

CIVIC HUB AND CONNECTIVITY PROJECT

Bid No. 2025-007

**City of Peekskill
Westchester County, New York**

CONSTRUCTION SPECIFICATIONS



NO ALTERATION PERMITTED HEREIN EXCEPT
AS PROVIDED UNDER SECTION 7209 SUBDIVISION
2 OF THE NEW YORK STATE EDUCATION LAW.

Bid Opening:

**Thursday, November 20, 2025
11:00 A.M.
City Clerk's Office, City Hall
840 Main Street
Peekskill, NY 10566**

TABLE OF CONTENTS

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

Section	Name	Page Number
A	Notice to Bid	A1 – A2
B	Instructions to Bidders	B1 – B4
C	Bid Submission Sheet	C1 – C3
	Acknowledgement of Receipt of Addenda	C3
	Bid Proposal Sheets	C4
	Bid Proposal Form	C5
	Statement of Non-Collusion	C6
	Resolution	C7
	Certification of Bidder Regarding Equal Employment Opportunity	C8
	Certification of Proposed Subcontractor Regarding Equal Employment Opportunity (Not Required with Bid)	C9
	Offer of Surety	C10
	Statement of Bidder's Qualifications	C11 – C13
	Bid Bond	C14 – C15
	Certificate as to Corporate Principal	C16
D	Agreement – Form of Contract	D1 – D3
E	Labor and Material Payment Bond and Performance Bond	E1 – E4
F	Form of Maintenance Bond	F1
G	General Release	G1
H	Insurance	H1 – H5
<i>Section 'I' Intentionally Left Blank</i>		
J	General Conditions	J1 – J33
K	Special Conditions	K1 – K14
L	Technical Specifications	
<u>Appendices</u>		
A	Standard Clauses for New York State Contracts	
B	New York State Prevailing Wage Rates	

Contract Drawings included as separate entity.

SECTION A

NOTICE TO BID

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

Sealed bids for the following construction work:

Sealed Bids will be received at the Office of the City Clerk of the City of Peekskill, New York, until **11:00 A.M. on Thursday, November 20, 2025**, at City Hall, 840 Main Street, Peekskill, New York 10566, and immediately thereafter the bids will be publicly opened and read aloud in said office. No bids will be accepted after said time and date.

The work for Bid No. 2025-007 installing new ADA compliant curb ramps, construction of bicycle facilities, pavement marking and striping, new signage, installation of new curb bumpouts, installation of new pedestrian signals at two intersections, and the reconstruction of Brown Plaza including the installation of site amenities. This Project is funded by New York State Department of State ("DOS") contract #C1001879 as part of the City of Peekskill's Downtown Revitalization Initiative. The Contractor must comply with State provisions under the DOS contract.

In addition to electronic plans included herein, a USB flash drive of Plans, Specifications and Contract Documents may be obtained as of **Wednesday, October 22, 2025 from 9 A.M. until 4 P.M.** at the Department of City Services, Bureau of Public Works, City Hall, 840 Main Street, Peekskill, NY, upon payment of \$10.00 for USB flash drive. This is a non-refundable fee. No paper copies will be distributed.

All Bidders must submit one (1) USB flash drive containing all Bid documents as part of the bid package.

Bid forms (Section C) must be filled out and submitted in paper form. Executed bid forms must also be scanned onto the provided USB flash drive and submitted as part of the bid. As bid security, each bid must be accompanied by a certified check or a bid bond acceptable to the City in the amount of not less than 5% of the total amount of the Bid. Certified Checks shall be made payable to the City of Peekskill, New York and are to be held by the City as a guarantee for the proper execution and delivery of the Contract and bonds to secure the faithful performance thereof. In default of such execution and delivery of Contract and Bonds, the amount of the deposit represented by the check shall be forfeited and retained by the City of Peekskill as liquidated damages.

The executed Bid forms, USB flash drive, and the certified check or bid bond must be enclosed in a sealed envelope bearing the name and address of the Bidder, addressed to the City Clerk, City of Peekskill, NY and endorsed "CIVIC HUB AND CONNECTIVITY PROJECT, City of Peekskill, NY, Bid Number 2025-007". All questions must be emailed to Peter Erwin, Planner at perwin@cityofpeekskillny.gov by **11:00 A.M. on Wednesday, November 12, 2025**. All questions, answers, and addendums, if any, will be posted on the City's 'Bid/RFP' webpage with a link emailed to all who provided a legible email address.

Minority and Women-owned Business Enterprise (M/WBE) goals for the DOS grant require that a total of 15% of the total grant award must be paid to MBEs and 15% of the total grant award must be paid to WBEs (for a total of 30% paid to M/WBEs). The successful bidder will be required to document compliance using the reporting forms provided by DOS.

Current prevailing wage rates shall apply to all work, and the project will be subject to audit(s) by the agencies of the State of New York.

The City of Peekskill reserves the right to accept or reject any or all Bids, or portions of a Bid, in accordance with the General Municipal Law, and to waive any informality in any Bid if deemed in the best interest of the City of Peekskill to do so.

Carol J. Samol, AICP
Director of Planning

SECTION B
INSTRUCTIONS TO BIDDERS

CIVIC HUB AND CONNECTIVITY PROJECT
CITY OF PEEKSKILL

BID NO. 2025-007

1. LOCATION OF THE WORK

The work included in this project is located in the City of Peekskill, NY on Railroad Avenue, Hudson Avenue, South Water Street, Central Avenue and South Division Street.

2. DESCRIPTION OF THE WORK

The project consists of installing new ADA compliant curb ramps, construction of a new cycletrack, pavement marking and striping, new signage, installation of new curb bumpouts, installation of new pedestrian signals at two intersections, and the reconstruction of Brown Plaza including the installation of site amenities.

3. COMMENCEMENT AND COMPLETION OF THE WORK

Upon execution of the Contract including delivery of the Performance Bond, Labor and Materials Payment Bond, and insurance policies and certificates by the Contractor to the Owner and the approval therefor by the Owner's attorney, the Contractor will be notified by letter from the Owner (City) to proceed with the work.

4. DOCUMENTS

A complete set of Bidding Documents will be issued on USB flash drive for bidding purposes as stated in the "Notice to Bidders." A complete set of Documents consists of the following:

- a. Sections A – H, J – K and Appendices A and B as identified in the Table of Contents herein.
- b. Addenda (if any)
- c. Contract Drawings
- d. Technical Specifications (Section L)

5. PROPOSALS

To be considered, Proposals must be in accordance with these Instructions to Bidders. All bids must be submitted on the prescribed forms which are included in Section C herein. All blank spaces for bid prices must be filled in, in both words and figures, either typed or in ink. All signatures must be in ink.

Proposals that contain any omissions, erasures, alterations, additions, or items not called for in the itemized Proposal, or that contain irregularities of any kind, may constitute sufficient cause for rejection of the bid. In case of any discrepancy between words and figures in the price bid in the Proposal, the price as expressed in words shall govern.

The Bidder must submit one (1) bound paper copy of the Bid forms in Section C of the Bid documents, one (1) *new* USB flash drive containing the signed forms from Section C, and a certified check made payable to the City of Peekskill or a bid bond not less than 5% of the total amount of the bid.

All submissions must be in a sealed envelope and addressed to the City Clerk, City of Peekskill, 840 Main Street, Peekskill, NY 10566 and be clearly identified with: (1) Project Name and (2) Name of Bidder and Bidder's address. Proposals shall be signed with name typed below signature. The Bidder's seal, if a corporation, shall be affixed under the Bidder's signature. Telephone, facsimile or electronic Bids will not be accepted.

If a separate set of proposal sheets or addenda are issued, they may be used with the understanding that all instructions and conditions of the contract documents are the same as if these pages were included with the bidding documents on the USB flash drive.

6. QUALIFICATIONS OF BIDDERS

The City may make such investigations as it deems necessary to determine the qualifications of the Bidder to perform the work, and the Bidder shall furnish information and data for this purpose as may be required. The City reserves the right to reject any bid if the evidence submitted by a Bidder, or the investigation of such Bidder, fails to satisfy the City, that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein within the time designated. Fraudulent statements shall cause rejection of Proposal and forfeiture of the related bid security.

7. CONDITIONS OF WORK

Each Bidder must inform himself fully of all conditions under which the work will be performed. Failure to do so will not relieve a successful Bidder of his obligation to furnish all material and labor necessary to carry out the provisions of the Contract and to complete the work for the consideration set forth in his bid. Bid shall include the complete costs of furnishing all materials, labor and equipment necessary to complete the work in accordance with the Contract Plans and Specifications and all other expenses incidental thereto. Local and State sales taxes shall not be included in the bid. Insofar as possible, the Contractor, in the carrying out of his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor, or of the proper functioning of the existing facilities of adjacent or contingent properties, and shall be maintained insofar as possible.

8. ADDENDA AND INTERPRETATION

Every request for information or interpretation of Bidding Documents or Drawings must be addressed in writing to Peter Erwin, City Planner, at perwin@cityofpeekskillny.gov and to be given any consideration must be received at least five (5) business 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 and the link to the addenda on the City of Peekskill website will be emailed to all prospective Bidders who provided a legible email address when purchasing the USB flash drive containing the Bid documents. The failure of any Bidder to receive any such Addenda will not relieve the Bidder of any obligation under his Bid as submitted. Any Addenda so issued shall become part of the Bidding Documents. **Receipt of Addenda shall be noted where indicated in "Section C".**

9. BID SECURITY

Each Bidder is required to deposit at the time of submission of his bid, a Bid Bond or certified check in an amount representing five (5%) percent of his bid payable to City of Peekskill, NY, which amount the bidder agrees is to be forfeited as liquidated damages and not as a penalty if he is awarded the contract and he shall thereafter fail to execute a Contract with the City under the conditions of this Proposal or to furnish the bonds required for the faithful performance of this contract. Bidders who submit certified checks must accompany them with a Consent of Surety from a recognized Bonding Company agreeing to supply a Performance Bond and Labor and Materials Bond if the Contract is awarded to the Bidder. **All Bid Bonds must be securely attached to the outside of the Bid Package or included in the envelope with the Bid Package.**

Such bid security will be returned to all except the three lowest formal Bidders within ten (10) days after the formal opening of bids, and the remaining bid security will be returned to the other bidders after the City and the accepted Bidder have executed a Contract. In the event no Contract has been so executed within forty five (45) calendar days after the date of the opening of bids, upon the demand of the Bidder, so long as he has not been notified of the acceptance of his bid, his bid security will be returned. The Bid Security of the successful Bidder will be retained until the signing of the Agreement and the filing and approval of the bonds and insurance certificates.

10. INSURANCE REQUIRED

The successful Bidder will be required to procure and pay for the following types of insurance, in accordance with the provisions listed in Section H.

- a. Commercial General Liability Insurance;
- b. Automotive Liability Insurance;
- c. Umbrella Liability Insurance;
- d. Workers' Compensation Insurance;
- e. Employer's Liability Insurance;

11. SECURITY FOR FAITHFUL PERFORMANCE

The Contractor shall, prior to execution of the Contract, submit two separately executed bonds: (1) a Performance Bond in amount equal to one hundred percent (100%) of the accepted bid as security for the faithful performance of the terms, covenants and conditions of the Contract; and (2) a Labor and Material Payment Bond for the full amount of the Contract price guaranteeing the full payment of all persons performing labor or furnishing material or rentals, under the contract.

The Bonds shall be prepared as specified in Section E, Labor and Material Bond Form and Section F, Performance Bond Form, and shall have as Surety thereon such Surety Company or companies as are acceptable to the City and are authorized to transact business in the State of New York.

12. GUARANTEE

The Contractor shall guarantee all materials and workmanship for one (1) year in accordance with all conditions set forth in these Specifications. The guarantee shall be provided in the form of a Maintenance Bond in the amount equal to one hundred percent (100%) of the contract. The bond shall be prepared as specified in SECTION F and shall be posted at the time of final payment.

13. FORM OF AGREEMENT

The form of agreement is included in these documents in Section D.

14. AWARD

The contract will, at the discretion of the City of Peekskill, be awarded on the basis of competitive bids to the lowest responsible eligible bidder who's Bid, after corrections and adjustments, totals the least number of dollars.

The City of Peekskill reserves the right to reject any and all Bids.

15. OWNER

The City of Peekskill (Westchester County)
840 Main Street
Peekskill, NY 10566

16. SALES TAX EXEMPTION

Under Chapter 513 of the Laws of New York 1974, 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 City of Peekskill are exempt from the payment of New York State Sales or compensatory use taxes. Therefore, the Contractor should not include any amount in his bid price to cover sales taxes for the above items.

17. REQUIRED SUBMISSIONS

Prior to award, the successful bidder will be required to meet the following requirements.

- a. The successful bidder, if his business is not registered in New York State, must provide the City with a certificate issued by the Secretary of State of New York stating that the Corporation is authorized to do business within the State and is presently in good standing. If the entity to whom the bid is awarded is not a corporation, it would be required that the entity's certificate of doing business, which should be on file in the County Clerk's Office, be provided. (This would also hold true in the case of joint ventures which would be required to disclose the underlying entities which make up the joint venture and the supplying of the requisite certificate of doing business of each such entity.)
- b. All bidders are required to submit a statement of non-investment in the Iranian energy sector in accordance with the provisions of Section 103-g of the NYS General Municipal Law.
- c. A Statement by the successful bidder that no officer, director or stockholder (if less than 10 stockholders) of the successful bidder is an officer or employee of the City or is a relative of any such City officer or employee. If such officer, director or stockholder does exist, their names and relationship should be disclosed to the City.

18. SPECIAL CONDITIONS

Refer to **Section K Appendices** for further detail regarding special conditions.

THE CITY STRONGLY ENCOURAGES BIDDERS TO ATTEND THE PRE-BID MEETING AND SITE VISIT.

NOTICE

The following pages of the Bid Proposal must be copied, filled out and submitted by the Contractor.

Section	Information	Page Number
C	Bid Submission Sheet	C1 – C3
	Acknowledgement of Receipt of Addenda	C3
	Bid Proposal Sheets	C4
	Bid Proposal Form	C5
	Statement of Non-Collusion	C6
	Resolution	C7
	Certification of Bidder Regarding Equal Employment Opportunity	C8
	Certification of Proposed Subcontractor Regarding Equal Employment Opportunity (Not Required with Bid)	C9
	Offer of Surety	C10
	Statement of Bidder's Qualifications	C11 – C13
	Bid Bond	C14 – C15
	Certificate as to Corporate Principal	C16

SECTION C

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

To: City Clerk
City of Peekskill
840 Main Street
Peekskill, NY
10566

Bid Submitted by:

(Name)

(Address)

(Telephone No.)

(Email Address)

(Federal I.D. Number)

1. I/We do hereby declare that I/We have carefully examined the Notice to Bidders, the Plans, and the Specifications relating to the above entitled matter and the work, and have also examined the site.
2. I/We do hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all work in the above titled matter in accordance with the Plans, Drawings, and Specifications relating thereto, and to furnish all labor, tools, implements, models, forms, transportation and materials necessary and proper for the purpose for the price/prices as given on the bid forms.
3. I/We do hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said work, and the contract, therefore, including all claims that may arise through damages or any other cause whatsoever.
4. I/We do hereby agree that I/We will execute a contract therefore, containing all the terms, conditions, provisions and covenants necessary to complete the work according to the Drawings and Specifications, therefore, within 10 business days after the award of the contract and if I/We fail to execute said contract within said period of time, that the City Clerk shall have the power to rescind said award and also that the said City Clerk shall retain the proceeds of the certified check, or require the payment of the sum of the bid bond.

5. I/We do also declare and agree I/We will commence the work within thirty days after the Contract execution and will complete the work fully and in every respect on or before the time specified in said Contract and do authorize the said Board, in case of failure to complete the work within such specified time, to employ such men, equipment and materials as may be necessary for the proper completion of said work and to deduct the cost thereof from the amount due under the Contract.
6. I/We agree that the City of Peekskill reserves the right to select any one, combination of, or all the Bid items in this proposal for the Contractor to complete without affecting any of the Bid prices.
7. I/We hereby affirm that by submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under the penalty of perjury, that to the best of knowledge and belief:
 - a. the prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
 - b. unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
 - c. no attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not submit a Bid for the purpose of restricting competition.
 - d. no member of the City Clerk or any officer or employee of the City of Peekskill, New York, or person whose salary is payable in whole or in part from the said Treasury is, shall be or become interested, directly, as a contracting party, partner, stockholder, surety or otherwise, in this Bid, or in the performance of the Contract, or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof.
8. I/We hereby further agree that this proposal is a firm Bid and shall remain in effect for a period of at least forty five (45) calendar days from the date of the opening of Bids, and that within said period of forty five (45) days, the City of Peekskill will accept or reject this proposal, or this period may be extended by mutual agreement.
9. I/We do hereby declare that, if this is a Corporate Bid, I have been duly authorized to act at the Signator on this proposal in behalf of this Corporation.
10. I/We hereby affirm, under penalty of perjury, the truth of all statements in this proposal.
11. I/We hereby agree that I/We accept the unit prices on the following pages, for the various items of work.
12. I/We hereby agree that I/We shall make no claim on account of any variation of the approximate estimate in the quantities of work to be done, whether the actual quantities are greater, smaller or completely deleted. A change in the quantity of any item shall not be regarded as sufficient grounds for a change in the price of that item. All quantities must be verified by each bidder and revised as required for the bid proposal submittal.
13. All work shall be completed within one hundred twenty (180) calendar days from the commencement of the work.
14. I/We do hereby declare that I/we will perform at least 51% of the work.
15. I/We acknowledge that I/we will be required to meet the following requirements:
 - a. Provide the City with a certification issued by the Secretary of State of New York stating that the Corporation is authorized to do business within New York State and is presently in good standing. If the entity for whom the bid is awarded is not a corporation, it would be required that the entity's certificate of doing business, which should be on file in the County Clerk's Office, be provided. (This would also hold true in the case of joint ventures which would be required to disclose the underlying entities which make up the joint venture and the supplying of the requisite certificate of doing business of each such entity.)
 - b. Submit a statement of non-investment in the Iranian energy sector in accordance with the provisions of Section 103-g of the NYS General Municipal Law.

- c. A Statement by the successful bidder that no officer, director or stockholder (if less than 10 stockholders) of the successful bidder is an officer or employee of the City of Peekskill or is a relative of any such City officer or employee. If such officer, director or stockholder does exist, their names and relationship should be disclosed to the City.
- d. In the event the successful bidder enters into a contract with the City in the amount of \$1,500,000 or greater, the successful bidder will be required to document compliance with Chapter 165 of the Peekskill City Code, which requires the contractor who enters into any construction contract in the amount of \$1,500,000 or more with the City, or enters into a subcontract for \$500,000 or more to have (and/or the subcontractor(s) to have) an apprenticeship agreement appropriate for the type and scope of work to be performed that has been registered with, and approved by, the Commissioner of Labor pursuant to the requirements of Article 23 of the Labor Law.
- e. Provide the City with a breakdown showing that at least 30% of the project budget and labor costs will be performed by a New York State Certified Minority-Owned Business Enterprise(s) and/or Women-Owned Business Enterprise(s). The labor should be equally distributed at a minimum of 15% each. This is a New York State Department of State grant requirement.
- f. Submit a statement of non-collusion in accordance with Section 103-d of the General Municipal Law.

(Legal Name of Bidder, Partner or Corporate Officer)

By:

Date:

(Authorized Signature)

Corporate Seal (if incorporated)

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA
(If applicable)

Bidder Acknowledges receipt of Addenda as follows:

	Signature
	Signature
	Signature

SECTION C
BID 2025-007

BID ALTERNATES (LUMP SUM)
CIVIC HUB AND CONNECTIVITY PROJECT
CITY OF PEEKSKILL, WESTCHESTER COUNTY, NEW YORK

ALTERNATE 1: RAILROAD AND HUDSON AVE (PL-1) LUMP SUM BID WRITTEN IN WORDS	ALT 1: BID AMOUNT (NUMERIC)	
	DOLLARS	CENTS

ALTERNATE 2: SOUTH WATER STREET (PL-2 TO PL-4) LUMP SUM BID WRITTEN IN WORDS	ALT 2: BID AMOUNT (NUMERIC)	
	DOLLARS	CENTS

ALTERNATE 3: CENTRAL AVE (PL-5 TO PL-8) LUMP SUM BID WRITTEN IN WORDS	ALT 3: BID AMOUNT (NUMERIC)	
	DOLLARS	CENTS

ALTERNATE 4: CIVIC HUB (PL-9, SL-1 TO SL-3, SHEETS 18-35, AND ALL OTHER SHEETS ASSOCIATED WITH THE CIVIC HUB CONSTRUCTION) LUMP SUM BID WRITTEN IN WORDS	ALT 4: BID AMOUNT (NUMERIC)	
	DOLLARS	CENTS

ALTERNATE 5: CIVIC HUB SHADE STRUCTURE FOUNDATION (S-1.0 TO S-4.0)	ALT 5: BID AMOUNT (NUMERIC)	
	DOLLARS	CENTS

CARRY FORWARD _____

BID PROPOSAL FORM

BID PRICE: CIVIC HUB AND CONNECTIVITY PROJECT

Total Base Bid (Alternates 1-4) for all labor, equipment, materials and installation:

Total \$_____

Total (Price in words) _____

(Signature of partner or corporate officer)

ATTEST:

(Corporate Seal)

(Secretary of Corporate Bidder)

Note: In case of any discrepancy between the price in words and that in figures, the price in words will be considered the price bid.

STATEMENT OF NON-COLLUSION

(To be Completed by Each Bidder)

In accordance with Section 103-d General Municipal Law, effective September 1, 1966, every bid or proposal hereafter made to a political subdivision of the State or any public department, agency, or official thereof or to a fire district or any agency or official thereof for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed to by the bidder and affirmed by such bidder as true under the penalties of perjury; [non-collusive bidding certification].

- a. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:
 - 1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or any competitor.
 - 2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor.
 - 3) No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.
- b. The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder, as well as the person signing in its behalf.
- c. That attached hereto (if a corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signator of this bid or proposal in behalf of the corporate bidder.

Date

Signature of Bidder

Name and Title of Person Signing

Sworn to before me this
____ day of _____, 20____

RESOLUTION

Resolved that _____
(Name of Corporation)

be authorized to sign and submit the bid or proposal of this corporation for the following project

(Describe Project)

and to include in such bid or proposal the certificate as to non-collusion required by section one-hundred-three d (103-d) of the General Municipal Law as the act and deed of such corporation, and for any inaccuracies or mis-statements in such certificate this corporate bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the resolution adopted by

_____ corporation at a meeting of the Board

of Directors held on the _____ day of _____ 20__.

(SEAL OF THE CORPORATION)

(Secretary)

Laws of New York, 1965
Ch. 751, Sec. 103-d, as amended
effective September 1, 1965.

**CERTIFICATION OF BIDDER REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instruction, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

BIDDER NAME: _____

ADDRESS AND ZIP CODE: _____

1. Bidder has participated in a previous contract or subcontract to the Equal Opportunity Clause.
YES _____ **NO** _____ (if answer is yes, identify the most recent contract).
2. Compliance reports were required to be filed in connection with such contract or subcontract.
YES _____ **NO** _____ (if answer is yes, identify the most recent contract).
3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
YES _____ **NO** _____
4. If answer to item 3 is "NO", please explain in detail on reverse side of this certification.

CERTIFICATION - THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

(Name and Title of Signer)

Signature

Date

(Not Required with Bid)

**CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

NAME OF PRIME CONTRACTOR

PROJECT NO.

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instruction, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

SUBCONTRACTOR'S CERTIFICATION

BIDDER NAME:

ADDRESS AND ZIP CODE:

1. Bidder has participated in a previous contract or subcontract to the Equal Opportunity Clause.
YES _____ **NO** _____ (if answer is yes, identify the most recent contract).
2. Compliance reports were required to be filed in connection with such contract or subcontract.
YES _____ **NO** _____ (if answer is yes, identify the most recent contract).
3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
YES _____ **NO** _____
4. If answer to item 3 is "NO", please explain in detail on reverse side of this certification.

CERTIFICATION - THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

(Name and Title of Signer)

Signature

Date

OFFER OF SURETY

(To be Completed by Each Bidder)

In the event the above Proposal is accepted and the undersigned is awarded the Contract for the work, the undersigned offers as surety for faithful performance, bond and/or bonds to protect labor and material men, the following surety:

SURETY COMPANY

Signed _____
(Bidder)

CERTIFICATE OF SURETY to be signed by a duly authorized official, agent or attorney of the Surety Company.

In the event that the above Proposal is accepted and the contract for the work is awarded to _____,
(Bidder's Name)
the _____ will execute the Surety Bonds as herein-before provided.
(Surety Company)

Signed: _____
Authorized Official, Agent, or Attorney

Date: _____

**IMPORTANT: THIS PAGE MUST BE FILLED OUT WHEN CERTIFIED CHECK IS SUBMITTED
IN LIEU OF BID BOND, OR BID MAY BE REJECTED.**

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder with this bid)

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Questions may be answered on separate sheets, attached to this bid.

1. Name of Bidder
2. Permanent main office address
3. Date organized
4. If a corporation, place of incorporation
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. Current contracts on hand: Name and location of each project, dollar amount awarded for each, start date, and anticipated date of completion.
7. General character of work performed by your company
8. Have you ever failed to complete any work awarded to you?
9. Have you ever defaulted or been defaulted on a contract? If yes, provide details such as, but not limited to, a description of the project, entity contracting for work, and reasons for default.
10. Provide a list of all federal, state and local violations or enforcement actions related to all commercial activity, the name of the project, total project cost, and contact person. The City reserves the right to ask for additional information based upon this response.
11. Provide a list of the names and locations of all projects (with aggregate costs at or exceeding \$1.5 million) that were completed by your company within five years prior to the date of this submission, a brief description, your fee, the month and year completed, and a client contact name and telephone number.
12. List your major equipment available for this Contract.
13. List your experience in work similar to this project.
14. Do you have an OSHA Awareness certification?
15. Provide a major milestones schedule.
16. List the background and experience of the principal members of your organization, including officers.
17. List the work to be performed by Subcontracts and summarize the dollar value of each Subcontract.
18. List the subcontractors, if applicable, who will be used as a qualified M/WBE firm using the tables below.

<u>Subcontractor Name</u>		
Type of M/WBE Certification of Subcontractor	<input type="checkbox"/> M/BE Certification	<input type="checkbox"/> W/BE Certification
Total Budget Amount	\$	
Percentage of Budget to M/WBE Certified firm	<input type="checkbox"/> M/BE \$ _____	<input type="checkbox"/> W/BE \$ _____

<u>Subcontractor Name</u>		
Type of M/WBE Certification of Subcontractor	<input type="checkbox"/> M/BE Certification	<input type="checkbox"/> W/BE Certification
Total Budget Amount	\$	
Percentage of Budget to M/WBE Certified firm	<input type="checkbox"/> M/BE \$ _____	<input type="checkbox"/> W/BE \$ _____

<u>Subcontractor Name</u>		
Type of M/WBE Certification of Subcontractor	<input type="checkbox"/> M/BE Certification	<input type="checkbox"/> W/BE Certification
Total Budget Amount	\$	
Percentage of Budget to M/WBE Certified firm	<input type="checkbox"/> M/BE \$ _____	<input type="checkbox"/> W/BE \$ _____

19. Credit available (\$)

20. Provide Bank Reference

21. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Owner?

22. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated: This _____ day of _____, 20____.

(Name of Bidder)

By _____

Title _____

State of _____)

)ss.

City of _____)

_____ being duly sworn deposes

and says that he is _____ of _____

(Name of Organization)

and that the answers to the foregoing questions and all statement therein contained are true and correct.

Subscribed and worn to before me
this _____ day of _____, 20____.

(Notary Public)

My commission expires _____, 20____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

_____ as Principal, and

_____ as Surety

are held and firmly bound unto **The City of Peekskill, NY**, hereinafter called the "**OWNER**", in the penal sum of

_____ Dollars, (\$ _____) lawful money of the United States, for payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the Accompanying Bid, dated:

_____, 20____, for **THE CITY OF PEEKSKILL, NEW YORK,
DOWNTOWN CIVIC HUB AND PEDESTRIAN AND CYCLIST
CONNECTIVITY PROJECT**

NOW THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or within any extended time period agreed to by the Principal, Surety and Owner, or, if no period is specified, within forty-five (45) days after the said opening, and shall within the period specified therefor, or if no period is specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Owner in accordance with the Bid as accepted, and give a bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract; then the above obligation shall be null and void and of not effect, otherwise to remain in full force or virtue.

Failure to comply with the aforementioned condition shall result in the forfeiture of this Bid Bond as liquidated damages.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____ of, 20____, the name and corporate seal of each corporate party being hereto affixed and these presents signed by its undersigned representative, pursuant to authority of its governing body.

No extension of time or other modification of this Bid Bond shall be valid unless agreed to on writing by the parties to this Bond.

In presence of:

(Individual Principal) (SEAL)

(Business Address)

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Attest:

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Attest:

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Countersigned

By: _____

*Attorney-in-Fact, State of _____

*Power-of-Attorney for person signing for Surety Company must be attached to Bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the
_____ of the Corporation named as Principal in the within bond; that
_____, who signed the said bond on behalf of the Principal was then
_____ of said corporation; that I know his signature, and his signature
thereto is genuine; and that said bond was duly signed, sealed, and attested to for and in behalf of said corporation by
authority of this governing body.

(Corporate Seal)

Title _____

SECTION D

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

AGREEMENT

D. Form of Contract

This agreement, made this _____ day of _____, 20__ by and between the City of Peekskill, Westchester County, New York, acting by and through the Common Council of the City of Peekskill under the laws of the State of New York, (hereinafter called the "Owner", "City" or "City of Peekskill") and _____ hereinafter called the "Contractor".

WITNESSETH:

WHEREAS, the City desires to engage the Contractor to render its services for CIVIC HUB AND CONNECTIVITY PROJECT, CITY OF PEEKSKILL, BID NO. 2025-007.

1. Scope of Work - The Contractor shall furnish all materials, equipment and labor necessary for the construction as shown on the Bid Drawings and/or described in the specifications entitled

Civic Hub and Connectivity Project
NYS DOS #C1001879
City of Peekskill, Westchester County, New York
2. Time of Completion and Liquidated Damages - The time of completion of the Bid will be 180 calendar days from the time of notice to proceed to substantial completion. All work shall be completed within 180 calendar days from the time of Notice to proceed. The contractor agrees to pay as liquidated damages the sum of five-hundred dollars (\$500.00), for each consecutive calendar day thereafter. General Conditions of the Contract, See Section 112.
3. Contract Sum - The Owner shall pay the Contractor for work done and labor, materials and equipment furnished, the prices set forth in the Proposal attached herewith. Extra work shall be paid for in accordance with and as stipulated in **Bid No. 2025-007**
4. Payments – As work under the contract is performed, the Contractor may submit a partial payment request to the City of Peekskill Department of Planning and Development for review. After approved by the City and the Project Engineer, a partial payment shall be made to the Contractor in an amount representing the work completed under the contract less retainage.
5. Contract Documents - The Advertisement and Notice To Bid (Section A), Instructions to Bidders (Section B), Bid Proposal Forms (Section C), Agreement (Section D), Labor and Material Payment Bond (Section E), Form of Maintenance Bond (Section F), General Release (Section G), Insurance (Section H), General Conditions (Section J), and Special Conditions (Section K) also including the Technical Specifications, Contract Drawings, Addenda, Appendices, Change Orders, and all Forms, Agreements and Documents included on the USB flash drive used by the Bidder for the Bid or Proposal, except as therein expressly excluded, from the Bid Documents, are deemed to be part of this Contract and binding upon the Contractor in all particulars.
6. Employment Practices: The City is an equal opportunity employer. The Contractor shall comply with all State, Local and Federal hiring practices with respects to the percent of minority engaged at the work site. **The Contractor is urged to hire local residents.**

IN WITNESS WHEREOF the respective parties hereto have hereunto set their hands and seal the day and year first written above.

CITY OF PEEKSKILL

By _____
City Manager

SEAL

Signed, Sealed and Delivered in the presence of:

CONTRACTOR

By _____

SEAL

(Address)

Signed, Sealed and Delivered in the presence of:

By _____

Approved by the Attorney for the City of Peekskill

By _____

STATE OF NEW YORK)
) SS.:
COUNTY OF WESTCHESTER)

On the _____ day of _____, 20____, before me
personally came _____ to me known, who, being by me
duly sworn, did depose and say that he resides at _____
_____ ; that he is the _____

of the City of PEEKSKILL, New York 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
affixed by order of the Board of Directors of the said corporation; and that he signed his name thereto by like order.

NOTARY PUBLIC

STATE OF NEW YORK)
) SS.:
COUNTY OF WESTCHESTER)

On the _____ day of _____, 20____, before me
personally came _____ to me known, who, being by me
duly sworn, did depose and say that he resides at _____
_____ ; that he is the _____

the corporation described in and which executed the foregoing instrument that he knows the seal of said corporation;
that the seal affixed by order of the Board of Directors of said corporation; and that he signed his name thereto by like
order.

NOTARY PUBLIC

SECTION E

LABOR AND MATERIAL PAYMENT BOND

**CIVIC HUB AND CONNECTIVITY PROJECT
CITY OF PEEKSKILL**

BID NO. 2025-007

BOND NO. _____

NOTE: This Bond is issued simultaneously
with another Bond in favor of
the Owner conditioned for the full
and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS:

That _____ as Principal (hereinafter called Principal)

and _____ as Surety (hereinafter called Surety)

are held and firmly bound unto the City of Peekskill, NY as Obligee (hereinafter called Owner) for the
use and benefit of claimants as hereinbelow defined; in the amount of

_____ Dollars (\$_____), for the
payment whereof Principal and Surety bind themselves, their heirs, executors, administrators,
successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement, dated _____,
entered into a Contract with the Owner for _____

_____ which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if the said Principal shall
promptly pay for all materials furnished and labor supplied or performed in the prosecution of the
work included in and under the aforesaid Contract, whether or not the material or labor enters into and
becomes a component part of the real asset, then this obligation shall be null and void; otherwise it
shall remain and be in full force and effect.

PROVIDED, that any alterations which may be made in the terms of the Contract or in the
work to be done under it, or the giving by the Obligee of any extension of time for the
performance of the Contract, or any other forbearance on the part of either the Obligee or the
principal to the other shall not in any way release the Principal and the Surety of either or any of
them, their heirs, executors, administrators, successors or assigns from their liability hereunder,
notice to the Surety of any such alterations, extension or forbearance being hereby waived.

Any party, whether a subcontractor or otherwise, who furnished materials or supplies or performs labor or services in the prosecution of the work under said Contract, and who is not paid therefor, may bring a suit on this bond in the name of the person suing, prosecute the same to a final judgment, and have execution thereon for such sum as may be justly due.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and seal of each corporate party being hereto affixed and these presents signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

(Individual Principal) (SEAL)

(Business Address)

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Attest:

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Countersigned

By: _____

*Attorney-in-Fact, State of _____

*Power-of-Attorney for person signing for Surety Company must be attached to Bond.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____ as Principal (hereinafter called Principal)

and _____ as Surety (hereinafter called Surety)

are held and firmly bound unto the City of Peekskill, NY as Obligee (hereinafter called Owner) for the use and benefit of claimants as hereinbelow defined; in the amount of

_____ Dollars (\$_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement, dated _____, entered into a Contract with the Owner for _____

_____ which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if Contractor shall promptly and faithfully perform said Contract, including such remedial work as may be required under the guaranty during the period of guaranty and shall certify in writing that all wages paid under said Contract to any mechanic, laborer or workman were equal to the rates or wages customary or then prevailing for the same trade or occupation in the Project area, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default or shall promptly:

- 1) Complete the Contract in accordance with its terms and conditions, by another Contractor acceptable to the Owner, said other Contractor to act as an agent for the Surety, or
- 2) Obtain a Bid or Bids for submission to the Owner for completing the Contract in accordance with its terms and conditions, and upon determination by the Owner and Surety of the lowest responsible Bidder, arrange for a Contract between such Bidder and Owner, and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price, but not exceeding, including, other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The terms "balance of the contract price," as used in this paragraph, shall mean the total amount payable by the Owner to the Contractor under the Contract and any amendments thereto, less the amount properly paid by the Owner to the Contractor.

Unless otherwise required by law, any suit under this Bond must be instituted before the expiration of one (1) year from the date on which the guaranty period under the Contract expires.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators and successors of Owner.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and seal of each corporate party being hereto affixed and these presents signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

(Individual Principal) (SEAL)

(Business Address)

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Attest:

(Corporate Principal) (SEAL)

(Business Address)

By: _____

Countersigned

By: _____

*Attorney-in-Fact, State of _____

*Power-of-Attorney for person signing for Surety Company must be attached to Bond.

SECTION F

**CIVIC HUB AND CONNECTIVITY PROJECT
CITY OF PEEKSKILL**

BID NO. 2025-007

FORM OF MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That We, _____, as Principal (hereinafter called Principal)

and _____, a _____ Corporation
with

an office and place of business for the State of New York at _____, New York
(hereinafter called Surety), are held and firmly bound unto the City of Peekskill, NY as Obligee

(hereinafter called Obligee) in the amount of _____ Dollars
(\$_____) lawful money of the United States of America, for the payment
whereof Principal and Surety bind themselves, their successors and assigns, jointly and
severally, firmly by these presents.

Signed, sealed, and dated this _____ day of _____, 20__.

WHEREAS, the Principal heretofore entered into a written contract with the Obligee for
the construction of Improvements to Civic Hub and Connectivity Project.

WHEREAS, the Contract provides that the Principal shall guarantee all materials and
workmanship for one (1) year in accordance with all conditions set forth in the Bid Documents.

NOW, THEREFORE, the condition of this obligation is such that, if the said Principal
shall indemnify the Obligee against loss by reason of his failure to make good at his own
expense any defects or deficiencies in materials or workmanship which may appear in the work
under said contract with the period of one (1) year(s) from the date of acceptance of the work,
then this obligation shall be void, otherwise to remain in full force and effect.

Principal

By: _____

By: _____

SECTION G

**CIVIC HUB AND CONNECTIVITY PROJECT
CITY OF PEEKSKILL**

BID NO. 2025-007

GENERAL RELEASE

(TO BE SUBMITTED WITH REQUISITION FOR FINAL PAYMENT)

KNOW ALL MEN BY THESE PRESENTS, that _____
(Contractor)

for and in consideration of the sum of _____ lawful money of
the United States of America, to it in hand paid by _____
(Owner/Contracting Agency)

have remised, released, quit-claimed, and forever discharged, and by these presents do for its
successors and assigns remise, release, quit-claim, and forever discharge the said

_____, and its successors and assigns and administrators,
(Owner/Contracting Agency)

of and from and all manner of action and actions, caused and causes of action, suits, debts, dues,
sum and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts,
controversies, agreements, promises, variances, trespasses, damages, judgments, patents,
extents, executions, claims and demands whatsoever in law and unity which against the said

_____ now have or which heirs, executors, or
(Owner/Contracting Agency)

administrator hereafter can, shall, or may have, for upon or by reason of any matter, cause or
thing whatsoever, from the beginning of the world to the day of the date of these presents rising
out of the construction, in accordance with contract entered into between parties hereto, dated

_____, 20____, any admittance or supplements thereto.

IN WITNESS WHEREOF, the undersigned corporation has caused this agreement to be signed

by its _____ and its corporate seal to be hereto affixed and duly

attested by its _____ this _____ day of 20__.

ATTEST:

PRINCIPAL:

SECTION H

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

INSURANCE

1. Insurance required to be provided by contractor and subcontractor shall comply with Section H naming the City of Peekskill ("City" or "Owner") as well as the New York State Department of State as additional insured ("Others").
2. The Contractor, prior to signing of the contract, shall provide to the City and Others, identified in Section H, and maintain throughout the life of the contract, at his own cost and expense, proof of the following insurance by insurance companies licensed in the State of New York carrying a Best's financial rating of A or better. The Contractor shall also require all sub-contractors, agents and vendors to provide and maintain the insurance set forth within Section H.
 - a. Workmen's Compensation. The Contractor shall take out and maintain during the life of this contract the statutory Workmen's Compensation, Disability, and Employer's Liability insurance for all of his employees to be engaged in work on the project under this Contract, and, in case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Workmen's Compensation, Disability, and Employer's Liability Insurance for all of the latter's employees to be engaged in such work. Certificate form C-105.2 or State Fund Insurance Company form U-26.3 is required for proof of compliance with the New York State Workers' Compensation Law. State Workers' Compensation Board form DB-120.1 is required for proof of compliance with the New York State Disability Benefits Law. Location of operation shall be "All locations in Westchester County, New York."

NOTE: Other generally recognized forms/certificates may be substituted for the above at the sole discretion of the City and others.

(Where an applicant claims to not be required to carry either a Workers' Compensation Policy or Disability Benefits' Policy, or both, a temporary permit may be issued if the employer completes form WC/DB-100 or, if applicable, form WC/DB-101. PLEASE NOTE THESE FORMS REPLACE FORM C-105.21. THE APPROPRIATE REPLACEMENT FORM MUST BE NOTARIZED PRIOR TO BEING SUBMITTED TO THE WORKERS' COMPENSATION BOARD, INFORMATION UNIT FOR INVESTIGATION AND REPORT).

If the employer is self-insured for Worker's Compensation, he should present a certificate from the New York State Worker's Compensation Board evidencing that fact.

- b. Employer's Liability with minimum limit of \$500,000
- c. Commercial General Liability Insurance with a minimum limit of liability per occurrence of \$1,000,000 per occurrence and \$2,000,000 in the aggregate for bodily injury and for property damage naming the City and others as additional insured. In addition, this insurance shall include the following coverages:
 - i. Premises - Operations.
 - ii. Broad Form Contractual.
 - iii. Independent Contractor and Sub-Contractor.
 - iv. Products and Completed Operations.

There shall also be excess/ umbrella coverage in the amount of \$3,000,000 which shall name the City and others, its elected officials, boards, commissions, engineers and employees as unrestricted additional insureds on the excess/ umbrella policy. The General Liability and Excess/umbrella policy shall be the primary coverage over any coverage the City and others obtain for themselves. All Contracts involving the use of explosives and demolition shall provide the above coverage with elimination of the XCU exclusion from the policy, or proof that XCU is covered.

- d. Automobile Liability Insurance with a minimum combined single limit of liability of \$1,000,000 for bodily injury and property damage unless otherwise indicated in the contract specifications. The City and others shall be named as unrestricted additional insured on all auto policies. This insurance shall be the primary coverage and non-contributory. This insurance shall include for bodily injury and property damage the following coverages:
 - i. Owned automobiles.
 - ii. Hired automobiles.
 - iii. Non-owned automobiles.

There shall also be excess/ umbrella coverage in the amount of \$3,000,000 which shall name the City and others, its elected officials, boards, commissions, engineers and employees as unrestricted additional insureds on the excess/ umbrella policy. The Excess/umbrella policy shall be the primary coverage over any coverage the City and others obtain for themselves.

- e. Owners and Contractors Protective Liability Policy - \$1,000,000 single limit endorsed that City of Peekskill and others are not responsible for premium (if applicable).

- f. Property Damage Insurance, subject to the limits set forth above, shall include the legal liability of its Contractor and Subcontractors for loss or damage to property of the City of Peekskill and others.
- g. Unemployment Insurance - The Contractor for the agreed consideration, promises and agrees to pay the contributions measured by the wages of his employees required by State Unemployment Insurance Laws and all amendments thereto, and to accept the account of any contribution measured by the wages as aforesaid of employees of the Contractors and his subcontractors assessed against the Owner under the authority of said law.
- h. Errors and Omissions Liability Insurance Policy - \$2,000,000 per each claim and in policy aggregate limit of liability providing coverages for liabilities arising out of acts and/or errors and omissions of the Contractor and all Subcontractors (if applicable).

In case of cancellation or material change in any and all of the policies, thirty (30) days notice shall be given to City Clerk, 840 Main Street, Peekskill, NY 10566 by registered mail, return receipt requested. All notices shall name the Contractor and/ or Subcontractor and identify the Agreement.

- 3. All policies of the Contractor and subcontractor(s) shall be endorsed to contain the following clauses:
 - a. Insurers shall have no right to recovery or subrogation against the City and others (including its employees and other agents and agencies), it being the intention of the parties that the insurance policies so affected shall protect all parties and be primary coverage for any and all losses covered by the above-described insurance.
 - b. The clause "other insurance provisions" in a policy in which the City or others are named as insured, shall not apply to the City or others.
 - c. The insurance companies issuing the policy or policies shall have no recourse against the City or others (including its agents and agencies as aforesaid) for payment of any premiums or for assessments under any form of policy.
 - d. Any and all deductibles in the above described insurance policies shall be assumed by and be for the account of, and at the sole risk of, the Contractor.
- 4. All property losses shall be made payable to and adjusted with the City of Peekskill or others.
- 5. All policies of insurance shall be acceptable to and approved by the City's Corporation Counsel prior to the inception of any work.

6. Other coverages may be required by the City of Peekskill or others based on specific needs.
7. If, at any time, any of the said policies shall be or become unsatisfactory to the City of Peekskill or others, as to form or substance, or if a company issuing such a policy shall be or become unsatisfactory to the City or others, the Contractor shall promptly obtain a new policy, submit the same to the City for approval and submit a certificate thereof as hereinafter provided. Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, this Contract, at the election of the City of Peekskill or others, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to take out and/or to maintain or the taking out and/or maintenance of any required insurance, shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with or otherwise limit the contractual obligations of the Contractor concerning indemnification. All property losses shall be made payable to and adjusted with the City or others.
8. In the event that claims, for which the City and others may be liable, in excess of the insured amounts provided herein are filed by reason of any operations under the Agreement, the amount of excess of such claims or any portion thereof, may be withheld from payment due or to become due the Contractor until such time as the Contractor shall furnish such additional security covering such claims in form satisfactory to the City or others.
9. The Contractor shall notify in writing the commercial general liability insurance carrier, and, where applicable, the worker's compensation and/or other insurance carrier, of any such loss, damage, injury, or accident, and any claim or suit arising therefrom, immediately, but not later than 20 days after such event. The Contractor's notice to the commercial general liability insurance carrier must expressly specify that "this notice is being given on behalf of the City of Peekskill and others as Additional Insured as well as [the Contractor] as Named Insured." The Contractor's notice to the insurance carrier shall contain the following information: the name of the Contractor, the number of the Contract, the date of the occurrence, the location (including street address) of the occurrence, and the identity of the persons or things injured, damaged or lost.
10. At the time notice is provided to the insurance carrier(s), the Contractor shall provide copies of such notice to the City Engineer and the Corporation Counsel of the City of Peekskill at 840 Main Street, Peekskill, NY 10566.
11. If the Contractor fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the Contractor shall indemnify the City and others for all losses, judgments, settlements and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the City and others.
12. To the fullest extent permitted by law, the Contractor agrees to protect, defend, indemnify and hold the City of Peekskill and others, and their elected officials, officers,

employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance by the Contractor and any and all Subcontractors hereof. Without limiting the generality of the foregoing, any and all claims, etc., relating to personal injury, death, damage to property, defects in materials and workmanship, actual or alleged infringement of any patent, trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or any actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false, or fraudulent. In any case in which such indemnification would violate Section 5-322.1 of the New York General Obligations Law, or any other applicable legal prohibition, the foregoing provisions concerning indemnification shall not be construed to indemnify the City of Peekskill and others for damage arising out of bodily injury to persons or damage to property caused by or resulting from the sole negligence of the City or others and their employees

SECTION J

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL BID NO. 2025-007

GENERAL CONDITIONS

	<u>Page</u>
101. Definitions	J-3
102. Superintendence by Contractor	J-4
103. Subcontracts	J-4
104. Other Contracts	J-4
105. Fitting and Coordination of the Work	J-5
106. Mutual Responsibility of Contractor	J-5
107. Progress Schedule.	J-5
108. Payments to Contractor	J-6
109. Changes in the Work	J-7
110. Changes in Subsurface Conditions.	J-9
111. Claims for Extra Cost	J-9
111-A. Extension of Time for Performance	J-10
112. Termination; Delays and Extensions; and Liquidated Damages	J-12
113. Assignment or Novation	J-14
114. Engineer's Authority.	J-14
115. Technical Specifications and Contract Drawings.	J-14
116. Shop Drawings	J-15
117. Requests for Supplementary Information	J-16
118. Materials and Workmanship	J-16
119. Samples, Certificates and Tests	J-17
120. Permits and Codes	J-19
121. Care of Work	J-19
122. Accident Prevention	J-20
123. Sanitary Facilities	J-21
124. Use of Premises	J-21
125. Removal of Debris, Cleaning, Etc.	J-21
126. Inspection/Acceptance of the Work	J-21
127. Review by Client	J-22
128. Final Inspection	J-22
129. Deductions for Uncorrected Work	J-23
130. Insurance	J-23
131. Patents	J-25
132. Warranty of Title	J-26
133. General Guarantee	J-26
134. Arbitration and Litigation	J-26
135. Risk of Loss.	J-26
136. Required Provisions Deemed Inserted	J-26
137. Corrections	J-27
138. Safety Provisions.	J-27
139. Time of Work.	J-27
140. Obstructions Encountered.	J-28
141. Existing Utilities, Structures and Fixtures	J-28
142. Control of Existing Flows	J-29
143. Sewage, Surface, Groundwater and Flood Flows	J-29
144. Connecting to Existing Work	J-29
145. Existing Improvements.	J-29
146. Access to Site	J-30
147. Access to Adjacent Properties	J-30
148. Use of Roadways	J-31
149. Snow Removal.	J-31
150. Weather Conditions/Work in Freezing Weather.	J-31
151. Intoxicating Liquors	J-31

152. Blasting	J-31
153. Indemnity Clause	J-33
154. Disputes	J-33

GENERAL CONDITIONS

Note: The headings of the articles herein are intended for the convenience of reference only and shall not be considered as having any bearing on their interpretation.

GENERAL CONDITIONS

PART I

101. DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the Client and the Contractor.
- b. The term "Local Public Agency" or "Agency" or "Client" or "Owner" means City of Peekskill, New York which, is authorized to undertake this Contract.
- c. The term "Contractor" means the person, firm or corporation entering into the Contract with the Client to perform and complete the work involved in this Contract.
- d. The term "Subcontractor" means a person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with the Contractor.
- e. The term "Project Area" means the site of the City of Peekskill, within which are the specified contract limits of the work to be performed in whole or in part under this Contract.
- f. The term "Engineer" or "Landscape Architect" means Design Staff and Engineer in charge, serving the Client with engineering services, his successor, or any other person or persons, employed by said Client for the purpose of administering the work embraced in this Contract, the said Engineer acting directly or indirectly through any Assistant.
- g. The term "Local Government" or "Municipality" or "City" means the City of Peekskill within which the Project Area is situated.
- h. The term "Contract Documents" means and shall include the Documents listed in Article 3 of the Agreement.
- i. The term "Drawings" or "Contract Drawings" means the drawings listed in the Schedule of Drawings.
- j. The term "Technical Specifications" or "Supplemental Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates, the quality of materials to be furnished, the quality of workmanship required, measurement and payment.
- k. The term "Addendum" or "Addenda" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the Client to prospective Bidders prior to the time of receiving Bids.

102. SUPERINTENDENCE BY CONTRACTOR

a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Client and the Client's Engineer, for the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work. Should, in the opinion of the Engineer, any language barrier exist between the superintendent and the Engineer, the Contractor will employ a qualified interpreter.

b. Unless otherwise specified in 'Section K Special Conditions,' the Contractor shall lay out his own work including all surveys required and he shall be responsible for all work executed by him under the Contract. He shall verify all figures, elevations, etc. before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

a. The Contractor shall not execute an agreement with any Subcontractor or permit any Subcontractor to perform any work included in this Contract until he has submitted a Non-Collusive Affidavit from the Subcontractor on the form shown in the "Invitation for Bids, Instructions and Forms" and has received written approval of such Subcontractor from the Owner. Unless specifically permitted otherwise, the Contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence work amounting to not less than 50 percent of the original total Contract value for the project, exclusive of specialty items not commonly found in contracts for similar work or which require highly specialized knowledge, craftsmanship or equipment, not ordinarily available in the organization of contractors performing work of the character embraced in this Contract. Specialty items, if any, shall be specified elsewhere.

b. The Contractor shall not execute an agreement with any Subcontractor or permit any Subcontractor to perform any work included in this Contract until he has submitted a "Certification of Proposed Subcontractor Regarding Equal Employment Opportunity" in the form shown in the "Invitation for Bids, Instructions and Forms" [Section C-9-10].

c. No proposed Subcontractor shall be disapproved by the Client except for cause.

d. The Contractor shall be as fully responsible to the Client for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

e. The Contractor shall cause appropriate provision to be inserted in all Subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the Contract for the work embraced in this Contract.

f. Nothing contained in the Contract shall create any contractual relation between any Subcontractor and the Client.

104. OTHER CONTRACTS

The Client reserves the right to let other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and/or coordinate his work with theirs.

The Client may award, or may have awarded Contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Client. The Contractor shall not permit or commit any act which will interfere with the performance of work by another Contractor as scheduled.

Wherever work being done by other Contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Client, to secure the completion of the various portions of the work in general harmony.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, Subcontractors or materialmen engaged upon this Contract. He shall be prepared to guarantee to each of his Subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work. The Contractor shall, at his own expense, effect all cutting, fitting, or patching of his work required to make the same conform to the Contract Drawings and Specifications and, except with the consent of the Client, not to cut or otherwise alter the work of any other Contractor.

106. MUTUAL RESPONSIBILITY OF CONTRACTOR

If, through acts or neglect on the part of the Contractor, any other Contractor or Subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or Subcontractor by agreement or arbitration, if such other Contractor or Subcontractor will so settle. If such other Contractor or Subcontractor shall assert any claim against the Client on account of any damage alleged to have been so sustained, the Client will notify the Contractor, who shall defend at his own expense any suit based upon such claim, and, in any judgment or claims against the Client shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and will in all other respects, including, but not limited to attorney's fees and court costs, hold harmless the Client.

107. PROGRESS SCHEDULE

The Contractor shall submit within five (5) calendar days after execution of the Agreement, a carefully prepared realistic Progress Schedule showing the proposed dates of starting and completing each and every item of work on each and every section of work in accordance with these Specifications and the SPECIAL CONDITIONS as noted in 'Section K.' The Progress Schedule shall be shown in calendar days (30 days, 60 days, 90 days, etc.) as a timetable for each item of work, including but not limited to paving, lighting and utilities, grading, trail amenities, signage installed, landscaping and stabilization, completion of mobilization (bonded, insurance, etc.). Other requirements include:

- 1) The project name, number, (if any) and geographic location.
- 2) The contract time, contract beginning date, ending date and periods of shutdown, if any.
- 3) A listing of all items of work with the estimated contract cost, percentage of the total contract and periods of activity noted for each segment of the project.
- 4) The total estimated contract cost for each segment of the work and its percentage of the total contract.
- 5) The schedule will generally be set up along the following guidelines unless otherwise stated in the SPECIAL CONDITIONS under "PROGRESS SCHEDULE":
 - a. From intersection to intersection along a street or from station to station along the project. (This will apply in street construction, utility construction or other LINEAR projects.)
 - b. By floor and/or room and trade. (This will generally apply in structures.)
 - c. For large area projects such as site work by SUB-AREA.

The initial requisition will not be approved for payment until said schedule is submitted. Said schedule will be revised or updated monthly unless otherwise permitted by the Engineer. No monthly payments will be approved without a revised/updated monthly Progress Schedule approved by the Engineer.

The Progress Schedule shall show the plan of construction and the proposed method of carrying out this work including a full statement of the equipment to be used. If the SPECIAL CONDITIONS include a "SEQUENCE OF OPERATIONS" and/or "WORK BY OTHERS", all operations referred to therein, together with any and all other operations critical to the timing of this project, shall be included in, proper sequence in the Progress Schedule.

108. PAYMENTS TO CONTRACTOR

1. Partial Payments

- a. The Contractor shall prepare a pencil copy of the requisition and allow 10 days for review by the Engineer and City. The final requisition for partial payment shall be submitted, with the required number of copies, to the City and Engineer for review and final approval. The amount of the payment due to the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting five percent (5%) of the total amount, to be retained until final payment. The total value of work completed to date shall be based on the in-field measurements & estimated quantities of work completed and on the unit prices contained in the Agreement. The value of materials properly stored on the site shall be based on the estimated quantities of such materials and the invoice prices as evidenced by a supplier's receipted invoice. Copies of all invoices shall be available for inspection by the City or Engineer. All payment requests shall be in AIA format Documents G-702 and G-703 including certified payrolls.
- b. Monthly or partial payments made by the Client to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. All material and completed work covered by such monthly or partial payments shall remain the property of the Contractor and he shall be responsible for the care and protection of all materials and work upon which payments have been made. Such payments shall not constitute a waiver of the right of the Client to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Client in all details.

2. Final Payment

- a. After final inspection and acceptance by the City and approval of Engineer of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the Client with a release in satisfactory form of all claims against the Client arising under and by virtue of his Contract, other than such claims, if any, as may be specifically accepted by the Contractor from the operation of the release as provided elsewhere herein.
- b. The City, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Client deems the same necessary in order to protect its interest. The Client, however, may if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impair the obligations of any surety or sureties furnished under this Contract.
- c. Withholding of any amount due the Client under the section entitled "LIQUIDATED DAMAGES" under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

3. Withholding Payments

- a. The Client may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Client and if it so elects may also withhold any amounts due from the Contractor to any Subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Client and will not require the Client to determine or adjust any claims or disputes between the Contractor and his Subcontractors or material dealers, or to withhold any monies for their protection unless the Client elects to do so. The failure or refusal of the Client to withhold any monies from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

4. Payments Subject to Submission of Certificates

- b. Each payment to the Contractor by the Client shall be made subject to submission by the Contractor of all written certifications required of him and his Subcontractors by the Section entitled SAMPLES, CERTIFICATES AND TESTS under the GENERAL CONDITIONS.

109. CHANGES IN THE WORK

a. The Client may make changes in the work required to be performed by the Contractor under the Contract by making additions thereto, or by omitting work therefrom, without invalidating the Contract.

b. Except for the purpose of affording protection against any emergency endangering life or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor; services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Client authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract price will be valid unless so ordered.

c. The Contractor agrees to perform any of the aforementioned changed work, along with all other required work found under the Contract, without delay and in accordance with good construction practices.

d. These changes outlined above may be made without relieving or releasing the Contractor from any of his obligations under the Contract provisions, and without affecting the validity of the guarantee bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is provided otherwise.

e. All adjustments to the Contract payment provisions will be made in accordance with the following paragraphs.

f. If applicable unit prices are contained in the Agreement (established as a result of either a Unit Price Bid or a Supplemental Schedule of Unit Prices), the Owner may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract. However, if the quantities are more than 125% of the estimated, then the following paragraph shall apply.

g. If applicable unit prices are not contained in the Agreement or the actual quantities exceed 125% of the estimated, the Client shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:

1. If the change in the work involves additional work, the procedure shall be as follows:
 - a.) If the proposal is acceptable, the Client will prepare the Change Order in accordance therewith for acceptance by the Contractor; or

b.) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Client may order the Contractor to proceed with the work on a Cost-Plus-Limited Basis. A Cost-Plus-Limited Basis is defined as the net cost of the work to the Contractor plus an allowance to cover overhead and profit, as stipulated below, the total cost not to exceed a specified amount. The following allowances for overhead and profit are hereby established as reasonable and shall apply:

c.) Fifteen percent (15%) of the net cost of all labor furnished by the Contractor.

For all labor the Contractor shall receive the rate of wage actually paid as shown by his certified payroll, which shall be at least the minimum rate established by the Contract Documents. For all foremen in direct charge of the work, the Contractor shall receive the actual wage paid the foremen, as shown on his certified payroll. No part of the salary or expense of anyone above the grade of foreman and having general supervision of the work will be included in the labor item.

d.) For the cost of all insurance and taxes imposed by law on labor employed on the work, the Contractor shall receive the actual amount paid.

e.) Fifteen percent (15%) of the net cost of all materials used by the Contractor, less any allowable cash discounts, delivered on the work, including delivery charges as shown by original receipted bills.

f.) Rental rates for any power operated machinery, trucks or equipment, which may be found necessary to use on Cost-Plus-Limited work shall be negotiated between the Engineer and the Contractor. These rates shall be reasonable and shall be based on those rental rates prevailing in the area where such work is to be done, and they shall be agreed upon in writing before the work is begun. In no case shall the rental rates exceed the rates set up in the current edition of the "Associated Equipment Distributors Compilation of Rental Rates for Construction Equipment." Those rates shall include all repairs, fuel, lubricants, taxes, insurance, depreciation, storage and all attachments complete, ready to operate, but excluding operators. Operators and oilers (tenders) shall be paid as stated herein above for labor.

No percentage for overhead and profit shall be added to the amounts of equipment rental prices agreed upon, the price agreed upon shall be the total compensation allowed for use of such equipment.

2. If the change in the work requires a reduction in the work involved, the procedure shall be as follows:

a.) If the proposal is acceptable, the Client will prepare the Change Order in accordance therewith for acceptance by the Contractor; or

b.) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Engineer shall fix the cost value of the credit.

The Client may then order the Contractor to proceed with the work. Should the Contractor disagree with the cost value of the credit as fixed by the Engineer, he may appeal the same in accordance with the procedures outlined in the GENERAL CONDITIONS, ARBITRATION AND LITIGATION.

c.) Each Change Order shall include in its final form:

1. A detailed description of the change in the work.

2. The Contractor's proposal (if any) or a confirmed copy thereof.
 3. A definite statement as to the resulting change in the Contract price and/or time.
 4. The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the Change Order.
- d.) Contractor shall not take advantage of any obvious error in the specifications or any such error in the drawings or other Contract Documents. Any obvious error or discrepancy in or between any of the Contract Documents will be immediately reported to the Engineer who shall make such corrections and interpretations as may be deemed necessary for the completion of the work in a satisfactory and acceptable manner.

110. CHANGES IN SUBSURFACE CONDITIONS

Prior to submission of its bid, the Contractor shall investigate for the presence of any subsurface structures or conditions and make inquiries of all potential owners of subsurface structures or conditions. In the event the Contractor shall, during the process of the work, encounter subsurface conditions (other than seasonal variations) which materially differ from those shown on or implied by the Contract Drawings or Specifications, and if said conditions could not reasonably have been foreseen and identified by inquiry and/or inspection of the site prior to the Bid, and, further, if these changed subsurface conditions cause the Contractor to perform extra work, the Contractor shall be entitled to submit a request for additional compensation in accordance with "Claims for Extra Cost" of the General Conditions. The Contractor shall not be entitled to submit a request for additional compensation for changed subsurface conditions which vary seasonally, including but not limited to groundwater rise and fall, freezing/frost, etc. or which could have been foreseen and/or identified by inquiry and inspection of the site prior to the Bid.

Notice of the changed condition must be given to the Client and its Engineer in accordance with Section 111 Claims for Extra Cost, so that the Client will have an opportunity to investigate the same and make any alteration which, in the sole discretion of the Client may be necessary. Such notice is a material condition which must be adhered to by the Contractor.

The Engineer shall investigate the facts and shall notify the Client whether the conditions are or are not materially different from those shown or implied by the Contract Drawings or Specifications. The Client shall then notify the Contractor of its decision.

In the event of a favorable decision by the Client the Contractor shall be entitled to additional compensation and the amount of the additional compensation shall be determined in accordance with the provisions of the GENERAL CONDITIONS, CHANGES IN THE WORK.

In the event of an unfavorable decision by the Client, the Contractor shall have the right to contest said decision as provided for under the provisions of this Contract.

111. CLAIMS FOR EXTRA COST

a. All claims between the parties, including all claims for additional compensation and/or additional time, arising out of, or in any way related to this Contract and/or the performance of the same, or its interpretation, except those disputes covered by Federal Labor Standards Provisions under GENERAL CONDITIONS, PART II, shall within ten (10) days of the event or action giving rise to the claim be presented to the Engineer. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt

by the Engineer of notice thereof. The Contractor shall in no case allow any claim or dispute to delay the work.

b. As soon as practicable after the final submission of all information the Client shall make a determination of any claim. Said decision of the Client shall be a condition precedent to any further action on the claim. However, upon certification in writing by the claimant that the claim has been submitted in its final form, the Client shall be obliged to render a decision on said claim within sixty (60) days of the date of said certification. Should the Client fail to render its decision within the aforementioned sixty (60) day period, its decision will not be a condition precedent to any further action on the part of the claimant.

c. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be considered unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonable estimated from the Drawings and maps issued.

d. If, on the basis of the available evidence, the Client determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Sections-"CHANGES IN THE WORK" or "TERMINATIONS; DELAYS AND EXTENSIONS; LIQUIDATED DAMAGES" of the GENERAL CONDITIONS, PART I.

e. In the event of an unfavorable decision by the Client, the Contractor shall have the right to contest said decision as provided for under the provisions of this Contract.

111-A EXTENSION OF TIME FOR PERFORMANCE

a. If performance by the **Contractor** is delayed for a reason set forth in Section C, the **Contractor** may be allowed a reasonable extension of time in conformance with this section.

b. Any extension of time may be granted only by the City upon written application by the **Contractor**.

c. Grounds for Extension: If such application is made, the Contractor shall be entitled to an extension of time for delay in completion of the **Work** caused solely:

1. By the acts or omissions of the **City**, its officers, agents or employees; or
2. By the act or omissions of **Other Contractors** on this **Project**; or
3. By supervening conditions entirely beyond the control of either party hereto (such as, but not limited to, acts of God or the public enemy, excessive inclement weather, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the **Contractor**).
4. The **Contractor** shall, however, be entitled to an extension of time for such causes only for the number of **Days** of delay which the Engineer may determine to be due solely to such causes, and then only if the **Contractor** shall have strictly complied with all of the requirements of Articles 9 and 10.

d. The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **Engineer**, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

e. The determination made by the **Client** on an application for an extension of time shall be binding and conclusive on the **Contractor**.

f. The granting of an application for an extension of time for causes of delay other than those herein referred to shall be entirely within the discretion of the **Client**.

g. Permitting the **Contractor** to continue with the **Work** after the time fixed for its completion has expired, or after the time to which such completion may have been extended has expired, or the making of any payment to the **Contractor** after such time, shall in no way operate as a waiver on the part of the **City** of any of its rights under this **Contract**.

h. Application for Extension of Time:

1. Before the **Contractor's** time extension request will be considered, the **Contractor** shall notify the **City** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **Engineer** identifying:

- (a) The **Contractor**; and **Project** description;
- (b) Liquidated damage assessment rate, as specified in the **Contract**;
- (c) Original bid amount;
- (d) The original **Contract** start date and completion date;
- (e) Any previous time extensions granted (number and duration); and
- (f) The extension of time requested.

i. In addition, the application for extension of time shall set forth in detail:

- 1. The nature of each alleged cause of delay in completing the **Work**;
- 2. The date upon which each such cause of delay began and ended and the number of **Days** attributable to each such cause;
- 3. A statement that the **Contractor** waives all claims except for those delineated in the application, and the particulars of any claims which the **Contractor** does not agree to waive. For time extensions for **Substantial Completion** and final completion payments, the application shall include a detailed statement of the dollar amounts of each element of claim item reserved; and
- 4. A statement indicating the **Contractor's** understanding that the time extension is granted only for purposes of permitting continuation of **Contract** performance and payment for **Work** performed and that the **City** retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

j. Analysis and Approval of Time Extensions:

- 1. For time extensions for partial payments, a written determination shall be made by the **City** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:
- 2. If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;
- 3. If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

4. If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multiple of six (6) months involved beyond the one (1) year period; or
5. If exceptional circumstances exist, the **City** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c).
6. For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **City**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.
7. Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the **Engineer**, or his/her authorized representative.
8. Neither the granting of any application for an extension of time to the **Contractor** or any other **Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

k. No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its officer, employees, agents or representatives, or any other contractor or subcontractor, and agrees that all it may be entitled to on account of any such delay is an extension of time to complete performance of the **Work** as provided herein.

112. TERMINATION; DELAYS AND EXTENSIONS: LIQUIDATED DAMAGES

1. Termination of Contract. For its own convenience the Client may, at any time prior to the issuance of a Notice to Proceed, void the Contract by giving unequivocal and unconditional written notice of such avoidance to the Contractor and in the event of such avoidance the Client will not be liable to the Contractor for any claims or losses, including anticipated loss of profit and monies expended in anticipation of performance under the Contract.

At any time subsequent to the Notice to Proceed the Client may, at its own convenience, terminate the Contract by giving unequivocal and unconditional written notice of such termination to the Contractor. In the event of such termination by the Client, the Client shall be responsible to the Contractor for the following monies only, which monies shall be subject to legitimate charges of the Client against the Contractor:

- a. All reasonable costs incurred by the Contractor in performance of or in anticipation of performance of the Contract provided the Contractor shall take all reasonable steps to mitigate such damages including the return and/or re-sale of materials ordered; and
- b. A mark-up of 10% for profit and 10% for overhead on the reasonable cost of the work completed and in place, in accordance with the Contract Drawings and Specifications, to the date of termination. The Contractor shall remain responsible for the work completed, in accordance with the Contract provisions.

Should any work under this contract be subject to, or terminated by the action of any third party, governmental unit or court due to any ecological or other reason the rights of the Contractor to recover from the Owner shall be determined as set forth above.

The Client may give notice in writing to the Contractor and his Surety of any material breach of the Contract by the Contractor to include but not be limited to any of the following:

- a. Failure to begin the work under the Contract within the time specified.
- b. Failure to perform the work with sufficient workmen, equipment or materials to insure the prompt completion of said work.
- c. Unsuitable performance of the work or failure to perform new such work as shall be rejected as defective and unsuitable.
- d. Neglecting or refusing to remove material rejected as defective and unsuitable.
- e. Discontinuing the suitable prosecution of the work for a period of 72 hours, excluding Sundays and holidays without written authorization of the Engineer.
- f. Failure to commence discontinued work within 48 hours after notice to resume (excluding Sundays and holidays).
- g. Becoming insolvent or declared bankrupt, or commits any act of bankruptcy or insolvency.
- h. Allowing any final judgment to stand against him unsatisfied for a period of ten (10) calendar days.
- i. Making any assignment for the benefit of creditors.
- j. Violating any covenants contained in the Contract Documents.

The Contractor or Surety within a period of ten (10) calendar days after such notice shall take all practical action to correct said material breach. Should said action fail to meet with the approval of the Client, the Client may, at its discretion, order the Surety to complete the work or, without violating the Contract, take the prosecution of the work out of the hands of said Contractor and Surety.

The Client may appropriate or use any or all materials and equipment on the ground as may be suitable and acceptable and may enter into an agreement, either by negotiation or public letting, for the completion of said Contract according to the terms and provisions thereof, or use such other methods or combinations thereof, as in its opinion shall be required or desirable for the completion of said Contract in an acceptable manner. All costs and charges incurred by the Client together with the cost of completing the work under Contract, shall be deducted from any monies due or which may become due said Contractor. In case such expense shall exceed the sum which would have been payable under the Contract, then the Contractor and the Surety shall be liable and shall pay to the Client the amount of said excess.

2. Excusable Delays and Extensions of Time. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:

- a. To any acts of the Government, including equipment, tools, or by labor by reason of war, National Defense or any other national emergency.
- b. To any acts of the Client, its Engineer or Agents; or injunction or litigation against said Client.
- c. To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other Contract with the Client, fires, floods,

epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions;
and

Provided, however, that the Contractor shall comply with the provisions **111-A EXTENSION OF TIME FOR PERFORMANCE and** promptly notify the Client within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Client shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this Contract, the delay is properly excusable, the Client shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

No claim for damages or any claim other than for an extension of time as herein provided shall be made or asserted against the Client by reason of any delay.

3. Liquidated Damage for Delay If the work is not completed within the time stipulated in Section - TIME FOR COMPLETION/NOTICE TO PROCEED under SPECIAL CONDITIONS, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Client as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section - LIQUIDATED DAMAGES under SPECIAL CONDITIONS and the Contractor and his sureties shall be liable to the Client for the amount thereof.

113. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities or responsibilities under this Contract without the written consent of the client provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Client.

No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered and materials, tools and equipment supplied for the performance of the work under this Contract in favor of all persons, firms or corporations rendering such labor or services or supplying such materials, tools or equipment.

114. ENGINEER'S AUTHORITY

The Engineer will decide all questions which may arise in relation to the work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said Contract, the determination or decision of the Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this Contract affected in any manner or to any extent by such question.

115. TECHNICAL SPECIFICATIONS AND CONTRACT DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Contract Drawings or shown on the Contract Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between the Contract Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in the Contract Drawings or Technical Specifications, the matter shall be immediately submitted to the Client without whose decision, said discrepancy, shall not be adjusted by the Contractor. If said discrepancy is adjusted by Contractor without Client consent, it shall be at Contractor's own risk and expense.

116. SHOP DRAWINGS

a. All required shop drawings, machinery details, layout drawings, working drawings, material and equipment descriptions, etc., shall be submitted to the Engineer in six (6) copies for review sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. Four (4) weeks should be allowed for checking from the date of receipt by the Engineer. The Contractor, with the approval of the Engineer, may submit manufacturer's literature as a substitute for, or supplement to, the shop drawings, etc. The minimum size for any submission shall be 8-1/2" x 11" and the maximum size shall be the size of the Contract Drawings. All shop drawings, etc. and/or printed matte submitted shall be properly identified by project and specific application with reference to Contract Drawing number and specification items.

b. No construction, purchase, delivery, installation or work shall be done or made on any part or feature of this Contract which is dependent upon shop drawing review, until such review has been received from the Engineer. If the Contractor proceeds without reviewed shop drawings, it shall be at his own risk. No claim by the Contractor, for extension of the Contract time will be granted by reason of his failure in this respect.

c. Shop drawings, etc., or printed matter shall give all dimensions, sizes, etc. to enable the Engineer to determine suitability of the construction, installation, material or layout for the purposes intended. Where needed for clarity, the drawings shall include outline, sectional views and detailed working dimensions and designations of the kind of material, machine work, finish, etc., required. The drawings to be submitted shall be coordinated by the Contractor with any other drawings previously reviewed, with the design and function of any equipment or structure and the Contract Drawings.

d. Any shop drawings, etc., submitted without the Contractor's stamp of approval will not be considered and will be returned to the Contractor for proper resubmission. By approving and submitting shop drawings, etc., the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so and that he has checked and coordinated each shop drawing, etc. with the requirements of the work and of the Contract Documents.

e. If any drawings show variations from the requirements of the Contract because of standard shop practice and/or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of the contract price and/or time; otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been reviewed.

f. After review, the submittals will be stamped "No Exceptions Taken," "Exceptions As Noted," "Revise and Resubmit" or "Rejected - See Remarks." Three (3) prints of "No Exceptions Taken" or "Exceptions As Noted" drawings will be returned to the Contractor for his use and distribution to his suppliers and/or Subcontractors. In the case of those stamped "Revise and Resubmit" or "Rejected - See Remarks," two (2) prints will be returned to the Contractor who shall make all indicated corrections and resubmit six (6) prints.

g. In any submission which is noted as "No Exceptions Taken" or " Exceptions As Noted ", the review shall not extend to details or dimensions and shall not relieve the Contractor from his responsibility for compliance with the Contract Drawings and Specifications.

h. When the Contractor proposes a revision to a previously submitted shop drawing, etc., six (6) copies shall be resubmitted for review. This resubmittal shall clearly indicate, in a revision block, the date, description and location of the revision. The letter of transmittal shall state the reasons for the revision.

i. The Contractor shall furnish as many copies of the submittals as is necessary for the proper coordination of the work, and shall maintain a complete set of the reviewed submissions at the site of the work at all times.

j. Upon the final acceptance of the project, the Contractor shall, on request, furnish the Client with a complete set of shop drawing tracings or reproducible cloth reproductions of the shop drawing tracings.

There will be no direct payment made for any of the above submittals, or reproducible drawings if required, but the cost there of shall be considered as included in the general cost of the work.

117. REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the Client for any additional information not already in his possession which should be furnished by the Client under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

118. MATERIALS AND WORKMANSHIP

a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.

b. All work performed and all materials furnished shall be, in conformity with the lines, grades, cross sections, dimensions and material requirements, including tolerances shown on the Contract Drawings or indicated in the Specifications.

c. The Contractor shall furnish to the Client for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section - SAMPLES, CERTIFICATES AND TESTS under GENERAL CONDITIONS, PART I.)

d. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.

e. Materials specified by reference to the number or symbol of a specific standard, such as an American Society for Testing Materials Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The standards referred to, except as modified in the Technical Specifications, shall have full force and effect as though printed therein.

f. The Contractor shall employ only competent and skillful men to do the work and whenever the Engineer shall notify the Contractor, in writing, that any man on the work is, in his opinion, incompetent or disorderly, the Contractor shall forthwith remove such person and shall not again employ him on any part of the work without the written consent of the Engineer.

g. The Client may stop any work or any part of the work under the Contract if the methods or conditions are such that unsatisfactory work might result, if improper materials or workmanship is being used, or unsafe conditions exist.

h. In the event the materials furnished or the work deviates from the requirements of the Contract Drawings and Specifications, but, in the opinion of the Client constitutes substantial performance, the Client may accept the same. Should the deviation in question result in a savings to the Contractor, the Client will

be entitled to a credit in the full amount of said savings. Should the deviation in question result in an additional cost to the Contractor the Client will not be liable to the Contractor for such additional cost.

If the materials or the finished product in which the materials are used or the work performed are not in conformity with the Contract Drawings and Specifications and have resulted in an inferior or unsatisfactory product, the work and materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

119. SAMPLES, CERTIFICATES AND TESTS

a. The Contractor shall submit all samples, materials, certified test reports, materials certificates, certificates of compliance, affidavits, etc., as called for in the Contract Documents or required by the Engineer, promptly after award of the Contract and acceptance of the Contractor's bonds. No such materials and/or equipment, etc., shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples/certificates/tests/etc., have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of the above for approval shall not be considered just cause for an extension of the Contract time.

b. Samples: Unless otherwise specified, the Contractor shall furnish the required samples without charge, and shall provide every facility for the securing of material samples. He shall provide means and assist in the verification of all scales, measures and other devices which he operates. Samples to be submitted shall be taken by the Engineer or a laboratory approved by the Client, unless otherwise specified. All materials being used shall be subject to resampling and testing at any time during their preparation and/or use.

All samples submitted by the Contractor shall be properly identified to include, but not be limited to, the project name, project number, item number and description of material, name of the producer, place of origin, and other detailed information which will assist the Engineer passing upon the acceptability of the sample. Certified test reports, materials certificates and/ or certificates of compliance required to be submitted with the samples or if permitted in lieu of samples, shall conform to the requirements stated hereafter.

c. Certified Test Report: A certified test report shall be a document containing a list of the dimensional, chemical, metallurgical, electrical and physical results obtained from an actual test of the materials involved, and shall certify that the materials meet the requirements of the Contract Drawings and Specifications, and shall also include the following information:

- (1) Item number and description of material
- (2) Date of manufacture
- (3) Date of testing
- (4) Name of organization to whom the material signed
- (5) Quantity of material represented, such as batch, lot, group, etc.
- (6) Means of identifying the consignment, such as label, marking, lot number, etc.
- (7) Date and method of shipment
- (8) Name of organization performing tests

The certified test report shall be signed by an authorized and responsible agent for the organization manufacturing the material, and it shall be notarized.

d. Materials Certificate. A materials certificate shall be a document certifying that the materials, components and equipment furnished, conform to all requirements of the Contract Drawings and Specifications, The document shall also include the following information:

- (1) Project to which the material is consigned.
- (2) Name of Contractor to whom material is supplied.

- (3) Item number and description of material.
- (4) Quantity of material represented by the certificate.
- (5) Means of identifying the consignment, such as label, marking, lot numbers, etc.
- (6) Date and method of shipment.

The materials certificate shall be signed by an authorized and responsible agent for the organization supplying the material, and it shall be notarized.

e. Certificate of Compliance. A certificate of compliance shall be a document certifying that the materials, components and equipment by the previously submitted certified test report and materials certificate, have been installed in the work and that they conform to all the requirements of the Contract Drawings and Specifications. The following information shall also be required on the document:

- (1) Project number.
- (2) Item number and description of material.
- (3) Quantity represented by the certificate.
- (4) Name of manufacturer.

The certificate of compliance shall be signed by an authorized and responsible agent for the prime Contractor, and shall be notarized.

f. Tests. Tests as required by the Specifications will be made in accordance with the latest revision to the Standard Method of American Association of State Highway Officials or the American Society for Testing and Materials in effect at the time of bidding, unless otherwise specified on the Contract Drawings or Special Conditions. Representative preliminary samples of the material proposed for use shall be submitted, without charge, by the Contractor or producer for examination and tested in accordance with specified methods. All materials being used are subject to test or rejection at any time during their preparation and use.

Materials will be rejected by the Engineer whenever, in his judgment, they fail to meet the requirements of the specifications.

The Client reserves the right to retest all materials which have been tested and accepted at the source of supply, after the same have been delivered, and to reject all materials which, when retested, do not meet the requirements of the specifications.

g. Approval/Acceptance. Approval of any materials shall be general only and shall not constitute a waiver of the Client's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

The Engineer may accept a material or combination of materials and therefore waive noncomplying test results provided that all of the following conditions are met:

1. Results of prior and subsequent series of tests of the material or materials from the same source or sources are found satisfactory.
2. The incidence and degree of nonconformance with the specification requirements are, in the Engineer's judgment within reasonable and particle limits.
3. The Contractor has diligently exercised material controls consistent with good practices in the Engineer's judgment.
4. No adverse effect on the value or serviceability of the completed work could result.

h. Costs. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follow:

- (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer and the Client shall pay all other testing costs of said samples.
- (2) The Contractor shall assume all costs of retesting materials which fail to meet Contract requirements.
- (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient or for those specified.

120. PERMITS AND CODES

a. The Contractor shall give all notices required by and shall observe and comply with all Federal and State laws and Local bylaws, ordinances and regulations in any manner affecting the conduct of the work, and all such orders or decrees as may exist at present and those which may be enacted later, of bodies or tribunals having any jurisdiction or authority over the work. The Contractor shall indemnify and save harmless the Client and all of its representatives, against any claim or liability arising from or based on the violation of any such law, bylaw, ordinance, regulation, order or decree, whether by himself or his employees. All construction, work and/or utility installations shall comply with all applicable ordinances and/or codes including any and all written waivers thereto.

Before commencing any work, the Contractor shall examine the Contract Drawings and Specifications for compliance with applicable ordinances, codes, etc., and shall immediately report any discrepancy to the Client. Where the requirements of the Contract Drawings and Specifications fail to comply with such applicable ordinances, codes, etc., the Client will adjust the Contract by Change Order to conform to such ordinances, codes, etc., (unless waivers in writing covering the differences have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction or work and/or install any utility at variance with any applicable ordinance, code, etc., including any written waivers (notwithstanding the fact that such installation is in compliance with the Contract Drawings and Specifications), the Contractor shall remove such work without cost to the Client, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

b. Unless otherwise specified, the Contractor shall at his own expense, secure and pay to the appropriate department of the Local/State/Federal Government the fees or charges for all permits including but not limited to those required for street pavements, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas, and sewer permits, etc., required by the regulatory body or any of its agencies.

c. The Contractor shall comply with applicable Local/State/ Federal laws, ordinances, codes, etc., governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the work under this Contract.

121. CARE OF WORK

a. The Contractor shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Client.

Materials shall be stored so as to insure the preservation of their quality and fitness for the work and shall be located so as to facilitate prompt inspection. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and when directed, shall be placed in weatherproof buildings.

Stored materials, even though approved before storage, shall be inspected prior to their use in the work and shall meet the requirements of the specifications at the time it is proposed to use them.

b. The Contractor shall at his sole expense and without any additional cost to the Client provide watchmen and/or other security measures as may be reasonably required to properly protect and care for materials and work completed, and to otherwise prevent property damage and/or personal injury.

c. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Client, is authorized to act at his discretion to prevent such threaten loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Client. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Client as provided in the Section - CHANGES IN THE WORK under GENERAL CONDITIONS.

d. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.

e. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Client, the Local Government, and the Engineer from any damages on account of settlements or the loss of lateral support of adjoining property and front all loss or expense and all damages for which the Client, the local Government and the Engineer may become liable in consequence of such injury or damage to the work or adjoining and adjacent structures and/or their premises.

122. ACCIDENT PREVENTION

a. The Contractor is solely responsible for and shall exercise proper precautions and safety measures at all times for the protection of persons and/ or property and shall be responsible for all injuries and/or damages to all persons and/or property, either on or off the site, which arise from the Contractor's work or the work of any of Contractor's agents, subcontractors or vendor under this Contract. The Contractor is solely responsible for compliance with the safety provisions of all applicable Local/State/Federal laws and building and construction codes and the Contractor shall take or cause to be taken such additional safety and health measures as are reasonably necessary for the protection of persons and property, as the then existing circumstances and conditions require

Machinery, equipment and trucks shall be properly guarded, and operational hazards shall be eliminated in accordance with the provisions and intent of the latest revised edition of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable law. A copy of this manual shall be available for reference at all times in the Contractor's field office. The Contractor's attention is also called to the Section - SAFETY PROVISIONS of the GENERAL CONDITIONS.

b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on the work under this Contract in accordance with the requirements of the applicable State/Local/ Federal regulations. The Contractor shall promptly furnish the Client with reports concerning these matters.

c. The Contractor shall indemnify and save harmless the Client, Local Government and the Engineer from any and all claims for damages resulting from personal injury, death and/or property damage, suffered or alleged to have been suffered, by any person as a result of any work conducted under this Contract. See also the Section INDEMNITY CLAUSE of the GENERAL CONDITIONS.

123. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the Health/Sanitary Codes of the Local/State/Federal Government. Drinking water shall also be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health/ sanitary regulations.

124. USE OF PREMISES

a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract Limits, Storage Area, Staging Area, Work Area, or Temporary Construction Area as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Client, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

b. The Contractor shall comply with all instructions of the Client, Engineer and the ordinances, codes, etc., of the Local/State/Federal Government, regarding signs, advertising, traffic, fires, explosives, danger signals, barricades, etc.

c. See also PARTIAL USE OF IMPROVEMENTS of the SPECIAL CONDITIONS.

125. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, prior to final inspection, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the whole site of the work and public rights of way in a neat and clean condition. Trash burning on the site of the work will be subject to prior approval of the Client and existing Local/State/Federal regulations.

The cost of all required clean-up shall be included in the various prices bid under this Contract.

126. INSPECTION/ACCEPTANCE OF THE WORK

a. All materials and workmanship shall be subject to inspection, examination or test by the Client and the Engineer to determine the acceptability of the work at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on and the Contractor shall provide proper facilities for such access and inspection. The Client or Engineer shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefor. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Client may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any monies which are due or may become due the Contractor, without prejudice to any rights or remedies of the Client.

b. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section - SAMPLES, CERTIFICATES AND TESTS, under the GENERAL CONDITIONS, PART I.) All tests by the Client or Engineer will be performed in such manner as not to delay the work unnecessarily and shall be made as required by the Technical Specifications.

c. If the specifications, the Engineer's instructions, laws, ordinances, or any public authority require any work to be specifically tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection, and if the inspection is by an authority other than the Engineer (such as a testing organization designated by the Client), of the date fixed for such inspection. If any work, should be covered up without approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination and properly restored at the Contractor's expense.

The Contractor shall notify the Engineer sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Engineer or Client, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the Client or Engineer.

Should it be considered necessary or advisable by the Engineer or Client at any time before final acceptance of the entire work to make an examination of work already completed, by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor and material. If such work is found to be defective due to the fault of the Contractor or his Subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, payment under the provisions of the GENERAL SPECIFICATIONS, CHANGES IN THE WORK, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

d. Inspection of materials and appurtenances to be incorporated in the improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

e. Neither inspection, testing, approval nor acceptance of the work in whole or in part by the Client or its agents shall relieve the Contractor or his sureties of the full responsibility for materials furnished or work performed not in strict accordance with the Contract.

127. REVIEW BY CLIENT

The Client, its authorized representatives and agents shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Client through its authorized representatives or agents.

128. FINAL INSPECTION

When the improvements embraced in this Contract are substantially completed, the Contractor shall notify the Client in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice will be given at least ten (10) days prior to the date stated for final inspection, and bear the signed concurrence of the representative of the Client having charge of inspection. If the Client determines that the status of the improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable. The inspection party may also include the representative of other Governmental Agencies, and representatives of each department of the Local Government having in charge improvements of like character when such improvements are later to be accepted by the Local Government.

129. DEDUCTIONS FOR UNCORRECTED WORK

If the Client deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Client and subject to settlement, in case of dispute, as herein provided.

130. INSURANCE

A. Workmen's Compensation.

The Contractor shall carry or require that there be carried Workmen's Compensation Insurance and Employer's Liability Insurance for all his employees and those of his Subcontractors engaged in work on the site, in accordance with State or Territorial Workmen's Compensation Laws. See Section H for further detail.

B. Manufacturers' and Contractors' Liability.

The Contractor shall carry or require that there be carried Manufacturers' and Contractors' Liability Insurance with limits as specified in the "SCHEDULE OF INSURANCE" under "INSURANCE" of Section H and the Special Conditions for:

1. **Personal Injury:** This shall protect the Contractor and his Subcontractors and their heirs and assigns against all claims for injury to or death of one, or more than one person, because of accidents which may occur as a result from operations under this Contract; such insurance shall cover the use of all equipment, including, but not limited to, excavation machinery, trenching machines, cranes, hoists, rollers, concrete mixers, motor vehicles, and other equipment as may be specified elsewhere which may be used in the construction of the improvements embraced in this Contract. This Personal Injury Liability Insurance will be carried from commencement of work to final acceptance of the work under this Contract and will be extended to include insurance for completed operations. The completed operations portion of the Personal Injury Liability Insurance shall be extended for the entire period of the guarantee unless otherwise specified. This insurance shall cover owned, hired, and non-owned equipment.

2. **Property Damage:** This shall protect the Contractor and his Subcontractors and their heirs and assigns from all claims for property damage which might arise from operations under this Contract.

Property Damage Liability shall be extended to include insurance for completed operations. The completed operations portion of the Property Damage Liability Insurance shall be extended for the entire period of the guaranty unless otherwise specified.

3. **Manufacturers' and Contractors' Liability** shall not exclude ability for personal injury or damages to property as a result of blasting, explosion, collapse of buildings or structures, and damage to underground installations.

C. Automotive Liability

The Contractor shall carry or require that there be carried Automotive Liability Insurance for personal injury and property damage with the limits as specified in the "SCHEDULE OF INSURANCE" under "INSURANCE" of the Special Conditions and Section H to protect the Contractor and his Subcontractors and their heirs and assigns from all claims for any personal injury or property damage caused by an occurrence and arising out of the ownership, maintenance or use, including loading and unloading, of any vehicles during the operations under this Contract. This coverage shall include coverage for owned, hired and non-owned vehicles.

D. Owners' Protective Liability

The Contractor shall carry or require that there be carried Client's Protective Liability Insurance for and in the name of the Client and any others as may be specified in the Special Conditions under "INSURANCE"

to protect them and their heirs and assigns from all claims for personal injury and property damage arising from the Contractor's or his Subcontractor's operations under this Contract with like coverage and requirements for the Contractor's "Manufacturers' and Contractor's Liability" Insurance as specified herein and with the limits as specified in the "SCHEDULE OF INSURANCE" under "INSURANCE" of the Special Conditions and Section H.

The Contractor and his Insurer shall waive governmental immunity as a defense and shall not use the defense of governmental immunity in the adjustment of claims or in the defense of any suit, action or claim brought against the Client or **City of Peekskill**.

E. Builder's Risk Insurance

If required by "INSURANCE" of the Special Conditions, the Contractor shall carry Builder's Risk Insurance (Fire and Extended Coverage, including "Special Extended Coverage" - also known as All-Risk Builder's Risk Coverage) on a 100% completed value basis of the insurable portions of the project for and in the name of the Client, the City of Peekskill, and the Engineer unless otherwise specified. The Contractor and Subcontractors and other interests shall be named only under the Loss Payable Clause as their interests may appear. The Reporting Form type of Builder's Risk Insurance will NOT be acceptable. The maximum acceptable deductible shall be \$1,000. See Section H for further detail.

F. Job Office Insurance

The Contractor, when required by the Special Conditions to provide job offices for the use of the Client and Engineer shall carry insurance for and in the name of the Client and the Engineer or accept full responsibility (in writing; for loss or damage to the contents to cover office records, supplies, instruments, equipment and personal property of the Client and Engineer using the field office. If insured, the limit shall be as specified in the "SCHEDULE OF INSURANCE" under "INSURANCE" of the Special Conditions and Section H.

G. Other Insurance

The Contractor shall carry or require that there be carried any other insurance as required in the Special Conditions under "INSURANCE" or Section H.

H. Endorsements

1. Each Contractor's policy shall include a Contractual "HOLD HARMLESS" endorsement and coverage as follows: "The Contractor (and his Subcontractors) shall, during the performance of this work, take necessary precautions and place proper guards for the prevention of accidents; shall keep up all night suitable and sufficient lights and barricades; shall fully comply with the Occupational Safety and Health Act of 1970 and all other Federal, State and Local Regulations including any and all amendments, revisions and additions thereto; shall relieve the Client, the **City of Peekskill**, the Project Engineer and Municipal Engineers, officers and agents from liability for consequent damages arising out of work performed under this Contract including delay, loss of business, damages to life or property caused as a result of damage, injury or other action by the Contractor (or his Subcontractors), direct or indirect; and shall indemnify and save harmless the Client, the **City of Peekskill**, the Engineers, and their employees, officers and agents from any and all claims, suits, actions, fines, fees, damages and costs to which they may be put by reason of death or injury to all persons and/or for all property damage of another resulting from non-compliance unskillfulness, willfulness, negligence or carelessness in the performance of the work, or in guarding or protecting the same, or from any improper methods, materials, implements or appliances used in performance of the work, or by or on account of any direct or indirect act or omission of the Contractor (or his Subcontractors) or his employees or agents, and whether or not active or concurrent negligent act or omission by the employees, officers, or agents of the **City of Peekskill**, Client or Engineer may have directly or indirectly caused or contributed thereto:

2. Manufacturers' and Contractors' Liability shall further include an endorsement stating: "This policy shall cover owned, hired and non-owned equipment". "Coverage for completed operations for both personal

injury and property damage extended for the period of guaranty shall be covered under this policy. Manufacturers' and Contractors' Liability coverage includes liability for personal injury or damages as a result of blasting, explosion, collapse of buildings or structures, and damage to underground installations.

3. Automotive Liability Insurance shall include an endorsement as follows: "This policy shall cover owned, hired and non- owned vehicles."

4. Owner's Protective Liability shall include an endorsement as follows: "The Contractor and the Insurance Company waive governmental immunity as a defense and will not use the defense of governmental immunity in the adjustment of claim or the defense of any suit, action or claim brought against the Client or the **City of Peekskill**."

5. ALL POLICIES shall include: (a) endorsement of the work description, contract name, number and location. (b) an endorsement that the Insurance Company will give at least thirty (30) days written notice to the Client and Engineer prior to any modification or cancellation of any such policy, (c) an endorsement that the Contractor will be responsible for the payment of all premiums and/or charges, and (d) an endorsement as follows: "This policy is issued in compliance with the requirements of the Contract, Documents for the project and issuing Company/Agent is fully cognizant of the requirements as stated therein."

I. Proof of Insurance

Before commencing any work under this Contract, the Contractor shall submit copies of the Endorsements to Insurance Policies, to the Client, Engineer and any others as may be specified in the Special Conditions under "INSURANCE" and Section H, evidencing that all insurance as required herein is in force. The policies shall be identified by title, policy number, effective date, expiration date, coverages and limits of liability. Required or verbatim quotes of endorsements as required above or by the Special Conditions and any non-standard exclusion endorsements for any required policies shall be attached to or be a part of the Certificate/Certificates of Insurance.

The Contractor must either include coverage for his Subcontractors in his policy or submit similar Certificates of Insurance from each of his Subcontractors before their work commences. Each Subcontractor must be covered by insurance of the same character and in the same amounts as the Contractor unless the Contractor and the Engineer agree that a reduced coverage is adequate because of the nature of the particular Subcontract work.

During the course of construction under this Contract, whenever there is a lapse in the insurance requirements as stated herein, through cancellation, expiration, failure to renew, or any other cause, the Client shall order the cessation of all construction activities until such time as the insurance requirements are complied with. The Contractor shall have no claim or claims whatever against the Client, the Engineer or other parties due to any delays caused thereby, nor shall it extend the completion time of the Contract.

J. Approval/Disapproval of Insurance

Upon receipt of the Certificate(s) of Insurance or binders, the Client will, in writing, identify the policies and indicate its approval or disapproval. New policies from other companies shall be provided in place of those disapproved. Such insurance shall only be carried with financially responsible insurance companies, licensed in the State and approved by the Client and HUD office. All policies shall be kept in force until the Contractor's work is accepted by the Client (unless otherwise specified). Insurance policies (covering all operations under this Contract or, if so noted for extended operations) which expire before the Contractor's work is accepted by the Client (or where noted for extended operations, through the period of guaranty) shall be renewed and evidence of same submitted to the Client for its approval.

131. PATENTS

The Contractor shall hold and save the Client and Engineer, their officers, and employees, harmless from liability of any nature or kind, including but not limited to court costs and attorney's fees, for or on account

of, any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the Contract, including its use by the Client, unless otherwise specifically stipulated in the Technical Specifications.

132. WARRANTY OF TITLE

No material, supplies or equipment incorporated or to be incorporated in the work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Client free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of person furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor in the hands of the Client. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

133. GENERAL GUARANTEE

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements embraced in this Contract by the Client or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Client will give notice of defective materials and work with reasonable promptness.

134. ARBITRATION AND LITIGATION

Any controversy or claim arising out of or relating to this Contract, or the breach thereof, shall at the option of the Client be settled by arbitration in accordance with the Rules of the American Arbitration Association, and judgment upon the award rendered by the Arbitrator(s) may be entered in any Court having jurisdiction thereof. The Client shall exercise its option to arbitrate concurrent with the rendering of its final decision on the claim. Should it fail to render a final decision within the prescribed time or fail to exercise its option, the claim will be determined in accordance with the Rules of the American Arbitration Association as herein, before stated.

135. RISK OF LOSS

The Client assumes no responsibility for the condition of existing buildings and structures and other property on the Project Area nor for their continuance in the condition existing at the time of issuance of the Invitation for Bids or thereafter. No adjustment of Contract Price or allowance for any change in conditions which may occur after the Invitation for Bids has been issued will be made except as provided for herein.

136. REQUIRED PROVISIONS DEEMED INSERTED

Each and every provision of law and clause 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 party the Contract shall forthwith be physically amended to make such insertion or correction.

137. CORRECTIONS

The Engineer shall have the right to correct any errors or omissions in the Contract, specifications or Contract Drawings when such corrections are necessary for the proper expression of their intent.

Such corrections shall take effect from the time that the Engineer gives notice thereof, and any alterations in the work rendered necessary thereby shall be made as corrected. Any conflict between the approved Contract Drawings and Specifications, or any disagreement in measurements upon the Contract Drawings' must be submitted to the Engineer before construction of the work.

138. SAFETY PROVISIONS

The safety provisions of applicable laws, building and construction codes and the safety codes approved by the State Labor Commissioner shall be observed.

The provisions of the Federal Occupational Safety and Health Administration's "Occupational Safety and Health Standards" and "Safety and Health Regulations for Construction" shall be observed.

Should at any time during the work under this Contract any Local/State/Federal safety inspector visit the site for the purpose of a safety inspection, the Contractor shall immediately notify the Engineer's representative on the job site.

The Contractor shall employ watchmen on the work as necessary and shall erect and maintain such strong and suitable barriers and such lights as will effectually prevent the happening of any accident to health, limb or property. Lights shall be maintained between the hours of sunset and sunrise, and during periods of low visibility.

If at any time in the opinion of the Engineer, the work is not properly lighted, barricaded and in all respects safe, both in respect to public travel or adjacent property, public or private, and if under such circumstances the Contractor does not or cannot immediately put the same into proper and approved condition, or if the Contractor or his representative is not upon the ground so that he can be immediately notified of the insufficiency of safety precautions, then the Engineer may put the work into such a condition that it shall be, in his opinion, in all respects safe and the Contractor shall pay all expenses of such labor and materials as may have been used for this purpose by him or by the Engineer. Such action of the Engineer, or his failure to take such action shall in no way relieve the Contractor of the entire responsibility for any cost, loss or damage by any party sustained on account of the insufficiency of the safety precautions taken by him or by the Engineer acting under authority of this section.

139. TIME OF WORK

Unless otherwise especially permitted, work shall be done only during the hours of 8:00 am and 4:00 pm daily, Monday through Friday. No work shall be done during nights, except as necessary for the protection of the public and the proper care of work already performed. If it shall become imperative to perform new work beyond the time limits stipulated above, the Owner shall be informed a reasonable time in advance of the beginning of such work. The Engineer must be present and the Contractor shall bear the costs for their inspection. The Contractor shall obey all local ordinances and shall obtain any waiver necessary for working beyond the limits specified and shall perform required neighborhood notifications. Should the contractor elect to work Saturdays, he shall bear the costs for inspection and Municipal employee's time at the site if necessary.

Only with the prior approval of the Engineer shall night work or work on Sundays or legal holidays requiring the presence of the Engineer be permitted except for emergencies or as specified elsewhere. Should night work be permitted or required, the lighting and other facilities which are necessary for performing such work must be provided by the Contractor and comply with the applicable safety codes.

140. OBSTRUCTIONS ENCOUNTERED

In addition to showing the construction under this Contract, the drawings show certain information obtained by the Client regarding conditions and features which exist at the site of the work, both at and below the surface of the ground. The Client and the Engineer expressly disclaim any responsibility for the accuracy or completeness of the information given on the drawings with regard to the existing conditions and features and the Contractor will not be entitled to any extra compensation on account of inaccuracy or incompleteness of such information except as provided under the Sections CHANGES IN SUBSURFACE CONDITIONS and EXISTING UTILITIES, STRUCTURES AND FIXTURES of the GENERAL CONDITIONS. It is specifically called to the Contractor's attention that all services, laterals, etc., are not shown on the Contract drawings and it shall be his responsibility to locate and protect the same; see paragraph 26 of the Special Conditions Section. The information which is shown is only for the convenience of the Contractor, who must verify this information to his own satisfaction. The giving of this information upon the Contract Drawings will not relieve the Contractor of his obligations to support and protect all existing utilities, structures and fixtures which may be encountered during the construction of the work, except as provided in the Section EXISTING UTILITIES, STRUCTURES AND FIXTURES of the GENERAL CONDITIONS..

141. EXISTING UTILITIES, STRUCTURES AND FIXTURES

The Contractor shall be responsible for the preservation of all public and private underground and surface utilities/structures at or adjacent to the construction work; insofar as they may be endangered by the work. This shall hold true whether or not they are shown on the contract drawings. If they are shown on the drawings, the Municipality does not guarantee their locations even though the information will be from the best available sources.

The Contractor shall give ample and reasonable notice to all private, corporate or municipal owners before work is done near their utility or structure; shall properly protect all utilities/structures encountered; shall at their expense repair/replace any items that are damaged; and shall proceed with caution to prevent undue interruptions to utility services.

Should it become necessary for the Contractor to remove or relocate any utilities, structures or other fixtures, due to a grade and alignment conflict which would require the proposed utility, structure or fixture (Not trench excavation, sheeting or other construction features) to occupy the same space as the existing pipe, pole, conduit and/or other fixture, such removal or relocation will be paid for in accordance with the provisions for CHANGES IN THE WORK of the GENERAL CONDITIONS. Should said utilities, structures or other fixtures be removed or relocated by the Owner or the respective utility companies at no cost to the Contractor, no payment will be made therefore.

Prior to any removal or relocation of existing facilities, structures or fixtures, the Contractor shall notify the Engineer of the location and the circumstances and shall cease work (which might prove detrimental to the utility, structure or fixture encountered) if necessary until satisfactory arrangements have been made with the owners of the same to properly care for them.

Should it be necessary to cease work and a delay is caused thereby, the Contractor shall have no claim for damages or any claim other than for an extension of time. See GENERAL CONDITIONS, CLAIMS FOR EXTRA COST.

If the Contractor desires temporary changes of location for his convenience for any reason whatsoever, of water lines, gas lines, sewer lines, wire lines, service connections, water and gas meter boxes, valve boxes, light standards, cableways, signals and any other utilities, structures or fixtures, he shall satisfy the Engineer and Client that the proposed relocation does not interfere with his or other Contractor's operations, or the requirements of the Contract Drawings and does not cause an obstruction or a hazard to traffic. The Contractor shall make his own request to the utility companies, pipe owners or other parties affected for such relocation work. Such relocation work for the convenience of the Contractor shall be made solely at the Contractor's expense.

The Contractor shall not remove or relocate any utility, structure or fixture without the written approval of the owner of that utility, structure or fixture unless otherwise shown on the Contract Drawings, specifications or ordered by the Engineer.

142. CONTROL OF EXISTING FLOWS

During the construction of all proposed work, the Contractor shall take every precaution and do the necessary work to maintain the flow of storm drainage, sanitary sewage and natural flows through the working areas. The Contractor is solely responsible for providing his flow control system and there shall be no separate payment for the required work. The Contractor shall be responsible for any flooding or sanitary backup on his work and to the property owners affected by such flooding or backup. The Contractor shall make such provisions as may be required by the local, state or federal health officers or any other public bodies with jurisdiction over the flow of storm drainage, sanitary seepage and natural flows.

In the event the Contractor uses water from natural water sources for his operations, intake method shall be such as to create no harmful effects; and where water is taken from a stream, reasonable flow downstream from the intake shall be maintained.

143. SEWAGE, SURFACE, GROUNDWATER AND FLOOD FLOWS

The Contractor shall furnish all the necessary equipment, shall take all necessary precautions, and shall assume the entire cost of handling any sewage, seepage, storm, groundwater, surface and flood flows which may be encountered at any time during the construction of the work. The manner of providing for these flows shall meet the approval of the Engineer and the entire cost of said work shall be included in the unit or lump sum prices bid for the various items of the work to be done under this Contract.

The Contractor shall employ such feasible and practical methods in his operations as will prevent pollution, sedimentation or the introduction of impurities or other objectionable materials that may become suspended or dissolved in waters reaching streams, ponds, lakes, water supplies or other water bodies.

Water shall not be disposed of by discharging it into any street gutter, drainage channel, existing drainage system, natural stream, waterway, lake, pond or bog, etc. without the prior approval of the Authority having jurisdiction thereof. Should such approval be obtained, the Contractor shall ensure that no solids, debris, suspended soil particles, impurities or pollutants are allowed to enter the drainage system. The Contractor shall be fully responsible for any damages to these systems resulting from his disposal methods and any necessary measures (such as but not limited to cleanup) required to return the system to preconstruction conditions. In addition to the above, disposal on private property shall be only with the prior written permission of the property owner.

Any water used for any purpose by the Contractor shall not be discharged in such a way as to create pollution, sedimentation or other adverse effects upon the aforementioned streams or waters.

144. CONNECTING TO EXISTING WORK

The Contractor shall remove such existing masonry, concrete, equipment and piping as is necessary, in order to make the proper connections to the existing work at the locations shown. Also, he shall make the necessary pipe line, roadway and other connections at the several points in order that on completion of this Contract, water, sewage, or storm water, as the case may be, will flow through the several pipe lines and structures. Unless otherwise specified herein, no extra payment will be made for this work, but the entire cost of the same shall be included in the unit or lump sum prices bid for the various items of the work to be done under this Contract.

145. EXISTING IMPROVEMENTS

The Contractor shall conduct his work so as to minimize damage to existing improvements, except where specifically stated otherwise in the specifications or drawings; it will be the responsibility of the Contractor

to restore, as nearly as practical, to their original conditions all improvements on public or private property damaged by his operations.

The utility mains, ducts, poles and services in the construction area, where shown on the Contract Drawings are at the approximate locations furnished by various utilities concerned. These locations are subject to possible errors in the source of the information; also, errors in transcription. The Contractor shall make certain of the exact location of mains, ducts, poles and services prior to excavation or construction near the same.

It is the responsibility of the Contractor to contact the various utility companies and make each aware of the pending construction and generally familiarize said utilities with the locations of conflicts in the case of the proposed construction. The Client shall be part of all conversations relating to utilities. The various utility companies will make all adjustments to their own lines except where otherwise shown on the Contract Drawings or specified. The Contractor shall give ample notice to the various utilities so that existing lines can be marked in the field and adjustments made. The Contractor shall cooperate fully with the various utilities and shall plan his work so that least interference is caused for all parties concerned. No additional payments shall be made to the Contractor for delays caused by utility interference due to negligence on the part of the Contractor. The Contractor shall support all utility lines uncovered during excavation.

146. ACCESS TO SITE

The Contractor shall make every effort to minimize damage to all access routes, and he shall be required to restore them to their original condition. The Contractor shall acquire all necessary permits for working in, on or from public streets or rights-of-way and for securing additional access rights thereto.

All costs of the removal and restoration to original condition of walls, fences, structures, utility lines, poles, guy wires or anchors, and other improvements required for passage of the Contractor's equipment shall be borne by the Contractor. The Contractor shall notify the proper authorities of the Local Government and all utilities of any intended modification or disruption to their property prior to the start of construction and shall cooperate with them in the scheduling and performance of his operation.

If the Contractor, by direct negotiation and bargain with any land owner, lessee or tenant, has secured for himself any right to use more space or greater privileges than the space provided by the Client for purposes incidental to the performance of the Contract, he shall, upon request of the Engineer, furnish to the Engineer proper evidence that such additional rights have been properly secured and assurance that no damage to or claim upon the Client and/or City of Peekskill will arise therefrom. The Client and/or City of Peekskill shall not be liable in any way for any expense incurred by the Contractor in securing any such right to use additional property.

The Contractor shall be responsible for and reimburse the Client and/or Local Government and others for any and all losses, damage or expense which the Client and/or Local Government or those others may suffer, either directly or indirectly or through any claims of any person or party, for any trespass outside the spaces and rights-of-way provided by the Client to the Contractor or any violation or disregard of the terms and conditions established for the use or occupancy of those rights or for negligence in the exercise of those rights.

The Client may retain or deduct from any sum or sums due or to become due to the Contractor such amount or amounts as may be proper to insure the Client and/or Local Government against loss or expense by reason of the failure of the Contractor to observe the limits and conditions of the rights-of-way, rights-of-access, etc. provided by the Client.

147. ACCESS TO ADJACENT PROPERTIES

The Contractor shall at all times maintain vehicular and pedestrian access to all properties abutting or adjacent to construction under this Contract, all at the Contractor's sole expense. In the event that normal access is cut off to a particular property due to operations or proposed work called for under the Contract, the

Contractor shall, at his sole expense, make other arrangements for access to said property satisfactory to the property owner, tenant and the Engineer.

148. USE OF ROADWAYS

During the progress of the work, the Contractor shall make ample provision for both vehicular and foot traffic on any public road, and shall indemnify and save harmless the Client from any expense whatsoever due to his operations on/over said roadways. The Contractor shall also provide free access to all fire hydrants, water and gas valves located along the line or in the vicinity of his work. Gutters and waterways must be kept open or other provisions made for the removal of storm water. Roadway intersections may be blocked but one-half at a time and the Contractor shall lay and maintain temporary driveways, bridges and crossings, such as in the opinion of the Engineer are necessary to reasonably accommodate the public and to provide access to private driveways. In the event of the Contractor's failure to comply with these provisions, the Client may cause the same to be done, and will deduct the cost of such work from any monies due or to become due the Contractor under this Contract, but the performance of such work by the Client or at its insistence shall serve in no way to release the Contractor from his general or particular liability for the safety of the public or the work.

149. SNOW REMOVAL

If the Contractor's operations or occupancy of any public street or highway, or the rough surfaces over any trench or area being maintained by the Contractor, shall interfere with the removal or plowing of snow or ice by the public authorities or land owners, or sanding of icy surfaces, in the ordinary manner with regular highway equipment, then the Contractor shall perform such services for the said public authorities or owners without charge; or failing to do so, shall reimburse the said authorities, Client for any additional cost to them for doing such work occasioned by the conditions arising from the Contractor's operations, occupancy or trench surfaces, together with any damage to the equipment of said parties by those conditions, or claims of any party for damage or injury or loss by reason of failure to remove snow or ice or to sand the icy spots under those conditions.

150. WEATHER CONDITIONS/WORK IN FREEZING WEATHER

In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause his Subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect his and their work, such materials shall be removed and replaced at the expense of the Contractor.

Unless written permission be given, work liable to be affected by frost or freezing shall be suspended during freezing weather. When work proceeds under such a condition the Contractor shall provide approved facilities for heating the materials and for protecting the finished work.

151. INTOXICATING LIQUORS

The Contractor shall neither permit nor suffer the introduction or use of intoxicating liquors upon or about the work specified in this Contract or upon any of the grounds occupied by him or by his employees.

152. BLASTING

If explosives are used, all requirements for transportation, use and storage of Local, State and Federal laws and regulations must be complied with and all necessary permits and licenses obtained by the Contractor at his expense. Permits and licenses must be shown to the Engineer on request.

Explosives must be carefully transported, stored, handled and used. The Contractor will keep on the job only such quantities of explosives as may be needed for the work underway and only during such time as

they are being used. Explosives shall be stored in a secure manner in locked containers and separate from all tools. Caps and detonators shall be stored separate from other explosives. When the need for explosives is ended, all such material remaining on the job shall be promptly removed from the premise. Care must be taken that no explosives, caps or detonators are stolen or get into the hands of unauthorized persons or left unguarded where they may cause accidents.

An accurate blasting log must be maintained continuously for the duration of the Contract. The log shall record, for each shot, the location, amount of holes, depth, spacing, amount of explosive per hole, number of caps used and the exact date and time of the blast. In addition, a sketch showing displacement of direct and delay caps for each shot shall be recorded.

Explosives shall be such power and placed and used in such quantities and positions as will not make the excavation unduly large, nor shatter unnecessarily the rock upon or against which the main or structure is to be built, nor injure adjacent persons or property, those portions of the new work or structure as may already be in place or other adjacent pipes, ducts or other structures. The quantity of explosives fired at one blast must be small enough and the time for blasting selected to avoid undue annoyance to persons owning or occupying premises near the work.

The rock must be completely matted when blasts are fired to prevent damage or injury to persons or property or the scattering of broken fragments on the adjacent ground. Adequate warning shall be given to all persons in the vicinity before any blast is discharged.

When blasting is required, the operation shall be conducted with such care as not to cause damage to any of the existing underground utilities. Should such occur, the cost of repairs shall be the sole responsibility of the Contractor.

When blasting for trench excavation, each shot sequence shall begin sufficiently ahead of completed work to prevent damage to the completed work which must be properly protected prior to each shot.

The provisions herein shall apply where soil formation resembles rock, whether in trench, structure or general excavation, even if it is of such a nature that it is not classified and paid for as rock excavation, and if so ordered by the Engineer, will apply to openings cut through masonry, nested boulders or other materials not herein classed as rock.

In areas where the proposed construction is built against the face of rock excavation, all loosened or shattered portions of the rock must be completely removed by barring, wedging or other approved means so the masonry can be built firmly in contact with solid rock.

The Contractor shall notify each public utility or others having structures in proximity to the site, and others who may be affected, of his intention to use explosives. Said notice shall be given in accordance with the applicable regulations therefore and sufficiently in advance to enable the involved agencies/companies/persons and the Contractor to take such steps as may be necessary to protect life and property. Such notice shall not in any way relieve the Contractor of responsibility for any damage resulting from his blasting operations.

When in sufficiently close proximity to existing gas, water, sanitary, storm, subway or other utilities and structures and all services connected thereto, the Contractor shall remove the rock by methods other than blasting, if necessary, in order to protect said utilities and their services from damage. Approved methods other than blasting are barring and wedging, jack hammer, drilling, rock jacks or other such hand or machinery methods which will not damage the adjacent utility.

No explosives shall be brought into, stored or used on the site of any job by the Contractor unless and until he shall have furnished the Engineer with a satisfactory certificate of insurance showing that the risks arising from the presence of and use of explosives and from blasting are included within the insurance provided by the Contractor to secure his obligations to the Owner. Insurance should also cover damage to any underground utilities or other underground facilities.

153. INDEMNITY CLAUSE

The Contractor (and his Subcontractors) shall, during the performance of this work, take necessary precautions and place proper guards for the prevention of accidents; shall keep up all night suitable and sufficient lights and barricades; shall fully comply with the Occupational Safety and Health Act of 1970 and all other Federal, State and Local Regulations including any and all amendments, revisions and additions thereto; shall relieve the Owner, the City of Peekskill, the Engineers and their employees, officers and agents from liability for consequent damages arising out of work performed under this Contract including delay, loss of business, damages to life or property caused as a result of damage, injury or other action by the Contractor (or his Subcontractors), direct or indirect; and shall indemnify and save harmless the Owner, the City of Peekskill, the Engineers, and their employees, officers and agents from any and all claims, suits, actions, fines, fees, damages and costs to which they may be put by reason of death or injury to all persons and/or for all property damage of another resulting from noncompliance, unskillfulness, willfulness, negligence or carelessness in the performance of the work, or in guarding or protecting the same, or from any improper methods, materials, implements or appliances used in performance of the work, or by on account of any direct or indirect act or omission of the Contractor (or his Subcontractors) or his employees or agents, and whether or not active or concurrent negligent act or omission by the employees, officers, or agents of the Client, City of Peekskill or Engineer may have directly or indirectly caused or contributed thereto.

154. DISPUTES

a. All disputes between the parties arising out of, or in any way related to this Contract and/or the performance of the same, or its interpretation, except those disputes covered by Federal Labor Standards Provisions under GENERAL CONDITIONS, PART II, shall within ten (10) days of the event or action giving rise to the dispute be presented to the Engineer. All papers pertaining to the dispute shall be filed in quadruplicate. Such notice shall state the facts surrounding the dispute in sufficient detail to identify the dispute, together with its character and scope. In the meantime, the Contractor shall proceed with the work under this Contract as directed. Any dispute not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the dispute is of a continuing character and notice of the dispute is not given within ten (10) days of its commencement, the dispute will be considered only for a period commencing ten (10) days prior to the receipt by the Engineer of notice thereof. The Contractor shall in no case allow any dispute delay the work under this Contract.

b. As soon as practicable after the final submission of all information the Owner shall make a determination of the dispute. Said decision of the Owner shall be a condition precedent to any further action on the dispute. However, upon certification in writing by the claimant that the dispute has been submitted in its final form, the Owner shall be obliged to render a decision on said dispute within sixty (60) days of the date of said certification. Should the Owner fail to render its decision within the aforementioned sixty (60) day period, its decision will not be a condition precedent to any further action on the part of the claimant.

c. Each decision by the Client will be in writing and will be mailed to the contractor by registered or certified mail, return receipt requested, directed to his last known address.

d. In the event of an unfavorable decision by the Client, the Contractor shall have the right to contest said decision as provided for under the provision of this Contract. The Contractor shall in no case allow the dispute or decision to delay any work but shall notify the Owner promptly that he is proceeding with the work under protest and he may then accept the matter in question from the final release.

SECTION K

SPECIAL CONDITIONS

CIVIC HUB AND CONNECTIVITY PROJECT CITY OF PEEKSKILL

BID NO. 2025-007

Table of Contents

1.	PROJECT SITE.....	2
2.	TIME FOR COMPLETION/NOTICE TO PROCEED	2
3.	LIQUIDATED DAMAGES	2
4.	RESPONSIBILITIES OF CONTRACTOR	2
5.	COMMUNICATIONS	2
6.	SIGNS.....	3
7.	CONTRACT DOCUMENTS AND DRAWINGS	3
8.	JOB OFFICES.....	3
9.	PARTIAL USE OF IMPROVEMENTS.....	3
10.	RAILROAD CROSSINGS	3
11.	MAINTENANCE OF ACCESS PROTECTION OF PUBLIC AND UTILITIES	3
12.	TEMPORARY LIGHT, POWER, HEAT, WATER, AND SANITATION FACILITY	4
13.	UNFORESEEN DIFFICULTIES	4
14.	PHOTOGRAPHS OF PROJECT.....	4
15.	MAINTENANCE OF TRAFFIC.....	5
16.	WORK IN STATE OR COUNTY ROADS	5
17.	INSURANCE	5
18.	LAYOUT OF WORK.....	5
19.	WORK BY OTHERS	5
20.	SCHEDULE OF DRAWINGS	6
21.	CONTRACTOR'S WORK AND STORAGE AREA.....	6
22.	"OR EQUAL" CLAUSE	7
23.	TEMPORARY WATER MAIN SHUTDOWN	7
24.	RECORD DRAWINGS	7
25.	GROUNDWATER AND WATER.....	7
26.	CONSTRUCTION, EXCAVATION AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES.....	8
27.	COMPLIANCE WITH AIR AND WATER ACTS	8
28.	GENERAL MUNICIPAL LAWS OF NEW YORK STATE	8
29.	DAMAGES, VANDALISM AND GRAFFITI	9
30.	EXISTING UTILITIES; UTILITIES SERVICE	9
31.	MANDATORY OSHA CONSTRUCTION SAFETY AND HEALTH TRAINING	10
	Appendix K-1 'Apprenticeship Program'	111
	Appendix K-2 'Equipment'	122
	Appendix K-3 'Utility Relocations'	133
	Appendix K-4 'DOS Reporting'	144

1. PROJECT SITE

The work included in this project is located in the City of Peekskill, NY on Railroad Avenue, Hudson Avenue, South Water Street, Central Avenue and South Division Street. The project consists of installing new ADA compliant curb ramps, construction of a new cycletrack, pavement marking and striping, new signage, installation of new curb bumpouts, installation of new pedestrian signals at two intersections, and the reconstruction of Brown Plaza including the installation of site amenities.

2. TIME FOR COMPLETION/NOTICE TO PROCEED

The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the Owner (City of Peekskill) in the Notice to Proceed to the Contractor and shall be fully completed within 180 consecutive calendar days thereafter or as modified in accordance with the GENERAL CONDITIONS.

The Contractor will be bound to the performance of the Contract when given a Notice to Proceed with the work no later than 30 calendar days after the date of the execution of the Contract by the Contractor.

When the Contractor is not given a Notice to Proceed with the work within the aforementioned 30 DAY PERIOD, the Contractor may elect to void the Contract by giving unequivocal and unconditional written notice of such avoidance to the Owner. Such avoidance shall be effective upon actual receipt by the Owner, prior to the mailing or actual delivery of any Notice to Proceed. In the event of the Owner's failure to issue a Notice to Proceed, the Contractor's sole remedy shall be the avoidance of the Contract as set forth and the Owner will not be liable to the Contractor for any claims or losses including anticipated loss of profit and monies expended in anticipation of performance under the Contract.

3. LIQUIDATED DAMAGES

As actual damages for any delay in completion of the work which the Contractor is required to perform under this Contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the Client the sum of FIVE HUNDRED DOLLARS (\$500.00) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated completion, or as modified in accordance with the GENERAL CONDITIONS, PART I, until such work is satisfactorily completed and accepted.

4. RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to complete this Contract in every respect within the specified time.

5. COMMUNICATIONS

- a. All notices, demands, requests, instructions, approvals, proposals and claims must be in writing.
- b. Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may from time to time designate) in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- c. All papers required to be delivered to the Client shall, unless otherwise specified in writing to the Contractor, shall be delivered to the City Planner – Planning Department, 840 Main Street, Peekskill, NY 10566, and any notice to or demand upon the Client shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Client at such address, or to such other representatives of the Client or to such other address as the Client may

subsequently specify in writing to the Contractor for such purpose.

- d. Any such notice shall be deemed to have been given as of the time of actual delivery or (in case of mailing) when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

6. SIGNS

- a. Project signs will be required as indicated in Section 'L' of the Technical Specifications or on the Contract Plans.
- b. Subject to prior approval of the City as to size, design, type and location and to local regulations, the Contractor and/or the Subcontractors may erect temporary signs for purpose of identification and controlling traffic. The Contractor shall furnish, erect and maintain such other signs as may be required by Safety Regulations or as necessary to safeguard life and property.

7. CONTRACT DOCUMENTS AND DRAWINGS

The City will furnish the Contractor without charge one (1) full sized paper copy of the Contract Documents, including Technical Specifications and Drawings.

8. JOB OFFICES

None Required

9. PARTIAL USE OF IMPROVEMENTS

The City at its election, may give notice to the Contractor and place in use those sections of the work which have been completed, inspected and can be accepted as complying with the Contract Documents and if in its opinion each such section is reasonably safe, fit and convenient for the use and accommodation for which it was intended, provided:

- a. The use of such sections of the work shall not materially impede the completion of the remainder of the work by the Contractor.
- b. The Contractor shall not be responsible for any damage or maintenance costs due directly to the use of such sections.
- c. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or to poor workmanship.
- d. The period of guarantee stipulated in the Section J - GENERAL GUARANTEE under GENERAL CONDITIONS, PART I, shall not begin to run until the date of the final acceptance of all work, which the Contractor is required to construct under this Contract.

10. RAILROAD CROSSINGS

Where railroad crossings occur, the Contractor shall provide the railroad with all data on how he intends to perform the Work and shall complete such Work in strict compliance with railroad requirements.

11. MAINTENANCE OF ACCESS PROTECTION OF PUBLIC AND UTILITIES

- a. Interference with Utilities: The Contractor shall not make connections to existing water mains, operate valves, or otherwise interfere with the operation of existing water distribution system until he has given a seventy-two (72) hour notice to the affected owner and secured his approval of the proposed action. The Contractor shall notify gas, electric, and telephone companies, and all other utility companies having facilities which are subject to interference, at least 72 hours in advance of

the time he proposes to perform Work in the area so that they may take such precautions as they deem necessary to protect their properties. Contractor shall be responsible for calling a code 53 prior to commencement of work.

- b. Protection of the Public: When necessary to close a street temporarily, detours shall be provided, and these shall be plainly and adequately marked. Adequate barricades, lights and other warnings shall be provided and erected to protect the public from the Work. No additional compensation will be allowed for traffic control; all costs thereof shall be included in the lump sum and unit prices bid for the Work.
- c. Maintenance of Access: The Contractor at all times shall maintain streets and thoroughfares in such condition as to provide ready access to business establishments and private dwellings.

Where necessary, suitable bridges shall be constructed over trenches for pedestrians and vehicular traffic. All such temporary structures shall be safe in all respects, and shall comply with OSHA regulations. The Contractor shall be liable for any damages or injuries resulting from his Work. The Contractor shall ascertain the evenings on which business establishments are open in the section where Work under this Contract is being performed, and he shall clean up and prepare the business section for the usual activities on those evenings.

12. TEMPORARY LIGHT, POWER, HEAT, WATER, AND SANITATION FACILITY

- a. The Contractor shall provide all wiring, piping, metering equipment, fixtures, current, fuel, etc., for temporary light, power, heat and water required for the construction Work, and shall operate and maintain same at his own expense.
- b. All wiring for electrical light and power shall be installed and maintained in a first-class manner, as ordered or approved, and securely fastened in place at all points. Unless otherwise authorized, circuits separate from lighting circuits shall be used for all power purposes. Electric light and power lines shall be kept as far as is practicable from telephone or signal wires and from wires for firing blasts. Special precautions shall be taken to avoid short circuits in any part of the wiring system. All wiring and conduits shall be removed when directed, on or before the completion of the Work of this Contract.
- c. If, in the opinion of the Engineer or City, the temporary facilities provided by the Contractor are inadequate, the Contractor will not be permitted to proceed with any portion of the Work thereby affected.
- d. The Contractor shall provide, at his own expense, the water supply necessary for drinking purposes, and all water required for the performance of the Work. =
- e. The Contractor will provide his own sanitary stations for usage by all approved affiliated crews.

13. UNFORESEEN DIFFICULTIES

- a. The Contractor shall bear all losses arising out of the nature of the Work to be performed under this Contract, or resulting from any unforeseen obstructions or difficulties which may be encountered in the prosecution of the Work, or from the action of the elements, or from encumbrances on the site of the Work.

14. PHOTOGRAPHS OF PROJECT

- a. The Contractor shall furnish photographs, both digital and hard copy sized 3"X5", if required by the Owner, in the number, type and stage as enumerated below:
 - 1) All facades and site features located within the contract limit line prior to commencement of construction.
 - 2) All facades and site features located within the contract limit line, at project completion.

- 3) One (1) photograph of each easement and generally at special construction, sidewalk, sewer construction or as directed by the Engineer or City taken prior to and upon completion of construction.
- 4) In addition, the Contractor shall furnish photographs taken prior to commencement and upon completion of construction along all State, County and Local roads, and at such other points as may be designated by the Engineer or the City.

15. MAINTENANCE OF TRAFFIC

- a. The Contractor shall cause as little inconvenience to traffic as is possible, and effort shall be made to preserve at least one-way traffic on all streets at all times.
- b. The handling of traffic on State and County Highways shall be with the approval of and in accordance with the requirements of the New York State Department of Transportation in the case of State Highways, and Westchester County Highway Department in the case of County highways. The Contractor shall consult with the Chief of Police, with the Chief of the Fire Department, and with the DPW Supervisor to ascertain requirements with respect to City and City Roads and the directions of these officials are to be fully complied with in all details. All necessary permits for the Work shall be obtained and paid for by the Contractor. No additional payments will be made for maintenance and control of traffic.

16. WORK IN STATE OR COUNTY ROADS

- a. Where sewer lines traverse or cross roads which are under the jurisdiction of the State or County, the Contractor shall post bonds and shall obtain all necessary permits and assume the costs in connection with the bonds and departmental supervision.

17. INSURANCE

The limits of coverage required for this Contract are described in this document under Section H "Insurance."

18. LAYOUT OF WORK

The Contractor shall perform all layout work necessary for the satisfactory execution of the construction as shown on the Contract Drawings and all costs in connection therewith shall be included in the contract price(s).

The Contractor shall employ competent personnel and all work shall be subject to the approval of the Engineer and City.

The Contractor shall be held responsible for the protecting and safe guarding of all control points and bench marks set by the Engineer or City and his own forces. Any replacement or re-establishment of control points or bench marks by the Engineer or City, shall be at the expense of the Contractor.

The required horizontal and vertical control necessary to perform this work will be supplied by the Engineer or City at a later date.

19. WORK BY OTHERS

Private utilities, Contractors, Developers or other parties may be expected to be working within the Contract Area during this Contract. When two or more contractors are working in the vicinity simultaneously the Contractor shall conduct his work harmoniously with the requirements of the other contractors and shall not interfere with or delay their work.

It shall be the responsibility of the Contractor to coordinate his work under this Contract with the work being done by others in order that the construction may proceed in an efficient and logical manner. The Contractor shall have no claim or claims whatever against the Owner, Engineer, or other parties due to delays or other

reasons caused by the work by others or his failure to coordinate such work.

The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.

If any part of the Contractor's work depends for proper execution or results upon the work of any other separate contractor, the Contractor shall inspect and promptly report to the Engineer or City any apparent discrepancies or defects in such work that render it unsuitable for such proper execution and shall constitute and acceptance of the other contractors works as fit and proper to receive his work, except as to defects which may develop in the other separate contractors work after the execution of the Contractor's work.

Should the Contractor cause damage to the work or property of any separate contractor, the Contractor shall, upon due notice, settle with such other contractor by agreement or arbitration, if he will so settle. If such separate contractor sues the Municipality or initiates an arbitration proceeding on account of any damage alleged to have been so sustained, see General Condition hereof, Section 134, Arbitration and Litigation.

20. SCHEDULE OF DRAWINGS

<u>DRAWING NO.</u>	<u>DESCRIPTION</u>	<u>DATE</u>
COV-1	COVER SHEET	6/2025
ID-1	INDEX & ABBREVIATIONS	6/2025
LE-1 TO LE-2	LEGENDS	6/2025
HC-1	HORIZONTAL CONTROLS	6/2025
GN-1	GENERAL NOTES	6/2025
WZTC-1	WORK ZONE TRAFFIC CONTROL NOTES	6/2025
KEY-1	PLAN SHEET KEY	6/2025
PL-1 TO PL-9	GENERAL PLAN: CONNECTIVITY	6/2025
EX-1 TO EX-3	DEMOLITION PLAN: CIVIC HUB	6/2025
SL-1 TO SL-3	STREETSCAPE LAYOUT PLAN: CIVIC HUB	6/2025
PP-1 TO PP-3	PLANTING PLAN: CIVIC HUB	6/2025
GP-1 TO GP-3	GRADING, DRAINAGE, AND UTILITIES PLAN: CIVIC HUB	6/2025
RI-1 TO RI-3	CIVIC HUB: RAISED INTERSECTION	6/2025
TSN-1	TRAFFIC SIGNAL NOTES	6/2025
TSP-1	TRAFFIC SIGNAL PLAN	6/2025
TSD-1	TRAFFIC SIGNAL DETAILS	6/2025
MD-1 TO MD-12	MISCELLANEOUS DETAILS	6/2025
UD-1 TO UD-2	UNION AVE DETAILS	6/2023
E-100 TO E-101	ELECTRICAL SITE PLAN	6/2025
E-400	ELECTRICAL ONE-LINE DIAGRAM	6/2025
E-500	ELECTRICAL DETAILS	6/2025
WM-100	WATER MAIN ABANDONMENT PLAN	6/2025
WM-500	WATER MAIN AND SERVICE DETAILS	6/2025
S-1.0 TO S-4.0	STRUCTURAL NOTES, PLANS, AND DETAILS	6/2025

21. CONTRACTOR'S WORK AND STORAGE AREA

Approved areas within the Project Boundary are available for use by the Contractor, for work, storage of equipment, materials and trailers during the period of this Contract. The Contractor shall contact the Owner to determine if any specific locations will be designated or gain their approval prior to using any other areas. The Contractor shall confine his work/storage area to the limits as designated or approved and shall be

responsible for the security of the work/storage area. Upon completion of the Contract, the Contractor shall remove all equipment and materials except as otherwise specified and restore the site to its original condition as approved by the Engineer or Owner and at no cost to the Owner.

22. "OR EQUAL" CLAUSE

UNLESS OTHERWISE SPECIFIED:

Whenever a material, article or piece of equipment is identified on the Contract Drawings or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., the intent is to establish a standard. Any material, article, or equipment of other manufacturers and vendors of equally high quality (particularly with regard to points specified in the specifications) which will perform equivalently within the design ranges specified will be equally acceptable provided that the material, article or equipment so proposed is, in the opinion of the engineer, of equal substance and function. Furthermore; the manufacturer must agree to comply fully with the warranty requirements of the specifications. The Contractor may not assume that substitute equipment will be approved by the Engineer and non-approval of said equipment will form no basis for a claim for additional compensation by the Contractor. No substitute equipment will be purchased or installed by the Contractor without the Engineer's written approval. If the Engineer's approval is obtained for alternate equipment, the Contractor shall, at his own expense, make any changes in the structures, building, piping or electrical necessary to accommodate the equipment and if engineering is required due to substitution of other material the Contractor shall reimburse the Owner for the engineering service.

23. TEMPORARY WATER MAIN SHUTDOWN

All work which requires an existing water main to be shut down temporarily shall be so scheduled and so executed to keep public inconvenience to an absolute minimum. The Contractor is hereby alerted to the fact that this shall require some work to be performed during unusual hours. Also, once an existing water main is shut down to allow reconnection to a new main, work shall continue diligently, without interruption, until the existing main can be returned to service. There shall be no separate payment for performing the above work but all cost incidental thereto are considered to be included in the various prices bid under this Contract.

24. RECORD DRAWINGS

Record Drawings will be made by the Contractor. The Contractor will be required to perform any necessary field measurements and provide reproducible Record Drawings. The Record Drawings must reflect changes made in the field contrary to the plan, diagrams, and/or notes specified in the Contract Plans, including exact dimensions, geometry, and location of all elements of the work completed under the Contract. All changes must be "red lined" to indicate the variation from the Contract Plans.

The Contractor will then superimpose these Record Drawings with the original Contract Plans and make available to the City and/or Project Engineer.

The Contractor will submit to the City and/or Project Engineer both hard copies, three (3) sets printed full size [Arch D, 24"X36"] and a digital version on a USB Flash Drive of the 'Record Drawings' and 'As Built Plans' provided as a PDF (600 dpi or higher) or another format as mutually agreed upon between the City and the Contractor.

25. GROUNDWATER AND WATER

The Contractor shall provide all necessary pumps, dams, drains, ditches, flumes, well points and other means of excluding and removing groundwater or water from any other source, from trenches, tunnels and other parts of the work and for preventing the trench slopes from sliding or caving. He shall sufficiently dewater all trenches, tunnels, or other excavations to completely dry out and solidify the bottom of the trench to whatever depth is necessary below said bottom of the trench to provide a firm, solid, completely dry bottom on which to place foundation material, lay pipe or build a structure.

It is expressly understood that the Engineer or Owner is not responsible for any flooding, high-water tables, underground water or any other water problems which may be encountered on any portion of the work called for under this Contract and that the Contractor must include all anticipated costs for dewatering all excavations in the price(s) bid under this Contract.

26. CONSTRUCTION, EXCAVATION AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES.

The Contractor's attention is directed to the State of New York, Department of Public Service code 16 NYCRR Park 753-"Protection of Underground Facilities." Call 1-800-962-7962 before digging.

Information regarding this law can be found at www.digsafelynewyork.com.

27. COMPLIANCE WITH AIR AND WATER ACTS

This contract is subject to the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.

In compliance with said regulations, the following requirements shall be inserted in full in all contracts and subcontracts with respect to any non-exempt transaction thereunder funded with assistance provided under this Contract:

- 1) A stipulation by the Contractor or subcontractors that any facility to be utilized in the performance of any non-exempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- 2) A stipulation that as a condition for the award of the Contract prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- 3) Agreement by the Contractor that he will include or cause to be included the criteria and requirements in paragraph (1) through (3) of this Section in every nonexempt subcontract and requiring that the Contractor will take such action as the Government may direct as a means of enforcing such provisions.

In no event shall any amount of the assistance provided under this Contract be utilized with respect to a facility which has given rise to a conviction under Section 113(c)(1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act.

28. GENERAL MUNICIPAL LAWS OF NEW YORK STATE

The attention of the Contractor is directed to the fact that all pertinent General Municipal Laws of the State of New York shall be adhered to including but not limited to the following:

This Contract is made subject to the provisions of Section 103-a of the General Municipal Law of the State of New York, effective July 1, 1959, which section is as follows:

103-a. Grounds for cancellation of contract by municipal corporations and fire districts.

A clause shall be inserted in all specifications or contracts made or awarded by a municipal corporation or any public department, agency or official thereof on or after the first day of July, nineteen hundred fifty-nine or by a fire district or any agency or official thereof on or after the first day of September, nineteen hundred sixty, for work or services performed or to be performed, or goods sold or to be sold, to provide that upon the refusal of a person, when called before a grand jury, head of a state department, temporary state commission or other state agency, the organized crime task force in the department of law, head of a city department, or other city agency, which is empowered to compel the attendance of witnesses and examine

this under oath, to testify in an investigation concerning any transaction or contract had with the state, any political subdivision thereof, a public authority or with any public department, agency or official of the state or of any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract.

- a. Such person, and any firm, partnership or corporation of which he is member, partner, director or officer shall be disqualified from after selling to or submitting bids to or receiving awards from or entering into any contracts with any municipal corporation or fire district or any public department, agency or official thereof, for goods, work or services, for a period of five years after such refusal, and to provide also that.
- b. Any and all contracts made with any municipal corporation or any public department, agency or official thereof on or after the first day of July, nineteen hundred fifty-nine or with any fire district or any agency or official thereof on or after the first day of September, nineteen hundred sixty, by such person, and by any firm, partnership, or corporation of which he is a member, partner, director officer may be canceled or terminated by the municipal corporation or the district without incurring any penalty or damages on account of such cancellation or termination, but any monies owing by the municipal, corporation or fire district for goods delivered or work done prior to the cancellation or termination shall be paid.

The Contractor's attention is also directed to the requirement of the General Business Law and amended NYS Industrial Code Rule #23 NYS Department of Labor, Board of Standards and Appeals. The general Business Law requires that a Contractor give the utility concerned 72 hours written notice in advance of any of his construction or blasting near gas facilities. Industrial Code Rule #23 requires that a Contractor give the utility concerned 24 hours' notice before commencing any construction near an overhead or underground electric facility.

29. DAMAGES, VANDALISM AND GRAFFITI

The Contractor is hereby advised that until final inspection, approval and acceptance of all newly constructed work including but not limited to the construction of new sidewalk, driveway aprons, pedestrian ramps, catch basin lids, concrete and stone curbing, asphalt and/ or right-of-way restorations; he shall remain entirely responsible for maintaining and protecting such work from all forms of damages and vandalism and graffiti

Should any damage, vandalism or graffiti occur before final acceptance of the work by the City, The Contractor shall correct, repair or replace any defected work under the direction of the Superintendent of highways and / or the City Engineer at his own expense with no additional cost to the City. The City of Peekskill reserves the rights to withhold payment of contractual work for which damages, vandalism and or/ Graffiti has taken place until such a time whereas said defected work has been corrected by the Contractor to the City's satisfaction.

30. EXISTING UTILITIES; UTILITIES SERVICE

Obstructions other than those as shown of the contract drawings may be encountered. The contractor shall understand that the Owner is not responsible for correctness or sufficiency of the information given and that he shall have no claim for relief from any obligation or responsibility under the contract because the extend, location, size, or character of any pipe, conduit, cable or other underground structure is incorrectly shown or has been omitted from the Contract Drawings. The Contractor shall notify all utility companies and authorities having buried utility service in the project area and file certificate of same with the Engineer prior to beginning work.

The Contractor shall maintain service in main lines and service connections for all utilities encountered, regardless of the type of utility or the arrangements necessary to maintain service. Water lines and service connections exposed during cold weather shall be protected against freezing. Service connections may be cut only by permission of the Owner of the utility, and a temporary connection shall be installed immediately. The Contractor shall notify all utility customers before interrupting their service. A permanent, first-class replacement of the cutout portion of the service connections shall be installed and inspected by the owner of

the utility before backfilling.

The Contractor shall protect all utilities and subsurface structures encountered in the work. Because he may encounter some utilities and subsurface structures not shown on the Contract Drawings, the Contractor shall proceed with caution in executing his work. Insofar as is feasible, the contractor shall not disturb existing utilities but shall support and sustain them. The Contractor shall repair all damage to any utilities and pay all cost of protecting them and replacing them as necessary including service connections encountered in the course of the work, regardless of character, function, conditions, size, location, material, construction, ownership, or interference with the alignment of pipeline to be built, whether such existing utilities, structures, or service connections are shown or not shown.

The Contractor is held responsible for all damage to all utility or other underground or surface structures, whether or not they are shown on the Contract Drawings, and he shall pay all costs for protecting them or for repairing and/or replacing them if they are damaged.

In addition to the general notification referred to above the Contractor shall advise such organizations at least 48 hours in advance of the time he proposes to start work in each street throughout the project, to allow representatives to locate their utility in the field.

The Contractor shall notify the Engineer and City of all exposed crossings where the utilities will have a clearance of 18" or less as measured between the outside walls of the pipe. The Contractor shall take all measurements he and/or the Engineer deem necessary to protect the existing and new pipes, sewers and utilities.

31. MANDATORY OSHA CONSTRUCTION SAFETY AND HEALTH TRAINING

Pursuant to NYS Labor Law 220-h – On all public work projects of as least \$250,000 all laborers, workers and mechanics working on the site are required to be certified as having successfully completed an OSHA construction safety and health course of at least 10 hours prior to performing any work on the project.

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;
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.

A certification by the employer attesting that all employees have completed such 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.**

The General Contractor will submit a copy of the certificate of each employee and subcontractor's employee to the City or their authorized representative. These certificates will be randomly audited by the Municipality against contract employee payroll records submitted for payment.

Appendix K-1
‘Apprenticeship Program’

Pursuant to Section 165-2 of the Peekskill City Code, when any contractor enters into any construction contract in the amount of \$1,500,000 or more with the City of Peekskill, or enters into a subcontract for \$500,000 or more, the contractor and/or his subcontractor(s) shall have an apprenticeship agreement appropriate for the type and scope of work to be performed that has been registered with, and approved by, the Commissioner of Labor pursuant to the requirements found in Article 23 of the Labor Law.

Appendix K-2

'Equipment'

The Contractor must provide a written narrative describing which pieces of equipment the Contractor owns to be used on the Project. If the Contractor does not own equipment, the Contractor must provide a written statement detailing how the Contractor intends to acquire all necessary equipment to complete the Project.

Appendix K-3

'Utility Relocations'

As shown on the Contract Plans and in the Technical Specifications, the Contractor must coordinate all activities relates to the resetting of the gas valves and electrical vaults within the construction limits with the Consolidated Edison (ConEd) Company to ensure this task is delivered on-time with the project schedule.

Appendix K-4 **'DOS Reporting'**

As part of the City's contract with the Department of State ("DOS"), the Project requires regular submission of reporting information demonstrating work completed by New York State certified Minority and Women-owned Business Enterprises ("M/WBE"). As such, the City will request specific information from the Contractor regarding the project's utilization and payment progress to M/WBE firms. The Contractor must provide to the City any additional information as necessary for the City to fulfill its contractual obligations with DOS.

Section L – Technical Specifications to be provided by engineer/architect

ITEM 520.51000006 - SAWCUTTING EXISTING CONCRETE GRANITE AND ASPHALT CURBS

DESCRIPTION

Under this item the Contractor shall sawcut existing concrete asphalt or granite as shown on the plans or as directed by the Engineer.

MATERIALS (Not Specified)

CONSTRUCTION DETAILS

An approved power saw shall be utilized to cut curbs to the configuration and depth as specified in the contract documents or as directed by the Engineer. Unless otherwise noted, the depth of the sawcut shall be for the full existing depth of the material being sawed.

Sawcutting for curb removal shall be along a neat line as shown in the contract documents or as directed by the Engineer. After the curb has been cut to its full depth, the Contractor may use pry bars or other methods approved by the Engineer to pry loose the material to be removed.

Care shall be taken not to disturb or damage existing pavement, sidewalk or curbs scheduled to remain.

Any existing pavement, sidewalks and curbs to remain which are damaged through the Contractor's negligence shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the State.

METHOD OF MEASUREMENT:

This work shall be measured by the number of linear feet of sawcutting completed in accordance with the plans, typical sections and as ordered by the Engineer.

BASIS OF PAYMENT:

The unit price bid per linear foot of sawcutting shall include the cost of all labor, materials and equipment necessary to complete the work, the removal and disposal of the cut curb, and the cost of any repairs made necessary by damage from the Contractor's operations.

ITEM 560.12010010 – SEAT WALL

DESCRIPTION

Under this item the Contractor shall furnish and install Seat Walls of the size and at the locations shown in the contract documents and as directed by the Engineer.

MATERIALS

- Concrete for footing and core shall be Class A, conforming to Section 501.
- Portland Cement - Type 1 or Type 2, conforming to Section 701-01.
- Masonry Cement, conforming to Section 701-02.
- Fine Aggregates, conforming to Section 703-01.
- Coarse Aggregates, conforming to Section 703-02.
- Mortar Sand, conforming to Section 703-03.
- Masonry Mortar, conforming to Section 705-21.
- Epoxy Coated Bar Reinforcement, Grade 60, conforming to Section 709-04.
- Bluestone cap shall conform to Dimensional Masonry, Section 560-2.01.
- Manufactured Masonry Veneer shall match base of adjacent Taste NY building as follows:
 - A. Profile: Drystack. Include matching corner pieces.
 - B. Stone Accents:
 - 1. Color: To match main building. To be selected from the manufacturer's full range of material styles and colors.
 - 2. Texture: To match main building. To be selected from the manufacturer's full range of material styles.
 - C. Veneer Unit properties: Precast veneer units consisting of Portland cement, lightweight aggregates, and mineral oxide pigments.
 - D. Compressive Strength: ASTM C 192 and ASTM C 39, 5 sample average: greater than 1,800 psi (12.4MPa).
 - E. Shear Bond: ASTM C 482: 50 psi (345kPa), minimum.
 - F. Freeze-Thaw Test: ASTM C 67: Less than 3 percent weight loss and no disintegration.
 - G. Thermal Resistance: ASTM C 177: 0.473 at 1.387 inches thick.
 - H. Weight per square foot: 2012 IBC and 2012 IRC, ASTM C1670, 15 pounds, saturated
 - I. Manufacturer:
 - 1. Eldorado Stone, LLC
1370 Grand Ave., Bldg. B
San Marcos, CA 92069
www.eldoradostone.com

ITEM 560.12010010 – SEAT WALL

2. Boral Stone Products LLC
One Owens Corning Parkway
Toledo, OH 43659 www.culturedstone.com
3. Quality Stone Veneer Inc.
50 Refton Road
Refton, PA 17568
info@qualitystoneveneer.com

CONSTRUCTION DETAILS

The Contractor shall perform all work necessary to construct seat walls at the locations shown on the Plans and as shown in the Details. Excavation shall be performed in accordance with Section 206 of the Standard Specifications. Masonry work shall comply with Section 560 of the Standard Specifications. Concrete for foundation and core shall meet the requirements for Class A concrete for structures as specified in Section 501.

General: No masonry shall be constructed when the ambient temperature is 40° F or below, or when any masonry unit exhibits frost, except by written permission of the Engineer and subject to any conditions he may require.

Masonry units shall not be dropped upon or slid over existing masonry, nor shall hammering or turning of masonry units on the existing masonry be allowed. Masonry units shall be carefully set without jarring masonry already laid, and they shall be handled in a manner so as not to cause disfigurement.

Protection and Handling: Upon 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 be permitted to dry for at least seven days before being laid in the wall.

Laying: The manufactured masonry veneer masonry shall be laid up, in the pattern shown on the plans, by skilled masons and in 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 masonry veneer and the adjacent concrete core shall be filled with mortar as each unit is placed.

METHOD OF MEASUREMENT

The work will be measured as the number of linear feet of seat wall, measured along the center line of the top of the wall, furnished and erected in accordance with the contract documents.

ITEM 560.12010010 – SEAT WALL

BASIS OF PAYMENT

The unit price bid per linear foot of seat wall shall include the cost of furnishing all labor, materials, tools, and equipment necessary to satisfactorily complete the work for each sign. Excavation, concrete footing, masonry work and installation and disposal of excess materials and backfilling are all included in this item.

ITEM 568.80010010 - ORNAMENTAL PEDESTRIAN RAILING

DESCRIPTION.

Work shall consist of furnishing and installing new ornamental pedestrian railing in accordance with the Contract Drawings.

MATERIALS.

Materials required for this work shall comply with Section 568 of the Standard Specifications, unless otherwise noted in the Plans or modified herein. The Contractor's attention is also directed to Subsection 106-01, Source of Supply and Quality Requirements, with regard to advising Departmental Representatives of the sources of proposed materials.

CONSTRUCTION DETAILS.

All work, including, but not limited to fabrication, inspection, transportation and installation of ornamental pedestrian railing shall be done in accordance with provisions of the New York State Steel Construction Manual and Section 568 of the Standard Specifications.

Paint color shall be as shown in the Plans.

Railing posts shall be set plumb and be fastened in accordance with the Plans.

METHOD OF MEASUREMENT.

Work shall be measured as the number of linear feet of ornamental pedestrian railing furnished and installed. Measurement shall be taken along the longitudinal centerline of railing post.

BASIS OF PAYMENT.

Unit price bid per linear foot of ornamental pedestrian railing shall include the cost of furnishing all labor, equipment and materials necessary to complete the work. All anchor bolts, base plates, shims, washers, rails and pickets 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. Payment will be made at the unit bid price for 70% of the quantity erected. The balance of the quantity will be paid for upon proper completion of the work.

ITEM 604.07260011 – CONNECTION TO EXISTING DRAINAGE FACILITIES

Description:

Under this item, the Contractor shall remove portions of existing drainage facilities and connect new drainage facilities thereto at the locations shown on the plans as ordered by the Engineer.

Materials:

Concrete	Performance Engineered Mix (PEM) Concrete
Concrete Grouting Material	Section 701-05
Bar Reinforcement	Grade 60 Section 709-01

Construction Details:

The work under this item provides for connecting new pipe lines to existing pipe lines or structures. The Contractor shall maintain the existing pipe lines and structures in continuous service as required and/or directed by the Engineer.

The Contractor shall perform all excavation and backfill and dispose of all excess materials as required to complete the work. Backfilling shall be compacted in conformance with Section 203 of the Standard Specifications.

When connecting to the existing pipe line or structures, the existing facility shall be broken into and reinforcement cut back only as needed to accommodate the new pipe as indicated on the plans. The new pipe shall be set to required grade and the existing pipe wall shall be repaired and patched as required to provide a secure and waterproof connection. Ends of the new pipe projecting into the existing drainage facility shall be neatly cut off and trimmed flush with the inside face of the structure.

Method of Measurement:

The quantity to be paid for shall be the actual number of connections made in conformance with the plans and specifications and the orders of the Engineer.

Basis of Payment:

Payment will be made at the unit price bid for each connection which shall include the cost of all materials, labor and equipment necessary to complete the work except excavation and backfill which will be paid under Trench and Culvert Excavation Item 206.02 and the new pipe which shall be paid under the appropriate pipe item.

ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE

DESCRIPTION

This work shall consist of furnishing, installing, and maintaining Temporary Plastic Barrier Fences of the type and at the locations shown in the plans or where directed by the Engineer.

MATERIALS

Materials for Temporary Plastic Barrier Fences shall meet the following requirements:

- **Fence:** High-density polyethylene mesh, ultraviolet-stabilized min. 2 years; minimum height 4.0 feet. Color: high-visibility orange or green. When used to protect trees or other vegetation, color shall be high-visibility orange.
- **Posts:** Rigid metal or wood posts, minimum length 6.0 feet.
- **Ties:** Steel wire, #14 gauge or nylon cable ties.
- **Warning signs:** Sheet metal, plastic or other rigid, waterproof material, 1.5 feet by 2.0 feet with 4 inch black letters on a white background. Text shall be: "Protected Site - Keep Out" unless otherwise specified.

CONSTRUCTION DETAILS

Fences shall be erected prior to moving construction equipment onto any area designated for protection.

The line of fences as indicated on the plans shall be staked or marked out on the ground by the Contractor and approved by the Engineer before any fence is installed. Where used for protection of individual trees, fence shall be placed at the drip line (extent of canopy). If not possible, placement shall be as close to the drip line as possible and in no case less than 5.0 feet away from the tree trunk.

On approval of the stakeout, posts shall be securely driven on 6.0 foot-maximum centers, normal to the ground, to a depth 1/3 of the total post length. Plastic barrier fence shall be placed along the side of all posts. Ends of fencing segments shall overlap a distance of at least one half the fence height.

Fencing shall be secured to posts with wire or cable ties at top, middle and bottom of post. Fastener shall be tight enough to prevent the fencing from slipping down. Overlaps shall also be securely fastened.

Barrier fence which is not orange in color shall be flagged at 6.0 foot intervals with red or orange florescent tape. Warning signs shall be mounted on the fence at no more than 100 foot intervals.

Maintenance shall commence immediately after erection of the fence and continue until one week prior to acceptance of the contract, and shall consist of: replacing damaged post(s) and fencing; re-fastening and tightening fencing; and restoring fence to its intended height.

Fencing used for tree or other vegetation protection shall not be temporarily removed to allow equipment access over a protected area, except as required for items of work specifically shown on the plans and approved by the Engineer in writing.

ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE

METHOD OF MEASUREMENT

The quantity to be measured for payment will be the number of feet of Temporary Plastic Barrier Fence erected, measured along the top, to the nearest whole foot.

BASIS OF PAYMENT

The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Relocation of a fence from one location to another as directed by the Engineer shall be considered as a new location and will be separately paid.

Seventy percent (70%) of the price bid will be paid after satisfactory installation of the fence. The remaining Thirty percent (30%) will be paid after complete removal of the fence.

ITEM 604.060000PS – DECORATIVE TRENCH DRAIN SYSTEM

DESCRIPTION

This work shall consist of furnishing and installing a trench drain system and accessories in accordance with the contract documents and as directed by the Engineer.

MATERIALS

Manufacturer:

Urban Accessories
465 East 15th Street
Tacmoa, WA 98421
877.487.0488
www.urbanaccessories.com

Ironsmith
41-701 Corporate Way #3
Palm Desert, CA 92260
800-338-4766
www.ironsmith.com

Or equal as approved by Engineer.

Trench drain units shall be interlocking channels and includes an attached grate meeting the requirements of §655, Frames, Grates, and Covers.

Channel units shall be able to accept connections to 4" or 6" underdrain pipe on the ends, bottom, and/or sides.

The trench drain system shall meet a design load of HS 20 and the grate shall be ADA compliant.

CONSTRUCTION DETAILS

Excavation shall be in conformance with the Construction Details of §206-3 Trench, Culvert, and Structure Excavation.

Install trench drain system with manufacturer's instructions. Drainage units shall be laid in close conformity to line and grade and have a full, firm and even bearing at each joint and along their entire length.

Backfill shall comply with §206-3.02, Structure Excavation.

METHOD OF MEASUREMENT

This work will be measured as the number of Trench Drains satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work. Excavation and backfill will be paid for under the items shown in the contract documents.

ITEM 608.01000010 - CONCRETE SIDEWALKS - UNREINFORCED

This work shall consist of the construction of a portland cement concrete sidewalk. All work shall be in accordance with this specification and in reasonably close conformity with the lines and grades shown on the plans or established by the Engineer.

The following requirements of Section 608 shall apply:

608-2
608-2.01
608-3.01
608-4.01
608-5.01

All references to driveways and wire fabric for reinforcement shall be disregarded. The sidewalk shall be constructed without wire fabric for concrete reinforcement.

608.010X0005 - COLORED AND IMPRINTED PORTLAND CEMENT CONCRETE SIDEWALK AND DRIVEWAYS

DESCRIPTION

The work shall consist of furnishing and installing colored, imprinted, or colored and imprinted Portland cement concrete sidewalks as shown on the contract documents and as directed by the Engineer.

MATERIALS

The following sections of the standard specifications shall apply:

Sidewalks, Driveways, Bicycle Paths, and Vegetation Control Strips	608-2
--	-------

The following ASTM Specifications shall apply:

Standard Specification for Pigments for Integrally Colored Concrete	C979
---	------

Integral Color Concrete Admixture.

The color shall be as indicated in the contract documents. For each color used, the pigment shall be from the same batch or lot unless otherwise approved.

Color admixtures for integrally colored concrete shall be:

- certified by the manufacturer as meeting the requirements of ASTM C979. The Contractor shall provide the manufacturer's certification verifying that the colored concrete admixture meets ASTM C979.
- added to the concrete mix per manufacturer's recommendations at a dosage rate to achieve the color specified in the contract documents; the manufacturer's recommended maximum dosage rate shall not be exceeded.
- packaged so that each dose is the proper dose for 1 cubic yard of concrete.

Imprinted Concrete

Use imprinting tools capable of imprinting the surface of the concrete with a uniform and aligned pattern and/or texture. Use a clear release agent as specified by the imprinting tool manufacturer. These materials shall be approved prior to their use. Formliners shall be composed of elastomeric urethane, polyvinyl chloride (PVC) or ABS material designed for their intended shape and number of reuses to achieve the desired pattern. Formliners shall not be worn, damaged, compromise the desired patterning effect, or cause damage to the concrete during form removal.

Color Matching Joint Material

When specified for any location, use a color matched caulking compound designed for joint sealing.

608.010X0005 - COLORED AND IMPRINTED PORTLAND CEMENT CONCRETE SIDEWALK AND DRIVEWAYS

CONSTRUCTION DETAILS

The following sections of the standard specifications shall apply:

Sidewalks, Driveways, Bicycle Paths, and Vegetation Control Strips

608-3

with the following modifications:

Test Panels

Per §105-02, The Contractor shall have sufficient skill and experience to properly perform colored and imprinted concrete work. The Contractor shall construct a job site test panel for each individual color and pattern or combination of color and pattern specified in the contract documents. The test panel(s) shall be 5 feet x 5 feet, minimum, constructed at a selected location. As many test panels will be constructed as are necessary to produce approved sample panels. The permanent work shall be consistent with the appearance of the approved test panel(s). The test panel(s) shall not be incorporated into the work and will be removed when ordered.

Color Concrete Admixture

Add the integral color admixture at the manufacturer's recommended dosage rate. This rate is to remain constant for all batches of concrete produced. Prior to placing concrete, the Contractor shall protect adjacent surfaces and structures from spatters. Once a portion of the batch has been placed, no additional water shall be added to the remaining batch.

To integrally color the concrete, introduce the color additive into the mixer drum in a manner recommended by the manufacturer. The quantity of concrete being delivered shall be no less than one-third the capacity of the mixer drum. Batch the concrete in full cubic yard increments.

After the concrete is placed, apply a color matching hardener evenly to the plastic surface by the "dry shake" method as recommended by the manufacturer.

Architectural Patterned and Textured Concrete

The Contractor shall,

- screed concrete to the finished grade and apply the release agent evenly over the entire imprinting tool. Using methods recommended by the manufacturer, apply pre-approved imprinting tools to the surface while the concrete is still plastic. The requirement for a lightly broomed surface is waived.
- unless otherwise specified, score or saw cut the surface to a minimum depth of $\frac{1}{4}$ the thickness of the slab at intervals that are consistent with the architectural pattern or as indicated in the contract documents. If the saw cut option is used, the Contractor shall be responsible for performing the saw cut operation at such time as to minimize the possibility of spalling and/or cracking.

**608.010X0005 - COLORED AND IMPRINTED PORTLAND CEMENT CONCRETE
SIDEWALK AND DRIVEWAYS**

- tool the edges, joints and scored areas in a manner consistent with the imprinting pattern.

Within 24 hours, remove release agent with pressure wash and apply a pre-approved sealer, recommended by the coloring manufacturer, at a rate consistent with manufacturer's specifications.

Color Matching Joint Material

Install pre-molded resilient joint filler (§705-07) where the sidewalk line intersects a building, walk, permanent structure, or other location designated, to within 1-inch of the top of the slab. Caulk the top 1-inch of the joint with color matching caulking compound.

METHOD OF MEASUREMENT

The work will be measured as the number of cubic yards, to the nearest 0.1 cubic yard of colored, imprinted, or colored and imprinted Portland cement concrete sidewalk installed.

BASIS OF PAYMENT

The unit bid price per cubic yard of colored, imprinted, or colored and imprinted Portland cement concrete sidewalk furnished and installed shall include the cost of all labor, equipment and materials necessary to satisfactorily complete the work.

The cost of construction and removal of the test panel(s) is to be included in the price bid for the specified item(s).

Payment will be made under:

ITEM NUMBER	ITEM DESCRIPTION	UNIT
608.01020005	Colored and Imprinted Portland Cement Concrete Sidewalk	CY
608.01030005	Colored Portland Cement Concrete Sidewalk	CY
608.01040005	Imprinted Portland Cement Concrete Sidewalk	CY

ITEM 608.03040008 - REMOVE, STORE AND RESET CONCRETE BLOCK PAVERS

DESCRIPTION:

Under this item the contractor shall carefully remove, store and reset concrete block pavers in the locations shown on the plans, or as directed by the Engineer.

MATERIALS:

Pavers shall be the units salvaged in a usable condition as determined by the Engineer.

Damaged pavers shall be replaced with new pavers of the same size, shape and color as the existing pavers as determined by the Engineer. Materials shall meet the requirements of Section 704-13, Precast Concrete Driveway and Sidewalk Pavers.

Setting bed material for the reset concrete block pavers shall conform to the requirements of Subsection 608-2.05.

CONSTRUCTION DETAILS:

All pavers shall be laid in the same pattern as existed or as directed by the Engineer to provide a uniformly even surface. Pavers shall be laid on a granular material setting bed not to exceed 2 inches of uniformly compacted material placed over the specified subbase.

After the pavers are in place, joint filler shall be swept over the pavers until the joints are completely filled.

METHOD OF MEASUREMENT:

Concrete block pavers shall be measured by the number of square yards of reset pavers. Damaged pavers shall be replaced by the contractor at his own expense. Unused concrete pavers shall be removed and disposed of under Item 203.02.

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. Excavation and subbase course necessary to reset the pavers, and removed unused pavers will be paid for under their appropriate items.

ITEM 608.21000003 - CAST IRON EMBEDDED DETECTABLE WARNING UNITS

DESCRIPTION

Section §608-1 of the Standard Specifications shall apply.

MATERIALS

Section §608-2.07 of the Standard Specification shall apply with the following modifications:

Embedded Detectable Warning Units 726-02

All embedded detectable warning units shall be cast iron. No other material will be accepted. Installation of detectable warning units shall be in accordance with manufacturer's recommendations. All detectable warning units shall have a natural finish color.

CONSTRUCTION DETAILS

Cast iron detectable warning units shall be installed in wet concrete as directed by the manufacturer. Follow all applicable manufacturer's requirements for environmental conditions, surface preparation, installation procedures, curing procedures, and materials compatibility.

METHOD OF MEASUREMENT

Section §608-4.07 of the Standard Specifications shall apply.

BASIS OF PAYMENT

The unit bid price per square yard shall include all labor, material, and equipment necessary to satisfactorily complete the work, including bedding material. No adjustment shall be made for concrete removed to accommodate embedded units.

Payment will be made under:

Item No.	Item	Pay Unit
608.21000003	Cast Iron Embedded Detectable Warning Units	Square Yard

ITEM 610.14000011 – STRUCTURAL SOIL MIX

DESCRIPTION

Under this item the Contractor shall furnish and place Structural Soil Mix in accordance with the contract documents and as directed by the Engineer.

MATERIALS

Structural Soil Mix shall be a mixture of crushed stone, clay loam, hydrogel and amendments meeting the requirements of “CU Structural Soil[®]” patented by Cornell University (Patent #5,849,069) also known as “CU Soil[™]”. The material shall be obtained from a Producer sub-licensed by Amereq, the exclusive Licensee of Cornell University for CU-Structural Soil[®]. Proof of such sub-licensing shall be submitted to the Engineer along with a sample of the finished mix, prior to delivery to the site. A list of sub-licensed Producers can be obtained from:

Amereq Inc.
“CU Soil[™]” Division
19 Squadron Blvd. New City, New York 10956,
phone: (800) 832-8788 ext. 11
contact: bkalter@amereq.com

Water: Shall comply with Standard Specifications Section 712-01.

CONSTRUCTION DETAILS

Mixing and Quality Control Testing: All Structural Soil components, including any organic material, water, or other amendments necessary to meet the requirements of CU-Structural Soil[®] shall be mixed by a licensed Producer at that Producer’s yard prior to delivery. No mixing shall be done at the project site. Sufficient time must be allowed prior to delivery for the Producer’s internal quality control, independent laboratory testing, analysis and (if necessary) amendment of the mix.

Delivery, Storage and Handling: The Contractor shall arrange for delivery of the Structural Soil Mix to the site, either by the Producer, or the Contractor’s own forces. The Contractor shall ensure that the delivered Mix is received from the Producer at or near optimum compaction moisture content as determined by AASHTO T-99 (ASTM D698) and shall protect the Mix from drying out or from excess moisture until placed. The Mix shall also be protected from contamination by toxic materials, trash, debris, water containing cement, clay, silt or materials that will alter the particle size distribution.

Structural Soil Mix shall not be transported when rain is expected. If not placed the day of delivery, it shall be stored and protected from excess water absorption and/or potential erosion.

The Engineer shall obtain and furnish to the EIC, a ticket ensuring that the delivered Structural Soil Mix was obtained from and mixed by a licensed Producer. The delivered Structural Soil Mix should also be compared to the original sample to ensure consistency.

ITEM 610.14000011 – STRUCTURAL SOIL MIX

Placement: The Contractor shall notify the Engineer of any subsurface conditions which may affect the Contractor's ability to install the Structural Soil Mix. If subsurface drain lines are included, they shall be installed prior to placement of the mix.

The Mix shall not be worked when frozen, excessively wet, or under otherwise unsatisfactory conditions nor shall it be placed on frozen, wet or muddy sites. The Mix must not be excessively or incorrectly handled to the point of separation of the clay loam soil from the crushed stones.

Structural Soil Mix shall be placed in 6 inch lifts, each compacted to at least 95% Proctor Density. If compaction moisture content exceeds the optimum per AASHTO T 99 (ASTM D 698), delay compaction and protect Mix until sufficiently dry to compact.

METHOD OF MEASUREMENT

The quantity to be measured for payment will be in cubic yards to the nearest cubic yard of Structural Soil Mix installed.

BASIS OF PAYMENT

The unit bid price shall include the cost of all labor, materials and equipment necessary to complete the work satisfactorily.

Payment will be made under:

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
610.14000011	Structural Soil Mix	Cubic Yard

ITEM 615.010101PS-TABLE

DESCRIPTION:

Under this item, the Contractor shall furnish and install all tables, with locations to be confirmed by Landscape Architect in field.

MATERIALS:

Tables shall be Streetlife Solid Meet & Work Table, or approved equal. Material as indicated on plans. Contractor to provide shop drawings and material sample to Engineer for approval.

CONSTRUCTION DETAILS:

All tables shall be mounted as indicated on plans. Contractor shall submit shop drawings for approval prior to fabrication.

METHOD OF MEASUREMENT:

The quantity to be paid for will be the number of tables furnished and installed at the locations confirmed by the Landscape Architect.

BASIS OF PAYMENT:

The unit price bid for each table shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

ITEM 615.020XNN24 - REMOVE, STORE AND RESET LANDSCAPE APPURTENANCES

DESCRIPTION

This work shall consist of removing, storing and resetting landscape appurtenances in accordance with the contract documents and as directed by the Engineer.

MATERIALS

The following sections of the standard specification shall apply:

Portland Cement Concrete – General

501-2

for all concrete foundations required, except that the requirements for inspection facilities, automated batching control and recordation do not apply. The concrete shall be Class A concrete for structures, unless otherwise specified. The batching, mixing and curing methods and the inspection facilities shall meet the approval of the Department or its representative. The Contractor may submit for approval a mix at least equivalent to the specified Class A concrete.

Incidental installation material may also include hardware, grout, silicone sealant or others. Refer to the contract documents and any manufacturer's installation instructions for incidental material(s) required to complete the re-setting of each landscape appurtenance.

CONSTRUCTION DETAILS

Prior to removal:

The Contractor, as necessary and appropriate to the intent of resetting, shall sufficiently document the current location and orientation(s) of the existing appurtenance(s). The documentation shall ensure that the required reassembly (including footings) in the existing or new location is accurate and consistent with the original assembly, unless otherwise noted in the contract documents.

Removal:

Existing landscape appurtenance(s) shall be removed from the location(s) indicated, and according to specific instructions provided, in the contract documents.

Removal shall be completed in a manner that prevents damage to the material, material assembly, mounting infrastructure and/or hardware, as appropriate. If removing the existing structural concrete is called for in the contract documents, the existing structural concrete or other materials for footings shall be broken up and removed, and the affected portions of the appurtenances carefully cleaned.

Any damage to the landscape appurtenance that may result from the Contractor's removal and storage operations shall be repaired or the damaged components shall be replaced at no additional cost to the State. Should the resultant damage be deemed irreparable, the Contractor must replace the landscape appurtenance with one of comparable size, appearance and capacity to the existing, as appropriate. Damaged landscape appurtenances requiring replacement, unless otherwise specified, shall become the property of the Contractor and shall be removed from the work site at no additional cost to the State.

ITEM 615.020XNN24 - REMOVE, STORE AND RESET LANDSCAPE APPURTENANCES

Storage:

Landscape appurtenance(s) shall be stockpiled at an approved location, and/or as indicated in the contract documents, with adequate provision for damage protection.

Resetting:

The landscape appurtenance(s) shall be reset at the location(s) and orientation(s) indicated in the contract documents.

All material, including footings, shall be reset according to the manufacturer's installation instructions and/or the contract documents and/or documentation by the Contractor prior to removal, as appropriate. The landscape appurtenance shall be satisfactorily reset in a secure and upright position.

METHOD OF MEASUREMENT

This work will be measured as the number of each landscape appurtenance satisfactorily removed, stored and reset.

BASIS OF PAYMENT

The unit price bid per each landscape appurtenance removed, stored and reset shall include the cost of furnishing all labor, materials, and equipment, including concrete footings, necessary to satisfactorily complete the work.

Payment will be made under the following:

<u>ITEM</u>	<u>DESCRIPTION</u>
615.02010124	Remove, Store and Reset Bench, Type 01
615.02010224	Remove, Store and Reset Bench, Type 02
615.02010324	Remove, Store and Reset Bench, Type 03
615.02020124	Remove, Store and Reset Trash Receptacle, Type 01
615.02020224	Remove, Store and Reset Trash Receptacle, Type 02
615.02020324	Remove, Store and Reset Trash Receptacle, Type 03
615.02030124	Remove, Store and Reset Planter, Type 01
615.02030224	Remove, Store and Reset Planter, Type 02
615.02030324	Remove, Store and Reset Planter, Type 03
615.02040124	Remove, Store and Reset Flagpole, Type 01
615.02040224	Remove, Store and Reset Flagpole, Type 02
615.02040324	Remove, Store and Reset Flagpole, Type 03
615.02050124	Remove, Store and Reset Boulder, Type 01
615.02050224	Remove, Store and Reset Boulder, Type 02
615.02050324	Remove, Store and Reset Boulder, Type 03
615.02060124	Remove, Store and Reset Landscape Appurtenance, Type 01
615.02060224	Remove, Store and Reset Landscape Appurtenance, Type 02
615.02060324	Remove, Store and Reset Landscape Appurtenance, Type 03

ITEM 615.020XNN24 - REMOVE, STORE AND RESET LANDSCAPE APPURTENANCES

DESCRIPTION

This work shall consist of removing, storing and resetting landscape appurtenances in accordance with the contract documents and as directed by the Engineer.

MATERIALS

The following sections of the standard specification shall apply:

Portland Cement Concrete – General

501-2

for all concrete foundations required, except that the requirements for inspection facilities, automated batching control and recordation do not apply. The concrete shall be Class A concrete for structures, unless otherwise specified. The batching, mixing and curing methods and the inspection facilities shall meet the approval of the Department or its representative. The Contractor may submit for approval a mix at least equivalent to the specified Class A concrete.

Incidental installation material may also include hardware, grout, silicone sealant or others. Refer to the contract documents and any manufacturer's installation instructions for incidental material(s) required to complete the re-setting of each landscape appurtenance.

CONSTRUCTION DETAILS

Prior to removal:

The Contractor, as necessary and appropriate to the intent of resetting, shall sufficiently document the current location and orientation(s) of the existing appurtenance(s). The documentation shall ensure that the required reassembly (including footings) in the existing or new location is accurate and consistent with the original assembly, unless otherwise noted in the contract documents.

Removal:

Existing landscape appurtenance(s) shall be removed from the location(s) indicated, and according to specific instructions provided, in the contract documents.

Removal shall be completed in a manner that prevents damage to the material, material assembly, mounting infrastructure and/or hardware, as appropriate. If removing the existing structural concrete is called for in the contract documents, the existing structural concrete or other materials for footings shall be broken up and removed, and the affected portions of the appurtenances carefully cleaned.

Any damage to the landscape appurtenance that may result from the Contractor's removal and storage operations shall be repaired or the damaged components shall be replaced at no additional cost to the State. Should the resultant damage be deemed irreparable, the Contractor must replace the landscape appurtenance with one of comparable size, appearance and capacity to the existing, as appropriate. Damaged landscape appurtenances requiring replacement, unless otherwise specified, shall become the property of the Contractor and shall be removed from the work site at no additional cost to the State.

ITEM 615.020XNN24 - REMOVE, STORE AND RESET LANDSCAPE APPURTENANCES

Storage:

Landscape appurtenance(s) shall be stockpiled at an approved location, and/or as indicated in the contract documents, with adequate provision for damage protection.

Resetting:

The landscape appurtenance(s) shall be reset at the location(s) and orientation(s) indicated in the contract documents.

All material, including footings, shall be reset according to the manufacturer's installation instructions and/or the contract documents and/or documentation by the Contractor prior to removal, as appropriate. The landscape appurtenance shall be satisfactorily reset in a secure and upright position.

METHOD OF MEASUREMENT

This work will be measured as the number of each landscape appurtenance satisfactorily removed, stored and reset.

BASIS OF PAYMENT

The unit price bid per each landscape appurtenance removed, stored and reset shall include the cost of furnishing all labor, materials, and equipment, including concrete footings, necessary to satisfactorily complete the work.

Payment will be made under the following:

<u>ITEM</u>	<u>DESCRIPTION</u>
615.02010124	Remove, Store and Reset Bench, Type 01
615.02010224	Remove, Store and Reset Bench, Type 02
615.02010324	Remove, Store and Reset Bench, Type 03
615.02020124	Remove, Store and Reset Trash Receptacle, Type 01
615.02020224	Remove, Store and Reset Trash Receptacle, Type 02
615.02020324	Remove, Store and Reset Trash Receptacle, Type 03
615.02030124	Remove, Store and Reset Planter, Type 01
615.02030224	Remove, Store and Reset Planter, Type 02
615.02030324	Remove, Store and Reset Planter, Type 03
615.02040124	Remove, Store and Reset Flagpole, Type 01
615.02040224	Remove, Store and Reset Flagpole, Type 02
615.02040324	Remove, Store and Reset Flagpole, Type 03
615.02050124	Remove, Store and Reset Boulder, Type 01
615.02050224	Remove, Store and Reset Boulder, Type 02
615.02050324	Remove, Store and Reset Boulder, Type 03
615.02060124	Remove, Store and Reset Landscape Appurtenance, Type 01
615.02060224	Remove, Store and Reset Landscape Appurtenance, Type 02
615.02060324	Remove, Store and Reset Landscape Appurtenance, Type 03

ITEM 615.0407NN01 - TREE GRATE WITH FRAME

DESCRIPTION:

This work shall consist of furnishing and installing a tree grate with frame as shown as in the contract documents and as directed by the Engineer.

The tree grate(s) furnished and installed under this pay item is identified in a special note titled "*Tree Grate with Frame*" in the contract documents.

MATERIALS:

The tree grate installed shall be from one of the following manufacturers:

Ironsmith
41-701 Corporate Way #3
Palm Desert, CA 92260
800.338.4766
www.ironsmith.cc

Neenah Foundry
2121 Brooks Avenue
Neenah, WI 54956
800.558.5075
www.nfco.com

Urban Accessories
465 East 15th Street
Tacoma, WA 98421
877.487.0488
www.urbanaccessories.com

EJ
301 Spring Street
East Jordan, MI 49727
800.874.4100
www.ejco.com

South Bay Foundry
9444 Abraham Way
Santee, CA 92071
619.956.2780
www.southbayfoundry.com

or equal, as approved by the Engineer.

Model numbers, names and/or styles, along with any other material requirements shall be identified in a special note titled, "*Tree Grate with Frame*" in the contract documents.

The tree grate shall have a maximum slot opening size of ½", unless otherwise specified in the contract documents.

The frame, anchor bolts and connecting fasteners shall be supplied by the same manufacturer as the grate.

Finish (paint) on either component shall NOT be required unless otherwise specified.

CONSTRUCTION DETAILS:

The Contractor shall install frame, grates, anchor bolts, and connecting fasteners as per the manufacturer's recommendations.

Frames and grates shall be placed true to line and grade. Frames and grates shall make firm, full and even bearing on their respective underlying surfaces and shall be non-rocking under the influence of load. The grate frame shall be anchored into the adjacent paving or curbing.

All other construction details, as necessary, shall be included in the special note titled, "*Tree*

ITEM 615.0407NN01 - TREE GRATE WITH FRAME

Grate with Frame” in the contract documents.

Submittals:

Unless specified otherwise, the Contractor shall submit:

1. plans, elevations, sections and attachment details for each tree grate furnished and installed with this specification, and
2. the details of the assemblies, including dimensions, installation methods (including mounting) and installation components.

METHOD OF MEASUREMENT:

The work will be measured as the number of each tree grate with frames installed in accordance with the contract documents.

BASIS OF PAYMENT:

The unit price for each tree grate with frame shall include the cost of furnishing all necessary labor, materials and equipment to satisfactorily complete the work.

Payment will be made under:

Item Number	Item Description	Pay Unit
615.04070101	Tree Grate with Frame, Type 1	Each
615.04070201	Tree Grate with Frame, Type 2	Each
615.04070301	Tree Grate with Frame, Type 3	Each
615.04070401	Tree Grate with Frame, Type 4	Each

ITEM 615.08XX0005 – BENCH, TYPE XX

DESCRIPTION:

The Contractor shall furnish and install benches as shown in the Contract Documents. The Contractor shall verify the type, quantity, location and installation method for each bench with the Engineer prior to ordering. This may include approval by owning or maintaining agencies other than NYSDOT.

MATERIALS:

As indicated in the contract documents.

CONSTRUCTION DETAILS:

The benches shall be installed in the locations indicated in the contract documents, in accordance with the manufacturer's instructions and as approved by the Engineer.

METHOD OF MEASUREMENT:

Quantity will be measured by the number of benches installed to the satisfaction of the Engineer.

BASIS OF PAYMENT:

The unit price bid for each bench shall include the cost of all labor, materials and equipment necessary to satisfactory complete the work.

ITEM 615.08030005–BOLLARD STORAGE CONTAINER

DESCRIPTION:

Under this item, the Contractor shall furnish and install the bollard storage container, with location to be confirmed by Landscape Architect in field.

MATERIALS:

Bollard storage container shall be materials as indicated on plans. Contractor to provide shop drawings and material sample to Engineer for approval.

CONSTRUCTION DETAILS:

All tables shall be mounted as indicated on plans. Contractor shall submit shop drawings for approval prior to fabrication.

METHOD OF MEASUREMENT:

The quantity to be paid for will be the number of bollard storage containers furnished and installed at the locations confirmed by the Landscape Architect.

BASIS OF PAYMENT:

The unit price bid for each bollard storage container shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

ITEM 615.27XX0010 - BICYCLE RACK (DESIGN CAPACITY XX BICYCLES)

DESCRIPTION:

This work shall consist of furnishing and installing bicycle racks in accordance with the plans and specifications or as directed by the Engineer.

MATERIALS:

The bicycle rack shall be constructed of ASTM F1083 schedule 40 steel pipe or approved equal. The Contractor shall submit shop drawings and/or catalog cuts to the Engineer for review and approval prior to the installation of the bicycle rack. Drawings shall show clearly all materials, finishes, and connecting methods.

Class A concrete shall be used for the footing.

CONSTRUCTION DETAILS:

Bicycle racks shall be constructed in accordance with this specification, the contract documents, and as directed by Engineer.

Each bicycle rack shall be permanently installed on the surface by embedding the bottom portion of the galvanized steel frame, or an extension of the frame, into concrete or by installing a surface flange mount as recommended by the manufacturer.

Assembly of bicycle rack components shall be performed in strict accordance with manufacturer's recommendations for installation if applicable. All work shall be free of blemishes or defects, which can affect durability, strength, safety or appearance. Bicycle racks or parts that are received chipped, scratched, bent, dented, stained, or damaged or are damaged during installation as determined by the Engineer will not be accepted and shall be removed immediately from the project site and replaced with new bicycle racks or parts, which are free from all defects.

The contractor shall set the bicycle rack plumb to the height indicated in the contract documents or as directed by the Engineer.

The contractor shall protect all parts of the bicycle rack and maintain it in an undamaged condition until completion and acceptance of the contract. Any sections damaged at any time prior to final acceptance shall be repaired or replaced at the contractor's expense.

All sidewalk restoration and excavation shall be included in the price bid for this item.

METHOD OF MEASUREMENTS:

This work will be measured as the number of bicycle racks satisfactorily furnished and installed at the locations shown on the plans or ordered by the Engineer.

BASIS OF PAYMENT:

The unit price bid for each bicycle rack shall include the cost of furnishing all labor, materials and equipment necessary to complete the work, including sidewalk restoration where necessary.

ITEM 618.78ABCN15 – SECURITY BOLLARD

DESCRIPTION

This work shall consist of furnishing and installing security bollards, with approved covering or finishes, and yellow, retro-reflective tape as shown on the contract documents and as directed by the Engineer.

Definitions:

Deep Foundation: Concrete foundation for bollard or bollard array that is greater than twenty-four inches (24”) deep.

Shallow Foundation: Concrete foundation for bollard or bollard array that is less than or equal to twenty- four inches (24”) deep.

Bollard Array: A group of two or more bollards pre-assembled to a metal “sled”. The assembly may or may not include reinforcing bar. The components are welded together to form a unit.

MATERIALS

The following sections of the standard specifications shall apply:

Portland Cement Concrete Production	501-2
Precast Concrete – General	704-03
Galvanized Coatings and Repair Methods	719-01
Security Bollards	710-35

Cast-In-Place Foundation:

Foundation shall be per manufacturer’s installation instructions unless specifically indicated otherwise in the contract documents.

Concrete: Any concrete necessary for the installation of these bollards, or to restore the site, shall meet the Misc. Concrete requirements as outlined in Table 2. Concrete Mixtures in NYSDOT Materials Procedure MP501-2 Mix Design and Approval Procedure for Performance Engineered Mixtures – Structural Concrete, or meet the requirements shown in the manufacturer’s installation instructions, whichever is higher strength.

Reinforcing Bar: Reinforcing bar shall be per manufacturer’s specification unless specifically indicated otherwise in the contract documents. Welded reinforcing bar that is part of a bollard or bollard assembly shall be visually inspected on site prior to acceptance.

Precast Foundation:

Only fixed or removable bollards shall be installed with precast foundations.

Precast foundation shall be produced in accordance with §704-03 and manufactured by a precast producer on the Approved List (Group 1) for QC/QA production.

Reinforcing Bar: Reinforcing bar shall be per manufacturer’s specification unless specifically indicated otherwise in the contract documents. Welded reinforcing bar that is part of a bollard or bollard assembly shall be visually inspected at the pre-casting facility prior to acceptance.

ITEM 618.78ABCN15 – SECURITY BOLLARD

Yellow, Retro-Reflective Tape:

Security bollards shall have yellow, retro-reflective tape that meets the material requirements described in §710-35.

CONSTRUCTION DETAILS

The manufacturer shall fabricate bollard arrays in a manner that satisfies the plan locations specified in the contract documents without compromising the performance of the system. This may require following a curved alignment for the bollards. It may also require increasing the size of an array and the number of bollards mounted on it in order to achieve the length of the line of the installations.

The manufacturer's written installation instructions shall be strictly adhered to unless the contract documents contain differing instructions specifically addressing the bollards. Any discrepancies or problems will be resolved by the Engineer.

Any concrete removal necessary for the installation of these bollards shall first be saw cut so as not to damage the existing concrete to remain. Prior to saw-cutting and/or excavation, the Contractor shall ensure that the affected area is free from obstacles, including, but not limited to, underground utilities. If utilities are known or discovered to be near the excavation, the Contractor shall take steps to ensure they are not damaged by his/her operations.

The Contractor shall ensure that the bollard(s) are oriented appropriately, with the "attack" side of the bollard facing toward the vehicular traffic. Refer to the manufacturer's installation instructions for additional information.

Any bollard covers or special finishes (e.g. powder coating, painting etc.) shall be one of the options specified in the contract documents.

Yellow, Retro-Reflective Tape:

Yellow, retro-reflective tape shall be:

- applied to the top and bottom of each security bollard (for single bollards or bollards in arrays), or if the bollard is covered, to each security bollard cover.
- located:
 - approximately 2" from the top of the bollard/bollard cover, AND
 - approximately 12" from the bottom of the bollard/bollard cover.
- applied to create a retro-reflective band around the bollard circumference that is approximately 6" in width. The 6" band width may be achieved by using a series of smaller width tapes (e.g. four 2" wide tape strips with spaces in between each individual strip of reflective tape). For ornamental security bollards or bollard covers, a 6" wide strip may not be achievable. The retro-reflective strip on ornamental security bollards shall be as wide as possible and be placed in a manner that does not detract from the security bollard's aesthetic.
- If the bollard material is wood or concrete, additional measures may be required to ensure the tape properly adheres. Refer to the contract documents for additional information.

ITEM 618.78ABCN15 – SECURITY BOLLARD

METHOD OF MEASUREMENT

This work will be measured as the number of each security bollard installed. Bollards supplied in arrays of two or more shall be paid individually (e.g., a 3-bollard array shall be paid as a quantity of three individual bollards).

BASIS OF PAYMENT

The unit price bid per each security bollard furnished and installed shall include the cost of any saw cutting, excavation, and material disposal, and furnishing all labor, materials, and equipment necessary to satisfactorily complete the work. The costs for site preparation and concrete foundation, including steel bar or mesh, shall be included in the cost of this payment item.

Payment will be made under:

Item	Description	Pay Unit
618.78ABCN15	Security Bollard	Each

Where:

A = Bollard Type

1 = Fixed

2 = Removable

3 = Retractable

B = Footing Type

0 = Cast-in-Place (CIP)

1 = Precast

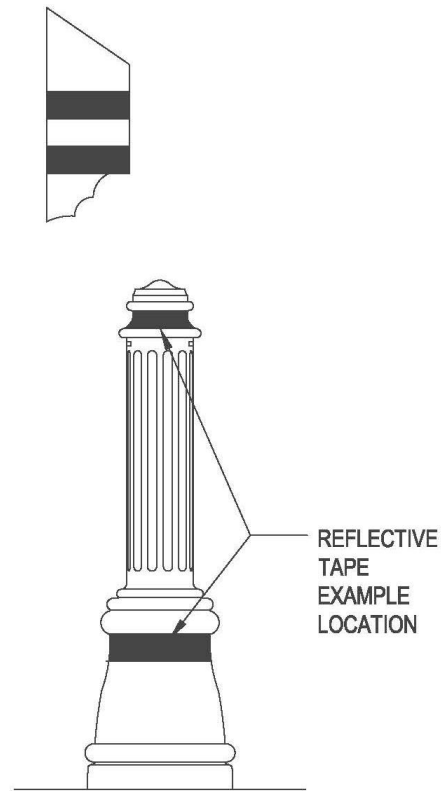
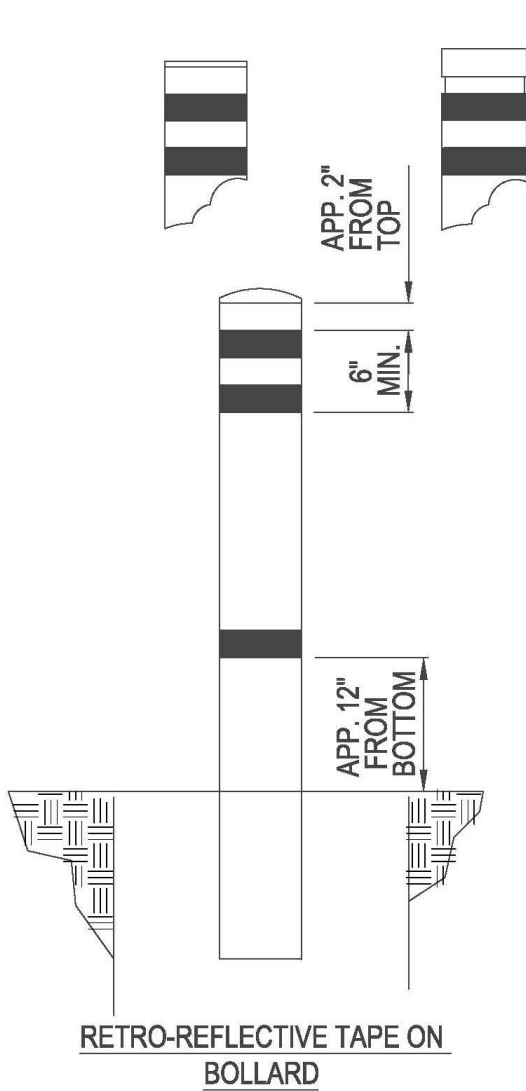
C = Foundation Depth

0 = Shallow

1 = Deep

and N is an optional identifier for unique features of the bollards. If not used, the default value will be 0. If used the significance of the number will be as defined in the contract documents. Typical uses will be to specify different bollard covers in different locations within the project.

ITEM 618.78ABCN15 – SECURITY BOLLARD



NOTES:

FOR ORNAMENTAL BOLLARDS, WHEN THE 6" MIN WIDE STRIP MAY NOT BE ACHIEVABLE. THE REFLECTIVE TAPE STRIP SHALL BE AS WIDE AS POSSIBLE, AND SHALL BE APPLIED IN A MANNER THAT DOES NOT DISTRACT FROM THE BOLLARD'S AESTHETIC.

RETRO-REFLECTIVE TAPE ON DECORATIVE BOLLARD

ITEM 627.50140008 - CUTTING PAVEMENT

DESCRIPTION:

The contractor shall cut existing asphalt pavement, concrete pavement, asphalt surface course, or asphalt concrete overlay on concrete pavement at the locations indicated and detailed on the plans and as directed by the Engineer.

MATERIALS:

None specified.

CONSTRUCTION DETAILS:

Existing pavement and overlay shall be cut perpendicular to the roadway surface along neat lines, and to the depth indicated on the plans and typical sections, using appropriate equipment. After the pavement has been cut through, the Contractor may use pry bars, pneumatic tools or other methods, to pry loose the pavement to be removed from the pavement that is to remain. A pavement breaker may be used to break up the pavement to be removed after the pavement has been completely cut through and completely free from the pavement to remain.

When pavement cutting is called for in the Contract documents, if a neat vertical face with minimal shatter is obtained by performing an adjacent operation (such as milling) which eliminates the need to perform a separate pavement cutting operation, payment will be made for both the pavement cutting item and the item for the adjacent operation.

Any existing pavements and curbs not indicated to be removed that are damaged by the contractor's operations, shall be repaired at no additional cost to the State. Pavement cutting that the contractor chooses to do for his/her own convenience shall not receive any additional payment from the State.

METHOD OF MEASUREMENT:

The quantity to be measured will be the number of linear feet of pavement cutting satisfactorily completed.

BASIS OF PAYMENT:

The unit price bid per linear foot of pavement cutting shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment for prying, breaking, removal and disposal of cut pavement shall be made through other appropriate items.

ITEM 634.06010007 - RELOCATE PARKING METERS

DESCRIPTION:

Under this item, the Contractor shall relocate existing parking meters where shown on the Plans or where ordered by the Engineer.

MATERIALS:

Materials not specified.

CONSTRUCTION DETAILS:

The meters and posts shall be removed in such a manner that damage does not occur. The posts shall be cleaned of any foreign material before being re-installed. All posts or meters damaged during relocation shall be replaced in kind at the Contractor's expense. The post shall be installed as detailed on the plans.

METHOD OF MEASUREMENT:

This work will be measured as the number of parking meters relocated.

BASIS OF PAYMENT:

The price bid for relocating each parking meter shall include all materials, labor, and incidental expenses necessary to properly complete the work.

ITEM 634.06050008 - PARKING METER POST WITH CONCRETE FOUNDATION
ITEM 634.06060008 - SINGLE MANUAL VANDAL-RESISTANT PARKING METERS
ITEM 634.06070008 - DOUBLE MANUAL VANDAL-RESISTANT PARKING METERS,
WITH A SINGLE COLLECTION BOX
ITEM 634.06080008 - TWIN MOUNTING YOKES FOR INSTALLING TWO SINGLE
OR TWO DOUBLE METERS ON ONE PIPE

DESCRIPTION:

This work shall consist of furnishing and installing new parking meters in accordance with the plans, specifications or directions of the Engineer.

MATERIALS:

The specific components used in the construction of new parking meters and their component parts of installation shall meet the requirements of the following subsections included under Section 700, Material Details:

Steel and Iron Posts	710-10
Castings, Forgings and Metals	715

Concrete shall meet the requirements of Section 501, Portland Cement Concrete and shall be Class A for the parking meter posts foundation.

Meter mechanism housings on single meter and double meters must be interchangeable.

The meters must comply with all specifications and tolerances as set forth in the Timing Device Code of the National Bureau of Standards Handbook 44.

The lower part of vandal-resistant meter housing that protects the coin box shall be made of malleable iron according to ASTM Designation A47, Grade 35018 with 54000 psi (370 MPa) minimum tensile strength and a modulus of elasticity in tension of 25000 psi (170 MPa). It must be engineered to give the greatest amount of protection against vandalism, breakage and theft of the money box.

The lock-on coin door of the vandal-resistant meter must be recessed to eliminate damage to lock from blows from hammers or any other instruments that may be used to gain entrance into the money box. The lock shall be protected by a deep channel behind the door.

The meter mechanism shall be capable of being manually adjusted to maintain proper tolerance between the coin and the timer winding mechanism to compensate for any eventual wear.

Meters must be equipped with double flags, one a time expired flag, and the second a so-called "trouble flag" to show them when said meter is jammed or the handle is not in its normal operating

ITEM 634.06050008 - PARKING METER POST WITH CONCRETE FOUNDATION
ITEM 634.06060008 - SINGLE MANUAL VANDAL-RESISTANT PARKING METERS
ITEM 634.06070008 - DOUBLE MANUAL VANDAL-RESISTANT PARKING METERS,
WITH A SINGLE COLLECTION BOX
ITEM 634.06080008 - TWIN MOUNTING YOKES FOR INSTALLING TWO SINGLE
OR TWO DOUBLE METERS ON ONE PIPE

position.

Time expired flag and trouble flag must be equally and plainly visible from both sides of the meter.

Each meter shall be provided with a clearly legible graduated dial.

Each meter must be equipped with an automatic slot closer working in conjunction with the trouble flag, making it impossible to insert coins into any coin slot when the handle is not in its normal coin acceptance position.

Meters must be equipped with metallic multiple coin slots. Bakelite, plastic or other types of materials are not acceptable. To eliminate meters accepting coins when the meter is jammed, meters with chutes that guide coins into mechanism will be rejected.

Mechanisms shall be the "lift-out" type after unlocking the meter. Mechanisms that need to be unscrewed or have levers to be turned to remove them from the meter housing are not acceptable.

Each meter shall be equipped with a washer detector feature capable of detecting the most common variety of washers or similar slugs with a hole, whereby they will pass through the meter without registering time.

The collection system shall be a locked, round can security type without the use of two locked or sealed cans.

Meter housings shall be gunmetal.

Meters whose mechanisms have plastic or materials other than metal will be rejected. Non-metal parts may only be used for seals.

Meters must be the cumulative type. The range of the meter shall be up to twenty four hours.

CONSTRUCTION DETAILS:

Unless otherwise waived, the contractor shall submit within 30 days following the award of contract, to the Regional Director, detailed specifications, catalog cuts, parts list, instruction sheets and shop drawings of equipment and materials which he proposes to install.

ITEM 634.06050008 - PARKING METER POST WITH CONCRETE FOUNDATION
ITEM 634.06060008 - SINGLE MANUAL VANDAL-RESISTANT PARKING METERS
ITEM 634.06070008 - DOUBLE MANUAL VANDAL-RESISTANT PARKING METERS,
WITH A SINGLE COLLECTION BOX
ITEM 634.06080008 - TWIN MOUNTING YOKES FOR INSTALLING TWO SINGLE
OR TWO DOUBLE METERS ON ONE PIPE

Manufacturer's warranties or guarantees normally given as customary trade practice on any item of mechanical equipment should be specified to the State of New York, Department of Transportation or the authority having jurisdiction over the facility as the warrantee for the standard time duration of for one year from the start of the operation, whichever is the greater period. A guarantee or warranty shall also be furnished by the contractor for satisfactory in-service operation of mechanical equipment on the project for a period of 6 months following project acceptance.

Parking meter posts shall be set plumb in concrete bases at the depth and diameter indicated on the plans or as directed by the Engineer. The parking meter posts shall be of the size and length as indicated on the plans or as directed by the Engineer.

Meter mechanism housings on double meters must be so constructed so that they may be changed to nine (9) different positions to accommodate various angles and types of parking should such a change be necessary at some future date.

METHOD OF MEASUREMENT:

The following items will be measured for payment as the number of each unit furnished and installed in accordance with the contract documents or as directed by the Engineer:

Parking Meter Posts With Concrete Foundation
Single Manual Vandal-Resistant Parking Meters
Double Manual Vandal-Resistant Parking Meters With A Single Collection Box
Twin Mounting Yokes For Installing Two Single Or Two Double Meters On One Pipe.

BASIS OF PAYMENT:

The unit price bid for all items of work encompassed by this specification shall include the furnishing of all labor, materials, tools, equipment and incidentals as required to complete the work.

Excavation and concrete for the meter posts shall be included in the price bid for that item.

**ITEM 640.25000010 - BLUE REFLECTORIZED PAVEMENT MARKING PAINT
FOR HANDICAPPED PARKING SPACES**

All of the provisions of Section 640 pertaining to White Paint ReflectORIZED Pavement Stripes shall apply except for the following:

The pavement marking paint shall be tinted blue prior to application. The color of the paint shall be such that a prepared color chip shall be a reasonable visual match to Federal Color Standard No. 595B, Color 15180. Viewing shall be done under normal daylight.

Application of the blue reflectORIZED pavement marking paint will be restricted to parking and passenger loading zones and other marking which are specifically intended for accessibility by handicapped persons, as detailed in the plans.

ITEM 645.81090003 – RETROREFLECTIVE SIGN POST STRIP

DESCRIPTION

This work shall consist of furnishing and installing Retroreflective Sign Post Strips in accordance with the contract documents.

MATERIALS

The retroreflective surface of Retroreflective Sign Post Strip shall conform to §730-05 Retro-Reflective Sign Sheeting - NYSDOT Class A sign sheeting and appear on the Department's Approved List of Materials and Equipment for Reflective Sign Sheeting.

Note: Signs supplied before March 1, 2023, may be fabricated with NYSDOT approved ASTM D4956 Type III/IV and IX retro-reflective sign sheeting. The grade of sheeting shall match the grade of sheeting on the sign panel that the strip supplements.

Nylon or plastic washers shall be installed between fastener bolt heads (or nuts) and the reflective sheeting on the face of the strip.

The color of the retroreflective sheeting on the Retroreflective Sign Post Strip shall match the background color of the sign, except that the color of the strip for the YIELD and DO NOT ENTER signs shall be red.

Retroreflective Sign Post Strips shall be made of durable, UV-stabilized plastics or aluminum panels in accordance with §730-01.

Hardware to mount Retroreflective Sign Post Strips to sign posts shall conform to §715-16 Stainless Steel Connecting Products, or §730-22 Stiffeners, Overhead Brackets, and Miscellaneous Hardware. Hardware to connect Retroreflective Sign Post Strips to sign posts shall be tamper resistant.

CONSTRUCTION DETAILS

Retroreflective Sign Post Strips shall be at least 2 inches in width and shall be in accordance with the contract documents. Retroreflective Sign Post Strips shall be placed for the full length of the support from the sign to 2 feet above the edge of the roadway.

Retroreflective Sign Post Strips shall be attached to the sign posts by mechanical means with standard nuts and bolts, clamps, brackets, or strapping according to the manufacturer's instructions. Retroreflective Sign Post Strips shall not be attached to sign posts with adhesives.

METHOD OF MEASUREMENT

This work will be measured as the number of Retroreflective Sign Post Strips satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

**ITEM 655.07010010 - CAST FRAME F1, WITHOUT CURB BOX AND WITH
RETICULINE GRATE G1**

**ITEM 655.07020010 - CAST FRAME F2, WITHOUT CURB BOX AND WITH
RETICULINE GRATE G2**

**ITEM 655.07030010 - CAST FRAME F3, WITHOUT CURB BOX AND WITH
RETICULINE GRATE G3**

All conditions and requirements of Items 655.0701, 655.0702, and 655.0703 of the Standard Specifications shall apply except for the following modifications:

These shall be cast frame without curb box and with reticuline grate as detailed on the plans.

ITEM 661.0100NN08 - REESTABLISHING ELECTRICAL SERVICE TO CUSTOMERS

DESCRIPTION:

This work shall consist of reestablishing customer electrical service in kind and/or as required in accordance with the contract documents and as directed by the Engineer.

MATERIALS:

All electrical materials such as wiring, connections, etc. necessary to complete the work under this item shall meet the current requirements of the national electric safety code and the local requirements of the municipality, and underwriters approval where necessary, as well as the local power company requirements. All work shall be done by a Certified, New York State Licensed Electrician.

CONSTRUCTION DETAILS:

The contractor shall reestablish the electrical service, underground and/or in structures/buildings, as detailed in the contract documents and as directed by the engineer.

Where excavation is necessary, the appropriate construction details specified for "Excavation & Embankment" in Subsection 203-3.01 through and including Subsections 203-3.12 & 203-3.15 and the requirements of "Legal Relations and Responsibility to Public" in Subsection 107 shall apply.

If required, direct buried cable shall be placed on a bed of sand 6 inches deep and covered with 12 inches of sand. Additional backfill shall be suitable material A.O.B.E.

The contractor shall be responsible at all times for carrying out all excavation and backfill operations in a safe and prudent manner so that workmen, the public, and adjacent public and private property will be protected from unreasonable hazard. All applicable local, State and/or Federal requirements shall be observed and necessary permits acquired by the contractor.

When excavation is required for the installation of direct buried cable, the contractor shall notify the Engineer upon completion of the excavation. No conduit or cable shall be placed in the excavation until the Engineer and/or the utility involved has approved the depth and cross section.

When the contractor in placing direct buried cable or utilities, excavates into lawns, parking areas, sidewalks, etc., the area will be restored to its original condition and/or as ordered by the Engineer.

The provisions of Subsections 203-3.06 and/or 203-3.07 shall apply to all materials excavated and disposed of under this section which is not used as backfill.

All cable installation work, under ground and within any structure(s), shall be done in accordance in all local codes and the latest requirements of the National Electric Code Handbook, to the satisfaction of the Engineer.

Before work commences in reestablishing the service, the contractor shall consult with the customer regarding

ITEM 661.0100NN08 - REESTABLISHING ELECTRICAL SERVICE TO CUSTOMERS

the time of reconnection to minimize the down time, and inconvenience to the customer.

All electrical installation shall be performed by qualified workmen and in accordance with the applicable codes and rules. All work shall be inspected by the local inspector and/or by the utility involved, if required.

METHOD OF MEASUREMENT:

Reestablishing electrical service to customers will be measured for payment on a lump sum basis for work satisfactorily completed in accordance with the contract documents and as directed by the Engineer.

BASIS OF PAYMENT:

The lump sum price bid shall cover all labor, tools, equipment, materials, etc., involving all excavation, backfill and to replace any pavement, sidewalks, curbs, lawns, and other top surfaces as required to complete the work.

ITEM 662.60030008 - ALTERING ELEVATION OF GAS VALVE BOXES

DESCRIPTION:

Under this item, the contractor shall alter the elevation of gas valve boxes to meet new grades as shown on the plans or as directed by the Engineer.

MATERIALS:

Concrete shall meet the requirements for concrete in Section 501 of the Standard Specifications. The Maintenance Repair/Misc. Items concrete in Table 2 of Materials Procedure MP 501-2 (Mix Design and Approval Procedure for Performance Engineered Mixtures – Structural Concrete) is acceptable.

CONSTRUCTION DETAILS:

Paved Areas:

Unless an alternate method is approved by the owner and directed by the Engineer, the following method shall be used:

The top section of the gas valve box shall be raised to meet the finished grade and supported on a concrete collar at least 6 inches in depth and at least 6 inches wider than the outer edges of the top section of the gas valve box casting. The existing pavement shall be cut and removed as needed in order to place the concrete collar. Cutting shall be done with tools or equipment acceptable to the Engineer and in such a manner as to avoid cracking the abutting portions of pavement. The concrete shall be allowed to cure for the required period before paving around the gas valve box.

Non-Paved Areas:

The method of raising the gas valve box shall be as approved by the owner and as directed by the Engineer.

METHOD OF MEASUREMENT:

The quantity to be paid for under this item will be the number of gas valve boxes altered.

BASIS OF PAYMENT:

The unit price bid per each shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work including any pavement cutting, excavation, backfill and pavement restoration. Any gas valve box castings or covers broken through carelessness on the part of the contractor shall be replaced at the contractor's expense.

ITEM 670.00100105 - LED TRAIL LIGHT ASSEMBLY

DESCRIPTION:

Under this item, the Contractor shall furnish and install LED trail light assemblies at locations shown in accordance with the Contract Documents and as directed by the Engineer.

All provisions of Section 670 of the NYSDOT Standard Specifications, latest revision, shall apply except as modified below.

MATERIALS:

A LED Trail Light Assembly shall consist of the LED luminaire and light post with integral architectural base conductor wires from the secondary power source to the light pole base, photocell and fuse/s assemblies and terminations as shown in the contract documents and as recommended by the lighting manufacturer.

CONSTRUCTION DETAILS:

The LED Trail Light Assemblies shall be installed at locations shown in the contract documents. The manufacturer's installation instructions shall be followed. All LED Trail Light Assemblies shall be installed in accordance with the National Electrical Code, the local utility company regulations and local ordinances. The Contractor shall be responsible for coordinating and obtaining all electrical service orders from utilities, all electrical inspections, inspection fees, permits and permit fees.

The Contractor shall ensure the luminaire is aimed in the proper direction or make corrections in aiming as directed by the Engineer.

METHOD OF MEASUREMENT:

This work will be measured as the number of LED Trail Light Assemblies satisfactorily furnished and installed.

BASIS OF PAYMENT:

The unit price for this item shall include the cost of all labor, equipment, and materials including conductor wires from the secondary power source to the light pole base, photocell and fuse/s assemblies and terminations necessary to satisfactorily complete the work.

ITEM 670.03020007 - REMOVE AND RELOCATE LAMPPOST ASSEMBLY

DESCRIPTION:

This work shall consist of removing, storing, and reinstalling at new locations, the lamppost assemblies designated on the plans or as directed to be relocated by the Engineer.

MATERIALS:

Any materials required shall be of a quality equal to the materials used in or connected to the existing lamppost assemblies.

Electrical pull boxes shall comply with Section 670-2.02.

CONSTRUCTION DETAILS:

The Contractor shall carefully remove the existing lamppost assembly, including any arms, luminaires, bases, foundations, or anchor bolts, from its existing location and store if necessary. The complete lamppost assembly shall be reinstalled and made operational at the new location in accordance with the plans or as directed by the Engineer. Installation of new wiring and conduit from the new location to the existing power source shall be included in this work and shall be done to the satisfaction of the Engineer and in conformance with applicable electrical codes. The existing foundation shall be relocated to the new location. If, to the satisfaction of the Engineer, the existing foundation cannot be relocated, a new foundation shall be constructed. The new foundation shall, as a minimum, meet the size and bearing capacity of the existing foundation. No additional payment will be made for the new foundation. Pull boxes, if necessary to accomplish the installation of the new wiring, shall be constructed in accordance with Subsection 670-3.08, except that the location of the pull boxes will be approved by the Engineer.

Any components of the lamppost assembly damaged during removal, storage, or reinstallation, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer, at no additional cost to the State.

METHOD OF MEASUREMENT:

This work will be measured as the number of complete lamppost assemblies removed and relocated in accordance with the plans, specifications and directions of the Engineer.

BASIS OF PAYMENT:

The unit price bid shall cover the cost of removing, storing, and reinstalling the lamppost assembly, including new conductor and conduit, electrical components, hardware, incidentals, labor, equipment and all other materials necessary to complete the work and make the lamppost operational. No separate payment will be made for relocating the existing foundation or constructing a new foundation including any required concrete, reinforcement, excavation, and backfill, or for furnishing and installing any required pull boxes including excavation, backfill, frames and covers.

ITEM 670.20010103– LINEAR LED STRIP LIGHTING

DESCRIPTION

This work shall consist of furnishing and installing linear LED strip lighting at locations shown in the Contract Documents.

MATERIALS

A linear LED strip lighting fixture includes; photoelectric cell controls, mounting hardware, LED fixtures, and associated wiring

The linear LED strip lighting fixture to be installed shall be:

1. FlexFireLEDs, IP65 Outdoor ColorBright White Series LED strip lights, 2700 K Color Temperature

Or an approved equal.

RELATED WORK BY OTHERS

Cast-in place concrete seating walls and columns with stone veneer and bluestone caps. Coordination will be required to ensure all necessary power supply is concealed.

SUBMITTALS

SEQUENCING AND SCHEDULING: Prior to start of Work, prepare a detailed schedule of the work for coordination with the other trades. Schedule for start of critical items of LED Strip Light installation and the final completion of the Work within the requirements of the total Project Schedule.

CONSTRUCTION DETAILS

All provisions of Section 670-3 shall apply to this specification except as modified below. The linear LED strip lighting fixture shall be installed at locations shown in the contract documents. The manufacturer's installation instructions shall be followed. All linear LED strip lighting shall be installed in accordance with the National Electric Code, the local utility company regulations, local ordinances, and any other agency having jurisdiction. The Contractor shall be responsible for obtaining all electrical service orders from power companies, all electrical inspections, paying all fees for inspections and final connections, and for making the linear LED strip lighting fixture operational. The LED lights and all exposed components shall be prepared as specified in the Contract Documents. The strips shall be installed so that even if one strip fails the others should function as intended.

METHOD OF MEASUREMENT

This work will be measured as the number of linear feet of linear LED strip lighting satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid for each linear foot of light strip shall include the cost of all labor, equipment, and materials necessary to complete the work.

ITEM 680.51000010 - ALTER ELEVATION OF PULL BOXES

DESCRIPTION:

Under this item the Contractor shall alter the elevation of existing pull boxes in accordance with this specification, the details included in the contract plans, and the directions of the Engineer.

MATERIALS:

Existing pull box frames and covers shall be reused.

Concrete shall meet the material requirements for Portland Cement Concrete, Class A, as outlined under Section 501 of the Standard Specifications.

CONSTRUCTION DETAILS:

The Contractor shall exercise care in removing and reinstalling pull box frames and covers so as not to damage any part thereof. Any component parts damaged by the Contractor shall be repaired or replaced at the Contractor's expense to the satisfaction of the Engineer.

Pull box walls shall be reconstructed as shown on the contract plans.

METHOD OF MEASUREMENT:

This work will be measured as the number of pull boxes altered in accordance with the plans, specifications, and directions of the Engineer.

BASIS OF PAYMENT:

The unit price bid for this item shall include the cost of all labor, equipment, and materials necessary to complete the work.

ITEM 680.51100010 - CLEAN EXISTING PULLBOX

DESCRIPTION:

The Contractor shall clean existing pullboxes as indicated on the plans or as directed by the Engineer.

MATERIALS:

Not applicable.

CONSTRUCTION DETAILS:

Existing pullboxes shall be cleaned to the base of its walls in a workmanlike manner and maintained clean as determined by the Engineer for the duration of the contract.

Existing pullboxes shall be dried by pumping, bailing, hauling or by any other method approved by the Engineer. Drying operations shall not cause soil erosion and shall be performed so as to avoid contamination of other new or existing facilities.

Material removed from the pullboxes shall be disposed of in accordance with provisions of Subsection 203-3.08, Disposal of Surplus Excavated Materials.

The Contractor shall execute care and protect all facilities within the pullboxes and the area adjacent to the work.

The Contractor shall replace in kind, any pullboxes or other facilities damaged by his operations at his own expense.

METHOD OF MEASUREMENT:

Cleaning existing pullboxes will be measured by the number of pullboxes actually cleaned and maintained in accordance with the Contract Documents and as directed by the Engineer.

BASIS OF PAYMENT:

The unit price bid to clean each existing pullbox shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work. Payment will be made for only those existing pullboxes designated by the Engineer to be cleaned. Only one payment for each existing pullbox will be made regardless of the number of times it is cleaned. No payments will be made for pullboxes which are installed by the Contractor under this contract. No separate payments will be made for pullboxes damaged by the Contractor's operations.

06/26/97M

ITEM 680.53010010 - CLEAN EXISTING CONDUIT

DESCRIPTION –

The Contractor shall clean existing conduit at the locations indicated on the plans or as directed by the Engineer to make certain that the conduit is clear and satisfactory for the installation of cable. The work does not include cleaning of a conduit following repair in place or replacement of a defective conduit.

MATERIALS –

Not applicable.

CONSTRUCTION DETAILS –

All existing cable shall be removed and a steel mandrel with wire brush cleaner no less than 2 inches long and having a diameter no less than 70 percent of the inside diameter of the conduit shall be passed through the entire run of conduit from one end to the other between pullboxes and/or poles without binding. Conduits which will not allow the mandrel with brush to be pulled through will be repaired under other contract pay items. After the conduit has been cleaned, the Contractor shall furnish and install a No. 10 AWG galvanized steel drag wire or nylon or polypropylene rope with a tensile strength of at least 495 lbf in the conduit from one end to the other, leaving no less than 3 ft of slack at each end in each pullbox or base of pole. The galvanized wire shall be grounded to a suitable grounding device at each end of the conduit in accordance with Section 680-3.12.

METHOD OF MEASUREMENT –

This work will be measured for payment as the number of feet of existing conduit actually cleaned in accordance with the Contract Documents and as directed by the Engineer.

BASIS OF PAYMENT –

The unit price bid shall include the cost of furnishing all labor, materials and equipment required to satisfactorily complete the work.

ITEM 680.77000001 - MODIFY TRAFFIC SIGNAL EQUIPMENT
ITEM 680.78000001 - MODIFY AND REMOVE TRAFFIC SIGNAL EQUIPMENT
ITEM 680.79000001 - REMOVE TRAFFIC SIGNAL EQUIPMENT

DESCRIPTION:

Under these items the contractor shall modify and/or remove traffic signal equipment at the locations shown and as detailed on the contract plans or as ordered by the Engineer.

MATERIALS:

The materials used in this work shall meet the requirements of Subsection 680-2, "Materials" of the Standard Specifications.

CONSTRUCTION DETAILS:

Where shown on the contract plans or specified by the Engineer, traffic signal equipment shall be either modified or removed and disposed of as specified in the contract documents.

Care shall be exercised in removing and salvaging electrical equipment so that it will remain in its original form and existing conditions whenever possible. The contractor will be required to replace, at his expense, any traffic signal equipment which is determined by the Engineer to have been damaged or destroyed by reason of the contractors operations.

Existing material required to be relocated and found to be unsatisfactory by the Engineer shall be replaced by new material and the cost, therefore, will be paid for as extra work.

METHOD OF MEASUREMENT:

The work will be measured for payment on a lump sum basis for the work completed in accordance with the contract documents and as ordered by the Engineer.

BASIS OF PAYMENT:

The unit price bid shall include the cost of furnishing all labor, material and equipment necessary to complete the work in accordance with the contract documents and as ordered by the Engineer.

<u>ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME</u>
<u>(NEMA)</u>
<u>ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL</u>
<u>TRAFFIC ACTUATED (NEMA)</u>

DESCRIPTION

Under these items the Contractor shall furnish and install traffic signal controllers, cabinets and peripheral equipment at the locations shown on the Plans and as ordered by the Engineer.

MATERIALS

A. Basic Requirements

1. The controller unit shall provide digital timing for two through eight vehicle phases with the options of pedestrian and volume density timing available for any or all phases. The controller unit shall be equipped with phase modules as specified in the sequence chart or intersection item sheet.
2. The controller unit shall be capable of operating in the following modes as required by the particular type of controller that is to be supplied:
 - a. Fixed time
 - b. Semi actuated
 - c. Vehicle actuated
 - d. Vehicle actuated, loop occupancy
 - e. Vehicle actuated, volume density
3. The controller unit shall be of modular design. Circuit boards shall be readily accessible for servicing.
4. The controller unit shall be used at isolated intersections as well as at intersections in an interconnected traffic signal system. The controller unit shall be designed for continuous unattended operation. All phase modules of varying complexity shall be interchangeable between two through eight phase controller unit frames. The inspection and testing of the controller, while in operation, shall be possible.
5. The controller assembly shall employ digital techniques and solid state electronics. No electromechanical devices, such as relays, contactors and cam shafts, shall be utilized.

- B. **Qualifications.** All equipment furnished under this specification shall be a product which has demonstrated its ability to meet the minimal requirements and is in compliance with the National Electrical Manufacturers Association (NEMA) Standards Publication No. TS 1-1989, and all subsequent revisions.

ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)

ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

C. General Requirements

1. Each controller assembly supplied under this specification must be accompanied with one manual of operation and maintenance including the following:

a. Operation and Maintenance Manual

- (1). General Description
 - (2). General Specifications
 - (3). General Characteristics
 - (4). Installation
 - (5). Adjustments
 - (6). Theory of Operation
 - (a). Functional Description (include block diagram)
 - (b). Detail Circuit Description
 - (7). Maintenance
 - (a). Preventative Maintenance
 - (b). Field Trouble Analysis
 - (c). Bench Trouble Analysis
 - (d). Trouble Shooting Analysis Chart
 - (e). Wave Forms
 - (f). Voltage Measurement
 - (g). Voltage Measurement Chart
 - (h). Alignment (interval and sequence sync.)
 - (8). Parts List (to include circuit and board designations, part types and class, power rating and component manufacturer)
 - (9). Electrical Interconnection Drawing
 - (10). Schematic
 - (11). Assembly drawings and a pictorial diagram showing physical locations and identification of each component.
- b. The controller assembly, as itemized in the Proposal, shall operate as a complete assembly providing the specific operation.

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)

c. Controller Unit.

- (1) The controller unit shall be capable of being shelf-mounted and shall also be capable of being mounted in an EIA – 19 inch rack (multiples of 1.75 inch mounting centers).
- (2). The height of the controller shall not exceed 25 inches; the depth of the unit, including connectors, harnesses, and protrusions shall not exceed 14.5 inches. On rack-mounted units, the mounting flanges of the control unit shall be so placed that no protrusion shall exceed 11 inches to the rear and 3.5 inches to the front.
- (3). Means shall be provided on the front panel to provide pedestrian timing, minimum green timing, maximum green timing, minimum recall, maximum recall, and pedestrian recall.
- (4). Functional or phase operating circuits and their associated components shall be grouped in plug-in printed circuit assemblies. Similar assemblies shall be interchangeable between controllers.
 - (a). Phases with no actuation shall be automatically ignored or skipped.
 - (b). All phase modules of varying complexity shall be interchangeable between different controller units of the same manufacturer as well as between phase module recesses in any one controller unit. This interchangeability shall be accomplished without the need for wiring changes. In addition, all modules produced by the same manufacturer shall be interchangeable between two through eight phase controller units.
- (5). The controller assembly shall be capable of operating with radar, magnetic, loop, magnetometer, microwave, pressure or sonic detectors.

d. Special Equipment.

- (1). The design of all special equipment shall incorporate only those pins which have a predesignated function as per the connector assignments in the NEMA Publication TS 1-1989 and all subsequent revisions.

D. Functional Requirements.

1. No concurrent phases shall be provided for in the three or four phase controller unit, unless otherwise specified.

<u>ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME</u>
<u>(NEMA)</u>
<u>ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL</u>
<u>TRAFFIC ACTUATED (NEMA)</u>

2. Phase Programming.

- a. The two through eight phase controller unit shall be capable of the following phase programming:
 - (1). Single Ring - Two through eight phase
 - (2). Dual Ring - Two 4 phase rings
 - (3). Dual Entry or Single Entry (Programmable)
- b. The phasing of the controller unit shall be as specified in the sequence chart or intersection item sheet.
- c. All overlaps shall be accomplished in the controller unit with no external overlap logic or equipment.

E. Operational Requirements.

1. Operation Characteristics.

- a. The three phase controller unit shall be capable of two or three phase operation. The four phase controller unit shall be capable of two through four phase operation. The five through eight phase controller unit shall be capable of two through eight phase operation, each of which shall have a concurrent pedestrian phase. It shall be possible to omit any phase if no demand exists for it, or if certain control functions are activated from an external source. It shall also be capable of performing the functions mentioned in the following paragraphs by insertion of proper modules or external commands.
- b. The controller unit shall provide the features per phase as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
- c. The controller unit shall provide the features per ring as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
- d. The controller unit shall provide the features per unit as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
- e. The two through eight phase module designation shall be as shown on the sequence chart or intersection item sheet.

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)

- f. The controller unit shall have an output circuit to control the flashing of the pedestrian signal during the pedestrian Walk interval and the pedestrian clearance Don't Walk interval. This circuit shall be programmable.
- g. Manual operation shall service all phases and intervals in sequence as programmed. The yellow and red intervals shall be timed independently of manual operation.
- h. All circuits shall be fully operational in the controller unit and shall be so designed and filtered that they may operate by conventional external means, including but not limited to manually operated switches, pushbuttons, control relays or solid state logic without requiring external filtering.

2. Controller Expansion

- a. In a five phase controller, phase modules for phases 6, 7 and 8 shall not be supplied. The resulting controller shall function in accordance with these requirements as if the phase modules for these phases were present but had no calls.
- b. In a six phase controller, phase modules for phases 7 and 8 shall not be supplied. The resulting controller shall function in accordance with these requirements as if the phase modules for these phases were present but had no calls.
- c. It shall be possible to expand a five phase or six phase controller by adding one or more phase modules without the necessity of any rewiring or addition to the controller unit frame.

3. Coordination. It shall be possible to use the controller unit for coordinated operation, without modifying it internally, by the simple addition of accessory equipment to the controller cabinet.

4. Vehicular Memory. A two position switch shall be located on the front of the controller unit to provide the following functions:

- a. Detector Memory. With the switch in the locking position and the associated phase in extension, yellow or red interval, vehicle actuations are registered the instant they are placed and remembered without the vehicle remaining in the detection area.
- b. Non-Locking Memory. With the switch in the non-locking position, vehicle calls will not be remembered, nor shall the right-of-way be transferred if the vehicle leaves the detection area prior to the beginning of the opposing phase yellow interval or prior to the termination of the extension intervals of the opposing phase. The phase having the right-of-way shall go to, or return to the rest condition.

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)

5. Indicators. Indicators shall be as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
6. Thumbwheel, Toggle Switch or Keyboard Entry.
 - a. A recall switch shall be provided on the front panel for each phase module supplied under this specification.
 - b. All timing intervals shall be established by means of either a positive setting on a calibrated thumbwheel or toggle switch or by keyboard entry. Where thumbwheels or toggle switches are used, they shall be linearly calibrated in seconds and give a clear visual indication of the length of each interval; linear calibration shall be within 5 percent of full scale. Where keyboard entry is used, the parameter and parameter length shall be clearly displayed on a suitable digital display which shall be capable of being read in bright sunlight. The parameter designations shall be clearly marked on the front panel of the unit.
 - c. It shall be possible to omit the All Red interval of any phase by turning off the appropriate switch or entering the appropriate value by keyboard.

F. Phase Modules.

1. Each module shall be equipped with the switches and indicating lights as specified in NEMA Publication TS1-1989 and all subsequent revisions, to control the various intervals in the phase and to permit normal or automatic recall to the phase and to permit visual observation of the operation and timing of the phase. All phase modules will be interchangeable between two through eight phase controllers. Removal or absence of a phase module shall cause the controller unit to skip the missing phase. Modules of varying complexity shall be interchangeable between controller unit frames without any wiring changes.

Each phase module shall have a minimum of one phase per module but not to exceed two phases per module.

2. Phase modules shall be furnished for each individual movement on accordance with the sequence chart or intersection item sheet.

G. Interface Standards.

1. Interface standards shall be as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
2. All electrical connections into an out of the controller unit shall be through a

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)

multiterminal connector, as specified in NEMA Publication TS 1-1989 and all subsequent revisions. The connector shall be protected and rigidly fixed to the front panel of the controller unit.

3. The mating female connector with mating inserts and appropriate cable clamp, shall be attached to one end of a connecting cable, which shall be at least 4 feet long. The other end of the cable shall have labeled sleeves, each of which shall be fitted with a crimp spade terminal. Wire size 16 AWG stranded shall be used in the connecting cable.
4. All connector wiring shall be as specified in NEMA Publication TS 1-1989 and subsequent revisions.

H. Electrical Requirements.

1. All electrical requirements shall be in compliance with NEMA Publication TS 1-1989 and all subsequent revisions.
2. Electrical tests shall be performed by the manufacturer on all units supplied. Certified copies of the results shall be furnished to the Regional Traffic Engineer. All tests shall be in conformance with NEMA Publication TS 1-1989 and all subsequent revisions.

I. Components. No components shall be of such design, fabrication, nomenclature or other identification as to preclude the purchase of said component from any wholesale electronics distributor or from the component manufacturer.

J. Mechanical Requirements.

1. Metal Case. All equipment shall be enclosed in a metal case protected against corrosion. The case shall be designed to provide convenient access to the entire interior assembly and permit the removal of printed circuit boards or modules without the use of special tools.
2. Controller Unit.
 - a. The controller unit switches input/output connectors and other components required for the operations and adjustment of the controller unit shall be mounted on the front panels. All component parts and terminals shall be readily accessible when the phase modules are removed from the metal case for adjustments, testing or services. Circuit board extender cards or cables may be employed to facilitate testing. The controller unit shall be designed for placement on a shelf or an EIA 19 inch rack.
 - b. The controller unit frame shall be completely equipped and wired for a full complement of modules so that no additional hardware or wiring is required whether or not the controller unit frame is used with the maximum possible number

ITEM 680.80370101	-	CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)
ITEM 680.80370201	-	CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)
ITEM 680.80370301	-	CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)
ITEM 680.80370401	-	CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)
ITEM 680.80370501	-	CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)

of phases.

- c. All modules of unlike function shall be mechanically keyed and electrically interlocked to prevent insertion into the wrong opening causing a controller malfunction. Each phase and the phase module opening shall be identified as to the phase controlled.

3. Phase Modules

- a. Each phase module with variable program controls and associated circuitry shall be assembled on a removable plug-in chassis. The phase module shall be positively fastened to the frame by means of a captive nut and bolt arrangement but no special tools shall be required to remove or replace individual modules.
 - b. Modules shall be removable from the front.
 - c. To facilitate interchangeability, a guide or track shall be provided for each phase module.
4. Size. The overall dimensions of the controller unit shall be as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
 5. Marking. The front panels of the controller unit shall be engraved or silk screened with the manufacturer's model number, serial number, module position, phasing, fuses, indicator lamps, switches, controls, etc., so that the operation of the controller unit shall be readily apparent.

K. Maintenance.

1. Equipment shall be designed for field maintenance (isolation of malfunction to particular modules or assemblies) by non-engineering personnel working under difficult conditions.
2. Test points shall be provided for checking essential voltages and wave forms and for injecting signals. All test points shall be readily accessible when equipment is opened in the service position.
3. The equipment shall be designed so that it can be easily installed and maintained. Fault location, accessibility and serviceability features which will lead to simplified maintenance shall be a prime consideration.

L. Cabinet Details.

1. Purpose. The purpose of this specification is to describe the minimum acceptable design requirement for the fabrication, wiring and installation of aluminum, weather tight traffic

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME (NEMA)**
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC ACTUATED (NEMA)**
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC ACTUATED (NEMA)**
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC ACTUATED (NEMA)**
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL TRAFFIC ACTUATED (NEMA)**

signal controller cabinets.

2. Cabinets.

- a. All equipment shall be housed within a weather proof outdoor mounted cabinet. The cabinet shall be clean cut in design and appearance and have minimum outside dimensions (not including handle or hinges) for the various size cabinets as follows:

SIZE	DEPTH	WIDTH	HEIGHT	APPLICATION
A	14 inches	14 inches	22 inches	Detectors, Flashers, etc.
B	14 inches	20 inches	32 inches	2 or 3 Phase Controller Assembly
C	22 inches	3 ft	4.5 ft	3 or 4 Phase Controller Assembly
D	22 inches	3 ft	6 ft	2-8 Phase Controller Assembly
E*	17 inches	20 inches	3.9 ft	2-8 Phase Controller Assembly

* Type E cabinets shall be mechanically identical on the outside to Model 170 microcomputer cabinets.

- b. Material. Sizes A, B, C, D and E shall be fabricated from No. 14 gauge aluminum or approved equal. Grinding, sanding or other appropriate means shall be used to effect a smooth surface. All non-aluminum parts shall be made of stainless steel.
- c. Door. The main door of all cabinets shall include substantially the full area of the front of the cabinet. All doors shall be reinforced on the inside in such a manner as to prevent warping. Two hinge lugs shall be integrally cast in the right side of the door in such a way that together with the stainless steel hinge pins, they shall provide proper mounting and operation of the door. A gasket bead shall be installed on the inside of the door, which together with the neoprene air-cored cabinet gasket, shall form a weather tight seal between the housing and the cabinet door.

The main door shall be equipped with a cylinder lock keyed for a number two corbin key, with a dust cover. An adjustable stainless steel striker plate shall be attached to the inside of the housing to insure positive locking. Size D cabinet shall be furnished with a three point positive locking door.

<u>ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME</u>
<u>(NEMA)</u>
<u>ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC</u>
<u>ACTUATED (NEMA)</u>
<u>ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL</u>
<u>TRAFFIC ACTUATED (NEMA)</u>

- d. Police Door. Size B, C, D and E shall be furnished with full doors and an auxiliary door equipped with a lock for a police key. Neoprene gasketing and stainless steel hinge pins shall be provided.
- e. Mounting Hardware. Size A, B and E shall be furnished with mounting plates and other necessary hardware as specified in the Plans or Proposal to mount the cabinet on a pole. Sizes C and D shall be equipped with a base, anchor bolts and other necessary hardware for mounting the cabinet on a concrete foundation.
- f. Ventilation. Size A shall be furnished with suitable top and bottom vents. The top of the cabinet shall provide a threaded opening for the installation of a tee vent. The vents shall be designed to prohibit the entry of rain and insects. The vent assembly for the purpose of shipment shall be installed on the inside of the cabinet with the locking attachment on the outside and then reversed upon installation.

 Sizes B, C, D and E cabinets shall be equipped with a thermostatically controlled ventilation fan. The vent shall be designed to prohibit entry of rain, insects and foreign objects. The fan shall have a minimum rating of 123.5 cubic foot per minute. The thermostat shall be adjustable from 70°F to 160°F.
- g. Exterior Finish. All cabinets shall be painted with two coats of high quality aluminum paint over a suitable primer coat.
- h. Keys. Two keys for each cabinet lock shall be furnished.
- i. Interior Equipment. All cabinets shall contain a mounting table, sliding ways or other suitable support for a controller. Each cabinet shall contain no less than the following equipment:

<u>EQUIPMENT</u>	<u>CABINET</u>
Main Switch and Circuit Breaker	A,B,C,D,E
Main Switch, On-Off	B,C,D,E
*Automatic-Flash Switch	B,C,D,E
*Automatic-Manual Switch	B,C,D,E
*Signal Shut-Down Switch	B,C,D,E
Radio Interference Filter and Suppressor	A,B,C,D,E
Thyrector for Protection of Solid State Equipment	A,B,C,D,E
Solid State Flasher Type 1-20 AMP Single Circuit	B,C,D,E
Flasher Relay	B,C,D,E
*Manual Control Switch	B,C,D,E
Coordination Switch On-Off	B,C,D,E
Signal Lamp Terminals	B,C,D,E
Interconnection Terminals	A,B,C,D,E
Detector Terminals	A,B,C,D,E

ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)
ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

*These features shall be located on the Police Panel.

- (1). The circuit breaker shall be installed for operation in a vertical direction. An enclosure for this switch shall not be required.
- (2). All cabinets containing a flasher and other kinds of interrupting devices shall be equipped with a suitable radio interference suppressor installed at the circuit breaker [paragraph (1)]. The suppressor shall provide a minimum attenuation of 50 kilohertz to 75 megahertz. The suppressor shall be hermetically sealed in a substantial metal case, filled with a suitable insulation compound.

The suppressor terminals shall be nickel plated, 10-24 brass studs of sufficient external length to provide space for connection of two No. 8 AWG conductors and shall be so mounted that the terminals cannot be turned in the case. The suppressors shall be designed for operation on 30 amperes, 125 volts, 60 hertz, single phase operation and shall be approved by UL and EIA.

- (3). The gauge of all insulated wires between various parts and components of the cabinet shall be of adequate size. Where signal lamp currents are carried, the minimum wire size shall be No. 14 AWG.

All cabinet wiring where connected to terminal strips, flasher, relays, switches, radio interference suppressor, etc., shall be identified by the use of either insulated pre-printed sleeving slipped over the wire before attachment of the lug or making the connection or by the use of heat stenciled wire designations on the wire itself. Where numerical wire designations are used, an appropriate translating sheet shall be supplied with the controller.

All wires shall be cut to the proper length before assembly. No wires shall be doubled back to take up slack. Wires shall be neatly laced into cables with nylon lacing. Cables shall be secured with nylon cable clamps. The grounded side of the electric service shall be carried throughout the cabinet without a break.

The electrical connections between the controller unit and the terminal panel shall be made by MS type, female cable socket to enable the rapid exchange of the complete mechanism without disconnecting and reconnecting individual wires. All electrical connections in the cabinet, including relays, flashers, terminal strips, etc., shall have sufficient

ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)

ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

clearance between each terminal and cabinet to provide an adequate distance to prevent a leakage path or physical contact under stress. Where these distances cannot be maintained, barriers must be provided.

All equipment grounds shall run directly and independently to the ground buss. The lay of the interconnect cable between the components must be such that when the door is closed, it does not press against the cables or force the cables against the various components inside the cabinet. Terminal strips located within the cabinet shall be accessible to the extent that it shall not be necessary to remove the controller from the cabinet to make an inspection or connection. The right side of the cabinet shall have the detector terminals. The electric service connections shall be on the left side of the cabinet. The signal lamp circuit shall be located at the rear wall and interconnection wiring, where required, shall be to the right wall.

Terminal strips shall be of dual binder-head screw type. Signal lamp circuit terminals shall be marked for each controller phase with a subscript denoting the particular phase, in consecutive order as follows:

R1, A1, G1, DW1, W1, R2, A2, G2, etc.

Terminals shall also be provided for all other circuits for the controller specified, including but not limited to detector circuits, yield circuits, coordination circuits, etc.

A ground strip having a minimum of nine connections shall be provided and grounded to the cabinet. The grounding strip shall be fastened directly to the left cabinet wall.

- (4). Size B, C, D and E cabinets shall be furnished with a manual control grip switch and cord installed in the police door. The cord to be approximately a 6 foot length of coiled wire which retracts itself into a 1 foot length.
- (5). Size A, B and E Cabinet shall be provided with an area within the lower center portion of the left, rear and right walls for accessories and cable entrances. A 2 NPS or 3 NPS threaded aluminum conduit shall be installed in the field as a raceway for the signal light conductors.
- (6). A coordination switch shall be installed in the cabinet and wired into the coordination circuit. When in the OFF position, the coordination unit shall be disconnected and the controller shall operate freely without supervision by a yield circuit or background cycle.

- ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)
- ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)
- ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)
- ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)
- ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

- (7). The automatic flash switch shall extinguish all signal indications except the yellow on the major street and the red on the minor street or streets, which shall flash. The power supply to the controller is not to be affected and the controller will continue to function in a normal manner.

It shall be possible to disconnect the controller without interfering with the flash operation. One contact on the flash switch shall extinguish the AC plus voltage used to feed power to the pedestrian signals.

- (8). Two copies of the cabinet wiring diagram shall be supplied with each cabinet.

M. Details for Solid-State Load Switches.

1. Requirements.

- a. This specification defines the minimum detailed requirements applicable to solid-state load switches, including switching and monitoring of signal lights. The intent of this specification is to set forth the minimum acceptable electrical and mechanical design and operating requirements within which all equipment must operate satisfactorily and reliably and to detail the means by which equipment as a whole shall be tested to determine whether it shall so operate.
- b. The solid-state load switches shall be triple-signal load switches as specified in NEMA Publication TS 1-1989 and all subsequent revisions.
- c. The solid-state load switches shall be mounted external to the controller unit and shall be jack mounted in compliance with NEMA Publication TS 1-1989 and all subsequent revisions.
- d. Each solid-state load switch shall be furnished with three built in indicator lights for phase identification.
- e. No mechanical means shall be employed to mount the solid-state load switches, which shall prohibit the interchangeability between the manufacturers.

N. Details for Signal Conflict Monitor.

1. Requirements.

- a. Solid-state load switch assemblies shall be provided with means to prevent the illumination of conflicting green indications.

ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)

ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)

ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

- b. A signal conflict monitor unit shall be supplied for all solid-state load switches.
- c. This unit, when connected to the field terminals of the signal lights circuits, shall be capable of detecting simultaneously conflicting vehicle and/or pedestrian traffic signal lights. The monitor shall include both the positive and negative side of the AC sine wave supplied to the traffic signal light indicators.
- d. The conflict monitor upon sensing conflicting signals or unsatisfactory operation voltages shall cause the transfer of the signal to a flashing indication. The controller assembly shall be wired in such a manner as to provide flash transfer if the unit is removed from service.
- e. And in the event that such conflicting indications develops, the controller shall freeze in the condition that existed at the moment of conflict and shall remain frozen until reset by maintenance personnel. This shall be accomplished by having the monitor send to the controller a stop timing command.
- f. This unit when connected to the field terminals of the signal light circuit shall provide protection against conflicting signals resulting from controller failure, relay or solid-state load switch failure, short circuited field wiring etc.
- g. There shall be mounted on the front panel, a visual indicator to provide an indication when the equipment has operated to protect against a conflicting signal condition.
- h. The equipment shall also provide a front panel mounted reset pushbutton for restoration of normal operation. Provision shall also be provided for reset from a remote location through a ground command level.
- i. The signal conflict monitor shall meet all the requirements of NEMA Publication TS 1-1976 and all subsequent revisions.

O. Details for Solid-State Flasher and Flash Relay.

1. Requirements.

- a. A solid-state flasher, type 1-20 ampere-signal circuit, as described in NEMA Publication TS 1-1989 and all subsequent revisions, shall be furnished with the cabinet, size B, C and D, and shall produce between 50 and 60 flashes per minute with an on period of 50 +/- 5 percent. The flasher shall mate with a Cinch-Jones socket type S-406-SB or equivalent (as required by Part 8, Section TS1-8.2.2).
- b. The flashing output shall consist of one output rated at 20 amperes. The combined load connected to circuits 1 and 2 shall not exceed 20 amperes.

ITEM 680.80370101 - CONTROLLER AND CABINET 2 PHASE FIXED TIME
(NEMA)
ITEM 680.80370201 - CONTROLLER AND CABINET 2 PHASE SEMI TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370301 - CONTROLLER AND CABINET 2 PHASE FULL TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370401 - CONTROLLER AND CABINET 3 PHASE FULL TRAFFIC
ACTUATED (NEMA)
ITEM 680.80370501 - CONTROLLER AND CABINET 4 THRU 8 PHASE FULL
TRAFFIC ACTUATED (NEMA)

- c. The flasher relay shall energize the solid-state flasher and transfer the signal light circuits from the controller unit to the flasher. The flasher relay shall have a plug-in mounting.

CONSTRUCTION DETAILS

Subsections 680-3.01, Equipment List and Drawings, 680-3.06, Work Sites, 680-3.07, Schedule of Work, 680-3.12, Grounding and 680-3.32, Tests, shall apply.

METHOD OF MEASUREMENT

Subsection 680-4.01, Each Unit, shall apply.

BASIS OF PAYMENT

Section 680-5 shall apply.

ITEM 680.94010003 - WATERTIGHT DISCONNECT BOX - NEMA 4X

DESCRIPTION - Under this item, the Contractor shall furnish and install a watertight disconnect box as shown on the plans, or the standard sheets or as ordered by the Engineer.

MATERIALS - The watertight disconnect box shall consist of a circuit breaker enclosed in a lockable corrosion resistant cabinet that complies with the requirements of NEMA 4X, and is approved for use by Underwriters Laboratory.

The amperage of the circuit breaker supplied in the disconnect box shall be at least 10 amperes higher than the main circuit breaker contained in the control cabinet being serviced, but shall not exceed the maximum amperage allowed for the service entrance cable being used, as specified by the most current National Electrical Code.

The watertight cabinet supplied shall be of a construction such that its hinged cover can be locked by a standard padlock.

CONSTRUCTION DETAILS - The disconnect box shall be attached to the pole or cabinet as shown on the plans, or the standard sheet or as ordered by the Engineer.

Once installed, the Contractor shall keep the disconnect box padlocked until the signal installation is accepted by NYSDOT. During this time, the EIC shall be provided with a key which will open the Contractor's padlock. Once the installation is accepted, the maintaining agency will install its own padlock and the Contractor's lock and key will be returned.

METHOD OF MEASUREMENT - This item will be measured for payment as the number of watertight disconnect boxes furnished, installed and accepted by the Engineer-in-Charge.

BASIS OF PAYMENT - The unit price bid shall include the cost of all labor, material and equipment necessary to complete the work as shown on the plans, on the standard sheets, or as ordered by the Engineer.

Appendix B

New York State Prevailing Wage Rates

The "Request for Wage and Supplement Information" (PW 39) you have submitted has been accepted, and a Prevailing Rate Case Number (PRC# 2023014748 - Civic Hub & Connectivity) has been assigned to the project.

To access the PDF file of your schedule, click on <https://apps.labor.ny.gov/wpp/publicViewProject.do?method=showIt&id=1560865> or copy and paste into your browser