
Contract receivables	9,275,985	8,381,056
Due from related parties	648,445	438,240
Costs and estimated earnings in excess of billings on uncompleted contracts	101,114	262,978
Prepaid expenses and other	<u>150</u>	<u>17,348</u>
Total Current Assets	11,823,554	9,950,161
Fixed Assets, Net	2,660,970	2,478,600
Other Assets		
Equity in joint venture	<u>164,210</u>	<u>162,263</u>
	<u><u>\$ 14,648,734</u></u>	<u><u>\$ 12,591,024</u></u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Line-of-credit	\$ 1,690,000	\$ -0-
Accounts payable	7,055,174	6,470,989
Notes payable	724,718	633,174
Capital lease obligation	6,323	6,016
Billings in excess of costs and estimated earnings on uncompleted contracts	1,321,921	2,056,848
Accrued expenses and other	<u>176,191</u>	<u>120,497</u>
Total Current Liabilities	10,974,327	9,287,524
Long-Term Liabilities		
Notes payable	1,322,563	1,508,207
Capital lease obligation	<u>9,516</u>	<u>15,739</u>
	<u><u>12,306,406</u></u>	<u><u>10,811,470</u></u>
Commitments and Contingencies		
Stockholders' Equity		
Common stock - no par value; 200 shares authorized, 100 shares issued and outstanding	4,000	4,000
Retained earnings	<u>2,338,328</u>	<u>1,775,554</u>
	<u><u>2,342,328</u></u>	<u><u>1,779,554</u></u>
	<u><u>\$ 14,648,734</u></u>	<u><u>\$ 12,591,024</u></u>

NOTICE OF AWARD

DATE PAID 10/1/11

NO TEXT ON THIS PAGE

LAURA CURRAN
NASSAU COUNTY EXECUTIVE



KENNETH G. ARNOLD, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

LIMITED NOTICE TO PROCEED/NOTICE OF AWARD

July 13, 2020

Mr. James J. Pratt, III
Pratt Brothers, Inc.
45 South Fourth Street
Bay Shore, New York 11706-1210

Re: 2020 General Requirements Contract for Various Civil/Site Reconstruction Highways,
Drainage, Bridges, Site, Parking Lot and Related Specialized Items
Contract Number H66302W
Notice To Proceed with Emergency Contract for Long Beach Bridge Emergency Work

Dear Mr. Pratt:

In accordance with the Emergency Declaration dated July 9, 2020, for emergency corrective actions necessary due to Red Flag conditions issued by the New York State Department of Transportation on the southbound Long Beach Bridge over Reynolds Channel (BIN 3300301) in the City of Long Beach, you are hereby authorized to proceed with this emergency work as of July 15, 2020 subject to providing the County of Nassau, Department of Public Works, Insurance and Performance and Labor and Material Bonds. No work at the site shall commence until the following is submitted, two (2) copies of insurance policies, or certificates thereof, and two (2) copies of Performance and Labor and Material Bonds, in the proper form as provided in the contract documents, and a check for Five Hundred Thirty-Three Dollars (\$533.00) made payable to the County of Nassau for a processing fee. Two (2) copies of Performance and Labor and Material Bonds are to be executed and dated on or before the same day that the County approves the commencement of work at the site.

All work is to be completed on or about August 14, 2020. The scope of your work will be as depicted and described in the Emergency Work Order to be issued.

Please note that this contract was expedited under an Emergency Declaration, see attached.

Should you have any questions regarding the foregoing, you may contact Mr. Jose Viteri (516) 571-6926.

It will be necessary for you to submit the following information to this office, in triplicate, for the approval of the Commissioner of Public Works.

- The names and addresses of any subcontractor you propose to use in the work, together with the items of work which you propose to have them perform. (SUBMIT UNDER SEPARATE COVER from the following.)

LIMITED NOTICE TO PROCEED/NOTICE OF AWARD

Mr. James J. Pratt, III

Pratt Brothers, Inc.

July 13, 2020

Page 2.

Re: 2020 General Requirements Contract for Various Civil/Site Reconstruction Highways,
Drainage, Bridges, Site, Parking Lot, and Related Specialized Items
Contract Number H66302W
Notice to Proceed with Emergency Contract for Long Beach Bridge Emergency Work

- Your schedule of progressive operations for the approval of the Commissioner of Public Works. Once this schedule has been approved, no deviation from there shall be made without the consent of the Commissioner of Public Works.
- The sources of supply of the materials to be used so that samples may be obtained for testing purposes. Only materials conforming to the requirements of the specifications and approved by the Commissioner of Public Works shall be used in the work.
- The names and addresses of any suppliers you propose to use for the batching of aggregates for concrete items and bituminous pavement, also the locations of the plants to be used.
- The names address and telephone numbers of three (3) supervisory personnel assigned to the work who can be contacted by the Police Department during non-working hours in case of emergency.

The following is hereby brought to your attention:

- Permits and Licenses – The contractor shall secure, at his own expense, all permits and/or licenses necessary or required under Local, State, or Federal Laws, Ordinances, Rules or Regulations, except such permits as are secured by the County of Nassau and described in the addenda to these specifications. Any security or form of insurance required by a permitter must be secured by the contractor at his own cost and expense.
- The contractor needs to be aware of Local Law 2-2017 regarding the use of heavy equipment on or over bridges in Nassau County
- Please note that all current requirements related to **COVID-19** shall apply.

Very truly yours,



Kenneth G. Arnold, P.E.
Commissioner of Public Works

KGA:RM:jd
Attachment

c: Jeff Schoen, Deputy Comptroller, Office of the Comptroller
Michael C. Pulitzer, Clerk of the Legislature
John Skinner, Commissioner, Department of Labor
Rakhal Maitra, Deputy Commissioner of Public Works
Roseann D'Alleva, Deputy Commissioner of Public Works
Loretta Dionisio, Assistant to Deputy Commissioner for Administration
Richard Iadevaio, Jr., Superintendent of Highway and Drainage Construction
Jose Viteri, Project Manager III
Douglas Castelli, Resident Engineer
Matt Duffy, Inspector, Office of the Comptroller

AGREEMENT

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COUNTY OF NASSAU
STATE OF NEW YORK
Department of Public Works
AGREEMENT

For furnishing all labor, materials and equipment, together with all work incidental thereto, necessary and required for the contract entitled:

**2020 GENERAL REQUIREMENTS
CONTRACT FOR
VARIOUS CIVIL/SITE RECONSTRUCTION,
HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS NASSAU
COUNTY, NEW YORK
Contract No. H66302W**

THIS AGREEMENT,

made and executed this _____ day of _____, 20____,
by and between the County of Nassau, hereinafter called the party of the
first part, and

the Contractor, hereinafter called the party of the second part.

WITNESSETH:

In consideration of the mutual stipulations, agreements and covenants herein contained, the parties hereto have agreed with each other, the party of the first part, for itself, its successors and assigns, and the party of the second part, for itself or themselves, its successors and assigns, or its or their executors, administrators and assigns, as follows:

ARTICLE I. GENERAL

- A. The Contractor shall do all the work and furnish all labor, materials, equipment, tools and appliances, except as hereinafter otherwise stated, that may be necessary and proper for performing and completing the work.
- B. The Contractor further agrees that he is fully informed regarding all of the conditions affecting the work to be done and labor and materials to be furnished for the completion of this contract and that his information was secured by personal investigation and research and not from the estimates of the Commissioner of Public Works, and that he will make no claim against the County by reason of estimates, tests or representations of any officer or agent of the County.

ARTICLE II. DEFINITIONS

Whenever the following words appear in this Contract and Specifications hereto attached:

COUNTY:

The word "County" or pronoun used in place thereof shall mean the County of Nassau as above mentioned, represented by it's County Executive, party of the first part.

CONTRACTOR:

The word "Contractor" or pronoun used in place thereof shall mean: the party of the second part of this Agreement, and shall apply thereto regardless of number or gender.

ENGINEER:

The word "Engineer" or pronoun used in place thereof shall mean the Commissioner of Public Works, acting directly or through authorized agent or agents.

HE, HIM, HIMSELF: The word "he" shall mean "he or she", "him" shall mean "him" or "her", "himself" shall mean "himself" or "herself" wherever appropriate throughout the Contract.

NOTICE:

The word "Notice" shall mean written notice. Notice shall be served upon the Contractor, either personally or by leaving the said notice at his residence or with his agent in charge of the work, or with any employee found on the work, or addressed to the Contractor at the residence or place of business given in the bid and deposited in post paid wrapper in any Post Office Box regularly maintained by the United States Post Office.

SPECIFICATIONS:

The word "Specifications" shall mean all of the directions, conditions, requirements and standards of performance applying to the work as hereinafter detailed and designated as such and as contained in the books prepared by the Department of Public Works of Nassau County entitled "2009 Standard Specifications and Detail Sheets for Civil Engineering and Site Development Construction" & "Traffic Signal Specifications & Standard Drawings".

ARTICLE III. SPECIAL CONDITIONS

The said work shall be performed in accordance with the true intent and meaning of the Plans and Specifications therefore which, together with the Proposal, Notice to Bidders, Instruction to Bidders, Notice of Award and the Bond, are hereby referred to and made a part of this

Contract, without any further expense of any nature whatsoever to the County than the consideration named in this Contract. The County, however, reserves the right to make such additions, deductions or changes, as it deems necessary, making an addition or deduction therefore at the prices named in the proposal for this work; and this Contract shall in no way be invalidated thereby, and no claim shall be made by the Contractor for any loss of anticipated profits because of any such change, or by reason of any variation between the approximate quantities and the quantities of the work as done.

ARTICLE IV. EXTRA WORK

It is further agreed that any material to be furnished or work necessary to be done other than that specified in this Contract shall be covered by a supplemental contract or resolution and that no claim will be made by the Contractor for any such work performed or material furnished before such supplemental contract shall have been approved or passed by the County Executive.

ARTICLE V. DETERMINATION AND DECISIONS

The work under this Contract shall be done to the satisfaction of the County Executive and Commissioner of Public Works, and in full accordance with the Plans and Specifications or any amendments or additions thereto, and before final acceptance by the County Executive all matters of dispute must be adjusted to the mutual satisfaction of the parties hereto. Determinations and Decisions, in case any question shall arise, shall constitute a condition precedent to the right of the Contractor to receive any money thereof, until the matter in question has been adjusted.

ARTICLE VI. ABANDONMENT OF WORK

It is mutually agreed that if the work to be done under this Contract shall be abandoned, or if this Contract or any part thereof shall be sublet without the consent of the Commissioner of Public Works being first obtained in writing, or if this Contract or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time, the Commissioner of Public Works shall be of the opinion that the conditions herein specified as to the rate of progress are not fulfilled, or that the work or any part thereof is unnecessary or unreasonably delayed, or that the Contractor is violating any of the provisions of this Contract, the Commissioner of Public Works, with the approval of the County Executive without prejudice to any other rights or remedy of the County shall notify the Contractor by a written notice to discontinue the work, or such part thereof, and cease to have any right to possession of the ground, and the County shall thereupon have the right by contract, or otherwise, as may be determined, to complete the work or such part thereof, and to charge the expense thereof to Contractor, and take possession of and use therein such materials plant and machinery, implements and tools of every description as may be found upon said work. The expense so charged shall be deducted and paid by the County out of the monies due or to become

due the Contractor under this Contract, or any part thereof; and in case such expense is more than the sum which would have been payable under this Contract if the Contract had been completed by the Contractor, the Contractor and his sureties shall pay the amount of such expense to the County of Nassau.

ARTICLE VII. MACHINERY AND PLANT

The Contractor shall furnish at his own cost all transportation, apparatus, ways, works, machinery, and plant, and also suitable appliances requisite for the execution of this Contract, and shall be solely answerable for the same, and for the safe, proper and lawful construction, maintenance and use thereof. The Contractor shall cover and protect the work from damage, and all injury to the same before completion of this Contract and its acceptance by the County Executive shall be made good by the Contractor who shall be solely answerable for all damages to the County, to the neighboring premises, or to any private or personal property due to improper, illegal or negligent conduct of himself or his subcontractor, employees or agents in or about the said work, or in the execution of the work covered by this Contract or any extra work undertaken, as hereinafter provided, or to any defect in or improper use of scaffolding, apparatus, ways, works, machinery and plant. He shall assume the defense and save harmless the County, its officers or agents from all claims whatsoever relating to labor or materials furnished for the work, or to inventions, patents or patent rights used in the work or in doing the work.

ARTICLE VIII. PATENTED DEVICE, MATERIAL AND PROCESSES

It is mutually understood and agreed that contract prices are to include all royalties and costs arising from patents, trademarks and copyrights in any way involved in the work. Whenever the Contractor is required or desires to use any design, device, material or process covered by letters patent or copyright, the Contractor shall indemnify and save harmless the County of Nassau from any and all claims for infringement by reason of the use of any such patented design, device, material or process, to be performed under the Contract and shall indemnify the said County for any costs, expenses and damages which it may be obliged to pay, by reason of any such infringement, at any time during the prosecution or after the completion of the work.

ARTICLE IX. RESPONSIBILITY FOR INJURIES TO PERSONS AND PROPERTY.

- A. The Contractor shall be solely responsible for physical injuries (including death) to persons (including, but not limited to, employees of the Contractor and subcontractors and employees of the County of Nassau) or damage to property (including, but not limited to, property of the County of Nassau or the Contractor or subcontractors) occurring on account of or in connection with the performance of the work hereunder or sustained by any employee of the Contractor, a subcontractor, County of Nassau or other persons while at the site of the work, and shall indemnify and save harmless the County of Nassau from loss and liability upon any and all claims

on account of such injuries to persons (including death) or damage to property, and from all costs and expenses in suits which may be brought against the County of Nassau on account of any such injuries to persons or damage to property, irrespective of the actual cause of the accident and irrespective of whether it shall have been due to negligence of the Contractor or his subcontractors or negligence of the County of Nassau, their respective agents, servants or employees.

- B. The term "loss and liability", as used herein, shall be deemed to include, but not to be limited to, liability for the payment of Worker's Compensation under the Worker's Compensation Law of the State of New York, and the Contractor specifically covenants to reimburse the County of Nassau for all payments of Worker's Compensation which the County of Nassau shall be required to make to any employee who shall claim to have sustained injuries on account of or in connection with the work hereunder, whether or not such injuries shall have been sustained as a result or negligence of the Contractor, his subcontractors, the County of Nassau, their respective agents, servants or employees, or negligence of the injured employee.
- C. The Contractor shall be solely responsible for all injuries to person or damage to property therein occurring on account of the performance of work under this Contract whether due to negligence, fault or default of the Contractor or not, and irrespective of whether it shall have been due to the negligence, fault or default of the County of Nassau, it's respective agents, servants or employees. The Contractor shall fully protect, indemnify and save harmless the County of Nassau from loss and from liability upon any and all claims on account of such injuries to employees or other persons or damage to property on account of any work done by the Contractor and from any costs and expenses in suits which may be brought against the County of Nassau for such damages or injuries.
- D. The obligation of the Contractor to indemnify and save harmless the County of Nassau as herein above set forth is absolute and not dependent upon any question of negligence on the part of the Contractor, the subcontractor, the County of Nassau, their respective agents, servants or employees. The approval by the County of Nassau of the methods of doing the work or the failure of the County of Nassau to call attention to improper or inadequate methods or to require a change in methods or to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall not excuse the Contractor in case of any such injury to person or damage to property.
- E. The Contractor shall take out and maintain during the life of this Contract a liability insurance policy and renewals thereof, issued by an insurance company approved by the County of Nassau, insuring the Contractor at all times during the life of the Contract against loss by reason of his contractual liability under this ARTICLE with limits of * for injuries to persons (including death) and * for

damage to property. A Certificate of the issuance of such insurance policy shall be delivered to the County of Nassau upon the execution and delivery of this Contract and such Certificate shall contain an agreement by the insurance company issuing the policy that the policy will not be canceled without 10 days prior notice to the County of Nassau. At least 2 weeks prior to the expiration of the original policy or any renewal thereof a new certificate of the renewal of such insurance, containing an agreement by the insurance company that the insurance will not be canceled without 10 days prior notice to the County of Nassau shall be delivered to the County of Nassau.

* See Article XXVI for schedule.

ARTICLE X. TIME OF START AND COMPLETION

- A. The Contractor shall commence work on the day specified in the Notice To Proceed signed by the Commissioner. Time being of the essence of this contract, the contractor shall thereafter prosecute the work diligently, using such means and methods of construction as will assure its full completion, in accordance with the requirements of the Contract Documents, not later than the date specified in the said notice.
- B. Unless the date for completion is extended as herein provided, the Contractor shall complete the work in the number of consecutive calendar days fixed in this contract. The period for performance shall start from the day specified in the Commissioner's Notice To Proceed.
- C. Unless approved in writing by the County, in its sole and absolute discretion, no contractual work shall be permitted on Official County Holidays. The Contractor is responsible for coordination with the County Engineer and/or his duly authorized representative prior to the start of work to determine the date(s) of observance of the Official County Holiday(s) that may occur during the course of the Contract. The Official County Holidays are: New Years Day, Martin Luther King, Jr. Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day and Christmas Day. Failure of the Contractor(s) to consider Official County Holidays during the preparation of their work plans and schedules shall not be cause for a delay claim against the County. Should circumstances arise, during the course of the Contract, where the Contractor requests approval to work on an Official County Holiday and it is granted, the Contractor will be required to reimburse the County for the cost of providing inspection services. Furthermore, failure of the Contractor to have considered such contingency costs in his bid price shall not be cause for an extra work claim to the County at a later date.

ARTICLE XI. EXTENSION OF TIME

- A. It is mutually agreed that no extension beyond the date of completion fixed by the terms of this Contract shall be effective unless in writing signed by the Commissioner of Public Works. Such extension shall be for such time and upon such terms and conditions as shall be fixed by the Commissioner of Public Works, which may include a charge for engineering and inspection expenses actually incurred upon the work. Applications for such extension shall be filed by the Contractor with the Commissioner of Public Works at least fifteen (15) days prior to the date of expiration fixed by the terms of this agreement.
- B. The Contractor agrees to make no claim for damages for delay in performance of this Contract occasioned by any act or omission to act by the County or any of its representatives and agrees that any such claim shall be fully compensated for by an extension of time to complete the performance of the work as provided herein.

ARTICLE XII. LIQUIDATED DAMAGES

It is mutually agreed between the parties that time is of the essence in this Contract, and that there will be on the part of the County considerable monetary damage in the event of any delay in the completion of the same. The sum of \$ 500.00 per day is hereby agreed upon as the liquidated damages for each and every day after the specified date of completion in which the work remains in an incomplete condition, which amount shall in no event be considered as a penalty or otherwise than as the liquidated and adjusted damages of the County because of the said delay. The party of the second part hereby agrees that the sum of \$ 500.00 for each such day shall be deducted and retained out of monies which may become due hereunder. The County agrees that the date when such liquidated damages shall cease to accrue shall be the date of advise of completion as given by the Commissioner of Public Works, and waives the right of such liquidated damages as to the period covered by the final inspection and by notice to any parties interested. When work is stopped by order of the Commissioner of Public Works during the Winter, the liquidated damages will be waived for the period until work may be resumed in the following spring.

* See Article XXVI for schedule.

ARTICLE XIII. INSURANCE AND BOND REQUIREMENTS

A. GENERAL

1. At the execution of this contract, the contractor, at his own expense, must furnish those insurance policies and bonds as described below. Insurance certificates will be acceptable at date of contractor's signing.
2. All insurance policies and bonds must remain in effect throughout the duration of this contract.

3. Limits of liability are described in the Schedule of Requirements (Article XXVI) of this agreement.

3. CONTRACTOR'S PUBLIC LIABILITY INSURANCE

The contractor shall procure such Public Liability Insurance as shall protect him and his subcontractor(s) or any one directly or indirectly employed by either of them from claims for damage for bodily injury, including death, as well for claims for damage to property which may arise from operations under this contract.

C. WORKER'S COMPENSATION INSURANCE

In accordance with the laws of The State of New York, failure to comply with this provision shall make this contract void.

D. OWNER'S CONTINGENT PUBLIC LIABILITY INSURANCE

The Contractor shall also furnish Owners Contingent Public Liability Insurance protecting, as the named insured;

1. The County of Nassau;
2. all Municipalities, Municipal Sub-Divisions; and
3. Fee Owners of Properties,
4. Consultants

on which work is being done, each to the full limits of liability as are listed in the Schedule of Requirements (Article XXVI) of this agreement, against claims arising from the operations of the Contractor and his subcontractors.

E. BONDS

The Contractor shall execute both a Performance Bond and a Labor and Material Bond, each in the amount of \$1,500,000.00 one million five hundred thousand dollars, to remain in effect for the duration of the contract, which includes the Maintenance/Guarantee period. Such bonds to be executed by a surety company authorized to do business in the State of New York and acceptable to the County; Copies of both bond forms are provided with the Contract Bid Documents, and must be used, no other forms are acceptable. The Performance bond and Labor and Material Bond shall serve as security for the faithful performance of this Contract and for the payment of all persons performing labor and furnishing materials in connection with this Contract.

All Bonds shall be issued by a Surety Company authorized to do business in the State of New York as evidenced by the Surety Company's most recent Certificate of Solvency under Section 1111 of the New York Insurance Law, a copy of which must be attached to the Bond. The amount of said Bond shall not exceed the limits set by the aforesaid Certificates of Solvency.

ARTICLE XIV. ARREARS TO COUNTY (Sec. 2206 COUNTY CHARTER)

The Contractor warrants that he is not in arrears to the County upon debt or contract, and that he is not a defaulter, as surety, contractor or otherwise.

ARTICLE XV. WORKER'S COMPENSATION LAW

Pursuant to the provisions of Chapter Four Hundred and Seventy-eight of the Laws of Nineteen Hundred Sixteen or amendments thereto, this Contract shall be void and if no effect unless the party of the second part shall secure compensation for the benefit of, and keep insured during the life of this Contract, such employees as are required to be insured by the provisions of Chapter Forty-one of the Laws of Nineteen Hundred Fourteen and acts amendatory thereto, known as the "Worker's Compensation Law."

ARTICLE XVI. LABOR LAWS AND NOTICE OF EMPLOYEES' RIGHTS

An updated New York State Schedule of Prevailing Hourly Wage Rates for this Contract have been applied for and should be attached. If the updated schedule has not been received at the time of bid, they will be attached and made part of this agreement prior to execution of Contract, the Prevailing Wage Rates apply.

1. All persons employed to perform any work under this contract, must be provided with major medical and hospitalization benefits for the duration of this contract. Such benefits may be provided through a monthly lump-sum payment to the health care insurer of the employee's choice. Nothing herein shall be deemed to require the establishment or maintenance of an employee benefit plan.
2. No apprentice employed by the Contractor or any of his Subcontractors shall be permitted to perform any work required under this contract unless said apprentice is individually enrolled in, or a graduate of, a New York State approved apprentice training program registered with the Commissioner of Labor, and in conformity with Article 23 of the New York State Labor Law.
3. The Contractor must pay all wages and supplements required by law. Cash payments in lieu of fringe benefit supplements may be made at the option of the contractor, but any such cash payments must be made by check, draft or order payable to the employee. Records of such cash payments must be made promptly available for inspection upon request for the Nassau County Office of Labor Relations.
4. Posting of Notices
 - a. Every Contractor who is a party to a public works contract with the County of Nassau shall, on behalf of

its employees, Subcontractors, employees of Subcontractors and independent Contractors of Subcontractors, acknowledges and agrees to establish and maintain a Bulletin Board at or near the established job site Management Office or at such site as the Nassau County Department of Public Works directs, for the conspicuous posting of Notices including the New York State Department of Labor Schedules of Prevailing Wages and Supplements applicable to the Project, Worker's Compensation Law Notices, and all other Notices which are required by law and such Notices as the County of Nassau may require the Contractor to post at the site. To the extent practicable, notice must be posted in such a manner so that the general public may view same at the entrance to the job site.

- b. Such posting shall be secure from deterioration and/or obliteration by the elements, defacement, and acts of vandalism.
- c. Notices shall be maintained in a legible manner and shall be replaced if damaged, defaced, rendered illegible or removed for any reason.
- d. The posting of such Notices shall be undertaken prior to commencement of work at the site, if practical and feasible, and shall be maintained until the project has been substantially completed.
- e. Said notice shall include the telephone number and address of the New York State Department of Labor, Bureau of Public Works.
- f. For multiple prime contracts, each Contractor is required to provide the above, and identify the Contract to which it pertains. Nothing herein shall be construed to relieve the Contractor from posting requirements otherwise required by law.

5. Providing Notice to Employees

- a. The Contractor shall, on behalf of its employees, Subcontractors, employees of Subcontractors and independent Contractors of Subcontractors, provide written notice to each employee including all his Subcontractors employees that he or she is entitled to receive the prevailing wage and supplements for the occupation for which he or she has been hired. Such written notice shall be given to the employee at or before such individual commences work at the Project Site.
- b. The Contractor shall obtain from each employee a written

acknowledgment that the employee has received a copy of such notice and is receiving the prevailing wage rate. For the purpose of this section, an employee includes, in addition to those immediately under the hire and/or supervision of the Contractor, employees and independent contractors of subcontractors engaged in work at the Project Site. The written acknowledgments of the employees required herein shall accompany each month's partial payment request.

6. Payroll Records

- a. The Contractor shall, on behalf of its employees, Subcontractors, employees of Subcontractors and independent Contractors of Subcontractors, maintain at the job site (or such place designated by the County of Nassau) original payrolls, employee attendance records and/or transcripts thereof as are required to be maintained pursuant to Section 220 of the New York Labor Law and shall maintain the written acknowledgments of the employees as required above with the payrolls and transcripts.
- b. The Contractor shall, on behalf of its employees, Subcontractors, employees of Subcontractors and independent Contractors of Subcontractors, provide to the Resident Project Engineer, the Nassau County Director of Labor Relations (or other individuals designated by the County of Nassau) upon application for payment an employment attendance sheet for all employees, including employees of Subcontractors, for each day on which work is performed on the site, upon a form acceptable to the County of Nassau, containing such information as the County of Nassau deems appropriate, including job classification, hours of employment, wage rate and supplements payable and employer. A current attendance record shall be maintained at a location designated by the County of Nassau.
- c. Every Contractor on a public works contract to which Nassau County is a party shall, on behalf of its employees, Subcontractors, employees of Subcontractors and independent Contractors of Subcontractors, submit a transcript of its original payroll record for all work performed by the Contractor to the Public Works Commissioner of the County of Nassau, the Clerk of the Nassau County Legislature and to the Nassau County Office of Labor Relations within thirty days after the issuance of its first payroll, and every thirty days thereafter. Submissions shall be in such a form as to comply with Section 220 of the Labor Law.
- d. Upon receipt of a copy of the prevailing rate schedule

of wages and supplements specified in the public improvement contract, or of a subsequently issued prevailing rate schedule, every Contractor and Subcontractor shall provide a verified statement attesting that the Contractor and Subcontractor has received and reviewed such schedule of wages and supplements, or subsequently issued schedule, and agrees that it will pay the applicable prevailing wages and will provide the supplements specified therein. Such verified statement shall be filed with the Public Works Commissioner of the County of Nassau and the Clerk of the Nassau County Legislature. It shall be a violation of Local Law 1998 for any Contractor or its Subcontractor to fail to provide to its Subcontractor a copy of the prevailing rate schedule of wages and supplements specified in the contract as well as any prevailing rate issued subsequent to the schedule specified in the contract.

- e. Before the Contractor may request a progress Payment for any item of work performed by a Subcontractor, the Contractor shall furnish the County of Nassau with a copy of that Subcontractor's verified statement required by New York Labor Law Section 220-a. Before issuance of the final payment, the Contractor shall furnish the County with the original certifications and verified statements required by New York Labor Law Section 220-a.
- f. Before final payment is made by or on behalf of the county for any sum or sums due on account of a contract for a public improvement, it shall be the duty of the Nassau County Comptroller to require the Contractor to file every verified statement required to be obtained by the Contractor from its Subcontractors pursuant to subdivision two of Local Law 1998 and to file a statement in writing in form satisfactory to such officer certifying to the amounts then due and owing from such Contractor filing such statement to or on behalf of any and all laborers for daily or weekly wages or supplements on account of labor performed upon the work under the contract, setting forth therein the names of the persons whose wages or supplements are unpaid and the amount due to each or on behalf of each respectively. Such statement shall also set forth the amounts known by the Contractor to be then due and owing from each Subcontractor, or from a Subcontractor of such Subcontractor, for wages or supplements, or shall certify that the Contractor has no knowledge of such amounts owing to or on behalf of any laborers of its Subcontractors, and that in the event it is determined by the Commissioner that the wages or supplements or both of any employees of such Subcontractors have not been paid or provided pursuant to the appropriate

schedule of wages and supplements, the Contractor shall be responsible for payment of such wages or supplements pursuant to New York State law. Such statements so to be filed shall be verified by the oath of the Contractor that he or she has read such statement subscribed by him or her and knows the contents thereof, and that the same is true of his or her own knowledge except with respect to wages and supplements owing by Subcontractors which may be certified upon information and belief.

- g. The Contractor shall ensure that all employees on the job site shall have received appropriate training and possess all required state and county licenses for specialty, craft, skill, trade or other professional or licensed trades.
- h. No Contractor, Subcontractor, nor any person acting on its behalf should in any manner discriminate because of race, creed, color, religion, sex, national origin, age, marital status, or disability, against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates.

PREVENTION OF DELAY

The Contractor and his Subcontractors shall not employ any labor or means whose employment or utilization during the course of this Contract, may tend to, or in any way cause, or result in, strikes, work stoppages, delays, suspension of work or similar troubles by workmen employed by the Contractor or his Subcontractors, or by any of the trades working in or about the job sites where work is being performed under this Contract, or any other Contract on the job site. Any violation of this requirement by the Contractor may, upon written determination of the Commissioner of Public Works, be considered as proper and sufficient cause for canceling and terminating this Contract without any penalty to the COUNTY and the COUNTY shall be entitled to recover any damages from the Contractor that may have been caused by such violation.

NEW YORK STATE

SCHEDULE OF PREVAILING HOURLY WAGE RATES

NO TEXT ON THIS PAGE



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

Nassau County Dept Public Work

Loretta Dionisio, Asst to Deputy Cmr Admin
1194 Prospect Avenue
Westbury NY 11590

Schedule Year 2019 through 2020
Date Requested 10/02/2019
PRC# 2019012831

Location Nassau County-Various
Project ID# H66302W
Project Type The principal features of the work to be performed under this contract involves labor, materials, tools, equipment & incidentals as specified for the resurfacing of asphalt &/or concrete surfaces and

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2019 through June 2020. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website: www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: _____ Date Cancelled: _____

Name & Title of Representative: _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission; a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract **MUST** obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule **MUST** be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

A laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "4 Day / 10 Hour Work Schedule" form (PW 30.1).

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form from the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is **REQUIRED** to provide complete copies to all prime contractors who in turn **MUST**, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

Payrolls and Payroll Records

Every contractor and subcontractor **MUST** keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8, Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers' compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeymen in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyman's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-

e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

Nassau County Dept Public Work

Loretta Dionisio, Asst to Deputy Cmr Admin
1194 Prospect Avenue
Westbury NY 11590

Schedule Year 2019 through 2020

Date Requested 10/02/2019

PRC# 2019012831

Location Nassau County-Variou

Project ID# H66302W

Project Type The principal features of the work to be performed under this contract involves labor, materials, tools, equipment & incidentals as specified for the resurfacing of asphalt &/or concrete surfaces and

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor Information

All information must be supplied

Federal Employer Identification Number: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Amount of Contract: \$ _____

Contract Type:

Approximate Starting Date: ____/____/____

Approximate Completion Date: ____/____/____

☐ (01) General Construction

☐ (02) Heating/Ventilation

☐ (03) Electrical

☐ (04) Plumbing

☐ (05) Other : _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

IMPORTANT NOTICE

FOR

CONTRACTORS & CONTRACTING AGENCIES

Social Security Numbers on Certified Payrolls

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concerns with regard to inclusion of this information on payrolls if another identifier will suffice.

For these reasons, *the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor.*

NOTE: This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

**To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor
Administrative Finance Bureau-PWEF Unit
Building 12, Room 464
State Office Campus
Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

Construction Industry Fair Play Act

Required Posting For Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site.

Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense.

The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, www.labor.ny.gov.

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.state.ny.us.



New York State Department of Labor
Required Notice under Article 25-B of the Labor Law

**ATTENTION ALL EMPLOYEES, CONTRACTORS AND SUBCONTRACTORS:
YOU ARE COVERED BY THE
CONSTRUCTION INDUSTRY FAIR PLAY ACT**

The law says that you are an employee unless:

- You are free from direction and control in performing your job AND
- You perform work that is not part of the usual work done by the business that hired you AND
- You have an independently established business

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

**IT IS AGAINST THE LAW FOR AN EMPLOYER TO MISCLASSIFY EMPLOYEES AS
INDEPENDENT CONTRACTORS OR PAY EMPLOYEES OFF-THE-BOOKS.**

Employee rights. If you are an employee:

- You are entitled to state and federal worker protections such as
 - unemployment benefits, if unemployed through no fault of your own, able to work, and otherwise qualified
 - workers' compensation benefits for on-the-job injuries
 - payment for wages earned, minimum wage, and overtime (under certain conditions)
 - prevailing wages on public work projects
 - the provisions of the National Labor Relations Act and
 - a safe work environment
- It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor:

- You must pay all taxes required by New York State and Federal Law.

Penalties for paying off-the-books or improperly treating employees as independent contractors:

- **Civil Penalty** First Offense: up to \$2,500 per employee.
Subsequent Offense(s): up to \$5,000 per employee.
- **Criminal Penalty** First Offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine and debarment from performing Public Work for up to one year.
Subsequent Offense(s): Misdemeanor - up to 60 days in jail, up to a \$50,000 fine and debarment from performing Public Work for up to 5 years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at 1(866)435-1499 or send an email to dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously and you can remain anonymous.

Employer Name:

IA 999 (09/10)

WORKER NOTIFICATION

(Labor Law §220, paragraph a of subdivision 3-a)

Effective February 24, 2008

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage rate* for their particular job classification *on each pay stub**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website www.labor.ny.gov or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

* In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

Attention Employees

THIS IS A: **PUBLIC WORK PROJECT**

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Chapter 629 of
the Labor Laws
of 2007:

**These wages are set by law and must be posted
at the work site. They can also be found at:
www.labor.ny.gov**

If you feel that you have not received proper wages or benefits,
please call our nearest office.*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5156		

* For New York City government agency construction projects, please
contact the Office of the NYC Comptroller at (212) 669-4443, or
www.comptroller.nyc.gov – click on Bureau of Labor Law.

Contractor Name: _____

Project Location: _____

OSHA 10-hour Construction Safety and Health Course – S1537-A

Effective July 18, 2008

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

NOTE: The OSHA 10 Legislation only applies to workers on a public work project that are required, under Article 8, to receive the prevailing wage.

Where to find OSHA 10-hour Construction Course

1. NYS Department of Labor website for scheduled outreach training at:

https://labor.ny.gov/workerprotection/safetyhealth/dosh_training.shtm

2. OSHA Training Institute Education Centers:

Rochester Institute of Technology OSHA Education Center

Rochester, NY

Donna Winter

Fax (585) 475-6292

e-mail: dlwtpo@rit.edu

(866) 385-7470 Ext. 2919

www.rit.edu/~outreach/course.php3?CourseID=54

Atlantic OSHA Training Center

UMDNJ – School of Public Health

Piscataway, NJ

Janet Crooks

Fax (732) 235-9460

e-mail: crooksje@umdnj.edu

(732) 235-9455

<https://ophp.umdnj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~>

Atlantic OSHA Training Center

University at Buffalo

Buffalo, New York

Joe Syracuse

Fax (716) 829-2806

e-mail: mailto:japs@buffalo.edu

(716) 829-2125

http://www.smbs.buffalo.edu/CENTERS/trc/schedule_OSHA.php

Keene State College

Manchester, NH

Leslie Singleton

e-mail: lsingleton@keene.edu

(800) 449-6742

www.keene.edu/courses/print/courses_oshafin

3. List of trainers and training schedules for OSHA outreach training at:

www.OutreachTrainers.org

Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h took effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.*)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

******A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-485-5696.

WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$3 million in Bronx, Kings, New York, Queens and Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.
- For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical work and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or use of a Project Labor Agreement (PLA), and must be open to public inspection.
- Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.
- The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.
- Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

IMPORTANT INFORMATION

**Regarding Use of Form PW30.1
(Previously 30R)**

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

To use the '4 Day / 10 Hour Work Schedule':

There **MUST** be a *Dispensation of Hours (PW30)* in place on the project

AND

You **MUST** register your intent to work 4 / 10 hour days, by completing the PW30.1 Form.

REMEMBER...

The '4 Day / 10 Hour Work Schedule' applies **ONLY** to Job Classifications and Counties listed on the PW30.1 Form.

Do not write in any additional Classifications or Counties.

(Please note : For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)

Instructions for Completing Form PW30.1

(Previously 30R)

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

Before completing Form PW30.1 check to be sure ...

- There is a *Dispensation of Hours* in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Instructions (Type or Print legibly):

Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company's Phone and Fax numbers; and the Company's email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD – Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown, NY; Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications -
 - Go to pages 2 and 3 of the form
 - Place a checkmark in the box to the right of the Job Classification you are choosing
 - Mark all Job Classifications that apply

Do not write in any additional Classifications or Counties.

Requestor Information:

- Enter the name of the person submitting the registration, their title with the company, and the date the registration is filled out

Return Completed Form:

- Mail the completed PW30.1 form to: NYSDOL Bureau of Public Work, SOBC – Bldg.12 – Rm.130, Albany, NY 12240 -OR-
- Fax the completed PW30.1 form to: NYSDOL Bureau of Public Work at (518)485-1870



Department of Labor

Bureau of Public Work Harriman
State Office Campus
Building 12, Room 130
Albany, New York 12240
Phone: (518) 457-5589 | Fax: (518) 485-1870
www.labor.ny.gov

Employer Registration for Use of 4 Day / 10 Hour Work Schedule

Before completing this form, make sure that:

- There is a **Dispensation of Hours** in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Please **type or print** the requested information and then **mail or fax** to the address above.

Contractor Information

Company Name: _____ FEIN: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone No: _____ Fax No: _____ Email: _____

Contact Person: _____

Phone No: _____ Fax No: _____ Email: _____

Project Information

Project PRC#: _____ Project Name/Type: _____

Exact Location
of Project: _____ County: _____

(If you are Subcontractor)

Prime Contractor Name: _____

Job Classification(s) to Work 4/10 Schedule: *(Choose all that apply on Job Classification Checklist - Pages 3-8)*
*** Do not write in any additional Classifications or Counties***

Requestor Information

Name: _____

Title: _____ Date: _____

Please use the list below with the number assigned to each county as a reference to the corresponding numbers listed in the following pages under **Entire Counties & Partial Counties**.

- | | |
|---------------------------------|-------------------------------------|
| 1. Albany County | 33. Oneida County |
| 2. Allegany County | 34. Onondaga County |
| 3. Bronx County | 35. Ontario County |
| 4. Broome County | 36. Orange County |
| 5. Cattaraugus County | 37. Orleans County |
| 6. Cayuga County | 38. Oswego County |
| 7. Chautauqua County | 39. Otsego County |
| 8. Chemung County | 40. Putnam County |
| 9. Chenango County | 41. Queens County |
| 10. Clinton County | 42. Rensselaer County |
| 11. Columbia County | 43. Richmond County (Staten Island) |
| 12. Cortland County | 44. Rockland County |
| 13. Delaware County | 45. Saint Lawrence County |
| 14. Dutchess County | 46. Saratoga County |
| 15. Erie County | 47. Schenectady County |
| 16. Essex County | 48. Schoharie County |
| 17. Franklin County | 49. Schuyler County |
| 18. Fulton County | 50. Seneca County |
| 19. Genesee County | 51. Steuben County |
| 20. Greene County | 52. Suffolk County |
| 21. Hamilton County | 53. Sullivan County |
| 22. Herkimer County | 54. Tioga County |
| 23. Jefferson County | 55. Tompkins County |
| 24. Kings County (Brooklyn) | 56. Ulster County |
| 25. Lewis County | 57. Warren County |
| 26. Livingston County | 58. Washington County |
| 27. Madison County | 59. Wayne County |
| 28. Monroe County | 60. Westchester County |
| 29. Montgomery County | 61. Wyoming County |
| 30. Nassau County | 62. Yates County |
| 31. New York County (Manhattan) | |
| 32. Niagara County | |

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Carpenter – Building	276B-All	7	2, 5	
Carpenter – Building	276B-Cat	15	5	
Carpenter – Building	276-B-LIV	26, 28, 35, 59	61	
Carpenter – Building	276B-Gen	19, 32, 37	61	
Carpenter – Heavy & Highway	276HH-All	2, 5, 7		
Carpenter – Heavy & Highway	276HH-Erie	15		
Carpenter – Heavy & Highway	276HH- Gen	19, 32, 37, 61		
Carpenter – Heavy & Highway	276HH-Liv	26, 28, 35, 59		
Carpenter – Residential	276R-All	7	2, 5	
Carpenter – Building	277B-Bro	4, 54		
Carpenter – Building	277B-CAY	6, 50, 62		
Carpenter – Building	277B-CS	8, 12, 49, 51, 55	2	
Carpenter – Building	277 JLS	23, 25, 45		
Carpenter – Building	277 omh	22, 27, 33		
Carpenter – Building	277 On	34		
Carpenter – Building	277 Os	38		
Carpenter – Building	277CDO Bldg	9, 13, 39		
Carpenter – Heavy & Highway	277CDO HH	9, 13, 39		
Carpenter – Heavy & Highway	277HH-BRO	4, 6, 8, 12, 22, 23, 25, 27, 33, 34, 38, 45, 49, 50, 51, 54, 55, 62		
Carpenter – Building	291B-Alb	1, 18, 20, 29, 42, 47, 48		
Carpenter – Building	291B-Cli	10, 16, 17		
Carpenter – Building	291B-Ham	21, 57, 58		
Carpenter – Building	291B-Sar	46		
Carpenter – Heavy & Highway	291HH-Alb	1, 10, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Electrician	25m	30, 52		
Electrician – Teledata Cable Splicer	43	12, 22, 27, 33, 38	6, 9, 34, 39, 55, 59	

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Electrician	86	26, 28	19, 35, 37, 59, 61	
Electrician	840 Teledata and 840 Z1	62	6, 34, 35, 50, 59	
Electrician	910	10, 16, 17, 23, 25, 45		
Electrical Lineman	1049Line/Gas	30, 41, 52		
Electrical Lineman	1249a	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 44, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 56, 57, 58, 59, 61, 62		
Electrical Lineman	1249a West	60		
Electrical Lineman	1249a-LT	1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 42, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 57, 58, 59, 61, 62		
Electrical Lineman	1249aREG8LT	11, 14, 36, 40, 44, 56		
Electrical Lineman	1249aWestLT	60		
Elevator Constructor	138	11, 14, 20, 36, 40, 53, 56	13, 44, 60	
Elevator Constructor	14	2, 5, 7, 15, 19, 32, 37, 61		
Elevator Constructor	27	8, 26, 28, 35, 49, 50, 51, 59, 62		
Elevator Constructor	35	1, 10, 16, 18, 21, 22, 29, 39, 42, 46, 47, 48, 57, 58		
Elevator Constructor	62.1	4, 6, 9, 12, 23, 25, 27, 33, 34, 38, 45, 54, 55	13	
Glazier	201	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Glazier	660r	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	660	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	677.1	23, 25, 26, 28, 35, 45, 50, 59, 62		
Glazier	677Z-2	6, 12, 22, 27, 33, 34, 38		
Glazier	677z3	4, 8, 9, 13, 39, 49, 51, 54, 55		
Glazier	677r.2	6, 12, 22, 27, 33, 34, 38		
Insulator – Heat & Frost	30-Syracuse	4, 6, 8, 9, 12, 22, 23, 25, 27, 33, 34, 38, 39, 49, 50, 45, 54, 55		
Laborer – Building	621b	2, 7	5	
Laborer – Building	633 bON	34		

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Laborer – Building	633b Cay	6		
Laborer – Building	633bOS	38		
Laborer – Building	785(7)	4	9, 13, 54	
Laborer – Building	785B-CS	8, 51	49	
Laborer – Building	7-785b	12, 55	49, 54	
Laborers – Heavy & Highway	157h/h	47	18, 29, 46	
Laborers – Heavy & Highway	190 h/h	1, 42, 58	11, 20, 46	
Laborers – Heavy & Highway	35/2h	21, 22, 27, 33	18, 29	
Laborer – Residential	621r	2, 7	5	
Laborers – Tunnel	157	47	18, 29, 46	
Laborers – Tunnel	35T	21, 22, 27, 33	18, 29	
Laborers – Tunnel	190	1, 42, 58	11, 20, 46	
Mason – Building	2TS.1	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Mason – Building	2TS.2	22, 23, 25, 33, 45	27	
Mason – Building	2TS.3	6, 34, 38	27	
Mason – Building	2b-on	34		
Mason – Building	2b.1	1, 11, 18, 20, 21, 29, 42, 46, 47, 48, 58	57	
Mason – Building	2b.2	22, 33	25	
Mason – Building	2b.3	6, 34	27	
Mason – Building	2b.4	38		
Mason – Building	2b.5	23	25	
Mason – Building	2b.6	45		
Mason – Building	2b.8	10, 16, 17	57	
Mason – Building	3b-Co-Z2	8, 49, 51	2	
Mason – Building	3B-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building – Residential	3B-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building	3B-Bing-Z2	4, 9, 13, 39, 54		
Mason – Building	3B-lth-Z2	12, 55		

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Mason – Building	3B-Jam-Z2	7	2, 5	
Mason – Building – Residential	3B-Jam-Z2R	2, 4, 8, 7, 9, 12, 39, 13, 49, 51, 54, 55	5	
Mason – Building	3B-Z3	15, 32	5	
Mason – Building	3B-Z3.Orleans	37		
Mason – Residential	3B-Z3R	15, 32	5	
Mason – Residential	3B-z3R.Orleans	37		
Mason - Heavy & Highway	3h	2, 4, 8, 7, 9, 12, 13, 19, 26, 28, 35, 37, 39, 49, 50, 51, 54, 55, 59, 61, 62	5, 15, 32	
Mason – Tile Finisher	3TF-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2	2, 4, 8, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3	15, 32, 37	5	
Mason – Tile Finisher	3TF-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2R	2, 4, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3R	15, 32, 37	5	
Mason – Tile Setter	3TS-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter Residential	3TS-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter	3TS-Z2	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter Residential	3TS-Z2R	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter	3TS-Z3	15, 32, 37	5	
Mason – Tile Setter Residential	3TS-Z3R	15, 32, 37	5	
Mason – Building/Heavy & Highway	780	3, 24, 30, 31, 41, 43, 52		
Operating Engineer - Heavy & Highway	137H/H	40, 60	14	
Operating Engineer – Heavy & Highway	158-832H	2, 8, 26, 28, 35, 49, 51, 59, 62	19	
Operating Engineer – Heavy & Highway	158-H/H	1, 4, 9, 10, 11, 14, 16, 17, 18, 20, 21, 22, 29, 39, 42, 46, 47, 48, 54, 57, 58		
Operating Engineer – Heavy & Highway	158-545h	6, 12, 23, 25, 27, 33, 38, 45, 50, 55		
Painter	1456-LS	1, 3, 10, 11, 14, 16, 17, 18, 20, 21, 24, 29, 30, 31, 36, 40, 41, 42, 43, 44, 46, 47, 48, 52, 53, 56, 57, 58, 60		
Painter	150	28, 59, 62	26, 35	

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Painter	178 B	4, 9, 54		
Painter	178 E	8, 49	51	
Painter	178 I	12, 55		
Painter	178 O	13, 39		
Painter	31	6, 22, 27, 33, 34, 50	25, 35, 38	
Painter	38.O		38	
Painter	38.W	23, 45	25	
Painter	4- Buf, Nia, Olean	2, 15, 19, 32, 37, 61	5, 7, 26, 51	
Painter	4-Jamestown		5, 7	
Sheetmetal Worker	46	26, 28, 35, 50, 59, 62		
Sheetmetal Worker	46r	26, 28, 35, 50, 59, 62		
Teamsters – Heavy & Highway	294h/h	1, 11, 18, 20, 29, 42, 46, 47, 48, 58	57	
Teamsters – Heavy & Highway	317bhh	6, 12, 50, 51, 55, 62	2	
Teamsters - Building/Heavy & Highway	456	40, 60		

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

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Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor
Bureau of Public Work
State Office Campus, Bldg. 12
Albany, NY 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Nassau County General Construction

Asbestos Worker

10/01/2019

JOB DESCRIPTION Asbestos Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019

Asbestos Worker \$ 44.00
Removal & Abatement Only*

NOTE: *On Mechanical Systems that are NOT to be SCRAPPED.

SUPPLEMENTAL BENEFITS

Per Hour:

Asbestos Worker \$ 8.70
Removal & Abatement Only

OVERTIME PAY

See (B, B2, *E, J) on OVERTIME PAGE

Hours worked on Saturdays are paid at time and one half only if forty hours have been worked during the week.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 8) on HOLIDAY PAGE

REGISTERED APPRENTICES

Apprentice Removal & Abatement Only:

1000 hour terms at the following percentage of Journeyman's rates.

1st	2nd	3rd	4th
78%	80%	83%	89%

SUPPLEMENTAL BENEFIT

Per Hour:

Apprentice
Removal & Abatement \$ 8.70

4-12a - Removal Only

Boilermaker

10/01/2019

JOB DESCRIPTION Boilermaker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per Hour: 07/01/2019 01/01/2020

Boilermaker	\$ 59.17	\$ 61.24
Repairs & Renovations	59.17	61.24

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019 01/01/2020

Boilermaker	32% of hourly	32% of hourly
Repair & Renovations	Wage Paid	Wage Paid
	+ \$ 25.35	+ \$ 25.38

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay.

Repairs & Renovation Includes replacement of parts and repairs & renovation of existing unit.

OVERTIME PAY

See (D, O) on OVERTIME PAGE

Repairs & Renovation see (B,E,Q)

HOLIDAY

Paid: See (8, 16, 23, 24) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 12, 15, 16, 22, 23, 24, 25) on HOLIDAY PAGE

NOTE: *Employee must work in pay week to receive Holiday Pay.
**Employee gets 4 times the hourly wage rate for working Labor Day.

REGISTERED APPRENTICES

Wage per hour:

(1/2) Year Terms at the following percentage of Boilermaker's Wage

1st	2nd	3rd	4th	5th	6th	7th
65%	70%	75%	80%	85%	90%	95%

Supplemental Benefits Per Hour:

Apprentice(s)	07/01/2019 32% of Hourly Wage Paid Plus Amount Below	01/01/2020 32% of Hourly Wage Paid Plus Amount Below
1st Term	\$ 19.38	\$ 19.41
2nd Term	20.24	20.26
3rd Term	21.08	21.11
4th Term	21.94	21.96
5th Term	22.79	22.82
6th Term	23.65	23.68
7th Term	24.48	24.52

NOTE: "Hourly Wage Paid" shall include any and all premium(s)

4-5

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

RATES

Per hour:

07/01/2019

Piledriver	\$ 54.63
Dockbuilder	\$ 54.63

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 51.63
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OVERTIME PAY

See (B, E2, O) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour

(1)year terms:

1st	2nd	3rd	4th
\$21.85	\$27.32	\$35.51	\$43.70

Supplemental benefits per hour:

Terms: \$ 33.97

8-1556 Db

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2019

Carpet/Resilient

Floor Coverer \$ 50.50

INCLUDES HANDLING & INSTALLATION OF ARTIFICIAL TURF AND SIMILAR TURF INDOORS/OUTDOORS.

SUPPLEMENTAL BENEFITS

Per hour: \$ 45.83

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE.

Paid for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage per hour - (1) year terms:

1st	2nd	3rd	4th
\$20.20	\$25.25	\$32.83	\$40.40

Supplemental benefits per hour - all apprentice terms:

\$ 31.09

8-228

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2019

Marine Construction:

Marine Diver \$ 69.22

Marine Tender 49.14

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker \$ 51.58

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 13, 16, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms.

1st year	\$ 21.85
2nd year	27.32
3rd year	35.51
4th year	43.70

Supplemental Benefits

Per Hour:

All terms \$ 33.97

8-1456MC

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2019

Building

Millwright \$ 54.20

SUPPLEMENTAL BENEFITS

Per hour:

Millwright \$ 53.66

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Overtime See (5,6,8,11,13,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms:

1st.	2nd.	3rd.	4th.
\$29.16	\$34.46	\$39.76	\$50.36

Supplemental benefits per hour:

One (1) year terms:

1st.	2nd.	3rd.	4th.
\$34.51	\$38.16	\$42.46	\$49.12

8-740.1

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour:

07/01/2019

Timberman

\$ 50.05

SUPPLEMENTAL BENEFITS

Per Hour:

07/01/2019

\$ 50.88

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms:

1st	2nd	3rd	4th
\$20.02	\$25.03	\$32.53	\$40.04

Supplemental benefits per hour:

All terms \$ 33.61

8-1556 Tm

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Westchester

PARTIAL COUNTIES

Orange: South of but including the following, Waterloo Mills, Slate Hill, New Hampton, Goshen, Blooming Grove, Mountainville, east to the Hudson River.

Putnam: South of but including the following, Cold Spring, Tompkins Corner, Mahopac, Croton Falls, east to Connecticut border.

Suffolk: West of Port Jefferson and Patchogue Road to Route 112 to the Atlantic Ocean.

WAGES

Per hour: 07/01/2019

Core Drilling:

Driller \$ 40.44

Driller Helper

32.12

Note: Hazardous Waste Pay Differential:

For Level C, an additional 10% above wage rate per hour

For Level B, an additional 10% above wage rate per hour

For Level A, an additional 10% above wage rate per hour

Note: When required to work on water: an additional \$ 0.50 per hour.

SUPPLEMENTAL BENEFITS

Per hour: 07/01/2019

Driller and Helper

\$ 26.70

OVERTIME PAY

OVERTIME: See (B,E,K*,P,R**) on OVERTIME PAGE.

HOLIDAY

Paid: See (5,6) on HOLIDAY PAGE.

Overtime: * See (5,6) on HOLIDAY PAGE.

** See (8,10,11,13) on HOLIDAY PAGE.

8-1536-CoreDriller

Carpenter

10/01/2019

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, New York, Putnam, Queens, Richmond

PARTIAL COUNTIES

Nassau: That portion of the county that lies west of Seaford Creek and south of the Southern State Parkway.

WAGES

Per hour: 07/01/2019

Show Exhibit \$ 54.19

Bldg. Carpenter 52.50*

* Not applicable in Putnam County

SUPPLEMENTAL BENEFITS

Per hour worked:

Show Exhibit \$ 49.54
Bldg. Carpenter 46.25

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour: Show Exhibit

(1) year terms:

1st.	2nd.	3rd.	4th.
\$21.68	\$27.10	\$35.22	\$43.35

Supplemental benefits per hour:

All terms \$ 32.94

Wages per hour: Bldg. Carpenter

(1) year terms:

1st	2nd	3rd	4th
\$21.00	\$26.25	\$34.13	\$42.00

Supplemental benefits per hour:

All terms \$ 31.31

8-EXHIB

Carpenter - Building / Heavy&Highway

10/01/2019

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour: 07/01/2019

Carpenter

(Building) \$ 49.38

Carpenter

(Heavy Highway) \$ 49.38

"NOTE" ADD 15% to straight time hourly wage for NEW YORK STATE D.O.T. and other GOVERNMENTAL MANDATED Off-Shift Work.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per Hour:

Both Carpenter

Categories \$ 32.81

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following:

Per Hour:

1st	2nd	3rd	4th	5th
\$ 23.73	\$ 27.86	\$ 29.93	\$ 32.00	\$ 33.13

Supplemental Benefits
Per Hour:

All Terms: \$ 18.10

4-Reg.Council Nass/Suff

Carpenter - Building High Rise Concrete Form Work

10/01/2019

JOB DESCRIPTION Carpenter - Building High Rise Concrete Form Work

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

PARTIAL COUNTIES

Nassau: Work performed beginning at the Intersection of the City Line & North Shore of Long Island, then running Southerly to the Southern State Pkwy, then East to Seaford Creek in Nassau County, then South to Atlantic Ocean, then West to Southern tip of Richmond County

WAGES

Per hour: 07/01/2019

Building High Rise:

Concrete Carpenter A \$ 50.78

Concrete Carpenter B* \$ 40.19

*NOTE: Tier B work excludes erection of decking, perimeter debris netting, leading edge work, self & climbing form systems and the installation of cocoon systems.

SUPPLEMENTAL BENEFITS

Per hour:

Concrete Carpenter A \$ 43.29

Concrete Carpenter B \$ 16.60

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

One (1) year terms:

Concrete Carpenter Apprentices	1st	2nd	3rd	4th
	\$ 17.52	\$ 23.95	\$ 30.53	\$ 38.15

Supplemental benefits per hour:

Concrete Carpenter: Apprentices	1st	2nd	3rd	4th
	\$ 16.15	\$ 16.28	\$ 16.41	\$ 16.56

8-NYC Bldg/212

Carpenter - Heavy&Highway

10/01/2019

JOB DESCRIPTION Carpenter - Heavy&Highway

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

PARTIAL COUNTIES

Nassau: That portion of the county that lies West of Seaford Creek and South of the Southern State Parkway.

WAGES

Per hour: 07/01/2019

Heavy&Highway Carpenter \$ 54.68

SUPPLEMENTAL BENEFITS

Per hour worked:

Heavy & Highway
Carpenter \$ 51.58

OVERTIME PAY

See (B, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 13, 25) on HOLIDAY PAGE
Paid : for 1st & 2nd yr
Apprentices See (5, 6, 11, 13, 25)

REGISTERED APPRENTICES

Wage per hour:

One (1) year terms:

	1st	2nd	3rd	4th
Heavy & Highway	\$ 21.87	\$ 27.34	\$ 35.54	\$ 43.74
Supplemental Benefits:				
Per Hour:				

All terms \$ 33.97

8-NYC H/H

Electrician

10/01/2019

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Hour:	07/01/2019	03/30/2020
Electrician		
Electrical Maintenance	\$ 43.70	\$ 44.12
Traffic Signal	\$ 44.60	\$ 45.05

"PLEASE NOTE"

Applicable to "EXISTING ELECTRICAL SYSTEMS" including, but not limited to TRAFFIC SIGNALS & STREET LIGHTING. Not used for addons.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per Hour:

Electrician	12% of Hourly Wage Paid + \$18.52	12% of Hourly Wage Paid + \$18.60
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NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

OVERTIME PAY

See (B, E2, K, P) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One (1) Year Term(s) at the following Percentage
of Journeyman(s) Wage:

1st	2nd	3rd	4th	5th	6th
40%	50%	60%	70%	80%	90%

Supplemental Benefits:

	07/01/2019	03/30/2020
1st	3% + \$3.65	3% + \$3.65
2nd	8% + \$4.19	8% + \$4.19
3rd	9% + \$5.20	9% + \$5.20
4th	10% + \$ 6.96	10% + \$ 6.96
5th	11% + \$10.91	11% + \$10.91
6th	12% + \$14.01	12% + \$14.01

NOTE: Percentages are on "Hourly Wage Paid"

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

4-25m

Electrician

10/01/2019

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2019	3/29/2020
Tree Trimmer/Remover Line Clearance Specialist	\$ 34.71	\$ 35.75
Groundman*	\$20.83	\$ 21.45

These rates apply to all tree trimming/removal contracts including but not limited to "Electrical Line Clearance"/"Long Island Railroad Right of Ways".

For Building Construction or Road/Highway Construction Contracts, Heavy & Highway Laborer and Operating Engineer classifications Apply.

* Note: Groundman Classification not to exceed 20% of the company workforce on Project.

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2019	3/29/2020
Tree Trimmer Line Clearance Specialist and Groundman	20.25% of Hourly Wage Paid + \$10.57	20.50% of Hourly Wage Paid + \$11.07

NOTE: "Hourly Wage Paid" shall include any and all premium(s) paid

OVERTIME PAY

See (B, E, P, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE

4-1049/Tree

Electrician

10/01/2019

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2019	04/26/2020
Electrician/Wireman	\$ 53.00	\$ 54.00
HVAC Controls	53.00	54.00
Fire Alarms	53.00	54.00

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2019	04/26/2020
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Electrician/Wireman (all categories)	16% of Hourly Wage Paid + \$ 27.52	16% of Hourly Wage Paid + \$ 29.16
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NOTE: "Hourly Wage Paid" shall include any and all premium[s]

OVERTIME PAY

See (B, E, E2, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following Percentage of Journeyman(s) Wage:

1st	2nd	3rd	4th	5th	6th
35%	35%	40%	45%	60%	75%

Supplemental Benefits Per Hour:

	07/01/2019	04/26/2020
1st	3% + \$5.15	3% + \$5.15
2nd	8% + \$6.32	8% + \$6.32
3rd	9% + \$7.45	9% + \$7.45
4th	10% + \$8.74	10% + \$8.74
5th	13% + \$10.97	13% + \$10.97
6th	14% + \$17.23	14% + \$17.23

NOTE: Percentages are on "Hourly Wage Paid"

NOTE: "Hourly Wage Paid" shall include any and all premium(s).

4-25

Electrician

10/01/2019

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour: 07/01/2019

Electrician

Pump & Tank \$ 41.65

SUPPLEMENTAL BENEFITS

Per Hour:

Electrician

Pump & Tank 65.25%
of *Wage
Paid

*Wage Paid includes any and all Premiums

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 Year Terms at the Following:

Per Hour:

1st Term	\$ 12.50
2nd Term	\$ 14.58
3rd Term	\$ 16.66
4th Term	\$ 18.74
5th Term	\$ 24.99
6th Term	\$ 29.16

SUPPLEMENTAL BENEFITS

Per Hour:

All Terms 65.25%
of *Wage
Paid

*Wage Paid includes any and all Premiums

4-25 Pump & Tank

Electrician

10/01/2019

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2019	04/25/2020
Telephone and Intergrated Tele-Data System Electrician	\$ 37.83	\$ 38.18

This rate classification applies to ALL Voice, Data & Video work.: Excluding Fire Alarm Systems and Energy Managment Systems (HVAC Controls), in those cases the regular Electrician rate applies. To ensure proper use of this rate please call Nassau Offices at (516)228-3912 or Suffolk Offices at (631)687-4882.

SUPPLEMENTAL BENEFITS

Per Hour:

Tele-Data Electrician	16% of Hourly Wage Paid + \$19.16	16% of Hourly Wage Paid + \$19.85
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NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

4-25tela

Electrician Lineman

10/01/2019

JOB DESCRIPTION Electrician Lineman

DISTRICT 4

ENTIRE COUNTIES

Nassau, Queens, Suffolk

WAGES

For Utility Distribution & Transmission Line Construction:
Per Hour: 07/01/2019

Lineman/Splicer	\$ 57.41
Material Man	49.95
Heavy Equip. Operator	45.93
Groundman	34.45
Flagman	25.83

For Natural Gasline Construction:

Per Hour:	07/01/2019	06/07/2020
Journeyman U.G.Mech.	\$ 48.52	\$50.10

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per Hour:

Utility Distribution & Transmission Line Construction:

07/01/2019

All Classifications

32% of Hourly
Wage Paid +
\$ 13.09

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

Natural Gasline Construction:

Per Hour:

07/01/2019

06/07/2020

Journeyman U.G.Mech.

27.5% of Hourly
Wage Paid +
\$13.94

28% of Hourly
Wage Paid +
\$14.60

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

OVERTIME for Natural Gas Mechanic:(B,G,P)

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 8, 16, 23, 25, 26) on HOLIDAY PAGE

Same as Above for Natural Gas Mechanic.

REGISTERED APPRENTICES

1000 hour Terms at the following Percentage of Journeyman's Wage.
(Lineman Only)

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFIT:

07/01/2019

All Terms

31% of Hourly
Wage Paid +
\$13.09

4-1049 Line/Gas

Elevator Constructor

10/01/2019

JOB DESCRIPTION Elevator Constructor

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

PARTIAL COUNTIES

Rockland: Entire County except for the Township of Stony Point

Westchester: Entire County except for the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and Yorktown.

WAGES

Per hour:

07/01/2019

03/17/2020

Elevator Constructor

\$ 66.95

\$ 69.56

Modernization &
Service/Repair

\$ 52.44

\$ 54.56

SUPPLEMENTAL BENEFITS

Per Hour:

Elevator Constructor

\$ 40.93

\$ 41.92

Modernization &
Service/Repairs

\$ 39.90

\$ 40.86

OVERTIME PAY

Constructor See (D, M, T) on OVERTIME PAGE.

Modern/Service See (B, F, S) on OVERTIME PAGE.

HOLIDAY

Paid: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES PER HOUR:

*Note: 1st Term is based on Average wage of Constructor & Modernization.

Terms 2 thru 4 Based on Journeymans wage of classification Working in.

1 YEAR TERMS:

1st Term*	2nd Term	3rd Term	4th Term
50%	55%	65%	75%

SUPPLEMENTAL BENEFITS

Elevator Constructor

1st Term	\$ 32.72	\$ 33.38
2nd Term	33.51	34.20
3rd Term	34.80	35.55
4th Term	36.09	36.89

Modernization & Service/Repair

1st Term	\$ 32.66	\$ 33.33
2nd Term	33.13	33.82
3rd Term	34.36	35.09
4th Term	35.58	36.36

4-1

Glazier 10/01/2019

JOB DESCRIPTION Glazier

DISTRICT 8

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per hour: 7/01/2019

Glazier	\$ 56.25
*Scaffolding	57.25
Glass Tinting & Window Film	28.74
**Repair & Maintenance	28.74

*Scaffolding includes swing scaffold, mechanical equipment, scissor jacks, man lifts, booms & buckets 24' or more, but not pipe scaffolding.

**Repair & Maintenance- All repair & maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$100,000. All Glass tinting, window film, regardless of material or intended use, and all affixing of decals to windows or glass.

SUPPLEMENTAL BENEFITS

Per hour: 7/01/2019

Journeyworker	\$ 33.39
Glass tinting & Window Film	19.39
Repair & Maintenance	19.39

OVERTIME PAY

See (C*, D* E2, O) on OVERTIME PAGE. (Premium is applied to the respective base wage only.)

* If an optional 8th hour is required to complete the entire project, the same shall be paid at the regular rate of pay. If a 9th hour is worked, then both hours or more (8th & 9th or more) will be paid at double time rate of pay.

For 'Repair & Maintenance' and 'Glass Tinting & Window Film' see (B, B2, F, P) on overtime page.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (4, 6, 16, 25) on HOLIDAY PAGE
or 'Repair & Maintenance' and 'Glass Tinting & Window Film' see (5, 6, 16, 25)

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage rates:

7/01/2019

1st term	\$ 19.44
2nd term	27.59
3rd term	33.35
4th term	44.77

Supplemental Benefits:

(Per hour)

1st term	\$ 15.86
2nd term	22.12
3rd term	24.41
4th term	28.76

8-1281 (DC9 NYC)

Insulator - Heat & Frost

10/01/2019

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019 01/01/2020

Insulators		
Heat & Frost	\$ 67.86	\$ 1.25/Hr. Additional

SUPPLEMENTAL BENEFITS

Per Hour:

Insulators	\$ 34.06
Heat & Frost	

OVERTIME PAY

See (*C, **O, V) on OVERTIME PAGE

* 8th Hour paid at time and one half

** Triple time for Labor Day (If worked)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:

1 year terms Per Hour:

Hired prior to 8/21/2017

	1st	2nd	3rd	4th
7/1/2019	\$27.14	\$33.93	\$40.72	\$50.90

Hired after 8/21/2017

7/1/2019	\$23.75	\$30.54	\$37.32	\$44.11
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Supplemental Benefits:

Hired prior to 8/21/2017

7/1/2019	\$13.62	\$17.03	\$20.44	\$25.55
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Hired after 8/21/2017

7/1/2019	\$11.92	\$15.33	\$18.73	\$22.14
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4-12

Ironworker

10/01/2019

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour: 07/01/2019

Ironworker Rigger \$ 62.84

Ironworker Stone
Derrickman \$ 62.84

SUPPLEMENTAL BENEFITS

Per hour: \$ 39.79

OVERTIME PAY

See (B, D1, *E, Q, **V) on OVERTIME PAGE

*Time and one-half shall be paid for all work on Saturday up to eight (8) hours and double time shall be paid for all work thereafter.

** Benefits same premium as wages on Holidays only

HOLIDAY

Paid: See (18) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 25) on HOLIDAY PAGE

*Work stops at schedule lunch break with full day's pay.

REGISTERED APPRENTICES

Wage per hour:

1/2 year terms at the following hourly wage rate:

	1st	2nd	3rd	4th	5th	6th
07/01/2018	\$31.42	\$31.42	\$44.54	\$43.07	\$54.41	\$54.41

Supplemental benefits:

Per hour:	\$19.97	\$19.97	\$30.02	\$30.02	\$30.02	\$30.02
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9-197D

Ironworker

10/01/2019

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour:	07/01/2019	1/1/2020
Ornamental	\$45.15	\$ 1.25/hr
Chain Link Fence	\$45.15	
Guide Rail	\$45.15	

SUPPLEMENTAL BENEFITS

Per hour:
Journeyworker: \$ 56.05

OVERTIME PAY

See (B, B1, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st term represents first 1-10 months, thereafter (1/2) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th
50%	55%	60%	70%	80%

Supplemental Benefits per hour:

1st Term	\$ 17.89
2nd Term	19.14
3rd Term	19.14

4th Term	48.15
5th Term	50.78

4-580-Or

Ironworker

10/01/2019

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

PER HOUR:

07/01/2019

01/01/2020

Additional

\$ 1.92/hr.

To Be Allocated

Ironworker:

Structural

\$ 51.45

Bridges

Machinery

SUPPLEMENTAL BENEFITS

PER HOUR:

Journeyman

\$ 78.43

OVERTIME PAY

See (B, B1, Q) on OVERTIME PAGE

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES PER HOUR:

6 month terms at the following rate:

1st	\$26.82
2nd	\$27.42
3rd - 6th	\$28.03

Supplemental Benefits

PER HOUR:

All Terms

\$54.54

4-40/361-Str

Ironworker

10/01/2019

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Rockland: Southern section - south of Convent Road and east of Blue Hills Road.

WAGES

Per hour:

07/01/2019

Reinforcing &

Metal Lathing

\$ 56.23

"Base" Wage

\$ 46.23

plus \$ 10.00

"Base" Wage is used to calculate overtime hours only.

SUPPLEMENTAL BENEFITS

Per hour:

Reinforcing &

Metal Lathing

\$ 35.30

OVERTIME PAY

See (B, E, Q, *X) on OVERTIME PAGE

*Only \$22.00 per Hour for non worked hours

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 13, 18, 19, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following wage rates:

Wages Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 26.38	\$ 30.38	\$ 35.38	\$ 37.38

SUPPLEMENTAL BENEFITS

Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 15.37	\$ 17.37	\$ 19.33	\$ 20.33

4-46Reinf

Laborer - Building 10/01/2019

JOB DESCRIPTION Laborer - Building¹

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

WAGES

Per Hour: 07/01/2019

Building Laborer \$ 39.40

Asbestos Abatement Workers 36.00
(Re-Roofing Removal see Roofer)

SUPPLEMENTAL BENEFITS

Per Hour:

Building Laborer \$ 29.56
Asbestos Abatement Worker 16.45

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE
See also (H) for Fire Watch on OVERTIME PAGE
Asbestos Worker See (B, H)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

Asbestos Worker see (5, 6, 8 & 28)

REGISTERED APPRENTICES

Regular Hours Work Terms

Term #1 1 hr to 1000hrs
Term #2 1001hrs to 2000hrs
Term #3 2001hrs to 3000hrs
Term #4 3001hrs to 4000hrs

Wages per hour:

1st Term	\$ 17.46
2nd Term	20.55
3rd Term	25.43
4th Term	30.41

Benefits per hour

1st Term	\$ 19.65
2nd Term	22.44
3rd Term	22.44
4th Term	22.44

4-66

Laborer - Heavy&Highway 10/01/2019

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

AGES

Laborer (Heavy/Highway):

GROUP # 1: Asphalt Rakers, Concrete Curb Formsetters.

GROUP # 2: Asphalt Shovelers, Roller Boys and Tampers.

GROUP # 3: Basic Laborer, Power Tool(Jackhammer), Landscape Construction, Traffic Control Personnel(flaggers)

WAGES PER HOUR:

	07/01/2019	06/01/2020
GROUP # 1		
Total Wage Paid	\$ 52.89	Additional
"Base Wage"	\$ 45.84	\$ 3.36
GROUP # 2		
Total Wage Paid	\$ 51.43	Additional
"Base Wage"	\$ 44.48	\$ 3.30
GROUP # 3		
Total Wage Paid	\$ 47.40	Additional
"Base Wage"	\$ 40.35	\$ 3.14

NOTE: "Base Wage" for Premium/Overtime calculation Only. \$7.05 is difference between "Base" and "Total"

SUPPLEMENTAL BENEFITS

Per Hour:

ALL GROUPS \$ 30.86

After Forty (40)paid hours in a work week

OVERTIME PAY \$ 19.29

OVERTIME PAY

OVERTIME PAY

See (B, E2, F) on OVERTIME PAGE

NOTES: Premium/Overtime Pay to be calculated on "Base Wage" ONLY

Example Group# 3: \$40.35 X Time and One Half = \$60.52 + \$7.05 = \$67.57

Premium Pay of 30% of base wage for all Straight time hours on all New York State, D.O.T. and other Government Mandated Off-Shift Work.

Hazardous Material Work add an Additional 10% of base wage

HOLIDAY

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (1) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour(s) Terms at the following Percentage of the "Base Wage" except

4th Term calculate at Total Wage Paid.

1st 0-1000/Hrs.	60%
2nd 1001-2000/Hrs.	70%
3rd 2001-3000/Hrs.	80%
4th 3001-4000/Hrs.	90%

Supplemental Benefits per hour:

All APPRENTICES	\$ 30.86
After Forty(40) paid hours in a work Week	\$ 19.29

4-1298

Mason

10/01/2019

JOB DESCRIPTION Mason

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019 07/01/2020

Brick/Blocklayer \$ 61.82 Additional \$ 1.36

SUPPLEMENTAL BENEFITS

Per Hour:

Brick/Block Layer \$ 27.80

OVERTIME PAY

See (A, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(800 hour) Terms at the following Percentage of Journeyworkers Wage:

1st	2nd	3rd	4th	5th
50%	60%	70%	80%	90%

Supplemental Benefits per hour:

All Apprentices \$ 18.95

4-1Brk

Mason - Building

10/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Nassau, Rockland, Suffolk, Westchester

WAGES

Per hour:	07/01/2019	12/02/2019	06/01/2020
		Additional	Additional
Tile Setters	\$ 58.95	\$0.88	\$0.88

SUPPLEMENTAL BENEFITS

Per Hour: \$ 24.56*+ \$9.34

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

* This portion of benefits subject to same premium rate as shown for overtime wages.
Work beyond 10 hours on Saturday shall be paid at double the hourly wage rate.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

Tile Setters:

(750 hour) term at the following wage rate:

Term:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1-	751-	1501-	2251-	3001-	3751-	4501-	5251-	6001-	6501-
750	1500	2250	3000	3750	4500	5250	6000	6750	7000
\$19.73	\$24.39	\$31.20	\$35.85	\$39.19	\$42.34	\$45.70	\$50.35	\$53.02	\$56.68

Supplemental Benefits per hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 13.20	\$ 13.25	\$ 15.85	\$ 15.90	\$ 17.27	\$ 18.82	\$ 20.17	\$ 20.22	\$22.26	\$28.01

9-7/52A

Mason - Building

10/01/20

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Building:

	07/01/2019	01/01/2020 Additional \$0.95	06/01/2020 Additional \$0.95
Wages per hour:			
Mosaic & Terrazzo Mechanic	\$56.41		
Mosaic & Terrazzo Finisher	\$54.81		

SUPPLEMENTAL BENEFITS

Per hour:

Mosaic & Terrazzo Mechanic	\$ 25.11* plus \$11.13
Mosaic & Terrazzo Finisher	\$ 25.11* plus \$11.11

OVERTIME PAY

See (A, E, Q) on OVERTIME PAGE

Deduct \$6.50 from hourly wages before calculating overtime.

*This portion of benefits subject to same premium rate as shown for overtime wages.

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

Easter Sunday is an observed holiday. Holidays falling on a Saturday will be observed on that Saturday. Holidays falling on a Sunday will be celebrated on the Monday.

REGISTERED APPRENTICES

Wages per hour:

(750 Hour) terms at the following wage rate.

	1st	2nd	3rd	4th	5th	6th	7th	8th
07/01/2019	\$ 24.95	\$ 27.43	\$ 29.94	\$ 32.42	\$ 34.94	\$ 37.41	\$ 42.40	\$ 47.40
Supplemental benefits per hour:								
07/01/2019	\$ 12.56* +\$8.82	\$ 13.82* +\$9.71	\$ 15.07* +\$10.58	\$ 16.33* +\$11.47	\$ 17.58* +\$12.34	\$ 18.84* +\$13.24	\$ 21.35* +\$15.02	\$ 23.86* +\$16.67

Apprentices hired after 07/01/2017:

Wages Per hour:

	1st 0- 1500	2nd 1501- 3000	3rd 3001- 3750	4th 3751- 4500	5th 4501- 5250	6th 5251- 6000
07/01/2019	\$19.73	\$25.37	\$33.84	\$39.49	\$45.13	\$50.71

Supplemental Benefits per hour:

	1st	2nd	3rd	4th	5th	6th
07/01/2019	\$8.79* +\$3.91	\$11.30* +\$5.02	\$15.07* +\$6.68	\$17.58* +\$7.79	\$20.09* +\$8.90	\$22.60* +\$10.02

9-7/3

Mason - Building

10/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour:

07/01/2019

01/01/2020

07/01/2020

Building-Marble Restoration:

Additional
\$1.10

Additional
\$1.10

Marble, Stone &
Terrazzo Polisher, etc

\$ 42.81

SUPPLEMENTAL BENEFITS

Per Hour:
Journeyworker:

Building-Marble Restoration:
Marble, Stone &
Polisher \$ 28.06

OVERTIME PAY

See (B, *E, Q, V) on OVERTIME PAGE

*ON SATURDAYS, 8TH HOUR AND SUCCESSIVE HOURS PAID AT DOUBLE HOURLY RATE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

1ST TERM APPRENTICE GETS PAID FOR ALL OBSERVED HOLIDAYS.

REGISTERED APPRENTICES

WAGES per hour:

900 hour term at the following wage:

07/01/2019	1st 1- 900	2nd 901- 1800	3rd 1801- 2700	4th 2701
	\$29.91	\$34.21	\$38.51	\$42.81

Supplemental Benefits Per Hour:

\$ 25.52	\$ 26.37	\$ 27.21	\$ 28.06
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9-7/24-MP

Mason - Building

10/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Wages:	07/01/2019	12/30/2019	06/29/2020
		Additional	Additional
Marble Cutters & Setters	\$ 59.44	\$0.47	\$0.95

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker \$ 36.73

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage Per Hour:

7500 hour terms at the following wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1- 750	751- 1500	1501- 2250	2251- 3000	3001- 3750	3751- 4500	4501- 5250	5251- 6000	6001- 6751	6751- 7500
07/01/2019									
\$23.72	\$26.69	\$29.66	\$32.65	\$36.21	\$38.59	\$41.56	\$44.55	\$50.50	\$56.47

Supplemental Benefits per hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$21.14	\$22.44	\$23.76	\$25.04	\$26.35	\$27.65	\$28.95	\$30.24	\$32.84	\$35.43

9-7/4

Mason - Building

10/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Nassau, Rockland, Suffolk, Westchester

WAGES

Per hour:	07/01/2019	12/02/2019 Additional	06/01/2020 Additional
Tile Finisher	\$ 45.54	\$0.73	\$0.72

SUPPLEMENTAL BENEFITS

Per Hour: \$ 21.26* + \$9.17

OVERTIME PAY

See (B, E, Q, *V) on OVERTIME PAGE

*This portion of benefits subject to same premium rate as shown for overtime wages

Work beyond 10 hours on a Saturday shall be paid at double the hourly wage rate.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

9-7/88A-tf

Mason - Building

10/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour:	07/01/2019	01/01/2020 Additional	07/01/2020 Additional
Marble, Stone, etc. Maintenance Finishers:	\$ 24.31	\$0.68	\$0.67

Note 1: An additional \$2.00 per hour
for time spent grinding floor using
"60 grit" and below.

Note 2: Flaming equipment operator
shall be paid an additional \$25.00 per day.

SUPPLEMENTAL BENEFITS

Per Hour:

Marble, Stone, etc
Maintenance Finishers: \$ 13.72

OVERTIME PAY

See (B, *E, Q, V) on OVERTIME PAGE

*Double hourly rate after 8 hours on Saturday

HOLIDAY

Paid: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

1st term apprentice gets paid for all observed holidays.

REGISTERED APPRENTICES

WAGES per hour:
07/01/2019

0-750	\$16.97
751-1500	\$17.95
1501-2250	\$18.93
2251-3000	\$19.90
3001-3750	\$21.38
3751-4500	\$23.33
4501+	\$24.31

Supplemental Benefits:
Per hour:

0-750	\$ 13.65
751-1500	\$ 13.66
1501-2250	\$ 13.67
2251-3000	\$ 13.68
3001-3750	\$ 13.69
3751-4500	\$ 13.71
4501+	\$ 13.72

9-7/24M-MF

Mason - Building / Heavy&Highway

10/01/2019

JOB DESCRIPTION Mason - Building / Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2019 12/30/2019 06/29/2020

Marble-Finisher	\$ 47.41	Additional \$0.41	Additional \$0.60
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SUPPLEMENTAL BENEFITS

Journeyworker:
per hour

Marble- Finisher \$ 34.49

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

HOLIDAY

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

* Work beyond 8 hours on a Saturday shall be paid at double the rate.

** When an observed holiday falls on a Sunday, it will be observed the next day.

9-7/20-MF

Mason - Building / Heavy&Highway

10/01/2019

JOB DESCRIPTION Mason - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour:	07/01/2019
Cement Mason	\$ 51.97

SUPPLEMENTAL BENEFITS

Per Hour:

Cement Mason	\$ 33.71
Overtime Rate*	\$ 54.42

OVERTIME PAY

See (*B1, Q, V) on OVERTIME PAGE

* Applies to 9th and 10th hours and up to the 10th hour on Saturday

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following Percentage of Journeyworkers Wage.

1st Term	50%
2nd Term	60%
3rd Term	70%

Supplement Benefits per hour paid:

1st Term \$ 16.86 OT Rate \$ 27.22
2nd Term \$ 20.23 OT Rate \$ 32.66
3rd Term \$ 23.60 OT Rate \$ 38.10

4-780

Mason - Building / Heavy&Highway

10/01/2019

JOB DESCRIPTION Mason - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

NOTE: Shall include but not limited to Precast concrete slabs (London Walks) Marble and Granite pavers 2'x 2' or larger.

Per Hour:

07/01/2019

Stone Setter \$ 64.42

Stone Tender \$ 44.89

SUPPLEMENTAL BENEFITS

Per Hour:

Stone Setter \$ 33.30

Stone Tender \$ 19.40

OVERTIME PAY

See (*C, **E, Q) on OVERTIME PAGE

* On weekdays the eighth (8th) and ninth (9th) hours are time and one-half all work thereafter is paid at double the hourly rate.

** The first nine (9) hours on Saturday is paid at time and one-half all work thereafter is paid at double the hourly rate.

HOLIDAY

1st day: See (*18) on HOLIDAY PAGE
2nd day: See (5, 6, 10) on HOLIDAY PAGE

Paid: *Must work first 1/2.

REGISTERED APPRENTICES

Per Hour:

Stone Setter(800 hour) terms at the following Percentage of Stone Setters wage rate per hour:

1st	2nd	3rd	4th	5th	6th
50%	60%	70%	80%	90%	100%

Supplemental Benefits:

All Apprentices \$ 20.44

4-1Stn

Mason - Heavy&Highway

10/01/2019

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019

Pointer, Caulkers & Cleaners \$ 53.67

SUPPLEMENTAL BENEFITS

Per Hour:

Pointer, Cleaners & Caulkers \$ 27.14

OVERTIME PAY

See (B, E2, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms at the following wage rates.

1st	2nd	3rd	4th
\$ 26.36	\$ 29.42	\$ 34.80	\$ 41.93

Apprentices Supplemental Benefits:
(per hour paid)

\$ 14.30	\$ 18.24	\$ 20.99	\$ 21.99
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4-1PCC

Operating Engineer - Building

10/01/2019

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

BUILDING CATEGORIES:

CLASS "AA "CRANES:

ABI Machine (150,000lbs and over or 149,999lbs and under when driving steel sheet piles), Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane & Pile Driver, Vertical Drill Rig (115,000lbs and over and 114,999lbs and under).

CLASS "A":

ABI Machine (149,999 and under used for augering and drilling), Asphalt Spreader, Backhoe Crawler(360 swing), Barrier Machine, CAP (ice machine), Cherrypicker CAP (over 70 tons), CMI or Maxim Spreader, Concrete Pump, Directional Boring, GradAll, Grader, Hydraulic Cherrypicker/Crane (2seats), Hoist (3drum or multi platform), Laser Screed, Loading Machine (Bucket/CAP 10yds or more), Milling Machine (Large), Pipeline Welder, Plant Engineer, Power Winch (stone setting/structural steel), Powerhouse, Scoop Carry-All Scraper (in tandem), Sideboom Tractor (includes tank work), Track Alignment Machine, Stone Spreader (self propelled), Striping Machine (long line/truck mounted), Tree Grapple, Zamboni.

CLASS "B":

Backhoe (other than 360), Belt Screte, Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker(under 70 Tons), Conveyor-Multi, Curb Machine (asphalt or concrete), Dinky Locomotive, Drill Rig (dowels)Fork Lift, Hoist (2 Drum), Loading Machine & Front End Loader, Mechanical Compactors (machine drawn), Mulch Machine(Machine Fed), Post Hole/Auger, Power Wincher (Not Included in Class "A"), Asphalt Roller, Hydraulic Pump with Boring Machine, Scoop, Carryall/Scaper, Skid Loader/Skid Steer/Bobcat, Trenching Machine, Vermeer Cutter, Work Boat, Inspection/Safety Boat.

CLASS "C":

Concrete Finish/Saw/Spreader, Dirt Roller, Hoist (1 drum), Interior Hoist, Milling Machine (small), Oiler Truck Crane (pile work), Power Broom, Vactor Truck, VacAll.

CLASS "D":

Boiler (thermoplastic), Concrete Breaker, Conveyer, Curing Machine, Fork Lift or Walk Behind (power operated), Generator, Hydra Hammer, Compactors (mechanical or hand operated), Maintenance Engineer (small equipment/well point/welding & burning), Mechanic (field man), Micro-Trap with Compressor, Oiler (Truck Crane Boom 100ft or more) Power Winch Truck Mounted (Stone Setter/Struct.Steel), Pin Puller, Portable Heaters, Power Buggies, Pump (double action diaphragm), Pump (4 inch or over), Pump (hydraulic/submersible) Jet Pump, Pulvi-Mixer, Ridge Cutter, Shot Blaster.

CLASS "E":

Batching Plant, Compressor (structural steel/2 or more battery), Generator (small), Grinder, Ground Heater, Power Grinder, Mixer with Skip, Mulching Machine (hand fed), Oiler, Pipeline Welder Helper, Power Washer, Pumps (up to 3 inch/single action 1 to 3 inches), Pump (gypsum), Root Cutter, Stump Chipper, Track Tamper, Tractor (caterpillar or wheel), Trenching Machine (hand), Welding Machine (pile work/structural steel), Deckhand on Work/Inspection/Safety Boat.

07/01/2019

6/01/2020

Additional

Class "AA" \$ 75.40

\$ 3.50

Cranes: Boom length over 100 feet add \$ 1.00

" " " 150 " " \$ 1.50 " "

" " " 250 " " \$ 2.00 " "

" " " 350 " " \$ 3.00 " "

Class "A"	62.53	3.10
Add \$3.50 for Hazardous Waste Work		
Class "B"	59.27	2.99
Add \$2.50 for Hazardous Waste Work		
Class "C"	57.09	2.93
Add \$1.50 for Hazardous Waste Work		
Class "D"	42.98	2.50
Add \$1.00 for Hazardous Waste Work		
Class "E"	41.03	2.44

SUPPLEMENTAL BENEFITS

Per Hour:

All Classes	\$ 38.10
Overtime Rate	32.60

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

"NOTE" Employee must be Employed day before
and day after Holiday to receive Holiday Pay.

REGISTERED APPRENTICES

One(1) Year Terms at the following Rate:

1st Term	\$ 21.94	\$1.13
2nd Term	22.80	1.15
3rd Term	23.48	1.17

Supplemental Benefits per hour:

All Apprentices	\$ 15.64
Overtime Rate	5.60

4-138

Operating Engineer - Building / Heavy&Highway

10/01/2019

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour:	07/01/2019	08/01/2019	08/01/2020 Additional 3%
Well Driller	\$ 37.33	\$ 38.40	
Well Driller Helper	32.49	33.42	3%
Hazardous Waste Differential Added to Hourly Wage:			
Level A	\$ 3.00	\$3.00	
Level B	2.00	2.00	
Level C	1.00	1.00	

Monitoring Well Work

Add to Hourly Wage:

Level A	\$ 3.00	\$3.00
Level B	2.00	2.00

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2019	08/01/2019
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Well Driller & Helper	10% of straight time rate plus \$ 12.20	10% of straight time rate plus \$ 12.25
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Additional \$ 4.00 for Premium Time Hours Worked

OVERTIME PAY

See (B2, P, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 16, 23) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 23) on HOLIDAY PAGE

REGISTERED APPRENTICES

Apprentices at 12 Month Terms

Wages Per Hour:	07/01/2019	08/01/2019
1st Term	\$ 21.94	\$ 21.94
2nd Term	22.80	22.80
3rd Term	23.48	23.48

SUPPLEMENTAL BENEFITS

Per Hour:

1st Term	10% of Wage + \$ 5.10
2nd Term	10% of Wage + \$ 5.60
3rd Term	10% of Wage + \$ 6.60

BENEFITS AT PREMIUM TIME

Per Hour:

1st Term	10% of Wage + \$ 5.85
2nd Term	10% of Wage + \$ 6.60
3rd Term	10% of Wage + \$ 8.10

4-138v

Operating Engineer - Heavy&Highway

10/01/2019

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

HEAVY and HIGHWAY CATEGORIES:

CLASS "AA" CRANES:

ABI Machine (150,000lbs and over), ABI Machine (149,000lbs and under driving steel sheets), Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane, Pile Driver.

CLASS "A":

ABI Machine (149,000lbs and under for Augering or Drilling), Asphalt Spreader, Backhoe Crawler (360 Swing & over 150,000lbs), Backhoe Crawler (360 Swing & under 149,000lbs), Barrier Machine, Cherrypicker Cap (over 70 tons), CMI or Maxim Spreader, Concrete Pump, Directional Boring, Grader, Gradall, Hoist (3 drum or multi-platform), Hydraulic Cherrypicker/crane (2 seats), Loading Machine (bucket 10 yds. or more), Laser Screed, Milling Machine (Large), Pipeline Welder, Plant Engineer, Power Winch-Stone Setting/Structural Steel or Truck Mounted, Powerhouse, Scoop-Carryall-Scaper in Tandem, Side Boom Tractor, Side Boom Tractor (Tank Work), Stone Spreader(self propelled), Stripping Machine (long line/truck mounted), Tree Grapple, Tank Work, Track Alignment Machine.

CLASS "B":

Backhoe (other than 360), Belt Screte, Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker (under 70 tons), Conveter-Multi, Curb Machine Asphalt/Concrete, Dinky Locomotive, Drill Rig for Dowels, Field Mechanic, Fork Lift, Hoist (2 Drum), Loading Machine, Loading Machine (Front End), Mechanical Compactors (Machine Drawn), Mulching Machine (Machine Fed), Post Hole/Auger, Power Winch (other than structural steel), Pump Hydraulic (with boring machine), Asphalt Roller, Scoop (carry-all, scraper), Skid Loader/Steer, Vermeer Cutter, Work Boat, Inspection & Safety Boat.

CLASS "C":

Concrete Finish/Saw/Spreader Machines, Dirt Roller, Hoist (1 drum), Interior Hoist, Oiler Truck Crane(Pile work), Power Broom, Small Milling Machine, Vactor Truck/VacAll Truck.

CLASS "D":

Boiler (Thermoplastic), Concrete Breaker, Conveyor, Curing Machine, Fireman, Fork lift (walk behind), Generator, Hydra Hammer, Maintenance Engineer (small equipment/Well Point/Welding & Burning), Compactors (hand operated), Pin Puller, Portable Heaters, Power Buggies, Pulvi Mixer, Pumps (double action/4 inch and over/Hydraulic/Submersible & Jet), Ridge Cutter, Robotic Unit Operator(Trenchless Rehab-Cleaning & Television of Sewers/CCTV Inspection), Shotblaster.

CLASS "E":

Batching Plant (On Job Site), Compressor (structural steel/2 or more in battery), Generator(small), Grinder, Ground Heater(boilers), Power Grinder, Mixer (with skip), Mulching Machine (hand feed), Oiler, Pipeline Welder Helper, Power Washer, Pump(up to 3 inches/Gypsum/Single action 1 to 3 inches), Root Cutter, Stump Grinder, Track Tamper, Tractor (caterpillar or wheel), Trenching Machine (hand), Welding Machine (Pile Work/Structural Steel), Deckhand (on Work/Inspection/Safety Boat).

	07/01/2019	6/01/2020 Additional
Class "AA"	\$ 77.78	\$ 3.48
Cranes: Boom Length over 100 feet add \$ 1.00 per hour		
"" 150 "" \$ 1.50 ""		
"" 250 "" \$ 2.00 ""		
"" 350 "" \$ 3.00 ""		
Class "A"	68.83*	3.22
*Add \$3.50 for Hazardous Waste Work.		
Class "B"	64.30*	3.07
*Add \$2.50 for Hazardous Waste Work.		
Class "C"	62.00*	3.01
*Add \$1.50 for Hazardous Waste Work		
Class "D"	47.08*	2.56
*Add \$1.00 for Hazardous Waste Work		
Class "E"	45.00	2.50

NOTE: ADD 30% to straight time hourly wage for NEW YORK STATE
D.O.T. and other GOVERNMENTAL MANDATED off-shift work.

SUPPLEMENTAL BENEFITS

Per Hour:

ALL CLASSES \$ 38.35

Note: OVERTIME AMOUNT 32.60

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 8, 15, 20, 22, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 8, 15, 20, 22, 25, 26) on HOLIDAY PAGE

"Note" Employee must be employed day before and day after
a holiday to receive holiday pay.

REGISTERED APPRENTICES

Wage per hour:

REGISTERED APPRENTICES

One(1) Year Terms at the following Rate:

		Additional
1st Term	\$ 28.00	\$ 1.31
2nd Term	22.80	1.34
3rd Term	23.48	1.37

SUPPLEMENTAL BENEFITS:

APPRENTICES 15.64

Note: Overtime Amount 5.60

4-138

Operating Engineer - Heavy&Highway

10/01/2019

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Party Chief - One who directs a survey party

Instrument Man - One who runs the instrument and assists Party Chief

Rodman - One who holds the rod and in general, assists the survey party

Categories cover GPS & Under Ground Surveying

Per Hour: 07/01/2019

Heavy Highway/Building

Party Chief \$ 67.76

Instrument Man 51.66

Rodman 44.30

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Highway/Building \$ 34.23

Premium*:

Heavy Highway/Building \$ 43.40

Premium**:

Heavy Highway/Building \$ 52.56

* Applies to instances where 1-1/2 regular rate are paid

**Applies to instances where 2 times the rate are paid.

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE

* Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

4-15D-N/S co.

Operating Engineer - Marine Dredging

10/01/2019

JOB DESCRIPTION Operating Engineer - Marine Dredging

DISTRICT 4

ENTIRE COUNTIES

Albany, Bronx, Cayuga, Chautauqua, Clinton, Columbia, Dutchess, Erie, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Niagara, Orange, Orleans, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

WAGES

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for all equipment and operators are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour: 07/01/2019 10/01/2019

CLASS A1 \$ 39.23 \$ 40.31

Deck Captain, Leverman

Mechanical Dredge Operator

Licensed Tug Operator 1000HP or more.

CLASS A2 34.96 35.92

Crane Operator (360 swing)

CLASS B To conform to Operating Engineer
Dozer, Front Loader Prevailing Wage in locality where work
Operator on Land is being performed including benefits.

CLASS B1 33.93 34.86

Derrick Operator (180 swing)

Spider/Spill Barge Operator

Operator II, Fill Placer,

Engineer, Chief Mate, Electrician,
Chief Welder, Maintenance Engineer
Licensed Boat, Crew Boat Operator

CLASS B2 Certified Welder	31.94	32.82
CLASS C1 Drag Barge Operator, Steward, Mate, Assistant Fill Placer	31.07	31.92
CLASS C2 Boat Operator	30.06	30.89
CLASS D Shoreman, Deckhand, Oiler, Rodman, Scowman, Cook, Messman, Porter/Janitor	24.97	25.66

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B	07/01/2019 \$11.23 plus 7.5% of straight time wage, Overtime hours add \$ 0.63	10/01/2019 \$11.88 plus 7.5% of straight time wage, Overtime hours add \$ 0.63
All Class C	\$10.93 plus 7.5% of straight time wage, Overtime hours add \$ 0.48	11.58 plus 7.5% of straight time wage, Overtime hours add \$ 0.48
All Class D	\$10.63 plus 7.5% of straight time wage, Overtime hours add \$ 0.33	11.28 plus 7.5% of straight time wage, Overtime hours add \$ 0.33

OVERTIME PAY

See (B2, F, R) on OVERTIME PAGE

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

Operating Engineer - Survey Crew - Consulting Engineer

10/01/2019

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Dutchess: That part in Dutchess County lying South of the North City line of Poughkeepsie.

WAGES

Feasibility and preliminary design surveying, any line and grade surveying for inspection or supervision of construction.

Per hour: 07/01/2019

Survey Classifications

Party Chief	\$ 43.71
Instrument Man	36.43
Rodman	31.84

SUPPLEMENTAL BENEFITS

Per Hour:

All Crew Members: \$ 19.50

OVERTIME PAY

OVERTIME:..... See (B, E*, Q, V) ON OVERTIME PAGE.

*Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE
Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

9-15dconsult

Operating Engineer - Trenchless Pipe Rehab

10/01/2019

JOB DESCRIPTION Operating Engineer - Trenchless Pipe Rehab

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

IMPORTANT NOTE: This Category & Classifications are now located in
Operating Engineers/Heavy Highway & Laborers/ Heavy Highway.

Per Hour:

07/01/2019
(SEE)

Robotic Unit Operator

Operator(class D)

Technician/Boiler, Generator

Operator(classes C&D)

AM Liner/Hydra Seal

Laborer(Grp#3)

Hobas Pipe, Polyethylene Pipe or
Pull and Inflate Liner

Laborer(Grp#3)

OVERTIME PAY

HOLIDAY

4-138TrchPReh

Painter

10/01/2019

JOB DESCRIPTION Painter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2019

Brush \$ 48.20*

Abatement/Removal of lead based
or lead containing paint on
materials to be repainted. 48.20*

Spray & Scaffold \$ 51.20*

Fire Escape 51.20*

Decorator 51.20*

Paperhanger/Wall Coverer 50.97*

*Subtract \$ 0.10 to calculate premium rate.

SUPPLEMENTAL BENEFITS

Per hour: 07/01/2019

Paperhanger \$ 29.47

All others 27.59

Premium 30.35**

**Applies only to "All others" category, not paperhanger journeyworker.

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One (1) year terms at the following wage rate.

Per hour:	07/01/2019
Appr 1st term...	\$ 18.39*
Appr 2nd term...	24.02*
Appr 3rd term...	29.12*
Appr 4th term...	38.95*

*Subtract \$ 0.10 to calculate premium rate.

Supplemental benefits:

Per Hour:	07/01/2019
Appr 1st term...	\$ 14.16
Appr 2nd term...	17.17
Appr 3rd term...	19.77
Appr 4th term...	24.91

8-NYDC9-B/S

Painter

10/01/2019

JOB DESCRIPTION Painter

DISTRICT 8

ENTIRE COUNTIES

Putnam, Suffolk, Westchester

PARTIAL COUNTIES

Nassau: All of Nassau except the areas described below: Atlantic Beach, Ceaderhurst, East Rockaway, Gibson, Hewlett, Hewlett Bay, Hewlett Neck, Hewlett Park, Inwood, Lawrence, Lido Beach, Long Beach, parts of Lynbrook, parts of Oceanside, parts of Valley Stream, and Woodmere. Starting on the South side of Sunrise Hwy in Valley Stream running east to Windsor and Rockaway Ave., Rockville Centre is the boundary line up to Lawson Blvd. turn right going west all the above territory. Starting at Union Turnpike and Lakeville Rd. going north to Northern Blvd. the west side of Lakeville road to Northern blvd. At Northern blvd. going east the district north of Northern blvd. to Port Washington Blvd. West of Port Washington blvd. to St. Francis Hospital then north of first traffic light to Port Washington and Sands Point, Manor HAven, Harbour Acres.

WAGES

Per hour:	07/01/2019
Drywall Taper	\$ 48.20*

*Subtract \$ 0.10 to calculate premium rate.

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2019
Journeyman	\$ 27.59

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages - Per Hour: 07/01/2019

1500 hour terms at the following wage rate:

1st term	\$ 18.39*
2nd term	\$ 24.02*
3rd term	\$ 29.12*
4th term	\$ 38.95*

Subtract \$ 0.10 to calculate premium rate.

Supplemental Benefits - Per hour:

One year term (1500 hours) at the following dollar amount.

1st year	\$ 14.16
2nd year	\$ 17.17
3rd year	\$ 19.77
4th year	\$ 24.91

8-NYDCT9-DV

Painter

10/01/2019

JOB DESCRIPTION Painter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

PARTIAL COUNTIES

Nassau: Atlantic Beach, Ceaderhurst, East Rockaway, Hewlett, Hewlett Bay, Hewlett Neck, Hewlett Park, Inwood, Lawrence, Lido Beach, Long Beach, parts of Lynbrook, parts of Oceanside, parts of Valley Stream, and Woodmere. Starting on South side of Sunrise Hwy in Valley Stream running east to Windsor and Rockaway Ave, Rockville is the boundary line up to Lawson Blvd, turning right going west all the above territory. Starting at Union Turnpike & Lakeville Rd going north to northern Blvd. the west side of Lakeville Rd to Northern Blvd. At Northern Blvd doing east the district north of Northern Blvd to Port Washington Blvd. West of Port Washington Blvd to St. Francis Hospital then north of first traffic light to Port Washington & Sands Point, Manor Haven, & Harbour Acres.

WAGES

Per hour: 07/01/2019
Drywall Taper \$ 53.98

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019
Journeyworker: \$ 20.95

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (4, 6, 8, 11, 18, 19, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

12 month terms (year consists of 1500 hours).

	07/01/2019
1st year	\$ 20.63
2nd year	\$ 32.43
3rd year	\$ 43.21

Supplemental Benefits per hour:

One (1) year term at the following dollar amount:

1st term	\$ 11.95
2nd term	\$ 16.55
3rd term	\$ 18.75

8-NYC9-1974-DWT

Painter - Bridge & Structural Steel

10/01/2019

JOB DESCRIPTION Painter - Bridge & Structural Steel

DISTRICT 8

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per Hour:

STEEL:

Bridge Painting: 07/01/2019
\$ 49.50
+ 6.38*

ADDITIONAL \$6.00 per hour for POWER TOOL/SPRAY, whether straight time or overtime.

NOTE: All premium wages are to be calculated on base rate per hour only.

* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

NOTE: Generally, for Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker: 07/01/2019
\$ 9.50
+26.05*

* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

OVERTIME PAY

See (A, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (4, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage - Per hour:

Apprentices: (1) year terms

07/01/2019
1st year \$ 23.13
2nd year 34.73
3rd year 46.30

Supplemental Benefits - Per hour:

1st year \$ 13.44
2nd year 20.16
3rd year 26.88

8-DC-9/806/155-BrSS

Painter - Line Striping

10/01/2019

JOB DESCRIPTION Painter - Line Striping

DISTRICT 8

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per hour:

Painter (Striping-Highway): 07/01/2019
Striping-Machine Operator* \$ 29.93
Linerman Thermoplastic \$ 36.06

Note: * Includes but is not limited to: Positioning of cones and directing of traffic using hand held devices. Excludes the Driver/Operator of equipment used in the maintenance and protection of traffic safety.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour paid: 07/01/2019
Journeyworker:

Striping-Machine operator \$ 7.44

Linerman Thermoplastic \$ 7.44

OVERTIME PAY

See (B, B2, E2, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 20) on HOLIDAY PAGE

Overtime: See (5, 20) on HOLIDAY PAGE

REGISTERED APPRENTICES

One (1) year terms at the following wage rates:

07/01/2019

1st term	\$ 11.97
2nd term	17.96
3rd term	23.94

Supplemental Benefits per hour:

1st term	\$ 7.44
2nd term	7.44
3rd term	7.44

8-1456-LS

Painter - Metal Polisher

10/01/2019

JOB DESCRIPTION Painter - Metal Polisher

DISTRICT 8

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

07/01/2019

Metal Polisher	\$ 30.58
Metal Polisher*	31.53
Metal Polisher**	34.08

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019

Journeyworker:

All classification \$ 7.72

OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

07/01/2019

1st year	\$ 15.00
2nd year	15.00
3rd year	15.75

1st year*	\$ 17.39
2nd year*	17.44
3rd year*	18.29

1st year**	\$ 19.50
2nd year**	19.50
3rd year**	20.25

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:
per hour:

1st year	\$ 5.52
2nd year	5.52
3rd year	5.52

8-8A/28A-MP

Plasterer

10/01/2019

JOB DESCRIPTION Plasterer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per hour:

	07/01/2019	08/01/2019
Building:		
Plasterer/Traditional & Spraying Fireproofing	\$ 45.58	\$ 50.73

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 26.27	\$ 22.37
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OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
(per hour)

800 hours term:	07/01/2019	08/01/2019
1st term	\$18.33	\$28.04
2nd term	\$20.62	\$30.59
3rd term	\$25.21	\$35.69
4th term	\$27.50	\$38.23
5th term	\$32.08	
6th term	\$34.37	

Supplemental Benefits:

(per hour):

(800) hours term:

	07/01/2019	08/01/2019
1st term	\$ 13.88	\$ 14.27
2nd term	\$ 14.36	\$ 15.14
3rd term	\$ 16.44	\$ 16.89
4th term	\$ 17.53	\$ 17.76
5th term	\$ 19.72	
6th term	\$ 20.81	

9-262

Plumber

10/01/2019

JOB DESCRIPTION Plumber

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2019	5/01/2020
-----------	------------	-----------

Plumber/ PUMP & TANK	\$ 44.99	\$ 45.49
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SUPPLEMENTAL BENEFITS

Per Hour:

Plumber	\$ 29.14	\$ 30.64
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OVERTIME PAY

See (B, B2, E2, Q, *V) on OVERTIME PAGE

(V) For Sundays & Holidays if Worked Only

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the Following

Percentage of Journeymans wage:

1st Term	30%
2nd Term	40%
3rd Term	50%
4th Term	60%
5th Term	70%

Supplemental Benefits Per Hour:

1st Term	\$17.22	\$18.72
2nd Term	\$17.86	\$19.36
3rd Term	\$18.68	\$20.18
4th Term	\$19.06	\$20.56
5th Term	\$22.29	\$23.79

4-200 Pump & Tank

Plumber

10/01/2019

JOB DESCRIPTION Plumber

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2019	11/01/2019	05/01/2020
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Plumber	\$ 52.48	\$ 52.48	\$ 52.48
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SUPPLEMENTAL BENEFITS

Per Hour:

Plumber	\$ 41.98	\$ 42.98	\$ 43.98
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OVERTIME PAY

See (A, E, Q, *V) on OVERTIME PAGE

CODE "V" is only for SUNDAYS and HOLIDAYS THAT ARE WORKED

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following percentage of Plumbers Rate:

1st Term	2nd Term	3rd Term	4th Term	5th Term
30%	40%	50%	60%	70%

Supplemental Benefits per hour:

	07/01/2019	11/01/2019	05/01/2020
1st Term	\$ 29.46	\$ 30.46	\$ 31.96
2nd Term	31.77	32.77	34.27
3rd Term	33.14	34.14	35.64
4th Term	34.63	35.61	37.13
5th Term	36.21	37.21	38.71

4-200

Plumber

10/01/2019

JOB DESCRIPTION Plumber

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

AGES

Per Hour:

07/01/2019

5/01/2020

Plumber

MAINTENANCE ONLY

\$ 34.24

\$ 34.74

Maintenance: Correction of problem(s) with the existing fixture or group of fixtures, preventive repairs or servicing of said fixtures

SUPPLEMENTAL BENEFITS

SUPPLEMENTAL BENEFITS

Per Hour:

Plumber

Maintenance

\$ 20.86

\$ 22.36

OVERTIME PAY

See (B, B2, J) on OVERTIME PAGE

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 15, 16) on HOLIDAY PAGE

4-200 Maintance

Roofer

10/01/2019

JOB DESCRIPTION Roofer

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour

07/01/2019

05/01/2020

ROOFER/Waterproofer

Additional

Total Wage

\$ 45.00

\$ 1.50

to be Paid

"Base" Wage

41.00**

SUPPLEMENTAL BENEFITS

Per Hour:

ROOFER/Waterproofer

\$ 33.12

OVERTIME PAY

Per Hour:

NEW ROOF SEE (B,E,Q)

RE-ROOF SEE (B,E,E2,Q)

NOTE:** Overtime Pay to be calculated on "BASE" Wage then add \$4.00.

(Example: \$41.00 x time and one half = \$61.50 + \$4.00 = \$65.50)

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 13, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) Year terms at the following Percentage of Roofers/Waterproofers Wage.

1st	2nd	3rd	4th
40%	50%	70%	80%

Supplemental Benefits per hour:

07/01/2018

1st Term

\$ 9.18

2nd Term

11.35

3rd Term

23.39

4th Term

26.65

4-154

Sheetmetal Worker

10/01/2019

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2019

Sign Erector \$ 50.45

NOTE: Structurally Supported Overhead Highway Signs(See STRUCTURAL IRON WORKER CLASS)

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019

Sign Erector \$ 46.66

OVERTIME PAY

See (A, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Per Hour:

6 month Terms at the following percentage of Sign Erectors wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
35%	40%	45%	50%	55%	60%	65%	70%	75%	80%

SUPPLEMENTAL BENEFITS

Per Hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$13.11	\$14.85	\$16.59	\$18.34	\$25.56	\$27.80	\$30.76	\$33.07	\$35.36	\$37.65

4-137-SE

Sheetmetal Worker

10/01/2019

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019 08/01/2019

Sheetmetal Worker
\$ 54.97 \$ 56.61

Temporary Operation or
Maintenance of Fans
44.94 46.49

SUPPLEMENTAL BENEFITS

Per Hour:

Sheetmetal Worker
\$ 47.54 \$ 47.90
Maintenance Worker
47.54 47.90

OVERTIME PAY

See (B, E, E2, Q, V) on OVERTIME PAGE

For Maintenance See Codes B,E, Q & V

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Per Hour:Wages

Six(6) Month Terms As Follows:

1st & 2nd Term	\$ 19.28	\$ 19.85
3rd & 4th Term	24.77	25.51
5th & 6th Term	30.27	31.17
7th & 8th Term	38.51	36.66
9th Term	44.00	45.31

Per Hour: Supplemental Benefits

1st & 2nd Term	\$ 18.05	\$ 17.63
3rd & 4th Term	24.03	24.19
5th & 6th Term	28.30	28.51
7th & 8th Term	34.72	34.97
9th Term	39.01	39.30

4-28

Steamfitter

10/01/2019

JOB DESCRIPTION Steamfitter

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019 01/01/2020
Additional

AC Service/Heat Service \$ 41.75 \$ 1.00

Refrigeration, A/C, Oil Burner and Stoker Service and Repair.

Refrigeration Compressor installation. (Not to exceed 5 Hp.)

Air Condition / Heating Compressor installation up to 15hp (Not to exceed 15 tons on any job).

SUPPLEMENTAL BENEFITS

Per Hour

AC Service/Heat Service \$ 17.06

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 year terms

Wages per hour:

1st Term	\$ 20.22
2nd Term	24.39
3rd Term	28.42
4th Term	34.31

Benefits per hour:

1st Term	\$ 11.61
2nd Term	12.65
3rd Term	13.76
4th Term	15.25

4-638B-StmFtrRef

Steamfitter

10/01/2019

JOB DESCRIPTION Steamfitter

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2019 01/01/2020
Additional

Sprinkler/Steam \$ 64.56 \$ 1.00

Fitter

Temporary \$ 49.08
Heat & AC
Fitter

Note: Add 15% to Hourly Wage for "Contracting Agency" Mandated Off Shift Work.

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019

Sprinkler/Steam \$ 50.43
Fitter

Temporary 41.36
Heat & AC
Fitter

Note: Add 15% to Hourly Benefit for "Contracting Agency" Mandated Off Shift Work.

OVERTIME PAY

See (C, *D, O, **V) on OVERTIME PAGE

(D*) For Temporary Heat & AC Fitter, on Fire Protection/Sprinkler contracts under \$3,000,000.00 and HVAC/Mechanical contracts under \$30,000,000.00.

(V**) Benefit Amount to be paid:

Sprinkler/Steam \$ 76.30
Temp Heat/AC 58.36

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 year Terms at the Following:

WAGES per hour:
07/01/2019

1st Term	2nd Term	3rd Term	4th Term	5th Term
\$ 25.86	\$ 32.31	\$ 41.99	\$ 51.66	\$ 54.89

SUPPLEMENTAL BENEFIT per hour:
07/01/2019

1st Term	2nd Term	3rd Term	4th Term	5th Term
\$ 20.70	\$ 25.67	\$ 33.09	\$ 40.52	\$ 43.00

Premium Time Amounts:

\$ 30.52	\$ 38.16	\$ 49.60	\$ 61.04	\$ 64.86
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4-638A-StmSpFtr

Teamster - Asphalt Delivery

10/01/2019

JOB DESCRIPTION Teamster - Asphalt Delivery

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall include the supply of Asphalt for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

07/01/2019
\$ 37.545

Asphalt Delivery

Light Construction Work:

Shall include the supply of Asphalt for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots, Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

07/01/2019

Asphalt Delivery \$ 32.16

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Construction Work

TRUCK DRIVER

07/01/2019

Asphalt Delivery \$ 46.6825

Light Construction Work

TRUCK DRIVER

07/01/2019

Asphalt Delivery \$ 13.05

OVERTIME PAY

See (B, *B2, E, **I, P, ***R, ****U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for New York State D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T&*U) Apply to Heavy Construction.

Note: (B2,I,T&*U) Apply to Light Construction.

Note: (*U) Only applies after 8 hours worked on holiday.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE

NOTE: (*16) Paid at Double if Worked; (**25) Paid at Double if Worked.

4-282

Teamster - Building

10/01/2019

JOB DESCRIPTION Teamster - Building

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Truck Driver (Building Demolition & Debris)

07/01/2019

Trailers \$ 34.61

Straight Jobs \$ 34.31

SUPPLEMENTAL BENEFITS

Per Hour:

All Classifications

07/01/2019

\$ 34.34

OVERTIME PAY

See (B, E, S1) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 12, 15, 25, 26) on HOLIDAY PAGE

4-282

Teamster - Delivery of Concrete

10/01/2019

JOB DESCRIPTION Teamster - Delivery of Concrete

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall include the supply of Ready-Mix Concrete for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools & Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

07/01/2019
\$ 40.005

Concrete Delivery

Light Construction Work:

Shall include the supply of Ready-Mix Concrete for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

07/01/2019
\$ 36.005

Concrete Delivery

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Construction Work 07/01/2019
Concrete Delivery \$ 43.955

Light Construction Work 07/01/2019
Concrete Delivery \$ 15.235

OVERTIME PAY

NOTE: Heavy Construction:B2,I
Light Construction:B,E,P

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE

NOTE: (*16) Paid at Double if Worked. (**25) Paid at Double if Worked.

4-282m

Teamster - Heavy&Highway

10/01/2019

JOB DESCRIPTION Teamster - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall include the construction, improvement or modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants.

07/01/2019

Site Excavating
(Chauffeurs)

\$ 37.545

Light Construction Work:

Shall include the construction, improvement and modification of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings.

Site Excavating 32.16
(Chauffeurs)

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2019

Heavy Construction Work
Chauffeurs \$ 46.6825

Light Construction Work
Chauffeurs 13.05

OVERTIME PAY

See (B, *B2, E, **I, P, ***R, ****U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for NEW YORK STATE D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T & *U) Apply to Heavy Construction.

Note: (B2,I,T & *U) Apply to Light Construction.

Note: (*U) Only applies after 8 hours work on holiday

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE

NOTE: (*16) Paid at Double if Worked. (**25) Paid at Double if Worked.

4-282

Welder

10/01/2019

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greenè, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schüyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour 07/01/2019

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

- (AA) Time and one half of the hourly rate after 7 and one half hours per day
- (A) Time and one half of the hourly rate after 7 hours per day
- (B) Time and one half of the hourly rate after 8 hours per day
- (B1) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday.
Double the hourly rate for all additional hours
- (B2) Time and one half of the hourly rate after 40 hours per week
- (C) Double the hourly rate after 7 hours per day
- (C1) Double the hourly rate after 7 and one half hours per day
- (D) Double the hourly rate after 8 hours per day
- (D1) Double the hourly rate after 9 hours per day
- (E) Time and one half of the hourly rate on Saturday
- (E1) Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
- (E2) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E3) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- (E4) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E5) Double time after 8 hours on Saturdays
- (F) Time and one half of the hourly rate on Saturday and Sunday
- (G) Time and one half of the hourly rate on Saturday and Holidays
- (H) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- (I) Time and one half of the hourly rate on Sunday
- (J) Time and one half of the hourly rate on Sunday and Holidays
- (K) Time and one half of the hourly rate on Holidays
- (L) Double the hourly rate on Saturday
- (M) Double the hourly rate on Saturday and Sunday
- (N) Double the hourly rate on Saturday and Holidays
- (O) Double the hourly rate on Saturday, Sunday, and Holidays
- (P) Double the hourly rate on Sunday
- (Q) Double the hourly rate on Sunday and Holidays
- (R) Double the hourly rate on Holidays
- (S) Two and one half times the hourly rate for Holidays

- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- (U) Four times the hourly rate for Holidays
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.
- (X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- (1) None
- (2) Labor Day
- (3) Memorial Day and Labor Day
- (4) Memorial Day and July 4th
- (5) Memorial Day, July 4th, and Labor Day
- (6) New Year's, Thanksgiving, and Christmas
- (7) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- (8) Good Friday
- (9) Lincoln's Birthday
- (10) Washington's Birthday
- (11) Columbus Day
- (12) Election Day
- (13) Presidential Election Day
- (14) 1/2 Day on Presidential Election Day
- (15) Veterans Day
- (16) Day after Thanksgiving
- (17) July 4th
- (18) 1/2 Day before Christmas
- (19) 1/2 Day before New Years
- (20) Thanksgiving
- (21) New Year's Day
- (22) Christmas
- (23) Day before Christmas
- (24) Day before New Year's
- (25) Presidents' Day
- (26) Martin Luther King, Jr. Day
- (27) Memorial Day
- (28) Easter Sunday



New York State Department of Labor - Bureau of Public Work
State Office Building Campus
Building 12 - Room 130
Albany, New York 12240

REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

This Form Must Be Typed

Submitted By:

(Check Only One)

☐

Contracting Agency

☐

Architect or Engineering Firm

☐

Public Work District Office

Date:

A. Public Work Contract to be let by: (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address ☐ (Check if new or change)

Telephone: ()

Fax: ()

E-Mail:

2. NY State Units (see Item 5)

☐ 01 DOT

☐ 02 OGS

☐ 03 Dormitory Authority

☐ 04 State University
Construction Fund

☐ 05 Mental Hygiene
Facilities Corp.

☐ 06 OTHER N.Y. STATE UNIT

☐ 07 City

☐ 08 Local School District

☐ 09 Special Local District, i.e.,
Fire, Sewer, Water District

☐ 10 Village

☐ 11 Town

☐ 12 County

☐ 13 Other Non-N.Y. State
(Describe)

3. SEND REPLY TO ☐ check if new or change
Name and complete address:

Telephone: ()

Fax: ()

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

☐ New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

☐ Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR
THIS PROJECT :

OFFICE USE ONLY

B. PROJECT PARTICULARS

5. Project Title

Description of Work

Contract Identification Number

Note: For NYS units, the OSC Contract No.

6. Location of Project:

Location on Site

Route No/Street Address

Village or City

Town

County

7. Nature of Project - Check One:

☐ 1. New Building

☐ 2. Addition to Existing Structure

☐ 3. Heavy and Highway Construction (New and Repair)

☐ 4. New Sewer or Waterline

☐ 5. Other New Construction (Explain)

☐ 6. Other Reconstruction, Maintenance, Repair or Alteration

☐ 7. Demolition

☐ 8. Building Service Contract

8. OCCUPATION FOR PROJECT :

☐ Construction (Building, Heavy
Highway/Sewer/Water)

☐ Tunnel

☐ Residential

☐ Landscape Maintenance

☐ Elevator maintenance

☐ Exterminators, Fumigators

☐ Fire Safety Director, NYC Only

☐ Guards, Watchmen

☐ Janitors, Porters, Cleaners,
Elevator Operators

☐ Moving furniture and
equipment

☐ Trash and refuse removal

☐ Window cleaners

☐ Other (Describe)

Has this project been reviewed for compliance with the Wicks Law involving separate bidding?

YES ☐

NO ☐

10. Name and Title of Requester

Signature



NEW YORK STATE DEPARTMENT OF LABOR
Bureau of Public Work - Debarment List

**LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE
AWARDED ANY PUBLIC WORK CONTRACT**

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

Debarment Database: To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, or under NYS Workers' Compensation Law Section 141-b, access the database at this link: <https://applications.labor.ny.gov/EDList/searchPage.do>

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

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AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****0996	A-1 CONSTRUCTION & RENOVATION INC		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		ABDUL KARIM		C/O NORTH AMERICAN IRON W 1560 DECATUR STREET RIDGEWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	*****4539	ACCOMPLISHED WALL SYSTEMS INC		112 OSCAWANNA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/12/2020
DOL	DOL	*****3344	ACT INC		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296 EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296 EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC	*****6775	ADVENTURE MASONRY CORP.		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		AJ TORCHIA		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****3344	ALL CATASTROPHE CONSTRUCTION TEAM INC	ACT INC	6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****8740	ALLSTATE ENVIRONMENTAL CORP		C/O JOSE MONTAS 27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/2020
DOL	DOL		AMADEO J TORCHIA	TORCHIA'S HOME IMPROVEMENT	10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL		ANGELO F COKER			12/04/2018	12/04/2023
DOL	NYC		ANISUL ISLAM		C/O RELIANCE GENERAL CONS 644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DA		ANTHONY CARDINALE		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	DOL		ANTHONY J MINGARELLI JR		C/O T & T CONCRETE INC 2560 HAMBURG TURNPIKE LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL		ANTHONY PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10323	01/23/2017	01/23/2022
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3020	APCO CONTRACTING CORP		24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	*****9232	ARKAY CONSTRUCTION INC		102-104 GREYLOCK AVENUE BELLEVILLE NJ 07109	07/15/2015	07/15/2020
DOL	NYC	*****4779	ASTORIA GENERAL CONTRACTING CORP		35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC	*****7217	ASTRO COMMUNICATIONS OF NY CORP		79 ALEXANDER AVE. STE 36A BRONX NY 10454	10/30/2015	10/30/2020
DOL	NYC	*****6046	ATLANTIC SUN CONSTRUCTION CORP		58-46 59TH AVENUE MASPETH NY 11378	05/08/2015	05/08/2020
DOL	NYC	*****6683	ATLAS RESTORATION CORP.		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	NYC		AUDLEY O'BRIEN		1273 NORTH AVENUE #1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	NYC	*****2591	AVI 212 INC.		260 CROPSY AVENUE APT 11B BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	DOL		AVIS R HILL		3510 HICKORY WALK LANE ELLENWOOD GA 32094	01/22/2015	01/22/2020
DOL	AG		AVTAR SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	AG		BALDEV SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020

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DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL		BARBARA CASSIDY		7 BLENIS PLACE VALHALLA NY 10595	04/02/2015	04/02/2020
DOL	DOL		BARRY KINNEY		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	NYC	*****3915	BEACON RESTORATION INC		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC	*****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
DOL	DOL	*****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8551	BRANDY'S MASONRY		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	NYC	*****6555	BROOKLYN WELDING CORP		1273 NORTH AVENUE/ #1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	DOL	*****1449	BRRESTORATION NY INC		140 ARCADIA AVENUE OSWEGO NY 13126	09/12/2016	09/12/2021
DOL	DOL		BRUCE MORSEY		C/O KENT HOLLOW SIDING LL 29A BRIDGE STREETNEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****8809	C.B.E. CONTRACTING CORPORATION		310 MCGUINNESS BLVD GREENPOINT NY 11222	03/07/2017	03/07/2022
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		CANTISANI & ASSOCIATES LTD		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC			06/12/2018	06/12/2023
DOL	DOL		CARIBBEAN POOLS		C/O DOUGLAS L. MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****3812	CARMODY "2" INC			06/12/2018	06/12/2023
DOL	DOL	*****1143	CARMODY BUILDING CORP	CARMODY CONTRACTIN G AND CARMODY CONTRACTIN G CORP.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY CONCRETE CORPORATION			06/12/2018	06/12/2023
DOL	DOL		CARMODY ENTERPRISES, LTD.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY INC		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3812	CARMODY INDUSTRIES INC			06/12/2018	06/12/2023
DOL	DOL		CARMODY MAINTENANCE CORPORATION		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY MASONRY CORP		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC	*****9172	CASSIDY EXCAVATING INC		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL	*****8809	CBE CONTRACTING CORP		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****7655	CHAMPION CONSTRUCTION SERVICES CORP		2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC		CHARLES CASSIDY JR		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		CHARLES ZIMMER JR		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		CHRISTINE J HEARNE		C/O CJ-HEARNE CONSTRUCTIO 131 PONCE DE LEON AVE NEATLANTA GA 30308	12/01/2015	12/01/2020

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DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	*****0671	CJ-HEARNE CONSTRUCTION CO		SUITE 204 131 PONCE DE LEON AVENUE ATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL	*****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	NYC	*****2164	CREATIVE TRUCKING INC		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL	*****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	DOL	*****7761	D L MALARKEY CONSTRUCTION		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****7888	D L MALARKEY CONSTRUCTION INC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****5629	DAKA PLUMBING AND HEATING LLC		2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DANICA IVANOSKI		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2C SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		DARYL T RIEKS		C/O RIEKS CONTRACTING LLC 4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	NYC	*****7707	DASSLE CONTRACTING INC		213-37 39TH AVE/SUITE 120 BAYSIDE NY 11360	05/08/2015	05/08/2020
DOL	DOL		DAVID MARTINEZ		C/O EMPIRE TILE INC 6 TREMONT COURTHUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL		DEBBIE STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DEDA GAZIVODAN		C/O DAKA PLUMBING AND H 2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DENNIS SCHWANDTNER		C/O YES SERVICE AND REPAIR 145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		DF CONTRACTORS OF ROCHESTER, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DF CONTRACTORS, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	NYC		DIMITRIOS KOUTSOUKOS		C/O ASTORIA GENERAL CONTR 35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC		DIMITRIOS TSOUHAS		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	DOL	*****3242	DONALD R. FORSAY	DF LAWN SERVICE	1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DONALD R. FORSAY		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DORIS SKODA		C/O APCO CONTRACTING CORP 24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	*****7404	DOSANJH CONSTRUCTION CORP		9439 212TH STREET QUEENS VILLAGE NY 11428	02/25/2016	02/25/2021
DOL	DOL		DOUGLAS L MALARKEY	MALARKEY CONSTRUCTI ON	64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		E C WEBB		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		EARL L WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002

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DOL	DOL	*****3270	EMPIRE TILE INC		6 TREMONT COURT HUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL	*****7403	F & B PAINTING CONTRACTING INC		2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FAY MATTHEW		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FAZIA GINA ALI-MOHAMMED	C/O CHAMPION CONSTRUCTI ON	2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK BENEDETTO		C/O F & B PAINTING CONTRA 2 PARKVIEW AVENUEHARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL	*****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	DOL		GALINDA ROTENBERG		C/O GMDV TRANS INC 67-48 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	DOL		GEOFF CORLETT		415 FLAGGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL	*****5674	GMDV TRANS INC		67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		GREAT ESTATE CONSTRUCTION, INC.		327 STAGG ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	DOL		GREGORY S. OLSON		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	NYC		HARMEL SINGH		15 CLINTON LANE HICKSVILLE NY 11801	02/25/2016	02/25/2021
DOL	NYC		HAROLD KUEMMEL		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL		HENRY VAN DALRYMPLE		2663 LANTERN LANE ATLANTA GA 30349	12/01/2015	12/01/2020
DOL	DOL	*****6370	HILLIANO CONSTRUCTION & ELECTRICAL INC		354 MAGNOLIA STREET ROCHESTER NY 14611	01/22/2015	01/22/2020
DOL	DOL	*****8282	IDEMA DEVELOPMENT INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****8282	IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****7001	INTEGRATED CONSTRUCTION & POWER SYSTEMS INC		SUITE 100 2105 W GENESEE STREETSYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	DOL	*****5131	INTEGRITY MASONRY, INC.	M&R CONCRETE	722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		IRENE KASSELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	AG		J A M CONSTRUCTION CORP		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****4910	J V MAGIC TOUCH CORPORATION		94-25 57TH AVENUE, APT 5G ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES B RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		JAMES E RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	AG		JAMES FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021

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DOL	DOL		JAMES LIACONE		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RACHEL		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RHYNDERS SR		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES SICKAU		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DOL		JASON W MILLIMAN		C/O ROCHESTER ACOUSTICAL P O BOX 799HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL	*****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JEFFREY CASSIDY		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		JESSICA WHITESIDE		C/O BRRESTORATION NY INC 140 ARCADIA AVENUEOSWEGO NY 13126	09/12/2016	09/12/2021
DOL	AG		JOHN ANTHONY MASSINO		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JOHN F. CADWALLADER		200 LATTI BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	*****4612	JOHN F. CADWALLADER, INC.	THE GLASS COMPANY	P.O BOX 100 200 LATTI BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	AG	*****0600	JOHNCO CONTRACTING, INC.		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE VILLALOBOS		94-25 57TH AVENUE - APT 5 ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		JOSE CHUCHUCA		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	DOL		JOSE MONTAS		27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/2020
DOL	AG		JOSEPH FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****9273	JOSEPH M LOVETRO		P O BOX 812 BUFFALO NY 14220	08/09/2016	08/09/2021
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		JOSEPH MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020
DOL	DOL		JUANA MARTINEZ		C/O LEAD CONSTRUCTION 27 BUTLER PLACEYONKERS NY 10710	03/19/2015	03/19/2020
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL	*****5062	K R F SITE DEVELOPMENT INC		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		KENNETH FIORENTINO		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL	*****9732	KENT HOLLOW SIDING LLC		29A BRIDGE STREET NEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		KIM SOROCENSKI		C/O SOLUTION MATTERS INC 198 NORWOOD ROADPORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	DOL	*****3490	L & M CONSTRUCTION/DRYWALL INC.		1079 YONKERS AVE YONKERS NY 10704	08/07/2018	08/07/2023
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL	*****6224	LAKESIDE FIRE SPRINKLERS LLC		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	AG	*****4643	LALO DRYWALL, INC.		221 OLD FORD ROAD NEW PLATZ NY 12561	05/20/2016	05/20/2021

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DOL	DOL	*****4505	LARAPINTA ASSOCIATES INC		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		LAURI MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	*****1364	LEAD CONSTRUCTION SERVICES INC		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/19/2015	03/19/2020
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	08/14/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	08/14/2017	08/14/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL		LINDSEY R CRILL		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DA	*****4460	LONG ISLAND GLASS & STOREFRONTS, LLC		4 MANHASSET TRL RIDGE NY 11961	09/06/2018	09/06/2023
DOL	AG	*****4216	LOTUS-C CORP.		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	AG		LUIS MARTINEZ	LALO DRYWALL	211 MAIN ST. NEW PALTZ NY 12561	05/20/2016	05/20/2021
DOL	DOL		M ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG	*****6957	M B DIN CONSTRUCTION INC		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	NYC	*****6317	M S QUALITY CONSTRUCTION LLC		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	DOL		M. ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	NYC		MACIEJ SONTOWSKI		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	NYC	*****9590	MACK GLASSNAUTH IRON WORKS INC		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL	*****1784	MADISON AVE CONSTRUCTION CORP		39 PENNY STREET WEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		MALARKEY'S BAR & GRILL LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****0705	MALARKEY'S PUB & GRUB LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/1998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/1998
DOL	NYC		MAREK FABIJANOWSKI		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		MARIACHI'S PIZZERIA		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		MARK MIONIS		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020

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DOL	DOL		MARVIN A STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		MASONRY CONSTRUCTION, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3333	MASONRY INDUSTRIES, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		MATTHEW IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL		MAURICE GAWENO		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****6416	MCCALL MASONRY		P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		MCLEAN "MIKKI BEANE"		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN "MIKKI" DRAKE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN M DRAKE-BEANE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	NYC	*****5330	METRO DUCT SYSTEMS INC		1219 ASTORIA BOULEVARD LONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	DOL	*****3368	MICEK CONSTRUCTION CO INC		20 CROSS STREET FALCONER NY 14733	12/02/2014	12/02/2019
DOL	DOL		MICHAEL A PASCARELLA		SUITE 100 2105 WEST GENESEE STREET SYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	NYC		MICHAEL HIRSCH		C/O MZM CORP 163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DOL		MICHAEL LENIHAN		1079 YONKERS AVE UNIT 4 YONKERS NY 10704	08/07/2018	08/07/2023
DOL	AG		MICHAEL RIGLIETTI		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MICHAEL WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	NYC		MILANCE HADZIC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	DOL	*****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29 MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	AG		MOHAMMED N CHATHA		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	DOL	*****2737	MOUNTAIN'S AIR INC		2471 OCEAN AVENUE- STE 7A BROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD PERVAIZ		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC	*****3613	MZM CORP		163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DA	*****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	NYC	*****1284	NEW AMERICAN RESTORATION INC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	DA	*****6988	NEW YORK INSULATION INC		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	NYC	*****4839	NEW YORK RIGGING CORP		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	NYC	*****1968	NORTH AMERICAN IRON WORKS INC		1560 DECATUR STREET RIDGEWOOD NY 11385	05/15/2015	05/15/2020

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DOL	DOL	*****6966	NORTH COUNTRY DRYWALL AND PAINT		23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL	*****0065	NORTHEAST LANDSCAPE AND MASONRY ASSOC		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL	*****1845	OC ERECTERS, LLC A/K/A OC ERECTERS OF NY INC.		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	NYC		ORSON ARROYO		C/O METRO DUCT SYSTEMS 12-19 ASTORIA BOULEVARD/LONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	NYC	*****9422	PELIUM CONSTRUCTION, INC.		22-33 35TH ST. ASTORIA NY 11105	12/30/2016	12/30/2021
DOL	DOL		PETER M PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL		PIERRE LAPORT		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	*****1543	PJ LAPORT FLOORING INC		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	*****6895	PROLINE CONCRETE OF WNY INC		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DA	*****6817	QUADRANT METAL BUILDINGS LLC		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	NYC		RAMESHWAR ASU		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL		RANA A KAHN		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		RANTIK PARIKH		13 LORIANN ROAD WARREN NJ 07059	07/15/2015	07/15/2020
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	AG	*****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	NYC	*****3461	RELiance GENERAL CONSTRUCTION INC		644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DA		RIANN MULLER		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	DOL	*****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MACONE		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL	*****9148	RICHARD TIMIAN	RICH T CONSTRUCTI ON	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL	*****8618	RIEKS CONTRACTING LLC		4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	DOL		ROBBYE BISSEsar		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT A. VALERINO		3841 LANYARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		ROBERT BRUNO		3 GAYLORD ST AUBURN NY 13021	11/15/2016	11/15/2021
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		ROBERT TORDELLA		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	DOL	*****3859	ROCHESTER ACOUSTICAL CORP		P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL		RODERICK PUGH		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL	*****4880	RODERICK PUGH CONSTRUCTION INC.		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	NYC		RODNEY SCOTT		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020

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DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	09/16/2013	09/15/2019
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL		RYAN ALBIE		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****3347	RYAN ALBIE CONTRACTING INC		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	NYC		SABIR MUHAMMED		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	DOL	*****9874	SALFREE ENTERPRISES INC		2821 GARDNER ROAD POMPEY NY 13138	08/26/2016	08/26/2021
DOL	DOL		SALVATORE A FRESINA			08/26/2016	08/26/2021
DOL	DOL		SAM FRESINA			08/26/2016	08/26/2021
DOL	NYC	*****2117	SCOTT ELECTRICAL LLC		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL	*****9751	SCW CONSTRUCTION		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	AG		SERGIO RAYMUNDO		109 DUBOIS RD. NEW PALTZ NY 12561	05/20/2016	05/20/2021
DOL	NYC	*****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL	*****1961	SHANE BURDICK	CENTRAL TRAFFIC CONTROL, LLC.	2238 BAKER ROAD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE NOLAN		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	*****0816	SOLAR ARRAY SOLUTIONS, LLC		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL	*****4025	SOLUTION MATTERS INC		198 NORWOOD ROAD PORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL	*****9751	STEPHEN C WAGAR		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN P SUCATO		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL		STEVEN TESTA		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	NYC	*****9432	SUBLINK LTD		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	*****7441	T & T CONCRETE INC		2560 HAMBURG TURNPIKE P O BOX 367LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL	*****9852	TAP STEEL INC		ROUTE 26 3101 P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****5570	TESTA CORP		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022

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DOL	DOL	*****0887	THE BRINSON PAINTING CORPORATION		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATION	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	*****8174	THE DALRYMPLE CORPORATION		UNIT 278 541 10TH STREET NWLATLANTA GA 30318	12/01/2015	12/01/2020
DOL	DOL	*****8174	THE DALRYMPLE GROUP LLC		289 JONESBORO RD/ STE 216 MCDONOUGH GA 30253	12/01/2015	12/01/2020
DOL	DOL		TIMOTHY A PALUCK		C/O TAP STEEL INC RTE 26 3101/ P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****0600	TOMSON ALLOYS RECYCLING INC		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DOL	*****3453	TORCHIA'S HOME IMPROVEMENT		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****8311	TRIPLE B FABRICATING, INC.		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL	*****9407	TURBO GROUP INC		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL	*****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	NYC		VALERIE VISCONTI		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLSTON NY 11363	01/14/2019	01/14/2024
DOL	DOL		VICTOR ROTENBERG		C/O GMDV TRANS INC 67048 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		VIKTAR PATONICH		2630 CROSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		WAYNE LIVINGSTON JR	NORTH COUNTRY DRYWALL AND PAINT	23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL	*****3296	WESTERN NEW YORK CONTRACTORS, INC.		3841 LAYNARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM C WATKINS		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		WILLIAM DEAK		C/O MADISON AVE CONSTR CO 39 PENNY STREETWEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		WILLIE BRINSON		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****6195	WILSON BROTHER DRYWALL CONTRACTORS		36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL	*****4043	WINDSHIELD INSTALLATION NETWORK, INC.		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	*****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL	*****7345	YES SERVICE AND REPAIRS CORPORATION		145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		YURIY IVANIN		C/O MOUNTAIN'S AIR INC 2471 OCEAN AVENUE-STE 7ABROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	NYC		ZAKIR NASEEM		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	NYC	*****8277	ZHN CONTRACTING CORP		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022

Appendix EE
Equal Employment Opportunities For Minorities and Women

The provisions of this Appendix EE are hereby made a part of the document to which it is attached.

The Contractor shall comply with all federal, State and local statutory and constitutional anti-discrimination provisions. In addition, Local Law No. 14-2002, entitled "Participation by Minority Group Members and Women in Nassau County Contracts," governs all County Contracts as defined by such title and solicitations for bids or proposals for County Contracts. In accordance with Local Law 14-2002:

- (a) The Contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status in recruitment, employment, job assignments, promotions, upgradings, demotions, transfers, layoffs, terminations, and rates of pay or other forms of compensation. The Contractor will undertake or continue existing programs related to recruitment, employment, job assignments, promotions, upgradings, transfers, and rates of pay or other forms of compensation to ensure that minority group members and women are afforded equal employment opportunities without discrimination.
- (b) At the request of the County contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status and that such employment agency, labor union, or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.
- (c) The Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the County Contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.
- (d) The Contractor shall make Best Efforts to solicit active participation by certified minority or women-owned business enterprises ("Certified M/WBEs") as defined in Section 101 of Local Law No. 14-2002, including the granting of Subcontracts.
- (e) The Contractor shall, in its advertisements and solicitations for Subcontractors, indicate its interest in receiving bids from Certified M/WBEs and the requirement that Subcontractors must be equal opportunity employers.
- (f) Contractors must notify and receive approval from the respective Department Head prior to issuing any Subcontracts and, at the time of requesting such authorization, must submit a signed Best Efforts Checklist.
- (g) Contractors for projects under the supervision of the County's Department of Public Works shall also submit a utilization plan listing all proposed Subcontractors so that, to the greatest extent feasible, all Subcontractors will be approved prior to commencement of work. Any additions or changes to the list of subcontractors under

the utilization plan shall be approved by the Commissioner of the Department of Public Works when made. A copy of the utilization plan any additions or changes thereto shall be submitted by the Contractor to the Office of Minority Affairs simultaneously with the submission to the Department of Public Works.

(h) At any time after Subcontractor approval has been requested and prior to being granted, the contracting agency may require the Contractor to submit Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises. In addition, the contracting agency may require the Contractor to submit such documentation at any time after Subcontractor approval when the contracting agency has reasonable cause to believe that the existing Best Efforts Checklist may be inaccurate. Within ten working days (10) of any such request by the contracting agency, the Contractor must submit Documentation.

(i) In the case where a request is made by the contracting agency or a Deputy County Executive acting on behalf of the contracting agency, the Contractor must, within two (2) working days of such request, submit evidence to demonstrate that it employed Best Efforts to obtain Certified M/WBE participation through proper documentation.

(j) Award of a County Contract alone shall not be deemed or interpreted as approval of all Contractor's Subcontracts and Contractor's fulfillment of Best Efforts to obtain participation by Certified M/WBEs.

(k) A Contractor shall maintain Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises for a period of six (6) years. Failure to maintain such records shall be deemed failure to make Best Efforts to comply with this Appendix EE, evidence of false certification as M/WBE compliant or considered breach of the County Contract.

(l) The Contractor shall be bound by the provisions of Section 109 of Local Law No. 14-2002 providing for enforcement of violations as follows:

- a. Upon receipt by the Executive Director of a complaint from a contracting agency that a County Contractor has failed to comply with the provisions of Local Law No. 14-2002, this Appendix EE or any other contractual provisions included in furtherance of Local Law No. 14-2002, the Executive Director will try to resolve the matter.
- b. If efforts to resolve such matter to the satisfaction of all parties are unsuccessful, the Executive Director shall refer the matter, within thirty days (30) of receipt of the complaint, to the American Arbitration Association for proceeding thereon.
- c. Upon conclusion of the arbitration proceedings, the arbitrator shall submit to the Executive Director his recommendations regarding the imposition of sanctions, fines or penalties. The Executive Director shall either (i) adopt the recommendation of the arbitrator (ii) determine that no sanctions, fines or penalties should be imposed or (iii) modify the recommendation of the arbitrator, provided that such modification shall not expand upon any sanction recommended or impose any new sanction, or increase the amount of any

recommended fine or penalty. The Executive Director, within ten days (10) of receipt of the arbitrators award and recommendations, shall file a determination of such matter and shall cause a copy of such determination to be served upon the respondent by personal service or by certified mail return receipt requested. The award of the arbitrator, and the fines and penalties imposed by the Executive Director, shall be final determinations and may only be vacated or modified as provided in the civil practice law and rules ("CPLR").

(m) The contractor shall provide contracting agency with information regarding all subcontracts awarded under any County Contract, including the amount of compensation paid to each Subcontractor and shall complete all forms provided by the Executive Director or the Department Head relating to subcontractor utilization and efforts to obtain M/WBE participation..

Failure to comply with provisions (a) through (m) above, as ultimately determined by the Executive Director, shall be a material breach of the contract constituting grounds for immediate termination. Once a final determination of failure to comply has been reached by the Executive Director, the determination of whether to terminate a contract shall rest with the Deputy County Executive with oversight responsibility for the contracting agency.

As used in this Appendix EE the term "Best Efforts Checklist" shall mean a list signed by the Contractor, listing the procedures it has undertaken to procure Subcontractors in accordance with this Appendix EE.

As used in this Appendix EE the term "County Contract" shall mean (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of twenty-five thousand dollars (\$25,000), whereby a County contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the County; or (ii) a written agreement in excess of one hundred thousand dollars (\$100,000), whereby a County contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon. However, the term "County Contract" does not include agreements or orders for the following services: banking services, insurance policies or contracts, or contracts with a County contracting agency for the sale of bonds, notes or other securities.

As used in this Appendix EE the term "County Contractor" means an individual, business enterprise, including sole proprietorship, partnership, corporation, not-for-profit corporation, or any other person or entity other than the County, whether a contractor, licensor, licensee or any other party, that is (i) a party to a County Contract, (ii) a bidder in connection with the award of a County Contract, or (iii) a proposed party to a County Contract, but shall not include any Subcontractor.

As used in this Appendix EE the term "County Contractor" shall mean a person or firm who will manage and be responsible for an entire contracted project.

As used in this Appendix EE "Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises" shall include, but is not limited to the following:

- a. Proof of having advertised for bids, where appropriate, in minority publications, trade newspapers/notices and magazines, trade and union publications, and publications of general circulation in Nassau County and surrounding areas or having verbally solicited M/WBEs whom the County Contractor reasonably believed might have the qualifications to do the work. A copy of the advertisement, if used, shall be included to demonstrate that it contained language indicating that the County Contractor welcomed bids and quotes from M/WBE Subcontractors. In addition, proof of the date(s) any such advertisements appeared must be included in the Best Effort Documentation. If verbal solicitation is used, a County Contractor's affidavit with a notary's signature and stamp shall be required as part of the documentation.
- b. Proof of having provided reasonable time for M/WBE Subcontractors to respond to bid opportunities according to industry norms and standards. A chart outlining the schedule/time frame used to obtain bids from M/WBEs is suggested to be included with the Best Effort Documentation
- c. Proof or affidavit of follow-up of telephone calls with potential M/WBE subcontractors encouraging their participation. Telephone logs indicating such action can be included with the Best Effort Documentation
- d. Proof or affidavit that M/WBE Subcontractors were allowed to review bid specifications, blue prints and all other bid/RFP related items at no charge to the M/WBEs, other than reasonable documentation costs incurred by the County Contractor that are passed onto the M/WBE.
- e. Proof or affidavit that sufficient time prior to making award was allowed for M/WBEs to participate effectively, to the extent practicable given the timeframe of the County Contract.
- f. Proof or affidavit that negotiations were held in Best Efforts with interested M/WBEs, and that M/WBEs were not rejected as unqualified or unacceptable without sound business reasons based on (1) a thorough investigation of M/WBE qualifications and capabilities reviewed against industry custom and standards and (2) cost of performance. The basis for rejecting any M/WBE deemed unqualified by the County Contractor shall be included in the Best Effort Documentation
- g. If an M/WBE is rejected based on cost, the County Contractor must submit a list of all sub-bidders for each item of work solicited and their bid prices for the work.

- h. The conditions of performance expected of Subcontractors by the County Contractor must also be included with the Best Effort Documentation
- i. County Contractors may include any other type of documentation they feel necessary to further demonstrate their Best Efforts regarding their bid documents.

As used in this Appendix EE the term "Executive Director" shall mean the Executive Director of the Nassau County Office of Minority Affairs; provided, however, that Executive Director shall include a designee of the Executive Director except in the case of final determinations issued pursuant to Section (a) through (l) of these rules.

As used in this Appendix EE the term "Subcontract" shall mean an agreement consisting of part or parts of the contracted work of the County Contractor.

As used in this Appendix EE, the term "Subcontractor" shall mean a person or firm who performs part or parts of the contracted work of a prime contractor providing services, including construction services, to the County pursuant to a county contract. Subcontractor shall include a person or firm that provides labor, professional or other services, materials or supplies to a prime contractor that are necessary for the prime contractor to fulfill its obligations to provide services to the County pursuant to a county contract. Subcontractor shall not include a supplier of materials to a contractor who has contracted to provide goods but no services to the County, nor a supplier of incidental materials to a contractor, such as office supplies, tools and other items of nominal cost that are utilized in the performance of a service contract.

Provisions requiring contractors to retain or submit documentation of best efforts to utilize certified subcontractors and requiring Department head approval prior to subcontracting shall not apply to inter-governmental agreements. In addition, the tracking of expenditures of County dollars by not-for-profit corporations, other municipalities, States, or the federal government is not required.

Introduced by Legislator Denenberg

Local Law No. 172006

A LOCAL LAW in relation to reducing the emission of pollutants from diesel fuel-powered motor vehicles

Passed by the Nassau County Legislature on November 13, 2006

Voting: ayes: 17, nays: 0, abstained: 0

Became a law on December 13, 2006 with the approval of the County Executive.

BE IT ENACTED by the County Legislature of the County of Nassau, as follows:

Section 1. This law shall be known as the Ultra Low Sulfur Diesel Fuel Law and shall appear in the miscellaneous laws as title sixty-two.

§ 2. Definitions.

As used in this local law, the following terms shall have the following meanings:

"Best available retrofit technology" means technology, verified by the EPA for reducing the emission of pollutants that achieves reductions in particulate matter emissions at the highest classification level for diesel emission control strategies, as set forth in section five of this local law, which is applicable to the particular engine and application. Such technology shall also, at a reasonable cost, achieve the greatest reduction in emissions of nitrogen oxides at such particulate matter reduction levels and shall in no event result in a net increase in the emissions of either particulate matter or nitrogen oxides.

"Commissioner" shall mean the Commissioner of the Department of Public Works.

"County contractor" means any person who enters into an agreement or contract with the County valued at more than one hundred fifty thousand dollars to perform County work or any person who enters into an agreement or contract with such person to perform County work.

"County department" means any department of County government that uses diesel-powered vehicles in any capacity.

"County" means County of Nassau.

"County work" means to provide labor, services, material and/or equipment which traditionally has been provided by the government of the County through County employees or contractors, except that it shall not mean labor, services, materials and equipment provided by a common carrier; a utility company; a shipping company (including overnight delivery companies); or a manufacturer or delivery company which delivers materials or equipment to County government.

"EPA" means the United States Environmental Protection Agency.

"Gross vehicle weight rating" means the value specified by the manufacturer of a motor vehicle model as the maximum design loaded weight of a single vehicle of that model.

"Motor vehicle" means a vehicle owned by the County and operated or driven upon a public highway which is propelled by any power other than muscular power, except electrically-driven mobility assistance devices operated or driven by a person with a disability, provided, however, that this term shall not include vehicles that are specially equipped for emergency response by the fire commission, the department of emergency management, or the sheriff's department.

"Non-road diesel vehicle" means a motor vehicle powered by a diesel engine fifty horsepower or greater, including but not limited to excavators, backhoes, cranes, compressors, bulldozers, and similar equipment, but not including a vehicle used for competition.

"On-road diesel vehicle" means a motor vehicle powered by a diesel engine that is used to transport persons or property on a street or highway.

"Person" means any individual, partnership, firm, company, association, joint stock association, corporation or other like organization.

"Reasonable cost means that such technology does not cost greater than thirty percent more than other technology applicable to the particular engine and application that falls within the same classification level for diesel emission control strategies, as set forth in section five of this local law, when considering the cost of the strategies, themselves, and the cost of installation.

"Specially equipped vehicle" means a motor vehicle defined as specially equipped pursuant to rules and regulations developed and approved by an appropriate department of county government designated by the county executive, and adopted by the County legislature.

"Ultra low sulfur diesel fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million.

§ 3. Use of ultra low sulfur diesel fuel required.

a. All on-road diesel vehicles and non-road diesel vehicles owned, leased, or operated by the County, and all such vehicles used by a County contractor to do County work shall be powered by ultra low sulfur diesel fuel.

b. All on-road diesel vehicles and non-road diesel vehicles owned, leased, or operated by the County, and all such vehicles used by a County contractor to do County work and have a gross vehicle weight rating of more than eight thousand five hundred pounds shall utilize the best available retrofit technology or be equipped with an engine certified to the applicable two thousand seven EPA standard for particulate matter as set forth in section 86.007-11 of title forty of the code of federal regulations or to any subsequent EPA standard for such pollutant that is at least as stringent, pursuant to the following schedule:

Twenty five percent of all such motor vehicles by January 1, 2009;

Fifty percent of all such motor vehicles by January 1, 2011;

One hundred percent of all such motor vehicles by January 1, 2013.

(1) This subdivision shall not apply to any vehicle subject to a lease or public works contract entered into or renewed prior to the effective date of this section.

§ 4. County executive discretion regarding technology.

a. The county executive shall make determinations, and shall publish a list containing such determination, as to the best available retrofit technology to be used for each type of diesel fuel-powered motor vehicle to which this section applies. Each such determination shall be reviewed and revised, as needed, on a regular basis, but in no event less often than annually.

b. The county executive may determine that a technology, whether or not it has been verified by the EPA, may be appropriate to test, on an experimental basis, on a

particular type of diesel fuel-powered motor vehicle owned or operated by a county department. The county executive may authorize such technology to be installed on up to three of such type of motor vehicle. Any motor vehicle on which such technology is installed may be counted for the purpose of meeting the requirements of subdivision b of section three of this local law. Such technology shall not be required to be installed on other motor vehicles of the same type and shall be subject to the provisions of paragraph d of this section.

c. Any solicitation for a public works contract and any contract entered into as a result of such solicitation shall include a specification that all contractors in the performance of such contract shall utilize the best available technology for reducing the emission of pollutants for diesel powered on-road vehicles and non-road vehicles and all contractors in the performance of such contract shall comply with such specification.

d. No county department or county contractor shall be required to replace best available retrofit technology or experimental technology utilized for a diesel fuel-powered motor vehicle in accordance with the provisions of this section within three years of having first utilized such technology for such vehicle, except that technology that falls within level four as set forth in section five of this law, shall not be required to be replaced until it has reached the end of its useful life.

§ 5. Classification of diesel emission control strategies.

The classification levels for diesel emission control strategies are as follows, with level four being the highest classification level:

Level Four – strategy reduces diesel particulate matter emissions by eighty-five percent or greater or reduces engine emissions to less than or equal to .01 grams diesel particulate matter per brake horsepower-hour;

Level Three – strategy reduces diesel particulate matter emissions by between fifty and eighty-four percent;

Level Two - strategy reduces diesel particulate matter emissions by between twenty-five and forty-nine percent;

Level One - strategy reduces diesel particulate matter emissions by between twenty and twenty-four percent.

§ 6. Contractor violations.

The Commissioner is authorized to enforce the provisions of this section.

a. Any contractor who violates any provision of this section shall be liable for a civil penalty between the amounts of one thousand and ten thousand dollars, in addition to twice the amount of money saved by such contractor for failure to comply with this section.

b. No contractor shall make a false claim with respect to the provisions of this section to any county agency. Where a contractor has been found to have done so, such contractor shall be liable for a civil penalty of twenty thousand dollars, in addition to twice the amount of money saved by such contractor in association with having made such false claim.

§ 7. Procedure when ultra-low sulfur diesel fuel is unavailable.

The county executive shall issue a written determination that permits the use of diesel fuel that has a sulfur content of no more than thirty parts per million to fulfill the requirements of this law if ultra low sulfur diesel fuel is not available to meet the needs of county departments to fulfill the requirements of this law. Such determination shall expire after six months if such lack of availability persists, but in no event shall be in effect after January first, two thousand eight

§ 8. Waiver.

The county executive may issue a waiver for the use of ultra low sulfur diesel fuel where a county department makes a written finding, approved in writing by the county executive, that a sufficient quantity of ultra low sulfur diesel fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million where a determination is in effect pursuant to section seven of this law, is not available to meet the requirements of this law, provided that such department, to the extent practicable, shall use whatever quantity of ultra low sulfur diesel fuel or diesel fuel that has a sulfur content of no more than thirty parts per million is available for its diesel fuel-powered motor vehicles. Any waiver issued pursuant to this section shall expire after two months, unless the county department renews the finding, in writing, and the county executive approves such renewal, in writing.

§ 9. Report to county executive and legislature.

a. Not later than January first, two thousand eight, and not later than January first of each year thereafter, the appropriate department or departments of county government, as determined by the county executive, shall submit a report to the county executive and legislature of Nassau county regarding, among other things, the use of ultra low sulfur diesel fuel and the use of the best available retrofit technology by diesel fuel-powered motor vehicles owned operated by county departments during the immediately preceding calendar year. The information contained in this report shall include, but not be limited to, for each county department: (i) the total number of diesel fuel-powered motor vehicles owned or operated by such department; (ii) the number of such motor vehicles that were powered by ultra low sulfur diesel fuel; (iii) the total number of diesel fuel-powered motor vehicles owned or operated by such department having a gross vehicle weight rating of more than eight thousand five hundred pounds; (iv) the number of such motor vehicles that utilized the best available retrofit technology, including a breakdown by motor vehicle model, engine year, and the type of technology used for each vehicle; (v) the number of such motor vehicles that are equipped with an engine certified to the applicable two thousand seven EPA standard for particulate matters as set forth in section 86-007-11 of title forty of the code of federal regulations or to any subsequent EPA standard for particulate matter that is at least as stringent; (vi) the number of such motor vehicles that utilized technology in accordance with paragraph two of subdivision c of this section and the results and analysis regarding the testing of such technology; and (vii) all waivers, findings, and renewals of such findings, issued pursuant to sections seven and eight of this law that, for each waiver, shall include, but not be limited to, the quantity of diesel fuel needed to power diesel fuel-powered motor vehicles owned or operated by such department; specific information concerning the availability of ultra low sulfur diesel fuel or diesel fuel that has a sulfur content of no more than thirty parts per million where a determination is in effect pursuant to section seven of this law; and detailed information concerning the department's efforts to obtain ultra low sulfur diesel fuel or diesel fuel that has a sulfur content of no more than thirty parts per million where a determination is in effect pursuant to sections seven or eight of this law

b. Where a determination is in effect pursuant to section seven or eight of this law, information regarding diesel fuel that has a sulfur content of no more than thirty parts per million shall be reported wherever information is requested for ultra low sulfur diesel fuel pursuant to paragraph one of this section.

c. the report due January first, two thousand eight in accordance with paragraph a of this section shall only include the information required pursuant to subparagraphs (i), (ii), and (vii) of such paragraph.

§10. Inapplicability.

This law shall not apply:

a. when federal or state funding precludes the county from imposing the requirement of this law; or

b. to purchases that are emergency procurements pursuant to the County charter or any local law allowing for such emergency procurements.

c. where such applicability would interfere with the purchase, lease or operation of emergency response vehicles operated by the Department of Emergency Management or the Nassau County Police Department.

d. to a diesel powered non-road vehicle where: 1) the commissioner certifies that the best available technology for reducing the emission of pollutants as required herein is unavailable for such vehicle, in which case such agency or contractor shall use whatever technology is available and appropriate for such vehicle that the commissioner approves for reducing the emission of pollutants; or 2) the vehicle is used for fewer than five calendar days per contract; or 3) the commissioner issues a written waiver based upon a finding that the use of the best available technology for reducing the emission of pollutants may present a hazard or threat to the safety of the operator, other workers or members of the public.

§ 11. Severability.

If any clause, sentence, paragraph, subdivision, section or part of this local law or the application thereof to any person, individual, corporation, firm, partnership, entity or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, effect or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence,

paragraph, subdivision, section or part of this law or in its application to the person, individual, corporation, firm, partnership, entity or circumstance directly involved in the controversy in which such order or judgment shall be rendered.

§ 12. SEQRA Determination

It is hereby determined, based on the recommendation of the Nassau County Planning Commission acting in an advisory capacity to the Nassau County Legislature, the lead agency, and pursuant to the provisions of the State Environmental Quality Review Act ("SEQRA"), 8 NYECL section 0101 et seq. and its implementing regulations, Part 617 of 6 NYCRR, and Section 1611 of the County Government Law of Nassau County, that this Local Law will not have a significant impact on the environment and that no further environmental review or action is required. A record of the Planning Commission's recommendation of negative declaration for this action shall be maintained in a file, readily accessible to the public, at the office of the Planning Commission.

§ 13. Effective date.

This local law shall take effect immediately.

APPROVED

Thomas R. Surry
County Executive

ARTICLE XVII. PRICES

The County shall pay as set forth in this Contract and the Contractor shall receive the price stipulated as full compensation for everything furnished and done by him under this Contract, and for all loss or damage arising out of the nature of the work aforesaid or from the action of the elements, or from unforeseen obstructions or difficulties encountered in the prosecution of the work and for all expense incurred by or in consequence of the discontinuance of the work herein specified, and for well and faithfully completing the work and the whole thereof as herein specified, and for making repairs to and maintaining the work in good condition until the final acceptance of the work.

ARTICLE XVIII. PAYMENTS

- A. On or about the first of each month, the Contractor may make an estimate of the amount and the fair value of the work done and may apply for partial payment therefor. The Contractor shall revise the estimate as the Engineer may direct. Whenever the monthly estimate of the Contractor, as approved by the Engineer, shows that the value of the work completed during the previous month exceeds one thousand (\$1,000.00) dollars in amount, the Commissioner will issue a certificate for such work. The Commissioner will thereupon cause the amount therein to be paid to the Contractor.
- B. Before any payments shall be made under this contract, the Contractor and all subcontractors performing any part of the work called for by this Contract must file in the office of the Department of Public Works of the County of Nassau verified statements provided for this Section 220-a of the Labor Law, as amended, certifying to the amounts then due and owing from the Contractor and subcontractor filing such statements to any and all laborers for daily or weekly wages on account of laborer performed upon the work under this Contract, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively.
- C. The Contractor must set forth in his statement the names of all his subcontractors and each subcontractor must likewise in his statement set forth the names of his subcontractors. If the Contractor or subcontractor has no subcontractor, he shall so state in his statement. If there be nothing due and owing to any laborer for daily or weekly wages on account of labor performed upon the work under this Contract, verified statements to that effect must be filed by the Contractor and all subcontractors before any payments are made under this Contract.

ARTICLE XIX. FINAL PAYMENT

Within fifteen days after completion of the work and compliance with all the terms of this Contract, and submission of satisfactory evidence of having repaired any and all damage to public or privately owned properties resulting from but not a part of the work under this Contract, the Commissioner of Public Works shall cause a final inspection to be made for approval of all work included in this Contract and shall issue a final certificate of completion to the Contractor for the work done under the Contract. The County shall, not later than thirty (30) days after the acceptance of this work, pay the Contractor the entire sum so found to be due thereunder after deductions of all previous payments and all previous payments and all percentages and amounts to be kept and retained under provisions of the contract. All prior estimates and payments shall be subject to correction in the final estimate and payment.

ARTICLE XX. NO ESTOPPEL

The County shall not, nor shall any department or officer thereof be precluded or stopped by any acceptance, return, certificate or payment made or given by the Commissioner of Public Works or other officer, agent or employee of the County under any provision of this agreement, from at any time (either before or after the final completion and acceptance of the work and payment therefor pursuant to any such acceptance, return certificate or payment) showing the true and correct amount, quality and character of the work done and materials furnished by the Contractor or any other person under this Agreement, or from showing at any time that any such acceptance, return, certificate or payment is untrue and incorrect, or improperly made in any particular, or that the work and materials or any part thereof do not in fact conform to the specifications, and the County shall not be precluded or stopped, notwithstanding any such acceptance, return, certificate or payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the specifications.

ARTICLE XXI. NO WAIVER OF RIGHTS

Neither the inspection by the County nor by the Commissioner of Public Works, nor by any of their employees, nor any order, measurements or certificate of the Commissioner of Public Works, nor any order of the County for payment of money, nor any money, nor any payment for or acceptance of the whole or any part of the work by the Commissioner of Public Works, or the County, nor any extension of time, nor any possession by the County or its employees, shall operate as a waiver of any provision of this Contract, nor any power herein provided, nor shall any waiver of any breach of this Contract be held as a waiver of any other subsequent breach. Any remedy provided in this Contract shall be taken and construed as cumulative; i.e. - in addition to each and every other former suit, action or legal proceeding. The County shall also be entitled as of right to an injunction against any breach of the provisions of this Contract.

ARTICLE XXII. CLAIMS AND LIABILITY

No person other than the signer of this Contract as Contractor has any interest hereunder, and no claims shall be made or be valid and neither the County nor any agent thereof shall be liable, or be held to pay any money, except as hereinbefore provided. The acceptance by the Contractor of the last payment shall operate as and shall be a release to the County and every officer or agent thereof, from any claims and liability to the Contractor for anything done or furnished, or any act or neglect of the Contractor or any person relating to or affecting the work. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this contract or the performance Bond.

ARTICLE XXIII. FINAL COMPENSATION

Upon the faithful performance of the work herein embraced as set forth in the Contract, and its acceptance by the Commissioner of Public Works, the County of Nassau hereby agrees to pay and the Contractor agrees to receive the prices stipulated in the proposal as full compensation for work done under the Contract.

ARTICLE XXIV. SPECIFICATION REFERENCES

All specifications, conditions and all other matter contained in the book prepared by the Department of Public Works of the County of Nassau and entitled "2009 Standard Specifications and Detail Sheets for Civil Engineering and Site Development Construction" and the Standard "Traffic Signal Specifications & Standard Drawings" except as modified on the plans or in the itemized proposal including addenda to the specifications, shall be a part of this Contract and incorporated therein by reference.

ARTICLE XXV. CONTRACTOR'S MAINTENANCE/GUARANTEES.

The Contractor hereby agrees to repair any imperfections that may arise and to maintain in a manner satisfactory to the Commissioner all of his work for a period of one year from date of final acceptance of the Contract. The Contractor also agrees, for this period, to indemnify and save harmless the County, its Officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in his work and shall immediately assume and take charge of the defense of such actions or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

ARTICLE XXVI. SCHEDULE OF REQUIREMENTS

A. The following schedule shall apply to the appropriate articles of this agreement:

1. TIME FOR COMPLETION, **Thirty-six (36) months**, With an extension of Contract(1) one year at the discretion of the Commissioner.

2. INSURANCE:

a. Contractor's Public Liability Insurance and Owner's Protective Public Liability Insurance shall be equal to the following minimum limits of liability:

1) Minimum Limits of Liability, for each occurrence.

a) Personal Injury - \$ 2,500,000

b) Property Damage - \$ 500,000

c) Or a Combined Single Limit of \$ 3,000,000 or greater.

b. Owner's Contingent public liability Insurance

1) For named insured, see: Article XIII. Sec. D.

3. Additional Named Insured (s) on Owners Protective Policy: EACH INSURED TO BE PROTECTED TO THE FULL LIMITS OF LIABILITY Protection to be extended to the owner of record of each parcel of real property upon which the contractor will operate. In case of public thoroughfares, the municipalities having jurisdiction thereof, shall be protected.

4. LIQUIDATED DAMAGES, **\$500.00** per day

ARTICLE XXVII. SUPERVISION

The Contractor shall give his personal supervision to the faithful prosecution of the work and in case of his absence he shall have a competent English-speaking representative or foreman on the ground who shall follow without delay all instructions of the Commissioner or his assistants in the prosecution and completion of the work and every part thereto, in full authority to supply men/women, material and labor immediately.

ARTICLE XXVIII. SUBLET OR ASSIGN

A. The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of his right, title or interest in or to it or any part thereof, or his power to execute it or assign, by power of attorney or otherwise, any of the monies due or to become due under this Agreement unless the previous written consent of the County Executive shall first be obtained thereto, and

the giving of any such consent to a particular subcontract or assignment shall not dispense with the necessity of such consent to any further or other subcontracts or assignments. The County Executive reserves the right to limit the total amounts of subcontracts to 60 percent (60%) of the total contract price.

- B. Before making any subcontract, the Contractor must submit a written statement to the Commissioner giving the name and address of the proposed subcontractor, the portion of the work materials which he is to perform and furnish, and any other information tending to prove that the proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract. As part of the approval process, the Contractor will assure that the proposed Subcontractor is registered in the County's financial and E-Procurement systems.
- C. If the Commissioner finds that the proposed subcontractor is qualified and is registered in the above cited system (see paragraph b., above) he will notify the Contractor.
- D. The Commissioner may revoke his approval of a subcontractor when, such subcontractor evidences an unwilling or inability to perform his work in strict accordance with this Contract.
- E. No assignment will receive approval unless the instrument of assignments contains a clause to the effect that it is agreed that the funds to be paid the assignee under this assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.
- F. The approval of the Commissioner of a subcontractor shall not relieve the Contractor of any of his responsibilities, duties, and liabilities hereunder. The Contractor shall be solely responsible to the County for the acts of defaults of his subcontractor and of such subcontractor's officers, agents, and employees, each of whom shall, for all purposes, be deemed to be the agent or employee of the Contractor. Nothing contained in the Contract shall create any contractual relationship between any subcontractor and the County.
- G. In addition, the Contractor, at the time of receiving approval from the Commissioner of the name of a subcontractor, shall, before permitting such subcontractor to commence any work contemplated by this Contract, furnish two certificates of workmen's compensation coverage of the employees of said subcontractor. Unless such certificates shall be furnished to the Commissioner, the approval of such subcontractor shall be deemed revoked.

ARTICLE XXIX. COMPTROLLER'S CERTIFICATE

This Contract shall not be binding or of any force unless the County Comptroller shall endorse thereon his certificate that there remains unexpended and unapplied a balance of the appropriation of fund applicable thereto sufficient to pay the estimated expense of executing this Contract as certified by the Officers making the same. In addition the Contractor shall maintain full and complete books and records of accounts in accordance with accepted accounting practices and such other records as may be prescribed by the Comptroller of the County of Nassau.

Such books and records shall be retained for a period of six (6) years and shall at all times be available for audit and inspection by the Comptroller of the County of Nassau or his duly designated representative.

ARTICLE XXX. ALL LEGAL PROVISIONS DEEMED INCLUDED; SEPARABILITY;
SUPEREMACY; COMPLIANCE WITH LAW

1. Every provision of Law required to be inserted into or referenced by this Agreement is intended to be part of this Agreement. If any such provision is not inserted or is not inserted in correct form then: (a) such provision shall be deemed inserted into this Agreement for purposes of interpretation, and (b) upon the application of either party this Agreement shall be formally amended to comply strictly with the Law, without prejudice to the rights of either party.

2. In the event that any provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

3. Unless the application of this subsection will cause a provision by Law to be excluded from this Agreement, in the event of any conflict between the terms set forth above the signature page to this Agreement and those contained in any schedule, exhibit, appendix, or attachment to this Agreement, the terms and conditions set forth above the signature page shall control. To the extent possible, all terms of this Agreement should be read together as not conflicting.

4. The Firm shall comply with any and all applicable federal, state and local Laws, including those relating to conflicts of interest, discrimination, and confidentially, in connection with its performance under this Agreement. In furtherance of the foregoing, the Firm is bound by and shall comply with the terms of Appendix EE attached hereto. As used in this Agreement, the word "Law" means any and all statutes, rules, regulations, orders, ordinances, writs, injunctions, official resolutions, or decrees, as the same may be amended from time to time, enacted, adopted, promulgated, released, or issued, by or on behalf of any government or political subdivision thereof, quasi-governmental authority, court or official investigative body.

5. The Contractor represents that it is in compliance with the provisions of Local Law No. 9-2002, 'Apprenticeship Training Programs for County Contracts,' including having apprenticeship programs appropriate to the type and scope of work to be performed, which have been registered with and approved by the New York State Commissioner of Labor in accordance with Article 23 of the New York Labor Law. Further, the Contractor shall ensure that any subcontractors performing work under the Contract with a value in excess of \$100,000 will similarly utilize approved apprenticeship programs."

6. Minimum Service Standards: Regardless of whether required by Law:

- a. The Firm shall, and shall cause Consultant Agents to, conduct its, his or her activities in connection with this Agreement so as not to endanger or harm any Person or property.
- b. The Firm shall deliver services under this Agreement in a professional manner consistent with the best practices of the industry in which the Firm operates. The Firm shall take all actions necessary or appropriate to meet the obligation described in the immediately preceding sentence, including obtaining and maintaining, and causing all Consultant Agents to obtain and maintain, all licenses, certifications, and approvals (collectively, "Approvals") necessary or appropriate in connection with the performance of services under this Agreement.

7. Compliance with Law.

(a) Prohibition of Gifts. In accordance with County Executive Order 2-2018, the Contractor shall not offer, give, or agree to give anything of value to any County employee, agent, consultant, construction manager, or other person or firm representing the County (a "County Representative"), including members of a County Representative's immediate family, in connection with the performance by such County Representative of duties involving transactions with the Contractor on behalf of the County, whether such duties are related to this Agreement or any other County contract or matter. As used herein, "anything of value" shall include, but not be limited to, meals, holiday gifts, holiday baskets, gift cards, tickets to golf outings, tickets to sporting events, currency of any kind, or any other gifts, gratuities, favorable opportunities or preferences. For purposes of this subsection, an immediate family member shall include a spouse, child, parent, or sibling. The Contractor shall include the provisions of this subsection in each subcontract entered into under this Agreement.

(b) Disclosure of Conflicts of Interest. In accordance with County Executive Order 2-2018, the Contractor has disclosed as part of its response to the County's Business History Form, or other disclosure form(s), any and all instances where the Contractor employs any spouse, child, or parent of a County employee of the agency or department that contracted or procured the goods and/or services described under this Agreement. The Contractor shall have a continuing obligation, as circumstances arise, to update this disclosure throughout the term of this Agreement.

(c) Vendor Code of Ethics. By executing this Agreement, the Contractor hereby certifies and covenants that:

- (i) The Contractor has been provided a copy of the Nassau County Vendor Code of Ethics issued on June 5, 2019, as may be amended from time to time (the "Vendor Code of Ethics"), and will comply with all of its provisions;
- (ii) All of the Contractor's Participating Employees, as such term is defined in the Vendor Code of Ethics (the "Participating Employees"), have been provided a copy of the Vendor Code of Ethics prior to their participation in the underlying procurement;
- (iii) All Participating Employees have completed the acknowledgment required by the Vendor Code of Ethics;
- (iv) The Contractor will retain all of the signed Participating Employee acknowledgements for the period it is required to retain other records pertinent to performance under this Agreement;
- (v) The Contractor will continue to distribute the Vendor Code of Ethics, obtain signed Participating Employee acknowledgments as new Participating Employees are added or changed during the term of this Agreement, and retain such signed acknowledgments for the period the Contractor is required to retain other records pertinent to performance under this Agreement; and

The Contractor has obtained the certifications required by the Vendor Code of Ethics from any subcontractors or other lower tier participants who have participated in procurements for work performed under this Agreement.

NO TEXT ON THIS PAGE

IN WITNESS THEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

THE COUNTY OF NASSAU

By Brian J. Salmeri
County Executive
Party of the First Part

8-24

ATTEST: [Signature]
Clerk, Nassau County Legislature

Approved: [Signature]
Office of the Commissioner

Pratt Brothers, Inc.

Contractor

Corporate
Seal

By [Signature] L.S.
Party of the Second Part
Joseph M. Williams, Jr., P.E., Sr. Vice President

APPROVED AS PER CHARTER

[Signature]
Deputy County Attorney

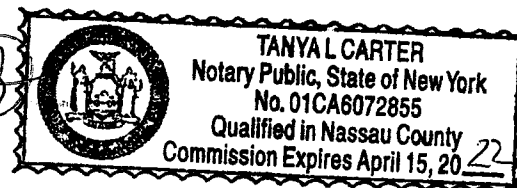
Approved: [Signature] 7/15/20
Bureau of Real Estate & Insurance
(PRATT)

NO TEXT ON THIS PAGE

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

On this 24 day of August, 2020, before me personally appeared Brian J. Schneider County Executive of the County of Nassau, the municipal corporation described herein, and who executed the foregoing instrument, to me known and known to me to be such County Executive and he being by me duly sworn, did depose and say: That he is the County Executive of Nassau County; and that he executed the same as such County Executive for the purposes therein mentioned.

Tanya L. Carter
Notary Public



STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

On this _____ day of _____, 20____, before me personally appeared _____, Deputy County Executive of the County of Nassau, the municipal corporation described herein and who executed the foregoing instrument, to me known and known to me to be such Deputy County Executive, and she by me being duly sworn, did depose and say: That she is the Deputy County Executive of the County of Nassau and that pursuant to Section 205 of the County Government Law of Nassau County executed the same as such Deputy County Executive for the purposes therein mentioned.

Notary Public

NO TEXT ON THIS PAGE

(Acknowledgment by Contractor if a Corporation)

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

On this 13th day of July, 2020, before me personally came Joseph J. Williams, Jr., P.E. to me known, who being by me duly sworn, did depose and say: That he/she resides at 19 Burgundy Lane, Nesconset, NY; That he/she is the Sr. Vice President of Pratt Brothers, Inc. the Corporation described herein; That he/she which executed the foregoing instrument for said Corporation; That he/she knows the seal of said corporation; That the seal affixed to said instrument is such Corporate Seal; That it was so affixed by order of the Board of Directors of said Corporation, That he/she signed his/her name thereto by like order.


Notary Public

(Acknowledgment by Contractor if a Company)

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

On this day of , 20 , before me personally came a partner of the firm of the firm described in the foregoing instrument and he/she duly acknowledged that he/she executed the same as for the act and deed of said firm.

Notary Public

(Acknowledgment by Contractor if an Individual)

STATE OF NEW YORK)
) ss.:
COUNTY OF NASSAU)

On this day of , 20 , before me personally came to me known and known to me to be the person described herein, who executed the foregoing instrument and he/she duly acknowledge to me that he/she executed the same.

Notary Public

NO TEXT ON THIS PAGE

NO TEXT ON THIS PAGE

DATE OF ADVISEMENT MO (2) DY (2) YR (2) 07/14/20			FUND (3) CAP	TRANSACTION CODE ENTER <input checked="" type="checkbox"/> MODIFY <input type="checkbox"/> CANCEL <input type="checkbox"/>		ENCUMBRANCE NUMBER CHPW20000012	DEPT (2) PW	CONTRACT / AGREEMENT NUMBER H66302W
--	--	--	-----------------	---	--	------------------------------------	----------------	--

ID: _____

161620294

VENDOR INFO.

Name: (30)

(30)

Pratt Brothers Inc.

Address: (30)

(30)

45 South Fourth Street

(30)

Bay Shore, NY 11706

LINE NO.	PROJECT NUMBER (CAPITAL)	PROJECT DETAIL	INDEX CODE	SUB-OBJECT CODE	LINE AMOUNT
1	41869	Q20	PWCAPCAP	00004	\$ 1,100,000.00
2	63029	007	PWCAPCAP	00004	\$ 250,000.00
3	66051	Q20	PWCAPCAP	00004	\$ 100,000.00
4	66017	Q20	PWCAPCAP	00004	\$ 200,000.00
5	66302	Q20	PWCAPCAP	00004	\$ 200,000.00
6	61587	Q20	PWCAPCAP	00004	\$ 100,000.00
DOCUMENT DESCRIPTION: (30)					TOTAL AMOUNT \$ 1,950,000.00

COMMENTS

2020 General Requirements Contract
For Various Civil/Site Reconstruction,
Highways, Drainage, Bridges, Site,
Parking Lot and Related Specialized
Items

Contract No. H66302W

Nassau County New York

DEPARTMENT - PREPARED BY: Elizabeth K. Bel NAME 7/14/2020 DATE 516-571-9454 PHONE		COMPTROLLER'S OFFICE CERTIFICATION: I hereby certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be charged. CONTRACT NUMBER CHPW20000012		CERTIFICATE OF ACCEPTANCE INTO NUMIS I certify that this document was accepted into NUMIS		CHECK IF THIS DOCUMENT IS CONTINUED: <input type="checkbox"/>	
DEPARTMENT - APPROVED BY: Arnold NAME Commissioner TITLE 7/14/20 DATE		NAME Deputy Comptroller TITLE 7/14/20 DATE		NAME Michael G. Chen DATE 7/14/20		PAGE OF	



COUNTY OF NASSAU
Laura Curran, County Executive
Theodore Roosevelt Executive and Legislative Office Building
1550 Franklin Avenue
Mineola, NY 11501

EMERGENCY DECLARATION AND PURCHASE

WHEREAS, the Commissioner of Public Works, Department of Public Works (the "Department") for the County of Nassau, New York has recommended that, due to an emergency condition at the Long Beach Bridge that was discovered after a New York State Department of Transportation safety inspection that resulted in the issuance of a "red flag notice" that identifies a dangerous public safety condition at the Long Beach Bridge and necessitates that the County Executive immediately execute the Pratt Brothers, Inc. general requirements contract known as H66302W ("Contract") in order to remediate the emergency condition.

NOW THEREFORE, I, **Laura Curran, County Executive** of the County of Nassau, do hereby declare that the emergency condition at the Long Beach Bridge constitutes an emergency under Section 2206 of the Nassau County Charter that necessitates the immediate execution of the Contract to the extent necessary to remediate the emergency.

Dated as of: July 9, 2020

A handwritten signature in cursive script, appearing to read "Laura Curran", is written over a horizontal line.

LAURA CURRAN, COUNTY EXECUTIVE

**COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
Inter-Departmental Memo**

TO: Laura Curran
County Executive

FROM: Department of Public Works

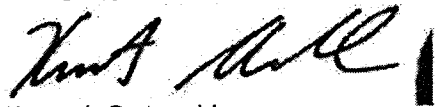
DATE: July 9, 2020

SUBJECT: Emergency Condition due to Notice of Red Flags by NYSDOT
Long Beach Bridge over Reynolds Channel, BIN # 3300301(Southbound)

During inspection on June 4th, 2020 by New York State Department of Transportation (NYSDOT), a Red Flag condition was discovered at the subject bridge. A written follow-up notice to the Department was delivered on June 8th concerning the details of the conditions that caused the Red Flag. Nassau County being the owner of the Bridge, is responsible for taking corrective action to assure public safety. In summary, the flag condition is associated with significant corrosion holes in two steel structural members. This has caused major section loss and load bearing capacity of the components.

NYSDOT defines a Red Flag condition as one which reports the actual or imminent risk of failure of a major structural component of a bridge and requires prompt or short-term corrective or protective action to assure safety. The Department immediately initiated further inspection of the span by an On-Call consultant to check the condition of other adjoining and adjacent primary components and prepare repair plans accordingly. These corrective plans are ready to address the red flags. A written reply is required by July 20, 2020 stating what action is being taken concerning the Red Flagged Conditions in order to assure Public Safety. In that response the NYSDOT requires actions to be taken or be underway.

The Department requests your authorization to proceed with emergency contracts to address this emergency condition affecting the bridge, and the safety of the public that utilizing the bridge.



Kenneth G. Arnold
Commissioner

KGA:ka

c: Brian Schneider, Deputy County Executive
Elisa Picca, Chief Deputy Commissioner
Raikal Maitra, P.E. Deputy Commissioner



RESOLUTION NO. 3-F -2020

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO AWARD AND EXECUTE A CONTRACT BETWEEN THE COUNTY OF NASSAU ACTING ON BEHALF OF THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS AND PRATT BROTHERS, INC.

Passed by Nassau County Legislature on
7-13-2020 A voice vote was taken with
Legislators present.
Voting: aye 19, nay 0, abstained 0, recused 0
Became a resolution on
With the approval of the County Executive 19

WHEREAS, in accordance with all Federal, State and Local Law, the County of Nassau on behalf of the NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS ["Department"] has received competitive bids for contract H66302W, for the 2020 GENERAL REQUIREMENTS CONTRACT FOR VARIOUS CIVIL/SITE CONSTRUCTION, HIGHWAYS, DRAINAGE, BRIDGES, SITE, PARKING LOTS AND PARKS RELATED SPECIALIZED ITEMS ["Contract"], as more particularly described in the contract documents, a copy of which are on file with the Clerk of the Legislature; and

WHEREAS, the Department is representing to the Rules Committee that the term of this requirements contract is three (3) years, with the Department's option to extend the term of the Contract for an additional one (1) year period for a total Contract term of four (4) years, and the estimated expenditures under this contract is a total of \$ 16,000,000.00, at \$ 4,000,000.00 per year, and

WHEREAS, the firm of PRATT BROTHERS, INC.,

["Vendor"] has submitted the lowest responsible comparison bid for the work described in the contract in accordance with all Federal, State and Local Law as determined by the Department, and

WHEREAS, the Commissioner of the Department is recommending to the Rules Committee that the contract be awarded to the vendor; now, therefore, be it

RESOLVED, that the Rules Committee of the Nassau County Legislature, based on the representations of the Department and the recommendation of the Commissioner of the Department, authorizes the County Executive to award and execute the said contract with the vendor.

CONTRACTOR'S INSURANCE
WORKER'S COMPENSATION INSURANCE

OWNERS PROTECTIVE

NO TEXT ON THIS PAGE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/13/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER National Insurance Brokerage of New York, Inc. 175 Oval Drive Islandia NY 11749		CONTACT NAME: Kathleen Hofmann PHONE (A/C, No. Ext): (631) 273-4242 E-MAIL ADDRESS: khofmann@nibony.com FAX (A/C, No): (631) 273-8990													
INSURED Pratt Brothers Inc 45 South 4th Street Bay Shore NY 11706		INSURER(S) AFFORDING COVERAGE <table border="1"><tr><td>INSURER A: American Southern Home Insurance Compar</td><td>NAIC # 10235</td></tr><tr><td>INSURER B: American Family Home Insurance Company</td><td>19275</td></tr><tr><td>INSURER C: Berkley Insurance Company</td><td>32603</td></tr><tr><td>INSURER D: Travelers Indemnity CO</td><td>25658</td></tr><tr><td>INSURER E: Evanston Insurance Company</td><td>35378</td></tr><tr><td>INSURER F:</td><td></td></tr></table>		INSURER A: American Southern Home Insurance Compar	NAIC # 10235	INSURER B: American Family Home Insurance Company	19275	INSURER C: Berkley Insurance Company	32603	INSURER D: Travelers Indemnity CO	25658	INSURER E: Evanston Insurance Company	35378	INSURER F:	
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INSURER D: Travelers Indemnity CO	25658														
INSURER E: Evanston Insurance Company	35378														
INSURER F:															

COVERAGES**CERTIFICATE NUMBER:** Master 20-21 w/ Poll**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			88A6GL0000310	4/1/2020	4/1/2021	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
	<input checked="" type="checkbox"/> Contractual Liability						MED EXP (Any one person) \$ 5,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY \$ 1,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						GENERAL AGGREGATE \$ 2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG \$ 2,000,000
							\$
	AUTOMOBILE LIABILITY			88A5CA0000779	4/1/2020	4/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
							PIP-Basic \$ 50,000
C	<input checked="" type="checkbox"/> UMBRELLA LIAB		<input checked="" type="checkbox"/> OCCUR	MKC11100029	4/1/2020	4/1/2021	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB		<input type="checkbox"/> CLAIMS-MADE				AGGREGATE \$ 5,000,000
	<input type="checkbox"/> DED	<input checked="" type="checkbox"/> RETENTION \$ 10,000					\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y/N	N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
D	Excess Umbrella			ZUP81N12504-20NF	4/1/2020	4/1/2021	\$4,000,000 Limit
E	Pollution Liability			MKLVIENV102049	9/05/2019	9/5/2020	\$2,000,000/\$1,000,000 \$5,000 DED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Contract Number: H66302W

The following are included as additional insured A.T.I.M.A on a primary and non-contributory basis and waiver of subrogation applies with respect to General Liability as required by written contract/written agreement per the policy terms, conditions and exclusions: County of Nassau Department of Public Works

CERTIFICATE HOLDER**CANCELLATION**

County of Nassau
Department of Public Works
1194 Prospect Avenue
Westbury, NY 11590-2723

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Frank Cormio/MILLER

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New York State Insurance Fund

199 CHURCH STREET, NEW YORK, N.Y. 10007-1100

| nysif.com

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE



SCAN TO VALIDATE
AND SUBSCRIBE

***** 161620294

LOVELL SAFETY MGMT CO., LLC
110 WILLIAM STREET 12TH FLR
NEW YORK NY 10038

POLICYHOLDER

PRATT BROTHERS INC
45 SOUTH 4TH STREET
BAY SHORE NY 11706

CERTIFICATE HOLDER

COUNTY OF NASSAU DEPARTMENT OF
PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY NY 11590

POLICY NUMBER	CERTIFICATE NUMBER	POLICY PERIOD	DATE
Z2378 461-4	132730	04/01/2020 TO 04/01/2021	4/8/2020

THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 2378 461-4, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS' COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

IF YOU WISH TO RECEIVE NOTIFICATIONS REGARDING SAID POLICY, INCLUDING ANY NOTIFICATION OF CANCELLATIONS, OR TO VALIDATE THIS CERTIFICATE, VISIT OUR WEBSITE AT [HTTPS://WWW.NYSIF.COM/CERT/CERTVAL.ASP](https://www.nysif.com/cert/certval.asp). THE NEW YORK STATE INSURANCE FUND IS NOT LIABLE IN THE EVENT OF FAILURE TO GIVE SUCH NOTIFICATIONS.

THE POLICY INCLUDES A WAIVER OF SUBROGATION ENDORSEMENT UNDER WHICH NYSIF AGREES TO WAIVE ITS RIGHT OF SUBROGATION TO BRING AN ACTION AGAINST THE CERTIFICATE HOLDER TO RECOVER AMOUNTS WE PAID IN WORKERS' COMPENSATION AND/OR MEDICAL BENEFITS TO OR ON BEHALF OF AN EMPLOYEE OF OUR INSURED IN THE EVENT THAT, PRIOR TO THE DATE OF THE ACCIDENT, THE CERTIFICATE HOLDER HAS ENTERED INTO A WRITTEN CONTRACT WITH OUR INSURED THAT REQUIRES THAT SUCH RIGHT OF SUBROGATION BE WAIVED.

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS NOR INSURANCE COVERAGE UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICY.

NEW YORK STATE INSURANCE FUND

DIRECTOR, INSURANCE FUND UNDERWRITING

VALIDATION NUMBER: 877682295

POLICY NUMBER: 88A6GL0000592-00

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY DECLARATIONS

COMPANY NAME American Southern Home Insurance Company 555 College Road East Princeton, NJ 08543-5241 (800) 305-4954	PRODUCER NAME McKee Risk Management, Inc. 610 Freedom Business Center Drive Suite 300 King of Prussia, PA 19406
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NAMED INSURED County of Nassau Dept. of Public Works

MAILING ADDRESS 1194 Prospect Avenue
Westbury, NY 11590

POLICY PERIOD: FROM 07/13/2020 TO 04/01/2021 AT 12:01 A.M. TIME AT
YOUR MAILING ADDRESS SHOWN ABOVE

LOCATION OF COVERED OPERATIONS: Road resurfacing

DESIGNATED CONTRACTOR: Pratt Brothers, Inc.

MAILING ADDRESS: 608 Union Avenue
Holtsville, NY 11742

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

LIMITS OF INSURANCE	
EACH OCCURRENCE LIMIT	\$3,000,000
AGGREGATE LIMIT	\$3,000,000

DESCRIPTION OF BUSINESS	
FORM OF BUSINESS: Municipality	
<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> PARTNERSHIP
<input type="checkbox"/> LIMITED LIABILITY COMPANY	<input type="checkbox"/> JOINT VENTURE
<input checked="" type="checkbox"/> ORGANIZATION, INCLUDING A CORPORATION (BUT NOT INCLUDING A PARTNERSHIP, JOINT VENTURE OR LIMITED LIABILITY COMPANY)	

PERFORMANCE BOND

FORM OF PERFORMANCE BOND

Bond No. PB11557500077

KNOW ALL MEN BY THESE PRESENTS,

that Pratt Brothers, Inc. 45 S. 4th Street Bay Shore NY 11706 (hereinafter called the "Contractor") and Philadelphia Indemnity Insurance Company a corporation created and existing under the laws of the State of Pennsylvania, and licensed to do business in the State of New York, having its principal office in the city of Florham Park, NJ (hereinafter called the "Surety"), are held firmly bound unto the COUNTY OF NASSAU, a municipal corporation of the State of New York (hereinafter called the "Owner"), in the full and just sum of

Five Million Four Hundred Eighty Thousand Six Hundred Seventy and 83/100 Dollars (\$5,480,670.83) good and lawful money of the United States of America, to the payment of which said sum of money, will and truly to be made and done, the said Contractor binds themselves (himself, itself), their (his, its) heirs, executors and administrators, successors and assigns, and the said Surety binds itself, its successors and assigns jointly and severally, firmly by these presents.

Signed, sealed and dated this 10th day of July, 2020

WHEREAS, said Contractor has entered into a certain written contract, bearing even date with these premises with the COUNTY OF NASSAU, for the

2020 General Requirements Contract - Contract No H66302W

For Various Civil / Site Construction - Highways, Drainage, Bridges, Site, Parking Lots and Related Specialized Items

which contract is hereby made a part of this bond as if herein set forth in full.

NOW, THEREFORE, THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, that if the said Contractor shall well, truly and faithfully comply with and perform all the terms, covenants and conditions of said contract on their (his, its) part to be kept and performed, according to the true intent and meaning of said contract, and shall protect the said Owner against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said Owner or its officers or agents or which the said Owner may be called upon to pay to any person or corporation by reason of any damages arising or growing out of the doing of said work, or the manner of doing the same, or the neglect of the said Contractor or his (their, its) agents or servants, or the improper performance of the said work by the said Contractor, or his (their, its) agents or servants, or the infringement of any or patent rights by

reason of the use of any materials furnished or work done as aforesaid or otherwise, and

also pay or cause to be paid the wages and compensation for labor performed and services rendered of all persons engaged in the prosecution of the work provided for therein, whether such persons be agents, servants or employees of the contractor, or his (their, its) successors or of any subcontractor or of any assignee thereof, (including all persons so engaged who perform the work of laborers or of mechanics regardless of any contractual relationship between the Contractor, or his (their, its) successors, or assigns, or any subcontractor or any assignee thereof) and such laborers or mechanics, but not including office employees not regularly stationed at the site of the work, and, further, shall pay or cause to be paid all lawful claims of subcontractors and of material men and other third persons arising out of or in connection with said Contract, and the work, labor, services, supplies and material furnished in and about the performance and completion thereof,

then this obligation shall be null and void, otherwise to remain in full force and virtue.

And the said Surety, for value received, hereby stipulates and agrees, if requested to do so by the Owner to fully perform and complete the work mentioned and described in said contract and specifications, pursuant to the terms, conditions and covenants thereof, if for any cause, said Contractor fails or neglects to so fully perform and complete said work, and said Surety further agrees to commence said work of completion within twenty days after notice thereof from the Owner, and to complete the same within twenty days from the expiration of the time allowed said Contractor in said contract and specifications for the completion of said work. When the contractor is declared in default by the Commissioner, the Surety Company must honor default notice and immediately progress the work to completion in the same manner as though the contractor were bankrupt or had willfully defaulted.

And the Surety, for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligations of said Surety and of its successors and assigns, and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the said contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provision thereof, or by any assignment, subletting or other transfer thereof, or any part thereof, or of any work to be performed, or of any moneys due or to become due thereunder; and the said Surety for itself and its successors and assigns, does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts, and transfers, and hereby stipulates and agrees that any and all things done or omitted to be done by and in relation to the executors, administrators, successors, assignees, subcontractors and other transferee of the Contract shall have the same effect as to said Surety and its successors and assigns, as though done

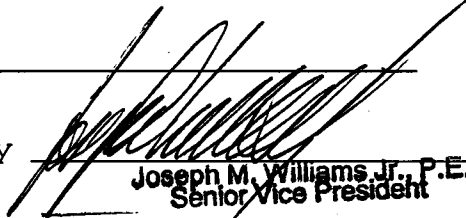
or omitted to be done by and in relation to said Contractor.

IN TESTIMONY WHEREOF, the said Contractor has hereunto set his (their, its) hand and seal and the said Surety has caused this instrument to be signed by its duly authorized officer (s) or representative (s), and its corporate seal to be hereunto affixed, the day and year first above written.

Pratt Brothers, Inc.

Contractor

by


Joseph M. Williams Jr., P.E.
Senior Vice President

(L.S.)

(Corporate seal of Contractor if a corporation)

by

(L.S.)

Title

by

(L.S.)

Title

Philadelphia Indemnity Insurance Company

Surety

by

(L.S.)

Title of Officer Joseph Tantillo Attorney-In-Fact

Attest:


Title of Officer

(L.S.)

(Corporate seal of Surety)

(Acknowledgment by Contractor if a corporation)

STATE OF New York)

SS.:
COUNTY OF Suffolk)

On this 13th day of July, 2020, before me personally came Joseph M. Williams Jr., P.E. to me known, who, being by me duly sworn, did depose and say for himself, that he resides in Nesconset, NY that he is the Sr. Vice Pres. of the Pratt Brothers, Inc. the corporation described in, and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Carol A. Miller
Notary Public

(Acknowledgment by Contractor if a partnership)

STATE OF _____)

SS.:
COUNTY OF _____)

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

On this _____ day of _____, 20____, before me personally came _____ to me known and known to me to be a member of the firm described in and which executed the foregoing bond or obligation, and he acknowledged to me that he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

Notary Public

(Acknowledgment by Contractor if an individual.)

STATE OF _____)

SS.:
COUNTY OF _____)

On this _____ day of _____, 20____, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged that he executed the same.

Notary Public

(Acknowledgment by Surety Company)

STATE OF New York)

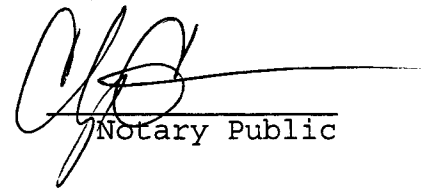
SS.:

COUNTY OF Suffolk)

On this 10th day of July, 20 20, before personally came
Joseph Tantillo to me
Known, who being by me duly sworn, did depose and say that he resides
in Ronkonkoma, NY

that he is the Attorney-In-Fact of the Philadelphia Indemnity Insurance Company,
the corporation described in and which executed the within instrument;
that he knows the seal of said corporation; that the seal affixed to
said instrument is such corporate seal; that it was so affixed by the
order of the Board of Directors of said corporation, and that he signed
his name thereto by like order; and that the liabilities of said company
do not exceed its assets as ascertained in the manner provided by the
laws of the State of New York, and the said Christopher P Catera further said
that he is acquainted with Joseph Tantillo and knows him
to be the Attorney-In-Fact of said company; that the signature
of the said Joseph Tantillo subscribed to the within instrument is
in the genuine handwriting of the said Joseph Tantillo
and was subscribed thereto by like order of the Board of Directors, and
in the presence of him, the said Christopher P Catera.

Christopher P Catera
Notary Public, State of New York
No. 01CA6176842, Suffolk County
Commission Expires, Nov 5, 2023


Notary Public

POWER OF ATTORNEY
FINANCIAL STATEMENT

NO TEXT ON THIS PAGE

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100
Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Joseph Tantillo and Christopher Catera of Coverage's Unlimited, Inc.**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed **\$50,000,000.00**.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED: That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 27TH DAY OF OCTOBER, 2017.

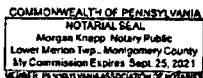
(Seal)



Robert D. O'Leary Jr.

Robert D. O'Leary Jr., President & CEO
Philadelphia Indemnity Insurance Company

On this 27th day of October, 2017, before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.



(Notary Seal)

Notary Public:

Morgan Knapp

residing at:

Bala Cynwyd, PA

My commission expires:

September 25, 2021

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and this Power of Attorney issued pursuant thereto on this 27th day of October, 2017 are true and correct and are still in full force and effect. I do further certify that Robert D. O'Leary Jr., who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY,

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 10th day of JULY, 20 20.



Edward Sayago

Edward Sayago, Corporate Secretary
PHILADELPHIA INDEMNITY INSURANCE COMPANY

PHILADELPHIA INDEMNITY INSURANCE COMPANY

Statutory Statements of Admitted Assets, Liabilities and Capital and Surplus (in thousands, except par value and share amounts)

Admitted Assets

	As of December 31,	
	2018	2017
Bonds (fair value \$7,036,118 and \$6,911,411)	\$ 7,018,246	\$ 6,708,174
Preferred stocks (fair value \$46,324 and \$50,134)	46,213	48,537
Common stocks (cost \$14,897 and \$31,965)	14,853	33,817
Mortgage loans	473,067	400,590
Real estate	1,514	3,294
Other invested assets (cost \$211,099 and \$234,382)	219,251	240,475
Derivatives	157	-
Receivables for securities sold	1,109	399
Cash, cash equivalents and short-term investments	65,668	140,468
Cash and invested assets	7,840,078	7,575,754
Premiums receivable, agents' balances and other receivables	968,504	831,770
Reinsurance recoverable on paid losses	34,694	33,955
Accrued investment income	82,576	86,998
Receivable from affiliates	5,480	6,611
Federal income taxes receivable	-	4,869
Net deferred tax asset	121,266	113,125
Other assets	5,586	89
Total admitted assets	\$ 9,058,184	\$ 8,653,171

Liabilities and Capital and Surplus

Liabilities:

Net unpaid losses and loss adjustment expenses	\$ 4,581,608	\$ 4,263,696
Net unearned premiums	1,616,043	1,533,201
Reinsurance payable on paid loss and loss adjustment expenses	30,374	23,933
Ceded reinsurance premiums payable	89,591	80,592
Commissions payable, contingent commissions and other similar charges	234,551	225,361
Federal income taxes payable	3,141	-
Funds held	61,944	83,909
Accrued expenses and other liabilities	37,562	33,890
Payable to affiliates	13,148	10,761
Provision for reinsurance	-	1
Payable for purchased securities	20,741	81,458
Total liabilities	\$ 6,688,703	\$ 6,336,802

Capital:

Common stock, par value of \$10 per share; 1,000,000 shares authorized, 450,000 shares issued and outstanding	4,500	4,500
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Surplus:

Gross paid-in and contributed surplus	386,071	386,071
Unassigned surplus	1,978,910	1,925,798
Total surplus	2,364,981	2,311,869
Total capital and surplus	2,369,481	2,316,369
Total liabilities and capital and surplus	\$ 9,058,184	\$ 8,653,171

The undersigned, being duly sworn, says: That she is the Executive Vice President and Chief Financial Officer of Philadelphia Indemnity Insurance Company; that said Company is a corporation duly organized in the state of Pennsylvania, and licensed and engaged in the State of Pennsylvania and has duly complied with all the requirements of the laws of the said State applicable of the said Company and is duly qualified to act as Surety under such laws; that said Company has also complied with and is duly qualified to act as Surety under the Act of Congress. And that to the best of her knowledge and belief the above statement is a full, true and correct statement of

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL

Attest:

Kimberly A. Kessleski, Notary Public
Lower Merion Twp., Montgomery County
My Commission Expires Dec. 18, 2020

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Karen Gilmer-Pauciello, EVP & CFO

Sworn to before me this 21st day of May 2019.

Kimberly Kessleski, Notary

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**CERTIFICATE OF SOLVENCY UNDER SECTION 1111 OF THE NEW
YORK INSURANCE LAW**

STATE OF NEW YORK

DEPARTMENT OF FINANCIAL SERVICES

It is hereby certified that

Philadelphia Indemnity Insurance Company

Of Bala Cynwyd, Pennsylvania

a corporation organized under the laws of the State of Pennsylvania and duly authorized to transact the business of insurance in this State, is qualified to become surety or guarantor on all bonds, undertakings, recognizances, guaranties and other obligations required or permitted by law; and that the said corporation is possessed of a capital and surplus including gross paid-in and contributed surplus and unassigned funds (surplus) aggregating the sum of \$2,468,560,818 (Capital \$4,500,000) as is shown by its sworn financial statement for the first quarter ending March 31, 2019, on file in this Department, prior to audit.

The said corporation cannot lawfully expose itself to loss on any one risk or hazard to an amount exceeding 10% of its surplus to policyholders, unless it shall be protected in excess of that amount in the manner provided in Section 4118 of the Insurance Law of this State.



In Witness Whereof, I have

unto set my hand and affixed

official seal of this Department
in the City of Albany, this

6th day of June 2019

Linda A. Lacewell
Acting Superintendent

By

Ellen R Buxbaum
Special Deputy Superintendent

LABOR AND MATERIAL PAYMENT BOND

FORM OF LABOR AND MATERIAL PAYMENT BOND

Bond No. PB11557500077

KNOW ALL MEN BY THESE PRESENTS:

that Pratt Brothers, Inc. 45 S. 4th Street Bay Shore NY 11706 as Principal,
(Here insert the name and address, or legal title, of the Contractor)

Pratt Brothers, Inc. 45 S. 4th Street Bay Shore NY 11706

hereinafter called Principal, and Philadelphia Indemnity Insurance Company,
a corporation of the State of Pennsylvania, and licensed
to do business in the State of New York, with its home office in

Florham Park, NJ, as Surety, hereinafter called Surety,
are held and firmly bound unto the County of Nassau, as Obligees, here-
in-after called Owner, for the use and benefit of claim-ants as herein
below defined, in the amount of

Five Million Four Hundred Eighty Thousand Six Hundred Seventy and 83/100 Dollars (\$ \$5,480,670.83)
(Here insert a sum equal to the contract price), for the payment whereof
Principal and Surety bind themselves, their heirs, executors,
administrators, successors and as-signs, jointly and severally, firmly
by these presents.

WHEREAS,
Principal has by written agreement dated July 9, 2020 entered into
a contract with Owner for,

2020 General Requirements Contract - Contract No H66302W

For Various Civil / Site Construction - Highways, Drainage, Bridges, Site, Parking Lots and Related Specialized Items,
which contract is by reference made a part hereof, and is hereafter
referred to as the CONTRACT.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the
Principal shall promptly make payment to all claimants as hereinafter
defined, for all labor and material used or reasonably required for use
in the performance of the CONTRACT, then this obligation shall be void;
otherwise it shall remain in full force and effect, subject, however, to
the following conditions:

1. A claimant is defined as one having a direct contract with the
Principal or with a sub-contractor of the Principal for labor,
material, or both, used or reasonably required for use in the
performance of the contract, labor and material being construed to
include that part of water, gas, power, light, heat, oil, gasoline,
telephone service or rental of equipment directly applicable to the
CONTRACT.

2. The above named Principal, and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant in the name of the Owner, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon, provided, however, that the Owner shall not be liable for the payment of any cost or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant.
- a. Unless claimant shall have given written notice to the following: Principal, the Owner, and the Surety above named, within ninety(90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail, postage prepaid, in an envelope addressed to the Principal, Owner and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
- b. After the expiration of one (1) year following the date on which Principal ceased work on said CONTRACT.
- c. Other than in a court of competent jurisdiction in and for the County of Nassau.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this 10th day of July 2020

Pratt Brothers, Inc.

Contractor

by [Signature] (L.S.)

Joseph M. Williams Jr., P.E. Senior Vice President

(Corporate seal of
Contractor
Title if a corporation)

by _____ (L.S.)

Philadelphia Indemnity Insurance Company

Title

Surety

by _____ (L.S.)

Joseph Tantillo Attorney-In-Fact

Attest: [Signature] Witness (L.S.)

Title of Officer

(Corporate seal
of Surety)

(Acknowledgment by Contractor if a corporation)

STATE OF New York)

SS.:
COUNTY OF Suffolk)

On this 13th day of July, 2020, before me personally came Joseph M. Williams Jr., P.E. to me known, who, being by me duly sworn, did depose and say for himself, that he resides in Nesconset, NY that he is the Sr. Vice Pres. of the Pratt Brothers, Inc. the corporation described in, and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Carol A. Miller
Notary Public

(Acknowledgment by Contractor if a partnership)

STATE OF _____)

SS.:
COUNTY OF _____)

On this _____ day of _____, 20____, before me personally came _____ to me known and known to me to be a member of the firm described in and which executed the foregoing bond or obligation, and he acknowledged to me that he subscribed the name of said firm thereto on behalf of said firm for the purpose therein mentioned.

CAROL A. MILLER
Notary Public, State of New York
No. 5002326
Qualified in Suffolk County
Commission Expires Sept. 28, 2022

Notary Public

(Acknowledgment by Contractor if an individual.)

STATE OF _____)

SS.:

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged that he executed the same.

Notary Public

(Acknowledgment by Surety Company)

STATE OF New York)

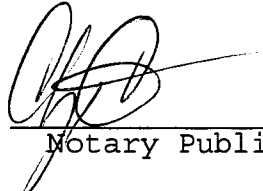
SS.:

COUNTY OF Suffolk)

On this 10th day of July, 2020, before me personally came Joseph Tantillo to me Known, who being by me duly sworn, did depose and say that he resides in Ronkonkoma, NY

that he is the Attorney-In-Fact of the Philadelphia Indemnity Insurance Company, the corporation described in and which executed the within instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation, and that he signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York, and the said Christopher P Catera further said that he is acquainted with Joseph Tantillo and knows him to be the Attorney-In-Fact of said company; that the signature of the said Joseph Tantillo and was subscribed thereto by like order of the Board of Directors, and in the presence of him, the said Christopher P Catera.

Christopher P Catera
Notary Public, State of New York
No. 01CA6176842, Suffolk County
Commission Expires, Nov 5, 2023



Notary Public

POWER OF ATTORNEY
FINANCIAL STATEMENT

NO TEXT ON THIS PAGE

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100
Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Joseph Tantillo and Christopher Catera of Coverage's Unlimited, Inc.**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed **\$50,000,000.00**.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED: That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

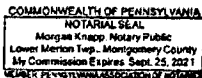
IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 27TH DAY OF OCTOBER, 2017.



(Seal)

Robert D. O'Leary, Jr., President & CEO
Philadelphia Indemnity Insurance Company

On this 27th day of October, 2017, before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.



(Notary Seal)

Notary Public:

Morgan Knapp

residing at:

Bala Cynwyd, PA

My commission expires:

September 25, 2021

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and this Power of Attorney issued pursuant thereto on this 27th day of October, 2017 are true and correct and are still in full force and effect. I do further certify that Robert D. O'Leary Jr., who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY,

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 10th day of July, 20 20.



Edward Sayago, Corporate Secretary
PHILADELPHIA INDEMNITY INSURANCE COMPANY

PHILADELPHIA INDEMNITY INSURANCE COMPANY

Statutory Statements of Admitted Assets, Liabilities and Capital and Surplus (in thousands, except par value and share amounts)

Admitted Assets

	As of December 31,	
	2018	2017
Bonds (fair value \$7,036,118 and \$6,911,411)	\$ 7,018,246	\$ 6,708,174
Preferred stocks (fair value \$46,324 and \$50,134)	46,213	48,537
Common stocks (cost \$14,897 and \$31,965)	14,853	33,817
Mortgage loans	473,067	400,590
Real estate	1,514	3,294
Other invested assets (cost \$211,099 and \$234,382)	219,251	240,475
Derivatives	157	-
Receivables for securities sold	1,109	399
Cash, cash equivalents and short-term investments	65,668	140,468
Cash and invested assets	7,840,078	7,575,754
Premiums receivable, agents' balances and other receivables	968,504	831,770
Reinsurance recoverable on paid losses	34,694	33,955
Accrued investment income	82,576	86,998
Receivable from affiliates	5,480	6,611
Federal income taxes receivable	-	4,869
Net deferred tax asset	121,266	113,125
Other assets	5,586	89
Total admitted assets	\$ 9,058,184	\$ 8,653,171

Liabilities and Capital and Surplus

Liabilities:

Net unpaid losses and loss adjustment expenses	\$ 4,581,608	\$ 4,263,696
Net unearned premiums	1,616,043	1,533,201
Reinsurance payable on paid loss and loss adjustment expenses	30,374	23,933
Ceded reinsurance premiums payable	89,591	80,592
Commissions payable, contingent commissions and other similar charges	234,551	225,361
Federal income taxes payable	3,141	-
Funds held	61,944	83,909
Accrued expenses and other liabilities	37,562	33,890
Payable to affiliates	13,148	10,761
Provision for reinsurance	-	1
Payable for purchased securities	20,741	81,458
Total liabilities	\$ 6,688,703	\$ 6,336,802

Capital:

Common stock, par value of \$10 per share; 1,000,000 shares authorized, 450,000 shares issued and outstanding	4,500	4,500
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Surplus:

Gross paid-in and contributed surplus	386,071	386,071
Unassigned surplus	1,978,910	1,925,798
Total surplus	2,364,981	2,311,869
Total capital and surplus	2,369,481	2,316,369
Total liabilities and capital and surplus	\$ 9,058,184	\$ 8,653,171

The undersigned, being duly sworn, says: That she is the Executive Vice President and Chief Financial Officer of Philadelphia Indemnity Insurance Company; that said Company is a corporation duly organized in the state of Pennsylvania, and licensed and engaged in the State of Pennsylvania and has duly complied with all the requirements of the laws of the said State applicable of the said Company and is duly qualified to act as Surety under such laws; that said Company has also complied with and is duly qualified to act as Surety under the Act of Congress. And that to the best of her knowledge and belief the above statement is a full, true and correct statement of

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL

Attest:

Kimberly A. Kessleski, Notary Public
Lower Merion Twp., Montgomery County
My Commission Expires Dec. 18, 2020

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Karen Gilmer-Pauciello, EVP & CFO

Sworn to before me this 21st day of May 2019.

Kimberly Kessleski, Notary

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**CERTIFICATE OF SOLVENCY UNDER SECTION 1111 OF THE NEW
YORK INSURANCE LAW**

STATE OF NEW YORK

DEPARTMENT OF FINANCIAL SERVICES

It is hereby certified that

Philadelphia Indemnity Insurance Company

Of Bala Cynwyd, Pennsylvania

a corporation organized under the laws of the State of Pennsylvania and duly authorized to transact the business of insurance in this State, is qualified to become surety or guarantor on all bonds, undertakings, recognizances, guaranties and other obligations required or permitted by law; and that the said corporation is possessed of a capital and surplus including gross paid-in and contributed surplus and unassigned funds (surplus) aggregating the sum of \$2,468,560,818 (Capital \$4,500,000) as is shown by its sworn financial statement for the first quarter ending March 31, 2019, on file in this Department, prior to audit.

The said corporation cannot lawfully expose itself to loss on any one risk or hazard to an amount exceeding 10% of its surplus to policyholders, unless it shall be protected in excess of that amount in the manner provided in Section 4118 of the Insurance Law of this State.



In Witness Whereof, I have

unto set my hand and affixed

official seal of this Department
in the City of Albany, this

6th day of June 2019

Linda A. Lacewell
Acting Superintendent

By

Ellen R Buxbaum
Special Deputy Superintendent

**2020 GENERAL REQUIREMENTS CONTRACT
FOR VARIOUS CIVIL/SITE RECONSTRUCTION,
HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND RELATED
SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK
CONTRACT NO. H66302W**

SPECIAL CONDITIONS

1. Referring to Notice of Award, Agreement section, Page 287, Article XXV, 'Contractor's Maintenance/Guarantee' – the provision shall apply except "one year from the date of final acceptance of the Contract." should be read "one year from the date of final acceptance of each Work Order."
2. Variation from Normal Bidding Procedure
 - a) The contract shall terminate upon reaching either, the contract CAP or the time limit of thirty-six (36) months from the contract execution, whichever comes first, unless an extension is granted at the discretion of the Commissioner. The County may grant an extension of time to permit the Contractor to complete open or incomplete Work Orders. However, no additional Work Orders will be issued unless an extension of contract as stated in Article XXVI, Schedule of Requirements, Section A, No. 1.
 - b) The quantities given are based on average weighted units with the exceptions of those items which are on a lump sum basis. All bid prices are to be based upon these average weighted units. The sum total of all the unit prices will determine the low bid; and the subsequent award of this contract.
 - c) The Bidder is further advised that the County may use only one item of work or may use some quantities of all the contract items in each Work Order. Quantities are provided for bid comparison purposes. Actual quantities may be less, more or none.
 - d) All Force Bids are fixed cost items and therefore the Contractor must bid the price as stated for all force bid items.

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**2020 GENERAL REQUIREMENTS CONTRACT
FOR VARIOUS CIVIL/SITERECONSTRUCTION,
HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK**

CONTRACT NO. H66302W

GENERAL NOTES

All work included in this contract shall be in accordance with the following Nassau County Standard Specifications and Drawings, if they apply, or modified and amended in the Contract Specifications and Drawings.

- a) County of Nassau, Department of Public Works, 2009 Standard Specifications for Civil Engineering and Site Development Construction, or latest edition.
- b) County of Nassau, Department of Public Works, Traffic Engineering, Traffic Signal Specifications and Standard Drawings, November 1998 and Addenda, or latest edition.
- c) County of Nassau, Department of Public Works, Latest Standard Specifications and Details for the Construction of Sanitary Sewers 2003 or latest edition.
- d) New York State Department of Transportation Standard Specifications 2008 and Addenda or latest edition.

Note: Compliance with Law

Prohibition of Gifts. In accordance with County Executive Order 2-2018, the Contractor shall not offer, give, or agree to give anything of value to any County employee, agent, consultant, construction manager, or other person or firm representing the County (a "County Representative"), including members of a County Representative's immediate family, in connection with the performance by such County Representative of duties involving transactions with the Contractor on behalf of the County, whether such duties are related to this Agreement or any other County contract to matter. As used herein, "anything of value" shall include, but not be limited to meals, holiday gifts, holiday baskets, gift cards, tickets to golf outings, tickets to sporting events, currency of any kind, or any other gifts, gratuities, favorable opportunities or preferences. For purposes of this subsection, an immediate family member shall include a spouse, child, parent, or sibling. The Contractor shall include the provisions of this subsection in each subcontract entered into under this Agreement.

Disclosure of Conflicts of Interest. In accordance with County Executive Order 2-2018, the Contractor has disclosed as part of its response to the County's Business History Form, or other disclosure form(s), any and all instances where the Contractor employs any spouse, child, or parent of a County employee of the agency or department that contracted or procured the goods and/or services described under this Agreement. The Contractor shall have a continuing obligation, as circumstances arise to update this disclosure throughout the term of this Agreement.

Special Note

When required by the County to provide prices for force account work the contractor shall provide the requested prices including a detailed breakdown of said prices within two (2) weeks of the date of initial receipt of the request.

The intention of this contract is that all emergency repair work shall be done in a responsible and timely manner. Failure to comply with such request will be considered a violation of the contract.

1. The contractor shall provide a work schedule within one (1) week for a scheduled location upon receipt of a work order issued by the Commissioner, unless deemed an emergency by the County at which time the contractor shall be expected to start work as soon as a verbal authorization to proceed is provided by the County. A site location plan or sketch of the work to be done may be provided if deemed necessary by the County. The Contractor shall notify the County 48 hours prior to the start of any work order.
2. The Contractor shall maintain and protect traffic within the limits of and for the duration of the contract (work order) in accordance with the plans and specifications and as directed.
3. Restrictions of Work in Roadway - Perpendicular to the curb line, no more than ten (10) feet of pavement is to be open at any one time. No work will be permitted before 9 AM or after 4PM, Monday through Friday unless written authorization is granted by the County. During these periods and at all times when work is not in progress, all openings in the roadway shall be covered with pinned steel plates or temporary pavement to safely permit traffic to cross over the excavation.
4. The Contractor will be responsible at all times for the safety of the general public, and for the protection of persons who may for any reason enter within the limits of his work.
5. The Contractor shall employ flagmen when deemed necessary by the Engineer and shall erect proper warning signs and necessary barricades to protect the general public and to warn them of changes caused by the progression of his contract. The contractor is responsible for work zone safety as per OSHA requirements.
6. The Contractor shall notify the local police, fire department, school district, utilities and all municipalities within the proximity of the work order limits, prior to the start of work, as to the conditions prevailing on the construction site.
7. The Contractor must provide a safe and uninterrupted two-way traffic over the roads under construction at all times, unless a detour plan is provided and approved by the County.

8. Lighted Barricades, Flashing Warning Lights and Signs

- a) Must be serviced a minimum of twice each week.
- b) Must be checked and maintained by the Contractor each day, including weekends and holidays.
- c) Must be secured or weighted in such a manner as to prevent them from blowing over under windy conditions.
- d) Must be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.

9. No direct payment shall be made for the above items of work, but the cost shall be included in the price bid for Item 102X, Work Zone Traffic Control Day & Item 102Y, Work Zone Traffic Control Night.

10. Conformance to the following notes with respect to the American with Disabilities Act Curb Ramps is required.

- All curb ramps installed shall be in compliance with the ADA, PROWAG, and NCDPW standards.
- Contractor shall verify the placement of all new ramp configurations prior to installation. Contractor must give 48 hours (2 business days) notification for NCDPW approval.
- A NCDPW inspector must be present during the installation of any curb ramp.
- It is recommended that a smart level tool (or equivalent) is used to check the slopes on all form work prior to the placement of concrete.
- NCDPW Civil Engineering Design Unit must be notified in writing of all work done to curb ramps to update the transition plan inventory.

NOTE: The contractor will be required to maintain safe pathways for pedestrians during the entire time the contract is in effect, including all periods of work shutdown. This may involve mowing of grass, removal of snow and ice, and any other interruptions interfering with their safe travel through the construction zone. Failure of the contractor to insure safe pedestrian passage as determined by County staff, or from pedestrian complaints in the work zone will result in a fine of \$500.00 a day. This fine will be deducted from any funds owed the contractor.

11. The Contractor must submit to the Engineer a schedule of work order locations at which he will be working and a tentative schedule of dates that he intends to be at said locations. All work will be done during a normal eight (8) hour day, Monday through Friday. If the Contractor chooses to work beyond the normal work hours, the Contractor will be responsible for reimbursing the County for the

additional cost, including benefits costs, of any County employees and/or County representatives working for the County that work these over time hours.

Note: If work is done under a County declared emergency condition, this provision will not apply.

12. The Contractor will not be allowed to commence more than three (3) work orders at any one time. If the County issues a written declaration of an emergency a fourth work order may be started prior to one of the three in progress work orders being 100% complete. However at no time will more than four Work Orders be in progress.
13. Payment for the work performed under each Work Order, shall be made upon the completion and acceptance by the County. However, final payment will not be made until all punch list work is completed to the satisfaction of the Engineer.
14. Where construction mark-out is performed by County forces, the Contractor shall supply cans of white spray paint, as necessary to permit the mark-out. These cans shall be compatible to the Fox Valley System, "Easy Marker" or equivalent.
15. All weather and temperature requirements specified by the Manufacturers for materials used must be adhered to.
16. Where there are fire hydrants situated along a section of roadway where markers are to be installed, blue double faced markers shall be installed in addition to the normal white and yellow markers in line with the hydrant (as required).
17. No separate cost for mobilization and demobilization will be paid. Cost shall be included in applicable unit price bids.
18. Pavement Restoration
 - a) Stone Base Pavement
 - (1) Longitudinal Openings
 - (a) The pavement over the trench shall be cut back a minimum of 6" on both sides of the trench to insure an even edge.
 - (b) If the remaining longitudinal strip is less than 3 feet on one side, the *total* width of the cutback, trench and side strip must be replaced.
 - (2) Transverse Openings
 - (a) The Pavement over the trench shall be cut back a minimum of 6 inches on both sides of the trench to insure an even edge.
 - (b) Asphalt plant mix, dense base or concrete, shall be used for the replacement of the stone base pavement removed.
 - b) Concrete Base and Finished Concrete Pavement
 - (1) Longitudinal Openings
 - (a) The entire panel width must be removed and replaced. Ends of panel to be saw cut if not at a transverse joint.
 - (b) In no case shall any portion of the existing panel that is less than 6 feet from a transverse joint be left in place.
 - (c) When concrete base panels with macadam overlays are to be removed, the Black Top shall be cut back a minimum of 6 inches onto the adjacent panels to provide a smooth vertical edge on the Black Top.

(2) Transverse Openings

- (a) Transverse openings shall be saw cut 90 degrees to the longitudinal joints.
- (b) Pavement replacement to be a minimum of 2 feet on both sides of the trench, and a total minimum of 6 feet wide.
- (c) In no case shall any portion of the existing panel that is less than 6 feet in length from a transverse joint be left in place.
- (d) Where openings are skewed across the pavement the concrete replacement must be carried straight across each panel and not staggered. No portion of the existing panel that is less than 6 feet from a transverse joint should be left in place.

19. The contractor shall ensure that the "Longitudinal Joints" in the top course correspond with the edges of the proposed traffic lanes, or are located within one (1) foot of the pavement markings. Longitudinal joints in the travel lanes wheel path shall be avoided. The crown of the roadway will *not be relocated for any reason*. Joint arrangements will require approval by the Engineer. The contractor must submit a detailed mat layout three (3) working days prior to any paving operations.
20. Item 36CX in this contract shall be used to fill all joints and cracks greater than one-inch (1") in the existing pavement as outlined in Nassau County Standard Specifications Item 107.
21. Truing and Leveling will only be used when shown on the plans or as directed by the Engineer. The contractor will not be paid for Item 36C unless directed by the Engineer. If this Item is directed to be installed separately other than the top course installation payment will be made under Item 36C, otherwise payment will be made under Item 36D.
22. If ROW at any intersection is not shown in the Construction Plans to mill and repave, paving limits will be the flow line or determined by the Engineer in Charge. Also, the Engineer in charge will determine if a topographic survey must be performed to establish a proper flow line.
23. All work performed under this contract shall be in compliance with Appendix EE, "Equal Employment Opportunities for Minorities and Women". As part of the "Detailed MBE/WBE Utilization Plan" the contractor shall provide documentation that a good faith effort was made to meet the intended goals. Also, all work performed under this contract shall include SDVOB goal of 6% or Good Faith Effort.
24. Procedure to Ensure Worker Safety

Work Zone safety was addressed in the contract documents. In addition, the County and contractor will discuss Work Zone safety issues at the pre-construction meeting. The contractor shall provide a safety plan (including subcontractors). The County Project Manager/Consultant R.E will ensure that the contractor has on site at all times at least one person skilled in safety and health procedures familiar with State and Federal safety and health regulations, whose responsibility it will be to monitor methods and procedures. NCDPW will review and approve prime contractor's Health & Safety plan as per NYSDOT Specification 107-05.

It is the Contractor's responsibility to only have on site for the particular contract those workers who successfully completed the OSHA 10-hour construction safety course, and to have each of the worker's certificates of completion with the project records, available for review by NCDPW.

The Health & Safety Plan must be approved by NCDPW prior to the start of contract work.

The Prime contractor will keep NCDPW informed as to their safety meeting schedule. Include with the schedule (whether it is monthly or weekly etc.) any meeting minutes, as well as sign-in sheets as part of the project file/records.

25. Maintenance of Traffic

- a) Maintenance and protection of traffic will be paid on a per day/night, per work order basis for those days/nights when maintenance and protection of traffic is provided. No work shall commence until all appropriate traffic devices have been placed and functioning.
- b) If in the judgment of the Engineer, traffic is not properly and adequately maintained, no payment will be made to the contractor for those days/nights. The price bid shall include the cost of furnishing all labor, materials, tools and equipment necessary to satisfactorily complete the required work.

Note:

During nighttime operations, the Contractor shall supply portable lights on his equipment and to light up the work area. there will be no additional payment for the increase in cost to supply lights and/or nighttime wage differential.

The Contractor, at his option and at no additional cost may install the pavement marking during night-time hours with prior approval by the Engineer. County pavement marking inspection staff will be provided 3 working days to inspect and approve the pavement marking layout before the permanent installation occurs.

26. Utilities

- a) The Contractor is directed to notify all utilities well in advance of beginning work, to allow them to mark-out their facilities.
- b) The Contractor is directed to notify all privately-owned utilities well in advance of beginning work, to allow them time to adjust their manholes and other castings.
- c) The Contractor will see to it that utility valve boxes and manholes are always readily accessible. The Contractor will not store materials over them, and should it become necessary to cover the valves and manholes with soil, will devise a method for finding them quickly and assist the Utility Company to uncover them. Further, the boxes will be uncovered during non-working hours.
- d) Prior to the award of contract, the Contractor will be required to submit a list, certified by National Grid, of his key personnel who have taken the National Grid Safety Course together with a statement that sufficiently trained personnel will be available on the job site at all times.
- e) Mechanical excavation will not be permitted within two feet (2') on either side of any utility or house service so marked by the utility company. Hand digging will be required to expose the utility pipe. All provisions of 16 NYCRR Part 753 shall apply.
- f) Prior to backfilling, a National Grid representative will inspect all gas facilities and any damaged pipe will be repaired by the utility company.
The Contractor's attention is called to existing PSE&G overhead lines. The Contractor is warned to keep all equipment and personnel a minimum of ten feet (10') from any conductor. The Contractor shall fully cooperate with PSE&G and comply with its requirements for safe operations.
- g) The Contractor's attention is called to the fact that there are utilities, both publicly and privately owned, that are within the contract area. The owners of privately-owned utilities may be relocating parts of their existing plants to conform to the new lines and grades of this project. The Contractor shall cooperate with the various agencies carrying out the work, which must be coordinated with the work of this contract.

- h) Existing structures, utilities and facilities, either shown or not shown on the plans, above or below the ground, may not have been located accurately. The Contractor shall determine the locations and elevations of pertinent structures, utilities and facilities, before new installations are started so that there will be no interference with the progression of the work. Any conflict between existing structures, utilities and facilities and the new items of work shall be ascertained by the Contractor prior to commencing any work under the respective items and called to the attention of the Engineer. It is the responsibility of the contractor to protect and maintain utilities or utility structures while working "in proximity". No additional payment will be made for this purpose except for the test holes, Item 122.
 - i) Grades and locations of new installations may be changed by the Engineer, if necessary, to prevent conflict with existing installations. Therefore, the Contractor shall locate, all existing installations accurately, both as to line and grade before new items of work are started.
 - j) If the above procedure is not followed by the Contractor and new work has to be removed and replaced, or there is a delay, all the cost will be borne by the Contractor and the County will only pay for the amount of the items in place at the completion of the work.
 - k) The Contractor shall exercise extreme care in the performance of any operation, in the vicinity of the existing or relocated cable pipelines. No such operations shall take place without proper personnel of PSE&G on hand. All excavation in the immediate vicinity of these lines shall be done by hand, with such application as to ensure that the pipe shall not be punctured or the coating disrupted. In the event that any length of cable pipeline is exposed, it shall be supported and protected to the satisfaction of PSE&G inspection personnel. No blind sheeting shall be driven in the proximity of the existing electric cable pipes before first exposing these cable pipes by hand.
 - l) The Contractor should inspect the utility companies' plans to ascertain the location of the underground work and locations of crossings of sewer and drainage work. The Contractor shall coordinate his work with the work being done by the utility companies. It is anticipated that job meetings will be held at various times to aid in coordination of the work.
 - m) Payment for locating utilities will be made only under Item 122, Test Holes.
27. Protection of Facilities - The Contractor shall protect all new work done under this contract from possible injury for the duration of the Contract. He shall be responsible for the repair or replacement, to the satisfaction of the Engineer, of any material, structure, or property on or adjacent to the site and damaged by him or his employees through the construction and demolition operations up to the time of acceptance by the County.
28. Drainage Installations - The Contractor shall plan his work and progress so that at all times either the new or the existing drainage facilities will function to carry off liquids so that no damage or inconvenience will result.
29. Clean-Up
- a) Prior to final acceptance of the work under this Contract, the Contractor shall clean the pipe, manholes and catch basins where construction was undertaken, of accumulated dirt, sand or other materials which have washed into them. No direct payment shall be made for the aforementioned work; but shall be included in the prices bid for the various items of the Contract.
 - b) The Contractor will be required to restore to original condition all areas, outside the work limits, that are disturbed by him during the life of this contract.

- c) No separate payment will be made for any of this clean-up and restoration work, but the cost thereof shall be included in the unit prices bid for various items.
30. Test Cylinders - The Contractor will provide a place for concrete test cylinders close enough to the work so that the cylinders share the same curing conditions. The Contractor will protect these cylinders for the three days they will be left on the job site.
31. Construction in State of New York Rights of Way
- a) Permits - A permit shall be obtained by the Contractor from the State of New York for all work within State rights of way. He shall pay for all costs of obtaining this permit including costs of State inspection. A copy of said permit shall be forwarded to the County prior to start of work.
 - b) General - Acceptance of all work within State rights of way shall be subject to the inspection and approval of the Regional Director, Region 10, State of New York Department of Transportation.
 - c) Payment - No separate or additional payment will be made for conforming to the various requirements of the State of New York Department of Transportation but the cost thereof will be deemed included in the appropriate Contract Items without regard to differences in materials, thicknesses and types of pavements and methods of construction, temporary construction or maintenance of traffic.
32. Construction in the City of New York Rights of Way
- a) Permits - Shall be obtained by the Contractor from the City of New York for all work within City rights-of-way. He shall pay for all costs of obtaining such permits including costs of City inspection.
 - b) General - Acceptance of all work within City rights of way shall be subject to the inspection and approval of the Transportation Administration Administrator, Office of Construction Coordination, 40 Worth Street, New York, N.Y. 10013.
 - c) Payment - No separate or additional payment will be made for conforming to the various requirements of the City of New York Transportation Administration but the cost thereof will be deemed included in the appropriate Contract Items without regard to differences in materials, thickness and types of pavements and methods of construction, temporary construction or maintenance of traffic.
33. The contractor shall supply the following equipment at the start of the project.

MINIMUM SPECIFICATION

Hand Held Infrared Thermometer:

Provide One Fluke Series 63 Infrared Thermometer
Temperature Range 25-999 Degrees Fahrenheit
Distance to Spot 12:1 at Focus Point or approved equal

Holster: Provide One Fluke Infrared Thermometer Holster
Model H6 or approved equal

Calculator: Provide One Construction Master - ProDesktop
Model 44080 or approved equal

Boots: Provide Four Pairs Timberland Pro – Helix Soft
Toe Work Boots or approved equal

At the completion of the Contract, all above referenced equipment shall become the property of Nassau County. The cost of this equipment shall be included in the cost of Item 1M-Mobilization.

34. Contractor shall provide one (1) cell phone under this item, so that County's Engineer may maintain contact with inspection forces. It must be a smart phone (type to be approved by the Engineer) with a minimum 256 GB storage capacity along with a mobile charger and a hard-protective cover. No work may begin until the phone is provided, and service is activated. The smart phone service shall be maintained for the duration of the contract. The phone shall be replaced at no additional cost to the County if damaged or lost, otherwise cease the operation.
35. The Contractor shall supply to the inspection forces one (1) new measuring wheel (Wheel Master DigiRoller Plus 3 Model 6575 or approved equal) At the completion of the contract said wheel and smart level shall remain with or become the property of the County.
36. The contractor when submitting shop drawings for approval must specify the work order number and location that said shop drawings will be used on.
37. Erosion and Sediment Control: The contractor shall assume responsibility for the temporary control of soil and water pollution that could potentially result from construction activities and shall be in accordance with Federal, State and Local regulations, as well as the Contract specifications and directions of the County representatives. All necessary precautions shall be taken to prevent contamination of waters and surrounding areas by slit, sediments, fuels, solvents, lubricants, epoxy coating, wet concrete, concrete leachate, washings from concrete equipment or any other pollutant associated with drilling and construction procedures. Specific reference is made to the New York State Department of Environmental Conservations' "Guidelines for Urban Erosion and Sediment Control", along with any subsequent updates. Associated costs for erosion and sediment control, inspection and maintenance of the same as mentioned above, including any permits required, shall be included in the unit prices for individual items.
38. When ordered, all concrete supplied for Items 26, 27 and 28 will include an admixture such as will assure compressive strength cores of 2500 PSI in 48 hours. The admixture will be added to the concrete at a rate recommended by the supplier. The cost of the admixture will be included under Items 26, 27 & 28.
39. The contractor shall have a full time Supervisor, fluent in English on the project at all times.

40. No Asphalt top course will be allowed to be placed after December 1st (unless approved by the Commissioner and as long as other conditions are met) or if the receiving surface temperature is equal to or below 45 Degrees Fahrenheit, or if the receiving surface is not completely dry for any reason.
41. All layout of traffic pavement markings must be completed immediately after paving and prior to opening the newly paved surface to traffic. The cost of all layout of traffic pavement markings shall be included in the various items of the Contract.
42. The Contractor must contact the Resident Engineer or the Nassau County Project Manager, within 48 to 72 hours prior to final pavement marking placement. On all roadways resurfaced under this contract, epoxy reflectorized pavement markings shall be placed within 3 business days of final paving. A \$1,000.00 per day penalty will be deducted from the various asphalt items after 3 business days until the epoxy is placed.
43. The Contractor must notify the Resident Engineer or Jeff Lindgren of the Nassau County Traffic Management Section prior to any lane closures by calling (516) 571-6998, by email jlindgren@nassaucountyny.gov, or TrafficHelp@nassaucountyny.gov; two (2) of the three (3) forms of contact must be used to ensure contact has been made.
The contractor must submit any lane closure to Nassau County Traffic Management website:
<https://apps.nassaucountyny.gov/trafficmanagement/closureform.php>
44. Any existing traffic signal post, pole, mast arm shaft, or strain pole affected by the installation of handicap ramps or change in grade must be height adjusted to bring the base plate to match new grades, including removing the pole/post and adjusting the anchor nuts, and reinstallation of the pole and equipment. Existing raincap is to be removed and new one installed as per Nassau County traffic signal foundation item specifications. All signal head heights must be checked before any pole height is adjusted so that they continue to meet signal head height requirements.

All traffic signal pushbuttons need to be adjusted in height to be ADA compliant, if affected by the ramp installation which includes changes in grade from existing and meet the Nassau County traffic signal specifications.

All traffic signals shall be placed on recall mode prior to any milling or asphalt paving.

The contractor must notify the Resident Engineer and Sheila M. Dukacz of the Nassau County Traffic Signal Management Section by calling (516) 572-0465, ext. 20958 or by email sdukacz@nassaucountyny.gov prior to any work involving alteration of traffic signal equipment or infrastructure including placing traffic signals within the work area on recall if required and return them to the existing operation once all work is completed. A Nassau County Traffic inspector must be present upon the completion of this work.

The contractor must notify the Resident Engineer or Nassau County Project Manager and coordinate with Nassau County Traffic Signal Management Section all required traffic loop installations.

45. The contractor is to notify all privately owned utilities at least 5 business days before starting work to permit the utility time to adjust their facilities.

46. The contractor will also be required to adjust all municipality owned drains, sewers, and/or water - manholes, surface inlets, and/or meter pits, under Item 16X-Adjusting Manholes, and Water Valves under Item 114 - Adjustment of Water Valve Box Elevations.

The contractor must notify all water districts and/or municipality owned water companies of any water valves that cannot be opened so that they can be adjusted, prior to resurfacing the roadways. Any complaints that the County receives for manholes and/or water valves not raised will be referred to the contractor to rectify at no cost to the County of Nassau.

If any water valve and/or gas valve box tops are milled off, complete replacement of the valve box top section will be required at no cost to the County of Nassau.

47. Under Item 116A a depth of 1" - 2" is required. Any depth greater than 2" and/or as ordered by the Engineer shall be prorated for payment. On a completely milled roadway, temporary 4" wide traffic lines shall be painted directly after the milling has been completed. The cost shall be included in Item 102X or 102Y.
48. Survey Stakeout - Survey work shall be paid for under Survey Stakeout (Item 136S) only when done with prior written approval of the project manager. When the work is completed in less than an 8 hour shift the payment will be prorated for the actual time required. Survey work done to determine the contractors' payment will not be paid for under this item.
49. **Sanitary Sewer Notes**
- a) The Contractor shall notify the Water/Wastewater Engineering a minimum of two (2) working days prior to work involving any sanitary sewer facilities. Notification is to be made by calling (516) 571-6841
 - b) All work shall be in accordance with NCDPW Standard Specifications and Details for the Construction of Sanitary Sewers, latest edition 2003. All work must be performed in the presence of a Nassau County inspector.
 - c) All sanitary sewer house connections and laterals shall be located prior to any excavation by Contractor.
 - d) The Horizontal/Vertical separation of sewer and drainage pipe or water main/services shall meet or exceed the requirements outlined in the RECOMMENDED STANDARDS FOR SEWAGE WORKS (Ten States Standards), latest edition.
 - e) Where sanitary or house connection sewers cross over a drainage trench area, the sewer shall be replaced with Ductile Iron extending a minimum of five (5) feet each side of crossing to undisturbed soil. The same replacement shall apply for sewers under a drainage trench area within twelve (12) inches clearance, bottom of drain to top of sewer.
 - f) All pipes, manholes and appurtenances shall have the County approval stamp thereon or written certification acceptable to the County, before the material can be installed.
 - g) Where it is necessary to raise sanitary sewer manhole castings to grade for repaving, fixed frame castings must be raised either by adjusting the height of the brick masonry or using an approved insert (metal inserts are not permitted). Adjustable frame type manholes may be raised by adding up to a maximum of two, one-inch (1") adjustment rings to achieve final grade.

h)

All non-adjustable Nassau County sewer manhole castings will be replaced with new adjustable manhole castings under Item 34 - Miscellaneous Metals and installed under Item 16X - Altering Brick Manholes. The cost of painting the new adjustable manhole castings with two coats of asphaltum paint shall be included in the various items of the contract.

No inserts are to be used. Manholes must be physically raised, except Adjustable Frame type. No payment will be made for manholes that are not set to proper grade. Where sanitary sewer manholes are of the adjustable frame type, a maximum of two (2) one inch adjustment rings will be allowed to bring casting to finished grade.

The contractor must inspect all Village-owned manhole castings at least one week prior to start of work and should any damaged castings be found to exist, the Contractor shall contact the Village and request a replacement casting to be furnished for the Contractor to install. All work shall be included under Item 16X - Altering Brick Manholes.

i) The Contractor shall comply with all OSHA requirements for entry into a confined space whenever it is necessary for a Contractor's employee to enter a Nassau County sanitary sewer manhole. The minimum requirements the Contractor must comply with are:

- i. Contractor issued "ENTRY PERMIT";
- ii. Confined space entry monitor to test for toxic, explosive and oxygen deficient atmosphere;
- iii. Confined space rescue and retrieval equipment.

The Contractor will not be permitted to work in a Nassau County sanitary sewer manhole, unless he complies with all applicable OSHA requirements.

j) The Minimum/ Maximum height limits for brickwork for new manholes are (4) four inches and (16) sixteen inches, respectively. Adjustments to chimney height to meet the limits shall be by altering the precast manhole barrel. Additional requirements are:

- A. Only concrete brick will be used for brickwork.
- B. The manhole frame is to be set in Portland cement concrete. Brick mortar will not be permitted.
- C. The manhole covers must be at Finished Street Grade. Warping or feathering of the pavement to meet improperly set manholes will not be permitted.
- D. The manholes and covers must be clean and free from all road paving materials and debris prior to painting the castings.

50. **Nassau County Drainage Manholes**

All Nassau County drainage manhole frames and castings raised under Item 16X, shall be replaced with new adjustable two part manhole frame and casting including new cover. No adjustment rings will be allowed in these castings. They should be raised to the proposed roadway grade. Payment for these new frames, covers, and castings shall be made under Item 34 - Miscellaneous Metals. If any debris is found by the contractor's carelessness in raising the drainage manholes it must be cleaned out immediately.

51. The contractor will be required to remove all existing plowable markers prior to the paving operation. Payment for the removal of existing plowable markers will be included in the cost of the various bid items. The voids left from the removal of the plowable markers will immediately be filled with Asphalt Cement, Type 1A, which will be paid for under Item 36D.
52. The contractor will be required to remove the following traffic markings just prior to the paving operations: *crosswalks, arrows, and stop lines*. Payment for removing these traffic markings will be included in the cost under Item 36D. Non paving areas (side streets) traffic pavement markings shall be removed under Item 137.
53. The contractor will be required to handout notices to the local homeowners and businesses affected by the milling and paving operations 24 hours prior to work starting.
The contractor must set up portable variable message signs at the limits of the job site three (3) days prior to the start of milling and/or paving, giving the start dates and work hours. Payment shall be made under Item 102PVMS – Portable Variable Message Sign.
54. When the final yield factor is not within the tolerances specified of the County worksheets for Item 36D, plus the leveling used in Item 36D, maximum payment of asphalt in those items shall be shown below:

Percent over Engineer's Estimate: Maximum Payment

5 to 10 Percent	95 percent of the total asphalt material delivered to the project
11 to 20 Percent	90 percent of the total asphalt material delivered to the project
21 to 25 Percent and Over	85 percent of the total asphalt material delivered to the project

55. GA-GC -Asphalt Quality Control at Asphalt Plants – if ten (10) Nassau County DPW Lab samples fail due to low AC content and/or 15 gradation samples fail, the approved job mix formula, one (1) percent for each infraction of asphalt concrete produced from that plant will be deducted from the total for Item 36DRAR - Rut Avoidance Asphalt Type 1A.
56. The Contractor is required to coordinate his work with Public Agencies and Private Utility companies to avoid conflicts and to arrange for castings and appurtenances which are to be adjusted by others in advance of performing any final pavement overlay work. The contractor is required to obtain approval for limits of proposed pavement milling and overlay work, sidewalk ramp type and layout of proposed pavement markings from a County representative prior to performing any proposed work.

**2020 GENERAL REQUIREMENTS CONTRACT
FOR VARIOUS CIVIL/SITE RECONSTRUCTION,
HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK**

CONTRACT NO. H66302W

SPECIAL PROVISIONS

1. Past History

To assist you in the bid process, we have reviewed the County's recent past history of expenditures for the nature of the work being bid herein. Our records have indicated that an average amount in excess of \$8,000,000.00 worth of work has been accomplished under the past few contracts. It is understood and agreed, however, that this allocated amount may be amended if budgetary allowances in said sums are not voted on and approved by the Nassau County Legislature for the County fiscal years in which said payments are to be made. Be advised that this figure is provided for your guidance only and is not to be interpreted as an indication that any specific dollar amount of work is contemplated through the establishment of the contract being bid at this time.

Addenda Notes and Modification to the Nassau County Specifications

NOTE: Where a standard Nassau County item has been modified for use under this agreement for payment purposes all the provisions of the standard item will apply unless indicated otherwise herein.

**2020 GENERAL REQUIREMENTS CONTRACT FOR
VARIOUS CIVIL/SITE RECONSTRUCTION,
HIGHWAYS, DRAINAGE,
BRIDGES, SITE, PARKING LOT AND
RELATED SPECIALIZED ITEMS
NASSAU COUNTY, NEW YORK**

CONTRACT NO. H66302W

SPECIAL SPECIFICATIONS

The General Construction Payment Item Specifications as per Nassau County Department of Public Works 2009 Standard Specifications and Detail Sheets for Civil Engineering and Site Development Construction – as amended by the current additions and modifications thereto.

NO TEXT ON THIS PAGE

ITEM 1X - CLEARING AND GRUBBING

Please refer to Item No. 1 of the Nassau County Standard Specifications (2009)
(except for C and D).

C. Method of Measurement.

The quantity to be paid for under this item will be the number of square yards of clearing and grubbing provided in accordance with the Plans and Specifications as determined by the Engineer.

D. Basis of Payment.

The price bid per square yard for this item shall include the cost of furnishing all labor, material and equipment necessary to complete the work satisfactorily.

ITEM 4PX - REMOVAL OF EXISTING PIPE

A. Description.

1. Under this Item, the Contractor shall expose, remove and dispose of existing pipe or parts thereof as shown on the Plans and/or directed by the Engineer.

B. Materials and Methods.

1. After the existing pipe has been removed, the resultant excavation shall be backfilled and compacted in accordance with the requirements of Items 3A and 3B - Trench, Culvert and Bridge Excavation as specified herein.

C. Method of Measurement.

1. The quantity to be paid for under this Item shall be the actual number of linear feet of pipe removed and disposed of, regardless of size or type, in accordance with the Specifications, Work Orders and/or as directed by the Engineer.

D. Basis of Payment.

1. The unit price bid per linear foot for this Item shall include the cost of furnishing all labor, materials, tools, equipment and incidentals including excavation, temporary sheeting and bracing and backfill necessary to satisfactorily complete the work.

ITEM 8X – TRIMMING SHOULDERS AND SLOPES

The Standard Specifications for Item 8 shall apply with the following

modifications: **A. Method of Measurement and Payment**

Measurement and payment under this item will be made on a Square Yard basis.

ITEM 12HP - CLEANING EXISTING CULVERTS AND ASSOCIATED STORM DRAINAGE PIPE

A. Description.

Under this Item the Contractor shall clean and maintain existing culverts and associated storm drains piping as indicated on the Plans and/or as directed by the Engineer.

B. Method.

1. All existing culverts and associated storm drains piping shall be cleaned and kept free from obstructions and sediment for the duration of this Project. Upon completion and final acceptance of the Project, these facilities shall be left clean and free-flowing to the satisfaction of the Engineer.
2. The Contractor shall provide necessary protection against damage to the existing culverts and pipes and any damage caused by his operations, in the judgment of the Engineer, shall be repaired at the Contractor's own expense.

C. Method of Measurement.

1. The quantity to be paid for will be the number of linear feet of culverts and associated storm drainage pipe actually cleaned and maintained, measured from the outside of end structures and through intermediate structures.
2. All new pipe installed under this contract are excluded from payment under this item. Cleaning and maintenance of these facilities is provided for elsewhere in the Proposal.

D. Basis of Payment.

1. The price bid per linear foot shall cover the cost of all labor, material and equipment necessary to clean, protect and maintain the drainage system to the satisfaction of the Engineer. This cost includes but is not limited to the proper legal disposal of the excavated material.

**ITEM 12S40-8 – SCHEDULE 40 POLYVINYL CHLORIDE (PVC) SANITARY
SEWER PIPE - 8" Dia.**

Standard Specifications for Item 12S40-6 shall apply except the pipe size will be 8" instead of 6".

DRAINAGE PIPES – ITEMS 12XX

- 12A-4-12 - 12" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-15 - 15" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-18 - 18" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-24 - 24" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-30 - 30" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-36 - 36" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-42 - 42" REINFORCED CONCRETE PIPE, CLASS IV**
- 12A-4-48 - 48" REINFORCED CONCRETE PIPE, CLASS IV**
- 12B-12 - REINFORCED CONCRETE PIPE END SECTION- 12" DIAMETER**
- 12B-15 - REINFORCED CONCRETE PIPE END SECTION-15" DIAMETER**
- 12B-18 - REINFORCED CONCRETE PIPE END SECTION- 18" DIAMETER**
- 12B-24 - REINFORCED CONCRETE PIPE END SECTION- 24" DIAMETER**
- 12B-30 - REINFORCED CONCRETE PIPE END SECTION- 30" DIAMETER**
- 12B-36 - 36" REINFORCED CONCRETE PIPE END SECTIONS**
- 12B-42 - 42" REINFORCED CONCRETE PIPE END SECTIONS**
- 12B-48 - 48" REINFORCED CONCRETE PIPE END SECTIONS**
- 12C-14X23 - 14"X23" REINFORCED ELLIPTICAL CONCRETE PIPE**
- 12C-19X30 - 19"X30" REINFORCED ELLIPTICAL CONCRETE PIPE**
- 12C-22X34 - 22"X34" REINFORCED ELLIPTICAL CONCRETE PIPE**
- 12C-24X38 - 24"X38" REINFORCED ELLIPTICAL CONCRETE PIPE**
- 12C-29X45 - 29"X45" REINFORCED ELLIPTICAL CONCRETE PIPE**
- 12D-12 - PERFORATED REINFORCED CONCRETE PIPE-12" DIAMETER**
- 12D-15 -PERFORATED REINFORCED CONCRETE PIPE-15" DIAMETER**
- 12D-18 -PERFORATED REINFORCED CONCRETE PIPE-18" DIAMETER**
- 12D-24 -PERFORATED REINFORCED CONCRETE PIPE-24" DIAMETER**
- 12D-30 -PERFORATED REINFORCED CONCRETE PIPE-30" DIAMETER**
- 12DIP-12 - DUCTILE IRON CULVERT PIPE-12" DIAMETER**
- 12DIP-14 - DUCTILE IRON CULVERT PIPE-14" DIAMETER**
- 12DIP-16 - DUCTILE IRON CULVERT PIPE-16" DIAMETER**
- 12DIP-18 - DUCTILE IRON CULVERT PIPE-18" DIAMETER**
- 12DIP-24 - DUCTILE IRON CULVERT PIPE-24" DIAMETER**
- 12DIP-30 - DUCTILE IRON CULVERT PIPE-30" DIAMETER**
- 12P-12 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE DRAINAGE PIPE- 12" DIAMETER**
- 12P-15 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE DRAINAGE PIPE- 15" DIAMETER**
- 12P-18 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE DRAINAGE PIPE- 18" DIAMETER**
- 12P-24 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE DRAINAGE PIPE- 24" DIAMETER**
- 12P-36 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE DRAINAGE PIPE- 36" DIAMETER**

A. Description.

All requirements of the above listed items from Nassau County 2009 Standard Specifications shall apply except for change in pipe sizes.

ITEM 13BX-4 – TREATMENT STRUCTURE, 4' DIAMETER

ITEM 13BX-6 – TREATMENT STRUCTURE, 6' DIAMETER

ITEM 13BX-8 – TREATMENT STRUCTURE, 8' DIAMETER

ITEM 13BX-10 – TREATMENT STRUCTURE, 10' DIAMETER

ITEM 13BX-12 – TREATMENT STRUCTURE, 12' DIAMETER

The applicable specifications for Item 13B – Manholes applies with the following modifications and or additions.

A. Description.

1. Under this item the Contractor shall furnish and install storm water treatment structures of the sizes and types at the locations indicated on the construction drawings. The storm water treatment structure and its appurtenances shall be a self-contained system incorporating an induced vortex to separate solids from liquids in the storm water flow. The system shall be self-activating with fluid flow driven by gravity force without the use of mechanical parts or external power requirements.
2. The storm water treatment device must be approved by the New York State Department of Environmental Conservation (NYSDEC). The Contractor shall provide the Engineer with the manufacturer's written certification indicating the structures supplied to the project meet all conditions of and are NYSDEC approved.

B. Materials.

1. The storm water treatment system shall be the "Downstream Defender" as designed by Hydo International, 94 Hutchins Drive, Portland, Maine 04102, 207- 756-6200, Fax 207-756-6212, or approved equal.
 - a. The storm water treatment system shall be supplied by a manufacturer regularly engaged in such work who has furnished similar installation in successful and continuous operation for a minimum period five years.
 - b. Performance data and references shall be made available to the Engineer upon request for use in determining conformance to the storm water treatment system design criteria and performance requirements required in this specification.
2. The treatment structure shall consist of a reinforced precast concrete hollow, cylindrical vessel with internal components.
 - a. The internal components to be supplied shall include the center shaft and cone, dip plate, benching skirt, floatables lid and component support frame. These components shall be composed of polypropylene material. The component support frame members and all metal parts shall be Type 304 stainless steel. All components shall be designed to withstand all normal loadings associated with fabrication, shipping, site installation and normal operation of the equipment. The component support frame shall withstand a live load of 500 lbs.

- b. The hollow cylindrical vessel shall be a precast concrete structure manufactured with 4,000 psi (at 28 days cure time) concrete. The structure shall be steel reinforced for H-20 loading. Shiplap joints to be sealed with one inch butyl rubber sealant. Slab tops shall be suitably reinforced and provided with manhole openings and covers as required. The cast iron manhole frames and covers shall be sized as per the manufacturer's drawings. The masonry fixing bolts shall be Type 304 stainless steel.

C. Submittals. As a minimum and to the satisfaction of the Engineer, the Contractor shall provide the following:

1. General arrangement and dimensional drawings of the storm water treatment system.
2. Plan and profile drawings of the storm water treatment system as part of the storm water drainage system. The profile drawing shall indicate the top of water level both upstream and downstream of the storm water treatment system at the design flow conditions.
3. Handling, storage and installations instructions.
4. Operation and maintenance instructions.

D. Equipment Performance, Design Criteria and Installation.

1. The storm water treatment unit shall adhere to the hydraulic parameters listed below and provide the efficiencies and storage capacities as follows.
2. Performance objectives — the treatment chamber must be capable for treating a maximum flow at least equal to the peak treatment flow listed below:

a. Item 13BX-4 — 4' Diameter Treatment Structure

- | | |
|---|-------------------|
| 1) Peak treatment flow | 3 cubic feet/sec. |
| 2) Vessel diameter | 4 feet |
| 3) Maximum inlet pipe diameter | 12 inches |
| 4) Maximum overflow pipe diameter | 12 inches |
| 5) Predicted head loss at peak treatment capacity
(head loss as defined as the difference between static water level at the inlet to the "Downstream Defender" to the free water surface in the overflow pipe assuming a free discharge) | 8 inches |
| 6) Sediment storage capacity | 0.70 cubic yards |
| 7) Oil storage capacity | 70 gallons |

b. Item 13BX-6 — 6' Diameter Treatment Structure

- | | |
|-----------------------------------|-------------------|
| 1) Peak treatment flow | 8 cubic feet/sec. |
| 2) Vessel diameter | 6 feet |
| 3) Maximum inlet pipe diameter | 18 inches |
| 4) Maximum overflow pipe diameter | 18 inches |

- 5) Predicted head loss at peak treatment capacity 8 inches
(head loss as defined as the difference between static water level at the inlet to the "Downstream Defender" to the free water surface in the overflow pipe assuming a free discharge)
- 6) Sediment storage capacity 2.10 cubic yards
- 7) Oil storage capacity 230 gallons

c. Item 13BX-8 — 8' Diameter Treatment Structure

- 1) Peak treatment flow 15 cubic feet/sec.
- 2) Vessel diameter 8 feet
- 3) Maximum inlet pipe diameter 24 inches
- 4) Maximum overflow pipe diameter 24 inches
- 5) Predicted head loss at peak treatment capacity 8 inches
(head loss as defined as the difference between static water level at the inlet to the "Downstream Defender" to the free water surface in the overflow pipe assuming a free discharge)
- 6) Sediment storage capacity 4.65 cubic yards
- 7) Oil storage capacity 525 gallons

d. Item 13BX-10 — 10' Diameter Treatment Structure

- 1) Peak treatment flow 25 cubic feet/sec.
- 2) Vessel diameter 10 feet
- 3) Maximum inlet pipe diameter 30 inches
- 4) Maximum overflow pipe diameter 30 inches
- 5) Predicted head loss at peak treatment capacity 10 inches
(head loss as defined as the difference between static water level at the inlet to the "Downstream Defender" to the free water surface in the overflow pipe assuming a free discharge)
- 6) Sediment storage capacity 8.70 cubic yards
- 7) Oil storage capacity 1,050 gallons

e. Item 13BX-12 — 12' Diameter Treatment Structure

- 1) Peak treatment flow 38 cubic feet/sec.
- 2) Vessel diameter 12 feet
- 3) Maximum inlet pipe diameter 36 inches
- 4) Maximum overflow pipe diameter 36 inches
- 5) Predicted head loss at peak treatment capacity 17 inches
(head loss as defined as the difference between static water level at the inlet to the "Downstream Defender" to the free water surface in the overflow pipe assuming a free discharge)
- 6) Sediment storage capacity 14.70 cubic yards
- 7) Oil storage capacity 1,770 gallons

3. The storm water treatment system shall be a hollow cylindrical vessel with internal components and a tangential inlet to induce a vortex flow pattern that will accumulate and store settle-able solids in a sediment storage facility that is isolated from the treatment flow path. The sediment storage facility shall be beneath the vortex chamber to prevent re-entrainment of captured sediment and reduction in treatment capacity.
4. Each storm water treatment unit shall utilize a submerged inlet to prevent the re-entrainment of trapped floating contaminants without raising the water surface inside the tank.
5. The storm water treatment system shall have a floatables trap that is separate from the treated effluent discharge area to prevent re-entrainment of captured floatables during surcharge conditions.
6. The useable sediment and oil storage capacities shall not be less than the volumes listed above. The useable sediment storage capacity shall not cause a reduction in the volume of the treatment chamber capacity. The useable oil storage capacity shall not encroach upon the useable sediment storage capacity.
7. Access cover shall be provided for the sediment and floatable contaminant storage areas to facilitate maintenance.
8. Installation.
 - a. Each treatment structure shall be factory assembled ready for connection to the proposed inlet and outlet drainage pipes.
 - b. The treatment structure shall be installed in its final position in accordance with the requirements of Item 13B and the manufacturer's recommendations.

E. Method of Measurement.

1. The quantity to be paid for under this item will be the number of treatment structures under the respective item numbers designated for the respective structure diameter sizes complete in accordance with the contract documents and orders of the Engineer.

F. Basis of Payment.

1. The unit price bid per each shall include all labor, equipment, materials, and incidentals necessary to satisfactorily complete the work.

ITEM 16XMH - ADJUSTING MANHOLES - EXTENSIONS

A. Description.

1. Under this Item, the Contractor shall furnish and install prefabricated adjustment rings for manholes. The extensions shall elevate and support the manhole covers at the proper grade without the necessity of removing the original manhole casting when the street is resurfaced. On adjustable Nassau County sewer manholes the extensions shall elevate and support the manhole inner frame to the proper grade when the street is resurfaced.

B. Materials.

1. The adjustment rings shall consist of one of the following types unless otherwise approved by the Engineer. Prefabricated adjustment rings for manholes will be accepted on the basis of inspection and approval by the Engineer. At the Contractor's option, he may use one of the following type of adjustment rings:
 - a. Type III - Single height filler ring unit for Nassau County Adjustable Sewer Manhole Frames & Covers, Type III Units: This type ring shall have a minimum width of 3/4" and height as specified for their surfacing, made of steel conforming to AISI C1020 HRS. All joints shall be welded to comply with the standards set forth by the AWS. The ring shall be painted with rust inhibitor paint. The depth of the filler ring shall not exceed three (3") inches.

C. Construction Details.

1. Prior to ordering the adjustment rings the Contractor shall determine the exact diameter of each manhole casting and thickness of each manhole cover so a proper manhole ring is ordered. Prior to the placement of the surface course the Contractor shall install adjustable rings for manholes. The adjustment ring shall be placed so the manhole cover will not protrude above the finished surface of the pavement. When adjustment rings having incremental height adjustment are installed and the increment cannot produce a height which will result in the cover being flush with the pavement surface they shall be installed so the cover is no more than one increment below the finished grade of the pavement.
2. To assure a firm and secure fit with the adjustment ring, the seat of the existing manhole casting shall be free of all foreign material at the time of the installation. The entire assembly shall be set on the seat of the existing manhole casting and the locking bolts shall be tightened evenly, expanding the unit for a tight fit against the existing manhole casting. The manhole cover shall then be set upon the seat of the adjustment ring. All rings shall be protected from displacement caused by traffic maintained on the roadway or equipment used in the paving operation.
3. The Contractor shall have the option of removing and resetting the existing manhole casting to the required grade where shown on the Plans or approved by the Engineer. If the Contractor chooses the above method, all the provisions of the appropriate Item 16 Series shall apply.

- a. Type III - Single height Filler Ring. The standard Nassau County adjustable sewer manhole frame filler ring (one piece), shall have an outside Diameter of 26 1/16". The Contractor shall verify and determine the exact inside diameter of the outer frame so the proper size filler ring can be ordered. Prior to the placement of the surface course, the Contractor shall install the filler ring by removing the inner frame of the manhole and placing the filler ring on the seat of the outer frame.
- b. To assure a firm and secure fit with the Filler Ring, the seat of the outer manhole frame shall be free of all foreign material at the time of the installation. The entire assembly of the manhole inner frame and cover shall be set into the manhole outer frame. All frames and covers shall be protected from displacement caused by traffic maintained on the roadway or equipment used in the paving operation. The new roadway surface shall be reasonably flush with the top of the existing manhole.

D. Method of Measurement.

1. This work shall be measured by the number of prefabricated adjustment rings furnished and installed.

E. Basis of Payment.

1. The unit price bid for each adjustment ring and/or filler ring shall include the cost of all material, labor, and equipment necessary to satisfactorily install the Adjustment Rings and/or Filler Rings. If the Contractor elects to reset the existing casting, the costs of this work and all work involved in the removal and replacement of existing disturbed pavement shall be included in the price bid for the adjustment rings.

ITEM 17A – CLASS A CONCRETE FOR STRUCTURES

Under this item the Contractor will be required to place any or all of the Concrete Items as covered under Item 17A of the Nassau County Standard Specifications (2009)

Under this item the Contractor will be paid under the following schedule on each work order:

Item 17A-A	-	0 CY to 25 CY placed
Item 17A-B	-	26 CY to 50 CY placed
Item 17A-C	-	51 CY to 100 CY placed
Item 17A-D	-	101 CY & over placed

ITEM 17F - CLASS F HIGH EARLY STRENGTH CONCRETE

Under this item the Contractor will be required to place any or all of the Concrete Items as covered under Items 17F of the Nassau County Standard Specifications (2009).

Under this item the Contractor will be paid under the following schedule on each work order:

ITEM 17F-A -	0 CY to 25 CY placed
ITEM 17F-B -	26 CY to 50 CY placed
ITEM 17F-C -	51 CY to 100 CY placed
ITEM 17F-D -	101 CY & over placed

ITEM 17PPCC – PERVIOUS PORTLAND CEMENT CONCRETE

A. DESCRIPTION:

Furnish and place non-reinforced pervious Portland cement concrete in accordance with the plans and specifications. Common applications include, but not limited to, parking lots, shoulders, bicycle paths, sidewalks and driveways.

B. MATERIALS:

Pervious Portland cement concrete shall be manufactured in accordance with the requirements of NYSDOT Standard Specifications, Section 501-2, with the following modifications:

Design a pervious Portland cement concrete mixture as specified in this document. Produce a homogeneous mixture of cement, pozzolan (fly ash or GGBFS), coarse aggregate, set retarding water reducing admixture, water reducing admixture, viscosity modifying admixture (VMA) and water.

Coarse aggregate gradation shall meet the requirements of size 1 or 1A in table 703-4 of the NYSDOT Standard Specifications, Section 703-AGGREGATES. Aggregate/cement ratio shall be in the range of 4:1 to 4.5:1.

Use Type I, II or I/II cement. Cementitious content shall be a minimum of 520 lb/yd³ for size 1 aggregate, and a minimum of 580 lb/yd³ for size 1A aggregate. Water/cementitious ratio shall be in the range of 0.27 – 0.34.

At least one (1) week prior to placement of the test panel, provide the Regional Materials Engineer with the following:

1. List of all materials and source numbers.
2. Proposed mix design batch weights, including design unit weight.
3. Proposed production facility and location.

C. CONSTRUCTION DETAILS:

All the provisions of NYSDOT Standard Specifications, Section 501-3 shall apply with the following modifications:

The Contractor shall provide a minimum of one National Ready Mix Concrete Association (NRMCA) Certified Pervious Concrete Technician at the placement site.

Mix the concrete in approved transit mix trucks. Load trucks to a maximum of 80% of the rated mixer capacity.

Thoroughly wet the entire subbase surface for a minimum of 2 hours immediately prior to placement. Remove all standing water prior to placement.

The NRMCA Certified Technician shall check each truck for uniformity during discharge. Mix water shall be such that the cement paste displays a "wet metallic sheen" without

causing the paste to flow from the aggregate. Additions of water to the mix, as directed by the Certified Technician, shall be followed by 20 mixing revolutions.

The concrete shall be deposited as close to its final position as practicable and such that fresh concrete enters the mass of previously placed concrete. The practice of discharging onto subbase and pulling or shoveling to final placement is not allowed.

Unless otherwise approved by the Engineer in writing, the Contractor shall provide mechanical equipment of either slipform or form riding with a following compactive unit that will provide a minimum of 10 psi vertical force. The pervious concrete pavement will be placed to the required cross section and shall not deviate more than $\pm \frac{1}{4}$ inch in 10 feet from profile grade.

Preferred method of strike off and compaction is the use of a form riding roller screed (i.e. NRMCA "One step method"). If allowed by the Engineer, the NRMCA "two step method" may be employed. If the two step method is used, strike off the concrete to approximately $\frac{3}{8}$ in. to $\frac{3}{4}$ in. above the forms to allow for compaction. After strike off, compact the concrete to the height of the forms. Compaction shall be accomplished by rolling over the concrete with a steel roller, compacting the concrete to the height of the forms. Concrete shall be covered with minimum 6 mil plastic prior to rolling to prevent aggregate pull outs. Compaction shall be completed within 15 minutes of placement. Edges near forms shall be compacted using a 1 ft. by 1 ft. steel tamp, a float, or other similar device to prevent raveling of the edges. If vibration, internal or surface applied, is used, it shall be shut immediately when forward progress is halted for any reason.

After mechanical or other approved strike-off and compaction operation, no other finishing operation will be allowed.

The Contractor will be restricted to pavement placement widths of a maximum of fifteen (15') feet unless the Contractor can demonstrate competence to provide pavement placement widths greater than the maximum specified, to the satisfaction of the Engineer.

Curing procedures shall begin within 15 minutes after placement. The pavement surface shall be covered with polyethylene curing covers meeting NYSDOT Standard Specifications, Section 711-04, or other pre-approved covering material. Overlap curing covers a minimum of 18 inches. Prior to covering, a fog or light mist shall be sprayed above the surface. The cover shall overlap all exposed edges and shall be fully secured throughout the curing period (without using dirt) to prevent dislocation due to winds or adjacent traffic conditions. The polyethylene covering shall remain on the surface for the full duration of the cure time. Supply form insulating materials when the air temperature is expected to fall below 40°F at any time during the curing period.

Cure Time:

- a. Minimum of 7 days.
- b. No truck traffic shall be allowed for 10 days (no passenger car/light trucks for 7 days).

Jointing: Control (contraction) joints shall be installed at maximum 20-foot intervals. They shall be installed at a depth of least 1/4 the thickness of the pavement. It is recommended that these joints be installed in the plastic concrete with a rolling joint tool. Saw cut joints, if used, should be installed as soon as the pavement has hardened sufficiently to prevent raveling and uncontrolled cracking (normally immediately after curing). Transverse construction joints shall be installed whenever placing is suspended a sufficient length of time that concrete may begin to harden. In order to assure aggregate bond at construction joints, a bonding agent suitable for bonding fresh concrete shall be brushed, rolled, or sprayed on the existing pavement surface edge. Isolation (expansion) joints will not be used except when pavement is abutting slabs or other adjoining structures.

Testing, Inspection, and Acceptance

- I. Test panel(s): At least one week prior to use, the Contractor shall place, joint, and cure a test panel, a minimum of 100 sq. ft. at the required project thickness, designed in-place unit weight, and finish. The test panel will be constructed at a location designated by the Engineer and will remain in place for the duration of the project to be used as a reference for acceptance of the pavement surface.
 1. Satisfactory performance of the test panels will be determined by:
 - i. Void Structure: 15% minimum; 25% maximum as per ASTM C1688.
 - ii. Unit weight (Density): Unit weight shall be within 5 lb/ft³ of the design unit weight as per ASTM C1688.
 - iii. Infiltration Rate: Infiltration rate shall be a minimum of 100 in./hr as per ASTM C1701. Perform this test after 7 day cure.
 - iv. Compacted Thickness: Core the test panel at a minimum of 7 days and determine the compacted thickness as per ASTM C42. Compacted thickness shall be within 1/4" of the specified thickness.
 2. If the test panel does not meet performance criteria, it shall be removed and redone at the Contractor's expense, and the failed test panel disposed of in an appropriate manner.
 3. The test panel will not be incorporated into the work, and will be removed when ordered by the Engineer.
- II. Testing:

During production, the following shall be conducted at the Contractor's expense:

 1. A minimum of one test for each day's placement of pervious concrete in accordance with ASTM C 1688 to verify unit weight and percent void content. Unit weight shall be within 5 lb/ft³ of the design unit weight.
 2. In a slipform paving operation, determine plastic thickness according to NYSDOT Standard Specifications, Section 502- 3.08. Perform this test at the frequency indicated in the NYSDOT Standard Specifications, Section 502-3.08, but at a minimum of twice per day. Fixed form thickness shall be determined by measuring from grade to top of forms prior to paving. Thickness shall be within 1/4" of the specified thickness.

3. Infiltration Rate: Test as per ASTM C1701 after 7 day cure at a minimum of three locations chosen by the Engineer. Infiltration rate shall be a minimum of 100 in./hr.

Should any of these test results fall outside of the specified limits, the concrete shall be removed, replaced, and retested at no additional cost.

IV. METHOD OF MEASUREMENT:

This work will be measured as the number of cubic yards of pervious Portland cement concrete satisfactorily furnished and installed in accordance with the plans, specifications, and orders of the Engineer.

V. BASIS OF PAYMENT:

The unit price bid per cubic yard shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work, including preparing the subbase, saw cutting, and providing a test panel(s), except that any necessary excavation and subbase course will be paid for under their appropriate items.

ITEM 26S - CONCRETE CURB (SPECIAL)

A. Description.

1. Under these Items the Contractor shall cast-in-place concrete curb of various types to match existing and/or conform to those types listed above as shown on the Plans, appropriate Standard Detail Sheets, or as ordered by the Engineer.

B. Materials.

1. The concrete placed under this item for conventionally formed curb shall be Class A, and for machine-formed curb, Class J, and shall conform in all respects to the requirements of PART THREE, SECTION A. The details of concrete materials permitted in this Item are shown in Table 1, "Concrete Mixtures" in Article 2 of Section A. Bar reinforcement shall conform to the requirements of M17.
2. Class F High Early Strength concrete or Class C concrete may be substituted for Class A concrete, if such substitution is approved by the Engineer. Class F concrete shall meet the requirements of Item 17F, and Class C concrete shall meet the requirements of Item 17C. No substitution may be made for Class J concrete.

C. Construction Details.

1. The concrete curb shall be cast in place in sections approximately 20' long and provision made at each joint for expansion of 1/4". Where joint supports are used between curb and reinforced concrete pavement or concrete foundation course, construction joints shall be located at approximately 20' intervals and/or opposite each joint in the pavement. Expansion joints 3/4" in thickness shall be located opposite each pavement expansion joint. Expansion joints 1/2" in thickness shall be installed in the curb at the beginning and end of all curb returns, all sharp curves, at each side of drainage structures or castings, at each side of driveway curb cuts and between curb and sidewalk or other abutting structures.
2. Expansion joint filler shall be pre-molded bituminous material conforming to M32. It shall be cut to fit the cross-section of the curb and shall be accurately installed and firmly secured in position.
3. All forms shall be set true to line and grade and held rigidly in position. They shall be either of metal or of acceptable planed and matched lumber, and shall be of such construction as to allow for inspection for grade and alignment and that will produce a smooth surface on the finished curb.
4. The concrete shall be compacted by means of an approved immersion type, mechanical vibrator of a size and weight sufficient to vibrate the entire concrete mass thoroughly without damaging or misaligning the forms. The vibrator shall be introduced into the concrete at one foot intervals for a period not to exceed two seconds for each immersion. When directed the concrete shall be compacted by working or spading by hand along the faces of the rear and front forms or pavement edge for the full depth. All compacting shall be performed while the concrete is in a plastic state and shall be to such extent as will secure a dense mass with even and uniform surfaces free from aggregate pockets or honeycomb.
5. The back forms shall be left in place at least 24 hours or until the concrete has set sufficiently so that, in the judgment of the Engineer, they can be removed without injury to

the curb. After the concrete has attained its initial set, the face forms shall be removed and the exposed faces of the curb shall be immediately tooled, rubbed down and finished to a smooth, true and uniform surface as directed but no plastering will be permitted. For this work, only skilled finishers shall be employed. All joints shall be retooled for the full depth subsequent to the completion of the facing work.

6. At the Contractor's option, either M34 quilted covers, M34A polyethylene coated burlap blankets, M34B polyethylene curing covers or M34C waterproof paper blankets shall be used in curing concrete curb. Other methods of curing may be used only if so indicated on the Plans, in the Itemized Proposal or permitted in writing by the Engineer.
7. The Contractor shall protect the curb, keep it in true alignment and first class condition until the completion of the contract. Any curb which is damaged at any time previous to the final acceptance of the work or which is unsatisfactory shall be removed and replaced with acceptable curb at the Contractor's own expense.

D. Method of Measurement.

1. The quantity to be paid for under this item will be the number of linear feet of curb placed in accordance with the Plans, Specifications and orders of the Engineer.

E. Basis of Payment.

1. The price bid per linear foot shall include the cost of furnishing all labor, materials and equipment necessary to complete the work satisfactorily, including bar reinforcement and all grading including removal of existing curb unless otherwise shown on the Plans or in the Proposal.
2. Payment will be made at the unit price bid regardless of any approved substitution for the classes of concrete.

ITEM 27MS - CONCRETE MOWING STRIP > 16" - 36" WIDE

The Standard Specifications for Item 27 shall apply with the following modifications:

A. Description.

1. Under this Item the Contractor shall construct a one course cement concrete mower strip with properly prepared sub-grade where and to the lines, grades, and details indicated on the plans in accordance with the specifications and/or orders of the Engineer.
2. The Contractor shall restore six (6") inches of grass area on either side of the mower strip in accordance with Item 368 - Topsoil and Grass Seeding. Payment shall be made under Item 27MS.

B. Method of Measurement.

The quantity to be paid for under this Item shall be the number of linear feet of cement concrete mowing strip measured in place and completed in accordance with the Plans and Specifications.

C. Basis of Payment.

The unit price bid per linear foot for this Item shall include the cost of all labor, materials, tools and incidentals necessary to satisfactorily complete the required work, including but not limited to mowing strip installation and grass area restoration.

ITEM 33X – EPOXY COATED BAR REINFORCEMENT FOR STRUCTURES

A. Description

1. The work under this item shall conform to the applicable requirements of Item 33 - Bar Reinforcement of the Nassau County Standard Specifications, except as modified by the plans and/or by the specifications, as stated herein.

B. Materials

1. Reinforcement.
 - a) This shall meet the requirements of ASTM A615 Grade 60.
2. Epoxy Coating Material.
 - a) The epoxy coating material shall be an organic, powdered epoxy resin that is applied by the electrostatic method. The epoxy coating materials shall be approved by the County.
3. Patching Material.
 - a) Patching or repair materials shall be supplied by the epoxy coating manufacturer. The patching material shall be compatible with the epoxy coating, inert in concrete, and shall be suitable for use in making field repairs.
4. Coating Application.
5. Surface Preparation.
 - a) The surface of bars to be coated shall be blast cleaned in accordance with the Steel Structures Painting Council – Surface Preparation Specifications No. 10 (SSPC-SP10), Near White Blast Cleaning. After blasting, the cleaned surface of the bar shall be defined by SSPC-Vis1, Pictorial Standards ASa 2- 1/2, BSa 2-1/2, or CSa 2-1/2, as applicable.
6. Coating Application.
 - a) The powdered epoxy resin coating shall be electro-statically applied in accordance with the recommendations of the coating manufacturer. The epoxy coating may be applied before or after fabrication of the reinforcing bars.
7. Coating Thickness.
 - a) The epoxy coating shall be applied as a smooth, uniform coat. After curing, the coating thickness shall be 7 plus/minus 2 mils. Coating thickness shall be controlled by taking measurements on a representative number of bars from each production lot. Coating thickness measurements shall be conducted by the method outlined in ASTM G12.
8. Continuity of Coating
 - a) The coating shall be checked visually after cure for continuity. It shall be free from holes, voids, contamination, cracks and damaged areas.
 - b) The coating shall not have more than two holes (pinholes not visible to the naked eye) in any linear foot of the coated bar. A hole detector shall be used, in accordance with

manufacturer's instructions, to check the coating for holes.

9. Coating Cure

- a) The coating applicator shall check each production lot to determine that the entire production lot of coated bars is in a fully-cured condition.

10. Flexibility of Coating

- a) The flexibility of the coating shall be evaluated on a representative number of bars selected from each production lot. The coated bar shall be bent 120 degrees (after rebound) around a 6-inch diameter mandrel. The bend shall be done at a uniform rate and may take up to one minute to complete. The test specimens shall be at the thermal equilibrium between 20 and 30 degrees C (68-85 degrees F) at the time of testing.
- b) No cracking of the coating shall be visible to the naked eye on the outside radius of the bent bar.

11. Plant Inspection

- a) The County reserves the right to have its authorized representative to observe the preparation, coating and testing of the reinforcement bars.
- b) The representative shall have free access to the plant and any work done when access has been denied shall be automatically rejected.

C. Construction Details

1. Shop Repair of Coated Bars

- a) Epoxy coated reinforcement bars which do not meet the requirements for Coating Thickness, Continuity of Coating, Coating Cure or Flexibility of Coating shall not be repaired.
- b) Reinforcement bars with these defects shall be replaced or alternately, stripped of epoxy coating, re-cleaned and recoated in accordance with the requirements of this specification.
- c) Coating breaks due to fabrication and handling shall be repaired with patching material if the defective area is greater than the cross-sectional area of the reinforcement bar. Defects which are smaller than the cross-sectional area need not be repaired.
- d) The repair of coating breaks shall be limited to bars on which the total of the defective coating bar does not exceed 5 percent of the surface area of the reinforcement bar. Bars with greater than 5 percent damage shall be replaced or alternately, stripped of epoxy coating, re-cleaned and recoated in accordance with this specification.

2. Handling

- a) All systems for coated bars shall have padded contact areas for the bars, wherever possible. All building bands shall be padded and all bundles shall be lifted with a strong back, multiple supports or a platform bridge so as to prevent bar to bar abrasion from sags in the bar bundle. The bars or bundles shall not be dropped or dragged.

D. Method of Measurement

The quantity to be paid for under this item is the number of pounds of bar reinforcement exclusive of chairs, fastenings and supports, that is incorporated in the work as shown on the Plans or as ordered by the Engineer. The weight of bar reinforcement will be computed by utilizing the unit weight for each size bar given in the "Table of Standard Weights". If the Engineer allows the substitution of larger bars than have specified, or splices not shown on the Plans or specifically ordered by him, payment will be only for weight of steel which would have been required if the specified size and length of bar had been used.

E. Basis of Payment

The unit price bid, per pound, for this item shall include the cost of furnishing all labor, materials and equipment necessary to complete the work. The cost of furnishing and placing chairs, fastenings and supports shall be included in the unit price bid for this item.

ITEM 35T - TIMBER GUIDE RAIL

A. Description.

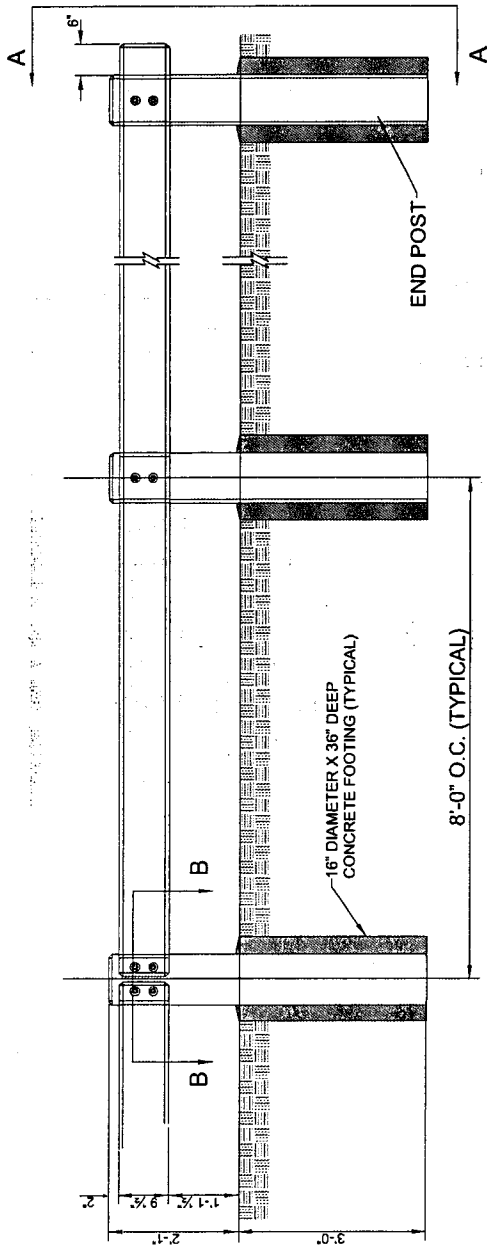
Under this item the Contractor shall furnish and install Timber Guide Rail at the location(s) indicated on the Plans and in accordance with the Specifications and appropriate Standard Detail Sheet and as directed by the Engineer.

B. Materials and Construction Details.

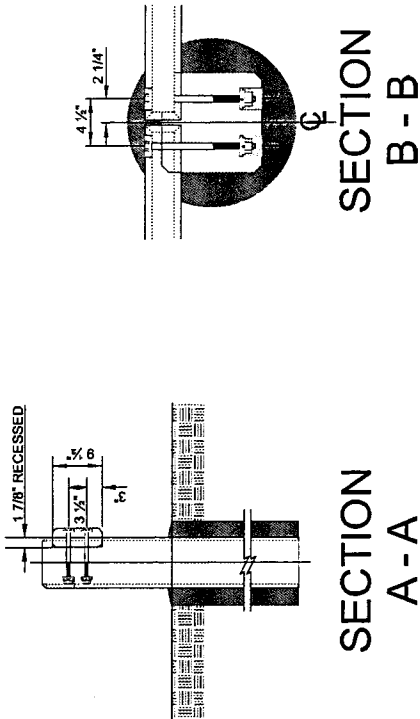
1. Lumber shall be of the size and type shown on the plans. Rails and posts shall be dried after treatment and shall not have over 15% moisture content or not over 19% air-dried. Lumber shall be Southern Yellow Pine No. 1 Dense SR (1500 F) and grade stamped.
2. All lumber shall be straight, smooth and free of splinters. Where exposed, all lumber shall have an eased edge and straight edges.
3. The lumber shall be subject to inspection and approval by the Engineer after arrival on the site.
4. All lumber used shall be treated with ACQ - Ammoniacal Copper Quaternary produced in accordance with ACQ Preserve Standard ACQ 01-02 and the appropriate AWWA Standard (Category UC1, UC2, UC3A, UC3B, UC4A, UC4B, U1 AND T1). The ACQ retention rate shall be a minimum of 0.60 lbs/cf.
5. Concrete for footings shall conform to Class A concrete 1-2-4 mix as specified in Item 17A, but payment shall be made under this item. Footings shall be cast rough in the ground and pitched above grade to shed water. The cost of excavation and backfilling for footings shall be paid for under this item.
6. The Contractor shall install the Timber Guide Rail in accordance with the Plans, Specifications and direction of the Engineer.

C. Measurement and Payment.

1. The quantity to be paid for under this item shall be the actual linear feet of Timber Guide Rail furnished and installed as indicated on the Plans, as required by the Specifications or where directed by the Engineer.
2. The unit prices bid for Timber Guide Rail under this item shall include the cost of all labor, tools, materials, equipment and other incidentals required to satisfactorily complete the required work as indicated on the Plans, as required by the Specifications or where directed by the Engineer.



FRONT ELEVATION



TIMBER GUIDE RAIL

POSTS:	SHALL BE 10" x 10" No. 1 COMMON DENSE DOUGLAS FIR OR SOUTHERN YELLOW PINE SET IN 16" DIAMETER X 36" DEEP 3,000 PSI CONCRETE FOOTINGS
RAILS:	SHALL BE 4" x 10" No. 1 COMMON DENSE DOUGLAS FIR OR SOUTHERN YELLOW PINE
BEVELING:	BEVEL ALL EXPOSED SURFACES SHALL BE BEVELED WITH 1" CHAMFERS
COUNTERSINKING:	ALL RAILS AND POSTS SHALL BE COUNTERSUNK WITH 2" DIA. HOLES TO RECEIVE THE ATTACHING BOLT ASSEMBLIES TO PROVIDE FOR A FLUSH INSTALLATION
TREATMENT:	ALL POSTS AND RAILS SHALL BE TREATED WITH ACQ - AMMONIACAL COPPER QUATERNARY PRODUCED IN ACCORDANCE WITH ACQ PRESERVE STANDARD ACQ 01-02 AND THE APPROPRIATE AWPA STANDARD (CATEGORY UC1, UCC2, UC3a, UC3b, UC4a, UC4b, U1 and T1). THE ACQ RETENTION RATE SHALL BE A MINIMUM OF 0.40 LBS/CF.
HARDWARE:	EACH RAIL SHALL BE FASTENED TO A POST USING THE FOLLOWING HOT DIPPED GALVANIZED STEEL BOLT ASSEMBLY: 1 - 5/8" DIA. x 10" LONG BOLT WITH HEX HEAD AND NUT, 2 - 2" x 5/32" FLAT WASHERS & 1 - 13/64" LOCK WASHER
BOLTING:	TWO BOLT ASSEMBLIES ARE REQUIRED AT EACH POST, EXCEPT THAT FOUR BOLT ASSEMBLIES

SCALE: 1/2"= 1'-0"

DATE: 10/27/09

NASSAU COUNTY

**ITEM 36CX – ASPHALT CONCRETE TRUING AND LEVELING COURSE TYPE 1A
(FOR CRACKS IN ASPHALT PAVEMENT)**

All provisions of Item 36C, "Asphalt Concrete Truing and Leveling Course Type 1A" shall apply with the following modifications and/or additions:

A. Description

This item will be utilized to fill all joints and cracks greater than one-inch (1") in the existing pavement, as outlined in Item 107, Cleaning, Filling & Sealing Existing Joints & Cracks in Asphalt Pavement.

ITEM 36D – ASPHALT CONCRETE TYPE 1A (Top & Binder)

Under this item the Contractor will be required to place any or all of the Asphalt Items as covered under Items 36D.

Payment under this item will be made under the following payment schedule for each work order:

ITEM 36D-A -	0 Ton to 25 Ton placed
ITEM 36D-B -	26 Ton to 50 Ton placed
ITEM 36D-C -	51 Ton to 100 Ton placed
ITEM 36D-D -	101 Ton & over placed

ITEM 36PAP — PERVIOUS ASPHALT PAVEMENT

PART 1— GENERAL

1.1 DESCRIPTION

A. This section includes the following:

1. Subgrade preparation.
2. Installation of infiltration beds.
3. Porous bituminous base course and paving.
4. Geomembrane and filter fabrics
5. Metal edge and edge stone

1.2 SYSTEM DESCRIPTION

A. Provide porous pavement according to the materials, workmanship, and other applicable requirements of the standard specifications of the state or of authorities having jurisdiction.

1.3 SUBMITTALS

A. Product Data: Submit a list of materials proposed for work under this Section including the name and address of the materials producer and the location from which the materials are to be obtained.

B. Material Certificates: Certificates signed by the materials producer and the paving subcontractor, stating that materials meet or exceed the specified requirements.

C. Samples:

1. Coarse aggregates for choker course in labeled plastic bag.
2. Coarse aggregate for infiltration bed in labeled plastic bag.
3. Non-woven geotextile 12x12" square.

D. Product Analysis:

1. Sieve analysis for infiltration bed coarse aggregate.
2. Sieve analysis for choker course.
3. Asphalt Mix: The asphalt mixing plant shall certify the aggregate mix. The certification letter from the mixing plant will include the following:
 - a. Abrasion loss factor.
 - b. Polymer additive.
 - c. Binder drain down.
 - d. Tensile strength ratio.
 - e. Resistance to stripping by water.
 - f. Asphalt content in the mix.
4. Polymer Additive: The polymer-modified asphalt supplier shall supply a certification letter before the mix is placed on the project. The certification letter from the supplier will include the following:
 - a. Type of elastomeric polymer used to modify the asphalt.
 - b. Information on the storage and stability of the polymer modified asphalt.

- c. Recommended mixing and compaction temperatures.
- d. A statement saying that the polymer modified asphalt will comply with these specifications.

1.4 QUALITY ASSURANCE

- A. **Installer Qualifications:** Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work in this section.
- B. **Manufacturer Qualifications:** Contractor will engage a firm experienced in manufacturing porous asphalt similar to that indicated for this Project and with a record of successful in-service performance.
 - 1. Firm shall be a registered and approved paving mix manufacturer with authorities having jurisdiction or with the DOT of the state in which the Project is located.
- C. **Pre-installation Conference:** Conduct conference at project site to review methods and procedures related to porous paving including, but not limited to, the following:
 - 1. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture porous asphalt.
 - 2. Review condition of substrate and preparatory work performed by other trades.
 - 3. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.
 - 4. Review and finalize construction schedule for paving and related work. Verify availability of materials, paving Installer's personnel, and equipment required to execute the work without delays.
 - 5. Review inspection and testing requirements, governing regulations, and proposed installation procedures.
 - 6. Review forecasted weather conditions and procedures for coping with unfavorable conditions.
- D. **Field Quality Control:**
 - 1. The full permeability of the pavement surface shall be tested by application of clean water at the rate of at least 5 gpm over the surface, using a hose or other distribution devise. Water used for the test shall be clean, free of suspended solids and deleterious liquids and will be provided at no extra cost to the Owner. All applied water shall infiltrate directly without puddle formation or surface runoff, and shall be observed by the Engineer and Owner.
 - 2. **Testing and Inspection:** Employ at Contractor's expense an inspection firm acceptable to the Engineer and Owner to perform soil inspection services, staking and layout control, and testing and inspection of site grading and pavement work. Inspection and list of tests shall be reviewed and approved in writing by the Engineer prior to starting construction. All test reports must be signed by a licensed Engineer.
 - 3. Test in-place base and surface course for compliance with requirements for thickness and surface smoothness. Repair or remove and replace unacceptable work as directed by the Owner.
 - 4. **Surface Smoothness:** Test finished surface for smoothness and even drainage, using a ten-foot to centerline of paved area. Surface will not be accepted if gaps or ridges exceed 3/16 of an inch.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in clean, dry, protected location and within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.6 PROJECT CONDITIONS

A. Protection of Existing Improvements:

- 1. Protect adjacent work from splashing of paving materials. Remove all stains from exposed surfaces of paving, structures, and grounds. Remove all waste and spillage.
- 2. Do not damage or disturb existing improvements or vegetation. Provide suitable protection where required before starting work and maintain protection throughout the course of the work.
- 3. Restore damaged improvements, including existing paving on or adjacent to the site that has been damaged as a result of construction work, to their original condition or repair as directed to the satisfaction of the Owner, and authority having jurisdiction at no additional cost.

B. Environmental Limitations: Do not apply asphalt materials if substrate is wet or excessively damp or if the following conditions are not met:

- 1. Porous bituminous paving mixtures: Minimum ambient temperature is 55 degrees Fahrenheit.
- 2. Pavement Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient temperature of 40 degrees F for oil-based materials, 50 degrees F for water-based materials, and not exceeding 95 degrees F.

1.7 REFERENCES

- A. Annual Book of ASTM Standards, 1997 or latest edition; American Society for Testing and Materials, Philadelphia, PA.
- B. Standard Specifications, latest edition; New York State Department of Transportation.
- C. Standards of the American Association of State Highway and Transportation Officials (AASHTO), 1998 or latest edition.

PART 2-PRODUCTS

2.1 MATERIALS

A. Coarse Aggregate for Infiltration Beds:

- 1. All aggregates within infiltration beds shall meet the following:
 - a. Maximum Wash Loss of 0.5%.
 - b. Minimum Durability Index of 35.
 - c. Maximum Abrasion of 10% for 100 revolutions and maximum of 50% for 500 revolutions.

2. Unless otherwise approved by the Engineer, coarse aggregate for the groundwater infiltration beds shall be crushed, washed, uniformly graded stone clean and free of fines with the following

U.S. Standard Sieve Size	Percent Passing
2-1/2" (61 mm)	100
2" (50 mm)	90-100
1-1/2" (37.5 mm)	35-70
1" (25 mm)	0-15
1/2" (12.5 mm)	0-5

3. If the above gradation cannot be met, the following gradation (AASHTO size number 5) is acceptable with approval of the Engineer and a minimum void space of 40% after compaction.

U.S. Standard Sieve Size	Percent Passing
1-1/2" (37.5 mm)	100
1" (25 mm)	90-100
3/4" (19. mm)	20-55
1/2" (12.5 mm)	0-10
3/8" (9.5 mm)	0-5

B. Choker Base Course:

1. Aggregate for the choker base course shall be crushed, washed, stone clean and free of fines with the following gradation (AASHTO size number 57):

U.S. Standard Sieve Size	Percent Passing
1-1/2" (37.5 mm)	100
1" (25 mm)	95-100
1/2" (12.5 mm)	25-60
4 (4.75 mm)	0-10
8 (2.36 mm)	0-5

C. Non-woven geotextile shall be Mirafi 160N, or approved equal with the following characteristics:

1. Grab Tensile Strength: 1601bs (0.71 kN); ASTM D 4632,
2. Tear Strength: 60 lbs (0.27 kN); ASTM D 4533.
3. Puncture Resistance: 95 lbs (0.42 kN); ASTM D 4833.
4. Water Flow Rate: 110 gpm per sq. ft. (4477 Us per sq. m); ASTM D 4491.
5. Apparent Opening Size: 70 US Sieve size (0.212 mm); ASTM D 4751.
 - a. Permittivity 1.4 sec-1; ASTM 4491

D. Porous Bituminous Asphalt:

1. Bituminous surface course for porous paving shall be two and one-half (2.5) inches thick with a bituminous mix of 5.5% to 6% by weight dry aggregate. In accordance with ASTM D6390, drain down of the binder shall be no greater than 0.3%. If more absorptive aggregates, such as limestone, are used in the mix then the amount of bitumen is to be based

on the testing procedures outlined in the National Asphalt Pavement Association's Information Series 131 - "Porous Asphalt Pavements" (2003) or NYSDOT equivalent.

2. Use neat asphalt binder modified with an elastomeric polymer to produce a binder meeting the requirements of PG 76-22. The elastomeric polymer shall be styrene-butadiene-styrene (SBS), or approved equal, applied at a rate of 3% by total weight of the binder. The composite materials shall be thoroughly blended at the asphalt refinery or terminal prior to being loaded into the transport vehicle. The polymer modified asphalt binder shall be heat and storage stable.
3. Aggregate in the asphalt mix shall be minimum 90% crushed material and have a gradation of:

U.S. Standard Sieve Size	Percent Passing
1/2" (12.5 mm)	100
3/8" (9.5 mm)	92-98
4 (4.75 mm)	32-38
8 (2.36 mm)	12-18
16 (1.18 mm)	7-13
30 (600 nth)	0-5
200 (75 Om)	0-3

4. Add hydrated lime at a dosage rate of 1.0% by weight of the total dry aggregate to mixes containing granite. Hydrated lime shall meet the requirements of ASTM C 977. The additive must be able to prevent the separation of the asphalt binder from the aggregate and achieve a required tensile strength ratio (TSR) of at least 80% on the asphalt mix.

The asphaltic mix shall be tested for its resistance to stripping by water in accordance with ASTM D-3625. If the estimated coating area is not above 95 percent, anti-stripping agents shall be added to the asphalt.

- E. Metal Edge — 1/4" x 5" commercial grade stainless steel metal edge with anchor stake 32" on center.
- F. Geomembrane — 30 mil HDPE
- G. Edge Stone — shall be #2 washed gravel — 3/4" to 1/2" stone size.

PART 3 — EXECUTION

3.1 INSTALLATION

A. Infiltration Beds:

1. Owner shall be notified at least 24 hours prior to all infiltration bed and porous paving work.
2. Subgrade Preparation:
 - a. The subgrade bed bottom shall be benched and back pitched in accordance with the plan details.
 - b. Existing subgrade under bed areas shall NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
 - c. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material shall be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a york rake or equivalent and light tractor.

- d. Bring subgrade of stone infiltration bed to line, grade, and elevations indicated. Fill and lightly regrade any areas damaged by erosion, ponding, or traffic compaction before the placing of stone.
 - e. Install geomembrane where pervious pavement will abut standard asphalt pavements
3. Infiltration Bed Installation:
- a. Upon completion of subgrade work, the Engineer shall be notified and shall inspect at his/her discretion before proceeding with infiltration bed installation.
 - b. Geotextile and infiltration bed aggregate shall be placed immediately after approval of subgrade preparation. Any accumulation of debris or sediment which has taken place after approval of subgrade shall be removed prior to installation of geotextile at no extra cost to the Owner.
 - c. Place geotextile in accordance with manufacturer's standards and recommendations. Adjacent strips of geotextile shall overlap a minimum of sixteen inches (16"). Secure geotextile at least four feet (45 outside of bed and take steps necessary to prevent runoff or sediment from entering the storage bed.
 - d. Install coarse aggregate in 8-inch maximum lifts. Lightly compact each layer with equipment, keeping equipment movement over storage bed subgrades to a minimum. Install aggregate to grades indicated on the drawings.
 - e. Install equalizer pipe and observation well. Install equalizer pipe at lowest elevation of lowest bench. Observation well location shall be determined in the field and cap shall be set flush with finished grade.
 - f. Install choker base course (see Materials section) aggregate evenly over surface of stone bed, sufficient to allow placement of pavement, and notify Engineer for approval. Choker base course shall be sufficient to allow for even placement of asphalt but no thicker than 1-inch in depth.
 - g. Following placement of bed aggregate, the geotextile shall be folded back along all bed edges to protect from sediment washout along bed edges. At least a four-foot edge strip shall be used to protect beds from adjacent bare soil. This edge strip shall remain in place until all bare soils contiguous to beds are stabilized and vegetated. In addition, take any other necessary steps to prevent sediment from washing into beds during site development. When the site is fully stabilized with vegetation, temporary sediment control devices shall be removed.

B. Porous Bituminous Asphalt:

1. Transporting Material:

- a. Transporting of mix to the site shall be in vehicles with smooth, clean dump beds that have been sprayed with a non-petroleum release agent.
- b. The mix shall be covered during transport to control cooling.

2. Porous bituminous asphalt shall not be stored in excess of 90 minutes before placement.

3. Asphalt Placement:

- a. The porous bituminous surface course shall be laid in one lift directly over the storage bed and stone base course to a 2.5-inch finished thickness.
- b. The laying temperature of the bituminous mix shall be between 300 degrees Fahrenheit and 350 degrees Fahrenheit (based on the recommendations of the asphalt supplier).
- c. Installation shall take place when ambient temperatures are 55 degrees Fahrenheit or above, when measured in the shade away from artificial heat.
- d. The use of a remixing material transfer device between the trucks and the paver is highly recommended to eliminate cold lumps in the mix.

- e. The polymer-modified asphalt is difficult to rake. A well-heated screed should be used to minimize the need for raking.
 - f. Compaction of the surface course shall take place when the surface is cool enough to resist a 10-ton roller. One or two passes are required for proper compaction. More rolling could cause a reduction in the surface porosity which is unacceptable.
- 4. After final rolling, no vehicular traffic of any kind shall be permitted on the surface until cooling and hardening has taken place, and in no case within the first 48 hours. Provide barriers as necessary at no extra cost to the Owner to prevent vehicular use; remove at the discretion of the Engineer. Work shall be done expertly throughout, without staining or injury to other work.
 - 5. Transition to adjacent pavements shall be merged neatly with flush, clean line. Contractor shall install edge gravel where shown on the plans. Metal edging shall be used where indicated on the plans. Metal edge and gravel shall be flush with top of asphalt to allow excess flow to run into swale. Finished paving shall be even, without pockets, and graded to elevations shown on drawing.
 - 6. Porous pavement beds shall not be used for equipment or materials storage during construction, and under no circumstances shall vehicles be allowed to deposit soil on paved porous surfaces.
 - 7. Repair of Damaged Paving:
 - a. Any existing paving on or adjacent to the site that has been damaged as a result of construction work shall be repaired to the satisfaction of the Owner without additional cost to the Owner.
 - 8. Grade Control:
 - a. Establish and maintain required lines and elevations. The Engineer shall be notified for review and approval of final stake lines for the work before construction work is to begin. Finished surfaces shall be true to grade and even, free of roller marks and free of low spots to form puddles. All areas must drain.
 - b. If, in the opinion of the Owner, based upon reports of the testing service and inspection, the quality of the work is below the standards which have been specified, additional work and testing will be required until satisfactory results are obtained.

PART 4 - MEASUREMENT

- 4 Method of Measurement. The quantity to be paid for under this item shall be the number of square yards of pervious asphalt installed complete, measured in place, acceptably completed in accordance with the Plans and Specifications.

PART 5 - PAYMENT

- 5 Basis of Payment. The unit price bid for this item shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the entire work including subgrade preparation, fine grading, infiltration beds, porous bituminous paving, geotextiles, geomembrane, metal edge and edge stone in accordance with the Plans and Specifications.

ITEM 37C- BRICK PAVERS ON CEMENT CONCRETE SETTING BED

A. Description.

1. Under this Item the Contractor shall furnish and install brick paving on cement concrete setting bed, in accordance with the Plans, Specifications and directions of the Engineer.

B. Materials.

1. All materials and methods of construction shall conform to the applicable sections of PARTS TWO AND THREE of these Specifications and as modified and further specified in the following paragraphs.
2. Brick Pavers.
 - a. All materials and methods of construction shall conform to the applicable sections of the Standard Specifications, and as modified and further specified herein.
 - b. The new paving stones shall be a Nicolock Pavers or approved equal. The stones are to be 2 3/8" thick, with the sizes as shown on the plans and/or as ordered by the Engineer. They are to be manufactured from extruded fireclay or shale and shall be fired to produce a dense paver with an average absorption of less than 4% (in a 24-hour cold water absorption test). They shall have an average compressive strength of not less than 10,500 pounds per square inch for any five pavers tested. The pavers must be capable of withstanding at least the equivalent of 1,200 cycles of freeze-thaw conditions. The permissible tolerance for individual pavers shall conform to ASTM Designation C 902-79a.
3. Sand Leveling Bed.
 - a. Sand for the leveling course shall be sound, sharp, washed, natural sand or crushed stone complying with gradation requirements of ASTM C 33 for fine aggregate.
4. Cement Concrete Setting Bed for Brick Paver.
 - a. Concrete shall conform to the requirements specified for Item 27 - Cement Concrete Sidewalk, but will be paid for under the cost of this Item.
5. Construction Details.
 - a. A concrete slab shall be laid in one course, 3 inches thick, or as shown on the Plans. The concrete shall be worked and floated so as to produce a rough broom finish with a uniform surface. Two (2") inch long expansion/drainage joints shall be placed at twenty (20') foot intervals to the full depth and width of the concrete slab and filled with 1/4" pea gravel. Twenty-four (24") inch wide geotextile shall be placed over this joint, between the pea gravel and sand layer.
 - b. Twenty-four (24") inch wide geotextile shall be installed between the concrete base and sand layer from 1" below the top of the back face of curb.

- c. A sand Leveling Course shall be constructed with a minimum thickness of one half ($\frac{1}{2}$ ") inch with a maximum thickness of one (1") inch. Brick pavers shall be installed hand tight, being careful not to disturb leveling base.
- d. In areas where the pavers are not bordered by curb or sidewalk, an edge restraint shall be installed for confinement. The paver edge will conform to the requirements of Item 179D – Aluminum Paver Edge, with cost included under the item 37C.
- e. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500-to 5000 lbf compaction force at 80 to 90 Hz. Perform at least three passes across paving with vibrator.
- f. Grout: After setting brick, the voids are to be swept full of cement with color additive dry grout.
- g. Samples. The Contractor will be required to submit four samples of the brick before starting work for approval by the Engineer. Samples shall be labeled with the name of the contract, title, and number, contractor, manufacturer and grade. The samples shall show the full range in color, texture and other physical qualities. Bricks used on the work shall conform to the approved samples. The brick shall be a high quality paving brick which shall be free from blisters, spalls, clinkers, and other defects.
- h. Brick Patterns .The Contractor shall submit shop drawings showing proposed brick patterns for the Engineer's approval.

C. Method of Measurement.

- 1. The quantity of pavers to be paid for will be the total number of square feet of paved surface furnished and installed in accordance with the plans, specifications and directions of the Engineer.

D. Basis of Payment.

- 1. The unit price bid per square foot of brick paving shall include the cost of furnishing all labor, materials, and equipment, including excavation, backfilling, final grading, cement concrete setting bed, sand, brick pavers, pavers edge and all incidentals necessary to complete the work.

ITEM 40RP - RELOCATING TRAFFIC SIGNS

The Standard Specifications for Item 27 shall apply with the following modifications:

A. Description.

1. This work shall consist of furnishing labor, materials, equipment and appliances necessary to perform and complete all work involved in relocating, in kind, an existing sign in accordance with the plans, specifications and as directed by the Engineer.

B. Materials.

1. The contractor may reuse as many of the original components as possible and as approved by the Engineer. If it becomes necessary to supply new components, they shall be of equal quality to the original components.
2. Concrete for footings, when required, shall be in accordance with the requirements of NCDPW Specifications Section A, "Portland Cement Concrete, General Specifications" and shall be Class "A" Concrete

C. Construction Details

1. The Contractor shall inspect the sign to be relocated to determine the materials, equipment and appliances necessary to effect the relocation. The Contractor shall submit shop drawings for approval, showing all dimensions, details of construction, design criteria and relationship to adjoining work, where same requires cutting and fitting, and other work required for a complete relocation. Use an accredited erection crew experienced in erecting signs.
2. Protect materials during relocation to preclude any damage. The Contractor shall replace, at his own expense, any components damaged during relocation.
3. Electrical connections, when required, shall be under the direction of a licensed electrician and in accordance with the current electrical codes.
4. Existing concrete sign footings shall be cut to a depth of 18 inches below the existing ground and covered with suitable material, or as directed by the Engineer.
5. Any areas, site elements or services disturbed during the relocation process shall be restored to their original condition.

D. Method of Measurement

1. Payment will be made for EACH sign relocated in accordance with these specifications and the orders of the Engineer.

E. Basis of Payment.

1. The unit price bid each for this Item shall include the cost of all labor, materials, tools and incidentals necessary to satisfactorily complete the required work.

ITEM 60A - ADJUST WATER SERVICE BOX ELEVATIONS

A. Description.

1. Under this Item the Contractor shall raise or lower the grade of the existing water service boxes that are necessitated by a change in grade between the existing grade and the new street grade at the location(s) indicated on the Plans, as required by the Specifications, or as directed by the Engineer.

B. Materials and Methods.

1. The "General Requirements for Modifications to Existing Water Service Facilities", which is included under Item 59, shall apply in addition to the requirements of this Item.
2. Water service boxes and other appurtenances shall conform to the latest standard practice and to the specifications and standards of the local Water District.

C. Method of Measurement.

1. The quantity to be paid for under this Item shall be the actual number of water service boxes reset to the new grade.

D. Measurement of Payment.

1. The unit price bid for under this Item shall include the cost of all labor, materials, equipment and incidentals necessary to satisfactorily complete the work.

ITEM 60B - RELOCATE CURB COCK AND WATER SERVICE BOXES

A. Description.

1. Under this Item the Contractor shall relocate existing curb cocks and water service boxes and furnish and install new pipe and fittings as required between the water main and the service shutoff that are necessitated by change in line and grade at the location(s) indicated on the Plans, as required by the Specifications, or as directed by the Engineer.

B. Materials and Methods.

1. The "General Requirements for Modifications to Existing Water Service Facilities", which is included under Item 59, shall apply in addition to the requirements of this Item.
2. Curb cocks, water service boxes and other appurtenances shall conform to the latest standard practice and to the specifications and standards of the local Water District having jurisdiction.

C. Method of Measurement.

1. The quantity to be paid for under this Item shall be the actual number of curb cock and water service boxes reset to the new grade.

D. Measurement of Payment.

1. The unit price bid for under this Item shall include the cost of all labor, materials, equipment and incidentals necessary to satisfactorily complete the work.

ITEM 63A - ADJUST SANITARY SEWER CLEANOUTS

A. Description.

1. Under this Item the Contractor shall raise or lower the grade of existing sanitary sewer cleanouts that are necessitated by a change in grade between the existing grade and the new street grade at the location(s) indicated on the Plans, as required by the Specifications, or as directed by the Engineer.
2. The Contractor shall obtain all required permits, releases and other authorization required from Nassau County.

B. Materials and Methods.

1. The work under this part of this Item shall conform to the requirements of the Nassau County Department of Public Works, Division of Sewers.
2. The Contractor shall obtain all required permits, releases and other authorization required from Nassau County.

C. Method of Measurement.

1. The quantity to be paid for under this Item shall be the actual number of sanitary sewer cleanouts reset to the new grade.

D. Measurement of Payment.

1. The unit price bid for under this Item shall include the cost of all necessary excavation and backfill and the furnishing and installation of all materials necessary to set the clean-out to the new finished grade, all in accordance with requirements of Nassau County.

ITEM 79UP - UNIT PAVERS

A. Description.

1. Work under this Item shall consist of unit pavers at locations shown on the Plans or as directed by the Engineer.

B. Materials.

1. Concrete Bedding.
 - a. Concrete shall conform to the requirements specified for Item 27 - Cement Concrete Sidewalk and be five (5") inches thick.
2. Unit Pavers.
 - a. Solid paving units, ASTM C 936, made from normal-weight aggregates in sizes and shapes indicated. Pavers shall be 4"x 8"x 2.5" HOLLAND PAVING STONE - COLOR RED by Nicolock or approved equal as per specifications. Color shall be full depth.
 - b. The Contractor shall submit two samples of unit pavers for approval as to color, texture, finish and dimensions prior to delivery and installation. After approval, the samples shall be used as a standard for all unit pavers incorporated into the work.
3. Aggregate Setting Bed Materials.
 - a. Sand for leveling course shall be sound, sharp, washed, natural sand or crushed stone complying with gradation requirements of ASTM C 33 for fine aggregate.

C. Construction Details.

1. A concrete slab shall be laid in one course, or as directed by the Engineer, or as shown on the plan. The concrete shall be worked and floated so as to produce a rough broom finish with a uniform surface. Two inch long expansion/drainage joints shall be placed at 20 foot intervals to the full depth and width of the concrete slab and filled with 0.25" pea gravel. A 24 inch wide geotextile shall be placed over this joint, between the pea gravel and sand layer.
2. A 24 inch wide geotextile shall be installed between the concrete base and sand layer from 1" below the top of the back face of curb.
3. A sand Leveling Course shall be constructed with a minimum thickness of 1/2 inch with a maximum thickness of 1 inch. Unit pavers shall be installed hand tight, being careful not to disturb leveling base. In areas where the pavers are not bordered by curb or sidewalk, an edge restraint shall be installed for confinement and shall be 2"x 3"x 7.5ft Rigid Model No. 29285 by Bric-EdgTM or approved equal.
4. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000 lbf compaction force at 80 to 90 Hz. Perform at least three passes across paving with vibrator.
5. GENERAL. Unit pavers area shall be constructed in strict accordance with the lines and grades shown on the Plans or as directed by the Engineer. All work shall be first class and performed by experience tradesmen. All unit pavers shall be free of defects in size, shape

and material. The Contractor shall cut out and remove from the site any unacceptable pavers. Pavers incorporated in the work shall conform to the approved samples in all respects. Pavers requiring cutting shall be cut by approved motor driven saws to neat, straight lines and planes.

D. Method of Measurement.

1. The quantity of unit pavers to be paid for under this item will be the number of square feet of exposed surface measured in its final position.

E. Basis of Payment.

1. The unit price bid per square foot shall include the cost of preparing subgrade, cutting when required, edge restraint and furnishing all labor, materials and equipment and incidentals as necessary to complete the work.
2. The cost of the concrete bedding shall be paid under Item 27 - Cement Concrete Sidewalk.

ITEM 102X – WORK ZONE TRAFFIC CONTROL (Day)

ITEM 102Y – WORK ZONE TRAFFIC CONTROL (Night)

A. Description

The Standard Specifications for Item 102 shall apply with the following modifications:

During night time operations, the contractor shall supply portable lights, on the road and equipment in order to satisfactorily light up the work area A.O.B.E.

B. Method of Measurement and Payment

Measurement and payment under this item will be made on a per day/night Basis.

ITEM 104PA-4X – POLYOLEFIN COATED CHAIN LINK FENCING 4' HIGH
 (TOP & BOTTOM TENSION WIRE)
 ITEM 104PA-6X – POLYOLEFIN COATED CHAIN LINK FENCING 6' HIGH
 (TOP & BOTTOM TENSION WIRE)
 ITEM 104PA-8X – POLYOLEFIN COATED CHAIN LINK FENCING 8' HIGH
 (TOP & BOTTOM TENSION WIRE)
 ITEM 104PA-10X – POLYOLEFIN COATED CHAIN LINK FENCING 10' HIGH
 (TOP & BOTTOM TENSION WIRE)
 ITEM 104PA-12X – POLYOLEFIN COATED CHAIN LINK FENCING 12' HIGH
 (TOP & BOTTOM TENSION WIRE)
 ITEM 104PB-4X – POLYOLEFIN COATED CHAIN LINK FENCING 4' HIGH (TOP
 RAIL & BOTTOM TENSION WIRE)
 ITEM 104PB-6X – POLYOLEFIN COATED CHAIN LINK FENCING 6' HIGH (TOP
 RAIL & BOTTOM TENSION WIRE)
 ITEM 104PB-8X – POLYOLEFIN COATED CHAIN LINK FENCING 8' HIGH (TOP
 RAIL & BOTTOM TENSION WIRE)
 ITEM 104PB-10X – POLYOLEFIN COATED CHAIN LINK FENCING 10' HIGH
 (TOP RAIL & BOTTOM TENSION WIRE)
 ITEM 104PB-12X – POLYOLEFIN COATED CHAIN LINK FENCING 12' HIGH
 (TOP RAIL & BOTTOM TENSION WIRE)
 ITEM 104PC-4X – POLYOLEFIN COATED CHAIN LINK FENCING 4' HIGH
 (TOP & BOTTOM RAILS)
 ITEM 104PC-4-1X – POLYOLEFIN COATED CHAIN LINK FENCING 4' HIGH 1"
 MESH (TOP & BOTTOM RAILS)
 ITEM 104PC-6X – POLYOLEFIN COATED CHAIN LINK FENCING 6' HIGH
 (TOP & BOTTOM RAILS)
 ITEM 104PC-8X – POLYOLEFIN COATED CHAIN LINK FENCING 8' HIGH
 (TOP & BOTTOM RAILS)
 ITEM 104PC-10X – POLYOLEFIN COATED CHAIN LINK FENCING 10' HIGH
 (TOP & BOTTOM RAILS)
 ITEM 104PC-12X – POLYOLEFIN COATED CHAIN LINK FENCING 12' HIGH
 (TOP & BOTTOM RAILS)
 ITEM 104PD-6X – POLYOLEFIN COATED CHAIN LINK FENCING 6' HIGH
 W/CONC CURB

A. Description.

1. All requirements of items 104PA-4 through 104PD-6 shall apply from 2009 Nassau County Standard Specifications except for tie wires spacing. The fabric shall be secured to all corner, gate and terminal posts with stretchers or tension bars fastened to posts and galvanized steel bands at 12 inch intervals with all terminal adjustments completely housed. The fabric shall be fastened to the line posts and braces with tie wires spaced not more than 12 inches on center. It shall be attached to the tension wire by means of 9 gauge polyolefin coated rings spaced at intervals of 2 feet and it shall be attached to the top, mid and bottom rails by means of the tie wires spaced at intervals of 12 inches.

ITEM 104R-4-1 - RENOVATE 4' CHAIN LINK FENCE - 1" MESH

All provisions of Item 104R-4 shall apply except the fabric for fence Item 104R-4-1 shall be one (1") inch mesh.

ITEM 104VCA-4 - VINYL CLAD CHAIN LINK FENCING - 4' HIGH
 ITEM 104VCA-6 - VINYL CLAD CHAIN LINK FENCING - 6' HIGH
 ITEM 104VCA-8 - VINYL CLAD CHAIN LINK FENCING - 8' HIGH
 ITEM 104VCA-10 - VINYL CLAD CHAIN LINK FENCING - 10' HIGH
 ITEM 104VCA-12 - VINYL CLAD CHAIN LINK FENCING - 12' HIGH

A. Description.

1. Under these Items the Contractor shall furnish and erect a fully galvanized steel vinyl clad chain link fence system with top and bottom tension wire where shown on the Plans or directed by the Engineer, in accordance with the Standard or approved Detail Sheet for Type A Fencing and the requirements modified and stated herein.

B. Materials.

1. Posts, Rails, Braces and Fittings.

- a. **Class A, Schedule 40 Pipe.** Posts, rails and braces shall be standard full weight Schedule 40 Pipe having a minimum yield strength of 30,000 psi, manufactured in accordance with ASTM F 1083, except that the protective coating system shall be as specified herein.
- b. **Class B, Steel Tubing.** Posts, rails and braces shall be manufactured by one of the following methods with the steel conforming to ASTM A569M or ASTM A607 with a minimum yield strength of 50,000 psi:
 - 1) Furnace butt welded, continuous welded
 - 2) Cold rolled and electric resistance welded
 - a) Seamless
- c. Posts, rails and braces shall conform to the following standards:

Industry Size	Outside Diameter	Wall Thickness		Weight	
		Class A	Class B	Class A	Class B
Inches	Inches	Inches	Inches	PLF	PLF
1 5/8	1.66	0.14	0.111	2.27	1.82
2	1.90	0.145	0.12	2.72	2.28
2 1/2	2.375	0.154	0.13	3.65	3.12
3	2.875	0.203	0.16	5.79	4.64
3 1/2	3.50	0.216	0.16	7.58	5.71
4	4.00	0.226	0.16	9.11	6.56

- d. **Protective Coating Systems.** Posts, rails and braces shall be coated with a protective coating system conforming to one of the following depending on structural member.
 - 1) **Galvanized Coatings.** Galvanized both inside and out in accordance with ASTM F 1083.
 - 2) **Combined Coatings.**
 - 3) External surfaces shall be coated with the following combined coating system:

- a) Hot Dip Galvanizing. The external surface shall be hot-dip galvanized with "Special High Grade" or "High Grade" slab zinc conforming to ASTM B6. The weight of the coating shall be a minimum 0.80 oz/ft².
- b) Chromate Conversion Coating. Chromate conversion coating shall be specifically designed for use as a pretreatment of galvanized surfaces. The coating shall be applied prior to the application of the thermoplastic acrylic coating at the manufacturer's recommended rate.
- c) Thermoplastic Acrylic Coating. A thermoplastic acrylic coating shall be electrostatically applied with a minimum dry film thickness of 0.3 mils.
- 4) Internal Surfaces. The internal surfaces of the pipe or tubing shall have either a zinc coating and shall have a minimum dry film thickness of 0.3 mils. The rich zinc coating shall contain not less than 80% zinc dust by weight and shall be capable of providing galvanic protection.
- e. **Top Rails.** When specified, 1 5/8" O.D. galvanized steel pipe shall be used for top, mid and bottom rails of the fence. Mid brace rails shall be installed at each corner, intermediate, terminal and gate post.
- f. **Fittings.** Except as otherwise herein specified or shown on the plans, fittings shall be of best quality malleable iron castings, wrought iron forgings or pressed steel, and shall be galvanized in accordance with ASTM Specifications A 123. Malleable iron fittings shall be galvanized in accordance with ASTM A 338.
- g. **Vinyl Coating – When Applicable.**
 - 1) **Material Requirements.** Posts, rails and braces shall comply with the above material requirements and in addition be resin-clad with either an epoxy modified poly (vinyl chloride), or a thermoplastic polyester resin. The coating shall have a minimum thickness of 0.178 mm and shall be of the same color as the fabric.
 - 2) **Fabrication Requirements.** The epoxy modified poly (vinyl chloride) coating shall be chemically bonded to heated pipe or the pipe shall be clad with a heavy molecule, saturated, linear thermoplastic polyester resin applied by electrostatic spray and fusing or equal method.

2. Fabric.

a. Mesh Size, Fabric Gauge and Zinc Coating:

ITEM NO.	FENCE HEIGHT	MESH SIZE	FABRIC GAUGE	MIN. ZINC (OZ/FT ²)
104VCA-4-1	4'	1"	9 (0.148")	0.30
104VCA-4	4'	2"	6 (0.192")	0.40
104VCA-6	6'	2"	6 (0.192")	0.40
104VCA-8	8'	2"	6 (0.192")	0.40
104VCA-10	10'	2"	6 (0.192")	0.40
104VCA-12	12'	2"	6 (0.192")	0.40

- b. **Wire.** The wire shall have a minimum tensile strength of 243,000 psi and be manufactured from galvanized open hearth steel core wire. The mesh shall be helically woven in a chain link diamond pattern of the size specified in the above table or individual work order.
- c. **Zinc-Coating.** The mesh shall conform to ASTM F 668 and the weight of the coating shall be as stated in the above table using the hot-dip process after weaving.
- d. **Selvage.** All selvages shall be knuckled and knuckled unless otherwise specified in the Plans and/or ordered by the Engineer.
- e. **Vinyl Coating in Accordance with ASTM F 668, Class 2b.**
 - 1) The color of the vinyl coating shall be black or green, unless another color is requested by an individual work order.
 - 2) The polymer coating shall be continuously applied over the galvanized wire by the extrusion process and the vinyl coating shall be bound to the steel wire with an adherent to insure a dense and impervious covering free of voids and having a smooth lustrous surface appearance. The wire shall be vinyl clad before weaving and shall be free and flexible at all joints.
 - 3) Colors shall be stabilized and shall withstand a minimum weather-o-meter exposure test of 1,000 hours without visible fading or discoloration.
 - 4) The vinyl covered wire shall withstand an accelerated aging test of a minimum of 1,000 hours at 145°F, without any cracking or peeling and shall exhibit a maximum shrinkage of 1/16 inch per 12 inches. The vinyl clad chain link fabric wire shall withstand a mandrel bend test (10 X o.d. on wire at minus 50°C) without cracking.
 - 5) The vinyl covering shall be capable of withstanding prolonged exposure to dilute solutions of most common mineral acids, seawater, and dilute solutions of most salts and alkali.
- 3. **Tension Wire.** Tension wire shall be marcelled 9 gauge core vinyl coated galvanized wire having a zinc coating of 0.30 oz/ft² and conforming to ASTM F 1664.
- 4. **Tie Wires.** Tie wires shall be 9 gauge core vinyl coated galvanized wire having a zinc coating of 0.30 oz/ft² and conforming to ASTM F 1664.
- 5. The delivery tickets shall be endorsed with the manufacturer's voucher certifying that the materials used in the manufacture of the fencing comply with these specifications. Additional tests maybe required at the discretion of the Engineer.

C. Construction Details.

- 1. Clear and remove from the site all brush, small trees, fallen trees and debris, etc. that interfere with the fence installation where shown on the Plans and when directed by the Engineer. The alignment of the fence may be adjusted at the discretion of the Engineer to avoid the removal of trees. All costs associated with this work will be paid for under Item 1X – Clearing and Grubbing.

2. The Contractor shall do such grading as necessary to provide a minimum clearance of one (1") inch and a maximum clearance of two (2") inches under the fabric. Where crossing a ravine, in order to keep a reasonably smooth top fence line, the Contractor shall weave additional fabric on the bottom to provide this clearance.
3. The Contractor shall dispose of excess earth material on the site where directed and clean up the work area so that it is left in a neat condition.
4. Stretches of fence more than 500 feet in length shall have one intermediate post with braces in two directions for every 500 feet or fraction thereof. A corner post shall be placed at every change in course as the Engineer directs.
5. Post Sizes and Spacing

FENCE HEIGHT	LINE POST SIZE (O.D.)	CORNER, INTERMEDIATE AND TERMINAL POST SIZE (O.D.)	MAXIMUM ON CENTER POST SPACING
4'	2 "	2 ½ "	10'-0"
6'	2 ½ "	3"	10'-0"
8'	2 ½ "	3"	10'-0"
10'	3"	4"	10'-0"
12'	3"	4"	10'-0"

6. Where shown on the Plans or designated by the Engineer, the Contractor shall install fence line posts plumb in concrete footings that are 3'-0" deep by 4 x O.D. inches in diameter. The concrete shall conform to Class A concrete 1-2-4 mix as specified in Item 17A, but payment shall be made under this Item. Footings shall be cast rough in the ground and pitched above grade to shed water. The cost of excavation and backfilling for footings shall also be paid for under this Item.
7. The fabric shall be secured to all corner, gate and terminal posts with tension bars fastened to posts and galvanized steel tension bands at 12 inch intervals. The fabric shall be fastened to the line posts and braces with tie wires spaced not more than 12 inches on center. Fabric shall be stretched to provide a smooth, taut, uniform appearance free from sag.
8. **Tension Wires.** Tension wires shall be stretched along the bottom of the fence where shown and securely fastened to the line posts. The fabric is to be attached to the tension wire by means of 9 gauge core vinyl coated hog rings spaced at intervals of two (2') feet.
9. **Rails.**
 - a. **Top Rail.** When top rail is specified, it shall pass through the base of the line tops to form a continuous brace from end to end of each stretch of fence. Individual rails shall be joined at ends with sleeve couplings and securely fastened to corner, gate and terminal posts by means of brace bands and rail end connectors.

- b. **Mid and Bottom Rails.** When mid and/or bottom rail is specified, it shall terminate at each line post using a boulevard clamp and each corner, gate and terminal post using a brace band and rail end connector or end rail clamp.
 - c. The fabric shall be secured to the rails by means of tie wires spaced at intervals of 12 inches.
10. When concrete curbs or mowing strips are indicated on the Plans, the Contractor shall coordinate the installation of the concrete fence footings and the installation of concrete curbs or mowing strips. If sleeves or core drilling is required, payment shall be made under this Item. Curbs and mower strips shall be paid for under the appropriate contract items.

D. Shop Drawings and Testing.

- 1. Prior to ordering any fencing, the Contractor shall submit to the Engineer for approval, shop drawings of the proposed fence installation showing complete details of material sizes, shapes and heights, proposed methods of fastening and complete details of all hardware to be used.
- 2. A 2' x 2' sample of the fence fabric shall be submitted for purpose of testing, as well as any other material or components deemed necessary by the Engineer.
- 3. Any material ordered by the Contractor prior to obtaining approval and which shall later be found unsatisfactory on the basis of test results shall be replaced to the satisfaction of and at no additional cost to the County.

E. Maintenance of Fencing.

- 1. The Contractor shall maintain the fencing until accepted by the County. All debris accumulation along the fencing shall be removed. Any settlement, movement or misalignment of the fencing shall be corrected by resetting of posts and fabric at the completion of work.
- 2. Where protective coating of vinyl has been fractured or otherwise damaged and its effectiveness to prevent corrosion of the base metal nullified, the affected parts shall be replaced.

F. Method of Measurement.

- 1. The quantity of chain link fence to be paid for shall be the total number of linear feet of each type of fencing measured in final position, furnished, installed and maintained complete, where shown on the Plans or directed by the Engineer, including grading, excavation, footings, painted frame work, disposal of excess earth and clean up.
- 2. An allowance of ten (10') feet will be added for each end post, corner post and pull post installed in accordance with the Plans, Specifications, Standard Sheets and directions of the Engineer.
- 3. Measurement for any material woven on the bottom shall be a conversion of the number of square feet so woven into lineal footage by dividing the square feet by the standard height.

G. Basis of Payment.

1. The unit price bid for this item shall include the cost of furnishing all labor, materials, tools, equipment, Shop Drawings and incidentals necessary to satisfactorily complete the required work.

ITEM 104VCB-4 - VINYL CLAD CHAIN LINK FENCING - 4' HIGH
ITEM 104VCB-6 - VINYL CLAD CHAIN LINK FENCING - 6' HIGH
ITEM 104VCB-8 - VINYL CLAD CHAIN LINK FENCING - 8' HIGH
ITEM 104VCB-10 - VINYL CLAD CHAIN LINK FENCING - 10' HIGH
ITEM 104VCB-12 - VINYL CLAD CHAIN LINK FENCING - 12' HIGH

All requirements of Items 104VCA-4 through 104VCA-12 shall apply, with the following modifications:

A. Description.

1. Under these Items the Contractor shall furnish and erect a fully vinyl clad galvanized steel chain link fence system with top rail and bottom tension wire where shown on the Plans or directed by the Engineer, in accordance with the Standard or approved Detail Sheet for Type B Fencing and the requirements stated herein.

ITEM 104VCC-4 - VINYL CLAD CHAIN LINK FENCING - 4' HIGH
ITEM 104VCC-4 -1 VINYL CLAD CHAIN LINK FENCING - 4' HIGH, 1" MESH
ITEM 104VCC-6 - VINYL CLAD CHAIN LINK FENCING - 6' HIGH
ITEM 104VCC-8 - VINYL CLAD CHAIN LINK FENCING - 8' HIGH
ITEM 104VCC-10 - VINYL CLAD CHAIN LINK FENCING - 10' HIGH
ITEM 104VCC-12 - VINYL CLAD CHAIN LINK FENCING - 12' HIGH

All requirements of Items 104VCA-4 though 104VCA-12 shall apply, with the following modifications:

A. Description.

1. Under these Items the Contractor shall furnish and erect a fully vinyl clad galvanized steel vinyl clad chain link fence system with top and bottom rails where shown on the Plans or directed by the Engineer, in accordance with the Standard or approved Detail Sheet for Type C Fencing and the requirements stated herein.

**ITEM 104VCD-6 - VINYL CLAD CHAIN LINK FENCING WITH CONCRETE CURB -
6' HIGH**

All requirements of Items 104VCA-4 through 104VCA-12 shall apply, with the following modifications:

A. Description.

1. Under this Item the Contractor shall furnish and erect a fully vinyl clad galvanized steel vinyl clad chain link fence system with top and bottom tension wire and continuous concrete curb where shown on the Plans or directed by the Engineer, in accordance with the Standard Detail Sheet for Type A Fencing with Concrete Curb and the requirements stated herein.
2. Particular attention is directed to the specifications for Item 2 - Unclassified Excavation, which requires complete enclosure of proposed storm water storage basin sites prior to starting of any excavation.

B. Materials.

1. **Fabric Anchors.** The fabric anchors shall be "Z" type having a 3/8" diameter and thirteen (13") inch overall length and shall have bent right angles. The anchors shall be embedded in the concrete with the bent end five (5") inches below the finished top of curb.
2. **Selvages.** The fabric shall have a twisted top and knuckled bottom selvage.

C. Construction Details.

1. The Contractor shall install a continuous cement concrete curb along the fence lines as shown on the Standard Detail Sheet for Type A - Fencing With Concrete Curb. The curb section between fence posts shall be 8" wide and 24" deep. At each fence post, the top 3 1/2" of the curb shall be cast between side forms and the remaining portion below shall be cast rough and increased to accommodate the specified cement concrete footing diameter.
2. Expansion joints 1/2" wide shall be provided for the full depth of the section and the exposed concrete surface at the top of the curb shall be finished smooth and true to line and grade as shown on the Standard Detail Sheet or as directed by the Engineer.
3. The bottom of the chain link fabric shall be installed a maximum of two (2") inches above the finish surface and secured to the curb by means of fabric anchors set in the concrete at three foot (3'-4") four inch intervals between posts. After the fence fabric has been installed and secured to the posts, the upper portion of the fabric anchor shall be bent through mesh and clinched to form a tight hook.

D. Method of Measurement.

1. The quantity to be paid for under this Item shall be the total number of linear feet of vinyl clad chain link fencing with concrete curb, measured in final position, furnished and installed complete in accordance with the Plans, Specifications and orders of the Engineer.

E. Basis of Payment.

1. The unit price bid for this item shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including, excavation, fill, concrete, grading, and shop drawings.

ITEM 104XR – MIDDLE RAIL, BRACE RAIL AND BOTTOM RAIL

All requirements of applicable Chain Link Fence Items (104 Series) shall apply, with the following modifications:

A. Description.

1. Under these Items the Contractor shall furnish and install an additional middle rail, brace rail and/or bottom rail where shown on the Plans or directed by the Engineer, in accordance with the Standard Detail Sheets and the requirements stated herein.
2. Middle rail, brace rail and bottom rail shall terminate at each line post using a boulevard clamp and each corner, gate and terminal post using a brace band and rail end connector or end rail clamp.

B. Measurement and Payment

1. The quantity to be paid for under this Item shall be the total number of linear feet of middle rail, brace rail and/or bottom rail measured in final position furnished and installed in accordance with these Specifications.
2. The unit price bid per linear foot for this Item shall include the cost of all labor, tools, materials, equipment and other incidentals.

ITEM 104XSF - REMOVE EXISTING FENCE

A. Description.

1. Under this Item the Contractor shall remove and dispose of the existing fence including the removal and disposal of chain link fence fabric, stockade fence, posts, top-rails, braces, gates, concrete footings, mowing strips, and other appurtenances of the fence.

B. Measurement and Payment.

1. The quantity of removed existing fence to be paid for under this Item shall be the number of square feet of fence which have been removed and disposed of satisfactorily in accordance with the Plans, Specifications and directions of the Engineer.
2. For payment purposes, gates shall be added to the square footage of removed fence.
3. The price bid shall include all labor, materials, equipment and performance of all operations and work necessary to complete the removal of the existing fence and gate.

ITEM 105SFS-6 - 6' STOCKADE FENCE

ITEM 105SFS-8 - 8' STOCKADE FENCE

A. Description.

1. Under this Item, the Contractor shall install a stockade fence as shown on the Plans and or as directed by the Engineer.

B. Materials.

1. All fence materials described herein shall be as manufactured by Master Halco, Inc. 4000 W. Metropolitan Drive, Suite 400 Orange, CA 92868, Phone (800) 229-5615 Fax (714) 385-0107, or approved equal.
2. The wood shall be new cedar, 1" x 3" fence pickets, new cedar 2" x 3" fence rails and new spruce 1" x 4" post covers.
3. The 8' x 3-1/2" x 1-3/4" 11 gauge [0.120" thick galvanized steel posts as shown on the Plans shall be roll formed steel shapes complying with ASTM A 653 having a 50,000 psi yield strength and G90 zinc coating of 0.90 oz/ft² and weigh 2.64 plf with punch thru holes: 13/64" Dia. 1" OC. at both flanges. Galvanizing shall take place individually after drilling to ensure maximum corrosion protection. Posts are to be given a 4 stage "Power Wash" pre-treatment process that cleans and prepares the galvanized surface to assure complete adhesion of the finish coat. All metal are then to be given a polyester resin based power coating applied by the electrostatic spray process, to a thickness 2.5 mils and then baked in a 4500 F metal temperature oven for 20 minutes. Steel Post shall be warranted that they are free from defects in material and workmanship for a period of 15 years from the date of near completion.
4. The 10"/12" diameter 36" deep concrete footings shall be cast rough in the ground around the posts. All concrete footings shall conform to the requirements for Item 17A - Class A Concrete, but the cost will be included under this Item.
5. The 6'/8' stockade fence shall meet a minimum 70 MPH wind load when constructed with posts every 8', with 10"/12" diameter concrete footings set 36" deep in the ground, in reference to 1994 Uniform Building Code for Exposure "B". Any later building code that has been issued since 1994 shall govern.

C. Construction Details.

1. The stockade fence shall be constructed where indicated on the Plans, as shown on the appropriate Standard Detail Sheet. All excavation and backfill shall conform to the requirements of PART III, SECTION D.
2. A hole shall be drilled in firm, undisturbed or compacted soil. Excavation shall be deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. The post bottom shall be set 24" below surface when in firm, undisturbed soil, and concrete placed around the post in a continuous pour.

3. Trowel finishing shall be performed around posts and the concrete surfaces shall be sloped to direct water away from posts.
4. Each post shall be checked for vertical and top alignment, and maintained in position during the placement and finishing operation.
5. Concealment board shall be placed as shown on the appropriate Standard Detail Sheet over installed posts.

D. Method of Measurement.

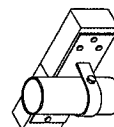
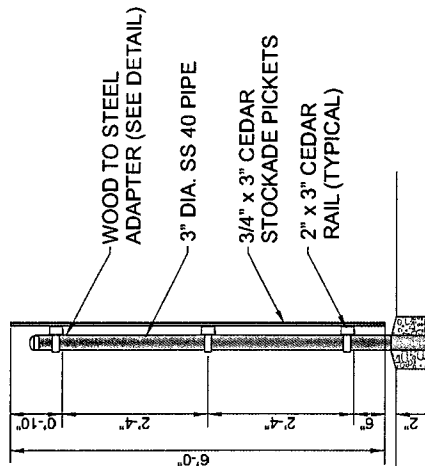
1. The quantity to be paid for under this Item shall be the number of linear feet of 6'8' stockade fence measured in place and accepted in accordance with the Plans and Specifications.

E. Basis of Payment.

1. The bid price per linear foot shall include the cost of all labor, materials, equipment and other incidentals required to complete the work as specified or indicated, including but not limited to stockade fencing, galvanized steel posts, concrete footing, all hardware, post caps, excavation and backfilling.
2. It is not anticipated but possible that loose soils could be encountered when placing footings at some locations which will require footings deeper than 30". There will be no additional payment for this additional work and/or concrete furnishing.

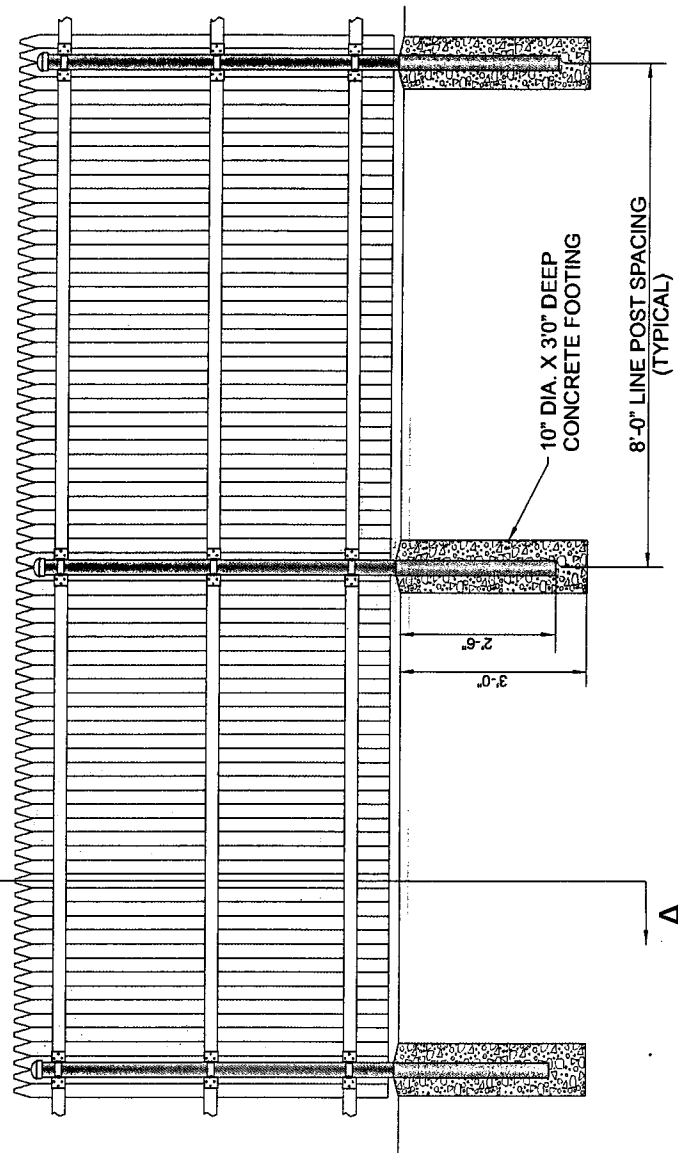
10/27/09

A



DETAIL
NOT TO SCALE

SECTION
A - A



6'-0" HIGH CEDAR STOCKADE FENCE

PANEL MATERIAL:
LINE POSTS:
TOP/MIDDLE/BOTTOM RAILS:
WOOD TO STEEL ADAPTERS:
FITTINGS AND ACCESSORIES:

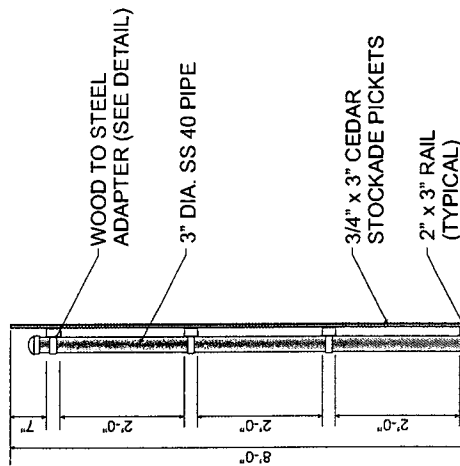
3/4" x 3" No. 1 STK GRADE CEDAR BOARDS
2 7/8" O.D., 4.64 LBS PER LF - SS 40 STEEL PIPE AS MANUFACTURED BY ALLIED TUBE & CONDUIT
SET IN 10" DIAMETER x 36" DEEP 3,000 PSI CONCRETE FOOTINGS AT 8'-0" O.C. AND VARIABLE
2" x 3" No. 1 STK GRADE CEDAR
FASTENED USING 9 - #8 x 1 1/2" EPOXY COATED SCREWS
PRESSED STEEL AND HOT DIPPED GALVANIZED WITH 1.2 OZ. OF
ZINC PER SF IN ACCORDANCE WITH ASTM F626

SCALE: 1/2" = 1'-0"

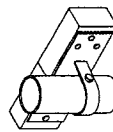
DATE: 10/27/09

NASSAU COUNTY

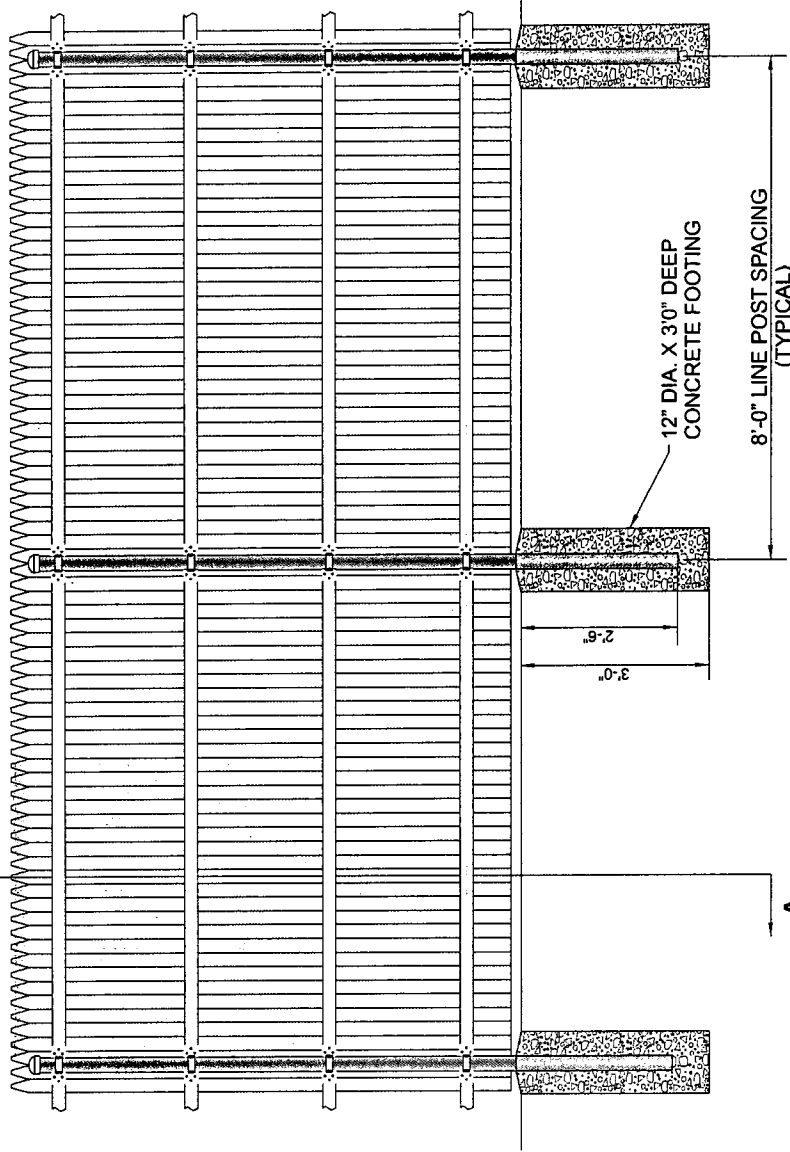
A



SECTION A - A



DETAIL
NOT TO SCALE



8'-0" HIGH CEDAR STOCKADE FENCE

3/4" x 3" No. 1 STK GRADE CEDAR BOARDS
2 7/8" O.D., 4.64 LBS PER LF - SS 40 STEEL PIPE AS MANUFACTURED BY ALLIED TUBE & CONDUIT
SET IN 12" DIAMETER X 36" DEEP 3,000 PSI CONCRETE FOOTINGS AT 8'-0" O.C. AND VARIABLE
2" x 3" No. 1 STK GRADE CEDAR
FASTENED USING 12 - #8 x 1 1/2" EPOXY COATED SCREWS
PRESSED STEEL AND HOT DIPPED GALVANIZED WITH 1.2 OZ. OF
ZINC PER SF IN ACCORDANCE WITH ASTM F626

PANEL MATERIAL:
LINE POSTS:
TOP/MIDDLE/BOTTOM RAILS:
WOOD TO STEEL ADAPTERS:
FITTINGS AND ACCESSORIES:

SCALE: 1/2" = 1'-0"

DATE: 10/27/09

NASSAU COUNTY

ITEM 106P - POST PAINTING

A. Description.

1. Under this Item the Contractor shall paint existing fence post type structures of various diameters, and/or sizes including but not limited to fence posts, basketball backstop posts, bollard posts, etc. The posts to be painted shall be where determined by the Engineer.

B. Materials and Methods.

- C. The specified paints shall be as manufactured by The Sherwin-Williams Co., 6216 34th Ave., Woodside, NY 11377, (718) 426-8813, or approved equal.

D. Painting of Posts shall be painted as follows:

1. Prior to painting, the surface shall be prepared by removing grease, oil, loose paint, rust, dirt and other foreign substances to assure sound bonding of the new paint.
2. Recommended manufacturers drying times before recoating shall be strictly adhered to. Paint adhesion shall be 100% retention in accordance with ASTM D3359, classification SB and shall perform in accordance with ASTM G-53.
3. After the framework has been cleaned and prepared, it shall be painted with a Water Base Urethane System Gloss Finish by Sherwin Williams Company or approved equal with standard colors selected by the Engineer as follows:
 - a. First Coat: Sherwin Williams Pro-Cryl Universal Acrylic Primer B66-310 Series 2.0 - 4.0 mils dry per coat.
 - b. Second and Third Coat: Sherwin Williams Centurion WB Urethane, B65-700 series 2-3 mils dry per coat.
 - c. All paints shall be applied when ambient air temperature is 50°F and rising and surfaces to be painted are moisture free. No painting will be allowed below the minimum ambient air temperature.
 - d. In addition, no painting will be allowed below the temperature at which moisture will condense on surfaces.
 - e. All coats shall be applied evenly. The cost of painting shall be included in the price bid for the contract item for fencing.

E. Method of Measurement.

1. The quantity to be paid for under this Item shall be the adjusted linear feet of posts painted based on the surface area of a 4" O.D. post painted all in accordance with the Plans, the Specifications and orders of the Engineer.

2. The following table provides the relevant multipliers:

SIZE	O.D.	MULTIPLIE
2"	1.90"	0.226
2 1/2"	2.375"	0.353
3"	2.875"	0.517
3 1/2"	3.5"	0.766
4"	4.0"	1.000
6 5/8"	6.625"	2.743
8 5/8"	8.625"	4.649

3. For example, the linear feet to be paid for a 10' long x 8 5/8" O.D. post would be calculated as the Actual Length of the Painted Post (LF) x Multiplier:

$$\text{Payment LF} = 10 \times 4.649 = 46.5 \text{ LF}$$

4. The Payment Multiplier for a flat post would be calculated using its surface area (SF) divided by the surface area of a 4" O.D. post, which is 1.745 SF and multiplied by its length.

F. Basis of Payment.

1. The unit price per each post to be painted shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work.

ITEM 106SVBG - SELF-SWING VEHICLE BARRIER GATES

A. Description.

1. Under this Item the Contractor shall furnish and install double self-swing barrier gates and all necessary accessories as specified herein in accordance with the details shown on the Plans and the requirements of Item 106VBG.
2. Double self-swing barrier gates shall be located as determined by the Engineer.

B. Materials and Workmanship.

1. Gate Posts. Gate posts shall be 4" O.D. Class B, Steel Tubing sleeved over 3 1/2" O.D. Class B Steel Tubing. Class A, Schedule 40 Pipe cannot be sleeved.
 2. Two 1" long x 4" O.D. Class B, Steel Tubing collars shall be welded to the 3 1/2" O.D. Class B Steel Tubing sleeve to:
 - a. Establish adequate ground clearance at the bottom of the frame and
 - b. Lock the 4" O.D. Class B, Steel Tubing pivot pipe onto the 3 1/2" O.D. Class B Steel Tubing sleeve, so that it cannot be easily removed.
 3. Gate Frames. Gate frames and braces shall be 2" Class B, Steel Tubing. All comers shall be securely welded. The frames shall be properly braced to prevent sagging.
 4. Post caps shall be provided for the Gate Post and the exterior vertical gate frames.
 5. A chain shall be welded on each gate frame to provide a means of securing the gate. Gate stops (hold backs) shall be provided.
- C. Footings.** All gate posts shall be set plumb in concrete piers of the depths and sizes shown. The concrete shall be Item 17A, Class A concrete 1-2-4 mix, but payment shall be under this item. Footings shall be cast rough in the ground and pitched above grade to shed water. The costs associated with excavation and backfilling for the footings will be paid for under this Item.

D. Shop Drawings and Testing.

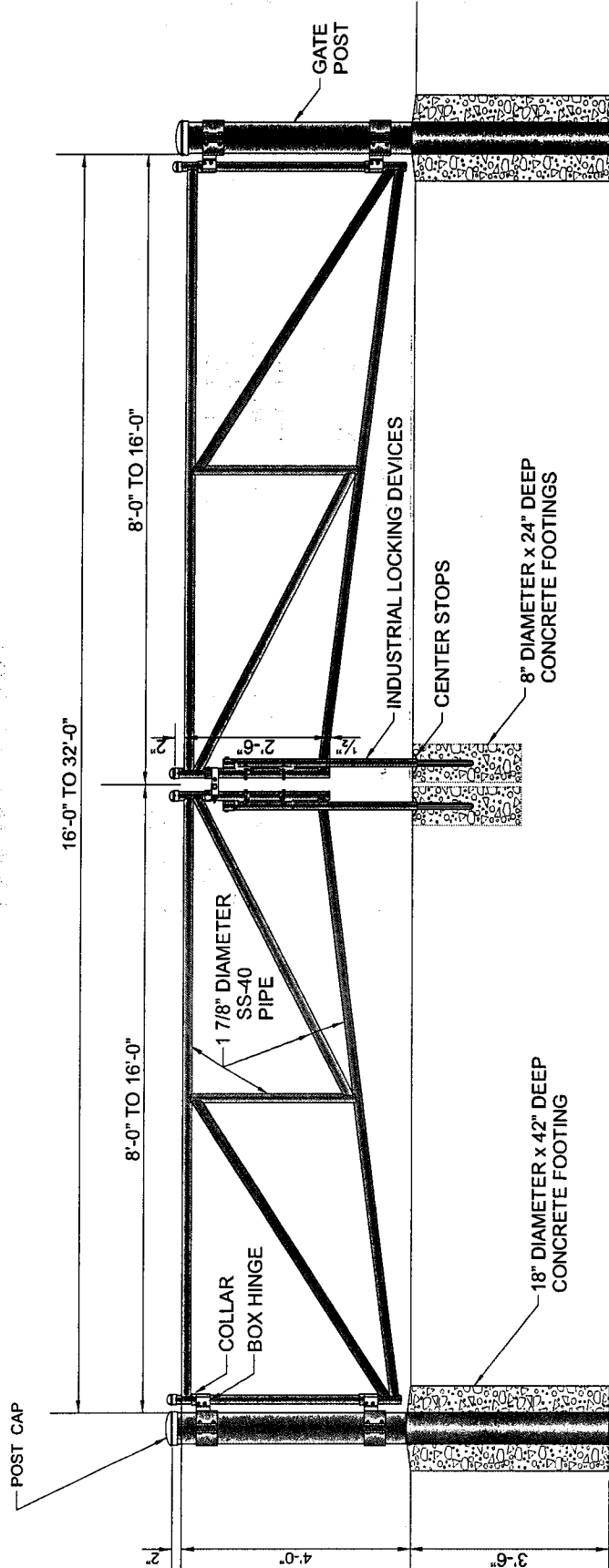
1. Prior to ordering any gates, the Contractor shall submit to the Engineer for approval shop drawings (three more than to be returned) of the proposed gate installation showing complete details of material sizes, shapes and heights, proposed methods of fastening and complete details of all hardware to be used.
2. The Contractor shall submit for testing any material or components deemed necessary by the Engineer. Any material ordered by the Contractor prior to obtaining approval and which shall later be found unsatisfactory on the basis of test results shall be replaced by him with satisfactory materials at no additional cost to the County.

E. Method of Measurement.

1. The quantity to be paid for under this item shall be the linear feet of double barrier gates measured from the center line of the two 4" fence posts supporting the gates, furnished and installed in final position complete and in a manner that will insure ease of operation of the gate, all in accordance with the Plans, the specifications and orders of the Engineer.

F. Basis of Payment.

1. The unit price bid per each double barrier gate shall include the cost of furnishing all labor, materials, concrete, tools, equipment, Shop Drawings and incidentals necessary to satisfactorily complete the required.



- NOTES:** 1) AN APPROVED LOCKING DEVICE SHALL BE PROVIDED FOR EACH GATE LEAF; AND
2) TWO ADDITIONAL FOOTINGS SHALL BE PROVIDED TO HOLD THE GATES IN THE OPEN POSITION.

SCALE: 1/2" = 1'-0"

DATE: 10/27/09

NASSAU COUNTY

16'-0" TO 32'-0" x 4'-0" HIGH DOUBLE SWING BARRIER GATE

6 5/8" O.D., 18.97 LBS PER LF - HOT DIPPED GALVANIZED SCHEDULE 40 STEEL PIPE SET IN 18" DIAMETER x 42" DEEP, 3,000 PSI CONCRETE FOOTINGS
8 5/8" O.D., 28.55 LBS PER LF - HOT DIPPED GALVANIZED SCHEDULE 40 STEEL PIPE SET IN 24" DIAMETER x 42" DEEP, 3,000 PSI CONCRETE FOOTINGS
1 7/8" O.D., 2.28 LBS PER LF SS 40 GALVANIZED STEEL PIPE AS MANUFACTURED BY ALLIED TUBE AND CONDUIT
2 3/8" O.D., 3.12 LBS PER LF SS 40 GALVANIZED STEEL PIPE AS MANUFACTURED BY ALLIED TUBE AND CONDUIT WELDED TO VERTICAL GATE FRAME AS A HINGE STOP
PRESSED STEEL HOT DIPPED GALVANIZED WITH 1.2 OZ. OF ZINC PER SF IN ACCORDANCE WITH ASTM F626

GATE POSTS FOR 16' TO 24':
GATE POSTS FOR 25' TO 32':
GATE FRAME & BRACES:
COLLAR:
GATE POST CAP:

**ITEM 106VC-CG - VINYL CLAD ALUMINUM FRAME CANTILEVER SLIDE GATES
WITH VINYL CLAD CHAIN LINK FABRIC (6'-0" TO 8'-0" HIGH
AND 16'-0" TO 24'-0" WIDE)**

A. Description.

1. Under this Item the Contractor shall furnish and install fully 6'-0" to 8'-0" High and 16'-0" to 24'-0" Wide Vinyl Clad Aluminum Frame Cantilever Slide Gates with Vinyl Clad Chain Link Fabric gates complete with all necessary accessories as specified herein and the labor and supervision for installing the gates in conjunction with the vinyl clad chain link fence all in accordance with the Plans, approved Detail Sheet.
2. The gates shall be located generally where shown on the Plans with the exact location to be determined by the Engineer.

B. Materials and Construction Details.

1. **Manufacturer.** All fence materials described herein shall be as manufactured by Master Halco, Inc. 4000 W. Metropolitan Drive, Suite 400 Orange, CA 92868, Phone (800) 229-5615 Fax (714) 385-0107, or approved equal.
2. **Gate Frames.** Fabricate chain link cantilever slide gates in accordance with ASTM F1184, Type II, Class 2, using 2" square aluminum members, ASTM B 221, alloy and temper 6063-T6, weighing 0.94 lbs/ft. Weld members together forming rigid one-piece frame integral with top track. These members shall be vinyl clad.
3. **Internal Uprights.** 2" x 2" aluminum members welded in gate frames, at 8'-0" on center subdividing frame into panels. These members shall be vinyl clad.
4. **Chain Link Fence Fabric.**
 - a. Gate fabric shall conform to the requirements of the fabric used in the adjacent fence installation.
 - b. Install fabric with galvanized bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15" on center.
5. **Bracing.** Provide diagonal adjustable length truss rods, or 3/8 inch galvanized steel, in each panel of gate frames. These members shall be vinyl clad.
6. **Top Track/Rail.** Enclosed, combination one-piece track and rail, aluminum extrusion with weight of 3.72 lbs/ft. Track to withstand reaction load of 2,000 lbs.
7. **Truck Assembly.** Swivel type, zinc die cast, with four (4) sealed lubricant ball bearing rollers, 2" in diameter by 9/16" in width, and two (2) side rolling wheels to ensure truck alignment in track. Mount trucks on post brackets using 7/8" diameter ball bolts with 1/2" shank. Design truck assembly to withstand same reaction load as track. These members shall not be vinyl clad.
8. **Gate Hangers, Latches, Brackets, Guide Assemblies and Stops.** Malleable iron or steel, galvanized after fabrication. Provide positive latch with provisions for padlocking. These members shall not be vinyl clad.
9. **Bottom Guide Wheel Assemblies.** Each assembly shall consist of two 4" diameter rubber wheels, straddling bottom horizontal gate rail, allowing adjustment to maintain gate frame

plumb and in proper alignment. Attach one assembly to each guide post. These members shall not be vinyl clad.

10. **Gate Post.** Galvanized steel 4" O.D. Schedule 40 pipe, ASTM F 1083, weighing 9.11 lbs/ft. provide one (1) latch post and two (2) support posts for single slide gates and four (4) support post for double slide gates. The gate post shall be vinyl clad.
11. **Concrete Set Gate Post.** Drill holes in firm, undisturbed or compacted soil. Holes shall have a diameter of four times greater than outside dimension of post, and depths approximately 6" deeper than the post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for post with heavy lateral loads. Set post bottom 42" below surface when in firm, undisturbed soil. Place concrete around post in a continuous pour, tamp for consolidation. Trowel finish around post and slope to direct water away from post. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.

12. Install Gate In Accordance With Manufacturer's Instructions.

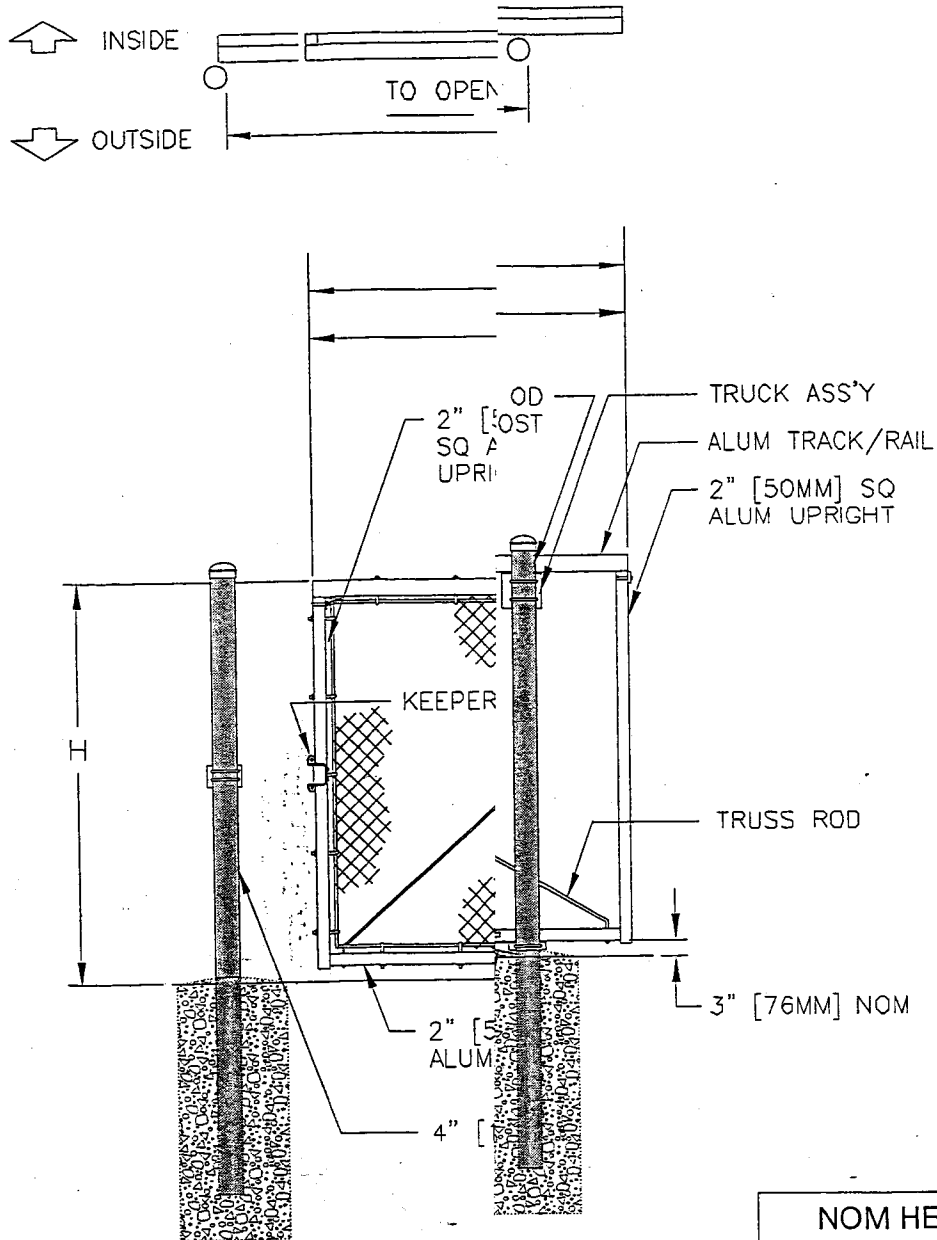
C. Measurement and Payment.

1. The quantity to be paid for under this item shall be the total number of square feet of vinyl clad cantilever slide gates furnished and installed in accordance with these specifications.
2. The unit price bid per square foot shall include the cost of all labor, materials, tools, equipment, and other incidentals required to furnish and install vinyl clad cantilever slide gates, gate post, stops, locking devices, guide rollers truck assemblies, locks, concrete, shop drawings and miscellaneous materials required for a complete installation.

1. The first part of the document is a list of names and addresses of the members of the committee.

2. The second part of the document is a list of names and addresses of the members of the committee.

3. The third part of the document is a list of names and addresses of the members of the committee.



NOM HEIGHT (H)

6'-0" [1829MM]

7'-0" [2134MM]

8'-0" [2438MM]

OPENING

16'-0" [4877MM]
THROUGH
22'-0" [6706MM]

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MONUMENT
IRON

DWG:

6-8100

LAYER:

1

SHEET:

1

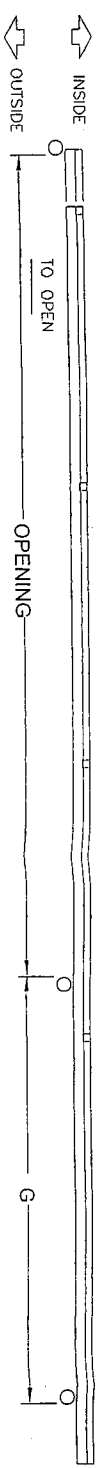
SCALE:

3/8" = 1'-0"

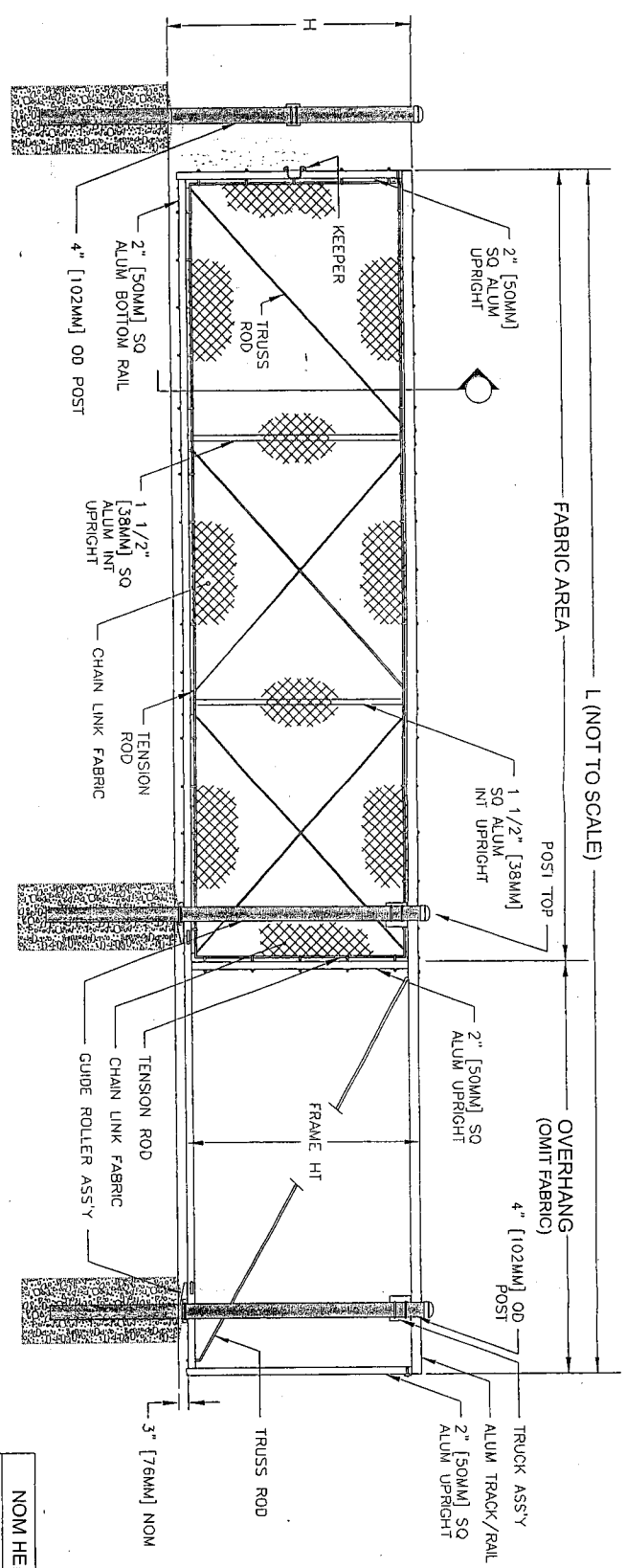
M
I
W



Ornamental
Picket



GATE PLAN



GATE ELEVATION - (3) BAYS SHOWN
SEE SHEET #2 FOR DETAILS & SECTIONS

- NOTES:
- 1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
 - 2. SPECIFICATIONS SHOWN CAN BE CHANGED BY MASTER-HALCO ONLY.
 - 3. GATES MAY BE MANUALLY OR ELECTRICALLY OPERATED. HARDWARE WILL VARY FOR ELECTRICALLY OPERATED GATES.

NOM HEIGHT (H)
6'-0" [1829MM]
7'-0" [2134MM]
8'-0" [2438MM]
OPENING
16'-0" [4877MM] THROUGH
22'-0" [6706MM]

M
I
W

Ornamental
Fence

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MONUMENTAL
IRON WORKS

SINGLE CANTILEVERED SLIDING GATE

NASSAU COUNTY

BY: JRR
DATE: 08-18-95

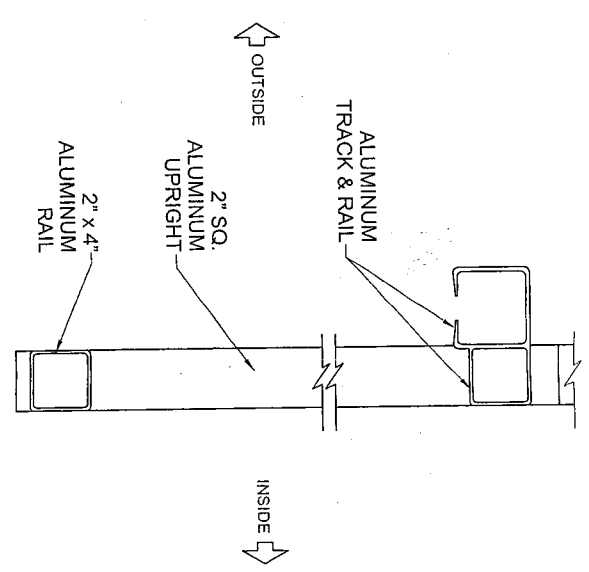
DWG: 6-8100

REV: D
REV DATE: 05-10-00

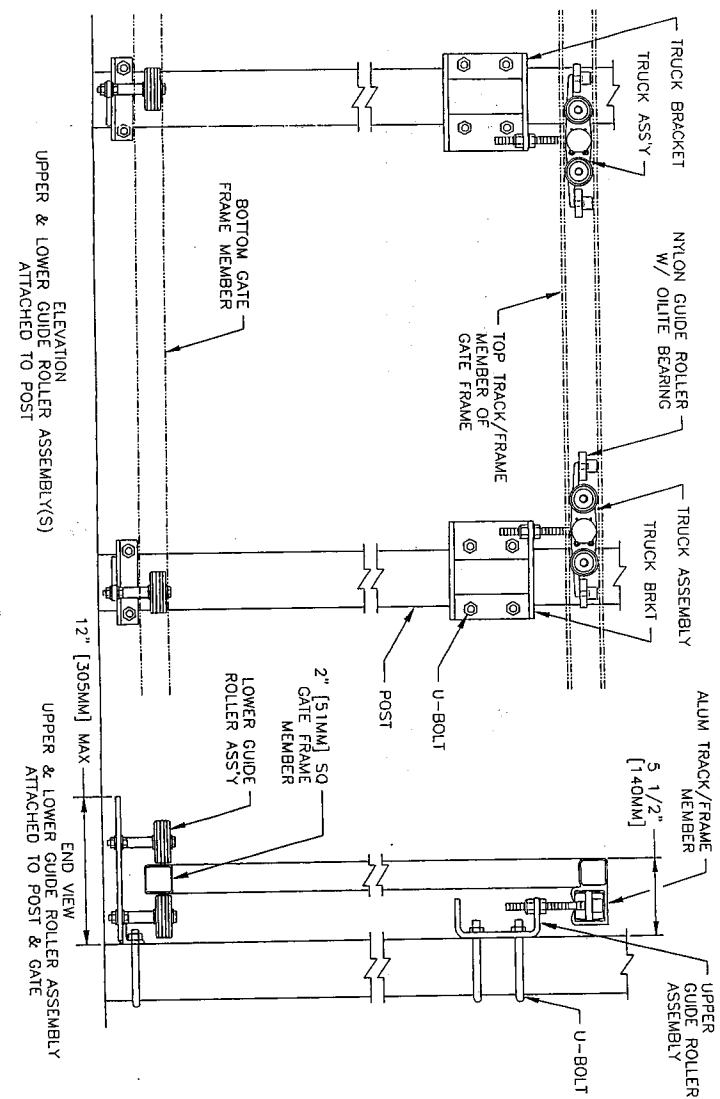
LAYER: 1
SCALE: 3/8" = 1'-0"

SHEET: 1

OPENING	LENGTH (L)	GATE POSTS (G)	BAYS	OVERHANG
I/S POST FACE TO I/S POST FACE	O/S DIM OF GATE LEAF	O/S POST FACE TO O/S POST FACE	NUMBER OF BAYS WITH PICKETS	NUMBER OF BAYS W/O PICKETS
16'-0" [4877MM]	26'-3" [8001MM]	10'-0" [3048MM]	(2) TWO	(1) ONE
17'-0" [5182MM]	27'-3" [8306MM]	10'-0" [3048MM]	(3) THREE	(1) ONE
18'-0" [5466MM]	28'-3" [8611MM]	10'-0" [3048MM]	(3) THREE	(1) ONE
19'-0" [5791MM]	29'-3" [8915MM]	10'-0" [3048MM]	(3) THREE	(1) ONE
20'-0" [6096MM]	30'-3" [9220MM]	10'-0" [3048MM]	(3) THREE	(1) ONE
21'-0" [6401MM]	31'-3" [9525MM]	10'-0" [3048MM]	(3) THREE	(1) ONE
22'-0" [6706MM]	32'-3" [9830MM]	10'-0" [3048MM]	(3) THREE	(1) ONE



SEC A - (16" THRU 22 OPENINGS)
SCALE: 3" = 1'-0"



SCALE: 1 1/2" = 1'-0"

M
I
W

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MONUMENTAL
IRON WORKS

SINGLE CANTILEVERED SLIDING GATE

BY: JRR

DATE: 08-18-95

REV: D

REV DATE: 05-10-00

DWG: 6-8100

LAYER: 1

SCALE: VARIES

SHEET: 2

ITEM 106VC-DG - VINYL CLAD CHAIN LINK DOUBLE GATES

ITEM 106VC-SG - VINYL CLAD CHAIN LINK SINGLE GATES

A. Description.

1. Under this Item the Contractor shall furnish and install fully vinyl clad galvanized steel chain link fence gates complete with all necessary accessories as specified herein and the labor and supervision for installing the gates in conjunction with the vinyl clad chain link fence all in accordance with the Plans or approved Detail Sheets.
2. The gates shall be located generally where shown on the Plans with the exact location to be determined by the Engineer.

B. Materials.

1. All posts, frames, braces, fittings and accessories shall conform to the requirements of Item 104VCA and shall be vinyl clad.
2. **Gate Posts.** The size of the gate post shall be the same size as that of corner posts for various heights as shown within the appropriate table in Item 104PA.
3. **Gate Frames.** Gate frames shall be 2 inch O.D. galvanized steel pipe. All comers shall be securely welded.
4. **Fabric.** The fabric on the gates shall be the same color and gauge as used for the fence. The fabric shall be stretched and fastened in the frame by means of tension bands and tension rods. Gate sections shall be properly braced using 15/8" O.D. galvanized steel pipe to prevent sagging.
5. **Gate Hinges.** Gate hinges of malleable iron shall be such as to permit the gates to swing inward through 180 degrees and back against the fence where gate stops (hold backs) shall be provided.
6. **Latching Devices.**
 - a. **Single Swing Gates.** Single swing gates shall be provided with a lockable fork latch.
 - b. **Double Swing Gates.** The latch for a double swing gate latches shall include a drop bar arranged to engage the center stop, which will insure that the gate can be positively secured in the closed position after a padlock has been properly affixed and shall be approved by the Engineer before installation. The Contractor shall furnish one padlock for each double gate for use during construction operations. Upon completion of the work, the County shall furnish and attach a #12 stainless steel chain, 9 inches long, to the gate for future attachment of a County padlock.
7. **Center Stops.** Center stops shall consist of channel type devices designed to be set in concrete and engage the drop rod of the latching device of double leaf gates. No stops are required for single leaf gates. Pipe center stops shall not be used.

8. **Keepers.** Keepers shall consist of a mechanical device for securing the free end of the gate when in the full open position.

C. Construction Details.

1. Footings.

- a. All gate posts shall be set plumb in concrete piers of the depths and sizes shown. The concrete shall be Item 17A, Class A concrete 1-2-4 mix, but payment shall be under this item. Piers shall be cast rough in the ground and pitched above grade to shed water.
- b. After the posts have been set in place and properly supported to hold them to line and grade, the remaining spaces shall be filled with grout consisting of one part cement and two parts sand, struck smooth. Excavation and backfilling for piers is included hereunder.

2. **Bottom Clearance.** The bottom of the gates shall clear the finished grade by approximately two (2") inches. The clearance under the gates in the closed position is not to exceed three (3") inches.

3. **Maintenance of Gates.** Where the vinyl cladding has been fractured or otherwise damaged and its effectiveness to prevent corrosion of the base metal nullified, the affected parts shall be replaced.

D. Shop Drawings and Testing.

1. Prior to ordering any gates, the Contractor shall submit to the Engineer for approval, shop drawings (three more than to be returned) of the proposed gate installation showing complete details of material sizes, shapes and heights, proposed methods of fastening and complete details of all hardware to be used.
2. The Contractor shall submit for testing any material or components deemed necessary by the Engineer. Any material ordered by the Contractor prior to obtaining approval and which shall later be found unsatisfactory on the basis of test results shall be replaced by him with satisfactory materials at no additional cost to the County.

E. Method of Measurement.

1. The quantity to be paid for under this Item or Items shall be the number of square feet of gate, furnished and installed in final position complete and in a manner that will insure ease of operation of the gates and locking devices, including chain link fence fabric on the gates and all in accordance with the Plans, the Specifications and orders of the Engineer

F. Basis of Payment.

1. The unit price bid per each square foot of gate shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including clearing and grubbing, excavation, fill, concrete, grading, and shop drawings.

**ITEM 116AM – PROFILING AND REMOVAL OF ASPHALT
(PAVING BY OTHERS WILL FOLLOW)**

Under this Item, the Contractor shall remove and dispose of existing asphalt surface pavement as out lined in Item 116A of the Nassau County 2009 Standard Specifications with the stipulation that the paving of the road will be performed by others.

ITEM 117T-6 - TEMPORARY FENCE - 6' HIGH

ITEM 117T-8 - TEMPORARY FENCE - 8' HIGH

A. Description.

1. Under these Items the Contractor shall furnish and install Six (6') Foot and/or Eight (8') Foot High Temporary Fence in accordance with the Plans, Specifications or directed by the Engineer.

B. Construction Details.

1. Fabric.

- a. All chain link fence fabric shall be 2" mesh, 9 gauge galvanized steel chain link fabric in accordance with ASTM F 668. Zinc coated steel wire shall have a minimum core wire break strength of 1,290 psi. Fabric selvages shall be knuckled top and bottom. The zinc coating shall be a minimum 1.20 oz. per square foot.

2. Line Posts.

- a. Line Posts shall be 2" diameter and manufactured to the following specifications:
 - 1) **Class A, Schedule 40 Pipe.** Posts shall be standard weight Schedule 40 Pipe, manufactured in accordance with ASTM F 1083.
 - 2) **Class B, Steel Tubing.** Posts shall be manufactured by one of the following methods with the steel conforming to ASTM A569M or ASTM A607 with a minimum yield strength of 50,000 psi:
 - a) Furnace butt welded, continuous welded
 - b) Cold rolled and electric resistance welded
 - c) Seamless
- b. Line posts shall be set at maximum of 10'-0" on centers.
- c. Posts shall be driven a minimum of 24" into the ground.
- d. Post Ties: Post tie spacing shall be 14" on centers and within 6" from the top and bottom of the fabric as herein specified.
- e. Each Line Post shall be fitted with a properly fastened steel cap.

3. **Fittings.** All fittings shall be hot dipped galvanized in accordance with ASTM F 626.

4. An allowance of ten (10) linear feet will be added for each Terminal Post - end, corner, angle, pull and gate post and will be complete with knee bracing and all of the necessary hardware components.

5. Method - all provisions as per Item 117 shall apply.

C. Measurement and Payment.

1. The quantity to be paid for under these Items shall be the total number of linear feet of Six (6') Foot and/or Eight (8') Foot High Temporary Fence measured in final position furnished and installed.
2. The unit price bid per linear foot for these Items shall include the cost of all labor, tools, materials, equipment and other incidentals necessary to satisfactorily erect, maintain and remove the fence as directed by the Engineer.

ITEM 117TP-6 - TEMPORARY FENCE WITH PRIVACY SCREENING - 6' HIGH

ITEM 117TP-8 - TEMPORARY FENCE WITH PRIVACY SCREENING - 8' HIGH

A. Description.

1. Under these Items the Contractor shall furnish and install Six (6') Foot and/or Eight (8') Foot High Temporary Fence With Privacy Screening Fence in accordance with the Plans, Specifications or directed by the Engineer.

B. Construction Details.

1. Fabric.

- a All chain link fence fabric shall be 2" mesh, 9 gauge galvanized steel chain link fabric in accordance with ASTM F 668. Zinc coated steel wire shall have a minimum core wire break strength of 1,290 psi. Fabric selvages shall be knuckled top and bottom. The zinc coating shall be a minimum 1.20 oz. per square foot.

2. Line Posts.

- a Line Posts shall be 2 1/2" diameter and manufactured to the following specifications:
 - 1) **Class A, Schedule 40 Pipe.** Posts shall be standard weight Schedule 40 Pipe, manufactured in accordance with ASTM F 1083.
 - 2) **Class B, Steel Tubing.** Posts shall be manufactured by one of the following methods with the steel conforming to ASTM A569M or ASTM A607 with a minimum yield strength of 50,000 psi:
 - a) Furnace butt welded, continuous welded
 - b) Cold rolled and electric resistance welded
 - c) Seamless
- b. Line posts shall be set at maximum of 8'-0" on centers.
- c. Posts shall be driven a minimum of 36" into the ground.
- d. Post Ties: Post tie spacing shall be 14" on centers and within 6" from the top and bottom of the fabric as herein specified.
- e. Each Line Post shall be fitted with a properly fastened steel cap.

3. Fittings.

- a All fittings shall be hot dipped galvanized in accordance with ASTM F 626.

4. Privacy Screen.

- a Material.
 - 1) Fiber Content: 100% high density polyethylene
 - 2) Construction: 85-90% knit Raschel weighing 3.8 lbs. per 100 sf
 - 3) Colors: black or green
- b. Fasten tie-raps at 12" on centers along entire perimeter of fabric roll.
5. An allowance of ten (10) linear feet will be added for each Terminal Post- end, corner, angle, pull and gate post and will be complete with knee bracing and all of the necessary hardware components.
6. Method – All provisions for Item 117 shall apply.

C. Measurement and Payment.

1. The quantity to be paid for under these Items shall be the total number of linear feet of Six (6') Foot and/or Eight (8') Foot High Temporary Fence With Privacy Screening measured in final position furnished and installed in accordance with the Plans, Specifications or directed by the Engineer.
2. The unit price bid per linear foot for these Items shall include the cost of all labor, tools, materials, equipment and other incidentals necessary to satisfactorily erect, maintain and remove the fence as directed by the Engineer.

ITEM 136S - SURVEY STAKEOUT (PER DAY)

A. Description.

1. Under this Item the Contractor shall do all necessary surveying required to construct all elements of the Project as shown on the Plans and Specifications and as ordered by the Engineer. This shall include, but shall not be limited to, stakeout, layout and elevations for the highway, structures and forms as shown and required, consistent with the current practices of the County and shall be performed by competently qualified personnel acceptable to the Commissioner of Public Works.

B. Materials.

1. All instruments, equipment, stakes and any other material necessary to perform the work satisfactorily, shall be provided by the Contractor. All stakes used shall be of a type approved by the Engineer. It shall be the Contractor's responsibility to maintain these stakes in their proper position and location at all times.

C. Construction Details.

1. The Contractor shall trim trees, brush and other interfering objects, not inconsistent with the Plans, from survey lines in advance of all survey work to permit accurate and unimpeded work by the Contractor's stakeout survey crews and the County's cross-section survey crews.
2. The exact position of all work shall be established from control points, baseline transit points or other points of similar nature which are shown on the Plans and/or modified by the Engineer. Any error, apparent discrepancy or absence in or of data shown or required for accurately accomplishing the stakeout survey shall be referred to the Engineer for interpretation or furnishing when such is observed or required.
3. The Contractor shall place two offset stakes or references at each centerline or theoretical grade line control point (PC, PT, and/or Angle Point), henceforth called centerline, and at such intermediate locations as the Engineer may direct. From computations and measurements made by the Contractor, these stakes shall be clearly and legibly marked with the correct centerline station and offset distance so as to permit the establishment of the exact centerline location during construction. If markings become faded or blurred for any reason, the markings shall be restored by the Contractor and at the request of the Engineer.
4. The Contractor shall locate and place all cut, fill, slope, fine grade or other stakes and points, as the Engineer may direct for the proper progress of the work. All control points shall be properly guarded and flagged for easy identification.
5. Drainage structures shall be staked out by the Contractor at the locations and elevations shown on the Plans or specified by the Engineer. All required Rights-of-Way and easement limits shall be established, staked and referenced by the Contractor concurrent with the construction stakeout survey. Rights-of-Way and easement limits shall be staked by or under the direction of a Licensed Land Surveyor or exempt Professional Engineer approved by the Commissioner of Public Works. The Contractor shall supply proof to the Engineer that such work is being performed by or supervised by a Licensed Land Surveyor or exempt Professional Engineer.

6. The Contractor shall be responsible for the accuracy of the work of this Item and shall maintain all reference points, stakes, etc. throughout the life of the contract. Damaged or destroyed points, bench marks or stakes, or any reference points made inaccessible by the progress of the construction shall be replaced or transferred by the Contractor. Any of the above points that may be destroyed or damaged shall be transferred by the Contractor before such damage or destruction occurs. All control points shall be referenced by ties to acceptable objects and recorded. Any alterations or revisions in the ties shall be so noted and the information furnished to the Engineer immediately. All stakeout survey work shall be referenced to the centerline shown on the Plans.
7. All computations necessary to establish the exact position of the work from control points, shall be made and preserved by the Contractor. All computations, survey notes and other records necessary to accomplish the work shall be neatly made. Such computations, survey notes and other records shall be made available to the Engineer upon request and shall become the property of the County and delivered to the Engineer not later than the date of acceptance of the contract.
8. The Engineer may check all or any portion of the stakeout survey work or notes made by the Contractor. Any necessary correction to the work shall be made immediately by the Contractor at no cost to the County. Such checking by the Engineer shall not relieve the Contractor of any responsibilities for the accuracy or completeness of his work.
9. The Contractor will not be permitted to take preconstruction and/or final cross-sections to be used for payment purposes.
10. During the progress of the construction work, the Contractor will be required to furnish all of the surveying and stakeout incidental to the proper location by line and grade for each phase of the work. For paving and any other operation requiring extreme accuracy, the Contractor will re-stake with pins or other acceptable hubs located directly adjacent to the work at a spacing directed by the Engineer. Fills required to pave intermediate courses of asphalt shall be painted on the existing pavement, all dimensions referring to finished grade.
11. Any existing stakes, iron pins, survey monuments or other markers defining current or existing property lines that may be disturbed during construction shall be properly tied into fixed reference points before being disturbed and accurately reset in their proper position upon completion of the work.
12. Upon the completion of construction, after all possibility of disturbance is past, the Contractor shall reestablish, layout and retie the centerline control points with a minimum of four ties per control point, as permanently as possible with drill holes and wings in concrete curbs and sidewalks and PK nails in asphalt pavement to the satisfaction of the Engineer. The contractor shall supply a drawing of each of the above noted control points, including, but not limited to: Station, type of point (PK nail, drill hole excreta), coordinates in the same system used by the County on the project plans, and 4 ties, with the distance measured and recorded to 0.01, to the described tie points. Survey notes signed and stamped by a New York State Licensed Land Surveyor showing the station and description of the control points, and the location and description of the ties shall be furnished to the Engineer, in a drawing size to be agreed to before final submittal.

D. Method of Measurement and Basis of Payment.

1. The price bid for this item will be made on a daily (8hrs/day) basis and shall include the cost of furnishing all labor, equipment, instruments, materials and other incidentals necessary to satisfactorily complete the required project including, but not limited to, surveying, stakeout and retie of the control points. Daily unit price rate shall be prorated for less than 8 hrs of survey work in a day, as determined by the Engineer.

ITEM 144 - BRIDGE DECK WATERPROOFING MEMBRANE

1. Description Under this item the Contractor shall clean the existing concrete pavement and furnish and place a heavy-duty membrane fabric for waterproofing of the structural bridge deck at the designated locations shown on the plan or as directed by the engineer.

2. Materials

a. The material shall be a waterproof membrane incorporating a high strength heat resistant mesh embedded in a layer of self-adhesive rubberized asphalt. The material shall be supplied in rolls interwound with a special release paper which protects the adhesive surface.

b. The fabric shall be stored in a dry protected place. The rolls shall not be stored on end.

c. The membrane shall be heavy-duty bituthene as supplied by Grace Construction Products or an approved equal.

3. Construction Procedure

a. Surface Preparation

i. Surfaces shall be free of voids, spalled areas and loose aggregate with no visible protrusions. The surfaces shall be thoroughly cleaned of all contaminants (oil, grease, etc.) Defects in the surface shall be corrected as ordered by the engineer.

ii. All surfaces shall be allowed to dry thoroughly following a rain or fog. Immediately before priming, the surface shall be thoroughly cleaned to remove dust, loose stones, and debris by vacuuming or blowing with compressed air.

b. Priming - All concrete surfaces must be primed with bituthene primer at a coverage of 250 and 350 sq. ft. per gallon, depending on surface porosity. Apply bituthene primer with a lambswool roller. Primer should dry one hour or until tack free. To avoid pickup of excess dirt, prime only the area which is expected to be covered in a working day. Areas not covered with membrane within 24 hours shall be re-primed. If excess dust covers primed areas, it shall be removed by blowing with compressed air. Primer dries to a gray color.

c. Temperature - Heavy-duty bituthene should be applied at deck and air temperatures above 40 degrees F and in fair weather.

d. Slab Drainage and Joints

i. Proper pitch shall be provided to gutters and drains. Heavy-duty bituthene shall be laid from the low point to the high point with the membrane overlapped in shingle fashion. Weep holes or drainage openings shall be provided at the structural deck level to drain water which penetrates the asphalt concrete and accumulates on the membrane.

ii. Over non-working joints or cracks greater than 3/16" wide, an 8" reinforcing strip of heavy-duty bituthene must be applied before placing the full coverage membrane.

iii. Heavy-duty bituthene should be terminated at expansion joints and the termination edges sealed with bituthene mastic. At steel expansion dams, heavy-duty bituthene should be terminated on the concrete deck and a fillet of bituthene mastic shall be used to insure a tight seal.

e. Placement of Membrane

i. Heavy-duty bituthene shall be applied by removing the release sheet as the membrane is unrolled with the tacky surface in contact with the primed structural deck. The membrane shall be laid in the direction of paving to assure that the end laps shall be staggered. Edges and ends of the membrane shall be overlapped a minimum of 2-11/2".

ii. The membrane shall be laid carefully to assure uniform laps and to minimize wrinkles and fishmouths. Immediately after placement, the entire membrane shall be thoroughly rolled to ensure uniform contact with the structural deck. Rolling shall be done as soon as possible after placement of the membrane in order to minimize blisters.

f. Curbs and Termination Edges

i. Curb flashing (as shown on plans) shall be applied to a point just below the height of the asphalt concrete overlay and a minimum of 6" on the deck. The first full sheet shall then be placed as close as possible to the curb. Irregularities shall be covered with an epoxy mortar, or a trowelled application of bituthene mastic, which is allowed to dry for a minimum of one day before applying the membrane. A fillet shall be provided at the curbs to avoid a sharp break at these points. The fillet material shall be well adhered to the deck and curb. All termination points at curbs, expansion joints or deck ends shall be carefully rolled. On curbs, pressure shall be applied to the membrane with a smooth metal or hardwood tool. This shall be done carefully to assure tight contact.

ii. All terminations shall be then sealed with a trowelled application of mastic, 1/2" to 1" wide and 1/8" thick.

iii. Areas around drains shall be double covered with heavy-duty bituthene flashing pieces and shall be applied under the full membrane to minimize damage.

g. Paving

i. The asphalt concrete temperature at time of placement shall be between 250 degrees F. and 300 degrees F. Paving shall not be started following rain, until the membrane surface is completely dry. Traffic shall not be permitted on the membrane prior to paving. Except for asphalt placing equipment, sudden stops or sharp turns shall be avoided by the compaction rollers.

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ii. To avoid damage to the membrane, the asphalt concrete overlay shall be placed within three days after placement of heavy-duty bituthene. Prior to paving, tears and inadequately lapped seams shall be prepared by patching with heavy-duty bituthene. All fishmouths shall be slit and the flaps overlapped and then repaired with a patch. Blisters shall also be punctured and repaired.

4. Basis of Payment.

- a. The placement of the membrane shall be paid on a square yard basis. The price bid shall include the cost of furnishing all labor, materials, tools and equipment necessary to satisfactorily complete the required work in accordance with the specifications and/or as directed by the engineer.
- b. No additional payment will be made for cleaning of the concrete pavement or the placement of the primer, but the cost shall be included in the square yard price bid for the installation of the membrane system. The placement of asphalt concrete and the repair of the concrete structural deck shall be paid for under the appropriate items.

ITEM 150 - BOX BEAM GUIDE RAILING
ITEM 151 - BOX BEAM MEDIAN BARRIER

A. Description.

1. Under this item, the Contractor shall furnish and install galvanized steel box beam guide railing and median barrier in accordance with the plans, specifications and as ordered by the Engineer.

B. Materials.

1. Rails.

- a. Rails shall be cold-formed welded and seamless structural tubing. Posts shall be American Standard Beam Section. The posts, splice tongues and plates shall conform to ASTM A36, Structural Steel. The rails shall conform to ASTM A500, Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes, Grade B, except as modified below.
- b. All rail shall be tested in accordance with ASTM E436 - Standard Method for Drop-weight tear tests of Ferritic steels; except as modified below.
- c. The tests shall be done after all galvanizing and associated operations have been performed on the rail. The testing shall be conducted at a temperature of -18 Degrees C. without removing the galvanizing, on 2" X 9" specimens supported to achieve a 7" span.
- d. The percent shear area will be determined by testing nine (9) specimens, three (3) from each of three (3) sides not containing a weld. The shear areas of the three specimens from the side with the lowest average shear area shall be disregarded and the final average based on the remaining six specimens. If the average percent shear area falls below 50, the material represented by these tests shall be rejected.
- e. To facilitate acceptance and rejection of material the manufacturer of the structural shape shall, before galvanizing, identify the product with the steel heat number, or some number which is traceable to the heat number, and his own unique identification code. The identification method shall be such that it can be read after the structural shape is galvanized. The identification information shall be placed on the structural shape at intervals not to exceed four feet.
- f. No mill transverse welds will be permitted on the rail sections. Longitudinal welds shall be made by the resistance, gas shielded arc, submerged arc or plasma arc welded process; shall be sound, free from defects, and shall not be repaired. The welded joint, in cold-formed welded rail, shall have a minimum tensile strength specified for the railing when tested according to the tensile strap test of test of ASTM Method E8. Fabrication welding shall comply with the requirements set forth under "welding" in the N.Y.S. Steel Construction Manual.
- g. Rails shall be galvanized in accordance with 719-01 of the N.Y.S. Specifications Type I, Galvanized Coatings and Repair Methods. Slots and round holes may be Subsequently drilled, punched, burned, or cut and re-galvanized according to the paragraph below on "Re-galvanizing Iron and Steel Using a Flame Sprayed Coating System". This repair procedure shall also apply to curved rail sections and splice plates as required.
- h. Re-galvanizing Iron and Steel Using a Flame Sprayed Coated System
 - 1) Those areas to be sand blasted shall be blasted with silica sand or crushed garnet of such gradation that sand shall be mesh size 20 to 40 with a minimum of 40%

retained on a 30 mesh screen (U.S. Standard Sieve series). Pressure of not less than 75 psi shall be maintained at the blast generator.

- 2) A sample steel plate shall be blasted until the surface cannot be further cleaned or roughened. This plate shall be used for visual comparison and any areas that do not meet this standard as to roughness or cleanliness shall be re-blasted.
- 3) The wire used in spraying shall be 15 gauge 1/8" or 3/16" diameter, zinc 99.0% purity. Air pressure at the Air Control Unit shall be 60 psi and there shall be no more than 35 feet of 3/8" I.D. hose between the Air Control Unit and the gun.
- 4) The metal coating shall be applied at a minimum thickness of .0045". At least one coating shall be applied within 4 hours of blasting and the surface must be completely coated within 8 hours of blasting.
- 5) The specified thickness of coating shall be applied in multiple layers and in no case shall less than two passes be made over every part of the surface.

2. Posts.

- a. The posts, splice tongues, plates and all hardware shall be fabricated and ready for assembly before galvanizing. The posts, splice tongues and plates shall be galvanized in accordance with 719-01, of the N.Y.S. Specifications, Type I, Galvanized Coatings and Repair Methods. Hardware shall be galvanized in accordance with 719-01 of the N.Y.S. Specifications Type II, Galvanized Coatings and Repair Methods.

3. Bolts.

- a. Bolts and nuts shall conform to ANSI B 18.2.1 and B 18.2.2, and washers shall conform to ANSI B 18.22.1.

C. Construction Details.

1. Posts and rails shall be erected in the position and manner indicated on the plans as ordered by the Engineer.
 - a. Rail sections shall be at least 18'-0" in length, and rail splices shall be a minimum of 18" from the centerline of any beam slot.
 - b. Necessary precautions shall be taken by the Contractor that all utilities and structures are safeguarded against damage. Damage incurred shall be satisfactorily repaired by the Contractor at no expense to the County.
 - c. Box-beam barrier shall be continuous at all entrance walks. Where a post location fails within the limits of a concrete walk, the concrete shall be neatly removed as directed by the Engineer and legally disposed of. The area shall then be restored to conform to the adjoining area.
 - d. Unpaved Shoulders - Posts shall be driven in all cases where driving is feasible. The driving shall be accomplished with approved methods and equipment that will leave the posts in their final position, free of any distortion, burring or any other damage.

D. Method of Measurement.

1. The quantity of guide railing or median barrier measured for payment will be the number linear feet measured along the axis of the railing and between its extreme outer limits as shown on the plans and/or Standard Sheets or as directed by the Engineer. If shop curved guide railing or median barrier is specifically called for in the Contract Plans and Proposal, the quantity of guide railing or median barrier shall be the number of linear feet measured

along the axis of the curved railing between the point of beginning of curvature and the point of ending of curvature as defined by the Engineer. If the railing is anchored to a structure instead of an anchorage unit or end assembly unit, the railing will be measured up to the structure.

- a. Where curved guide railing or median barrier is specifically called for on the Contract Plans or ordered in writing by the Engineer and no provision for such curved beam railing is included in the contract proposal, the quantity of railing measured for payment will be as described above plus an additional allowance of 33 1/3% of the curved lengths at a factor of 1.0 measured along the horizontal centerline of the beam. Curved beam guide railing or median barrier is defined as that which will require shop working to attain the required curvature and not that curvature which may be attained by springing or bending in the field.

E. Basis of Payment.

1. The unit price bid per linear foot for the above work shall include the cost of all labor, equipment and material necessary to complete the work, including all costs necessary to attain the required curvature
2. Payment for guide rail and median barrier shall include the unit price bid and the measured quantity multiplied by the payment factor for the various typical post spacing listed in Table I.
3. When posts are driven through Asphalt Concrete or Bituminous treated material, any repairs to damaged paved or treated areas shall be at the Contractor's expense.
4. Progress payments will be made when the metal railing and/or metal barrier is erected in the position and manner indicated on the Standard Sheets and in a manner approved by the Engineer, exclusive of bituminous repair and final alignment. Payment will be made, at the unit price bid, for 90% of the quantity erected. The balance of the quantity erected will be paid for upon proper repair to the bituminous surfaces and alignment of the metal railing and/or metal barrier to the specified tolerances.

ITEM 152 - BOX BEAM GUIDE RAIL END ASSEMBLY
ITEM 153 - BOX BEAM MEDIAN BARRIER END ASSEMBLY-TYPE A OR B

A. Description.

Under this item, the Contractor shall furnish and place galvanized steel box beam guide rail and median barrier end assemblies in accordance with the Plans, Specifications, the Standard Sheet and as ordered by the Engineer.

B. Materials.

All material shall conform to the material requirements of Item 150 and shall consist of the box beam, accessory hardware, complete deadman in place, the necessary excavation and backfill, all as detailed on the Plans and/or Standard Sheet.

C. Construction Details.

End assemblies shall be installed as shown on the Plans and/or the Standard Sheet and as ordered by the Engineer.

D. Method of Measurement.

The quantity of end assembly units to be paid for will be the actual number of units installed in accordance with the Plans, Standard Sheets and/or as directed by the Engineer.

E. Basis of Payment.

The unit price bid for each end assembly unit shall include the cost of furnishing all labor, materials and equipment necessary to complete the work including the necessary concrete, excavation and backfill.

ITEM 185N - NEW SPRINKLER SYSTEM

A. Description.

1. Under this Item the Contractor shall furnish and install new underground sprinkler systems in accordance with the Specifications, as shown on the Plans or as directed by the Engineer.

B. Materials.

1. Pipe and Pipe Fittings.

- a. Main Line and Lateral Pipe. Provide Schedule 40 PVC pipe complying with ASTM D 1785 for Schedule 40 pipe and ASTM D 1784 for PVC compounds in 20-foot lengths, free of holes, foreign material, blisters, wrinkles or dents.
- b. PVC Fittings. Schedule 40 PVC socket fitting, Type 1, Cell Classification 12454-B, complying with ASTM D 2466, D 2467, and D 1784.
- c. Threaded Nipples: Schedule 80 PVC pipe.
- d. Risers. Schedule 40 galvanized steel pipe, unless otherwise indicated.
- e. Cleaner, Primer, and Solvent Cements.
 - 1) Cleaner. Uni-Weld 7300 cleaner or approved substitute.
 - 2) Primer. Uni-Weld 8700 Hi-Etch purple primer, ASTM F656, or an approved substitute.
 - 3) Solvent Cements. Uni-Weld 2200 clear, light viscosity type, for lateral lines, Uni-Weld 1700 gray, heavy duty viscosity type, for lateral lines larger than 2-1/2" diameter, and Uni-Weld 6700 for clear, light viscosity type for Flex/PVC connections or approved substitute.
- f. Sealing Tapes and Pastes.
 - 1) Threaded Connections between PVC and Metal Pipe: Rectorseal No. 100 virgin heavy duty sealing paste, Plastojoint Stick as manufactured by Lake Chemical Company, or Teflon tape.
 - 2) Metal to Metal Connection: Rectorseal No. 5 slow dry, soft set pipe thread compound.
 - 3) PVC to PVC Connections: Teflon tape.
 - 4) Plastic Irrigation Head or Plastic Valve to Pipe Connections: Teflon tape.
- g. Pipe Lubricant. As provided by pipe manufacturer for "O" ring gasket and pipe spigot ends. If not provided, use I.P.S. Weld-On No. 787 gasket lubricant as manufactured by Industrial Polychemical Service.
- h. Flexible Nipples. COBRA CONNECTOR, U.S. Patent #5,039,011 & 5,221,114, with 1/2" Nominal I.P.S. heavy wall flexible hose, as manufactured by F. P. Parker Manufacturing Co. Inc., 230-A Coney Island Dr., Sparks, Nevada, 89431, (702) 358-7900 or (510) 657-1641, Fax (800) 372-6272, or approved substitute. Material is available from Neumark Inc., Albuquerque, New Mexico.
- i. Sleeves. Schedule 40 PVC when under Contractor installed or removed and replaced pavement, Schedule 40 steel for sleeves under existing pavement to remain.

2. Valve Boxes. Provide and install standard green colored valve boxes with covers as manufactured by Carson or approved equal. Valve boxes shall be sized to allow room for testing, manual operation, calibration, removal and maintenance of equipment.
3. Automatic Zone Valves.
 - 1) Provide valves with a manual bleed screw on the bonnet and bleed ports protected with built-in filter. Provide valve which may be installed at any angle and has a flow control and manual shutoff.
 - 2) Material: Noncorrosive.
 - 3) Operation: Open and close smoothly with low pressure loss.
 - 4) Solenoid: 24 volts A.C. 60 Hz, energy consumption not exceeding 6 watts.
 - 5) Identification: Clearly tag with legible permanent brass waterproof label indicating the controller zone number.
4. Manual Valves. Brass angle valves with brass cross handles.
5. Controllers. Provide and install Mini-Click Freeze Sensor, Model 401 as manufactured by Glen-Hilton Products Inc., P.O. Box 31614, Richmond, Virginia 23294, (804)264-0055
6. Wire.
 - a. UL approved for direct burial, type UF, rated for 600 volts, PVC insulated.
 - b. Minimum Wire Size: No. 16 AWG.
 - c. Common Wire: Plastic coated, white color.
 - d. Control Wire: Insulated, single-strand copper designed for 24 to 50 volts, plastic coated, red color or copper strand meeting or exceeding ASTM B3.
7. Wire Splicing Materials. Provide watertight splices using Spears #300 connectors and #100 glue, 3M brand, DBY connectors, or approved substitute.
8. Provide and install tap and backflow preventer in accordance with the requirements of the local water authority having jurisdiction.
9. Pop-Up Spray Heads. Provide Rain Bird Sprinkler Mfg. Corp. or approved substitute. Fixed pattern, with screw-type flow adjustment, stainless steel retraction spring, and PRS module, if required. Include a serviceable screen on the spray heads to prevent foreign materials from entering the sprinkler. Set flow adjustment to ensure even coverage and to avoid overspray.
10. Automatic Drain Valves. Provide King Technology, Inc. automatic drain valve or approved substitute. Corrosion resistant PVC plastic with 1/2 inch male pipe threaded connections. The valve shall open when pressure in the line decreases to 9 psi and seal again when pressure increases to 10 psi. Provide a screen on both inlet and outlet. Install automatic valves only on laterals of average pipe size 1 1/2 inch or less. Install at low points and at 100 feet on center in the laterals.
11. Pressure Regulator

C. Construction Requirements.

1. Provide a diagrammatic drawing, which is indicative of the work to be installed.
2. Utilities. Verify the locations and sizes of stubouts for water sources indicated on drawings as the source of water supply to the underground irrigation system. Prior to

excavation, determine the locations of all newly constructed and existing cables, conduits, sewers, water lines, and other underground utilities. Do not damage or disturb underground utilities.

3. Trenching. Excavate straight and true with bottom uniformly sloped to low points.
4. Minimum Cover. Provide following minimum cover over top of installed piping:
 - a. Main Lines: 18" minimum.
 - b. Lateral Lines: 12" minimum.
 - c. Piping under pavement: 24" minimum
 - d. Sleeves: 18" minimum
5. Backfill. Backfill with clean material from excavation. Remove organic material as well as rocks and debris larger than 1" diameter. Place acceptable backfill material in 6" lifts, compacting each lift and flush with water to settle trench except under pavement.
6. Staking. Stake all trench, sprinkler head and valve locations.
7. Sleeved Crossings. Sleeve pipe and wiring under sidewalks, roadways, parking lots, or through walls. Provide sleeves a minimum of one inch in diameter greater than the pipe or wire bundle to be sleeved.
8. Existing Lawns. Where trenching is required across existing lawns, uniformly cut strips of sod 6 inches wider than trench. Remove sod in rolls of suitable size for handling and keep moistened until replanted.
9. Irrigation Line Slope. The minimum pitch of irrigation lines to automatic drain valves shall be 3 inches in 100 feet.

D. Installation.

1. General. Install material and equipment in accordance with manufacturer's recommendations, Uniform Plumbing Code and ASTM 2774. Install the work to avoid conflicts between underground irrigation installation, existing utilities, planting and other existing features.
2. Pipe.
 - a. Provide connections between plastic pipe and metal valves or steel pipe with screw fitting, using plastic male adapters with the specified pipe sealant applied to male threads. Connect screwed connections with light wrench pressure. Do not screw steel pipe into plastic fittings except at head risers.
 - b. Apply cleaner and solvent in accordance with ASTM D 2855
 - c. Rest the full length of each pipe section solidly on the pipe bed with recesses excavated to accommodate bells and joints.
 - d. Thoroughly clean the interior of pipe and remove rocks, gravel, soil, and other objects prior to assembly. At the end of a work period, cap open ends on installed pipe to keep out foreign matter.
 - e. Provide 4 inches minimum horizontal clearance between lines in the same trench.
 - f. Sterilize piping up to backflow preventer.
 - g. Provide for expansion/contraction of piping in accordance with manufacturer's recommendations.

3. **Controllers.** Install controllers as required. Make power connections. Mount and wire the controllers in accordance with manufacturer's approved procedures. Install freeze sensor in accordance with manufacturer's recommendations.
4. **Sprinkler Heads.** Install sprinkler heads at grade unless otherwise indicated. Install sprinkler heads with a minimum of 4 inches and a maximum of 6 inches clearance from curbs, walks, driveways, etc. and a minimum of 12 inches and a maximum of 18 inches from buildings and walls. Install heads in vertical position, hand backfilled and compacted to near original density.
5. **Valves and Valve Boxes.** Cover automatic and manual control valves with valve boxes and set top of boxes at grade. Install automatic valves according to manufacturer's recommendations and as shown. Set Pressure Regulating Module to 45 PSI or as directed by Engineer. Wire each valve to a separate station on the controller. Clearly tag each valve with a legible, permanent, waterproof tag indicating the controller zone number
 - a. **Control Wiring.** Install control wires in same trenches as irrigation main lines and laterals whenever practical. Snake wires in the trench to allow for displacement of the wire during backfilling. Securely tape wires running in the same trench together at 10-foot intervals. Place wiring bundles to one side of piping (east of north/south lines and north of east/west lines) at a maximum of 3 inches from piping. If wiring is not in the same trench as piping or is under paving, install in Schedule 40 PVC piping and provide 18 inches minimum cover.
 - b. **Splices.** Minimize wire splices. Where splices are required, use common splice boxes located in valve boxes. Provide a slack-wire loop at each valve with enough slack so that wire splices can be extended 24 inches above ground level to facilitate testing and trouble shooting.
 - c. **Codes and Other Electrical Information.** Install 115 volt AC wiring in accordance with requirements of the National Electrical Code and the manufacturer's electrical specifications. Provide electrical service to controllers consisting of one black and one white wire in rigid conduit. Connect electrically-operated devices and metal enclosures to ground, in accordance with manufacturer's recommendations.
 - d. **Automatic Drain Valves.** Install automatic drain valves on lateral lines only, at low points, 100 foot o.c.; install one cubic foot of gravel, with filter fabric completely surrounding gravel at each drain valve. Install automatic drain valves 3 inches below top of gravel. Install a 2-inch diameter Class 200 PVC pipe vertically above drain valve. Do not connect to pipe. Install with slip cap (not solvent welded), with 1/2-inch diameter hole. Install top of pipe flush with gravel.
 - e. **Backflow Preventer:** Install as detailed and in conformance with the Uniform Plumbing Code.
 - f. **Thrust Block.** On lines over 2 inches in diameter, install concrete thrust blocks at tees, bends, and pipe ends.

E. Field Quality Control.

1. **Hydrostatic Test.** Test water piping and valves, before backfilling trenches, to a hydrostatic pressure of not less than 100 psi and/or as directed by the Engineer. Piping may be tested in sections to expedite work. Remove and repair piping, connections, valves which do not pass hydrostatic testing.

2. Operational Testing. Perform operational testing after hydrostatic testing is completed, backfill is in place, and sprinkler heads adjusted to final position.
 - a. Demonstrate to the Engineer that system meets coverage requirements and that automatic controls function properly.
 - b. Coverage requirements are based on operation of one circuit at a time.

F. Method of Measurement.

1. The quantity to be paid for under this Item shall be the actual number of linear feet of piping furnished and installed in the new underground sprinkler system in accordance with the Specifications, as shown on the Plans or as directed by the Engineer and approved after satisfactory testing.

G. Basis of Payment.

1. The unit price bid for this Item shall include all labor, materials, tools, equipment and incidentals, including excavation, fine grading, backfill, testing and other necessary work required to satisfactorily complete the new underground sprinkler system.

ITEM 200 - HEAVY POST, PLASTIC AND SYNTHETIC BLOCKED OUT GALVANIZED CORRUGATED STEEL BEAM GUIDE RAILING

ITEM 201 - HEAVY POST, PLASTIC AND SYNTHETIC BLOCKED OUT GALVANIZED CORRUGATED STEEL BEAM MEDIAN BARRIER

A. Description.

1. Under this Item the Contract shall furnish and install heavy steel post, plastic and synthetic blocked out galvanized steel beam guide railing as shown on the Plans in accordance with the Specifications and/or ordered by the Engineer.

B. Construction Details.

1. General. Posts and railing shall be erected in the position and manner indicated on the Plans and Standard Sheets and in a manner approved by the Engineer.
2. Posts shall be driven unless otherwise specified by the Engineer. The driving shall be accomplished with approved equipment and methods that will leave the posts in their final position, free of any distortion, burring or other damage.
3. When posts are driven through asphalt concrete or a bituminous treated material, the Contractor shall take care to prevent damage to the paved or treated areas. Large holes and voids caused by driving the posts shall be filled and compacted with a bituminous treated material or asphalt concrete similar to that damaged. The small area adjacent to the post disturbed during installation or where gaps exist at the post after pavement repairs shall be sealed with a bituminous material approved by the Engineer, at no cost to the County.

C. Materials.

1. Beams, Posts, Sections and Accessory Hardware.
 - a. Beams and terminal sections shall be fabricated as shown on the plans. When beams and terminal sections are galvanized by the hot-dip method in accordance with ASTM A123, they shall be blanked to the proper shape, fabricated and ready for assembly before galvanizing. No punching, drilling, cutting or welding will be permitted after galvanizing. Bolt holes in the beam at the post bolt and elsewhere as necessary shall be enlarged or slotted to permit expansion and contraction and to facilitate erection. The beams shall be straight unless otherwise required by the plans or specifications and of uniform section. The edges shall be rolled to eliminate sharp edges.
 - b. Beams and terminal sections shall be made from 12 gauge or heavier sheet. Beams, terminal sections, SL and SH posts shall be rolled from new billet open hearth, electric furnace or basic oxygen steel. All connections or splices shall be made with flat, round-headed galvanized bolts and galvanized nuts conforming to ASTM Designation A307 and as shown on the plans.
 - c. Strength. The minimum yield point and elongation of steel used in the manufacture of beam and terminal sections shall be 50,000 psi and 12% in 2" gage length respectively.
 - d. Galvanizing.
 - e. Beams and terminal sections shall be galvanized in accordance with ASTM A 123. Bolts, nuts and washers shall be galvanized in accordance with ASTM A 153.
 - 1) As an alternative to ASTM123 galvanizing beam guide rail and terminal sections may be galvanized by a process or system of continuous galvanizing substantially in

conformance with ASTM A525 except the minimum check limits for the weight of coating as determined by the triple post and single spot tests shall be 4.0 and 3.0 ounces per square foot respectively (total amount both sides of sheet).

- 2) All the requirements for beam and terminal sections as stated herein shall apply to this continuous galvanizing method except sampling, shop inspection and test procedures shall be as directed by the Laboratory.
2. The posts shall be as detailed on the Standard Structure Sheet for guide railing.
 - a. SL Posts shall conform to ASTM A 245, Grade C.
 - b. SH Posts shall conform to ASTM A36.
 - c. WF and I Beam Posts shall conform to ASTM A36
 - d. The above posts shall be galvanized in accordance with ASTM A 123.
 - e. No posts shall be installed without the prior approval of the Chief Engineer.
3. Hardware. All post connection bolts shall be in conformance with ASTM A 307 and details shown on the plans and shall be galvanized in accordance with ASTM A 153.
4. Plastic and Synthetic Block-Outs. The plastic and synthetic material block-outs are used to provide a uniform offset distance from the corrugated beam rail to the heavy post. The block-out shall have the same general dimensions as detailed in the Department Standard Sheets. The block-out shall not contain excessive voids that would compromise its physical strength. The material shall be designated for outdoor exposure and shall include chemical additives to resist UV degradation. If the product contains recycled materials, they shall be environmentally friendly and non-hazardous. Blocks shall contain no materials that will negatively affect their field performance, such as materials that absorb moisture.
5. Certification. When shop inspection is not provided, each shipment of guide rail to a project site shall be accompanied by a certificate of chemical analysis and physical tests for the heat of base metal used in fabricating beams, SL and SH posts and terminal sections as well as a certificate of compliance with the galvanizing requirements of this specification.

D. Method of Measurement.

1. The quantity of heavy steel post, plastic and synthetic blocked out galvanized steel beam guide railing to be paid for under this Item shall be the number of linear feet center to center of end posts furnished and installed in accordance with these specifications, the plans and the orders of the Engineer.
2. An allowance of 4 linear feet will be paid for each end terminal section.
3. Where curved beam type guide railing is specifically called for on the plans or ordered in writing by the Engineer and no special item for such curved beam type guide railing is included in the contract proposal, the quantity of guide railing to be paid for will be as described above plus an additional allowance of 33-1/3% of the curved lengths measured along the horizontal center line of "valley" of the beam. Curved Beam Type Guide Railing is defined as that which will require shop working to attain the required curvature. Railing curved by springing in the field is not to be considered as Curved Beam Type Guide Railing.

E. Basis of Payment.

1. The unit price bid per linear foot shall include the cost of all labor, equipment and material necessary to satisfactorily complete the work, including all costs to attain the required curvature. Payment for guide rail shall include the unit price bid and the measured quantity multiplied by the payment factor for various typical post spacing and lengths listed below.

PAYMENT FACTORS FOR POST SPACING

Post Spacing	Post Length	Payment Factor
6'-3"	5'-6"	1.0
6'-3"	7'-0"	1.3
3'-1 1/2"	5'-6"	1.8
3'-1 1/2"	7'-0"	2.3
1'-6"	7'-0"	3.3

4. Salvage of Marketable Timber. In the interest of conservation, the Contractor shall make every effort possible to salvage marketable timber produced as a result of clearing operations, provided the amount of timber is great enough to make the hauling practical. In general, marketable timber is construed to mean logs 8 to 16 feet in length, plus appropriate trimming allowance, having a diameter inside the bark, at the small end, of approximately 10 inches. In the event that the Contractor is not successful in salvaging marketable timber, the Contractor shall advise the Engineer, in writing, of the efforts to salvage and indicate the reason why the timber could not be salvaged.

Any wood that is cut up in firewood lengths or other marketable lengths may be neatly piled adjacent to the right-of-way in an area provided by the Contractor for periods in excess of one week but shall be removed prior to completion of the contract.

201-4 METHOD OF MEASUREMENT

201-4.01 Per Acre. Payment for Clearing and Grubbing will be made at the unit price bid per acre computed to the nearest one tenth acre.

201-4.02 Per Lump Sum. Payment for Clearing and Grubbing will be made on a lump sum basis for work satisfactorily completed. Monthly payments will be made in proportion to the amount of work done as determined by the Engineer.

201-4.03 Borrow Areas. Borrow pits or other pit areas from which material is secured shall not be included for measurement of clearing and grubbing.

201-5 BASIS OF PAYMENT.

201-5.01 Clearing and Grubbing. Payment will be made at the contract price to furnish all materials, labor and equipment necessary to satisfactorily complete the work as specified. No separate payment will be made for any excavation, backfill or earth cover necessary to complete the work of disposal outside the embankment area nor for the work in handling, storing, rehandling and hauling of disposable material within or outside the right-of-way.

Payment will be made under:

Item No.	Item	Pay Unit
201.6	Clearing and Grubbing	Lump Sum
201.7	Clearing and Grubbing	Acre

SECTION 202 - DEMOLITION OF BUILDINGS AND STRUCTURES

(Last Revised September, 2016)

202-1 DESCRIPTION. This work shall consist of the demolition, removal and disposal of existing buildings; and the demolition, removal and disposal of existing bridge structures, removal and disposal of steel supported and concrete superstructure supported structural slabs (with and without shear connectors), in accordance with the contract documents, or as directed by the Engineer.

202-2 MATERIALS. Not specified.

202-3 CONSTRUCTION DETAILS

202-3.01 General. The Contractor shall conduct all demolition and removal operations in accordance with the contract documents and local building codes. The Contractor shall repair or replace in kind sidewalks, curbs, roadway and other materials designated to remain in place which are damaged as a result of the work at no additional cost to the State.

Where a falling hazard of 6 feet or more above a lower level exists to workers, each worker shall be protected from falling by fall arrest systems, or guardrail systems to a height of approximately 42 inches, or by covering openings. All floor or deck openings not used as material drops shall be covered over with materials substantial enough to support the weight of any loads which may be imposed upon them. Such materials shall be properly secured to prevent accidental movement.

When excavation is required, the Contractor shall provide protection for the public in accordance with §107-0SK. *Open Excavations and Trenches*. The Contractor shall make provisions to control dust resulting from demolition operations by wetting the work area and debris or other appropriate measures.

A. Demolition Plan. Prior to any demolition or removal operations, the Contractor shall conduct an engineering survey, performed by a competent person, of the building, bridge, or other structure to determine its condition and the possibility of collapse of any portion, in accordance with 29 CFR 1926 Subpart T. Bridge data inspection reports will be made available by the Department, where available. Adjacent buildings or structures within 100 feet of the building or structure shall be included in the survey. If the Demolition Plan is required to be sealed by a Professional Engineer, the engineering survey shall be conducted under the direction of a Professional Engineer.

The Demolition Plan for the demolition, removal, or dismantling of a bridge structure longer than 20 feet shall be prepared, checked, and sealed by a Professional Engineer experienced in the design, construction, or demolition of such structures.

The Demolition Plan for a building, other than ordinary wood frame construction of 2-1/2 stories or less shall be prepared, checked, and sealed by a Professional Engineer or an Architect experienced in building design, construction, or demolition. The Demolition Plan for the demolition of ordinary wood frame construction buildings of 2- 1/2 stories or less need not be prepared by a Professional Engineer.

The Demolition Plan for the removal of steel supported structural slabs, Type B, shall be prepared, checked, and sealed by a Professional Engineer, in accordance with §202-3.07.

The Demolition Plan for the removal of steel supported structural slabs – Type A, and concrete superstructure supported concrete slabs need not be prepared by a Professional Engineer.

Demolition Plans that are required to be prepared by a Professional Engineer or an Architect shall be submitted to the Engineer 30 calendar days prior to the start of demolition. Unless otherwise noted, all other Demolition Plans shall be submitted to the Engineer 14 calendar days prior to the start of demolition.

The Engineer may return the Demolition Plan if it does not adequately identify and address obvious safety and other identified conditions. The Engineer's failure to return any Demolition for additional studies and recommendations shall not relieve the Contractor from the obligation of preparing an adequate Demolition Plan and conducting adequate engineering surveys that safeguard workers and the public.

When the Demolition Plan is required to be prepared by a Professional Engineer, the Professional Engineer shall prepare the following, as appropriate. When the Demolition Plan is not required to be prepared by a Professional Engineer, the Contractor shall prepare the following, as appropriate:

1. A plan of the work area including roadways, support structures, railroad tracks, canals or streams, both underground utilities and overhead utility lines, and any other information pertinent to demolition.
2. A description and catalog cuts of the type, size, and weight of cranes, heavy equipment, and trucks to be used.
3. A plan of the location of cranes, heavy equipment, and trucks.
4. Identification of components analyzed, with reference to controlling specifications or codes.

5. Identification of strength of materials (or allowable stresses) related to means and methods, within calculations or drawings.
6. Girder stability analysis, including non-composite girder analysis with dead load and equipment loads.
7. Current condition of superstructure and substructure. Indicate whether it is based on site visit and date, or latest inspection report and date.
8. Section loss of all components (including components in the load path), where applicable, both within calculations and on demolition drawings. State whether section loss is assumed percentage based on inspection report and date, or measured section loss based upon field inspection and date.
9. Demolition sequences (including deck removal), with a narrative description. Calculations associated with the Demolition Plan shall be included for each stage. Include saw cut locations.
10. Clear statement of critical assumptions, with guidance on contingency steps if conditions do not match assumptions.
11. The locations and details of supporting members, framing and foundation, etc., necessary to accomplish the partial demolition of a building.
12. Measures necessary to prevent a partial building demolition from affecting adjacent property.

The following shall be identified in the Demolition Plan, but need not be prepared by a Professional Engineer:

13. The locations and details of signs, barricades, curbing, and decking used to cover over holes in the flooring of a building.
14. Details of water diversion plans necessary for the proposed means and methods. Identify environmental ground and environmental water protection requirements, including location specific information.
15. Description of plans to contain and collect paint waste generated from subsequent cutting operations, or reference to other submittals.
16. Sequence of operations, including Work Zone Traffic Control requirements such as lane closures, required to perform the work.
17. Means and methods to control dust from being objectionable to nearby residents or potentially hazardous to workers.
18. Description of plans for abatement of all identified and impacted asbestos-containing materials.

B. Monitoring. A competent person is defined in 29 CFR 1926, Subpart Cas someone who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are or will be unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. If the Demolition Plan is required to be sealed by a Professional Engineer per conditions stated herein, then the monitoring performed by a competent person shall be under the direction of a Professional Engineer.

The competent person shall monitor the on-going structural condition of surveyed buildings and structures prior to and during demolition, by observing them for the presence of excessive vibrations; by measuring and recording the width, extent, and progression of cracks; by measuring and recording the plumbness and integrity of structural elements and bracing; and by making other observations as necessary. If these assessments indicate that potential for collapse of a structure or building exists, the competent person shall undertake measures to ensure safety. If these assessments indicate that the work is causing damage to or degradation of structural condition of a structure or building that is to remain or be relocated, the competent person shall undertake measures to prevent additional damage or degradation from occurring and, as directed by the Engineer, shall undertake measures necessary to reverse the degradation or repair the damage.

During the periods that personnel are required to work on, in, or around a building or structure to be demolished or relocated which is in a damaged or deteriorated condition by fire, flood, explosion, weather, or other cause, its elements shall be adequately braced to prevent collapse.

The findings of monitoring assessments shall be promptly provided to the preparer of the Demolition Plan and to the Engineer, if the Demolition Plan has already been submitted.

C. Utility Facilities. The Contractor shall protect existing utility facilities during demolition, or if necessary, they shall be temporarily relocated prior to start of demolition work.

Before any structure or building served with or having utility facilities thereon is demolished, all utility services shall be shut off, capped, or otherwise made safe and controlled outside the building or off the structure, before the general demolition work is started. All severed sewer lines or drains emanating from the building or structure shall be capped or otherwise tightly sealed to prevent the entry of foreign materials into the main sewer or drain.

All electric circuits in any work area that is or may become wet or humid during the work shall be shut down and locked out. If electrical power is required, temporary circuits may be brought into the work area, provided such circuits are ground fault protected.

D. Paint Removal. Prior to beginning any paint removal operations, deposits of bird droppings and

loosely adhered paint shall be removed by hand via shoveling or scraping.

The Contractor shall comply with the provisions of 29 CFR 1926.62 when working on steel structures coated with lead-based paint. The Contractor shall comply with all applicable regulations controlling the release of lead into the environment. In enclosed spaces, the Contractor shall remove paint for a minimum distance of 4 inches on each side of the centerline of cut, bolt row, or weld, or protect workers with air-line respirators in accordance with the requirements of 29 CFR 1926.354(c). Demolition Plans shall reference special project specific worker safety and health concerns, and protective measures shall be detailed in the Safety and Health Plan.

Prior to beginning any steel removal operations, paint shall be removed for a minimum distance of 4 inches on each side of the centerline of cut, bolt row, or weld using vacuum-shrouded paint removal equipment that removes paint, collects and contains the removed paint material, does not permit release of visible dust or debris, and does not vaporize paint into the atmosphere. Following paint removal work, loose paint material not contained by the paint removal equipment shall be collected by vacuums equipped with high efficiency particulate (HEPA) filters. Disposal of paint waste shall be performed in accordance with Section 571 *Disposal of Paint Removal Waste*.

In cases where the Contractor can clearly demonstrate that alternative work practices and engineering controls comply with applicable OSHA regulations associated with worker safety and health and applicable USEPA regulations associated with public and environmental protection, exception to the paint removal requirement may be granted by the Department as part of the Demolition Plan review and approval. Demolition Plans that propose the use of hydraulic shears without prior paint removal shall include Environmental Ground Protection and/or Environmental Water Protection in order to minimize potential impacts to the environment and/or the public. Demolition Plans that propose the use of torch cutting without prior paint removal shall include adequate containment and/or engineering controls to minimize potential impacts to the environment and/or the public. The Contractor shall ensure proper respiratory protection for exposures via initial personal monitoring. Interim protection of the workers, as defined by OSHA, shall be provided until exposures are determined. Local exhaust ventilation shall be used during periods of wind stagnation. Workers shall stand upwind from activity and ensure no downwind impacts to other, non-protected individuals, including the public. Torch cutting will not be approved in close proximity to sensitive public receptors, such as schools, pedestrian pathways, or buildings.

E. Disposal of Materials. All materials removed under this work, abandoned equipment, and fixtures of any kind remaining on any site after it is released to the Contractor are the property of the Contractor and, except for material other than those of a hazardous nature and materials incorporated into the work, shall be removed and disposed of in accordance with §107-10 *Managing Surplus Material and Waste*.

F. Hazardous Material. The Contractor shall remove and dispose of, or otherwise remediate, asbestos, hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous materials in the building or on the property and will be paid separately.

The Contractor shall remove, or otherwise remediate, asbestos materials or other hazardous materials on each structure or building before demolition work begins. If it is not feasible to remediate hazardous materials from a building due to lack of structural integrity, or other unsafe conditions, the Contractor shall obtain a regulatory variance as applicable, and perform controlled demolition in accordance with applicable federal and state regulations.

202-3.02 Disposal of Buildings. The Contractor shall demolish buildings designated for disposal and released to the Contractor 30 days or more before the contract completion date in accordance with the contract documents. The Contractor shall demolish buildings on site without the use of explosives, unless approved by the Deputy Chief Engineer (Construction).

Any proposal to allow such building or any portion thereof to remain standing at the site, or to be relocated to another site, will be referred to the Regional Director for approval and shall be accomplished under terms and conditions established by the State.

A. Unauthorized Entry. The Contractor shall inspect all buildings released for demolition and shall prevent unauthorized entry to these buildings by boarding up or otherwise blocking potential entrances. If material blocking entrances is removed, the Contractor shall, after determining the building to be vacant, replace the removed material in such a manner as to keep the buildings from being re-entered.

B. Pedestrian Access. The Contractor shall maintain and keep safely passable and free from debris, snow and ice, all public walkways adjacent to the properties on which buildings to be demolished are located.

Active entrances to two or more story buildings and active walkways within 8 feet of two or more story buildings being demolished shall be completely protected for a minimum of 8 feet from the face of the building by sidewalk sheds, canopies or other means. Protection shall extend a minimum of 1 foot beyond each side of the building entrances, openings or walkways. Protection shall be designed by a Professional Engineer, and be capable of sustaining a load of 150 psf. No canopy or shed shall be designed to deflect falling material into an area where they could cause harm or injury to person or property.

For single story buildings, these requirements may be waived if the work may be satisfactorily and safely completed without protection.

C. Removal of Salvaged Materials. The Contractor shall remove all salvaged materials from the site. The Contractor shall not hold any sales, public or private, of salvaged equipment or material within the right of way. The Department does not guarantee the number of fixtures, quantity or quality of equipment or any other material of value existing in the building to be present upon its release to the Contractor.

D. Rodent, Insect, and Wildlife Control. The Contractor shall exterminate rodents and insects in each building so infested, in accordance with the requirements of the City, County or the NYS Department of Health. The Contractor or Subcontractor performing the extermination work shall have at least 5 years experience. If the building or structure to be demolished is inhabited by wildlife, the NYS Department of Environmental Conservation or the local animal control officer shall be contacted and given the opportunity to remove such wildlife before extermination or demolition operations are commenced. If inhabited by domesticated animals, the local animal control officer shall be given the opportunity to arrange for their removal.

Bait shall be placed at least 13 calendar days but not more than 30 calendar days before demolition is started, or at such other times as required by the City or County Health Department. Insects shall be controlled by spraying or fumigating. The Contractor shall seal the building if necessary for the treatment to be effective or to prevent migration of insect, pest, or vermin. Demolition work shall not proceed until the extermination is completed.

If extermination is being conducted because it was ordered by the City, County, or NYS Department of Health, the Contractor shall notify that office that the extermination has been completed and shall obtain their written concurrence that the extermination work was satisfactorily completed.

E. Demolition of Buildings. Unless mechanically demolished from the exterior, the demolition of multi-story buildings of more than 2-112 stories shall be accomplished story by story without accumulating rubble on the floors of the partially demolished structure. Signs warning of the hazard and of falling materials shall be posted at each level. Glass that will create a hazard if fragmented shall be removed.

If mechanical demolition is used, no worker shall be permitted at any location onto which debris may fall or which may become unstable or collapse as a result of the demolition operations. Only the minimum number of workers necessary for the performance of the work shall be permitted in those locations at other times until such time as the operations are complete and the debris has been removed.

If debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped shall be completely enclosed with substantial barricades nominally a minimum of 42 inches high, and placed not less than 6 feet back from the projected edge of the opening above. If a hole is used by machines as a material drop, substantial timber or other curbing shall be securely anchored around the hole. The barricades, but not the curbing, may be moved aside temporarily during periods that the machines are actually using the hole. Barricades shall be promptly restored to their proper locations when the machines have ceased dropping material down the hole. Demolition work and workers shall not be permitted in lower areas until debris handling ceases above.

F. Partial Demolition of Buildings. If the work involved consists of demolishing only a portion of a building, the Contractor shall cooperate with the owner(s) of the remaining portion so that inconvenience is minimized.

The Contractor shall close the open portions of the buildings being partially demolished with construction similar to the remainder of the building and shall install supporting members, framing, and foundations to support the remaining structure in accordance with the Demolition Plan. Construction necessary to close the open portions shall meet the local building codes. Structural supports shall be of similar materials as the existing supporting members to which they frame or with which they share load or shall be compatible with them. The Contractor may use salvaged lumber for sheathing provided that such lumber is sound and suitable. The Contractor shall use new timber and lumber for all other purposes.

G. Demolition of Party Wall Structures. If the demolition of one or more units of a group of party wall structures leaves a wall or walls exposed, in accordance with the contract documents, the Contractor shall comply with the following:

1. Furring, plaster, chimneys to be removed, projecting parts, and the like shall be removed.
2. The roof shall be properly flashed, repaired, or otherwise treated to prevent leaks.
3. Walls shall be left in a presentable and sound weatherproof condition compatible in appearance with the remaining building and in conformance with local building codes.
4. Walls shall be made self-supporting, safe and weatherproof with construction similar to or consistent with the remaining building. Supports and bracing shall be installed in accordance with the contract documents.

5. Shoring necessary to prevent damage to adjacent property shall be placed on solid foundation in accordance with the contract documents.

H. Demolition of Foundations. After demolition of the structure, the Contractor shall remove the foundation walls to the depth of the lowest cellar floor, break up any cellar floor, remove any walkways or other materials, backfill the hole and grade the site; unless the removal would endanger adjacent utility facilities or infrastructure. If the hole is not backfilled promptly, it shall be protected with substantial fencing and signs in accordance with § 107-05 *Restricted Areas*.

I. Domestic Sewage Facilities. Septic tanks, leaching basins, cesspools and other similar facilities associated with buildings being demolished or those that will be abandoned shall be pumped free of septage or sewage, removed, and the resulting hole shall be backfilled in lifts of compacted suitable material. The facilities may be collapsed in place after pumping instead of removal. Septage recovered from the pumping operation shall be handled, transported, and disposed of in accordance with 6 NYCRR Part 364.

J. Basement Petroleum Storage Tanks. Aboveground petroleum storage tanks associated with buildings being demolished shall be emptied, cleaned, and removed. Petroleum storage tanks with a capacity greater than 1100 gallons that are regulated by NYSDEC, or are regulated by other local codes, and require closure, shall be emptied, cleaned, and closed in accordance with 6 NYCRR Part 619.3, and closure will be paid for under Section 629 *Petroleum Storage Tank Closure*. Any waste products removed from the tanks or generated during tank cleaning/removal operations shall be disposed of in accordance with §107-10 *Managing Surplus Material and Waste*.

202-3.03 Relocation of Buildings. The Contractor shall relocate buildings, to sites designated by the owner and approved by the Department, in accordance with the contract documents. Sites to which the buildings are to be moved will be furnished without cost to the Contractor.

A. Site Preparation. The Contractor shall construct all necessary foundations and cellar floors for the relocated building to meet applicable local building codes but not less than equivalent in construction to the existing features. The Contractor shall grade the new site, construct necessary driveways and sidewalks, topsoil and/or seed the area and perform other incidentally required items of work to prepare the site in accordance with the contract documents.

B. Moving Buildings. The Contractor shall conduct a precondition survey to establish current condition prior to the move, using written and photographic measures. The Contractor shall move the building safely and in a manner so as to cause the least possible damage to the building and the least possible interference with or inconvenience to its occupant(s). The Contractor shall arrange for any temporary rerouting of overhead lines or relocating guide wires and for the clearance of other obstructions. The Contractor shall repair any damage that may occur to the building, pavement and other features as a result of the move.

C. Restoration of Service Connections. The Contractor shall restore necessary gas, electrical, sanitary, water supply and other service connections at the building's final location, at least equivalent in construction to the existing connections, so as to cause the least possible disruption in accordance with the requirements of the Utilities and local building codes, and will be paid separately.

D. Restoration Work. The Contractor shall restore exterior portions of the building, including steps, porches, railings, and other appurtenances, to as good and serviceable condition, as existed prior to its relocation, in accordance with local building codes. Any property damaged or destroyed during the execution of the work shall be repaired or replaced at no additional cost to the State.

E. Demolition of Existing Foundations. The Contractor shall demolish the existing foundation of any relocated building, including those relocated by the owner in accordance with §202-3.02H *Demolition of Foundations*.

202-3.04 Dismantling and Storage of Superstructures. The Contractor shall dismantle and store existing superstructures in accordance with the contract documents. A superstructure is defined as that part of a structure above, supported by, and including the bearings. The Contractor shall carefully remove concrete, paving material and other materials from the existing superstructures so as to prevent damage to superstructures to be stored. The parts of superstructure designated to be stored shall be protected, and stored on site or at the locations designated. All stored members shall be adequately match-marked in order to facilitate reassembly. Any parts of the superstructure designated for storage or to remain which are damaged during the course of the operation or during storage shall be repaired or replaced at no additional cost to the State.

202-3.05 Removal of Superstructures. The Contractor shall demolish and remove existing superstructures at the site in accordance with the contract documents. A superstructure is defined as that part of a structure above, supported by, and including the bearings. The removal of steel supported structural slabs where the supporting structural steel is to remain shall be performed in accordance with §202-3.07 *Removal of Steel Supported Structural Slabs*. The Contractor shall obtain the approval of the Deputy Chief Engineer, Structures (DCES) for any proposal to allow such structure or any portion thereof to remain standing on the site or to be relocated to another site.

The Contractor shall designate all areas that could become subject to collapse or that could become unstable as a result of demolition activity as non-access areas, and clearly identify them. The public, workers and equipment with operators shall remain outside these designated non-access areas at all times during demolition operations or at any time the area is subject to potential superstructure collapse.

202-3.06 Removal of Substructures. The Contractor shall demolish and remove existing substructures in accordance with the contract documents. A substructure is defined as that part of a structure below the superstructure, such as abutments, piers, and wingwalls. The Contractor shall comply with the appropriate construction details specified in Section 203 *Excavation and Embankment*. Excavations shall be dewatered and kept free from water, snow and ice as necessary. If excavation protection is necessary to protect structures or other improvements, or if the alternatives of laying back slopes or benching are not available, the support system shall be as indicated in the contract documents.

Sheeting or piling shown in the contract documents which is integral with the substructure and is designated to remain in place shall be cut off at the elevations shown. If indicated in the contract documents, existing sheeting or piling shall be extracted. The Contractor may, with the permission of the Engineer, extract sheeting or piling not shown to be extracted or designated to remain in place rather than cutting it off at the elevations shown on the plans, at no additional cost to the State.

Resulting holes shall be backfilled with suitable material placed in lifts and compacted, and the area reggraded.

202-3.07 Removal of Steel Supported Structural Slabs. The Contractor shall remove steel supported structural slabs in accordance with the contract documents. All concrete and other materials carried by the supporting steel members of the superstructure shall be removed unless the plans specifically indicate removal under another item or that the material is to remain in place. Prior to beginning removal operations, the Contractor shall mark the location of the existing primary structural steel members on the surface of the slab. Prior to beginning any sawcutting of the structural slab in order to facilitate removal, the Contractor shall mark the edges of existing structural steel members in contact with the bottom of the slab on the slab surface, or make other adequate provisions approved by the Engineer to prevent damage to the underlying structural steel.

The Contractor shall protect existing structural steel while removing steel supported structural slabs. Nicks or gouges in existing structural steel to remain caused by demolition operations shall be reviewed by the DCES and the Contractor shall repair those damages in accordance with the Steel Construction Manual (SCM) and the direction of the DCES.

All unpainted structural steel surfaces exposed by concrete removal, against which new concrete will be subsequently placed, shall be cleaned sufficiently to ensure proper bond between the steel and concrete.

A. Removal of Steel Supported Structural Slabs with Shear Connectors. The Contractor shall remove all existing spiral shear connectors, so that the remaining cut surface is a maximum 3/4 inch from the surface of the structural steel. Spirals shall be cut in such a manner that the structural steel to remain is not damaged.

The Contractor shall retain existing shear studs undamaged. Existing shear studs removed or damaged during removal of structural slabs, shall be replaced by the Contractor in accordance with the provisions of the SCM, Section 7, Part C *Stud Welding*, at no additional cost to the State.

The Demolition Plan for the removal of steel supported structural slabs with shear connectors shall be either of two types, as described below:

1. Removal of Steel Supported Structural Slab (with shear connectors)-

Type A. Under this type, the Demolition Plan for the structural slab removal need not be sealed by a Professional Engineer.

2. Removal of Steel Supported Structural Slab (with shear connectors)-

Type B. Under this type, due to the increased risks of structural instability in this type of removal, the Demolition Plan for the structural slab removal shall be prepared, sealed, and checked by a Professional Engineer.

B. Removal of Steel Supported Structural Slabs without Shear Connectors.

The Contractor shall remove steel supported structural slabs in accordance with the contract documents. Installation of new shear studs, if required, will be paid for separately.

The Demolition Plan for the removal of steel supported structural slabs without shear connectors shall be either of two types, as described below:

1. Removal of Steel Supported Structural Slab (without shear connectors)-

Type A. Under this type, the Demolition Plan for the structural slab removal need not be sealed by a Professional Engineer.

2. Removal of Steel Supported Structural Slab (without shear connectors)-

Type B. Under this type, due to the increased risks of structural instability in this type of removal, the Demolition Plan for the structural slab removal shall be prepared, sealed, and checked by a Professional Engineer.

202-3.08 Removal of Concrete Superstructure Supported Concrete Slabs. Concrete slabs shall be removed to expose the tops of the prestressed concrete beams and diaphragms while retaining the tie-in bar reinforcement, which is precast into the prestressed concrete beam and diaphragms. All other reinforcement and wire mesh shall be removed. The concrete slab shall be removed with chipping hammers not exceeding 40 lbs. in weight with the bit removed. The Contractor shall exercise care during the execution of the work to avoid damaging or loosening material that is to remain. If the Contractor's operations result in damage to concrete that is to remain, the Contractor shall stop work and make immediate corrections at no additional cost to the State. Any damage caused by the Contractor's operations to material that is to remain shall be repaired or replaced. If the concrete superstructure to remain is cut, or otherwise damaged by Contractor operations, the Contractor shall stop work immediately until a repair procedure is approved by the DCES.

The Contractor may request in writing to the DCES, to mill the top of the deck to a maximum depth of 2 inches, or until the top mat of reinforcing is exposed, whichever is less. The request shall include the specifications for the piece of equipment to be utilized.

A. Removal of Concrete Superstructure Supported Concrete Slab with Shear Connectors. The Contractor shall remove concrete superstructure supported concrete slabs in accordance with the contract documents in such a way that the shear connectors to remain are undamaged. Any damage caused by Contractor operations to shear connectors to remain shall be replaced by a method approved by the DCES at no additional cost to the State.

B. Removal of Concrete Superstructure Supported Concrete Slab without Shear Connectors. The Contractor shall remove the concrete superstructure supported concrete slab in accordance with the contract documents.

202-4 METHOD OF MEASUREMENT

202-4.01 General. Vacant.

202-4.02 Disposal of Buildings. The work under disposal of buildings will be measured for payment on a lump sum basis for a specific building.

202-4.03 Relocation of Buildings. The work under relocation of buildings will be measured for payment on a lump sum basis for a specific building.

202-4.04 Dismantling and Storage of Superstructures. The work under dismantling and storage of superstructures will be measured for payment on a lump sum basis for a specific superstructure.

202-4.05 Removal of Superstructures. The work under removal of superstructures will be measured for payment on a lump sum basis for a specific superstructure.

202-4.06 Removal of Substructures . The quantity of removal of substructures to be measured for payment will be in cubic yards measured to the nearest whole cubic yard, computed from the payment lines.

202-4.07 Removal of Steel Supported Structural Slab. The quantity to be measured for payment will be in square feet of structural slab removed, measured to the nearest whole square foot. Measurements will not make any deductions for openings.

202-4.08 Removal of Concrete Superstructure Supported Concrete Slab. The quantity to be measured for payment will be in square feet of structural slab removed, measured to the nearest whole square foot.

202-5 BASIS OF PAYMENT

202-5.01 General. Vacant.

202-5.02 Disposal of Buildings. The lump sum price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Progress payments will be made monthly in proportion to the amount of work completed.

Suitable or select material obtained from other than the demolition site and used to fill foundation holes, and surface restoration will be paid for separately. Water used for dust control or compaction will be paid for separately if a contract pay item for water is included in the contract. Closure of basement petroleum storage tanks will be paid for separately if regulations require the tank to be closed. The cost of asbestos removal, abatement, and disposal will be paid for separately.

The cost of extermination shall be included in the lump sum price bid if the contract documents indicate that extermination work is required, otherwise it will be considered extra work.

202-5.03 Relocation of Buildings. The lump sum price bid shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work, including excavation necessary at the old or the new building site and water used for dust control or compaction if a contract pay item for water is not included in the original contract bid documents. Extermination shall be included in the lump sum price bid if the original contract bid documents indicate that extermination work is required. Progress payments will be made monthly in proportion to the amount of work completed.

If a property owner, upon agreement with the Department, removes the building, the Contractor will be paid 20% of the bid price for demolition of the existing foundation, walks and other facilities.

Suitable or select material obtained from other than the demolition site and used to fill foundation holes, and surface restoration will be paid for separately.

The work of reconnecting and providing services for the relocated building at its new site will be paid for separately.

202-5.04.Dismantling and Storage of Superstructures . The lump sum price bid shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work . Progress payments will be made in proportion to the amount of work completed. The cost of paint waste disposal will be paid for separately.

202-5.05. Removal of Superstructures . The lump sum price bid shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work. Progress payments will be made in proportion to the amount of work completed. The cost of paint waste disposal will be paid for separately.

202-5.06 Removal of Substructures. The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work. Excavation and excavation protection required to access portions of the substructure for removal will be paid for separately.

Material obtained from other than the demolition site and used to fill substructure holes and surface restoration will be paid for separately. Water used for dust control or compaction will be paid for separately if a contract pay item for water is included in the contract. The cost of asbestos removal, abatement, and disposal will be paid for separately.

202-5.07 Removal of Steel Supported Structural Slabs. The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work, including any sawcutting performed in order to facilitate removal.

202-5.08 Removal of Concrete Superstructure Supported Concrete Slabs. The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work, including any sawcutting performed in order to facilitate removal. No additional payment will be made for removals, repairs or replacements made necessary due to the Contractor's operations.

Payment will be made under:

Item No.	Item	Pay Unit
202.0 1 nnnn	Disposal of Buildings	Lump Sum
202.03 nnnn	Relocating Buildings	Lump Sum
202.11 nnnn	Dismantling and Storing Existing Superstructures	Lump Sum
202.12 nnnn	Removing Existing Superstructures	Lump Sum
202.19	Removal of Substructures	Cubic Yard
202.2201	Removal of Steel Supported Structural Slabs (with shear connectors) -Type A	Square Foot
202.2202	Removal of Steel Supported Structural Slabs (with shear connectors) -Type B	Square Foot
202.230 1	Removal of Steel Supported Structural Slabs (without shear connectors), -Type A	Square Foot
202.2302	Removal of Steel Supported Structural Slabs (without shear connectors), -Type B	Square Foot
202.24	Removal of Concrete Superstructure Supported Concrete Slabs (with shear connectors)	Square Foot
202.25	Removal of Concrete Superstructure Supported Concrete Slabs (without shear connectors)	Square Foot

NOTE: nnnn denotes serialized pay item for each building or structure.

SECTION 203- EXCAVATION AND EMBANKMENT

<Last Revised January 2019>

203-1 DESCRIPTION. This work shall consist of excavation, disposal, placement and compaction of all materials that are not provided for under another section of these Specifications, and shall be executed in conformance with payment lines, grades, thicknesses and typical sections specified in the contract documents.

203-1.01 Definitions.

A. Unclassified Excavation. Unclassified excavation shall consist of the excavation and disposal of all materials, of any description, encountered in the course of construction, unless otherwise specified in the contract. Estimated limits and descriptions of subsurface deposits and formations which may be shown in the contract documents are supplied as a part of Base Line Data.

B. Embankment. The embankment is the portion of a fill section situated between the embankment foundation and the subgrade surface, excluding any material placed under another section of these specifications.

C. Embankment Foundation. The embankment foundation is the surface upon which an embankment is constructed after all work required under §203-3.03A. *Embankment Foundation* has been completed.

D. Subgrade Surface. The subgrade surface is the surface of the road section upon which the select materials and/or subbase are placed.

E. Subgrade Area. The subgrade area is that portion of an embankment situated above either of the following, but excluding any material placed under another section of these specifications.

ITEM 202 - ANCHORAGE UNITS FOR HEAVY POST BLOCKED OUT CORRUGATED BEAM GUIDE RAILING FOR DRIVEWAYS

ITEM 203 - ANCHORAGE UNITS FOR HEAVY POST BLOCKED OUT CORRUGATED BEAM GUIDE RAILING FOR HIGHWAYS

CORRUGATED BEAM GUIDE RAILING FOR HIGHWAYS

ITEM 204 - ANCHORAGE UNITS FOR HEAVY POST BLOCKED OUT CORRUGATED BEAM MEDIAN BARRIER

A. Description.

Under this item the Contractor shall furnish and install anchorage units for heavy post blocked out corrugated beam guide railing in accordance with the Plans, Specifications and as ordered by the Engineer.

B. Materials.

The materials shall conform to the material requirements of Item 35BO, Heavy Post, Plastic and Synthetic Block-Out Galvanized Corrugated Steel Beam Guide Railing, M6 Structural Steel, M17 Bar Reinforcement for Cement Concrete. Concrete shall meet the requirements of Class A Concrete for structures. All steel shall be galvanized in accordance with ASTM A 123.

C. Construction Details.

1. WF Beam Posts shall be driven, unless otherwise specified by the Engineer, by approved methods and equipment that will leave the posts in their final position, free of any distortion, burring or other damage.
2. When posts for guide railing are to be driven through asphalt or adjacent to a stabilized shoulder course, extreme care shall be taken to prevent damage to the paved or shoulder course. Large holes and voids caused by driving the posts shall be filled and compacted with a bituminous treated material or asphalt concrete similar to that damaged. The small area adjacent to the post disturbed during installation or where gaps exist at the post after pavement repairs shall be sealed with a bituminous material approved by the Engineer, at no cost to the County.

D. Method of Measurement.

1. Anchorage units will be measured by the actual number of anchorage units installed in accordance with the Plans, Specifications or as directed by the Engineer

E. Basis of Payment.

1. The unit price bid for each anchorage unit shall include the cost of furnishing all labor, materials, equipment and incidentals as necessary to satisfactorily complete the work.

ITEM 204 - FLOWABLE FILL

204-1 DESCRIPTION. The work shall consist of mixing and placing flowable fill at the locations shown in the contract documents.

204-1.01. Controlled Low Strength Material. Controlled Low Strength Material (CLSM) is an acceptable alternative to compacted soil backfill in confined spaces. CLSM consists of cement, water and, at the Contractor's option, fly ash, aggregate or chemical admixtures in any proportions such that the final product meets the strength and flow consistency requirements included in the specification. The mix is proportioned to be self-leveling and does not require compaction. It is much lower in strength than concrete, making future excavation possible.

204-1.02. Lightweight Concrete Fill. Lightweight Concrete Fill is an engineered geotechnical material with a unique strength / density relationship which can be used to reduce loads on soft foundation soils, buried structures, or against retaining walls. Lightweight Concrete Fill consists of a Portland cement matrix containing uniformly distributed, non-interconnected air voids introduced by a foaming agent. The flowability and cementitious properties provide a product that is self-leveling and does not require compaction.

204-2 MATERIALS.

204-2.01 Controlled Low Strength Material. Provide backfill material meeting the requirements for CLSM as stated in §733-01 *Flowable Fill*.

204-2.02 Lightweight Concrete Fill. Provide backfill material meeting the requirements for Lightweight Concrete Fill as stated in §733-01 *Flowable Fill*.

204-3 CONSTRUCTION DETAILS.

204-3.01 Controlled Low Strength Material.

A. CLSM Submittal. Submit to the Engineer (1) a mix design, with certified test results supplied by a qualified independent testing laboratory for the CLSM verifying the unconfined compressive strength meets the requirements of the specification, and (2) the methods of installation to be employed. Include in the CLSM placement sequence, a procedure to account for subsidence during the settling and curing process.

B. CLSM Production. Mix the materials at a stationary mixing plant which is either a continuous or a batch type plant. A batch is defined as the amount of material that can be mixed at one time. Design the mix of materials to accurate proportions, either by volume or by weight, so that when the materials are incorporated in the mix a thorough and uniform mix will result.

If the CLSM can be placed within 30 minutes of the end of mixing, then open haul units may be used for transport. If it cannot be placed within 30 minutes after the end of mixing, it must be transported by a rotating drum unit capable of 2-6 rpm.

For work involving quantities of CLSM less than 2.5 yd³, the Contractor may use a small portable mixer. Provide a mixer capable of mixing CLSM that has the specified unconfined compressive strength and flow consistency. Mix all components so as to produce a uniform product.

C. CLSM Placement - General. Do not place CLSM that is frozen, or place CLSM on frozen ground. Do not expose CLSM to freezing temperatures until after it has gained its requisite strength, abiding by the *Provisions for Curing in Cold Weather in Section 555 Structural Concrete*.

If the CLSM is to be placed via pumps, the placement sequence shall be such that the equipment is able to access the entire volume to be filled without separating the mixture.

Keep CLSM encapsulated with soil or protected by other means so as to prevent erosion and environmental degradation.

D. CLSM Placement – at Structures, Culverts, Pipes, Conduits and Direct Burial Cables. Place the CLSM in accordance with the installation details shown on the Standard Sheet.

When placing CLSM for pipe backfill, discharge the material onto the top and at the center of the pipe.

Do not place CLSM in contact with aluminum pipe, including connections, fixtures, etc., unless the aluminum has been thoroughly coated with Zinc Chromate Primer, *§708-04 Zinc Chromate Primer*, or an equivalent alternative as approved by the Materials Bureau.

Do not place CLSM containing fly ash in direct contact with cast iron or ductile iron pipes, fittings or appurtenances.

In situations where CLSM is used as backfill around pipe, take precautions to counteract the pipe's buoyancy.

E. CLSM – QA Testing. The Department maintains a Quality Assurance (QA) program for CLSM. The Department will sample and test specimens of the CLSM during placement to compare its properties to the specification requirements and verifying the spread diameter and unconfined compressive strength of the in-place material. The QA program provides oversight of the Contractors Quality Control (QC) process, to reveal changes which may occur in the approved mix design.

Several scenarios may develop as a result of the QA testing

1. The properties are shown to meet the requirements of the specification for the type(s) identified in the contract documents. No action will be taken.
2. The properties are shown to be outside the requirements of the specification for the type(s) identified in the contract documents.
 - a) If the results are within an acceptable margin as determined by the Department through an independent analysis of the site-specific conditions, the material may remain in-place contingent upon an agreed credit. If a credit cannot be agreed upon, the scenario reverts to 2.b.
 - b) If the results are not within an acceptable margin as determined by the Department through an independent analysis of the site-specific conditions, the entire lift (and all overlying lifts) of material will be removed and replaced at the Contractor's expense.

204-3.02 Lightweight Concrete Fill.

A. Lightweight Concrete Fill Submittal. Submit to the Engineer (1) a mix design, with certified test results supplied by a qualified independent testing laboratory for the Lightweight Concrete Fill verifying the wet cast density and unconfined compressive strength meets the requirements of the specification for the type(s) identified in the contract documents, and (2) the methods of installation to be employed.

B. Lightweight Concrete Fill Production. Generate foam in accordance with the manufacturer's recommendations for inclusion into the mix.

Mix the materials at a stationary mixing plant which is either a continuous or a batch type plant. A batch is defined as the amount of material that can be mixed at one time. Design the mix of materials to accurate proportions, either by volume or by weight, so that when the materials are incorporated in the mix, a thorough and uniform mix will result.

Locate equipment such that the mixed product is capable of being pumped into place properly.

C. Lightweight Concrete Fill - Placement. A representative of the supplier of the foaming agent shall be on site during the initial placement and at such times as requested by the Engineer to advise the Contractor on his operation. The lightweight concrete fill shall be placed in lifts not to exceed 24 in. unless otherwise approved by the Engineer. Subsequent lifts shall be placed only after a minimum 12 hour waiting period has been observed.

At the end of each pour, exposed surfaces shall be roughened with a stiff broom or scored with a tool. The Lightweight Concrete Fill shall be placed on supporting surfaces which have been cleaned of loose debris, sand, dust, or other foreign materials to the satisfaction of the Engineer.

Do not place Lightweight Concrete Fill that is frozen or place Lightweight Concrete Fill on frozen ground. Do not expose Lightweight Concrete Fill to freezing temperatures until after it has gained its requisite strength, abiding by the Provisions for Curing in Cold Weather in Section 555 Structural Concrete.

D. Lightweight Concrete Fill – QA Testing. The Department maintains a Quality Assurance (QA) program for Lightweight Concrete Fill. The Department will sample and test specimens of the Lightweight Concrete Fill material during placement to compare its properties to the specification requirements and verifying the wet cast density and unconfined compressive strength of the in-place material. The QA program provides oversight of the Contractors Quality Control (QC) process, to reveal changes which may occur in the approved mix design.

Several scenarios may develop as a result of the QA testing

1. The properties are shown to meet the requirements of the specification for the type(s) identified in the contract documents. No action will be taken.
2. The properties are shown to be outside the requirements of the specification for the type(s) identified in the contract documents.

- a) If the results are within an acceptable margin as determined by the Department through an independent analysis of the site-specific conditions, the material may remain in-place contingent upon an agreed credit. If a credit cannot be agreed upon, the scenario reverts to 2.b.
- b) If the results are not within an acceptable margin as determined by the Department through an independent analysis of the site-specific conditions, the entire lift (and all overlying lifts) of material will be removed and replaced at the Contractor's expense.

204-4 METHOD OF MEASUREMENT.

204-4.01. Controlled Low Strength Material. CLSM will be measured for payment in cubic yards measured to the nearest 0.1 cubic yard computed from the payment lines shown on the contract documents.

A deduction will be made for pipes (based on nominal diameters) and other features when the combined cross-sectional area exceeds 1 ft².

No additional quantity shall be measured for payment to make up losses due to foundation settlement, compaction, erosion or any other cause.

Cross sectioning, for the purpose of determining quantities for payment, will be employed only where payment lines are not shown on the contract documents or Standard Sheets, and cannot be reasonably established by the Engineer.

204-4.02. Lightweight Concrete Fill. Lightweight Concrete Fill will be measured for payment in cubic yards measured to the nearest 0.1 cubic yard computed from the payment lines shown on the contract documents.

204-5 BASIS OF PAYMENT.

204-5.01 Controlled Low Strength Material. The unit price bid shall include the costs of all labor, material, and equipment necessary to satisfactorily complete the work.

204-5.02. Lightweight Concrete Fill. The unit bid price shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
204.01	Controlled Low Strength Material (CLSM)	Cubic Yard
204.02	Controlled Low Strength Material (CLSM) (No Fly Ash)	Cubic Yard
204.03	Lightweight Concrete Fill (Type A)	Cubic Yard
204.04	Lightweight Concrete Fill (Type B)	Cubic Yard

**ITEM 205 - HEAVY POST BLOCKED-OUT CORRUGATED BEAM GUIDE
RAILING CONNECTION TO TWO RAIL STEEL BRIDGE
RAILING**

A. Description.

1. The Contractor shall furnish and install components for connecting galvanized heavy post blocked-out corrugated beam guide railing to existing two rail steel bridge railing at the locations indicated on the Contract Plans.
2. The performance of this work will require the removal of a portion of the existing railing.

B. Materials.

1. All material furnished for the steel bridge rail end assembly shall conform to the requirements stated on the plans.
2. All remaining material shall conform to the requirements of Items 200 and 201, except that the posts, back-up plates, offset beams, soil plates, channels and hardware shall be as detailed on the plans.
3. The offset beams and channels for the guide rail shall conform to ASTM A36. End sections and back-up plates shall conform to the requirements for corrugated rails.
4. Bolts, nuts, and washers for attaching guide rail to bridge rail extension, offset beams to posts, and rails to offset beams shall conform to ASTM A325 and shall be galvanized according to ASTM A153.

C. Construction Details

1. All requirements of Items 200 and 201 shall apply in addition to the following: The Contractor shall exercise care in attaching the guide rail to the existing railing so as not to damage the rails, posts, joints or splices. Any damage due to the Contractor's operation shall be repaired or replaced as ordered by the Engineer at no expense to the County in accordance with Item B6B, Steel Bridge Railing.

D. Method of Measurement.

1. Guide railing connections to bridge railing shall be measured by the number installed.

E. Basis of Payment.

1. The unit price bid for each guide railing connection shall include the cost of all labor, materials and equipment necessary to complete the work.

ITEM 206 - HEAVY POST BLOCKED-OUT CORRUGATED BEAM GUIDE RAILING CONNECTION TO THREE RAIL TUBULAR STEEL BRIDGE RAILING

A. Description.

1. The Contractor shall furnish and install a galvanized heavy post blocked-out corrugated beam guide railing to existing three rail tubular steel bridge railing at the locations indicated on the Contract Plans. The performance of this work will require the removal of a portion of the existing railing.

B. Materials.

1. All materials furnished shall conform to the requirements of Items 200 and 201, except that the posts, back-up plates, offset beams, soil plates, channels and hardware shall be as detailed on the plans.
2. The offset beams and channels shall conform to ASTM A36. The back-up plates shall conform to the requirements for corrugated rails.
3. Bolts, nuts and washers for rail splices shall conform to Items 200 and 201. U-Bolts, nuts, and washers shall conform to ASTM 307, shall be galvanized. All other bolts, nuts and washers, shall meet the requirements of ASTM A325 and shall be galvanized according to ASTM A 153.

C. Construction Details

1. All requirements of Items 200 and 201 shall apply in addition to the following:
2. The Contractor shall exercise care in attaching the guide rail to the existing railing so as not to damage the rails, posts, joints or splices. Any damage due to the Contractor's operation shall be repaired or replaced as ordered by the Engineer at no expense to the County in accordance with Item 86B.

D. Method of Measurement.

1. Guide railing connecting to bridge railing shall be measured by the number of linear feet measured along the axis of the guide railing and between its extreme outer limits as shown on the plans.

E. Basis of Payment.

1. The unit price bid per linear foot shall include the cost of all labor materials and equipment necessary to complete the work.

ITEM 207 - HEAVY POST BLOCKED-OUT CORRUGATED BEAM GUIDE RAILING CONNECTION TO WALLS (TRAILING ENDS)

A. Description.

1. The Contractor shall furnish and install all components for connecting trailing ends of heavy post blocked-out corrugated beam guide railing to walls in accordance with the plans, specifications, and as ordered by the Engineer.

B. Materials.

1. All materials furnished shall conform to the requirements of Items 200 and 201 except that the posts, back-up plates, offset beams, soil plates, base plates, channels, expansion anchors, anchor bolts, and hardware shall be as detailed on the plans.
2. The offset beams and channels shall conform to ASTM A36. The back-up plates shall conform to the requirements for the corrugated rails.
3. Bolts, nuts, and washers for attaching offset beams to posts, and rails to offset beams, shall conform to ASTM A325 and shall be galvanized in accordance with requirements of ASTM A153.
4. Anchor bolts and grout for anchor bolts shall conform to the requirements of Items 200 and 201.
5. When the posts are required to be encased in concrete, the concrete shall meet the requirements specified for Class A concrete in Item 17.

C. Construction Details

1. All the requirements of Items 200 and 201 shall apply except for the following:
2. Holes for the expansion anchors shall be carefully drilled. Any damage caused to the wall shall be repaired by the Contractor to the satisfaction of the Engineer.

D. Method of Measurement.

1. Guide railing connections shall be measured by the number furnished and installed in accordance with the plans, specifications and as directed by the Engineer.

E. Basis of Payment.

1. The unit price bid for each guide railing connection shall include the cost of all labor, materials, and equipment necessary to complete the work as well as any repairs to existing facilities made necessary by the Contractor's operations.

ITEM 208 - RECONSTRUCTION OF HEAVY POST BLOCKED-OUT CORRUGATED GUIDE RAILING

ITEM 209 - RECONSTRUCTION OF MEDIAN BARRIER

A. Description.

1. Under this Item the contractor shall remove, store, reconstruct and reinstall guide railing or median barrier of the type(s) existing on the contract site where and as shown on the plans in accordance with the specifications and/or ordered by the Engineer.

B. Materials.

1. The guide railing or median barrier on which the work is to be performed under this Item shall be that existing on the site. It shall be galvanized corrugated steel beam guide railing (as specified under Item 200 & 201 of this contract).
2. The existing guide railing designated to be reconstructed shall be carefully dismantled and the posts removed if necessary. All posts, rails, hardware and other railing parts which are in satisfactory condition acceptable to the Engineer for incorporation in the repaired guide rail shall be salvaged. All other members or parts of the railing that are determined to be in unsatisfactory condition and not acceptable to the Engineer shall be removed from the site.
3. The Contractor shall furnish all such new railing parts or members to replace the damaged discarded materials in sufficient quantity as necessary to restore the guide rail/median barrier complete in its original state and position.
4. All materials furnished shall be new, equal in all respects in quality, type and kind to railing members as specified under Items 200 & 201 of the contract.
5. All salvaged material re-used shall be cleansed and free of dirt, rust, scale or other foreign material.
6. All railing members damaged or loosened by the contractor as a result of his work under this Item shall be repaired, tightened or replaced as directed by the Engineer, at the contractor's expense.
7. The contractor shall reset posts as necessary and install the railing and other railing parts or members as required to complete the installation and establish the guide rail/median barrier to its initial line and grade. All fastening hardware (splice bolts, attachment bolts etc.) shall be reinstalled or replaced as necessary and tightened to the appropriate torque limits.

C. Maintenance and Protection of Traffic.

1. Proper precautions shall be taken to protect and maintain traffic at all times according to standards set forth in the New York State Manual of Traffic Control Devices. Repairs shall generally be made within one working day. In no case shall gaps or disconnected sections of rail with un-protected ends be allowed overnight once repair work has been started.

D. Method of Measurement.

1. The quantity to be paid for under this Item shall be the number of linear feet reconstructed, as measured from center to center between posts complete in final position.

E. Basis of Payment.

1. The unit price bid for this item shall include the cost of furnishing all labor, materials, tools, equipment, and incidentals necessary to satisfactorily complete the work including all new materials furnished as required to replace materials discarded, damaged or as otherwise directed by the Engineer.

ITEM 210E - ET-2000 ENERGY ABSORBING SAFETY END TREATMENT

A. Description.

1. This item shall govern for the furnishing and installation of the ET-2000 guiderail end treatment, or equal (based on equivalent crash-tests results and equivalent site=space requirements) at the locations shown in the plans. After installation, the end treatments shall remain intact and redirect traffic face vehicular impacts and flatten the rail elements to attenuate end-on vehicular impacts within normally expected ranges. The ET-2000 was tested on flat terrain and is recommended on slopes. The ET-2000 end treatment is a patented product and may be obtained from Syro Steel Company, 1170 North State Street, Girard, Ohio 44420. (216) 245- 4373.

B. Materials.

1. All materials shall be new. The ET-2000 terminal shall be capable of flattening the guiderail to a depth of approximately 1 inch and bend it approximately 180 degrees away from the impacting vehicle. This unit shall be supported by two leg supports attached to the bottom and have two rubber pads on its face. This unit shall be attached to a 6" X 8" wood post by two 3/8" X 5" lag screws. The post shall be installed in a galvanized steel tube 8" X 6" X 3/16" X 4' 6" long with a 1'6" X 2'0" soil plate attached to the tube. A breakaway-cable assembly shall be anchored to the guiderail as shown in the plans. Other post and foundation tube assemblies in the system will be of similar size. Post 1 through 4 must be set in the steel foundation tubes. The breakaway posts at locations 5, 6, 7 and 8, may be installed if shown in the plans as option "B" without foundation tubes.
2. The guiderail elements shall be 25 feet continuous 12 gauge sections as specified in AASHTO M-180. Timber posts shall meet the requirements for materials as specified in AASHTO M-168 and preserved as specified in AASHTO M-133.

C. Construction.

1. Guiderail Extruder Terminal ET-2000 shall be fabricated and installed in accordance with the details shown in the plans so as to provide an end treatment which will remain intact and redirect traffic face vehicular impacts and flatten the rail element to attenuate end-on vehicular impacts within normally-expected ranges.
2. Further information regarding assembly and installation of the ET-2000 Energy Absorbing Safety End Treatment may be obtained from Syro Steel Company.
3. Damaged end treatments shall be repaired and replaced immediately. The repair or replacement will be at the contractor's expense.

D. Method of Measurement.

1. This item will be measured as each ET-2000 installation is in place as shown on the plans.

E. Basis of Payment.

1. The work performed and the materials furnished under this item, will be paid for at the unit price bid for ET-2000 which shall be full compensation for all labor, equipment, tools, incidentals, and services, and for furnishing all materials necessary to complete the work described in this item, including wood posts and blocks, steel tubes, guiderail, cable anchoring system, guiderail extruder and incidentals.

All provisions of Item 210E shall apply with the exception of the following:

1. Entire end treatments shall not be installed, but shall be delivered to Nassau County Department of Public Works' Maintenance Garage in Hicksville. If particular parts are required then payment for these parts shall be made under Item 506.

209.110604	Check Dam (Ditch Bottom Width > 10') Stone-Permanent	Each
209.13	Silt Fence-Temporary	Foot
209.1401nn	Sediment Trap, Earth Berm-Temporary	Each
209.1402nn	Sediment Trap, Sand Bag-Temporary	Each
209.1403nn	Sediment Trap, Ditch Dam-Temporary	Each
209.1501	Turbidity Curtain-Temporary	Foot
209.160103	Pipe Slope Drain, 12" -Temporary	Each
209.160105	Pipe Slope Drain, 18" -Temporary	Each
209.160106	Pipe Slope Drain, 24" -Temporary	Each
209.1701	Drainage Structure Inlet Protection, Silt Fence-Temporary	Foot
209.1702	Drainage Structure Inlet Protection, Gravel Bag-Temporary	Cubic Yard
209.1703	Drainage Structure Inlet Protection, Prefabricated-Temporary	Foot
209.1704	Drainage Structure Inlet Protection, Concrete Block-Temporary	Foot
209.1705	Drainage Structure Inlet Protection, Excavated-Temporary	Foot
209.1801	Rolled Erosion Control Product, Class I Type A, Short Term	Square Yard
209.1802	Rolled Erosion Control Product, Class I Type B, Short Term	Square Yard
209.1803	Rolled Erosion Control Product, Class I Type C, Short Term	Square Yard
209.1901	Rolled Erosion Control Product, Class II Type A, Intermediate	Square Yard
209.190201	Rolled Erosion Control Product, Class II Type B, Intermediate	Square Yard
209.190301	Rolled Erosion Control Product, Class II Type C, Intermediate	Square Yard
209.1904	Rolled Erosion Control Product, Class II Type D, Intermediate	Square Yard
209.200101	Turf Reinforcement Mats, Class III Type A, Permanent	Square Yard
209.200201	Turf Reinforcement Mats, Class III Type B, Permanent	Square Yard
209.200301	Turf Reinforcement Mats, Class III Type C, Permanent	Square Yard
209.200401	Turf Reinforcement Mats, Class III Type D, Permanent	Square Yard
209.2101	Soil Stabilizers, Class IV Type A	Square Yard
209.2102	Soil Stabilizers, Class IV Type B	Square Yard
209.2103	Soil Stabilizers, Class IV Type C	Square Yard
209.22	Construction Entrance/Exit	Square Yard
209.2301	Sediment Filter Log, 12"	Foot
209.2302	Sediment Filter Log, 18" to 20"	Foot
209.2303	Sediment Filter Log, 24"	Foot

NOTE: nn denotes serialized pay item. These items will be paid for within established size groups.

SECTION 210- REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING MATERIAL (BUILDINGS, BRIDGES AND HIGHWAYS)

210-1 DESCRIPTION. This work shall consist of removal and disposal of asbestos- containing material (ACM) from locations designated in the Contract Documents and/or where directed by the Engineer. Additional contract-specific requirements may be found on the plans or in the proposal in a Special Note entitled "Asbestos Remediation Supplemental Requirements."

210-2 MATERIALS. All materials used in the performance of the work shall comply with all applicable regulatory standards. Respirators and filters shall comply with NIOSH and MSHA standards. HEPA filtration systems shall comply with ANSI Z9.2-79.

210-3 CONSTRUCTION DETAILS. Prior to beginning any work under this item, the Contractor shall supply the Engineer with proof that the firm performing the work has a valid asbestos handling license; that its insurance coverage whether provided by the Contractor or the Asbestos Subcontractor, is

consistent with §107-06 Insurance and includes an asbestos-specific, occurrence-type policy with no deductible or sunset clause; that its project supervisor is a NYSDOL certified asbestos project supervisor; that all employees engaged in the work are properly certified and have current physical examinations and respirator fit tests; and that the proper notification of work beginning on the asbestos project has been given to the New York State Department of Labor (NYSDOL) and the United States Environmental Protection Agency (USEPA). The Contractor shall schedule a coordination meeting between the Asbestos Subcontractor and the Department contracted Asbestos Project Monitor to be held at least two (2) weeks before the start of any asbestos abatement work. The meeting shall be held at the Engineer's Field Office unless otherwise approved by the Engineer.

The Contractor shall remove and dispose of ACMs in accordance with 12 NYCRR 56 or, if indicated, an approved variance thereof promulgated by the New York State Department of Labor (NYSDOL); the National Emission Standards for Hazardous Air Pollutants (NESHAP), promulgated by the United States Environmental Protection Agency (USEPA); and the Occupational Safety and Health Administration (OSHA). In the event of a conflict between these specification requirements and laws, rules and regulations of Federal, State, or local agencies, the more restrictive shall apply.

ACM shall be disposed of in accordance with 40 CFR Part 61 and all other requirements and laws, rules, and regulations of applicable Federal, State, or local agencies. Disposal sites which accept ACM for disposal shall be permitted by the New York State Department of Environmental Conservation (NYSDEC). If disposed of out-of-state, the rules, regulations, and laws of that state shall apply.

After the work is completed, the Contractor shall provide the Engineer with two copies of Daily Logs, Visitor Logs, Final Visual Inspection Logs and OSHA Air Monitoring records. The Contractor shall also provide the Engineer with a written certification that the material was disposed of in an approved waste disposal site. For friable waste this certification shall be in the form of a Waste Shipment Record. For non-friable waste this certification shall include the name and address of the waste disposal site or sites used.

210-4 METHOD OF MEASUREMENT. The quantity of ACM to be measured for payment will be determined by one of the following methods:

210-4.01 Square Foot. The quantity to be measured will be the area, measured to the nearest 0.1 square foot, of asbestos-containing material removed and disposed of.

210-4.02 Foot. The quantity to be measured will be the length, measured to the nearest 0.1 foot, of asbestos-containing material removed and disposed of.

210-4.03 Lump Sum. The quantity will be measured for payment on a lump sum basis.

210-4.04 Fixed Price Lump Sum. The lump sum shown in the itemized proposal for this item will be considered the price bid even though payment will be made for the work performed. Should the amount shown be altered, the altered figures will be disregarded and the original price will be used to determine the total contract bid amount. Payments will be based on one or both of the following:

A. Agreed Price. An Agreed Price will be based on a cost analysis submitted by the Contractor and agreed to by the State prior to performing the work. The submittal shall include a detailed estimate from the licensed asbestos removal contractor for the cost of the removal and disposal.

B. Force Account. A separate Force Account will be maintained for the total asbestos removal work performed on each building, structure, or highway included in the work.

210-5 BASIS OF PAYMENT. Payment for the work under this specification shall include all labor, materials, equipment, and asbestos-related fees and insurances necessary to satisfactorily complete the work.

Payment shall not include Work Zone Traffic Control devices outside the regulated asbestos work area.

210-5.01 Square Foot, Foot, or Lump Sum Bid Items. Payment for 75% of the completed quantity will be made upon the Project Monitor's written concurrence with the Contractor's certification as to the following: that the building, structure, and/or highway is visually free of asbestos; that the removal of the asbestos containing material was performed as required; that the final clearance air monitoring results meet the acceptable level specified in 12 NYCRR 56; and, that the building(s), bridge(s), and/or highway(s) are certified by the asbestos Contractor to be available for normal demolition.

The remainder of the payment for completed work will be made upon receipt by the Engineer of a certified statement from the disposal facility, signed by an official thereof, that the asbestos-containing material has been accepted and disposed of in accordance with all applicable laws, codes, rules, and regulations.

210-5.02 Fixed Price Lump Sum. The fixed price lump sum published in the proposal is an amount estimated by the State to be adequate to complete the work. Payments under this work will be made by Force Account or by Agreed Price, or by a combination thereof.

Payment for 75% of the Agreed Price or Force Account charges will be made upon the Project Monitor's written concurrence with the Contractor's certification that the building, structure, and/or highway is visually free of asbestos; the removal of the asbestos containing material was performed as required; that the final clearance air monitoring results meet the acceptable level specified in 12 NYCRR 56; and, that the building(s), bridge(s), and/or highway(s) are certified by the asbestos Contractor to be available for subsequent demolition and/or construction.

The remainder of the payment for completed work will be made upon receipt by the Engineer of a written certification that the ACM was disposed of in an approved waste disposal site.

Asbestos-specific insurance premiums will be reimbursed as the actual and identifiable cost of the portion of the premium attributable to the work performed under the Fixed Price Lump Sum Item. No overhead or profit will be allowed on asbestos specific insurance premiums.

Payment will be made under:

Item No.	Item	Pay Unit
Roofing (Buildings)		
210.1002	Removal and Disposal of Roofing ACM	Square Foot
210.1003	Removal and Disposal of Roofing ACM	Lump Sum
210.1004	Removal and Disposal of Roofing ACM	Fixed Price Lump Sum
Siding (Buildings)		
210.1102	Removal and Disposal of Siding ACM	Square Foot
210.1103	Removal and Disposal of Siding ACM	Lump Sum
210.1104	Removal and Disposal of Siding ACM	Fixed Price Lump Sum
Window Caulking and/or Glazing (Buildings)		
210.1201	Removal and Disposal of Caulk/Glazing ACM	Foot

210.1203	Removal and Disposal of Caulk/Glazing ACM	Lump Sum
210.1204	Removal and Disposal of Caulk/Glazing ACM	Fixed Price Lump Sum

Flooring/Mastic (Buildings)

210.1302	Removal and Disposal of Flooring/Mastic ACM	Square Foot
210.1303	Removal and Disposal of Flooring/Mastic ACM	Lump Sum
210.1304	Removal and Disposal of Flooring/Mastic ACM	Fixed Price Lump Sum

Ceilings (Buildings)

210.1402	Removal and Disposal of Ceiling ACM	Square Foot
210.1403	Removal and Disposal of Ceiling ACM	Lump Sum
210.1404	Removal and Disposal of Ceiling ACM	Fixed Price Lump Sum

Thermal System Insulation (Buildings)

210.1501	Removal and Disposal of Thermal System Insulation ACM	Foot
210.1502	Removal and Disposal of Thermal System Insulation ACM	Square Foot
210.1503	Removal and Disposal of Thermal System Insulation ACM	Lump Sum
210.1504	Removal and Disposal of Thermal System Insulation ACM	Fixed Price Lump Sum

Miscellaneous (Buildings)

210.2901XX	Removal and Disposal of Miscellaneous ACM	Foot
210.2902XX	Removal and Disposal of Miscellaneous ACM	Square Foot
210.2903XX	Removal and Disposal of Miscellaneous ACM	Lump Sum
210.2904XX	Removal and Disposal of Miscellaneous ACM	Fixed Price Lump Sum

Concrete Encased Pipe (Bridges & Highways)

210.3001	Removal and Disposal of Concrete-Encased Pipe ACM	Foot
210.3003	Removal and Disposal of Concrete-Encased Pipe ACM	Lump Sum
210.3004	Removal and Disposal of Concrete-Encased Pipe ACM	Fixed Price Lump Sum
210.3011	Removal and Disposal of Concrete-Encased Pipe ACM (BV 14)	Foot
210.3013	Removal and Disposal of Concrete-Encased Pipe ACM (BV 14)	Lump Sum
210.3014	Removal and Disposal of Concrete-Encased Pipe ACM (BV14)	Fixed Price Lump Sum

Underground Pipe (Bridges & Highways)

210.3101	Removal and Disposal of Underground Pipe ACM	Foot
210.3103	Removal and Disposal of Underground Pipe ACM	Lump Sum
210.3104	Removal and Disposal of Underground Pipe ACM	Fixed Price Lump Sum
210.3111	Removal and Disposal of Underground Pipe ACM (BY 14)	Foot
210.3113	Removal and Disposal of Underground Pipe ACM (BV14)	Lump Sum
210.3114	Removal and Disposal of Underground Pipe ACM (BV14)	Fixed Price Lump Sum

Suspended Pipe (Bridges & Highways)

210.3201	Removal and Disposal of Suspended Pipe ACM	Foot
210.3203	Removal and Disposal of Suspended Pipe ACM	Lump Sum

210.3204	Removal and Disposal of Suspended Pipe ACM	Fixed Price Lump Sum
210.3211	Removal and Disposal of Suspended Pipe ACM (BY 14)	Foot
210.3213	Removal and Disposal of Suspended Pipe ACM (BY 14)	Lump Sum
210.3214	Removal and Disposal of Suspended Pipe ACM (BY14)	Fixed Price Lump Sum

Bond Breaker/Filler (Bridges & Highways)

210.3302	Removal and Disposal of Bond Breaker/Filler ACM	Square Foot
210.3303	Removal and Disposal of Bond Breaker/Filler ACM	Lump Sum
210.3304	Removal and Disposal of Bond Breaker/Filler ACM	Fixed Price Lump Sum
210.3312	Removal and Disposal of Bond Breaker/Filler ACM (BY 14)	Square Foot
210.3313	Removal and Disposal of Bond Breaker/Filler ACM (BV14)	Lump Sum
210.3314	Removal and Disposal of Bond Breaker/Filler ACM (BY 14)	Fixed Price Lump Sum

Caulking (Bridges & Highways)

210.3401	Removal and Disposal of Caulking ACM	Foot
210.3403	Removal and Disposal of Caulking ACM	Lump Sum
210.3404	Removal and Disposal of Caulking ACM	Fixed Price Lump Sum
210.3411	Removal and Disposal of Caulking ACM (BV14)	Foot
210.3413	Removal and Disposal of Caulking ACM (BV14)	Lump Sum
210.3414	Removal and Disposal of Caulking ACM (BV14)	Fixed Price Lump Sum

Miscellaneous (Bridges & Highways)

210.4801XX	Removal and Disposal of Miscellaneous ACM	Foot
210.4802XX	Removal and Disposal of Miscellaneous ACM	Square Foot
210.4803XX	Removal and Disposal of Miscellaneous ACM	Lump Sum
210.4804XX	Removal and Disposal of Miscellaneous ACM	Fixed Price Lump Sum
210.4811XX	Removal and Disposal of Miscellaneous ACM (BY14)	Foot
210.4812XX	Removal and Disposal of Miscellaneous A CM (BY14)	Square Foot
210.4813XX	Removal and Disposal of Miscellaneous ACM (BY 14)	Lump Sum
210.4814XX	Removal and Disposal of Miscellaneous ACM (BY14)	Fixed Price Lump Sum

Item Number Codes

210.xxyzXX

where xx equals Category

10-28 Buildings, 29 Miscellaneous (Buildings)

30-47 Bridges and Highways, 48 Miscellaneous (Bridges and Highways)

where y equals BV

1-9 In order of listing within the category, 0 No BV

where z equals payment Method

1=Foot, 2=Square Foot, 3=Lump Sum, 4=Fixed Price Lump Sum

where XX denotes serialization (applicable to only miscellaneous items)

SECTION 211 - INTERNALLY STABILIZED CUT STRUCTURES

ITEM 216 - REMOVAL OF EXISTING GUIDE RAIL

A. Description.

1. Under this item the Contractor shall remove existing guide rail where and as shown on the plans and/or as ordered by the Engineer.

B. Removal Details.

1. The Contractor shall remove the existing guide rail, posts, bolts, nuts, washers, and concrete bootings, etc., and deliver to a designated County maintenance garage or dispose of as ordered by the Engineer.

C. Method of Measurement.

1. The quantity to be paid for under this item will be the number of lineal feet measured prior to the removal of the existing guide rail.

D. Basis of Payment.

1. The price bid per linear foot of removal shall include the cost of all labor, equipment, tools, storage delivery and/or disposal of the guide railing including the filling in of any voids.

ITEM 220 - CORRUGATED BEAM GUIDE RAILING

A. Description.

1. The Contractor shall furnish and install galvanized corrugated steel beam guide railing and median barrier posts, soil plates, base plates and hardware in accordance with the plans, specifications, and as ordered by the Engineer.

B. Materials.

1. The posts, soil plates, base plates, anchor bolts; and hardware shall be as detailed on the plans.
2. Corrugated beams, terminal sections and all hardware shall be fabricated as shown on the plans. Bolt holes in the beam at the post hole and elsewhere, as necessary, shall be enlarged or slotted to permit expansion and contraction and to facilitate erection. The beams shall be straight, unless otherwise required by the plans or specifications, and of uniform section. The edges shall be rolled to eliminate sharp edges.
3. Beams and terminal sections shall be made from 12 gage or heavier sheet and rolled from new billet open hearth, electric furnace or basic oxygen steel. The minimum yield point and elongation of the steel used in the beam and terminal sections shall be 50,000 psi and 12% in 2" gauge length respectively. They shall be galvanized in accordance with the requirements of ASTM A123.
4. Posts and soil plates shall conform to ASTM A36 and the backup plates shall conform to the requirements for the corrugated rails. They shall be galvanized in accordance with the requirements of ASTM A123.
5. Anchor bolts shall be fabricated from A449 steel having a minimum yield point of 50,000 psi (50ksi). All anchor bolts shall be hot-dipped galvanized, in accordance with the requirements of ASTM A153.
6. Splices shall be made with flat, roundheaded, grippable, galvanized bolts, nuts and washers conforming to ASTM A307, ASA E18.2, galvanized in accordance with anchor bolts above.
7. When posts are required to be encased in concrete; the concrete shall meet the requirements specified for Class A concrete in Item 17.
8. Epoxy polysulfid grout shall be a two-component, flexible, polysulfide modified epoxy grout containing inert mineral filler. This material is used for bonding fresh concrete to hardened concrete in both vertical and horizontal planes; grouting studs, etc. into hardened concrete; and making epoxy mortar for the repair of minor damaged areas or hardened concrete. This material should not be used when the temperature is below 50 degrees F.
9. The two-component epoxy system shall have a maximum ratio of epoxy resin to polysulfid polymer of 2:1 by weight (Min. 1 3/4:1). In addition, the ratio of epoxy resin to curing agent shall be 11:1 by weight (Max. 12:1, Min. 10:1). The fine inert mineral filler when incorporated into the carrying component(s) shall be nonsettling.

10. The epoxy resin shall consist of an unmodified epoxy resin and may contain a portion of fine inert mineral filler. It shall not contain solvents or reactive diluents. The epoxy resin shall be the condensation product of the reaction of bisphenol A with epichlorohydrin, shall be translucent, and shall have the following physical characteristics.

Specific Value			
Property	Min.	Max.	Test Method
Color, Hellige	0	5	ASTM D1544
Epoxide Equivalent	180	200	ASTM D1652

11. The polysulfied polymer shall consist of a blend of a low viscosity polysulfied polymer, a tertiary amine catalyst and shall include a fine inert mineral filler. The component shall not contain solvents or diluents.

- a. The polysulfide polymer flexibilizer shall be a dichloroethyl formal polysulfide in the 1000-Molecular weight range having the following characteristics:

Specific Value			
Property	Min.	Max.	Test Method
Color, Hellige	9	12	ASTM D1544
Sulfur Content %	36	40	ASTM D129
Shelf Life	6 mos.	--	-----

12. When the two components are mixed in accordance with the manufacturer's instructions, the mixture shall have the following physical characteristics:

Specific Value			
Property	Min.	Max.	Test Method
Pot life at 77 Deg. F, min. Initial viscosity @ 77 Deg. F, poises	30		-----
Spray application	20	200	
Other applications	20	400	
Track free time @ 77 Deg. F, Hrs.	2	---	-----
Degree of temporary gelation, depth, in.	1/8		-----
Ash content, %	---	---	ASTM D482
Volatiles, %	0	4	ASTM D1259

13. The grout when mixed according to the manufacturer's instructions, shall harden into a solid having the following physical characteristics:

Property	Min.	Max.	Test Method
Compressive Shear	400	---	Interim Fed.
Double Strength, psi			Spec MMM-B-00350 (Army CE) Paragraph 4.5.4
Beam Break Test, lbs.	800		

C. Construction Details.

1. Posts, railing, median barriers and end assemblies shall be erected in the position and manner indicated on the Standard Sheets and in a manner approved by the Engineer. Necessary precautions shall be taken by the contractor that all utilities and structures are safe-guarded against damage. Any damage incurred during guide rail or median barrier systems installation shall be satisfactorily repaired by the contractor at no expense to the County.
2. Posts shall be driven unless otherwise specified by the Engineer. The driving shall be accomplished with approved equipment and methods that will leave the posts in their final position, free of any distortion, burring or other damage. When posts are driven through asphalt concrete or a bituminous treated material, the Contractor shall take care to prevent damage to the paved or treated areas. Large holes and voids caused by driving the posts shall be filled and compacted with a bituminous treated material or asphalt concrete similar to that damaged. The small area adjacent to the post after pavement repairs shall be sealed with a bituminous material approved by the Engineer.
3. As an alternate to driving posts on unpaved medians and where site conditions are such that driving is not possible, the Contractor shall carefully excavate for all post holes. Post holes and post foundation structures shall be backfilled and backfilled material compacted in accordance with Part 3, Section D, Paragraph j, County of Nassau Standard Specifications.
4. On structures and paved medians, base plates for posts shall be anchored as shown on the plans and as specified by the Engineer. Where drilling and grouting is required, the Contractor shall take care to prevent damage to the concrete, asphalt or other paved surfaces. The proposed construction method and equipment for drilling and grouting of holes shall be submitted to the Engineer for approval before drilling and grouting operations begin.
5. All posts shall be aligned to a tolerance of 1/4 inch for plumb and grade line.
6. The Contractor shall conduct all operations in a safe and prudent manner and shall provide, deploy and maintain traffic control devices and measures, i.e., signs, barricades, cones, flagmen, etc. as necessary according to standards set forth in the New York State Manual of Uniform Traffic Control Devices, as shown on the plans, or as directed by the Engineer.

D. Method of Measurement.

1. The quantity of guide railing or median barrier measured for payment will be the number of linear feet measured along the axis of the railing and between its extreme outer limits as shown on the plans and/or Standard Sheets or as directed by the Engineer. If shop curved guide railing or median barrier is specifically called for in the Contract Plans and Proposal, the quantity of guide railing or median barrier shall be the number of linear feet measured along the axis of the curved railing between the points of beginning of curvature as defined by the Engineer. If the railing is anchored to a structure instead of an anchorage unit or end assembly unit, the railing will be measured up to the structure.
2. Where shop curved beam guide railing or median barrier is specifically called for on the Contract Plans or as ordered in writing by the Engineer and no provision for such curved beam railing is included in the contract proposal, the quantity of railing measured for payment will be as described above plus an additional allowance of 33 1/3 percent of the curved lengths at a factor of 1.0 measured along the horizontal centerline of the beam.

E. Basis of Payment.

1. The unit price bid per linear foot for the above work shall include the cost of all labor, equipment and material necessary to complete the work.
2. When posts are driven through Asphalt Concrete or Bituminous treated material, any repairs to damaged paved or treated areas shall be at the Contractor's expense.
3. The following payment factors shall be used for Item 220:

Post Spacing	Payment Factor
12' - 6"	1.0
6' - 3"	1.4
4' - 2"	1.6
3' - 1 1/2"	1.9

4. The cost of installing posts by other means than driving, including hand excavation, shall be included in the unit price bid per linear foot.
5. The cost of test holes, as called for on the plans or as directed by the Engineer, shall be included in the unit price bid for this item.

NOTE: Under these items the Contractor will be paid under the following schedule on each Work Order:

(0 - 100 ft.)	Installed
(101 - 200 ft.)	Installed
(201 - 300 ft.)	Installed
(301 ft. & over)	Installed

ITEM 221 - ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING
ITEM 222 - ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING
(DRIVEWAY)

A. Description.

1. The Contractor shall furnish and install galvanized corrugated steel beam guide railing anchorage units and median barrier anchorage units as shown on the plans, in accordance with the specifications, and as ordered by the Engineer.

B. Materials.

1. All materials furnished shall conform to the requirements of Item 220 except that the anchors, posts, mounting brackets, back-up plates, anchor rods, and hardware shall be as detailed on the plans.
2. The anchorage unit for driveways shall include the special shop curved rail.
3. Bolts, nuts, and washers for attaching mounting brackets to post and rails to mounting brackets, shall conform to ASTM A325 and shall be galvanized according to ASTM A153.
4. Concrete for the anchor shall meet the requirements specified for Class A concrete in Item 17.

C. Construction Details.

1. All of the requirements of Items 220 shall apply in addition to the following:
2. The anchors for guide rail shall be as noted on the plans and/or as ordered by the Engineer either flat top or slanted top according to slope conditions at the particular installation site. The anchors for median barrier shall be flat top with provision for fastening both rails as shown on the specification plans. The anchors may be either precast or formed and poured in place. Backfilling shall be according to Part III, Section D, Paragraph N, Nassau County Standard Specifications except that the horizontal layers may be 18 inches thick. Where anchors are placed within the limits of a concrete sidewalk, the concrete shall be carefully removed as directed by the engineer and legally disposed of. After completion of the installation, the area shall then be restored to conform to the adjoining area, or as ordered by the Engineer.
3. In the event of unusual field conditions, the Engineer may require an anchorage unit of different size and shape than that shown on the specification plans.

D. Method of Measurement.

1. Anchorage units shall be measured by the number furnished and installed in accordance with the plans, specifications, and as directed by the Engineer.

E. Basis of Payment.

1. The unit price shall be as designated "Pay Limit anchorage unit" on the plans. The unit price bid for each anchorage unit shall include the cost of all labor, materials as shown on the plans, and equipment necessary to complete the work including: rails, posts, brackets; anchor rods, hardware, reinforcing bars, concrete excavation and backfill and forms if

necessary.

2. The cost of test holes, as called for on the plans or as directed by the Engineer, shall be included in the unit price bid for this item.

ITEM 502 - HIGHWAY SEALING AND SURFACE COATING (LATEX)

A. Scope

This specification covers the materials and construction procedures for sealing shrinkage cracks and spalling in roadways and sidewalks, and providing a surface coating to prevent further deterioration. To accomplish these goals, a latex admixture shall be used in mortars and concrete.

B. Materials

The material used to surface coat the roadways and sidewalks is a 42% solids, organic polymer latex admixture (sika latex or equal). A white milky mixture it contains air-detraining agents.

C. Mixing

The mixes to be used should be mixed in the following proportions:

a. Mortar

Cement - 94 lb., (one bag) 7 Type II or Type III
Sand 3 1/4 cubic ft.
Latex 4 gal.
Water - as required

b. Concrete

Cement - 94 lb. (one bag) Type II or Type III
Sand - 2 % cu. ft.
Crushed stone or gravel, % in. max. size - 2 cu. ft.
Latex - 4 gal.
Water-as required

c. With mixer running, add materials in the following order:

- (1) Latex
- (2) Aggregate
- (3) Cement
- (4) Water as required

D. Construction Procedure

- a. All surfaces to be coated must be cleaned free of dust, laitance, scale, oil, grease, curing compounds, impregnations, waxes, foreign particles, painted lines, and disintegrated material, by sandblasting or using mechanical abrasion methods. Particular care must be used to ensure that cracks are free of any substance that may prevent sealing or a successful bond between the surface coating and the concrete.
- b. At time of placement, substrate should be damp with no free standing water. Place mortar or concrete in area to be resurfaced, and brush into surface with a

stiff bristled broom. Care should be exercised to see that mortar is brushed into surface at all edges. Before scrub coat has a chance to dry, additional mortar or concrete should be placed and struck off to a smooth even surface. The latex mortar should then be screed, bull floated and/or troweled. Over finishing should be avoided.

- c. As soon as the finish is placed and to avoid any damage, area should be cured with damp burlap or white-pigmented polyethylene film. Curing should continue for 24 hours.
- d. Under normal temperature conditions, area may be opened to foot traffic after 24 hours; to light traffic after 2-4 days' and to heavy traffic after 3-5 days.
- e. Latex-modified Portland-cement mixtures are more difficult to finish than non-modified mixtures. A hard, steel trowel finish is almost impossible to achieve. Avoid overworking or over finishing surface. Do not use air entraining cements with latex.

E. Basis of Payment.

- a. Sealing and surface coating shall be paid on a square foot basis. The price bid shall include the cost of furnishing all labor, materials, tools and equipment necessary to satisfactorily complete the required work in accordance with the specifications and/or as directed by the Engineer.
- b. No additional payment will be made for cleaning the existing pavement or sidewalk, but the cost shall be included in the square foot paid for the sealing and surface coating.
- c. The Contractor shall conform to the requirements of Items 102X (DAY) or 102Y (NIGHT) – Work Zone Traffic Control. A minimum of one lane of traffic in each direction shall be maintained at all times. The cost of Work Zone Traffic Control shall be paid for under Items 102X or 102Y.

ITEM 502A - 2" INSIDE DIAMETER PVC ELECTRICAL CONDUIT

ITEM 502B - 3" INSIDE DIAMETER PVC ELECTRICAL CONDUIT

ITEM 502C - 4" INSIDE DIAMETER PVC ELECTRICAL CONDUIT

A. Description.

1. Under this Item the Contractor shall furnish and install polyvinyl chloride (PVC) electrical conduit in unpaved areas, under driveway aprons, sidewalk ramps, sidewalks and other locations shown on the Plans, in accordance with the Specifications and/or as directed by the Engineer.

B. Materials.

1. All PVC electrical conduits shall have a minimum cover of eighteen (18") inches.
2. Conduit ends shall extend a minimum of two (2') feet beyond the edge of the driveway apron or sidewalk unless otherwise directed by the Engineer.
3. All PVC couplings shall be secured with approved PVC cement. All open ends shall be capped without gluing to provide for subsequent removal. Joints shall be kept to a minimum.
4. All materials and methods of installation shall conform to the requirements of the latest edition of the National Electrical Code and Municipal Codes.

C. Method of Measurement.

1. The quantity to be paid for under this Item shall be the number of linear feet of PVC electrical conduit having the inside diameter specified above furnished and installed at locations shown on the Plans, in accordance with the Specifications and/or as directed by the Engineer.

D. Basis of Payment.

1. The unit price bid shall include the cost of furnishing all labor, materials, equipment and any other incidentals necessary to complete the work, except as hereafter noted:
2. The cost for removal of the driveway aprons and sidewalks, when required, shall be paid for under the appropriate item for removal.
3. The cost for excavation, compaction, backfill/restoration required for the installation of this Item shall be included in this Item.

ITEM 502J - ELECTRICAL JUNCTION BOXES

A. Description.

1. Under this Item the Contractor shall furnish and install electrical junction boxes complete with all necessary covers, conduits, duct and hardware at locations shown on the Plans, in accordance with the Specifications and/or as directed by the Engineer.

B. Materials.

1. The polymer concrete boxes shall be stackable, shall have bolted covers and their sizes shall be determined on an as needed basis and agreed to by the Engineer.
2. The polymer concrete material shall be an aggregate consisting of sand and gravel bound together with a polymer and reinforced with continuous woven glass strands. Minimum mechanical strength properties of the material shall be: 11,000 psi compressive, 1700 psi tensile and 7500 psi flexural.
3. The material shall meet minimum acceptance criteria for chemical resistance, accelerated service exposure, simulated sunlight exposure, water absorption, flexural properties and flammability in accordance with ASTM D543, D756, D1501, D560, D790 and D635 respectively.
4. Light vehicular traffic design shall be based on a 5000 pound load over a ten-inch by ten-inch (10"×10") area. Light vehicular design shall be provided.
5. The bottom of the box shall be open "footed."
6. A standard "ELECTRIC" logo shall be displayed on the box cover. A minimum two and three-eighth-inch (2 3/8") hex head stainless steel cover bolts and inserts shall be provided.
7. The ground rod shall be five-eighth-inch (⁵/₈") diameter, eight feet (8') long solid steel core with copper jacket. The ground rod clamp shall be one piece bronze with hex head screw. Both rod and clamps shall conform to UL Standard 467 "Electrical Grounding and Bonding Equipment."
8. Sealant for duct, conduit and the box cover shall be a putty-like compound which is non-hardening, non-oxidizing and non-corrosive. It shall seal against the entrance of water, and shall have a service temperature range at minus 30°F to 200°F. It shall be clean, non-poisonous and non-injurious to human skin.
9. All materials and methods of installation shall conform to the requirements of the latest edition of the National Electrical Code and Municipal Codes.

C. Construction Methods.

1. Conduits and duct shall be installed before the boxes are set in place.
2. The boxes shall be set plumb and secure with the top above grade so that water will not drain into the boxes. Backfilling shall be done with sufficient care that no part of the junction box, conduit or duct will be displaced or moved out of alignment.
3. Backfill material shall be placed in six-inch (6") layers and compacted to a density comparable to the adjacent disturbed material.

4. Junction boxes shall be located as shown on the Plans, in accordance with the Specifications and/or as directed by the Engineer. Relocation will be acceptable for better routing of conduit and duct and to minimize drainage problems, if so directed by the Engineer. Junction boxes are neither designed nor intended for use where they would be subjected to roadway traffic loadings such as in useable shoulders or pavements.
5. The bottom of the box shall not rest directly on conduits, ducts or cables.
6. The top of the box shall be on the same grade as the surrounding area except it shall be raised a minimum of three (3") inches to allow the backfill materials to be sloped to prevent surface runoff from entering the box.
7. A ground rod shall be installed as indicated on the plans with bonding jumpers, etc. as required. Ends of conduit and duct shall be stubbed up vertical as near the top of the box as practical and shall be sealed. Wiring shall be arranged so that it will not lie in the bottom of the box.
8. Sealant shall be placed between the cover and box to prevent surface runoff from entering the top of the box.

D. Methods of Measurement.

1. The quantity to be paid for under this Item shall be the total number of cubic feet of electrical junction boxes furnished and installed in accordance with the Specifications and/or as directed by the Engineer

E. Basis of Payment.

1. The unit price bid for furnishing and installing electrical junction boxes shall include the cost of furnishing all labor, material and equipment necessary to complete the work, including but not limited to the necessary excavation, compaction, backfill/restoration required for the installation of the electrical junction boxes.

ITEM 511 - PNEUMATICALLY PLACED CONCRETE

1. Description

Under this item the Contractor shall remove loose and deteriorated concrete and rebuild the damaged concrete surfaces by placing pneumatically projected concrete at designated locations shown on the plan or as directed by the engineer.

2. Materials.

- a. Cement shall be Portland Cement Type II A.
- b. Sand shall be clean, sharp and reasonably free from clay, loam and silt. The term "dry" as applied to sand, designates a normal moisture content of from 3% to 5%. All particles shall pass a 3/8" sieve.
- c. Water shall be fresh, clean and free from injurious amounts of oils, acids, alkali or organic matter.

3. Reinforcement.

- a. Wire mesh shall conform to the Standard Specifications for Welded Steel Wire Fabric or Concrete Reinforcement (A.S.T.M. Designation: A 185) of the American Society for Testing & Materials. Wire mesh shall be 2" X 2" #12 X #12 galvanized welded wire fabric. Wire sizes are expressed as gauge numbers of the United States Steel Wire Gauge. The galvanized coating shall be capable of successfully withstanding an eight-dip Preece Test conducted in accordance with the Standard Method of Test for Uniformity of Coating by the Preece Test (A.S.T.M. Designation: A239) of the American Society for Testing and Materials. Wire mesh sheets shall be side lapped at least one and one-half meshes and all laps shall be firmly tied together with wire at intervals not to exceed 18" along the lap.
- b. Wire mesh shall be fastened to the existing concrete with 1/4" diameter expansion bolts or powder-actuated fastenings spaced a maximum of 24" center to center in each direction. Wire mesh shall be tied to existing steel reinforcing, with wire ties spaced a maximum of 4 inches on center, where necessary.
- c. Where the chipped area or surface is more than two (2) or more inches in depth, and the existing reinforcement is in poor conditions as determined by the Engineer or there is no reinforcement, galvanized wire fabric and mechanical concrete anchors shall be used as a bond between existing and new concrete.
- d. Minimum clearance between the wire fabric and the surface of the old concrete and minimum cover over the fabric shall be 3/4". The fabric shall be carefully bent and shaped so as to follow closely the contours of the area to be repaired. Care shall be exercised not to peel off the galvanizing of the fabric while bending.
- e. The full area of wire mesh shall be held firmly in position by means of sixteen (16) gauge or eighteen (18) gauge galvanized wire ties.
- f. In places where the depth of the section removed exceeds three (3) inches over an appreciable area, two (2) or more layers of fabric shall be used.

4. Surface Preparation.

- a. Disintegrated and Spalled Concrete shall be removed by chipping with pneumatic hammers and chisels to sound concrete. All cracks and cavities shall be chipped to such formation that their sides are approximately perpendicular to the exposed surface forming a mechanical shoulder for at least two (2) inches in depth. All existing concrete shall be cleaned by flushing or scouring with water and compressed air jets to assure removal of all loose particles. The air pressure at the nozzle shall not be less than 50 pounds and the water pressure shall be 20 pounds greater.
- b. Corrosion: corroded and rusted reinforcing steel shall be cleaned by sandblasting to insure positive bond of the pneumatically placed mortar reinforcing steel.
- c. Bond: to insure perfect bond, the newly chipped and sand-blasted surface shall be thoroughly moistened with water, not less than one hour prior to application of the mortar. In no instance shall the mortar be applied in an area where free running water exists.

5. Proportioning.

Mortar shall be mixed in the proportion of one (1) sack of Portland Cement to 3 cubic feet of sand, volumetrically batch measured.

6. Mixing.

- a. Mortar shall be thoroughly mixed in a dry state either by hand or in a mechanical mixer before placing in the hopper of the cement gun or other apparatus.
- b. Water shall not be added to the mix after mixing or before using the cement gun.
- c. Material that has been mixed forty-five (45) minutes without being used shall be discarded.
- d. Remixing or Tempering shall not be permitted.

7. Application.

- a. Temperature Below 32 Degrees F.- Mortar shall not be placed on a frozen surface nor during freezing weather. Mortar shall not be placed when it is anticipated that the temperature during the following twenty-four (24) hours will drop below thirty-two (32) degrees Fahrenheit.
- b. Sequence of Application may be from bottom to top or vice-versa if rebound is properly removed.
- c. Corners Shall be filled first, "shooting" shall be from an angle as near perpendicular to the surface as practicable, with the nozzle held approximately three (3) feet from the work (except in confined control). If the flow of material at the nozzle is not uniform, and slugs, sand spots, or wet "sloughs" result, the nozzle man shall direct the nozzle away from the work until the faulty conditions are corrected. Such defects shall be replaced as the work progresses.

8. Suspension.

Work shall be suspended if:

- a. High Wind separates the cement from the sand at the nozzle.
- b. Temperature approaches freezing temperature and the mortar cannot be protected.
- c. Rain or other than very light sprinkles would wash out the mortar.
- d. Time Interval between successive layers in sloping, vertical or overhanging work must be sufficient to allow initial, but not final, set to develop. At the time the initial set is developing the surface shall be cleaned to remove the thin film of laitance in order to provide for a perfect bond with succeeding application.
- e. Construction Joints or day's work joints shall be sloped off to a thin clean, regular edge, preferably at a forty-five (45) degree slope. Before placing the adjoining work, the sloped portion and adjacent work shall be thoroughly cleaned as necessary, then moistened and scoured with an air jet.

9. Surface Finish.

- a. Nozzlemen shall bring the mortar to an even plane and to well-formed corners by working up to ground wires or other guides, using somewhat lower placing velocity than normal.
- b. Screeding- after the body coat has been placed, the surface shall be trued with a thin edge screed to remove high areas and expose low areas. Low areas shall be properly filled with mortar to insure a true flat surface.
- c. Final Finish- after surface has been trued the entire surface shall have a broom finish.

10. Curing.

The curing compound shall be antisol clear, as manufactured by Sika Chemical Company or an approved equal.

11. Adjacent Surface Protection.

Appearance: during progress of the work, where appearance is important, adjacent areas or grounds which may be permanently discolored, stained, or otherwise damaged by dust and rebound, shall be adequately protected and, if contacted, shall be cleaned by early scraping, brushing, or washing, as the surroundings permit.

12. Equipment.

- a. Cement Gun: the pneumatic mixing and delivering equipment shall be of sufficient capacity and the lower chamber shall deliver material to the delivery hose continuously during the upper chamber recharging period.

- b. Gaskets: in the equipment shall be kept in good condition, to avoid reduced' pressure and consequent reduced velocity of material during the charging periods. The interior of the drums, feed gearing and valves shall be cleaned at regular intervals (at least once very 8 hour shift).
- c. Hose & Nozzle: the maximum length of material hose for the application of the mortar shall be approximately one-hundred (100) feet although it shall be permissible to use as much as five-hundred (500) feet of material hose if the supply nozzle pressures are increased to maintain proper velocity. The following nozzle pressures shall be determined by the type of work involved.
- d. Pressures
 - (1) For Rough or Heavy Work: nozzle pressures of fifty (50) to sixty (60) pounds.
 - (2) For High Lifts or long hose to insure against clogging, pressures of seventy (70) to seventy-five (75) pounds.
- e. Air Compressor: Any standard type of compressor shall be satisfactory if it is of sufficient capacity to provide, without interruption, the pressures and volume of air necessary for the longest hose delivery. The air compressor capacity determinations shall include allowances made for the air consumed in blowing rebound, cleaning reinforcing and for incidental uses. Compressor equipment shall be of such capacity so as to insure air pressures at the special mixer capable of producing the following material velocities.
- f. Velocities
 - (1) 375 to 500 feet per second using three-fourth (3/4) inch or one (1) inch nozzles.
 - (2) 425 to 550 feet per second using one one-half (1-1/2) inch nozzle. Nozzles shall be of the "Pre-Mixing" type, with perforated water-feed ring inside the nozzle to direct an even distribution of water through the material at the place of application.
- g. Water Pump: Water pressure shall be maintained at approximately twenty (20) pounds higher than the highest air pressure required for placing. Both air and water pressure shall be uniformly steady (non-pulsating).

13. Qualifications & Duties of Contractors, Sub-Contractors & Working Personnel

- a. The Contractor or the Sub-Contractor for this work shall have sufficient experience in this type of work and be able to show project satisfactorily completed.
- b. The Contractor or Sub-Contractor shall do this work only with competent operators.

14. Contractors Daily Log & Record of Cement Used.

- a. The Contractor shall make available to the Engineer a daily log defining the location and extent of each day's shooting operation.
- b. A daily count of full bags of cement at the start and full bags of cement at the end of each day's shooting, as well as empty bags at the end of each day's shooting, will be verified by the Engineer.

15. Method of Measurement.

The quantity to be paid for under this item shall be the number of bags of cement used.

16. Basis of Payment.

The unit price bid per bag of cement for this item shall include the cost of furnishing all materials, labor, equipment and other incidentals necessary to perform this item, including but not necessarily limited to sand blasting, reinforcing steel and/or mesh, sand, cement, mixers, nozzles, curing compound, protection to structures and restoration of all areas damaged during the construction. The final product shall be satisfactory to the Engineer.

ITEM 512 – REPAIRING STRUCTURAL SLABS

A. Description.

1. Under this item the Contractor shall repair structural slabs by the use of a quick- setting concrete repair material as shown on the plan or as directed by the Engineer. To perform this work it will be necessary to remove all deteriorated or unsound concrete to a depth of at least 1/2 inch, sand blast all surfaces which will be in contact with the concrete repair material, vacuum clean the excavation and place and finish the concrete repair material. It will be required to saw cut areas to be repaired to provide vertical edges for new repair.

B. Materials.

1. The quick-setting concrete repair material used as part of the work shall be one of the following or an approved equal:
2. Duracal Gypsum Cement manufactured by United States Gypsum Company of Chicago, Illinois.
3. Pike Patch #1 manufactured by Preco Chemical Company of Plainview, New York.
4. Thoro System Road Patch manufactured by Standard Dry Wall Products of Miami, Florida.
5. At least one (1) week prior to starting the work, the Contractor shall supply the Engineer with two (2) copies of the manufacturer's literature for the concrete repair material(s) which he elects to use.

C. Equipment.

1. All equipment used for this work shall be subject to approval by the Engineer. The following requirements shall also apply:
2. Pneumatic Hammers heavier than the nominal 25- pound class shall not be used.
3. Sand Blasting Equipment shall be capable of removing chips of partially-loosened concrete and of removing rust from reinforcing scale.
4. Vacuum Cleaning Equipment shall be capable of all debris from the sand blasting operation.

D. Construction Details

1. The completed work shall have no depressions or projections greater than 1/4" measured from a straight-edge placed across the repair area. Where the surface deviations exceed 1/4", the repaired pavement shall be removed and replaced to the satisfaction of the Engineer: Where necessary, a minimum of 1" peripheral clearance around the upper reinforcing bar of the top reinforcing mat will be required.
2. The Engineer shall be the sole determiner of what constitutes deteriorated concrete.
3. Reinforcing steel and any miscellaneous metals encountered shall be cleaned of injurious rust.
4. No. 40 Boiler Slag Grit or No. 2 Sand Blast Sand shall be used for blast cleaning.
5. Debris from the sand blasting operation shall be removed by vacuum cleaning.

6. The concrete repair material shall be mixed in strict accordance with the manufacturer's literature.
7. Particular care shall be taken to ensure that thorough consolidation is attained at the edges.
8. The concrete repair material shall be cured in strict accordance with the manufacturer's literature or as directed by the Engineer.
9. Traffic shall be restricted from the repaired area until the required curing period can be obtained.

E. Method of Measurement.

1. The quantity to be paid for under this item will be the number of square feet of concrete repair material placed in accordance with the specifications.

F. Basis of Payment.

1. The unit price bid per square foot shall include the cost of furnishing all labor, materials and equipment to perform this work including but not necessarily limited to chipping, sand blasting, saw cutting, vacuuming and placing concrete repair material. The final product shall be satisfactory to the Engineer.

ITEM 513 - SAND BAGS IN PLACE

1. Description.

Under this item the Contractor shall furnish and place bagged sand around structures, in and around stream beds or at any location deemed necessary as shown on the plans or ordered by the Engineer where it is necessary to divert or stem the flow of water.

2. Materials.

Sand shall be of any grade but shall not contain gravel, stone, clay, loam or any deleterious lumpy material. The sand shall be placed in heavy cloth or burlap bags (plastic will not be allowed), each bag having not less than one cubic foot capacity.

3. Construction Details.

Bags of sand shall be placed where shown on the plans and shall provide a thickness not less than that shown or ordered by the Engineer.

4. Method of Measurement.

The quantity of bagged sand to be paid for under this item shall be the amount of bagged sand placed, measured in cubic yard in its final position within payment limit either shown on the plans or as directed by the Engineer.

5. Basis of Payment.

The unit price bid per cubic yard shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

ITEM 514 - EPOXY PROTECTIVE COATING

1. Description.

Under this item the contractor shall clean, furnish and place an epoxy protective coating on the exposed concrete or steel surfaces of bridges where indicated on the plans or where ordered by the engineer.

2. Material.

The protective coating for use under this item shall be a two component, solvent free, 100% solids epoxy based system duralkote as manufactured by Dural International Corporation, 95 Brook Avenue, Deer Park, New York, 11729 or an approved equal.

3. Method.

- a. Preparation of surface - Concrete or steel surfaces shall be thoroughly cleaned of any dust, dirt, grease, oil or other objectionable Materials by sandblasting or power tool cleaning.
- b. Mixing. The two parts of the epoxy coating system are furnished in separate containers - It is essential that the entire contents of both containers be thoroughly blended together. A paddle attached to a W electric drill with a rated speed not to exceed 550 RPM is recommended for mixing. For batches of less than one gallon, thorough hand stirring would be allowed.
- c. Application - Material furnished under this item shall be applied in air temperatures above 40.degrees F. Dural Kote or an approved equal can be applied to a damp surface. However, freestanding water should be avoided.
- d. Application shall be by brush or roller - Two different colored coats shall be applied on concrete. The 'first coat shall be gray or an approved equal. The second coat shall be tan or an approved equal and shall be applied after the first coat is thoroughly dry, the entire surface of the concrete shall be adequately covered and all pores filled. The total finished dry thickness shall be approximately 12 - 15 mils. on steel work. The color and thickness shall be as ordered by the engineer.
- e. Caution in handling of the Epoxy Resin components cannot be over emphasized. It is recommended that the workers wear protective clothing, gloves and goggles. Do not get epoxy or resin on the skin or eyes and avoid breathing the vapors.

4. Method of Measurement.

The quantity to be paid for under this item will be the actual number of gallons of epoxy material properly mixed and incorporated in the completed work.

5. Basis of Payment.

The unit price bid shall include the cost of furnishing all labor, materials, tools, scaffolding and equipment necessary to prepare the surfaces and apply the surface coating in accordance with the plans or as directed by the engineer.

ITEM 515 - SAWCUTTING GROOVES IN EXISTING ASPHALT OR CONCRETE PAVEMENT

A. Description.

Under this item the Contractor shall cut grooves in existing pavement to conform with the details as shown on the contract plans and/or as directed by the Engineer.

B. Method.

The Contractor shall broom the pavement surface prior to saw-cutting the grooves. He shall keep the roadway clean and free from all residue and debris that may occur from his operation. Upon completion and final acceptance of the contract, all grooves shall be clean and free from any materials washed into them to the satisfaction of the Engineer.

C. Method of Measurement.

The quantity to be paid for under this item will be the number of linear feet of actual grooves sawcut in the existing asphalt or concrete pavement.

D. Basis of Payment.

The unit price shall include the cost of furnishing all labor, equipment and material necessary to satisfactorily complete the work.

ITEM 516 – LIME CEMENT PAVEMENT GROUTING

1. Work Included:

Under this item the Contractor shall prepare and place a mixture of limestone and cement in amounts sufficient to fill the existing voids in the subgrade where indicated on the plans and/or as ordered by the Engineer. Voids will be filled without modifying the existing grade of the pavement.

2. Materials:

The limestone-cement slurry formula shall consist of the following materials and approximate proportions as directed by the Engineer:

One (1) bag of type 2 Portland Cement

Five (5) bags of ground limestone (75# to 100# per bag)

Ten (10) to fifteen (15) gallons of water

Water reducer shall be added to the above water at the rate recommended by the manufacturer.

Based upon field conditions and characteristics of the materials, equipment and traffic, the above proportions may be modified by the Engineer. These modifications may include the addition of air entraining agents meeting the following requirements:

- a. Bleeding - The bleeding of concrete made with the admixture under test shall not exceed that of concrete made with the reference admixture by more than 2 percentage points, the bleeding being computed as a percentage of the net amount of mixing water in each concrete. The net mixing water is the water in excess of that present as absorbed water in the aggregate.
- b. Time of Setting - The initial time of setting of concrete containing the admixture under test shall not deviate from that of the concrete made with the reference admixture by more than +/- 1 hour and 15 minutes.
- c. Compressive Strength - The compressive strength of concrete containing the admixture under test shall be not less than 90 percent of that of similar concrete containing the reference admixture at 48 hours, 7 days, and 28 days.
- d. Resistance to Freezing and Thawing - The hardened concrete containing the admixture under test shall not exceed a weight loss of 4.0 percent in 25 cycles in a 10 percent NaCl solution.
- e. Length Change - The length change on drying of concrete containing the admixture under test shall not be greater than 120 percent of that of similar concrete containing the reference admixture. The specimens shall be moist cured for 14 days followed by 14 days of air drying. Length changes shall be based on initial measurements taken at the time of removal of the specimens from the molds and final measurements shall be taken at the end of the 14 days of air drying.

The materials used in the limestone-cement mix shall conform to the following requirements:

- (1) Portland Cement shall meet the requirements of Section B-MI.
- (2) Ground Limestone shall contain a minimum of 90 percent of calcium and magnesium carbonates. The gradation shall meet the following requirements:

100% shall pass the #40 mesh sieve

94%-100% shall pass the #60 mesh sieve

80%-90% shall pass the #100 mesh sieve

20%-60% shall pass the #200 mesh sieve

The limestone shall be dry and free of caking.

- (3) The water reducer shall meet the following requirements:

The water-reducing admixtures shall reduce the quantity of mixing water required to produce concrete of a given consistency, and retard the setting of concrete. Concrete containing this admixture shall conform to the following requirements:

- (a) Water-Reducing Admixtures - The water-reducing admixtures shall reduce the quantity of mixing water required to produce concrete of a given consistency. Concrete containing this admixture shall meet the following requirements of the water-reducing and retarding admixtures above except that the time of setting of the concrete containing the admixture under test shall not deviate from that of similar concrete without the admixture under test used as a reference by more than +/- 1 hour and 15 minutes.
- (b) Water Reduction - The mixing water required for concrete containing the admixture under test shall be reduced at least 5.0 percent when compared to that of the reference concrete without the admixture under test.
- (c) Time of Setting - The initial set time of the concrete containing the admixture under test shall be increased by at least 50 percent when compared to that of the reference concrete without the admixture under test.
- (d) Compressive Strength - The compressive strength of the concrete containing the admixture under test when compared to concrete without the admixture under test, shall be equal or greater at 48 hours, 7 days, and 28 days.
- (e) Resistance to Freezing and Thawing The hardened concrete containing the admixture under test shall not exceed a weight loss of 4.0 percent, in 25 cycles in a 10% NaCl solution.
- (f) Length Change. The length change on drying of concrete containing the admixture under test shall not be greater than 135 percent of that of similar concrete used as a reference. The specimens shall be moist cured for 14 days followed by 14 days of air drying. Length changes shall be based on initial measurements taken at the time of removal of the specimens from the molds and final measurements shall be taken at the end of the 14 days of air drying.

(4) Material for filling drilled holes shall meet the following requirements:

This product shall be of high strength and have fast setting characteristics. Compressive strength shall be a minimum of 2000 psi after 1 day and 5000 psi after 28 days. The material shall be able to withstand 25 cycles of freeze-thaw (10% NaCl) with a maximum loss of 4 percent. There shall be a minimal amount of expansion or shrinkage such that a special bonding agent is not necessary. The material shall exhibit no appreciable heat of hydration.

The color of the repair after it cures will be of substantially the same color as the item being repaired.

3. Execution:

The Contractor will arrange his operation such that successive drilling and grouting operations will progress within a time period that will insure the proper maintenance of traffic. The pressure distributor shall be approved by the Engineer and shall be capable of pumping the mixture at sufficient pressure over the required distances and through the drilled holes into the voids beneath the slabs. Pumping shall continue until the mixture emerges along the edge of the pavement or breaks through the shoulder. To prevent distortion of the slab, pumping shall be immediately discontinued if the slab begins to rise before the mixture is observed at the edges of the pavement and, if so directed, additional holes shall be drilled before pumping is resumed. Pumping shall also be discontinued if the mixture begins to leak on the pavement surface through a joint or crack. When the mixture appears in an unfilled hole or holes in the immediate pumping area, said hole or holes shall be plugged with a tapered softwood plug.

When the voids within an area have been completely filled, the pumping shall be discontinued and the hose nozzle allowed to remain in the hole for approximately thirty seconds before being withdrawn. Immediately following removal of the nozzle a softwood plug shall be driven into the hole and allowed to remain until the mixture has set. The softwood plugs shall be maintained flush with the top of the pavement until such time as the Engineer directs that the plugs be removed. Following the removal of the plug, all spillage and leakage around the hole and adjacent area shall be removed. The holes shall then be filled to the pavement surface with Concrete Repair Material.

Short trenches, extending slightly below the bottom of the pavement shall be dug at the end of joints or cracks where mud or water is encountered. Compressed air shall be used to remove the mud or water from beneath the pavement by forcing it out through the trenches.

At depressed joints, designated by the Engineer-in-charge, pumping will be discontinued at least ten feet from the end of the high side of a joint. Undersealing will be resumed beginning within ten feet from the joint on the low side and pumping until the void area has been filled to the proper maximum. Operation will then be resumed in the area on the high side of the joint as previously described.

No lime-cement mixture shall be placed when the subgrade is frozen. The quantity of material pumped into each hole shall be determined by the Engineer.

4. Measurement Payment:

This work will be measured by the number of pounds of limestone furnished and placed as shown on the plans or directed by the Engineer. The unit price bid per pound of limestone furnished and placed will include the cost of furnishing wood plugs, cement, limestone, water, labor and equipment necessary to prepare and, place the lime-cement mix and seal the holes. Drilling holes will be paid for under a separate item.

**ITEM 517 - DRILLING SUBSEALING HOLES FOR LIME-CEMENT PAVEMENT
GROUTING**

1. Work Included:

Under this work the Contractor shall drill holes through the existing cement concrete pavement for the undersealing of. The pavement with lime-cement pavement grouting at locations shown on the plans or as designated by the Engineer.

2. Material:

Not required.

3. Execution:

The hole diameter shall be between 2 1/4" and 2 5/8" diameter or of a diameter compatible with the installation of the lime-cement pavement grouting as determined by the Engineer or as recommended by the equipment manufacturer of the equipment used for placing the lime-cement mixture.

Holes shall be placed longitudinally at a spacing of 5' c to c and three rows of holes shall be placed in each slab. The middle row shall be located on the centerline of the slab and the other two rows approximately 2' in from the outer edges of the slabs. Holes shall be placed in a triangular pattern and the layout staggered in adjacent lanes so that as near as possible they would be about the same distance apart, or lay in circular patterns about each other. The hole pattern may be varied if shown on the plans or as ordered by the Engineer.

4. Measurement and Payment:

The number of holes to be paid for under this work will be the number of holes drilled in accordance with the plans and specifications or as directed by the Engineer. The unit price bid per each hole shall include the cost of all labor, materials, and equipment necessary for proper completion of the work.

ITEM 522 - TRIANGULAR GUIDE RAIL DELINEATOR

A. Description:

1. This item is to be used on Corrugated Beam Guide Rail, Heavy Post Blocked-Out Corrugated Beam Guide Rail, and Heavy Post Blocked-Out Corrugated Beam Median Barriers. The Triangular (trapezoid) shaped galvanized steel bracket delineator faced with reflective sheeting are placed within the depressed portion of the corrugated beam guide rail visible to vehicles.
2. Specifications are as follows: Triangular shaped slotted bracket - 12 gauge galvanized steel - approximately 5" X 2 3/4"

B. Material:

1. Reflective Material shall be Hi-Intensity Grade Sheeting.
2. Colors:
 - a) **Front/Back:** White/Yellow, White/Red, Yellow/Red, White/Blank, and Yellow/Blank as specified on the plans or ordered by Engineer.
 - b) **Size:** Top - 5", Bottom - 2 3/4", Height - 2 1/4" Effective Reflex Area approximately 8 square inches.

C. Construction Details:

1. The appropriate color, galvanized steel triangular guide rail delineator should be placed within the center of the depressed portion of the corrugated beam guide rail utilizing the existing 5/8" X 1 %" hex head steel full body bolt. The delineator bracket will be bolted between the flat plate washer and the front of the guide rail in accordance with the manufacturer's specifications and as directed by the Engineer.

D. Method of Measurement:

1. The quantity to be paid for under this item shall be the actual number of triangular guide rail delineators furnished and installed in accordance with the plans, specifications and as directed by the engineer.

E. Basis of Payment:

1. The unit price per each bid for this Item shall include all materials, labor, tools, equipment and incidentals necessary to complete the required work.

**ITEM 525 (A, B, C, D) - FULL DEPTH PAVEMENT CLEANING AND RESEALING
OF TRANSVERSE JOINTS IN PORTLAND
CEMENT CONCRETE PAVEMENT**

1. Description:

This work shall consist of cleaning and sealing transverse joints in existing concrete pavement at locations shown on the plans or as ordered by the Engineer.

2. Materials:

The sealant shall be an improved rubberized asphalt meeting the requirements of Federal Specification SS-S-1401B; Sealing Compound, Hot Applied, for Concrete and Asphalt Pavements. The sealant shall be accepted on the basis of the manufacturer's certifications that it conforms to the requirements of Federal Specification SS-S-1401B.

The joint sealant shall be packaged in sealed containers. Each container shall be clearly marked with the name and address of the manufacturer, the trade name of the sealant, specification number, manufacturer's batch or lot number, date of manufacture, quantity in container, recommended pouring temperature, safe heating temperature (the highest temperature to which the sealing compound can be heated and still conform to the requirements of the specification), and application instruction.

3. Construction Details:

All pavement repairs called for on the plans must be completed, as specified in the appropriate item(s), prior to commencement of the sealing operation.

Pavement joints shall be prepared to a depth as detailed on the plans or as ordered by the Engineer. In all cases, preparation shall entail removal of all existing joint material, incompressibles, foreign materials and debris with a plow, router, wire brush, concrete saw, or other suitable tool approved by the Engineer and designed for the purpose of neatly cleaning pavement joints. During preparation of joints, care shall be taken so as not to damage the subgrade, curbs, shoulder load transfer devices at the joint, nor any pavement surfaces including repaired areas, joint sidewalls and adjacent lanes. Any damage shall be repaired as ordered by the Engineer at no cost to the County.

After the joint has been prepared as specified above, both faces of the joint shall be thoroughly cleaned by either sand blasting, or high pressure water blasting, to the depth of the bottom of the proposed sealer or as ordered by the Engineer. Immediately prior to the sealing, the joint shall be blown with a compressed air stream of at least 100 p.s.i.g., measured at the source, in order to remove all remaining dirt, sand and loose material and to provide dry joint surfaces prior to sealing. The Contractor is required, at all times while cleaning and/or blowing joints, to provide protection by means of screening to prevent damage to or interference with traffic in adjacent lanes. This method of screening is to be submitted to the Engineer for his approval prior to starting the operation.

The air compressors used for the purpose described above must be equipped with traps capable of removing moisture and oil from the air. Work shall be stopped when and if it is found that there is oil or moisture in the compressed air. Work shall not resume until suitable adjustments are made and the air stream is found to be free of such contaminants.

Under no conditions will the Contractor be permitted to place the sealant if there is dust, moisture, oil, or any foreign material on that portion of the concrete which is to receive the backup material or joint sealant.

Joint sealant material shall be heated in a kettle or melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat-transfer medium. Positive temperature control, mechanical agitation, and recirculation pumps shall be provided. Direct heating must not be used. Heating must be performed in strict accordance with the manufacturer's recommendations and the kettle or melter used shall be of a type approved by the material manufacturer. Reheating shall not be permitted unless permitted by the manufacturer.

The unit shall be provided with two separate thermometers; one of which to indicate the temperature of the heat-transfer medium and the other to indicate the temperature of the joint sealing material in the hopper.

Before any joint sealing operations shall commence, the Engineer will inspect the joint sealing apparatus to ascertain the presence of and the working condition of the thermometers. Under no conditions or circumstances will the Engineer permit any joint sealing if the thermometers are found to be defective or missing.

The temperature of the sealant at placement shall be the recommended pouring temperature. The allowable variance from the recommended pouring temperature shall be 10 degrees +.

The Contractor shall be responsible for a safe and efficient means and method by which the Engineer will be able to accurately measure the temperature of the sealant, as it is discharged from the applicator wand. The means and method used must be submitted to the Engineer for his approval before the commencement of joint sealing operations.

The Contractor shall provide the Engineer with two (18" stem) thermometers, in addition to the two thermometers on the machine and a surface thermometer for pavement temperature measurements. The temperature range of the thermometers shall be such that the range is sufficient to meet the requirements of this specification.

If heat losses of sufficient magnitude are incurred as the sealant passes through the discharge hose and applicator wand to make it impossible to maintain sealant discharge pouring temperatures within the specified range of this specification, the Contractor shall provide the discharge hose and applicator wand with a means of controlling the temperature loss. Any method to be used shall be approved by the Engineer.

Under no circumstances shall the temperature of the sealant in the hopper be brought tip to a temperature exceeding the Safe Heating Temperature of the sealant.

A copy of the manufacturer's recommendations pertaining to the heating and application of the material shall be submitted to the Engineer prior to the commencement of work, and these recommendations shall be adhered to and followed by the Contractor, with such exceptions as this specification may require.

The applicator wand shall be returned to the machine and the material recirculated immediately upon the completion of each joint sealing.

At no time shall the sealant remain in the discharge hoses and applicator wand in a non-

circulating condition for a period of time exceeding 15 seconds.

The backup material/bondbreaker shall be stitched cotton piping cord. The diameter shall be such that when placed in the joint, it will; support the sealant at its proper depth, allowing the sealant to achieve the desired shape; prevent the sealant from leaking around and underneath it; and allow the sealant to deform freely when the joint expands and contracts.

The pavement at the joints to be sealed, shall be surface dry as judged by the Engineer. The temperature of the pavement shall not be less than 40 degrees F. as the sealer is poured. Similarly, the air temperature shall not be less than 40 degrees F. nor more than 75 degrees F. as the sealer is poured. Backup material shall be placed and joints shall be poured in a neat workmanlike manner and in accordance with the dimensions as detailed on the plans or as ordered by the Engineer. Care shall be taken not to overfill the joint space. Joint areas improperly sealed to the extent that the backup material and/or the sealant do not fall within the tolerances shown on the plans shall be resealed. The sealer and backup material shall be removed for the full lane width, the joint shall again be prepared and sealed in accordance with this specification.

This extra work shall be done by the Contractor at no additional cost to the County.

Prior to allowing traffic on the traffic lane, all sand and debris from the sandblasting and cleaning operations shall be removed from the pavement.

4. Method of Measurement:

This work will be measured by the number of linear feet of joints sealed.

5. Basis of Payment:

The unit price bid per linear foot shall include the cost of furnishing all labor, equipment, and materials as necessary to complete the work' as specified or as ordered by the Engineer. Damaged areas shall be repaired by the Contractor at no cost to the County.

The cost of resealing defective work shall be at the Contractor's expense and no additional payment will be made.

Note: Under these Items the Contractor will be paid under the following schedule for each Work Order

525A	(0' - <1000')	Installed
525B	(1000' - <5000')	Installed
525C	(5000' - <10,000')	Installed
525D	(10,000' & over)	Installed

ITEM 526 (A, B, C, D) - CLEANING AND RESEALING OF LONGITUDINAL JOINTS IN PORTLAND CEMENT CONCRETE PAVEMENT

1. Description:

Under this item the Contractor shall clean and seal existing longitudinal joints in accordance with the plans, specifications and as ordered by the Engineer.

2. Materials:

Pourable Sealant - The sealant shall meet the requirements of Federal Specification SS-S-1401B; Sealing Compound, Hot Applied, for concrete and asphalt pavements. The sealant shall be accepted on the basis of the manufacturer's certification that it conforms to the requirements of Federal Specification SS-S-1401B. The joint sealant compound shall be packaged in sealed containers. Each container shall be clearly marked with the name and address of the manufacturer, the trade name of the sealant, specification designation, the manufacturer's batch and lot number, recommended pouring temperature, safe heating temperature (the highest temperature to which the sealing compound can be heated and still conform to the requirements of the specification), and application instruction.

Backup Material/Bondbreaker - The backup material/bondbreaker shall be stitched cotton piping cord. The diameter shall be such that when placed in the joint, it will: Support the sealant at its proper depth, allowing the sealant to achieve the desired shape, prevent the sealant from leaking around and underneath it, and allow the sealant to deform freely when the joint expands and contracts.

3. Construction Details:

Joint sealing shall be performed when the pavement temperature shall be above 40 degrees F, and the pavement shall be surface dry.

The removal of existing joint sealing material shall be performed using tools and methods meeting the approval of the Engineer. The material removed from the joints shall be disposed of by the Contractor in a manner approved by the Engineer.

The top 1 1/2" of both sides of the joint seal cavity shall have all adhesives and other foreign material removed by any method meeting the approval of the Engineer. Then the top 1 1/2" of the joint shall be thoroughly cleaned by use of a high pressure sand water blaster, high pressure water blaster, or compressed air sandblaster.

During all operations, care shall be taken not to damage the sub base, curbs, longitudinal joint ties, longitudinal joint keys, or pavement. In the event that such damage occurs, it shall be repaired to the satisfaction of the Engineer at no expense to the County. Any damage to the sub base shall be repaired by a method which meets the approval of the Engineer.

Immediately prior to the placement of the backup material and the sealant, the joints shall be cleaned with a compressed air stream of at least 100 psi measured at the source.

The air compressors used for the purpose described above must be equipped with traps capable of removing moisture and oil from the air. Work shall be stopped when and if it is found that there is oil or moisture in the compressed air. Work shall not resume until suitable adjustments are made and the air stream is found to be free of such contaminants.

Under no conditions will the Contractor be permitted to place the sealant if there is dust, moisture, oil, or any foreign material on that portion of the concrete which is to receive the backup material or joint sealant.

The Contractor shall be responsible for protecting traffic from hazard or damage during the sand or water blasting and joint cleaning operations. Rigidly supported plywood sheeting or other suitable material and methods used for this purpose will be subject to the approval of the Engineer.

The material shall be heated in a kettle or melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat-transfer medium. Positive temperature control, mechanical agitation, and recirculation pumps shall be provided. Direct heating shall not be used. Heating must be performed in strict accordance with the manufacturer's recommendation. Reheating shall not be permitted.

With the exception of the 'Field Extruder' type, all units shall have an engine driven agitator which wipes the bottom of the sealant vat.

The unit shall be provided with two separate thermometers; one of which is to indicate the temperature of the heat-transfer medium and the other to indicate the temperature of the joint sealing material in the hopper.

Before any joint sealing operations shall commence, the Engineer will inspect the joint sealing apparatus to ascertain the presence of and the working condition of the thermometers. Under no conditions or circumstances will the Engineer permit any joint sealing if the thermometers are found to be defective or missing.

The recommended pouring temperature shall be 10 degrees below the manufacturer's designated Safe Heating Temperature. The allowable variance from the recommended pouring temperature shall be 10 degrees +.

The Contractor shall be responsible for a safe and efficient means and method by which the Engineer will be able to accurately measure the temperature of the sealant, as it is discharged from the applicator wand. The means and method used must be submitted to the Engineer for his approval before the commencement of joint sealing operations. The Contractor shall provide the Engineer with two (18" stem) thermometers. The temperature range of the thermometers shall be such that the range is sufficient to meet the requirements of this specification.

If heat losses of sufficient magnitude are incurred as the sealant passes through the discharge hose and applicator wand to make it impossible to maintain sealant discharge pouring temperatures within the specified range of this specification, the Contractor shall provide the discharge hose and applicator wand with a controlled heating apparatus. This apparatus must be supplied by the manufacturer of the sealing apparatus, be fully compatible with it and be available for use as the need may arise.

Under no circumstances shall the temperature of the sealant in the hopper be brought up to a temperature exceeding the Safe Heating Temperature of the sealant sealantd sealant.

A copy of the manufacturer's recommendations pertaining to the heating and application of the sealant shall be submitted to the Engineer prior to the commencement of work, and these recommendations shall be adhered to and followed by the Contractor, with such exceptions as this specification may require.

The applicator wand shall be returned to the machine and the material recirculated immediately upon the completion of each joint sealing.

At no time shall the sealant remain in the discharge hoses and applicator wand in a non-circulating condition for a period of time exceeding 15 seconds.

The depth of the sealant shall be as shown in the plans.

If in the opinion of the Engineer, the Contractor displays an inconsistency in his ability to fill the joints to the dimensions shown on the plans, he shall order the Contractor to cease his operations until such time as he can comply with the required criteria in a consistent manner.

4. Method of Measurement:

This work will be measured by the number of linear feet of longitudinal joints sealed.

5. Basis of Payment:

The unit price bid per linear foot shall include the cost of furnishing all labor, equipment, and materials as necessary to complete the work as specified or as ordered by the Engineer. All damage to sub base, curbs, pavement, longitudinal joint ties and longitudinal joint keys shall be repaired to the satisfaction of the Engineer and at no cost to the County.

Note: Under these Items the Contractor will be paid under the following schedule for each Work Order:

526A	(0' - <1000')	Installed
526B	(1000' - <5000')	Installed
526C	(5000' - <10,000')	Installed
526D	(10,000' & over)	Installed

ITEM 527 (A, B, C, D) - CLEANING, FILLING AND SEALING EXISTING JOINTS AND CRACKS IN ASPHALT PAVEMENT

1. Description:

Under this item the Contractor shall clean and seal existing joints and cracks in asphalt pavement in accordance with the specifications.

2. Materials:

The Polymer/Polyester Modified Asphalt Sealant is a homogeneous blend of high quality modified asphalt and polyester fibers supplied in blocks in polyethylene lined boxes.

The unique characteristics of the modified asphalt, including improved elasticity, adhesion and temperature susceptibility virtually eliminate bleeding during hot weather and greatly improves low temperature flexibility as compared to field mixed materials using AC-20 asphalt and fibers.

Physical Properties and Specifications Conformance:

The Polymer/Polyester Modified Asphalt Sealant contains 5%± by weight of polyester fibers blended with high quality modified asphalt cement.

Fiber Properties

Type.....	Polyester
Denier	3 to 5
Length.....	1/4 inch
Specific Gravity.....	1.38
Melt Temperature.....	478 deg. to 490 deg. F
Tensile Strength.....	78,000 to 88,000 PSI
at Break.....	Elongation 35-38%

Modified Asphalt Properties

Penetration, 77 deg. F (ASTM D5).....	100min
Softening Point (ASTM D36).....	125 deg. F min
Ductility, 77 deg. F, 5cm/min. (ASTM D113).....	100cm min
Ductility, 39.2 deg. F, 5cm/min. (ASTM D113)	50cm min
Point (ASTM D92).....	Flash 400 deg. F min

Property	Typical Results
Recommended Application Temperature	350 deg. F
Safe Heating Temperature	400 deg. F
Workability	Capable of being melted and applied through pressure feed indirect heated, agitated melter applicator units
Softening Point (ASTM D36)	180 deg. F min
Cone Penetration, 77 deg. F (ASTM D3407)	10-30
Ductility, 77 deg. F, 5cm/min (ASTM D113)	10cm min
Flexibility, 1", 10 deg.F, 90 deg. Bend, 10 sec.	Pass
Unit Weight at 60deg. F	8.0 lbs/gal

Note: Material for softening point, penetration, ductility and flexibility is poured after heating to the safe heating temperature as specified by the manufacturer using ASTM D3407 procedures.

3. Construction Details:

Joint sealing shall be performed when the pavement temperature shall be above 40 degrees F, and the pavement shall be surface dry.

The removal of existing joint sealing material shall be performed using, a pavement router meeting the approval of the Engineer. The material removed from the joints shall be disposed of by the Contractor in a manner approved by the Engineer.

The Contractor shall clean and rout to a width of 1" and to a depth of 1/2". The cleaning and routing shall provide for the removal of all existing joint sealers and shall result in a clean vertical edge against which to place the new sealant.

Immediately prior to the placement of the sealant, the joints shall be cleaned with a compressed air stream of at least 100 p.s.i. measured at the source.

The air compressors used for the purpose described above must be equipped with traps capable of removing moisture and oil from the air. Work shall be stopped when and if it is found that there is oil or moisture in the compressed air. Work shall not resume until suitable adjustments are made and the air stream is found to be free of such contaminants.

Under no conditions will the Contractor be permitted to place the sealant if there is dust, moisture, oil, or any foreign material on that portion of the pavement which is to receive the joint sealant.

The Contractor shall be responsible for protecting traffic from hazard or damage during the joint cleaning operations. Rigidly supported plywood sheeting or other suitable material and methods used for this purpose will be subject to the approval of the Engineer.

Polymer/Polyester Modified Sealant must be melted in a double jacketed boiler type melting kettle which is equipped with both agitation and recirculation systems. Prior to applying the sealant, it should be heated to a temperature between the recommended pour temperature of 350F and 400F. Due to the high viscosity imparted by the fiber reinforcement, this sealant must be applied through pressure feed wand application systems with a wand tip which consists of a flat metal plate which is between 3 and 4 inches across and is attached at the end of the applicator wand. During sealant application, the banding attachment facilitates leveling of the polymer/polyester modified asphalt to a band approximately 1/8" thick.

With the exception of the 'Field Extruder' type, all units shall have an engine driven agitator which wipes the bottom of the sealant vat.

The unit shall be provided with two separate thermometers; one of which is to indicate the temperature of the heat-transfer medium and the other to indicate the temperature of the joint sealing material in the hopper.

Before any joint sealing operations shall commence, the Engineer will inspect the joint sealing apparatus to ascertain the presence of and the working condition of the thermometers. Under no conditions or circumstances will the Engineer permit any joint sealing if the thermometers are found to be defective or missing.

The recommended pouring temperature shall be 10 degrees below the manufacturer's designated Safe Heating Temperature. The allowable variance from the recommended pouring temperature shall be $10^{\circ} \pm$.

The Contractor shall be responsible for a safe and efficient means and method by which the Engineer will be able to accurately measure the temperature of the sealant, as it is discharged from the applicator wand. The means and method used must be submitted to the Engineer for his approval before the commencement of joint sealing operations. The Contractor shall provide the Engineer with two (18" stem) thermometers. The temperature range of the thermometers shall be such that the range is sufficient to meet the requirements of this specification.

If heat losses of sufficient magnitude are incurred as the sealant passes through the discharge hose and applicator wand to make it impossible to maintain sealant discharge pouring temperatures within the specified range of this specification, the Contractor shall provide the discharge hose and applicator wand with a controlled heating apparatus. This apparatus must be supplied by the manufacturer of the sealing apparatus, be fully compatible with it and be available for use as the need may arise.

Under no circumstances shall the temperature of the sealant in the hopper be brought up to a temperature exceeding the Safe Heating Temperature of the sealant.

A copy of the manufacturer's recommendations pertaining to the heating and application of the sealant shall be submitted to the Engineer prior to the commencement of work, and these recommendations shall be adhered to and followed by the Contractor, with such exceptions as this specification may require.

The applicator wand shall be returned to the machine and the material recirculated immediately upon the completion of each joint sealing. At no time shall the sealant remain in the discharge hoses and applicator wand in a non-circulating condition for a period of time exceeding 15 seconds. Joints should be filled in a neat workmanlike manner to adjacent pavement surface.

4. Method of Measurement:

This work will be measured by the number of linear feet of joints sealed.

5. Basis of Payment:

The unit price bid per linear foot shall include the cost of furnishing all labor, equipment, and materials as necessary to complete the work as specified or as ordered by the Engineer. All damage to subbase, curbs or pavement, shall be repaired to the satisfaction of the Engineer and at no cost to the County.

Note: Under these Items the Contractor will be paid under the following schedule for each Work Order:

527A (0'- <1000')	Installed
527B (1000'- <5000')	Installed
527C (5000'- <10,000')	Installed
527D (10,000' & over)	Installed

ITEM 540 - STEEL BOLLARDS

A. Description.

1. Under this item, the contractor shall furnish and install steel bollards in strict accordance with the approved manufacturer's printed directions utilizing the proper anchorage and attachments as designated by the manufacturer at the locations shown on the drawings or as directed by the Engineer.

B. Materials.

1. The contractor shall submit complete and accurate shop drawings, catalog cuts, details or illustrated literature for the Engineer's approval. No installation shall be made prior to approval of the Engineer.

C. Installation.

1. Steel Bollards shall be installed in accordance with the plans and specifications, manufacturer's recommendations, and as directed by the Engineer. No installation shall begin until shop drawings, catalog cuts, details or illustrated literature are submitted and approved by the Engineer.

D. Submittals.

1. Product Data: Shop drawings, catalog cuts, details, illustrated literature, specifications and installation instructions.

E. Method of Measurement.

1. The quantity to be measured for payment shall be the number of steel bollards installed in their entirety.

F. Basis for Payment.

1. The unit price bid per steel bollard shall include the cost of furnishing all labor, material, and equipment necessary to satisfactorily complete the work, to the acceptance of the Engineer.

SECTION 557 - SUPERSTRUCTURE SLABS, SIDEWALKS ON BRIDGES, AND STRUCTURAL APPROACH SLABS

(Last Revised May, 2019)

557-1 DESCRIPTION. The work shall consist of placing high performance (Class HP) concrete to construct superstructure slabs, sidewalks, safety walks, and structural approach slabs, as required by the contract documents.

557-2 MATERIALS

557-2.01 General. The materials used for superstructure slabs, sidewalks on bridges, and structural approach slabs shall meet the material requirements of the following subsections:

Structural concrete materials	555-2.01
Reinforcing steel	556-2
Prestressed concrete form units	718-05
Permanent Corrugated Metal Forms for Bridge Slabs	736-01

557-2.02 Concrete. This shall meet the material requirements for Class HP in accordance with §501. Unless otherwise directed by the Engineer, all concrete shall contain a water-reducing and retarding admixture, meeting the requirements of §711-08. The quantity of the admixture shall be sufficient to achieve the minimum retardation consistent with placing conditions to keep the entire placement plastic (either one continuous placement or all sections of a sequence placement). The dosage rate used shall be determined by the Contractor in accordance with the manufacturer's recommendation and in concurrence with the Regional Materials Engineer. The dosage shall remain consistent for the duration of the concrete placement except for minor adjustments to meet changing environmental conditions.

557-2.03 HPIC Concrete This shall meet the requirements of **557-2.02 HP Concrete** with the following modifications:

1. The maximum w/c ratio is 0.40. Do not include absorbed moisture of the light weight fine aggregate as part of the w/c ratio calculation.
2. Substitute lightweight fine aggregate, meeting the requirements of AASHTO M 195, for 30% (by volume) of standard fine aggregate.

The Regional Materials Engineer, or his representative, will approve the batch weights prior to use. Use these values to manufacture all internally cured high performance concrete and periodically correct the batch weights to account for changes in the fine aggregate fineness modulus and aggregate moisture contents.

557-3 CONSTRUCTION DETAILS

557-3.01 Concrete Manufacturing and Transportation. The requirements of §501-3 shall apply.

A. For HPIC additional requirements follow:

1. Construct lightweight fine aggregate stockpile(s) at the production facility so as to maintain uniform moisture throughout the pile. Using a sprinkler system approved by the Materials Engineer. Continuously and uniformly sprinkle the stockpile(s) with water for a minimum of 48 hours, or until the "Absorbed Moisture content" of the aggregate in the stockpile is at least 15% by weight as determined by Test Method NY 703-19E (<https://www.dot.ny.gov/divisions/engineering/technical-services/materials-bureau/forms->

manuals). If a steady rain of comparable intensity occurs, turn off the sprinkler system at the direction of the Materials Engineer, until the rain ceases. At the end of the wetting period, or after the rain ceases, allow stockpiles to drain for 12 to 15 hours immediately prior to use, unless otherwise directed by the Materials Engineer.

2. The moisture content of the lightweight fine aggregate must be determined immediately prior to batching, using Test Method NY 703-19E. If the supplied mix design is based on "oven dry" weight of lightweight fine aggregate, a corresponding adjusted weight must be supplied to account for the actual absorbed moisture content, so that the mix design entered in to the automated batching system is based on SSD weight. After the adjusted mix design is entered into batching system, additional adjustments must be made to the fine aggregate and water quantities to account for the "surface" moisture of the fine aggregates.
3. The lightweight fine aggregate, at the time of batching must be at least 15% absorbed moisture content. Batch the lightweight fine aggregate first, then routinely batch the fine aggregate, coarse aggregate, admixtures, cement, pozzolan, Microsilica, and remaining mixing water and mix completely.

557-3.02 Falsework. The requirements of §555-3.02 shall apply.

557-3.03 Forms. Unless otherwise noted the contractor may use any of the following forming systems to form the underside of the superstructure slabs:

A. Removable Forms. The requirements of §555-3.03A shall apply.

B. Permanent Corrugated Metal Forms for Superstructure Slabs. Where permanent metal forms are employed, the following construction procedures shall apply.

Care and protection shall be given the metal form sheets, supports, and accessory items during handling, shipping, and storage. During loading, hoisting, and unloading operations, extra precaution and care shall be taken to prevent damage to ends, corners, and edges of the form sheets, supports, and accessory items. If the form units and accessories are to be stored prior to installation, they shall not be placed in contact with the ground and the material shall be adequately covered or protected to keep it dry.

Form supports shall be placed in direct contact with the flange of a stringer or floor beam. All attachments shall be made by permissible welds, bolts, clips, or other approved means. The welding of form supports to steel not considered weldable or to portions of flanges subject to tensile stresses shall not be permitted. Welding shall be in accordance with the provisions of the New York State Steel Construction Manual (SCM) except that 1/8 inch fillet welds will be permitted. All welding shall be performed by a welder certified under the SCM.

Form sheets shall not be permitted to rest directly on the flanges. They shall be securely fastened to form supports by self-tapping screws and shall have a minimum bearing length of 1 inch at each end. Transverse construction joints shall be located at the bottom of a flute and 1/4 inch weep holes shall be field drilled at not less than 1 foot on centers along the line of the joint.

Screed rail and pouring runway supports shall not be located directly on the form sheets, form supports, or reinforcing steel. No loose sheets or miscellaneous hardware shall be left on the structural slab at the end of the work day. Metal forms shall not be used where longitudinal slab construction joints are located between stringers, nor shall they be used on the fascia overhang.

The corrugated metal sheets shall be fabricated for the placement sequence used with the joints between sections of sheet overlapped or securely fastened to eliminate differential deflections between sections. Any exposed form metal where galvanizing has been damaged, shall be cleaned and repaired as provided for in §719-01, Galvanized Coatings and Repair Methods.

C. Prestressed Concrete Form Units. The applicable requirements of §555-3.03A and the Prestressed Concrete Construction Manual shall apply.

Form supports shall be placed in direct contact with the flange of the stringer. All attachments shall be made by permissible welds, bolts, or other means approved by the Engineer. The welding of form supports to steel not considered weldable, or to portions of flanges subject to tensile stresses will not be permitted. Welds and welding shall be in accordance with those portions of the SCM concerned with fillet weld design, fillet weld details, general workmanship and technique, except that 1/8 inch fillet welds will be permitted. All welding shall be performed by a welder certified under the SCM.

D. Restrictions. The following restrictions shall apply to all forms.

1. Fascia overhangs shall be formed with removable forms to provide a flat concrete surface.
2. A bay, constructed in stages such that a longitudinal joint is required, shall only be formed with removable forms.
3. A haunch which rests upon an end diaphragm shall only be formed with removable or permanent corrugated metal forms.
4. Prestressed concrete form units shall not be used where the design span is less than 5 feet nor greater than 11 feet. The design span is equal to the beam spacing minus one-half the top flange width.
5. Prestressed concrete form units may be restricted at the ends of some skewed spans. Refer to the contract documents for details.
6. Prestressed concrete form units shall not be used on prestressed concrete box beam superstructures unless specifically allowed by the contract documents.

557-3.04 Placing and Fastening Reinforcing Steel. Immediately prior to placement of concrete, the Engineer will verify that the reinforcing steel is positioned within required tolerances. If the allowable tolerances are exceeded, the Contractor shall correct the position of the reinforcing steel before placing concrete. All reinforcing steel and chairs shall be anchored to prevent uplift.

A. Permanent Corrugated Metal Forms or Removable Forms. Except for prestressed concrete form units the requirements of §556-3.01 and §556-3.03 shall apply.

B. Prestressed Concrete Form Units. The requirements of §556-3.01 and §556-3.03 shall apply. The top reinforcing steel mat shall be securely connected to the forms and the stud shear connectors. Connections shall be placed no farther apart than 4 feet on center. Connections to the forms may be made to the form-lifting devices, reinforcing steel projecting from the forms, or devices in the form supplied for this purpose. Hold-down devices shot into the form will not be permitted. Connections shall neither deflect the reinforcing steel nor interfere with the smooth flow of concrete.

557-3.05 Handling and Placing Concrete. The requirements of §555-3.04 Handling and Placing Concrete shall apply. A Preplacement Meeting is required to be held at least one week prior to the start of any concrete placement for superstructure slabs. Meeting participants besides the Contractor and Engineer should include materials suppliers, subcontractors, Regional Materials Engineer, Regional Safety Officer, and others as deemed appropriate. Participants will review all aspects of the proposed placement including, but not limited to, the following:

Equipment proposed for use and for backup.

- Planned workforce, assigned tasks of each designated position, and experience and expertise.
- Proposed construction techniques and crew experience.

- Safety considerations.
- Concrete mix design.
- Admixtures and technical data; dosage rates will be approved by the Regional Materials Engineer.
- Proposed placement rate, curing and loading schedules.
- Curing practices to be employed as well as the workforce designated to the curing process.
- Delivery/conveyance equipment, including deck finishing machine setup and operation.
- Traffic control.

For placements proposed between October 1st and April 1st the Preplacement Meeting should additionally review cold weather concreting operations including, but not limited to, the following:

- Expected environmental conditions at time of placement and during curing
- Proposed curing methods to maintain acceptable curing temperature

No concrete shall be placed until all aspects of the proposed placement are approved by the Engineer. A written report of the preplacement meeting will be established by the Engineer. Modifications shall be submitted in writing to the Engineer for approval. Further, for placements between October 1 and April 1st, no concrete shall be placed until all aspects of the proposed placement are approved by the Regional Construction Engineer.

Before concrete slabs are placed on steel spans, all permanent field connections shall be completed unless otherwise noted on the contract plans, and all temporary supports and mechanisms used in steel erection shall be removed.

No concrete shall be placed until all the provisions of §555-3.04A. Placement Limitations are met, environmental conditions are deemed favorable, and satisfactory means to mitigate adverse environmental conditions exist. Favorable environmental conditions are defined as an expected weather forecast suitable for concrete placement during the entire placement duration, the evaporation rate not to exceed 0.25 lb/sf-hr, and acceptable curing temperatures expected for the duration of the curing period.

The Contractor shall provide any necessary means to mitigate adverse weather conditions and curing temperatures. Failure to maintain acceptable environmental conditions will result in the concrete placement being stopped and a bulkhead put in place.

The Contractor shall take the necessary measurements and calculate the theoretical evaporation rate. The measurements for air temperature, relative humidity, and wind speed shall be taken as near as possible to the final placement location of the concrete.

Concrete temperature will be taken from the same sample used for slump and air content tests. These measurements will be taken prior to commencement of concrete placement. If, in the Engineer's opinion, significant changes occur in atmospheric conditions, additional atmospheric measurements and calculations by the Contractor will be required. The Contractor shall supply all instruments necessary to make the required calculations. All instruments shall be approved by the Engineer, as being in good working order. The Contractor's measurements and calculations will be subject to the Engineer's approval. To determine the evaporation rate, apply the values taken for relative humidity, plastic concrete temperature, air temperature, and wind velocity to Figure 557-1 Structural Concrete Evaporation Rate.

The placing of concrete for any bridge slab shall be continuous between joints. Conveyance of concrete shall meet the requirements of §555-3.04B.

Vibrating of concrete shall be in accordance with §555-3.04E except the number of vibrators required shall be one for every 40 cy of concrete placed per hour, with a minimum of two vibrators in use at all times, and equally spaced across the placement front. One additional vibrator shall be available for use as a backup.

557-3.06 Cold Joints. "Cold Jointing," the bonding of fresh concrete to set concrete, shall be done where indicated in the contract documents, or where approved by the DCES.

A. Horizontal Joints. Within 24 hours of the start of the placement, the hardened concrete shall have laitance and dirt removed by a high-pressure water wash. The high-pressure water wash shall be sufficiently strong to remove any laitance and dirt, but not damage the reinforcement or reinforcement coating. The pressure wash equipment shall be capable of providing pressure of 3000 to 5000 psi.

After pressure washing, the concrete shall be continuously wetted for a minimum of 12 hours immediately prior to deck placement. Before placing fresh concrete, all standing water shall be removed with oil-free compressed air. The surface shall be protected from drying to maintain a clean, saturated surface dry condition when placing the new concrete.

If the tops of precast/prestressed elements have been sealed with a penetrating sealer, pressure wash the tops a maximum of 2 hours prior to concrete placement. The requirement for prewetting is waived.

B. Construction Joints. The requirements of § 555-3.06 A. shall apply. Construction joints shall be placed only where shown in the contract documents or where permitted by the DCES.

In the event an ongoing placement is delayed excessively, the establishment of a bulkhead shall be required.

557-3.07 Finishing Integral Wearing Surfaces on Superstructure Slabs. Machine finishing shall be used throughout all superstructure concrete placement operations with the exception of areas which are inaccessible to finishing machines.

Machine finishing shall be accomplished with an approved power-driven, one-operation (strike-off and finishing) machine. The finishing machine shall have a strike-off auger set 1/4 to 1/2 inch above the finished surface, a power-driven roller or oscillating type screed, and a pan float.

Finishing machines shall be equipped with adjustable strike-off and finishing screeds, the bottom surfaces of which shall be adjusted to produce the required contour of the finished surface. Machines shall be kept in true adjustment. Machines out of adjustment shall not be used until proper adjustments have been made and the adjustments have been approved by the Engineer.

The specific method and equipment that the Contractor proposes to use for finishing will be supplied during the Preplacement Meeting and will be subject to approval by the Engineer based on the above listed requirements.

Finishing machine rail supports shall be accurately set and of substantial construction so that the finished deck surface will conform to the profile and transverse sections shown in the contract documents. Finishing machine rail supports shall be placed and adjusted to properly provide for the deflection of forms, falsework, and structural supporting members which will occur during the placement of the concrete. Finishing machine rail supports shall not be attached by welding to portions of flanges subject to tensile stresses. The finishing machine rail supports shall be spaced at a maximum of 2 feet on center. During stage construction, the support system shall be on the stage being placed.

Where the deck surface falls outside the fascia stringer flange, the finishing machine rail supports shall be placed on the forms. The forms shall be designed to take these loads through the use of outriggers or some other approved means.

Prior to commencing concreting operations, the finishing machine shall be given a test run over the full length of the superstructure segment to be paved, with the finishing machine adjusted to its finishing position. While operating the finishing machine during this test, the finishing machine rails shall be checked for deflection and proper adjustment, the cover on slab reinforcement measured, and the controlling dimensions of slab reinforcement and forms checked. All necessary corrections shall be made and verified by the Engineer before concreting is begun.

A sufficient amount of concrete equal to the finishing machine capacity shall be supplied at all times.

After the concrete has been placed, spread, and consolidated to provide a uniformly dense structural slab, the surface shall be struck off immediately by a single passage of the transverse finishing machine.

The finishing machine shall carry sufficient concrete in front of the screed to fill low and porous places. This operation shall be done only once and shall produce a uniformly consolidated dense smooth surface of the required contour. The passage of the strike-off auger shall provide a concrete surface slightly above grade so that after settlement, if any, and the disappearance of excess water from the surface, the passage of the finishing screed will result in a uniform surface at the required grade and contour over its entire area, and provide the required cover over reinforcing.

In areas which are inaccessible to finishing machines, use of approved manual vibratory equipped power screeds may be used, with written approval of the DCES.

Hand finishing shall be allowed only in areas inaccessible to finishing machines or manually driven vibratory-equipped power screeds. Hand finishing shall be performed in the same sequence and manner as machine finishing, unless otherwise permitted by the Engineer. Hand finishing shall be performed in such a manner as to produce a concrete surface with quality and uniformity identical to that produced by the finishing machine. Hand screeds or bullfloats shall be magnesium and 10 inches, or more, in width. Care shall be taken not to overwork the concrete surface during any finishing operation.

In the event the placement is delayed as a result of equipment breakdowns or delivery problems, all concrete in place shall be protected from evaporation by covering the surface with wet burlap, curing blankets, or plastic sheets. Excessive delays shall require the establishment of a bulkhead and the ceasing of the placement.

Prior to texturing, the finished concrete surface shall be examined by the Contractor and the Engineer using a straightedge. The straight-edge shall not be less than 10 feet long. It shall be furnished by the Contractor and maintained in good, usable condition at the placement site at all times. While the concrete is still plastic, surface depressions shall be filled with concrete of the same class as the placement in progress. Surface irregularities greater than 1/4 inch in 10 feet in either the longitudinal or the transverse direction shall be corrected in a manner acceptable to the Engineer. Thin mortar or laitance, which may have accumulated ahead of the finishing machine screed, shall be removed from the work site. They shall not be used to fill depressions.

After finishing, the surface shall be given a suitable texture with an artificial turf drag made of molded polyethylene with approximately 53,500 synthetic turf blades per square yard, each approximately 1/2 inch long. The artificial turf drag shall be of a type and brand appearing on the Department's Approved List.

The Contractor may apply texture in a transverse direction, longitudinal direction, or parallel to the finishing machine. Once begun, the direction of texturing shall not change. All texturing shall be done from a work bridge immediately following the finishing operation. Texturing shall be done prior to the beginning of curing operations. Only one pass of the turf drag over the finished area will be permitted.

If texturing is done in a transverse or skewed direction, the Contractor shall texture by hand methods immediately after finishing machine passage.

If texturing is done in the longitudinal direction the turf drag shall be a seamless strip and shall be attached to the work bridge such that the surface of the concrete is textured immediately after finishing machine passage. Small areas, otherwise inaccessible to the attached drag, may be textured by hand methods. Texture resulting from the drag shall stop within 1 foot of curbs.

The finishing movement and resulting progress of the turf drag shall be done in a manner so as to prevent ridges or gouges forming in the concrete surface. The drag shall be weighted and the contact area changed as required to produce an acceptable texture. The drag shall be cleaned periodically to remove all hardened concrete particles.

557-3.08 Finishing Integral Wearing Surfaces on Structural Approach Slabs. The requirements of §557-3.07 shall apply together with the following:

The Contractor may use an approved, manually driven, vibrator-equipped power screed in lieu of a

power-driven transverse finishing machine. Only screed model types appearing on the Department's Approved List shall be employed for this work. The Engineer may require the use of a power-driven finishing machine if satisfactory results are not being attained.

557-3.09 Finishing Surfaces to be Overlaid with Portland Cement or Asphalt Concrete.

Machine finishing shall be used throughout all superstructure concrete placement operations, with the exception of areas which are inaccessible to finishing machines. In areas which are inaccessible to finishing machines, use of approved manual vibratory equipped power screeds may be used, with written approval of the D.C. E. S.

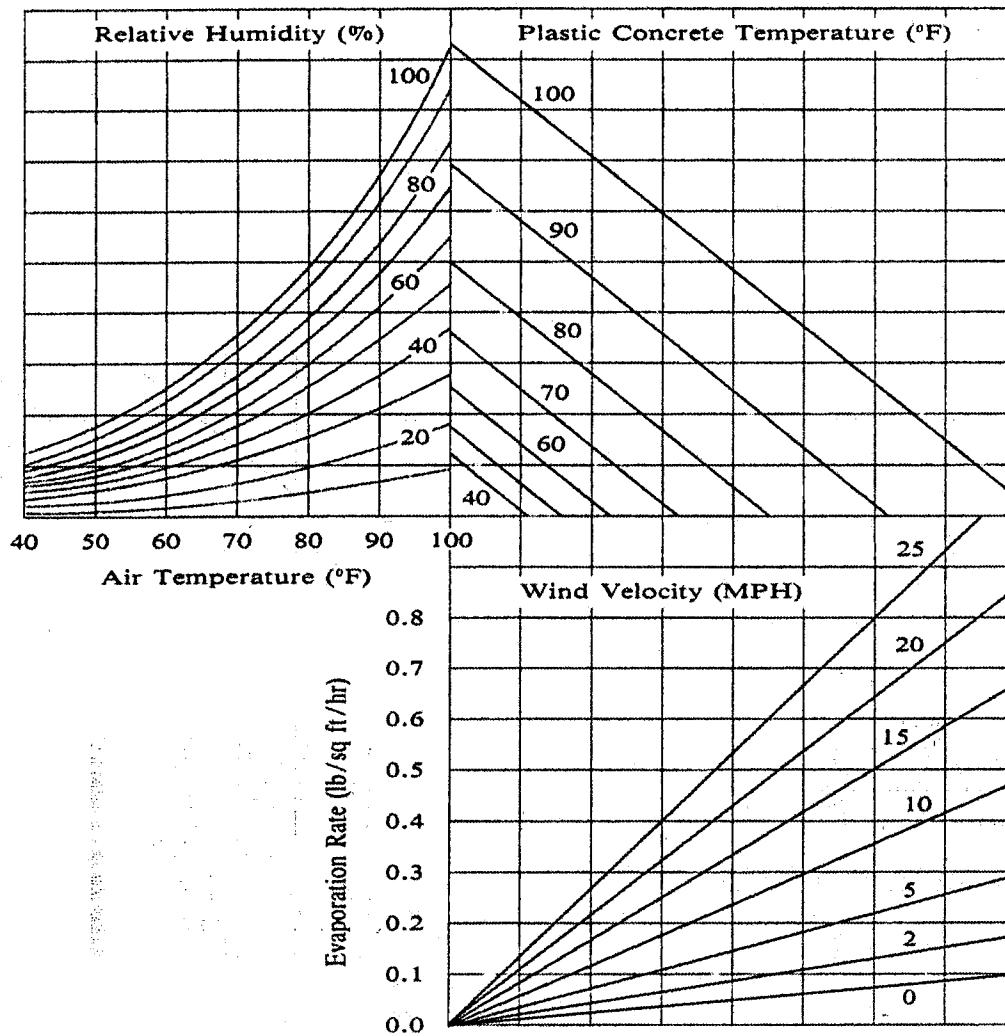
Surfaces shall be finished to a surface tolerance of 3/8 inch in 10 feet. The surface tolerance shall be verified by the Engineer with an approved straightedge not less than 10 feet long. The straightedge shall be furnished by the Contractor who shall maintain it in good condition at the paving site at all times.

Hand finishing shall be allowed only in areas inaccessible to finishing machines or manually driven vibratory-equipped power screeds. Hand finishing shall be performed in the same sequence and manner as machine finishing, unless otherwise permitted by the Engineer. Hand finishing shall be performed in such a manner as to produce a concrete surface with quality and uniformity identical to that produced by the finishing machine. Hand screeds or bullfloats shall be magnesium and 10 inches, or more, in width. Care shall be taken not to overwork the concrete surface during any finishing operation.

Upon completion of screeding, surfaces which will be overlaid with portland cement concrete shall be textured to conform to §557-3.07.

557-3.10 Sidewalk and Safety Walk Finish on Bridges. Sidewalks and safety walks shall be constructed by placing concrete continuously to an elevation slightly higher than shown in the contract documents. The concrete shall then be screeded to the correct elevations and worked with a magnesium float to give uniform surface. Floating shall be kept to a minimum, consistent with the desired finish, in order to avoid overworking the concrete. Follow floating with a broom finish. Surface scoring will not be permitted.

FIGURE 557-1 STRUCTURAL CONCRETE EVAPORATION RATE



To use this chart:

1. Enter with air temperature, move up to relative humidity.
2. Move right to plastic concrete temperature.
3. Move down to wind velocity.
4. Move left to read approximate rate of evaporation.

557-3.11 Curing. After finishing and plastic-concrete texturing operations are completed, the concrete surface shall be completely covered with clean, prewetted burlap. The allowable time period for wet burlap covering shall not exceed five minutes from the completion of texturing, and 30 minutes from the time of concrete placement. Care shall be taken so as not to damage the finished surface and texturing. The curing shall not be delayed beyond the specified period. Burlap shall be lapped a minimum of 1 foot. Lapped edges are not required to be sealed. Burlap shall be thoroughly saturated over its entire surface area and shall be drained of excess water prior to its application. Burlap shall be kept continuously wet, commencing 10 minutes from the time the wet burlap is placed, and protected from displacement. The Contractor may cover the wet burlap and soaker hoses only if it is necessary to maintain curing temperature.

The curing period shall begin only after all concrete for a given placement is complete. A curing day is defined as any day during which the ambient air temperature at the concrete surface is 45°F or higher for the entire day.

Conditions may occur which prevent an entire day from qualifying as a curing day, but do not prevent portions of that day from reaching temperatures that qualify as curing temperatures. If these conditions occur and with the Engineer's approval, the Contractor may aggregate curing hours. A curing hour is defined as any hour during which the curing temperature remains at, or above 45°F.

An aggregation of 24 curing hours will be credited as one curing day. Aggregations of less than 24 curing hours will not be credited.

Curing hours will be determined with continuous recording thermometers. The number and placement of the thermometers will be determined by the Engineer. Thermometers used to monitor curing temperatures shall consist of the following types:

1. Continuously Recording Thermometer. The thermometer shall be capable of continuously recording temperatures within a range of 0°F to 120°F for a minimum of 24 hours.
2. Maximum - Minimum Recording Thermometer. For all placements the thermometer shall be capable of recording maximum and minimum temperatures in a range of 0°F to 120°F.

The curing temperature of concrete is the air temperature at the concrete surface, or the air temperature between the concrete surface and its protective covering. Temperatures at these locations are critical for proper concrete curing. For the purposes of this section the temperatures at the foregoing locations shall be maintained between 45°F and 85°F inclusive.

A. Superstructure Slabs. After the burlap placement has been fully completed, the concrete surface shall be cured for 14 curing days. The Contractor may use either option listed below. After seven curing days, the Contractor may be permitted to perform incidental work on the structure under the loading limitations of §557-3.14 Loading Limitations for Superstructure Slabs. The burlap may be displaced in limited areas, for short durations, to perform items such as sawcut grooving, placement of sidewalks, safety walks, curbing, bridge rail, and fencing. The amount of burlap displaced to perform these operations shall be limited to the immediate area affected by the Contractor's operations. All concrete surfaces exposed during these operations shall be kept in a saturated condition. Immediately after the work is completed in the affected area, all burlap shall be replaced for the duration of the curing period. Removable forms shall remain in place until the minimum curing period is complete. HPIC Concrete curing requirement is seven days.

1. Fourteen-Day Continuous Wetting. Leave all burlap in place for 14 curing days. Provide continuous, uniform wetting for the entire curing period.

2. Wet Burlap and Curing Covers. Provide continuous uniform wetting for seven curing days. After seven curing days, either of the following methods may be used:

- a. Remove all burlap after seven curing days. Apply curing covers immediately upon burlap removal. Plastic-coated fiber blankets are not required to be laid dry. Application and maintenance of covers shall be in accordance with §555-3.08A General. Concrete cured in this manner shall not be exposed to the atmosphere for more than 10 minutes between burlap removal and curing cover placement.
- b. Apply curing covers directly over the wet burlap. Plastic-coated fiber blankets are not required to be laid dry. Application and maintenance of covers shall be in accordance with §555-3.08A General. The concrete surface shall be inspected periodically to ensure that its condition remains saturated.

The Contractor shall inform the Engineer of the intended curing procedure at the Preplacement Meeting.

B. Structural Approach Slabs, Curbs, Sidewalks and Safety Walks on Bridges. After the burlap placement has been fully completed, leave all burlap in place for 7 curing days. Provide continuous, uniform wetting for the entire curing period. Forms for curbs, sidewalks, and safety walks shall remain in place until the minimum curing period is complete. Forms for structural approach slabs shall remain in place until sufficient strength is achieved to avoid damage to the concrete. After removal of approach slab forms, the formed surfaces shall be cured as per the requirements of §555-3.08A.

557-3.12 Provisions for Concreting in Cold Weather. Cold-weather concreting provisions shall apply when the ambient air temperature below 45°F for 24 consecutive hours, or drops below 32°F at any time, during the curing or drying periods of the concrete.

When cold-weather concreting of superstructure slabs is progressed, curing shall be maintained in accordance with §555-3.08C *Provisions for Curing in Cold Weather*, except as modified here:

A. Superstructure Slabs.

The curing duration shall be 14 days (336 hours). Conditions may occur which prevent an entire 24 hour day from qualifying as a curing day, but do not prevent portions of that day from reaching temperatures that qualify as curing temperatures. If these conditions occur the Contractor may aggregate curing hours. An aggregation of 24 curing hours will be credited as one curing day based on the Engineer's acceptance of monitored temperature data. Any aggregations of less than 24 curing hours will not be credited as a curing day. A curing hour is defined as any hour during which the curing temperature remains at, or above 45°F. Curing temperature is defined as the temperature of the air measured at the surface of the curing concrete.

Curing temperatures shall be maintained in accordance with the requirements of Table 555-2, *Cold Weather Curing Requirements*. If ambient air temperatures are expected to fall below 45°F, materials and equipment necessary to maintain required curing temperatures shall be present on the site or readily available. The contractor shall provide protection in a timely manner to maintain acceptable curing.

External heat and enclosures to maintain curing temperatures may be required, as determined by the contractors proposed curing methods documented at the Preplacement Meeting. Enclosures are defined as those materials, combinations of materials, or systems that provide for uniform temperature and curing management of the concrete. If enclosures are required, they shall be constructed in such a way that all surfaces of the fresh concrete shall be maintained between 45°F and 80°F for the curing period. On structures where bottom formwork is not required, the existing superstructure materials may be considered for their insulating values provided all curing temperature requirements are maintained. If the Contractor expects to, or will, perform work when ambient temperatures are below 45°F, the enclosure shall be constructed in such a manner that work can be performed inside the enclosure without exposing any concrete to a temperature below 45°F. All concrete surfaces within heated areas shall be protected from drying by the use of live steam or use of continuously wetted burlap. All concrete surfaces within heated areas shall be protected from surface disintegration of fresh concrete due to an accumulation of carbon dioxide gas by properly venting the enclosure or use of non-combustion type heating systems.

Continuously recording thermometers shall be placed on both the top and underside of the deck to monitor areas where extreme cold or heat can be expected. Multiple thermometers may be required as directed by the Engineer. On structures where bottom formwork is not required and the existing superstructure materials are considered for their insulating value, temperatures shall be monitored at

the interface between the existing superstructure materials and new concrete using continuously recording thermocouples and thermometers.

A maximum temperature differential of 30° F between any two locations within any form of enclosure, heated or otherwise, shall be maintained at all times.

When the ambient temperature is 45°F or greater, an enclosure may be removed for access to progress additional work providing there is a temperature difference of 30 Fahrenheit degrees or less between the air and the surface of the concrete. If the temperature difference between the air and the surface of the concrete is greater than 30 Fahrenheit degrees, temperatures shall be gradually reduced at a rate not to exceed 1°F /hr until the temperature difference is equal to or less than 30 Fahrenheit degrees. If an enclosure is removed, all heating in other areas shall cease until such time that the enclosure is replaced. Upon completion of the incidental work and replacement of the enclosure, the Contractor shall reestablish acceptable curing temperature differentials, with a maximum temperature differential not more than 30 Fahrenheit degrees between any two locations within the enclosure.

After seven (7) curing days, the Contractor may perform work on the structure to complete sidewalks, safety walks, curbs, and barriers. Work shall progress only when ambient temperatures are 45°F or greater or within an enclosure as described above. Incidental work shall not cause damage to the structure.

For all incidental work, the requirements of §557-3.14, *Loading Limitations for Superstructure Slabs*, shall apply.

B. Structural Approach Slabs, Curbs, Sidewalks and Safety Walks on Bridges.

The provisions of 557-3.12 A *Superstructure Slabs* shall apply except the curing duration shall be 7 days (168 hours). After three (3) curing days, the Contractor may perform work on approach slabs to complete sidewalks, safety walks, curbs, and barriers. Work shall progress only when ambient temperatures are 45°F or greater or within an enclosure as described above. Incidental work shall not cause damage to the structure.

For structural approach slabs, the requirements of §557-3.15 *Loading Limitations for Structural Approach Slabs, Sidewalks, and Safety Walks on Bridges*, shall apply.

C. Saw Cut Grooving.

When concrete is placed, cured, or dried under cold weather provisions, and a surface treatment option requiring saw cut grooving is used, saw cut grooving may be commenced after 7 curing days and shall be completed prior to commencing the drying period. Work shall progress only when ambient temperatures are 45°F or greater or within an enclosure as described in §557-3.12 A. Care shall be taken to prevent damage to the structure and no chipping or spalling of concrete shall occur at the sawcut edges.

D. Winter Surface Treatment - Superstructure Slabs and Structural Approach Slabs.

Upon completion of the curing period, the Contractor shall progress one of the following two options:

1. Option 1. The top surface and fascias of the superstructure slab shall be air dried for 10 days before being sealed with a penetrating sealer or exposed to freezing temperatures. Saw cut grooving shall be completed, as described above, prior to application of penetrating sealer. External heat and enclosures to maintain drying temperatures may be required. Drying shall be achieved by the following:

- a. Providing free air flow and maintaining temperatures between 45°F and 80°F to the top surface and fascias (vertical faces) of the superstructure slab. Fascia forms shall be removed to allow for free air flow.

b. Drying of the underside of the structure, and of the fascias when a concrete barrier is to be placed on the superstructure slab, will not be required. However, ambient temperatures shall be maintained between 45°F and 80°F in these areas for the duration of the drying period.

c. The drying period shall be continuous except that aggregate drying hours may be allowed when a contractor ceases free air flow for any reason but protects the drying concrete from exposure to any additional water. Exposure to any additional water, beyond minor leakage thru an enclosure in limited areas, will require the drying period to re-commence for 10 days. Any 3 hour period of time, or fraction thereof, when the concrete is exposed to minor leakage shall not be counted as part of the drying period. Minor leakage shall be defined as water that dries or evaporates in 3 hours or less. Limited areas are defined as areas less than 100 ft². The total area of allowable minor leakage shall not exceed 5% of the concrete area under drying conditions. The same area of concrete shall not be exposed to minor leakage more than twice. Areas that exceed 100 ft² or are exposed to additional water that does not dry or evaporate in less than 3 hours, may be dried independently to accommodate removal of the original enclosure. Any independent enclosures shall be maintained under the same temperature and air flow requirements as the original enclosure for 10 days.

d. Means of accelerating the drying process will be considered by the Director, Materials Bureau, to achieve an internal moisture content of 85% relative humidity or less, measured at a depth of 1 inch from any concrete surface.

Once the drying period is complete, temperatures shall be gradually reduced at a rate not to exceed 1°F/hr until the temperature within the enclosure equals the temperature outside the enclosure. Application of a penetrating sealer, in accordance with other items shall be completed before opening the superstructure slab to traffic.

2. Option 2. The top surface and fascias of the superstructure slab shall be air dried for 24 hours before being sealed with an interim application of penetrating sealer or being exposed to freezing temperatures. No saw cut grooving will be performed. External heat and enclosures to maintain drying temperatures may be required. Work shall be progressed by doing the following:

a. Providing free air flow and maintaining temperatures between 45°F and 80°F to the top surface and fascias of the superstructure slab. Fascia forms shall be removed to allow for free air flow.

b. Drying of the underside of the structure, and of the fascias when a concrete barrier is to be placed on the superstructure slab, will not be required. However, ambient temperatures shall be maintained between 45°F and 80°F in these areas for the duration of the 24 hour drying period. Application of interim penetrating sealer shall be completed before opening the superstructure slab to traffic.

c. After April 1st the contractor shall clean the deck of debris and provide necessary site access. The Department will inspect the superstructure slab for freeze / thaw or scaling damage. Damage shall be defined as:

(1) Delaminations

(2) Surface defects as follows:

- Total combined area greater than 50 ft² with a scaling rating of 3 or greater as defined by ASTM C-672.
- Total combined area greater than 10 ft² where the surface distress is greater than 3/16 inch deep.

(3) Pop-outs – surface imperfections greater than 3/4 inch in diameter

d. If the above described damage exists, the Contractor shall repair any damaged or defective concrete greater than 3/16 inch deep by saw cutting the perimeter of the area to a depth of 3/4 inch, chipping any unsuitable material to 1-1/2 inch or sound concrete (whichever is deeper) with light, hand held, pneumatic tools, at a 45 degree angle into the repair area. Clean all repair area surfaces thoroughly by blast cleaning. Repair small areas 3 ft² or less using approved concrete repair material that provides a permeability less than 1200 coulombs, Item 701-04, preparing the surface according to the material manufacturer's recommendations. Repair larger areas using Class DP concrete, preparing the surface according to §584-3.02 and 584-3.03. Cure Class DP concrete for 7 days.

e. After all necessary repairs are completed, the Contractor shall perform diamond grinding to the entire superstructure slab and approach slabs, to within 1 foot of any curb or barrier. Diamond grinding shall be performed as follows:

(1) The depth of the grinding shall be approximately 3/16 inch to obtain a smooth texture.

(2) In all travel lanes, use equipment having gang-mounted diamond saw blades on a multi-blade arbor specifically designed for PCC pavement or superstructure production grinding. Using equipment capable of producing a 3 ft wide (minimum) grinding pass that is equipped with a vacuum system capable of removing slurry from the bridge deck surface, such as the Target 3800, Boart-Longyear (Kushion Kut) PC5000 or PC600, or equal as approved by the Director, Materials Bureau. Smaller diamond grinding equipment shall be used as necessary to complete grinding adjacent to curbs or barriers. The Contractor shall submit requests to use other equipment at least 7 days prior to the start of grinding operations.

(3) Begin and end diamond grinding lines normal to the bridge deck centerline. Grind the bridge deck longitudinally such that at least 95% of the bridge deck surface is ground and the bridge deck is in the same plane across a joint or crack when measured with a 3 ft (minimum) straightedge. When steel joints are specified, joints shall be placed to allow for the required grinding of 3/16 inch. Feathering of the grinding operation at steel joints shall be kept to a minimum. Provide surface drainage by maintaining the proper cross-slope on the finished surface and by blending adjacent passes. Regrind the bridge deck if an acceptable surface is not being obtained.

(4) Continuously remove slurry from the bridge deck using the vacuum system on the grinding equipment. If required, provide equipment capable of transporting the slurry from the job site to an acceptable waste area or facility, without spilling.

(5) Traffic may be allowed on ground areas after slurry removal is complete or on decks where only partial diamond grinding is complete.

(6) After diamond grinding is complete, concrete shall be saw cut grooved according to contract documents and specifications for saw cut grooving, followed by penetrating sealer application placed in accordance with contract documents and specifications for penetrating sealers.

E. Winter Surface Treatment –Curbs, Sidewalks and Safety Walks on Bridges.

Upon completion of the curing period, concrete shall be air dried for 24 hours by providing free air flow and maintaining temperatures between 45°F and 80°F to all concrete surfaces. The drying period shall be continuous. Upon completion of drying, curbs, sidewalks and safety walks shall be sealed with a penetrating sealer in accordance with contract documents.

557-3.13 Removal of Forms. Removal of forms for superstructure slabs shall meet the requirements of §555-3.09 Form Removal and as modified herein. The minimum curing period prior to form removal is 10 curing days, except that for cold weather concreting a minimum of 14 curing days is required unless

minimum compressive strengths are achieved as determined by the D.C. E. S. A curing day is defined in §555-3.08A. Permanent field connections, if required, shall be made on the same day prior to removal of forms and falsework.

The following inspection procedures will be used as a check to insure the soundness of the concrete structural slab adjacent to the steel forms. Not less than two days after completion of a concrete structural slab pour, but prior to the next slab pour, the Contractor shall remove a section of the steel form from the most recently completed pour of each span, at a location selected by the Engineer, in order to provide visual evidence that the concrete mix or the construction procedures are obtaining the desired results. If either the concrete mix or the construction procedures are varied significantly within a pour, such as a change in the extent of vibration or change in the workability of the mix, the Contractor shall remove another section of form to verify that the new procedures yielded desirable results.

After the concrete has been placed in a span for a minimum of ten days but prior to any further work performed on the superstructure in that span, the Engineer will spot-check the underside areas of the steel forms by sounding with a suitable-weight hammer at least 50% of the area of at least 25% of the individual form panels on a random basis to determine whether any honeycomb or void areas exist. If such areas are detected, the Contractor shall remove the forms from these areas for a visual inspection of the slab.

The amount of sounding and form removal may be reduced after a substantial amount of slab has been constructed and inspected, if the Contractor's methods of construction and the results of the inspections as outlined above indicate that sound concrete is present throughout the slabs.

If, after removing a section of form, the concrete is found to be defective, additional panels shall be removed. All defective concrete shall be repaired to match the adjacent concrete in section and color.

The form sections shall be removed by a metal saw or air-carbon-arc gouging with minimum damage to the concrete. Cuts shall only be sufficiently deep to sever the form. Any other method of removal shall be submitted to the Deputy Chief Engineer (Structures) for approval. Cuts that are parallel to the corrugations in the forms shall be located on the sloping surface midway between a crest and a valley. Cuts parallel to the supporting beams shall be made through the supporting angles taking care not to damage the structural steel beams. The Contractor will not be required to replace the removed forms.

The Contractor shall provide all the facilities required for safe, suitable and convenient means of access to the forms for the Engineer's inspection.

557-3.14 Loading Limitations for Superstructure Slabs. Superstructure slabs, during the curing period, may be subjected to a vehicle load not to exceed 10 tons, or a wheel load not to exceed 3 tons no sooner than seven curing days after placement. Full legal loading may commence using either of the following options:

A. Superstructure slabs may be subjected to full legal loads no sooner than 14 calendar days after completion of the curing period.

B. The Contractor may subject a superstructure slab to its full legal load upon completion of the curing period, or any day thereafter provided that the procedure below is followed:

1. The Contractor shall notify the Engineer at the Preplacement Meeting of the intention to subject the slab to full legal load prior to the 14th day after completion of curing.
2. During the slab concrete placement, the Engineer will cast two sets (pairs) of test cylinders in addition to each set cast for record and cure the cylinders on site in the same manner as the superstructure slab.
3. The Engineer will forward cylinders to the Materials Bureau or Regional Testing Facility. One set will be tested fourteen calendar days after placement and, if necessary, the second set will be tested twenty-one calendar days after concrete placement. Under no circumstances will cylinders be tested sooner than fourteen calendar days after the concrete placement they represent.

4. Concrete cylinder sets (pairs) designated for advance testing shall achieve an average compressive strength of 3000 psi, or greater, with individual cylinders having a compressive strength of 2800 psi, or greater.

5. Results of compression tests will be transmitted to the Engineer as soon as possible. The Engineer will inform the Contractor of the cylinder testing results and allow early loading if appropriate. If the required compressive strengths are not achieved, the requirements of §557-3.14A shall apply.

557-3.15 Loading Limitations for Structural Approach Slabs, Sidewalks, and Safety Walks on Bridges. During the curing period, approach slabs may be subjected to a vehicle load not to exceed 10 tons, or a wheel load not to exceed 3 tons. The Contractor may subject structural approach slabs, sidewalks, and safety walks to their full legal load upon completion of the 7-day curing period.

557-3.16 Damaged or Defective Concrete. Damaged or defective concrete shall be defined by, and repaired in accordance with, the requirements of §555-3.13, Defective or Damaged Concrete.

Subsequent to placement of concrete, either before or after setting, the Engineer will verify at random that the vertical clear distance from the top of the structural slab to the top mat of main reinforcing, as shown on the contract plans; is correct within a tolerance of plus or minus 1/2 inch. If the allowable tolerance is exceeded, the Engineer shall reject the work so advise the Contractor and the Deputy Chief Engineer (Structures), in writing, stating the deficiencies upon which the rejection is based.

The Deputy Chief Engineer (Structures) shall review the nature and extent of the deficiencies and shall designate one or more of the following alternatives:

- The affected placement shall be removed and replaced in whole or in part.
- The Contractor shall provide special corrective measures as directed by the Deputy Chief Engineer (Structures).
- The concrete placement shall be accepted without corrective action.

After the concrete has hardened, the Engineer will examine it using the Contractor's straightedge. Surface irregularities greater than 1/4 inch in 10 feet shall be corrected. Unless otherwise directed by the Regional Materials Engineer, the concrete used for repairs shall be of the same materials as that used for the original placement.

557-3.17 No Bar list provided. When no bar lists are provided in the contract documents the following shall apply:

1. At least thirty (30) days prior to fabrication of the reinforcement the Contractor shall submit a minimum of two copies of the bar lists and placement drawings showing the bar locations to the Engineer. The details of the bar list and placement drawings shall meet the requirements of the current edition of the Concrete Reinforcing Steel Institute's publication Reinforcing Bar Detailing. Placement drawings shall be size "B". Drawings and bar lists shall be clear and legible.
2. Requests for information or changes along with reasons shall be documented in a separate list.
3. The Engineer will transmit the documents to the designer for review for conformance with the design requirements in accordance with the Shop Drawing Approval process. The designer will not be checking lengths, number of bars, weights or bar marks. Corrections will be returned to the Contractor. When the documents are satisfactory they will be returned to the Contractor stamped "Approved In Conformance With Design Requirements".
4. Partial submissions that require coordination with other drawings will not be accepted.

557-4 METHOD OF MEASUREMENT. The work will be measured for payment in square yards of superstructure slab, approach slab, or sidewalk and safety walks installed, measured to the nearest 0.1 square yards.

Winter surface treatment of superstructure and approach slabs will be measured for payment in square yards of superstructure and approach slab, measured to the nearest 0.1 square yard.

557-5 BASIS OF PAYMENT. The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work. Unless otherwise provided, the unit price bid shall include the cost of furnishing and placing bar reinforcement, wire fabric for concrete reinforcement, copper flashing, flexible water stops, mechanical connectors where specified, sheet packing, water for wetting, joint sealing compounds, joint fillers, concrete curing materials, including any materials for temperature management during the curing period and the cost of screed rail supports and other brackets or braces necessary to support finishing machines.

If permanent metal forms are used, the cost of furnishing all facilities required for access, removing the permanent forms for inspection or repair purposes, painting the cut edges of the forms and repairing the concrete as required herein shall be included in the price bid for this work.

No extra compensation for corrective finishing or repairs to damaged or defective concrete will be paid.

Progress payments will be made on a per-span basis as follows:

Forty (40) percent of the area will be paid for after all reinforcing is properly placed. Forty (40) percent of the area will be paid for after the concrete has been properly placed and proper curing applications have been instituted. The remainder will be paid for after completion of all curing, and necessary corrective work.

The unit price bid for Surface Treatment of Superstructure and Approach Slabs shall include all labor, materials and equipment necessary to satisfactorily complete the work including work zone traffic control for work associated with deck cleaning, evaluation, and diamond grinding. The cost for interim penetrating sealer applied under §557-3.12C.2., prior to the concrete being exposed to freezing conditions, shall be included in this item. The cost for saw cut grooving and final application of penetrating sealer will be paid for under separate items and paid for only once.

Winter Surface treatment – Superstructure Slabs and Structural Approach Slabs shall only be paid when environmental conditions related to temperature and moisture protection during the drying period require use of enclosures.

Payment will be made under:

Item No.	Item	Pay Unit
557.0101	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Required – Type 1 Friction	Square Yard
557.0102	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Required – Type 2 Friction	Square Yard
557.0103	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Required – Type 3 Friction	Square Yard
557.0109	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Required – Type 9 Friction	Square Yard
557.0501	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Not Required – Type 1 Friction	Square Yard
557.0502	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Not Required – Type 2 Friction	Square Yard
557.0503	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Not Required – Type 3 Friction	Square Yard
557.0509	Superstructure Slab with Integral Wearing Surface – Bottom Formwork Not Required – Type 9 Friction	Square Yard
557.07	Superstructure Slab with Separate Wearing Surface – Bottom Formwork Required	Square Yard
557.09	Superstructure Slab with Separate Wearing Surface – Bottom Formwork Not Required	Square Yard

557.13	Class D Concrete	Square Yard
557.2001	Structural Approach Slab with Integral Wearing Surface – Type 1 Friction	Square Yard
557.2002	Structural Approach Slab with Integral Wearing Surface – Type 2 Friction	Square Yard
557.2003	Structural Approach Slab with Integral Wearing Surface – Type 3 Friction	Square Yard
557.2009	Structural Approach Slab with Integral Wearing Surface – Type 9 Friction	Square Yard
557.22	Structural Approach Slab with Separate Wearing Surface	Square Yard
557.29	Winter Surface Treatment – Superstructure Slabs and Structural Approach Slabs	Square Yard
557.30	Sidewalks and Safety Walks	Square Yard
557.4101	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Required, Type 1 Friction	Square Yard
557.4102	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Required, Type 2 Friction	Square Yard
557.4103	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Required, Type 3 Friction	Square Yard
557.4109	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Required, Type 9 Friction	Square Yard
557.4301	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Not Required, Type 1 Friction	Square Yard
557.4302	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Not Required, Type 2 Friction	Square Yard
557.4303	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Not Required, Type 3 Friction	Square Yard
557.4309	Superstructure Slab with Integral Wearing Surface – HPIC Bottom Formwork Not Required, Type 9 Friction	Square Yard

ITEM 557.01XX2403-ACCELERATED SUPERSTRUCTURE CONCRETE (24 HOURS) FOR STRUCTURAL SLAB BRIDGE DECK, FRICTION TYPE XX, FORMWORK REQUIRED

Curing. Wet cure accelerated concrete a minimum of 24 hours or until compressive strength requirements have been met. If additional materials are to be cast or applied to the accelerated concrete, surface preparation and drying shall be progressed according to any manufacture's recommendations for the subsequent materials placement(s). If cold weather conditions exist, upon completion of curing concrete shall be air dried for a minimum of 24 hours while maintaining acceptable curing temperatures.

METHOD OF MEASUREMENT

The work will be measured for payment as the number of square yards of accelerated superstructure concrete satisfactorily placed.

necessary to satisfactorily complete the work.

Payment Will Be Made Under:

Item No.	Description	Pay Unit
557.01XX2403	Accelerated Superstructure Concrete (24 Hours) For Structural Slab Bridge Deck, Friction Type XX, Formwork Required	Square Yard

XX = friction type

01- Type I
02- Type 2
03 -Type 3
09 - Type 9

ITEM 557.01XX2403- ACCELERATED SUPERSTRUCTURE CONCRETE (24 HOURS) FOR STRUCTURAL SLAB BRIDGE DECK, FRICTION TYPE XX, FORMWORK REQUIRED

DESCRIPTION

This work shall consist of placing accelerated superstructure concrete where indicated in accordance with the contract documents and as directed by the Engineer.

MATERIALS AND EQUIPMENT

All the provisions of 557-2 shall apply except as modified herein.

Produce a modified Class H concrete mix design that will achieve 3000 psi in 24 hours. Modifications may include:

- Non-chloride accelerator (§711-08)
- Normal range water reducer (§711-08)
- Hot water
- Insulating materials during curing

Maximum water/cement ratio -0.40

Slump range- 3"-5"

Air content -5.0%- 8.0%

The use of a water reducing, and retarding admixture is not required.

Transit Mixed and Truck Mixed Accelerated Structural Concrete. Use trucks modified to monitor water additions and dispense admixtures on site. Trucks shall be calibrated and approved by the Regional Materials Engineer. Apply the following in addition to the requirements of the Standard Specification sections listed above.

A. Accelerating Admixtures. If used, accelerating admixtures may be batched into transit mixed concrete at the plant in accordance with §501-2.03F, Admixture Dispensing Systems, or added at the site during or after any water addition. For truck mixed concrete, accelerating admixtures shall be added at the site and after the water is added.

When adding accelerating admixtures at the site, equip trucks with an air pressurized tank that:

- Contains the correct volume of admixture (for the volume of concrete in the truck) dispensed through the plant's admixture dispensing system.
- Discharges the admixture into the mixer drum in less than one minute.
- Has a clear plastic tank output hose that leads into the mixer drum.
- Has a properly working relief valve.

Add the entire admixture into the mixer drum in one uninterrupted operation in one minute or less.

B. Water-to-Cementitious Ratio Control. Twice daily, or more frequently if weather conditions change significantly as determined by the Engineer, determine the aggregate moisture content in accordance with Materials Method 9.1, Plant Inspection of PCC, and

ITEM 557.01XX2403- ACCELERATED SUPERSTRUCTURE CONCRETE (24 HOURS) FOR STRUCTURAL SLAB BRIDGE DECK, FRICTION TYPE XX, FORMWORK REQUIRED

adjust batch quantities accordingly. Determine the maximum amount of water that can be added to the mix that will not exceed the maximum water-to-cementitious ratio. Subtract from this quantity the portion of accelerating admixture that is water and any water added at the plant, including wash down water. Document, on the delivery ticket, the maximum amount of water that may be added at the project to maintain the maximum 0.40 water-to-cementitious ratio. Upon arrival at the site, provide the delivery ticket to the Engineer. Do not add more water than the maximum volume indicated on the delivery ticket.

C. In-Line Water Flow Meter. Equip trucks with an in-line water flow meter that:

- Resets easily to "0".
- Is mounted to allow easy reading.
- Withstands water temperatures up to 200°F.
- Is equipped with air strainers capable of removing entrapped air within the system.
- Has a batching delivery tolerance of 1% by weight or volume?
- Has a manufacturer's certified flow rate capacity of 70 gal/min.
- Has a minimum actual flow rate of 50 gal/min.

The Regional Materials Engineer will measure the actual flow rate and inspect the flow meter prior to use. Reset the flow meter to zero before adding any water at the site.

For truck mixed concrete, execute 20 dry revolutions at 12 to 18 rpm before adding water. Add water in one uninterrupted operation. No water is to be removed from the truck for any purpose while water is being added to the drum. After the required water designated on the delivery ticket has been added, add the entire accelerating admixture, if any, as described above in Accelerating Admixtures. Mixing shall not exceed 200 mixing revolutions after the addition of all materials.

Concrete Sampling and Testing. Provide an American Concrete Institute (ACI) Certified Concrete Field-Testing Technician, Grade I, or higher, to measure slump, air content, and unit weight of concrete and to cast cylinders for compressive strength testing. Use an agency accredited by the AASHTO Accreditation Program (AAP) in the field of construction materials testing of Portland Cement Concrete to perform all compressive strength testing. Provide acceptable proof of ACI Certification and AASHTO Accreditation to the Engineer before placing any concrete.

Accelerated Superstructure Concrete Trial Batch. At least 14 days prior to the start of concrete placement, produce a 4.0 yd³ (minimum) trial batch. Produce the trial batch using the same materials and processes as those to be used to produce the project concrete. Provide the Engineer a minimum of 7 days advance notification of trial batch production. Coordinate trial batch production to ensure the presence of the Engineer and the Regional Materials Engineer.

Cast a minimum of 12 cylinders in accordance with Materials Method 9.2, Field Inspection of Portland Cement Concrete. Determine the concrete compressive strength in accordance with

ITEM 557.01XX2403- ACCELERATED SUPERSTRUCTURE CONCRETE {24 HOURS) FOR STRUCTURAL SLAB BRIDGE DECK, FRICTION TYPE XX, FORMWORK REQUIRED

ASTM C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens, and establish a rate of strength gain over a period of 96 hours. Cast and test in the presence of the Engineer, or the Engineer's representative. Begin compressive strength testing of the trial batch concrete 18 hours after casting cylinders. Test one pair of cylinders at 18 hours, three pairs at 24 hours, one pair at 48 hours and one pair at 96 hours of age. The mix will be considered acceptable for use if the three cylinder pairs tested at 24 hours (6 cylinders total) achieve an average compressive strength exceeding 3000 psi with no individual cylinder strength less than 2600 psi.

At least 7 days prior to use, submit the mix design to the Engineer. Include admixture brands and dosages as well as mixing, transporting, placing, curing, and strength gain data. Changes other than minor fluctuations in admixture dosage rates will require a new mix design and trial batch. The Engineer may halt placement and order additional trial batches whenever the specified properties are not achieved.

CONSTRUCTION DETAILS

All the provisions of 557-3 shall apply except as modified herein. Meet with the Engineer a minimum of one week in advance to coordinate all aspects of removal, preparation, and material placement including mixing, transport, and discharge, jointing, material requirements and testing, and personnel requirements.

Project Strength Determination. Provide an ACI Certified Concrete Field Testing Technician, Grade I, or higher, to cast all cylinders and use an AASHTO accredited lab for compression testing of all cylinders. Cast and test in the presence of the Engineer, or the Engineer's representative. The Engineer, or the Engineer's representative, will complete the Concrete Cylinder Report as cylinders are cast and tested.

Cast a minimum of one cylinder pair from each truck in a scheduled placement operation in accordance with Materials Method 9.2, Field Inspection of Portland Cement Concrete. A minimum of three cylinder pairs (6 cylinders total) is required. Develop an Engineer-approved marking system that allows a cylinder to be readily associated with the corresponding placement location and placement time.

Determine the concrete compressive strength in accordance with ASTM C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens. Open the placement to traffic when the average compressive strength of the cylinder pair from the last truck of the operation exceeds 3000 psi. Use other cylinders cast to properly anticipate the time frame required for that pair to reach 3000 psi. If 3000 psi is not achieved, test another cylinder pair from the last truck later, provided an adequate number of additional cylinders were cast and the placement has not been opened to traffic. If the placement is opened to traffic before it has been shown to achieve 3000 psi, the placement will be considered Damaged or Defective Concrete and will be replaced at no additional cost to the State.

557.0502	Superstructure Slab with Integral Wearing Surface - Bottom Formwork Not Required- Type 2 Friction	Square Yard
557.0503	Superstructure Slab with Integral Wearing Surface- Bottom Formwork Not Required -Type 3 Friction	Square Yard
557.0509	Superstructure Slab with Integral Wearing Surface- Bottom Formwork Not Required -Type 9 Friction	Square Yard
557.07	Superstructure Slab with Separate Wearing Surface- Bottom Formwork Required	Square Yard
557.09	Superstructure Slab with Separate Wearing Surface- Bottom Formwork Not Required	Square Yard
557.13	Class D Concrete	Square Yard
557.2001	Structural Approach Slab with Integral Wearing Surface- Type 1 Friction	Square Yard
557.2002	Structural Approach Slab with Integral Wearing Surface - Type 2 Friction	Square Yard
557.2003	Structural Approach Slab with Integral Wearing Surface- Type 3 Friction	Square Yard
557.2009	Structural Approach Slab with Integral Wearing Surface- Type 9 Friction	Square Yard
557.22	Structural Approach Slab with Separate Wearing Surface	Square Yard
557.29	Winter Surface Treatment- Superstructure Slabs and Structural Approach Slabs	Square Yard
557.30	Sidewalks and Safety Walks	Square Yard
557.4101	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Required ,Type 1 Friction	Square Yard
557.4102	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Required ,Type 2 Friction	Square Yard
557.4103	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Required ,Type 3 Friction	Square Yard
557.4109	Superstructure Slab with Integral Wearing Surface -HPIC Bottom Formwork Required ,Type 9 Friction	Square Yard
557.4301	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Not Required, Type 1 Friction	Square Yard
557.4302	Superstructure re Slab with Integral Wearing Surface- HPIC Bottom Formwork Not Required, Type 2 Friction	Square Yard
557.4303	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Not Required, Type 3 Friction	Square Yard
557.4309	Superstructure Slab with Integral Wearing Surface- HPIC Bottom Formwork Not Required , Type 9 Friction	Square Yard

SECTION 558 - LONGITUDINAL SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE

558-1 DESCRIPTION. Sawcut grooves into the surface of a Portland cement concrete structural slab at the locations indicated in the contract documents.

The Contractor is hereby notified that concrete curing requirements ,combined with structural slab loading restrictions, may have a significant effect upon the specific time, relative to concrete placement, at which sawcut grooving may be performed. The Contractor shall be familiar with the limits imposed by these factors and conduct operations accordingly.

558-2 MATERIALS. Use multibladed wet saw cutting equipment using circular saw blades. The Engineer may allow the use of single blade, circular saw equipment, where it is determined such equipment is necessary to complete the work as required. The equipment the Contractor proposes to use will be subject to the approval of the Engineer, prior to use.

Use water which meets the requirements of §712-01.

558-3 CONSTRUCTION DETAILS. Sawcutting concrete produces silica dust. Include sawcutting of concrete in the Health and Safety Plan in accordance with the silica safety requirements of §107-05 L.4.

Start sawcutting only after the specified curing period has elapsed, unless otherwise allowed by the applicable specification.

Cut longitudinal grooves parallel to the centerline of roadway using a single pass. Space the center-to-center of grooves at 0.75 inch +/- 10%. Cut all grooves rectangular in shape conforming to the following dimensions:

Width 0.1 inch (+ 20%, - 0) Depth 0.15 inch +/- 50%

During the grooving operations, the Engineer will verify, at random, that the minimum groove depth is being achieved. Should the Engineer determine that minimum groove depth is not being achieved, the Contractor shall stop grooving operations and make all adjustments necessary to achieve the minimum depth.

Supply the Engineer with two (2) accurate, easily readable gauges with which to verify groove depth. Deliver the gauges and applicable manufacturer's instructions for use, if necessary, no later than one week prior to the anticipated beginning of grooving operations.

Terminate grooves within the following limits unless otherwise indicated on the contract documents:

Location	Closest Allowable Distance	Farthest Allowable Distance
Drainage structure	4 inches	15 inches
Vertical face (curb or parapet), or face of railing (no curb)	4 inches	15 inches
Joint System (Dimension measured perpendicular to the centerline of the joint system)	4 inches	15 inches

Using a self-contained system, continuously collect any slurry or debris created by the grooving operation such that it does not accumulate on the surface.

558-4 METHOD OF MEASUREMENT. The quantity will be measured as the number of square yards of structural slab satisfactorily grooved, measured between the faces of barrier, curb, or rail, and between the ends of the slabs, computed to the nearest whole square yard. No deduction will be made for areas left ungrooved near curbs, barriers, rails, joints, drainage structures, or other objects embedded in the slab.

558-5 BASIS OF PAYMENT. The unit price bid per square yard shall include the cost of all labor, materials, and equipment necessary to complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
558.02	Longitudinal Sawcut Grooving of Structural Slab Surface	Square Yard

SECTION 559- PROTECTIVE COATINGS AND GRAFFITI REMOVAL

559-1 DESCRIPTION. The work in this section shall include work required for protective coatings and graffiti removal.

559-2 MATERIALS. Materials shall meet the requirements specified in the special specifications.

559-3 CONSTRUCTION DETAILS. The extent of work and construction requirements will be covered by special specifications in the contract documents.

559-4 METHOD OF MEASUREMENT. As specified in the special specifications.

559-5 BASIS OF PAYMENT. As specified in the special specifications.

SECTION 560 - MASONRY

560-1 DESCRIPTION. Under this work the Contractor shall furnish and place masonry, with or without coping, of the type, shape, size, color and location indicated in the plans, proposal or as directed by the Engineer.

560-2 MATERIALS. Materials shall meet the requirements specified in the following subsections of 700 - Materials:

Split Faced Concrete Brick	704-10
Precast Concrete Coping	704-11
Caulking Compound for Structures	705-06
Premolded Resilient Joint Filler	705-07
Masonry Mortar	705-21
Bar Reinforcement - Grade 60	709-01
Wire Fabric for Concrete Reinforcement	709-02
Admixtures	711-08

560-2.01 Dimension Stone Masonry. All stone shall be sound, durable, free from reeds, rifts, seams, laminations and minerals which would cause discoloration or deterioration from weathering. The stone shall be of size, quality and color acceptable to the Regional Director. Duplicate samples of stone showing the complete color range shall be submitted to the Regional Director for approval. Stone shall be quarried so the stratification will be radial or parallel to the bed when set in place except where split face or seam face finish is called for on the plans. All beds and joints shall have a "Fine Point or Sawn Finish" for at least 2 inches from the arris lines. The balance shall not fall off from a straight line for more than 1/6 of the stone's minimum dimension. When stones project beyond adjoining faces, the fine pointing shall be carried at least 2 inches in from the adjoining surfaces (arris lines of stone or face of concrete).

Soffits of ring stones shall be cut to the curve of the arch and shall have a "Fine Point or Sawn Finish" unless otherwise shown on the plans. All other showing surfaces shall be finished as indicated on the plans.

On square bridges and on bridges where the skew is 30 degrees or less, the ring stones shall be cut so the joint sides are parallel to the faces of the abutments. On bridges with a skew greater than 30 degrees the ring stones shall be cut so the joint sides of each stone will be at right angles with the face. Soffit joints shall lie in a horizontal plane.

"Fine Point or Sawn Finish" shall be as described in §560-2.07, Definition of Finishes.

560-2.02 Split Faced Concrete Masonry. Split faced concrete masonry units shall be new, sound, durable, true to size, free from laminations and cracks, and uniform quality which complies with the

ITEM 559.16960011 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE
BY COATING TYPE

DESCRIPTION. Under this work the Contractor shall furnish and apply, in accordance with this specification, a protective sealer to concrete surfaces, at locations indicated on the plans or where directed by the Engineer. The color of the protective sealer shall be as ordered by the Engineer.

MATERIALS. The protective sealer used on concrete surfaces shall be one appearing on the Department's Approved List and shall meet the requirements of:

717-04 - Coating Type Protective Sealers

CONSTRUCTION DETAILS.

- A. General. Coating type sealers shall not be applied to walking or riding surfaces. The Contractor shall provide the Engineer with the sealer Manufacturer's written instructions for application and use, at least five (5) working days before the start of work. Only one (1) brand and Coating Type Protective sealer will be allowed for use on each individual element of a project (i.e. each pier, deck, abutment, etc.).
- B. Surface Preparation.
1. **New Concrete.** All required surface texturing, and saw cut grooving, shall be completed before the surface is prepared. All concrete that is to be sealed shall air dry for fourteen (14) days after curing has been removed, or for the length of time specified in the manufacturer's written instructions, whichever is longer. If the concrete is subjected to rain or moisture from other project operations, the drying period shall be extended twenty-four (24) hours for every day the concrete is subjected to water. After the drying period has ended, the concrete surface shall be lightly sand or shot blasted, followed by vacuum cleaning, to remove loose particles.
 2. **Existing Concrete.** Concrete surfaces to be sealed shall be thoroughly cleaned by light sand or shot blasting, followed by vacuum cleaning, to remove loose particles. If the concrete is subjected to rain or moisture from other project operations, the surface will be allowed to air dry for a minimum of forty-eight (48) hours before the sealer is applied.
- Care shall be taken while blast cleaning that all dirt is removed with minimal exposure of coarse aggregate. After cleaning, no blasting residue, laitance, curing compounds, standing water, oil, dirt or other foreign particles shall be present, which may prevent adhesion of the sealer. All surface preparation work shall be completed and approved by the Engineer, before sealer application can commence.
- C. **Weather Limitations.** Sealer materials shall not be applied during wet weather conditions or, if in the opinion of the Engineer, adverse weather conditions are anticipated within twelve (12) hours of the completion of sealer application. Ambient and surface temperatures shall be a minimum of 40°F during application and until the sealed concrete is dry to the touch. Application by spray methods will not be permitted during windy conditions, if in the opinion of the Engineer unsatisfactory results will be obtained.
- D. **Sealer Application.** The sealer shall be used as supplied by the Manufacturer without thinning or alteration, unless specifically required in the Manufacturer's instructions. Thorough mixing of

**ITEM 559.16960011 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE
BY COATING TYPE**

the sealer before and during its use shall be accomplished as recommended by the Manufacturer. Equipment for sealer application shall be clean of foreign materials and approved by the Engineer before use.

The total quantity of sealer applied by all coats shall be equal to the quantity required at the application rate specified in the Approved List. The second and each additional coat shall be applied perpendicular to the previous coat. Care shall be taken when applying each coat, such that running or puddling does not occur. Each coat shall be allowed to dry for a minimum of two (2) hours before the next coat is applied. The final coat shall be allowed to dry according to the manufacturer's instructions, before the removal of maintenance and protection of traffic.

On sloping and vertical concrete surfaces, sealer application shall progress from bottom to top. Care shall be taken to ensure that the entire surface of the concrete is covered and all pores filled.

METHOD OF MEASUREMENT. The work will be measured as the number of square feet of structural concrete sealed.

BASIS OF PAYMENT. The unit price bid per square feet shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
559.16960011	Protective Sealing of Structural Concrete by Coating Type	Square Foot

ITEM 559.90010011 - ANTI-GRAFFITI PROTECTION COATING

DESCRIPTION. The work shall consist of the application of Anti-Graffiti Protection Coating to the concrete, brick or stone masonry surfaces indicated on the Contract Plans and where directed by the Engineer.

MATERIALS.

One of the following three products shall be used, as approved by the Engineer for the applicable surface:

1. Knight and Shield-100, as manufactured by East Coast Clean-up Corp., 799 Broadway, NY 10003, Tel. (212) 875-9044.
2. Protect Epoxy, as manufactured by A.G.P. Systems, Inc., Windham, NY 12496, Tel. (518) 734-5880.
3. Graffiti Control, as manufactured by Prosoco, Inc., 111 Snyder Road, S. Plainfield, NJ 07080, Tel. (908) 754-4410.

or, an approved equal.

CONSTRUCTION DETAILS.

1. Prior to application of the Anti-Graffiti Protection Coating, the surfaces to be coated shall be clean, dry and free of dirt, oil and contaminants and meet the approval of the Engineer.
2. The Anti-Graffiti Protection Coating shall be applied to the surfaces in accordance with the manufacturer's instruction and recommendations and shall meet the approval of the Engineer. The Contractor shall supply the instructions to the Engineer at least two (2) weeks prior to starting work. The Contractor shall provide protection to collect anti-graffiti protection coating material to prevent the material from falling onto all areas below the work area.

METHOD OF MEASUREMENT.

The Anti-Graffiti Protection Coating will be measured per square yard of area coated. Measurement will be taken as the vertical plans projection for the coated area.

BASIS OF PAYMENT.

The unit price bid for this item shall include the cost of all labor, materials and equipment necessary to complete this work.

No payment will be made for repair of, or replacement of, damaged material, caused by the Contractor's operations.

559-1 DESCRIPTION. The work in this section shall include work required for protective coatings and graffiti removal.

559-2 MATERIALS. Materials shall meet the requirements specified in the special specifications.

559-3 CONSTRUCTION DETAILS. The extent of work and construction requirements will be covered by special specifications in the contract documents.

559-4 METHOD OF MEASUREMENT. As specified in the special specifications.

559-5 BASIS OF PAYMENT. As specified in the special specifications.

SECTION 560 - MASONRY

560-1 DESCRIPTION. Under this work the Contractor shall furnish and place masonry, with or without coping, of the type, shape, size, color and location indicated in the plans, proposal or as directed by the Engineer.

560-2 MATERIALS. Materials shall meet the requirements specified in the following subsections of 700 -Materials:

Split Faced Concrete Brick	704-10
Precast Concrete Coping	704-11
Caulking Compound for Structures	705-06
Premolded Resilient Joint Filler	705-07
Masonry Mortar	705-21
Bar Reinforcement - Grade 60	709-01
Wire Fabric for Concrete Reinforcement	709-02
Admixtures	711-08

560-2.01 Dimension Stone Masonry. All stone shall be sound, durable, free from reeds, rifts, seams, laminations and minerals which would cause discoloration or deterioration from weathering. The stone shall be of size, quality and color acceptable to the Regional Director. Duplicate samples of stone showing the complete color range shall be submitted to the Regional Director for approval. Stone shall be quarried so the stratification will be radial or parallel to the bed when set in place except where split face or seam face finish is called for on the plans. All beds and joints shall have a "Fine Point or Sawn Finish" for at least 2 inches from the arris lines. The balance shall not fall off from a straight line for more than 1/6 of the stone's minimum dimension. When stones project beyond adjoining faces, the fine pointing shall be carried at least 2 inches in from the adjoining surfaces (arris lines of stone or face of concrete).

Soffits of ring stones shall be cut to the curve of the arch and shall have a "Fine Point or Sawn Finish" unless otherwise shown on the plans. All other showing surfaces shall be finished as indicated on the plans.

On square bridges and on bridges where the skew is 30 degrees or less, the ring stones shall be cut so the joint sides are parallel to the faces of the abutments. On bridges with a skew greater than 30 degrees the ring stones shall be cut so the joint sides of each stone will be at right angles with the face. Soffit joints shall lie in a horizontal plane.

"Fine Point or Sawn Finish" shall be as described in §560-2.07, Definition of Finishes.

560-2.02 Split Faced Concrete Masonry. Split faced concrete masonry units shall be new, sound, durable, true to size, free from laminations and cracks, and uniform quality which complies with the

requirements of §704-10. All split face concrete masonry units delivered to the site shall be of the sizes necessary to produce the wall pattern as indicated on the plans.

An approved mechanical self-leveling splitting machine with two steel knives, one directly above the other will be used for all field splitting. Four samples of each thickness of each split faced concrete masonry unit shall be submitted to the Engineer for tentative approval. They shall be labeled with the contract title and number, the Contractor's name, and manufacturer's name. The split faced concrete masonry units used in the work shall be equal in all respects, color, quality, texture and surface to the approved samples.

Anchors shall be a metal slot formed from sheet zinc not less than 0.025 inches in thickness, bent to form a dovetail channel 5/8 inch wide at the front, 1 inch wide at the rear, 1 inch deep and with wings 1/8 to 1/4 inch wide. The slots shall be provided with a felt insert to prevent the entrance of fresh concrete. These inserts shall be removed just prior to the insertion of the ties. Ties shall be formed of zinc not less than 0.078 inches thick, 1 inch wide with one end designed to fit snugly into the anchor slots and shall be crimped with corrugations 1/8 inch deep, but no less than 1/16 inch deep.

The ties shall be at least 4 inches long. The Contractor shall submit to the Engineer for tentative approval four samples of the material used to fabricate the ties, i.e. anchors, felt and ties.

560-2.03 Stone Masonry. All stone shall be sound, durable, properly quarried, free from reeds, rifts, seams, laminations and minerals which would cause discoloration from weathering. Samples of stone shall be submitted to and be approved by the Regional Director prior to the beginning of any work on this masonry. The size, color and quality of the stone delivered to the site shall be substantially in accordance with the approved samples.

The stones may have an average variation of 1/6 of the thickness shown on the plans, however, they shall have a minimum thickness of at least 2/3 that shown on the plans and a maximum thickness of 1/6 over the maximum thickness shown on the plans.

560-2.04 Rubble Stone Masonry. All stones shall be clean, free from structural defects and acceptable to the Engineer. Selected stones, roughly squared and pitched to line, shall be used at all angles and ends of walls.

560-2.05 Precast Concrete Coping. Precast concrete coping units shall be new, sound, durable, true to size, free from laminations and cracks and of uniform quality which complies with the requirements of §704-11.

560-2.06 Mortar. Use 705-21 Masonry Mortar.

560-2.07 Definition of Finishes. Finishes of stone or manufactured masonry units shall be defined as shown in Table 560-1.

560-3 CONSTRUCTION DETAILS

560-3.01 General. Masonry or precast concrete coping shall not be constructed when the ambient temperature is 40°F or below, or when the stone or masonry units contain frost, except by written permission of the Engineer and subject to any conditions the Engineer may require.

Stone, masonry units or coping units shall not be dropped upon or slid over existing masonry, nor shall hammering or turning of stones, masonry units or coping on the masonry be allowed. Stones, masonry unit or coping units shall be carefully set without jarring masonry already laid, and they shall be handled in a manner so as not to cause disfigurement.

TABLE 560-1 MASONRY UNITS, SURFACE FINISH	
Finish Name	Maximum Surface Projection Beyond Pitch Lines

Smooth Finish	1/16 inch
Fine Point or Sawn Finish	1/4 inch
Rough Finish	1/2 inch
Scabbed Finish	3/4 inch
Seam and Split Face	1 inch
Rock Face	1/10 the vertical height of the individual stone
Thermal Finish	1/4 inch

NOTE: All faces of Dimension Masonry shall extend to the pitch lines shown on the plans.

560-3.02 Dimension Stone Masonry. The provisions of §560-3.01 shall apply with the following additional requirements:

A. Preparation of Stone and Bed. Each stone shall be cleaned and thoroughly saturated with water before being set. The bed which is to receive the masonry shall also be cleaned and moistened.

B. Bedding of Stone. All stone shall be well bedded in mortar and settled in place with a suitable wooden maul before the setting of the mortar.

C. Spalls not Permitted in Mortar Beds. No pinning up of stones with spalls will be permitted, and no spalls will be permitted in beds.

D. Expansion Joints. All surfaces of stone in contact with expansion joint material shall be made smooth, unless otherwise shown on the plans. The joints shall be filled with premolded resilient joint filler and sealed with an approved joint sealer as shown on the plans, or as ordered by the Engineer.

All joints in concrete backing shall be protected against intrusion of water into or through the joint by the installation of an approved water stop. The water stop shall be embedded into the concrete at least 3 inches on each side of the joint and shall be installed as near to the inside face of the concrete backing as practicable. The water stop may be of ASTM B370, 20 ounce preformed copper strip, 0.025 inch minimum thickness, soldered to be water tight and continuous, or may be approved flexible water stop as shown on the plans. Water stops shall be manufactured and installed so as to provide for the expansion and contraction movements present at the joint.

In case any stone is moved or the joint broken, the stone shall be taken up, the mortar thoroughly cleaned from beds and joints, and the stone reset in fresh mortar.

Joints shall not be filled by pouring in a thin or liquid mortar.

E. Pointing (new construction) and Tuck Pointing (raking out and repointing).

1. Pointing. Tool the face joints with a pointing tool before the mortar sets, as approved by the Engineer. Avoid smearing the masonry surfaces with excess mortar forced out of the joints. For joints not pointed when the masonry is laid, prepare the joints for pointing by following the tuck pointing procedures. There will be no separate payment for this work.

2. Tuck Pointing (Repointing). Repoint the joints in masonry where indicated on the Contract plans or directed by the Engineer. Use an Item 705-21 Type M, S or N masonry or mortar cement, tuck pointing mortar (or a specially designed one) with the same or weaker strength than the original mortar, as approved by the Engineer.

Remove soft, loose, cracked and deteriorated mortar to a minimum depth (measured from the wall face) of twice the average joint width, and remove all deteriorated mortar beyond the

minimum depth, as ordered by the Engineer. Do not damage the masonry during the removal process. Clean all contamination from the prepared joints.

Prior to repainting, flush with water and leave all surfaces to be re-mortared in a dampened, surface dry state. Pack the prepared joints in layers with mortar that closely matches the original color and texture, allowing each layer to become thumb-print hard before the next. Use at least two layers when the joint depth is twice the joint width. Apply a final layer thickness that does not exceed the joint width. When the final layer is thumb-print hard, finish with a pointing tool that recreates the original joint shape, or as approved by the Engineer.

Perform pointing when the ambient temperature is 40°F or above, and the masonry is frost free. Avoid recessed joints that hold water.

After the mortar sets, clean all mortar and cement stains from other surfaces. In direct sunlight, keep the newly pointed masonry moist for at least 3 days. In shade, moisten 2 to 3 times a day for at least 3 days.

F. Drawings. The contract plans show the general character of the masonry. Prior to the beginning of any work, the Contractor shall prepare and submit for the approval of the Regional Director, three sets of detail plans for all dimension masonry shown on the plans. The Contractor shall carefully check and assume full responsibility for the accuracy of this work. These detail plans will be examined and either approved or returned without approval to the Contractor, who shall check the indicated corrections and resubmit two sets of prints of revised details. When the detail plans have been approved, the Contractor shall furnish the Regional Director with three sets, one of which shall be reproducible. The drawings shall conform to the size and type of requirements for Shop Drawings set forth in the New York State Steel Construction Manual.

560-3.03 Split Faced Concrete Masonry. The provisions of §560-3.01 shall apply with the following additional requirements:

A. Sample Wall. The Contractor shall construct a split faced concrete masonry wall 6 feet long and 4 feet high of approved units and matching mortar at a location designated. This procedure shall be repeated until a sample wall is approved by the Engineer. The approved sample wall shall be maintained intact until the Engineer directs its removal.

In lieu of the field sample wall, the Contractor may show, for approval, a building constructed with units of the same type, color, texture and surface finish required. The field sample wall shall be required if the building masonry is not approved.

Upon approval of the sample wall or building, the Contractor shall furnish and lay split masonry to conform with the approved sample wall.

B. Protection and Handling. Split faced concrete masonry units shall be protected by a wrapping of 4 mil polyethylene, and shall be handled on pallets by mechanical means, or by hand or tongs. Dumping of the masonry units from trucks, wheel barrows or other conveyances is prohibited. Care shall be taken to protect all edges and the face of the masonry units. Distorted, laminated, checked or cracked masonry units will be rejected and removed from the site of construction.

On delivery to the site, the masonry units shall be neatly piled off the ground, on pallets or other approved implements, and protected from moisture by wrapping them with 4 mil polyethylene.

Masonry units which become wet, shall not be laid in the wall until their conformance with the specifications for §704-10 is shown by tests. The cost of these tests shall be borne by the Contractor.

C. Laying. The split faced concrete masonry shall be laid up, in the pattern shown on the plans, by skilled masons and in a first-class manner. The masonry shall be laid true to line and grade in level horizontal beds and be properly anchored. Each masonry unit shall be laid in a full mortar bed and in

a manner to form a full end joint in one operation. The space between the split face masonry and the supporting concrete shall be filled with mortar and rodded until the mortar rises to the top of the masonry unit as each unit is placed.

D. Bonding. The split faced concrete masonry shall be bonded to the supporting concrete. Dovetail anchors shall be continuous, set vertically and spaced on centers not exceeding 1 foot on the concrete walls. Ties shall be installed in the anchor slots at a maximum vertical height of 1 foot on centers.

E. Joints. Joints in the exposed face shall be struck with a concave jointing unless otherwise specified. The joints shall be 3/8 inch wide and the concave jointing shall be 1 1/8 inch deep at the center.

F. Protection Against Weather. The split faced concrete masonry shall be protected against the action of the weather. The tops and at least 2 feet down the sides of all walls not completed shall be constantly protected with suitable waterproof covering properly secured in place during periods of suspended work. The facing shall be so protected until it has been bonded to the concrete wall and completely sealed against moisture. During hot dry weather, the masonry shall be protected from the sun and kept moist for at least three days after completion.

G. Protection Against Damage. Projections and angles exposed to damage shall be boxed or otherwise protected to prevent damage. Any units damaged during the progress of the work shall be replaced with new units at the Contractor's expense.

H. Cleaning of Exposed Faces of Mortar and Drippings. Exposed faces of split faced concrete masonry units shall be cleaned free of excess mortar and mortar drippings, as the work progresses, to prevent excessive rubbing during final cleaning operations.

I. Expansion and Contraction Joints. Expansion and contraction joints shall be constructed as shown on the plans. The surfaces of the joints shall be plumb, true to line and smooth to the caulking compound.

J. Final Cleaning. After the completion of adjacent work likely to soil the masonry, the split faced concrete masonry shall be thoroughly cleaned, removing all dirt, dust, mortar, stains, etc. The concrete masonry shall be brushed, while dry, with stiff fiber brushes. If this brushing does not clean the masonry to the satisfaction of the Engineer, then the Contractor shall clean the facing with soap powder in clean water applied with stiff fiber scrub brushes. After scrubbing with soap and water the Contractor shall rinse the masonry with clean water. The Contractor may, with the Engineer's approval, substitute a cleaning solution that will not harm the concrete or mortar joints. The cleaning operation shall in all cases start at the top and proceed downward.

K. Caulking. When the split faced concrete masonry has received the final cleaning, all expansion and contraction joints shall be filled at least 1 inch deep with caulking compound.

All surfaces to receive the caulking compound shall be clean, free of loose materials, dirt, dust, frost, moisture, oils, laitance or curing compounds and shall be primed with clear lacquer, shellac or the manufacturer's recommended primer after the surfaces have been cleaned. A bond breaker shall be used as a release material back of the caulking compound. The bond breaker may be polyethylene, specially treated bond inhibiting pressure sensitive tape or any approved equal. The caulking compound shall be tooled with a concave joint finishing tool to provide a neat smoothly finished joint of uniform width. Where solvents are required on the jointing tool, they shall be as recommended by the manufacturer of the caulking compound.

560-3.04 Stone Masonry. The construction provisions of §560-3.02 shall apply. The individual stones shall be trimmed, recut and dressed, as may be necessary at the site, to obtain a pattern in the finished wall which will be in character with the requirements of drawings, specifications and the approved sample wall.

The following general requirements will apply to the placing of stone masonry:

A. Cross-Joints, Steps or Ladders. There shall be no cross-joints, steps or ladders.

B. Subdivision of Rectangles. There shall be no subdivision of rectangles.

C. Stone Shapes. There shall be no unusually shaped stone.

D. Clusters. There shall be no clusters of stone of the same length and height.

E. Horizontal Joint Length. There shall be no continuous horizontal joint greater in length than 10 feet.

F. Vertical Joints. There shall be no more than five stones abutting any one vertical joint.

G. Stone Proportions. There shall be no stone longer than six times its height nor shorter than one and one halftimes its height. The length of the average stone shall be three to five times its height.

H. Horizontal Joints. Horizontal joints shall not have a slope varying from the horizontal by more than one percent.

I. Color. Where stone masonry and dimension masonry are specified, for the same structure or in close proximity to each other, there shall be no great contrast in size or color between the Stone Masonry and the Dimension Masonry.

Prior to beginning the work the Contractor shall lay up a sample wall conforming to the requirements of §560-3.03A except that the material details for the work shall conform to those for Stone Masonry.

560-3.05 Rubble Stone Masonry. The provision of §560-3.01 shall apply with the following additional requirements:

The stone shall be laid to form substantial masonry presenting a neat, finished appearance. The minimum size of stone to be used shall be 4 inches in depth or rise, 9 inches in width, and 12 inches long. Spalls and pinnars will not be allowed to show on the face of the work and shall be used otherwise only where necessary. All stones shall be soundly and completely bedded in the mortar. The length of stretchers shall not exceed three times their rise, and the width of stretchers shall in no case be less than one and one-halftimes their rise. At least one-fourth of the stones in the face shall be headers and shall be evenly distributed. The length of headers shall be not less than 32 inches nor more than the thickness of the wall, where the work is 4 feet or less in thickness. Where the work is more than 4 feet thick, the length of headers shall be not less than 32 inches. The width of headers shall be not less than their rise. All stones shall be laid to break joints 6 inches or more and to thoroughly bond the work. No joint in the face shall be over 1 inch in width. Backing shall be good-sized, well-shaped stones so laid as to break joints. Spaces between stones shall be filled with spalls set in mortar. The degree of roughness of exposed faces shall be measured with a 6 foot straight edge supported between adjacent projections on the stone face. Variations in the stone face, in excess of 4 inches, measured from the straight edge to the extreme depression in stone or mortar will not be permitted. Rear faces shall present approximately plane surfaces.

Pointing shall conform to the requirements of §560-3.02E.

560-3.06 Rubble Stone Masonry Laid Dry. The specifications of §560-3.05, Rubble Stone Masonry, shall apply except that no mortar shall be used and the requirements of §560-3.0I Construction Details (General), pertaining to frost shall not apply unless otherwise directed by the Engineer.

560-3.07 Precast Concrete Coping. The provisions of §560-3.02, Dimension Stone Masonry and §560-3.03, Split Faced Concrete Masonry, shall apply with exception of §560-3.02D, §560-3.03A, and §560-3.03O.

560-3.08 Tuck Pointing. Apply the provisions of §560-3.02E2 Tuck Pointing. For re-caulking work, rake out any old caulking to a minimum 1 inch depth and follow the provisions of §560-3.03K. Caulking. Do not damage masonry during the removal and cleaning process.

560-4 METHOD OF MEASUREMENT

560-4.01 Dimension Masonry. Dimension masonry will be measured as the number of square feet (including joints within the dimension masonry) measured on the plane of all the exposed surfaces of the dimension masonry incorporated in the work.

560-4.02 Split Faced Concrete Masonry. Split faced concrete masonry will be measured as the number of square feet (including joints within the masonry and between the split faced concrete masonry and the concrete wall, and the mortar bed for precast concrete coping), on the plane of all exposed surfaces of the masonry incorporated in the work. Split faced masonry below the finished surface of the ground or paving shall be considered as exposed in computing the area for payment. The approved, constructed, split faced concrete masonry sample wall will be paid for as split face concrete masonry.

560-4.03 Rubble Stone Masonry. Payment for rubble stone masonry will be made for the number of cubic feet within the payment lines shown on the plans and placed in accordance with the specifications. Concrete, mortar or any joint material within these payment lines will, for the purpose of payment, be classified as stone masonry and will not be paid for under any other item.

560-4.04 Stone Masonry. Payment for stone masonry will be made for the number of square feet (including joints within the stone masonry) measured on the plane of all the exposed surfaces of the stone masonry incorporated in the work. Mortar joints between concrete and stone masonry will be paid for as stone masonry.

Stone masonry shown on the plans below the finished grade or sidewalk (to prevent the possible exposure of unfaced concrete) shall be considered as exposed in computing the payment area for *this* item.

Thirty square feet will be used in payment for the complete accepted sample wall required in this specification.

560-4.05 (Vacant)

560-4.06 Precast Concrete Coping. The quantity to be paid for will be the number of feet of precast concrete coping (including the joints between the coping units) placed in accordance with the plans, specification and orders of the Engineer.

560-4.07 Tuck Pointing. The Engineer will measure this work in the field as the number of square or linear feet of masonry pointed and cleaned, as bid. Linear measurements will be made along the joint centerline.

560-5 BASIS OF PAYMENT

560-5.01 Dimension Stone Masonry. The unit price bid per square feet shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

Concrete, dimension masonry, mortar or any joint material within the nominal thickness of the dimension masonry will, for the purpose of payment, be classified as dimension masonry and will not be paid for under any other item. Projections, if any, into the concrete beyond the nominal thickness of dimension masonry will be paid for as the class of concrete displaced by the stone. No deduction will be made for railing post holes.

Mortar Joints between Dimension Masonry and Concrete will be paid for as Dimension Masonry.

Mortar Joints between Dimension Masonry and Stone Masonry will be paid for as Stone Masonry.

560-5.02 Split Faced Concrete Masonry. The unit price bid per square feet shall include the cost of furnishing all labor, materials (including anchors, ties, premolded bituminous joint material, and caulking compound) and equipment necessary to complete the work. The payment shall also include the labor, materials and equipment necessary to remove and dispose of all constructed sample masonry panels when directed by the Engineer.

No payment shall be made to the Contractor for the submitted alternate sample walls or for any unapproved sample walls.

The cost of furnishing and placing anchoring devices shall be included in the unit price bid for this work.

The cost of erecting and disposing the sample wall shall be included in the unit price bid for this item.

560-5.03 Stone Masonry. The unit price bid per square feet shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

Concrete, stone masonry, mortar or any joint material within the nominal thickness of the stone masonry will, for the purpose of payment, be classified as stone masonry and will not be paid for under any other item. Projections, if any, into the concrete beyond the nominal thickness of stone masonry will be paid for as the class of concrete displaced by the stone. No deduction will be made for railing post holes.

The cost of furnishing and placing anchoring devices shall be included in the unit price for this item.

560-5.05 Rubble Stone Masonry. The unit price bid per cubic feet for Rubble Stone Masonry with joints or laid dry, shall include the cost of furnishing all labor, materials and equipment necessary to complete the work except excavation will be paid for under the appropriate excavation item.

560-5.06 Precast Concrete Coping. The unit price bid per feet shall include the cost of furnishing all labor, materials (including anchors, reinforcement, premolded resilient joint materials, and caulking compound) and equipment necessary to complete the work.

560-5.07 Tuck Pointing. Include all labor, material (including any re-caulking material), and equipment to complete the work in the unit bid price.

560-5.08 Progress Payments. Progress payments will be made, at the unit price bid, for 75% of the quantity properly placed. The balance of the quantity will be paid for upon proper cleaning and caulking of the joints.

Payment will be made under:

Item No.	Item	Pay Unit
560.01	Dimension Stone Masonry	Square Foot
560.02	Split Faced Concrete Masonry	Square Foot
560.0401	Stone Masonry	Square Foot
560.05	Rubble Stone Masonry	Cubic Foot
560.06	Rubble Stone Masonry Laid Dry	Cubic Foot

560.07	Precast Concrete Coping	Foot
560.08	Tuck Pointing	Foot
560.09	Tuck Pointing	Square Foot

SECTION 561 (VACANT)

SECTION 562 - REINFORCED CONCRETE THREE-SIDED STRUCTURES

562-1 DESCRIPTION. The work consists of designing and constructing reinforced concrete three-sided structure(s) at the location(s) indicated on the Plans.

A reinforced concrete three-sided structure is composed of some of the following discrete elements:

1. Span Unit
2. Span Unit Footing
3. Wing Wall with Footing
4. Headwall
5. Invert Slab with Cut-off Wall
6. Apron with Cut-off Wall

NOTE: Any of the above elements may be cast in place at no additional cost to the State.

562-2 MATERIALS. Materials for all precast concrete components shall meet the requirements of the PCCM. Materials for cast-in-place concrete shall be Class HP concrete meeting the requirements of Section 555 and modified to include corrosion inhibitor meeting the requirements of 711-13. The penetrating type protective sealer shall meet the requirements of 717-03. Reinforcement shall meet the requirements of Section 556.

562-3 CONSTRUCTION

562-3.01 Design. An appropriate structure design and all details necessary for construction meeting the Design parameters given in these specifications shall be developed and submitted to the DCES for approval. All design work, detail development, and proposed handling and installation procedure development, shall be done by a Professional Engineer. The design submittal shall conform to the requirements stated in the PCCM. The DCES reserves the right to reject a proposed design(s) if the structure type is determined to be unsuitable for the proposed application based on safety, durability, serviceability, or maintainability.

The Load Rating shall be determined in accordance with the current AASHTO *"Manual for Bridge Evaluation"* with all interim provisions in effect. The contractor shall show which method (allowable stress or load factor) was used in load rating computations. Load ratings shall also be computed by the Load and Resistance Factor Rating (LRFR) method. The load ratings shall be shown on the Production Note Sheet of the shop drawings. The contractor shall include all load rating computations in the design calculation submittal.

562-3.02 Design Parameters. The design of the structure(s) described above shall meet the following:

1. Design Specification : NYSDOT LRFD Bridge Design Specifications.
2. Live Load : HL-93 and the NYSDOT Design Permit \
3. Highway Profile Section : As shown in the contract documents.
4. Soil Parameters : As shown in the contract documents.

A. Setting Anchor Bolts for Bridge Bearings. The pipe sleeves, anchor bolts and work required to furnish, set and grout the anchor bolts, shall be included in the price bid for the respective bearing item.

B. Vertical Load Transmitting Devices. The furnishing and installing of vertical load transmitting devices, such as; rubber impregnated random fiber pad, and plain rubber pad, shall be included in the price bid for the respective item.

Payment will be made under:

Item No.	Item	Pay Unit
564.05XX	Structural Steel (Type 1-22)	Lump Sum
564.10nnnn	Structural Steel Replacement	Pound
564.51nnnn	Structural Steel	Pound
564.70nnnn	Structural Steel Replacement	Each

NOTE: nn denotes a serialized pay item.

ITEM 560.16010008 - REMOVE, STORE AND RESET EXISTING STONE COPING
ITEM 560.16020008 - REMOVE AND STORE EXISTING STONE COPING

DESCRIPTION:

This work shall consist of removing and storing existing stone coping at locations indicated on the plans and as directed by the Engineer.

The coping that is designated for reuse in this item shall be approved by the Engineer and reset as shown in the plans.

MATERIALS:

All stone coping is existing material.

Mortar used to reset the coping shall conform to the requirements of Subsection 560-2.06 of the Standard Specifications.

CONSTRUCTION DETAILS:

The contractor shall remove the existing stone coping from its original position, clean off the existing mortar, and store the coping at location(s) approved by the Engineer.

The coping that is to be reset shall be placed in accordance with the requirements of Subsection 560-3.02 of the Standard Specifications and as directed by the Engineer.

The stone coping that is to be stored but is not to be reset shall be picked up by others, designated by the Engineer, and removed from the project.

Coping that is to be reset and is damaged as a result of the contractor's operations shall be repaired or replaced by the contractor at no additional cost to the State.

METHOD OF MEASUREMENT:

This work will be measured as the number of feet of existing stone coping that is either removed, stored and reset or removed and stored, depending on the item specified. Measurement shall be taken along the centerline of the top surface of the coping.

BASIS OF PAYMENT:

The unit price bid shall include the cost of all labor, materials and equipment necessary to complete the work.

The cost of the fresh mortar bedding shall be included in this item for resetting the coping.

ITEM 560.18000008 - REMOVE AND REPLACE CAULK IN MASONRY EXPANSION JOINTS

DESCRIPTION:

Remove caulk and replace with new caulk in masonry expansion joints at locations indicated on the plans or where directed by the Engineer.

MATERIALS:

Caulking Compound for Structures	705-06
Premolded Resilient Joint Filler	705-07

CONSTRUCTION DETAILS:

Caulk Removal:

Remove caulk to a depth of 1 inch, or more if directed by the Engineer, by methods which do not damage masonry edges or adjacent mortar joints. Clean old caulk and dirt from the masonry.

Use vacuum or oil free compressed air to clean joints of all loose dirt or particles prior to placement of new caulk.

New Caulk:

Place additional premolded resilient joint filler in the joint if required by the Engineer.

Use caulk that color matches the mortar joints between masonry units, as approved by the Engineer.

Caulk when the ambient temperature is 40°F or above, and when the masonry is frost-free and surface dry.

Place caulk at a 1 inch minimum thickness (depth), or more if directed by the Engineer. Clean all masonry faces smeared with caulk to the satisfaction of the Engineer.

METHOD OF MEASUREMENT:

This work will be measured as the number of feet of joints caulked. The measurement will be taken along the centerline of caulked joints.

BASIS OF PAYMENT:

Include the cost of furnishing all labor, materials, and equipment necessary to complete the work in the unit price bid.

ITEM 560.18100011 - REMOVE AND RESET STONE MASONRY

DESCRIPTION

The work under this item shall include removing existing stone masonry, removing existing anchoring devices and furnishing and placing new anchoring devices, cleaning mortar, etc. from the stone, cataloguing and tagging each stone including a key drawing indicating location of each stone, storing and protecting the stones on pallets, and replacing the stone masonry including repair if required, as shown on the plans.

MATERIALS

The requirements of Subsections 560-2 and 560-2.06 shall apply.

CONSTRUCTION DETAILS

The requirements of Subsections 560-3.01 and 560-3.02, Sections A through E, shall apply.

METHOD OF MEASUREMENT

The method outlined in Subsection 560-4.04 shall apply with the exception that a sample wall will not be required nor measured.

BASIS OF PAYMENT

The basis of payment outlined in Subsection 560-5.03 shall apply. Progress payments will be made, at the unit price bid, for 40% of the quantity when the masonry is removed, an additional 50% when the masonry is reset, and 10% when all remaining work is complete.

ITEM 564.20010008- HOT-DIP GALVANIZING OF STRUCTURAL STEEL

DESCRIPTION

This work shall consist of hot-dip galvanizing of fabricated structural steel members.

MATERIALS

Materials for galvanizing shall meet the requirements of §719-01, Type I.

CONSTRUCTION DETAILS

Hot-dip galvanizing shall be in accordance with the material specifications.

Galvanizing shall be performed consistent with the current New York State Steel Construction Manual.

METHOD OF MEASUREMENT

This work will be measured as the number of pounds of steel hot dip galvanized and installed as per the contract documents.

BASIS OF PAYMENT

The unit price bid per pound shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work including transportation to and from the galvanizing facility and any necessary drilling or reaming. No additional payment will be made for additional fabrication step. required as a result of the galvanizing process.

ITEM 564.75010004 - STRUCTURAL STEEL REPAIR, TYPE I
ITEM 564.75020004 - STRUCTURAL STEEL REPAIR, TYPE II
ITEM 564.75030004 - STRUCTURAL STEEL REPAIR, TYPE III
ITEM 564.75040004 - STRUCTURAL STEEL REPAIR, TYPE IV

DESCRIPTION. Under this item the Contractor shall perform repair work to the existing structural steel where indicated on the plans. A Type I repair involves grinding, gouging, welding, and/or bending processes as defined in the contract documents. A Type II repair involves heat straightening, bending, and making/breaking connections by welding/bolting as defined in the contract documents. A Type III repair occurs at girder webs and may include such work as steel tear repair, crack repair, and/or other impact damage repair as defined in the contract documents. A Type IV repair occurs at bracing elements including diaphragms, connecting plates, stiffeners, etc, and may include crack repair, tear repair and/or other impact damage repair as defined in the contract documents.

MATERIALS. Materials for this work shall meet the requirements of the New York State Steel Construction Manual (SCM), the welding procedure specifically listed in the Special Notes and subsection 700 - Materials of the Standard Specifications.

Paint, as specified	708
Structural Steel	715-01
High Strength Bolts, Nuts & Washers	715-14
Painting Procedure	573

CONSTRUCTION DETAILS. See the contract documents for the repair procedure required for each location. The procedure specifies all welding work which shall be done in accordance with the provisions of the SCM. Unless otherwise specified in the contract documents, the SCM establishes the workmanship standards and standards of acceptance.

All testing of the finished repair shall be done by qualified technicians in accordance with the appropriate sections of the SCM and witnessed by a representative of the State. Ultrasonic Testing shall be performed by a New York state certified technician in accordance with the SCM. Written inspection reports documenting the results of all testing shall be provided to the EIC.

All existing paint shall be removed to a distance of 6 inches from any cut line, crack or any location to be heated prior to actual cutting, gouging or heating work being performed. All workers shall wear protective clothing and respirators as required by OSHA Regulations. No work shall be performed by unprotected workers.

All damage done to the structure while performing the necessary repairs shall be corrected to the satisfaction of the Engineer at the Contractor's expense.

METHOD OF MEASUREMENT. This work will be measured as the number of structural steel repairs performed in accordance with the plans. One repair shall be considered the work involved to complete the repair at one location shown on the plans. Removal and disposal of existing paint shall be paid under the appropriate contract items. Localized painting of the repair location, when required by the contract documents, shall be included in the price bid for this item.

BASIS OF PAYMENT. The unit price bid for each structural repair shall include the cost of furnishing all labor, materials, equipment, and non-destructive testing (including visual, magnetic particle, dye penetrant, and ultrasonic testing) necessary to complete the work.

SECTION 565 - BRIDGE BEARINGS

565-1 DESCRIPTION. The work shall consist of furnishing, placing and setting bridge bearings at the locations indicated on the plans.

The Contractor shall notify the Deputy Chief Engineer, Structures (DCES) of the name and address of the fabricator of all bridge bearings in accordance with §106-01 Sources of Supply.

565-1.01 Bearing Types. There are various types of bearings. The specific type required will be indicated on the plans. Bearing types are:

A. Type S.R. - Steel Rocker Bearings. These accommodate rotation by pivoting around a pinned joint. They are fabricated in fixed and expansion versions. The expansion version accommodates longitudinal movement by means of a curved rocker rotating on the bearing surface. Steel rocker bearings do not allow for transverse movement. This type of bearing shall only be used in rehabilitation situations where only one or two bearings are to be replaced on a bridge.

B. Type S.S. - Steel Sliding Bearings. These accommodate rotation by means of a rocker. They are fabricated in fixed and expansion versions. The expansion version accommodates movement with a sliding element. Steel sliding bearings do not allow for transverse movement. This type of bearing shall only be used in rehabilitation situations where only one or two bearings are to be replaced on a bridge.

C. Type M.R. - Multi-Rotational Bearings. These accommodate rotation by the deformation of a confined elastomeric element, or an unconfined urethane disc. Multi-rotational bearings are fabricated in fixed and expansion versions. The expansion version accommodates movement by means of sliding elements. Expansion versions may be guided, allowing movement in only one direction, or non-guided, allowing multi-directional movement.

D. Type E.P. - Plain Elastomeric Bearings. These accommodate rotation by the deformation of a plain elastomeric pad. They may be used for both fixed and expansion applications without changes in details. The bearings will accommodate longitudinal, transverse, and rotational movements.

E. Type E.L. - Steel Laminated Elastomeric Bearings. These accommodate rotation by the deformation of a laminated elastomeric and steel pad. They may be used for both fixed and

expansion applications without changes in details. The bearings will accommodate longitudinal, transverse, and rotational movements.

F. Type E.B.- Elastomeric Bearings with External Load Plates. These accommodate rotation by the deformation of a plain or steel laminated elastomeric pad. Elastomeric bearings with external load plates are fabricated in fixed and expansion versions. The fixed version will accommodate rotational movements. The expansion bearings will accommodate longitudinal, transverse, and rotational movements.

565-2 MATERIALS

565-2.01 General. Materials shall meet the following requirements:

Concrete Grouting Material	701-05
Steel Anchor Dowel	709-01 ³
Disc-Design Structural Bridge Bearings	716-06
Pot-Design Structural Bridge Bearings	716-07
Plain Elastomeric Bridge Bearings	716-10
Steel-Laminated Elastomeric Bridge Bearings	716-II
Elastomeric Bridge Bearings with External Load Plates	716-12
Rubber-Impregnated Woven Cotton Fabric	728-01
Rubber-Impregnated Random Fiber Pad	728-02
Plain Rubber Pad	728-03
Nuts	ASTM A563
Washers	ASTM F436
Anchor Studs	ASTM A325 or A449 Type I
Cap Screws	ASTM F835M or A574M
Structural Steel Paint Class 1	708-01

NOTE a. Steel anchor dowels shall meet the requirements of §709-01 - Bar Reinforcement.

565-2.02 Fabrication. Steel components of bridge bearings shall be fabricated in accordance with the applicable requirements of the NYS Steel Construction Manual (SCM). In addition, component parts of individual bearings shall meet fabrication details as shown in the contract documents.

A. Type S.R. Bearings. These shall conform to the plans and other contract documents.

B. Type S.S. Bearings. These shall conform to the plans and other contract documents.

C. Type M.R. Bearings. These shall conform to the requirements of either §716-06.01 or §716-07.01 as applicable, and other contract documents. When type M.R. bearings are specified, the Contractor may supply either disc design or pot design bearings. Only one bearing design, disc or pot, shall be supplied for any one bridge.

D. Type E.P. Bearings. These shall conform to the requirements of §716-10 and other contract documents.

E. Type E.L. Bearings. These shall conform to the requirements of §716-II and other contract documents.

F. Type E.B. Bearings. These shall conform to the requirements of §716-12 and other contract documents.

565-2.03 Drawings. Shop drawings shall meet the requirements specified in the following:

Type S.R. and S.S. Bearings	SCM
Type M.R. Bearings	716-06.01 or 716-07.01
Type E.L. Bearings	716-11
Type E.B. Bearings	716-12

565-2.04 Protective Coatings

- A. Machine finished surfaces in contact, including pins, pin holes, surfaces in sockets at the top of rocker bearings, and bronze or copper plates in sliding contact shall receive one coat of automotive grease as soon as machining is complete. None of these surfaces shall be painted.
- B. Stainless steel and polytetrafluoroethylene surfaces shall not be painted or otherwise coated.
- C. Metal to metal surfaces to be field welded shall be given a coat of clear lacquer or other protective coating approved by the Engineer, or Inspector, if exposure is to exceed three months prior to welding. The coating shall be removed at the time of welding. Painting, if required, will be done only after the completion of welding. Surfaces to be painted shall be primed and painted in accordance with §565-2.040.
- D. All other metal surfaces shall be cleaned to meet SSPC-SP10, "Near-White Metal Blast Cleaning" and painted in accordance with section 572, Structural Paint System: Shop Applied. The paint shall be selected from the Department's Approved List, Structural Steel Paints- Class 1. For bearings used in conjunction with unpainted steel, the color of the finish coat shall Weathered Brown as defined by §708-05.

565-2.05 Shipping. Each bearing shall be shipped as an assembled unit, except for elastomeric bearings. Elastomeric bearings may be shipped in packages containing more than one bearing, provided the package can be handled with normal construction equipment. Bearings shall be packaged in such a manner to protect all rotating and sliding surfaces from the intrusion of outside material. Bearings shall be packaged securely to prevent separation of the elements during shipping.

565-3 CONSTRUCTION DETAILS

565-3.01 Concrete Bearing Surface Elevations

A. General. The elevation of the concrete bearing surface for all types of bearings, except Type M.R. bearings, shall be as given on the plans.

B. Type M.R. Bearings. The elevation of the concrete bearing surface may vary from that given on the plans depending on the vertical dimension of the actual bearing supplied. The Contractor shall notify the Engineer of all required elevation changes. Changes to the roadway profile will not be allowed. All elevation adjustments necessary to maintain the profile shall be made to the concrete bearing surfaces. Any adjustments, including changes to the reinforcement, will be made at no additional cost to the State.

565-3.02 Concrete Bearing Surface Preparation. No bearing shall be placed upon a concrete bearing surface which is deformed, irregular, or poorly finished. The entire bearing surface area shall be floated and troweled.

565-3.03 Setting Anchor Studs. Anchor studs shall be set as shown on the plans unless changes are permitted by the DCES. If anchor studs are cast in substructure concrete, templates, or other suitable means, shall be used to keep the studs vertical at the required embedment and in the correct horizontal position during concrete placement. If the Contractor elects to drill the finished, cured concrete in order

to set the anchor studs, the reinforcing steel shall be positioned prior to casting the concrete so that it will not be damaged during drilling. If anchor studs are drilled and grouted, material and construction details shall be in conformance with §586-2 and §586-3.

565-3.04 Bearing Pad Installation. Bearing pads placed between concrete, or other masonry, and steel masonry plates shall be located to correct alignment and elevation, and placed at the time of masonry plate installation. Bearing pads shall conform to §728-01, §728-02, or §728-03 at the Contractor's option. Each bearing pad shall be the same size in plan as the masonry plate it supports. Holes to accommodate anchor studs shall be cleanly and accurately cut prior to bearing pad placement.

565-3.05 Bearing Installation and Alignment

A. Type S.R. and Type S.S. Bearings

1. General

- a. The centerline of sole plates or fixed portions of bearing assemblies attached to the structural steel shall not be offset from the centerline of bearing stiffeners or diaphragm connection plates by more than one-half the thickness of the flange at that location, or the thickness of the bearing stiffener or connection plate, whichever is the lesser distance.
- b. The bearing shall be cleaned and regreased with automotive grease at the time of installation.

2. Fixed. No additional requirements apply.

3. Expansion. These may vary from perfect alignment. Therefore, expansion bearings shall be set in accordance with the following.

a. Type S R. Bearings

- (1) The bearing shall be set vertical under full dead load at an ambient temperature of 68°F.
- (2) The maximum variation from perfect alignment is a function of the bearing height. The bearing height is the distance between the upper and lower contact surfaces of the movable portion of the bearing. For bearings with a height of 20 inches or less, the maximum variation from perfect alignment, considering the effect of temperature and load at the time of measurement, shall be calculated by the following formula:

$$M = \pm (1/2 \text{ inch} + (U/14,000))$$

where "M" = maximum variation from perfect alignment measured as the horizontal distance between the centerline of the cap plate and the centerline of the masonry plate in inches and "L" = total expansion length in inches between the centerline of the movable bearing being considered and the centerline of the fixed bearing, from which motion must progress. Such variations shall not exceed 1 inch offset, or a five degree rotation of the movable portion of the bearings from the required alignment, whichever is less.

The maximum variation of all bearings having a height exceeding 20 inches shall be approved on an individual basis by the DCES.

- (3) No bearing adjustments shall be made until the completed structural slab has been in place for at least seven curing days. Any adjustments needed to meet the above requirements may require jacking the superstructure. All adjustments shall be accomplished according to a written procedure submitted by the Contractor for DCES approval. All adjustments shall be made at no additional cost to the State.

b. Type S. S. Bearings

- (1) The sliding plate shall be centered on the masonry plate under full dead load at an ambient temperature of 68°F.
- (2) The maximum variation from perfect alignment between the centerlines of the fixed and movable portions of the bearing device, taking into account the effect of temperature and load at the time of measurement, shall not exceed plus or minus 1/2 inch longitudinally. This variation shall be measured as the horizontal distance between the centerline of the sliding plate and the centerline of the masonry plate. The movable portion of the bearing device shall be fully supported by the fixed portion under all temperature and loading conditions.
- (3) No bearing adjustments shall be made until the completed structural slab has been in place for at least seven curing days. Any adjustments needed to meet the above requirements may require jacking the superstructure. All adjustments shall be accomplished according to a written procedure submitted by the Contractor for DCES approval. All adjustments shall be made at no additional cost to the State.

B. Type M.R. Bearings

1. General. The centerline of sole plates or other fixed portions of bearing assemblies attached to the structural steel shall not be offset from the centerline of bearing stiffeners or diaphragm connection plates by more than one-half the thickness of the flange at that location, or the thickness of the bearing stiffener or connection plate, whichever is the lesser distance.

2. Fixed. No additional requirements apply.

3. Expansion. These may vary from perfect alignment. Therefore expansion bearings shall be set in accordance with the following:

- a. The sliding plate shall be centered on the masonry plate under full dead load at an ambient temperature of 68°F.
- b. The maximum variation from perfect alignment between the centerline of the fixed and movable portions of the bearing device, taking into account the effects of temperature and load at the time of measurement, shall not exceed plus or minus 1 inch longitudinally unless otherwise indicated on the plans. This variation shall be measured as the horizontal distance between the centerline of the sliding plate and the centerline of the masonry plate.
- c. No bearing adjustments shall be made until the completed structural slab has been in place for at least seven curing days. Any adjustments needed to meet the above requirements may require jacking the superstructure. All adjustments shall be accomplished according to a written procedure submitted by the Contractor for DCES approval. All adjustments shall be made at no additional cost to the State.

C. Type E.P. and Type E.L. Bearings

1. General

- a. These bearings are designed to function properly provided that minimum distortion occurs along the beam axis under full dead load at an ambient temperature of 68°F. Elastomeric bearings shall be installed when the ambient temperature is between 40° and 80°F inclusive. The Contractor may elect to install the bearings when the ambient temperature is outside of the

allowable range, provided the Contractor submits, and receives DCES approval, of an installation procedure that either resets the bearings when the temperature is in the allowable range or deforms the bearings so that they perform as if they were installed at 68°F.

b. For prestressed concrete superstructures, the bearing shall be anchored to establish the fixed end of the bridge as soon as possible after stringer erection. For adjacent prestressed box beams, or prestressed slab superstructures, the anchorage shall be completed prior to filling the shear keys. The method of anchorage shall be in accordance with the details shown on the plans. Anchor dowel holes shall be core drilled to the nominal size and depth and at the locations required by the plans. In lieu of core drilling, the Contractor may submit an installation procedure that incorporates the use of either preset anchor bolts or pipe sleeves to the DCES for approval. Prior to placing the anchor dowel, the hole shall be inspected and approved for filling by the Engineer. Fill material shall be in accordance with the details on the plans.

2. Fixed. No additional requirements apply.

3. Expansion

a. These may vary from perfect alignment. The maximum variation from perfect alignment under full dead load shall not exceed the value shown on the plans. This variation shall be measured as the horizontal distance between the centerline of the highest elastomer surface and the centerline of the lowest elastomer surface.

b. No bearing adjustments shall be made until the completed structural slab has been in place for at least seven curing days. Any adjustments needed to meet the above requirements may require jacking the superstructure. All adjustments shall be accomplished according to a written procedure submitted by the Contractor for DCES approval. All adjustments shall be made at no additional cost to the State.

D. Type E.B. Bearings

1. General

a. The centerline of sole plate or other fixed portions of bearing assemblies, attached to steel stringers, shall not be offset from the centerline of bearing stiffeners of diaphragm connection plates by more than one-half the thickness of the flange at that location, or the thickness of the bearing stiffener or connection plate, whichever is the lesser distance.

b. These bearings are designed to function properly provided that minimal distortion occurs along the beam axis under full dead load at an ambient temperature of 68°F. Elastomeric bearings shall be installed when the ambient temperature is between 40° and 80°F inclusive. The Contractor may elect to install the bearings when the ambient temperature is outside of the allowable range, provided the Contractor submits, and receives DCES approval, of an installation procedure that either resets the bearings when the temperature is in the allowable range or deforms the bearings so that they perform as if they were installed at 68°F.

2. Fixed. No additional requirements shall apply.

3. Expansion

a. These may vary from perfect alignment. The maximum variation from perfect alignment under full dead load shall not exceed the value shown on the plans. This variation shall be measured as the horizontal distance between the centerline of the highest elastomer surface and the centerline of the lowest elastomer surface.

b. No bearing adjustments shall be made until the completed structural slab has been in place for at least seven curing days. Any adjustments needed to meet the above requirements may require jacking the superstructure. All adjustments shall be accomplished according to a written procedure submitted by the Contractor for DCES approval. All adjustments shall be made at no additional cost to the State.

565-3.06 WELDING

A. Type S.R. Bearings. Bearings shall be welded permanently to the structural steel only after all necessary adjustments have been made. All welding shall be done in accordance with the requirements of the SCM. The Contractor shall submit a Welding Procedure Specification to the DCES. No welding shall be performed until the manufacturer receives an approved Welding Procedure Specification.

B. Type S.S. Bearings. The requirements of §565-3.06A shall apply.

C. Type M.R. Bearings. The requirements of §565-3.06A shall apply except that during field welding operations the temperature of the steel adjacent to the rotational element shall not exceed 200°F. Temperature shall be controlled by welding procedures and monitored using temperature indicating crayons, or other devices. Procedures, crayons, and other devices shall be acceptable to the Engineer. If the temperature limit is exceeded, the DCES and the Director, Materials Bureau shall be immediately notified. The DCES will provide the proper repair procedure, which may include complete replacement of the bearing. All repair work shall be done at no additional cost to the State.

D. Type E.B. Bearings. The requirements of §565-3.06A and §565-3.06C shall apply.

565-3.07 Grouting Anchor Bolt Holes. All slotted anchor bolt holes in masonry plates shall be filled with concrete grouting material to the top edge of the hole. All excess grout material shall be cleaned from the bearing surfaces in a manner satisfactory to the Engineer. Slotted anchor bolt holes in fixed bearings may be filled any time subsequent to stringer placement. Slotted holes in expansion bearings shall be filled only after all necessary bearing adjustments have been made.

565-3.08 Final Verification. Prior to final acceptance of the bridge, the Engineer will verify that all necessary adjustments have been made; that all steel bearings, or external load plates, are permanently welded or attached with cap screws to the superstructure steel as shown on the contract plans; that all slotted holes are completely filled with grout; that all anchor studs are firmly tightened; and that all other work required to make the bearings completely functional has been completed.

565-4 METHOD OF MEASUREMENT. Measurement will be taken as the number of bearings installed in accordance with the Contract Documents.

565-5 BASIS OF PAYMENT. The unit price bid for each bearing shall include the cost of all labor, materials, equipment and adjustment necessary to complete the work. All material between the bottom of the superstructure, and the top of the substructure, including anchor studs and sole plates, shall be included in the price bid for this item.

565-5.01 Progress Payments. Eighty percent of the quantity will be paid for after the bearing is installed. The remainder of the quantity will be paid for after the bearing is aligned.

Payment will be made under:

Item No.	Item	Pay Unit
565.1121	Type S.R. Expansion Bearing (All Load Ranges)	Each
565.1221	Type S.R. Fixed Bearing (All Load Ranges)	Each
565.1321	Type S.S. Expansion Bearing (All Load Ranges)	Each
565.1421	Type S.S. Fixed Bearing (All Load Ranges)	Each
565.1521	Type M.R. Expansion Bearing (0 to 225 k)	Each
565.1522	Type M.R. Expansion Bearing (226 to 450 k)	Each
565.1523	Type M.R. Expansion Bearing (451 to 675 k)	Each
565.1524	Type M.R. Expansion Bearing (676 to 900 k)	Each
565.1525	Type M.R. Expansion Bearing (Over 900 k)	Each
565.1721	Type M.R. Fixed Bearing (0 to 225 k)	Each
565.1722	Type M.R. Fixed Bearing (226 to 450 k)	Each
565.1723	Type M.R. Fixed Bearing (451 to 675 k)	Each
565.1724	Type M.R. Fixed Bearing (676 to 900 k)	Each
565.1725	Type M.R. Fixed Bearing (Over 900 k)	Each
565.1821	Type E.P. Bearing (All Load Ranges)	Each
565.1921	Type E.L. Bearing (0 to 55 k)	Each
565.1922	Type E.L. Bearing (56 to 111 k)	Each
565.1923	Type E.L. Bearing (112 to 168 k)	Each
565.1924	Type E.L. Bearing (169 to 225 k)	Each
565.1925	Type E.L. Bearing (Over 225 k)	Each
565.2021	Type E.B. Fixed Bearing (0 to 55 k)	Each
565.2022	Type E.B. Fixed Bearing (56 to 111 k)	Each
565.2023	Type E.B. Fixed Bearing (112 to 168 k)	Each
565.2024	Type E.B. Fixed Bearing (169 to 225 k)	Each
565.2025	Type E.B. Fixed Bearing (Over 225 k)	Each
565.2031	Type E.B. Expansion Bearing (0 to 55 k)	Each
565.2032	Type E.B. Expansion Bearing (56 to 111 k)	Each
565.2033	Type E.B. Expansion Bearing (112 to 168 k)	Each
565.2034	Type E.B. Expansion Bearing (169 to 225 k)	Each
565.2035	Type E.B. Expansion Bearing (Over 225 k)	Each
565.30	Rubber Impregnated Woven Cotton-Polyester Fabric	Each

ITEM 565.43020015 - BRIDGE BEARING RESTORATION

DESCRIPTION

The work shall consist of restoring bearings designated for restoration by the plans or by the Engineer.

Restoration of bearings shall consist of dismantling, removal, repairing, unfreezing, replacing designated parts, cleaning, lubricating, and painting, if indicated by the Contract Documents or ordered by the Engineer.

MATERIALS

Mill and Shop Inspection. All new steel shall be mill and shop inspected as required by the SCM.

Fabrication Details. The requirements of subsection 565-2.02 shall apply to all fabrication done for bearing restoration unless subsection 565-2.02 clearly does not apply to the bearing being restored.

Lubricants. The lubricant shall be multi-purpose automotive grease conforming to SAE J310 designation MPG.

Only fresh lubricants arriving at the work site, in the manufacturer's unopened containers shall be used to lubricate the bearings.

Bearing Pads. New bearing pads shall comply with the requirements of 728-01, 728-02, or 728-03. Only one type of bearing pad shall be installed on any one structure.

Protective Coatings. The requirements of subsection 565-2.04 shall apply.

Miscellaneous Steel. Anchor bolts, nuts and washers shall conform to the requirements given on the plans.

CONSTRUCTION DETAILS

Drawings. Drawings shall be required for all newly fabricated parts. The requirements of the SCM shall apply.

Repair. Bearings shall be repaired in the manner indicated on the plans.

All machine finished surfaces, shall be lubricated. Stainless steel plates shall not be lubricated. Polytetrafluoroethylene surfaces shall not be lubricated.

ITEM 565.43020015 - BRIDGE BEARING RESTORATION

Reinstallation. If the bearing has been removed and requires reinstallation, the following subsections shall apply:

565-3.02	565-3.06
565-3.03	565-3.07
565-3.04	565-3.08
565-3.05	

If the bearing is of a type that the requirements of subsection 565-3.05 will not apply, then the bearing shall be reinstalled in the manner indicated on the plans.

Painting. New fabricated steel parts which require painting shall be painted in accordance with the requirements of §565-2.04.D.

METHOD OF MEASUREMENT

The work will be measured as each bearing restored.

BASIS OF PAYMENT

The unit price bid for each bearing shall include the cost of all labor, material and equipment necessary to complete the work.

SECTION 568 - BRIDGE RAILING

568-1 DESCRIPTION. This work shall consist of furnishing and erecting bridge railing as shown on the contract plans and in accordance with the specifications.

As soon as the Contract is awarded, the Contractor shall notify the DCES of the name and address of the Fabricator of all bridge railing in accordance with §106-01 Sources of Supply. This notification shall list the specific shop or shops in which the railing will be fabricated.

568-2 MATERIALS. Materials shall meet the requirements of the following subsections:

Concrete Grouting Material	701-05
Steel Bridge Railing	710-23
Stainless Steel Connecting Products	715-16
Rubber Impregnated Random Fiber Pad	728-02

568-3 CONSTRUCTION DETAILS

568-3.01 Erection of Railing

A. Inspection of Railing. Immediately prior to erection, the railing shall be inspected for damage. Significant bends or kinks in the railing not specifically called for in the contract documents shall constitute sufficient cause for rejection. Straightening of such bends or kinks shall not be allowed.

Bending or curving rails in the field in order to fit alignment requirements, shall not be permitted. The Engineer may order some bending or curving to allow for necessary minor adjustments.

B. Inspection of Galvanizing. Damage to galvanizing of steel bridge railing shall constitute sufficient cause for rejection except for the following conditions:

1. If the damaged area is not required to be repaired under the provisions of 710-23, Steel Bridge Railing.
2. If the total damaged area of a single piece (i.e. post or rail) is 6 square inches or less. Total damaged area is exclusive of the damaged area as described under §568-3.01B1.

C. Field Galvanizing for Repair. Field galvanizing repair shall be allowed to be performed upon damaged areas meeting the requirements of §568-3.01B2.

Field galvanizing repair shall be made by painting zinc repair material onto the damaged area in accordance with the requirements of §719-01, Galvanized Coatings and Repair Methods.

All finished surfaces of welds and adjacent surfaces of rails and posts upon which galvanizing has been removed, due to any field welding operation, shall be field galvanized.

D. Field Welding. Field welding shall not be permitted unless noted in the contract documents or ordered by the Engineer.

E. Erection. All railing shall be erected in accordance with the contract documents or, when required, the approved shop drawings prepared and submitted as specified in the New York State Steel Construction Manual.

F. Positioning Railing. Railing shall be erected so that the rails are parallel to each other and to the top of parapet, sidewalk or structural slab.

G. Positioning Posts. Posts shall be set vertical.

H. Base Plates. Post base plates shall be perpendicular to the post, unless otherwise noted. When the railing is to be placed on a preformed surface, the base plate may be placed parallel to the grade or may be perpendicular to the post and made level by the use of beveled shims conforming to the applicable requirements of §710-23, Steel Bridge Railing.

I. Non-Metallic Pads. Posts which are to be placed on a preformed surface shall be mounted on a non-metallic pad conforming to the requirements of §728-02. Beveled Shims, if required, shall be inserted between the non-metallic pad and the post base plate.

J. Jacking Nuts. For railings set on jacking nuts, the railing posts shall be erected to proper line and grade before concrete under the post and in back of the granite curb is placed or before the mortar pad is placed.

K. Rail Span. The rails of railings shall span the following minimum number of posts:

Railing Type	Number of Posts
Two-Rail, Steel	3*
Four-Rail, Steel	3
Five-Rail Steel	3

NOTE: If this is not possible, the absolute minimum shall be 2 posts if approved by the DCES.

L. Anchor Studs. After the anchor stud nuts have been tightened in a manner satisfactory to the Engineer, the studs shall be flame cut 1 inch above the nut. The first thread of the stud above the nut shall be damaged. The cut end of the anchor stud shall be coated in conformance with the requirements of §719-01, Galvanized coating and Repair Methods.

M. Touch-Up Painting. Any damage to the paint on a railing system shall be repaired in accordance with §657 Painting Galvanized Surfaces.

N. Inspection. All erection shall be subject to the inspection of the Engineer who shall be given all facilities required for a visual inspection of workmanship and materials.

Any single piece of the railing system with a total damaged area in excess of the amount specified in §568-3.01B2 shall be rejected and replaced.

568-3.02 Cement Mortar Pads

A. Proportioning. Cement mortar pads shall consist of a concrete grouting material.

The concrete grouting material shall meet the requirements of §701-05, Concrete Grouting Material. The grouting material shall be mixed with water, in the ratio recommended by the manufacturer, to produce a trawable mix.

B. Mixing. Mixing shall be carried out in strict accordance with the manufacturers recommendations or the following as determined by the Engineer.

- All necessary mixing equipment shall be present and in good working order prior to the start of mixing.

- Mixing time shall not exceed three minutes unless otherwise permitted. No mixing shall be started until all preparations have been made to place the mortar.
- All mortar in any individual batch shall be used within 25 minutes after the start of mixing.
- Retempering will not be allowed.

C. Surface Preparation. All concrete surfaces to receive the mortar shall be free from laitance, oil, grease, paint, dust, loose particles or other foreign material.

The concrete surface shall be cleaned by sandblasting to the satisfaction of the Engineer, followed by a thorough vacuum cleaning.

The bottom surfaces of the base plates shall be free of oil, dirt and other foreign matter.

The concrete surface shall be lightly moistened with water.

D. Form Preparation. The forms shall be positioned about the base plate as shown in the plans or as directed by the Engineer. If the forms are to be coated with a release agent, it shall not be deleterious to the physical properties of the mortar system being used as determined by the Engineer.

E. Application. After the concrete surfaces and the base plates surfaces have been properly prepared the mortar shall be placed within the limits of the forms and tamped into place to assure that there are no voids in the completed pad. Exposed surfaces of the mortar shall be screeded and troweled to the level of the bottom of the base plate. The mortar pads shall be protected from rain for at least 24 hours.

F. General. In all cases, the installation of the mortar pads shall be made when the concrete and ambient air temperatures are above 50°F.

568-4 METHOD OF MEASUREMENT

568-4.01 Bridge Railing. The quantity to be paid for bridge railing shall be the number of feet measured along the centerline of railing anchorage between the extreme outer limits indicated on the contract plans.

568-4.02 Transition Bridge Railing. The quantity to be paid for transition railing shall be the number of feet measured along the axis of the top rail between the limits shown on the plans.

568-5 BASIS OF PAYMENT

568-5.01 Bridge Railing. The unit price bid shall include the cost of furnishing all labor, materials and equipment necessary to complete the work. All pads (including Mortar Pads), shims, splices with their hardware, railing anchor studs with nuts, washers and anchor plates, and hand rails when specified shall also be included in the price bid.

No payment shall be made for those railing pieces which are replacements for those railing pieces that have been rejected.

Progress payments will be made when the railing is erected in accordance with the contract documents as specified in the New York State Steel Construction Manual exclusive of the cutting, peening and galvanizing of studs. Payment will be made at the unit bid price for 90% of the quantity erected. The balance of the quantity will be paid for upon proper completion of the work.

568.50	Steel Bridge Railing (Two-Rail)	Foot
568.51	Steel Bridge Railing (four-Rail)	Foot
568.52	Steel Bridge Railing (Five-Rail)	Foot
568.53	Steel Bridge Railing (Two-Rail) with Handrail	Foot
568.54	Steel Bridge Railing (Three-Rail)	Foot
568.60	Steel Bridge Railing- Brown (Two-Rail)	Foot
568.61	Steel Bridge Railing- Brown (Four-Rail)	Foot
568.62	Steel Bridge Railing- Brown (Five-Rail)	Foot
568.63	Steel Bridge Railing- Brown (Two-Rail) with Handrail	Foot
568.64	Steel Bridge Railing- Brown (Three-Rail)	Foot
568.70	Transition Bridge Railing	Foot
568.71	Transition Bridge Railing- Brown	Foot
568.80	Pedestrian and Bicycle Railing (One-Rail)	Foot
568.81	Pedestrian and Bicycle Railing (Two-Rail)	Foot
568.82	Pedestrian and Bicycle Railing (Three-Rail)	Foot
568.83	Pedestrian and Bicycle Railing (Four-Rail)	Foot
568.84	Pedestrian and Bicycle Railing (Five-Rail)	Foot
568.85	Pedestrian and Bicycle Railing- Brown (One-Rail)	Foot
568.86	Pedestrian and Bicycle Railing - Brown (Two-Rail)	Foot
568.87	Pedestrian and Bicycle Railing- Brown (Three-Rail)	Foot
568.88	Pedestrian and Bicycle Railing -Brown (Four-Rail)	Foot
568.89	Pedestrian and Bicycle Railing- Brown (Five-Rail)	Foot
568.90	Bicycle Railing (Two-Rail)	Foot
568.91	Bicycle Railing- Brown (Two-Rail)	Foot
568.92	Bicycle Railing (Four-Rail)	Foot
568.93	Bicycle Railing- Brown (Four-Rail)	Foot

SECTION 571- DISPOSAL OF PAINT REMOVAL WASTE

(Last Revised January 2019)

571-1 DESCRIPTION. The work shall consist of managing, accumulating, packaging, labeling, loading, transporting, treating, and disposing paint removal waste.

571-1.01 Paint Removal Waste. Paint removal waste consists of removed paint particles combined with material used to remove the paint and any organic or inorganic materials from bridge surfaces, by either bridge washing or blast cleaning operations, without use of any added chemical solvents. All testing of the paint removal waste necessary to satisfy the requirements of the waste transporter or disposal facility shall be the responsibility of the contractor.

Paint removal waste does not include used tyvek suits, respirator filters, tarpaulins or incidental trash. These incidental wastes generated by the Contractor in completing the work are covered by § 107-10 *Managing Surplus Material and Waste*.

A. Hazardous Paint Removal Waste Containing Lead. This shall apply to spent abrasives, coatings and paint chips removed from steel substrates on bridges designated in the contract documents as being lead-based. This does not include waste containing a mixture of lead and asbestos. Waste containing a mixture of lead and asbestos shall be disposed of in accordance with Section 210 *Removal and Disposal of Asbestos-Containing Material (Buildings, Bridges and Highways)*.

B. Non-Hazardous Industrial Solid Paint Removal Waste. This shall apply to spent abrasives and coatings removed from steel substrates on bridges designated in the contract plans as being non-lead-based.

571-2 MATERIALS. The Contractor shall use containers or roll-offs acceptable to the Waste Disposal Facility. The capacity of each container shall be clearly marked on each container in an easily visible location.

571-3 CONSTRUCTION DETAILS.

571-3.01 General. The Engineer will provide the Contractor with the Generator site identification number(s) issued by the USEPA. All paint removal waste shall be deposited and sealed in containers or roll-offs concurrent with generation. The paint removal waste shall be accumulated in clean, dry, weatherproof, watertight containers or roll-offs furnished by the Contractor and shall not be left exposed to the elements at the end of the working shift. All equipment and containers or roll-offs shall meet the requirements of USDOT for transport.

Paint removal waste shall be accumulated, handled, packaged, documented, loaded, transported, treated and disposed in accordance with all applicable Federal and State laws, rules, and regulations.

571-3.02 Paint Removal Waste Composition.

A. Hazardous Paint Removal Waste Containing Lead. Paint chips are known to contain lead and the combined paint removal waste stream is therefore categorized as hazardous waste. The Department has presumed that the waste will test as hazardous. The Contractor shall ensure that only solid paint removal waste is deposited into the containers or roll-offs. The determination has been made that such waste contains less than 2% by weight of organic material. Disposal facilities may refuse to accept paint removal waste that is different than the Typical Paint Waste Composition. Paint removal waste containing additional contaminants added by the Contractor or by the Contractor's operations shall be the responsibility of the Contractor. All testing of the paint removal waste necessary to satisfy the requirements of the chosen Disposal Facility or Transporter shall be the responsibility of the Contractor.

Provided is typical lead-based paint waste information which provides typical chemical and physical properties of paint removal waste based on previous testing, as follows:

Lead-Based Paint Waste Profile: Lead-based paint waste generated by the removal of paint consists of a mixture of abrasive blast media such as boiler slag or steel grit and paint chips. This supplemental information about the waste is provided in accordance with Resource Conservation and Recovery Act (RCRA) regulations. This composition profile does not include waste resulting from removal by chemical strippers for which the resulting waste will contain components of the stripper. Based on the knowledge of the process and the resulting waste material, and on previous testing of typical waste by independent laboratories approved by the NYS Department of health, this composition waste material information has been developed for typical lead-based paint waste.

Process Generating Waste: The waste results from removal of lead-based coatings from painted structures, typically steel bridges, by abrasive blasting, manual, shrouded mechanical, or high- pressure (hp) water methods. The North American industry Classification System Code (NAICS) typically assigned for the site is 23731-Highway, Street, and Bridge Construction.

Composition: To the Department's knowledge, the waste does not contain PCBs, pesticides, cyanides, organic TCLP constituents, dioxins, asbestos, ozone depleting substances, volatile organics or greater than 1000 ppm halogenated organic compounds. The waste is not a RCRA reactive, corrosive or ignitable, or source-listed or chemical product-listed waste. It is not radiological, etiological, explosive, water reactive, or shock sensitive. The specific composition will vary based on the removal method used, abrasive used, the proportion of paint chips to abrasives and other variables determined by the Contractor's operation. For wastes resulting from any chemical stripping of paint, the Contractor shall consider the components and properties of the stripper and the resulting waste mixture to characterize the waste.

The waste typically contains the following:

Removal Method	Approximate %	
	Abrasive	<u>Paint Chips</u>
Boiler Slag (an amorphous mixture of Fe, Al and Ca silicates)	90-95%	5-10%
Steel Grit (% varies by degree of grit recycling)	40-90%	10-60%
No Abrasive (manual, shrouded mechanical and water methods)	0%	100%

Paint Chips: Paint chips contain basic lead silico chromate, titanium dioxide, chromate dioxide, magnesium silicate, linseed oil, alkyd resin, fillers, driers, and other miscellaneous materials.

Other Components: Water may be present from water used during removal. Iron oxide (rust, mill scale) may be present. Animal waste (i.e., feces, guano, nesting materials, etc.) and dirt/miscellaneous debris may also be potentially present.

RCRA Metals: The waste is presumed to contain lead at levels exceeding the regulatory limit of 5 milligrams per liter (approximately 5 ppm) by the Toxicity Characteristic Leaching Procedure (TCLP) test for lead (unless contract documents provided for testing to determine lead toxicity characteristic). Chromium is considered present as an underlying characteristic.

Typical Physical Characteristics:

Physical State- Solid

Color- Black for boiler slag component, or metallic grey/black for steel grit component.

Color varies for paint chips.

Odor-None

pH-Not Applicable

Liquid Flash Point- Not Applicable

Specific Gravity- Approximately 2.7 (boiler slag) and Approximately 7.5 (steel grit)

Bulk Density- Approximately 1.2 kg/l (boiler slag)

Approximately 3.6 kg/l (steel grit)

Free Liquids- None (moisture may be present from water added during removal)

Consolidated Hazardous Waste Information: The following consolidated information for hazardous lead-based paint waste can be used in completing the required items needed for its proper shipment and disposal:

- USDOT Shipping Description- RQ Hazardous Waste, Solid, n.o.s. (D008); 9; NA3077; PG III
n.o.s. = Not Otherwise Specified, PG = Packing Group
- Hazard Label on containers- Class 9
- Placard for shipments exceeding 455 kg or bulk- Class 9
- Hazardous Waste due to the Characteristic Lead Toxicity, Waste Code D008
- Constituents of Concern- Lead and Chromium
- Treatability Group-Non-wastewater
- Treatment Standard- 0.75 mg/L Lead and 0.06 mg/L Chromium by TCLP test
- Reportable Quantity- 4.54 kg or greater
- Markings on Container-
 - Hazardous waste, solid, n.o.s. (D008); NA3077
 - HAZARDOUS WASTE -Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the Environmental Protection Agency.
 - Generator's Name: NYSDOT Region ()
 - EPA ID Number ()
 - Manifest Document Number ()
 - Accumulation Start Date ()

USDOT Emergency Response Guidebook Guide: 171, Substances (Low to Moderate Hazard)

B. Non-Hazardous Industrial Solid Paint Removal Waste. The Contractor shall ensure that only solid paint removal waste is deposited into the containers or roll-offs. All testing of the paint removal waste necessary to satisfy the requirements of the disposal facility or transporter shall be the responsibility of the Contractor.

571-3.03 Hazardous Paint Removal Waste Containing Lead - Management

Requirements. Employees handling hazardous paint removal waste shall be trained in accordance with 6 NYCRR Part 373-3.2(g) in hazardous waste management procedures including hazardous waste accumulation, preparedness and prevention, contingency and emergency procedures. The Contractor's Preparedness

and Prevention Plan, Contingency Plan and Emergency Procedures, and Personnel Training Records, as required by 6 NYCRR Part 373-1.1(d)(1)(iii), shall be submitted to the Engineer for acceptance prior to the generation of any hazardous waste. Containers in storage shall be inspected on at least a weekly basis in accordance with 6 NYCRR Part 373-3.9(b)-(d).

571-3.04 Containers and Labeling. No roll-off shall be filled to a capacity in excess of that marked on the roll-off as the maximum capacity. Once the Engineer determines the quantity within a specific container or roll-off, that container or roll-off shall be properly sealed and not thereafter be tampered with. No additional waste shall be placed in it, nor shall any be removed from it (except for analytical sampling). All containers or roll-offs shall be located in a place secured from traffic and in a manner acceptable to the Engineer. The Contractor shall take measures to prevent the blowing or dispersion of the waste during each loading operation and while being transported.

The Contractor shall label, mark, and placard all containers or roll-offs prior to shipment in accordance with USDOT and NYSDEC regulations. Each container shall have an appropriate label prior to filling with the applicable words identifying its contents as paint removal waste providing the presumed waste classification of hazardous or non-hazardous industrial waste, and indicating the hazard of the contents CRCRA Toxicity. The accumulation start date shall be completed at the time when waste is first deposited into each container. All label markings shall be permanent, printed in English, and displayed on a background of contrasting color un-obscured by other labels or attachments. Labeling shall be located away from other markings that could substantially reduce its effectiveness.

571-3.05 Document Preparation.

A. Hazardous Paint Removal Waste Containing Lead. The Contractor shall prepare and distribute all documentation including the Uniform Hazardous Waste Manifest. The Engineer will sign the Generator's Certification on the Uniform Hazardous Waste Manifest. The LOR (Land Disposal Restricted) certification shall be completed and attached to the manifest, as required by 40 CFR Part 268 *Land Disposal Restrictions*.

B. Non-Hazardous Industrial Solid Paint Removal Waste. The Contractor shall prepare and distribute all documentation, including the disposal record forms.

571-3.06 Paint Removal Waste Transport. All paint removal waste shall be in transit to the disposal site from the site of generation no later than 45 calendar days unless otherwise approved by the Engineer, but no longer than 90 days. Any additional required shipment information, including manifest number, shall be entered on the container label(s) prior to shipment offsite. The Contractor shall present evidence that the vehicle that will be used for the shipment is permitted to transport the designated waste in accordance with 6 NYCRR Part 364.

Conditions for hazardous paint removal waste transporting vehicles to pick up paint waste debris, in bulk, from one or more bridge sites (multiple collection) for delivery to an authorized Treatment, Storage and Disposal Facility (TSDF) include the following:

A. Hazardous Paint Removal Waste Containing Lead.

- The materials picked up at each site shall be essentially identical in physical and chemical characteristics. No materials, other than paint waste debris, may be included if wastes from several individual generating sites are to be combined on the same truck. All of the component shipments are presumed to be 0008 hazardous wastes, and disposed as such.
- A manifest is prepared for each generating bridge site. Each manifest shall reflect a bulk shipment, and all manifests being carried by the same transporting vehicle must express the

quantity in pounds. In sum total, the manifests accompanying the shipment shall account for the entire quantity transported.

All component shipments are intended to be conveyed to the same TSDF, and the TSDF has agreed to accept consolidated bulk loads.

All component shipments shall have originated at sites where the Department is the waste generator. No loads may be included that were generated at a site for which another agency is the waste generator.

Measures shall be taken to prevent the blowing or dispersion of the paint removal waste during each loading operation and while being transported.

The weight of waste shall be provided by the disposal facility.

B. Non-Hazardous Industrial Solid Paint Waste. Conditions for non-hazardous waste transporting vehicles to pick up paint waste debris, in bulk, from one or more bridge sites (multiple collection) for delivery to an authorized disposal facility include the following:

The materials picked up at each site shall be essentially identical in physical and chemical characteristics. No materials, other than paint waste debris, may be included if wastes from several individual generating sites are to be combined on the same vehicle.

- All component shipments are intended to be conveyed to the same disposal facility, and the disposal facility has agreed to accept consolidated bulk loads.

All component shipments shall have originated at sites where the Department is the waste Generator. No loads may be included that were generated at a site for which another agency is the waste Generator.

Measures shall be taken to prevent the blowing or dispersion of the waste during each loading operation and while being transported.

The weight of waste shall be provided by the disposal facility.

571-3.07 Conditionally Exempt Small Quantity Generator (CESQG) Exemption.

Shipments of non-hazardous paint removal wastes of less than 200 pounds shipped in a single load may be transported without a waste transporter permit as allowed by the Small Quantity Waste Transporter

Exemption at 6 NYCRR Part 364.1(e)364-2.1(b)C5). For activities with generation of hazardous paint removal wastes that meet Conditionally Exempt Small Quantity Generator (CESQG) status (generate less than 220 pounds in any month and store less than 2205 pounds on site at any time), no USEPA ID number is required, the waste can be shipped without a manifest, and a CESQG can self-transport up to 220 pounds of waste in any calendar month to a disposal facility. CESQGs can dispose of their waste at a permitted hazardous waste facility or municipal or industrial solid waste facilities that are permitted to accept that type of waste.

571-3.08 Hazardous Paint Removal Waste Containing Lead Stabilization. Treatment of hazardous paint removal waste, as required by Federal regulations, is presumed to require stabilization of the waste such as mixing it with portland cement and water at a permitted Hazardous Waste Treatment or Disposal Facility. The stabilized waste shall meet the treatment standards of the Federal regulations prior to disposal in a permitted Hazardous Waste Disposal Facility.

571-3.09 Non-Hazardous Industrial Solid Paint Waste Sampling and Analysis. The Contractor shall conduct all sampling and analysis as required by the designated authorized disposal facility as soon as feasible upon waste generation at each non-hazardous designated bridge. Sampling shall be conducted by individuals thoroughly trained in sampling protocols, handling and chain of custody procedures, and laboratory requirements. Accepted sampling practices shall be used to obtain representative composite sample(s) as required for the specific analysis to be completed. Each composite sample shall include a minimum of four distinctly different sampling points. Analyses shall be completed

at a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory using NYSDEC Analytical Services Protocols (ASPs). The analysis must include, at a minimum, the RCRA heavy metals analysis using the Toxicity Characteristic Leaching Procedure (TCLP) and a total weight analysis. If analytical results indicate that the waste is hazardous, the waste shall be disposed of as such and the hazardous waste pay item shall be used.

571-3.10 Waste Disposal Facility.

A. Hazardous Paint Waste Containing Lead. Prior to generating any hazardous paint removal waste, the Contractor shall provide the Engineer with a letter from a permitted Hazardous Waste Disposal Facility, stating that the Facility has agreed to accept the hazardous waste generated by the work requirements of this contract; is authorized to accept the hazardous waste under the laws of the State of residence; has the required capacity to treat and dispose of the material; and will provide, or assure the ultimate disposal method indicated on the Uniform Hazardous Waste Manifest. The letter shall be signed by a representative of the Disposal Facility who is legally authorized to sign such an agreement.

B. Non-Hazardous Industrial Solid Paint Waste. Prior to generating any non-hazardous paint removal waste, the Contractor shall provide the Engineer, in writing, the name and location of the permitted solid waste management facility selected for disposal.

571-4 METHOD OF MEASUREMENT.

571-4.01 Hazardous Paint Waste Containing Lead. The quantity of paint removal waste to be measured for payment will be in net pounds of waste disposed of, based on disposal facility weight tickets of the waste as manifested, not including the weight of the containers.

571-4.02 Non-Hazardous Industrial Solid Paint Waste. The quantity of paint removal waste to be measured for payment will be in net pounds of waste disposed of, based on disposal facility weight tickets, not including the weight of the containers.

571-5 BASIS OF PAYMENT.

571-5.01 Hazardous Paint Waste Containing Lead. The unit price bid per pound of paint removal waste shall include the cost of all labor, materials, equipment, sampling, testing, and fees necessary to complete the work based on the assumption that treatment by stabilization will satisfy the applicable Federal regulations. Only waste for which manifest copies (not applicable for CESQG exemption) and weight ticket(s) are returned to the Engineer by the Contractor and Disposal Facility will be authorized for payment. If the Department is fined or penalized as a result of the Contractor's performance or lack thereof, in addition to other remedies the Department may possess, said fine or penalty will be deducted from monies due the Contractor.

571-5.02 Non-Hazardous Industrial Solid Paint Waste. The unit price bid per pounds of paint removal waste shall include the cost of all labor, materials, equipment, sampling, testing, and fees necessary to complete the work. Only waste for which weight ticket(s) are returned to the Engineer by the Contractor and Disposal Facility will be authorized for payment. If the Department is fined or penalized as a result of the Contractor's performance or lack thereof, in addition to other remedies the Department may possess, said fine or penalty will be deducted from monies due the Contractor.

571.03	Disposal of Hazardous Paint Removal Waste Containing Lead	Pound
571.04	Disposal of Non-Hazardous Industrial Solid Paint Removal Waste	Pound

SECTION 572 - STRUCTURAL STEEL PAINTING: SHOP APPLIED

572-1 DESCRIPTION. This work shall consist of preparing and painting new steel surfaces in a permanent facility, enclosure, or building, with four walls to grade and a roof, where surface preparation and painting activities are conducted in an environment not subject to outdoor weather conditions and/or blowing dust. All painting work, except field touchup and bolt painting, shall be conducted inside this facility. See special note entitled "*Structural Painting Details*" for the description and requirements of serialized items.

572-2 MATERIALS

572-2.01 Paints. Paints shall meet the requirements of §708-01 Structural Steel Paints- Class 1, and shall appear on the Department's Approved List, "Structural Steel Paints- Class I". All new paint applied to a single structure shall be the same paint system produced by the same manufacturer. The Contractor shall assure this to be the case in the event that multiple paint items are specified on a single structure. This includes both shop and field components of the structure.

A. Shelf Life. The shelf life of all components of the coating system shall be a maximum of 12 months from the date of manufacture. The shelf life of factory sealed containers of thinner shall be the manufacturer's recommendation or 3 years from the date of manufacture, whichever is less, and a maximum of 7 months after the factory seal has been broken. Paint and thinner shall arrive at the work site in new, unopened containers. The label shall include the manufacturer's name, batch number, color, paint name, and date of manufacture.

B. Paint Storage. Paint in storage shall be protected from damage and maintained in accordance with manufacturer's recommendations. Paint will be considered in storage if it is onsite for more than 8 hours prior to application.

C. Color. Each single coat of paint shall be a different color and provide substantial contrast with the underlying substrate and previous coats. The colors of the primer, stripe coat, and intermediate coat will be the Contractor's option. The color of the finish coat shall be as specified in contract documents.

D. Data Sheets. The Contractor shall supply the Department's representative with the paint manufacturer's material safety data sheets for each paint to be applied. The material safety data sheets shall be delivered to the Department's representative a minimum of five work days prior to beginning of work. The Department's representative and Contractor shall use the product data sheets posted on the Structural Steel Paints Class I Approved List.

572-2.02 Abrasive for Blast Cleaning. Abrasive material for blast cleaning shall be selected by the Contractor. Silica sand and other types of nonmetallic abrasive containing more than one percent free silica, by weight, will not be allowed. The abrasive blasting shall produce an angular anchor profile suitable for the paint system to be applied.

572-2.03 Paint Inspection Equipment. Prior to the start of work, the Contractor shall supply the Engineer with the following specifications and equipment in good working order:

ITEM 574 - STRUCTURAL STEEL PAINTING: OVERCOATING AND LOCALIZED

574-1 DESCRIPTION. This work shall consist of pressure washing and power-tool or vacuum-blast cleaning of damaged paint areas and corroded structural steel surfaces, and painting surfaces described in contract documents. See Special Note entitled *Structural Painting Details* for the description and requirements of serialized items.

574-2 MATERIALS

574-2.01 Paints. Paints shall meet the requirements of §708-02 *Structural Steel Paints Class 2* and shall appear on the Department's Approved List, Structural Steel Paints – Class 2 for localized and overcoat painting, or on the Structural Steel Paints – Class 1 Approved List for localized painting only. All new paint to be applied to a single structure shall be the same paint system produced by the same manufacturer. The Contractor shall assure this to be the case in the event that multiple paint items are specified on a single structure. This includes both shop and field painted components of the structure.

A. Shelf Life. The shelf life of all components of the coating system shall be a maximum of 12 months from the date of manufacture. The shelf life of factory sealed containers of thinners shall be per manufacturer's recommendations or 3 years from the date of manufacture, whichever is less, and a maximum of 7 months after the factory seal has been broken. Paint and thinner shall arrive at the work site in new, unopened containers. The label shall include the manufacturer's name, batch number, color, paint name, and date of manufacture.

B. Paint Storage. Paint in storage shall be protected from damage and maintained in accordance with manufacturer's recommendations. Paint will be considered in storage if it is onsite for more than 8 hours prior to application.

C. Color. Each single coat of paint shall be a different color and provide substantial contrast with the underlying substrate and previous coats. The color of the finish coat shall be as specified in contract documents. The color of the other coats will at the Contractor's option.

D. Data Sheets. The Contractor shall supply the Department's representative with the paint manufacturer's material safety data sheets for each paint to be applied. The material safety data sheets shall be delivered to the Department's representative a minimum of five work days prior to beginning of work. The Department's representative and Contractor shall use the product data sheets posted on the Structural Steel Paints Class 1 or Class 2 Approved List, as applicable.

574-2.02 Water for Washing. Water for pressure washing shall be potable water. Any detergent or soluble salt remover used must receive approval by the paint manufacturer and the Materials Bureau. Water shall not be recycled.

574-2.03 Abrasive for Blast Cleaning. Abrasive material for blast cleaning shall be selected by the Contractor. Silica sand and other types of nonmetallic abrasive containing more than one percent free silica, by weight, will not be allowed. The abrasive blasting shall produce an angular anchor profile suitable for the paint system to be applied.

574-2.04 Paint Inspection Equipment. Prior to the start of work the Contractor shall supply the Engineer with the following specifications and equipment in good working order:

1. One bound copy of the Steel Structures Painting Council surface preparation specification, SSPC SP-1 – *Solvent Cleaning*.
 2. One (1) bound copy of the Steel Structures Painting Council surface preparation specification, SSPCSP 11 – *Power Tool Cleaning to Bare Metal*.
 3. One (1) bound copy of the Steel Structures Painting Council surface preparation specification, SSPCSP 10 – *Near-White Metal Blast Cleaning*.
 4. One bound copy of the Steel Structures Painting Council pictorial standards, SSPC-VIS 3, *Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning*.
 5. One bound copy of the most current Steel Structures Painting Council pictorial standards, SSPC-VIS 1, *Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning*.
 6. One bound copy of the Steel Structures Painting Council method SSPC-PA2, *Paint Application Specification No. 2 - Measurement of Dry Film Thickness With Magnetic Gages*.
 7. One copy of ASTM D4417 Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel.
 8. One copy of ASTM D4285-83 (1999) Test Method for Indicating Oil or Water in Compressed Air.
 9. One Air Thermometer, pocket type, 10°F to 110°F.
 10. One noncontact Infrared Thermometer, 10°F to 110°F.
 11. One Contact Thermometer, 10°F to 110°F.
 12. One Paint Thermometer, 10°F to 110°F.
 13. One Magnetic Dry-Film Thickness Gage, Type 2 (as defined per SSPC PA-2), with a display capable of measuring 0 to 60 mils in 0.1 mil increments, with calibration shims.
 14. Two Wet-Film Thickness Gages, Prong Type, capable of measuring 1 to 10 mils in 1 mil increments.
 15. Psychrometer and US Weather Bureau Psychrometric Tables.
 16. Profile micrometer with extra coarse replica tape.
- All equipment will be returned to the Contractor upon completion of the work.

574-3 CONSTRUCTION DETAILS. Overcoating is defined as treating corroded areas by spot cleaning and applying two coats of primer, followed by applying intermediate and topcoats of paint to all prepared steel surfaces, both cleaned and primed previously corroded areas and cleaned existing intact painted surfaces. Localized cleaning and painting are defined by spot cleaning and applying four coats of paint, including two coats of primer, intermediate and topcoat, to spot-cleaned steel only. The Contractor shall provide adequate access, suitable lighting, and time for inspections to be made. Any work done while the Engineer has been denied, or restricted from access, shall be recleaned and repainted at no additional cost to the State.

574-3.01 Quality Control Plan. The Contractor shall provide the Engineer a copy of the Contractor's Quality Control (QC) procedures and/or Quality Control Plan (QCP). The QCP describes the minimum QC activities that will be performed by Contractor's QC personnel to ensure compliance. The QCP shall minimally include operating procedures and maintenance records for equipment on site, proof of formal QC training for the Contractor's QC personnel on site, and daily reports including the following information:

- Compressed Air Cleanliness
- Dry-Film Thickness
- Air Temperature
- Humidity and Dew Point
- Surface Temperature
- Abrasive Cleanliness Checks
- Degree of Cleanliness Achieved

- Surface Profile
- Batch Numbers of Paint Used
- Batch Numbers of Thinner Used
- Mixing According to Specification

The Contractor must provide daily reports to the Engineer upon request. The reports shall be submitted no later than 24 hours following the completion of the days work.

574-3.02 Surface Preparation for Overcoating. Steel surfaces shall be prepared for painting by a combination of pressure washing and power-tool or vacuum-shrouded blast cleaning. Pressure washing of all areas to be painted shall be performed first, followed by power-tool cleaning of areas demonstrating corrosion of the steel substrate to remove all paint, rust, rust scale, and mill scale, as per SSPC SP-11, *Power Tool Cleaning to Bare Metal* or *SSPC SP-10, Near-White Metal Blast Cleaning* as applicable. If heavy deposits of rust and scale are present, they shall be removed by hand or power tool prior to pressure washing. Areas of tightly adhered coating to remain shall be abraded to provide an anchor profile for overcoat paint. Large deposits of bird droppings shall be removed prior to pressure washing.

A. Pressure Washing and Solvent Cleaning. All steel surfaces to be painted shall be pressure washed, using an operating pressure range of 1800 to 2000 psi, a minimum flow of 3.5 gal/minute, and a water temperature of 185°F to 200°F. The nozzle shall be held at a distance of 6 to 12 inches from the steel surface. Pressure washing shall only be allowed when ambient air temperatures are greater than 40°F and rising. In no case will pressure washing be conducted when spent wastewater could freeze on roadway or bridge surfaces or in any other way create a hazardous situation. The washing is intended to remove contaminants from the surface, not to remove tightly adhered paint. Oil and grease shall be removed by solvent cleaning as described in SSPC SP1, *Solvent Cleaning*. The areas shall be pressure washed again following this cleaning.

When the washing is completed, the cleaned surfaces shall be free of dust, dirt, oil, grease, animal waste, salts, and other debris

A containment shall be suspended around and beneath the work area during pressure washing. The containment for pressure washing is intended to capture solid paint chips and other solid debris that may become dislodged from washing operations. Unless otherwise noted, spent wash water will not require collection and will be allowed to fall to the underlying ground or waterway, provided that the other requirements of this specification are met.

Special note, Structural Painting Details, will provide scheduling requirements for washing a structure over a body of water. Spent wash water over a public water supply or the New York City watershed shall be collected and diverted to the adjoining land mass.

If steel surfaces become contaminated or 7 calendar days elapse between washing and abrasive blasting cleaning, they shall be rewashed at no additional cost to the State.

B. Power Tool Cleaning. Power tools as described in SSPC-SP 11 shall be used to clean corroded steel. Vacuum-shrouded abrasive blasting may be allowed. Steel cleaned using vacuum shrouded blasters shall be cleaned to SSPC-SP 10.

1. Atmospheric Conditions. No cleaning operations will be conducted under the following conditions:

The relative humidity exceeds 85%.

When the substrate is damp or covered by frost.

The surface temperature is less than 5°F above the dew point.

2. Steel Cleanliness and Profile. Surfaces which have become visibly corroded shall be

cleaned in accordance with SSPC-SP 11 or SSPC-SP 10, as applicable. Areas where the existing paint has peeled, flaked, blistered, or otherwise become deteriorated shall be cleaned until only sound paint, tightly adherent paint remains. These areas need not be cleaned to SP-11 or SP-10 if the damage does not extend to the steel surface and corrosion of the steel substrate or the mill scale is not evident.

Equipment used shall produce an anchor profile meeting the manufacturer's requirements as reported on the manufacturer's data sheets. The anchor profile shall be measured in accordance with ASTM D4417, Method C.

Special attention shall be given to the edges of beam flanges, angles and plates, bearings, rivets, the heads of nuts and bolts, structural steel surrounding bridge joints, and similar surfaces that are marginally accessible and difficult to clean.

The edges of intact paint shall be feathered back, and the adjoining paint must be tightly adhered. Ragged or lifting edges on adjoining paint will not be allowed. Adherence will only be considered satisfactory if the adjoining paint is smoothly feathered back and cannot be removed by lifting with a dull putty knife.

3. Vacuuming. The vacuum assembly on all tools shall be capable of containing all visible dust and debris produced by the operation of the cleaning equipment. Air passing through the vacuum assembly shall be exhausted through a HEPA filter. A HEPA filter shall be defined as a filter that is at least 99.97% efficient for particles that are 0.3 μm in diameter, or larger.

4. Preparation of Remaining Coating. Areas exhibiting damaged or deteriorated paint not extending to the steel shall be power tool cleaned to remove all damaged or loosely adhered paint and provide a suitable surface for top coating. Loosely adhered paint will lift when scraped with a dull putty knives.

After cleaning and feathering edges, all remaining tightly adhered coating shall be abraded.

The abrading operation shall not fracture or remove a significant amount of existing coating, only provide surface profile suitable to receive additional coats of paint. The degree of abrasion shall

be in accordance with the manufacturer's recommendations.

The Contractor shall choose the method of abrasion. No additional payment will be made for the appropriate containment and waste collection required to abrade the surface. Open abrasive blasting to abrade the surface shall require a Class A containment, in accordance with Section 570 *Paint Removal Operations*. All other methods of abrasion shall minimally require the same level of containment as specified in contract documents for a particular structure. If the Contractor chooses a wet-abrasive method for abrasion, the containment must meet the requirements of SSPC – Guide 6, Class 2W. All water and abrasive must be collected and disposed of as hazardous waste.

All dust, powder, or residual abrasive remaining on the surface after the abrading operation shall be thoroughly removed and the remaining surface clean prior to painting.

5. Cleaning Area. The area cleaned shall be limited to that which can be cleaned, inspected and prime coated within a 10-hour period. Cleaned areas shall be inspected by the Engineer prior to priming. Areas that exhibit flash rusting within the 10-hour period or fail to meet the project cleaning standard prior to painting shall be recleaned.

C. Visual and Project Standards. The Contractor shall prepare at least one project cleaning standard for each representative area on the structure that is being prepared for painting. Multiple standards may be required if the cleaned steel differs significantly from the photographic standards due to surface conditions, location from work area, or other factors such as distance of the standard from the work area.

The prepared standard shall generally conform to SSPC VIS 3, *Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning* or SSPC VIS 1, *Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning*, as appropriate, and shall be approved by the Engineer before the start of general cleaning work. Each cleaning standard shall be at least 12 x 12 inches in size, and shall be located in an area of the structure that is accessible to, and approved by the Engineer. The Contractor shall protect the cleaning standard from corrosion and contamination throughout the duration of work by applying a clear coat of polyurethane. At the completion of cleaning work, the project standard shall be recleaned and painted. If the project cleaning standard becomes deteriorated, or otherwise ineffective, it shall be reestablished at no additional cost to the State. Corroded and deteriorated surfaces that have been cleaned using power tools shall be accepted by visual comparison to the project prepared standard(s) for each structure. In case of a dispute over the visual standard, the written standard shall take precedence.

574-3.03 Surface Preparation for Localized Cleaning and Painting. All of the requirements of §574-3.02 shall apply with the exception of abrading the remaining coating. Only tightly adherent existing coating within 6 inches of a power tool cleaned surface shall be abraded.

574-3.04 Overcoat Painting. The paint shall appear on the Department's Approved List, 'Structural Steel Paints - Class 2' and be approved for overcoating application. The Contractor shall apply each coat of paint in the order listed on the Department's Approved List 'Structural Steel Paints - Class 2.'

A. Atmospheric Conditions. Paint shall be applied only if surface and ambient temperatures are greater than or equal to 40°F and rising. Paint shall not be applied when surface or ambient temperatures are greater than 100°F. If the temperature range listed on the manufacturer's data sheets is more restrictive, the manufacturer's range shall be used. The use of accelerator additives is prohibited. No paint shall be applied unless the receiving surface is absolutely dry. Paint shall not be applied when the relative humidity is more than 85% or the surface temperature is less than 5°F

above the dew point. If the manufacturer's requirements are more restrictive, they shall be followed. No paint shall be applied during rain.

The Contractor shall observe the dew point restrictions listed on the manufacturer's data sheets. If an epoxy coating is exposed to cold temperatures or humid conditions outside of the manufacturer's recommended values prior to cure, the surface shall be visually examined for greased or oily surfaces which may have formed. The Engineer may also require the Contractor to use a commercially available amine blush test kit in various locations. If testing indicates the presence of an amine blush or if there is any oily film on the surface, the surfaces shall be cleaned in accordance with paint manufacturer's recommendations at no additional cost to the State.

B. Paint Mixing. All paint shall be thoroughly mixed with mechanical mixers in accordance with the manufacturer's recommendations. After mixing the bottom of the container shall have no unmixed pigment.

C. Solvents and Thinners. Paint may be thinned if recommended by the manufacturer and approved by the Engineer. The primer, if classified as metallic pigmented, shall not be thinned such that the resulting VOC level exceeds the maximum allowable limit set by 6 NYCRR Part 205, §205.3 for metallic pigmented coatings. All other coats of paint shall not be thinned such that the resulting VOC level exceeds the maximum allowable §205.3 limit for industrial maintenance coatings. Use of unauthorized thinners or using excess amounts of thinners is prohibited. Any area where unauthorized solvents or thinners are used shall be recleaned and repainted at no additional cost to the

State. All thinning shall be performed in the presence of the Engineer.

D. Paint Application. Painting shall not begin until cleaned surfaces have been inspected and approved by the Engineer. Paint may be applied using spray, brush, or roller, unless otherwise indicated by the contract documents or prohibited by the paint manufacturer. All paint shall be applied so as to produce a uniform, even coating, free of runs, sags, drips, ridges or other defects. Roller nap shall be limited in accordance with the paint manufacturer's recommendation. Areas exhibiting trapped fiber or bristles shall be rejected. Prepared areas that exhibited damaged paint not extending to the steel substrate shall receive two coats of paint: intermediate and finish coat. Complete protection against paint spatter, spillage, wind-blown paint, or similar releases of paint shall be provided. Covers, tarps, mesh, and similar materials shall be placed around the work area to protect public and private property, pedestrian, vehicular, marine, or other traffic, all portions of the bridge, highway appurtenances, waterways, and similar surrounding areas and property, upon, beneath, or adjacent to the structure. The use of spray equipment for paint application shall be allowed within containments provided that the aforementioned protection against paint release is provided, all equipment used (including tarps, mesh and similar materials) meets all safety requirements for such enclosed use with paint spraying, and all OSHA requirements for safety and ventilation is met.

E. Paint Film Thickness. Paint shall be applied to produce the specified dry-film thickness (DFT) as directed by the range listed on the paint manufacturer's data sheets. The dry-film thickness shall be determined in accordance with SSPC-PA 2, Paint Application Specification No. 2 - *Measurement of Dry Film Thickness with Magnetic Gages*, using a Type 2, fixed-probe magnetic gages. Dry film thickness gauges shall be calibrated over a cleaned, approved surface on the structure using two NIST traceable shims as described in the "two-point calibration adjustment" section of Appendix 2 of SSPC-PA 2. The two shims must be just below and above the recommended thickness range of the prime coat, or the combined thickness of successive coats, as applicable. DFTs of the all coats applied subsequent to the primer shall be determined by subtracting the average DFT readings of the previous coat(s) from the actual DFT readings. An average DFT value shall minimally be recorded and calculated for every 1000 square feet prepared. The average shall be calculated using a minimum of 5 spot measurements as defined by SSPC-PA2. At least one of the spot measurements shall be performed on the bottom face of the bottom flange of stringers, girders or floor beams if these elements are in the work area. Areas failing to meet the specified minimum dry-film thickness shall be top coated with the same paint to produce the total dry film thickness required. The top coating must be performed within the paint manufacturer's specified recoat window. The Engineer may require any area exceeding the manufacturers recommended dry film thickness to be cleaned to the SSPC-SP 11 or SSPC-SP 10 condition.

F. Painting Schedule. Primer shall be applied as per §574-3.02, B.5 of this specification. The second coat of primer shall be applied within 72 hours of the application of the initial prime coat. The intermediate coat shall be applied within 72 hours of prime coating of the areas as defined by §574-3.02, B.5. All areas of adherent existing paint to be overcoated shall receive the intermediate coat within 72 hours of that area's cleaning operation. To prevent intercoat adhesion failure, topcoat must be applied within the manufacturer's recommended recoat window, or 14 days, whichever is shorter. If the contractor fails to recoat within the specified time period, the surface to be painted shall be cleaned and abraded in accordance with manufacturer's recommendations. This work shall be done at no additional cost to the State. If the steel has become dirty between coats, the Contractor shall wash the bridge again at no additional cost to the State.

574-3.05 Painting for Localized Cleaning and Painting. The paint shall appear on the Department's Structural Steel Paints – Class 1 Approved List, or Structural Steel Paints – Class 2 Approved List and be approved for localized application. The Contractor shall apply each coat of paint in the order listed on the Department's Approved List. All of the requirements of §574-3.04 shall apply with the exception of area painted. Only areas that have been cleaned shall be painted. Paint shall not extend more than 6 inches beyond all power-cleaned areas.

574-4 METHOD OF MEASUREMENT

574-4.01 Overcoating - Lump Sum. The work under this item will be measured on a lump sum basis, per structure.

574-4.02 Overcoating - Square Feet. The measurement of this item will include the area requiring overcoating, measured to the nearest whole square feet.

574-4.03 Localized - Square Feet. The quantity to be measured will be in square feet of area of steel cleaned and painted, measured the nearest whole square feet.

574-5 BASIS OF PAYMENT

The lump sum price bid shall include the cost of all labor, materials, and equipment necessary to complete the work, including the cost of providing protection against damage to public and private property during pressure washing and paint application. Payment for the containment, collection and disposal of dust and paint waste generated by surface preparation work shall be paid for separately. Progress payments will be based on the percentage of steel cleaned and painted. 60% of the quantity will be paid for surface preparation and priming. The remaining amount will be paid following the satisfactory completion of work.

Payment will be made under:

Item No.	Item	Pay Unit
574.01nnnn	Structural Steel Painting: Overcoating	Lump Sum
574.02nnnn	Structural Steel Painting: Overcoating	Square Foot
574.03nnnn	Structural Steel Painting: Localized	Square Foot

ITEM 580 - REMOVAL OF STRUCTURAL CONCRETE

580-1 DESCRIPTION. This work shall consist of removal and disposal of structural concrete from structural concrete elements, concrete approach slabs, concrete bridge pylons, concrete from structural steel members, and other concrete removal and disposal in accordance with the contract documents and as directed by the Engineer.

580-2 MATERIALS. Not Specified.

580-3 CONSTRUCTION DETAILS

580-3.01 General. The Contractor shall remove structural concrete in accordance with the contract documents, so as not to damage material designated to remain in place. Reinforcement designated to remain in place shall be cleaned.

The Contractor shall only remove structural concrete from elements to remain to the limits shown in the contract documents, in order to preserve structural adequacy and stability. Replacement concrete shall be placed and allowed to reach its initial set prior to any additional removals. A minimum of 7 calendar days prior to beginning removal of structural concrete, the Contractor shall provide a Structural Concrete Removal Plan for acceptance by the Engineer. The Structural Concrete Removal Plan shall identify the equipment to be used, the sequence of operations, provisions for protection of structural steel, provisions for removal and disposal of material, and any additional work zone traffic control or worker safety provisions.

580-3.02 Removal of Structural Concrete. The Contractor shall remove concrete to a sound surface in accordance with the contract documents. The removal operation shall be angled inward creating a key. Small angle corners shall be minimized per contract documents to prevent voids. Reinforcing bars and miscellaneous material shall be removed or shall be retained, as shown in the contract documents. After removal of concrete has been performed; surfaces designated to come in contact with new concrete placements shall be cleaned in order to ensure proper bonding with the new concrete. Concrete surfaces to be cleaned shall be thoroughly blast cleaned or abraded by other mechanical means to remove remaining loose material. After blast cleaning or abrading, vertical or overhead surfaces shall be air-blown, or rinsed with water to remove dust. Other surfaces shall be vacuum cleaned.

Demolition or chipping hammers shall weigh no more than 45 lbs excluding the weight of the bit and muffler. The hammers shall deliver no more than 1600 blows per minute. The Contractor shall provide the Engineer information from the hammer manufacturer to assure that these requirements are not exceeded. The air pressure used to power the hammer shall not exceed 110 psi, measured at the air compressor, as shown by an air pressure gauge in proper working condition provided by the Contractor. Only sharp chisel point bits, a minimum of 2 inches wide, shall be used.

If the Contractor's operations result in damage to concrete that is to remain, the Contractor shall make immediate corrections to prevent damage. Exceptions to the hammer limitations shall be approved by the Deputy Chief Engineer (Structures) prior to use.

580-3.03 Removal of Concrete Approach Slabs. The Contractor shall remove concrete approach slabs in accordance with the contract documents. Sawcutting of the concrete approach slab in order to separate it from existing abutment will be shown in the contract documents and paid for separately.

580-4 METHOD OF MEASUREMENT

580-4.01 General. Vacant.

580-4.02 Removal of Structural Concrete. The quantity to be measured for payment will be in cubic

yards measured to the nearest 0.1 cubic yards of concrete removed.

580-4.03 Removal of Concrete Approach Slabs. The quantity to be measured for payment will be in square feet of concrete approach slab removed, measured to the nearest whole square foot.

580-5 BASIS OF PAYMENT

580-5.01 General. Vacant.

580-5.02 Removal of Structural Concrete. The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work, and all costs of disposal.

580-5.03 Removal of Concrete Approach Slabs. The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work, including any sawcutting other than separating the approach slab from the existing abutment, and all costs of disposal.

Payment will be made under:

Item No.	Item	Pay Unit
580.01	Removal of Structural Concrete	Cubic Yard
580.04	Removal of Concrete Approach Slab	Square Foot

584.3200nn

Slab Reconstruction Concrete, Class D, DP or Microsilica Concrete Square Yard

NOTE: nn denotes a serialized pay item.

SECTION 585 - STRUCTURAL LIFTING OPERATIONS

585-1 DESCRIPTION. The work shall consist of raising, supporting and lowering each bearing point designated on the plans in order to perform the work to be done under other items.

585-1.01 Bearing Point. For purposes of this specification the term bearing point is defined as a point on the structure, designated on the plans, to be raised in order to perform other work.

585-1.02 Lift Point. For purposes of this specification, the term lift point is defined as a point on the structure where the lifting force is applied.

585-1.03 Type. Some bearing point locations may require different methods of accomplishing the work. Such situations will be noted on the contract plans. They will be defined by a type designation. The type designation will be reflected in the pay item title (e.g., 585.01 Structural Lifting Operations-Type A, etc.).

585-2 MATERIALS

585-2.01 Used Materials. Used materials will be allowed, except that materials that are permanently attached to the structure shall be in conformance with the current New York State Department of Transportation Standard Specifications.

585-2.02 Lifting Equipment. Unless otherwise specified on the plans, the choice of lifting equipment shall be at the Contractor's option, subject to the following provisions:

If jacks are used for the lifting operations, each jack shall have the rated capacity clearly shown on the manufacturer's name plate attached to each jack. Jacks or other lifting equipment shall have a rated capacity of at least one and a half times the calculated lifting force. The Engineer may require that any lifting equipment deemed to be inadequate or faulty be removed from the project site.

Jacks or other lifting equipment shall be equipped with pressure gages or other load measuring devices that will enable the applied lifting force to be monitored at all times.

585-3.01 General. The plans designate, by type, the bearing points that must be raised in order to perform the work. The loads at each bearing point are shown on the plans.

The Contractor shall select the location of the lift points, subject to the approval of the Deputy Chief Engineer (Structures), and calculate the required lifting force.

Unless a specific distance is shown on the plans, each designated bearing point shall be raised the minimum distance that will allow the work to be completed.

The Contractor shall engage the services of a New York State Licensed Professional Engineer (PE) to design and detail the structural lifting system. The PE shall be available for consultation in interpreting his plans and in the resolution of problems which may arise during the performance of the work.

All design and details shall be in conformance with the current New York State Department of Transportation Standard Specifications for Highway Bridge and the current New York State Steel Construction Manual.

585-3.02 Working Drawings. The Contractor shall furnish working drawings, prepared, stamped and signed by a New York State Licensed Professional Engineer, for the system proposed to raise, support

and lower each designated bearing point. The working drawings shall not alter the number or location of designated bearing points.

The drawings shall include, but need not be limited to the following:

- Lift point locations.
- Calculated lifting forces.
- Details for all lifting equipment and support systems.
- Type and grade of all materials.
- Distance that each bearing point is to be raised.
- Schematic hydraulic layout.
- All disconnections, reconnections or adjustments that are necessary to properly complete the lifting operations. This includes but is not limited to railings, joints, power lines, gas lines, water lines, etc.

Three legible, standard sized (22 x 34 inches nominal, 20 1/2 x 33 inches working area) prints of each drawing, together with three copies of all design computations shall be submitted to the Deputy Chief Engineer (Structures) for approval. Failure to submit drawings of the required size will be cause for their return without examination.

The Deputy Chief Engineer (Structures) shall be allowed the longest of the following time durations to examine design computations and working drawings:

- Fifteen working days.
- Two working days for each drawing of a set of working drawings.
- One working day for every four (4) design computation sheets. Any design computation sheet written on both sides will be considered as two design computation sheets.

All time for examination shall begin upon receipt of all pertinent information by the Deputy Chief Engineer (Structures).

The Deputy Chief Engineer (Structures) comments shall be indicated on the returned copies. Should the proposed system not be approved, the reasons shall be indicated with the return of the material. The Contractor shall then submit revised drawings for approval, subject to the same terms as the first submission. Resubmission shall not be considered a legitimate reason to request an extension of time.

All work shall be done in accordance with the approved working drawings. The Contractor must have approved working drawings prior to the start of any structural lifting operations.

The Contractor shall bear all costs and/or damages which may result from the ordering of any materials, or equipment; or the use of any preparatory labor prior to the approval of the working drawings.

585-3.03 Lifting Operations. The Contractor shall raise each designated bearing point by applying the necessary lifting force at each lift point. At no time will the Contractor be allowed to apply a lifting force in excess of one and a halftimes the calculated lifting force.

During all phases of the operation, the differential lift between any two adjacent bearings on a common centerline of bearing shall not exceed 5/8 inch unless otherwise noted on the Plans.

The Contractor shall, at the earliest possible moment during or after each lift, safely secure the structure with shims, cribbings, bolsters or other suitable supports. Details to be used shall be shown on the working drawings.

Unless otherwise indicated on the plans, vehicular traffic or construction equipment shall not be permitted on the lifted span until shims, cribbing, bolsters or other suitable supports are in their required position.

The lifting operation shall be conducted such that the distance between the structure and the shims, cribbing, bolsters or other suitable supports do not exceed 3/8 inch at any time.

Any replacement, repair, or adjustments to the superstructure steel shall be performed in conformance with the current New York State Steel Construction Manual.

All welding shall comply with the requirements specified in the current New York State Steel Construction Manual.

All materials required for temporary support of the structure shall remain the property of the Contractor and shall be removed from the site after the work is completed, unless otherwise agreed to.

585-4 METHOD OF MEASUREMENT. The quantity to be paid for under this item shall be the number of bearing points designated on the plans, actually raised, supported and lowered. Payment will be made only once at each bearing point regardless of the number of times the bearing point is raised, supported and lowered during the course of the planned work.

585-5 BASIS OF PAYMENT. Payment will be made at the unit price bid for each bearing point actually raised, supported and lowered. The unit price bid per bearing point shall include the cost of all labor, materials and equipment necessary to complete this work.

For payment purposes each bearing point will be considered a separate unit. After all lifting has been performed and all temporary supports have been installed for any one bearing point, payment will be made for seventy percent of that particular unit. The remainder of the unit will be paid for after the bearing point has been lowered to its final permanent position and the lifting equipment and temporary supports have been removed.

Payment will be made under:

Item No.	Item	Pay Unit
585-XX	Structural Lifting Operations - (Types A- K)	Each
	XX (OJ through II) = Type Designation (A through K)	

SECTION 586 -MISCELLANEOUS STRUCTURAL RECONSTRUCTION

(Last Revised May, 2016)

586-1 DESCRIPTION

N

586-1.01 Drilling and Grouting Bolts or Reinforcing Bars. This work shall consist of drilling and grouting bolts or reinforcing bars. The terms bolts and reinforcing bars are used interchangeably. The word Anchor in this section refers to both bolts and reinforcing bars.

586-1.02 Removal of Rivets-Replacement with High Strength Bolts. This work shall consist of removal of rivets and replacement with high strength bolts.

586-1.03 Field Drill Holes in Existing Structural Steel. This work shall consist of field drilling holes in existing structural steel that is in service prior to the beginning of construction.

586-2 MATERIALS

586-2.01 Drilling and Grouting Bolts or Reinforcing Bars. Grout material used where a sustained tensile load will exist, including but not limited to all horizontal or overhead applications, as well as all angles in between, shall conform to §701-05 *Concrete Grouting Material*. Grout used in other applications shall conform to either §701-07 *Anchoring Materials- Chemically Curing* or §701-05 *Concrete Grouting Material*. Chemically curing anchoring materials or adhesives are referred to herein as grout.

§701-07 *Anchoring Materials -Chemically Curing* shall not be used in where sustained tensile loads will exist, including but not limited to all horizontal or overhead applications, as well as all angles in between. installation of anchors for Bridge railing, decorative railing, pedestrian fence and screening are

ITEM 589 - REMOVAL OF STRUCTURAL STEEL

589-1 DESCRIPTION. The work shall consist of removal and disposal of existing structural steel as shown in the contract documents and as directed by the Engineer.

589-2 MATERIALS. Not Specified.

589-3 CONSTRUCTION DETAILS

589-3.01 General. A minimum of 14 days prior to the removal of existing structural steel, the Contractor shall submit a written Structural Steel Removal plan meeting the requirements of §202-3.01A. *Demolition Plan* to the Engineer for approval. The Structural Steel Removal plan shall set forth all expected supports, disconnections and adjustments to steel which is to remain. If, during the course of the work it becomes necessary to support, disconnect, or adjust steel not previously noted in the Structural Steel Removal plan, the Contractor shall submit a revised plan to the Engineer for approval.

All work performed on steel which is to remain shall be in accordance with the applicable requirements of the Steel Construction Manual (SCM). Materials removed as part of this work shall become the property

of the Contractor and shall be removed from the work site.

Cutting of steel to remain shall be performed in a manner to produce edges and surfaces suitable for welding, in accordance with the requirements of the SCM, Part 603 *Surfaces and Edges to be Welded*. Thermal cutting of A709 steels shall be performed in accordance with the requirements of the SCM, Part 602 *Thermal Cutting of A709 Steels*. Replacement of steel removed will be paid for separately.

589-3.02 Steel Structures Coated with Paint. If the steel is coated with paint, prior to the start of steel removal operations, the paint shall be removed for a minimum distance of 4 inches on each side of the centerline of cut, bolt row, rivet row, or weld, as applicable. The paint removal work shall be performed in accordance with the requirements of §202-3.01D. *Paint Removal*.

589-3.03 Fastener Removals. If rivet shanks, or bolts, cannot be removed by punching without damaging the base metal, the rivet shank, or bolt, shall be removed by drilling.

A. Bolts. Nuts shall be removed with wrenches, wherever possible, and the bolts driven out with a handheld punch. Alternate removal procedures shall be set forth in the Removal Plan.

B. Rivets. Rivets shall be removed by either of the following methods:

- Shearing the rivet head, using a pneumatic rivet breaker (hell dog), and driving out the rivet shank with a pneumatic punch
- Flame-cutting the rivet head 1/16 inch above the base metal, using a rivet scarfing tip, and driving out the shank using a pneumatic punch.

589-3.04 Welded Connection Disassembly. Welded connections shall be disassembled in accordance with the following:

A. Removal. The affected weld shall be removed by means of air carbon arc gouging equipment. To avoid damaging the base material, 1/8 inch of weld material should be left in place. If more removal is needed to break the weld, then the removal shall be done in the vicinity of the component which will not remain. Any damaged steel to remain shall be repaired or replaced in a manner to be approved by the DCES.

B. Grinding. The weld material on the existing steel to remain in place shall be ground flush with

the base metal surfaces. No base metal shall be removed by grinding.

C. Inspection. The Engineer will perform a visual inspection of all weld removal locations. If the Engineer suspects that damage has occurred, the Contractor shall perform a dye penetrant inspection in accordance with the requirements of the SCM.

If the Contractor's operations damage existing steel which is to remain in place, the damaged steel shall be repaired, or replaced, as determined by the DCES at no additional cost to the State.

589-4 METHOD OF MEASUREMENT.

The quantity to be measured for payment for removal of existing steel with a pay unit of pounds will be in pounds of existing steel removed, measured to the nearest whole pound. The weight of existing steel removed will be computed from the nominal sizes indicated in the contract documents. If the nominal size is not indicated, field measurements shall be used to determine the weight, using 490 pcf as the density of steel. The weight of bolts, rivets and welds will be neglected, and no deductions will be made for any rivet or bolt holes in the existing steel or for any section loss due to corrosion.

The quantity to be measured for payment for removal of existing steel with an each pay unit will be in each unit of existing steel removed.

589-5 BASIS OF PAYMENT. The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work, including the removal of paint and fasteners, and disconnecting, supporting, or adjusting steel as necessary.

The treatment, handling and disposal of the paint removal waste will be paid separately.

Payment will be made under:

Item No.	Item	Pay Unit
589.01nnnn	Removal of Existing Steel	Pound
589.52nnnn	Removal of Existing Steel	Each

ITEM 594 - TIMBER AND LUMBER

594-1 DESCRIPTION. Under this work the Contractor shall furnish and place timber and lumber of various sizes and types as may be specified for sills or platforms beneath the road, for culverts, bridges reinforcing existing structures, and for other similar purposes as shown on the plans or specified by the Engineer.

594-2 MATERIALS. Materials shall meet the following requirements:

Wood Preservative - Creosote Oil, Type I	708-30
Wood Preservative - Water Borne	708-31
Wood Preservative - Oil Borne	708-32
Timber and Lumber	712-13
Stress Graded Timber and Lumber	712-14
Steel Plates as Specified	715-01

594-2.01 Fasteners. Fasteners such as: spikes, nails, screws, timber connectors, bolts, nuts and washers shall meet the standard industrial fastener specifications for the intended application.

594-2.02 Approval of Order. Prior to ordering timber and lumber, the Contractor shall submit to the Engineer for approval, a detailed statement of his proposed order. No material shall be ordered until the statement is approved.

594-2.03 Preservative Treatment. The preservative treatment shall be applied to stress graded lumber and timber and shall conform to the requirements of the AWPA C2, C3, and C18.

594-2.04 Sampling and Inspection. Sampling and inspection will be done by an accredited representative of the Department. The Inspector shall have the power to take samples of the material for analysis and to reject those materials which do not fulfill the requirements of these specifications as to either quality or workmanship. The acceptance of any materials by the Inspector shall not be a bar to their subsequent rejection if found defective. The Contractor shall furnish all facilities and equipment for the inspection and testing of materials and workmanship and the Inspector shall be allowed free access to all premises where inspections can be made.

The Contractor shall give the Department and Department's Inspection Agents ample notice relative to the location of, and time when, treating operations will take place. Inspection of all timber and lumber will be made by the Department's Inspection Agents before, during, and after pressure treatment at the treating plant. No treated timber and lumber shall be shipped which does not bear, in legible form, the Inspector's stamp of approval.

594-3 CONSTRUCTION DETAILS

594-3.01 General. Timber and lumber shall be placed or erected as shown on the plans or specified by the Engineer.

Any surface breaks resulting from storage and handling which do not warrant rejection shall be treated in accordance with AWPA M4 with the addition that at least three coats of preservative shall be applied.

Paint, where specified, shall be applied as required by the Contract Documents.

594-3.02 Treatment after Fabrication. All cutting, framing and boring of timber and lumber shall be done before treatment whenever practicable. Cutting and boring below high water shall be particularly

avoided in material which is to be used in waters infested with marine borers.

All cut surfaces and all bolt holes bored subsequent to treatment shall be treated in accordance with AWP4 M4 with the addition that at least three coats of preservative shall be applied. Any unfilled holes, after being treated with preservative shall be plugged with preservative treated plugs.

All cut surfaces and bolt holes below the high-water line shall, in addition to the AWP4 M4 preservative treatment be coated with a thick application of a mixture of 30% creosote and 70% pitch.

The Contractor shall obtain all necessary permits pertaining to the purchase and field application of wood preservatives from the U.S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation.

594-4 METHOD OF MEASUREMENT. The quantity to be paid for timber and lumber will be the number of cubic feet placed in the completed work. In measuring dressed timber and lumber, the cross section of any piece will be taken as the minimum nominal commercial size of undressed material from which the piece could have been cut. When round timber is used, it shall be estimated as square timber of the smallest undressed commercial size from which the timber can be manufactured. The length of any piece will be taken as the actual length in the finished work, making no deductions for bevels, notches or splices. If the measured quantity is first computed in board feet, the conversion factor shall be 0.083334 cubic feet per board feet.

594-5 BASIS OF PAYMENT. The unit price bid per cubic foot shall include the cost of furnishing all spikes, nails, screws, timber connectors, bolts, nuts, washers, hardware, preservative treatment and other required materials together with labor and equipment necessary to complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
594.01	Timber and Lumber	Cubic Foot
594.02	Stress Graded Timber and Lumber	Cubic Foot
594.03	Treated Timber and Lumber	Cubic Foot

ITEM 685.0715XX10 - EPOXY REFLECTORIZED PAVEMENT MARKINGS 15 MILS THICK
(WET NIGHT VISIBILITY SPHERES)
ITEM 685.0720XX10 - EPOXY REFLECTORIZED PAVEMENT MARKINGS 20 MILS THICK
(WET NIGHT VISIBILITY SPHERES)

DESCRIPTION:

Under this work the contractor shall furnish and apply epoxy reflectORIZED pavement markings in accordance with these specifications, the Contract Documents, the NYSMUTCD, or as ordered by the Engineer. Items for Special Markings include stop bars and crosswalks.

Yield line symbols are isosceles triangles with height equaling 1.5 times the base dimension:
A small yield line symbol shall have a base dimension of one foot.
A large yield line symbol shall have a base dimension of two feet.
Yield line symbols are to be installed with the Apex of the triangle oriented towards oncoming traffic.

The epoxy marking material shall be hot-applied by spray methods onto bituminous and portland cement concrete pavement surfaces at the thickness and width shown on the Contract Documents. Following a simultaneous application of Standard Glass Beads (Type 2) and Wet/Night Visibility Beads (Type 1), the cured epoxy marking shall be an adherent reflectORIZED stripe that will provide wet night retro-reflectivity.

MATERIALS REQUIREMENTS:

Epoxy Paint	727-03
Glass Beads for Pavement Markings	727-05

Reflective Glass Spheres

Retro-reflective beads shall be a double drop system of glass spheres consisting of Standard Beads (Type 2) and Wet/Night Visibility Beads (Type 1) as defined in §727-05 Glass Beads for Pavement Markings.

EPOXY APPLYING EQUIPMENT

In general, a mobile applicator shall be a truck mounted, self-contained pavement marking machine, specifically designed to apply epoxy resin materials and reflective glass spheres in continuous line patterns. The applying equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. In addition, the truck mounted unit shall be provided with accessories to allow for the marking of cross hatching and other special patterns as directed by the Engineer.

At any time throughout the duration of the project, the Contractor shall provide free access to his epoxy applying equipment for inspection by the Engineer or his authorized representative.

The Engineer may approve the use of a portable applicator in lieu of mobile truck mounted accessories for use in applying special markings only, provided such equipment can demonstrate satisfactory application of reflectORIZED epoxy markings in accordance with these specifications.

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Mobile applying equipment shall be capable of installing up to 19 miles of epoxy reflectorized pavement markings in an eight hour day and shall include the following features:

1. Individual tanks for the storage of Part A and Part B of the epoxy resin.
2. Individual tanks for the storage of Standard (Type 2) and Wet/Night Visibility (Type 1) glass spheres. Each tank shall have a minimum capacity of 3000 lbs.
3. Heating equipment of sufficient capacity to maintain the individual epoxy resin components at the manufacturer's recommended temperature for spray application.
4. Individual dispensers for the simultaneous application of Standard (Type 2) and Wet/Night Visibility (Type 1) glass spheres. Each dispenser shall be capable of applying spheres at a minimum rate of 10 lbs/gal of epoxy resin composition.
5. Metering devices or pressure gauges on the proportioning pumps, positioned to be readily visible to the Engineer.
6. All necessary spray equipment, mixers, compressors, and other appurtenances for the placement of epoxy reflectorized pavement markings in a simultaneous sequence of operations as described in Construction Details, D. Application of Epoxy ReflectORIZED Pavement Markings.

CONSTRUCTION DETAILS

A. General

All pavement markings shall be placed as shown on the Contract Documents and in accordance with the New York State, Manual of Uniform Traffic Control Devices (MUTCD).

Before any pavement marking work is begun, a schedule of operations shall be submitted for the approval of the Engineer.

At least five (5) days prior to starting striping, the Contractor shall provide the Engineer with the epoxy manufacturer's written instructions for use. These instructions shall include, but not be limited to, material mixing ratios and application temperatures.

When pavement markings are applied under traffic, the Contractor shall provide all necessary flags, markers, signs, etc. in accordance with the MUTCD to maintain and protect traffic, and to protect marking operations and the markings until thoroughly set.

The application of pavement markings shall be done in the general direction of traffic. Striping against the direction of traffic flow shall not be allowed.

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The Contractor shall be responsible for removing, to the satisfaction of the Engineer, all tracking marks, spilled epoxy, and epoxy markings applied in unauthorized areas.

When necessary the Contractor shall establish marking line points at 30 foot intervals throughout the length of the pavement or as directed by the Engineer.

B. Atmospheric Conditions

Epoxy pavement markings shall only be applied during conditions of dry weather and on substantially dry pavement surfaces. At the time of installation the pavement surface temperature shall be a minimum of 50°F and the ambient temperature shall be a minimum of 50°F and rising. The Engineer shall be the sole determiner as to when atmospheric conditions and pavement surface conditions are such to produce satisfactory results.

C. Surface Preparation

The Contractor shall clean the pavement and existing durable markings to the satisfaction of the Engineer.

Surface cleaning and preparation work shall be performed only in the area of the epoxy markings application.

At the time of application all pavement surfaces and existing durable markings shall be free of oil, dirt, dust, grease and similar foreign materials. The cost of cleaning these contaminants shall be included in the bid price of this item.

In addition, concrete curing compounds on new portland cement concrete surfaces and existing painted pavement markings on both concrete and bituminous pavement surfaces shall be cleaned and paid for in accordance with §635 Cleaning and Preparation of Pavement Surfaces for Pavement Markings.

D. Application of Epoxy ReflectORIZED Pavement Markings

Epoxy reflectORIZED pavement markings shall be placed at the width, thickness, and pattern designated in the Contract Documents.

Marking operations shall not begin until applicable surface preparation work is completed and approved by the Engineer, and the atmospheric conditions are acceptable to the Engineer.

Pavement markings shall be applied by the following simultaneous operation:

1. The pavement surface is air-blasted to remove dirt and residues.
2. The epoxy resin, mixed and heated in accordance with the manufacturer's

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recommendations, is uniformly hot-sprayed onto the pavement surface at the minimum specified thickness.

3. Standard (Type 2) and Wet/Night Visibility (Type 1) reflective glass spheres are injected into or dropped onto the liquid epoxy marking. Standard beads (Type 2) shall be applied first immediately followed by the application of Wet/Night Visibility beads (Type 1). Each type shall be applied at a minimum rate of 10 lbs/gal of epoxy resin (minimum total application = 20 lbs/gal).

E. Defective Epoxy Pavement Markings

Epoxy reflectORIZED pavement markings, which after application and curing are determined by the Engineer to be defective and not in conformance with this specification, shall be repaired. Repair of defective markings shall be the responsibility of the Contractor and shall be performed to the satisfaction of the Engineer as follows:

1. Insufficient film thickness and line width; insufficient glass bead coverage or inadequate glass bead retention.

Repair Method. Prepare the surface of the defective epoxy marking by grinding or blast cleaning. No other cleaning methods will be allowed. Surface preparation shall be performed to the extent that a substantial amount of the reflective glass spheres are removed and a roughened epoxy marking surface remains.

Immediately after surface preparation remove loose particles and foreign debris by brooming or blasting with compressed air.

Repair shall be made by restriping over the cleaned surface in accordance with the requirements of this specification and at the full thickness indicated on the Contract Documents.

2. Uncured or discolored epoxy*; insufficient bond (to pavement surface or existing durable marking).

Repair Method. The defective epoxy marking shall be completely removed and cleaned to the underlying pavement surface in accordance with the requirements of Section 635 - Cleaning and Preparation of Pavement Surfaces, at the Contractor's expense.

The extent of removal shall be the defective area plus any adjacent epoxy pavement marking material extending three feet in any direction.

After surface preparation work is complete, repair shall be made by reapplying epoxy over the cleaned pavement surface in accordance with the requirements of this specification.

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*Uncured epoxy shall be defined as applied material that fails to cure (dry) in accordance with the requirements of §727-03 Epoxy Paint; or applied material that fails to cure (dry) within a reasonable time period under actual field conditions, as defined by the Engineer.

Discoloration shall be defined as localized areas or patches of brown, grayish or black colored epoxy marking material. These areas often occur in a cyclic pattern and often are not visible until several days or weeks after markings are applied.

Other defects not noted above, but determined by the Engineer to need repair, shall be repaired or replaced as directed by and to the satisfaction of the Engineer.

All work in conjunction with the repair or replacement of defective epoxy reflectORIZED pavement markings shall be performed by the Contractor at no additional cost to the State.

METHOD OF MEASUREMENT

Pavement striping (regular lines, cross hatching and special markings) will be measured in feet along the centerline of the pavement stripe and will be based on a 4 inch wide stripe. Measurement for striping with a width greater than the basic 4 inches, as shown on the plans or directed by the Engineer, will be made by the following method:

$$\frac{\text{Plan Width of Striping (inches) X Feet}}{4 \text{ inches}}$$

BASIS OF PAYMENT

The accepted quantities of markings will be paid for at the contract unit price, which shall include the cost of furnishing all labor, materials and equipment to satisfactorily complete the work. The cost for maintaining and protecting traffic during the marking operations shall be included in the price bid. The cost of removal of concrete curing compounds and existing pavement markings will be paid under separate items and are not included in this item.

No payment will be made for the repair or replacement of defective epoxy reflectORIZED pavement markings.

<u>PAY ITEM NO.</u>	<u>DESCRIPTION</u>	<u>PAY UNIT</u>
685.07150110	White Epoxy ReflectORIZED Pavement Stripes – 15 mils	Foot

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685.07150210	(Wet Night Visibility Spheres) White Epoxy ReflectORIZED Pavement Letters - 15 mils	Each
685.07150310	(Wet Night Visibility Spheres) White Epoxy ReflectORIZED Pavement Symbols - 15 mils	Each
685.07150410	(Wet Night Visibility Spheres) White Epoxy ReflectORIZED Cross Hatching -15 mils Thick	Foot
685.07150510	(Wet Night Visibility Spheres) White Epoxy ReflectORIZED Pavement Stripes (Special Markings) 15 mils Thick (Wet Night Visibility Spheres)	Foot
685.07150610	Yellow Epoxy ReflectORIZED Pavement Stripes - 15 mils (Wet Night Visibility Spheres)	Foot
685.07150710	Yellow Epoxy ReflectORIZED Pavement Stripes (Cross Hatching) 15 mils Thick (Wet Night Visibility Spheres)	Foot
685.07150810	White Epoxy ReflectORIZED Pavement Yield Line Symbols - Small - 15 mils (Wet Night Visibility Spheres)	Each
685.07150910	White Epoxy ReflectORIZED Pavement Yield Line Symbols - Large - 15 mils (Wet Night Visibility Spheres)	Each
685.07200110	White Epoxy ReflectORIZED Pavement Stripes - 20 mils (Wet Night Visibility Spheres)	Foot
685.07200210	White Epoxy ReflectORIZED Pavement Letters - 20 mils (Wet Night Visibility Spheres)	Each
685.07200310	White Epoxy ReflectORIZED Pavement Symbols - 20 mils (Wet Night Visibility Spheres)	Each
685.07200410	White Epoxy ReflectORIZED Pavement Stripes (Cross Hatching) 20 mils Thick (Wet Night Visibility Spheres)	Foot
685.07200510	White Epoxy ReflectORIZED Pavement Stripes (Special Markings) 20 mils Thick (Wet Night Visibility Spheres)	Foot

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685.07200610	Yellow Epoxy ReflectORIZED Pavement Stripes – 20 mils (Wet Night Visibility Spheres)	Foot
685.07200710	Yellow Epoxy ReflectORIZED Pavement Stripes (Cross Hatching) 20 mils Thick (Wet Night Visibility Spheres)	Foot
685.07200810	White Epoxy ReflectORIZED Pavement Yield Line Symbols - Small - 20 mils (Wet Night Visibility Spheres)	Each
685.07200910	White Epoxy ReflectORIZED Pavement Yield Line Symbols - Large - 20 mils (Wet Night Visibility Spheres)	Each

ITEM 723 - ORNAMENTAL STEEL PICKET FENCE (4'-0" to 8'-0" HIGH)

A. Description.

1. Under this Item the Contractor shall furnish and install Ornamental Steel Picket Fence in Four (4') to Eight (8') Foot Heights in accordance with the Plans, Specifications and appropriate Detail as approved and directed by the Engineer.

B. Materials and Construction Details.

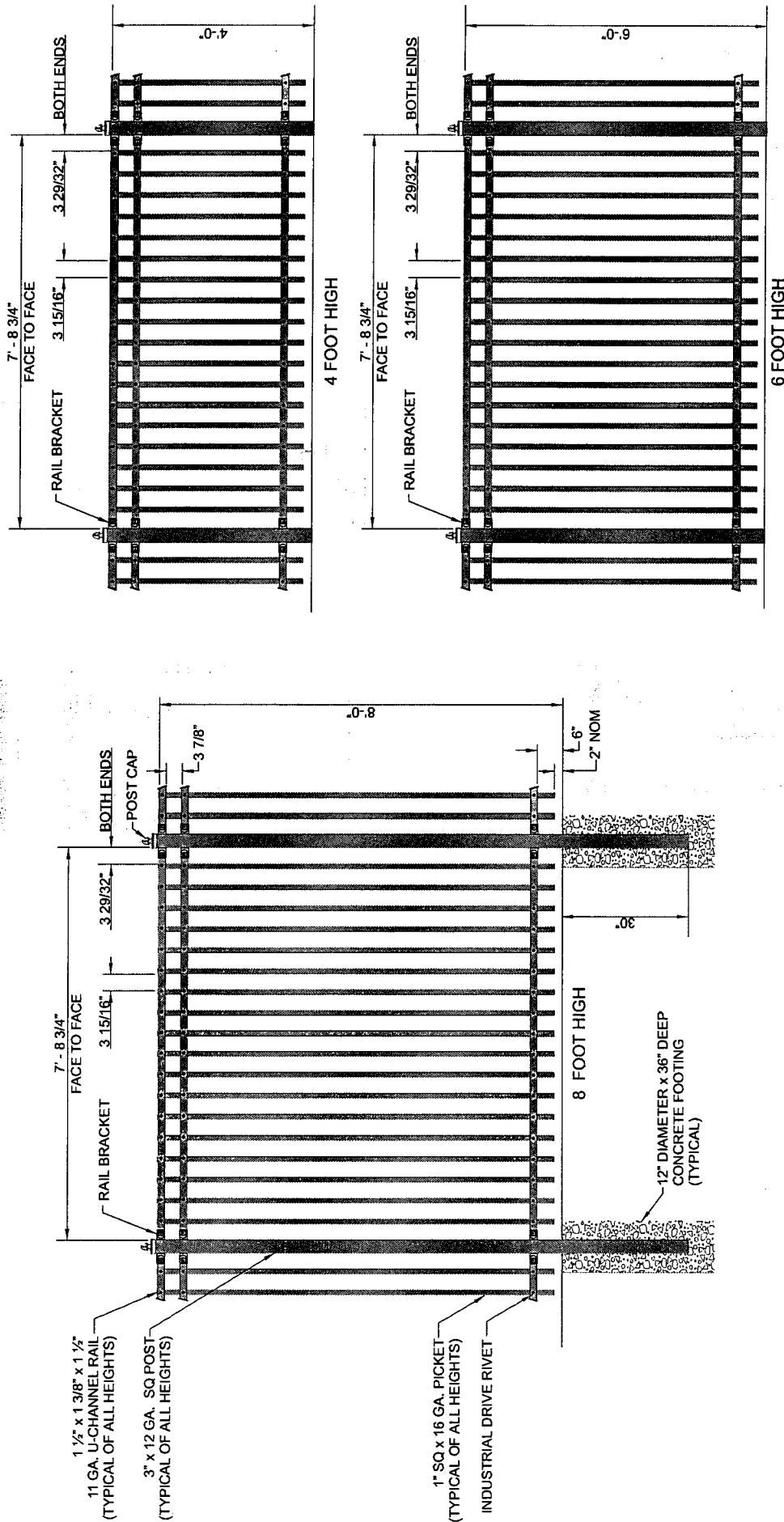
1. **Heights.** Fence sections shall come in four (4') to eight (8') foot heights (See individual Plans.).
2. **Style.** Monumental Iron Works (25 Mill Rd., Ronkonkoma, NY 11779 Telephone No. 631 585-8150) Ornamental Picket Fence shall be Imperial Fence - Style B or Approved Equal.
3. **Pickets.** Pickets shall consist of 1" square x 16 gauge (0.83 plf) thick galvanized steel tubular members manufactured in accordance with ASTM A 787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Pickets shall be spaced at 3 15/16" maximum face to face and attached to each rail with industrial drive rivets.
4. **Rails.** 1 1/2" x 1 3/8" x 1 1/2" x 11 gauge (0.120") thick galvanized steel "U" channel per ASTM A 653 or ASTM A 607, having a yield strength of 50,000 psi and zinc coated in accordance with ASTM A 90. Punch rails to receive pickets and rivets and attach rails to rail brackets with two industrial drive rivets. Steel for rail shall conform to ASTM A 653.
5. **Posts.** Posts shall be 3" square x 12 gauge (4.29 plf) thick galvanized steel tubular members manufactured in accordance with ASTM A-787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Zinc coating shall be applied inside and outside.
6. **Finish.** All pickets, channels, posts, fittings and accessories shall be black, polyester coated individually after drilling and layout, to ensure maximum corrosion protection. Coating of assembled sections is unacceptable. All components shall be power washed to clean and prepare the galvanized surface to assure complete adhesion of the finish coat. All metal shall receive a polyester resin based powder coating applied by the electrostatic spray process to a 2.5 mil thickness. The finish is then baked in a 450⁰F (metal temperature) oven for 20 minutes.
7. **Hardware.**
 - a. Rail Attachment Brackets. - Brackets shall be die cast of zinc (ZAMAK #3 Alloy) in accordance with ASTM B 86-83Z 33521. Ball and socket design capable of 30° swivel (up/down - left/right). Bracket to fully encapsulate rail end for complete security.
 - b. Industrial Drive Rivets. Rivets shall be 1/4" (Size #4) and of sufficient length to attach items in a secure non-rattling position. Rivet to have a minimum of 1100 lbs. holding power and a shear strength of 1500 lbs.
 - c. Post Caps. Post caps shall be the flat style consisting of formed steel, cast of malleable iron or aluminum alloy, weather tight closure cap.

C. Construction Details.

1. Heights. Fence sections shall come in four (4') to eight (8') foot heights (See individual Plans and/or Release Number(s)).
2. Post Spacing. Post spacing shall be 7'-8 3/4" face to face.
3. Concrete Footings.
 - a. Line Posts shall be set in 12" diameter by 36" deep concrete footings. All footing tops shall be crowned with a 1" slope to shed water.
 - b. All gate posts shall be set plumb in concrete footings of the depths and sizes shown. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
 - c. Excavation and backfilling for footings is included hereunder.

D. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of Ornamental Steel Picket Fence in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as Approved by the Engineer.
2. The unit price bid per square foot shall include the cost of all labor, materials, tools, equipment, shop drawings, excavation, backfill, restoration and other incidentals necessary to satisfactorily complete the required work.
3. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.



THREE RAIL ORNAMENTAL FENCE (BLACK)		NASSAU COUNTY	
MONUMENTAL IRON WORKS ORNAMENTAL PICKET FENCE SHALL BE IMPERIAL FENCE - STYLE B OR APPROVED EQUAL	SCALE: 1/2" = 1'-0"		DATE: 10/27/09

**ITEM 724 - 4'-0" WIDE SINGLE SWING ORNAMENTAL STEEL PICKET GATES
(4'-0" TO 8'-0" HIGH)**

A. Description.

1. Under this Item the Contractor shall furnish and install 4' Wide Single Swing Ornamental Steel Picket Gate(s) in Four (4') to Eight (8') Foot Heights in accordance with the Plans, Specifications and appropriate Detail and as approved and directed by the Engineer.

B. Materials and Construction Details.

1. **Heights.** Fence gates shall come in Four (4') to Eight (8') foot heights (See individual Plan.).
2. **Style.** Monumental Iron Works (25 Mill Rd., Ronkonkoma, NY 11779 Telephone No. 631 585-8150) Ornamental Picket Fence shall be Imperial Fence - Style B or Approved Equal.
3. **Pickets.** Pickets shall consist of 1" square x 16 gauge (0.83 plf) thick galvanized steel tubular members manufactured in accordance with ASTM A 787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Pickets shall be spaced at 3 15/16" maximum face to face and attached to each rail with industrial drive rivets.
4. **Rails.** 1 1/2" x 1 3/8" x 1 1/2" x 11 gauge (0.120") thick galvanized steel "U" channel per ASTM A 653 or ASTM A 607, having a yield strength of 50,000 psi and zinc coated in accordance with ASTM A 90. Punch rails to receive pickets and weld inside gate frame. Steel for rail shall conform to ASTM A 653.
5. **Gate Posts.** Posts shall be 3" square x 12 gauge (4.29 plf) galvanized steel tubular members manufactured in accordance with ASTM A-787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Zinc coating shall be applied inside and outside.
6. **Finish.** All pickets, channels, posts, fittings and accessories shall be black, polyester coated individually after drilling and layout, to ensure maximum corrosion protection. Coating of assembled sections is unacceptable. All components shall be power washed to clean and prepare the galvanized surface to assure complete adhesion of the finish coat. All metal shall receive a polyester resin based powder coating applied by the electrostatic spray process to a 2.5 mil thickness. The finish is then baked in a 450 F (metal temperature) oven for 20 minutes.
7. **Hardware.**
 - a. Bracing. Provide diagonal adjustable length truss rods on gates to prevent sag.
 - b. Hinges. Structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180°.
 - c. Latch. Capable of retaining gate in closed position and have provision of padlock.
 - d. Industrial Drive Rivets. Rivets shall be 1/4" (Size #4) and of sufficient length to attach items in a secure non-rattling position. Rivet to have a minimum of 1100 lbs. holding power and a shear strength of 1500 lbs.
 - e. Post Caps. Post caps shall be the flat style consisting of formed steel, cast of malleable iron or aluminum alloy, weather tight closure cap.

C. Construction Details.

1. Footings.

- a. All gate posts shall be set plumb in concrete footings of the depths and sizes shown. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- b. Excavation and backfilling for footings is included hereunder.

2. **Bottom Clearance.** The bottom of the gates shall clear the finished grade by approximately two (2") inches. The clearance under the gates in the closed position is not to exceed three (3") inches.

D. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of 4' Wide Single Swing Ornamental Steel Picket Gate(s) in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage shall be determined by measuring the clear opening between the inside faces of the gate's hinge and latch posts and multiplying by the nominal height of the fence.
3. The unit price bid per each square foot of gate shall include the cost of furnishing all labor, materials, tools, equipment and other incidentals necessary to satisfactorily complete the required work, including the gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

**ITEM 725 - 10'-0" WIDE DOUBLE SWING ORNAMENTAL STEEL PICKET GATES
(4'-0" to 8'-0" HIGH)**

A. Description.

1. Under this Item the Contractor shall furnish and install 10' Wide Double Swing Ornamental Steel Picket Gate(s) in Four (4') to Eight (8') Foot Heights in accordance with the Plans, Specifications and appropriate Detail as approved and directed by the Engineer.

B. Materials and Construction Details.

1. **Heights.** Fence gates shall come in Four (4') to Eight (8') heights (See individual Plans.).
2. **Style.** Monumental Iron Works (25 Mill Rd., Ronkonkoma, NY 11779 Telephone No. 631 585-8150) Ornamental Picket Fence shall be Imperial Fence - Style B or Approved Equal.
3. **Pickets.** Pickets shall consist of 1" square x 16 gauge (0.83 plf) thick galvanized steel tubular members manufactured in accordance with ASTM A 787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Pickets shall be spaced at 3 15/16" maximum face to face and attached to each rail with industrial drive rivets.
4. **Rails.** 1 1/2" x 1 3/8" x 1 1/2" x 11 gauge (0.120") thick galvanized steel "U" channel per ASTM A 653 or ASTM A 607, having a yield strength of 50,000 psi and zinc coated in accordance with ASTM A 90. Punch rails to receive pickets and weld inside gate frame. Steel for rail shall conform to ASTM A 653.
5. **Gate Posts.** Posts shall be 4" square x 12 Gauge (5.77 plf) galvanized steel tubular members manufactured in accordance with ASTM A-787, having a yield strength of 45,000 psi and zinc coated in accordance with ASTM A 90. Zinc coating shall be applied inside and outside.
6. **Finish.** All pickets, channels, posts, fittings and accessories shall be black, polyester coated individually after drilling and layout, to ensure maximum corrosion protection. Coating of assembled sections is unacceptable. All components shall be power washed to clean and prepare the galvanized surface to assure complete adhesion of the finish coat. All metal shall receive a polyester resin based powder coating applied by the electrostatic spray process to a 2.5 mil thickness. The finish is then baked in a 450 F (metal temperature) oven for 20 minutes.
7. **Hardware.**
 - a. Bracing. Provide diagonal adjustable length truss rods on gates to prevent sag.
 - b. Hinges. Structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180°.
 - c. Latch. Capable of retaining gate in closed position and have provision of padlock.
 - d. Keeper. Gate keeper (holdback) shall consist of mechanical device for securing the free end of the gate when in the open position.
 - e. Drop Rod. Provide a drop rod to secure the inactive leaf; gate stop pipe to engage the center of the drop rod; locking device and padlock eyes as an integral part of the latch; and one padlock for each double swing gate.
 - f. Industrial Drive Rivets. Rivets shall be 1/4" (Size #4) and of sufficient length to attach

items in a secure non-rattling position. Rivet to have a minimum of 1100 lbs. holding power and a shear strength of 1500 lbs.

- g. Post Caps. Post caps shall be the flat style consisting of formed steel, cast of malleable iron or aluminum alloy, weather tight closure cap.

C. Construction Details.

1. **Heights.** Fence sections shall come in four (4') to eight (8') foot heights.
2. **Footings.**
 - a. All gate posts shall be set plumb in concrete footings of the depths and sizes shown. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
 - b. Excavation and backfilling for footings is included hereunder.
3. **Bottom Clearance.** The bottom of the gates shall clear the finished grade by approximately two (2") inches. The clearance under the gates in the closed position is not to exceed three (3") inches.

D. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of 10' Wide Double Swing Ornamental Steel Picket Gate(s) in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage shall be determined by measuring the clear opening between the inside faces of the gate's hinge and latch posts and multiplying by the nominal height of the fence.
3. The unit price bid per each square foot of gate shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work, including the gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

ITEM 726 - ORNAMENTAL STEEL PICKET CANTILEVER SLIDE GATES IN FOUR (4') TO EIGHT (8') FOOT HEIGHTS (16'-0" TO 22'-0" WIDE)

A. Description.

1. Under this Item the Contractor shall furnish and install Ornamental Steel Picket Cantilever Slide Gates in Four (4') to Eight (8') Foot Heights between 16'-0" and 22'-0" wide in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

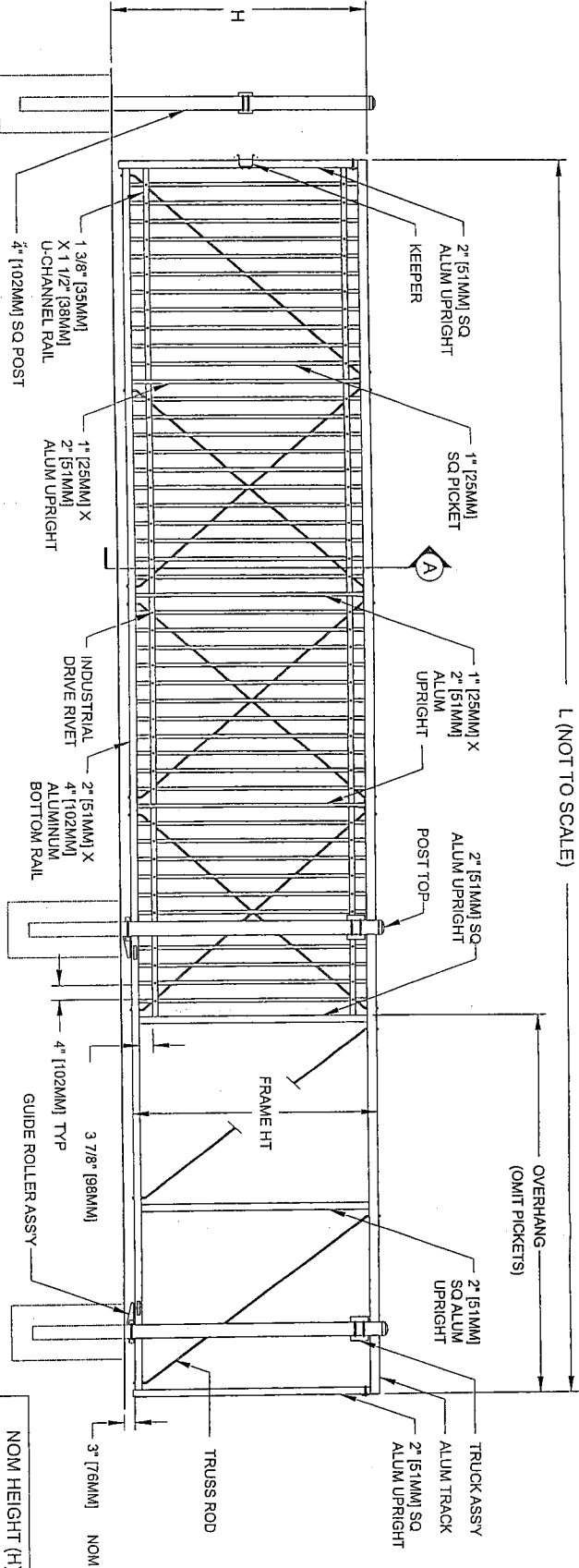
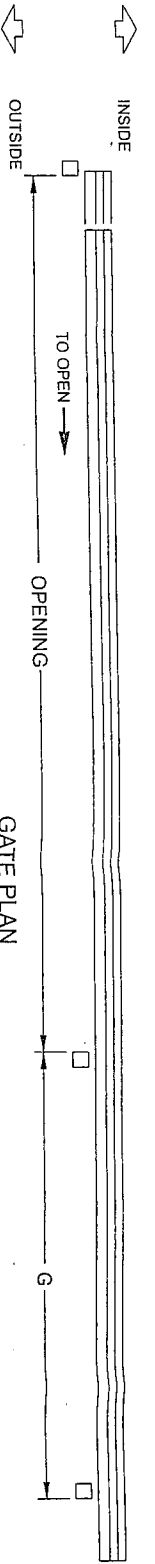
1. **Gate Frames.** Fabricate ornamental steel picket cantilever slide gates in accordance with ASTM F1184, Type II, Class 2, using 2" square aluminum members, ASTM B 221, alloy and temper 6063-T6, weighing 1.88 lbs/ft. Weld members together forming rigid one-piece frame integral with top track. Provide two (2) truck assemblies for each gate leaf
2. **Internal Uprights.** 1" x 2" aluminum members welded in gate frames, at maximum 6'-2" face to face subdividing frame into panels.
3. **Ornamental Picket Infill.** "U" channel rails formed aluminum, 1-3/8" wide x 1- 1/2" deep, 11 gauge [0.120"] wall thickness. Punch rails to receive pickets, and welded inside gate frame. Pickets, galvanized steel, 1" square tube of 16 gauge and 3 15/16" spacing. Attach pickets to "U" rails by 1/4" industrial drive rivets.
4. **Bracing.** Provide diagonal adjustable length truss rods, or 3/8 inch galvanized steel, in each panel of gate frames.
5. **Top Track/Rail.** Enclosed, combination one-piece track and rail, aluminum extrusion with weight of 3.72 lbs/ft. Track to withstand reaction load of 2,000 lbs.
6. **Truck Assembly.** Swivel type, zinc die cast, with Four (4) sealed lubricant ballbearing rollers, 2" in diameter by 9/16" in width, and two (2) side rolling wheels to ensure truck alignment in track. Mount trucks on post brackets using 7/8" diameter ball bolts with 1/2" shank. Design truck assembly to withstand same reaction load as track.
7. **Gate Hangers, Latches, Brackets, Guide Assemblies, and Stops.** Malleable iron or steel, galvanized after fabrication. Provide positive latch with provisions for padlocking.
8. **Bottom Guide Wheel Assemblies.** Each assembly shall consist of two 3" diameter rubber wheels, straddling bottom horizontal gate rail, allowing adjustment to maintain gate frame plumb and in proper alignment. Attach one assembly to each guide post.
9. **Gate Posts.** Galvanized steel 4" square, weighing 9.59 lb./ft. Provide 1 latch post and 2 support posts for single slide gates.
10. **Finish.** To match fence.
11. **Concrete Footings.**
 - a. Gate Posts shall be set plumb in 18" diameter by 48" deep concrete footings and filled completely with concrete. All footing tops shall be crowned with a 1" slope to shed water.
 - b. The concrete shall be Item 17A, Class A concrete 1-2-4 mix.

c. Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this item shall be the total number of square feet of Ornamental Steel Picket Cantilever Slide Gates in Four (4') to Eight (8') Foot Heights between 16'-0" and 22'-0" wide furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage shall be determined by measuring the clear opening between the inside faces of the gate's hinge and latch posts and multiplying by the nominal height of the fabric.
3. The unit price bid per each square foot of gate shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work, including the gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.





GATE ELEVATION - (4) BAYS SHOWN
SEE SHEET #2 FOR DETAILS & SECTIONS

- NOTES:
1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
 2. SPECIFICATIONS SHOWN CAN BE CHANGED BY MASTER-HALCO ONLY.
 3. GATES MAY BE MANUALLY OR ELECTRICALLY OPERATED. HARDWARE WILL VARY FOR ELECTRICALLY OPERATED GATES.

NOM HEIGHT (H)	
6'-0" (1829MM)	
7'-0" (2134MM)	
8'-0" (2438MM)	
OPENING	
16'-0" (4877MM)	THROUGH
22'-0" (6706MM)	

M

I

W

Ornamental Picket

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MONUMENTAL
IRON WORKS

IMPERIAL SINGLE CANTILEVERED SLIDING GATE

NASSAU COUNTY

BY: JRR

DATE: 08-18-95

REV: D

REV DATE: 05-10-00

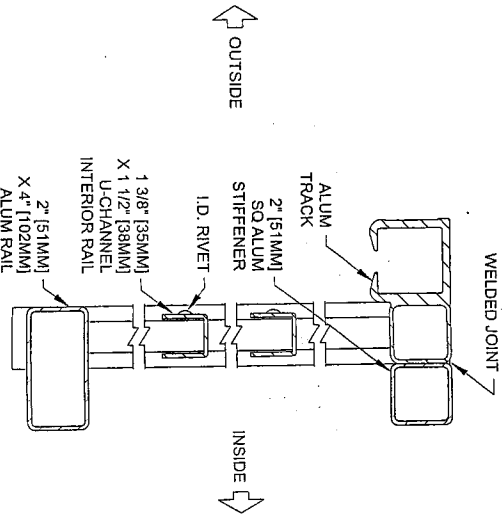
DWG: 6-8100

LAYER: 1

SCALE: 3/8" = 1'-0"

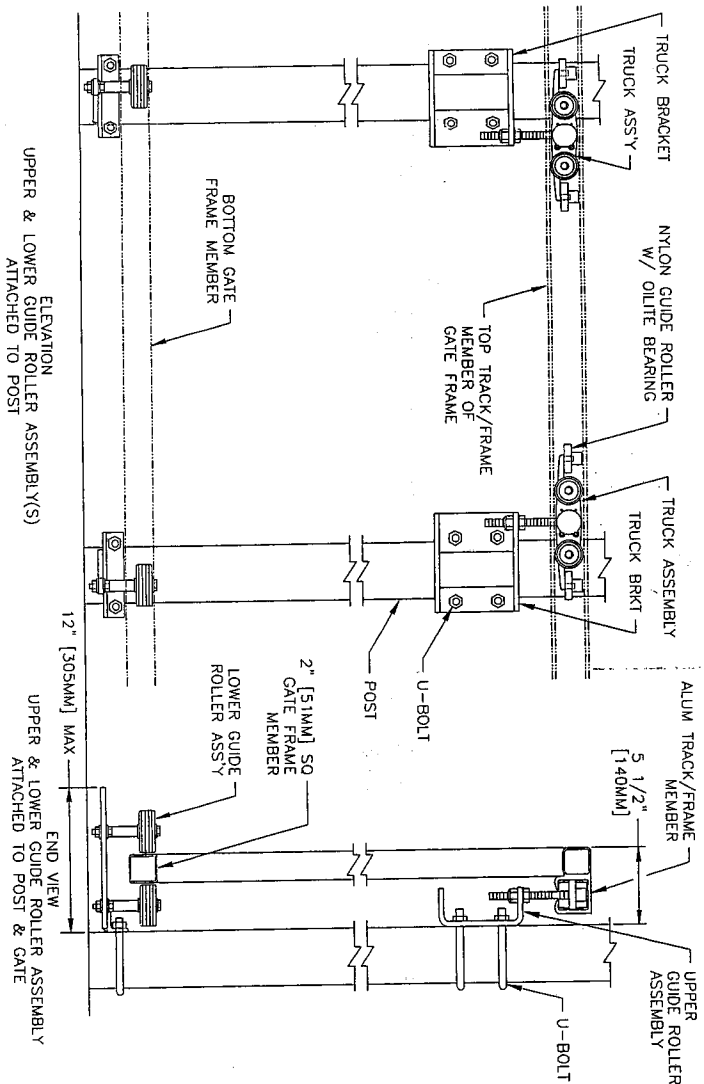
SHEET: 1

OPENING	LENGTH (L)	GATE POSTS (G)	BAYS	OVERHANG
I/S POST FACE TO I/S POST FACE	O/S DIM OF GATE LEAF	O/S POST FACE TO O/S POST FACE	NUMBER OF BAYS WITH PICKETS	NUMBER OF BAYS W/O PICKETS
16'-0" (4877MM)	26'-3" (8011MM)	10'-0" (3048MM)	(3) THREE	(2) TWO
17'-0" (5182MM)	27'-3" (8330MM)	10'-0" (3048MM)	(3) THREE	(2) TWO
18'-0" (5486MM)	28'-3" (8611MM)	10'-0" (3048MM)	(3) THREE	(2) TWO
19'-0" (5791MM)	29'-3" (8915MM)	10'-0" (3048MM)	(3) THREE	(2) TWO
20'-0" (6096MM)	30'-3" (9220MM)	10'-0" (3048MM)	(3) THREE	(2) TWO
21'-0" (6401MM)	31'-3" (9525MM)	10'-0" (3048MM)	(4) FOUR	(2) TWO
22'-0" (6706MM)	32'-3" (9830MM)	10'-0" (3048MM)	(4) FOUR	(2) TWO



SEC A (16' THRU 22' OPENINGS)

SCALE: 3" = 1'-0"



ELEVATION

SCALE: 1 1/2" = 1'-0"

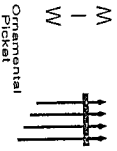
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MONUMENTAL
IRON WORKS

IMPERIAL SINGLE CANTILEVERED SLIDING GATE

NASSAU COUNTY

BY: JPR	DWG: 6-8100
DATE: 06-18-95	LAYER: 1
REV: D	SHEET: 2
REV DATE: 06-10-00	SCALE: VARIES



ITEM 727 - STRAIGHT PICKET PVC FENCE (4'-0" TO 6'-0" HIGH)

A. Description.

1. Under this Item the Contractor shall furnish and install Straight Picket PVC Fence in Four (4') to Six (6') Foot Heights in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Hampton or approved equal

2. **Heights.** Fence sections shall come in four, five and six foot heights.

3. Line Post and Components.

- a. One (1) – 5" x 5" x 0.135" Fence Post
- b. One (1) – New England Post Cap
- c. Line posts shall be spaced at 8'-0" on centers
- d. Every fourth line post shall be filled two-thirds of its height with concrete - the same concrete as used in concrete footings.

4. Section Specifications

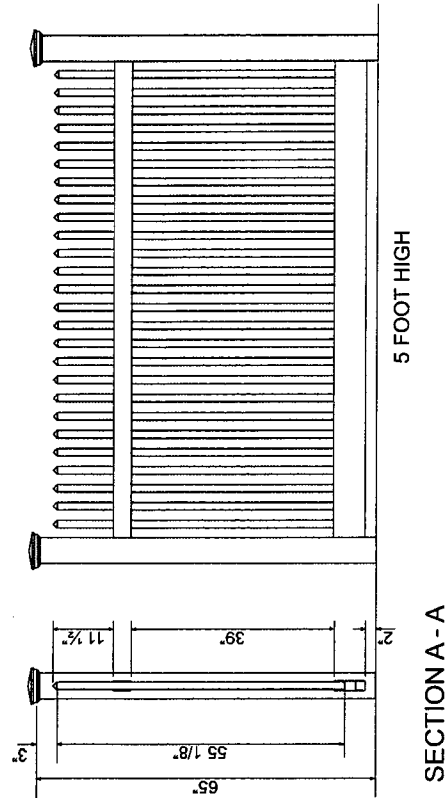
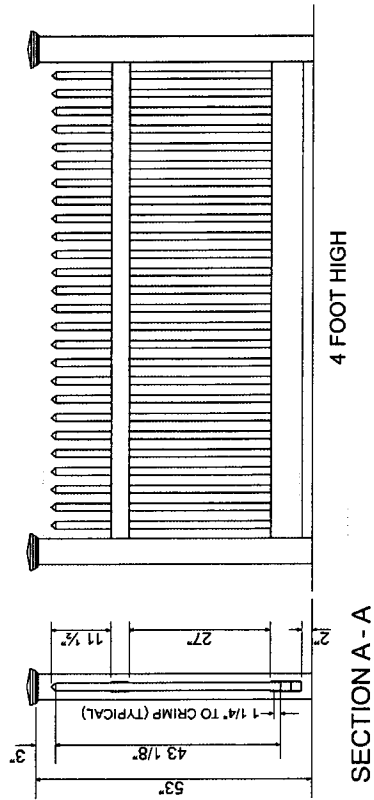
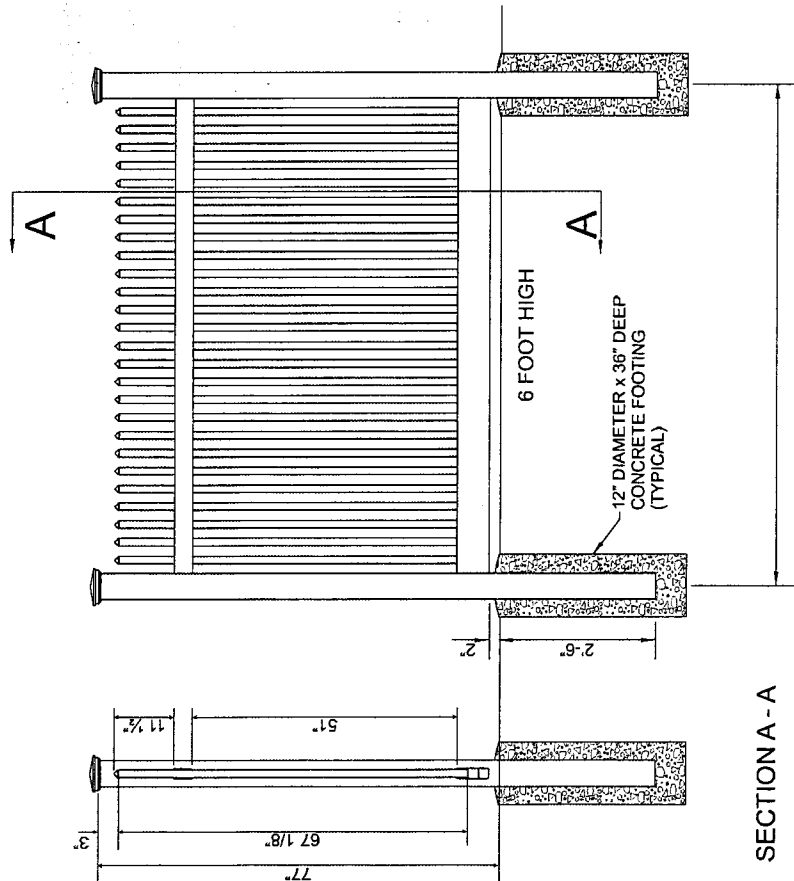
- 1) **Heights.** Fence sections shall come in four, five and six foot heights.
- 2) Top Horizontal – 2" x 3 1/2"
- 3) Bottom Horizontal – 2" x 6" 4) Verticals – 1 1/2" x 1 1/2"
- 4) One white powder coated latch

b. Concrete Footings

- 1) Line Posts shall be set in 12" diameter by 36" deep concrete footings. All footing tops shall be crowned with a 1" slope to shed water.
- 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of Straight Picket PVC Fence in Four (4') to Six (6') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The unit price bid per each square foot of fence shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, concrete, grading, and shop drawings.
3. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.



STRAIGHT PICKET PVC FENCE

LINE POSTS: 5" x 5" x 0.135" THICK FENCE POST SET IN 12" DIAMETER BY 36" DEEP, 3,000 PSI CONCRETE FOOTINGS AT 8'-0" O.C. AND VARIABLE
MANUFACTURED BY MARKSMEN MANUFACTURING CORP. OR EQUAL
TOP RAIL: 2" x 3 1/2" RIBBED FENCE PROFILE
BOTTOM RAIL: 2" x 6" RIBBED PLANK PROFILE
PICKETS: 1 1/2" x 1 1/2" RIBBED FENCE PROFILE
CONSTRUCTED OF SOLID WALL VIRGIN POLYVINYL CHLORIDE CONFORMING TO ASTM F 964 -
COUNTRY ESTATE AS MANUFACTURED BY NEBRASKA PLASTICS, INC. OR EQUAL.

SCALE: 1/2" = 1'-0"

DATE: 10/27/09

NASSAU COUNTY

**ITEM 728 - 4'-0" WIDE SINGLE SWING STRAIGHT PICKET PVC GATES
(4'-0" to 6'-0" HIGH)**

A. Description.

1. Under this item the Contractor shall furnish and install 4' Wide Single Swing PVC Picket Gates in Four (4') to Six (6') Foot Heights for PVC Fence, including two heavy duty gate in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Hampton or approved equal.

2. **Heights.** Single Swing Gates shall come in four, five and six foot heights.

3. **Gate Posts:** 6 1/2" x 6 1/2" heavy duty (two required)

4. Gate Specifications

- a. Straight Picket PVC Fence Gate

- 1) Top Horizontal – 2" x 3 1/2"
- 2) Bottom Horizontal – 2" x 6" 3) Verticals – 1 1/2" x 1 1/2"
- 4) One pair of white powder coated stainless steel hinges and
- 5) One white powder coated latch

- b. Concrete Footings

- 1) Gate Posts shall be set in 16" diameter by 42" deep concrete footings and filled completely with concrete. All footing tops shall be crowned with a 1" slope to shed water.
- 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of 4' Wide Single Swing PVC Picket Gates in Four (4') to Six (6') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage of gates shall be determined by measuring the clear opening between the inside faces of the gate's hinge and latch posts and multiplying by the nominal height of the fence.

3. The unit price bid per each square foot of gates shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

ITEM 729 - 10'-0" WIDE DOUBLE SWING STRAIGHT PICKET PVC GATES (4'-0" TO 6'-0" HIGH)

A. Description.

1. Under this item the Contractor shall furnish and install 10' Wide Double Swing PVC Gates in Four (4') to Six (6') Foot Heights for PVC Fence, including two heavy gate posts in accordance with the Plans, Specifications and appropriate Detail Sheet and as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Hampton or approved equal.
- d. **Heights.** Double Swing Gates shall come in four, five and six foot heights

2. Gate posts: 6 1/2" x 6 1/2" heavy duty (two required)

3. Gate Specifications

- a. Straight Picket PVC Fence Gate
 - 1) Top Horizontal – 2" x 3 1/2"
 - 2) Bottom Horizontal – 2" x 6" 3) Verticals – 1 1/2" x 1 1/2"
 - 3) Two pairs of white powder coated stainless steel hinges and
 - 4) One white powder coated cane rod
- b. Concrete Footings
 - 1) Gate Posts shall be set in 18" diameter by 48" deep concrete footings and filled completely with concrete. All footing tops shall be crowned with a 1" slope to shed water.
 - 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
 - 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the actual number of square feet of 10' Wide Double Swing PVC Gates in Four (4') to Six (6') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage of gates shall be determined by measuring the clear opening between the inside faces of the two gate posts and multiplying by the nominal height of the fence.

3. The unit price bid per each square foot of gates shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, restoration, grading, and shop drawings. Payment of concrete for footings will be paid under Item 17A-Class A Concrete

ITEM 730 - STRAIGHT SOLID PANEL PVC FENCE (4'-0" TO 8'-0" HIGH)

A. Description.

1. Under this Item the Contractor shall furnish and install Straight Solid Panel PVC Fence in Four (4') to Eight (8') Foot Heights in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Lakeland or approved equal.

2. **Heights.** Fence sections shall come in four, five, six and eight foot heights

3. **Line Post and Components.**

- a. One (1) - 5" x 5" x 0.135" Fence Post
- b. One (1) - New England Post Cap
- c. Line posts shall be spaced at 8'-0" on centers
- d. Every fourth line post shall be filled two-thirds of its height with concrete - the same concrete as used in concrete footings.

4. **Section Specifications**

a. Straight Solid Panel PVC Fence

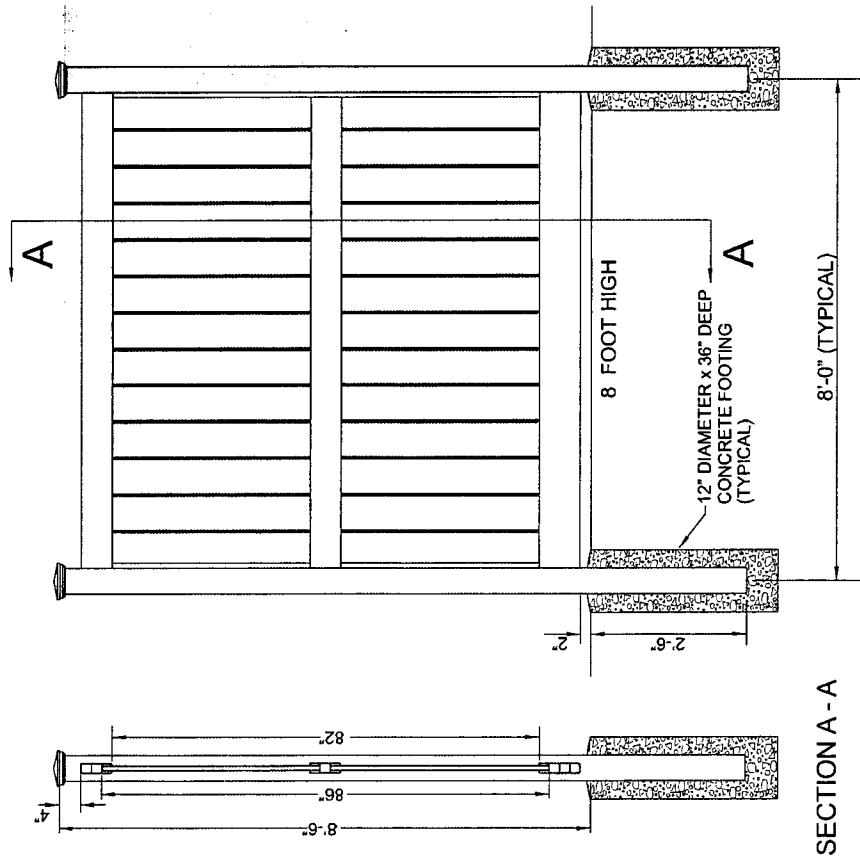
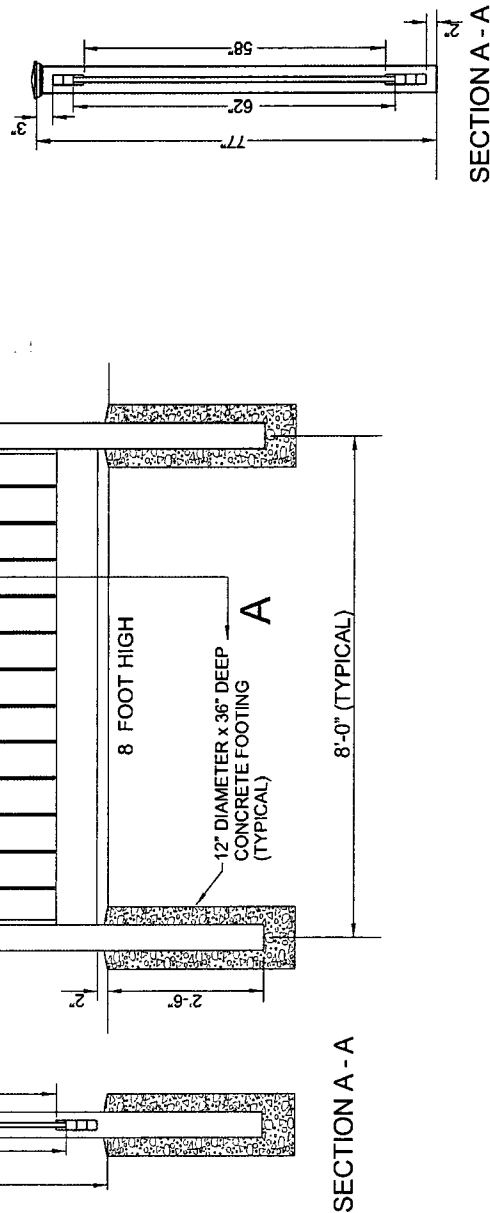
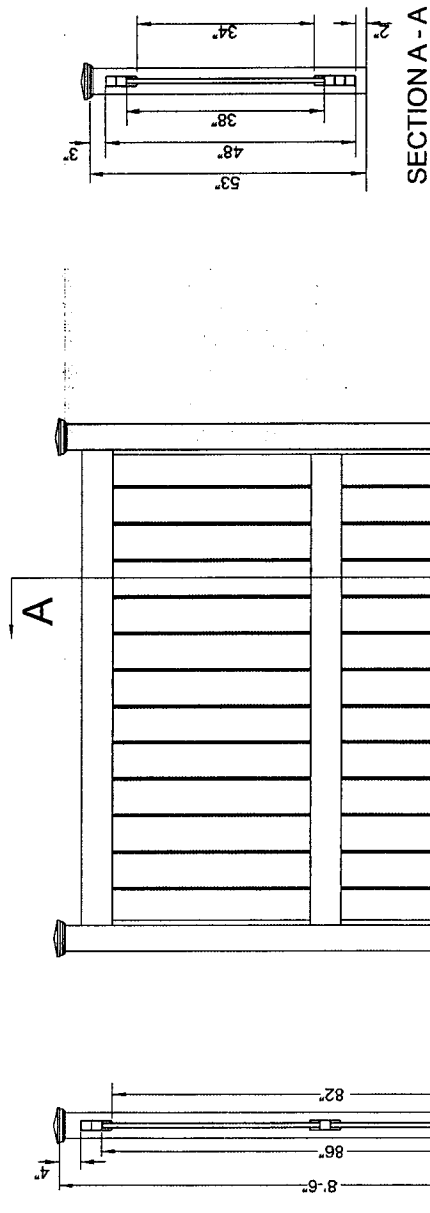
- 1) Top Horizontal - 2" x 6"
- 2) **8' High Only** - Middle Horizontal - 2" x 6"
- 3) Bottom Horizontal - 2" x 8"
- 4) Verticals - 7/8" x 7"
- 5) U Channel - 1" x 1 1/2"

b. Concrete Footings

- 1) Line Posts shall be set in 12" diameter by 36" deep concrete footings. All footing tops shall be crowned with a 1" slope to shed water.
- 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of Straight Solid Panel PVC Fence in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The unit price bid per each square foot of fence shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, restoration, grading, and shop drawings.
3. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.



STRAIGHT SOLID PANEL PVC FENCE

LINE POSTS:	5" x 5" x 0.135" THICK FENCE POST SET IN 12" DIAMETER BY 36" DEEP, 3,000 PSI CONCRETE FOOTINGS AT 8'-0" O.C. AND VARIABLE
TOP RAIL:	MANUFACTURED BY MARKSMEN MANUFACTURING CORP. OR EQUAL
BOTTOM RAIL:	2" x 6" RIBBED FENCE PROFILE W/1 3/4" x 1 3/4" ALUMINUM U-CHANNEL INSERT
VERTICAL:	2" x 8" RIBBED PLANK PROFILE W/1 3/4" x 1 3/4" ALUMINUM U-CHANNEL INSERT
VERTICAL U-CHANNEL:	7/8" x 7" RIBBED FENCE TONGUE & GROOVE PROFILE
PVC MATERIAL:	1" x 1 1/2" U-CHANNEL CONSTRUCTED OF SOLID WALL VIRGIN POLYVINYL CHLORIDE CONFORMING TO ASTM F 964 - COUNTRY ESTATE AS MANUFACTURED BY NEBRASKA PLASTICS, INC. OR EQUAL.

SCALE: 1/2" = 1'-0"

DATE: 10/27/09

NASSAU COUNTY

ITEM 731 - 4'-0" WIDE SINGLE SWING STRAIGHT SOLID PANEL PVC GATES (4'-0" to 8'-0" HIGH)

A. Description.

1. Under this item the Contractor shall furnish and install 4' Wide Single Solid Panel PVC Picket Gates in Four (4') to Eight (8') Foot Heights for PVC Fence, including two heavy duty gate in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Lakeland or approved equal.

2. **Heights.** Single Swing Gates shall come in four, five, six and eight foot heights

3. **Gate Posts:** 6 1/2" x 6 1/2" heavy duty (two required)

4. Gate Specifications

a. Straight Solid Panel PVC Fence Gates

- 1) Two (2) - 5" x 5" x 0.135" Fence Posts
- 2) Two (2) - New England Post Caps
- 3) Top Horizontal - 2" x 6"
- 4) **8High Only** - Middle Horizontal - 2" x 6"
- 5) Bottom Horizontal - 2" x 8"
- 6) Verticals - 7/8" x 7"
- 7) U Channel - 1" x 1 1/2"
- 8) One pair of white powder coated stainless steel hinges and
- 9) One white powder coated latch

b. Concrete Footings

- 1) Gate Posts shall be set in 16" diameter by 42" deep concrete footings and filled completely with concrete. All footing tops shall be crowned with a 1" slope to shed water.
- 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the total number of square feet of 4' Wide Single Swing PVC Solid Panel Gates in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage of gates shall be determined by measuring the clear opening between the inside faces of the gate's hinge and latch posts and multiplying by the nominal height of the fence.

3. The unit price bid per each square foot of gates shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

**ITEM 732 - 10'-0" WIDE DOUBLE SWING STRAIGHT SOLID PANEL PVC GATES
(4'-0" TO 8'-0" HIGH)**

A. Description.

1. Under this item the Contractor shall furnish and install 10' Wide Double Swing PVC Gates in Four (4') to Eight (8') Foot Heights for PVC Fence, including two heavy gate posts in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.

B. Materials and Construction Details.

1. Materials

- a. Solid Wall Virgin Polyvinyl Chloride (PVC) conforming to ASTM F 964
- b. **Manufacturer.** Nebraska Plastics, Inc., P.O. Box 45, Cozard, Ne 69130; Telephone 1-800-445-2887; Fax 1-308-784-3216 or Approved Equal.
- c. **Style.** Country Estate Fence – Lakeland or approved equal.

2. **Heights.** Double Swing Gates shall come in four, five, six and eight foot heights

3. **Gate posts:** 6 1/2" x 6 1/2" heavy duty (two required)

4. Gate Specifications

- a. Straight Solid Panel PVC Fence Gates

- 1) Two (2) - 5" x 5" x 0.135" Fence Posts
- 2) Two (2) - New England Post Caps
- 3) Top Horizontal - 2" x 6"
- 4) **8High Only** - Middle Horizontal - 2" x 6"
- 5) Bottom Horizontal - 2" x 8"
- 6) Verticals - 7/8" x 7"
- 7) U Channel - 1" x 1 1/2"
- 8) Two pairs of white powder coated stainless steel hinges and
- 9) One white powder coated cane rod

- b. Concrete Footings

- 1) Gate Posts shall be set in 18" diameter by 48" deep concrete footings and filled completely with concrete. All footing tops shall be crowned with a 1" slope to shed water.
- 2) All posts shall be set plumb in concrete. The concrete shall be Item 17A, Class A concrete 1-2-4 mix. Footings shall be cast rough in the ground and pitched above grade to shed water.
- 3) Excavation and backfilling for footings is included hereunder.

C. Measurement and Payment.

1. The quantity to be paid for under this Item shall be the actual number of square feet of 10' Wide Double Swing PVC Gates in Four (4') to Eight (8') Foot Heights furnished and installed in accordance with the Plans, Specifications and appropriate Detail as approved by the Engineer.
2. The actual square footage of gates shall be determined by measuring the clear opening between the inside faces of the two gate posts and multiplying by the nominal height of the fence.

3. The unit price bid per each square foot of gates shall include the cost of furnishing all labor, materials, tools, equipment and incidentals necessary to satisfactorily complete the required work including gate posts, excavation, fill, restoration, grading, and shop drawings.
4. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

ITEM 733 - 35' HIGH ALUMINUM FLAGPOLE - INTERNAL HALYARD

A. Description.

1. Under this Item, the Contractor shall furnish and install 35' High Aluminum Flagpoles with internal halyards as described in the following Specification, as shown on Plans and/or as directed by the Engineer.

B. Submittals.

1. Submit two copies of manufacturer's shop drawings, installation instructions and maintenance procedures.

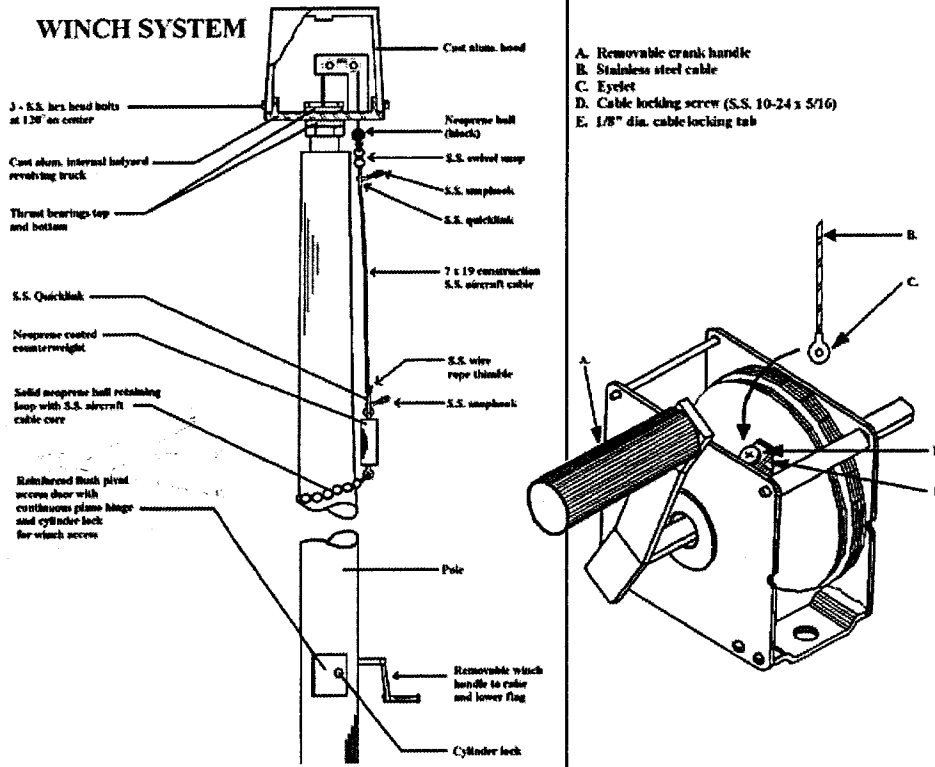
C. Materials and Construction Details.

1. The Contractor shall furnish and install 35' Exposed x 38' -6" Overall x 6" Butt x 3/16" Wall Thickness Tapered Aluminum Flagpole as manufactured by Pole Tech CO., Inc., 97 Gnarled Hollow Road, East Setauket, New York 11733, Web Site: www.poletech.com; Phone: (631) 689-5525; Fax (631) 689-5528 or approved equal and shall consist of the following:
2. **Pole.** Fabricated from seamless, extruded tubing complying with ASTM B241, alloy 6063-T6, with a minimum yield strength of 30,000 psi. The rate of taper is 1" every 5'6". Polished Satin Brush Finish. A textured mechanical finish produced by abrasive polishing yielding a smooth and uniform appearance.
3. **Internal Winch System** - See Detail. A stainless steel cable is attached to a gearless positive locking winch that allows display of the flag at any position on the pole. The cable is routed over two pulleys inside the revolving truck and ends with a neoprene ball block to prevent jamming at the poles top. Then, an arrangement, the length of each flag to be flown, is attached. At the bottom of this arrangement a beaded sling encircles the pole and keeps the flag tight against the flagpole. The neoprene-coated counterweight allows for proper lowering of the flag.
4. **Access.** A flush-hinged door with a cylinder lock is provided to access and maintain the winch and cable. The winch handle is removable and is used to raise and lower the flag through an access hole in the pole.
5. **Ball.** The ornamental ball shall be 6" in diameter and made of 14 gauge gold anodized aluminum.
6. **Ground Sleeve.** The ground sleeve is made of a 16 gauge corrugated galvanized steel tube. On the inside, at the bottom, 4 steel wedges are welded to center the pole upon installation. A 1/2" steel base plate is welded to the bottom with an 18" length x 3/4" diameter steel spike attached to act as lightning protection
7. **Foundation** - See Detail. The foundation shall be cast in accordance with the attached detail using concrete conforming to the requirements of and be paid for under Item 17A - Class A Concrete.
8. **Flag.** The United States flag shall be 6' x 10' made using durable heavyweight Dupont Solarmax nylon with embroidered stars and sewn stripes. The fly end shall have four rows of stitching, the heading shall be made of canvas and the flag shall connect to the swivel snaps with two brass grommets.

D. Measurement and Payment.

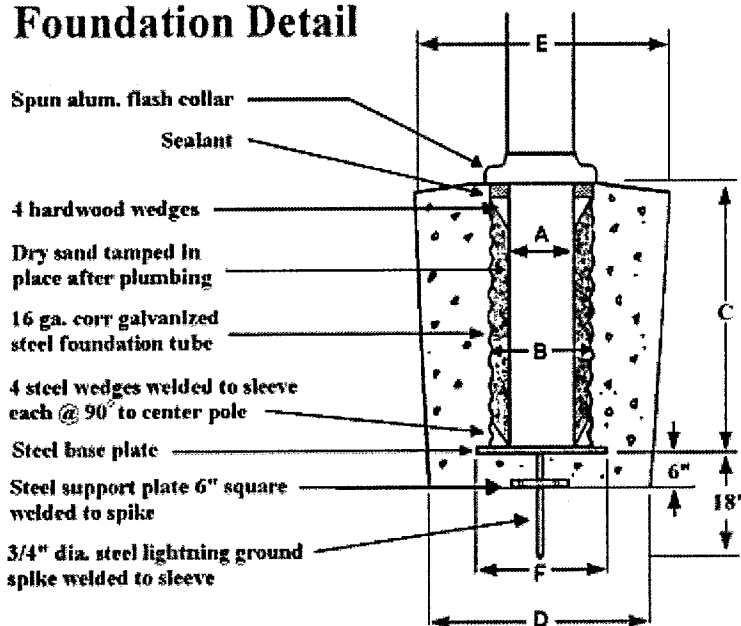
1. The quantity to be paid for under this Item shall be the number of 35' High Aluminum Flagpoles with internal halyards furnished and installed. The unit bid price shall include, but not be limited to all necessary labor, materials, tools, supplies, equipment and incidentals necessary to complete the work.
2. Payment of concrete for footings will be paid under Item 17A-Class A Concrete.

WINCH SYSTEM



Flagpole		A	B	C	D	E	F
EXPOSED HEIGHT	OVERALL LENGTH	POLE BUTT	SLEEVE DIA	SLEEVE LENGTH	FOUNDATION BASE	FOUNDATION TOP	BASE PLATE
35'	38.5'	6/7"	10"	42"	30"	36"	14"

Foundation Detail



ITEM 744 - FORCE ACCOUNT WORK

A. Description.

1. The amount estimated for the work under this Item is approximate and may be less or greater than the amount of the force account work indicated on the bid sheets. The amount will be based on the Force Account Work actually performed during the term of the contract with prior written approval of the Commissioner.
2. The use of this Item will require prior authorization of the County for each individual Force Account Work to be performed under this contract.

B. Materials and Construction Details.

1. Materials incorporated into the force account work shall be approved by the Engineer prior to installation. When no applicable contract unit prices exist, material costs shall be reimbursed based upon acceptable receipts and/or invoices plus markup, as per the requirement of contract documents, and as approved by the Commissioner of Public Works.

C. Method of Measurement.

1. All Force Account work performed under this Item shall be either:
 - a. agreed upon unit price with backup
 - b. agreed upon lump sum cost with detailed backup
 - c. not to exceed agreed prices with detailed backup (final cost may be lower but will never exceed the agreed price)
 - d. on a Time and Material basis plus applicable overhead and profit as stipulated within the Contract Documents and will be inspected and measured by the Engineer on a daily basis and signed off by the Contractor.

D. Basis of Payment.

1. Under this Item, all provisions as incorporated in the Contract concerning payment for extra or additional work are applicable. Total payment for this Item is subject to the requirements and conditions of this contract.
2. The amount to be paid for each type of Force Account Work per work order shall be based (see Method of Measurement, Section C.1.) upon the actual work satisfactorily completed and/or materials/machines furnished and approved in accordance with the requirements of the Contract documents.

ITEM 762 - INTEGRAL COLOR PIGMENT FOR CEMENT CONCRETE

A. Description.

1. Under this item, the contractor shall furnish and mix color pigment into cement concrete at locations shown on the plans, or as directed by the Engineer.

B. Materials.

1. The pigment shall conform to "Integral Colors" as supplied by "Stampcrete International Ltd.", of Centereach, N.Y., or approved equal. The color to be used shall be as indicated on the plans or as directed by the Engineer.

C. Construction Details.

1. The pigment shall be added to, and thoroughly mixed into, the cement concrete prior to placement, to insure a consistent color throughout the concrete. Pigment shall be added at the rate of 12 pounds per cubic yard of concrete, or in accordance with the manufacturer's instructions, or as directed by the Engineer.

D. Method of Measurement.

1. The quantity to be paid under this item will be the number of pounds of pigment added to the cement concrete mix.

E. Basis of Payment.

1. The unit price bid shall include the cost of all labor, materials, and equipment necessary to complete the work, including cleaning residue of color pigment from the concrete truck. Imprinting and cement concrete will be paid for under their respective items.

ITEM 763 - IMPRINTING ON CONCRETE PAVEMENT OR SIDEWALK

A. Description.

1. Under this item the contractor shall modify the surface of newly placed cement concrete pavement or sidewalk to create a pattern as specified in the plans and/or as directed by the Engineer.

B. Construction Details.

1. Cement concrete pavement or sidewalk shall be placed at locations and dimensions shown on the plans and/or as directed by the Engineer, in accordance with Items No. 24, 27, 30, 32A, 32X and 7 as described in the Standard Specifications. At the appropriate time in the concrete curing process (as detailed in the specific treatment directions) the concrete surface shall be imprinted, stamped, or rolled such that the specified pattern is obtained. The contractor shall submit the recommended method of operation, containing dimensions of forms and/or rollers, timing of installation, and any other pertinent information to the Engineer for approval. Immediately after the surface finishing has been completed, the Impervious Membrane Method of curing shall be implemented, as detailed in the latest edition of the New York State Department of Transportation Standard Specifications.
2. Suppliers and/or Installers - Possible technology to complete this work is available from, but not limited to:
 - a. Bomanite Corporation, P.O. Box 599, Madera, California 93639
 - b. Quick Imprint Systems, P.O. Box 7, Goodman, Mo., 64850
 - c. Stampcrete International Ltd., Centereach, N.Y., 11720
 - d. Or equal

C. Method of Measurement.

1. The quantity to be paid under this item will be the number of square feet of imprinting on cement concrete pavement or sidewalk, in accordance with the plans and specifications, or as directed by the Engineer.

D. Basis of Payment.

1. The unit price bid per square foot for this item shall include the cost of furnishing all labor, materials, equipment and incidentals necessary to complete the imprint work to the satisfaction of the Engineer. Cement concrete pavement or sidewalk will be for paid under their respective items.

ITEM 764 - COLORED AND IMPRINTED ASPHALT

A. Description.

1. This work shall consist of furnishing and installing Colored and Imprinted Asphalt System, as manufactured by, Integrated Paving Concepts Inc., #102 - 17957 - 55 Ave. Surrey, BC V3S 6C4, Phone: (604) 574-7510, FAX: (604) 574-7520 or approved equal. Colored and Imprinted Asphalt System shall be installed on new Asphalt Concrete pavement installed as part of this contract under other items. The surface of the HMA shall be patterned and colored to create the appearance of hand laid decorative paving stones by an authorized StreetPrint™ applicator. Two areas will receive this treatment. First is roadway pavement that has been overlaid with new asphalt concrete pavement. The second is new mowstrip asphalt within raised median areas. Asphalt pavement texturing is a highly specialized process that requires the skill of a qualified applicator working with the proper equipment and applying highly specialized coating(s) designed specifically for application to asphalt pavement.

B. References.

1. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser. ASTM D522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials. ASTM D-2486 MEK rub test for chemical resistance. ASTM E-303 British Pendulum test for friction. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

C. Submittals.

1. The documents shall be submitted to the Engineer prior to installation:
 - a. Proof of applicator's ability. A copy of the current year license as provided to the proposed applicator issued by a recognized authority in the execution of asphalt pavement texturing work.
 - b. Failing that, at least 3 reference sites and written references from 3 previous customers for work performed by this applicator.
 - c. A list of the major equipment to be used in the execution of the Work. This list will include the asphalt pavement reheat machinery, spray equipment, compactor(s) and templates.
 - d. The name of the coating(s) and the coating supplier's name.
 - e. Certified performance test results of the coating materials as outlined in Table 1.
 - f. Confirmation of coating color(s).

D. Materials.

1. Coatings.

- a. Properly designed asphalt pavement coatings have been scientifically formulated to provide the optimal balance of performance properties for a durable, long lasting color and texture to asphalt pavement surfaces. Some of these key properties include wet wear durability, crack resistance, fade resistance, adhesion, and friction properties. These properties must be backed up by a Certificate of Analysis from an independent laboratory or an equal document that certifies these performance properties.
- b. The asphalt pavement coating must be environmentally safe and meet EPA requirements for Volatile Organic Compounds (VOC).
- c. Only use asphalt pavement coatings from qualified pavement coating suppliers who can provide proof of these required performance properties.

2. Minimum Performance Properties of Asphalt Coating.

- a. The following table outlines the minimum required performance properties of the asphalt pavement coating. These performance properties must be ascertained by a Certificate of Analysis issued by an approved testing facility

Characteristic	Test Specification	Minimum Required Results
Durability Taber Abrasion (cycles to wear-through)	ASTM D-4060 Abrasion Resistance of Organic Coatings (wet wear) 7 day cure, 24 hour soak; H-10 wheel	Wear Index (WI) < 5.0
Color stability		Brick color $\Delta E < 1.5$
Flexibility: Mandrel Bend	ASTM D 522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	> 5000
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction Wet	ASTM E-303 British Pendulum Tester	> 55
Environmental Sensitivity	EPA 24 ASTM D3960-05 Volatile Organic Compounds	VOC < 150

Table 1: Required Performance Properties of Asphalt Pavement Coating.

3. Equipment.

- a. The following specialized equipment shall be used in the execution of the Work.
 - 1) Metal wire rope templates are used to create the desired imprint pattern. Only use templates that have been supplied by a manufacturer who has the proven expertise in manufacturing these templates for this type of application.
- b. Asphalt pavement reheat equipment specifically designed for asphalt pavement texturing is to be used in the execution of this work. The primary asphalt pavement re-heat equipment must cycle the heat application and must allow the equipment operator to check the pavement surface temperature during the

heating process, These controls are necessary to enable the pavement temperature to be elevated gradually, giving the operator the ability to ensure that the pavement is not overheated or adversely affected. Heaters without these controls are strictly prohibited as the primary re-heats equipment.

- c. Hand-held portable heating devices may be used only for areas where It is difficult to operate the re-heat machine. These may not be used as the primary pavement re-heating device.
- d. Finishing tools that are designed to enable the applicator to complete the imprinting of the asphalt pavement in areas which may be inaccessible to the template such as curbs and manhole covers are permitted.
- e. Vibratory Plate Compactors shall be used for pressing the templates into the heated asphalt pavement to create the specified pattern.
- f. Specialized coating spray equipment must be used in the application of the coating and must be capable of applying the coating to the asphalt pavement surface in a thin, controlled film which will optimize the drying and curing time of the coating. More specifically, the spray equipment pump must be capable of providing a continuous recirculation of the coating in order to keep the solids within the coating in suspension.

E. Construction Details.

1. **General.** The Colored and Imprinted Asphalt System shall be supplied and installed by a Qualified Applicator in accordance with the plans and specifications or as directed by the Owner. Do not begin the Work until confirmation of the Applicator's qualifications is provided.
2. **Surface Preparation.** The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.
3. **Layout.** Layout of the pattern for imprinting into the surface of the asphalt pavement shall be as per the drawings and specifications.
4. **Heating the Asphalt Pavement.** The Applicator shall use asphalt pavement reheat equipment as described above. The optimal pavement temperature for imprinting the template is dependent upon mix design, modifiers used in the mix, the age of the pavement and weather. The surface temperature of the pavement should not exceed 325°F as determined by an infra-red thermometer reading taken after the heat is applied to the asphalt pavement. In order to achieve the proper depth of imprint it is important to elevate the asphalt pavement temperature to a minimum depth of 1/2 inch (12.5mm) without burning the pavement surface. This can only be accomplished using asphalt pavement reheat equipment that is specifically designed for this Work.
5. **Surface Imprinting.** The pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue. Once the asphalt pavement has reached imprinting temperature, the templates shall be placed in position and pressed into the surface using vibratory

plate compactors. The top of the template is to be flush with the surrounding asphalt pavement and can then be removed. Areas that have an imprint depth less than 3/8 inch shall be re-heated and re-stamped prior to applying the coatings. Hand tooling is a permitted method to achieve proper imprint depth in areas difficult to get at with the template.

6. Application of Asphalt Pavement Coating Guidelines

- a. The qualified applicator shall refer to the asphalt pavement coating supplier's recommendations for methods of application. Special care and attention must be paid to ensure asphalt pavement coatings are applied in environmental conditions that permit proper cure.
- b. The coating application shall proceed as soon as possible upon completion of the imprinting of the asphalt pavement. The pavement surface shall be completely dry and thoroughly cleaned prior to application of the asphalt pavement coating(s).
- c. Depending upon the condition and age of the pre-existing pavement, primer may be required. Refer to the asphalt pavement coating supplier's specifications.
- d. The qualified applicator shall use spray equipment specifically designed for the application of the coating(s) as outlined in Section 2.3 above.
- e. Refer to the asphalt pavement coating supplier's recommendations for coating coverage rate, number of recommended passes and recommended film thickness.

7. **Opening to Traffic.** Minimally, the surface coating must be 100% dry before traffic is permitted. Refer to the asphalt pavement coating supplier's guide.

F. Method of Measurement.

1. The installation of the Colored and Imprinted Asphalt System will be measured by the number of square feet of hot mix asphalt satisfactorily imprinted, colored and sealed in accordance with the plans, this specification and as approved by the Engineer.

G. Basis of Payment.

1. The unit price bid per square foot shall include the cost of test panels, maintenance kit and the furnishing all labor, materials, equipment and tools necessary to complete the work. The asphalt pavement will be paid for under separate individual items. Areas where the Colored and Imprinted Asphalt System is deemed unacceptable by the Engineer will not be measured for payment. The contractor will be directed by the Engineer to re-apply the Colored and Imprinted Asphalt System to the satisfaction of the Engineer before payment is made. Milling and re-Installation of asphalt top course and reapplication of misapplied Colored and Imprinted Asphalt System will be done at the contractor's expense.

ITEM 765 - FURNISH & INSTALL CONCRETE PARKING BUMPER

A. Description.

1. Under this item, the contractor shall furnish and install precast cement concrete parking bumpers at locations shown on the plans, or as directed by the Engineer.

B. Materials.

1. Precast parking bumpers shall be manufactured for the intended purpose by a company or firm specializing in the manufacture of precast concrete parking bumpers. Provide precast concrete parking bumpers of half octagonal cross section, with dimensions approved by the Engineer. Unless indicated otherwise, provide bumpers of 6 foot length.
2. Bumpers shall be manufactured of 4000 p.s.i minimum reinforced concrete, to withstand constant use and rough service. Each bumper shall be reinforced with two No. 4 deformed steel reinforcing bars, minimum.
3. Each bumper to be installed on at-grade asphalt pavement shall be manufactured with two holes to accommodate the anchor rebar. Bumpers to be installed on concrete slabs shall be manufactured without holes.
4. Epoxy Adhesive: Adhesive for anchoring bumpers to pavement shall be an epoxy adhesive manufactured for the purpose, complying with ASTM C 881/C 881M, Type IV, Grade 3, Class B or C. Use Class B whenever the surface temperature is from 40 to 60 degrees F. Use Class C whenever the surface temperature is above 60 degrees F. Whenever the surface temperature is below 40 degrees F, go home and wait until such time that the surface temperature is above 40 degrees F.
5. Steel Bars for Installation: Epoxy-coated rebar, No. 5 size, conforming item 33X.
6. Submit shop drawings of bumpers, including plan layout and installation details, for approval.
7. Product data: Submit manufacturers' product data of precast bumpers and epoxy adhesive for approval

C. Construction Details.

1. No installation shall begin until shop drawings, catalog cuts, details or illustrated literature, and installation details are submitted and approved by the Engineer.
2. The pavement surface shall be prepared as per epoxy adhesive manufacturer's instructions prior to installation.
3. Precast concrete bumpers shall be anchored and secured in position on at-grade asphalt pavements, as indicated, with an appropriate epoxy adhesive as specified above and two No. 5 epoxy-coated rebar (24" long each, recessed 1/4" below the top of the bumper after installation).
4. Precast concrete bumpers shall be secured in position on concrete pavements, as indicated, with an appropriate epoxy adhesive as specified above.

D. Method of Measurement.

1. The quantity to be paid under this item will be the number of parking bumpers installed in accordance with this specification.

E. Basis of Payment.

1. The unit price bid shall include the cost of all labor, materials, and equipment necessary to complete the work.

ITEM 766 - RETAINING WALL SYSTEM

A. Description.

1. The work shall consist of furnishing and installing a low height retaining wall system, in accordance with all applicable Standard Sheets and Specifications, and in accordance with the Contract Documents and as ordered by the Engineer.
2. Retaining wall systems are externally stabilized fill structures. Externally stabilized fill structures are structures which utilize the weight of the wall system elements and the weight of the infill to resist lateral soil pressure.
3. The location(s), elevation(s) and aesthetics shall be as shown in the contract documents or as directed by the Engineer.
4. The work shall include any demolition, saw cutting, excavation, disposal, fill, sub- base material, compaction, drainage material, drain pipe, geotextile material and all labor and material necessary for the construction of the new wall system (including backfill, leveling pads, joint fillers, geotextiles, face units and coping units, and subsurface drainage system). Also included are landscaping (adjustments and grading of existing ground), patching and repairs to affected asphalt or concrete as necessary, topsoil, establishing turf on disturbed areas, finish work, and any required adjustments to utilities. All material and labor required to perform these tasks is included.
5. The material and aesthetic treatment (color, texture and pattern) will be as described in the contract documents, using special notes and details, or as directed by the Engineer, as needed.
6. The contractor shall submit a plan including the sample materials, aesthetic treatments and proposed construction methods. Written approval of the plan must be received from the Engineer in Charge prior to commencement of the work.

B. Materials.

1. Ensure that the proper materials are supplied for the chosen system design.
2. The material shall comply with the latest edition of the New York State Department of Transportation, Standard Specifications, and the latest update to the effective at the date of letting, including the associated Material and Manufacturing requirements of Section 700.
3. The material shall comply with, but not be limited to, the requirements of the following sections of the New York State Department of Transportation Standard Specifications: 202-2, 203-2, 204-2, 206-2, 304-2, 554-2, 605-2, 608-2 and 610-2.

C. Construction Details.

1. The work shall be in conformance with the NYSDOT Standard Sheets. The work performed shall comply with, but is not limited to, the following Specification Sections: 202-3, 203-3, 204-3, 206-3, 304-3, 554-3, 605-3, 608-3, and 610-3.

2. The contractor shall be in compliance with New York State Code, Rule 753. The contractor shall coordinate with utility companies and any appropriate governmental agency when utilities and/or access to these facilities are affected by the contractor's work. This may include, but is not limited by, utility poles, pull boxes, shut off boxes, manhole access covers, and underground equipment. Any existing facilities not indicated to be removed that are damaged by the contractor's operations, shall be repaired by the contractor to the satisfaction of the Engineer at no additional cost.
 - a. During construction, remove and replace any face units damaged beyond repair with approved face units at no additional cost to Nassau County.
 - b. Movement of construction equipment and all other vehicles and loads over and adjacent to the low height retaining wall system shall be done at the Contractor's risk. Control all operations and procedures to prevent misalignment of the low height retaining wall system. Any damage to face units from any cause shall be repaired or replaced by the Contractor at no additional cost to Nassau County.
 - c. Provide aesthetic treatment as specified in the contract documents. Any damage to the treatment shall be repaired to the satisfaction of the Engineer at no additional cost to Nassau County.

D. Method of Measurement.

1. The quantity to be paid shall be, measured by the square foot, (measured to the nearest square foot), of satisfactorily installed Retaining Wall System, in accordance with the Contract Documents or as ordered by the Engineer. The area of the wall is obtained from the product of the height of the wall (measured as the vertical projection distance from the top of the leveling pad to the top of the wall, (including cap blocks, when utilized) and the horizontal length of the wall (measured along the bottom of the wall at the top of the leveling pad). The computations will take into consideration variations in the height of the wall.

E. Basis of Payment.

1. The inclusive unit price bid per square foot shall include the cost of furnishing all labor, material, and equipment necessary to satisfactorily complete the work, to the acceptance of the Engineer, including all applicable items described in Sections 554-5 and 610-5. The unit price bid shall be inclusive of the aesthetic treatment, topsoil and turf establishment. Any required survey, shall be paid for separately under the price bid for survey operations.

ITEM 767 - FURNISH & INSTALL & MAINTAIN TURBIDITY CURTAIN

A. Description.

1. This work shall consist of furnishing, installing, repairing, maintaining, and removing turbidity curtains in accordance with the contract documents and as directed by the Engineer.

B. References.

1. New York State Department of Transportation, (NYSDOT) Standard Specifications dated September 2, 2010 and updated supplements.

C. Materials.

1. The turbidity curtain shall be a commercially available, preassembled system, including a geotextile, flotation system, bottom weight, and anchoring and securing mechanism. If assembled in panels, it shall include a secure mechanism for joining panels together. Geotextiles shall conform to the requirements specified in §737- 01F. Turbidity Curtain. Hemmed pockets shall be sewn or heat bonded to contain flotation material, bottom weights, and for anchor lines. The flotation material shall maintain buoyancy if punctured or cut. The bottom weight shall be sufficient to hold the curtain in a vertical position. For sites not subject to tidal or heavy wave action, the curtain shall be capable of molding to conform to bottom contours so that suspended sediment is prevented from escaping underneath the curtain. Anchorage lines shall be provided of sufficient strength and number to support the curtain and maintain it in position under normally expected conditions. End anchors shall be provided, with intermediate anchor points (for stakes or anchors) such that unanchored spans do not exceed 100 feet, sufficient to maintain the turbidity curtain in place. Where the turbidity curtain is constructed in panels, anchor-line and shackle connections securing the panels together shall be sufficient for normally expected current, wind, or wave conditions.

D. Construction Details.

1. Systems Requirements.

- a. Perform all work in accordance with Section 209 except as modified herein.
- b. For sites not subject to tidal or heavy wave action the curtain height shall provide sufficient slack to allow the top of the curtain to rise to the maximum expected highwater level (including waves) while the bottom maintains continuous contact with the bottom of the water body. The bottom edge of the curtain shall have a weight system capable of holding the bottom of the curtain down and conforming to the bottom of the water body, so as to prohibit escape of turbid water under the curtain.
- c. For sites subject to tidal or heavy wave action, the curtain height shall provide sufficient slack to allow the top of the curtain to rise to the maximum expected highwater level (including waves) while the bottom remains 12 inches above the bottom. The weight system shall hold the lower edge of the curtain in place so as to allow 12 inches of clearance above the bottom at mean low water, so that the curtain does not stir up sediment by repeatedly striking the bottom.

- d. If constructed in panels, panels shall be connected in such a manner as to prevent suspended particles passing through joints. Load lines shall be connected so as to develop the full strength of the line across the joint.
- e. Flotation material shall be arranged so as to be flexible and to provide continuous support.
- f. The flotation and curtain top shall be such as to provide a minimum of 4 inches of freeboard along the entire length of the curtain, to prohibit escape of turbid water over the top.

2. Installation.

- a. The turbidity curtain shall be installed as shown in the contract documents in accordance with the manufacturer's instructions. It shall be placed as close to the site of disturbance as possible without interfering with construction activity.
- b. Turbidity curtain shall be installed and maintained in a manner that precludes entry of equipment, other than hand-held equipment or boats, to the water body outside the protected area.
- c. The fully assembled turbidity curtain shall be prepared for installation by being furled and tied at intervals of 5 foot for the length of the curtain. It shall be placed and secured in the furled condition, then released to allow the bottom edge to sink.
- d. At sites subject to tidal or heavy wave action, adjustment lines may be used to achieve the required height of the curtain.
- e. At sites not subject to tidal or heavy wave action, excess curtain material shall lay on the bottom, away from construction activity.
- f. Turbidity curtain shall be placed as nearly as possible parallel to current flow. It shall not be deployed across a flowing water course.
- g. The ends of the installation shall be anchored securely well up the bank. Intermediate anchors of a type and number sufficient to hold the curtain in place under expected conditions shall be placed, and firmly fastened to the top of the curtain assembly. Maximum spacing between anchorage points shall not exceed 100 feet.
- h. In situations with flow velocities that exceed 5 feet/sec use a redirection barrier. The redirection barrier shall be installed prior to installation of the turbidity curtain wherever possible, and care should be exercised in order to minimize disturbance of the bottom of the water body during installation of the redirection barrier.

3. Maintenance.

- a. The turbidity curtain shall be inspected daily, with additional monitoring of performance during storms or significant flow events.
- b. Any visible plume of cloudy water passing beyond the curtain from the enclosed construction area shall constitute inadequate performance of the turbidity curtain. The Contractor shall immediately modify, adjust, or repair any portion of the turbidity curtain to correct inadequate performance.
- c. The turbidity curtain shall remain in place until the protected construction activities have

ceased and the turbidity of the water enclosed is reduced to acceptable levels. The curtain shall be removed within 72 hours of this condition being met.

4. Removal.

- a. The turbidity curtain shall be removed in such a way as to minimize release of sediment.
- b. Sediment behind the curtain shall be removed before removal of the curtain, if directed by the Engineer. If so, any resulting turbidity shall be allowed to settle before removal proceeds.

E. Method of Measurement.

1. Payment for this work will be made per linear foot for work satisfactorily completed. Progress payments will be made in proportion to the amount of work done as determined by the Engineer.

F. Basis of Payment.

1. The unit price bid per linear foot shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including redirection barrier and the cost of removal associated with the removal of accumulated sediment. Payment will not be made for work which is attributed to the Contractor's negligence, carelessness or failure to install temporary or permanent controls in accordance with the contract documents.

ITEM 768 - FURNISH & INSTALL ARMORLESS BRIDGE JOINT SYSTEM

A. Description.

1. The system shall consist of components shown on a NYSDOT Approved Materials Detail Sheet for a Manufacturer and System whose name appears on the NYSDOT Materials Bureau Approved List. The required method of installation will be shown on the NYSDOT Approved Materials Detail Sheet.
2. **Terminology.** Materials Detail Sheet (MDS). A sheet approved by the NYSDOT DCES and containing all material requirements and installation information for Armorless Bridge Joints which are included on the NYSDOT Materials Bureau Approved List

B. Materials.

1. The material requirements shall be as shown on the NYSDOT Approved Materials Detail Sheet corresponding to a Manufacturer and System listed on the NYSDOT Materials Bureau Approved List.
2. Shop drawings will be required for any joint system supplied as part of this work. All shop drawings shall note the name and address of the joint system (or segment) fabricator as well as the location where the joint system (or segments) are to be fabricated.

C. Construction Details.

1. **Manufacturer's Representative.** The joint system shall be installed in strict accordance with the manufacturer's instructions and the NYSDOT Approved Materials Detail Sheet. In the event of a conflict, the terms of the NYSDOT Approved Materials Detail Sheet shall rule. A representative of the bridge joint system manufacturer shall be present prior to placement to inspect the prepared surfaces and remain at the job during all phases of the installation. The representative shall be fully conversant in all respects with the correct installation methods. The representative shall be responsible to advise both the Engineer and the Contractor on properly installing the joint system. The representative may be excused from the project site at the discretion of the NCDPW project manager.
2. **Preparation.** All surfaces shall be prepared as per the NYSDOT Approved MDS. At a minimum, the preformed recess which is to receive the joint system shall be air blown using air free of water and oil or vacuum-cleaned so that all loose or foreign matter is removed prior to installation of the system. The substrate shall be dry for a minimum of 24 hours prior to installation for the joint system.
3. **Storage Inspection and Handling.** The joint system shall be stored, inspected and handled in accordance with the NYSDOT Approved Materials Detail Sheet.
4. **Installation Inspection.** All installation work shall be subject to the Engineer's inspection.
5. **Watertight Integrity Test.** At least five work days after the joint system has been fully installed the Contractor shall test the entire (full length) joint system for watertight integrity. The entire joint system shall be covered with water, either ponded or flowing, for a minimum duration of 15 minutes.

6. The concrete surfaces under the joint shall be inspected during this 15 minute period, and also for a minimum of 45 minutes after the supply of water has stopped, for any evidence of dripping water or moisture. Water tightness shall be interpreted to be no free dripping water on any surface on the underside of the joint. Patches of moisture shall not be cause for non-acceptance.
7. Should the joint system exhibit evidence of water leakage at any place whatsoever, the Contractor shall locate the place(s) of leakage and take all measures necessary to seal the leak. A subsequent water integrity test shall be performed subject to the same conditions and consequences as the original test. No additional payment will be made for corrective actions.

D. Method of Measurement.

1. Measurement will be made as the number of feet of joint system completely installed, measured horizontally and vertically along the centerline of joint system between the outer limits as indicated on the contract plans.
2. The words "completely installed" shall be interpreted to mean the joint system in place with the following operations completed where applicable:
 - a. All sealant in its proper position.
 - b. All nuts tightened or retightened as required.
 - c. Concrete placed and finished.
 - d. Elastomeric concrete placed and finished.
 - e. Water-tight integrity tests

E. Basis of Payment.

1. The unit price bid per foot shall include all labor, materials and equipment necessary to complete the work.

ITEM 769A – Type “A” Catch Basin Insert- Filter Type (Combination Inlet)

ITEM 769B – Type “B” Catch Basin Insert- Filter Type (Curb Inlet Only)

A. Description.

1. Under each of these items the Contractor shall furnish and install cartridge type catch basin inserts to collect and retain sediment and debris prior to entering the storm water system.

B. Submittals.

1. The manufacturer shall develop and furnish a worksheet to be used by the installer(s) to measure and certify the actual condition of the catch basin which will receive the catch basin insert.

C. Delivery, Storage & Handling.

1. All materials shall be protected during loading, transporting, and unloading, in accordance with the manufacturer's recommendations.

D. Materials.

1. The catch basin insert to be used in Type A and B catch basins shall comply with the following specifications:

a. Physical Properties:

1) Material:

- a) Adjustable Flange and Deflector
- b) Splash Guard: Neoprene Rubber (Trim to Fit)
- c) Plastic or polypropylene basket
- d) Protected by-pass to retain re-suspended material
- e) Support Hardware

2) Performance Characteristics & Removal Rates:

- a) Debris Capacity: 4.0 Cu-Ft
- b) Filtered Flow Rate: 0.5 cfs
- c) Bypass Flow Rate: 4.0 cfs
- d) Sediment Removal: Remove \geq 50% of sub 100 micron
- e) Hydrocarbons, Oil & Grease: Remove \geq 80%
- f) Phosphorous: Remove \geq 50%
- g) Nitrogen Compounds: Remove \geq 40%
- h) Bacteria: Remove \geq 70%

- 3) Under this item the catch basin insert manufacturer is required to submit test data to the County (with supporting documentation) specifically indicating that the proposed

devices have been proven to achieve the performance characteristics and removal rates specified herein. No materials may be ordered until the County has accepted said documentation, in writing.

b. Serviceability:

1) Catch Basin Insert Maintenance

- a) The catch basin inserts shall be serviceable from the street level only; maintenance shall not require "confined space" entry into the catch basin.
- b) The consumables (filters) shall be designed to enable replacement from the street level only; maintenance shall not require "confined space" entry into the catch basin.

E. Method of Measurement.

1. The quantity to be paid for under these two items shall be the number of catch basin insert assemblies that are furnished and installed.

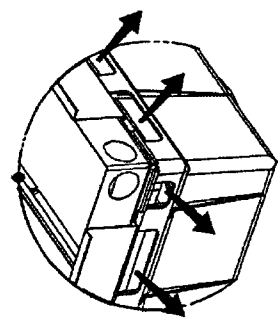
F. Basis of Payment.

1. The unit price bid for each item(s) shall include the cost of furnishing and installing one (1) complete catch basin insert assembly which shall consist of all materials including one set of filters and the metal framework to be installed inside the catch basin.

G. Warranty.

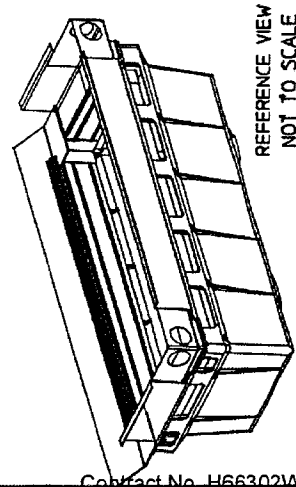
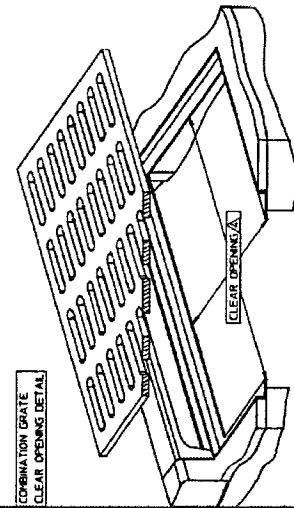
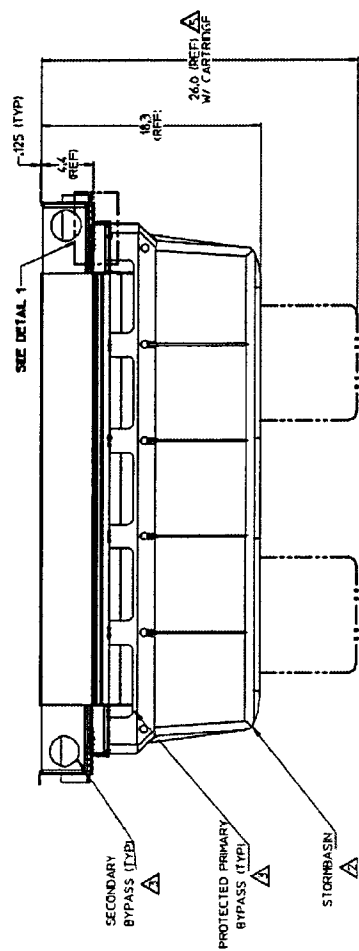
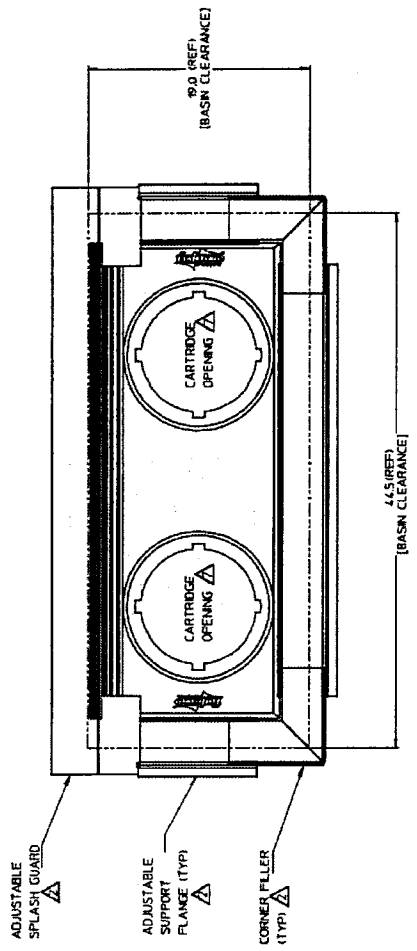
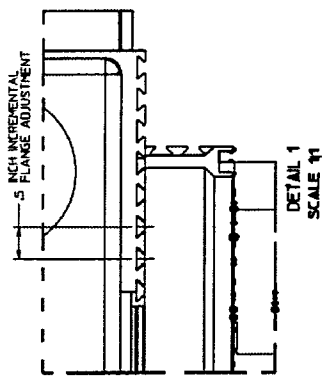
1. The equipment, materials, and products furnished under this item shall be guaranteed against defective design, materials, workmanship and operation for a period of one (1) year from the date the equipment is placed into problem free operation. The date of problem free operation will be determined by the Owner's representative. Upon receipt of notice from the Owner of failure of any part of the equipment, material, or product during the guarantee period, the affected item shall be repaired or replaced (if necessary), at the sole cost and expense of the Contractor, and at no additional cost to the County.

REV	DESCRIPTION	DATE	APPROVED
A	POST RELEASE	8/2/94	



PROTECTED BYPASS. TYPICAL
NOT TO SCALE

DO NOT ADJUST MEN FEA UR-
(TYPICAL - ADJ F ANGE)



REFERENCE VIEW
NOT TO SCALE

- THE DRAWING IS THE PROPERTY OF FABCO INDUSTRIES, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS TO BE RETURNED TO FABCO INDUSTRIES, INC. UPON COMPLETION OF THE PROJECT. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF FABCO INDUSTRIES, INC.
- HEIGHT (EMPTY): 50 LB MAX. NO CARTRIDGES
- MATERIAL:
 - ADJUSTABLE FLANGE AND DEFLECTOR: ALUMINUM ALLOY 6063-T6
 - BASIN (PLASTIC): POLYPROPYLENE POLYETHYLENE COPOLYMER
 - CORNER FILLER: ALUMINUM ALLOY 5052-H32
 - SUPPORT HARDWARE: CRES 300 SERIES
 - SPLASH GUARD: NEOPRENE RUBBER (TRIM F. NECESSARY)
- PERFORMANCE CHARACTERISTICS (TYP):
 - DEBRIS CAPACITY: 52 CU-FT
 - FILTERED FLOW RATE (CLEAN HIGH FLOW CARTRIDGE): 520 GPM (1.6 CFS)
 - PRIORITARY BYPASS FLOW RATE: 1917 GPM (4.3 CFS)
 - SECONDARY BYPASS FLOW RATE: 164 GPM (0.37 CFS)
 - TOTAL BYPASS FLOW RATE: 2082 GPM (1.6 CFS)
- CLEAR OPENING RANGE: 16.5 INCH INCREMENTS
 - MINIMUM SIZE: 9.0 X 4.50
 - MAXIMUM SIZE: 24.0 X 5.00
- RECOMMENDED MINIMUM VAULT DEPTH: 2'-4" BELOW CARTRIDGE
- TYPICAL INSTALLATION: REMOVE STORM GRATE, MEASURE CATCH BASIN CLEAR OPENING AND ADJUST FLANGES TO REST ON GRATE SUPPORT LEDGE. INSTALL STORMBASIN INSERT WITH RUBBER SPLASH GUARD EXTENDING INTO CURB-BOX AND VERIFY THE ADJUSTABLE FLANGES ARE SECURELY RESTING ON THE GRATE SUPPORT LEDGES. INSTALL THE CORNER FILL PIECES. REINSTALL THE STORM GRATE DIRECTLY ON STORMBASIN SUPPORT FLANGES.
- USE WITH FABCO REPLACEABLE MEDIA CARTRIDGES ONLY.

NO	QTY	PART NUMBER	DESCRIPTION	REMARKS
1	1	9770-RE-ASSY3	STORMBASIN	
2	1	9770-RE-ASSY3	STORMBASIN	
3	1	9770-RE-ASSY3	STORMBASIN	
4	1	9770-RE-ASSY3	STORMBASIN	
5	1	9770-RE-ASSY3	STORMBASIN	
6	1	9770-RE-ASSY3	STORMBASIN	
7	1	9770-RE-ASSY3	STORMBASIN	
8	1	9770-RE-ASSY3	STORMBASIN	
9	1	9770-RE-ASSY3	STORMBASIN	
10	1	9770-RE-ASSY3	STORMBASIN	

NO	QTY	PART NUMBER	DESCRIPTION	REMARKS
1	1	9770-RE-ASSY3	STORMBASIN	
2	1	9770-RE-ASSY3	STORMBASIN	
3	1	9770-RE-ASSY3	STORMBASIN	
4	1	9770-RE-ASSY3	STORMBASIN	
5	1	9770-RE-ASSY3	STORMBASIN	
6	1	9770-RE-ASSY3	STORMBASIN	
7	1	9770-RE-ASSY3	STORMBASIN	
8	1	9770-RE-ASSY3	STORMBASIN	
9	1	9770-RE-ASSY3	STORMBASIN	
10	1	9770-RE-ASSY3	STORMBASIN	

Contract No. H66302W

THIS DOCUMENT IS THE PROPERTY OF FABCO INDUSTRIES, INC. AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE RETURNED TO FABCO INDUSTRIES, INC. AT THE END OF THE LOAN PERIOD. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM FABCO INDUSTRIES, INC.

Nassau County DPW

NOTES

WEIGHT (EMPTY): 40 LB MAX.

MATERIAL:

- A) STORMBASIN SUPPORT FLANGE AND DEFLECTOR: ALUMINUM ALLOY 6063-T6
- B) CORNER DEFLECTOR: PLASTIC POLYPROPYLENE POLYETHYLENE COPOLYMER
- C) BASIN (PLASTIC): POLYPROPYLENE POLYETHYLENE COPOLYMER
- D) RUBBER SUPPORT PLATE: ALUMINUM ALLOY 5052-H32
- E) SUPPORT HARDWARE: CRES 300 SERIES OR EQUAL
- F) OIL BOOM: 3" DIAMETER POLYPROPYLENE
- G) GULL WING SUPPORT FLANGE: 6063-T6, CLEAR ANODIZE

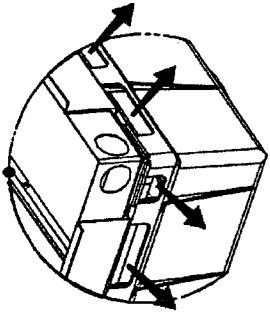
PERFORMANCE CHARACTERISTICS (TYP)

- A) DEBRIS CAPACITY: 4.0 CU-FT
- B) FILTERED FLOW RATE (CLEAN HIGH FLOW CARTRIDGES): 520 GPM (1.16 CFS)
- C) PROTECTED BYPASS FLOW RATE: 1207 GPM (2.7 CFS)
- D) TOTAL BYPASS FLOW RATE: UNRESTRICTED

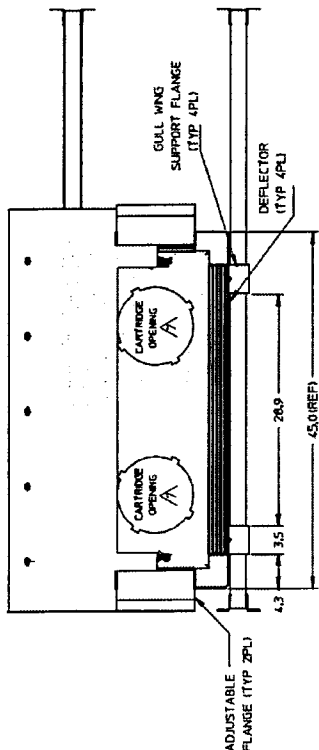
PROTECTED BYPASS PREVENTS RE-SUSPENSION OF FLOATABLES

USE WITH FABCO REPLACABLE FILTER CARTRIDGES ONLY. FABCO P/N 9718-7-000.

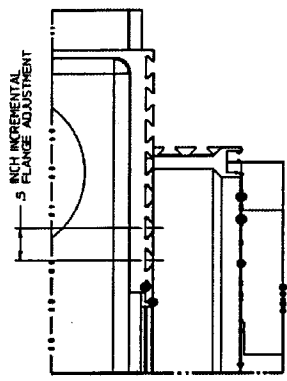
VISIT FABCO INDUSTRIES WEBSITE FOR COMPLETE INSTALLATION INSTRUCTIONS. WWW.FABCO-INDUSTRIES.COM



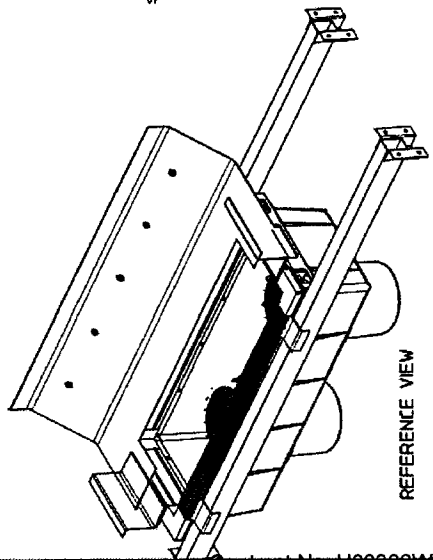
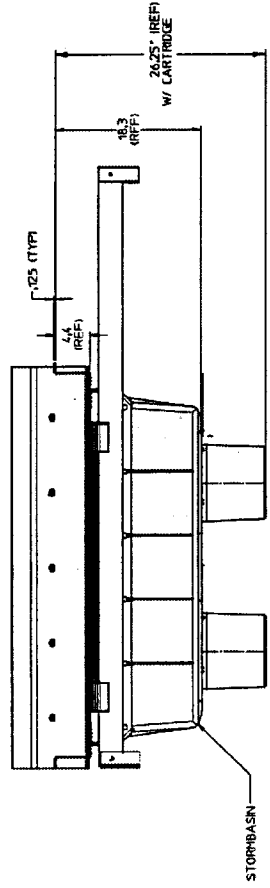
PROTECTED BYPASS, TYPICAL



DOVETAIL ADJUSTMENT FEATURE (TYPICAL EACH FLANGE)



DETAIL 1



REFERENCE VIEW

REV	DATE	DESCRIPTION	BY	CHKD	APP'D
1	01/10/2000	ISSUED FOR FABCO	WJH		
2	01/10/2000	REVISED FOR FABCO	WJH		
3	01/10/2000	REVISED FOR FABCO	WJH		
4	01/10/2000	REVISED FOR FABCO	WJH		
5	01/10/2000	REVISED FOR FABCO	WJH		
6	01/10/2000	REVISED FOR FABCO	WJH		
7	01/10/2000	REVISED FOR FABCO	WJH		
8	01/10/2000	REVISED FOR FABCO	WJH		
9	01/10/2000	REVISED FOR FABCO	WJH		
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12	01/10/2000	REVISED FOR FABCO	WJH		
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16	01/10/2000	REVISED FOR FABCO	WJH		
17	01/10/2000	REVISED FOR FABCO	WJH		
18	01/10/2000	REVISED FOR FABCO	WJH		
19	01/10/2000	REVISED FOR FABCO	WJH		
20	01/10/2000	REVISED FOR FABCO	WJH		



NASSAU COUNTY, NY
TYPE-B STORMBASIN

SEE FABCO WEBSITE FOR
INSTALLATION INSTRUCTIONS

WWW.FABCO-INDUSTRIES.COM

ITEM 770A - Type "A" Catch Basin Insert- Sediment Control Type (Combination Inlet)

ITEM 770B - Type "B" Catch Basin Insert- Sediment Control Type (Curb Inlet Only)

A. Description.

1. Under each of these items the Contractor shall furnish and install geotextile technology catch basin inserts to collect and retain sediment and debris prior to entering the storm water system.

B. Submittals.

1. The manufacturer shall develop and furnish a worksheet to be used by the installer(s) to measure and certify the actual condition of the catch basin which will receive the catch basin insert

C. Delivery, Storage & Handling.

1. All materials shall be protected during loading, transporting, and unloading, in accordance with the manufacturer's recommendations.

D. Materials.

The catch basin insert to be used in both the Type A and B installations shall comply with the following specifications.

1. Physical Properties.

a. Material:

1) Adjustable Flange and Deflector

- a) Splash Guard: Neoprene Rubber to redirect water from curb opening to the insert
- b) Woven Polypropylene Geotextile bag, replaceable oil boom
- c) Protected by-pass to retain re-suspended material
- d) Lifting Tabs
- e) Mounting kit and support hardware

2) Performance Characteristics:

- a) Debris Capacity: 6.0 Cu-Ft
- b) Filtered Flow Rate: 5.0 cfs
- c) Bypass Flow Rate: 3.4 cfs

3) Oil Absorbing Boom:

- a) Absorbent Material: 100% polypropylene, non-biodegradable
- b) Hydrophobic Media
- c) Absorption Capacity: 3.0 gal (max)
- d) Dimensions: 3" diameter x 100" long

2. Serviceability.

a. Catch Basin Insert Maintenance

- 1) The catch basin inserts shall be serviceable from the street level only; maintenance shall not require "confined space" entry into the catch basin.
- 2) The consumables (filters) shall be designed to enable replacement from the street level only; maintenance shall not require "confined space" entry into the catch basin.

E. Method of Measurement.

1. The quantity to be paid for under these two items shall be the number of catch basin insert assemblies that are furnished and installed.

F. Basis of Payment.

1. The unit price bid for each item(s) shall include the cost of furnishing and installing one (1) complete catch basin insert assembly which shall consist of all materials including one set of filters and the metal framework to be installed inside the catch basin.

G. Warranty.

1. The equipment, materials, and products furnished under this item shall be guaranteed against defective design, materials, workmanship and operation for a period of one (1) year from the date the equipment is placed into problem free operation. The date of problem free operation will be determined by the Owner's representative. Upon receipt of notice from the Owner of failure of any part of the equipment, material, or product during the guarantee period, the affected item shall be repaired or replaced (if necessary), at the sole cost and expense of the Contractor, and at no additional cost to the County.

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Nassau County DPW

NOTES

HEIGHT (EMPTH): 40 LB MAX

- MATERIAL**
- A) ADJUSTABLE FLANGE AND DEFLECTOR ALUMINUM ALLOY 6063-T6
 - B) SPLASH GUARD, NEOPRENE RUBBER (TRIM TO FIT)
 - C) STORMSACK, GEOTEX TYPE, REINFORCEMENT RIBBON
 - D) MESH LINER, HOPE, DIAMOND PATTERN
 - E) LIFTING TABS, ALUMINUM ALLOY 5052-H32
 - F) CORNER FILLER, ALUMINUM ALLOY 5052-H32
 - G) SUPPORT HARDWARE, CRES 300 SERIES
 - H) OIL BOOM, POLYPROPYLENE, 3" DIAMETER

3. PERFORMANCE CHARACTERISTICS (TYP)

- A) DEBRIS CAPACITY: 85 CU-FT
- B) FILTERED FLOW RATE (INITIAL): 3504 GPM (7.8 CFS)
- C) PROTECTED PRIMARY BYPASS FLOW RATE: 804 GPM (4.2 CFS)
- D) DISCHARGE BYPASS FLOW RATE: 84 GPM (0.37 CFS)
- E) TOTAL BYPASS FLOW RATE: 2048 GPM (4.6 CFS)
- F) OIL BOOM ABSORPTION CAPACITY: 376 OZ (3 GAL)

4. CLEAR OPENING RANGE 10.5 INCH INCREMENTS

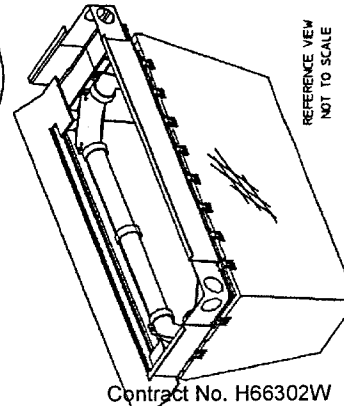
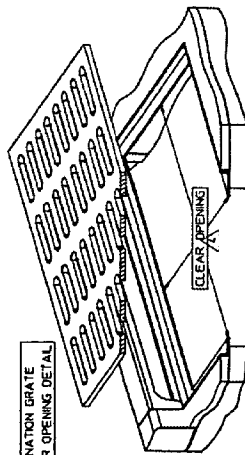
- A) MINIMUM SIZE: 19" X 45"
- B) MAXIMUM SIZE: 24" X 50"
- C) MINIMUM RECOMMENDED VAULT DEPTH: 2'-0" BELOW STORMSACK

5. PROTECTED BYPASS PREVENT RE-SUSPENSION OF FLOATABLES

6. TYPICAL INSTALLATION REMOVE STORM GRATE, MEASURE CATCH BASIN CLEAR OPENING AND ADJUST FLANGES TO REST ON GRATE SUPPORT LEDGE. TRIM SPLASH GUARD AS NEEDED. INSTALL CORNER FILL PIECES. REINSTALL STORM GRATE DIRECTLY ON STORMSACK SUPPORT FLANGES.

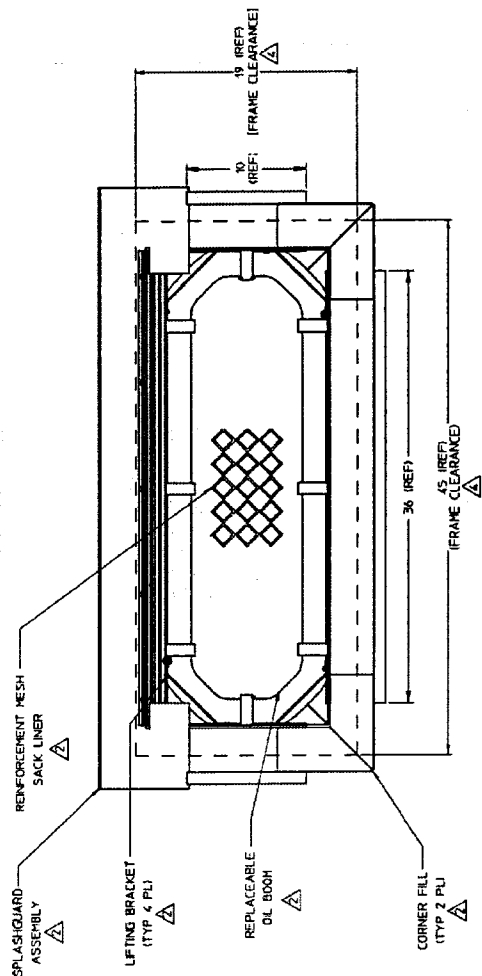
7. USE ONLY FABCO REPLACEABLE STORMSACKS, FABCO PART NO. 9748-1-200

CONFORMATION GRATE
CLEAR OPENING DETAIL



REFERENCE VIEW
NOT TO SCALE

Contract No. H66302W



100% 100% 100% 100%

SPLASH GUARD ASSEMBLY

REINFORCEMENT MESH

SACK LINER

LIFTING BRACKET (TYP 4 PL)

REPLACEABLE OIL BOOM

CORNER FILL (TYP 2 PL)

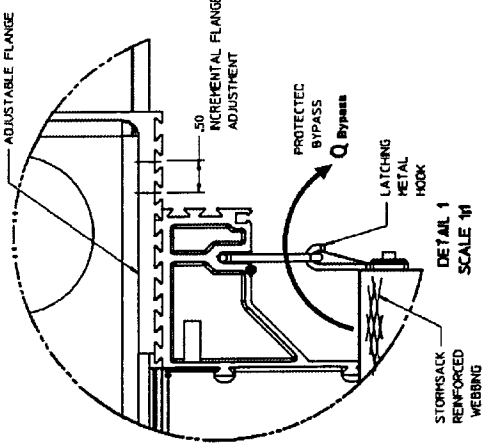
45 (REF) (FRAME CLEARANCE)

36 (REF)

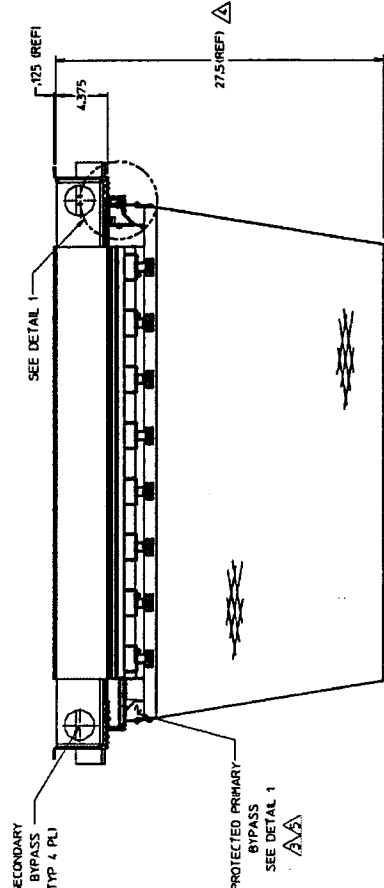
10 (REF)

19 (REF) (FRAME CLEARANCE)

DOVETAIL ADJUSTMENT FEATURE (TYPICAL EACH FLANGE)



DETAIL 1
SCALE 1/4"



SECONDARY BYPASS (TYP 4 PL)

PROTECTED PRIMARY BYPASS SEE DETAIL 1

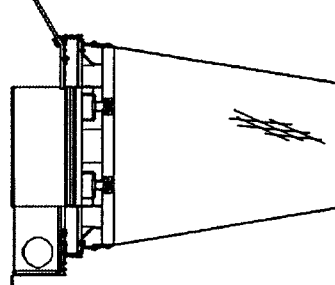
REPLACEABLE STORMSACK

27.5 (REF)

4.375

125 (REF)

SEE DETAIL 1



NO.	QTY.	PART NUMBER	DESCRIPTION	REVISIONS
1	1	9748-1-200	STORMSACK	1
2	1	9748-1-200	STORMSACK	1
3	1	9748-1-200	STORMSACK	1
4	1	9748-1-200	STORMSACK	1
5	1	9748-1-200	STORMSACK	1
6	1	9748-1-200	STORMSACK	1
7	1	9748-1-200	STORMSACK	1
8	1	9748-1-200	STORMSACK	1
9	1	9748-1-200	STORMSACK	1
10	1	9748-1-200	STORMSACK	1



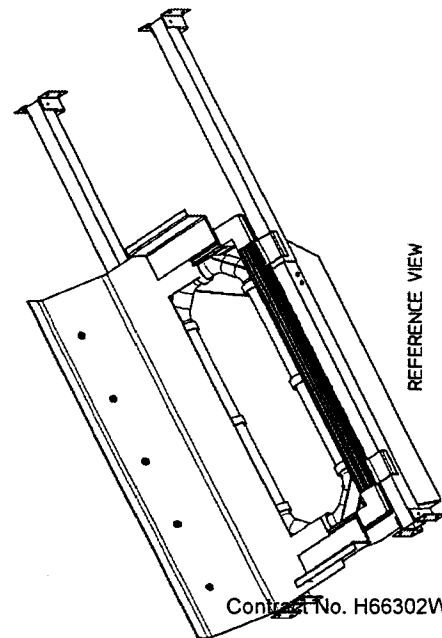
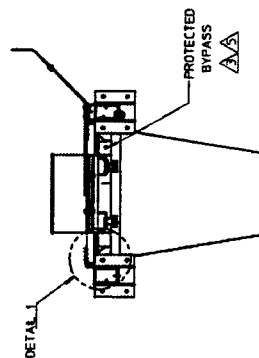
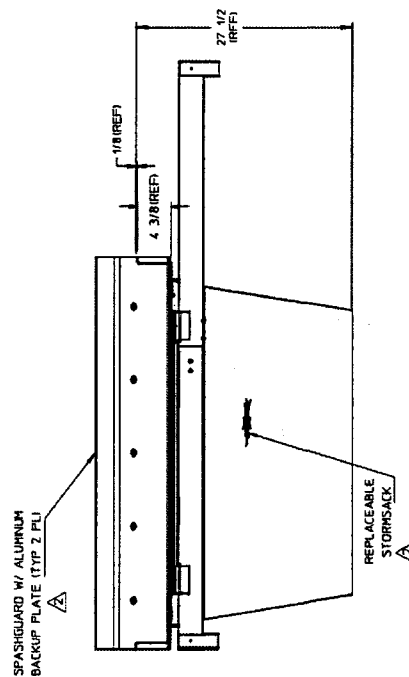
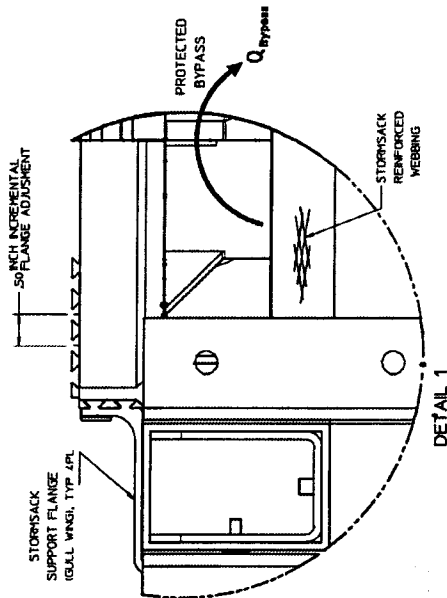
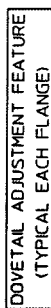
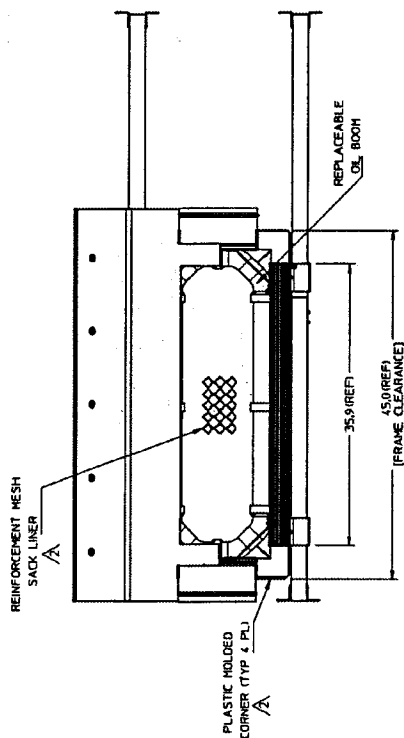
NASSAU COUNTY, NY
TYPE-2A STORMSACK

SEE PART NO. 9748-1-200
FOR PARTS LIST

1 OF 1

1. WEIGHT EMPTY: 50 LB MAX.

2. MATERIAL:
 - A. STORMSACK, SUPPORT FLANGE AND DEFLECTOR: ALUMINUM ALLOY 6063-T6
 - B. COVER DEFLECTOR: PLASTIC POLYPROPYLENE POLYETHYLENE COPOLYMER
 - C. GEOTEXTILE SACK: NOVEN POLYPROPYLENE, 20 US SIEVE SIZE
 - D. SUPPORT PLATE: ALUMINUM ALLOY 5052-H32
 - E. SUPPORT HARDWARE: CRES 300 SERIES OR EQUAL
 - F. OIL BOOM, 3" DIAMETER, POLYPROPYLENE
 - G. MESH LINER: HDPE, DIAMOND PATTERN
3. PERFORMANCE CHARACTERISTICS (TYP):
 - A) DEBRIS CAPACITY: 7.1 CU-FT
 - B) FILTERED FLOW RATE (INITIAL): 3440 GPM (7.7 FPS)
 - C) PROTECTED BYPASS FLOW RATE: 342 GPM (3.1 FPS)
 - D) TOTAL BYPASS FLOW RATE: 342 GPM (3.1 FPS)
4. COVERED BYPASS PREVENTS RE-SUSPENSION OF FLOATABLES
5. USE WITH FABCO REPLACEABLE STORMSACKS ONLY. FABCO P/N 9748-1-200, CONTACT FABCO REPRESENTATIVE FOR ALTERNATE STORMSACK SIZES.
6. VISIT FABCO INDUSTRIES WEBSITE FOR COMPLETE INSTALLATION INSTRUCTIONS. WWW.FABCO-INDUSTRIES.COM



REFERENCE VIEW

Contract No. H66302W

[illegible]

**ITEM 771A – Type “A” Catch Basin Insert- Sediment Control Type with Pathogen
Filtration (Combination Inlet)**

**ITEM 771B – Type “B” Catch Basin Insert- Sediment Control Type with Pathogen
Filtration (Curb Inlet Only)**

A. Description.

1. Under each of these items the Contractor shall furnish geotextile technology catch basin inserts to collect and retain sediment and debris prior to entering the storm water system.

B. Submittals.

1. The manufacturer shall develop and furnish a worksheet to be used by the installer(s) to measure and certify the actual condition of the catch basin which will receive the catch basin insert.

C. Delivery, Storage & Handling.

1. All materials shall be protected during loading, transporting, and unloading, in accordance with the manufacturer's recommendations.

D. Materials.

1. The catch basin insert to be used in both the Type A and B installations shall comply with the following specifications:
 - a. Physical Properties:
 - 1) Material:
 - a) Adjustable Flange, Deflector and Treated Media
 - b) Treated Polyether Open-Cell Foam for Bacteria Reduction
 - c) Splash Guard: Neoprene Rubber to redirect water from curb opening to the insert
 - d) Inner woven polypropylene geotextile pre-filter bag, with outer polypropylene pocket to house treated foam.
 - e) Replaceable oil boom
 - f) Protected by-pass to retain re-suspended material
 - g) Lifting Tabs
 - h) Mounting kit and support hardware
 - 2) Performance Characteristics:
 - a) Debris Capacity: 6.0 Cu-Ft
 - b) Filtered Flow Rate: 5.0 cfs
 - c) Bypass Flow Rate: 3.4 cfs

3) Oil Absorbing Boom:

- a) Absorbent Material: 100% polypropylene, non-biodegradable
- b) Hydrophobic Media
- c) Absorption Capacity: 3.0 gal (max)
- d) Dimensions: 3" diameter x 100" long

b. Serviceability:

1) Catch Basin Insert Maintenance

- a) The catch basin inserts shall be serviceable from the street level only; maintenance shall not require "confined space" entry into the catch basin.
- b) The consumables (filters) shall be designed to enable replacement from the street level only; maintenance shall not require "confined space" entry into the catch basin.

E. Method of Measurement.

- 1. The quantity to be paid for under these two items shall be the number of catch basin insert assemblies that are furnished to the County or its Municipalities.

F. Basis of Payment.

- 1. The unit price bid for each item(s) shall include the cost of furnishing one (1) complete catch basin insert assembly which shall consist of all materials including one set of filters and the metal framework to be installed inside the catch basin.

G. Warranty.

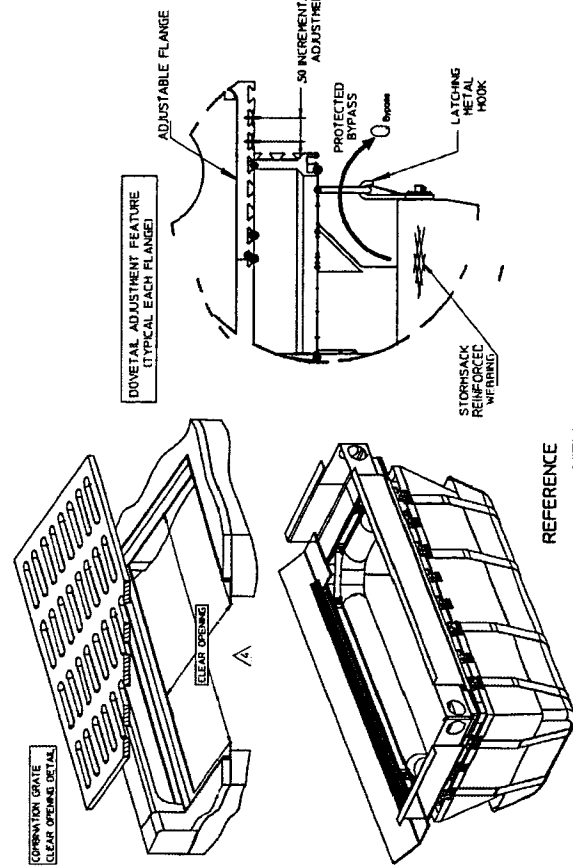
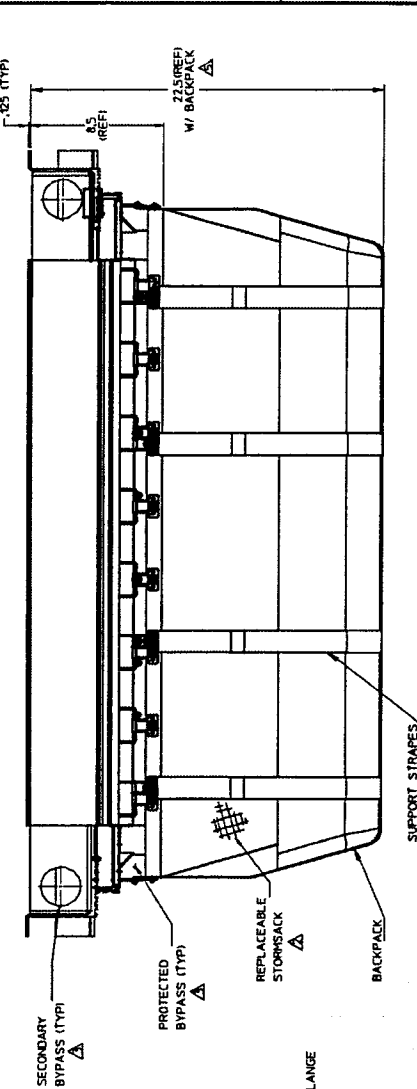
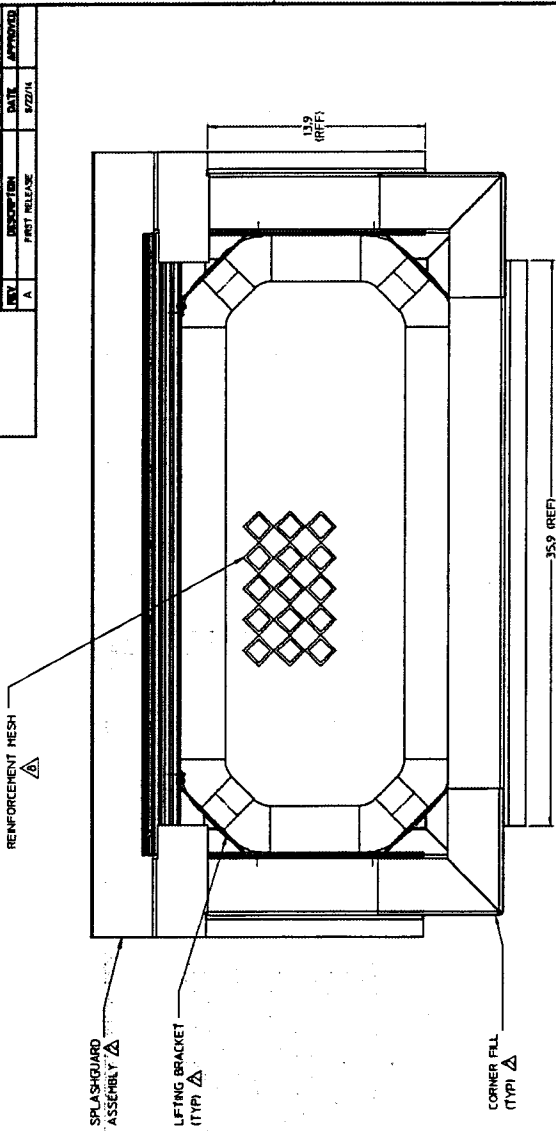
- 1. The equipment, materials, and products furnished under this item shall be guaranteed against defective design, materials, workmanship and operation for a period of one (1) year from the date the equipment is placed into problem free operation. The date of problem free operation will be determined by the Owner's representative. Upon receipt of notice from the Owner of failure of any part of the equipment, material, or product during the guarantee period, the affected item shall be repaired or replaced (if necessary), at the sole cost and expense of the Contractor, and at no additional cost to the County.

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NOTES FOR BACTERIA PACK:

1. WEIGHT: 5-LBS
2. MATERIALS:
 - A) PERMEABLE FABRIC: GEOTEXTILE, 20 US MESH
 - B) NON-PERMEABLE FABRIC: POLYESTER LAMINATED VINYL
 - C) SUPPORT STRAP: NYLON NYLON RIVETS
 - D) SPRING CLIPS: CR3 W/ ALUMINUM RIVETS
 - E) FABRIC: ANTI-MICROBIAL FOAM POLYETHER BASE MATERIAL
3. PERFORMANCE CHARACTERISTICS:
 - A) TREATMENT FLOW RATE: 2300 GPM (5.1 CFS)
 - B) BYPASS FLOW RATE: 2000 GPM (4.5 CFS)
4. TYPICAL INSTALLATION

THE BAC-PACK UNIT HAS BEEN DESIGNED TO ADD BACTERIA TREATMENT CAPABILITY TO A TYPICAL FABCO STORMSACK PRODUCT, ESSENTIALLY CREATING A TWO-STAGE FILTERING SYSTEM, WITH THE BAC-PACK POSITIONED BENEATH THE STORMSACK. ATTACH EACH METAL SPRING CLIP TO THE STORMSACK FRAME HANGERS AS ILLUSTRATED.



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Nassau County DPW

NOTES FOR BACTERIA PACK1

1. WEIGHT: 5-LBS

2. MATERIALS:

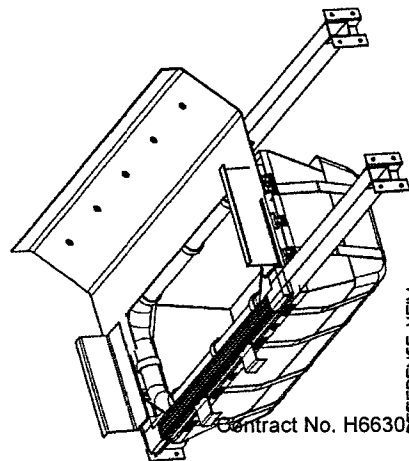
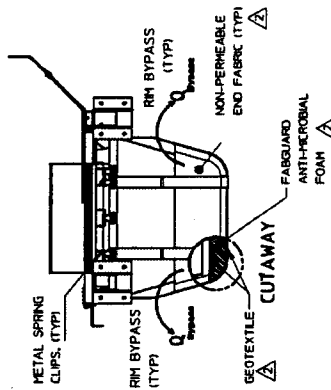
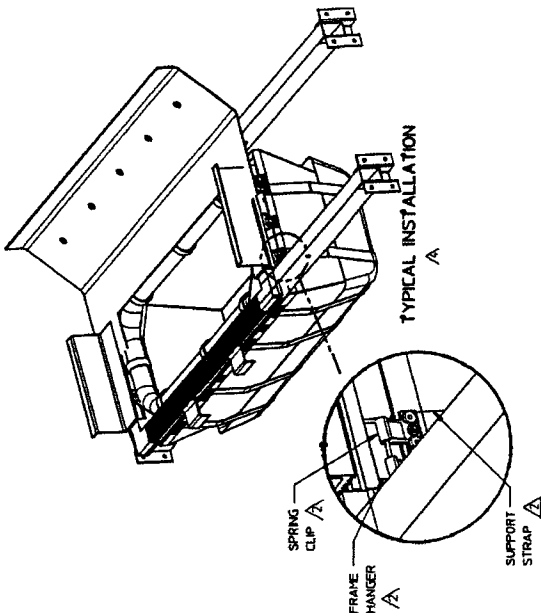
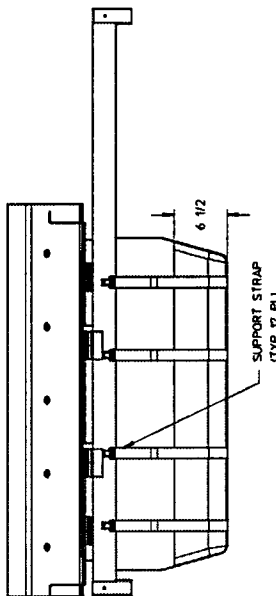
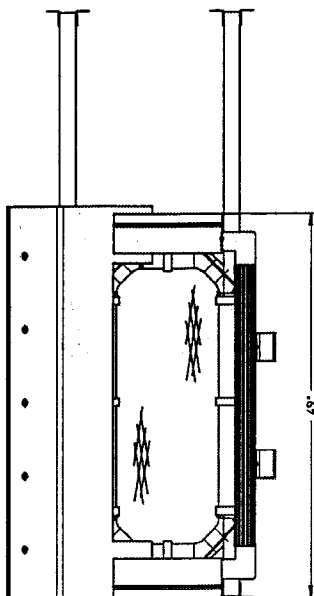
- A) PERMEABLE FABRIC: GEOTEXTILE, 70 US MESH
- B) NON-PERMEABLE FABRIC: POLYESTER LAMINATED VINYL
- C) SUPPORT STRAPS: WOVEN NYLON
- D) SPRING CLIPS: CRS W/ ALUMINUM RIVETS
- E) FARGUARD ANTI-MICROBIAL FOAM: POLYETHER BASE MATERIAL

3. PERFORMANCE CHARACTERISTICS:

- A) TREATMENT FLOW RATE: 2300 GPM (5.1 CFS)
- B) BYPASS FLOW RATE: 2000 GPM (4.5 CFS)

4. TYPICAL INSTALLATION

THE BAC-PACK UNIT HAS BEEN DESIGNED TO ADD BACTERIA TREATMENT CAPABILITY TO A TYPICAL FARGUARD STORMSACK PRODUCT, ESSENTIALLY CREATING A TWO-STAGE FILTERING SYSTEM. WITH THE BAC-PACK POSITIONED BENEATH THE STORMSACK, ATTACH EACH METAL SPRING CLIP TO THE STORMSACK FRAME HANGERS AS ILLUSTRATED.



REFERENCE VIEW

Contract No. H66308W

NO.	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	10100-6	BAC-PACK UNIT	
<p>SEE NOTES</p>				
<p>DO NOT SCALE THIS DRAWING</p>				
<p>DATE: 10/10/96</p>				
<p>BY: [Signature]</p>				
<p>FOR: NASSAU COUNTY, NY</p>				
<p>TYPE: 30 BACTERIAL PACK</p>				
<p>10100-6-000</p>				
<p>10100-6-000</p>				
<p>10100-6-000</p>				

NO TEXT ON THIS PAGE