

**FISHKILL AVENUE
SEWER & WATER REPLACEMENT**

**Contract Documents
&
Technical Specifications**

**CITY OF BEACON
DUTCHESS COUNTY, NEW YORK**

**COB Bid No. 2025-007
COB Contract No.**

**Consulting Engineers
Lanc & Tully
Engineering and Surveying, P.C.
P.O. Box 687
Goshen, NY 10924**



May 2025

TABLE OF CONTENTS

ADVERTISEMENT FOR BIDS	A-1
INFORMATION FOR BIDDERS	
Receipt and Opening of Bids	B-1
Preparation of Bid	B-1
Bid Modification and Withdrawal	B-2
Method of Bidding	B-2
Bid Security	B-3
Liquidated Damages for Failure to Enter Into Contract	B-3
Addenda and Interpretations	B-3
Security for Faithful Performance	B-3
Warranty and Guarantee	B-4
Obligation of Bidder	B-4
Qualifications of Bidder	B-4
Power of Attorney	B-4
Time of Completion and Liquidated Damages	B-4
Laws and Regulations	B-5
Additions and Deletions	B-5
Insurance	B-5
HUD Requirements	B-5
Contractor Information Form	B-9
Conflict of Interest Statement	B-10
Assurance of Compliance	B-11
Reference Sheet	B-12
Affirmative Action Plan	B-13
Statement of Bidders Qualifications	B-14
Certification of Bidder Regarding E.O.E.	B-17
Certification of Bidder Regarding Section 3 & Segregated Facilities	B-18
Contractor Section 3 Plan Format	B-19
Proposed Subcontractors Breakdown	B-21
Estimated Project Workforce Breakdown	B-22
Section 3 Project Area Manpower Utilization Table	B-23

TABLE OF CONTENTS - *continued*

Affirmative Action Plan for Utilization of Section 3 Project Businesses.....	B-24
Bidder's Certificate of Limited Foreign Involvement.	B-25
Sexual Harassment Prevention Policy Certification.....	B-26
Iran Divestment Act Compliance Certification.	B-27
Contractor Certification Form: Labor Law 220-i.....	B-28
BID FORM.....	C-1
BID BOND	D-1
NON-COLLUSIVE BIDDING CERTIFICATION	E-1
AGREEMENT.....	F-1
PERFORMANCE BOND	G-1
PAYMENT BOND.....	H-1
NOTICE OF AWARD.....	I-1
NOTICE TO PROCEED	J-1
CHANGE ORDER	K-1
CONTRACTOR'S AFFIDAVIT FOR RELEASE OF RETAINAGE AND FINAL PAYMENT	L-1
GENERAL CONDITIONS	M-1
SUPPLEMENTARY CONDITIONS	
Contractor's and Subcontractor's Insurance.....	N-1
Sales Tax	N-1
Equal Employment Opportunities.....	N-2
Clarification of "Paragraph 4.4 -- Reference Points" of General Conditions	N-2
Amendments to General Conditions	N-3
NYSDOL Schedule of Occupations Classifications and Minimum Hourly Wage Rates	
FEDERAL Schedule of Occupations Classifications and Minimum Hourly Wage Rates	
TECHNICAL SPECIFICATIONS	

ADVERTISEMENT FOR BIDS

Fishkill Avenue Sewer & Water Replacement City of Beacon, Dutchess County, New York

Separate sealed bids will be received by the City of Beacon in City Hall at One Municipal Plaza, Beacon, New York, until 10:00 a.m. on June 9th, 2025, and then at said office publicly opened and read aloud. Bids are requested for:

Fishkill Avenue Sewer & Water Replacement City of Beacon, Dutchess County, New York

GENERAL CONTRACT

Work includes the installation of 1,387 linear feet of 12" SDR-35 PVC sewer pipe, 6 manholes, installation of 1,883 linear feet of 10" Class 52 ductile iron pipe, 5 hydrants, reconnection of sewer and water service lines, and abandonment of sewer and water lines, and restoration of all disturbed areas on Fishkill Avenue.

Documents may be obtained via electronic means from: Proposals and Bid Notices – City of Beacon (beaconny.gov), Bidnet, NYS Contract Reporter. Paper Copies of the Contract Documents and Plans may be obtained at Lanc & Tully Engineering and Surveying, P.C., 3132 Route 207, Campbell Hall, NY 10916. Phone (845) 294-3700, between the hours of 9:00 am and 3:00 pm, starting on May 16, 2025. Persons shall leave name, correct mailing address, phone, fax and **email address**, along with a \$100.00 deposit for each set of documents and plans. The deposit shall be in the form of check or money order **ONLY**, for each set and shall be drawn payable to the City of Beacon. Addenda, if any, will be issued only to those persons whose name and address are on the record as having obtained the contract documents.

The City of Beacon reserves the right to waive what it deems to be informalities relating to a specific bid, to waive what it deems to be technical defects, irregularities and omissions relating to a specific bid, to reject any or all bids, to request additional information from any Bidder, to re-advertise for new bids or to accept the whole or part of any bid which in the opinion of the City Council of the City of Beacon is in the best interest of the City of Beacon. The City of Beacon will not discriminate against bidders because of race, creed, color, national origin, sex, age, disability, or marital status. **Every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course, in accordance with Labor Laws.**

Each bidder must deposit with their bid a bid security in the proper amount and form, as described and provided in the Information to Bidders and Non-Collusive Certificate.

INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS

The City of Beacon, Dutchess County, New York (herein, called the "Owner") invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Envelopes containing the bids must be sealed, addressed to: City of Beacon, City Hall, One Municipal Plaza, Beacon, New York 12508 and designated as **Fishkill Avenue Sewer & Water Replacement** must be actually received not later than the time and the date specified in the Advertisement for Bids.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions thereof and may waive any informalities or reject any or all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 45 days after the actual date of the opening thereof.

2. PREPARATION OF BID

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be completed in ink or by typewriter. In addition to the prescribed for, each bid must be accompanied by the following:

1. Required Bid Security
2. Information Sheet
3. Conflict of Interest Statement
4. Reference Sheet
5. Assurance of Compliance
6. Affirmative Action Plan
7. Equal Employment Opportunity
8. Non-Collusive Bidding Certificate
9. Statement of Bidder's Qualifications
10. Certification of Bidder regarding Section 3 and Segregated Facilities
11. Contractor Section 3 Plan Format
12. Proposed Subcontractors Breakdown
13. Estimated Project Workforce Breakdown
14. Section 3 Project Area – Manpower Utilization
15. Affirmative Action Plan for Utilization of Section 3 Project Businesses
16. Certification of Limited Foreign Involvement
17. Sexual Harassment Prevention Policy Certification
18. Iran Divestment Act Compliance Certification
19. Contactor Certification Form: Labor Law 220-i

Each envelope containing a bid must bear on the outside the name and address of the bidder, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified above. The Contractor assumes the risk of any error or delay in the delivery of its bid by whatever delivery means it chooses (e.g. mail, hand delivery, courier, overnight service or other means) including the handling of mail by employees of the City of Beacon.

The Contractor shall not include in the bid any sales and compensating use taxes of the State of New York or of any City or County in the State of New York for any materials which are to be incorporated in the work. The City has a tax exemption number and forms which will be made available to the successful bidder to the extent permitted under the present applicable statutes.

No bids will be accepted unless the Non-Collusive Bidding Certificate provided in these specifications is properly executed and submitted with the bid, as required by the General Municipal Law.

3. BID MODIFICATION AND WITHDRAWAL

Any bidder may modify or withdraw its bid by telegraphic or written communication at any time prior to the opening of bids, provided such communication is received by the Owner prior to the opening, and provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the opening time. The communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two days from the opening of bids time, no consideration will be given to the telegraphic modification.

4. METHOD OF BIDDING

A. The bid is unit price per item.

B. Lowest Bidder

Bids will be compared on the basis of the correct totals of the schedule of quantities comprising all items at the unit and lump sum prices bid for these items. The lowest bidder under each Contract will be that Bidder whose Bid totals the lowest number of dollars as determined above.

Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, non-responsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Discrepancies in the Multiplication of units of Work and unit prices will be resolved in favor of the Unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

When numbered Alternate Bid items are required, the lowest Bidder is the Bidder whose Bid for the Alternate or combination of Alternates, selected by Owner, is the lowest. It shall be understood that the Owner reserves the right to select any alternate or combination of Alternates.

The alternate Bid Items are provided because of the City of Beacon's budgetary constraints and to achieve the economy of scale.

5. BID SECURITY

Each bid must be accompanied by cash, certified check of the bidder or a bid bond prepared on the Bid Bond Form attached, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, **licensed in the state of New York with a minimum rating of "bbb"**, in the amount of 5% of the total contract bid. Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and accepted bidder have executed the contract, or, if no award has been made within 45 days after the date of the opening of bids, upon demand of the bidder at anytime thereafter, as long as he has not been notified of the acceptance of his bid. Bid Security shall be made payable to the City of Beacon.

6. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 15 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner the security deposited with this bid, which sum is agreed on as the proper measure of liquidated damages that the Owner will sustain as a result of the failure or refusal to execute and deliver the contract and bonds as required in this paragraph. This sum is not to be construed in any sense as a penalty but as a good faith measure of the economic injury to the Owner which otherwise is impractical to calculate.

7. ADDENDA AND INTERPRETATIONS

No interpretations of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. Every request for such interpretation should be in writing and emailed to Lanc & Tully, P.C., ldr@lanctully.com and to be given consideration must be received at least five working days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by Certified Mail with return receipt requested or by facsimile to all prospective bidders (at the respective address or facsimile number furnished for such purposes) not later than three working days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

8. SECURITY FOR FAITHFUL PERFORMANCE

Simultaneously with his delivery of the executed contract, the Contractor shall furnish a Construction Performance Bond and a Construction Payment Bond in amounts equal to 100% of contract price, as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. **Each bond shall state "The amount of the bond shall be adjusted to reflect the effect of any changes ordered by the owner by a Written Amendment, a Change Order, or a Work Change Directive".** The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner, **licensed in the state of New York with a minimum rating of "bbb"**, and shall be prepared on the forms found in these contract documents.

9. WARRANTY AND GUARANTEE

The Contractor shall warrant and guarantee all his work and material for a period of two years after final acceptance by the Owner in accordance with the General Conditions. The Owner shall retain 5% of the total completed works cost during this **two-year** period unless the Contractor provides an acceptable Maintenance Bond in the same amount, or unless his Performance Bond covers this two-year period.

10. OBLIGATION OF BIDDER

At the time of the opening of bids, each bidder will be presumed to have inspected the Technical Specifications and to have read and to be thoroughly familiar with the contract documents. The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to his bid. The lowest bidder shall supply the names and addresses of major material suppliers and subcontractors when requested to do so by the Owner.

11. QUALIFICATIONS OF BIDDER

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract. Conditional bids will not be accepted.

12. POWER OF ATTORNEY

Attorneys-in-fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each Bond a certified and effective dated copy of their power of attorney.

13. TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to complete all work, no later than 125 calendar days after the date specified in the Notice to Proceed.

Bidder must agree to pay in accordance with the following schedule for each consecutive calendar day the project completion extends past the completion date, which sum is agreed on as the proper measure of liquidated damages that the Owner will sustain per diem by the failure of the Bidder to complete the work in the time stipulated, and this sum is not to be construed in any sense as a penalty but a good faith measure of the economic injury to the Owner which is otherwise impractical to calculate.

Original Contract Amount		Liquidated Damages Per Day
From More Than	To and Including	
\$0	\$25,000	\$575
\$25,000	\$50,000	\$600
\$50,000	\$100,00	\$725
\$100,000	\$500,000	\$825
\$500,000	\$2,000,000	\$1,025

14. LAWS AND REGULATIONS

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written in full.

15. ADDITIONS AND DELETIONS

The Owner may elect to delete from the contract any portion of the work or material described. Any major alterations, either subtractions or additions, will be made prior to the contract award.

16. INSURANCE

During the life of the contract, the Contractor shall maintain in full force and effect the following.

1. Workers Compensation Insurance and New York State Disability Insurance in conformity with the applicable laws of the State of New York.
2. Contractor's Comprehensive General Liability and Property Damage Insurance.
3. Contractor's Protective Comprehensive General Liability and Property Damage Insurance in his own name and for Sub-contractor operations.
4. Contractor's Protective Comprehensive General Liability and Property Damage Liability Insurance in the name of the Owner.
5. Bodily Injury Liability and Property Damage Liability Insurance for all automotive equipment utilized for this contract.

The Contractor shall furnish to OWNER Certificates of Insurance as evidence of coverage prior to commencement of the PROJECT and naming the OWNER and ENGINEER as Additional Insured on a primary and non-contributory basis. Waiver of Subrogation in favor of the OWNER is to be included. The Contractor shall provide thirty (30) days written notice to the OWNER, by registered mail with return receipt requested, prior to cancellation or expiration of the policy. Policies that lapse and/or expire during term of work shall be recertified and received by the OWNER no less than thirty (30) days prior to expiration or cancellation. All carriers listed in the certificates of insurance shall be A.M. Best Rated A VII or better and be licensed in the State of New York.

17. HUD REQUIREMENTS

All Bidders are subject to all conditions of the Community Development Program including, but not limited to the following:

- a. Meeting the Prevailing Rates as published by the New York State Department of Labor and United States Department of Labor.
- b. Contractor's Questionnaire, to be submitted with Bid Proposal.
- c. An inventory of the Contractor's employment.
- d. Statement of Compliance.
- e. Affirmative Action Plan.
- f. Certification by proposed Contractor regarding Equal Employment Opportunity, to be completed at award of Contract.

17. HUD REQUIREMENTS - continued

g. Labor Standards

(1) *Davis Bacon Requirements*

The Municipality agrees to comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Federal Labor Standards, Contract Work Hours, the Safety Standards Act, The Copeland "Anti-Kickback" Act (40 U.S.C. 276, 327-333) and all other applicable Federal, State, and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this Contract. The Municipality shall maintain documentation which demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the County for review upon request.

The Municipality agrees that, except with respect to the rehabilitation or construction of residential property designed for residential use of less than eight households, all contractors engaged under contracts in excess of \$2,000.00 for construction, renovation or repair of any building or work financed in whole or in part with assistance provided under this contract, shall comply with Federal requirements adopted by the County pertaining to such contracts and with the applicable requirements of the regulations of the Department of Labor, under 29 CFR, Part 5 governing the payment of wages and ratio of apprentices and trainees to journeymen; provided, that if wage rates higher than those required under the regulations are imposed by State or local law, nothing hereunder is intended to relieve the Municipality of its obligations, if any, to require payment of the higher wage. The Municipality shall cause or require to be inserted in full, in all such contracts subject to such regulations, provisions meeting the requirements of this paragraph, for such contracts in excess of \$10,000.00.

(2) *"Section 3" Clause*

(a) Compliance

Compliance with the provisions of "Section 3," the regulations set forth in 24 CFR 135, and all applicable rules and orders issued hereunder prior to the execution of this Contract, shall be a condition of the Federal financial assistance provided under this Contract and binding upon the County, the Municipality and any subcontractors, their successors and assigns, to those sanctions specified by the agreement through which Federal assistance is provided. The Municipality certifies and agrees that no contractual or other disability exists which would prevent compliance with these requirements.

The Municipality further agrees to comply with these "Section 3" requirements and to include the following language in all subcontracts executed under this agreement: "The work to be performed under this contract is a project assisted under a program providing direct Federal financial assistance from HUD and is subject to the requirements of "Section 3" of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701. "Section 3" requires that to the greatest extent feasible, opportunities for training and employment be given to lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the areas of the project."

17. HUD REQUIREMENTS - continued

(b) Notifications

The Municipality agrees to send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or worker's representative of its commitments under this "Section 3" clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

(c) Subcontracts

The Municipality will include this "Section 3" clause in every subcontract and will take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Grantor Agency. The Municipality will not subcontract with any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

h. Pre-construction Conference

After Contract Award but prior to execution of the Contract Agreement, the Contractor (and all available subcontractors) shall attend a pre-construction conference with the Municipality and the City and County Community Development program representatives.

i. Employee Interviews

The County Community Development department will conduct employee interviews on the job site.

j. Requests for Payment and Payment Procedures

The Contractor shall submit payroll sheets with each Request for Payment. After review by the Municipality, Requests for Payment shall be forwarded to the County for review. The County will pay to the Municipality funds available under this Contract based upon information submitted by the Municipality and consistent with any approved budget and County policy concerning payments. Payments will be made for eligible expenses actually incurred by the Municipality and not to exceed actual cash requirements. Payments will be adjusted by the County in accordance with advance fund and program income balances available in Municipality accounts. In addition, the County reserves the right to liquidate funds available under this Contract for costs incurred by the County on behalf of the Municipality.

k. Progress Reports

The Contractor shall submit periodic and/or ongoing detailed project status reports when submitting a Request for Payment. These reports will be forwarded to the County by the Municipality.

l. Civil Rights

(1) *Compliance*

The Municipality agrees to comply with Title VI of the Civil Rights Act of 1964 as amended, Title VIII of the Civil Rights Act of 1968 as amended, Section 109 of Title I of the Housing and Community Development Act of 1974, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063 and Executive Order 11246 as amended by Executive Orders 11375 and 12086.

17. HUD REQUIREMENTS - continued

(2) *Non-discrimination*

The Municipality will not discriminate against any employee or applicant for employment because of race, color, creed, religion, ancestry, national origin, sex, disability or other handicap, age, marital status, or status with regard to public assistance. The Municipality will take affirmative action to ensure that all employment practices are free from such discrimination. Such employment practices include but are not limited to the following: hiring, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Municipality agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting agency setting forth the provisions of this non-discrimination clause. That there may be deducted from the amount payable to the Contractor by the County under this agreement, a penalty of five dollars for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Agreement.

This Agreement may be cancelled or terminated by the County, and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of this section of the Agreement.

(3) *Section 504*

The Municipality agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (20 U.S.C. 706), which prohibits discrimination against the handicapped in any Federally assisted program. The County shall provide the Municipality with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Contract.

m. Affirmative Action

(1) *Approved Plan*

The Municipality agrees that it shall be committed to carry out an Affirmative Action Program in keeping with the principles as provided in President's Executive Order 11246 of September 24, 1965.

(2) *Women and Minority Business Enterprises*

The Municipality will use its best efforts to afford minority and women-owned business enterprises the maximum practicable opportunity to participate in the performance of this Contract. As used in this Contract, the term "minority and female business enterprise" means a business at least fifty-one (51) percent owned and controlled by minority group members or women. For the purpose of this definition, "minority group members" are Afro-Americans, Spanish-speaking, Spanish surnamed or Spanish-heritage Americans, Asian-Americans, and American Indians. The Municipality may rely on written representations by Municipalities regarding their status as minority and female business enterprises in lieu of an independent investigation.

(3) *Access to Records*

The Municipality shall furnish and cause each of its Contractors to furnish all information and reports required hereunder and will permit access to its books, records and accounts by the County, HUD or its agent, or other unauthorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions state herein.

DATE: _____

BID NAME: _____

INFORMATION SHEET

NAME OF BIDDER: _____

ADDRESS: _____

TYPE OF ENTITY: Corp _____ Partnership _____ Individual _____

If a non-publicly owned Corporation:

NAME OF CORPORATION: _____

List Principal Stockholders, holding over 5% of outstanding shares:

LIST OFFICERS: _____

LIST DIRECTORS: _____

DATE OF ORGANIZATION: _____

If partnership:

PARTNERS: _____

NAME OF PARTNERSHIP: _____

DATE OF ORGANIZATION: _____

****If the business is conducted under an assumed name, a copy of the Certificate required to be filed under the New York General Business Law must be attached.****

**CITY OF BEACON
CONFLICT OF INTEREST STATEMENT**

VENDOR'S NAME: _____

SIGNATURE REQUIRED: _____

Print Name

DATE: _____

If the bidder is an individual, the bid must be signed by that individual; if the bidder is a corporation, by an officer of the corporation, or other person authorized by resolution of the Board of Directors, and in such case a copy of the resolution must be attached; if a partnership, by one of the partners or other person authorized by a writing signed by at least one general partner and submitted with the bid or previously filed with the Purchasing Agent.

"The submission of this constitutes a certification that no City Officer has any interest therein. (Note: In the event that any City Official has any such interest, the full nature thereof should be disclosed below.)"

ASSURANCE OF COMPLIANCE

Every municipality/operating agency and contractor shall incorporate or cause to be incorporated, in all contracts and subcontracts for work in connection with a Federally assisted project the following:

- A. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Executive Order 11625.
- B. The parties to this contract will comply with the intent and purposes of said Executive Order 11625, and all applicant procedures issued thereunder prior to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- C. The municipality/operating agency will send to appropriate minority organizations or representative(s) of minority(s) a notice advising the said minority organization or representative of his commitments under this Executive Order 11625 and shall retain copies of the notice in an appropriate file available for inspection by authorized party(s).
- D. The municipality/operating agency will include this Executive Order 11625 clause in every contract for work in connection with the project and will at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the contract upon a finding that the contractor is in non-compliance. The municipality will not contract with any contractor where it has notice or knowledge that the latter will not participate and will not let any contract unless the contractor has first provided it with a preliminary statement of goals to comply with the intent and purpose of these procedures.
- E. Compliance with the provision of Executive Order 11625, the intent and purpose thereof, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided.

Contractor Signature

Date

REFERENCE SHEET

All bidders will be required to complete this form providing three references of past performance. References should involve projects and/or service situations of similar size and scope to this bid. References must have had dealings with the bidder within the last 12 months. The City reserves the right to contact any or all of the references supplied for an evaluation of past performance in order to establish the responsibility of the bidder before the actual award of the bid and/or contract. Completion of the reference form is required.

If references have been filed with the City of Beacon Purchasing Department during the last 12 months, it will not be necessary to complete this form. Indicate filing date on the line provided.

BIDDER'S NAME: _____

DATE FILED: _____

Bidder's Name: _____

Reference's Name: _____

Address: _____

Telephone: _____ Contact Person: _____

Bidder's Name: _____

Reference's Name: _____

Address: _____

Telephone: _____ Contact Person: _____

Bidder's Name: _____

Reference's Name: _____

Address: _____

Telephone: _____ Contact Person: _____

AFFIRMATIVE ACTION PLAN

To ensure equal opportunity in hiring and employment for all work funded through the Dutchess County Community Development Program.

ALL contractors and subcontractors agree to take the following actions:

1. Endorse the following statement: The undersigned contractor has agreed that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin and will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin.

Furthermore, this contractor has agreed that, to the greatest extent feasible, opportunities for training and employment will be given to lower income residents of the project area and contracts for work in connection with the project will be awarded to business concerns which are located in, or owned in substantial part by persons residing in, the area of the project.

2. When hiring any subcontractors, to provide an opportunity for any minority owned firms located within Dutchess County to bid for the job. The Office of Community Development will provide a list of any such firms.
3. Report to the Office of Community Development on the firm's total employees, by race and sex.
4. Send a copy of this Affirmative Action Plan to any collective bargaining organization with which the contractor has an agreement.
5. Post the Equal Opportunity Poster and this Affirmative Action Plan in a conspicuous location available to employees.

Name of Firm

hereby agrees to abide by the provisions of this Affirmative Action Plan.

Signature and Title

STATEMENT OF BIDDERS QUALIFICATIONS

The Undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter. Answer all questions in a clear and comprehensive manner. This form must be completed in full and sealed (if corporation) or signed by all partners. The bidder may submit any additional information he/she desires.

NOTE: THIS STATEMENT MUST BE NOTARIZED.

SUBMITTED BY:

Name of Bidder: _____

Federal Identification Number: _____

Permanent Principal Office Address: _____

Corporation ___ Partnership ___ Individual ___ Joint Venture
Other

1. Date When Firm Organized:
2. State of incorporation:
3. How many years has your organization been engaged in contracting under your present firm or trade name?
4. Have you ever failed to complete any work awarded to you? If so, note when, where, and why:
5. Has any office or partner of your organization ever been an officer or partner of another organization that failed to complete a construction contract? _____ If so, state circumstances:

6. List name of project, owner, architect, contract amount, percentage complete and scheduled completion of the major construction projects your organization has in process on this date:
7. List name of project, owner, architect, contract amount, date of completion the major construction projects your organization has completed in the last five years:
8. **List your major equipment (manufacturer, model, size, etc.) available for this contract (this should not include equipment dedicated to other projects).** This may be attached as a separate sheet if necessary.

9. Experience in work similar in scope and scale to this project:
10. List the construction experience of the principal individuals of your organization:
11. Trade References:
12. Bank References:

State of New York Name of Bidder:

County of () Date:

On this _____ day of _____, 202__ before me came

_____ to me known to be the individual(s)

described in and who executed the foregoing instrument and acknowledged
that he/she executed the same.

Notary Public

County

THIS AFFIDAVIT MUST BE COMPLETED BY ALL BIDDERS

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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 subcontractor, 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 instructions, 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

NAME AND ADDRESS OF BIDDER (INCLUDE ZIP CODE)

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

☐ No ☐ Yes

2. Compliance reports were required to be filed in connection with such contract or subcontract.

☐ No ☐ Yes

3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.

☐ No ☐ Yes

4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?

☐ No ☐ Yes

NAME AND TITLE OF SIGNER (Please type)

SIGNATURE

DATE

CERTIFICATION OF BIDDER REGARDING SECTION 3 AND SEGREGATED FACILITIES

NAME OF PRIME CONTRACTOR

PROJECT NAME AND NUMBER

The undersigned hereby certifies that

- (a) Section 3 provisions are included in the Contract
- (b) A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$10,000).
- © No segregated facilities will be maintained.

NAME AND TITLE OF SIGNER (Print or Type)

SIGNATURE

DATE

CONTRACTOR

Section 3 Plan Format

_____ agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within the County of Dutchess.

- A. To ascertain from the locality's CDBG program official the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.**
- B. To attempt to recruit from within the County the necessary number of lower income residents through:**
Local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U.S. Employment Service.
- C. To maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.**
- D. To insert this Section 3 plan in all bid documents, and to require all bidders or subcontractors to submit a Section 3 affirmative action plan including utilization goals and the specific steps planned to accomplish these goals.**
- E. To insure that subcontracts which are typically let on a negotiated rather than a bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, whenever feasible, when let in a Section 3 covered project area.**
- F. To formally contract unions, subcontractors and trade associations to secure their cooperation for this program.**
- G. To insure that all appropriate project area business concerns are notified of pending subcontractual opportunities.**
- H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.**
- I. To appoint or recruit an executive official of the company or agency as Equal Opportunity officer to coordinate the implementation of this Section 3 plan.**

* Loans, grants, contracts and subsidies for less than \$10,000 will be exempt.

THIS FORM MUST BE SIGNED ON PAGE B-20

- J. To list on page B-21, information related to subcontracts awarded for the three year period preceding date of this bid submission.**
- K. To list on page B-23, all projected workforce needs for all phases of this project by occupation, trade, skill level and number of positions.**

As officers and representatives of _____
(Name of Contractor)

We the undersigned have read and fully agree to this Affirmative Action Plan, and become a party to the full implementation of this program.

(SIGNATURE)

(TITLE)

(DATE)

(SIGNATURE)

(TITLE)

(DATE)

PROPOSED SUBCONTRACTS BREAKDOWN

For the period covering _____ 2025 through _____ 202____
(Duration of the CDBG-Assisted Project)

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Type of Contract (Business of Profession)	Total Number of Contracts	Total Approximate Dollar Amount	Estimated Number of Contracts to Project Area Businesses*	Estimated Dollar Amount to Project Area Businesses*

*The project area is coextensive with the County of Dutchess boundaries.

Company: _____

Project Name: Fishkill Ave Sewer & Water Replacement

EEO Officer (Signature): _____ Date _____

ESTIMATED PROJECT WORKFORCE BREAKDOWN

Column 1	Column 2	Column 3	Column 4	Column 5
Job Category	Total Estimated Positions	No. Positions Currently Occupied by Permanent Employees	No. Positions Not Currently Occupied	No. Positions to Be Filled with L.I.P.A.R.*
Officers/ Supervisors				
Professionals				
Technicians				
Housing Sales/Rental /Management				
Office Clerical				
Service Workers				
Others				
Trade:				
Journeyman				
Helpers				
Apprentices				
Maximum no. of trainees				
Others				
Trade:				
Journeyman				
Helpers				
Apprentices				
Maximum no. of trainees				
Others				
Trade:				
Journeyman				
Helpers				
Apprentices				
Maximum no. of trainees				
Others				

* Lower Income Project Area Residents. Individuals residing within the County of Dutchess whose family income does not exceed 90% of the median income in the SMSA.

Company _____

MANPOWER UTILIZATION TABLE

EMPLOYMENT CERTIFICATION

- _____
Contractor

Authorized Signature

Title

Date

AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF SECTION 3 PROJECT BUSINESSES

Whenever possible, the successful Bidder shall utilize Dutchess County business concerns when contracting for materials or services to be performed in conjunction with this Contract. Any Subcontractors are subject to the same requirement.

1. On the chart below, list the materials (in general) expected to be purchased, from whom it will be purchased, and the approximate amount of the purchase.
2. If you are subcontracting work, list the successful bidders, etc., as completed for material contracts.
3. A Section 3 business concern must be located in Dutchess County.

1. Type of Material Purchased	Company	Value \$	Section 3 Business	
			Yes	No
2. Type of Work to Let				

Date: _____

Contractor

Authorized Signature

Title

**BIDDER'S CERTIFICATION OF
LIMITED FOREIGN INVOLVEMENT**

(Completion of this statement is required in advance of consideration for award of this contract.)

SUBMITTED TO:

SUBMITTED FOR:

SUBMITTED BY:

Name:

(print or type name of bidder)

A Corporation / A Partnership / An Individual / A Joint Venture

Address:

Gentlemen:

The undersigned certifies under oath the truth and correctness of all statements made hereinafter.

1. The Offeror is not a contractor of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S. Trade Representative (USTR).
2. The Offeror has not or will not enter into any subcontract with a subcontractor or a foreign country included on the USTR list.
3. The Offeror will not provide any product of a country included on the USTR list.

(print or type name of bidder)

(Seal, if Corporation)

By: _____

Title: _____

**BIDDER'S CERTIFICATION OF COMPLIANCE WITH NEW YORK STATE DEPARTMENT OF LABOR
SEXUAL HARASSMENT PREVENTION POLICY**

Pursuant to New York State Labor Law §201-g, every employer shall adopt a model sexual harassment prevention policy promulgated pursuant to this subdivision or establish a sexual harassment prevention policy to prevent sexual harassment that equals or exceeds the minimum standards provided by such model sexual harassment prevention policy.

Pursuant to New York State Finance Law §139-1, every bid hereafter made to the state or any public department or agency thereof, where competitive bidding is required by statute, rule or regulation, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under the penalty of perjury:

BIDDER'S CERTIFICATION

By submission of this bid, _____
(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 the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of §201-g of the Labor law."

_____ further represents that it has adopted a sexual harassment prevention policy ('policy') and that it provides annual sexual harassment prevention training to its employees as required by and consistent with the regulations promulgated by the New York State Department of Labor. _____ agrees to provide a copy of the policy to _____ upon request.

SIGNATURE

PRINTED NAME

TITLE

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

Notary Public

BIDDER'S CERTIFICATION OF COMPLIANCE WITH IRAN DIVESTMENT ACT

Pursuant to General Municipal Law §103-g, which generally prohibits the City of Beacon from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification:

[Please Check One]

BIDDER'S CERTIFICATION

☐ By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer 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 its knowledge and belief, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.

☐ I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so certify.

Dated: _____, _____, New York, 20 __

SIGNATURE

PRINTED NAME

TITLE

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

Notary Public

CONTRACTOR CERTIFICATION FORM: LABOR LAW § 220-i
SIGN AND SUBMIT WITH BID

Contractors submitting bids for a municipal public work project must be registered with the New York State Department of Labor ("NYSDOL") ***before*** the submission of a bid. The person authorized to submit this bid on behalf of the prospective bidder hereby certifies, under the penalties of perjury, that: **(1)** the prospective bidder (i.e., contractor) is currently registered with the NYSDOL pursuant to NYS Labor Law § 220-i; and **(2)** each and any subcontractors engaged by contractor for work on this project shall be registered with the NYSDOL pursuant to NYS Labor Law § 220-i prior to commencing work on the project. Certificates of Registration for subcontractors can be submitted with this form but ***must*** be submitted ***before*** such subcontractor(s) commence work on the project. Bidder will be responsible for any project delays caused due to a subcontractor's failure to timely register with the NYSDOL. *Failure to complete this form or to include copies of bidder's current Certificate of Registration may result in disqualification from this bid.*

Bidder hereby represents it has attached to this form, a copy of the Certificate(s) of Registration issued by the NYSDOL for the Bidder.

Project: _____

Bidder's Business Name: _____

Bidder's Address: _____

Bidder's NYSDOL Certificate Number: _____

Issued: _____ Expiration Date: _____

Subcontractor(s) NYSDOL Certificate Number (*if available at time of bid submission*): _____

☐ Copy of Bidder's NYSDOL Certificate of Registration shall be attached. **A copy of a submitted application will not be accepted.**

Date: _____

Signature of Bidder's Authorized Representative

Sworn to before me this _____

Print Name/Title

day of _____, 20____

Notary Public

BID FORM

Fishkill Avenue Sewer & Water Replacement City of Beacon, Dutchess County, New York

This Bid is submitted to:

CITY OF BEACON CITY HALL
ONE MUNICIPAL PLAZA
BEACON, NEW YORK 12508

By: _____
(Name of Contractor)

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents and Technical Specifications for the Contract Price and within the Contract Time indicated in the accordance with the other terms and conditions of the Contract Documents. The terms and conditions of the Contract Documents shall become enforceable upon the adoption of a Resolution by the City Council to award the Contract to the selected BIDDER.
2. BIDDER accepts all of the terms and conditions of the Advertisement for Bids and Information for Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for the specified number of calendar days after the day of Bid opening as stated in the Information for Bidders. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements also as specified in the Information for Bidders.
3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that BIDDER has examined copies of all the Contract Documents, the Advertisement for Bids, the Information for Bidders, and of the following Addenda (receipt of all which is hereby acknowledged):

Date Received

Addendum Number

4. BIDDER has familiarized itself with the nature and extent of the Contract Documents, technical specifications, work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

BID FORM - *continued*

5. BIDDER agrees that the Work will be complete in accordance with the Contract Documents within the number of calendar days indicated in the Agreement and accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
6. The following documents are attached to and made a Condition of this Bid:
- A. Required Bid Security in the form of: (check appropriately)
 - 1. 5% Bid Bond _____
 - 2. Certified Check _____
 - 3. Cash _____
 - B. Non-Collusion Bidding Certification
 - C. Affirmative Action Plan
 - D. Certification of Bidder regarding Equal Employment Opportunity
 - E. Information Sheet
 - F. Conflict of Interest Statement
 - G. Reference Sheet
 - H. Assurance of Compliance
 - I. Statement of Bidder's Qualifications
 - J. Certification of Bidder regarding Section 3 and Segregated Facilities
 - K. Contractor Section 3 Plan Format
 - L. Proposed Subcontractor's Breakdown
 - M. Estimated Project Workforce Breakdown
 - N. Section 3 Project Area – Manpower Utilization
 - O. Affirmative Action Plan for Utilization of Section 3 Project Businesses
 - P. Certification of Limited Foreign Involvement
 - Q. Sexual Harassment Prevention Policy Certification
 - R. Iran Divestment Act Compliance Certification
7. Communications concerning this Bid shall be addressed to the BIDDER at the following address:
- _____
- _____
- _____
8. The terms used in this Bid are defined and have the meanings assigned to them in the General Conditions.
9. The UNIT PRICES shall include all of the Contractor's Costs including but not limited to the cost of material, labor, delivery, installation, loading, unloading, overhead, profit, insurance, etc.

10. **The approximate quantities of work to be performed under the proposed contract are set forth in the Bid Form. These quantities are to be considered as approximate only and are given solely for the comparison of bids. The Owner does not expressly or by implication agree that the actual amount will correspond therewith, but reserves the right to increase or decrease the amount of any item or portion of the work as may be deemed necessary by the Engineer. The Contractor shall at no time make claim for anticipated profit or loss of profits because of any difference between the quantities of work actually done, or of material actually furnished, and the estimated quantities. The Contractor will be paid only for the actual quantities of work performed at the Contract Unit Price bid.**

**FISHKILL AVE. SEWER & WATER REPLACEMENT
CITY OF BEACON, DUTCHESS COUNTY, NY**

All items are *complete items* & include furnishing, installation, excavation, backfilling, labor, etc., unless mentioned otherwise in this Bid Form.

BIDDER will complete the BASE BID work on **Fishkill Ave. Sewer & Water Replacement** using the following unit prices:

Item #	Item Description	Unit	Est. Qty <i>(Column "D")</i>	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) <i>(Column "F")</i>	Total Amount (= Column "D" x Column "F")
1	Bonds and Insurance	LS	1			
2	Test Pits to allow for verification of existing utilities at crossings for new water and sewer mains, and to verify existing water & sewer service sizes	LS	1			
3	Contractor to perform GPS location of new sewer main and water main at end of each length of pipe (horizontal & vertical location), all fittings and connection on the new sewer and water mains, along each of the sewer and water service lines, and at all utility crossings uncovered during the installation of the water and sewer utilities. Contractor shall provide all GPS data to Project Engineer for preparation of as-built for all new utilities.	LS	1			
4	Traffic Control for the duration of the project. Includes development of traffic control plans for all work.	LS	1			
5	Sawcutting and removal of blacktop and concrete road for new utilities	SY	3,750			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty <i>(Column "D")</i>	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) <i>(Column "F")</i>	Total Amount (= Column "D" x Column "F")
6	Removal of water main where indicated on plans. Includes excavation, removal of water line, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes. This work to be completed after new water line has been installed and service lines have been switched over.	LS	1			
7	Abandonment of existing water main in place where noted on plan by filling existing line with low density cellular concrete (LDCC), after new water line has been installed and service lines have been switched over. Includes removal of valve boxes along section of line to be abandoned in place.	LS	1			
8	Removal of existing hydrants and capping of existing connections. Includes excavation, capping, backfilling with Select Material No. 4, disposal of all wastes, and return of hydrants to City of Beacon Water Department	Each	2			
9	Installation of new 10" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	1,915			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
10	Installation of new 8" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	25			
11	Installation of new 6" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	80			
12	Installation of new 4" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	60			
13	10"x10"x10" wet tap. Includes wet tap tee, wet tap valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
14	6"x6"x6" wet tap. Includes wet tap tee, wet tap valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty <i>(Column "D")</i>	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) <i>(Column "F")</i>	Total Amount (= Column "D" x Column "F")
15	10" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	4			
16	8" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
17	6" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			
18	4" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
19	Installation of new fire hydrant. Includes hydrant, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
20	10"x10"x10" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
21	10"x10"x8" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
22	10"x10"x6" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			
23	10"x10"x4" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
24	8"x8"x6" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
25	2" mechanical joint tapped tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
26	1 ½" mechanical joint tapped tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
27	10" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
28	10" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
29	10" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
30	8" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
31	8" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
32	8" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
33	6" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
34	6" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
35	6" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
36	Installation of "Domestically Made" valve box set to final grade.	EA	14			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
37	3/4" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	50			
38	1" k-copper water service line. Includes copper, all fittings necessary for connections, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	150			
39	1-1/2" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	30			
40	2" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	30			
41	Installation of 10" ductile iron cap with restraints.	EA	7			
42	Installation of 8" ductile iron cap with restraints.	EA	1			
43	Installation of 6" ductile iron cap with restraints.	EA	2			
44	Installation of 4" ductile iron cap with restraints.	EA	1			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
45	Installation of ¾" corporation valve.	EA	2			
46	Installation of 1" corporation valve.	EA	6			
47	Installation of ¾" curb stop.	EA	2			
48	Installation of 1" curb stop.	EA	6			
49	Installation of 1-1/2" curb stop.	EA	1			
50	Installation of 2" curb stop.	EA	1			
51	Installation of curb stop box.	EA	10			
52	Installation of 12" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	1,387			
53	Installation of 8" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	20			
54	Installation of 6" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	185			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty <i>(Column "D")</i>	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) <i>(Column "F")</i>	Total Amount (= Column "D" x Column "F")
55	Installation of 4" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	110			
56	6" Romac Industries stainless steel Style LSS1 repair clamp for connection of PVC pipe to PVC pipe where pipe cannot be connected at bell.	EA	3			
57	4" Romac Industries stainless steel Style LSS1 repair clamp for connection of PVC pipe to PVC pipe where pipe cannot be connected at bell.	EA	3			
58	6" Romac Industries stainless steel Style SS1 transition clamp for connection of new PVC lateral to existing sewer lateral that is not PVC.	EA	3			
59	4" Romac Industries stainless steel Style SS1 transition clamp for connection of new PVC lateral to existing sewer lateral that is not PVC.	EA	3			
60	Installation of 12"x 6" SDR 35 PVC Tee-Wye for service connection	EA	6			
61	Installation of 12"x 4" SDR 35 PVC Tee-Wye for service connection	EA	6			
62	6" SDR 35 45-degree bend for service reconnection where needed	EA	2			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
63	4" SDR 35 45-degree bend for service reconnection where needed	EA	2			
64	6" SDR 35 22 ½ degree bend for service reconnection where needed	EA	3			
65	4" SDR 35 22 ½ degree bend for service reconnection where needed	EA	3			
66	Installation of new sewer manhole - 4' I.D., includes backfilling with Select Material No. 4 and compaction (no frame and cover)	VLF	78			
67	Installation of "Domestically Made" sewer manhole frame & cover set to final grade. Casting is to be fully grouted to new manhole structure on the interior and exterior of the casting.	EA	7			
68	Sanitary Sewer By-Pass pumping, as needed, to allow for installation of new sanitary sewer lines	LS	1			
69	3" binder course for temporary pavement installed on trench in Fishkill Avenue at the end of each day. Includes removal of temporary pavement prior to final paving.	SY	3,750			
70	8" base course, Type 1, installed and compacted in two (2) 4" lifts on Fishkill Avenue	SY	3,750			
71	4" binder course, Type 3, installed on Fishkill Avenue	SY	3,750			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
72	Installation of 3" of top course, Type 6FX, for restoration of driveways and parking lots.	SY				
73	Removal of curbing, and disposal of all wastes, where curbing is damaged for installation of new mains and service lines as directed by Engineer.	LF	300			
74	Removal of sidewalk, and disposal of all wastes, where sidewalk is damaged for installation of new service lines.	LF	125			
75	Installation of new concrete curb where damaged curbing was removed.	LF	300			
76	Installation of new 4" thick concrete sidewalk. Sidewalk shall be 6" thick in driveway aprons.	SF	650			
77	Abandonment in place of existing sanitary sewer line where noted on plans. Sewer lines to be abandoned in place shall be filled completely with Low Density Cellular Concrete (LDCC), backfilling of excavation(s) with Select Material No. 4, compaction, and disposal of all wastes.	LS	1			

**Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY**

Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
78	Abandonment of existing manholes in place where noted on plans. Includes removal of existing manhole frames & covers, upper 4 feet of existing sanitary sewer manhole structure, backfilling of remaining structure, compaction of fill in lifts, and disposal of all wastes. Manhole castings to be returned to City of Beacon.	EA	4			
79	Removal of complete sanitary sewer manholes and sanitary sewer main where noted on plan, backfilling of excavation with Select Material No. 4 in lifts, compaction of lifts, and disposal of all wastes. Sanitary Sewer Manhole castings to be returned to City of Beacon.	LS	1			
80	Double yellow line center line striping of Fishkill Avenue	LF	1,760			
81	Single white edge of pavement line along Fishkill Avenue	LF	1,760			
82	Grading, top-soiling, and seeding all disturbed areas.	LS	1			
83	Additional Select Material NYSDOT Item 304.12, as ordered by Engineer, installed and compacted.	CY	100			
84	Rock Excavation	CY	50			
85	Repair of unlocated damaged sewer service (up to and including 6" diameter)	EA	2			

Fishkill Ave. Sewer & Water Replacement
City of Beacon, Dutchess County, NY

Item #	Item Description	Unit	Est. Qty <i>(Column "D")</i>	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) <i>(Column "F")</i>	Total Amount (= Column "D" x Column "F")
86	Repair of unlocated damaged water service (up to and including 2" diameter)	EA	1			
TOTAL (BASE BID)						

Total BASE BID *(in words)* Price for ***Fishkill Ave. Sewer & Water Main Replacement*** (Item Nos. 1 - 86):

(in words)

IF BIDDER is:

INDIVIDUAL

By _____

[Seal]

(Individual's Name)

doing business as _____

Business address: _____

Telephone #: _____

PARTNERSHIP

By _____

[Seal]

(Firm Name)

(General Partner)

doing business as _____

Business address: _____

Telephone #: _____

CORPORATION

By _____

[Corporate Seal]

(Corporation Name)

(State of Corporation)

By _____

(Name of Person Authorized to Sign)

(State of Corporation)

Attest: _____

(Secretary)

Business address: _____

Telephone #: _____

JOINT VENTURE

By _____

(Name)

(Address)

By _____

(Name)

(Address)

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

BID BOND (PENAL SUM FORM)

Bidder Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Beacon Address <i>(principal place of business)</i> : 1 Municipal Plaza Beacon, NY 12508	Bid Project <i>(name and location)</i> : Bid Due Date:
Bond Penal Sum: Date of Bond:	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder	Surety
_____ <i>(Full formal name of Bidder)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature) (Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</i>	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

NON-COLLUSIVE BIDDING CERTIFICATION
(General Municipal Law 103-d)

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, communications, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with 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; and
3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit a bid for the purposes of restricting competition.

The foregoing statement has been read and subscribed by the undersigned bidder and is hereby affirmed as true under the penalties of perjury.

[Seal]

Company Name

Name & Title

Signature

Address

City & State

Telephone Number/Facsimile Number

E-Mail Address

Federal ID Number

Date

GOODS AND SERVICES AGREEMENT

THIS AGREEMENT, made and executed this _____ day of _____, 2025 by and between the City of Beacon, a municipal corporation and city of the State of New York, with principal offices at 1 Municipal Plaza, Beacon, New York 12508 (the "City") and _____, with principal offices at _____ (the "Contractor").

WHEREAS, the City solicited bids for **Fishkill Avenue Sewer & Water Replacement**; and

WHEREAS, the Contractor submitted a bid in response to the solicitation;

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

ARTICLE 1: SCOPE OF WORK

The Contractor shall perform all work and furnish all services, labor, material and equipment described in and required by the Request for Bids ("RFB") issued by the City, a copy of which is attached hereto as Attachment A. Project consists of the replacement of 1,387± linear feet of sewer main and 1,883± linear feet of water main, re-connection of sewer and water services, and abandonment of old sewer and water mains on Fishkill Avenue. The Contractor shall perform all work and furnish all services, labor, material and equipment in accordance with the specifications and conditions included in and/or attached to the RFB, unless otherwise specifically stated in this Agreement. The Contractor must satisfy the performance requirements, if any, contained in the RFB and in the technical specifications attached to the RFB. The Contractor represents that it has the requisite knowledge and skills to perform the all work and furnish all services, labor, material and equipment described in and required by the RFB (See Attachment A).

The Contractor must comply with the prevailing wage rates that are applicable to the labor and services to be provided. All wages and supplements paid to laborers performing any work pursuant to this Agreement shall be paid not less than the wages and supplements in the applicable New York State Department of Labor ("NYSDOL") Prevailing Wage Schedule for Dutchess County, specifically Prevailing Wage Schedule PRC#2025005723. New York State Prevailing Wage Rates are subject to change annually on July 1st. The Contractor must comply with the wages and supplements posted by NYSDOL July 1st every year. If federal grant monies are funding any of the work to be performed or any of the services, labor, materials or equipment to be furnished, the Contractor also must comply with the Davis-Bacon Act, 40 U.S.C. § 3141 et seq., as supplemented by regulations of the U.S. Department of Labor, 29 CFR Part 5, which requires the Supplier to pay wages to laborers and mechanics at a rate not less than prevailing wages specified in a wage determination made by the U.S. Secretary of Labor. The Contractor must pay wages not less than once a week.

ARTICLE 2: TIME OF PERFORMANCE

The Contractor shall perform all work and furnish all services, labor, material and equipment described within the time stated in the RFB, unless otherwise stated herein, subject to any adjustments authorized through an amendment of this Agreement. Upon issuance of Notice to Proceed, Contractor shall have **125 calendar days** to complete the scope of work. Time is of the essence for all work, services, material and equipment to be performed pursuant to this Agreement as described in Article 1 herein and as described in the RFB (See Attachment

A). The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

The Date of Final Completion is the date all of work, services, labor, material and equipment required under the Contract Documents is completed, all required materials, equipment and documents required by the Contract Documents have been delivered to the City (e.g., Record Drawings, O&M manuals, etc.), and all applicable licenses, permits, certificates, or approvals have been obtained for the City's beneficial use of the work, services, labor, material and equipment required under the Contract Documents.

ARTICLE 3: CONTRACT DOCUMENTS

The following documents form the Agreement, and all are as fully a part of the Agreement as if attached to this Agreement or repeated herein and shall be referred to herein as the "Contract Documents":

1. This Agreement.
2. Amendments to this Agreement that are mutually agreed upon by the parties.
3. The City's Request for Bid with all Addenda (Attachment A), including but not limited to any instructions for the bidders, bidding procedures and requirements, qualifications of bidders, specifications, technical specifications, drawings, conditions (general, supplementary and any other conditions) included therein and any Bid Addenda issued prior to the bid opening.
4. All other attachments to this Agreement.

In the event of any conflict among the provisions of the Contract Documents or between the Contract Documents and any applicable standard, code, statute, regulation or ordinance, those provisions most favorable to the City shall govern. In the event of any conflict among the provisions of the Contract Documents or between the Contract Documents and any applicable standard, code, statute, regulation or ordinance, the Contractor shall notify the City of same, comply with the more stringent requirement and comply with the City's interpretation. Where there is a conflict in quantity, unless otherwise directed by the City, the Contractor shall provide the greater quantity. Where there is a conflict in quality, unless otherwise directed by the City, the Contractor shall provide the superior quality.

This Agreement, including all of the Contract Documents, represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral, with respect to the subject of this Agreement.

ARTICLE 4: COMPENSATION

For the above-described Scope of Work (see Article 1), the City shall pay the Contractor a sum not to exceed \$_____, subject to any adjustment authorized through an amendment of this Agreement. This lump sum includes all costs, expenses, overhead and profit of the Contractor and no other compensation shall be due for the work performed, unless this sum is adjusted through an amendment of this Agreement.

Payment of any invoice or claim shall not preclude the City from making a claim for adjustment on any item found not to have been in accordance with the Contract Documents.

The Contractor shall submit invoices and payment requisitions by the 10th of each month for the percentage of the work performed and labor, materials and equipment furnished in the prior calendar month, which invoices must be supported by the following documentation:

- a. Invoice must reference purchase order number issued to the Contractor by City;
- b. Certified payroll(s); and
- e. Any other documentation required by the Contract Documents or requested by the City to confirm the work performed and labor, materials and equipment furnished.

Payment will be made after receipt of an invoice with all required supporting documentation in accordance with the terms of the RFB (Attachment A). If payment of invoices is not addressed in RFB, then replace prior sentence with: Payment will be made within thirty (30) days after receipt of an invoice with all required supporting documentation less five percent of the sum earned. The five percent retainage shall be paid in the final payment when all work has been performed and all services, labor, material and equipment furnished in accordance with the Contract Documents.

ARTICLE 5: AGREEMENT TERMINATION

The City may suspend or terminate this Agreement by providing the Contractor with ten (10) days written notice for the reasons outlined as follows:

1. Failure of the Contractor, for any reason, to fulfill in a timely and proper manner its obligations under this Agreement.
2. Violation of any of the provisions of this Agreement by the Contractor.
3. A determination by the City that the Contractor has engaged in fraud, waste, mismanagement, misuse of funds, or criminal activity with any funds provided by this Agreement.

The City may also terminate this Agreement at any time for convenience by providing the Contractor written notice specifying therein the termination date which shall be no sooner than thirty (30) days from the issuance of said notice.

Upon receipt of a notice of termination, the Contractor shall cease to incur additional expenses in connection with the Agreement. Upon termination of the Agreement for the City's convenience, the Contractor shall be entitled to compensation for all work performed and all services, labor, material and equipment furnished prior to the termination date as reasonably determined by the City. Such payment shall not exceed the fair value of the services provided hereunder. Upon termination of the Agreement by the City for cause, the Contractor shall be entitled to compensation for all work performed and all services, labor, material and equipment furnished in accordance with the Contract Documents less any damages and/or expenses incurred by the City as a result of the Contractor's acts or omissions in the performance of this Agreement as reasonably determined by the City. Such payment shall not exceed the fair value of the services provided hereunder.

ARTICLE 6: INSPECTION

The City shall have the right to inspect the work performed by the Contractor and the services, materials and equipment furnished by the Contractor at all times, but such inspection shall not relieve the Contractor of responsibility for the proper performance of the Scope of Work (see Article 1).

ARTICLE 7: INDEMNIFICATION

To the maximum extent permitted by law, the Contractor shall indemnify, defend and hold harmless the City and its respective elected officials, officers, agents, and employees from and against any and all losses, damages, detriments, suits, claims, demands, liabilities, costs and charges, including reasonable attorneys' fees and disbursements that (1) arise directly or indirectly from or are in any way related to the performance under this Agreement, (2) to the extent they arise from any negligent act or omission of the Contractor and/or its contractors, employees, volunteers or subcontractors; or (3) result from any default of this Agreement or any provision hereof by the Contractor. The Contractor shall be solely responsible for all local taxes or contributions imposed or required under the Social Security, Workers' Compensation, and Income Tax laws. The terms of this Article 7 shall not be construed as a limitation of the Contractor's liability under the Agreement or as otherwise provided by law. The obligation of the Contractor to indemnify any party under this Article 7 shall not be limited in any manner by any limitation of the amount of insurance coverage or benefits including worker's compensation or other employee benefit acts provided by the Contractor.

If any action by the Contractor or its employees, consultants, contractors, or subcontractors results in damage to the real or personal property of the City, the Contractor shall repair or cause to be repaired such damage at its sole cost and expense.

The Contractor shall defend and hold the City harmless against any and all claims and suits based on a claim that the operation of any equipment furnished by the Contractor infringes on any U.S. patent under which the City is not licensed.

ARTICLE 8: APPLICABLE LAW

The Contractor, at its sole cost and expense, agrees to comply with all applicable local, state, and federal laws, statutes, ordinances, regulations, rules, requirements and orders relating to work to be performed and the services, labor, materials and equipment to be furnished pursuant to this Agreement and the Contract Documents. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

ARTICLE 9: ASSIGNMENT

The Contractor shall not make any assignment, transfer, conveyance, sublet or otherwise dispose of all or any part of its rights and obligations under this Agreement without the prior written consent of the City.

ARTICLE 10: AMENDMENTS

All amendments or any changes to the provisions specified in this Agreement can only occur when mutually agreed upon by the City and the Contractor. Further, such amendments or changes shall be in writing and signed by officials with the authority to bind the City. Additionally, all amendments and changes shall be approved by the City prior to execution.

No amendment or change to the Agreement provisions shall be made until after the written execution of the amendment or change to the Agreement by both parties.

ARTICLE 11: INSURANCE AND BONDS

The Contractor shall be responsible to the City or any third party for any property damage or bodily injury caused by it, any of its subcontractors, employees, or agents in the performance of, or as a result of, the performance of this Agreement. The Contractor hereby certifies that the Contractor and any subcontractors retained or to be retained, with the consent of the City, by the Contractor have and shall maintain the types and amounts of insurance set forth in this Article 11 and such insurance complies with the terms and conditions set forth in this Article 11.

A. Insurance Requirements.

1. No work shall commence and the City has the option to void this Agreement unless the Contractor, at its sole cost and expense, shall secure and deliver a certificate(s) of insurance dated within five (5) days of the date of the signing of this Agreement and showing that the required insurance coverage is in effect and has been obtained from an insurer that is admitted and licensed to issue insurance and to do business in New York State. The Contractor shall maintain such insurance coverage as will protect itself, its subcontractors, and unless otherwise specified, the City, its agents, servants and employees and the Project Architect and/or Engineer(s) as additional named insureds, from any all claims for Bodily Injuries, Death or Property Damage which may arise from operations under this Agreement whether such operations be by the Contractor or by any subcontractor or anyone employed by the Contractor directly or indirectly, or any other party who may be injured, claim injuries or die.
2. The Contractor shall furnish original, signed/notarized Certificates of Insurance in duplicate, with the project name and number (if any) stated on the certificates and submit prior to the beginning performance under this Agreement. Attached to each certificate of insurance shall be a copy of the Additional Insured Endorsement that is part of the Contractor's Commercial General Liability Policy, automotive and excess liability/umbrella policies. The coverage and amounts below are minimum requirements and do not establish limits to the Contractor's liability. Other coverage and higher limits may be provided at the Contractor's option and expense.
3. Worker's Compensation at statutory limits. New York State Disability Insurance and Paid Family Leave for all employees in New York. Employers' Liability for all employees in New York in an amount not less than \$500,000.00.
4. Commercial General Liability and Contractual Liability insurance to be provided on an "occurrence" basis, with coverage to include explosion, collapse and underground hazards (XCU). Blanket Contractual Products, Independent Contractors Completed Operations, Personal Injury, and Employees as additional insured, with limits of coverage to be:
 - a. Bodily Injury, Property Damage and Personal Injury Limits:

- 1) \$1,000,000 each occurrence (Bodily Injury and Property Damage)
- 2) \$2,000,000 General aggregate
- 3) \$2,000,000 Products and Completed Operations Aggregate
- 4) \$1,000,000 Personal and advertising injury

b. Aggregate shall apply to this project only (aggregate not to include other projects) and must be identified as such on the certificate of insurance.

5. Automotive Liability insurance including owned, non-owned, borrowed and hired automobiles with limits of coverage to be \$1,000,000 each occurrence for bodily injury and property damage (insurance on automobiles of subcontractors and material suppliers must meet the same requirements).
6. Umbrella/Excess Liability to provide insurance in excess of Employer's Liability, Commercial General Liability, and Automobile Liability policies required hereunder in the amount of \$5,000,000 each occurrence and in the aggregate.
7. The Contractor is responsible for insuring its own equipment, tools, and real and personal property.
8. Liability Insurance under a "claims-made" policy is not acceptable. Coverage must be provided on an "occurrence" basis.
9. Waiver of Subrogation: The Contractor waives all rights against the City and its agents, officers, directors and employees for recovery of damages to the extent the damages are covered by commercial general liability, umbrella liability, auto liability or workers compensation and employer's liability insurance maintained per requirements stated above.

B. Payment and Performance Bonds

1. The Contractor shall, at its cost and expense, furnish bonds in the amount of 100 percent of the amount to be paid pursuant to this Agreement (the "Contract Sum") covering the faithful performance of this Agreement and the payment of all obligations arising thereunder, in such form as the City may prescribe in this Article 11 and with such sureties as the City may approve. If the Contract Sum changes, the value of the bonds shall be adjusted to match the Contract Sum. The amount of the payment and performance bonds shall remain in full force and effect during the term of any warranty or guarantee to be furnished hereunder, and in no event for a period of less than one year following the issuance of final payment. The Contractor shall keep the surety informed of any and all changes in the amount of this Agreement. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety insurance/bonds in New York State.
2. No work shall commence and the City has the option to void this Agreement unless the Contractor, at its sole cost and expense, shall secure and deliver to the City payment and performance bonds that comply with the requirements of this Article 11 and the Contract Documents within five (5) days of the date of the signing of this Agreement. The attorney in fact who executes the

required bonds on behalf of the surety, shall affix thereto a certified and current copy of the power of attorney.

3. The bonds shall be written on EJCDC Document C-610-2018 Performance Bond and C-615-2018 Payment Bond and shall contain the following provisions in the modifications section of each bond or contain the following provisions in a rider attached to each bond that is referenced in the modifications section of each bond (for purposes of this paragraph Owner refers to the City and Contractor refers to the Contractor):
 - .1 Surety hereby agrees that it consents to and waives notice of any addition, alteration, omission, change, or other modification of the Contract Documents. Such addition, alteration, change, extension of time, or other modification of the Contract Documents, or a forbearance on the part of either the Owner or the Contractor to the other, shall not release the Surety of its obligations hereunder and notice to the Surety of such matters is hereby waived.
 - .2 Surety further agrees that in event of any default by the Owner in the performance of the Owner's obligations to the Contractor under the Contract, the Contractor or Surety shall cause written notice of such default (specifying said default in detail) to be given to the Owner, and the Owner shall have fifteen (15) days after receipt of such notice within which to cure such default, or such additional reasonable period of time as may be required if the nature of such default is such that it cannot be cured within fifteen (15) days. Such Notice of Default shall be sent by certified or registered U.S. Mail, return receipt requested, first class postage prepaid, to the Owner.
 - .3 Any proceeding, legal or equitable, under the Payment Bond may be instituted in any court of competent jurisdiction in the County of Dutchess in the State of New York and shall be instituted within three years after termination by the Owner of the Contractor's contract or within three years after final completion by the Contractor. In the event the Contractor files for bankruptcy, the commencement of the three year period shall not start to run until the bankruptcy proceeding is finalized or the Owner obtains relief from an automatic stay, whichever is later.
3. The Contractor shall keep its surety informed of the progress of the Scope of Work, and, when necessary, obtain the surety's consent to, or waiver of: (1) request for reduction or release of retainage; (2) request for final payment; and (3) any other material required by the surety. The City may, in the City's sole discretion and without prior notice to the Contractor, through the Project Architect/Engineer or directly, inform the Contractor's surety of the progress of the Contractor's work and obtain consents as necessary to protect the City's rights, interest, privileges and benefits under and pursuant to any bond issued in connection with this Agreement.
4. Upon the request of any person or entity appearing to be a potential beneficiary of the bonds covering payment of obligations arising under this Agreement, the Contractor shall promptly furnish a copy of the bonds and consents to the City or the Project Architect/Engineer furnishing a copy of the bonds to the potential beneficiaries upon request.

ARTICLE 12: INDEPENDENT CONTRACTOR

The Contractor and all its employees, officers, directors, associates, consultants, subcontractors, and agents shall be independent contractors to the City and shall not claim or receive any benefit or privilege conferred to the City employees, including, without limitation, disability or unemployment insurance, workers' compensation, medical insurance, sick leave, retirement, or any other employment benefit. The City shall not be responsible for the Contractor's compliance with any local, state, or federal law, regulation or requirement and shall not withhold any taxes, including payroll or income taxes, for the Contractor or any employee, officer, director, associate, subcontractor, consultant or agent thereof. The Contractor will indemnify the City for any tax liability, interest, and/or penalties imposed upon the City by any taxing authority based upon the City's failure to withhold any amount from the payments for tax purposes. The Contractor exclusively assumes responsibility for the acts of its employees, officers, directors, associates, consultants, subcontractors, and agents as they relate to this Agreement.

ARTICLE 13: NOTICES

All notices required or permitted to be given under this Agreement shall be in writing and shall be given by certified mail return receipt requested or by overnight or express mail services, addressed to the parties as designated below. Each such notice sent by overnight or express mail shall be deemed effective on the next business day after being dispatched and notices sent by certified mail shall be deemed effective on the fifth business day after being dispatched. Each party may change its address for written notice by giving written notice of such change in accordance with this Article 13. Notices shall be addressed to each party as follows:

As to the City:
City Hall, City of Beacon
1 Municipal Plaza
Beacon, NY 12508
Attn: Chris White, City Administrator

-and-

Keane & Beane, P.C.
445 Hamilton Avenue, Suite 1500
White Plains, NY 10601
Attn: Nicholas M. Ward-Willis, Esq.

As to the Contractor:

Attn: _____

ARTICLE 14: CHOICE OF LAW AND VENUE

This Agreement shall be governed by, and interpreted under, the laws of the State of New York, without consideration to its conflict of law's provisions. The venue for mediation, arbitration or legal proceedings arising out of this Agreement shall be Dutchess County in the State of New York. The parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated only in the State and Federal courts of Dutchess

County in the State of New York. Each party hereby waives any right or claims that venue is improper in such a court.

ARTICLE 15: WAIVER

The failure of either party to enforce, at any time, any provision of this Agreement shall not constitute a waiver of such provision in any way or waive the rights of either party at any time to avail itself of such remedies as it may have for any breach or breaches of such provision. None of the conditions of this Agreement shall be considered waived by either party unless such waiver is given in writing by the waiving party. No such waiver shall be a waiver of any past or future default, breach, or modification or any of the terms or conditions of this Agreement unless expressly stipulated in such waiver.

ARTICLE 16: SEVERABILITY

If any term, provision, covenant or condition of this Agreement, or the application thereof to any person, place or circumstance, shall be held by a court of competent jurisdiction to be invalid, unenforceable or void, the remainder of this Agreement and such term, provision, covenant or condition as applied to other persons, places and circumstances shall remain in full force and effect.

ARTICLE 17: COUNTERPARTS

This Agreement may be executed in counterparts each of which shall be deemed an original and all of which taken together shall constitute one and the same Agreement. Delivery of an executed counterpart of this Agreement by facsimile or email shall be equally as effective as delivery of a manually executed counterpart of this Agreement.

ARTICLE 18: AUTHORITY TO ENTER AGREEMENT

The undersigned representative of the Contractor hereby represents and warrants that the undersigned is the owner or an officer, director, or agent of the Contractor with full legal rights, power and authority to enter into this Agreement on behalf of the Contractor and to bind the Contractor with respect to the obligations enforceable against the Contractor in this Agreement.

_____ **(CONTRACTOR)**

BY: _____
Signature

NAME: _____
Name Printed

TITLE: _____

DATE: _____

CITY OF BEACON

BY: _____

NAME: Christopher White

TITLE: City Administrator, City of Beacon

DATE: _____

PERFORMANCE BOND

Contractor Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Beacon Mailing address <i>(principal place of business)</i> : 1 Municipal Plaza Beacon, NY 12508	Contract Description <i>(name and location)</i> : Contract Price: Effective Date of Contract:
Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <div style="text-align: center;"><i>(Signature)</i></div>	By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>	Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

PAYMENT BOND

Contractor Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Beacon Mailing address <i>(principal place of business)</i> : 1 Municipal Plaza Beacon, NY 12508	Contract Description <i>(name and location)</i> : Contract Price: Effective Date of Contract:
Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <div style="text-align: center;"><i>(Signature)</i></div>	By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>	Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

NOTICE OF AWARD

TO: _____
Dated: _____

(Bidder)

ADDRESS: _____

PROJECT: Fishkill Avenue Sewer & Water Replacement

OWNER'S CONTRACT NO.: _____

CONTRACT FOR: Fishkill Avenue Sewer & Water Replacement, City of Beacon, Dutchess County, New York

(Insert name of Contract, as it appears in the Bidding Documents)

You are notified that your Bid dated _____ for the above Contract has been considered.

You are the apparent Successful Bidder and have been awarded a contract for: _____

(Indicate total work, alternates or section or work awarded)

The Contract Price of your contract is _____

_____ Dollars (\$_____)

_____ copies of each the proposed Contract Documents (except Drawings) accompany this Notice of Award.

_____ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within **ten** (10) days of the date of this Notice of Award,

that is by _____

1. You must deliver to the Owner ___ fully executed counterparts of the Agreement including all the Contract Documents. This includes _____ sets of Drawings. Each of the Contract Documents and sets of Drawings must bear your signature on the cover page.
2. You must deliver with the executed Agreement the Contract Security (Bonds) as specified in the Instructions to Bidders, General Conditions (§ 5.1) and Supplementary Conditions.

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3.(List other conditions precedents).

Failure to comply with these conditions within the time specified will entitle OWNER to consider your bid in default, to annul this Notice of Award and to declare your Bid Security forfeited.

After you comply with the above conditions, OWNER will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.

City of Beacon

(Owner)

BY:

(Authorized Signature) Christopher White

City Administrator

(Title)

ACCEPTANCE OF AWARD

(Contractor)

BY:

(Authorized Signature)

(Title)

(Date)

NOTICE TO PROCEED

Dated: _____
TO: _____

(Contractor)

ADDRESS: _____

PROJECT: Fishkill Avenue Sewer & Water Replacement

OWNER'S CONTRACT NO.: _____

CONTRACT FOR: Fishkill Ave Sewer & Water Replacement, City of Beacon, Dutchess County, NY

(Insert name of Contract, as it appears in the Bidding Documents)

You are notified that the Contract Times under the above contract will commence to run on _____.

By that date, you are to start performing your obligations under the Contract Documents. In accordance with the

Agreement the date of completion and readiness for final payment is _____.

Before you may start any Work at the site, ¶2.7 of the General Conditions provides that you and Owner must each deliver to the other (with copies to ENGINEER and other identified additional insurers) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the site, you must (add other requirements):

City of Beacon

(Owner)

By:

(Authorized Signature) Christopher White

City Administrator

(Title)

ACCEPTANCE OF AWARD

(Contractor)

By:

(Authorized Signature)

(Title)

(Date)

CHANGE ORDER

(Instructions on reverse side)

No. _____

PROJECT

DATE OF ISSUANCE EFFECTIVE DATE

OWNER

OWNER's Contract No.

CONTRACTOR ENGINEER

You are directed to make the following changes in the Contract Documents.

Description:

Reason for Change Order:

Attachments: (List documents supporting change)

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price \$	Original Contract Times Substantial Completion: Ready for final payment: days or dates
Net changes from previous Change Orders No. ____ to No. ____ \$	Net change from previous Change Orders No. ____ to No. ____ days
Contract Price prior to this Change Order \$	Contract Times prior to this Change Order Substantial Completion: Ready for final payment: days or dates
Net Increase (decrease) of this Change Order \$	Net Increase (decrease) of this Change Order days
Contract Price with all approved Change Orders \$	Contract Times with all approved Change Orders Substantial Completion: Ready for final payment: days or dates

RECOMMENDED:

APPROVED:

ACCEPTED:

By: _____
Engineer (Authorized Signature)

By: _____
Owner (Authorized Signature)

By: _____
Contractor (Authorized Signature)

Date: _____

Date: _____

Date: _____

EJCDC No. 1910-8-B (1990 Edition)

Prepared by the Engineers Joint Contract Documents Committee and endorsed by The Associated General Contractors of America.

**CONTRACTOR & SUBCONTRACTOR AFFIDAVIT FOR RELEASE OF RETAINAGE
and/or
FINAL PAYMENT**

Municipality

Project

Contract No.

Contractor
Address: _____

Telephone No.

State of _____ }
County of _____ } S.S.:

_____, being duly sworn deposes and says:

1. He is the _____ (TITLE) of the contractor on the above referenced project and makes this affidavit in the regular course of business with full authorization.
2. There are no claims, liens, or judgements against the contractor except as set forth herein:

(Insert "No Exceptions", if applicable - or - attach list, if necessary)

3. All provisions of the Labor Law of the State of New York have been fully complied with except as set forth herein:

(Insert "No Exceptions", if applicable - or - attach list, if necessary)

4. The municipality upon the release of retainage requested herewith, is released of any and all claims by the contractor with respect to the project to the date hereof.
5. This certification is made to include the municipality to release final payment and/or retainage held pursuant to the contract in accordance with General Municipal Law §106-b.

Subscribed and sworn to before
me on _____

Signature

Affix Seal,
if Corporation

Notary Public

GENERAL CONDITIONS

TABLE OF CONTENTS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY	00700-4
1.01 Defined Terms	00700-5
1.02 Terminology	00700-8
ARTICLE 2 - PRELIMINARY MATTERS.....	00700-9
2.01 Delivery of Bonds.....	00700-9
2.02 Copies of Documents.....	00700-9
2.03 Commencement of Contract Times; Notice to Proceed	00700-9
2.04 Starting the Work	00700-9
2.05 Before Starting Construction	00700-9
2.06 Preconstruction Conference	00700-10
2.07 Initial Acceptance of Schedules	00700-10
ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE.....	00700-10
3.01 Intent.....	00700-10
3.02 Reference Standards	00700-10
3.03 Reporting and Resolving Discrepancies	00700-11
3.04 Amending and Supplementing Contract Documents	00700-11
3.05 Reuse of Documents	00700-11
ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS;	
REFERENCE POINTS	00700-11
4.01 Availability of Lands	00700-11
4.02 Subsurface and Physical Conditions.....	00700-12
4.03 Differing Subsurface or Physical Condition	00700-12
4.04 Underground Facilities	00700-13
4.05 Reference Points	00700-13
4.06 Hazardous Environmental Condition at Site.....	00700-14
ARTICLE 5 - BONDS AND INSURANCE.....	00700-15
5.01 Performance, Payment and Other Bonds	00700-15
5.02 Licensed Sureties and Insurers.....	00700-15
5.03 Certificates of Insurance	00700-15
5.04 Contractor's Liability Insurance	00700-15
5.05 Owner's Liability Insurance	00700-16
5.06 Property Insurance.....	00700-16
5.07 Waiver of Rights.....	00700-17
5.08 Receipt and Application of Insurance Proceeds	00700-18
5.09 Acceptance of Bonds and Insurance; Option to Replace	00700-18
5.10 Partial Utilization, Acknowledgement of Property Insurer	00700-18
ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES.....	00700-18
6.01 Supervision and Superintendence	00700-18
6.02 Labor; Working Hours	00700-19
6.03 Services, Materials, and Equipment.....	00700-19
6.04 Progress Schedule.....	00700-19
6.05 Substitutes and "Or Equals"	00700-19
6.06 Concerning Subcontractors, Supplies, and Others	00700-20
6.07 Patent Fees and Royalties	00700-21
6.08 Permits.....	00700-21
6.09 Laws and Regulations.....	00700-22
6.10 Taxes	00700-22
6.11 Use of Site and Other Areas	00700-22
6.12 Record Documents	00700-22

6.13 Safety and Protection.....	00700-23
6.14 Safety Representative.....	00700-23
6.15 Hazard Communication Programs	00700-23
6.16 Emergencies.....	00700-23
6.17 Shop Drawings and Samples.....	00700-23
6.18 Continuing the Work	00700-24
6.19 Contractor's General Warranty and Guarantee.....	00700-25
6.20 Indemnification.....	00700-25
ARTICLE 7 - OTHER WORK.....	00700-26
7.01 Related Work at Site	00700-26
7.02 Coordination.....	00700-26
ARTICLE 8 - OWNER'S RESPONSIBILITIES	00700-26
8.01 Communications to Contractor.....	00700-26
8.02 Replacement of Engineer.....	00700-26
8.03 Furnish Data	00700-26
8.04 Pay Promptly When Due.....	00700-26
8.05 Lands and Easements; Reports and Tests	00700-26
8.06 Insurance	00700-27
8.07 Change Orders	00700-27
8.08 Inspections, Tests and Approvals	00700-27
8.09 Limitations on Owner's Responsibilities	00700-27
8.10 Undisclosed Hazardous Environmental Condition	00700-27
8.11 Evidence of Financial Arrangements	00700-27
ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION	00700-27
9.01 Owner's Representative.....	00700-27
9.02 Visits to Site	00700-27
9.03 Project Representative.....	00700-27
9.04 Clarifications and Interpretations.....	00700-28
9.05 Authorized Variations in Work.....	00700-28
9.06 Rejecting Defective Work.....	00700-28
9.07 Shop Drawings, Change Orders and Payments	00700-28
9.08 Determinations for Unit Price Work.....	00700-28
9.09 Decision on Requirements of Contract Documents and Acceptability of Work	00700-28
9.10 Limitations on Engineer's Authority and Responsibilities	00700-28
ARTICLE 10 - CHANGES IN THE WORK; CLAIMS.....	00700-29
10.01 Authorized Changes in the Work.....	00700-29
10.02 Unauthorized Changes in the Work.....	00700-29
10.03 Execution of Change Orders	00700-29
10.04 Notification to Surety	00700-29
10.05 Claims and Disputes	00700-30
ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK.....	00700-30
11.01 Cost of the Work.....	00700-30
11.02 Cash Allowances.....	00700-32
11.03 Unit Price Work	00700-32
ARTICLE 12 - CHANGE OF CONTRACT PRICE/ CHANGE OF CONTRACT TIMES.....	00700-33
12.01 Change of Contract Price	00700-33
12.02 Change of Contract Times.....	00700-33
12.03 Delays Beyond Contractor's Control	00700-33
12.04 Delays Within Contractor's Control.....	00700-34
12.05 Delays Beyond Owner's and Contractor's Control	00700-34
12.06 Delay Damages.....	00700-34
ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK	00700-34

13.01 Notices of Defects	00700-34
13.02 Access to Work	00700-34
13.03 Tests and Inspections	00700-34
13.04 Uncovering Work.....	00700-35
13.05 Owner May Stop the Work	00700-35
13.06 Correction or Removal of Defective Work	00700-35
13.07 Correction Period	00700-35
13.08 Acceptance of Defective Work	00700-36
13.09 Owner May Correct Defective Work	00700-36
ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION	00700-36
14.01 Schedule of Values	00700-37
14.02 Progress Payments	00700-37
14.03 Contractor's Warranty of Title.....	00700-38
14.04 Substantial Completion	00700-38
14.05 Partial Utilization.....	00700-39
14.06 Final Inspection	00700-39
14.07 Final Payment	00700-39
14.08 Final Completion Delayed	00700-40
14.09 Waiver Claims	00700-40
ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION	00700-40
15.01 Owner May Suspend Work.....	00700-40
15.02 Owner May Terminate for Cause	00700-40
15.03 Owner May Terminate for Convenience	00700-41
15.04 Contractor May Stop Work or Terminate	00700-41
ARTICLE 16 - DISPUTE RESOLUTION.....	00700-41
16.01 Methods and Procedures	00700-41
ARTICLE 17 - MISCELLANEOUS.....	00700-42
17.01 Giving Notice	00700-42
17.02 Computation of Times	00700-42
17.03 Cumulative Remedies	00700-42
17.04 Survival of Obligations.....	00700-42
17.05 Controlling Law.....	00700-42

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. *Addenda* - Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.

2. *Agreement* - The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.

3. *Application for Payment* - The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos* - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid* - The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidding Documents* - The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

7. *Bidding Requirements* - The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.

8. *Bonds* - Performance and payment bonds and other instruments of security.

9. *Change Order* - A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the

Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim* - A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price • or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract* - The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents* - The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

13. *Contract Price* - The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times* - The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

15. *CONTRACTOR* - The individual or entity with whom OWNER has entered into the Agreement.

16. *Cost of the Work* - See paragraph 11.01.A for definition.

17. *Drawings*-That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*-The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *ENGINEER*-The individual or entity named as such in the Agreement.

20. *ENGINEER's Consultant*-An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.

21. *Field Order*-A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

22. *General Requirements*-Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

23. *Hazardous Environmental Condition*-The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

24. *Hazardous Waste*-The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

25. *Laws and Regulations; Laws or Regulations* - Any and all applicable Laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Limits - Charges, security interests, or encumbrances upon Project funds, real property, or personal property.*

27. *Milestone-A* principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

28. *Notice of Award*-The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

29. *Notice to Proceed*-A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.

30. *OWNER*-The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

31. *Partial Utilization*-Use by OWNER of a substantially completed part of (the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

32. *PCBs*-Polychlorinated biphenyls.

33. *Petroleum*-Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

34. *Project*-The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

35. *Project Manual* -The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

36. *Radioactive Material - Source*, special nuclear, or by product material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

37. *Resident Project Representative*-The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

38. *Samples*-Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Shop Drawings*-All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

40. *Site-Lands* or areas indicated in the Contract Documents as being furnished by OWNER upon (which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

41. *Specifications* - That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

42. *Subcontractor*-An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.

43. *Substantial Completion*-The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

44. *Supplementary Conditions*-That part of the Contract Documents which amends or supplements these General Conditions.

45. *Supplier*-A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

46. *Underground - Facilities* - All underground **pipelines, conduits, ducts, cables, wires, manholes** vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products,

Telephone or other **communications, cable television, water, wastewater**, storm water, other liquids or chemicals, or traffic or other control systems.

47. *Unit Price Work*-Work to be paid for on the basis of unit prices.

48. *Work*-The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

49. *Work Change Directive*-A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

50. *Written Amendment*-A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 Technology

A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms "**as allowed**," "**as approved**," or terms of like effect or import are used, or the adjectives "**reasonable**," "**suitable**," "**acceptable**," "**proper**," "**satisfactory**" or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The

use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. Day

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. Furnish, Install, Perform, Provide

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform" or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied,

E: Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 Copies of Documents

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixteenth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *CONTRACTOR's Review of Contract Documents:* Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures herein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected hereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified

in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

C. *Evidence of Insurance:* Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 *Preconstruction Conference*

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.02 *Intent*

A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in , Article 9.

3.03 *Reference Standards*

A. *Standards, Specifications, Codes, Laws, and Regulations*

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the effective date of the Agreement if there were no Bids),

except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees. from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier," CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.02 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

(i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.03 *Reuse of Documents*

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER:

(i) shall not have or acquire any title to or ownership rights in any of the Drawings; Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER, or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

B. *Limited "Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions, and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially **inaccurate; or**

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical **condition causes an increase or decrease in** CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others unless it is otherwise expressly provided in the Supplementary Conditions:

1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents.

c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 *Reference Points*

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property

monuments, and shall: make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information;

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a hazardous

Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.

F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing

in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5- BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain, in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements

of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR; with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

5.04 CONTRACTOR's Liability Insurance

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed, by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any **other reason**;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be

correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 OWNER's Liability Insurance

A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by **OWNER** prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by **ENGINEER**;

5. allow for partial utilization of the Work by **OWNER**;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by **OWNER**, **CONTRACTOR**, and **ENGINEER** with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of **OWNER**, **CONTRACTOR**, Subcontractors, **ENGINEER**, **ENGINEER's** Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereat) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to **OWNER** and **CONTRACTOR** and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.

D. **OWNER** shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of **CONTRACTOR**; Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by **CONTRACTOR**, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If **CONTRACTOR** requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, **OWNER** shall, if possible, include such insurance, and the cost thereof will be charged to **CONTRACTOR** by appropriate Change Order or Written Amendment. Prior to commencement of the Work

at the Site, **OWNER** shall in writing advise **CONTRACTOR** whether or not such other insurance has been procured by "OWNER."

5.07 Waiver of Rights

A. **OWNER** and **CONTRACTOR** intend that all policies purchased in accordance with paragraph 5.06 will protect **OWNER**; **CONTRACTOR**, Subcontractors, **ENGINEER**, **ENGINEER's** Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. **OWNER** and **CONTRACTOR** waive all rights against each other and their respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising on or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, **ENGINEER**, **ENGINEER's** Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by **OWNER** as trustee or otherwise payable under any policy so issued.

B. **OWNER** waives all rights against **CONTRACTOR**, Subcontractors, **ENGINEER**, **ENGINEER's** Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to **OWNER's** property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by **OWNER**; and

2. Loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by **OWNER** during partial utilization pursuant to paragraph 14.05, after Substantial Completion

pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required

of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 *Labor; Working Hours*

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site;

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with

any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Supplier may be submitted to ENGINEER for review under the circumstances described below.

1. *"Or-Equal" Items:* If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment ENGINEER determines that: (i) if it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2: *Substitute Items*

a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under

paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the **circumstances**.

d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the space use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available **engineering, sales, maintenance, repair, and** replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly

required by the Contract Documents, **CONTRACTOR** may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents: The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. *Engineer's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

D. *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. *ENGINEER's Cost Reimbursement:* ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR. CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.

F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.

6.06 *Canceling Subcontractors, Suppliers, and Others*

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or

entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

C. CONTRACTOR shall be fully responsible to

OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor-

or supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same,

6.07 *Patent Fees and Royalties*

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER'S Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits

and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 *Laws and Regulations*

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 *Taxes*

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not

unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at Law.

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work,

B. *Removal of Debris During Performance of the Work:* During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work

Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 *Safety and Protection*

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and

responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER, and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. Emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals shall be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample

submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements; quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the **time** of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation (to be made on each Shop

Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. ENGINEER's Review

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.I.

F. Resubmittal Procedures

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 Continuing the Work

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except

as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 CONTRACTOR's General Warranty and Guarantee

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage cause by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or
2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by ENGINEER;
2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;
3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;
4. use or occupancy of the Work or any part thereof by OWNER;
5. any acceptance by OWNER or any failure to do so;
6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
7. any inspection, test, or approval by others; or
8. any correction of defective Work by OWNER.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any from

and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and
2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of CONTRACTOR Under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 *Related Work at Site*

A. OWNER may perform other work related to the Project at the Site by OWNER'S employees, or let other direct contracts therefore, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

2. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other contractor

who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs.

Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 *Replacement of ENGINEER*

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 *Furnish Data*

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 *Pay Promptly When Due*

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations

and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface

structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 Insurance

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 Limitations on OWNER's Responsibilities

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR'S failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 OWNER'S Representative

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 Visits to Site

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER'S authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR'S Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another

representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 *Authorized Variations in Work*

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a result of a Field Order, a Claim may be made therefore as provided in paragraph 10.05.

9.06 *Rejecting Defective Work*

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.01 *Shop Drawings, Change Orders and Payments*

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 *Determinations for Unit Price Work*

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER Will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 *Limitations on ENGINEER's Authority and Responsibilities*

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority

or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project-Representative, and assistants.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change

Directive, a Claim may be made therefore as provided in paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 *Claims and Disputes*

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent

of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such

Claim, dispute, or other matter). A Claim for an adjustment

in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. *ENGINEER's Decision:* ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be formal and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or

2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the owner and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claim or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs necessarily incurred and paid by CON-

TRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage hereof, and Suppliers' field services required in connection herewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph U.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel; and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by, any of them or for whose acts any of them may be liable,

and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with written consent and approval of the OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

g. The cost of utilities, fuel and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.

i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.

j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, **engineers, architects, estimators, attorneys, auditors,** accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1. or specifically covered by paragraph 11.01.A.4, all of which are to be

considered administrative costs covered by the CONTRACTOR's fee.

2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.

C. *CONTRACTOR's Fee*: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

D. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 Cash Allowances

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allow-

ances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequately to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12- CHANGE OF CONTRACT PRICE;
CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit

prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).

C. *CONTRACTOR's Fee:* The CONTRACTOR's fee overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no

fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 *Delays Beyond CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefore as provided in paragraph

12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by

Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given

to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by

paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and.

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR'S expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected

or tested by others, CONTRACTOR at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop

the Work shall not give ease to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or, in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that

item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 *OWNER May Correct Defective Work*

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR **fails** to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In

connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto; take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefore as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and

- belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination) of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.

3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests,

revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Written Amendment or Change Orders;
- c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
- d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendations, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. *Reduction in Payment*

1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

- a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling OWNER to a set-off against the amount recommended; or
- d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.

2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld.

OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 *CONTRACTOR's Warranty of Title*

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion Promptly thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities

pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance; heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER'S aforesaid. recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion; but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment*

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments,

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. *Review of Application and Acceptance*

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of

paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due*

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 *Final Completion Delayed*

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *OWNER May Suspend Work*

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefore as provided in paragraph 10.05.

15.02 *OWNER May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);

2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

3. CONTRACTOR's disregard of the authority of ENGINEER; or

4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate

the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 OWNER May Terminate For Convenience

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of

engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 CONTRACTOR May Stop Work or Terminate

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum formally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum formally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation. .

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

SUPPLEMENTARY CONDITIONS

SUPPLEMENTARY CONDITIONS

1. CONTRACTOR'S & SUBCONTRACTOR'S INSURANCE & LIMITS

The Contractor shall provide insurance as specified in the General Conditions with coverage not less than the following amounts or greater where required by law.

- Workmen's Compensation - Statutory
- Disability Benefits - Statutory
- Comprehensive Automobile Liability (including owned, non-owned, and hired autos)
Combined Single Limit (bodily injury and property damage) - \$1,000,000
- Comprehensive General Liability
(including contractual, products and completed operations coverage)
 1. General Aggregate - \$2,000,000
 2. Products-Completed Operations Aggregate - \$1,000,000
 3. Personal Injury - \$1,000,000
 4. Each Occurrence - \$1,000,000
- Excess Liability - \$1,000,000

THE CITY OF BEACON AND LANC & TULLY ENGINEERING AND SURVEYING, P.C. SHALL BE NAMED ON ALL POLICIES AS ADDITIONAL INSURED.

The Contractor shall either:

1. Require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage of the type and in the same amounts and adding additional insureds as specified in the preceding paragraph;
or
2. Insure the activities of his subcontractors in his own policy.

2. SALES TAX

The City of Beacon is exempt from sales tax from the State of New York or any City or County in the State of New York for any material which is to be incorporated in this project. The City will make available to the successful bidder the tax exemption number and form to be used to the extent permitted under the present applicable statutes.

SUPPLEMENTARY CONDITIONS - *continued*

3. EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

- A. The Contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status or sex. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants; for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause:
- B. The Contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, or sex.
- C. The Contractor or subcontractor where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. During the performance of this contract the Contractor or subcontractor agrees not to employ on such project any alien in the United States in violation of the Immigration and Nationality Act or any other law, convention, or treaty of the United States relating to the immigration, exclusion, deportation, or expulsion of aliens.

4. CLARIFICATION OF GENERAL CONDITIONS ¶4.05 "REFERENCE POINTS"

The Owner shall provide the following engineering surveys. Topographic survey maps, engineering site plans and construction details shall be supplied to Contractor. **NO** staking shall be done by the Owner. If staking is required by Contractor, it shall be done at Contractor's cost.

5. AMENDMENTS TO GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

- A. The Contractor shall have full responsibility for compliance with the Industrial Code including without limitation § 23 and 53. The Contractor shall have the duty to notify operators of underground facilities as provided therein. See also General Conditions, Paragraph 4.04.

SUPPLEMENTARY CONDITIONS - *continued*

- B. **No payment to the Contractor shall be due until thirty (30) days after audit and approval by the City Council at a regularly scheduled monthly meeting.**
- C. *The Contract:* It is understood that all the documents and/or specifications constitute a part of this agreement; that those documents are incorporated into this agreement as if set out at length at this point and that the award of the contract on the basis of the proposal constitutes a contract; the execution of this agreement being a mere formality.
- D. *Responsibility for Work:* The Contractor covenants and agrees at their own proper cost, charge and expense, to furnish all machinery, appliances, tools, labor and material necessary or proper to do all the work necessary to construct all the works, equipment and fixtures, appurtenant thereto, as set forth in the Contractor's proposal as accepted by the City.
- E. *Payment:* The City, in consideration of the Contractor faithfully complying with all the terms and conditions herein set forth agrees to pay the Contractor at the price as set forth in the Contractor's proposal as accepted by the Owner, upon the terms and conditions for monthly payments on estimates as may be set forth in the specifications. Payment requests shall be on properly completed forms provided by the City.
- F. *Interest in Contract:* The Contractor agrees that the only person or persons interested as principal or principals in the proposal submitted by the Contractor for this contract are named therein and that no person other than those mentioned therein, except regular agents of the Contractor, has any interest in the said proposal or in the securing of the award, and that this contract has been secured without any connection with any person or persons other than those named, and that the proposal is in all respects fair, and was prepared, and the contract was secured, without collusion or fraud, and that no officer or employee of the City has or shall have a financial interest in the performance of the contract or in the work or business to which it relates, or in any portion of the proceeds thereof.
- G. *Compliance with Law:* The Contractor agrees to comply with all applicable laws, rules and regulations; the cost of such compliance and the fees for any permits required will be at the expense of the Contractor.
- H. *Labor Law:* The Contractor agrees to comply with all applicable provisions of the Labor Law. Particular attention is drawn to the anti-discrimination provisions. Applicable wage determinations, as may be revised from time- to-time, shall be deemed inserted as if set forth at length at this point.
- I. *Required Provisions:* All provisions required by law to be inserted into this contract are hereby deemed inserted as if expressly set forth at this point.
- J. *Assignment:* This contract shall bind the parties, hereto, and their heirs, executors, administrators, successors and assigns respectively, and may not be assigned by the Contractor without written consent of the Owner.

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

- K. *Subcontractors*: The Owner reserves the right to approve all subcontractors. The Contractor will notify the Owner of the name and address of any such subcontractor intended for employment, the portion of the work which they are to do or the material which they are to furnish, their place of business and such other information as the Owner may require, in order to know whether such subcontractor is reputable and reliable and able to perform the work as called for in the specifications. The Contractor shall not be released from any liabilities or obligations under this contract, should any subcontractor fail to perform in a satisfactory manner the work undertaken by that subcontractor.
- L. *Indemnification and Insurance*: Neither the City nor any of its officers or agents shall in any manner be answerable or responsible for any loss or damage that shall or may happen during the performance of this contract by the Contractor, nor shall it be in any manner answerable or responsible for any injury done or damages or compensation required to be paid under any present or future law, to any person or persons whatever, whether employees of the Contractor or otherwise, or for damages to any property, whether belonging to the City or to others occurring during or resulting during the performance of this contract by the Contractor. Against all such injuries, damages and compensation, the Contractor shall and will properly guard. The Contractor shall also, at all times, indemnify and save the City and its officers and agents harmless against all such injuries, damages and compensation arising or resulting from the performance of this contract. The Contractor shall provide the City a certificate of insurance indicating insurance coverage acceptable to the City.
- M. *Time for Performance*: The Contractor shall proceed diligently toward the prompt completion of the work. The Contractor shall have no claim against the City for damages for delay unless the Owner is found to have caused such damage while acting in bad faith and with deliberate intent. The City agrees that the time for performance may, upon written application, be extended for such period of time as the governing board of the City deems reasonable upon the circumstances. Nothing herein shall limit the Contractor's rights against others causing such delays.
- N. *Remedies*: In addition to such remedies, the City may have in law or equity upon the Contractor's breach of this agreement, the City may terminate or suspend the agreement, or perform any part of the work at the expense of the Contractor as is determined to be in the best interest of the City.
- O. *Notice of Claim*: Service of a Verified Claim on the City Clerk within ninety (90) days of accrual of a claim against the City or completion of the work or portion thereof, whichever is earlier, and the expiration of forty (40) days thereafter shall be a condition precedent to the commencement by the Contractor of any action or proceeding with respect to this agreement. In no event shall an action be commenced by the Contractor subsequent to the tender of payment on the Contractor's final voucher under this agreement.

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

- P. The following revisions and/or additions are an expansion of the General Conditions and, therefore, the section listed below relate to the General Conditions.

1.01 *Defined Terms*

- A. 23. *Hazardous Environmental Condition*—Insert after the word “that” in the third line: requires reporting to any federal, state or local authority, or under circumstances that...

2.05 *Before Starting Construction*

- C. Evidence of Insurance: Before any work at the site is started, CONTRACTOR shall deliver to the OWNER, with copies to each Additional Insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR is required to purchase and maintain in accordance with Article 5.

2.07 *Initial Acceptance of Schedules*

- A. 1. Insert at end of paragraph: Pursuant to paragraph 5(M) of the Supplementary Conditions' Amendments to General Conditions, the schedule will not determine to cost for delay claims against the OWNER.
3. Insert at end of paragraph: Pursuant to paragraph 5(M) of the Supplementary Conditions' Amendments to General Conditions, the schedule of values will not determine to cost for delay claims against the OWNER.

4.01 *Availability of Lands*

- C. Insert at end of paragraph: CONTRACTOR shall enter into a separate, written agreement with any and all landowners whose real property will be used for access or storage by CONTRACTOR in connection with this Agreement. Such agreement shall include express language that the City shall be held harmless by the landowner for any damage to the property caused by CONTRACTOR's activities thereon. CONTRACTOR shall ensure that such real property and any activity on such property is covered by the insurance required by this contract and provide a copy of the fully-executed agreement between CONTRACTOR and the landowner prior to commencement of any use or storage on the affected property.

4.02 *Subsurface and Physical Conditions*

- B. No reliance by CONTRACTOR on Technical Data: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, and such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER'S Consultants with respect to:

4.03 *Differing Subsurface or Physical Conditions*

- A. 1. is of such a nature as to establish that any "technical data" is materially inaccurate; or

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

C. Possible Time Adjustments

1. The Contract Times, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR'S time required for performance of the Work, however, such condition must meet any one or more of the categories described in paragraph 4.03.A.

b. delete
2. CONTRACTOR shall not be entitled to any adjustment in the Contract Times if:
3. If OWNER and CONTRACTOR are unable to agree on entitlement or on the amount or extent, if any, of any adjustment in the Contract Times, a Claim may be made therefore as provided in paragraph 10.05 concerning Contract Times only. However, OWNER, ENGINEER, and ENGINEER'S Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.03 *Differing Subsurface or Physical Conditions*

Insert: D. The CONTRACTOR shall be responsible for verifying any subsurface conditions before any work in such area commences. The CONTRACTOR shall not be entitled to any extra fee or extra compensation based upon the difference between actual subsurface conditions and data, information, or test results secured or furnished by any source. The CONTRACTOR agrees that it has satisfied itself by its own investigation and research regarding all the conditions affecting the work to be done and labor and material needed and that its conclusion to execute the contract is based on such information and research and not on the estimate of quantities or other information that ENGINEER has used in preparation of the Contract Documents.

4.04 *Underground Facilities*

- B. 1. Delete the words starting in the third line: “, or not shown or indicated with reasonable accuracy”
2. Delete the words starting in the eighth line: “or not shown or indicated with reasonable accuracy”

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

4.06 *Hazardous Environmental Condition at Site*

- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the technical data contained in such reports and drawings as they pertain to any hazardous environmental conditions at the site, but such reports and drawings are not Contract Documents. Such technical data is identified in the Supplementary Conditions. Except for such reliance on such technical data CONTRACTOR may not rely upon or make any Claim against, OWNER, ENGINEER, or any of ENGINEER'S Consultants with respect to:

5.04 *CONTRACTOR's Liability Insurance*

- A. Insert after the word "appropriate" in the second line: ", or as specified by OWNER,"

5.06 *Delete in entirety.*

5.07 *C. Delete in entirety.*

5.08 *Delete in entirety.*

5.10 *Delete in entirety.*

6.02 *Labor; Working Hours*

- B. Insert at the end of the paragraph: Subject to Article 12, CONTRACTOR shall be responsible for all additional costs and expenses, including overtime compensation, incurred as the result of CONTRACTOR, or any of its subcontractors, performing Work on Saturdays, Sundays or legal holidays, in order to comply with the Contract Times. Notwithstanding the preceding sentence, OWNER shall bear all such additional costs and expenses where CONTRACTOR, or its subcontractors, perform Work on weekends or legal holidays in order to comply with an acceleration of the Contract Times ordered in writing by OWNER.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

- 1. Insert at end of paragraph: Nothing in this paragraph shall prohibit CONTRACTOR from entering into an agreement for access or storage of materials or equipment as provided for in paragraph 4.01(C).

6.17 *Shop Drawings and Samples*

F. *Resubmittal Procedures*

- 1. Insert after the word "approval" in the fourth line: "in accordance with a deadline set by ENGINEER."

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

9.01 *OWNER's Representative*

A. Delete in the second line: "the construction period" and insert: "performance of all Work and during any modification or correction thereof."

10.06 The Contractor shall and will at no time make any claim for anticipated profit or loss of profits, because of any difference between the quantities of the various classes of work actually done, or of the materials actually furnished, and the original specified scope of work and the shown approximate estimated quantities.

10.07 The Contractor waives all claims of any nature due to a misunderstanding of the location, character, or other conditions surrounding the work or of the shown approximate estimated quantities of items of the work.

11.03 *Unit Price Work*

C. 1. - 3. Delete in entirety.

Insert: The CONTRACTOR agrees:

1. That he will make no claim of any nature against the OWNER or ENGINEER because of a difference between the quantities for unit price items of Work actually furnished and the estimated quantities state in the Bid even though the estimated quantities prove grossly different from the quantities actually used, and
2. That quantity of any unit price item or Work may be increased or decreased as may be deemed necessary without alteration or modification of the Contract.

Insert: D. In the event that the quantities of various items actually used are either higher or lower than the quantities stated in the Bid, the CONTRACTOR agrees as follows:

1. Where the change in quantities for any item in the regional bid does not exceed 20% of the original bid quantity, the applicable unit price bid shall be the sole basis for computing payment;
2. Where the change in quantities for any item in the original bid exceeds 20% of the original bid quantity, the OWNER, may review the unit price for said item to determine if a new unit price should be negotiated.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or claims for additional compensation arising out of or resulting from:

B. Delete in entirety.

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

13.07 *Correction Period*

- A. Delete the words "one year" in the first line and insert the words "two years." Insert at the end of the paragraph: Nothing contained in this Paragraph 13.07 shall be construed to establish a period of limitation with respect to other obligations which the CONTRACTOR might have under the Contract Documents. Establishment of the time period of two years as describe in this paragraph relates only to the specific obligation of the CONTRACTOR to correct the Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the CONTRACTOR's liability with respect to the CONTRACTOR's obligations other than specifically to correct the Work.
- B. Delete the word "Specifications" and insert the words "Contract Documents."

13.09 *OWNER May Correct Defective Work*

- A. Delete the words "a reasonable time" in the first line and insert the words "forty five (45) days."

14.02 *Progress Payments*

- A. *Application for Payments*
 - 1. Insert at the end of the paragraph: Notwithstanding the preceding sentence, OWNER shall not be required to pay CONTRACTOR, or any subcontractor, for materials or equipment delivered but not incorporated in the Work, except where such equipment or materials are in short or critical supply, as agreed to by the ENGINEER, or were specifically fabricated for the Work.
- B. *Review of Applications*
 - 3. Delete the phrase beginning in the third line: "inspections made to check the quality or quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents" and insert: "the Work is free of defects not capable of discovery by ENGINEER in performing a reasonable inspection of the Work..."

14.10 *Payments to Subcontractors and Materialmen by Contractor*

Within fifteen calendar days of the receipt of any payment from the Owner, the Contractor shall pay each of his subcontractors and materialmen the proceeds from the payment representing the value of the work performed and/or materials furnished by the subcontractor and/or materialmen as reflected in the payment from the Owner less an amount necessary to satisfy any claims, liens, or judgement against the subcontractor or materialmen which have not been suitably discharged and less any retained amount as hereafter described. The Contractor shall retain not more than 5% of each payment to the subcontractor and/or materialmen except that the Contractor may retain in excess of 5% but not more

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

then 10% of each payment to the subcontractor provided that prior to entering into a subcontract with the Contractor, the subcontractor is unable or unwilling to provide a performance bond and a labor and material bond both in the full amount of the subcontract at the request of the Contractor. However, the Contractor shall retain nothing from the payments representing proceeds owned the subcontractor and/or materialmen from the Owner's payments to the Contractor from the remaining amounts of the contract balance as provided in Article 14.07 of this section. Within fifteen calendar days of the receipts of payment from the Contractor, the subcontractor and/or materialmen shall pay each of his subcontractors and materialmen in the same manner as the Contractor has paid the subcontractor. Nothing provided herein shall create any obligation on the part of the Owner to pay or to see to the payment of any monies to any subcontractor or materialmen from the Contractor nor shall anything provided herein serve to create any relationship in contract or otherwise, implied or expressed, between the subcontractor or materialman and the Owner.

However, the Contractor shall retain nothing from the payments representing proceeds owned the subcontractor and/or materialmen from the Owner's payments to the Contractor from the remaining amounts of the contract balance as provided in Article 14.07 of this section. Within fifteen calendar days of the receipts of payment from the Contractor, the subcontractor and/or materialmen shall pay each of his subcontractors and materialmen in the same manner as the Contract has paid the subcontractor. Nothing provided herein shall create any obligation on the part of the Owner to pay or to see to the payment of any monies to any subcontractor or materialmen from the Contractor nor shall anything provided herein serve to create any relationship in contract or otherwise, implied or expressed, between the subcontractor or materialmen and the Owner.

15.02 Owner May Terminate for Cause

5. The Contractor becomes insolvent;
6. The Contractor makes an assignment for the benefit of creditors pursuant to the statutes of the State of New York;
7. A voluntary or involuntary petition in bankruptcy is filed by or against the Contractor;
8. A receiver or receivers are appointed to take charge of the Contractor's property or affairs;
9. The Contractor shall sublet, assign, transfer, convey or otherwise dispose of the contractor other than as herein specified.

15.03 OWNER May Terminate For Convenience

3. Delete in entirety

SUPPLEMENTARY CONDITIONS - *continued*

5. AMENDMENTS TO GENERAL CONDITIONS - continued

- Q. Delete in its entirety Article 16 entitled "Dispute Resolution". The City of Beacon does not agree to participate in an arbitration concerning any controversy arising under this contract. The parties to this contract designate Dutchess County as the proper venue to commence any action arising from this contract.

6. SCHEDULE OF OCCUPATIONAL CLASSIFICATIONS & MINIMUM HOURLY WAGE RATES

Contractors and subcontractors are to meet "The Prevailing Wage Schedules" as published by New York State Department of Labor & Federal Wage Rates, attached herein.

NEW YORK STATE WAGE RATES



Kathy Hochul, Governor

Roberta Reardon, Commissioner

City of Beacon

John Russo
Lanc & Tully, P.C.
PO Box 687
Goshen NY 10924

Schedule Year 2024 through 2025
Date Requested 05/13/2025
PRC# 2025005723

Location Fishkill Avenue
Project ID#
Project Type Replacement of sewer and water mains on Fishkill Avenue

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Rate Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2024 through June 2025. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: _____ Date Cancelled: _____

Name & Title of Representative: _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Contractor Registry

Effective December 30, 2024 all contractors and subcontractors submitting bids or performing construction work on public work projects, or private projects covered by Article 8 of the Labor Law, are required to register with the New York State Department of Labor (NYSDOL) under Labor Law Section 220-i. To register, contractors and subcontractors must submit an application through NYSDOL's Contractor Registry portal which is available through the agency's Management System for Protecting Worker Rights (MPWR) <https://mpwr-public.labor.ny.gov/en/login>.

For additional information, please visit [online](#).

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission; a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion [online](#).

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12226; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website

Payrolls and Payroll Records

Every contractor and subcontractor **MUST** keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational **ONLY** and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer **MUST** then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "[Public Work Project](#)" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers' compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeymen in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyman's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12226 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.



Kathy Hochul, Governor

Roberta Reardon, Commissioner

City of Beacon

John Russo
Lanc & Tully, P.C.
PO Box 687
Goshen NY 10924

Schedule Year 2024 through 2025
Date Requested 05/13/2025
PRC# 2025005723

Location Fishkill Avenue
Project ID#
Project Type Replacement of sewer and water mains on Fishkill Avenue

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor Information

All information must be supplied

Federal Employer Identification Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	<input type="checkbox"/> (01) General Construction	
Approximate Completion Date: ____/____/____	<input type="checkbox"/> (02) Heating/Ventilation	
	<input type="checkbox"/> (03) Electrical	
	<input type="checkbox"/> (04) Plumbing	
	<input type="checkbox"/> (05) Other : _____	

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

Social Security Numbers on Certified Payrolls:

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, <https://dol.ny.gov/public-work-and-prevailing-wage>

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.ny.gov.

Worker Notification: (Labor Law §220, paragraph a of subdivision 3-a)

Effective June 23, 2020

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website www.labor.ny.gov or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. *In the event the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

**To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor
Administrative Finance Bureau-PWEF Unit
Building 12, Room 464
State Office Campus
Albany, NY 12226

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.



Required Notice under Article 25-B of the Labor Law

**Attention All Employees, Contractors and Subcontractors:
You are Covered by the Construction Industry Fair Play Act**

The law says that you are an employee unless:

- You are free from direction and control in performing your job, **and**
- You perform work that is not part of the usual work done by the business that hired you, **and**
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.

Employee Rights: If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor, **you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.**

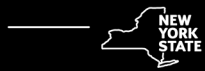
Penalties for paying workers off the books or improperly treating employees as independent contractors:

- **Civil Penalty**
 - First offense: Up to \$2,500 per employee
 - Subsequent offense(s): Up to \$5,000 per employee
- **Criminal Penalty**
 - First offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine and debarment from performing public work for up to one year.
 - Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a \$50,000 fine and debarment from performing public work for up to 5 years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously. You can remain anonymous.

Employer Name:

IA 999 (09/16)



Attention Employees

THIS IS A: **PUBLIC WORK PROJECT**

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Your pay stub and wage notice received upon hire must clearly state your wage rate and supplement rate.

Chapter 629 of
the Labor Laws
of 2007:

These wages are set by law and must be posted at the work site. They can also be found at:
<https://dol.ny.gov/bureau-public-work>



If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5287		

* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or www.comptroller.nyc.gov – click on Bureau of Labor Law.

Contractor Name: _____

Project Location: _____

Requirements for OSHA 10 Compliance

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is \$250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.*)
- Training roster, attendance record or other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

**A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

WICKS

Public work projects are subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work, when the total project's threshold is \$3 million in Bronx, Kings, New York, Queens and, Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.

For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or the use of a Project Labor Agreement (PLA), and must be open to public inspection.

Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.

The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.

Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.

Contractors must pay subcontractors within a 7 days period.

(07.19)

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor
Bureau of Public Work
State Office Campus, Bldg. 12
Albany, NY 12226

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Dutchess County General Construction

Boilermaker

05/01/2025

JOB DESCRIPTION Boilermaker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per Hour: 07/01/2024 01/01/2025

Boilermaker \$ 67.38 \$ 68.88

Repairs & Renovations 67.38 68.88

Repairs & Renovation: Includes Repairing, Renovating replacement of parts to an existing unit(s).

SUPPLEMENTAL BENEFITS

Per Hour:

Boilermaker	33.5% of hourly	33.5% of Hourly
Repair & Renovations	Wage Paid	Wage Paid
	+ \$ 26.85	+ \$26.85

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay.

Repairs & Renovation Includes replacement of parts and repairs & renovation of existing unit.

OVERTIME PAY

See (*B, O, **U) on OVERTIME PAGE

Note:* Includes 9th & 10th hours, double for 11th or more.

** Labor Day ONLY, if worked.

Repairs & Renovation see (B,E,Q) on OT Page

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 12, 15, 25, 26, 29) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

(1/2) Year Terms at the following percentage of Boilermaker's Wage

1st	2nd	3rd	4th	5th	6th	7th
65%	70%	75%	80%	85%	90%	95%

Supplemental Benefits Per Hour:

	33.5% of Hourly Wage Paid Plus Amount Below	33.5% of Hourly Wage Paid Plus Amount Below
1st Term	\$ 20.36	\$ 20.36
2nd Term	21.28	21.28
3rd Term	22.22	22.22
4th Term	23.12	23.12
5th Term	24.07	24.07
6th Term	25.00	25.00
7th Term	25.93	25.93

NOTE: "Hourly Wage Paid" shall include any and all premium(s)

4-5

Carpenter

05/01/2025

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Dutchess, Orange

WAGES

Per hour: 07/01/2024

Building:
Millwright \$ 46.35
 + 8.44*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 34.94

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE

Paid: See (5,6,11,13,16,18,19,25) for 1st & 2nd yr. Apprentices

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms:

1st	2nd	3rd	4th
\$ 28.18	\$ 30.51	\$ 34.84	\$ 43.50
+ 4.40*	+ 5.19*	+ 5.94*	+ 7.44*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

Supplemental benefits per hour:

1st	2nd	3rd	4th
\$ 23.00	\$ 24.79	\$ 26.90	\$ 29.63

8-740.2

Carpenter

05/01/2025

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Orange: : The territory west demarcated by a line drawn from the Bear Mountain Bridge continuing east to the Bear Mountain Circle. The territory south demarcated by a line continuing north on 9W to the town of Cornwall where County Road 107 (also known as Quaker Rd) crosses under 9W to the centerline of Route 32, The territories south and east heading north on Route 32 to Orrs Mills Rd, then west on Orrs Mills Rd to Route 94, continue west and south on Route 94 to the Town of Chester, to the intersection of Kings Highway, continue south on Kings Highway to Bellvale Rd, west on Bellvale Rd to Bellvale Lakes Rd, then south on Bellvale Lakes Rd to Kain Rd, southeast on Kain Rd to Route 17A, then north and southeast along Route 17A to Route 210, then follow Route 210 to NJ Border.

WAGES

Per hour: 07/01/2024

Carpet/Resilient

Floor Coverer \$ 34.45
 + 3.25*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

INCLUDES HANDLING & INSTALLATION OF ARTIFICIAL TURF AND SIMILAR TURF INDOORS/OUTDOORS.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 28.33

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE

Paid for 1st & 2nd yr.

Apprentices: See (5, 6, 11, 13, 16, 18, 19, 25)

Overtime: See (5, 6, 11, 13, 16, 18, 19, 25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage per hour - (1) year terms:

1st	2nd	3rd	4th
\$15.75	\$18.87	\$23.55	\$28.23
+ 2.48*	+ 2.48*	+ 2.48*	+ 2.48*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

Supplemental Benefits per hour - All apprentice terms:

\$ 20.87

8-2287D&O

Carpenter

05/01/2025

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2024

Marine Construction:

Marine Diver \$ 75.46
+ 10.00*

Marine Tender \$ 55.00
+ 10.00*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker \$ 45.65

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 13, 16, 18, 19, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms.

1st year	\$ 26.98 + 5.50*
2nd year	32.58 + 5.50*
3rd year	40.96 + 5.50*
4th year	49.35 + 5.50*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

Supplemental Benefits

Per Hour:

All terms \$ 32.20

8-1456MC

Carpenter - Building / Heavy&Highway

05/01/2025

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Columbia, Dutchess, Orange, Sullivan, Ulster

WAGES

WAGES (per hour)

Applies to Carpenter (Building/Heavy & Highway/Tunnel), Dockbuilder, Piledriver, Dive Tender, and Diver (Dry):

	07/01/2024	07/01/2025 Additional	07/01/2026 Additional
Base Wage	\$ 37.19 + 6.31*	\$ 2.23**	\$ 2.30**

Applies to Diver (Wet):

Base Wage	\$ 50.00 + 6.31*
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*For all hours paid straight or premium.

**To be allocated at a later date.

SHIFT WORK

SHIFT DIFFERENTIAL: When mandated by a Government Agency irregular or off shift can be worked. The Carpenter shall receive an additional fifteen percent (15%) of the base wage.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 30.65
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OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

BUILDING:

Paid: See (1) on HOLIDAY PAGE.

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE.

- Holidays that fall on Sunday will be observed Monday.

HEAVY&HIGHWAY/TUNNEL:

Paid: See (5, 6, 25) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

- Holidays that fall on Sunday will be observed Monday

- Must be employed during the five (5) work days immediately preceding a holiday or during the five (5) work days following the paid holiday to receive holiday pay

- If Employee is entitled to a paid holiday, the Employee is paid the Holiday wage and supplemental benefits whether they work or not. If Employee works the Holiday, the Employee will receive holiday pay (including supplemental benefits), plus the applicable premium wage for working the Holiday. If Employee works in excess of 8 hours on Holiday, then benefits will be paid for any hours in excess of 8 hours.

REGISTERED APPRENTICES

1 Year terms at the following wage rates.

1st	2nd	3rd	4th
\$ 18.60	\$ 22.31	\$ 26.03	\$ 29.75
+3.09*	+3.09*	+3.09*	+3.09*

*For all hours paid straight or premium

SUPPLEMENTAL BENEFITS per hour:

All Terms	\$ 16.30
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11-279.2B/H&H

Electrician

05/01/2025

JOB DESCRIPTION Electrician

DISTRICT 11

ENTIRE COUNTIES

Orange, Putnam, Rockland

PARTIAL COUNTIES

Dutchess: Towns of Fishkill, East Fishkill, and Beacon.

WAGES

Per hour:

	07/01/2024	04/01/2025
Electrician Wireman/Technician	\$ 50.50	\$ 51.50

+ 9.50*

+ 10.00*

*For all hours paid straight or premium, not to be included in 3% calculation for supplemental benefits.

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (subject to overtime premiums):

- On jobs where employees are required to work from boatswain chairs, swinging scaffolds, etc., forty (40) feet or more above the ground, or under compressed air, using Scottair packs, or gas masks, they shall receive an additional \$2.00 per hour above the regular straight time rate.
- Journeyman Wireman working in Shafts, Tunnels or on Barges: \$5.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman when performing welding or cable splicing: \$3.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman required to have a NYS Asbestos Certificate: \$3.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman required to have a CDL: \$3.00 above the Journeyman Wireman rate of pay.

SHIFT WORK

SHIFT DIFFERENTIAL: On Public Work in New York State when shift work is mandated either in the job specifications or by the contracting agency, the following rates apply when shift is worked:

Between 4:30pm & 12:30am	\$ 59.30 + 9.50*	\$ 60.43 + 10.00*
Between 12:30am & 8:30am	\$ 66.35 + 9.50*	\$ 67.69 + 10.00*

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2024	04/01/2025
Journeyman	\$ 29.68 plus 3% of straight or premium wage	\$ 30.69 plus 3% of straight or premium wage

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 13, 15, 16, 25) on HOLIDAY PAGE

When the holiday falls on a Saturday it is observed the Friday before. When the holiday falls on a Sunday it is observed on the Monday after.

REGISTERED APPRENTICES

WAGES:

(1)year terms at the following rates

07/01/2024	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 16.01 +1.00*	\$ 19.40 +1.00*	\$ 24.25 +1.50*	\$ 29.10 +2.00*	\$ 33.95 +2.50*	\$ 36.38 +2.50*
2nd Shift	18.78 +1.00*	22.76 +1.00*	28.45 +1.50*	34.13 +2.00*	39.82 +2.50*	42.67 +2.50*
3rd Shift	21.04 +1.00*	25.49 +1.00*	31.86 +1.50*	38.24 +2.00*	44.61 +2.50*	47.80 +2.50*
09/01/2024	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 16.01 +1.00*	\$ 19.40 +1.00*	\$ 24.25 +1.00*	\$ 29.10 +2.00*	\$ 33.95 +2.50*	\$ 36.38 +2.50*
2nd Shift	18.78 +1.00*	22.76 +1.00*	28.45 +1.00*	34.13 +2.00*	39.82 +2.50*	42.67 +2.50*
3rd Shift	21.04 +1.00*	25.49 +1.00*	31.86 +1.00*	38.24 +2.00*	44.61 +2.50*	47.80 +2.50*
04/01/2025	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 17.00 +1.00*	\$ 20.60 +1.00*	\$ 25.75 +1.00*	\$ 33.48 +2.00*	\$ 36.05 +2.50*	\$ 38.63 +2.50*
2nd Shift	19.94 +1.00*	24.17 +1.00*	30.22 +1.00*	39.28 +2.00*	42.30 +2.50*	45.32 +2.50*
3rd Shift	22.34 +1.00*	27.08 +1.00*	33.85 +1.00*	44.00 +2.00*	47.38 +2.50*	50.77 +2.50*

*For all hours paid straight or premium, not to be included in 3% calculation for supplemental benefits.

SUPPLEMENTAL BENEFITS per hour:

07/01/2024	
1st term	\$ 16.28 plus 3% of straight or premium wage
2nd term	\$ 16.28 plus 3% of straight or premium wage

3rd term	\$ 18.28 plus 3% of straight or premium wage
4th term	\$ 18.78 plus 3% of straight or premium wage
5th term	\$ 20.28 plus 3% of straight or premium wage
6th term	\$ 20.28 plus 3% of straight or premium wage

09/01/2024

1st term	\$ 16.28 plus 3% of straight or premium wage
2nd term	\$ 17.78 plus 3% of straight or premium wage
3rd term	\$ 18.78 plus 3% of straight or premium wage
4th term	\$ 19.78 plus 3% of straight or premium wage
5th term	\$ 21.28 plus 3% of straight or premium wage
6th term	\$ 21.28 plus 3% of straight or premium wage

11-363/1

Electrician

05/01/2025

JOB DESCRIPTION Electrician

DISTRICT 11

ENTIRE COUNTIES

Sullivan, Ulster

PARTIAL COUNTIES

Delaware: Only in the Townships of Andes, Harpersfield, Kortwright, Stamford, Bovina, Roxbury, Middletown and those portions of Colchester and Hancock south of the East Branch of the Delaware River.

Dutchess: All of the county except for the towns of Fishkill, East Fishkill, and Beacon.

Greene: That portion of the county south of a line following the south limits of the city of Catskill in a Westerly direction from the Hudson River to Highway 23A along 23A to the road following the Little Westkill and continuing along this road to Delaware County.

WAGES

Per hour:

Electrician Wireman/ Technician Electrical/Technician Projects under \$ 250,000.00	07/01/2024	04/01/2025
	\$ 46.50	\$ 47.50
	+ 9.50*	+ 10.00*
over \$ 250,000.00	\$ 50.50	\$ 51.50
	+ 9.50*	+ 10.00*

*For all hours paid straight or premium, not to be included in 3% calculation for supplemental benefits.

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (subject to overtime premiums):

- On jobs where employees are required to work from boatswain chairs, swinging scaffolds, etc., forty (40) feet or more above the ground, or under compressed air, using Scottair packs, or gas masks, they shall receive an additional \$2.00 per hour above the regular straight time rate.
- Journeyman Wireman working in Shafts, Tunnels or on Barges: \$5.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman when performing welding or cable splicing: \$3.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman required to have a NYS Asbestos Certificate: \$3.00 above the Journeyman Wireman rate of pay
- Journeyman Wireman required to have a CDL: \$3.00 above the Journeyman Wireman rate of pay.

SHIFT WORK

SHIFT DIFFERENTIAL: On Public Work in New York State when shift work is mandated either in the job specifications or by the contracting agency, the following rates apply:

Shift worked between 4:30pm & 12:30am

Electrical/Technician Projects under \$ 250,000.00	\$ 54.56	\$ 55.73
	+ 9.50*	+ 10.00*
over \$ 250,000.00	\$ 59.30	\$ 60.43
	+ 9.50*	+ 10.00

Shift worked between 12:30am & 8:30am

Electrical/Technician Projects under \$ 250,000.00	\$ 61.12	\$ 62.43
	+ 9.50*	+ 10.00*
over \$ 250,000.00	\$ 66.35	\$ 67.69
	+ 9.50*	+ 10.00*

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2024	04/01/2025
Journeyman	\$ 29.68 plus 3% of straight or premium wage	\$ 30.69 plus 3% of straight or premium wage

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 13, 15, 16, 25) on HOLIDAY PAGE

When the holiday falls on a Saturday it is observed the Friday before. When the holiday falls on a Sunday it is observed on the Monday after.

REGISTERED APPRENTICES

WAGES:

(1)year terms at the following rates

07/01/2024	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 16.01	\$ 19.40	\$ 24.25	\$ 29.10	\$ 33.95	\$ 36.38
	+1.00*	+1.00*	+1.50*	+2.00*	+2.50*	+2.50*
2nd Shift	18.78	22.76	28.45	34.13	39.82	42.67
	+1.00*	+1.00*	+1.50*	+2.00*	+2.50*	+2.50*
3rd Shift	21.04	25.49	31.86	38.24	44.61	47.80
	+1.00*	+1.00*	+1.50*	+2.00*	+2.50*	+2.50*
09/01/2024	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 16.01	\$ 19.40	\$ 24.25	\$ 29.10	\$ 33.95	\$ 36.38
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*
2nd Shift	18.78	22.76	28.45	34.13	39.82	42.67
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*
3rd Shift	21.04	25.49	31.86	38.24	44.61	47.80
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*
04/01/2025	1st	2nd	3rd	4th	5th	6th
1st Shift	\$ 17.00	\$ 20.60	\$ 25.75	\$ 33.48	\$ 36.05	\$ 38.63
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*
2nd Shift	19.94	24.17	30.22	39.28	42.30	45.32
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*
3rd Shift	22.34	27.08	33.85	44.00	47.38	50.77
	+1.00*	+1.00*	+1.00*	+2.00*	+2.50*	+2.50*

*For all hours paid straight or premium, not to be included in 3% calculation for supplemental benefits.

SUPPLEMENTAL BENEFITS per hour:

07/01/2024	
1st term	\$ 16.28 plus 3% of straight or premium wage
2nd term	\$ 16.28 plus 3% of straight or premium wage
3rd term	\$ 18.28 plus 3% of straight or premium wage
4th term	\$ 18.78 plus 3% of straight or premium wage
5th term	\$ 20.28 plus 3% of straight or premium wage
6th term	\$ 20.28 plus 3% of straight or premium wage

09/01/2024	
1st term	\$ 16.28 plus 3% of straight or premium wage
2nd term	\$ 17.78 plus 3% of straight or premium wage
3rd term	\$ 18.78 plus 3% of straight or premium wage
4th term	\$ 19.78 plus 3% of straight or premium wage
5th term	\$ 21.28 plus 3% of straight or premium wage
6th term	\$ 21.28 plus 3% of straight or premium wage

11-363/2

Elevator Constructor

05/01/2025

JOB DESCRIPTION Elevator Constructor

DISTRICT 1

ENTIRE COUNTIES

Columbia, Dutchess, Greene, Orange, Putnam, Sullivan, Ulster

PARTIAL COUNTIES

Delaware: Towns of Andes, Bovina, Colchester, Davenport, Delhi, Harpersfield, Hemdon, Kortright, Meredith, Middletown, Roxbury, Hancock & Stamford

Rockland: Only the Township of Stony Point.

Westchester: Only the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and Yorktown.

WAGES

Per Hour	07/01/2024	01/01/2025
Mechanic	\$ 70.15	\$ 73.07
Helper	70% of Mechanic Wage Rate	70% of Mechanic Wage Rate

SUPPLEMENTAL BENEFITS

Per hour	07/01/2024	01/01/2025
Journeyworker/Helper	\$ 37.885*	\$ 38.435*

(*)Plus 6% of regular hourly if less than 5 years of service. Plus 8% of regular hourly rate if more than 5 years of service.

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

Note: When a paid holiday falls on Saturday, it shall be observed on Friday. When a paid holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES

Wages per hour:

0-6 mo*	6-12 mo	2nd yr	3rd yr	4th yr
50 %	55 %	65 %	70 %	80 %

(*)Plus 6% of the hourly rate, no additional supplemental benefits.

Supplemental Benefits per hour worked:

Same as Journeyperson/Helper

1-138

Glazier

05/01/2025

JOB DESCRIPTION Glazier

DISTRICT 8

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per hour:	07/01/2024	05/01/2025
Glazier, Glass Tinting and Window Film	\$ 63.28	\$ 64.23
Scaffolding, including swing scaffold	67.28	69.23
*Mechanical Equipment	64.28	65.23
**Repair & Maintenance	30.76	31.71

*Mechanical equipment, scissor jacks, man lifts, booms & buckets 30' or more, but not pipe scaffolding.

**Repair & Maintenance- All repair & maintenance work on a particular building whenever performed, where the total cumulative Repair & Maintenance contract value is under \$193,000.

***To be allocated at a later date.

SUPPLEMENTAL BENEFITS

Per hour:		
Glazier, Glass Tinting Window Film, Scaffolding and Mechanical Equipment	\$ 42.13	\$ 43.03
Repair & Maintenance	24.62	25.12

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

For 'Repair & Maintenance' see (B, B2, I, S) on overtime page.

HOLIDAY

Paid: See (5, 6, 16, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

For 'Repair & Maintenance'

Paid: See(5, 6, 16, 25)

Overtime: See(5, 6, 16, 25)

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage rates:

	7/01/2024	05/01/2025
1st term	\$ 22.34	\$ 22.79
2nd term	30.64	31.15
3rd term	40.87	41.53
4th term	50.14	50.90

Supplemental Benefits:

(Per hour)

1st term	\$ 19.27	\$ 19.56
2nd term	27.34	27.85
3rd term	32.85	33.49
4th term	36.01	36.73

8-1087 (DC9 NYC)

Insulator - Heat & Frost

05/01/2025

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 8

ENTIRE COUNTIES

Dutchess, Orange, Putnam, Rockland, Westchester

WAGES

Per hour: 07/01/2024

Insulator \$ 60.85

Discomfort & 63.92
Additional Training**

Fire Stop Work* 32.97

* Applies on all exclusive Fire Stop Work (When contract is for Fire Stop work only). No apprentices on these contracts only.

**Applies to work requiring: garb or equipment worn against the body not customarily worn by insulators; psychological evaluation ;special training, including but not limited to "Yellow Badge" radiation training

Note: Additional \$0.50 per hour for work 30 feet or more above floor or ground level.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$ 38.25

Discomfort & 40.32
Additional Training

Fire Stop Work:
Journeyworker 19.48

OVERTIME PAY

See (B, E, E2, Q, *T) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Note: Last working day preceding Christmas and New Years day, workers shall work no later than 12:00 noon and shall receive 8 hrs pay.

Overtime: See (2*, 4, 6, 16, 25) on HOLIDAY PAGE.

*Note: Labor Day triple time if worked.

REGISTERED APPRENTICES

(1) year terms:

Insulator Apprentices:

1st	2nd	3rd	4th
\$ 32.97	\$ 38.54	\$ 44.12	\$ 49.70

Discomfort & Additional Training Apprentices:

1st	2nd	3rd	4th
\$ 34.51	\$ 40.38	\$ 46.27	\$ 52.16

Supplemental Benefits paid per hour:

Insulator Apprentices:

1st term	\$ 19.48
2nd term	23.23
3rd term	26.98
4th term	30.74

Discomfort & Additional Training Apprentices:

1st term	\$ 20.50
2nd term	24.47
3rd term	28.43
4th term	32.39

8-91

Ironworker

05/01/2025

JOB DESCRIPTION Ironworker

DISTRICT 11

ENTIRE COUNTIES

Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster

WAGES

Per hour:

	07/01/2024	07/01/2025 Additional	07/01/2026 Additional
Structural	\$ 51.38	\$ 2.00*	\$2.00*
Reinforcing	51.38	2.00*	2.00*
Ornamental	51.38	2.00*	2.00*
Chain Link Fence	51.38	2.00*	2.00*

* To be allocated at a later date.

NOTE: For Reinforcing classification ONLY, Ironworker 4-46Reinf rates apply in Rockland County's southern section (south of Convent Road and east of Blue Hills Road).

SHIFT WORK

On Government Mandated Irregular Workdays or Shift Work, the following wage will be paid:

1st Shift	\$ 51.38
2nd Shift	66.39
3rd Shift	71.39

Note- Any shift that works past 12:00 midnight shall receive the 3rd shift differential.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 45.56
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OVERTIME PAY

See (B1, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16) on HOLIDAY PAGE

If a holiday falls on Saturday, it will be observed Friday. If a holiday falls on Sunday, it will be observed Monday.

REGISTERED APPRENTICES

Wages:

(1) year terms at the following wage:

	1st yr	2nd yr	3rd yr	4th yr
1st Shift	\$ 25.69	\$ 30.83	\$ 35.97	\$ 41.10

2nd Shift	36.15	42.20	48.25	54.29
3rd Shift	39.64	45.99	52.35	58.69

Supplemental Benefits per hour:

	07/01/2024
1st year	\$ 40.94
2nd year	41.86
3rd year	42.79
4th year	43.71

11-417

Laborer - Building

05/01/2025

JOB DESCRIPTION Laborer - Building

DISTRICT 11

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Columbia: Only the Townships of Greenport, Claverack, Philmont, Clermont, Germantown, Livingston, Hillsdale, Gallatin, Copake, Ancram, Taghkanic and the City of Hudson.

WAGES

ALL WORK RELATED WITH TOXIC OR ANY ASBESTOS OR HAZARDOUS MATERIAL

WAGES: (per hour)

	07/01/2024	06/01/2025	06/01/2026
		Additional	Additional
Class 4	\$ 49.00	\$ 2.90*	\$ 3.00*

*To be allocated at a later date.

These rates will cover all work within five feet of the building foundation line.

SHIFT WORK

Shift Differential: On all Governmental mandated irregular or off shift work, an additional 25% of wage is required. The 25% shift differential will be paid on public works contract for shifts or irregular workdays outside the normal working hours for 2nd and 3rd shifts or irregular workday or when mandated or required by state, federal, county, local or other governmental agency contracts.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 33.50
Shift	\$ 40.84

OVERTIME PAY

See (B, *E, E5, **Q) on OVERTIME PAGE

*For first 8 hours on Saturday

**When an employee is required to work on a holiday which falls on a Sunday the employee shall be paid three (3) times the hourly rate and one (1) hour benefits for every hour worked. When an employee is required to work on a holiday which falls on a Saturday the employee shall be paid two and a half (2.5) times the hourly rate and one hour benefits for every hour worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

Holidays that fall on Saturday shall be observed on Friday, when holidays fall on Sunday they shall be observed on Monday.

REGISTERED APPRENTICES

(1000) hour terms at the following wages.

	07/01/2024
1st term	\$ 28.05
2nd term	32.35
3rd term	36.70
4th term	41.00

Supplemental Benefits per hour:

All Terms Regular	\$ 29.23
All Terms Shift Rate	35.39

11-17tox B

Laborer - Building

05/01/2025

JOB DESCRIPTION Laborer - Building

DISTRICT 8

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Columbia: Only the Townships of Ancram, Claverack, Clermont, Copake, Gallatin, Germantown, Greenport, Hillsdale, Hudson, Livingston, Philmont and Taconic.

WAGES

GROUP # 1:

All Laborers except those listed in Group 2

GROUP # 2:

Blaster, Laser Beam Oper., Asphalt Rakers, & Drilling Equipment Only Where a Separate Air Compressor Unit Supplies Power

WAGES per hour:	07/01/2024	06/01/2025
		Additional
GROUP # 1	\$ 40.00*	\$ 2.00**
GROUP # 2	42.35*	

*Subtract \$ 4.50 to calculate overtime premium

** To be allocated at a later date

Note: Any job requiring Hazwopper Certification will pay \$1.00 above job classification wage rate.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 30.60

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: Whenever a holidays falls on Sunday, it will be observed on the following Monday.

REGISTERED APPRENTICES

Wages per hour: 07/01/2024

1000 Hour terms

1st term	\$ 28.08
2nd term	31.90
3rd term	35.72
4th term	39.54

Note: Any job requiring Hazwopper Certification will pay \$1.00 above job classification wage rate.

Supplemental Benefits per hour:

All terms \$ 23.60

8-235

Laborer - Heavy&Highway

05/01/2025

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 8

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Columbia: Only the Townships of Ancram, Claverack, Clermont, Copake, Gallatin, Germantown, Greenport, Hillsdale, Hudson, Livingston, Philmont and Taconic.

WAGES

GROUP I: Blaster, Asphalt Screedman, ACI Certified Flatwork Finisher, Pipe Jacking and Boring Operations, Operator Qualified Dead Condition Pipe Fuser (B Mechanic)

GROUP II: Burner, Drill Operator, Jumbo Driller, Wagon Driller, Air Track Driller, Hydraulic Driller, Self Contained Rotary Drill Operator, Pneumatic Dowel Driller, Concrete Form Aligner, Concrete Form and Curb Form Highway, Concrete Finisher, Asphalt Raker, Pipe Fusion, Wrecking "Bar Person", Operator Qualified Peer Checker.

GROUP III: Asphalt Curb Machine Operator, Jeepers Operator, Pavement Breaker Operator, Power Saw Operator, Jack Hammer Drill, all types Pneumatic Tool and Gasoline Drill, Concrete Saw, Gunning, Railroad, Spike Puller, Sandblasting, Shoring, Pipe Layer, Deck Winches on Scows, Power Buggy and Operator, Power Wheelbarrow Operator, Laser Beam and X-Ray Operator, Pipe Religner, Underpinning, Chain Saw, Tree Cutter, Jack Leg Driller, Hydraulic Rock Splitter, certified, Certified Scaffold Erector, Remote Controlled Demolition Robot, Wrecking "Bar Person" Helper, Utility Per Diem Laborer, Compressed air-lance, Water jet lance

Group IV: General Concrete Laborers - anything pertaining to concrete, aggregate or concrete material handling, Puddlers, Asphalt Worker, Crack Router Operator, Rock Scalars, Vibrator Operator, Bit Grinder, Concrete Grinder, Remote Walk Behind Roller (Wacker, Rammax, etc), Air Tampers and All Tampers not covered by any other classification, Form Pin Pullers, Pumps and their operation, Service of Air Power, Epoxy and Waterproofing Worker, Fine Grade person between forms, Barco Rammer, Guard Rail Installation and Demolition Link Fence, Steel Kings, Wire Mesh, Setting of all Paving Blocks, Brick Paver and Rubber Pavers, Rip Rap and Dry Stone Layer Wall, Stone Work and Pointing, Cement Spray Men, Gabion Basket Assembler, Installation of Noise Barrier, Jersey Barrier and Joints, Pre-Cast Manholes, and Pre-cast and Pre-cast Catch Basins, Crib Retaining Walls

Group V: All Driller Helpers(including Hydraulic Wagon Air Track). Common Laborers, Certified Fire Watch Laborers, All AFL/CIO Trades, Signal Person Truck Spotters, Power Person, Landscaping and Nursery Person, Artificial Turf, Placing Fabric on Landfill, Sign Installer, Temporary and Interim Pavement Line Striping, String Line Automation Grades, Lock Level, Certified Traffic Safety and Control (Pattern)

Group V (A): Flagperson

Group VI: Confined Space Laborer

WAGES per hour 07/01/2024

Group I:	\$ 49.05
Group II:	47.70
Group III:	47.30
Group IV:	46.95
Group V:	46.60
Group V(A):	40.25
Group VI:	48.60

Note: All employees working on a project that requires Hazwopper Certification will receive \$1.00 per hour over job classification rate of pay.

SHIFT WORK

Supplemental Benefits: \$ 40.00*

*Applies for contracting agency mandated irregular shift work

All employees who work an irregular work day that starts after 9:00 AM on a governmental mandated schedule shall be paid an additional 15% per hour.

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2024
Journeyman	\$ 29.30

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

Note: Whenever a holidays falls on Sunday, it will be observed on the following Monday.

REGISTERED APPRENTICES

Wages per hour
1000 hour year terms

1st Term	\$ 28.08
2nd Term	31.90
3rd Term	35.72
4th Term	39.54

Note: All employees working on a project that requires Hazwopper Certification will receive \$1.00 per hour over job classification rate of pay.

Supplemental Benefits per hour:	
All Terms	\$ 23.60

8-235h

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Columbia: Only the Townships of Claverack, Clermont, Greenport, Philmont, Germantown, Livingston, Hillsdale, Taghkanic, Gallatin, Copake, Ancram, City of Hudson.

WAGES

ALL WORK RELATED WITH TOXIC OR ANY ASBESTOS OR HAZARDOUS MATERIAL, BIOREMEDIATION AND PHYTO REMEDIATION(Five feet or more outside of building foundation line)

WAGES:(per hour) 07/01/2024

Class 3 \$ 50.75

* To be allocated at a later date.

SHIFT WORK

SHIFT DIFFERENTIAL: Night work and irregular shift require 20% increase on wages for all Government mandated night and irregular shift work.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 33.38

Shift 39.18

OVERTIME PAY

See (B, E, P, *R, **S, ***T, X) on OVERTIME PAGE

*For Mon-Fri Holidays, Double Benefits to be paid for all hours worked.

**For Saturday Holidays, Two and one-half Benefits for all hours worked.

***For Sunday Holidays, Triple Benefits for all hours worked.

HOLIDAY

Paid: See (5, 6, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 25) on HOLIDAY PAGE

To be eligible for a paid holiday, an employee must work at least two (2) days in the calendar week or payroll week in which the holiday falls.

REGISTERED APPRENTICES

(1000) hour terms at the following wages.

07/01/2024

1st term \$ 28.05

2nd term 32.35

3rd term 36.70

4th term 41.00

Supplemental Benefits per hour:

All Terms Regular \$ 29.23

All Terms Shift Rate 34.18

11-17tox HH

Laborer - Tunnel

05/01/2025

JOB DESCRIPTION Laborer - Tunnel

DISTRICT 11

ENTIRE COUNTIES

Columbia, Dutchess, Greene, Orange, Otsego, Putnam, Rockland, Sullivan, Ulster, Westchester

PARTIAL COUNTIES

Chenango: Townships of Columbus, Sherburne and New Berlin.

Delaware: Townships of Andes, Bovina, Middletown, Roxbury, Franklin, Hamden, Stamford, Delhi, Kortright, Harpersfield, Merideth and Davenport.

WAGES

Class 1: All support laborers/sandhogs working above the shaft or tunnel.

Class 2: All laborers/sandhogs working in the shaft or tunnel.

Class 4: Safety Miners

Class 5: Site work related to Shaft/Tunnel

WAGES: (per hour)

07/01/2024

06/01/2025

Class 1	\$ 57.05	\$ 58.55
Class 2	59.20	60.70
Class 4	65.60	67.10
Class 5	49.90	51.40

Toxic and hazardous waste, lead abatement and asbestos abatement work will be paid an additional \$ 3.00 an hour.

SHIFT WORK

SHIFT DIFFERENTIAL...On all Government mandated irregular shift work:

- Employee shall be paid at time and one half the regular rate Monday through Friday.
- Saturday shall be paid at 1.65 times the regular rate.
- Sunday shall be paid at 2.15 times the regular rate.

SUPPLEMENTAL BENEFITS

Per hour:

Benefit 1	\$ 36.98	\$ 38.23
Benefit 2	55.39	59.99
Benefit 3	74.58	76.73

Benefit 1 applies to straight time hours, paid holidays not worked.

Benefit 2 applies to over 8 hours in a day (M-F), irregular shift work hours worked, and Saturday hours worked.

Benefit 3 applies to Sunday and Holiday hours worked.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

When a recognized Holidays falls on Saturday or Sunday, holidays falling on Saturday shall be recognized or observed on Friday and holidays falling on Sunday shall be recognized or observed on Monday. Employees ordered to work on the Saturday or Sunday of the holiday or on the recognized or the observed Friday or Monday for those holidays falling on Saturday or Sunday shall receive double time the established rate and benefits for the holiday.

REGISTERED APPRENTICES

FOR APPRENTICE RATES, refer to the appropriate Laborer Heavy & Highway wage rate contained in the wage schedule for the County and location where the work is to be performed.

11-17/60/235/754Tun

Lineman Electrician

05/01/2025

JOB DESCRIPTION Lineman Electrician

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

A Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors, assembly of all electrical materials, conduit, pipe, or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

Crane Operators: Operation of any type of crane on line projects.

Crawler Backhoe: Operation of tracked excavator/crawler backhoe with 1/2 yard bucket or larger on line projects.

Digging Machine Operator: All other digging equipment and augering on line projects.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines. Also includes digging of holes for poles, anchors, footer, and foundations for electrical equipment.

Below rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of fiber optic cable where no other construction trades are or have been involved. Includes access matting for line work.

Per hour: 07/01/2024

Group A:
Lineman, Technician \$ 58.90
Crane, Crawler Backhoe 58.90
Welder, Cable Splicer 58.90

Group B:
Digging Mach. Operator 53.01
Tractor Trailer Driver 50.07
Groundman, Truck Driver 47.12
Equipment Mechanic 47.12
Flagman 35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work." Includes access matting for line work.

Group A:
Lineman, Technician \$ 58.90
Crane, Crawler Backhoe 58.90
Cable Splicer 64.79
Certified Welder,
Pipe Type Cable 61.85

Group B:
Digging Mach. Operator 53.01
Tractor Trailer Driver 50.07
Groundman, Truck Driver 47.12
Equipment Mechanic 47.12
Flagman 35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all switching structures, maintenance projects, railroad catenary install/maintenance third rail installation, bonding of rails and pipe type cable and installation of fiber optic cable. Includes access matting for line work.

Group A:
Lineman, Tech, Welder \$ 60.22
Crane, Crawler Backhoe 60.22
Cable Splicer 66.24
Certified Welder,
Pipe Type Cable 63.23

Group B:
Digging Mach. Operator 54.20
Tractor Trailer Driver 51.19
Groundman, Truck Driver 48.18
Equipment Mechanic 48.18
Flagman 36.13

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all overhead and underground transmission line work & fiber optic cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction. Includes access matting for line work.

Group A:
Lineman, Tech, Welder \$ 61.41
Crane, Crawler Backhoe 61.41

Group B:
Digging Mach. Operator 55.27
Tractor Trailer Driver 52.20
Groundman, Truck Driver 49.13
Equipment Mechanic 49.13

Flagman 36.85

Additional \$1.00 per hour for entire crew when a helicopter is used.

SHIFT WORK

THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM to 4:30 PM REGULAR RATE
2ND SHIFT	4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %
3RD SHIFT	12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

SUPPLEMENTAL BENEFITS

Per hour:

07/01/2024

Group A \$ 30.90
*plus 7% of
the hourly
wage paid

Group B \$ 26.90
*plus 7% of
the hourly
wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE. NOTE: Double time for all emergency work designated by the Dept. of Jurisdiction.

WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.
Overtime See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyworker's Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

07/01/2024

\$ 26.90
*plus 7% of
the hourly
wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

6-1249a

Lineman Electrician - Teledata

05/01/2025

JOB DESCRIPTION Lineman Electrician - Teledata

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour:

For outside work, stopping at first point of attachment (demarcation).

07/01/2024

01/01/2025

Cable Splicer	\$ 39.24	\$ 40.81
Installer, Repairman	\$ 37.24	\$ 38.73
Teledata Lineman	\$ 37.24	\$ 38.73
Tech., Equip. Operator	\$ 37.24	\$ 38.73
Groundman	\$ 19.74	\$ 20.53

NOTE: EXCLUDES Teledata work within ten (10) feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

SHIFT WORK

THE FOLLOWING RATES APPLY WHEN THE CONTRACTING AGENCY MANDATES MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION ARE WORKED. WHEN TWO (2) OR THREE (3) SHIFTS ARE WORKED THE FOLLOWING RATES APPLY:

1ST SHIFT	REGULAR RATE
2ND SHIFT	REGULAR RATE PLUS 10%
3RD SHIFT	REGULAR RATE PLUS 15%

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2024	01/01/2025
Journeyworker	\$ 5.70	\$ 5.70
	*plus 3% of the hour wage paid	*plus 3% of the hour wage paid

*The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

Lineman Electrician - Traffic Signal, Lighting	05/01/2025
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JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting

DISTRICT 6

ENTIRE COUNTIES

Columbia, Dutchess, Orange, Putnam, Rockland, Ulster

WAGES

Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors which includes, but is not limited to road loop wires; conduit and plastic or other type pipes that carry conductors, flex cables and connectors, and to oversee the encasement or burial of such conduits or pipes.

Crane Operators: Operation of any type of crane on Traffic Signal/Lighting projects.

Crawler Backhoe: Operation of tracked excavator/crawler backhoe with 1/2 yard bucket or larger on Traffic Signal/Lighting projects.

Digging Machine Operator: All other digging equipment and augering on Traffic Signal/Lighting projects.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

A flagger's duties shall consist of traffic control only.

Per hour:	07/01/2024
Group A:	
Lineman, Technician	\$ 51.82
Crane, Crawler Backhoe	51.82
Certified Welder	54.41

Group B:

Digging Machine	46.64
Tractor Trailer Driver	44.05
Groundman, Truck Driver	41.46
Equipment Mechanic	41.46
Flagman	31.09

Above rates are applicable for installation, testing, operation, maintenance and repair on all Traffic Control (Signal) and Illumination (Lighting) projects, Traffic Monitoring Systems, and Road Weather Information Systems. Includes digging of holes for poles, anchors, footer foundations for electrical equipment; assembly of all electrical materials or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

SHIFT WORK

THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM TO 4:30 PM REGULAR RATE
2ND SHIFT	4:30 PM TO 1:00 AM REGULAR RATE PLUS 17.3%
3RD SHIFT	12:30 AM TO 9:00 AM REGULAR RATE PLUS 31.4%

SUPPLEMENTAL BENEFITS

Per hour worked:

07/01/2024

Group A: \$ 30.90
*plus 7% of
the hourly
wage paid

Group B \$ 26.90
*plus 7% of
the hourly
wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE. NOTE: Double time for all emergency work designated by the Dept. of Jurisdiction.

WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 13, 25) on HOLIDAY PAGE and Governor of NYS Election Day.

Overtime: See (5, 6, 8, 13, 25) on HOLIDAY PAGE and Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyworker's Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

07/01/2024

\$ 26.90
*plus 7% of
the hourly
wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

6-1249aReg8LT

Lineman Electrician - Tree Trimmer

05/01/2025

JOB DESCRIPTION Lineman Electrician - Tree Trimmer

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also includes stump removal near underground energized electrical lines including telephone and CATV lines.

Per hour: 07/01/2024

Tree Trimmer	\$ 31.44
Equipment Operator	27.80
Equipment Mechanic	27.80
Truck Driver	23.15
Groundman	19.07
Flag person	15.00*

*NOTE-Rate effective on 01/01/2025 - \$15.50 due to minimum wage increase.

SUPPLEMENTAL BENEFITS

Per hour:

07/01/2024

Journeyworker	\$ 10.48
	*plus 4.5% of the hourly wage paid

* The 4.5% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 15) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE

NOTE: All paid holidays falling on a Saturday shall be observed on the preceding Friday. All paid holidays falling on a Sunday shall be observed on the following Monday.

6-1249TT

Mason - Building

05/01/2025

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per Hour:

07/01/2024 01/06/2025

Marble Cutters & Setters	\$ 63.92	\$ 64.21
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SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker	\$ 40.05	\$ 40.51
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OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage Per Hour:

750 hour terms at the following wage

1st 2nd 3rd 4th 5th 6th 7th 8th

0- 3000	3001- 3750	3751- 4500	4501- 5250	5251- 6000	6001- 6750	6751- 7500	7500+
07/01/2024 \$ 27.01	\$ 40.52	\$ 43.88	\$ 47.26	\$ 50.64	\$ 54.32	\$ 60.71	\$ 63.92
01/06/2025 \$ 27.24	\$ 40.84	\$ 44.25	\$ 47.63	\$ 51.05	\$ 54.58	\$ 60.99	\$ 64.21

Supplemental Benefits per hour:

1st	2nd	3rd	4th	5th	6th	7th	8th
07/01/2024 \$ 26.42	\$ 29.76	\$ 30.61	\$ 31.44	\$ 32.28	\$ 37.55	\$ 39.23	\$ 40.05
01/06/2025 \$ 26.88	\$ 30.14	\$ 30.95	\$ 31.78	\$32.59	\$38.07	\$ 39.71	\$ 40.51

9-7/4

Mason - Building

05/01/2025

JOB DESCRIPTION Mason - Building

DISTRICT 11

ENTIRE COUNTIES

Dutchess, Sullivan, Ulster

PARTIAL COUNTIES

Orange: Entire county except the Township of Tuxedo.

WAGES

Per hour:

07/01/2024

Bricklayer	\$ 46.45
Cement Mason	46.45
Plasterer/Stone Mason	46.45
Pointer/Caulker	46.45

Additional \$1.00 per hour for power saw work

Additional \$0.50 per hour for swing scaffold or staging work

SHIFT WORK

SHIFT WORK: When shift work or an irregular workday is mandated or required by state, federal, county, local or other governmental agency contracts, the following premiums apply:

Irregular workday requires 15% premium

Second shift an additional 15% of wage plus benefits to be paid

Third shift an additional 25% of wage plus benefits to be paid

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 38.00
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OVERTIME PAY

Cement Mason See (B, E, Q, W) on OVERTIME PAGE.

All Others See (B, E, Q) on OVERTIME PAGE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

Whenever any of the above holidays fall on Sunday, they will be observed on Monday. Whenever any of the above holidays fall on Saturday, they will be observed on Friday.

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	85%

Supplemental Benefits per hour

750 hour terms at the following percentage of journeyman supplements

1st	2nd	3rd	4th	5th	6th	7th	8th
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50%	55%	60%	65%	70%	75%	80%	85%
Apprentices indentured before June 1st, 2011 receive full journeyman benefits							
							11-5du-b

Mason - Building

05/01/2025

JOB DESCRIPTION		Mason - Building	DISTRICT 9	
ENTIRE COUNTIES				
Dutchess, Orange, Putnam, Sullivan, Ulster				
WAGES				
Per hour:		07/01/2024	12/02/2024	
Tile, Marble,& Terrazzo				
Mechanic/Setter		\$ 58.06	\$ 58.23	
SUPPLEMENTAL BENEFITS				
Per Hour:				
Journeyworker:		\$ 25.11*	\$ 25.56*	
		+6.14	+6.15	

* This portion of benefits subject to same premium rate as shown for overtime wages.

OVERTIME PAY	
See (B, E, Q) on OVERTIME PAGE	
Double time rate applies after 10 hours	
HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES									
Wage per hour:									
(Counties of Orange & Putnam)									
750 hour terms at the following wage rate:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1-	751-	1501-	2251-	3001-	3751-	4501-	5251-	6001-	6751-
750	1500	2250	3000	3750	4500	5250	6000	6750	7500
07/01/2024									
\$22.19	\$27.21	\$34.45	\$39.46	\$43.07	\$46.58	50.23	\$55.24	\$57.71	\$62.00
12/02/2024									
\$22.29	\$27.35	\$34.36	\$39.41	\$43.05	\$46.60	\$50.29	\$55.33	\$57.84	\$62.20

Supplemental Benefits per hour:									
(Counties of Orange & Putnam)									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
07/01/2024									
\$12.55*	\$12.55*	\$15.36*	\$15.36*	\$16.36*	\$17.86*	\$18.86*	\$18.86*	\$18.86*	\$24.11*
+ 0.76	+ 0.81	+ 0.91	+ 0.96	+ 1.43	+ 1.48	+ 1.91	+ 1.97	+ 4.57	+ 5.18
12/02/2024									
\$12.70*	\$12.70*	\$15.81*	\$15.81*	\$16.81*	\$18.31*	\$19.31*	\$19.31*	\$19.31*	\$24.56*
+ 0.76	+ 0.81	+ 0.91	+ 0.96	+ 1.43	+ 1.48	+ 1.91	+ 1.97	+ 4.57	+ 5.18

Wages per hour:									
(Counties of Dutchess, Sullivan, Ulster)									
750 hour terms at the following wage rate:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1-	751-	1501-	2251-	3001-	3751-	4501-	5251-	6001-	6751-
750	1500	2250	3000	3750	4500	5250	6000	6750	7500

07/01/2024									
\$22.06	\$26.44	\$28.50	\$32.88	\$35.84	\$39.71	\$43.21	\$46.59	\$47.95	\$51.44
12/02/2024									
\$22.06	\$26.44	\$28.50	\$32.88	\$35.84	\$39.71	\$43.21	\$46.59	\$47.95	\$51.94

Supplemental Benefits per hour:
(Counties of Dutchess, Sullivan, Ulster)

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
07/01/2024									
\$12.55*	\$12.55*	\$14.86*	\$14.86*	\$15.86*	\$16.36*	\$16.86*	\$17.86*	\$17.86*	\$22.61*
+ 0.76	+ 0.80	+ 0.85	+ 0.89	+ 1.35	+ 1.40	+ 1.82	+ 1.87	+ 4.93	+ 5.02
12/02/2024									
\$12.55*	\$12.55*	\$14.86*	\$14.86*	\$15.86*	\$16.36*	\$16.86*	\$17.86*	\$17.86*	\$22.61*
+ 0.76	+ 0.80	+ 0.85	+ 0.89	+ 1.35	+ 1.40	+ 1.82	+ 1.87	+ 4.93	+ 5.02

* This portion of benefits subject to same premium rate as shown for overtime wages.

9-7/52B

Mason - Building	05/01/2025
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JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Dutchess, Orange, Putnam, Sullivan, Ulster

WAGES

Per hour:	07/01/2024	12/02/2024
Building		
Tile, Marble, &		
Terrazzo Finisher	\$ 47.74	\$ 47.82

*To be allocated at a later date.

SUPPLEMENTAL BENEFITS

Journeyworker:

Per Hour	\$ 22.11*	\$ 22.56*
	+ 6.01	+ 6.02

*This portion of benefits subject to same premium rate as shown for overtime wages

OVERTIME PAY

See (A, *E, Q) on OVERTIME PAGE

Double time rate applies after 10 hours on Saturdays.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

9-7/88B-tf

Mason - Heavy&Highway	05/01/2025
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JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Dutchess, Sullivan, Ulster

PARTIAL COUNTIES

Orange: Entire county except the Township of Tuxedo.

WAGES

Per hour:	07/01/2024
Bricklayer	\$ 46.95
Cement Mason	46.95
Marble/Stone Mason	46.95
Plasterer	46.95
Pointer/Caulker	46.95

Additional \$1.00 per hour for power saw work
Additional \$0.50 per hour for swing scaffold or staging work

SHIFT WORK

When shift work or an irregular workday is mandated or required by state, federal, county, local or other governmental contracts, the following rates apply:

Irregular workday requires 15% premium
Second shift an additional 15% of wage plus benefits to be paid
Third shift an additional 25% of wage plus benefits to be paid

SUPPLEMENTAL BENEFITS

Per hour:
Journeyman \$ 38.00

OVERTIME PAY

Cement Mason See (B, E, Q, W)
All Others See (B, E, Q)

HOLIDAY

Paid: See (5, 6, 16, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

- Whenever any of the above holidays fall on Sunday, they will be observed on Monday. Whenever any of the above holidays fall on Saturday, they will be observed on Friday.
- Supplemental Benefits are not paid for paid Holiday
- If Holiday is worked, Supplemental Benefits are paid for hours worked.
- Whenever an Employee works within three (3) calendar days before a holiday, the Employee shall be paid for the Holiday.

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	85%

Supplemental Benefits per hour

750 hour terms at the following percentage of journeyman supplements

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	85%

Apprentices indentured before June 1st, 2011 receive full journeyman benefits

11-5du-H/H

Operating Engineer - Building

05/01/2025

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Putnam, Queens, Richmond, Westchester

PARTIAL COUNTIES

Dutchess: that part of Dutchess County lying south of the North City Line of the City of Poughkeepsie.

WAGES

NOTE: Construction surveying

Party Chief--One who directs a survey party

Instrument Man--One who runs the instrument and assists Party Chief.

Rodman--One who holds the rod and assists the Survey Crew

Wages:(Per Hour) 07/01/2024

Building Construction:

Party Chief	\$ 79.99
Instrument Man	60.36
Rodman	40.45

Steel Erection:

Party Chief	83.13
Instrument Man	64.21

Rodman 44.33

Heavy Construction-NYC counties only:
(Foundation, Excavation.)

Party Chief 88.06
Instrument man 65.66
Rodman 55.70

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2024

Building Construction \$ 28.63* +\$ 7.65

Steel Erection 29.23* + 7.65

Heavy Construction 30.04* + 7.64

* This portion subject to SAME premium as wages

Non-Worked Holiday Supplemental Benefit:
21.83

OVERTIME PAY

See (A, B, E, Q) on OVERTIME PAGE
Code "A" applies to Building Construction and has double the rate after 7 hours on Saturdays.
Code "B" applies to Heavy Construction and Steel Erection and had double the rate after 8 hours on Saturdays.

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

9-15Db

Operating Engineer - Building

05/01/2025

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 8

ENTIRE COUNTIES

Putnam, Westchester

PARTIAL COUNTIES

Dutchess: All the counties of Westchester and Putnam and the southern part of Dutchess County defined by the northern boundary line of the City of Poughkeepsie, then due east to Route 115, then north along Route 115 to Bedell Road, then east along Bedell Road to Van Wagner Road, then north along Van Wagner Road to Bower Road, then east along Bower Road to Route 44 and along Route 44 east to Route 343, then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to the border line of the State of Connecticut and bordered on the west by the middle of the Hudson River.

WAGES

GROUP I:

Cranes (All Types up to 49 tons), Boom Trucks, Cherry Pickers (All Types), Clamshell Crane, Derrick (Stone and Steel), Dragline, Franki Pile Rig or similar, High Lift (Lull or similar) with crane attachment and winch used for hoisting or lifting, Hydraulic Cranes, Pile Drivers, Potain and similar.

Cranes (All types 50-99 tons), Drill Rig Casa Grande (CAT or similar), Franki Pile Rig or similar, Hydraulic Cranes (All types including Crawler Cranes- No specific boom length).

Cranes (All types 100 tons and over), All Tower Cranes, All Climbing Cranes irrespective of manufacturer and regardless of how the same is rigged, Franki Pile Rig or similar, Conventional Cranes (All types including Crawler Cranes-No specific boom length), Hydraulic Cranes.

GROUP I-A: Barber Green Loader-Euclid Loader, Bulldozer, Carrier-Trailer Horse, Concrete Cleaning Decontamination Machine Operator, Concrete-Portable Hoist, Conway or Similar Mucking Machines, Elevator & Cage, Excavators all types, Front End Loaders, Gradall, Shovel, Backhoe, etc.(Crawler or Truck), Heavy Equipment Robotics Operator/Mechanic, Hoist Engineer-Material, Hoist Portable Mobile Unit, Hoist(Single, Double or Triple Drum), Horizontal Directional Drill Locator, Horizontal Directional Drill Operator and Jersey Spreader, Letourneau or Tournapull(Scrapers over 20 yards Struck), Lift Slab Console, etc., Lull HiLift or Similar, Master Environmental Maintenance Mechanics, Mucking Machines Operator/Mechanic or Similar Type, Overhead Crane, Pavement Breaker(Air Ram), Paver(Concrete), Post Hole Digger, Power House Plant, Road Boring Machine, Road Mix Machine, Ross Carrier and Similar Machines, Rubber tire double end backhoes and similar machines, Scoopmobile Tractor-Shovel Over 1.5 yards, Shovel (Tunnels), Spreader (Asphalt) Telephie(Cableway), Tractor Type Demolition Equipment, Trenching Machines-Vermeer Concrete Saw Trencher and Similar, Ultra High Pressure Waterjet Cutting Tool System, Vacuum Blasting Machine operator/mechanic, Winch Truck A Frame.

GROUP I-B: Compressor (Steel Erection), Mechanic (Outside All Types), Negative Air Machine (Asbestos Removal), Push Button (Buzz Box) Elevator.

GROUP II: Compactor Self-Propelled, Concrete Pump, Crane Operator in Training (Over 100 Tons), Grader, Machines Pulling Sheep's Foot Roller, Roller (4 ton and over), Scrapers (20 yards Struck and Under), Vibratory Rollers, Welder.

GROUP III-A: Asphalt Plant, Concrete Mixing Plants, Forklift (All power sources), Joy Drill or similar, Tractor Drilling Machine, Loader (1 1/2 yards and under), Portable Asphalt Plant, Portable Batch Plant, Portable Crusher, Skid Steer (Bobcat or similar), Stone Crusher, Well Drilling Machine, Well Point System.

GROUP III-B: Compressor Over 125 cu. Feet, Conveyor Belt Machine regardless of size, Compressor Plant, Ladder Hoist, Stud Machine.

GROUP IV-A: Batch Plant, Concrete Breaker, Concrete Spreader, Curb Cutter Machine, Finishing Machine-Concrete, Fine Grading Machine, Hepa Vac Clean Air Machine, Material Hopper(sand, stone, cement), Mulching Grass Spreader, Pump Gypsum etc, Pump-Plaster-Grout-Fireproofing. Roller(Under 4 Ton),Spreading and Fine Grading Machine, Steel Cutting Machine, Siphon Pump, Tar Joint Machine, Television Cameras for Water, Sewer, Gas etc. Turbo Jet Burner or Similar Equipment, Vibrator (1 to 5).

GROUP IV-B: Compressor (all types), Heater (All Types), Fire Watchman, Lighting Unit (Portable & Generator) Pump, Pump Station(Water, Sewer, Portable, Temporary), Welding Machine (Steel Erection & Excavation).

GROUP V: Mechanics Helper, Motorized Roller (walk behind), Stock Attendant, Welder's Helper, Maintenance Engineer Crane(75 ton and over).

Group VI-A: Welder Certified

GROUP VI-B: Utility Man, Warehouse Man.

WAGES: (per hour)

07/01/2024

GROUP I	
Cranes- up to 49 tons	\$ 67.43
Cranes- 50 tons to 99 tons	69.77
Cranes- 100 tons and over	79.64
GROUP I-A	59.04
GROUP I-B	54.41
GROUP II	56.97
GROUP III-A	54.88
GROUP III-B	52.25
GROUP IV-A	54.33
GROUP IV-B	45.94
GROUP V	49.53
Group VI-A	57.96
GROUP VI-B	
Utility Man	47.00
Warehouse Man	49.26

An additional 20% to wage when required to wear protective equipment on hazardous/toxic waste projects.

Engineers operating cranes with booms 100 feet but less than 149 feet in length will be paid an additional \$2.00 per hour.

Engineers operating cranes with booms 149 feet or over in length will be paid an additional \$3.00 per hour.

Loader operators over 5 cubic yard capacity additional .50 per hour.

Shovel operators over 4 cubic yard capacity additional \$1.00 per hour.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$ 32.32

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 15, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 25, 26) on HOLIDAY PAGE

8-137B

Operating Engineer - Building

05/01/2025

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 1

ENTIRE COUNTIES

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedell Road then east along Bedell Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

WAGES

NOTE:

-- In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

-- If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASS A1*: All cranes that require A NYS crane license, tower cranes**(including self erecting), hydraulic cranes, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom trucks, cherry pickers, overhead cranes (gantry or saddle type), truck cranes

CLASS A:

Shovel, Excavators 18,001 lbs. and above(including rubber tire full swing), Gradalls, power road grader, all CMI equipment, front-end rubber tire loader, tractor-mounted drill (quarry master), mucking machine, concrete central mix plant, concrete pump, belcrete system, automated asphalt concrete plant, and tractor road paver, boom trucks 5 tons and under, maintenance engineer, self-contained crawler drill-hydraulic rock drill, Profiler/Milling machine.

CLASS B:

Excavators 18,000 lbs. and under, Backhoes (rubber tired backhoe/loader combination), bulldozer, pushcat, tractor, traxcavator, scraper, LeTourneau grader, form fine grader, self-propelled soil compactor (fill roller), asphalt roller, blacktop spreader, power brooms, sweepers, trenching machine, Barber Green loader, side booms, hydro hammer, concrete spreader, concrete finishing machine, one drum hoist, power hoisting (single drum), hoist two drum or more, three drum engine, power hoisting (two drum and over), two drum and swinging engine, three drum swinging engine, hod hoist, A-L frame winches, core and well drillers (one drum), post hole digger, model CHB Vibro-Tamp or similar machine, batch bin and plant operator, dinky locomotive, skid steer loader, track excavator 5/8 cubic yard or smaller, front end rubber tired loader under four cubic yards, vacuum machine (mounted or towed).

CLASS C:

Fork lift, high lift, all terrain fork lift: or similar, oiler, fireman and heavy-duty greaser, boilers and steam generators, pump, vibrator, motor mixer, air compressor, dust collector, welding machine, well point, mechanical heater, generators, temporary light plants, electric submersible pumps 4" and over, murphy type diesel generator, conveyor, elevators, concrete mixer, beltcrete power pack (belcrete system), seeding, and mulching machines, pumps, rotating telehandler (that does not require NYS crane license).

WAGES per hour

	07/01/2024	07/01/2025
Class A1*	\$ 53.11	\$ 55.42
Class A	52.62	54.93
Class B	51.60	53.91
Class C	48.70	51.01

(*) TONNAGE RATING PREMIUMS:

Note: Additional value subject to same premiums as shown for OT

All cranes 1000 tons and over, A1 rate plus \$7.00

All cranes 800-999 tons, A1 rate plus \$6.00

All cranes 600-799 tons, A1 rate plus \$5.00

All cranes 400-599 tons, A1 rate plus \$4.00

All cranes 200-399 tons, A1 rate plus \$3.00

All cranes 111-199 tons, A1 rate plus \$2.25

All cranes 110 tons and under, A1 rate only

(**)Additional \$0.50 per hr on A1 rate for Tower Cranes (no tonnage premiums apply)

Additional \$2.50 per hr over B rate for Nuclear Leader work.

Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

SUPPLEMENTAL BENEFITS

Per hour

	07/01/2024	07/01/2025
Journeyworker	\$ 32.40	\$ 33.50

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: All hours worked on designated holidays shall be paid a double the hourly rate of pay plus 8 hours of straight time.

NOTE: If a holiday falls on Sunday, it will be celebrated on Monday. If the holiday falls on Saturday, it will be celebrated on Friday.

REGISTERED APPRENTICES

Wages per hour

1000 hours terms at the following percentage of Journeyworker's wage Class B

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour worked

	07/01/2024	07/01/2025
All terms	\$ 27.70	\$ 28.80

1-158 Alb

Operating Engineer - Building

05/01/2025

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 1

ENTIRE COUNTIES

Broome, Chenango, Tioga

PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedell Road then east along Bedell Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

WAGES

NOTE:

--In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

--If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASS A1*: All cranes that require NYS crane license, tower cranes**(including self erecting), hydraulic cranes, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom trucks, cherry pickers, overhead cranes (gantry or saddle type), truck cranes

CLASS A:

Shovel, Excavators 18,001 lbs. and above(including rubber tire full swing), Gradalls, power road grader, all CMI equipment, front-end rubber tire loader, tractor-mounted drill (quarry master), mucking machine, concrete central mix plant, concrete pump, belcrete system, automated asphalt concrete plant, and tractor road paver, boom trucks 5 tons and under, maintenance engineer, self-contained crawler drill-hydraulic rock drill, Profiler/Milling machine.

CLASS B:

Excavators 18,000 lbs. and under, Backhoes (rubber tired backhoe/loader combination), bulldozer, pushcat, tractor, traxcavator, scraper, LeTourneau grader, form fine grader, self-propelled soil compactor (fill roller), asphalt roller, blacktop spreader, power brooms, sweepers, trenching machine, Barber Green loader, side booms, hydro hammer, concrete spreader, concrete finishing machine, one drum hoist, power hoisting (single drum), hoist two drum or more, three drum engine, power hoisting (two drum and over), two drum and swinging engine, three drum swinging engine, hod hoist, A-L frame winches, core and well drillers (one drum), post hole digger, model CHB Vibro-Tamp or similar machine, batch bin and plant operator, dinky locomotive, skid steer loader, track excavator 5/8 cubic yard or smaller, front end rubber tired loader under four cubic yards, vacuum machine (mounted or towed).

CLASS C:

Fork lift, high lift, all terrain fork lift: or similar, oiler, fireman and heavy-duty greaser, boilers and steam generators, pump, vibrator, motor mixer, air compressor, dust collector, welding machine, well point, mechanical heater, generators, temporary light plants, electric submersible pumps 4" and over, murphy type diesel generator, conveyor, elevators, concrete mixer, beltcrete power pack (belcrete system), seeding, and mulching machines, pumps, rotating telehandler (that does not require NYS crane license).

WAGES per hour

	07/01/2024	07/01/2025
Class A1*	\$ 49.65	\$ 51.71
Class A	47.25	49.31
Class B	46.79	48.85
Class C	44.48	46.54

(*) TONNAGE RATING PREMIUMS:

Note: Additional value subject to same premiums as shown for OT

All cranes 1000 tons and over, A1 rate plus \$7.00

All cranes 800-999 tons, A1 rate plus \$6.00

All cranes 600-799 tons, A1 rate plus \$5.00
All cranes 400-599 tons, A1 rate plus \$4.00
All cranes 200-399 tons, A1 rate plus \$3.00
All cranes 111-199 tons, A1 rate plus \$2.25
All cranes 110 tons and under, A1 rate only

(**)Additional \$0.50 per hr over A1 rate for Tower Cranes (no tonnage premium applies)

Additional \$2.50 per hr over B rate for Nuclear Leader work.

Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

SUPPLEMENTAL BENEFITS

Per hour

	07/01/2024	07/01/2025
Journeyworker	\$ 31.85	\$ 32.95

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: All hours worked on designated holidays shall be paid a double the hourly rate of pay plus 8 hours of straight time.

NOTE: If a holiday falls on Sunday, it will be celebrated on Monday. If the holiday falls on Saturday, it will be celebrated on Friday.

REGISTERED APPRENTICES

Wages per hour

1000 hours terms at the following percentage of Journeyworker's wage Class B:

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour worked

	07/01/2024	07/01/2025
All terms	\$ 27.25	\$ 28.35

1-158 BCT

Operating Engineer - Heavy&Highway

05/01/2025

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 8

ENTIRE COUNTIES

Putnam, Westchester

PARTIAL COUNTIES

Dutchess: All the counties of Westchester and Putnam and the southern part of Dutchess County defined by the northern boundary line of the City of Poughkeepsie, then due east to Route 115, then north along Route 115 to Bedell Road, then east along Bedell Road to Van Wagner Road, then north along Van Wagner Road to Bower Road, then east along Bower Road to Route 44 and along Route 44 east to Route 343, then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to the border line of the State of Connecticut and bordered on the west by the middle of the Hudson River.

WAGES

GROUP I: Boom Truck, Cherry Picker, Clamshell, Crane, (Crawler, Truck),

Dragline, Drill Rig (Casa Grande, Cat, or Similar), Floating Crane (Crane on Barges) under 100 tons, Gin Pole, Hoist Engineer-Concrete (Crane-Derrick-Mine Hoist), Knuckle Boom Crane, Rough Terrain Crane.

GROUP I-A: Auger (Truck or Truck Mounted), Boat Captain, Bulldozer-All Sizes, Central Mix Plant Operator, Chipper (all types), Close Circuit T.V., Combination Loader/Backhoe, Compactor with Blade, Concrete Finishing Machine, Gradall, Grader (Motor Grader), Elevator & Cage (Materials or Passenger), Excavator (and all attachments), Front End Loaders (1 1/2 yards and over), High Lift Lull and similar, Hoist (Single, Double, Triple Drum), Hoist Portable Mobile Unit, Hoist Engineer (Material), Jack and Bore Machine, Log Skidders, Mill Machines, Mucking Machines, Overhead Crane, Paver (concrete), Post Pounder (of any type), Push Cats, Road Reclaimer, Robot Hammer (Brokk or similar), Robotic Equipment (Scope of Engineer Schedule), Ross Carrier and similar, Scrapers (20 yard struck and over), Side Boom, Slip Form Machine, Spreader (Asphalt), Trenching Machines (Telephies-Vermeer Concrete Saw), Tractor Type Demolition Equipment, Vacuum Truck. Vibratory Roller(Riding) or Roller used in mainline paving operations.

GROUP I-B: Asphalt Mobile Conveyor/Transfer Machine, Road Paver (Asphalt).

GROUP II-A: Ballast Regulators, Compactor Self Propelled, Fusion Machine, Rail Anchor Machines, Roller (4 ton and over), Scrapers (20 yard struck and under).

GROUP II-B: Mechanic (Outside) All Types, Shop Mechanic.

GROUP III: Air Tractor Drill, Asphalt Plant, Batch Plant, Boiler (High Pressure), Concrete Breaker (Track or Rubber Tire), Concrete Pump, Concrete Spreader, Excavator Drill, Farm Tractor, Forklift (all types), Gas Tapping (Live), Hydroseeder, Loader (1 1/2 yards and under), Locomotive (all sizes), Machine Pulling Sheeps Foot Roller, Portable Asphalt Plant, Portable Batch Plant, Portable Crusher (Apprentice), Powerhouse Plant, Roller (under 4 ton), Sheer Excavator, Skid Steer/Bobcat, Stone Crusher, Sweeper (with seat), Well Drilling Machine.

GROUP IV: Service Person (Grease Truck), Deckhand.

GROUP IV-B: Conveyor Belt Machine (Truck Mounted), Heater (all types), Lighting Unit (Portable), Maintenance Engineer (For Crane Only), Mechanics Helper, Pump (Fireproofing), Pumps-Pump Station/Water/Sewer/Gypsum/Plaster, etc., Pump Truck (Sewer Jet or Similar), Welders Helper, Welding Machine (Steel Erection), Well Point System.

GROUP V: All Tower Cranes-All Climbing Cranes and all cranes of 100-ton capacity or greater (3900 Manitowac or similar) irrespective of manufacturer and regardless of how the same is rigged, Hoist Engineer (Steel), Engineer-Pile Driver, Jersey Spreader, Pavement Breaker/Post Hole Digger.

WAGES: Per hour: 07/01/2024

Group I	\$ 68.63
Group I-A	60.42
Group I-B	63.70
Group II-A	57.84
Group II-B	59.67
Group III	56.81
Group IV	51.57
Group IV-B	44.19
Group V	
Engineer All Tower, Climbing and	
Cranes of 100 Tons	77.82
Hoist Engineer(Steel)	70.41
Engineer(Pile Driver)	75.13
Jersey Spreader, Pavement Breaker (Air	
Ram)Post Hole Digger	59.19

Engineers operating cranes with booms 100 feet but less than 149 feet in length will be paid an additional \$2.00 per hour over the rate listed in the Wage Schedule. Engineers operating cranes with booms 149 feet or over in length will be paid an additional \$3.00 per hour over the rate listed in the Wage Schedule. Loader and Excavator Operators: over 5 cubic yards capacity \$0.50 per hour over the rate listed in the Wage Schedule. Shovel Operators: over 4 cubic yards capacity \$1.00 per hour over the rate listed in the Wage Schedule.

SHIFT WORK

A 15% premium on all hours paid, including overtime hours for 2nd, 3rd shifts
on all government mandated off-shift work

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker:	\$ 34.85 up to 40 Hours
	After 40 hours \$ 25.55* PLUS \$ 1.25 on all hours worked

*This amount is subject to premium

OVERTIME PAY

See (B, E, P, *R, **U) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 15, 25, 26) on HOLIDAY PAGE

Overtime..... See (5, 6, 8, 15, 25, 26) on OVERTIME PAGE

* For Holiday codes 8,15,25,26 code R applies

** For Holiday Codes 5 & 6 code U applies

Note: If employees are required to work on Easter Sunday they shall be paid at the rate of triple time.

REGISTERED APPRENTICES

(1)year terms at the following rate.

1st term	\$ 30.21
2nd term	36.25

3rd term 42.30
4th term 48.34
Supplemental Benefits per hour:

26.85

8-137HH

Operating Engineer - Heavy&Highway

05/01/2025

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 1

ENTIRE COUNTIES

Albany, Broome, Chenango, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Tioga, Warren, Washington

PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedell Road then east along Bedell Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

WAGES

NOTE:

--- In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

--- If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASSIFICATION A1*: All Cranes that require a NYS Crane License; tower cranes(including self erecting)**; hydraulic cranes, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom trucks, cherry pickers, overhead cranes (gantry or saddle type), truck cranes

CLASSIFICATION A:

Asphalt Curb Machine (Self Propelled, Slipform), Asphalt Paver, Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted, Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CMI Type), Blacktop Plant (Automated), Blacktop Roller, Boom truck, GPS operated Bull Dozer, Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine (Self Propelled, Slipform), Concrete Pump, Crane, Cherry Picker, Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All Purpose Hydraulically Operated) (Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole, PB-4 and similar type, Power Grader, Profiler/Milling Machine (over 105 H.P.), Quad 9, Quarry Master (or equivalent), Rotating Telehandler, Scraper (Including Challenger Type), Shovel, Side Boom, Slip Form Paver (If a second man is needed, he shall be an Oiler), Tractor Drawn BeltType Loader, Truck or Trailer Mounted Log Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

CLASSIFICATION B:

Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (Non-Automated), Blast or Rotary Drill (Truck or Tractor Mounted), Brokk, Boring Machine, Cage Hoist, Central Mix Plant [(Non-Automated) and All Concrete Batching Plants], Concrete Paver (Over 16S), Crawler Drill (Self-contained), Crusher, Diesel Power Unit, Drill Rigs, Tractor Mounted, Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, Hi Pressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders (If Employer requires another man to clean the screen or to maintain the equipment, he shall be an Oiler), L.C.M. Work Boat Operator, Locomotive, Material handling knuckle boom, Mini Excavator (under 18,000 lbs.), Mixer (for stabilized base self-propelled), Monorail Machine, Plant Engineer, Prentice Loader, Profiler/Milling Machine (105 H.P. and under), Pug Mill, Pump Crete, Ready Mix Concrete Plant, Refrigeration Equipment (for soil stabilization), Road Widener, Roller (all above subgrade), Sea Mule, Self-contained Ride-on Rock Drill(Excluding Air-Track Type Drill), Skidder, Tractor with Dozer and/or Pusher, Trencher, Tugger Hoist, Vacuum machine (mounted or towed), Vermeer saw (ride on, any size or type), Welder, Winch, Winch Cat

CLASSIFICATION C:

A Frame Winch Hoist on Truck, Articulated Heavy Hauler, Aggregate Plant, Asphalt or Concrete Grooving Machine (ride on), Ballast Regulator(Ride-on), Boiler (used in conjunction with production), Bituminous Heater (self-propelled), Boat (powered), Cement and Bin Operator, Concrete Pavement Spreader and Finisher Concrete Paver or Mixer (16' and under), Concrete Saw (self-propelled), Conveyor, Deck Hand, Directional Drill Machine Locator, Drill (Core and Well), Farm Tractor with accessories, Fine Grade Machine, Fireman, Fork Lift, Form Tamper, Grout Pump, Gunit Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker (ride-on), Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heaterman, Power Sweeper, Revinius Widener, Roller (Grade and Fill), Scarifier (ride-on), Shell Winder, Skid steer loader (Bobcat or similar; including all attachments), Span-Saw (ride-on), Steam Cleaner, Tamper (ride-on), Tie Extractor (ride-on), Tie Handler (ride-on), Tie Inserter (ride-on), Tie Spacer (ride-on), Tire Repair, Track Liner (ride-on), Tractor, Tractor (with towed accessories), Vibratory Compactor, Vibro Tamp, Well Point, and the following hands-off equipment: Compressors, Dust Collectors, Generators, Pumps, Welding Machines, Light Plants and Heaters

WAGES per hour

07/01/2024

07/01/2025

Class A1*	\$ 57.90	\$ 60.30
Class A	54.90	57.30
Class B	53.99	56.39
Class C	51.42	53.82

(*) TONNAGE RATING PREMIUMS:

Cranes over 1000 tons, A1 rate plus \$7.00

Cranes from 800-999 tons, A1 rate plus \$6.00

Cranes from 600-799 tons, A1 rate plus \$5.00

Cranes from 400-599 tons, A1 rate plus \$4.00

Cranes from 200-399 tons, A1 rate plus \$3.00

Cranes from 111-199 tons, A1 rate plus \$2.00

Cranes from 65-110 tons, A1 rate plus \$1.50

Cranes from 0-64 Tons, A1 rate only

NOTE: Additional value subject to same premiums as shown for OT

(**) Tower Cranes, A1 rate plus \$3.00 (no tonnage premiums apply)

-- Cranes in Luffer Configuration, A1 rate plus \$5.00

-- Cranes with external ballast (tray or wagon), A1 rate plus \$5.00

NOTE: Additional value subject to same premiums as shown for OT

Additional \$2.50 per hr. for hazardous waste removal work on State and/or Federally designated waste site which require employees to wear Level C or above forms of personal protection.

SHIFT WORK

Additional \$2.50 per hour for All Employees who work a single irregular work shift, of at least 5 consecutive days, starting from 5:00 PM to 1:00 AM that is mandated by the Contracting Agency.

SUPPLEMENTAL BENEFITS

Per hour

	07/01/2024	07/01/2025
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Journeyworker	\$ 32.60	\$ 33.70
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OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If the holiday falls on Sunday, it will be observed on Monday. If the observed Monday Holiday is worked, pay shall be double time plus Holiday pay for time worked. If the Holiday falls on a Saturday and is worked pay shall be double time plus Holiday pay for time worked. If the Holiday falls on a Saturday employer can choose to observe the paid holiday Saturday or give Friday off with holiday pay.

REGISTERED APPRENTICES

Wages per hour

1000 hours terms at the following percentage of Journeyworker's wage Class B

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour worked

	07/01/2024	07/01/2025
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All Terms	\$ 27.45	\$ 28.30
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1-158H/H Alb

Operating Engineer - Heavy&Highway

05/01/2025

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

Putnam, Westchester

PARTIAL COUNTIES

Dutchess: South of the North city line of Poughkeepsie

WAGES

Party Chief - One who directs a survey party

Instrument Man - One who runs the instrument and assists Party Chief

Rodman - One who holds the rod and in general, assists the Survey Crew

Categories cover GPS & Underground Surveying

Per Hour:	07/01/2024
Party Chief	\$ 84.94
Instrument Man	63.15
Rodman	53.43
SUPPLEMENTAL BENEFITS	
Per Hour:	07/01/2024
All Categories	
Straight Time:	\$ 30.04* + \$7.64
Premium:	
Time & 1/2	\$ 45.06* + \$7.64
Double Time	\$ 60.08* + \$7.64
Non-Worked Holiday Supplemental Benefits:	\$ 21.83

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE

* Doubletime paid on all hours in excess of 8 hours on Saturday

HOLIDAY

Paid: See (5, 6, 7, 11, 12) on HOLIDAY PAGE

Overtime: See (5, 6, 7, 11, 12) on HOLIDAY PAGE

9-15Dh

Operating Engineer - Heavy&Highway - Tunnel

05/01/2025

JOB DESCRIPTION Operating Engineer - Heavy&Highway - Tunnel

DISTRICT 8

ENTIRE COUNTIES

Putnam, Westchester

PARTIAL COUNTIES

Dutchess: All the counties of Westchester and Putnam and the southern part of Dutchess County defined by the northern boundary line of the City of Poughkeepsie, then due east to Route 115, then north along Route 115 to Bedell Road, then east along Bedell Road to Van Wagner Road, then north along Van Wagner Road to Bower Road, then east along Bower Road to Route 44 and along Route 44 east to Route 343, then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to the border line of the State of Connecticut and bordered on the west by the middle of the Hudson River.

WAGES

GROUP I: Boom Truck, Cherry Picker, Clamshell, Crane(Crawler, Truck), Dragline, Drill Rig Casa Grande(Cat or Similar), Floating Crane(Crane on Barge-Under 100 Tons), Hoist Engineer(Concrete/Crane-Derrick-Mine Hoist), Knuckle Boom Crane, Rough Terrain Crane.

GROUP I-A: Auger(Truck or Truck Mounted), Boat Captain, Bull Dozer-all sizes, Central Mix Plant Operator, Chipper-all types, Close Circuit T.V., Combination Loader/Backhoe, Compactor with Blade, Concrete Finishing Machine, Gradall, Grader(Motor Grader), Elevator & Cage(Materials or Passengers), Excavator(and all attachments), Front End Loaders(1 1/2 yards and over), High Lift Lull, Hoist(Single, Double, Triple Drum), Hoist Portable Mobile Unit, Hoist Engineer(Material), Jack and Bore Machine, Log Skidder, Milling Machine, Moveable Concrete Barrier Transfer & Transport Vehicle, Mucking Machines. Overhead Crane, Paver(Concrete), Post Pounder of any type, Push Cats, Road Reclaimer, Robot Hammer(Brokk or similar), Robotic Equipment(Scope of Engineer Schedule), Ross Carrier and similar machines, Scrapers(20 yards struck and over), Side Boom, Slip Form Machine, Spreader(Asphalt), Trenching Machines, Telephies-Vermeer Concrete Saw, Tractor type demolition equipment, Vacuum Truck, Vibratory Roller (Riding) used in mainline paving operations.

GROUP I-B: Asphalt Mobile Conveyor/Transfer Machine, Road Paver(Asphalt).

GROUP II-A: Ballast Regulators, Compactor(Self-propelled), Fusion Machine, Rail Anchor Machines, Roller(4 ton and over), Scrapers(20 yard struck and under).

GROUP II-B: Mechanic(outside)all types, Shop Mechanic.

GROUP III: Air Tractor Drill, Asphalt Plant, Batch Plant, Boiler(High Pressure), Concrete Breaker(Track or Rubber Tire), Concrete Pump, Concrete Spreader, Excavator Drill, Farm Tractor, Forklift(all types of power), Gas Tapping(Live), Hydroseeder, Loader(1 1/2 yards and under), Locomotive(all sizes), Machine Pulling Sheeps Foot Roller, Portable Asphalt Plant, Portable Batch Plant, Portable Crusher(Apprentice), Powerhouse Plant, Roller(under 4 ton), Sheer Excavator, Skidsteer/Bobcat, Stone Crusher, Sweeper(with seat), Well Drilling Machine.

GROUP IV-A: Service Person(Grease Truck), Deckhand.

GROUP IV-B: Conveyor Belt Machine(Truck Mounted), Heater(all types), Lighting Unit(Portable), Maintenance Engineer(for Crane only), Mechanics Helper, Pump(Fireproofing), Pumps-Pump Station/Water/Sewer/Gypsum/Plaster, etc., Pump Truck(Sewer Jet or similar), Welding Machine(Steel Erection), Welders Helper.

GROUP V-A: Engineer(all Tower Cranes, all Climbing Cranes & all Cranes of 100 ton capacity or greater),Hoist Engineer(Steel-Sub Structure), Engineer-Pile Driver, Jersey-Spreader, Pavement breaker, Post Hole Digger

WAGES: (per hour)

07/01/2024

GROUP I	\$ 68.63
GROUP I-A	60.42
GROUP I-B	63.70
GROUP II-A	57.84
GROUP II-B	59.67
GROUP III	56.81
GROUP IV-A	51.57
GROUP IV-B	44.19
GROUP V-A	
Engineer-Cranes	77.82
Engineer-Pile Driver	75.13
Hoist Engineer	70.41
Jersey Spreader/Post Hole Digger	59.19

An additional 20% to wage when required to wear protective equipment on hazardous/toxic waste projects. Operators required to use two buckets pouring concrete on other than road pavement shall receive \$0.50 per hour over scale. Engineers operating cranes with booms 100 feet but less than 149 feet in length will be paid an additional \$2.00 per hour. Engineers operating cranes with booms 149 feet or over in length will be paid an additional \$3.00 per hour. Operators of shovels with a capacity over (4) cubic yards shall be paid an additional \$1.00 per hour. Operators of loaders with a capacity over (5) cubic yards shall be paid an additional \$0.50 per hour.

SHIFT WORK

A 15% premium on all hours paid, including overtime hours for 2nd, 3rd shifts
on all government mandated off-shift work

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker:

\$ 34.85 up to
40 hours
After 40 hours
\$25.55 plus
\$1.25 on all
hours worked

OVERTIME PAY

See (D, O, *U, V) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 15, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 25, 26) on HOLIDAY PAGE

* Note: For Holiday codes 5 & 6, code U applies. For Holiday codes 8, 15, 25, 26, code R applies.

Note: If employees are required to work on Easter Sunday, they shall be paid at the rate of triple time.

REGISTERED APPRENTICES

(1)year terms at the following rates:

1st term	\$ 30.21
2nd term	36.25
3rd term	42.30
4th term	48.34

Supplemental Benefits per hour:

All terms \$ 26.85

8-137Tun

JOB DESCRIPTION Operating Engineer - Marine Dredging

DISTRICT 4

ENTIRE COUNTIES

Albany, Bronx, Cayuga, Clinton, Columbia, Dutchess, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Orange, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

WAGES

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for all equipment and operators are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour: 07/01/2024

CLASS A1 \$ 45.26

Deck Captain, Leverman,
Mechanical Dredge Operator,
Licensed Tug Operator 1000HP or more.

CLASS A2 40.33

Crane Operator (360 swing)

CLASS B To conform to Operating Engineer
Dozer, Front Loader Prevailing Wage in locality where work
Operator on Land is being performed including benefits.

CLASS B1 39.14

Derrick Operator (180 swing)
Spider/Spill Barge Operator
Operator II, Fill Placer, Engineer
Chief Mate, Electrician, Chief Welder,
Maintenance Engineer, Licensed Boat, Crew Boat Operator

CLASS B2 36.84

Certified Welder

CLASS C1 35.83

Drag Barge Operator,
Steward, Mate,
Assistant Fill Placer

CLASS C2 34.68

Boat Operator

CLASS D 28.81

Shoreman, Deckhand, Oiler,
Rodman, Scowman, Cook,
Messman, Porter/Janitor

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B \$ 12.00 plus 7%
of straight time
wage, Overtime hours
add \$ 0.63

All Class C & D \$ 11.75 plus 7%
of straight time
wage, Overtime hours
add \$ 0.50

OVERTIME PAY

See (B2, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

JOB DESCRIPTION Operating Engineer - Survey Crew

DISTRICT 12

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.

Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES

These rates apply to Building, Tunnel and Heavy Highway.

Per hour:

SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.

Instrument Person - One who operates the surveying instruments.

Rod Person - One who holds the rods and assists the Instrument Person.

07/01/2024

Party Chief \$ 50.65

Instrument Person 46.54

Rod Person 34.55

Additional \$3.00/hr. for Tunnel Work

Additional \$2.50/hr. for Hazardous Work Site

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 29.75

OVERTIME PAY

See (B, E, P, *X) on OVERTIME PAGE

*Note: \$25.10/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

07/01/2024

0-1000 60%

1001-2000 70%

2001-3000 80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000 \$ 21.53 / PHP \$18.45

1001-2000 24.55 / " 20.45

2001-3000 27.58/ " 22.93

NOTE: PHP is premium hours paid when worked.

12-158-545 D.H.H.

Operating Engineer - Survey Crew - Consulting Engineer

05/01/2025

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

DISTRICT 12

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.

Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES

These rates apply to feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction

when performed under a Consulting Engineer Agreement.

Per hour:

SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.

Instrument Person - One who operates the surveying instruments.

Rod Person - One who holds the rods and assists the Instrument Person.

07/01/2024

Party Chief	\$ 50.65
Instrument Person	46.54
Rod Person	34.55

Additional \$3.00/hr. for Tunnel Work.

Additional \$2.50/hr. for EPA or DEC certified toxic or hazardous waste work.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 29.75
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OVERTIME PAY

See (B, E, Q, *X) on OVERTIME PAGE

*Note: \$25.10/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on percentage of Rod Persons Wage:

07/01/2024

0-1000	60%
1001-2000	70%
2001-3000	80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	\$ 21.53 / PHP \$18.45
1001-2000	\$ 24.55 / " 20.45
2001-3000	\$ 26.98 / " 22.93

NOTE: PHP is premium hours paid when worked.

12-158-545 DCE

Operating Engineer - Survey Crew - Consulting Engineer

05/01/2025

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Dutchess: That part in Dutchess County lying South of the North City line of Poughkeepsie.

WAGES

Feasibility and preliminary design surveying, any line and grade surveying for inspection or supervision of construction.

Per hour:

07/01/2024

Survey Classifications

Party Chief	\$ 49.39
Instrument Man	40.96
Rodman	35.63

SUPPLEMENTAL BENEFITS

Per Hour:

All Crew Members:	\$ 23.75
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OVERTIME PAY

OVERTIME:.... See (B, E*, Q, V) ON OVERTIME PAGE.

*Double-time paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

9-15dconsult

Operating Engineer - Tunnel

05/01/2025

JOB DESCRIPTION Operating Engineer - Tunnel

DISTRICT 7

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schoenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: Northern part of Dutchess, to the northern boundary line of the City of Poughkeepsie, then due east to Route 115 to Bedell Road, then east along Bedell Road to VanWagner Road, then north along VanWagner Road to Bower Road, then east along Bower Road to Rte. 44 east to Rte. 343, then along Rte. 343 east to the northern boundary of the Town of Dover Plains and east along the northern boundary of the Town of Dover Plains, to the borderline of the State of Connecticut.

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98 and the entirety of the City of Batavia.

WAGES

CLASS A: Automatic Concrete Spreader (CMI Type); Automatic Fine Grader; Backhoe (except tractor mounted, rubber tired); Belt Placer (CMI Type); Blacktop Plant (automated); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Concrete Curb Machine (self-propelled slipform); Concrete Pump (8" or over); Dredge; Dual Drum Paver; Excavator; Front End Loader (4 cu. yd & over); Gradall; Head Tower (Sauerman or Equal); Hoist (shaft); Hoist (two or three Drum); Log Chipper/Loader (self-feeder); Maintenance Engineer (shaft and tunnel); any Mechanical Shaft Drill; Mine Hoist; Mining Machine(Mole and similar types); Mucking Machine or Mole; Overhead Crane (Gantry or Straddle Type); Pile Driver; Power Grader; Remote Controlled Mole or Tunnel Machine; Scraper; Shovel; Side Boom; Slip Form Paver (If a second man is needed, they shall be an Oiler); Tripper/Maintenance Engineer (shaft & tunnel); Tractor Drawn Belt-Type Loader; Tug Operator (manned rented equipment excluded); Tunnel Shovel.

CLASS B: Automated Central Mix Concrete Plant; Backhoe (topside); Backhoe (track mounted, rubber tired); Backhoe (topside); Bituminous Spreader and Mixer, Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Cage Hoist; Central Mix Plant(non-automated); all Concrete Batching Plants; Compressors (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Pump; Crusher; Diesel Power Unit; Drill Rigs (tractor mounted); Front End Loader (under 4 cu. yd.); Grayco Epoxy Machine; Hoist (One Drum); Hoist (2 or 3 drum topside); Knuckle Boom material handler; Kolman Plant Loader & similar type Loaders (if employer requires another person to clean the screen or to maintain the equipment, they shall be an Oiler); L.C.M. Work Boat Operator; Locomotive; Maintenance Engineer (topside); Maintenance Grease Man; Mixer (for stabilized base-self-propelled); Monorail Machine; Plant Engineer; Personnel Hoist; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above sub-grade); Sea Mule; Shotcrete Machine; Shovel (topside); Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Tunnel Locomotive; Vacuum Machine (mounted or towed); Welder; Winch; Winch Cat.

CLASS C: A Frame Truck; All Terrain Telescoping Material Handler; Ballast Regulator (ride-on); Compressors (4 not to exceed 2,000 c.f.m. combined capacity; or 3 or less with more than 1200 c.f.m. but not to exceed 2,000 c.f.m.); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (4 or any type combination)); Concrete Pavement Spreaders and Finishers; Conveyor; Drill (core); Drill (well); Electric Pump used in conjunction with Well Point System; Farm Tractor with Accessories; Fine Grade Machine; Fork Lift; Grout Pump (over 5 cu. ft.); Gunite Machine; Hammers (hydraulic-self-propelled); Hydra-Spiker (ride-on); Hydra-Blaster (water); Hydro-Blaster; Motorized Form Carrier; Post Hole Digger and Post Driver; Power Sweeper; Roller grade & fill); Scarifer (ride-on); Span-Saw (ride-on); Submersible Electric Pump (when used in lieu of well points); Tamper (ride-on); Tie-Extractor (ride-on), Tie Handler (ride-on), Tie Insertter (ride-on), Tie Spacer (ride-on); Track Liner (ride-on); Tractor with towed accessories; Vibratory Compactor; Vibro Tamp, Well Point.

CLASS D: Aggregate Plant; Cement & Bin Operator; Compressors (3 or less not to exceed 1,200 c.f.m. combined capacity); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (3 or less or any type or combination)); Concrete Saw (self-propelled); Form Tamper; Greaseman; Hydraulic Pump (jacking system); Junior Engineer; Light Plants; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Power Broom (towed); Power Heaterman (when used for production); Revinius Widener; Shell Winder; Steam Cleaner; Tractor.

Per hour:	07/01/2024	07/01/2025
CLASS A	\$ 55.91	\$ 58.44
CLASS B	54.69	57.22
CLASS C	51.90	54.43
CLASS D	48.89	51.42

Additional \$5.00 per hour for Hazardous Waste Work on a state or federally designated hazardous waste site where the Operating Engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin and eye protection.

CRANES:

Crane 1: All cranes, including self-erecting.

Crane 2: All Lattice Boom Cranes and all cranes with a manufacturer's rating of fifty (50) ton and over.

Crane 3: All hydraulic cranes and derricks with a manufacturer's rating of forty nine (49) ton and below, including boom trucks.

Crane 1	\$ 59.91	\$ 62.44
Crane 2	58.91	61.44
Crane 3	57.91	60.44

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.05	\$ 25.90
+ 9.85*	+ 10.10*

* This portion of benefits subject to same premium rate as shown for overtime wages.

OVERTIME PAY

See (B, B2, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: If a holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES

WAGES:(1000) hours terms at the following percentage of Journeyworker's Class B wage.

1st term	60%
2nd term	65%
3rd term	70%
4th term	75%

SUPPLEMENTAL BENEFITS per hour: Same as Journeyworker

7-158-832TL.

Painter

05/01/2025

JOB DESCRIPTION Painter

DISTRICT 1

ENTIRE COUNTIES

Columbia, Dutchess, Greene, Orange, Sullivan, Ulster

WAGES

Per hour

	07/01/2024	05/01/2025 Additional
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Brush/Paper Hanger	\$ 38.81	\$ 1.99*
Dry Wall Finisher	38.81	1.99*
Lead Abatement	38.81	1.99*
Sandblaster-Painter	38.81	1.99*
Spray Rate	39.81	1.99*

(*) To be allocated at later date.

See Bridge Painting rates for the following work:

Structural Steel, all work performed on tanks, ALL BRIDGES, towers, smoke stacks, flag poles. Rate shall apply to all of said areas from the ground up.

SUPPLEMENTAL BENEFITS

Per hour

Journeyworker \$ 27.37

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour

Six (6) month terms at the following percentage of Journeyperson's wage

1st	2nd	3rd	4th	5th	6th
50%	55%	65%	75%	85%	95%

Supplemental Benefits per hour worked

1st term	\$ 11.39
All others	27.37

1-155

Painter - Bridge & Structural Steel

05/01/2025

JOB DESCRIPTION Painter - Bridge & Structural Steel

DISTRICT 8

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per Hour:

STEEL:

Bridge Painting:	07/01/2024
	\$ 56.00
	+ 10.35*

ADDITIONAL \$7.00 per hour for POWER TOOL/SPRAY, whether straight time or overtime.

NOTE: All premium wages are to be calculated on base rate per hour only.

* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (50 hour cap).

NOTE: Generally, for Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

SHIFT WORK

When directly specified in public agency or authority contract documents for an employer to work a second shift and works the second shift with employees other than from the first shift, all employees who work the second shift will be paid 10% of the base wage shift differential in lieu of overtime for the first eight (8) hours worked after which the employees shall be paid at time and one half of the regular wage rate. When a single irregular work shift is mandated in the job specifications or by the contracting agency, wages shall be paid at time and one half for single shifts between the hours of 3pm-11pm or 11pm-7am.

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker:	\$ 12.43
	+ 31.55*

* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (50 hour cap).

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (4, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage - Per hour:

Apprentices: (1) year terms.

1st year	\$ 22.40
	+ 4.14
2nd year	\$ 33.60
	+ 6.21
3rd year	\$ 44.80
	+ 8.28

Supplemental Benefits - Per hour:

1st year	\$ 1.16 + 12.62
2nd year	\$ 7.46 + 18.93
3rd year	\$ 9.94 + 25.24

NOTE: All premium wages are to be calculated on base rate per hour only.

8-DC-9/806/155-BrSS

Painter - Line Striping	05/01/2025
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JOB DESCRIPTION Painter - Line Striping

DISTRICT 8

ENTIRE COUNTIES

Albany, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Nassau, Orange, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per hour:

Painter (Striping-Highway):	07/01/2024	04/01/2025	04/01/2026
Striping-Machine Operator*	\$ 34.12	\$ 35.49	\$ 36.93
Linerman Thermoplastic	41.12	42.74	44.44

Note: * Includes but is not limited to: Positioning of cones and directing of traffic using hand held devices. Excludes the Driver/Operator of equipment used in the maintenance and protection of traffic safety.

SHIFT WORK

When directly specified in public agency or authority contract documents there shall be a 30% night shift premium pay differential for all work performed after 9:00pm and before 5:00am.

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyworker:			
Striping Machine Operator:	\$23.65	\$ 24.30	\$ 24.95
Linerman Thermoplastic:	23.65	24.30	24.95

OVERTIME PAY

See (B, B2, E2, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 20) on HOLIDAY PAGE

Overtime: See (5, 20) on HOLIDAY PAGE

REGISTERED APPRENTICES

One (1) year terms at the following wage rates:

	07/01/2024	01/01/2025	04/01/2025	04/01/2026
1st Term:	\$ 16.00	\$ 16.50	\$ 16.50	\$ 16.50
2nd Term:	20.47	20.47	21.29	22.16
3rd Term:	27.30	27.30	28.39	29.54

Supplemental Benefits per hour:

All terms:	\$ 23.65	\$ 23.65	\$ 24.30	\$ 24.95
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8-1456-LS

Painter - Metal Polisher	05/01/2025
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JOB DESCRIPTION Painter - Metal Polisher

DISTRICT 8

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

	07/01/2024
Metal Polisher	\$ 39.33
Metal Polisher*	40.43
Metal Polisher**	43.33

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2024
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Journeyworker:	
All classification	\$ 12.79

OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Paid:	See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE
Overtime:	See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

	07/01/2024
1st year	\$ 19.67
2nd year	21.63
3rd year	23.60
1st year*	\$ 22.06
2nd year*	22.07
3rd year*	24.14
1st year**	\$ 22.17
2nd year**	24.13
3rd year**	26.10

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:

Per hour:

1st year	\$ 8.69
2nd year	8.69
3rd year	8.69

8-8A/28A-MP

Plumber

05/01/2025

JOB DESCRIPTION Plumber

DISTRICT 8

ENTIRE COUNTIES

Dutchess

PARTIAL COUNTIES

Delaware: Only the Townships of Middletown and Roxbury.

Ulster: Entire county (including Wallkill and Shawangunk Prisons in Town of Shawangunk) EXCEPT for remainder of Town of Shawangunk, and Towns of Plattekill, Marlboro, and Wawarsing.

WAGES

Per hour:	07/01/2024
Plumber & Steamfitter	\$ 59.35

SHIFT WORK

SHIFT WORK:

When directly specified in public agency or authority contract documents, shift work outside the regular hours of work shall be comprised of eight (8) hours per shift not including Saturday, Sundays and holidays. One half (1/2) hour shall be allowed for lunch after the first four (4) hours of each shift. Wage and Fringes for shift work shall be straight time plus a shift premium of twenty-five (25%) percent. A minimum of five days Monday through Friday must be worked to establish shift work.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker: \$ 43.61

OVERTIME PAY

See (B, E, E2, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1)year terms at the following rates:

07/01/2024

1st year	\$ 22.71
2nd year	31.32
3rd year	36.34
4th year	43.55
5th year	50.12

Supplemental Benefits per hour:

1st year	\$ 18.45
2nd year	23.62
3rd year	27.42
4th year	31.72
5th year	35.00

8-21.2-SF

Plumber - HVAC / Service

05/01/2025

JOB DESCRIPTION Plumber - HVAC / Service

DISTRICT 8

ENTIRE COUNTIES

Dutchess, Putnam, Westchester

PARTIAL COUNTIES

Delaware: Only the townships of Middletown and Roxbury

Ulster: Entire County(including Wallkill and Shawangunk Prisons) except for remainder of Town of Shawangunk and Towns of Plattekill, Marlboro, and Wawarsing.

WAGES

Per hour: 07/01/2024

HVAC Service \$ 43.43
+ \$ 4.47*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker HVAC Service
\$ 30.39

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

HVAC SERVICE

(1)year terms at the following wages:

1st yr.	2nd yr.	3rd yr.	4th yr.	5th yr.
---------	---------	---------	---------	---------

\$ 19.66	\$ 23.32	\$ 29.05	\$ 35.73	\$ 38.83
+\$2.43*	+\$2.76*	+\$3.31*	+\$3.96*	+\$4.21*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

Supplemental Benefits per hour:

Apprentices 07/01/2024

1st term	\$ 21.47
2nd term	23.05
3rd term	24.76
4th term	27.13
5th term	28.81

8-21.1&2-SF/Re/AC

Plumber - Jobbing & Alterations**05/01/2025**

JOB DESCRIPTION Plumber - Jobbing & Alterations

DISTRICT 8

ENTIRE COUNTIES

Dutchess, Putnam, Westchester

PARTIAL COUNTIES

Ulster: Entire county (including Wallkill and Shawangunk Prisons in Town of Shawangunk) EXCEPT for remainder of Town of Shawangunk, and Towns of Plattekill, Marlboro, and Wawarsing.

WAGES

Per hour:	07/01/2024
Journeyworker:	\$ 49.63

Repairs, replacements and alteration work is any repair or replacement of a present plumbing system that does not change existing roughing or water supply lines.

SHIFT WORK

When directly specified in public agency or authority contract documents, shift work outside the regular hours of work shall be comprised of eight (8) hours per shift not including Saturday, Sundays and holidays. One half (1/2) hour shall be allowed for lunch after the first four (4) hours of each shift. Wage and Fringes for shift work shall be straight time plus a shift premium of twenty-five (25%) percent. A minimum of five days Monday through Friday must be worked to establish shift work.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 36.44
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OVERTIME PAY

See (B, *E, E2, Q, V) on OVERTIME PAGE

*When used as a make-up day, hours after 8 on Saturday shall be paid at time and one half.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 8, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following wages:

1st year	\$ 21.35
2nd year	23.73
3rd year	25.87
4th year	36.28
5th year	38.34

Supplemental Benefits per hour:

1st year	\$ 12.11
2nd year	14.21
3rd year	18.38
4th year	24.86
5th year	26.96

8-21.3-J&A

Roofer**05/01/2025**

JOB DESCRIPTION Roofer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, New York, Orange, Putnam, Queens, Richmond, Rockland, Sullivan, Ulster, Westchester

WAGES

Per Hour: 07/01/2024

Roofer/Waterproofer \$ 48.50
+ \$7.00*

* This portion is not subjected to overtime premiums.

Note: Abatement/Removal of Asbestos containing roofs and roofing material is classified as Roofer.

SUPPLEMENTAL BENEFITS

Per Hour: \$ 31.87

OVERTIME PAY

See (B, H) on OVERTIME PAGE

Note: An observed holiday that falls on a Sunday will be observed the following Monday.

HOLIDAY

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year term apprentices indentured prior to 01/01/2023

	1st	2nd	3rd	4th
	\$ 16.97	\$ 24.25	\$ 29.10	\$ 36.37
		+ 3.50*	+ 4.20*	+ 5.26*

Supplements:

	1st	2nd	3rd	4th
	\$ 4.10	\$ 16.17	\$ 19.31	\$ 24.02

* This portion is not subjected to overtime premiums.

(1) year term apprentices indentured after 01/01/2023

	1st	2nd	3rd	4th	5th
	\$ 18.43	\$ 21.82	\$ 24.25	\$ 29.10	\$ 36.37
		+ 3.16*	+ 3.50*	+ 4.20*	+ 5.26

Supplements:

	1st	2nd	3rd	4th	5th
	\$ 7.73	\$ 14.59	\$ 16.17	\$ 19.31	\$ 24.02

* This portion is not subjected to overtime premiums.

9-8R

Sheetmetal Worker

05/01/2025

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 8

ENTIRE COUNTIES

Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester

WAGES

SheetMetal Worker 07/01/2024
\$ 49.51
+ 3.71*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

SHIFT WORK

For all NYS D.O.T. and other Governmental mandated off-shift work:

10% increase for additional shifts for a minimum of five (5) days

SUPPLEMENTAL BENEFITS

Journeyworker \$ 46.20

OVERTIME PAY

OVERTIME:.. See (B, E, Q,) on OVERTIME PAGE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 16, 23) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 20.20	\$ 20.81	\$ 23.12	\$ 25.42	\$ 27.74	\$ 30.08	\$ 32.86	\$ 35.63
+ 1.48*	+ 1.67*	+ 1.86*	+ 2.04*	+ 2.23*	+ 2.41*	+ 2.60*	+ 2.78*

*This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

Supplemental Benefits per hour:

Apprentices

1st term	\$ 18.07
2nd term	22.24
3rd term	24.71
4th term	27.21
5th term	29.67
6th term	32.12
7th term	34.12
8th term	36.15

8-38

Sprinkler Fitter	05/01/2025
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JOB DESCRIPTION Sprinkler Fitter

DISTRICT 1

ENTIRE COUNTIES

Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester

WAGES

Per hour 07/01/2024

Sprinkler \$ 53.34
Fitter

SUPPLEMENTAL BENEFITS

Per hour

Journeyworker \$ 30.77

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

One Half Year terms at the following wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 25.89	\$ 28.77	\$ 31.39	\$ 34.27	\$ 37.14	\$ 40.02	\$ 42.90	\$ 45.77	\$ 48.65	\$ 51.53

Supplemental Benefits per hour

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 9.18	\$ 9.18	\$ 20.90	\$ 20.90	\$ 21.15	\$ 21.15	\$ 21.15	\$ 21.15	\$ 21.15	\$ 21.15
									1-669.2

Teamster - Building / Heavy&Highway	05/01/2025
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JOB DESCRIPTION Teamster - Building / Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Dutchess, Orange, Rockland, Sullivan, Ulster

WAGES

GROUP 1: LeTourneau Tractors, Double Barrel Euclids, Athney Wagons and similar equipment (except when hooked to scrapers), I-Beam and Pole Trailers, Tire Trucks, Tractor and Trailers with 5 axles and over, Articulated Back Dumps and Road Oil Distributors, Articulated Water Trucks and Fuel Trucks/Trailers, positions requiring a HAZMAT CDL endorsement.

GROUP 1A: Drivers on detachable Gooseneck Low Bed Trailers rated over 35 tons.

GROUP 2: All equipment 25 yards and up to and including 30-yard bodies and cable Dump Trailers and Powder and Dynamite Trucks.

GROUP 3: All Equipment up to and including 24-yard bodies, Mixer Trucks, Dump Crete Trucks and similar types of equipment, Fuel Trucks, Batch Trucks and all other Tractor Trailers, Hi-Rail Truck.

GROUP 4: Tri-Axles, Ten Wheelers, Grease Trucks, Tillerman, Pattern Trucks, Attenuator Trucks, Water Trucks, Bus.

GROUP 5: Straight Trucks.

GROUP 6: Pick-up Trucks for hauling materials and parts, and Escort Man over-the-road.

WAGES: (per hour) 07/01/2024

GROUP 1	\$ 34.58
GROUP 1A	35.72
GROUP 2	34.02
GROUP 3	33.80
GROUP 4	33.69
GROUP 5	33.57
GROUP 6	33.57

NOTE ADDITIONAL PREMIUMS:

- Employees engaged in hazardous/toxic waste removal, on a State or Federally designated hazardous/toxic waste site, where the employee comes in contact with hazardous/toxic waste material and when personal protective equipment is required for respiratory, skin, or eye protection, the employee shall receive an additional 20% premium above the hourly wage.

SHIFT WORK

- On projects requiring an irregular shift a premium of 10% will be paid on wages. The premium will be paid for off-shift or irregular shift work when mandated by Governmental Agency.

SUPPLEMENTAL BENEFITS

Per hour:

First 40 hours	\$ 44.59
Over 40 hours	36.99

OVERTIME PAY

See (*B, E, **E2, ***P, X) on OVERTIME PAGE

*Holidays worked Monday through Friday receive Double Time (2x) after 8 hours.

**Makeup day limited to the employees who were working on the site that week.

***Sunday Holidays are paid at a rate of double time and one half (2.5x) for all hours worked.

HOLIDAY

Paid: See (5, 6, 15, 25) on HOLIDAY PAGE

Overtime: See (*1) on HOLIDAY PAGE

- Any employee working two (2) days in any calendar week during which a holiday occurs shall receive a days pay for each holiday occurring during said week. This provision shall also apply if a holiday falls on a Saturday or Sunday.

*See OVERTIME PAY section for when additional premium is applicable on Holiday hours worked.

11-445B/HH

Teamster - Delivery - Building / Heavy&Highway

05/01/2025

JOB DESCRIPTION Teamster - Delivery - Building / Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Dutchess, Orange, Rockland, Sullivan, Ulster

WAGES

THESE RATES ARE ONLY TO BE USED FOR DELIVERY OF AGGREGATE MATERIALS TO THE JOB SITE. FOR ALL ONSITE WORK AND HAULING OF SPOILS SEE THE TEAMSTER BUILDING/HEAVY & HIGHWAY RATES.

Group 1	Tractor Trailer Drivers
Group 2	Tri- Axle

Wages: 07/01/2024

Group 1	\$ 33.70
Group 2	29.70

Hazardous/Toxic Waste Removal additional 20% when personal protective equipment is required.

SUPPLEMENTAL BENEFITS

Per hour paid:

First 40 hours \$ 32.30

Over 40 hours 0.00

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 13, 15, 16, 20, 22, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 13, 15, 16, 20, 22, 25, 26) on HOLIDAY PAGE

- Employee must work either the scheduled day of work before or the scheduled day of work after the holiday in the workweek.

- Any employee working one (1) day in the calendar week during which a holiday occurs shall receive a day's pay for each holiday occurring during said week. This provision shall also apply if a holiday falls on a Saturday.

- When any of the recognized holidays occur on Sunday and are celebrated any day before or after the holiday Sunday, such days shall be considered as the holiday and paid for as such.

11-445 B/HH Delivery

Welder

05/01/2025

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour 07/01/2024

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

- (AA) Time and one half of the hourly rate after 7 and one half hours per day
- (A) Time and one half of the hourly rate after 7 hours per day
- (B) Time and one half of the hourly rate after 8 hours per day
- (B1) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday.
Double the hourly rate for all additional hours
- (B2) Time and one half of the hourly rate after 40 hours per week
- (B3) Time and one half of the hourly rate after 40 straight hours per week
- (C) Double the hourly rate after 7 hours per day
- (C1) Double the hourly rate after 7 and one half hours per day
- (D) Double the hourly rate after 8 hours per day
- (D1) Double the hourly rate after 9 hours per day
- (E) Time and one half of the hourly rate on Saturday
- (E1) Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
- (E2) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E3) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- (E4) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E5) Double time after 8 hours on Saturdays
- (F) Time and one half of the hourly rate on Saturday and Sunday
- (G) Time and one half of the hourly rate on Saturday and Holidays
- (H) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- (I) Time and one half of the hourly rate on Sunday
- (J) Time and one half of the hourly rate on Sunday and Holidays
- (K) Time and one half of the hourly rate on Holidays
- (L) Double the hourly rate on Saturday
- (M) Double the hourly rate on Saturday and Sunday
- (N) Double the hourly rate on Saturday and Holidays
- (O) Double the hourly rate on Saturday, Sunday, and Holidays
- (P) Double the hourly rate on Sunday
- (Q) Double the hourly rate on Sunday and Holidays
- (R) Double the hourly rate on Holidays

- (S) Two and one half times the hourly rate for Holidays
- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- (U) Four times the hourly rate for Holidays
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.
- (X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- (1) None
- (2) Labor Day
- (3) Memorial Day and Labor Day
- (4) Memorial Day and July 4th
- (5) Memorial Day, July 4th, and Labor Day
- (6) New Year's, Thanksgiving, and Christmas
- (7) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- (8) Good Friday
- (9) Lincoln's Birthday
- (10) Washington's Birthday
- (11) Columbus Day
- (12) Election Day
- (13) Presidential Election Day
- (14) 1/2 Day on Presidential Election Day
- (15) Veterans Day
- (16) Day after Thanksgiving
- (17) July 4th
- (18) 1/2 Day before Christmas
- (19) 1/2 Day before New Years
- (20) Thanksgiving
- (21) New Year's Day
- (22) Christmas
- (23) Day before Christmas
- (24) Day before New Year's
- (25) Presidents' Day
- (26) Martin Luther King, Jr. Day
- (27) Memorial Day
- (28) Easter Sunday

(29) Juneteenth

New York State Department of Labor - Bureau of Public Work
State Office Building Campus
Building 12 - Room 130
Albany, New York 12226

REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

This Form Must Be Typed

Submitted By:

(Check Only One) ☐ Contracting Agency ☐ Architect or Engineering Firm ☐ Public Work District Office Date:

A. Public Work Contract to be let by: (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address ☐ (Check if new or change)

Telephone

Fax

E-Mail:

2. NY State Units (see Item 5).

☐ 01 DOT

☐ 02 OGS

☐ 03 Dormitory Authority

☐ 04 State University
Construction Fund

☐ 05 Mental Hygiene
Facilities Corp.

☐ 06 OTHER N.Y. STATE UNIT

☐ 07 City

☐ 08 Local School District

☐ 09 Special Local District, i.e.,
Fire, Sewer, Water District

☐ 10 Village

☐ 11 Town

☐ 12 County

☐ 13 Other Non-N.Y. State
(Describe)

3. SEND REPLY TO ☐ (check if new or change)
Name and complete address:

Telephone

Fax

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

☐ New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

☐ Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR
THIS PROJECT :

OFFICE USE ONLY

B. PROJECT PARTICULARS

5. Project Title

Description of Work

Contract Identification Number

Note: For NYS units, the OSC Contract No.

6. Location of Project:

Location on Site

Route No/Street Address

Village or City

Town

County

7. Nature of Project - Check One:

- ☐ 1. New Building
☐ 2. Addition to Existing Structure
☐ 3. Heavy and Highway Construction (New and Repair)
☐ 4. New Sewer or Waterline
☐ 5. Other New Construction (Explain)
☐ 6. Other Reconstruction, Maintenance, Repair or Alteration
☐ 7. Demolition
☐ 8. Building Service Contract

8. OCCUPATION FOR PROJECT :

- ☐ Construction (Building, Heavy
Highway/Sewer/Water)
☐ Tunnel
☐ Residential
☐ Landscape Maintenance
☐ Elevator maintenance
☐ Exterminators, Fumigators
☐ Fire Safety Director, NYC Only

- ☐ Fuel Delivery
☐ Guards, Watchmen
☐ Janitors, Porters, Cleaners,
Elevator Operators
☐ Moving furniture and
equipment
☐ Trash and refuse removal
☐ Window cleaners
☐ Other (Describe)

9. Does this project comply with the Wicks Law involving separate bidding? YES ☐ NO ☐

10. Name and Title of Requester

Signature



NEW YORK STATE DEPARTMENT OF LABOR
Bureau of Public Work - Debarment List

**LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE
AWARDED ANY PUBLIC WORK CONTRACT**

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

Debarment Database: To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, or under NYS Workers' Compensation Law Section 141-b, access the database at this link: <https://apps.labor.ny.gov/EDList/searchPage.do>

For inquiries please call 518-457-5589.

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****5754	0369 CONTRACTORS, LLC		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL	*****5784	A.J.M. TRUCKING, INC.		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	DOL		AKHLAQ OULAKH		4307 28TH AVE ASTORIA NY 11103	10/11/2024	10/11/2029
DOL	NYC		ALL COUNTY SEWER & DRAIN, INC.		7 GREENFIELD DR WARWICK NY 10990	03/25/2022	03/25/2027
DOL	DOL	*****8387	AMERICAN PAVING & MASONRY, CORP.		8 FOREST AVE GLEN COVE NY 11542	05/24/2024	05/24/2029
DOL	DOL	*****8654	AMERICAN PAVING, INC.		8 FORREST AVE. GLEN COVE NY 11542	05/24/2024	05/24/2029
DOL	NYC		AMJED PARVEZ		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANGELO STANCO		8 FOREST AVE. GLEN COVE NY 11542	05/24/2024	05/24/2029
DOL	DOL		ANGELO TONDO		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	*****4231	ANKER'S ELECTRIC SERVICE, INC.		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL		ANTHONY MONGELLI		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	NYC		ARADCO CONSTRUCTION CORP		115-46 132RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AVM CONSTRUCTION CORP		117-72 123RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AZIDABEGUM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****8421	B & B DRYWALL, INC		206 WARREN AVE APT 1WHITE PLAINS NY 10603	12/14/2021	12/14/2026
DOL	DOL		B&L RENOVATION CO.		618 OCEAN PARKWAY APT A6BROOKLYN NY 11230	09/17/2020	09/17/2025
DOL	NYC	*****2113	BHW CONTRACTING, INC.		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL	*****5078	BLACK RIVER TREE REMOVAL, LLC		29807 ANDREWS ROAD BLACK RIVER NY 13032	10/17/2023	10/17/2028
DOL	DOL		BRADLEY J SCHUKA		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL	*****5161	CALADRI DEVELOPMENT CORP.		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****3391	CALI ENTERPRISES, INC.		1223 PARK STREET PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****4155	CASA BUILDERS, INC.	FRIEDLANDER CONSTRUCTI ON	64 N PUTT CONNERS ROAD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	AG	*****7247	CENTURY CONCRETE CORP		2375 RAYNOR ST RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	NYC	*****2117	CHARAN ELECTRICAL ENTERPRISES		9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/2028
DOL	DOL		CHRISTOPHER GRECO		26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	*****2281	CORRAO TRUCKING, INC.		PO BOX 393 NANUET NY 10954	09/17/2024	09/17/2029
DOL	DOL		CRAIG JOHANSEN		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL	*****3228	CROSS-COUNTY LANDSCAPING AND TREE SERVICE, INC.	ROCKLAND TREE SERVICE	26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	*****7619	DANCO CONSTRUCTION UNLIMITED INC.		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL		DANIEL ROBERT MCNALLY		7 GREENFIELD DRIVE WARWICK NY 10990	03/25/2022	03/25/2027

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		DARWIN PEGUESE		6400 BALTIMORE NATIONAL SUITE 602CANTONSVILLE NY 21228	10/24/2024	10/24/2029
DOL	DOL		DAVID FRIEDLANDER		64 NORTH PUTT CORNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	DOL		DINA TAYLOR		64 N PUTT CONNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	AG		EDWIN HUTZLER		23 NORTH HOWELLS RD BELLPORT NY 11713	08/04/2021	08/04/2026
DOL	DA		EDWIN HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL		EMIL KISZKO		84 DIAMOND ST BROOKLYN NY 11222	07/18/2024	07/18/2029
DOL	DOL	*****3298	EMJACK CONSTRUCTION CORP.		84 DIAMOND ST BROOKLYN NY 11222	07/18/2024	07/18/2029
DOL	DOL	*****3298	EMJACK CONSTRUCTION LLC		4192 SIR ANDREW CIRCLE DOYLESTOWN PA 18902	07/18/2024	07/18/2029
DOL	DOL		EUGENIUSZ "GINO" KUCHAR		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	DA		FREDERICK HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****2998	G.E.M. AMERICAN CONSTRUCTION CORP.		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	NYC		GAYATRI MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DA		GIOVANNA TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DA		GIOVANNI NAPOLITANO		2501 BAYVIEW AVENUE WANTAGH NY 11793	02/21/2024	02/21/2029
DOL	DA	*****0213	GORILLA CONTRACTING GROUP, LLC		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DA	*****4760	GTX CONSTRUCTION ASSOCIATES, CORP		2501 BAYVIEW AVE WANTAGH NY 11793	02/21/2024	02/21/2029
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL	*****2397	ISLAND BREEZE MARINE, INC.		6400 BALTIMORE NATIONAL CANTONSVILLE MD 21228	10/24/2024	10/24/2029
DOL	DOL	*****9211	J. WASE CONSTRUCTION CORP.		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		J.M.J CONSTRUCTION		151 OSTRANDER AVENUE SYRACUSE NY 13205	11/21/2022	11/21/2027
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	12/12/2022	12/12/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JAMES J. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	*****7993	JBS DIRT, INC.		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	*****2435	JEFFEL D. JOHNSON	JMJ7 AND SON	5553 CAIRNSTRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JEFFEL JOHNSON ELITE CARPENTER REMODEL AND CONSTRUCTION		C2 EVERGREEN CIRCLE LIVERPOOL NY 13090	11/21/2022	11/21/2027
DOL	DOL	*****2435	JEFFREY M. JOHNSON	JMJ7 AND SON	5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JIM PLAUGHER		17613 SANTE FE LINE ROAD WAYNEFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		JMJ7 & SON CONSTRUCTION, LLC		5553 CAIRNS TRAIL LIVERPOOL NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 AND SONS CONTRACTORS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS		7014 13TH AVENUE BROOKLYN NY 11228	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS AND SONS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS, LLC		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JOHN MARKOVIC		47 MANDON TERRACE HAWTHORN NJ 07506	03/29/2021	03/29/2026
DOL	DOL		JOHN WASE		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		JORGE RAMOS		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	DOL		JOSEPH HALL		937 US ROUTE 11 CENTRAL SQUARE NY 13036	10/21/2024	10/21/2029
DOL	DOL	*****2271	JOSEPH HALL COMPANIES LLC		937 US ROUTE 11 CENTRAL SQUARE NY 13036	10/21/2024	10/21/2029
DOL	DOL		JOSEPH K. SALERNO		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL		JOSEPH K. SALERNO II		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		JRN CONSTRUCTION CO, LLC		1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL		KARIN MANGIN		796 PHELPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	DOL		KATE E. CONNOR		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

DOL	DOL		KEAN INDUSTRIES, LLC		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL	*****2959	KELC DEVELOPMENT, INC		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KEVIN FUNEZ URBINA A/K/A KEVIN FUNEZ		1009 LYNDAL AVE TRENTON NJ 08629	12/16/2024	12/16/2029
DOL	DOL		KIMBERLY F. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	*****8760	KJ&J CONSTRUCTION, LLC		1009 LYNDAL AVE TRENTON NJ 08629	12/16/2024	12/16/2029
DOL	DOL		KMA GROUP II, INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL	*****1833	KMA GROUP INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL		KMA INSULATION, INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL		KRIN HEINEMANN		2345 ROUTE 52, SUITE 2N HOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	NYC		KULWANT S. DEOL		9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/2028
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL	*****3716	LIGHTNIN ELECTRIC INC.		3418 NORTHERN BLVD SUITE 5-27LONG ISLAND CITY NY 11101	12/13/2024	12/13/2029
DOL	AG	*****3291	LINTECH ELECTRIC, INC.		3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/2027
DOL	DOL		LOUIS A. CALICCHIA		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****2196	MAINSTREAM SPECIALTIES, INC.		11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		MAQSOOD AHMAD		618 OCEAN PKWY BROOKLYN NY 11230	09/17/2020	09/17/2025
DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	DOL		MOHAMMAD MIAN		8269 21ST ST BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	NYC		MUHAMMED A. HASHEM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****7790	NATIONAL BUILDING & RESTORATION CORP		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	*****1797	NATIONAL CONSTRUCTION SERVICES, INC		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	NYC		NAVIT SINGH		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		NELCO CONTRACTING, LLC		1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DA		NICHOLAS T. ANALITIS		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	*****7429	NICOLAE I. BARBIR	BESTUCCO CONSTRUCTI ON, INC.	444 SCHANTZ ROAD ALLENTOWN PA 18104	09/17/2020	09/17/2025

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

DOL	DOL		NIKOLA NTONI		3418 NORTHERN BLVD SUITE 5-27LONG ISLAND CITY NY 11101	12/13/2024	12/13/2029
DOL	NYC	*****5643	NYC LINE CONTRACTORS, INC.		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PAULINE CHAHALES		935 S LAKE BLVD MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		PETER STEVENS		11 OLD TOWN ROAD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DOL	*****4168	PHANTOM CONSTRUCTION CORP.		95-27 116TH STREET QUEENS NY 11419	07/12/2024	07/12/2029
DOL	DOL	*****4168	PHANTOM CONSTRUCTION CORP.		95-27 116TH STREET QUEENS NY 11419	05/28/2024	05/28/2029
DOL	DOL	*****4772	R. W. LOBDELL CONTRUCTION, INC		635 WEST DRYDEN ROAD FREEVILLE NY 13068	01/31/2025	01/31/2030
DOL	NYC		RASHEL CONSTRUCTION CORP		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP.		3 PARK CIRCLE MIDDLETOWN NY 10940	07/11/2022	07/11/2027
DOL	DA	*****7559	REGAL CONTRACTING INC.		24 WOODBINE AVE NORTHPORT NY 11768	10/01/2020	10/01/2025
DOL	DOL		ROBBYE BISSEsar		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	07/11/2022	07/11/2027
DOL	DOL	*****7172	RZ & AL INC.		198 RIDGE AVENUE VALLEY STREAM NY 11581	06/06/2022	06/06/2027
DOL	DOL		SAL FRESINA MASONRY CONTRACTORS, INC.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		SAL MASONRY CONTRACTORS, INC.		(SEE COMMENTS) SYRACUSE NY 13202	07/16/2021	07/16/2026
DOL	DOL	*****9874	SALFREE ENTERPRISES INC		P.O BOX 14 2821 GARDNER RDPOMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		SALVATORE A FRESINA A/K/A SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DOL		SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DA	*****0476	SAMCO ELECTRIC CORP.		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DA		SILVANO TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DOL	*****0440	SOLAR GUYS INC.		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	NYC		SOMATIE RAMSUNAHAI		115-46 132ND ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC	*****3661	SPANIER BUILDING MAINTENANCE CORP		200 OAK DRIVE SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		STANADOS KALOGELAS		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****9528	STEEL-IT, LLC.		17613 SANTE FE LINE ROAD WAYNESFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL	*****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	DOL	*****9150	SURGE INC.		8269 21ST STREET BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	DOL		SYED MUHAMMAD S. JAFRI A/K/A SHARRUKH JAFRI		4307 28TH AVE ASTORIA NY 11103	10/11/2024	10/11/2029
DOL	DOL		SYED RAZA		198 RIDGE AVENUE NY 11581	06/06/2022	06/06/2027
DOL	DOL		TARLOK SINGH		95-27 116TH STREET QUEENS NY 11419	05/28/2024	05/28/2029
DOL	DOL		TARLOK SINGH		95-27 116TH STREET QUEENS NY 11419	07/12/2024	07/12/2029

NYSDOL Bureau of Public Work Debarment List 05/13/2025

Article 8

DOL	DOL	*****9733	TERSAL CONSTRUCTION SERVICES INC		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13208	07/16/2021	07/16/2026
DOL	DOL		TERSAL CONTRACTORS, INC.		221 GARDNER RD P.O BOX 14POMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		TERSAL DEVELOPMENT CORP.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATION	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL	*****2426	THE MATRUKH GROUP, INC.		4307 28TH AVE PO BOX 9082ASTORIA NY 11103	10/11/2024	10/11/2029
DOL	DOL		THOMAS LOBDELL		635 WEST DRYDEN ROAD FREEVILLE NY 13068	01/31/2025	01/31/2030
DOL	DOL		TIMOTHY PERCY		29807 ANDREWS ROAD BLACK RIVER NY 13612	10/17/2023	10/17/2028
DOL	DA	*****1050	TRI STATE CONSTRUCTION OF NY CORP.		50-39 175TH PLACE FRESH MEADOWS NY 11365	03/28/2022	03/28/2027
DOL	DA	*****4106	TRIPLE H CONCRETE CORP		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****8210	UPSTATE CONCRETE & MASONRY CONTRACTING CO INC		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	*****6418	VALHALLA CONSTRUCTION, LLC.		796 PHLEPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	NYC	*****2426	VICKRAM MANGRU	VICK CONSTRUCTION	21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	NYC		VICKRAM MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		VINCENT CORRAO		PO BOX 393 NANUET NY 10954	09/17/2024	09/17/2029
DOL	DOL	*****8266	WILLIAM CHRIS MCCLENDON	MCCLENDON ASPHALT PAVING	1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM CHRIS MCCLENDON		1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM G. PROERFRIEDT		85 SPRUCEWOOD ROAD WEST BABYLON NY 11704	01/19/2021	01/19/2026
DOL	DOL	*****5924	WILLIAM G. PROPHY, LLC	WGP CONTRACTING, INC.	54 PENTAQUIT AVE BAYSHORE NY 11706	01/19/2021	01/19/2026
DOL	DOL		WILLIAM SCRIVENS		4192 SIR ANDREW CIRCLE DOYELSTOWN PA 18902	07/18/2024	07/18/2029
DOL	DOL		XENOFON EFTHIMIADIS		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028

FEDERAL WAGE RATES

Superseded General Decision Number: NY20240007

State: New York

Construction Types: Building, Heavy and Highway

Counties: Dutchess, Orange, Sullivan and Ulster Counties in New York.

BUILDING CONSTRUCTION PROJECTS FOR ALL COUNTIES EXCEPT SULLIVAN (does not include single family homes and apartment up to and including 4 stories), HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	02/07/2025
2	02/28/2025
3	03/07/2025
4	03/14/2025
5	04/25/2025

ASBE0040-003 05/01/2024

SULLIVAN AND ULSTER COUNTIES

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER Duties limited to preparation wetting; stripping; removal; scrapping; vacuuming; bagging; and disposing of all insulation materials whether they contain asbestos or not from mechanical systems.....	\$ 38.40	24.42
Insulator/asbestos worker (includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems).....	\$ 40.46	26.86

ASBE0091-002 06/03/2024

DUTCHESS AND ORANGE COUNTIES

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER Duties limited to preparation, wetting, stripping, removal scrapping, vacuuming, bagging and disposing of all insulation materials; whether they contain asbestos or not from mechanical systems.....	\$ 45.37	48.65
Insulator/asbestos worker (Includes application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 45.37	48.65

* BOIL0005-001 01/01/2025

	Rates	Fringes
BOILERMAKER.....	\$ 68.88	49.83+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

 BRNY0005-001 06/01/2023

	Rates	Fringes
BRICKLAYER (BUILDING CONSTRUCTION)		
DUTCHESS, ORANGE (Excluding the town of Tuxedo) and ULSTER COUNTIES Bricklayers, Cement Masons, Plasterers, Stone Masons.....\$ 45.00		36.89
ORANGE COUNTY (Town of Tuxedo) Bricklayers, Cement Masons, Plasterers, Stone Masons.....\$ 45.89		37.45
BRICKLAYER (HEAVY CONSTRUCTION)		
DUTCHESS, ORANGE (Excluding the town of Tuxedo) and ULSTER COUNTIES Bricklayers, Cement Masons, Plasterers, Stone Masons.....\$ 45.50		36.89
ORANGE COUNTY (Town of Tuxedo) Bricklayers, Cement Masons, Plasterers, Stone Masons.....\$ 46.39		37.45
BRICKLAYER (HIGHWAY CONSTRUCTION)		
DUTCHESS, ORANGE (Excluding the town of Tuxedo), SULLIVAN and ULSTER COUNTIES Bricklayers, Cement Masons, Plasterers, Stone Masons.....\$ 45.50		36.89

 CARP0279-005 07/01/2024

	Rates	Fringes
Carpenters:		
BUILDING CONSTRUCTION Carpenters, Millwrights, Pile Drivers.....\$ 43.50		30.22
HEAVY & HIGHWAY CONSTRUCTION Carpenters, Millwrights, Pile Drivers.....\$ 43.50		30.22

 CARP0740-002 07/01/2024

DUTCHESS AND ORANGE COUNTIES		
	Rates	Fringes
MILLWRIGHT.....\$ 46.35		43.52

CARP1556-005 07/01/2024

DUTCHESS AND ORANGE COUNTIES

	Rates	Fringes
Diver Tender.....	\$ 55.00	55.84
Diver.....	\$ 75.46	55.84
Dock Builder & Piledrivermen.....	\$ 60.59	55.84

ELEC0363-001 04/01/2024

	Rates	Fringes
ELECTRICIAN		
DUTCHESS (Remaining Townships), ULSTER AND SULLIVAN COUNTIES.....	\$ 50.50	3%+39.17+a
ORANGE and DUTCHESS (Townships of Fishkill, East Fishkill and Beacon) COUNTIES.....	\$ 50.50	3%+39.17+a

FOOTNOTE:

a. Paid Holidays: New Year's Day, President's Day, Memorial Day, Fourth of July, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day

ELEC1249-002 05/01/2023

	Rates	Fringes
ELECTRICIAN (LINE CONSTRUCTION-LIGHTING AND TRAFFIC SIGNAL INCLUDING ANY AND ALL FIBER OPTIC CABLE NECESSARY FOR THE TRAFFIC SIGNAL SYSTEMS, AND TRAFFIC MONITORING SYSTEMS, ROAD WEATHER INFORMATION SYSTEMS)		
Flagman.....	\$ 30.36	7%+35.40
Groundman (Digging Machine Operator).....	\$ 45.54	7%+35.40
Groundman (Truck Driver)....	\$ 40.48	7%+35.40
Groundman Truck Driver (Tractor Trailer Unit).....	\$ 43.01	7%+35.40
Lineman and Technician.....	\$ 50.60	7%+38.40
Mechanic.....	\$ 40.48	7%+35.40

PAID HOLIDAYS:

a. Memorial Day, New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-004 05/01/2023

Rates	Fringes
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ELECTRICIAN (Line
Construction)

Overhead and underground
distribution and
maintenance work and all
overhead and underground
transmission line work
including any and all
fiber optic ground wire,
fiber optic shield wire or
any other like product by
any other name
manufactured for the dual
purpose of ground fault
protection and fiber optic
capabilities :

Flagman.....	\$ 34.44	7%+35.40
Groundman digging machine operator.....	\$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit).....	\$ 48.79	7%+35.40
Groundman Truck driver.....	\$ 45.92	7%+35.40
Lineman and Technician.....	\$ 57.40	7%+38.40
Mechanic.....	\$ 45.92	7%+35.40

Substation:

Cable Splicer.....	\$ 63.14	7%+38.40
Flagman.....	\$ 34.44	7%+35.40
Ground man truck driver....	\$ 45.92	7%+35.40
Groundman digging machine operator.....	\$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit).....	\$ 48.79	7%+35.40
Lineman & Technician.....	\$ 57.40	7%+38.40
Mechanic.....	\$ 45.92	7%+35.40

Switching structures;
railroad catenary
installation and
maintenance, third rail
type underground fluid or
gas filled transmission
conduit and cable
installations (including
any and all fiber optic
ground product by any
other name manufactured
for the dual purpose of
ground fault protection
and fiber optic
capabilities), pipetype
cable installation and
maintenance jobs or
projects, and maintenance
bonding of rails; Pipetype
cable installation

Cable Splicer.....	\$ 64.59	7%+38.40
Flagman.....	\$ 35.23	7%+35.40
Groundman Digging Machine Operator.....	\$ 52.85	7%+35.40
Groundman Truck Driver (tractor-trailer unit).....	\$ 49.91	7%+35.40
Groundman Truck Driver.....	\$ 46.98	7%+35.40
Lineman & Technician.....	\$ 58.72	7%+38.40
Mechanic.....	\$ 46.98	7%+35.40

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-005 05/01/2023

SULLIVAN COUNTY

	Rates	Fringes
ELECTRICIAN (LIGHTING AND TRAFFIC SIGNAL LINEMAN INCLUDING ANY AND ALL FIBER OPTIC CABLE NECESSARY FOR THE TRAFFIC SIGNAL SYSTEM, TRAFFIC MONITORING SYSTEMS AND ROAD WEATHER INFORMATION SYSTEMS.)		
Flagman.....	\$ 29.59	7%+35.40
Groundman (Digging Machine Operator).....	\$ 44.39	7%+35.40
Groundman (Truck Driver)....	\$ 39.46	7%+35.40
Groundman Truck Driver (tractor trailer unit).....	\$ 41.92	7%+35.40
Lineman & Technician.....	\$ 49.32	7%+38.40
Mechanic.....	\$ 39.46	7%+35.40

FOOTNOTE:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, plus President's Day, Good Friday, Decoration Day, Election Day for the President of the United States and Election Day for the Governor of the State of New York, provided the employee works the day before or the day after the holiday.

ELEC1249-008 01/01/2025

	Rates	Fringes
ELECTRICIAN (Line Construction) TELEPHONE, CATV FIBEROPTICS CABLE AND EQUIPMENT		
Cable splicer.....	\$ 40.81	3%+5.77
Groundman.....	\$ 20.53	3%+5.77
Installer Repairman- Teledata Lineman/Technician- Equipment Operator.....	\$ 38.73	3%+5.77
Tree Trimmer.....	\$ 31.45	3%+10.48

a. New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day.

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 73.07	38.435+a+b

FOOTNOTE:

- a. Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked.
- b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

DUTCHESS COUNTY (POUGHKEEPSIE AND SOUTH THEREOF)

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1A.....	\$ 59.04	31.32+a
GROUP 1B.....	\$ 54.41	31.32+a
GROUP 2A.....	\$ 56.97	31.32+a
GROUP 3A.....	\$ 54.88	31.32+a
GROUP 3B.....	\$ 52.25	31.32+a
GROUP 4A.....	\$ 54.33	31.32+a
GROUP 4B.....	\$ 45.94	31.32+a
GROUP 5.....	\$ 49.53	31.32+a
GROUP 5A.....	\$ 61.95	31.32+a
GROUP 5B.....	\$ 47.00	31.32+a
GROUP 6.....	\$ 49.26	31.32+a

NOTES: Hazmat: 20% above regular rate
 Pumping operation Premium .50

Crane Operators (100-149 ft) 2.00

Crane Operators (149 ft +) 3.00

Loader Operators (over 5 cu y) .50

Shovel Operators (over 4 cu yd) 1.00

FOOTNOTE:

- a. New Years Day, Memorial Day, Independence Day, Labor Day Thanksgiving Day, Christmas Day, plus Lincoln's Birthday, Washington's Birthday, Good Friday, Columbus Day, November Election Day, Veteran's Day.

POWER EQUIPMENT OPERATORS CLASSIFICATION

GROUP 1-A: Carrier- trailer horse; concret-portable hoist; crane & hoist engineer-steel (concrete, material, super structure sub- structure); derrick (stone-steel); elevator & cage; hoist- single/double or triple drum; hoist-portable mobile unit; hoist engineer-concert (crane-derrick-mine hoist); hoist engineer- material; overhead crane; power house plant; telephies (cableway); whirly; maintenance engineer; Lull hiliift or similar; hydraulic crane 25 ton and over; cherry picker 25 tons and over; backhoe Oliver 88; fordson; dynahoe; dual purpose and similar machines;

Barber Green Loader-euclid loader or similar type; conway or similar mucking macking machines; dragline; gradall; shovel; backhoe etc. (crawler or truck); front end loaders; hydraulic boom; jersey spreader; lift slab console; letournequ or tounapull (scrapers over 20 yds struck); mucking machines; pavement breaker (air ram); paver (concrete); road boring machine; road mix machines; ross carrier and similar machines; post hole digger; shovel (tunnels); side boom; spreader (asphalt); scoopmobile-tractor-shovel over 1 1/2 yds. trenching machines vermeer concrete saw trencher and similar; tractor type demolition equipment; winch truck (a frame); hydraulic crane over 10 ton up to 25 ton); cherry picker over 10 ton up to 25 ton)

GROUP 1-B: Compressor (steel erection); pulse meter and push button buzz box; elevator; mechanic (outside) all types; welder; scrapers 20 yds struck and under; machine pulling sheep's foot roller; vibratory rollers; roller 4 tons and over.

GROUP 2-A: Compactor self-propelled; grader; bulldoze D7 and similar tractors with a draw bar horsepower of 100 or over; bulldozer D6 and under; welder; scraper 20 yds struck and under; machine pulling sheep's foot roller; vibratory rollers.

GROUP 3-A: Asphalt plant; boiler (high pressure); concrete mixing plants; concrete pump; firemen; forklift; forklift (electric); joy drill or similar tractor drilling machine; loader - 1 1/2 yards and under; locomotive (all sizes); mixer concrete - 21E and over; portable asphalt plant; portable batch plant; portable crusher; quarry master; stone crusher; well drilling machine and well point system; cherry picker under 10 tons; hydraulic crane under 10 tons; concert buffy; one yard an up ride on dumper (benford or similar).

GROUP 3-B: Compressor over 125 cu. feet; conveyor belt machine regardless of size; lighting unit (portable & generator); welding machine (steel erection and excavation); and compressor plant; stud machine; ladder hoist.

GROUP 4-A: Air tractor drill; batch plant; bending machine; concrete breaker; concrete spreader; curb cutter machine; farm tractor (all types); finishing machine-concrete; hepavac clean air machine (all similar types: removal of asbestos etc.); material hopper-sand-stone-cement; mixer-concrete-under 21E; mulching grass spreader; pump-gypsum, etc., pump-plaster-grout -fireproofing; shop mechanic (not employed on job site); roller under 4 ton; spreading and fine grading machine; steel cutting machine; syphon pump-air-steam; tar joint machine; turbo jet burner or similar equipment; vibrator (1 to 5); fine grading machine; roof hoist (tugger hoist); television cameras-water- sewer-gas-etc.

GROUP 4-B: Compressor to 125 feet; dust; dust collector; heater all types; pump; pump station (water and sewer); steam jenny; sweeper; chipper; mulcher.

GROUP 5: Motorized roller (walk behind)

GROUP 5-A: Master Mechanic

GROUP 5-B: Utility Man

GROUP 6: Warehouse Man

ENGI0137-007 03/04/2024

Poughkeepsie and South thereof

	Rates	Fringes
Power Equipment Operator (HEAVY & HIGHWAY)		
GROUP 1.....	\$ 68.63	35.25+a
GROUP 1-A.....	\$ 60.42	35.25+a
GROUP 1-B.....	\$ 63.70	35.25+a
GROUP 2-A.....	\$ 57.84	35.25+a
GROUP 2-B.....	\$ 59.67	35.25+a
GROUP 3.....	\$ 56.81	35.25+a
GROUP 4-A.....	\$ 51.57	35.25+a
GROUP 4-B.....	\$ 44.19	35.25+a
GROUP 5.....	\$ 64.02	35.25+a
GROUP 5-A-1.....	\$ 64.02	35.25+a
GROUP 5-A-2.....	\$ 77.82	35.25+a
GROUP 5-A-3.....	\$ 75.13	35.25+a
GROUP 5-A-4.....	\$ 70.41	35.25+a
GROUP 5-A-5.....	\$ 59.19	35.25+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS (HEAVY & HIGHWAY)

GROUP 1: Boom Truck; Cherry Picker; Clamshell; Crane,
(Crawler, Truck); Dragline; Rough Terrain Crane

GROUP 1-A: Auger; Auto Grader; Dynahoe and Dual purpose and similar machines; Boat Captain; Boring Machine (all types); Bull Dozer-all sizes; Central Mix Plant Operator; Chipper-all types; Close circuit t.v.; Compactor with Blade; Concrete Portable Hoist; C.M.I. or similar; Conway or similar mucking machines; Gradall, Shovel Backhoe, etc. Grader; Derrick, (Stone- Steel; Elevator & cage, materials or passengers; Front end loaders over 1 1/2 yds.; Hoist Single, Double, Triple Drum, Hoist Portable Mobile Unit; Hoist Engineer-Concrete (Crane-Derrick-Mine Hoist); Hoist Engineer-Material, Hydraulic Boom; Letourneau or Tournapull (Scrapers over 20 yds. struck); Log Skidder; Movable Concrete Barrier Transfer & Transport Vehicle; mucking machines; overhead crane; paver (concrete); pulsemeter; push button (buzz box) elevator; road mix machines; Robot Hammer (brock or similar), Ross carrier and similar machines; shovels (tunnels); side boom; Slip Form Machine; spreader (asphalt); scoopmobile-tractor-shovel over 1 1/2 yards; trenching machines; telephies- vermeer concrete saw trencher and/or similar; tractor-type demolition equipment, Whirly

GROUP 1-B: Road Paver, Asphalt

GROUP 2-A: Ballast Regulators; Compactor self-propelled; Cow Tracks; Fusion Machine; Rail Anchor Machines; Roller 4 ton and over; Scrapers - 20 yards struck; Switch Tampers; Vibratory roller, etc.

GROUP 2-B: Mechanic (outside) all types

GROUP 3-A: Air tractor drill; asphalt plant; batch plant; boiler (high pressure; concrete breaker; concrete pump concrete spreader; curb cutter machine; farm tractor (all types); finishing machine (concrete); fine grading machine; fireman; forklift; forklift (electric); joy drill or similar tractor drilling machine; loader - 1 1/2 yards and under; locomotive (all sizes), maintenance engineer; machine pulling sheeps foot roller; material hopper; mixer concrete - 21-E and over; mulching grass spreader; portable asphalt plant, portable batch plant, portable crusher; powerhouse plant; quarry master; roller under 4 ton; spreading and fine grading machine; steel cutting machine; stone crusher; sweeper; turbojet burner or similar; well drilling machine ; winch truck ""A"" frame. John Henry Drill or similar.

GROUP 4-A: Service men (fuel or grease truck).

GROUP 4-B: Oiler; Compressor - compressor plant; paint compressor-steel erection; conveyor belt machine; lighting unit (portable & generator); oiler; pumps - pump station-water-sewer- gypsum- plaster, etc.; roller-motorized (walk-behind); welding machine (steel erection excavation); well point system; bending machine; dust collector; mixer - concrete under 21-E; heater all types; steam jenny; syphon pump-air-steam; tar joint machine; vibrator (1 to 5); Compressor Truck Mounted (2-6)

GROUP 5: Oiler

GROUP 5-A-1: Master Mechanic

GROUP 5-A-2: Engineer - all tower cranes, all climbing cranes and all cranes of 100 ton capacity or greater (3900 Manitowac or similar) irrespective of manufacturer and regardless of how the same is rigged (except for pile rigs).

GROUP 5-A-3: Engineer-- Pile Driver

GROUP 5-A-4: Hoist Engineer- Steel -Sub Structure

GROUP 5-A-5: Jersey-spreader, pavement breaker (air ram); Post Hole Digger

NOTES:

Loader Operator (over 5 cu yds)	.50
Shoval Operators (over 4 cu yd)	1.00
Hazmat premium over regular rate	20%

CRANES:

100 ft- 149 ft: receive \$2.00 more than Group 1 rate

149 ft and over receive \$3.00 more than Group 1 rate

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day; Lincoln's Birthday; Good Friday; Memorial Day; Independence Day; Labor Day; Veterans Day; Columbus Day; November Election Day; Thanksgiving Day; and Christmas Day

ENGI0158-006 07/01/2024

NORTHERN PART OF DUTCHESS (TO THE NORTHERN BOUNDARY LINE OF THE CITY OF POUGHKEEPSIE) BUILDING CONSTRUCTION

	Rates	Fringes
Power equipment operators:		
GROUP A(1).....	\$ 53.11	32.58
1.....	\$ 49.06	30.74
2.....	\$ 50.06	30.74
GROUP A.....	\$ 52.62	32.58
GROUP B.....	\$ 51.60	32.58
GROUP C.....	\$ 48.70	32.58

Hazardous work - Anytime Operating Engineers are involved with level C or above, \$2.50 per hour over regular rate.

FOOTNOTE:

a. Paid Holiday: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP A(1): Crane, hydraulic cranes, tower crane, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom truck (over 5 tons)

GROUP A(1): Crane Premiums

- 1 over 150' :add \$1.00
- 2 over 200': add \$2.00

GROUP A: Shovel, All excavator (except tractor mounted rubber tired John Deere 510 or smaller), gradalls, power road grader, all CMI equipment, front-end rubber tire loader, tractor-mounted drill (quarry master), mucking machine, concrete central mix plant, concrete pump, Belcrete system, automated asphalt concrete plant and tractor road paver, boom truck (5 tons and under).

GROUP B: Backhoe, (tractor mounted rubber tired equivalent to John Deere 510 or less), bulldozer, pushcat, tractor, traxcavator, scraper, LeTourneau grader, form fine grader, road roller, blacktop roller, blacktop spreader, power brooms, sweepers, trenching machine, Barber Green loader, side booms, hydrohammer, concrete spreader, concrete finishing machine, one drum hoist, power hosting (single drum), hoist - two drum or more, three drum engine, power hoisting (two drum and over), two drum and swinging engine, three drum swinging engine, hod hoist, A-L frame winches, cord and well drillers (one drum), post hole digger, model CHB Vibro-Tamp or similar machine, batch bin and plant operator, dinky locomotive, skid steer loader, track excavator 5/8 cu. yd. or smaller.

GROUP C: Fork lift, high lift, lull, Oiler, fireman and heavy- duty greaser, boilers, and steam generators, pump, vibrator, motor mixer, air compressor, dust collector, welding machine, well point, mechanical heater, generators, temporary light plants, concrete pumps, electric submersible pump 4" and over, murphy type diesel generator, conveyor, elevators, concrete mixer and belcrete power pack (belcrete system), seeding, and mulching machines, pumps.

ENGI0158-018 07/01/2024

NORTHERN PART OF DUTCHESS (To The Northern Boundary line of the

	Rates	Fringes
Power Equipment Operator		
HEAVY & HIGHWAY		
GROUP 1.....	\$ 54.90	32.45
GROUP 2.....	\$ 53.99	32.45
GROUP 3.....	\$ 51.42	32.45
GROUP 4.....	\$ 60.90	32.45
GROUP 5.....	\$ 59.40	32.45
GROUP 6.....	\$ 57.90	32.45
GROUP 7.....	\$ 57.01	32.45

POWER EQUIPMENT OPERATORS HEAVY & HIGHWAY CLASSIFICATIONS

GROUP 1: Asphalt Curb Machine, Self Propelled, Slipform, Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted, Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CMI Type), Blacktop Plant (Automated), Boom truck , Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine, Self Propelled, Slipform, Concrete Pump, Crane, Cherry Picker, Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All Purpose Hydraulically Operated) (Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole Pavement Breaker(SP) Wertgen; PB-4 and similar type, Power Grader, Profiler (over 105 H.P.) Quad 9, Quarry Master (or equivalent), Scraper, Fireman, Form Tamper, Grout Pump, Guniting Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker, ride-on, Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement, Shovel, Side Boom, Slip Form Paver, Tractor Drawn, BeltType Loader, Truck or Trailer Mounted Log , Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

GROUP 2: Asphalt Paver, Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (NonAutomated), Blast or Rotary Drill (Truck or Tractor Mounted), Boring Machine, Cage Hoist, Central Mix Plant (NonAutomated) and All Concrete Batching Plants, Cherry Picker (5 tons capacity and under), Concrete Paver (Over 16S), Crawler Drill, Self-contained, Crusher, Diesel Power Unit, Drill Rigs, Tractor Mounted, Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, HiPressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders, L.C.M. Work Boat Operator, Locomotive Mixer (for stabilized base selfpropelled), Monorail Machine, Plant Engineer, Profiler (105 H.P. and under), Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heaterman, Power Sweeper, Revinus Widener, Roller (Grade and Fill), Scarifier, ride-on, Shell Winder, Skid steer loader (Bobcat or similar), Span-Saw, ride-on, Steam Cleaner, Pug Mill, Pump Crete Ready Mix Concrete Plant Refrigeration Equipment (for soil stabilization)Road Widener, Roller (all above subgrade), Sea Mule, Self-contained Ride-on Rock Drill, Excluding Air-Track Type

Drill, Skidder, Tractor with Dozer and/or Pusher, Trencher.
Tugger Hoist, Vermeer saw (ride on, any size or type),
Winch, Winch Cat

GROUP 3: A Frame Winch Hoist on Truck , Articulated Heavy
Hauler, Aggregate Plant, Asphalt or Concrete Grooving,
Machine (ride on), Ballast Regulator, Ride-on Boiler (used
in conjunction with production), Bituminous Heater,
self-propelled, Boat (powered), Cement and Bin Operator,
Compressors, Dust Collectors, Fork Lift, Generators, Pumps,
Welding Machines, Light Plants, Heaters (hands-off
equipment), Concrete Pavement Spreader and Finisher,
Concrete Paver or Mixer (16S and under), Concrete Saw
(self-propelled), Conveyor, Deck Hand, Directional Drill
Machine Locator, Drill, (Core), Drill, (Well,) Farm Tractor
with accessories, Fine Grade Machine, Tamper, ride-on, Tie
Extractor, ride-on, Tie Handler, ride-on, Tie Insertter,
ride-on, Tie Spacer, ride-on, Tire Repair, Track Liner,
ride-on, Tractor, Tractor (with towed accessories),
Vibratory Compactor, Vibro Tamp, Well Point

GROUP 4: Tower Cranes

GROUP 5: Cranes 50 tons and over

GROUP 6: Cranes 49 tons and below

GROUP 7: Master Mechanic

FOOTNOTES:

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence
Day, Labor Day, Thanksgiving Day, and Christmas Day

ENGI0825-007 07/01/2024

ORANGE, ULSTER AND SULLIVAN COUNTIES

	Rates	Fringes
Power Equipment Operator		
BUILDING, HEAVY & HIGHWAY		
GROUP 1.....	\$ 60.47	36.25
GROUP 2.....	\$ 58.88	36.25
GROUP 3.....	\$ 56.97	36.25
GROUP 4.....	\$ 55.34	36.25
GROUP 5.....	\$ 51.63	36.25
GROUP 6.....	\$ 62.29	36.25

NOTES:

Hazmat Premium 20%
Hydrographic Premium .50

POWER EQUIPMENT OPERATORS CLASSIFICATIONS (BLDG, HEAVY & HWY)

GROUP 1: Autograde-Pavement-Profiler (CMI and Similar Type);
utograde-Pavement-Profiler (CMI and Similar
Types);Autograde Slipform Paver (CMI and Similar Types);
Backhoe; Central Power Plants (all types); Concrete Paving
Machine (s-240 and Similar Types); Cranes (All Types,
Including Overhead and Straddle Traveling Type); Cranes,
Gantry; Derricks (Land, Floating or Chicago Boom Type);
Drillmaster/Quartmaster (Down the Hole Drill) Rotary Drill;

Self-Propelled, Hydraulic Drill, Self-Powered Drill
Draglines, Elevator Graders, Front End Loaders (5 yds. and over), Gradalls, Grader: Rago, Helicopters (Copilot), Helicopters, (Communication Engineer), Locomotive (large), Mucking Machines, Pavement and Concrete Breaker (Superhammer, Hoe Ram, Brokk 250 and Similar Types), Pile Driver (length of boom including length of leads shall determine premium rate applicable), Roadway Surface Grinder Scooper (loader and shovel), Shovels, Tree Chooper with Boom, Trench Machines, Tunnel Boring Machines.

GROUP 2: ""A"" Frame; Backhoe (Combination); Boom Attachment on Loaders (Rate based on size of bucket) not applicable to Pipehook) Boring and Drilling Machines, Brush Chopper, Shredder and Tree Shredder Tree Shearer, Cableways, Carry-alls, Concrete Pump, Concrete Pumping System, Pumpcrete and Similar Types, Conveyors, 125 ft and over; Drill Doctor (duties include dust collector, maintenance), Front End Loader (22 yds. but less than 2 yds.), Graders (Finish); Groove Cutting Machine (ride on type), Heater Planer; Hoists: (all type hoists, Shall Also Include Steam, Gas, Diesel, Electric, Air Hydraulic, Single and Double Drum, Concrete, Brick Shaft, Caisson, Snorkel Roof, and or any other similar type Hoisting Machines, Portable or Stationary, Except Chicago Boom Type). Long Boom Rate to Be Applied if Hoist is ""outside material lower hoist""; Hydraulic Cranes-10tons and Under; Hydro-Axe; Hydro-Blaster; Jacket (Screw Air Hydraulic Power Operated Unit or Console Type: Not Hand Jack or Pile Load Test Type), Log Skidder; Pans, Pavers (all) Concrete; Plate and Frame Filter Press; Pumpcrete Machines; Squeeze Crete and Concrete Pumping (regardless of size); Scrapers; Sidebooms; Straddle Carrier, Ross and Similar Types; Vacuum Truck; Whip Hammer; Winch Trucks (Hoisting).

GROUP 3: Asphalt Curbing Machine, Asphalt Plant Engineer, Asphalt Spreader; Autograde Tube Finisher & Texturing Machine (CMI and Similar types) Autograde Curecrete Machine (CMI and Similar Types); Bar Bending Machines (power), Batchers, Batching Plant and Crusher on-site; Belt Conveyor Systems; Boom Type Skimmer Machines; Bridge Deck Finisher; Bulldozers (all); Car Dumpers (A:road); Chief of Party; Compressor and Blower Type Units (used) Independently or Mounted On Dual Purpose Trucks, On Job Site or In Conduction with Job Site, In Loading and Unloading of Concrete, Cement, Fly Ash, Instantcrete, or Similar Type Materials); Compressor 92 or 3 in Battery); Concrete Finishing Machines; Concrete Saws and Cutters (ride on type); Concrete Spreaders, Hetzel, Rexomatic and Similar types; Concrete Vibrators; Conveyors, Under 125 ft), Crushing Machines, Ditching Machine, Small (ditchwitch, Vermeer or Similar type); Dope Dots (mechanical with or without pump), dumpsters; Elevator; Fireman; Forklifts (economobile, lull, and similar types of equipment); Front End Loaders (1 yd. and over but less than 2 yds.); Generators (2 or 3 in Battery/ within 100 ft); Giraffe Grinders, Graders and Motor Patrols; Grout Pump; Gunnite Machines (excluding nozzle); Hammer Vibratory (in conduction with generators); Hoists (Roof, Tuggeraerial Platfrom Hoist and House Cars), Hoppers, Hoppers Doors (power operated); Hydro-Blaster (where required); Ladders (Motorized); Laddervator; Locomotive, Dinky type; Maintenance, Utility Man; Mechanics; Mixers (Excepting Paving Mixers); Motor Patrols and Graders; Pavement Breakers, Small, Self-Propelled ride on type (also

maintains compressor or hydraulic unit); Pavement Breaker, Truck Mounted; Pipe Bending Machine (power); Pitch Pump; Plaster Pump (regardless of size); Post Hole Digger (post pounder and auger); Rod Bending Machines (power); Roller, Black Top; Scales, (power); Seaman Pulverizing Mixer; Shoulder Widener; Silos; Skimmer Machines (Boom Type); Steel Cutting Machine, Services and Maintains; Tamrock Drill; Tractors; Tug Captain; Vibrating Plants (used in conduction with unloading); welder and Repair Machines. Concrete cleaning/decontamination machine operator; Directional boring machine; Heavy equipment robotics operator; Master environmental maintenance operator; Ultra high pressure waterjet cutting tool system operator; maintenance operator; Vacuum blasting machine operator

GROUP 4: Brooms and Sweepers; Chippers; Compressors (single); Concrete Spreaders (small type); Conveyor Loaders (not including Elevator Graders); Engines, Large Diesel (1620 h.p.) and Staging Pump; Farm Tractors; Fertilizing Equipment (Operator and Maintenance of); Fine Grade Machine (small type); Form Line Graders (small type); Front End Loader (under 1 yd); Generator (single); Grease, Gas, Fuel and Oil Supply Trucks; Heaters (Nelson or Other Type Including Propane, Natural Gas or Flowtype Units); Lights, Portable Generating Light Plants; Mixers, Concrete Small; Mulching Equipment (Operation and Maintenance of); Pumps (2 of Less Than 4 Inch Suction); Pumps 94 Inch Suction and Over Including Submersible Pumps); Pumps (Diesel Engine and Hydraulic); Immaterial of Power; Road Finishing Machines (Small Type); Rollers, Grade, Full Or Stone Base; Seeding Equipment (Operation and maintence of); Sprinkler and Water Pump Trucks (Used on job Site or in conduction with Job Site); Steam Jennies and Boilers, Irrespective of Use; Stone Spreader; Tamping Machines, Vibrating Ride On; Temporary Heating Plant (nelson or Other Type, Including Propane, Natural Gas or Flow Type Units); Water and Sprinkler Trucks (Used On Job Site In Conduction with Job Site); Welding Machines-Within 100 ft (Gas, and /or Electric Converters of any type, single, tow or three in a battery). welding system, multiple (rectifier transformer type) well point systems (including installation by bull gang and maintenance of); Off Road back dumps.

GROUP 5: Oiler

GROUP 6: Helicopter Pilot

a. PAID HOLIDAYS: New Years Day, Washington's Birthday Memorial Day, July 4th, Labor Day, Veteran's Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day during the calendar week in which the holiday occurs.

ENGI0825-008 07/01/2024

ORANGE, ULSTER AND SULLIVAN COUNTIES

	Rates	Fringes
Power equipment operators:		
BUILDING CONSTRUCTION		
STEEL ERECTION		
GROUP 1.....	\$ 68.99	36.25

GROUP 2.....	\$ 67.33	36.25
GROUP 3.....	\$ 60.04	36.25
GROUP 4.....	\$ 57.38	36.25
GROUP 5.....	\$ 55.85	36.25
GROUP 6.....	\$ 52.09	36.25
GROUP 7.....	\$ 64.49	36.25
BUILDING CONSTRUCTION TANK ERECTION		
GROUP 1.....	\$ 68.71	36.25
GROUP 2.....	\$ 67.12	36.25
GROUP 3.....	\$ 63.60	36.25
GROUP 4.....	\$ 60.03	36.25
GROUP 5.....	\$ 52.82	36.25
OILSTATIC MAINLINES AND TRANSPORTATION PIPE LINES		
GROUP 1.....	\$ 61.10	36.25
GROUP 2.....	\$ 59.45	36.25
GROUP 3.....	\$ 57.31	36.25
GROUP 4.....	\$ 55.81	36.25
GROUP 5.....	\$ 52.09	36.25
GROUP 6.....	\$ 63.03	36.25

NOTES:

Hydrographic Premium	50
Hazmat Premium	20%
Tunnel Premium	.75

STEEL ERECTION CLASSIFICATIONS

GROUP 1: Cranes (All Cranes, Land or Floating with Booms Including Jib 140 ft and over, Above Ground); Derricks, Land, Floating or Chicago Boom Type with Booms including Jib 140 ft and over above ground).

GROUP 2: Cranes (All Cranes, Land or Floating with Booms Including Jib Less Than 140 ft Above Ground); Derricks, Land, Floating or Chicago Boom Type with Booms Including Jib Less Than 140 ft above Ground).

GROUP 3: "'A"' Frame, Cherry Pickers 10 tons and under, Hoists Shall Also Include Steam, Gas, Desel, Electric, Air Hydraulic, Single and Double Drum Concrete, Brick Shaft Caisson, or Any Other Similar Type Hoisting Machines, Portable or Stationary, Except Chicago Boom Type; Jacks: Screw Air Hydraulic Power Operated unit or Console Type (not hand Jack or Pile Load Test Type); Side Booms.

GROUP 4: Aerial Platform used as Hoist; Compressor: 2 or 3 in Battery; Elevators or House Cars; Conveyors and Tugger Hosits; Chief of Party; Firemanp; Forklift; Generators (2 or 3); Maintenance (Utility Man); Rod Bending Machine (power); Welding Machines (Gas or Electric, 2 or 3 in Battery, Including Diesels); Captain: Power Boats: Tug Master: Power Boats.

GROUP 5: Compressor, Single; Welding Machine, Single, Gas, Diesel, and Electric Converters of any Type: Welding System Multiple (Rectifier Transformer Type); Generator, Single.

GROUP 6: Oiler

GROUP 7: Helicopter Pilot .

FOOTNOTE: a. PAID HOLIDAYS: New Years Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day,

Veteran's Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the calendar week during which the holiday occurs.

For BUILDING CONSTRUCTION TANK ERECTION CLASSIFICATIONS

NOTES: Tunnel Premium	.75
Hazmat Premium	20%
Hydrographic Premium	.50

TANK ERECTION CLASSIFICATIONS

GROUP 1: Operating Engineers on all Cranes, Derricks, ets with Booms Including Jib 140 ft or More Above Ground.

GROUP 2: Operating Engineer on all Equipment, Including Cranes, Derricks, ets with Booms Including Jib, Less Than 140 ft above the ground.

GROUP 3: Helicopter Pilot Engineer.

GROUP 4: Air Compressors, Welding Machines and Generators are Covered and are Defined as Cover: Gas, Diesel, or Electric Driven Equipment and Sources of Power from a Permanent Plant: ie: Staem, Comgressed Air, Hydraulic or Other Power, For The Operating of any Machine or Automatic Tools, Used In The Erection, Alteration, Repair and Dismantling of Tanks and Any and All ""Dual Purpose"" Trucks Used On The Construction Job Site, or in the Loading and Unloading of Materials, at the Construction Job Sited or in Conjunction with the Job Site.

GROUP 5: Oiler

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Election Day, Thanksgiving Day, and Christmas Day provided the Employee works one day in the calendar week during which the holiday occurs

For OILOSTATIC MAINLINES AND TRANSPORTATION PIPE LINE CLASSIFICATIONS

NØTES:	
Hydrographic Premium	.50
Hazmat Premium	20%
Tunnel Premium	.75

OILSTATIC MAINLINES AND TRANSPORTATION PIPE LINES CLASSIFICATIONS

GROUP 1: Backhoe; Cranes (all types); Draglines, Front End Loaders (5yds. and over), Gradalls, Helicopters (co-pilot), Helicopters (Communication Engineer); Scooper (Loader and Shovel) Koehring; Trench Machines.

GROUP 2: ""A"" Frame; Backhoe (Combination Hoe Loader); Boring and Drilling Machines; Ditching Machines, Small, Ditchwitch, Vermeer or Similar type; Forklifts; Front End

Loaders 92 yds. and over but less than 5 yds.); Graders, Finish (fine); Hydraulic Cranes 10 tons and under (over 10 tons) Cranes Rate Applies); Side Booms: Winch Trucks (Hoisting).

GROUP 3: Backfiller; Brooms and Sweepers; Bulldozers; Compressor (2 or 3 in battery); Chief of Party; Front End Loaders (under 2 yds); Generators; Giraffe Grinders; Graders and Motor Patrols; Machnic; Pipe Bending Machine (power);Tractors; Water and Sprinkler Trucks used on Job Site or in Conduction with Job Site); Welder and Repair Mechanic; Captain (power boats); Tug Master (power boats).

GROUP 4: Compressor (single); Dope Pots (Mechanical with or without Pump); Dust Collectors; Pumps (4 inch suction and over); Pumps (2 of less than 4 inche suction); Pumps, Diesel Engine and Hydraulic (immaterial of power); Welding Machines, Gas or Electric Converters of any type- 2 or 3 in Battery Mulptle Welders; Well Point Systems (including installation and Maintenance); Fram Tractors.

GROUP 5: Oiler, grease, gas, fuel and oil supply trucks; Tire repair and maintenance

GROUP 6: Helicopter Pilot

FOOTNOTE:

a. Paid Holidays: New Years Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Election Day, Thanksgiving Day and Christmas Day provided the Employee works one day in calendar week during which the holidays occurs.

IRON0417-001 07/01/2024

	Rates	Fringes
IRONWORKER.....	\$ 42.38	47.70+a

a) Paid Holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Day after Thanksgiving (unpaid), Christmas Day.

* LAB00017-002 06/01/2023

	Rates	Fringes
LABORER		
DUTCHESS COUNTY (Asbestos, lead, toxic and hazardous waste abatement and any other environmental related work): (BUILDING CONSTRUCTION)		
GROUP 1.....	\$ 35.95	27.15
GROUP 2.....	\$ 37.75	27.15
DUTCHESS COUNTY (Asbestos, lead, toxic and hazardous waste abatement and any other environmental related work): (HEAVY & HIGHWAY:)		

GROUP 2.....	\$ 44.80	32.45+a
GROUP 3.....	\$ 49.40	32.45+a
ORANGE AND ULSTER COUNTIES (BUILDING CONSTRUCTION:)		
GROUP 1.....	\$ 35.95	27.15
GROUP 2.....	\$ 37.75	27.15
GROUP 3.....	\$ 40.50	27.15
ORANGE, ULSTER, AND SULLIVAN COUNTIES (HEAVY & HIGHWAY)		
GROUP 1.....	\$ 40.80	32.45+a
GROUP 2.....	\$ 44.80	32.45+a
GROUP 3.....	\$ 49.40	32.45+a
GROUP 4.....	\$ 54.70	32.45+a
TUNNEL, SHAFT & CAISSON WORK		
GROUP 1.....	\$ 48.05	29.50+a

LABORERS BUILDING CLASSIFICATIONS

GROUP 1: Custodial work, flag person, portable generator tender, portable pump tender, pitman and dumpman, firewatch, temporary heat tender, temporary light tender, traffic control, tool room tender; Artificial turf, air chipping hammer acoustic pump and mixer, carpenter tender, concrete, concrete curb and sidewalk form setter, concrete form stripping, concrete sealing, concrete curing, concrete finisher, concrete vibrator, compressor, clean up after trades, dismantling demolition, excavation, fireproofing, foundation and building piping, pump and mixer, gunite, general clean up, grade checker, grading and backfilling, hoists, hod carrier, landscaping, mason tender, multi building trades tender, jackhammer, pavement breaker, poured gypsum roof work, power tampers, power walk behind roller, pressure blasting, power mixer, scaffolding, snow removal, signal person, sandblasting, styrofoam and similar installation, radio control equipment including but not limited to radio control tampers and rollers, radio control excavator, all erecting and dismantling of scaffold for masonry regardless of height, walking and riding power buggies, temporary weather protection, wrecking, waterproofing, stone and tile tenders, radio controlled hammers and breakers, unloading of trucks, air track, assembling and placing gabion baskets, asphalt, blaster, bob cat type machine for demo and clean up, chain link fence, chain saw, chipping hammer, concrete conveyor belt, saw, core drill, corrugated pipe, construction specialist, cleaning machine, concrete form setter, conduit layer, cutting torch, discharge pipe, drill chuck tender, duct bank layer, explosive handler, hydraulic splitter, granite or stone curbing, handler, joy and jib drill, Ingersoll Rand heavy duty crawler master type HCMZ drill machines or equivalent, laser level, nonmetallic pipe layer, metallic pipe layer, LeRoi hydraulic drill or similar, mega mixer, power fork lift, prestressed and precast concrete, power brush cutter, pump crete machine, retaining walls, rip rap, retention and toxic and hazardous waste liners, setting of block, setting of block, setting of brick, setting of stone, sound barriers, transit under laborers jurisdiction, tow behind concrete or grout pump, traffic and pedestrian stripping, surface planner, manufactured curb, walk behind durface planner, wagon drill, welding; * asbestos abatement work, lead abatement work, toxic and hazardous waste related work; when protective equipment and clothing are not required.

GROUP 2: Forklift for masonry purposes

GROUP 3: Asbestos Abatement work, toxic and hazardous abatement, lead abatement work, environmental work.

BUILDING CLASSIFICATIONS

GROUP 1: Asbestos abatement work, lead abatement work, toxic and hazardous waste related work; when protective equipment and clothing are not required.

GROUP 2: Asbestos abatement work, toxic and hazardous abatement, lead abatement work, environmental work.

LABORERS HEAVY AND HIGHWAY CLASSIFICATIONS

GROUP 1: Flagperson, gateperson

GROUP 2: General laborers, chuck tender, handling and distributing drinking water, distributing all tools and supplies of laborers, nipper, powder carrier, magazine tender, warehouse laborers, concrete man, vibrator man, mason tender, mortar man, spraying, brushing and covering of concrete for curing and preservative purposes, traffic striping, scaffold builder, concrete curb and sidewalk from setter; permanent traffic striping and reflective devices, placing and maintenance of all flares, cones, lights, signs, barricades, traffic patterns, and all temporary reflective type materials for traffic control, custodial work, traffic directors, temporary heat or light tenders, tool room, dewatering pump men, pitman, dumpmen, snow removal and firewatch, asphalt man, joint setter, signal person, pipelayer, pipelining and relining, wellpoints, conduit and duct layer, wire puller rip rap and dry stone layer, steel rod carrier, core drill, rock splitter, Hilti gun air or electric, jackhammer, bush hammer, pavement breaker, chipping hammer, wagon drill, air track, jib rig, joy drill, gunite and sand blasting, coal passer and other machine operators, power tool operator, sprayer and nozzle man on mulching and seeding machine, all guard rail and fence, all seeding and sod laying, all landscape work, grade checker, all bridge work, walk behind self-propelled power saw, grinder, groover or similar type machine, walk behind tamper and roller of all types, salvage, stripping, wrecking and dismantling laborer (including barman, cutting torch and burner man), sheeting and shoring coming under laborers

jurisdiction, bit grinder, operator of form pin puller and drivers, sandblasting, joint and jet sealer, filling and wiring baskets for gabion walls, permanent sign man, median barrier,

sta-wall or similar type product, chain saw operator, railroad track laborer, waterproofer, pre-stressed and pre-cast concrete brick, block and stone pavers, power tools used to perform work usually done by laborers, power buggy and pumpcrete operator, fireproof, plaster and acoustic pump, asbestos, toxic, bio-remediation, phyto-remediation, lead or hazardous materials abatement when protective clothing and equipment is not required, power brush cutter, retention liners, artificial turf, retaining walls, walk behind surface planer, welding related to laborers work, remote controlled equipment normally operated by laborers, all technician work including but not limited to stitching, seaming, heat

welding, fireproof sprayer, mortar mixer, concrete finisher, form setter for concrete curbs and flatwork. Guniting nozzle man, stone cutters, granite stone layer, manhole, catch basin or inlet installing, laser men. Ground man on milling machine.

GROUP 3: Ingersoll Rand heavy duty crawler master type HCMZ any drill using 4" or larger bit, asbestos, toxic, bio-remediation, phyto-remediation, lead or hazardous material abatement when protective clothing and equipment is required, all working foremen including grade, pipe, concrete, clearing, blacktop, drill, paving and blaster etc., Hydraulic drill or similar, forklift for masonry only, Blaster and asphalt screedman.

GROUP 4: Asbestos, toxic, lead or hazardous material abatement foreman.

HEAVY & HIGHWAY CLASSIFICATIONS

GROUP 1: Asbestos, toxic, bio-remediation, phyto-remediation, lead or hazardous material abatement; when protective equipment and clothing are not required.

GROUP 2: Asbestos toxic, bio-remediation, phyto-remediation, lead or hazardous material abatement when protective clothing and equipment is required.

FOOTNOTE:

PAID HOLIDAYS: New Years Day, Presidents's Day, Memorial Day, Independence Day, Labor Day, Election Day, Veterans Day, Thanksgiving Day, Christmas Day

TUNNEL, SHAFT & CASSION CLASSIFICATIONS

GROUP 1: Laborer, Pit and Dumpman, Chuck Tender, Brakeman and Powder; Miner and all machine men, Safety Miner, all shaft work, cassin work, drilling, blow pipe, all air tools, tugger scaling, nipper gunniting from pot to nozzle, bit grinder, singal man (top and bottom), shift steward, concrete man, shield driven tunnel, mixed face and soft ground liner plate tunnel in free air.

LAB00235-003 06/01/2024

DUTCHESS COUNTY

	Rates	Fringes
Laborers:		
BUILDING CONSTRUCTION		
GROUP 1.....	\$ 40.00	32.45
GROUP 2.....	\$ 41.12	32.45
GROUP 3.....	\$ 42.35	32.45

LABORERS CLASSIFICATIONS (BUILDING)

GROUP 1: Mason tenders, carpenter tenders, laborer stripping and cleaning forms, laborer grading and digging ditches, sweepers, cleaners.

GROUP 2: Hod carriers, plasterers' tenders, scaffold builders (padlock and self-supporting scaffold 14 ft. or

under all runways, mortar mixers) machine and hand, concrete mixers by machine under 21e, vibrators, form setters, asphalt rakers, handling reinforcement rods, drillers, jackhammer, operator, signalman, gunniting, motorbugs, water pump 2" or under barco machine, wreckers, paving breakers, power saw operators, other machine operators.

GROUP 3: Blasters, Laser beam operator.

LAB00235-005 05/01/2023

DUTCHESS COUNTY

	Rates	Fringes
Laborers:		
HEAVY & HIGHWAY		
GROUP 1.....	\$ 36.45	27.80+a
GROUP 2.....	\$ 42.80	27.80+a
GROUP 3.....	\$ 43.90	27.80+a

LABORERS CLASSIFICATIONS (HEAVY & HIGHWAY)

GROUP 1: Flagperson, placing and maintenance of all flares, cones, light, signs, barricades, traffic control, custodial work, traffic directors, temporary heat or light tenders, tool rooms.

GROUP 2: General Laborers, Dumpman, Pitman, Concrete Man, Signal Man, Pipelayer, Rip Rap, Dry Stone Layer, Jackhammer, Powderman, Highscalers, Power Buggy Operator, Steel Rod Carrier, Vibratory Operator, Other Machine Operator, Wrecking, Vibrator Operator-Compactor, Guniting and Sand Blasting, Water Pump 2" or under, Nipper, Chucker, Asphalt Workers.

GROUP 3: Asphalt Raker, Asphalt Screeman, Drillers (all), Laser Beam Operator, Form Setter/Aligners, Blasters.

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Good Friday, Washington's Birthday, November Election Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Thanksgiving Day and Christmas Day and Veteran's Day.

PAIN0009-004 05/01/2024

DUTCHESS, ORANGE, SULLIVAN and ULSTER COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 49.00	55.75

PAIN0155-003 05/01/2021

	Rates	Fringes
Painters:		
Drywall Finishers.....	\$ 35.94	24.66
Lead Abatement Work.....	\$ 35.94	24.66
Painter/Paperhanger.....	\$ 35.94	24.66
Spray Rate.....	\$ 36.94	24.66

PAIN0806-008 10/01/2024

DUTCHESS, ORANGE, SULLIVAN AND ULSTER COUNTIES

	Rates	Fringes
PAINTER		
Structural steel and Bridge.	\$ 56.25	55.14

PLUM0021-005 05/01/2024

ZONE 2

DUTCHESS COUNTY AND THE REMAINDER OF ULSTER COUNTY

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 59.35	43.61

PLUM0373-002 05/01/2024

ORANGE COUNTY Towns of Lakeville, Four Corners, Sterling Forest, Tuxedo Park, Southfields, Arden, Newburgh Junction, Greenwood Lake, Monroe, Harriman, Woodbury Falls, Woodbury, Woodbury Station, Central Valley, and the Palisades Interstate Park and Bear Mountain Park

	Rates	Fringes
Plumber; Steamfitter.....	\$ 51.20	45.57
REFRIGERATION MECHANIC.....	\$ 40.09	36.42

PLUM0373-003 05/01/2024

SULLIVAN COUNTY (Townships of Lumberland, Forestburgh, Highland, Tusten, Mamakating, Fallsburgh, Thompson, Bethel, Cohecton, Delaware, Freemont, Callicoon, Liberty, Monticello, Neversink and Rockland); ORANGE COUNTY (Remaining Townships) and ULSTER COUNTY (Towns of Shawangurk, Wawarsing, Plattekill, Marlboro and Ellenville up to Napanoch Prison)

	Rates	Fringes
Plumber; Steamfitter.....	\$ 51.20	45.57

ROOF0008-002 05/01/2024

	Rates	Fringes
ROOFER.....	\$ 48.50	38.87

SFNY0669-002 01/01/2025

	Rates	Fringes
SPRINKLER FITTER.....	\$ 53.34	31.36

SHEE0038-001 07/01/2024

	Rates	Fringes
Sheet metal worker.....	\$ 53.22	46.20

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 36.32	45.14+a
GROUP 1A.....	\$ 37.44	45.14+a
GROUP 2.....	\$ 37.44	45.14+a
GROUP 3.....	\$ 35.54	45.14+a
GROUP 4.....	\$ 35.43	45.14+a
GROUP 5.....	\$ 35.31	45.14+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Labor Day, President's Day, Presidential Election Day, Veterans Day, Decoration Day, Independence Day, Thanksgiving Day and Christmas Day provided the employee works two days in any calendar week during which the holidays occurs.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Drivers on Letourneau tractors, double barrel euclids, Athey wagons and similar equipment (except when hooked to scrapers), I-beam and pole trailers, drivers of road oil distributors, tire trucks and tractors and trailers with 5 axles and over, Articulated Back Dumps and Articulated Water Trucks.

GROUP 1A: Drivers on detachable Gooseneck Low bed Trailers rated over 35 tons.

GROUP 2: Drivers on all equipment 25 yards and over, up to and including 30 yard bodies and cable dump trailers and powder and dynamite trucks.

GROUP 3: Drivers on all equipment up to and including 24 yard bodies, mixer trucks, dump crete trucks and similar types of equipment, fuel trucks, batch trucks and all other tractor trailers.

GROUP 4: Drivers on tri axles, ten-wheelers, grease trucks and tillermen.

GROUP 5: Drivers on pick-up trucks used for materials & parts, drivers on escort man over-the-road and drivers on straight trucks.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including

preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

----- WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

=====
END OF GENERAL DECISION"

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS - TABLE OF CONTENTS

FISHKILL AVENUE SEWER & WATER REPLACEMENT CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DIVISION 1 - GENERAL REQUIREMENT

SECTION	TITLE	# OF PAGES
01011	Work Under This Contract.....	1
01013	Work By Others	1
01030	Special Project Requirement	6
01035	Prohibited Construction Procedures.....	2
01045	Cutting and Patching	3
01047	Utilities - Notification and Mark Out	1
01068	Waste Materials Disposal	2
01070	Abbreviations and Symbols	6
01150	Measurement and Payment.....	1
01153	Change Order Procedure	1
01201	Preconstruction Conference.....	2
01202	Progress Meetings	1
01310	Progress Schedules.....	4
01340	Shop Drawings and Samples	4
01341	Review of Contractor's Construction Procedures	1
01510	Temporary Bypass Pumping	5
01516	Temporary Sanitary Facilities	1
01546	Protection of Existing Property	3
01561	Noise Control.....	1
01562	Dust Control.....	1
01568	Erosion Control	2
01570	Maintenance & Protection of Traffic	7
01620	Product Delivery, Storage and Handling	2
01651	Connection to Existing Utilities	1
01701	Contract Closeout	1
01710	Cleaning.....	2
01720	Record Documents	1

TECHNICAL SPECIFICATIONS - TABLE OF CONTENTS

FISHKILL AVENUE SEWER & WATER REPLACEMENT CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DIVISION 2 - SITEWORK

SECTION	TITLE	# OF PAGES
02015	Test Pits - Verification of Utilities & Structures	2
02201	Existing Utilities and Structures	3
02210	Grading	2
02211	Rock Removal	4
02212	Pipe/Structure Abandonment with Low Density Cellular Concrete (LDCC).....	4
02221	Trenching, Backfilling and Compaction	5
02224	Unsuitable, Suitable and Select Material.....	5
02225	Pipe Embedment Zone	2
02250	Soil Compaction.....	3
02401	Dewatering.....	4
02486	Restoration	4
02513	Bituminous Pavement.....	5
02521	Concrete Sidewalks	4
02528	Concrete Curbs	3
02601	Manholes	8
02603	Tapping Sleeves and Valves	3
02615	Ductile Iron Pipe	6
02622	PVC Sewer Pipe.....	4
02627	Copper Pipe (Buried) and Necessary Fittings.....	4
02641	Valves, Meters & Appurtenances - Water	4
02646	Restraint Systems	2
02675	Disinfection of Water Distribution Systems	6
02706	Sanitary Sewer Service Connections	2
02709	Testing and Inspecting Water Lines	2
02724	Testing and Inspecting of Gravity Lines.....	4
02830	Topsoiling, Seeding and Mulching.....	4

DIVISION 3 - CONCRETE

03051	Hot and Cold Weather Concreting Procedures.....	2
03100	Concrete Formwork.....	3
03200	Concrete Reinforcement	3
03250	Concrete Accessories	1
03300	Cast-In-Place Concrete	9
03600	Grout	5

DIVISION 1 - GENERAL REQUIREMENTS

PART 1 GENERAL

1.1. SECTION INCLUDES

1.1.1 Summary of work under this Contract.

1.2. SYSTEM DESCRIPTION

1.2.1. The Fishkill Avenue Sewer & Water Main Replacement project is a project located in the City of Beacon, Dutchess County, New York and it entails the installation of 1,387 linear feet of 12" SDR-35 PVC sewer pipe, 6 manholes, installation of 1,915 linear feet of 10" Class 52 ductile iron pipe, 5 hydrants, and reconnection of water and sewer services to existing buildings along Fishkill Avenue to replace the existing 8" clay sewer main and 10" cast iron water main. The new sewer main shall be pressured tested, mandrel tested, and the new sewer manholes vacuum tested. The new water main shall be flushed, pressure tested and disinfected. All disturbed areas, such as curbing, pavement, grass areas, etc., shall be restored to a condition equal to or better than existing prior to the project. The Contractor will be responsible to provide all labor, tools, electric power, construction equipment, materials, disposal of all wastes, and all other facilities and services necessary for the proper execution and construction of work. Included in this work shall be acquiring all work permits from local, state or federal agencies, excavation, backfill material, backfilling, compaction, paving, concrete, supply and installation of all piping, structures, fittings, valves hydrants, castings, testing, and restoration of all disturbed areas, including road surfaces as called for in these specifications and bid documents.

** END OF SECTION **

PART 1 GENERAL

1.1. WORK INCLUDED

- 1.1.1. Requirements describing the work to be done by others.

1.2. SYSTEM DESCRIPTION

- 1.2.1. **Prior to the commencement of construction, the contractor shall meet with all known public and private utility companies occupying the work site. The contractor, at this meeting(s), shall inform the utility companies of their schedule of operations and coordinate their work with these companies. The contractor shall keep minutes of the meeting(s) and shall submit them to the engineer.**

The contractor specifically agrees that they have included in their unit prices and lump sum prices, any additional cost of doing the work under this contract because of the fact that they may not have a clear site for the work, and because of interference of roadway use by the utilities, and the necessity or desirability of opening certain sections of pavement to traffic before the entire work is completed.

- 1.2.2. Work on certain existing utilities may be required to be done by the utility forces. The contractor shall coordinate this work with the utility authority having jurisdiction and schedule all such work.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for work required not included in other sections within this Specification.

1.2. SYSTEM DESCRIPTION

1.2.1. HIGHWAY WORK PERMITS

- 1.2.1.1. Contractor shall be responsible to obtain and maintain all local, county and state highway work permits required for completion of project. This shall include all costs for acquiring permits.

- 1.2.2. Contractor is responsible for maintenance of traffic and access to businesses, and maintenance of pedestrian traffic. Contractor shall ensure that at least one lane is open for traffic at all times, and shall sufficiently staff traffic control with flag personnel to ensure smooth continued operations of traffic.

- 1.2.2.1. Contractor shall construct temporary walkways, ramps and all else necessary to maintain access to businesses and homes at all times.

- 1.2.2.2. In areas where sidewalks have been removed by the Contractor, the Contractor shall provide a smooth passable walkway to allow for the continued flow of pedestrian traffic, so that pedestrians are not forced to walk within the roadway.

- 1.2.2.3. Access for emergency vehicles shall be maintained at all times. Contractor shall on site certified road plates at excavations within the roadway to ensure that the trench(s) could be covered to allow for passage of emergency vehicles.

- 1.2.2.4. Two-way traffic shall be maintained during working hours, UNLESS OTHERWISE APPROVED BY THE CITY OF BEACON IN ADVANCE.

- 1.2.2.5. If one-way traffic approved by the City of Beacon, at the end of each work day, two-way traffic shall be re-established and maintained during non-working hours.

- 1.2.2.6. Contractor shall provide all necessary signs, barricades, warning lights, flag personnel, etc. required by the NYSDOT Manual of Traffic Control Devices, and as directed by the Engineer. All traffic control devices shall be in accordance with the NYSDOT Manual of Traffic Control Devices. Warning lights shall be supplied and mounted on barricades during the duration of the project. Warning lights shall be operational each night for the duration of the project.
- 1.2.3. MISCELLANEOUS ITEMS
- 1.2.3.1. Crews shall be sufficiently manned and equipped to complete the required tasks.
- 1.2.3.2. Existing sanitary sewer manhole structures, sanitary sewer piping and water main shall be removed and disposed of properly where noted on plans or abandoned in place where noted on plans. When sewer main is to be abandoned in place, sewer manholes shall have upper half of structure completely removed and structure shall be filled with excavated materials from site and compacted in 9" lifts maximum on interior of structure. Sewer lines and water lines to be abandoned in place shall be filled completely with Low Density Cellular Concrete (LDCC) in accordance with Section 02212 of the technical specifications.
- 1.2.3.3. **Contractor shall dig test pits in accordance with Section "Test Pits - Verification of Utilities & Structures", Division 2 to verify existing location and elevation of utilities and to check for any conflicts between proposed storm drainage, sewer main, sewer services, water main, water services, and existing utilities. Contractor shall also dig test pits to verify location and size of existing water and sewer services to each building located along the work zone prior to the installation of and sewer and water mains.**
- 1.2.3.4. Where Contractor damages unlocated water service, Contractor shall repair water service with new K-copper pipe and required fittings. If water service was marked but is damaged by Contractor, Contractor shall repair water service at no cost to City.
- 1.2.3.5. Where Contractor damages unlocated sewer service, Contractor shall repair sewer service with new PVC pipe and required fittings, and shall connect service to new sewer main.
- 1.2.3.6. Contractor shall restore all disturbed lawn and landscaped areas to pre-existing or better than pre-existing conditions. Restoration of all lawn areas shall commence within 48 hours after construction has been completed in that area of disturbance.

- 1.2.3.7. Contractor shall saw cut existing pavement and concrete road along Fishkill Avenue the width of the proposed trench. As Contractor constructs new sewer and water mains, existing asphalt and concrete roadway shall be removed and properly disposed of.
- 1.2.3.8. Contractor shall pave the trench in Fishkill Avenue with temporary pavement at the end of each day. Temporary pavement shall be 3" of binder course. Temporary pavement shall be maintained until such time as Contractor is ready to install final pavement section per plans.
- 1.2.3.9. Contractor shall GPS locate the new force main at ends of each length of pipe installed (horizontal and vertical), all force main fittings and all utility crossings uncovered during the installation of the force main. GPS data shall be provided to Project Engineer upon completion to allow for development of as-built drawings. GPS shall be done in NYS Plane/Gird North, with vertical control in NAVD 88.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. Manhole frames and covers shall be Pattern No. 1009 as manufactured by Campbell Foundry Company, Harrison, New Jersey, or approved equal, and shall be Domestically Made. Covers shall be either marked "SEWER" or "STORM", depending upon application.

PART 3 EXECUTION

3.1. UTILITY CASTINGS

- 3.1.1. **Utility castings (catch basins, manholes, valve boxes, etc.) shall be set a 1/4 "below the grade of the finished pavement or finished ground surface. Valve box risers shall not be used.**
- 3.1.2. Solid concrete brick shall be used to adjust the grade of manhole and catch basin frames no more than 11 inches. Solid concrete block or grade rings are acceptable.
- 3.1.3. Frames shall be set concentric with the top of the masonry and in a full bed of mortar so that the space between the top of the masonry and the bottom flange of the frame shall be completely filled and watertight.
- 3.1.4. A thick plug of mortar extending to the outer edge of the manhole shall be placed all around and on the top of the bottom flange. The mortar shall be smoothly finished and have a slight slope to shed water away from the frame.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement of maintaining access to business and homes shall not be made. This would include the construction or installation of any ramps, steel plates, etc. to allow for access.
- 4.1.2. Measurement for miscellaneous items shall be as follows:
- 4.1.3. Measurement for miscellaneous items shall be as follows:
 - 4.1.3.1. Measurement for crews being sufficiently manned and equipped shall not be made.
 - 4.1.3.2. Measurement of sewer manhole removal; sanitary sewer and water piping removal; proper disposal of all excavated materials piping and structures; and abandoning of manholes in place shall be Lump Sum. Abandonment of sewer lines and water main in place with Low Density Cellular Concrete shall be paid in accordance with Section 02212.
 - 4.1.3.3. Measurement of test pits shall be Lump Sum.
 - 4.1.3.4. Measurement for repair of existing unlocated water service shall be by the unit.
 - 4.1.3.5. Measurement for repair of damaged unlocated sewer service shall not be made.
 - 4.1.3.6. Measurement for the restoration of lawn and landscaped areas shall be Lump Sum.
 - 4.1.3.7. Measurement for removal of asphalt and concrete road from Fishkill Avenue shall be lump sum.
 - 4.1.3.8. Measurement for temporary pavement along Fishkill Avenue shall be by the square yard and shall be based upon maximum trench width per plans.
 - 4.1.3.9. Measurement for GPS location of force main, fittings, utility crossings, and supplying GPS data to Project Engineer shall be Lump Sum.
- 4.1.4. Measurement of traffic control shall be Lump Sum.

4.2. PAYMENT

- 4.2.1. There is no payment for maintaining access to businesses within the contract limits or providing for a passable pedestrian/vehicular access.

- 4.2.2. Unit price for miscellaneous items should be as follows:
- 4.2.2.1. There is no payment for crews being sufficiently manned and equipped.
 - 4.2.2.2. Lump Sum price for removal of existing sewer main and associated sewer manholes, and existing water main, shall include excavation; disposal of all wastes, piping and structures; backfilling of excavation with Select Material No. 4 within road right-of-way; compaction of backfill materials in 8" lifts; equipment; labor; tools; disposal of all wastes, and all else incidental and necessary to complete the work.
 - 4.2.2.3. Lump sum price for test pits shall include excavation, acquiring of all pertinent information as noted in Section 02015, "Test Pits - Verification of utilities and structures," backfilling, compaction, equipment, labor, disposal of all wastes, and all else incidental and necessary to complete the work.
 - 4.2.2.4. Unit price for repair of unlocated damaged water service shall include excavation, removal of existing damaged water service piping, supplying and installation of k-copper pipe, backfilling with Select Material No. 4, compaction, all fittings required, disposal of all surplus material, equipment, labor, an all else incidental and necessary to complete the work.
 - 4.2.2.5. There is no measurement for repair of damaged unlocated sewer services, as the project requires the installation of new sewer services at the location of all existing active sewer laterals. Contractor shall make a temporary repair of the service until such time as the new sanitary sewer service line is installed.
 - 4.2.2.6. Lump sum price for restoration of lawn and landscaped areas shall include screened topsoil in accordance with Section 02830, placing of topsoil, seed, mulch, watering, replacement of wood mulch and plantings if removed, disposal of all wastes, equipment, labor, and all else incidental and necessary to complete the work.
 - 4.2.2.7. Lump sum price for saw cutting of pavement and concrete roadway on Fishkill Avenue shall include saw cutting, disposal of asphalt, concrete and all wastes when excavating for installation of new sewer and water mains, new sewer and water services, equipment, labor, tools, and all else incidental and necessary to complete the work.
 - 4.2.2.8. Unit price for temporary pavement shall include supplying of asphaltic binder course asphalt at end of each day, preparation of trench surface for 3" of asphaltic binder course, installation of asphaltic binder course, compaction of asphaltic binder, disposal of all surplus material, equipment, labor, an all else incidental and necessary to complete the work.

- 4.2.2.9. Lump sum price for GPS location of force main, fittings and utility crossings, shall include the location of force main piping at each end pipe length laid, location at each fitting, and location of exposed utility crossings using a GPS unit that has accuracy to within 3" horizontal and 1" vertical, with GPS being done in NYS Plan/Grid North for horizontal and NAVD 88 for vertical. This shall also include providing all GPS data to the Project Engineer.
- 4.2.3. Lump Sum price for traffic control shall include installation and removal of traffic control signage, flaggers, installation and removal of barricades, lights, cones, traffic barrels, etc. as required in accordance with the NYSDOT Manual of Uniform Traffic Control and other items as directed by the Highway Superintendent and/or project engineer.
- 4.2.4. **Where there is no unit price for any required task, the cost for such task shall be included in other bid unit price.**

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

1.1.1. Requirements for prohibiting the following construction procedures.

1.2. SYSTEM DESCRIPTION

1.2.1. Prohibited construction procedures for all parts of the work include, but are not limited to, the following:

- 1.2.1.1. Dumping of spoil material into any stream corridor, any wetlands, any surface waters, or at unspecified locations.
- 1.2.1.2. Indiscriminate, arbitrary or capricious operation of equipment in any stream corridor, any wetlands, or any surface waters.
- 1.2.1.3. Pumping of silt-laden water from trenches or other excavations into any surface waters, any stream corridors, or any wetlands.
- 1.2.1.4. Damaging vegetation adjacent to or outside of the access road or right- of-way.
- 1.2.1.5. Disposal of trees, brush, and other debris in any stream corridors, any wetlands, any surface waters, or at unspecified locations.
- 1.2.1.6. Permanent or unspecified alteration of the flow line of the stream.
- 1.2.1.7. Open burning of debris.
- 1.2.1.8. Applying any pesticides, including defoliants, desiccants, and plant regulators, in any wetlands.
- 1.2.1.9. Applying pesticides whose residues and metabolic products persist in the environment over extended periods of time.
- 1.2.1.10. Locating storage, stockpile, staging and de-watering controls in environmentally sensitive areas.
- 1.2.1.11. Disposal of excess excavation material in wetlands, stream corridors and flood plains.
- 1.2.1.12. Disposal of heavily chlorinated water into sanitary sewer, storm drainage system, or wetlands, stream corridors and flood plains prior to de-chlorination.

- 1.2.2. Permission or other arrangements with a landowner or others shall not relieve the Contractor of compliance with the requirements of this section.
- 1.2.3. Any violation of the requirements of this section by the Contractor or any person employed by him will be brought to the immediate attention of the responsible regulatory agencies with a request that appropriate action be taken against the offending parties. Further, the Contractor will be required to remedy any violation at his own expense.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements pertaining to cutting and patching as required to perform the work.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The work includes cutting and patching as required for the removal or installation of equipment, correcting damaged concrete or masonry surfaces and for modifications to existing structures as shown on the drawings and as specified herein.
- 1.2.2. Patching, replacing and refinishing of concrete and masonry work shall match the adjoining work.
- 1.2.3. Unused openings left by removal of piping, conduit, duct and equipment, or portions disturbed during the work, shall be patched.
- 1.2.4. New concrete work shall be made integral with the existing concrete as shown on the drawings and in accordance with the Section "Cast in Place Concrete," Division 3.
- 1.2.5. Existing concrete that has been or is in contact with sewage, shall be sandblasted to a grease free condition before applying the bonding compounds. Bonding compounds shall be applied as described in the Section "Cast in Place Concrete," Division 3.
- 1.2.6. Exposed existing reinforcing bars shall be cleaned by wire brushing before connecting to new bars. New reinforcing bars shall be capped or welded or as shown on the drawings.
- 1.2.7. Where portions of existing structures and equipment are to be removed and where the remaining concrete shall be finished smooth, the Contractor shall cut off any projecting reinforcing to provide at least one inch of cover over the existing reinforcement. The concrete shall be roughened and a bonding compound applied to the existing concrete as described in the Section "Cast In Place Concrete," Division 3. Cement mortar shall be placed in excess of the finished surface and steel troweled flush with the adjacent surface.
- 1.2.8. When concrete is cut to provide openings for new pipe gate stems, or other penetrations, pipe sleeves shall be accurately installed and grouted in place.

- 1.2.9. Before patching, embedded conduits, pipes and other embedded items left in place shall be cut to at least two inches into the wall, floor or ceiling.

1.3. SUBMITTALS

- 1.3.1. The Contractor shall submit a written request to the Engineer before cutting or executing alteration work which affects the following:

- 1.3.1.1. Owner's operation;
- 1.3.1.2. Structural value or integrity of any element of the project;
- 1.3.1.3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems;
- 1.3.1.4. Efficiency, operational life, maintenance or safety of operational elements; or,
- 1.3.1.5. Visual qualities of sight-exposed elements.

- 1.3.2. The submittal request shall include but not be limited to the following:

- 1.3.2.1. Description of affected work;
- 1.3.2.2. The necessity for cutting, alteration or excavation;
- 1.3.2.3. Effect on owner's operation or on structural or weatherproof integrity of project; and,
- 1.3.2.4. Description of proposed work:

Scope of cutting, patching, alteration, or excavation.
Products proposed to be used.
Extent of refinishing to be done.

- 1.3.3. Submittals shall be in accordance with the Sections "Shop Drawings and Samples," Division 1 and "Review of Contractor's Construction Procedures," Division 1.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. **Concrete Bonding Compounds:** As specified in the Contract Documents or as approved by the Engineer.

2.2. MATERIALS

- 2.2.1. Materials for patching and restoration of surfaces shall match the adjoining work and shall be as specified in the respective sections of these specifications.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. Inspect existing conditions of project, including elements subject to damage or to movement during cutting and patching.
- 3.1.2. After uncovering work, inspect conditions affecting installation of products, or performance of work.
- 3.1.3. Report unsatisfactory or questionable conditions to Engineer in writing.

3.2. PREPARATION

- 3.2.1. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of work.
- 3.2.2. Provide devices and methods to protect other portions of project from damage.
- 3.2.3. Provide protection from elements for that portion of the project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.3. INSTALLATION

- 3.3.1. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs or new work.
- 3.3.2. Execute excavating and backfilling by methods which will prevent settlement or damage to the work.
- 3.3.3. Execute fitting and adjustment of products to provide finished installation to comply with specified products, functions, tolerances and finishes.
- 3.3.4. Restore work which has been cut or removed; install new products to provide complete work in accordance with requirements of contract documents.
- 3.3.5. Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for notifying utility owners and marking out existing utilities on the site.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Contractor shall be responsible for protection of underground facilities in accordance with 16 NYCRR Part 753.
- 1.2.2. Prior to construction, contractor shall call the UFPO and **notify in writing** owners of utilities and structures within the vicinity of the proposed work. Copies of written notification to utility owners shall be submitted to the engineer.
- 1.2.3. **Contractor shall provide the engineer with a list of all owners of utilities and structures contacted, including the time and date of contact and the names of responsible individuals contacted.**
- 1.2.4. Contractor shall be responsible for full mark out of existing utilities and structures sufficiently in advance of the work to allow for a field evaluation of the routing of the work. Contractor shall not proceed with work where utilities have not been located and marked by utility companies or others.
- 1.2.5. The contractor shall maintain the mark out of existing utilities and structures until the work in the vicinity of the marked out utilities and structures has progressed sufficiently in advance thereof that their location is no longer required.

1.3. SITE CONDITIONS

- 1.3.1. The locations of all utilities and structures as shown on the drawings are based on the best information available, but neither the owner nor the engineer guarantee the accuracy or completeness of the data.
- 1.3.2. Other utilities and structures may exist within the construction site in addition to those shown on the drawings.
- 1.3.3. House service utility lines may or may not be shown on the drawings. The contractor shall be responsible for checking these services as to actual locations and possible interferences.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for collecting and disposing waste materials encountered in or resulting from the work.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Waste material common to construction shall include but not be limited to the following:
- 1.2.1.1. Solid waste: Equipment and materials resulting from demolition or restoration work, large pieces of asphalt or concrete, trees, stumps, bricks, wire, fences, drums, rubbish and construction debris generated by construction activities and rubble and excess excavated material.
 - 1.2.1.2. Liquid or semi-liquid waste: Cleanings from settling tanks, digesters, lagoons, basins, manholes, sewer mains, and channels including grit, sludge, scum and miscellaneous debris.
- 1.2.2. Contractor shall collect and promptly dispose of all waste materials in the project site. Clean-up shall be done and maintained on a daily basis.
- 1.2.3. All materials and equipment which are not designated as re-usable or salvageable by the owner shall become the property of the Contractor. However, all materials and equipment designated as re-usable or salvageable by the owner shall be carefully removed so as to cause minimum damages and safely stored by the Contractor until accepted by the owner.
- 1.2.4. Waste materials shall not be burned or buried on the work site.
- 1.2.5. On contained work sites such as treatment plants or pumping stations, containers suitable for the collection and disposal of waste shall be provided by the Contractor. On transport piping contracts, collection and disposal shall be a continuous function. The Contractor shall remove all waste materials before moving to other sections of the work.
- 1.2.6. Waste materials shall be disposed of at sites, approved by the NYSDEC Office of Solid Waste Management, which are compatible with the nature of materials being disposed.

- 1.2.7. Waste materials shall be transported by vehicles properly licensed to transport waste by the New York State Department of Environmental Conservation.
- 1.2.8. Disposal of waste materials shall also conform to the applicable requirements of the Sections "Prohibited Construction Procedures" and "Erosion Control", Division 1.

** END OF SECTION **

PART 1 GENERAL

1.1. SYSTEM DESCRIPTION

- 1.1.1. Where any of the following abbreviations of standards, associations, specifications or publications are used in the Contract Documents, they shall have the meaning set forth opposite each and shall be the latest revision thereof at the time of bidding.

AA	-	Aluminum Association
AAA	-	Aluminum Alloy Association
AABC	-	Associated Air Balance Council
AAMA	-	Architectural Aluminum
AAN	-	American Association of Nurserymen
AASHTO	-	American Association of State Highway and Transportation Officials
ACGIH	-	American Conference of Governmental Industrial Hygienists
ACI	-	American Concrete Institute
ACPA	-	American Concrete Pipe Association
AFBMA	-	Anti Friction Bearing Manufacturers Association
AGA	-	American Gas Association
AGC	-	Associated General Contractors of America
AGMA	-	American Gear Manufacturers Association
AGWA	-	American Gear Works Association
AHA	-	American Hardboard Association
AI	-	Asphalt Institute
AIA	-	American Institute of Architects
AIEE	-	American Institute of Electrical Engineers
AISC	-	American Institute of Steel Construction
AISI	-	American Iron and Steel Institute
AITC	-	American Institute of Timber Construction
AMCA	-	Air Moving and Conditioning Association
ANSI	-	American National Standards Institute (Synonymous with USASI-ASA)
APA	-	American Plywood Association
API	-	American Petroleum Institute
ARA	-	American Railroad Association
ARI	-	Air Conditioning and Refrigeration Institute
AREA	-	American Railway Engineering Association
ASCE	-	American Society of Civil Engineers
ASHRAE	-	American Society of Heating, Refrigeration and Air Conditioning Engineers
ASLA	-	American Society of Landscape Architects
ASME	-	American Society of Mechanical Engineers
ASTM	-	American Society for Testing and Materials
AWG	-	American (or Brown and Sharpe) Wire Gauge

AWI	- Architectural Woodwork Institute
AWPA	- American Wood Preservers Association
AWPB	- American Wood Preservers Bureau
AWPI	- American Wood Preservers Institute
AWS	- American Welding Society
AWWA	- American Water Works Association
BIA	- Brick Institute of America
BOCA	- Building Officials and Code Administrators International
CEMA	- Conveyor Equipment Manufacturers Association
CGA	- Compressed Gas Association
CISPI	- Cast Iron Soil Pipe Institute
CSPC	- Consumer Product Safety Commission
CRSI	- Concrete Reinforcing Steel Institute
CSA	- Canadian Standards Association
CTC	- Concrete Technology Corporation
DEC	- New York State Department of Environmental Conservation
DOC	- United States Department of Commerce
DOD	- United States Department of Defense
DOT	- New York State Department of Transportation
EEI	- Edison Electrical Institute
EJMA	- Expansion Joint Manufacturers Association
EPA	- United States Department of Environmental Protection
FHWA	- Federal Highway Administration, U.S. Dept. of Transportation
FM	- Factory Mutual Engineering Corporation
FSS	- Federal Specifications and Standards (General Services Administration -- Federal Supply Service) GA-Gypsum Association
HPMA	- Hardwood Plywood Manufacturers Association
IBR	- Institute of Boiler and Radiator Manufacturers
ICBO	- International Congress of Building Officials
IEEE	- Institute of Electrical and Electronic Engineers
IES	- Illuminating Engineering Society
IMIAWC	- International Masonry Industry All Weather Council
IMSA	- International Municipal Signal Association
IPCEA	- Insulated Power Cable Engineers Association
ITE	- Institute of Traffic Engineers
MBMA	- Metal Building Manufacturers Association
MMA	- Monorail Manufacturers Association
MSS	- Manufacturers Standardization Society
MUTCD	- Manual on Uniform Traffic Control Devices
NBFU	- National Board of Fire Underwriters
NBS	- National Bureau of Standards
NCMA	- National Concrete Masonry Association
NEBB	- National Environmental Balancing Bureau
NEC	- National Electrical Code
NELA	- National Electric Light Association
NEMA	- National Electrical Manufacturers Association

NESC	-	National Electrical Safety Code
NFIPA	-	National Fire Protection Association
NFOPA	-	National Forest Products Association
NIOSH	-	National Institute for Occupational Safety and Health
NRMCA	-	National Ready Mix Concrete Association
NSF	-	National Sanitation Foundation
NWMA	-	National Woodwork Manufacturers Association
NYSDEC	-	New York State Department of Environmental Conservation
NYSDOT	-	New York State Department of Transportation
OSHA	-	Occupational Safety and Health Act
PCA	-	Portland Cement Association
PCI	-	Prestressed Concrete Institute
PDI	-	Plumbing and Draining Institute
PEI	-	Porcelain Enamel Institute Incorporated
PPI	-	Plastics Pipe Institute
PRA	-	Public Roads Alphabet
RMA	-	Rubber Manufacturers Association
SAE	-	Society of Automotive Engineers
SDI	-	Steel Door Institute
SJI	-	Steel Joist Institute
SMACNA	-	Sheet Metal and Air Conditioning Contractors National Association
SSPC	-	Steel Structures Painting Council
TPI	-	Truss Plate Institute, Inc.
UL	-	Underwriters Laboratories, Inc.
USSG	-	United States Standard Gauge (for uncoated sheets and thin plates)
USSWG	-	United States Steel Wire Gauge

1.1.2. Where any of the following abbreviations or symbols are used in the Contract Documents, they shall have the meaning set forth opposite each.

1.1.2.1. UNITS OF LINEAR MEASURE

cm. -- Centimeters

in. or " -- Inches

LF, Ft. or ' -- Linear Feet or Feet

Yds. -- Yards

1.1.2.2. UNITS OF SQUARE MEASURE

Sq. cm. -- Square Centimeters

Sq. in. -- Square Inches

Sq. Ft./SF -- Square Feet

SY -- Square Yards

Ac. -- Acres

- 1.1.2.3. UNITS OF CUBIC MEASURE
Cu. in. -- Cubic Inches
Cu. Ft./CF -- Cubic Feet
CY -- Cubic Yards
- 1.1.2.4. UNITS OF LIQUID MEASURE
Pt. -- Pint
Qt. -- Quart
Gal. -- Gallon
Bbl -- Barrel
L -- Liter
- 1.1.2.5. UNITS OF WEIGHT
Oz. -- Ounces
Lb. or # -- Pounds
Cwt -- Hundredweight or 100 pounds
Kip -- 1000 pounds
gm -- Gram
mg -- Milligram
Kg -- Kilogram
- 1.1.2.6. UNITS OF TEMPERATURE
°F -- Degrees Fahrenheit
°C -- Degrees Centigrade
- 1.1.2.7. UNITS OF FORCE OR PRESSURE
psi -- Pounds per Square Inch
psia -- Pounds per Square Inch Absolute
psig -- Pounds per Square Inch Gauge
psf -- Pounds per Square Foot
ksi -- Kips per Square Inch
ksf -- Kips per Square Foot
tsf -- Tons per Square Foot
- 1.1.2.8. UNITS OF VELOCITY/FLOW
ips -- Inches per Second
fpm -- Feet per Minute
mph -- Miles per Hour
rev -- Revolutions
rpm -- Revolutions per Minute
cfs -- Cubic Feet per Second
cfm -- Cubic Feet per Minute
gpm -- Gallons per Minute
mgd -- Million Gallons per Day

- 1.1.2.9 UNITS OF TIME
Sec. -- Seconds
Min. -- Minutes
Hrs. -- Hours
- 1.1.2.10. UNITS OF ANGULAR MEASUREMENT
Sec. or " -- Seconds
Min. or ' -- Minutes
Deg. or ° -- Degrees
- 1.1.2.11. UNITS OF CONCENTRATION
ppm -- Parts per Million
Kg/l -- Kilograms per Liter
mg/l -- Milligrams per Liter
- 1.1.2.12. UNITS OF POWER
hp -- Horsepower
bhp -- Brake Horsepower
- 1.1.2.13. MATERIALS
ABS -- Acrylonitrile Butadine Styrene
ACCMP -- Asphalt Coated Corrugated Metal Pipe
ACP -- Asbestos Cement Pipe
BIT -- Bituminous
CIP -- Cast Iron Pipe
CISP -- Cast Iron Soil Pipe
CONC -- Concrete
CPVC -- Chlorinated Polyvinyl Chloride
DIP -- Ductile Iron Pipe
CLDIP -- Cement Lined Ductile Iron Pipe
GLDIP -- Glass Lined Ductile Iron Pipe
HDPE -- High Density Polyethylene
PCCP -- Prestressed Concrete Cylinder Pipe
PE -- Polyethylene
PVC -- Polyvinyl Chloride
RCP -- Reinforced Concrete Pipe
SST -- Stainless Steel
CU -- Copper
TCP -- Terra Cotta Pipe
VCP -- Vitrified Clay Pipe

- 1.1.2.14. MISCELLANEOUS
B&B -- Balled and Burlapped
BR -- Bare Root
CPM -- Critical Path Method
CTS -- Copper Tube Size
Div. -- Division
ID or OD -- Inside Diameter or Outside Diameter
IPS -- Iron Pipe Size
NPT -- National Pipe Thread
ODS -- Oven Dried Solids
pH -- Measure of Acidity or Alkalinity
- 1.1.2.15. ELECTRICAL
A -- Amperes
AC -- Alternating Current
DC -- Direct Current
V -- Volts
Hz -- Hertz
KvA -- Kilovolt Amperes
KW -- Kilowatts
MA -- Milliamps
- 1.1.2.16. MECHANICAL
NPSH -- Net Positive Suction Head
TDH -- Total Dynamic Head
BTU -- British Thermal Units
K -- Thermal Conductivity -- BTU/(hr) (FT²) (Degree F/Ft) (°F/Ft)
C -- Thermal Conductance -- BTU/(hr) (FT²) (Degree F) (°F)
U -- Coefficient of Heat Transmission -- BTU/(hr) (FT²) (Degree F) (°F)
R -- Thermal Resistance -- (hr) (FT²) (Degree F)/BTU (°F)/BTU

** END OF SECTION **

PART 1 GENERAL

1.1 SECTION INCLUDES

- 1.1.1. Requirements for determining measurement and payment of work in place and for determining measurement and payment of materials and equipment delivered but not incorporated in the work.

1.2 SYSTEM DESCRIPTION

- 1.2.1. The requirements in this section are supplementary to the General Conditions.

- 1.2.2. Unit Price Items and Unit Price Contracts.

- 1.2.2.1. Measurement of units of work for which payment will be made by unit prices will be defined in Part Four of the respective Sections for only those items of work which appear in the bid form.

- 1.2.2.2. Payment for the units of work will be determined by multiplying the unit prices stated within the bid, times the quantity of the unit of work as determined by the measurement provisions of Part Four of the respective Sections. Payment for the units of work shall fully compensate the contractor for furnishing all materials, labor, equipment, services, tools and all else incidental and necessary to complete the work.

- 1.2.3. Lump Sum Items and Lump Sum Contracts.

- 1.2.3.1. Measurement of quantities of work will be as indicated on the accepted schedule of values.

- 1.2.3.2. Payment for the quantities of work indicated in the accepted schedule of values will be at the prices stated in the accepted schedule of values, not to exceed the lump sum stated within the bid. Payment for the work to be performed under the lump sum shall fully compensate the contractor for furnishing all material, labor, equipment, services, tools and all else incidental and necessary to complete the work.

- 1.2.4. **No specific measurement and payment will be made for units of work described in Sections not including a Part Four, or for those items which include a Part Four but are not contained in the bid form, but the costs thereof shall be included in the prices bid for the various other items in the bid.**

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for preparing and submitting of required information for change orders.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Requirements of this Section are supplemental to General Conditions.
- 1.2.2. Contractor shall provide such information as the Engineer may require for preparation of the change order including but not limited to the following:
- 1.2.2.1. Itemized description of the addition, deletion or revision in the work.
- 1.2.2.2. Itemized description of the change in the contract price including documentation.
- 1.2.2.3. Description of the change in the contract time. Time extensions shall be allowed only when conditions causing the delay are beyond the control of the Contractor. Any change in the contract time will only be effected when demonstrated that the approved project schedule has been implemented as described in the Section "Progress Schedules," of the General Conditions.
- 1.2.3. Change orders shall be in the form as indicated on Page L-1 of the Contract Documents.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for Contractor to attend a preconstruction conference.

1.2. SYSTEM DESCRIPTION

- 1.2.1. This Section is supplemental to the general condition section "Preliminary Matters."
- 1.2.2. A preconstruction conference will be held at a time and location set by the Engineer to establish various procedures that will be followed for the duration of the construction period and to review the contractor's construction schedule and schedule of shop drawing and sample submissions.
- 1.2.3. The Engineer will preside at the preconstruction conference and will prepare for distribution minutes that describe the major topics of discussion.
- 1.2.4. In addition to the items that will be reviewed in accordance with general conditions, the preconstruction conference agenda will include but not be limited to:
- 1.2.4.1. Designation of contractor's responsible personnel and phone numbers to be used in event of an emergency during non-working hours.
 - 1.2.4.2. Designation of Contractor's competent safety person that will be on the job as required by OSHA.
 - 1.2.4.3. Disclosure of contractor's intended suppliers, vendors, fabricators and major subcontractors.
 - 1.2.4.4. Contractor shall supply preliminary construction schedule as developed in accordance with Section 01310.
 - 1.2.4.5. Contractor shall supply schedule of values for lump sum items.
 - 1.2.4.6. Procedures for the implementation of field orders and change orders.
 - 1.2.4.7. Contractor's insurance.
 - 1.2.4.8. Procedures for contacting and requirements for providing access for local fire and first aid companies, police, bus companies and local traffic.

- 1.2.4.9. Site security.
 - 1.2.4.10. Housekeeping.
 - 1.2.4.11. Field offices.
 - 1.2.4.12. Record drawings.
 - 1.2.4.13. Job site coordination.
 - 1.2.4.14. Protection of utilities.
 - 1.2.4.15. Other topics pertinent to the work that may be presented by conference attendants.
- 1.2.5. Preconstruction conference attendants will be as follows:
- 1.2.5.1. Owner.
 - 1.2.5.2. Engineer.
 - 1.2.5.3. Contractor and major subcontractors.
 - 1.2.5.4. Governmental agency representatives, utility owner representatives and other parties who may have control of, or may be affected by the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for Contractor to attend a progress meetings.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Contractor and/or Contractor's representatives shall attend regularly scheduled progress meetings held for the purpose of coordinating the execution of the work.
- 1.2.2. The Engineer will preside at the progress meetings.
- 1.2.3. The proceedings of these meetings will be recorded by the Project Engineer and the Contractor will be furnished a reasonable number of copies of the meeting minutes.
- 1.2.4. During the project meetings the Contractor shall provide updated schedules concerning his plans for carrying out each part of the work.
- 1.2.5. The Contractor shall provide a list of all items which are impacting the completion of the work (i.e. decisions required, easements required, shop drawing approvals required, etc.).
- 1.2.6. As the work progresses, the Contractor's actual progress rate will be compared to the scheduled progress rate.

1.3. QUALITY ASSURANCE

- 1.3.1. The Contractor's representatives at these meetings shall be empowered to make binding decisions regarding all matters pertaining to the work and to make definite reports as to status and anticipated progress of the work.

1.4. SEQUENCING/SCHEDULING

- 1.4.1. Progress meetings shall be scheduled at least bi-weekly and more frequently if the Engineer decides more frequent meetings are required.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for preparing and submitting progress schedules to the Owner and Engineer review.

1.2. GENERAL

- 1.2.1. A CPM (Critical Path Method) arrow-node diagram shall be employed for the planning, scheduling, and reporting of all work to be performed under the contract.
- 1.2.2. The CPM diagram shall be part of the Owner/Contractor agreement as stipulated herein.
- 1.2.3. The CPM diagram shall be prepared and updated by the Contractor as required.

1.3. INITIAL SUBMIT

- 1.3.1. Within ten (10) days after the effective date of the agreement, the Contractor shall provide a preliminary CPM arrow-node diagram to the Engineer. The Contractor's plan of operations shall consist of, but not be limited to, the following, with the understanding that unless otherwise approved, the sequence of work shall be as outlined and required in the contract documents.
- A. All construction activities including major procurement items.
 - B. Proposed durations for each of the construction activities. Diagram shall also show early start time, latest allowable start time, estimated duration for activity, early finish time, latest allowable finish time, and total float for each activity.
 - C. Proposed sequencing of construction activities.
 - D. The critical path through the activities.
 - E. Estimated manpower per activity.

1.4. FINAL PROGRESS SCHEDULE

- 1.4.1. Within ten (10) days of the submittal of the preliminary CPM diagram (arrow-node diagram), and after review by the Engineer, the Contractor shall develop the final CPM diagram, based on the Contractor's proposed plan of operation. The purpose of the plan and schedule shall be to assure adequate planning and execution of the work by the Contractor; to assure coordination of the work by the Contractor; to assure coordination of the work of the various contractors; and to assist the Engineer in monitoring the progress of the work, establish payments to the Contractor, and evaluate proposed changes to the contract and schedule.
- 1.4.2. In preparing the CPM diagram, the Contractor shall be responsible for assuring that all subcontractor work, as well as his own work, is included in the network diagram, that work sequences are logical, and that the diagram shows a coordinated plan of work.
- 1.4.3. The CPM diagram as developed shall show the sequence and interdependence of activities required for completion of the work. In developing the CPM diagram, the work shall be divided into activities with a minimum and maximum duration of working days shown for each activity.
- 1.4.4. Proposed durations assigned to each activity shall reflect the Contractor's best estimate of time required to complete the activities considering the scope and resources planned for the activity; these shall be furnished by the Contractor for each activity.
- 1.4.5. Failure by either the Contractor to include any element of work required for performance of the contract shall not excuse the Contractor from completing all work within the contract completion date. If the Engineer questions the Contractor's proposed durations, the Contractor shall within ten (10) calendar days provide estimates of labor and intended crew sizes required for the activity which supports the proposed duration to the satisfaction of the Engineer.
- 1.4.6. Seasonal weather conditions shall be considered in the planning and scheduling of all work influenced by high or low ambient temperatures to insure the completion of all contract work within the allotted contract time milestone completion dates.
- 1.4.7. Holidays and week ends shall be considered in the planning and scheduling of all work.

1.5. REVIEW AND APPROVAL

- 1.5.1. Upon establishment of an agreed upon schedule, the Contractor shall sign the CPM diagram, which will then indicate the acceptance and approval of the project schedule, sequence of activities, times for completion, and manpower. **Acceptance of the approved project schedule by the Contractor and Engineer will be a condition precedent to the making of any payments under the contract.**

1.6. PROJECT SCHEDULE UPDATING

- 1.6.1. **The approved project schedule will be updated every two weeks for the purpose of recording and monitoring the progress of work.** The Contractor shall submit to the Engineer each two week period actual progress made-to-date, dates of activities started and completed, and the percentage of work completed-to-date on each activity started but not completed.
- 1.6.2. The Contractor may request revision to the logic sequence and schedule in the event his planning for the project is revised. If the Contractor desires to make changes in the approved project schedule to reflect revisions in his method of operation and scheduling, he shall notify the Engineer in writing, and submit proposed revisions.
- 1.6.3. Updating the schedule to reflect actual progress made up to the date of an update shall not be considered revisions to logic sequence and schedule; in case of disagreements concerning actual progress-to-date, the Engineer's determination shall govern.
- 1.6.4. **The Contractor shall notify the owner and Engineer 48-hours in advance of any changes in work schedule.**

1.7. CONTRACT TIME CHANGE EVALUATION

- 1.7.1. Activity time delays will not automatically mean that an extension of contract time is warranted or due the Contractor. It is possible that a strike or contract modification will not affect existing critical activities, or cause non-critical activities to become critical, i.e., a strike modification may result in only absorbing part of the available total float that may exist within an activity, thereby not causing any effect on the contract completion date or time. Float or slack is not the exclusive use of or benefit of either the Owner or the Contractor.

1.8. RESPONSIBILITY FOR COMPLETION

- 1.8.1. **The Contractor shall furnish sufficient forces, plant and equipment, and shall work such hours, to ensure the procession of the work in accordance with the current update of the project schedule. If, in the opinion of the Engineer, the Contractor falls behind in meeting the schedule as presented in the current update, the Contractor shall take such steps as may be necessary to improve his progress, and the Engineer may require him to increase the hours of work, the number of shifts, and the amount of construction plant and equipment without additional cost to the Owner.**

- 1.8.2. Failure of the Contractor to comply with the requirements of this subsection shall be a basis for determination by the Owner that the Contractor is not prosecuting the work with such diligence as will ensure completion within the time stipulated. Upon such determination, the Owner may terminate the Contractor's right-to-proceed with the work or any separate part thereof or may take such other actions as may be deemed appropriate.
- 1.8.3. **It shall be the responsibility of the Contractor to maintain his progress so as not to delay the progress of the project or the progress of other contractors. If the Contractor delays the progress of the project or the progress of other contractors, it shall be the responsibility of the Contractor to increase the number of shifts, days of work, and, to the extent permitted by law, to institute or increase overtime operations, all without additional cost to the Owner, to regain the time lost and to maintain the overall schedule.**

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for preparing and submitting shop drawings and samples to Engineer for review.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Requirements of this Section are supplemental to General and Special Conditions.
- 1.2.2. Contractor shall submit to the Engineer shop drawings, certified tests, and manufacturer's specifications for equipment and material being supplied under this Contract. Shop drawings shall also be submitted for piping, miscellaneous metal, structural steel, reinforcing steel, tools and furnishings, and all fabricated items. Samples of materials furnished by the Contractor to be incorporated in the work shall also be submitted. The Contractor shall submit this data with such promptness as to avoid delay in the work, allowing reasonable time for the engineer's review and approval.
- 1.2.3. Details on shop drawings submitted for review shall clearly show the relation of the various parts and, where the work depends upon field measurement, such measurements shall be obtained by the Contractor and noted on shop drawings before being submitted for review.
- 1.2.4. Drawings submitted by Subcontractors or manufacturers shall be sent directly to the Contractor for approval. The Contractor shall be responsible for their submission to the Engineer. **The Contractor shall thoroughly check all subcontractors' or manufacturers' shop drawings regarding measurements, sizes of members, materials and details to verify that they conform to the drawings and specifications and acknowledge same by so stamping and signing the drawings. Drawings found to be inaccurate or otherwise in error shall be returned by the Contractor for correction before submitting to the Engineer. Shop drawings not stamped and signed by the Contractor shall be returned for Contractor's stamp and signature prior to review by Engineer.**
- 1.2.5. The Contractor shall coordinate reviewed equipment shop drawings with shop drawings of related new and altered structures, including but not limited to connecting details, supports, piping, electrical and mechanical work to insure proper accommodation of the furnished equipment.

- 1.2.6. **Submissions shall be properly referenced to indicate clearly the specification section, drawing number, location, service and function of each particular item.** All submissions for one item or group of related items shall be complete. Where manufacturer's publications in the form of catalogs, pamphlets or other data sheets are submitted instead of prepared shop drawings, such submissions shall specifically indicate the item for which review is required. Identification of items shall be made in ink and submissions showing only general information are not acceptable.
- 1.2.7. All materials furnished by the Contractor to be incorporated in the work shall be subject to the review and inspection of the Engineer. No material shall be processed or fabricated for, or delivered to, or used for the work without prior review and approval by the Engineer.
- 1.2.8. Prior to beginning and during the progress of the work as required, the Contractor shall submit samples of materials for such specific tests as may be necessary to demonstrate that the materials conform to the specifications. Samples shall be furnished, taken, stored, packed and shipped where directed, at the expense of the Contractor.
- 1.2.9. Samples shall be packed so as to reach their destination in good condition, and shall be so labeled as to indicate the materials represented, the name of the facility or work and location for which the material is intended, and the name of the supplier submitting the sample. To ensure consideration of samples, the Contractor shall notify the Engineer by letter that the samples have been shipped, and shall properly describe the samples in the letter. In no case shall the letter of notification be enclosed with the samples.
- 1.2.10. The Contractor shall submit to the Engineer notarized certifications of compliance with the Contract Documents from all material suppliers.
- 1.2.11. The Engineer's review will be confined to general arrangement and compliance with the Contract Documents only and will not be for the purpose of checking dimensions, weights, clearances, fittings, tolerances, interferences or coordination of trades.
- 1.2.12. The Contractor is advised that color selections when required for items such as, but not limited to special coatings, glazed masonry block, resinous flooring, ceramic tile and the like will only be made by the Engineer when all samples and color chips for all such items are received. Contractor shall schedule his submission of these items to coincide as much as practical to allow the Engineer to coordinate the color selections.

1.3. SUBMITTALS

- 1.3.1. Submittals shall be a minimum of 8½" x 11" and a maximum size of 24" x 36".
- 1.3.2. For submittals up to and including 11" x 17", the Contractor shall submit four copies.
- 1.3.3. For submittals larger than 11" x 17", the Contractor shall submit the original tracings or reproducible reproductions or the tracings and four sets of prints. Reproducible reproductions shall be submitted with a matte finish working surface.
- 1.3.4. Submittals with inadequate information to allow evaluation or review will be returned for resubmission. Resubmission with additional data does not guarantee approval.
- 1.3.5. The Engineer will return two copies of shop drawings to the Contractor, bearing a stamp with the following language and marked appropriately:

☐ NO EXCEPTION TAKEN ☐ REVISE AND RESUBMIT
☐ FURNISH AS CORRECTED ☐ REJECTED SEE REMARKS

Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specifications and does not authorize any changes involving additional cost. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

LANC & TULLY ENGINEERING AND SURVEYING, P.C.

Date _____

By _____

- 1.3.6. Copies returned marked "Approved" or "Furnish As Corrected" shall be for the Contractor's use and no additional copies need be submitted. Copies returned marked "Revise and Resubmit" shall be corrected by the Contractor and resubmitted in the same manner and number of copies as the original submission. Copies returned marked "Rejected See Remarks" do not conform to the design concept of the project or comply with the information given in the Contract Documents and shall not be resubmitted. New submittals shall be required.

- 1.3.7. Should the Contractor propose a revision to a previously submitted and reviewed shop drawing, the same shall be submitted in the manner and number of copies as the original submission. The resubmission 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.

**** END OF SECTION ****

SECTION 01341

REVIEW OF CONTRACTOR'S CONSTRUCTION PROCEDURES

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for submitting Contractor's construction procedures for review.

1.2. SYSTEM DESCRIPTION

- 1.2.1. When submittal of any means, methods, sequences and procedures of construction is requested in the Contract Documents or by the Engineer, it will be for the purpose of informing the Engineer and the owner of the intended procedures of construction and will be in the context of the responsibilities of the Contractor, Owner and Engineer stated in the General Conditions.
- 1.2.2. The Engineer shall not be responsible to respond to the submittal of any means, methods, sequences and procedures of construction.
- 1.2.3. Submittals shall be made sufficiently in advance of the work to allow for Engineer's review.

1.3. SUBMITTALS

- 1.3.1. Contractor shall submit three copies of intended procedures of construction.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1 Furnishing all materials, labor, equipment, power and maintenance, etc. to implement a temporary pumping system for the purpose of diverting the existing flow around the work area for the duration of the project.
- 1.1.2 Design, installation, and operation of the temporary pumping system shall be the Contractor's responsibility. The Contractor shall employ the services of a vendor who can demonstrate to the engineer that the vendor specializes in the design and operation of temporary bypass pumping systems. The vendor shall provide at least two (2) references of projects of a similarly size and complexity as this project performed by his firm within the past three years, upon request. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction as supplied by the contractor.

1.2. SYSTEM REQUIREMENTS

- 1.2.1 The Contractor shall prepare with the vendor a specific, detailed description of the proposed pumping system and submit it and the vendor's references.
- 1.2.2 The contractor shall submit to the Engineer detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding handling of existing wastewater flows. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, materials, and all other incidental items necessary and/or required to ensure proper protection of the facilities, including protection of the access and bypass pumping locations from damage due to the discharge flows. No construction shall begin until all provisions and requirements have been reviewed by the Engineer.
- 1.2.3 The plan shall include but not be limited to the details of the following:
 - 1. Staging areas for pumps.
 - 2. Sewer plugging method and types of plugs.
 - 3. Size and location of manholes or access points for suction and discharge hose or piping.
 - 4. Size of pipeline or conveyance system to be bypassed.
 - 5. Number, size, material, location and method of installation of suction piping.
 - 6. Number, size, material, method of installation and location of installation of discharge piping.

7. Bypass pump sizes, capacity, number of each size to be on site and power requirements.
8. Calculations of static lift, friction losses, and flow velocity (pump curves showing pump operating range shall be submitted)
9. Standby power generator size, location
10. Downstream discharge plan
11. Method of protecting discharge manholes or structures from erosion and damage.
12. Thrust and restraint block sizes and locations.
13. Sections showing suction and discharge pipe depth, embedment, select fill and special backfill.
14. Method of noise control for each pump and/or generator
15. Any temporary pipe supports and anchoring requirements.
16. Design plans and computation for access to bypass pumping locations indicated on the drawings.
17. Calculations for selection of bypass pumping pipe size.
18. Schedule for installation of and maintenance of bypass pumping lines.
19. Plan indicating selection of location of bypass pumping lines locations.

1.3. SYSTEM DESCRIPTION

1.3.1 Design Requirements

1. Bypass pumping systems shall have sufficient capacity to handle maximum flow being bypassed.
2. The Contractor shall provide all pipeline plugs, pumps of adequate size to handle peak flow, and temporary discharge piping to ensure that the total flow of the main can be safely diverted around the section to be repaired. Bypass pumping systems shall only be operated during working hours, with temporary connections between the old and new sewer system made during non-working hours, to ensure continual operation of the sewer system.
3. The Contractor shall have adequate standby equipment available and ready for immediate operation and use in the event of an emergency or breakdown. One standby pump for each size pump utilized shall be installed at the mainline flow bypassing locations, ready for use in the event of primary pump failure.
4. Bypass pumping system shall be capable of bypassing the flow around the work area and be sized to handle any amount of flow up to full available flow as defined by the Owner into the work area as necessary for satisfactory performances of work.

5. The Contractor shall make all arrangements for bypass pumping during the time when the main is shut down for any reason. System must overcome any existence force main pressure on discharge.

1.3.2 Performance Requirements

1. It is essential to the operation of the existing system being bypassed that no interruptions in the flow occur throughout the duration of the project. To this end, the Contractor shall provide, maintain, and operate all temporary facilities such as dams, plugs, pumping equipment (both primary and back-up units as required), conduits all necessary power, and all other labor and equipment necessary to intercept the incoming flow before it reaches the point where it would interfere with his work, carry it past the work area and return it to the existing system downstream of his work.
2. The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.
3. The Contractor shall provide all necessary means to safely convey the sewage past the work area. The Contractor will not be permitted to stop or impede the main flows under any circumstances.
4. The Contractor shall divert the flow around the work area in manner that will not cause damage to or surcharging of customers system and will protect public and private property from damage and flooding.
5. The Contractor shall protect water resources, wetlands, and other natural resources.

PART 2 PRODUCTS

2.1 EQUIPMENT

- 2.1.1 All pumps used shall be fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric or diesel powered. All pumps used must be constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows.
- 2.1.2 The Contractor shall provide the necessary stop/start controls for each pump.
- 2.1.3 The Contractor shall include one stand-by pump of each size to be maintained on site. Back up pumps shall be online, isolated from the primary system by a valve.

- 2.1.4 It is recommended that the pump be contained inside a temporary portable berm or secondary containment to contain any fuel or sewage that may spill during the normal course of operation.
- 2.1.5 Discharge Piping – In order to prevent the accidental spillage of flows, all discharge systems shall be temporarily constructed of rigid pipe with positive, restrained joints. Under no circumstances will “irrigation” type piping or glued PVC pipe be allowed. Discharge hose will only be allowed in short sections and by specific permission from the engineer.
- 2.1.6 Any piping found to be leaking shall be immediately taken out of service and replaced at Contractor’s cost.

PART 3 EXECUTION

3.1 FIELD QUALITY CONTROL AND MAINTENANCE

- 3.1.1 Test: Contractor shall perform leakage and pressure tests of the bypass pumping discharge piping using clean water prior to the actual operation. The Engineer will be given 24 hours notice prior to testing.
- 3.1.2 Inspection: Contractor shall inspect bypass-pumping system on a continuous basis to ensure the system is working correctly.
- 3.1.3 Maintenance Service:
1. Contractor shall ensure the temporary pumping system is properly maintained and a responsible operator shall be on hand at all times when pumps are operating.
 2. Contractor shall monitor pump fuel levels if required and make arrangements for timely refueling as needed.

3.2 PREPARATION

3.2.1 Precautions:

1. Contractor is responsible for locating any existing utilities in the area selected for the bypass pipelines. The Contractor shall locate his bypass pipelines to minimize any disturbance to existing utilities, private property, and structures, and shall obtain approval of the pipeline locations from the Owner. All costs associated with relocating utilities, if necessary, and obtaining all approvals shall be paid by the Contractor.

2. During all bypass-pumping operations, the Contractor shall protect the Owner's system (Pumping Station, Conveyance System, Etc.) as applicable from damage inflicted by any equipment. The Contractor shall be responsible for all physical damage to the Owner's system caused by human or mechanical failure.

3.3 INSTALLATION AND REMOVAL

- 3.3.1 Plugging or blocking of flows shall incorporate a primary or secondary plugging device. When plugging or blocking is no longer needed for performance and acceptance or work, it is to be removed in a manner that permits the sewage flow to slowly return to normal without surge, to prevent surcharging or causing other major disturbances downstream.
- 3.3.2 When working inside manhole or force main, the Contractor shall exercise caution and comply with OSHA requirements when working in the presence of sewer gases, combustible or oxygen-deficient atmospheres, and confined spaces.
- 3.3.3 The installation of the bypass pipelines is prohibited in all wetland areas. The pipeline must be located if possible off streets and sidewalks and on shoulders of the roads. When the bypass pipeline crosses local streets and private driveways, the Contractor must place the bypass pipelines in trenches and cover with temporary pavement. Upon completion of the bypass pumping operations, and after receipt of written permission from the Customer, the Contractor shall remove all the piping, restore all property to pre-construction condition, and restore all pavements. The Contractor is responsible for obtaining any approvals for placement of the temporary pipeline from the Owner.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for by-pass pumping shall be lump sum for entire project, regardless of how many times contractor must set up a by-pass system, or length of by-pass required.

4.2. PAYMENT

- 4.2.1. Lump Sum price for by-pass pumping shall include inspection of entire project site; design of by-pass pumping system at each location required; supplying and set up of pump(s); supplying and set up of hoses and piping required to establish by-pass; equipment; labor; temporary tie-in connections for use during non-working hours; breakdown of pump, hoses, and piping upon completion; construction temporary ramping over by-pass lines to allow for unrestricted flow of traffic; disposal of surplus and unsuitable material; restoration; and all else incidental and necessary to complete the work.

** END OF SECTION **

SECTION 01516
TEMPORARY SANITARY FACILITIES

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing temporary sanitary facilities.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Contractor shall provide, maintain and remove when no longer required, an adequate number of temporary, prefabricated, chemical type toilets with proper enclosures for the use of workmen during construction. Toilets shall be cleaned at least twice a week.
- 1.2.2. Keep toilets clean and supplied with toilet paper at all times. Comply with all Local and State Health Requirements and Sanitary Regulations.

1.3. SEQUENCING/SCHEDULING

- 1.3.1. Contractor shall provide these facilities as soon as a work force is active at the site.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for protecting existing public and private property on or in the vicinity of the work site and the handling of claims and complaints arising as a result of the work.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Requirements of this section are supplemental to General Conditions Section "Contractor's Responsibilities."
- 1.2.2. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to all public and private property not designated for removal, relocation or replacement in the course of construction. The Contractor shall not damage or disturb existing or future structures adjacent to the construction easement.
- 1.2.3. During construction, if it is necessary to temporarily remove any existing services, they shall be reconnected the same day or temporary services shall be provided.
Affected owners shall be notified 48 hours prior to disruption of service.
- 1.2.4. Contractor shall protect the natural vegetation and other existing landscape features and surroundings. Where practical, trees shall be protected to the drip-line as shown in the Standards for Soil Erosion and Sediment Control as published by the State Soil Conservation Committee. If damage occurs to a tree's root system within the drip-line, the tree shall be pruned accordingly using accepted tree surgery techniques to compensate for the loss of root system. Damages to tree trunks, limbs, bark and roots shall be repaired using accepted tree surgeon methods.
- 1.2.5. All grass areas beyond the construction limits damaged by the Contractor shall be repaired using seeding methods and materials equal to or better than that which existed prior to construction.
- 1.2.6. Where damage or injury or loss is done to public or private property as a result of the Contractor's execution of the work, such property shall be restored by the Contractor at his expense to a condition equal to or better than that existing prior to the damage.

- 1.2.7. Where property has existing damages that cannot be clearly verified by the preconstruction photographs or video tapes previously submitted, the nature and extent of such damages shall be documented and submitted to the Engineer prior to any construction or construction related activity.
- 1.2.8. Damages to curbs, sidewalks, driveways, lawns, shrubbery, property, monuments or other property that are not documented as pre-existing and do not show on the preconstruction photographs or video tapes, will be viewed as a result of the Contractor's execution of the work and shall be repaired in a manner acceptable to the Engineer. The Contractor shall, at his own expense, take such additional photographs as may be required to document damage which exists prior to construction.

1.3. QUALITY ASSURANCE

- 1.3.1. Survey markers removed or disturbed by the Contractor's Operations shall be reset by a Licensed Land Surveyor registered in the State of the project. Such surveyor shall certify to the Owner that reset markers are located at the same location and/or elevation as they were prior to their removal or disturbance.
- 1.3.2. The Contractor shall expeditiously and satisfactorily resolve all claims and complaints arising as a result of work under this Contract. The Contractor shall provide the services of an authorized representative during normal working hours for the purpose of handling all such claims and complaints. A file shall be maintained to log all claims and complaints and shall include the date and time, person filing the claim or complaint, nature and extent of the claim or complaint, and its resolution. The Contractor must advise the owner monthly in writing of all such claims and complaints received by him including the status of each and for each claim or complaint that has been secured by his insurance company, proof that such has been done.
- 1.3.3. The Contractor shall pay for all costs to handle and resolve all claims or complaints. If within 30 days of receipt of a complaint, the Contractor fails to settle or secure any claim or complaint, the owner may retain such amounts of money from payments that would otherwise be due the Contractor as, in the opinion of the owner, may be required to settle all claims filed with the owner.

1.4. SUBMITTALS

1.4.1. The Contractor will submit to the Engineer lists of damages to property that exist prior to construction or construction related activity. The list shall include the following information:

- Location of damage by station or address
- Nature of damage
- Extent of damage
- Color photographs of damage

1.4.2. Lists shall be submitted sufficiently in advance in order that the Engineer can verify the damages.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for controlling noise levels resulting from construction activities.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Contractor shall control the noise generated by his construction operations.
- 1.2.2. Noise caused by construction activities shall not exceed the levels permitted by applicable Federal, State or local regulations.
- 1.2.3. All construction equipment powered by an internal combustion engine shall be equipped with a properly maintained muffler.
- 1.2.4. Air compressors shall be operated in accordance with the manufacturer's instructions for proper noise abatement.
- 1.2.5. Air powered equipment shall be fitted with pneumatic exhaust silencers.
- 1.2.6. Stationary equipment powered by an internal combustion engine shall not be operated within 150 feet of noise sensitive sites without temporary noise barriers placed between the equipment and the noise sensitive sites. Noise sensitive sites shall include residential buildings, motels, hotels, schools, churches, hospitals, nursing homes, libraries and public recreation areas. Temporary noise barriers shall be constructed of plywood or tongue and groove boards with a noise absorbent treatment on the interior surface (facing the equipment).
- 1.2.7. Unless otherwise permitted by the owner in times of an emergency, powered construction equipment shall not be operated before 7:30 am or after 5:00 pm.
- 1.2.8. Unless otherwise permitted by the owner in times of an emergency, driving, pulling or other operations entailing the use of vibratory hammers or use of vibratory compactor shall not be permitted before 8:00 am or after 5:00 pm within 100 feet of a noise sensitive site.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for controlling generation and dispersal of dust.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Contractor shall conduct his operations and maintain the area of his activities so as to minimize the creation and dispersion of dust.
- 1.2.2. The Contractor shall sprinkle with water and calcium chloride to control dust in unpaved streets, trench areas or excavation sites on a daily basis.
- 1.2.3. Areas under immediate construction (including access roads and other affected areas) will be swept clean and wet down sufficiently to lay dust at the end of each day. In addition, these areas will be wet down during non-working hours (including weekends) as often as required to keep the dust under control.
- 1.2.4. If, in the opinion of the Engineer, the Contractor is not maintaining adequate dust control, the Engineer will notify the Contractor who shall promptly provide whatever methods and means are necessary to bring the dust under control.
- 1.2.5. In the event of restricted water use in the municipality at the time of bid, the Contractor shall obtain, pay for and transport water from his own sources as required.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for controlling erosion as a result of the work.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Contractor shall control erosion of earth and sediment runoff resulting from the work. Erosion control measures shall comply with the publication "New York Standards and Specifications for Erosion and Sediment Control".
- 1.2.2. Erosion as a result of surface drainage from cuts and fills within the construction limits, whether or not completed, and from staging, stockpile, borrow and waste disposal areas, shall, if turbidity producing materials are present, be held in suitable sedimentation basins or shall be graded to control erosion. Temporary erosion and sediment control measures including but not limited to berms, dikes, drains, soil stabilization matting, diversion channels, baled hay or straw, silt fences, catch basin protection, and sedimentation basins, shall be provided and maintained as required to meet the referenced standards.
- 1.2.3. Along slopes and designated critical erosion or siltation areas, clearing and grubbing operations shall be delayed until absolutely necessary for the continuation of the work so that the area of exposed, bare soil subject to erosion is minimized.
- 1.2.4. All temporary erosion control measures shall be in place prior to any grading or excavation operations and shall be left in place or replaced as required to retain their desired effectiveness until the construction is completed and the area is stabilized.
- 1.2.5. All excavated material, when excavating parallel to streams, wetland habitats, and other critical impact areas, shall be deposited on the up-slope side of the excavation.
- 1.2.6. Stockpiled material shall not have side slopes in excess of 3:1. Stockpiled material shall be protected from erosion by the use of mulch, jute netting, grass seeding, hay bales, or similar material.

- 1.2.7. Contractor shall select stockpile areas in areas where a minimum of erosion sediment will reach catch basins, streams, lagoons or other receiving systems. Only environmentally suitable stockpile sites shall be used for the purpose of storing materials, equipment and spoils. Suitable sites shall be level, devoid of mature stands of natural vegetation, and removed from drainage facilities and features, wetlands and stream corridors. Protect stockpile areas from erosion by wind or water.
- 1.2.8. Contractor shall periodically during construction remove sediment from all receiving systems where material has been deposited as a result of his operations in the performance of the work. Upon completion of the work, all affected areas shall be restored.
- 1.2.9. Contractor shall submit intended plans for erosion and sediment control at the preconstruction conference.
- 1.2.10. Whenever excess excavated material is disposed of on private lands, the Contractor shall obtain a statement from the land owner that the land owner has been apprised by the Contractor of the erosion control requirements and accepts complete responsibility for their implementation.

1.3. REFERENCES

- 1.3.1. New York Standards and Specifications for Erosion and Sediment Control.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for the furnishing, installing, maintaining and removing, when no longer required, of all traffic control devices necessary for the maintenance and protection of pedestrian and vehicular traffic.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Contractor shall keep the portion of the project being used by public traffic, whether it be through or local traffic, in such condition that pedestrian and vehicular traffic will be adequately and safely accommodated, both temporarily and permanently. The Contractor shall erect, and/or maintain in good condition, striping, barricades, signs, lights, traffic signals, cones, and other warning and danger signals and devices, including flagmen and uniformed traffic directors, appropriate and adequate for the specific needs and as specified in the NYSDOT Manual of Uniform Traffic Control. Traffic control devices are to be provided at work sites, closed roads, intersections, open excavations, locations of material storage, standing equipment and other obstructions, at points where usable traffic width of road is reduced, at points where traffic is diverted from its normal course or lanes, and other places of danger to vehicular or pedestrian traffic.
- 1.2.2. **The requirements of the agency having jurisdiction over the roadways in which the contractor is working shall govern. If the governing jurisdiction does not feel that the contractor is meeting the required traffic control as set forth in the New York State Department of Transportation manual, all work shall be stopped until the contractor complies. This shall not entitle the contractor to a time extension or claim for delays.**
- 1.2.3. The contractor shall provide access for police, fire, ambulance, bus and emergency vehicles and personnel at all times on all roads in which the Contractor is working.
- 1.2.4. The Contractor may be required to provide, in addition to flagmen, uniformed traffic officers to fulfill the expressed needs of the municipality or any governmental agency having jurisdiction.

- 1.2.5. If the Contractor reroutes traffic over detours, he shall first obtain authorization of the Engineer and consent of the appropriate authorities having jurisdiction. The Contractor shall make all necessary arrangements with such authorities regarding the establishment, maintenance and repair of such detours, the regulation and direction of traffic thereon, and signing. Adequate directional and detour signs, acceptable to the appropriate authorities, shall be furnished by the Contractor and shall be erected by him at locations where such authorities may direct.
- 1.2.6. When the construction of a detour is provided for in the drawings or requested by the jurisdictional authority, the Contractor shall furnish and erect all necessary signs, barricades, lights and other warning and danger signals and devices.
- 1.2.7. During any suspension of the work, the Contractor shall make passable, and shall open to traffic such portions of the project and temporary roadways or portions thereof, as may be agreed upon between the Contractor, the Engineer and the jurisdictional authority for the temporary accommodation of necessary traffic during the anticipated period of suspension. When work is resumed, the Contractor shall replace or renew all work or materials lost or damaged because of such temporary use of the project and shall complete the project in every respect as though its prosecution had been continuous and without interference.
- 1.2.8. Prior to beginning construction work in any area or phase of the project, the Contractor shall erect or place those barricades, lights, signs, cones and other warning and danger signals and devices which are adequate and appropriate for that particular area or phase. Traffic control devices shall conform to the drawings and specifications and to the Manual of Uniform Traffic Control Devices of the Federal Highway Administration and NYSDOT.
- 1.2.9. All signs shall be erected and maintained in a substantial manner and shall be maintained so as to provide maximum visibility and legibility at all times.

1.3. REFERENCES

- 1.3.1. NYS DOT Standard Specifications.
- 1.3.2. NYS DOT Manual of Uniform Traffic Control Devices.
- 1.3.3. Manual on "*Uniform Traffic Control Devices for Streets and Highways*," U. S. Department of Transportation, Federal Highway Administration.

1.4. SUBMITTALS

- 1.4.1. The Contractor shall notify the owners of adjoining property in writing at least 24 hours prior to the time he proposes to begin any work which will interfere with their normal passage.

- 1.4.2. The Contractor shall notify the Engineer and the jurisdictional authority ten working days in advance of a tentative date for establishing new traffic patterns. This date shall be finalized five working days prior to the establishment of new traffic patterns resulting from staged construction and five working days prior to the establishment of a detour for the closing of any roadway.
- 1.4.3. Review by the Engineer of the Contractor's traffic control system shall in no way relieve the Contractor from his full responsibility for the maintenance and protection of traffic.
- 1.4.4. Shop Drawings shall be submitted by the Contractor in accordance with the provisions of the Section "Shop Drawings and Samples," Division 1.

1.5. PROJECT CONDITIONS

- 1.5.1. Except as necessary during actual working hours, and then only with the specific authorization of the Engineer or jurisdictional authority, the Contractor shall not occupy with his equipment, materials, or personnel, any roadway or sidewalk area within or adjacent to the project that is open to traffic.
- 1.5.2. No equipment or machinery having caterpillar or other heavy treads that mar or damage pavements shall be permitted to move over or operate from newly constructed or existing pavements unless such equipment or machinery is moved on suitable pontoons or trailers or operated on heavy planing or other suitable platforms.
- 1.5.3. The Contractor shall provide for prompt removal from existing roadways of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by his hauling and other operations whenever the accumulation is sufficient to cause the formation of mud, interfere with drainage, damage pavements, create a traffic hazard or dust condition.
- 1.5.4. The Contractor shall cease work on existing roads when snow is imminent. The Contractor is responsible for snow removal on any roads on which he is working. He shall, however, park his equipment in such a manner as not to hinder the removal of snow by other agencies. The Contractor shall make suitable provisions to mark the location of equipment and all other obstructions in the event of deep snow.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. **Barricade, Type IIIA:** Materials and construction shall be as specified in the Manual of Uniform Traffic Control Devices. Lighting shall be placed and maintained as required.

- 2.1.2. **Drums:** Materials shall be as specified in the Manual of Uniform Traffic Control Devices. Each drum when used to delineate the edge of a traveled way on detour curves, lane changes, lane closures and other similar conditions shall be lighted with a steady burning light as hereinafter specified. All drums used at other locations shall be lighted with a low intensity flashing warning light. Drums shall be clean, bright and reflectorized.
- 2.1.3. **Traffic Cones:** Material and construction shall be as specified in the Manual of Uniform Traffic Control Devices. Cones shall be kept clean and bright for maximum target value. Traffic cones shall be reflectorized or equipped with steady burning lights when used during the hours specified below for steady burning lights. Cones shall be painted orange. Rubber cones shall be painted at the place of manufacture. Plastic cones shall be polyvinyl chloride with the color molded into the plastic.
- 2.1.4. **Barricade, Type I:** Material and construction shall be as specified in the Manual of Uniform Traffic Control Devices. Barricade, Type I shall be lighted with low intensity flashing warning lights.
- 2.1.5. **Breakaway Barricades:** Materials and construction shall be as specified in the Manual of Uniform Traffic Control Devices. Breakaway Barricades shall be lighted with low intensity flashing warning lights.

2.2. LIGHTING SPECIFICATIONS

- 2.2.1. **General:** Storage batteries or other bulk power sources, not part of a monolithic flasher unit shall be located as far as practical from the traveled way and at ground level. Single flasher and steady burning units with self-contained batteries shall weigh not more than seven pounds and when located on traffic control devices shall be securely fastened with the bottom tangent of the lens at 36" above the existing ground level. Battery powered dual alternate flashers located on advance warning signs shall have the battery power source located as far as practical from the traveled way and at ground level.
- 2.2.2. **Steady burning lights:** Steady burning lights shall be installed on traffic control devices where specified elsewhere herein. Steady burning lights shall be low wattage yellow electric lamps having a minimum of ten beam candle power. They may be self-contained units with a batteries or may be operated with a portable electric generator or from available utility lines. When a circuit in excess of fifty volts is used and such circuits including the light units are within reach of a person who can make contact with the ground, they shall be equipped with a UL approved ground-fault circuit interrupter. Steady burning lights when used where specified shall be kept lighted from one hour before sunset until one hour after sunrise, and through all hours of fog, smog, and other adverse atmosphere conditions affording insufficient visibility for the safe operation or traffic.

- 2.2.3. **Low Intensity Flashing Warning Lights:** Low intensity flashing warning lights shall be installed on traffic control devices where specified elsewhere herein. Low intensity lights shall be battery operated yellow flashing lights with a one piece lens not less than seven inches in diameter. They shall flash at a rate of 55-75 flashes per minute and the flash duration shall be ten percent of each flash cycle. Light intensity shall not drop below ten candelas during the first 336 hours of continuous flashing as specified in ITE Standards Requirement 5.0, Paragraph 5.10, Section 1 of the ITE Standards for Flashing and Steady Burn Barricade Warning Lights. The lens shall be externally illuminated by reflex elements built into the lens to be seen by reflex-reflection of the light from the headlights of oncoming automotive traffic. Intensity when acting as a reflex-reflector shall be as in ITE Standard Requirement 5, Paragraph 5.50. If designed with a reflex reflector ring, the ring shall not be less than 1/2" in width around the periphery of the lens. Manufacturing design requirements shall conform to the ITE Standard. Low intensity flashing warning lights when used where specified shall be kept lighted as specified for steady burning lights.

2.3. CONSTRUCTION SIGNS

- 2.3.1. The type, size, legend, color, illumination, location, number and shape of construction signs shall be in accordance with the MUTCD.
- 2.3.2. The number and construction of sign supports shall be as shown on the drawings unless otherwise directed by the jurisdictional authority.

2.4. PAVEMENT MARKINGS

- 2.4.1. Pavement markings shall be ready-mixed white or yellow traffic paints, fast dry, with glass beads applied for nighttime visibility with the composition as described in the NYS DOT Standard Specifications.

PART 3 EXECUTION

3.1. ERECTION

- 3.1.1. As a minimum the Contractor shall erect, maintain and replace as necessary, the required signs for each direction of traffic on all private, municipal, county or state roadways affected by the project. The signs shall bear no symbols or messages except as specified. The sign supports shall carry no other signs not essential to traffic control.

3.2. INSTALLATION

- 3.2.1. **Barricade, Type IIIA:** When a road section is closed to traffic, Type IIIA Barricades shall be erected at points of closure. They may extend completely across a roadway and its shoulder or from curb-to-curb. Where provisions must be made for access of equipment and authorized vehicles, the Type IIIA barricades should be provided with gates or movable sections that can be closed when work is not in progress, or with indirect openings that will discourage public entry. Where access is provided through the Type IIIA barricades, responsibility shall be assigned to a person to assure proper closure at the end of each working day. When a road is legally closed, but access must still be allowed for local traffic, the Type IIIA barricade cannot be erected completely across a roadway. Instead, an arrangement should be devised that will permit local use but effectively discourage use by through traffic. The use of Type IIIA barricade in areas where contact with public vehicular traffic is possible must be approved by the Engineer and/or the jurisdictional authority.
- 3.2.2. **Drums:** Drums shall generally be used to delineate the edge of a traveled way on detour curves, lane changes, lane closures and other similar conditions such as to channel traffic. Drums may also be used to mark specific hazards.
- 3.2.3. **Traffic Cones:** Traffic cones shall generally be installed to channel traffic.
- 3.2.4. **Barricade, Type I:** Type I barricades are intended for use in situations where traffic is maintained through the area being constructed and/or reconstructed. They may be used singly or in groups to mark a specific hazard or they may be used in a series for channeling traffic. Type I barricades would normally be used on conventional roads or urban streets and arterials.
- 3.2.5. **Breakaway Barricades:** Breakaway barricades shall be used as a warning and a delineation device at the edge of the traveled way.
- 3.2.6. **Pavement Markings:** Pavement markings, both permanent and temporary, shall be constructed in accordance with the MUTCD. Where maintenance of traffic or construction staging require the use of traffic stripes for relatively short and temporary periods, striping of pavements and base courses shall be accomplished before opening to traffic. Where traffic stripes are to be provided on the final surface of the pavement, the stripes shall be placed before the pavement is opened to traffic. The contractor shall maintain the traffic stripes in good condition at all times. When no longer required, all temporary traffic stripes shall be removed from the pavement by use of appropriate brush and detergents or by other means approved by the jurisdictional authority.

- 3.2.7 **Uniformed Traffic Directors:** Uniformed traffic directors shall be provided when and where called for in the specifications or as directed by the jurisdictional authority and authorized by the Engineer. The Contractor shall, with the permission of the respective Police Department, secure the services of uniformed police officers to direct traffic in those parts of the project under the jurisdiction of the respective municipality. These directors shall be responsible and trained in their duties to direct pedestrian and vehicular traffic, shall act in conformance with Police Department requirements and while serving as traffic directors on this project, shall not be required to perform any other duties. When controlling traffic, uniformed traffic directors shall follow the procedures stipulated for flagmen in the MUTCD.
- 3.2.8. **Flagmen:** Flagmen provided by the Contractor who are normally hired to do other work on the project during the same work period, shall not be considered as uniformed traffic directors. Flagmen shall be provided when and where called for in the specifications or as directed by the jurisdictional authority and authorized by the Engineer. Flagmen shall be trained and of average intelligence, good physical condition, including sight and hearing, having a mental alertness, a courteous but firm manner, neat appearance and sense of responsibility for the safety of the public. Flagmen shall wear an orange vest. This garment shall be reflectorized for nighttime operations.

**** END OF SECTION ****

SECTION 01620
PRODUCT DELIVERY, STORAGE AND HANDLING

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for properly delivering, storing and handling products.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Products shall be delivered, stored and handled in a manner that will assure preservation of quality and fitness for incorporation in the work.
- 1.2.2. As and if required products shall be protected from the elements during storage by providing sheltered, weather-tight enclosures. Skids or platforms shall be provided for products subject to damage by contact with ground.
- 1.2.3. Packaged materials shall be stored in their original packages or containers with weather resistant tags identifying the package contents, manufacturer's name and Contractor's name.
- 1.2.4. **Copies of all delivery tickets, vendor tickets, bills of lading and other records shall be given to the Engineer or construction observer at the time of delivery and shall contain the name of supplier, material delivered, quantity of material, date of delivery and project name.**
- 1.2.5. If partial payments have been made for products or equipment suitably stored off-site, the Contractor shall provide certificates of insurance for full replacement value of the products or equipment.
- 1.2.5.1. Unless otherwise specified, the Contractor shall provide insurance to hold harmless the Owner and Engineer against liability claims and judgements or demands for damages arising from accidents to persons or property occasioned by transportation, handling and storage of products or equipment. A certificate shall be provided prior to shipping.
- 1.2.6. The Contractor shall comply with manufacturer's recommendations concerning periodic maintenance requirements for items stored for extended periods.
- 1.2.7. **Equipment or materials shall not be stored on the site in such a manner as to interfere with the Owner's operation, create obstructions that would endanger the public, or interfere with the work. Equipment and material shall not be stored within 100 feet of any intersection, or on any sidewalks.**

- 1.2.8. Pipe, manholes, appurtenances, backfill material, stone, select materials, and all other construction materials shall not be stored or stockpiled on public thoroughfares or adjoining rights-of-way more than one day in advance of their intended incorporation into the work. **In no case shall any material be stored or stockpiled outside of the rights-of-way or easements or on private property without the written permission of the property owner. A copy of said written permission shall be supplied to the City of Beacon.**

**** END OF SECTION ****

SECTION 01651
CONNECTION TO EXISTING UTILITIES

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for connecting to existing utility systems.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The Owner, Engineer and Utility Owner shall be notified 48 hours in advance of all tie-ins to existing utility systems.
- 1.2.2. All new utility services requiring connection to existing utility systems shall remain isolated from the existing utility until all required tests have been satisfactorily complied with and if required, the service has been inspected and approved by the respective utility owner.
- 1.2.3. All materials and construction methods used for the connection to an existing utility and the requirements for protecting the same shall comply with the respective utility company's requirements.

1.3. SUBMITTALS

- 1.3.1. Prior to construction, the proposed method of connection and list of materials to be used for the necessary utility connections shall be submitted in accordance with the requirements of Division 1.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for the furnishing of documentation by contractor that are prerequisites to contract closeout.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The information in this section is supplemental to General Conditions for submissions made by the contractor for contract closeout and final payment.

1.3. SUBMITTALS

- 1.3.1. Submissions shall include but not be limited to the following:

- 1.3.1.1. Consent of surety attesting to the fact that the surety has examined the contractor's records and the surety concludes that all payrolls, materials bills, and outstanding indebtedness in connection with the contract have been paid.
- 1.3.1.2. Contractor's release waiving all claims against the owner other than those previously made in writing and still unsettled.
- 1.3.1.3. Maintenance bond, if required.
- 1.3.1.4. Completed operations insurance certificates as required in General Conditions.
- 1.3.1.5. A list from contractor's insurance company indicating status of claims of damages arising from the work. List shall include claimant's name, nature of damage and disposition.
- 1.3.1.6. A list indicating the disposition of claims of damages arising from the work, not designated as insurance claims.
- 1.3.1.7. Evidence satisfactory to the Engineer that deficiencies, as noted by permitting agencies or any other body having jurisdiction over the work, have been satisfactorily completed.
- 1.3.1.8. Extended warranties if required in the individual specification sections.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for leaving the site in a neat and satisfactory condition at the completion of the work.

1.2. SYSTEM DESCRIPTION

- 1.2.1. **During construction, the Contractor shall clean the road and all sidewalks of all dirt and debris at the end of each work day.**
- 1.2.2. At the completion of construction, the Contractor shall remove all temporary construction facilities and structures unless expressly directed otherwise, and shall remove remaining waste or surplus materials of all kinds from the site and structures occupied during the progress of the work. The Contractor shall leave the site, structures, and adjacent properties which may have been affected by his operation in a neat and satisfactory condition.
- 1.2.3. All silt or other foreign debris that may have been deposited in channels, storm drains or other points of water discharge during the construction period shall be removed. Unless otherwise directed, all temporary erosion control measures, including but not limited to silt fences, hay or straw bales, mulch, etc., shall be removed provided that the areas have been permanently restored.
- 1.2.4. All structures and parts thereof constructed by the Contractor shall be thoroughly cleaned and left in condition satisfactory to the Engineer. Final interior cleaning shall include but not be limited to the following:
- 1.2.4.1. Remove dust, wire cuttings and other debris from inside of electrical cabinets.
 - 1.2.4.2. Dust cabinets, piping, ducting and other equipment.
 - 1.2.4.3. Wash ceilings and walls, if necessary.
 - 1.2.4.4. Sweep, wash and buff resilient floors and baseplates or sweep and wash tile, slate or concrete floors.
 - 1.2.4.5. Wash windows.
- 1.2.5. Final exterior cleaning shall include but not be limited to the following:
- 1.2.5.1. Remove all unused construction and surplus materials.

1.2.5.2. Sweep and clean all walks, streets and roads affected by construction activities.

1.3. SEQUENCING/SCHEDULING

1.3.1. Final cleaning shall be performed after the work is completed and prior to turning the work over to the Owner.

1.4. DISPOSAL

1.4.1. Disposal of waste materials shall conform to the applicable requirements of the Sections "Waste Materials Disposal", "Prohibited Construction Procedures", and "Erosion Control", Division 1.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for assisting the Engineer and Construction Manager to prepare record documents to provide factual information regarding all dimensional aspects of the work, both concealed and visible to enable future accurate location of all components.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Record documents will be prepared by the Engineer from field measurements by the Construction Manager.
- 1.2.2. The Contractor shall assist the Construction Manager during these measurements by providing such personnel and equipment as may be necessary, to include but not limited to:
 - 1.2.2.1. Gaining access to manholes
 - 1.2.2.2. Cleaning and/or pumping lines
 - 1.2.2.3. Ventilating manholes or other structures that must be entered
- 1.2.3. Work shall not be concealed until the construction manager has obtained the necessary measurements.

** END OF SECTION **

DIVISION 2 - SITE WORK

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for verifying in the field the location of existing utility locations and structures.

1.2. SYSTEM DESCRIPTION

- 1.2.1. **The Contractor shall accurately locate all utilities and structures in the field sufficiently in advance of the work to enable a field evaluation of the proposed work, but in no case less than seven days prior to the excavation for the proposed work. Test pits shall be dug at all proposed utility crossings for the new sewer main and water main lines. Test pits shall also be excavated to verify location and size of existing water and sewer services to each building within the project work zone.**
- 1.2.2. Where a test pit must be dug to obtain information relative to fabricating materials to fit field conditions, the pit shall be scheduled and dug such that the fabrication process may proceed and not impede construction progress.
- 1.2.3. Requirements for the test pit excavation prior to actual construction in the test pit area may require special dewatering methods or equipment to be used since the normal dewatering system for construction of the work will not be operable.
- 1.2.4. The Contractor shall coordinate the digging of all test pits with the respective utility owners having facilities in the vicinity of the location of the test pit.
- 1.2.5. Test pits shall be excavated by the Contractor at those locations where he requests and receives authorization of the Engineer.
- 1.2.6. Failure of the Engineer to authorize digging of test pits will not relieve the Contractor from his contractual obligations regarding location, protection and preservation of utilities and structures.
- 1.2.7. **All dimensions, locations, elevations, and other information about the exposed utilities, facilities, lines and structures shall be accurately recorded by the Contractor and submitted to the Engineer.**
- 1.2.8. **In addition to recording all pertinent information, the Contractor shall take sufficient color photographs to clearly show the configuration, location and condition of the exposed facilities. These photographs shall also be submitted to the engineer.**

1.3. SUBMITTALS

- 1.3.1. Contractor shall submit with the Contractor's construction schedule the proposed locations and schedule of test pits to the Engineer for review and shall not proceed with the excavation without authorization from the Engineer.

PART 3 EXECUTION

3.1. EXCAVATION

- 3.1.1. Excavation of test pits shall be accomplished by such means as are required including hand excavation in the anticipated vicinity of the utilities and structures, to ensure that the underground utilities or structures that may be encountered are not damaged. It shall be the Contractor's sole responsibility for any damages incurred during the excavation operations. All such damages shall be repaired or replaced by him (if permitted) to the satisfaction of the Owner, responsible utility and/or Engineer at the Contractor's own expense. Where the repair or replacement must be done by the Owner/responsible utility any and all costs thereof shall be borne by the Contractor.
- 3.1.2. Contractor shall provide and maintain the test pit site in a safe condition.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for protecting, removing, relocating and replacing existing utilities and structures.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Protection of existing utilities and structures not designated for removal, relocation or replacement are supplemental to the requirements of the general conditions.
- 1.2.1.1. The Contractor shall strictly comply with the requirements of the owners of existing utilities and structures including but not limited to those related to support, protection, inspection and testing.
- 1.2.1.2. As the excavation approaches utilities or underground structures, digging by machinery shall be discontinued until manual excavation properly locates the extent of the utility or structure.
- 1.2.2. In the event of damage, injury or loss to existing utilities and structures, whether shown on the drawings or not, the Contractor shall make all reasonable efforts to facilitate repairs and to mitigate the impact of such events upon the utility or structure's owner's normal operations. The Contractor shall be responsible for restoring the existing utility or structure to the condition required by the owner of the utility or structure, or at least to a condition found immediately prior to the work. In the event that the utility owner elects to repair, the Contractor shall provide all reasonable access and assistance and will reimburse the utility owner for the cost of the repair. If utility service is interrupted, alternate facilities shall be provided.
- 1.2.2.1. Backfilling around protected utilities and structures shall be in accordance with the Section "Trenching, Backfilling and Compaction," Division 2.
- 1.2.3. Re-routing of the work to avoid existing utilities and structures.

- 1.2.3.1. Where existing utilities and structures appear to be located differently than shown on the drawings as indicated by the mark out described in the Section "Utilities - Notification and Markout," Division 1, test pits as described in the Section "Test Pits for Verification of Utilities and Structures," Division 2, or by field observation, the Contractor shall notify the Engineer so that the work may be re-routed, if possible, to avoid interferences. Re-routing to avoid interferences shall be treated as a Minor Change thereby not involving an adjustment in the contract price or contract time.
- 1.2.4. Removal, relocation or replacement of existing utilities and structures.
 - 1.2.4.1. Where shown on the drawings, the Contractor shall be responsible to remove, relocate or replace existing utilities and structures in accordance with the specific specifications section describing the item of work.
 - 1.2.4.2. If removal, relocation or replacement of existing utilities and structures are required because of interference with the work, or by request of the utility owner, the change shall be in accordance with General Conditions.
 - 1.2.4.3. Backfilling around relocated utilities, facilities, lines and structures shall be in accordance with the section "Trenching, Backfilling and Compaction," Division 2.
- 1.2.5. Work affecting existing gas distribution system shall be in accordance with the minimum federal safety standards under Title 49 -- Transportation, Chapter 1 -- Materials Transportation Bureau, Department of Transportation - - Part 192 -- Transportation of Natural and other Gas by Pipeline and The American Society of Mechanical Engineers' Guide material relating to the standards.
- 1.2.6. Work affecting water distribution systems which will take fire hydrants out of service must be coordinated with the local Water Department and Fire Department. The Contractor shall be prepared to take whatever measures are necessary to restore fire flows in the event of an emergency or provide for temporary fire flow service in accordance with the requirements of the local Fire Department.

1.2.7. DEFINITIONS

- 1.2.7.1. Interference with the work of utilities that may require re-routing or removal, relocation or replacement is defined as utilities that are either approximately parallel with the new pipeline and within the two vertical planes enclosed by the maximum trench width, as shown on the drawings, plus 6 inches on each side (total of 1 foot added to the maximum trench width) or crossing the pipe at any angle and at the same elevation as the proposed piping so as to be in direct conflict. All other utilities, including all house laterals and services, approximately parallel to the new pipeline but outside of the maximum trench width plus 1 foot, or crossing the pipe trench at any angle and not in direct conflict with the proposed piping are the obligation of the Contractor to remove, relocate or replace at no additional cost to the owner.
- 1.2.7.2. Utilities are defined as any pipelines, conduits, wires or other facilities that convey fuel, gas, water, sewage or storm water; transmit electricity, voice communications, television, signals or alarms; and similar related services.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. All materials used for relocation or replacement of utilities and structures shall be of an equivalent material, type, class grade and construction as that existing, or as approved by the respective owners thereof.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for grading in preparation for the placing of topsoil, planting areas, paved and unpaved walks, drives and traveled ways.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The site shall be kept graded during performance of the work as required to prevent depressions which may form water pockets, and to permit movement of normal vehicular traffic.
- 1.2.2. Areas to receive pavements, walks and traveled ways shall be graded to bottom of base course or subbase course as applicable, and compacted as shown on the drawings or specified herein. After compaction, the subgrade of roadways or traveled ways shall be proof-rolled with a fully loaded tandem dump truck prior to the installation of subbase material. All areas that shown signs of distress, fatigue, or are determined by the Engineer or Highway Superintendent to be unsuitable shall be removed in accordance with Section 01030, "Special Project Requirements". A minimum of four (4) passes shall be made with the fully loaded tandem dump truck.
- 1.2.3. Select Material #4 shall be used to fill low areas in the roadway subgrade to bring it to the proper grade prior to the installation of the base course or subbase course.
- 1.2.4. Areas to receive topsoil shall be graded and compacted to the bottom of the topsoil layer.

PART 3 EXECUTION

3.1. PREPARATION

- 3.1.1. During the grading operation, the subgrade shall be maintained in such condition that it will be well drained at all times. Grading shall be performed to facilitate surface drainage away from buildings. No low areas shall remain which would inhibit proper surface drainage in any areas. If required, temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution of the work, erode the subgrade or adversely affect adjacent properties.

- 3.1.2. Stones or rock fragments larger than 4 inches in their greatest dimension will not be permitted in the top 6 inches of the finished subgrade of all embankments.
- 3.1.3. In cuts, all loose or protruding rocks on the back slopes shall be barred loose or otherwise removed to line or finished grade of slope. All cut and fill slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the drawings.

** END OF SECTION **

PART 1 GENERAL

1.1. DESCRIPTION

- 1.1.1. Work covered by this section includes rock excavation and removal and disposal of boulders.
- 1.1.2. Definitions
 - 1.1.2.1. Rock -- As a name for excavated materials, natural solid rock formation, including shale, which can be removed properly only by means of explosives, or by recognized methods of quarrying. The term rock, for payment purposes, shall specifically exclude all loose, soft stratified deposits, and any other material which can be removed by mechanical equipment. Minimum size of mechanical equipment used to try and remove material shall be a Cat 245 hydraulic track excavator, or approved equivalent, with a 2' wide bucket. Teeth on excavator bucket shall be in good condition. Such excluded materials may include shale, slate, soft sandstone, nested boulders, or other material which is decomposed, stratified or shattered. In no case will excavated materials be paid for as rock excavation without first being loosened by ram hoe or drilling and/or blasting operations. Such excluded materials shall further include previously blasted rock, loose shakes, broken rock in fillings, materials which may be removed with pick and material which has fallen into the trench or excavation.
 - 1.1.2.2. Boulder -- As a name for excavated materials, boulders, rock and large cobbles, one (1) cubic yard or greater in volume, regardless of the size of equipment used to excavate such materials. The term boulder, for payment purposes shall specifically exclude materials with a solid volume of less than one (1) cubic yard.

1.2. SUBMITTALS

- 1.2.1. Name, qualifications and experience record of all blasters.
- 1.2.2. Certificates of insurance and license of blaster.
- 1.2.3. Pre-blasting photographs as specified in Section 01300.
- 1.2.4. Blasting permit obtained from municipality.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. Verify that blasting operations will not violate the boundaries of easements or property lines.
- 3.1.2. Determine the locations of structures and underground utilities, and verify that blasting operations will not disturb them.
- 3.1.3. **Notify the Construction Observer and Highway Superintendent, who will inspect and determine if the material is to be qualified as rock, boulders, or otherwise, and who will further take measurements to determine the volume thereof, assisted by the Contractor, after the initial stripping of earth. If Construction Observer and Highway Superintendent are not notified, Contractor shall not be paid for rock removal.**

3.2. PERFORMANCE

- 3.2.1. At the direction of the Engineer, attempt to remove materials by use of mechanical equipment.
- 3.2.2. When rock is encountered, excavate the same as required for the construction of the work. No projection of rock shall be allowed to remain nearer than 6" to any part of a pipe or conduit when laid, nor to project beyond the lines and grades of any masonry structure, not so as to interfere with the proper construction and removal of forms. Where masonry will be in contact with rock, the surface of the rock shall be rough and clean, in order to secure a good bond. Before rock is excavated, it shall be stripped of earth, and the Engineer notified and given time to measure the same. All rock and boulders removed before measurement by the Engineer will not be paid for as Rock Excavation or Removal and Disposal of Boulders.
- 3.2.3. Where the material cannot be reasonably removed by mechanical equipment, it shall be removed by drilling and blasting; drilling, jack-hammering, plug and feather; or by other recognized quarrying methods; in which case the material will be considered as rock excavation.
- 3.2.4. If rock is encountered, it shall be removed to 6" below the footing, base slab, or proposed pipe and the area brought back to proper subgrade by placing a 6" minimum layer of compacted select backfill. The cost of the select backfill will be included in the price per cubic yard of rock, unless otherwise specified.
- 3.2.5. Where rock is encountered in right-of-way, close to houses or other structures, or adjacent to watermain, gas mains, or electrical underground installations, special precautions shall be observed. In some cases, the Engineer may require that the rock be removed without the use of explosives.

- 3.2.6. Remove and dispose of all boulders and excavated rock as specified in Section 02221 for excess excavated materials, unless otherwise directed by the Engineer.

3.3. BLASTING

- 3.3.1. All damages to persons and public and private property shall be the responsibility of and adjusted by the Contractor. Conduct all operations so as to circumvent and minimize such instances inasmuch as is possible.
- 3.3.2. Conduct all operations, including the use of air compressors and air hammers, in full conformance with all applicable laws and regulations.
- 3.3.3. All blasting operations shall be performed by a qualified, licensed blaster.
- 3.3.4. In all cases of blasting, the prepared blast shall be carefully covered with heavy timers securely chained together and covered with a blasting mat and placed so that the area affected by the explosives is positively confined. No blasting shall be done within 40 feet of finished pipelines, and shall a gas or sewer pipe or any underground conduit intersect the line of trench, the rock shall be removed without blasting for a distance of 10 feet on each side of such pipes or conduits. The end of the finished pipeline shall be covered and stopped with plank or earth during each blast.
- 3.3.5. Charges shall be properly sized, and mitigating measures properly employed, to limit the effect of blasting (including pre-blasting) to the trench or excavation limits. All damages and disturbance to roadway and other surfaces, bases, sub-bases, and earth outside of the trench or excavation limits shall be repaired to the complete satisfaction of the Engineer, with no additional compensation to the Contractor therefore. If, in the opinion of the Engineer, road sub-bases or earth layers have been disturbed, with or without evidence of such opinion, further subsidence may occur, said disturbed areas shall be excavated and reconstructed to the complete satisfaction of the Engineer, entirely at the Contractor's expense.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for boulder removal is by the cubic yards actually removed. Measurement for rock removal excavation is defined by the maximum width equal to the outside diameter of the pipe or width footing or a structure plus 12" either side by the depth of the rock to a maximum depth of 6" below the pipe or structure.

4.2. PAYMENT

- 4.2.1. Unit price for rock excavation includes ram hoe, drilling, explosives, preparation of area for blasting, labor, all equipment required for mechanical removal of rock where required, pre-blast surveys, disposal of the rocks, 6" depth of select backfill under structure or pipes, and all else incidental and necessary to complete the work.
- 4.2.2. Price for boulder removal includes all equipment and labor required for removal and disposal of the boulders, and all else incidental and necessary to complete the work. Boulders will be paid for on the basis of 1/2 the rock excavation price.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. This work consists of providing a non-pervious, Low Density Cellular Concrete (LDCC) to fill pipes or other structures to be abandoned at the location shown in the plans in accordance with these specifications.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Pipes to be abandoned in place, as designated on the plans or as directed by the Engineer, shall be abandoned by filling the pipe with LDCC.

1.3. REFERENCES

- 1.3.1. ASTM C150 – Standard specification for Portland Cement.
- 1.3.2. ASTM C796 – Standard Test Method for Foaming Agents for use in Producing Cellular Concrete using Preformed Foam.
- 1.3.3. ASTM D6103 – Standard Test Method for Flow Consistency of Controlled Low Strength Material.

1.4. SUBMITTALS

- 1.4.1. Mix design for LDCC, including materials to be used and their sources.
- 1.4.2. Resume of contractor showing experience as specified below, including qualifications of contractor's superintendent and/or foreman.
- 1.4.3. Description of equipment and placement methods to verify compliance with specifications.
- 1.4.4. Certified testing lab to perform required testing per specifications.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1 Portland cement shall comply with ASTM C150 (Type I, II or III).
- 2.1.2 Fly ash shall be Class C or Class F and compatible with foaming agent.

- 2.1.3 -Water shall be free from deleterious substances.
- 2.1.4 Foaming agent shall be Geofill Concentrate conforming to ASTM C796, or approved equal.
- 2.1.5 Admixtures for water reducing, retarding, accelerating, and other specific properties may be used when recommended by the manufacturer of the foaming agent.
- 2.1.6 Geofill LD shall have the following properties:
- | | |
|---|-----------------|
| Range of Cast Density, PCF | 24-30 |
| Minimum Compressive Strength (28 Days), PSI | 40 |
| Flow Consistency per ASTM D6103 | Greater than 7" |

PART 3 EXECUTION

3.1. HANDLING

- 3.1.1. All materials shall be protected from inclement weather.
- 3.1.2. Foam generating equipment shall be used to produce a predetermined quantity of pre-formed foam which shall be mixed and blended with cementitious slurry. Equipment shall be calibrated to produce consistent foam with stable, uniform cellular structure.
- 3.1.3. LDCC shall be produced utilizing specialized automated proportioning, mixing, and foam producing equipment, which is capable of meeting the specified properties.
- 3.1.4. Avoid excessive handling of the material. After sufficient mixing of the foam with slurry, the material shall be conveyed promptly in its final location.
- 3.1.5. All equipment used must be approved by the foam manufacturer.

3.2. QUALITY CONTROL AND QUALITY ASSURANCE

- 3.2.1. Contractor shall have a record of experience and quality of work placing foam concrete that is satisfactory to the Engineer. Including the following:
1. Shall be capable of developing a mix design, batching, mixing, handling, and placing LDCC.

2. Shall be regularly engaged in the production and pumping of LDCC for filling abandoned pipes or other structures.
3. Shall have satisfactory completed at least five (5) similar LDCC projects during the last twelve (12) months.
4. Workers included the contractor's superintendent and /or foreman, shall be fully qualified to perform the work and have had previous experience in production and pumping of LDCC under similar conditions.

3.3. INSTALLATION

- 3.3.1. LDCC shall be pumped through injection ports located at bulkhead to allow abandonment to be completely filled.
- 3.3.2. All bulkheads and injection ports installed shall be capable of withstanding a minimum of 30 PSI or the allowable maximum pressure, whichever is greater and shall be water tight.
- 3.3.3. Injection and vent ports and pipes must be securely installed and be able to receive a minimum 2" male threaded NPT.
- 3.3.4. Space injection points at intervals that allow material to be forced from one injection point to the next at pressures below maximum allowable pressure.
- 3.3.5. All water and other residual materials must be removed from pipe prior to initiating filling procedure. If required, dewatering shall be continuous during installation.
- 3.3.6. If pipe cannot be dewatered, Geofill LD Hybrid, with a density greater than 65pcf, is recommended.
- 3.3.7. LDCC shall be placed in a manner so as not to cause collapsing of material, which may require multiple lifts depending upon length and diameter of pipe being abandoned.

3.4. TESTING

- 3.4.1. Testing to be performed by approved testing lab.
- 3.4.2. A minimum of four (4) 3" x 6" cylinders shall be molded for each shift of operation.

- 3.4.3. LDCC to be tested at any age after three (3) days for compressive strength. At least two (2) specimens from each set should be tested at 28-days in accordance with ASTM C-495 unless otherwise approved by engineer.
- 3.4.4. Contractor shall record and measure wet cast densities at the point of placement regularly. Mix shall be adjusted as required to obtain the specified cast density at the point of placement.
- 3.4.5. Contractor shall record and measure flow consistency regularly in accordance with ASTM D6103.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for Low Density Cellular Concrete (LDCC) shall be Lump Sum.

4.2. PAYMENT

- 4.2.1. Lump sum price for Low Density Cellular Concrete (LDCC) shall include clearing; excavation; protecting and shoring of trench walls; protecting existing utilities, structures and property; saw cutting of pavement; materials for bulkhead(s); installation of bulkhead(s); all necessary vent tubing; grout injection lines; concrete and add mixtures; foaming agent; water; all mixing and pumping equipment; complete filling of all lines and structures to be abandoned; testing; backfilling of all excavations; compaction of backfill material in 8" lifts; disposal of all wastes; restoration; equipment; labor; hand tools; and all else incidental and necessary to complete the work.

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for trenching, backfilling and compaction.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Trench excavation shall be to the bottom of the pipe embedment zone or subgrade for pipelines and to the bottom of bedding for appurtenant pipeline structures.
- 1.2.2. All excavation other than rock and boulders shall be unclassified. Trench excavation shall include the removal and subsequent handling of all materials excavated, including rock, in the performance of the work regardless of type, character, composition or condition.
- 1.2.3. Trench excavations shall be performed in such a manner as will give suitable room for laying and jointing pipe; building structures; provide protection for existing utilities and structures not designated for removal, relocation or replacement; provide protection for existing public or private property; provide for trench wall support, drainage, dewatering, stockpiling and disposal of materials; and all appurtenant work.
- 1.2.4. Trench excavation and backfill within the rights-of-way of the agency having jurisdiction shall be done in accordance with requirements and provisions of the permits issued by the agencies for the construction within their respective rights-of-way. Such requirements and provisions, where applicable, shall take precedence and supersede the provisions of these specifications.
- 1.2.5. If the bottom of the trench excavation is removed below subgrade or beyond the limits shown on the drawings except when authorized by the Engineer to remove unsuitable foundation material, this additional excavation shall be termed unauthorized. The zone of unauthorized excavation shall be backfilled with select material No. 4 and compacted at no additional cost to the owner.
- 1.2.6. The width of the trench shall not exceed the permissible widths shown on the drawings. If the permissible width is exceeded, the pipe shall be installed in a higher class bedding than shown on the drawings or the specified pipe shall be replaced with pipe of greater crushing strength or both, as determined by the Engineer to achieve suitable conditions, at no increase in cost to the owner.

PART 2 ACCEPTABLE MANUFACTURERS

N/A

PART 3 EXECUTION

3.1 TRENCH EXCAVATION

- 3.1.1. When excavations are to be made in paved surfaces, the pavement shall be cut ahead of the excavation to provide a clean, uniform edge with minimum disturbance of remaining pavement. Reinforced concrete pavement shall be cut in a manner approved by the agency having jurisdiction. Unless specific approval otherwise is obtained by the Contractor from the agency having jurisdiction, the Contractor shall cut the concrete pavement leaving the transverse steel reinforcement bars intact as required on each side of the trench for tying back into the new concrete surface. If pavement is removed in large pieces, it shall not be mixed with other excavated materials but shall be disposed of away from the site of the work by the Contractor before the remainder of the excavation is made.
- 3.1.2. In excavating the trench, machinery may be used to excavate the trench to slightly above the designated subgrade. The last of the material to be excavated shall be removed manually in such a manner that the bedding material or the pipe, when installed directly on the trench bottom, can be laid on undisturbed material. Where pipe is laid directly on the trench bottom, the pipe shall be on undisturbed material with suitable bellholes made at joints. The bucket on the excavating equipment shall have no teeth or the teeth blocked.
- 3.1.3. All excavations, except as otherwise shown on the drawings, shall be made by the open cut method. **The extent of excavation open at any one time will be controlled by the conditions, but shall not exceed 100 feet, including easements which shall have been at least rough graded to original contours.** If possible, material excavated from the trench shall be laid neatly on the side of the trench and kept trimmed up, so that little or no inconvenience may be caused to the traveling public and adjoining areas. If material excavated from the trench is unsuitable or is not to be used as backfill, the material shall be trucked away from site. All excavations shall be entirely backfilled by the end of the day.
- 3.1.4. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction to support the sides of the excavation and to prevent any movement of earth to prevent damage, injury or loss to:
 - 3.1.4.1. All employees on the work and other persons who may be affected thereby.
 - 3.1.4.2. All the work and all materials and equipment to be incorporated therein.

- 3.1.4.3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 3.1.5. The Contractor's means, methods, techniques, sequences and procedures for temporary trench support shall not interfere with nor disrupt materials within the pipe embedment zone during installation, relocation or removal of the support system. Contractor shall provide trench support in accordance with OSHA Regulations.
- 3.1.6. Suitable and safe bridges and other crossings shall be provided over excavations where required for the safe accommodation of vehicular and pedestrian traffic and access to private property. All bridges and crossing shall be removed promptly when no longer required.
- 3.1.7. Contractor shall manage the trenching operations to maintain access to streets, driveways and walkways for normal usage including fire, ambulance and utility access to all property and people in the construction area. Free access must be provided to all fire hydrants, water valves, meters and private drives. Contractor shall have certified steel road plates on site at all areas where trenching is occurring within the roadway.
- 3.1.8. Suitable excavated material that may be used for backfill, embankment or fill in other areas of the work shall not be removed from the site until all of the fill and backfill needs of the work are met or if backfill material to be used is otherwise specified.

3.2. TRENCH BACKFILL

- 3.2.1. Trench excavations shall be backfilled as soon as practicable after installation of the work with suitable material or specified material on plans or in these specifications. All suitable excavated material shall be stockpiled as necessary and used for trench backfill (unless select material is noted on plans or in contract documents to be used for backfilling), embankment, fill or other backfill required by the work. **All excavations shall be completely backfilled by the end of the day.**
- 3.2.2. Excavated material suitable for trench backfill may be stockpiled adjacent to the trench, providing that safety regulations are met, only if select material is not to be used as backfill. In no case shall material be stockpiled in such a manner as to endanger the trench or existing utilities and structures. No excavated material shall be stockpiled in environmentally sensitive areas. Stockpiled material shall have adequate erosion control measures and shall not be located where the possibility of siltation of any surface water exists. When stockpiled materials interfere with natural drainage, necessary procedures shall be employed to permit surface and subsurface flow.

- 3.2.3. Trench backfill shall be initially compacted in accordance with the requirements of Section "Soil Compaction", Division 2. Even if testing may indicate that the required density has been attained, the Contractor shall remain responsible for correcting any surface settlement or damage to utilities throughout the two-year correction period described in General Conditions.
- 3.2.4. Contractor shall be responsible for the means, methods, techniques, sequences and procedures of construction to compact the trench backfill to the required densities. The means, methods, techniques, sequences and procedures of construction to compact the trench backfill shall suit the condition and type of soil used as trench backfill. The trench backfill shall be compacted in 8" lifts unless otherwise direct by the Engineer. If lifts are larger than 8" without engineer's approval, all backfill material shall be excavated and re-installed in 8" lifts at the contractor's expense. This shall not entitle the contractor to an extension of time or a claim for delay.
- 3.2.5. No compacting shall be done when the material is too wet to be compacted properly; at such times the work shall be suspended until the previously placed and new materials have dried out sufficiently to permit proper compaction, or until such other precautions are taken as may be necessary to obtain proper compaction.
- 3.2.6. Care shall be taken to thoroughly compact backfill material below and over utilities and appurtenances so that the utilities and appurtenances shall be continuously supported on compacted material without damage or settlement. Strict conformance with the requirements of the utility companies shall be observed.
- 3.2.7. No large masses of trench backfill material shall be dropped into the trench in such a manner as to endanger the pipe.
- 3.2.8. All voids left by removal of trench support material shall be completely refilled with suitable materials and thoroughly compacted.
- 3.2.9. Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested, and that all voids between stoned and lumps shall be completely filled with fine material.
- 3.2.10. Frozen material shall not be placed in the trench backfill, nor shall trench backfill be placed upon frozen material. Frozen material shall be removed, or shall be otherwise treated to make it acceptable, before new trench backfill is placed.
- 3.2.11. Pieces of bituminous pavement shall be excluded from the backfill unless expressly permitted by the Engineer, in which case the pavement shall be broken up into small pieces and placed only in the mid zone of the trench.

3.2.12. Unless otherwise noted on the drawings or specifications, all trench excavation in roads, streets or traveled ways shall be backfilled and compacted on the same day as they were excavated.

3.2.13. All trenches crossing the roadway shall be capped with 2" of hot bituminous top course within 24 hours without exception.

3.3 DISPOSAL OF MATERIAL

3.3.1. All material collected as a result of trench excavation operations that are not suitable for reuse shall become the property of the Contractor to dispose of off the site in accordance with the requirements of the Sections "Waste Materials Disposal" and "Erosion Control", Division 1.

3.3.2. Disposal of any material shall conform with the requirements of the Section "Prohibited Construction Procedures", Division 1.

3.3.3. Disposal of waste materials shall be in accordance with the requirements of the Section "Waste Material Disposal", Division 1.

3.3.4. Excess excavated material shall become the property of the contractor and shall be disposed of in accordance with the requirements of Sections: "Waste Materials Disposal" and "Erosion Control", Division 1.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements, definitions and uses for unsuitable, suitable and select material.

1.2. SYSTEM DESCRIPTION

1.2.1. UNSUITABLE MATERIAL -- DEFINITION

- 1.2.1.1. Excavated materials shall be unsuitable for use if the excavated material contains objectionable quantities of organic matter, clays, trees, stumps, frozen material, rubble, refuse, cinders, rock, asphalt or other material considered deleterious by the Engineer, which in the opinion of the Engineer can not be removed by the Contractor.
- 1.2.1.2. The soil material at or below subgrade or excavation depth as shown on the drawings shall be unsuitable if the soils will not serve as an adequate foundation for the work, and/or show signs of distress or fatigue.

1.2.2. SUITABLE MATERIAL -- DEFINITION

- 1.2.2.1. Suitable materials from excavations shall be free from or in the opinion of the Engineer can be made free of objectionable quantities of organic matter, clays, trees, stumps, frozen material, rubble, refuse, cinders, rock, asphalt and other material considered deleterious by the Engineer, nor stones larger than ½ cubic foot, except for backfill within the initial backfill zone where no stones shall be larger than 2".
- 1.2.2.2. Suitable material from off-site borrow pits shall meet the requirements of 2.1.1.

1.2.3. SELECT MATERIAL -- DEFINITION

- 1.2.3.1. Select materials shall be as described in 2.1.2.

1.3. QUALITY ASSURANCE

- 1.3.1. Testing will be performed by an approved independent testing lab, at the Contractor's cost, at Engineer's direction.

1.4. REFERENCES

- 1.4.1. "Tests for Moisture-Density Relations of Soils," ASTM designation as shown on the drawings.
- 1.4.2. NYSDOT Standard Specifications.
- 1.4.3. "Standard Specifications for Transportation Materials and Method of Sampling and Testing," AASHTO.

1.5 SUBMITTALS

- 1.5.1. Samples of imported materials shall be submitted for testing and approval before execution of work.

PART 2 PRODUCTS

2.1 MATERIALS

- 2.1.1. Suitable material from off-site borrow pits (run of bank) shall consist of a natural or artificial mixture hard, durable pebbles, rock fragments and soil binder, free from soft particles and excess clay, and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
4 inch	100
1/4 inch	25 - 60
No. 200	0 - 20

2.1.2. SELECT MATERIAL

- 2.1.2.1. Select Material No. 1 (crushed stone or pea gravel stone) shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
3/4 inch	100
1/2 inch	90 - 100
3/8 inch	40 - 70
No. 4	0 - 15
No. 8	0 - 5

- 2.1.2.2. Select Material No. 2 (crushed stone #2 – NYSDOT Table 703-4) shall conform to NYSDOT Section 703 – Aggregates, and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
1½ inch	100
1 inch	90 - 100
½ inch	0 - 15

- 2.1.2.3. Select Material No. 3 (sand) shall be clean and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
No. 4	90-100
No. 8	75-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	1-10
No. 200	0 - 3

- 2.1.2.4. Select Material No. 4 (manufactured quarry processed stone) shall conform to the requirements of the NYSDOT Standard Specifications for NYSDOT Item No. 304.12, and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
2 inch	100
¾ inch	25 - 60
No. 40	5 - 40
No. 200	0 - 10

- 2.1.2.5. Select Material No. 5 (crushed stone #3A – NYSDOT Table 703-4) shall conform to NYSDOT Section 703-Aggregates, and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
2 inch	100
1½ inch	90 -100
1 inch	0 - 15

- 2.1.2.6. Select Material No. 6 (crushed stone #3 – NYSDOT Table 703-4) shall conform to NYSDOT Section 703 – Aggregates, and shall be graded as follows:

Sieve Size	Percent Passing (By Weight)
2½ inch	100
2 inch	90 - 100
1½ inch	35 - 70
1 inch	0 - 15

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1. USE OF SUITABLE MATERIAL

- 3.1.1.1. Where shown on the drawings, or if there is not sufficient excavated material suitable for use to fulfill the requirements of the work, sufficient suitable material to meet the requirements of the work shall be imported from off site borrow pits and placed and compacted in accordance with the Section "Soil Compaction," Division 2.

3.1.2. USE OF SELECT MATERIAL

- 3.1.2.1. Where shown on the drawings, or if in the opinion of the Engineer a select material is necessary for use above subgrade, the designated select material shall be provided.
- 3.1.2.2. Where shown on the drawings, or if in the opinion of the Engineer the foundation soils at or below subgrade shall be considered unsuitable as an adequate foundation material for the work, a designated select material as shown on the drawings or as determined by the Engineer, shall be used to replace the unsuitable material.

- 3.1.2.3. Unsuitable soils shall be removed to such widths and to such depths as determined by the Engineer to provide for suitable support.
- 3.1.2.4. The designated select material shall be provided, placed and compacted in accordance with the Section "Soil Compaction", Division 2.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement of suitable material from off site sources is by cubic yards of unsuitable material removed from within the pay limits shown or ordered by the Engineer, that is replaced by the suitable material (compacted).
- 4.1.2. Measurement of select material is by cubic yards in place (compacted) within the pay limits shown or ordered by the Engineer, except when begin used as road subgrade material, at which time it will be paid by the square yard.

4.2. PAYMENT

- 4.2.1. Unit price for suitable material from off site sources includes excavating and disposal of unsuitable and/or unused material, dewatering, furnishing and compacting the suitable material and all else incidental and necessary to complete the work.
- 4.2.2. Unit price for select material below subgrade includes excavating and disposing of unsuitable and/or unused material, dewatering, furnishing and compacting the select material, protection of the excavation and all else incidental and necessary to complete the work.
- 4.2.3. Unit price for select material above subgrade includes excavation to the required subgrade; preparation of the subgrade; stockpiling of suitable material and disposal of unsuitable and/or unused material; furnishing, placing and compacting the select material, and all else incidental and necessary to complete the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for bedding and backfilling in the pipe embedment zone.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The pipe embedment zone for each type of pipe is shown on the drawings. The pipe embedment zone is founded on the planned subgrade of undisturbed earth or schedule rock excavation and does not include the zone of unauthorized excavation or select material below subgrade replacing unsuitable foundation material.
- 1.2.2. Unless otherwise stated, the pipe embedment zone consists of:
- 1.2.2.1. Bedding which may be either undisturbed earth, suitable material, or select material.
 - 1.2.2.2. Compacted backfill of suitable material or select material. Suitable excavated material shall be used if available. If suitable excavated material is not available, off-site suitable material or select material as shown on the drawings shall be used.

1.3. SUBMITTALS

- 1.3.1. Submit all relative materials specifications and samples including void ratio of crushed stone bedding in conformance with provisions of the Section "Shop Drawings and Samples", Division 1.

PART 2 PRODUCTS

2.1 MATERIALS

- 2.1.1. Unless otherwise shown on the drawings, material for the pipe embedment zone shall be suitable material as specified in the Section "Unsuitable, Suitable and Select Materials", Division 2.
- 2.1.2. Select material for pipe embedment zone backfill, if required, shall meet the requirements as specified in the Section "Unsuitable, Suitable and Select Materials", Division 2.

PART 3 EXECUTION

3.1. INSTALLATION

- 3.1.1. Bedding on undisturbed earth. The trench excavation in the pipe embedment zone shall be executed in conformance with the requirements as stated in "Trenching, Backfilling and Compaction", Division 2. The undisturbed soil shall have contact with the pipe for an angle of at least 90°, unless otherwise shown on the drawings.
- 3.1.2. Pipe embedment zone backfill. Suitable or select material shall be deposited and compacted in layers not to exceed 6" until a minimum of 1 foot of earth has been placed and compacted over the pipes in a manner that will not disturb or injure the pipe. Each layer shall be leveled and thoroughly compacted in accordance with the Section "Soil Compaction", Division 2.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement of select material used as pipe embedment backfill when authorized by the Engineer is on a cubic yard basis as stated in "Unsuitable, Suitable and Select Materials", Division 2, unless requested to be included in the unit price for pipe.
- 4.1.2. Measurement of suitable material from excavations used as pipe embedment backfill shall not be made.
- 4.1.3. Measurement of suitable materials from off-site sources as pipe embedment backfill when authorized by the Engineer is on a cubic yard basis as stated in "Unsuitable, Suitable and Select Materials", Division 2, unless requested to be included in the unit price for pipe.

4.2. PAYMENT

- 4.2.1. Unit price for select material used as pipe embedment backfill when authorized by the Engineer is described in Part 4, "Unsuitable, Suitable and Select Materials" Division 2.
- 4.2.2. There is no unit price payment for suitable material from excavations used as pipe embedment backfill. The price shall be included in the unit prices bid for pipe.
- 4.1.3. Unit price for suitable materials from off-site sources as pipe embedment backfill when authorized by the Engineer is described in Part 4 of the Section "Unsuitable, Suitable and Select Materials", Division 2.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for soils compaction.

1.2. QUALITY ASSURANCE

- 1.2.1. **The taking of samples and the performing of field compaction density tests shall be done by an approved independent testing laboratory, obtained and paid for by the Contractor.**

1.3. SUBMITTALS

- 1.3.1. Copies of the results of the laboratory maximum density tests, certified by the Testing Laboratory.

- 1.3.2. List and description of proposed compaction equipment.

1.4. JOB CONDITIONS

- 1.4.1. Compaction shall not take place in freezing weather or when materials to be completed are frozen, too wet or moist, or too dry.
- 1.4.2. Schedule the work to allow ample time for laboratory tests and to permit the collecting of samples and the performing of field density tests during the backfilling and compaction operations.
- 1.4.3. Protect pipes, structures and all other subsurface work from displacement or injury during compaction operations.

PART 2 PRODUCTS

2.1. COMPACTION

- 2.1.1. Utilize the proper compaction methods and equipment to suit the soils and conditions encountered.
- 2.1.2. Foundation course material placed on finished subgrade shall be thoroughly compacted by rolling with a self-propelled ten ton roller.

2.2. LABORATORY TEST REPORTS

2.2.1. As a minimum, the laboratory maximum density testing reports shall contain the following:

- 2.2.1.1. Laboratory's name.
- 2.2.1.2. Date, time and specific location from which sample was taken and name of person who collected the sample.
- 2.2.1.3. Moisture-Density Curve plotted on graph paper to as large a scale as is practical, with all points used to derive the curve clearly visible.
- 2.2.1.4. Designation of the test method used.
- 2.2.1.5. The optimum density and moisture content.
- 2.2.1.6. A description of the sample.
- 2.2.1.7. The date the test was performed and the person who performed the test.
- 2.2.1.8. The project name and identification, and the Contractor's name.
- 2.2.1.9. The signature of a responsible officer of the Testing Laboratory certifying to the information contained in the report.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. Verify that layers of material are no thicker than the maximum thicknesses specified in other sections.
- 3.1.2. Verify that moisture content is nearly optimum.

3.2. PERFORMANCE

- 3.2.1. Compaction densities shown are percentages of the maximum density obtainable at optimum moisture content as determined by ASTM D1557, Method C.

- 3.2.2. Moisten or dry each layer of material to achieve optimum moisture content. Unless otherwise specified or directed by the Engineer, compact each layer of material to the following required densities:

Location	Density
Under concrete slabs, foundation and footings	95% * 100% **
Backfill at structures	95%
Embankments	95%
Paved Areas	95%
All Other Areas Select Fill *** Remainder of Trench	95% 90%

- * For cohesive materials.
** For granular materials.
*** Bedding, around pipes, over pipes and over sand encasements.

3.3. FIELD QUALITY CONTROL

- 3.3.1. Field density tests shall be done, at the contractor's expense in accordance with the following average frequencies:
- 3.3.1.1. Structures and Roads -- One test for each layer of compacted fill and base material at intervals of approximately 100 feet along structure walls and roadways.
 - 3.3.1.2. Under Structures, Foundations, Slabs and Footings -- One test for every 40 square foot area of each layer of compacted fill or backfill.
 - 3.3.1.3. Trenches and All Other Areas -- One test for every 50 feet of trench for each lift of backfill, and one test for every 40 square foot area of each layer of compacted fill or backfill in all other areas.

3.4. ADJUST AND CLEAN

- 3.4.1. Replace or repair any pipe, structure or other work which has been displaced, damaged or injured.
- 3.4.2. Compacted soils not meeting compaction densities shall be re-excavated, recompacted and retested until all requirements are met.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for dewatering of excavations.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction to properly dewater, remove, and dispose of water entering into trenches and other excavations and to prevent saturated soil from flowing into the excavation.
- 1.2.2. The design and operation of the dewatering system shall maintain the stability of existing utilities, structures and pavements and prevent settlement of original ground, existing utilities, structures and pavements in the project area.
- 1.2.3. Unless otherwise shown on the drawings, the groundwater level shall be maintained at least two feet below the bottom of the excavation or controlled fill.
- 1.2.4. When jacking, boring, or tunneling operations are required, the contractor shall have available at all times adequate pumping equipment for dewatering shafts, jackings, borings, and tunnels. The contractor shall at all times use whatever means are required to control groundwater to prevent loss of ground. In addition, when placing the concrete cradle for the carrier pipe, the water in the jacking, boring or tunnel shall be controlled so that at no time during placement or hardening of the concrete will water wash, mix with, or seep into the unhardened concrete.

1.3. REFERENCES

- 1.3.1. New York Standards and Specifications for Erosion and Sediment Control.

1.4. SUBMITTALS

- 1.4.1. The contractor shall submit a comprehensive dewatering plan to the engineer for review including design and location of settlement basins, and plans for monitoring adjacent ground water, surface water, existing utilities and structures and water supplies to prevent loss or settlement.

- 1.4.2. Where dewatering is discharged into a storm drainage system, siltation levels shall be measured at each manhole or basin downstream of the discharge point both prior to dewatering and after termination. Levels shall be certified to by a licensed Land Surveyor.

1.5. SITE CONDITIONS

- 1.5.1. Where existing pipelines enter the construction area, they may be supported on permeable crushed stone material. This stone may act as a point source for large quantities of water at each such pipe location.

PART 2 PRODUCTS

N/A

PART 3 EXECUTION

3.1. PREPARATION

- 3.1.1. If shown on the drawings, water observation pipes shall be installed to monitor the ground water level during the dewatering operation. Daily observation of the ground water level in relation to bottom of the excavation shall be taken and recorded by the contractor under the observation of the engineer.
- 3.1.2. Power for dewatering equipment shall be electric utility power. Use of equipment which operates on gasoline or other such fuel will only be permitted if the availability of electric power is not feasible, or the equipment is used for standby power.

3.2. INSTALLATION

- 3.2.1. The water level obtained by dewatering shall be maintained at the specified depth below the excavation or controlled fill across the entire width of the excavation or controlled fill. Excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged and the placement and compaction of backfill material has taken place.
- 3.2.2. All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work or damage to surfaces and property. Suitable temporary channels shall be provided for water that may flow along or across the site of the work. No water shall be pumped or drained into work built or under construction. Water shall be disposed in such a manner as not to be a menace to Public Health.

- 3.2.3. Suitable provisions for adequate drainage of the discharge shall be made considering normal and flood conditions of both surface and ground water. Adequate stream flow in adjacent streams shall be maintained at all times.
- 3.2.4. Silt laden water or water contaminated by acid soils shall not be discharged directly into storm sewers, surface waters, stream crossings, wetlands or any critical impact area. Care shall be taken not to damage or fill vegetation by excessive watering or by silt accumulations in the discharge area. Settlement basins shall be employed where necessary to remove silt and to treat acid water to the ambient PH of the receiving waters.
- 3.2.5. To allow sediment to settle out of water that interferes with construction before such water enters any surface waters, dewatering operations shall direct pumpage as far from the critical impact area as possible and into suitable settlement basins. Settlement basins shall be constructed and used as specified to protect vegetation and to achieve environmental objectives.
- 3.2.6. All dewatering of excavations shall be done on the upland side of the excavation, away from the stream crossings, wetland habitats or critical impact areas, and the effluent shall be discharged through a manifold apparatus of no less than 50 feet in length with multiple discharge holes upland of an overlapped, anchored double hay bale barrier to prevent sediment discharge into the waterway, stream, wetland habitat or critical impact area or into suitable settlement basins.
- 3.2.7. All dewatering structures shall be maintained functional throughout their use period and siltation deposits in settlement basins, storm sewers, surface waters, streams or wetlands resulting from the dewatering operation shall be removed by the contractor periodically during construction and prior to the removal of the siltation control devices. Removed siltation deposits shall be disposed of in accordance with the Section "Waste Materials Disposal", Division 1. All areas shall be restored by the contractor to the condition existing prior to commencement of the dewatering operation.
- 3.2.8. Unless specified otherwise, if any water supplies such as wells are affected or disrupted by the dewatering operation, the contractor shall take whatever steps are required to provide uninterrupted water service at an average rate of 250 gallons per unit per day, including the installation of temporary water lines, if necessary. Prior to construction, the contractor shall ascertain the depth of existing water supply wells in the area which may be affected. Shallow wells whose depth is within the cone of influence of the dewatering operations shall be deepened prior to construction or other temporary measures taken.
- 3.2.9. In the event that excavations are to be carried below the elevations shown on the drawings, no work will proceed until the water level is lowered to a depth of at least two feet below the anticipated depth of the excavation.

- 3.2.10. In the event that the settlement basin, storm sewer, surface waters, streams or wetlands become surcharged or flooded, whether due to dewatering discharge or rainfall or a combination of both, the contractor shall throttle back or terminate his dewatering, until the adverse conditions subside.
- 3.2.11. Upon removal of well points, deep wells or other dewatering equipment, the contractor shall backfill, compact and pave (in roads) all holes. Holes shall be compacted for the full depth of the hole to a density equal to adjacent in place soils.

3.3. FIELD QUALITY CONTROL

- 3.3.1. If the potential for saline intrusion exists, water observation pipes shall be utilized and salinity tests shall be performed by the contractor on a weekly basis at observation pipes selected by the engineer. The contractor shall prevent saline intrusion by re-injection of dewatering discharge, minimizing pumping rates, or other methods.
- 3.3.2. When encountering acid soil conditions, the effluent pH from the settling basin shall be tested a minimum of two times daily and adjusted to ambient receiving water pH by the contractor.
- 3.3.3. Monitoring and testing of hydrogen sulfide content of dewatering discharge shall be the responsibility of the contractor. When hydrogen sulfide is present, means of oxidizing the hydrogen sulfide is present, means of oxidizing the hydrogen sulfide content of the discharge and, if required, neutralization of the acid shall be employed. The method of treatment shall be submitted to the engineer for review in accordance with provisions of the Section "Review of Contractor's Construction Procedure," Division 1.

3.4. PROTECTION

- 3.4.1. In the event that the bottom of the excavation is disturbed due to failure of the dewatering operation resulting in a loss of bearing capacity as determined by the engineer, the contractor shall assume full responsibility and bear the expense of all additional dewatering, excavating and backfilling required to correct the condition to the satisfaction of the engineer. To the end, the contractor shall provide all emergency generating equipment necessary to maintain dewatering operations during power outages.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for restoring work and adjacent areas.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Restoration shall be done as promptly as practicable to minimize inconvenience to the public and property owners and shall not be left until the end of the construction period.
- 1.2.2. **Permanent restoration shall begin within 3 days after the backfilling or grading has been finished and be completed within 10 days unless extenuating circumstances exist which would delay such restoration and the delay has been approved by the owner or applicable regulatory agency.** If the permanent restoration measures are delayed, temporary restoration measures shall be employed until the permanent restoration can be accomplished.
- 1.2.3. Restoration, unless otherwise shown on the drawings, shall consist of replacing or restoring to a condition equal to or better than original, all topsoil, lawns, shrubs, trees, fences, fields, curbs, sidewalks, driveways, parking lots, pavements, guide rail, incidental works or any and all other property removed or harmed in any way by reason of work done under this contract.
- 1.2.4. Restoration in critical impact areas shall conform to the requirements of all applicable permits, the regulations of the authorities having jurisdiction and the requirements herein.
- 1.2.5. Temporary restoration, unless otherwise shown on the drawings, shall consist of final grading of the restoration area, temporary soil stabilization with seed or mulch in accordance with the requirements herein.
- 1.2.5.1. When seeding work does not coincide with permanent seeding dates or where necessary, as determined by the engineer, disturbed areas shall be temporarily seeded or mulched until proper weather conditions exist for the establishment of a permanent vegetative cover.

1.2.5.2. Temporary seeding as a temporary stabilization measure shall consist of liming, fertilizing, and seeding at the following rates:

- a) Seed shall be annual rye grass spread uniformly at a rate of 1 lb. per 1,000 square feet.
- b) Fertilizer shall be applied at a rate of 14 lbs. per 1,000 square feet of 5-10-10 or its equivalent.
- c) Limestone (equivalent to 50 percent calcium plus magnesium oxides) shall be as follows:

SOIL TEXTURE	TONS/ ACRE	LBS./ 1,000 SQ. FT.
Clay, clay loams, and highly organic soils	3	135
Sandy loams, loams, and silt loams	2	90
Loamy sands, sands	1	45

1.2.5.3. Temporary restoration shall be employed as soon as it is determined that permanent restoration will not be employed but in no case later than 7 days after the trench backfilling or grading has been finished and shall be completed within 30 days. In no case, however, shall bare earth surfaces be allowed to remain exposed in excess of 7 days without the application of temporary restoration measures described herein.

1.2.5.4. When mulch alone is employed as a temporary restoration measure, as in cases where weather conditions prevent even temporary seeding, mulch materials shall be un-rotted salt hay, hay, or small grain straw applied at the rate of 1½ - 2 tons per acre, or 70 to 90 lbs. per 1,000 square feet and bound in place.

1.2.5.5. Mulch shall be employed only when all forms of seeding are impractical and shall be generally limited to the time between November and March when it is too cold to seed.

PART 2 PRODUCTS

2.1. MATERIALS

2.1.1. Materials for the restoration work shall conform to the applicable requirements contained elsewhere within these contract documents for similar work.

PART 3 EXECUTION

3.1. APPLICATION

- 3.1.1. Surfaces which have been damaged by the Contractor's operations shall be restored to the condition and the elevations equal to that in which they were found immediately prior to the beginning of operations or as otherwise indicated on the drawings. Suitable materials and methods shall be used for such restoration.
- 3.1.2. Prior to construction, the Contractor will carefully identify for inspection, by flagging, all trees and cultivated shrubs which shall be scheduled for transplanting. No tree or shrub shall be transplanted without prior inspection by the engineer or his representatives. No trees or shrubs shall be cut or removed without notification of the property owner unless specifically called for on the drawings.
- 3.1.3. The Contractor shall not be required to transplant trees of more than 3" caliper. Trees over this caliper shall be cut and removed. For any such trees cut and removed, the Contractor shall replace them with a tree of like or approved kind, of 2½" - 3" caliper, planted in a location as directed by the property owner but not more than 100 feet from the original tree's position.
- 3.1.4. The Contractor shall notify each property owner of the cultivated trees and shrubs scheduled for transplanting and shall transplant them at the Contractor's own expense as directed by and to the satisfaction of the property owner. However, in no case shall trees be replanted within 10 feet measured horizontally of the edge of a new pavement or new underground pipe line. The Contractor will not be required to transplant any shrub or tree over 100 feet away from its original location. Responsibility for successful transplanting rests with the Contractor, and all trees or shrubs that do not survive transplanting shall be replaced to the satisfaction of the owner by the Contractor at the Contractor's expense. However, no tree or shrub required for replacement shall be over 3" caliper.
- 3.1.5. In restoring the areas the Contractor shall, in general:
- a) Topsoil, with screened topsoil, all disturbed areas by placing a minimum of 4 to 6 inches of screened topsoil in accordance with Section "Topsoiling, Seeding and Mulching", Division 2.
 - b) Remove from the property and dispose of all trees, brush and other items that the Contractor has cut in order to perform his work.
 - c) Remove from the property upon completion of the work thereon all excess materials of construction such as stone, pipe, concrete block, gravel, etc., that the Contractor may have stockpiled for use during the course of the work.
 - d) Except where otherwise indicated, remove all temporary erosion control measures and deposited silt or other debris.

- e) Leave the land in a smooth, even condition. All ruts, holes or other undesirable grading conditions which resulted from work under this contract shall be filled and the area so graded to eliminate ponding and restored to preexisting drainage patterns. All drainage courses shall be restored to their preexisting condition or better.
- f) Fertilize and seed those areas where the original ground cover was removed or disturbed by operations under this contract in accordance with Section "Topsoiling, Seeding and Mulching", Division 2.
- g) The Contractor shall also repair, reset or replace all pipes, walls, utilities, fences, railings, stone walls, etc., and ornamental or utilitarian domestic accessories, not limited to arbors, fireplaces, sheds and incinerators, or other surfaces, structures, or property which may have been damaged, either directly or indirectly by his operations under this contract.
- h) Restore all curbs, sidewalks, driveways and pavements removed or damaged by operations under this contract.

3.1.6. In addition to the applicable restoration requirements above, the Contractor shall:

- a) After the excavation has been backfilled, prepare the right-of-way immediately (weather permitting) for restoration of vegetation. Erosion control measures shall be utilized immediately, and final restoration shall be undertaken as soon as an area is no longer needed for construction, stockpiles, or access. Excavated stones and boulders too large to be incorporated in backfilling shall be removed from the construction site. Excess soil within the right-of-way shall be graded or removed. When access roads are no longer needed, road fill shall be removed and the access area shall be restored to its preexisting condition. Care shall be taken to avoid damage to adjacent vegetation and to prevent the formation of depressions.
- b) When shown on the drawings in order to minimize the impact of construction and of the right-of-way, plant common native trees and shrubs in the cleared portions of the right-of-way. Numbers, sizes and types shall be shown.
- c) Lime, fertilize and seed all disturbed areas with the permanent seed mixtures in accordance with Section "Topsoiling, Seeding and Mulching", Division 2. Mulch seeded areas immediately after seeding. If permanent seeding is not practical, all disturbed areas shall be seeded with a temporary seed mixture and/or mulched immediately as a temporary stabilization measure until the permanent seeding and mulching can be accomplished.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for installing bituminous pavement.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Bituminous pavement shall consist of bituminous base course, bituminous binder course, tack coat and bituminous top course, hot-mixed, placed on a thoroughly compacted and shaped gravel base course or subbase course or subgrade as shown on the drawings.
- 1.2.2. Thickness and type of bituminous pavement shall be as shown on the drawings or equal to the existing pavement and shall be satisfactory to the roadway's jurisdictional authority.
- 1.2.3. Type and thickness of the foundation course or subbase shall be as shown on the drawings.

1.3. REFERENCES

- 1.3.1. NYSDOT Standard Specifications.

1.4. SUBMITTALS

- 1.4.1. Certification of mix for each batch and polymer modified sealer shall be submitted to the Engineer. Certifications for mix designs shall be for the year that the project is being constructed.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Subbase course shall conform to the requirements of the Section "Unsuitable, Suitable and Select Materials," Division 2, unless otherwise shown on the drawings.
- 2.1.2. Bituminous base course (Type 1), NYSDOT Item No. 403.118902, shall conform to the requirements of Section 403 of the NYSDOT Standard Specifications.
- 2.1.3. Bituminous binder course (Type 3), NYSDOT Item No. 403.138902, shall conform to the requirements of section 403 of the NYSDOT Standard Specifications.

- 2.1.4. Bituminous top course (Type 6F2), NYSDOT Item No. 403.178202, shall conform to the requirements of Section 403 of the NYSDOT Standard Specifications.
- 2.1.5. Trueing and leveling course, NYSDOT Item No. 403.218902, shall conform to the requirements of Section 403 of the NYSDOT Standard Specification.
- 2.1.6. Tack coat shall conform to the requirements of Section 407 of the NYSDOT Standard Specifications.

PART 3 EXECUTION

3.1 TRENCH REPAIR

- 3.1.1. The temporary pavement placed upon completion of the trench backfill shall be removed and existing pavement and base shall be removed to the limits shown on the drawings. The top surface shall be saw cut to provide a straight, square edged surface against which the new surface course shall butt. All exposed edges of existing asphalt shall have tack coat applied prior to placement of new asphalt. All removed pavement materials shall be properly disposed of in accordance with the Section "Waste Materials Disposal", Division 1. Excavate to required subgrade elevation and prepare the subgrade for placement of the subbase or base course.

3.2. NEW CONSTRUCTION

- 3.2.1. Excavation, grading and preparation of the subgrade shall be in accordance with requirements of the applicable Division 2 sections.
- 3.2.2. Subbase shall be installed in accordance with requirements of the applicable Division 2 sections.
- 3.2.3. Bituminous base course shall be installed in accordance with the NYSDOT Standard Specifications and as shown on the drawings.
- 3.2.4. Bituminous binder course shall be installed in accordance with the NYSDOT Standard Specifications, and as shown on the Contract Drawings.
- 3.2.5. Binder course may not be placed until satisfactory results of the initial compactive effort testing have been obtained as specified in the Section "Trenching, backfilling and Compaction," Division 2, and as shown on the drawings.
- 3.2.6. Bituminous top course and tack coat shall be installed in accordance with the requirements of the NYSDOT Standard Specifications and where requested by Engineer. **Tie-in of new top course to existing paved roadways shall be by means of a milled 1 1/2" deep by 2 foot wide key-way. Key-way shall be cleaned and tack coated prior to pavement application.**

- 3.2.7. Upon completion of paving, all tie-in joints shall be sealed with a polymer modified sealer. This includes all tie-in joints located within driveways.
- 3.2.8. Pavement shall be laid at the required temperatures set forth in the NYSDOT Standard Specifications. **Any material found to be below the required temperature shall be immediately rejected at the Contractor's expense.** Rejection of pavement due to low temperature does not entitle Contractor to an extension of time or claims for delays or damages.

- 3.2.9. All transverse joints shall be staggered a minimum of 3 feet between courses.

3.3. TRUEING AND LEVELING FOR EXISTING ROADWAYS TO BE OVERLAID

- 3.3.1. Contractor shall thoroughly sweep and clean roadway and apply tack coat prior to placement of the trueing and leveling course.
- 3.3.2. Trueing and leveling course shall be New York State Department of Transportation Type 5 where course is greater than 1/4" and less than 3/4".
- 3.3.3. Trueing and leveling course shall be New York State Department of Transportation Type 6F2 where course is greater than 3/4" and less than 2".
- 3.3.4. Trueing and leveling course shall be New York State Department of Transportation - Type 3 Binder where course is thicker than 2".
- 3.3.5. All trueing and leveling courses shall be placed, thoroughly compacted and rolled in accordance with the current New York State Department of Transportation Standard Specifications.

3.4. WEATHER AND SEASONAL LIMITATIONS

- 3.4.1. Bituminous plant mix shall not be placed on any wet surfaces or when weather conditions otherwise prevent the proper handling or finishing of the bituminous mixtures as determined by the Engineer.
- 3.4.2. Paving courses shall be placed within the following temperature and seasonal limitations:

Nominal Compacted Lift Thickness	Surface Temperature Minimum (Note 1 & 4)	Seasonal Limits
4" or greater	40°F	None
Greater than 2" but less than 4"	45°F	Note 2
2" or less	50°F	Note 2

NOTES:

1. All temperatures shall be measured on the surface where the paving is to be placed, and the controlling temperature shall be the average of three temperature reading taken at locations 25± feet apart in accordance with the NYSDOT Specification.
 2. Top course shall be placed only during the period of April 1st up to and including the third Saturday in November.
- 3.4.3. Paving operations shall be scheduled such that all paving necessary to provide safe and adequate maintenance and protection of traffic, or for protection of previously laid courses is completed within the weather and seasonal limitations.
- 3.4.4. All additional costs, including but not limited to, expediting construction, limiting length of work, shimming castings and protrusions, drainage, providing acceptable rideability, and all temporary work required due to failure to complete work within the weather or seasonable limitation shall be at no additional cost to the Owner. In addition, any binder course which will be permanently incorporated into the work, left open to traffic over the winter shall be cleaned and tack coated immediately prior to overlaying at no additional cost to the Owner.
- 3.4.5. Waivers to the seasonal limitations shall be submitted by the Contractor, in writing, to the Engineer for approval.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement of sub-base course is by the square yard in accordance with the payment widths and compacted thicknesses as shown on the drawings without deduction of areas occupied by manholes and similar structures within the pavement area.
- 4.1.2. Measurement of bituminous base course is by the square yard in accordance with the payment widths and compacted thicknesses as shown on the drawings without deduction of areas occupied by manholes and similar structures within the pavement area.
- 4.1.3. Measurement of bituminous binder course is by the square yard in accordance with the payment widths and compacted thicknesses as shown on the drawings without deduction of areas occupied by manholes and similar structures within the pavement area.

- 4.1.4. Measurement of bituminous top course is by the square yard in accordance with the payment widths and compacted thicknesses as shown on the drawings without deduction of areas occupied by manholes and similar structures within the pavement area.
- 4.1.5. Measurement of bituminous base course, binder course, shim course, and top course used for trueing and leveling is by the ton without the deduction of areas occupied by manholes and similar structures within the pavement area.

4.2. PAYMENT

- 4.2.1. The unit price for sub-base course is described in Part 4 of the Section "Unsuitable, Suitable and Select Materials," Division 2, and includes excavating to the required subgrade elevation; preparing the subgrade; furnishing, placing and compacting the foundation material; and all else incidental and necessary to complete the work.
- 4.2.2. The unit price for bituminous base course includes removal and disposal of temporary roadway surfaces; saw cutting; removal and disposal of the existing pavement or base course to the limits shown on the drawings; excavation to the required subbase elevation; preparation of the subbase; furnishing, placing and compacting the base course material; and all else incidental and necessary to complete the work.
- 4.2.3. The unit price for bituminous binder course includes removal and disposal of temporary roadway surfaces; saw cutting; removal and disposal of the existing pavement or base course to the limits shown on the drawings; excavation to the required subbase elevation; preparation of the subbase; furnishing, placing and compacting the base course material; and all else incidental and necessary to complete the work.
- 4.2.4. The unit price for bituminous top course includes furnishing, placing and compacting the surface course material; paved berms; furnishing and applying the tack coat; cutting of key-ways; sealing of all joints with polymer modified sealer; the raising of utility castings and valve boxes; the restoration or leveling courses required to maintain grades in roadways, driveways, parking lots and other paved areas, and all else incidental and necessary to complete the work.
- 4.2.5. The unit price for bituminous base course, binder course, shim course and top course used for trueing and leveling includes removal of temporary roadway surfaces, saw cutting, removal and disposal of existing damaged pavement or base course and furnishing and applying tack coat.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for installing concrete sidewalks.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Sidewalks shall consist of Portland cement concrete constructed on a thoroughly compacted subgrade and shall be of the strength and to the dimensions as shown on the drawings and/or specified herein.

- 1.2.2. As a minimum, the dimensions shall conform to existing sidewalks, unless otherwise specified.

1.3. QUALITY ASSURANCE

- 1.3.1. The finished sidewalk shall be homogeneous, neat and workmanlike in appearance, and shall be of the required strength. All work with chips, scratches, or cracks (including hair line cracks) shall be removed and replaced at contractor's expense.
- 1.3.2. Completed sidewalks shall show no visible defects which require re-finishing.
- 1.3.3. Completed sidewalk shall not be subject to vehicular and/or pedestrian traffic until the work has gained sufficient strength to preclude damage.
- 1.3.4. Contractor shall ensure all exposed concrete surfaces are properly sealed to protect against de-icing agents. Any sidewalk shown to be scaling during warranty period shall be replaced at Contractor's cost.

1.4. SUBMITTALS

- 1.4.1. Shop drawings shall be submitted by the Contractor in accordance with the provisions of the Section "Shop Drawings and Samples," Division 1.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Preformed bituminous cellular type expansion joint fillers shall conform to the requirements of AASHTO M-213.

- 2.1.2. The concrete curing and sealing compound for concrete sidewalks shall be CERTI-VEX GUARD CLEAR AIM as manufactured by ChemMasters. Curing and sealing compound shall be delivered to site in un-opened manufactures containers to verify product.
- 2.1.3. Forms shall be metal, wood or other suitable material and shall be straight, free from warp, clean and oiled.
- 2.1.4. Detectable warning fields shall be a cast in place system such as Armor Tile Tactile System, as manufactured by Armor Tile, or Step-Safe, as manufactured by TRANSPRO Industries, or approved equal. Detectable warning fields shall be brick red in color, and shall be installed in accordance with manufactures specifications and guidelines.

2.2. MIXES

- 2.2.1. Concrete mix shall be an air entrained Portland cement having a minimum 28-day strength of 4,000 psi. Concrete shall be fiber reinforced using Stealth e3 micro-reinforcement as manufactured by SI Concrete Systems.

PART 3 EXECUTION

3.1. PREPARATION

- 3.1.1. The subgrade for the sidewalk shall be compacted by suitable means to a density equal to that described in the Section "Soil Compaction", Division 2.

3.2. INSTALLATION

- 3.2.1. Prior to setting of forms, and after setting of string lines, the Contractor, Construction Observer and/or Engineer shall review the string lines to ensure that the proper grades are being achieved, and that the curb line is straight and un-wavy horizontally and vertically.
- 3.2.2. The concrete for sidewalks shall be tamped, screened and finished to true grade and surface. The finish shall be made with a wood float, followed by brushing transversely to the curb line with a wet soft hair brush to a neat and workmanlike surface.
- 3.2.3. In sidewalks, transverse expansion joints of the preformed cellular type, 3/16" thick, shall be installed at street corners following the projections of the building lines from the corner of the building through the sidewalk to the curb or grassed area, and at intervals of 10' maximum spacing. Expansion material shall also be placed in line with all utility poles within the sidewalk, and around the utility pole.

- 3.2.4. In sidewalks, expansion joints of the preformed cellular type, 3/16" thick, shall be installed longitudinally between sidewalks and curbs; and longitudinally between sidewalks and permanent structures with the top 1/2" below the top of the sidewalk of which a 1/2" void shall be filled with a joint sealer. Expansion material shall also be placed around all structures within the sidewalk.
- 3.2.5. In sidewalks, transverse contraction joints 1" deep and 1/4" wide shall be cut by means of a suitable tool between transverse expansion joints at intervals equal to the sidewalk width.
- 3.2.6. Sidewalk joints shall be neatly rounded to a 1/4" radius.
- 3.2.7. Sidewalks shall be cured where the concrete has been finished. In sidewalks, cotton mats, burlap bags or straw, maintained wet, of the adequate size and/or thickness, and kept in place for not less than 72 hours, can be substituted for liquid curing with the approval of the Engineer.
- 3.2.8. During the curing process, suitable signs warning workmen and the general public shall be erected and maintained by the Contractor, as well as means of bridging the newly installed sidewalks. Foot traffic shall be restricted for at least 24 hours.
- 3.2.9. Sidewalks shall be sloped to depressed curbs at intersections to facilitate access by the handicapped. Grooves, 1/2" in depth, shall be placed parallel to the curb along the ramp at 1 1/2" intervals.
- 3.2.10. All **driveway aprons and handicap ramps** shall be a minimum of 6" thick and shall be reinforced with fiber mesh. Detectable warning fields shall be placed at all handicap ramps, and shall be installed in accordance with manufactures specifications and guidelines.
- 3.2.11. All sidewalks shall be a minimum of 4" thick and shall be reinforced with fiber mesh.
- 3.2.12. Sidewalks shall be sealed with the specified sealer after seven days. The sidewalk shall be clean and dry before sealing. Foot traffic shall be restricted for at least two hours after sealing. Sealing manufacturer's guidelines for application should be followed. Sidewalks shall receive at least 2 coats of sealer.

3.3. FIELD QUALITY CONTROL

- 3.3.1. Concrete samples and testing shall be done as specified in Section 03300 "Cast-in-Place Concrete". If concrete is not sampled and tested, it shall be removed and replaced at Contractor's expense.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for concrete sidewalk, driveway aprons, and handicap ramps is by the square foot actually constructed.

4.2. PAYMENT

- 4.2.1. Unit price concrete sidewalk includes excavation outside the pay limits of other items, preparation of the subgrade, supplying and installation of subbase material, compaction, construction of the sidewalk, handicap ramps, expansion joints, backfilling, joint sealer, detectable warning fields, finishing, curing, cleaning up, sealing, reinforcing and all else incidental and necessary to complete the work.
- 4.2.2. Payment for concrete driveways, aprons, and handicap ramps shall be made under the unit price for concrete sidewalks.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for installing concrete curbs.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Curbing shall consist of Portland cement concrete constructed to the dimensions as shown on the drawings.
- 1.2.2. Curbs shall be constructed in coordination with pavement removal and replacement.

1.3. QUALITY ASSURANCE

- 1.3.1. The finished work shall be homogeneous, neat and workmanlike in appearance, and shall be of the required strength. All work with chips, spalling, scratches, or cracks (including hair line cracks) shall be removed and replaced at contractor's expense.
- 1.3.2. Curbs shall not vary from the prescribed line and grade more than 1/4 inch at any point, unless directed otherwise by the engineer.
- 1.3.3. Completed work shall show no visible defects which require re-finishing.
- 1.3.4. Completed curb shall not be subject to vehicular and/or pedestrian traffic until the work has gained sufficient strength to preclude damage.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Preformed bituminous cellular type expansion joint fillers shall conform to the requirements of AASHTO M-33.
- 2.1.2. The concrete curing compound for concrete curbs shall be Sealtight CS-309-30 as manufactured by W.R. Meadows. Curing compound shall be delivered to site in un-opened manufacturer's containers to verify product.

2.1.3. The concrete sealing compound for concrete curbs shall be Sealtight "TIAH" Acrylic Concrete Sealer as manufactured by W.R. Meadows. Sealing compound shall be delivered to site in un-opened manufactures containers to verify product.

2.1.4. Forms shall be metal, wood or other suitable material and shall be straight, free from warp, clean and oiled.

2.2. MIXES

2.2.1. Concrete mix shall be an air entrained Portland cement having a minimum 28-day strength of 4000 and shall be in accordance with the appropriate Sections of Division 3. Concrete shall be reinforced with Stealth e3 micro-reinforcement fiber mesh as manufactured by SI Concrete Systems.

PART 3 EXECUTION

3.1. PREPARATION

3.1.1. Excavation including the removal of existing curbs, pavement or sidewalks shall be to the depth and width necessary to install the new curb or as shown on the drawings. All soft or yielding material shall be removed and replaced with suitable material.

3.1.2. Base material to the thickness shown on the drawings, shall be Manufactured Item 4, conforming to the provisions of Section "Unsuitable, Suitable and Select Material," Division 2.

3.2. INSTALLATION

3.2.1. Prior to setting of forms, and after setting of string lines, the Contractor , Construction Observer and/or Engineer shall review the string lines to ensure that the proper grades are being achieved, and that the curb line is straight and un-wavy horizontally and vertically.

3.2.2. The concrete for curbs shall be tamped and spaded, or vibrated, so that the forms are completely filled, the concrete thoroughly compacted, and the mortar flush with the faces and top. The top shall be finished with a wood float to an even, smooth and dense surface and, as soon as the forms can be removed, the face shall be similarly finished. The edges of the curb shall be rounded to the required radius with suitable edging tools.

3.2.3. In curbs, transverse expansion joints of the preformed cellulose type, 3/16" thick, shall be installed at the point where curved and tangent sections join; opposite joints in abutting concrete pavement; at any catch basin or other similar structure within the limits of the curb; and at intervals of 10-foot maximum spacing.

- 3.2.4. Expansion joints of the preformed cellulose type, 3/16" thick, shall be installed longitudinally between curbs and sidewalks; and longitudinally where curb abuts concrete base or surface courses.
- 3.2.5. Curbs shall be depressed at driveways and entrances as shown on the drawings.
- 3.2.6. Curbs shall also be depressed at intersections to facilitate access by the handicapped. Depressed curbs shall be as shown on the drawings.
- 3.2.7. Curbs shall be cured when the concrete has been finished.
- 3.2.8. During the curing process, suitable signs warning workmen and the general public shall be erected and maintained by the Contractor, as well as means of bridging the newly installed work.
- 3.2.9. Curbs shall be sealed with the specified sealer after seven days. The curb shall be clean and dry before sealing. Sealing manufacturers guidelines for application should be followed.

3.3. FIELD QUALITY CONTROL

- 3.3.1. Concrete samples and testing shall be done as specified in Section 03300, "Cast-in-Place Concrete". If concrete is not sampled and tested, it shall be removed and replaced at Contractor's expense.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for concrete curb shall be the linear feet actually constructed.

4.2. PAYMENT

- 4.2.1. Unit price for concrete curb includes excavation, preparation of subgrade, backfill and compaction, supplying and installation of subbase material; construction of the curbs, provisions for roof drain connections, expansion joints, backfilling, finishing, curing, sealing, cleaning up, and all else incidental and necessary to complete the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing or constructing manholes at the locations and in accordance with the details shown on the drawings.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Unless otherwise shown on the drawings or required by field conditions and approved by the Engineer, all manholes and drop manholes shall be precast and manufactured using wet-cast concrete methods only with butyl rubber manhole ring gaskets.
- 1.2.2. Drop manholes shall be constructed as shown on the drawings where the vertical distance between the elevation of the invert of incoming pipe and the invert of the outgoing pipe is two feet or greater.
- 1.2.3. Manholes, slabs, and castings shall be designed for AASHTO H-20 loading.
- 1.2.4. Flow channels shall be constructed in the field as shown on the drawings after the completion of adjacent pipe laying operations.
- 1.2.5. Exterior surfaces of manholes, including the bottom of the base shall be coated with two coats of a coal tar epoxy to a minimum total dry film thickness of 16 mils. If, in the opinion of the Engineer, the exterior does not appear sufficiently sealed, Contractor shall apply additional coating in the field.
- 1.2.6. Access into manholes shall be provided as shown on the drawings.
- 1.2.7. For each type of manhole cover installed and for every fifty thereafter, the Contractor shall provided the owner with one set of hooks, keys and lifting devices as may be required by the type of cover provided.

1.3. REFERENCES

- 1.3.1. ASTM A 48 -- Specifications for gray iron castings.
- 1.3.2. ASTM C 32 -- Specifications for sewer and manhole brick (made from clay or shale).
- 1.3.3. ASTM C 139 -- Specifications for concrete masonry units for construction of catch basins and manholes.
- 1.3.4. ASTM C 140 -- Methods of sampling and testing concrete masonry units.

- 1.3.5. ASTM C 207 -- Specifications for hydrated lime for masonry purposes.
- 1.3.6. ASTM C 207 -- Specifications for precast reinforced concrete manhole sections.

1.4. SUBMITTALS

- 1.4.1. Shop drawings for manholes shall conform with the provisions of the Section "Shop Drawings and Samples," Division 1, and shall include, but not be limited to details on joints, reinforcement, steps or ladders, pipe connections, casting weights and dimensions, block, mortar, construction details and design calculations for top slabs if required, signed by a licensed Professional Engineer.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. Castings, unless otherwise noted on the drawings, shall be as follows:
 - 2.1.1.1. Standard manhole frames and covers shall be Pattern No. 1009 and 1012B as manufactured by Campbell Foundry Company, Harrison, New Jersey, or equal, and shall be **Domestically made**.
 - 2.1.1.2. Watertight manhole frames shall be Pattern No. 1539 as manufactured by Campbell Foundry Company, Harrison, New Jersey, or equal.
 - 2.1.1.3. Standard slab type manhole frames shall be Pattern No. 1728 as manufactured by Campbell Foundry Company, Harrison, New Jersey, or equal.
 - 2.1.1.4. Watertight slab type manhole frames shall be Pattern No. 1564 as manufactured by Campbell Foundry Company, Harrison, New Jersey, or equal.
- 2.1.2. Coatings shall be products of Koppers Company, Inc., Pittsburgh, PA or equal.

2.2. MATERIAL

2.2.1. CASTINGS

- 2.2.1.1. Castings for manhole frames and covers shall be close grained, tough gray iron free from cracks, holes, swells and shrinkage distortion in accordance with ASTM A 48, Class 30B.
- 2.2.1.2. Cross lock bar for watertight manhole covers shall be steel or ductile iron with a bronze lock screw.
- 2.2.1.3. Watertight manhole cover gaskets shall be a ¼-inch flat neoprene gasket.

2.2.2. STEPS

- 2.2.2.1. Manhole steps shall be copolymer polypropylene plastic with steel reinforcement.

2.2.3. MANHOLES

- 2.2.3.1. Precast concrete manholes, bases, risers, slab tops and grade rings shall conform to the requirements of ASTM C 478. Maximum absorption rate shall not exceed 9% using method A of ASTM C 497. Manholes shall be bituminous coated on the exterior.
- 2.2.3.2. Concrete required for forming of flow channels shall conform to the applicable sections of Division 3.

2.2.4. DROP PIPE

- 2.2.4.1. Materials for the drop pipe and fittings shall be as indicated on the drawings and conform to the requirements of their respective Division 2 Sections.

2.2.5. FLEXIBLE PIPE CONNECTIONS

- 2.2.5.1. Flexible watertight pipe connections shall conform to ASTM C 923.

2.2.6. BRICK

- 2.2.6.1. Brick shall be sound, hard and uniform burned brick, and shall be Grade MM in conformance with ASTM C 32.

2.2.7. MORTAR

- 2.2.7.1. Mortar shall be composed of Portland cement, hydrated lime and sand. The volume of sand shall not be less than 2½ and not more than 3 times the volume of cement and lime. The proportion of cement to lime shall be 1:¼. The quality of the items shall be:
 - Cement shall be Type II Portland Cement
 - Hydrated lime shall be Type S conforming to ASTM C 207.

2.3. FABRICATION

2.3.1. CASTINGS

- 2.3.1.1. Castings shall be made accurately to the manufacturer's patterns and to the dimensions as shown on the drawing with all bearing surfaces carefully mill machined.

- 2.3.1.2. Allowances shall be made in the patterns so that the specified thickness is not reduced.
- 2.3.1.3. Manhole covers shall be supplied with two watertight pickholes.
- 2.3.1.4. Manhole covers shall be supplied with cast letters and cope pattern. Cope pattern must be approved by the Engineer. Covers should be labeled "Storm" or "Sewer", depending upon application.
- 2.3.1.5. Inner cover of watertight manhole castings shall have two lifting handles.
- 2.3.1.6. No plugging, burning-in or filling will be allowed.
- 2.3.1.7. Frames and covers shall receive two shop coats of a black asphalt paint.

2.3.2. STEPS

- 2.3.2.1. Manhole steps shall be made to the shapes shown on the drawings.

2.3.3. PRECAST MANHOLES

- 2.3.3.1. Manhole bases, risers, cones and slabs shall be manufactured to the dimensions as shown on the drawings and shall be marked immediately after manufacture with diameter, class, wall thickness, date of manufacture, and name or trade mark of manufacturer.
- 2.3.3.2. No more than two inserts for lifting may be cast in each section.
- 2.3.3.3. Joints shall be compatible between sections and connections with pipe.
- 2.3.3.4. Flexible watertight pipe connections shall be cast into all pipe openings in the precast manholes and shall be capable of deflecting a minimum of 10°. Installation shall be in accordance with the manufacturer's written instructions.
- 2.3.3.5. Exterior surface of manholes shall have **two coats** of a bituminous coating.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. All components of precast manholes, block, brick and castings shall be inspected for defects before installation.
- 3.1.2. Damaged pieces shall be repaired or replaced in accordance with the manufacturer's written recommendations, as approved by the Engineer.

- 3.1.3. Damaged pieces that cannot be repaired shall be immediately removed from the job site.

3.2. INSTALLATION

3.2.1. PRECAST MANHOLES

- 3.2.1.1. Manhole bases shall be installed on a 8" compacted base course of Select Material #4, extending one foot beyond the periphery of the base as shown on the drawings.
- 3.2.1.2. Manhole sections shall be set vertical and with sections and steps, if used, in true alignment.
- 3.2.1.3. Rubber gaskets shall be installed in all joints in accordance with the manufacturer's recommendations.
- 3.2.1.4. Inserts for lifting sections shall be thoroughly plugged with rubber plugs made specifically for the sections or with mortar. The mortar, made of 1 part cement to 1½ parts sand, and mixed slightly damp to the touch (just short of balling), shall be hammered into the holes until it is dense, and an excess of paste appears on the surface. Finish smooth and flush with the adjoining surfaces.
- 3.2.1.5. All manhole joints shall be parged inside and out with mortar.
- 3.2.1.6. The interior of all manholes shall be coated with 2 coats of a water stop compound.
- 3.2.1.7. Manhole shall be backfilled with Select Material No. 4 in 6" lifts, and compacted around the entire structure with a jumping jack compactor.

3.2.2. CAST-IN-PLACE MANHOLES OR DOGHOUSE MANHOLES

- 3.2.2.1. Where manholes are indicated on the drawings to be constructed over existing sewers, the existing sewer pipe shall be left undisturbed and the flow maintained through it until the manhole has been completed and accepted or until the receiving facility to where the flow is being diverted is ready to accept the flow, unless otherwise specified, required or ordered, the Contractor shall carefully excavate around and properly support the existing sewer pipe. On completion and acceptance of the manhole, the top portion of the existing sewer pipe shall be carefully removed and the flow channel formed to the limits and in accordance with the details shown on the drawings. Reinforced concrete pipe entering or exiting the manhole shall have the reinforcement cut off and mortared over with a minimum of one half inch of mortar.

- 3.2.2.2. Where a cast-in-place base section is used, the top of the base section shall have a ring-formed joint cast or formed in the section which shall be compatible with the corresponding precast manhole riser sections.
- 3.2.2.3. Where doghouse manholes are used, the base slab may be cast-in-place or precast and shall have reinforcing bars extending into the concrete fill used for the flow channel and bench. The doghouse manhole section shall have openings provided by the manufacturer to fit over the existing pipe(s). The opening around the existing pipe(s) shall be sealed with concrete when forming the flow channel to the top of the bench and the remaining opening above the bench with concrete or brick and mortar.
- 3.2.2.4. Cast-in-place concrete and reinforcement shall be placed in accordance with the applicable Section of Division 3.

3.2.3. MANHOLE FRAMES AND COVERS

- 3.2.3.1. Frames shall be set with the tops conforming accurately to ¼" below the grade of the finished pavement or finished ground surface, or as shown on the drawings.
- 3.2.3.2. Brick shall be used to adjust the grade of the frames no more than 11 inches. Concrete block or grade rings are acceptable.
- 3.2.3.3. Frames shall be set concentric with the top of the masonry and in a full bed of mortar so that the space between the top of the masonry and the bottom flange of the frame shall be completely filled and watertight.
- 3.2.3.4. A thick plug of mortar extending to the outer edge of the manhole shall be placed all around and on the top of the bottom flange. The mortar shall be smoothly finished and have a slight slope to shed water away from the frame.

3.2.4. FLOW CHANNELS

- 3.2.4.1. After the manholes have been built to the proper height and all adjacent pipe has been installed, a concrete flow channel shall be formed as shown on the drawings.
- 3.2.4.2. Height of the channel shall be the full diameter of the pipes.
- 3.2.4.3. Benches on the side of the channel shall provide good footing with a slope of 1" on 12" toward the channel.

3.2.5. PIPE CONNECTIONS

- 3.2.5.1. Flexible, watertight pipe connections shall be made in accordance with the manufacturer's recommendations.

3.2.6. COATINGS

- 3.2.6.1. Exterior coating of the manhole, including the bottom of the base section, shall be two coats of a asphalt tar epoxy. Reduce first coat by 25% and apply succeeding coats within 24 hours. Minimum dry film thickness per coat shall be 8 mils.
- 3.2.6.2. Interior manhole surfaces shall be coated (minimum of 2 coats) with an acceptable water stop material.

3.2.7. FIELD TESTING

Manholes - All sanitary sewer manholes shall be tested for leakage. Manholes shall be tested for leakage in accordance with the following:

- 3.2.7.1. Vacuum Test - This method of testing manholes for leakage involves the use of a device for sealing the top of the manhole cone section and pumping the air out the manhole, creating a vacuum and holding this vacuum for a prescribed period of time. The procedure for this test is as follows:
 - a) All lifting holes in exterior joint shall be filled and painted with an approved non-shrinking mortar. The completed manhole shall not be backfilled prior to testing. Manholes which have been backfilled shall be excavated to expose the entire exterior prior to vacuum testing or the manhole shall be tested for leakage by means of a hydrostatic test.
 - b) All pipes and other openings into the manhole shall be suitably plugged in a manner to prevent displacement.
 - c) A plate with an inflatable rubber ring the size of the top of the manhole shall be installed by inflating the ring with air to a pressure adequate to prevent leakage of air between the rubber ring and manhole wall.
 - d) Air shall then be pumped out of the manhole through an opening in the plate until a vacuum is created inside of the manhole equal to 10 inches of mercury on an approved vacuum gauge. The removal of air shall then be stopped the test time begun.
 - e) The vacuum must not drop to below 9 inches of mercury within a 2 minute test period. If more than 1-inch drop in vacuum occurs with the 2 minute test period, the manhole has failed the test and shall be repaired or reconstructed, and retested.
 - f) Following satisfactory test results, the manhole may be backfilled.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement of manhole is by the vertical linear foot installed, measured to the nearest tenth of a foot from the invert of the trough to the bottom of the casting.
- 4.1.2. Measurement of casting is by the unit.

4.2. PAYMENT

- 4.2.1. Unit price for manholes and doghouse manholes includes clearing; excavation, dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; manhole base; riser sections; cone or flat slab tops; drop pipe; castings; steps; flow channels; flexible pipe connections; brick; block or grade rings; mortar; coatings and linings; stone bedding, backfilling and compaction; backfill with selection material #4; disposal of surplus and unsuitable material, conducting leakage testing and all else incidental and necessary to complete the work.
- 4.2.2. Unit price for casting includes furnishing and setting of casting to grade, and all else incidental and necessary to complete the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing tapping sleeves and valves.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Provide tapping sleeves and valves to connect to the existing system. Size and location shall be as shown on the drawings and/or as specified in the contracts.

1.3. REFERENCES

- 1.3.1. ASTM A 126 - Specifications for Grey Iron Castings for Valves, Flanges and Pipe Fittings, Class B.
- 1.3.2. ASTM A 240 - Specifications for Heat-Resisting Chromium and Chromium- nickel Stainless Steel Plate, Sheet and Strip for Fusion-Welded Pressure Vessels.
- 1.3.3. ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings, Class 125.
- 1.3.4. AWWA C110 (latest revision) - Standard for Grey Iron Ductile Iron Fittings 2-inch through 48-inch for Water and Other Liquids.
- 1.3.5. AWWA C111 (latest revision) - Standard for Rubber Gasket Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings.
- 1.3.6. AWWA C509 (latest revision) - Standard for Resilient Seated Gate Valves 3 through 12 NPS for Water and Other Liquids.
- 1.3.7. NSF Standard 61 - Drinking Water System Components.

1.4. SUBMITTALS

- 1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. Tapping Sleeves and valves shall be as manufactured by Mueller Company.

2.2. MATERIALS

- 2.2.1. Tapping valves 4 inches and larger installed underground shall have mechanical joint ends, be resilient wedge, non-rising stem, as manufactured by Mueller. Tapping valves shall have square operating nuts and shall open left or counter-clockwise.
- 2.2.2. Valve boxes and covers shall be provided in accordance with the Section "Valves, Meters & Appurtenances", Division 2.
- 2.2.3. Tapping sleeve shall be cast iron, mechanical joint, class 250.
- 2.2.4. Tapping sleeves shall conform to the applicable requirements for fittings in the Section "Ductile Iron Pipe", Division 2.

2.3. FABRICATION

- 2.3.1. All valves and operators shall be fabricated complete and ready for installation when delivered.
- 2.3.2. All valves shall be marked to show name of manufacturer, the year of manufacture, maximum working pressure, and size of valve.
- 2.3.3. Valves shall be fusion epoxy coated on the interior and exterior with a minimum of 10 mils of Mueller Pro-Gard. Epoxy coating shall meet or exceed all applicable requirements of ANSI/AWWA C550 Standard (latest revision) and be certified to ANSI/NSF 61.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. All tapping sleeves and valves shall be inspected for damage or defects prior to their incorporation in the work. All tapping sleeves and/or valves found to be defective shall be removed from site.

3.2. PREPARATION

- 3.2.1. Prior to installation of the tapping sleeves and valves, the contractor shall clean them of all foreign materials and operate the tapping valve to insure it is not frozen in position.

3.3 INSTALLATION

- 3.3.1. All tapping sleeves and valves with valve boxes shall be installed in accordance with the manufacturer's recommendations and at the location and in the positions and configurations shown on the drawings.
- 3.3.2. Valve boxes shall be adequate for the trench depth so that when set on the valve, the cover is level with the pavement or the completed surrounding ground, whichever is applicable.

3.4. FIELD QUALITY CONTROL

- 3.4.1. Valves and appurtenances shall be field tested to determine that the valves operate as specified.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for tapping valve and sleeve shall be by the unit as indicated in the Bid Form.

4.2. PAYMENT

- 4.2.1. Unit price for tapping valve and sleeve shall includes tapping valve; tapping sleeve; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; coatings and linings; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site, unless otherwise stated in bid forms); subbase coursing; disposal of surplus and unsuitable material; restoration (other than pavement); testing and, all else incidental and necessary to complete the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirement for providing ductile iron pipe and fittings.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Ductile iron pipe shall be installed where shown on the Plans. Class of pipe shall be Class 52 unless otherwise shown on the Plans, and shall conform to ANSI/ AWWA C151 (latest revision)/ A21.51. Fittings shall be cast iron or ductile-iron, mechanical joint, Standard Class 250, or Compact Class 350, shall conform with ANSI/ AWWA C110 (latest revision)/ A21.10, ANSI/ AWWA C111 (latest revision)/ A21.11, and ANSI/ AWWA C153 (latest revision)/ A21.53, and NSF Standard 61.
- 1.2.2. Ductile iron pipe placed in trenches shall have push-on joints in accordance with ANSI A21.11.
- 1.2.3. Fittings placed in trenches shall have mechanical joints in accordance with ANSI A21.11
- 1.2.4. Unless otherwise indicated on the plans, restrained joints shall be used to effectively resist all thrust forces, for plugs, bulkheads, caps, bends, and tees or as shown on the drawings.
- 1.2.5. The interior of all force main pipe and fittings, shall have a cement mortar lining with a bituminous seal coat.
- 1.2.6. All ductile iron pipe and fittings shall have an exterior bituminous coating in accordance with ANSI A21.8.
- 1.2.7. Polyethylene wrap, for wrapping of ductile iron pipe where shown on plans, shall be in accordance with ANSI/ AWWA C105/ A21.5.

1.3. REFERENCES

- 1.3.1. ANSI A21.10 Standard for gray-iron and ductile iron fitting 3 inches through 48 inches for water and other liquids.
- 1.3.2. ANSI A21.11 Standard for rubber gasket joints for cast iron pressure pipe and fittings.
- 1.3.3. ANSI A21.50 Standard for the thickness design of ductile iron pipe.

- 1.3.4. ANSI/AWWA C151 (latest revision)/ A21.51 Standard for ductile iron pipe, centrifugally cast in metal molds or sand lined molds, for water and other liquids.
- 1.3.5. AWWA C104 Standard (latest revision) for cement-mortar lining for cast iron and ductile iron pipe and fittings for water.
- 1.3.6. ANSI (AWWA C153) Standard (latest revision) for Compact Ductile Iron Fittings 3" - 16" for water and other liquids.
- 1.3.7. NSF Standard 61 - Drinking Water System Components.
- 1.3.8. ANSI/AWWA C105/A21.5 (latest revision) Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.

1.4. SUBMITTALS

- 1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1, and shall include pipe and design calculations.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. Pipe and fittings shall be as manufactured by U.S. Pipe and Foundry, Birmingham, Alabama, or equal.
- 2.1.2. Foster Adaptor shall be as supplied by IN FACT, Corporation.
- 2.1.3. Polyethylene Encasement shall be as manufactured by McWane Ductile, or approved equal.

2.2. MATERIAL

- 2.2.1. Pipe shall be cast from iron with minimum tensile strength of 60,000 PSI, minimum yield strength of 42,000 PSI, and minimum elongation of ten percent (Grade 60-42-10).
- 2.2.2. Fittings shall be cast from iron with minimum tensile strength of 70,000 PSI, yield strength of 50,000, and minimum elongation of five percent (Grade 70-50-05).
- 2.2.3. Gaskets for pipe joints shall conform to the provisions of ANSI A21.11.
- 2.2.4. Foster Adaptor shall be rated for 350 psi, and shall be asphalt coated.

- 2.2.5. Polyethylene encasement shall be polyethylene film in tube or sheet form. Low density polyethylene film shall have a nominal thickness of 0.008 inches (8 mil) and high density polyethylene film shall have a nominal thickness of 0.004 inches (4 mil). Polyethylene fill shall be used with "push-on" joint pipe with the material conforming to ANSI/ AWWA C105/ A21.5.

2.3. MIXES

- 2.3.1. Cement mortar lining shall conform with AWWA C104.

2.4. FABRICATION

- 2.4.1. Ductile iron pipe shall be fabricated in accordance with ANSI/ AWWA C151 (latest revision)/ A21.51.
- 2.4.2. Cement-mortar lining and bituminous seal coat shall be in accordance with AWWA C104 (latest revision).
- 2.4.3. Fittings shall be fabricated in accordance with ANSI A21.10.
- 2.4.4. Pipe shall be made in 18 to 20 foot lengths and shall be marked in accordance with Section 51-11 of ANSI A21.51.
- 2.4.5. Foster Adaptor shall be meet all ANSI/ AWWA C153/ A21.53 standards.

2.5. THRUST RESTRAINT

- 2.5.1. Thrust blocks shall be placed at all bends, plugs, caps, tees, or where otherwise shown on the Plans or required by the Engineer.
- 2.5.2. Thrust restraint system shall conform to the requirements of the Section "Restraint Systems", Division 2.
- 2.5.3. Concrete shall have a minimum 28-day compressive strength of 2500 psi.

2.6. INSULATION OF PIPE

- 2.6.1. Where shown on the plans, pipe and all associated fitting shall be insulated as shown in the detail documents.
- 2.6.2. Insulation shall be 2" thick-closed cell polyurethane.
- 2.6.3. Pipe and insulation shall be encased in 3000 psi concrete as shown in detail drawings.

PART 3 EXECUTION

3.1. INSTALLATION

- 3.1.1. Pipe and fittings shall be inspected prior to installation for defects. Pipe or fittings found to be defective shall be immediately removed from the project site and replaced in accordance with the contract documents.
- 3.1.2. Pipe and fitting shall be installed in accordance with AWWA C-600 (latest revision) and manufacturer's published installation guides.
- 3.1.3. Mechanical joint tapped tees shall be provided at all locations for taps larger than 1".
- 3.1.4. Joints shall be cleaned of all excess material and wiped clean and dry and free from oil and grease.
- 3.1.5. Pipe bedding shall be prepared in accordance with the Section "Pipe Embedment Zone", Division 2 and as shown on the drawings.
- 3.1.6. Pipe shall be protected from lateral displacement by installation of pipe bedding material as shown on the drawings and specified in the Section "Pipe Embedment Zone", Division 2.
- 3.1.7. Pipe shall be protected from flotation by placing adequate backfill as shown on the drawings and specified in the Section "Pipe Embedment Zone," Division 2.
- 3.1.8. Pipe shall be laid to conform to lines and grades shown on the Plans or as directed by the Engineer.
- 3.1.9. Where thrust blocks are installed, excavation shall be carried out by hand to provide good bearing against undisturbed material within a short distance from the pipe or fitting. Thrust restraint shall be installed in accordance with the Section "Restraint Systems", Division 2.
- 3.1.10. Contractor shall supply solid casted transition sleeve where outer diameter of existing pipe does not accept any of the proposed fittings.
- 3.1.11. During construction, watertight plugs shall be provided in the end of the pipes while work is not in progress.

3.2. INSTALLATION - POLYETHYLENE ENCASEMENT

- 3.2.1. The polyethylene encasement shall prevent contact between the pipe and the backfill and bedding material. All debris on the pipe surface shall be removed prior to installation of the polyethylene encasement. During installation, care shall be exercised to prevent soil or bedding material from becoming trapped between the pipe and the polyethylene.
- 3.2.2. Repair all rips, punctures or damage with adhesive tape or polyethylene patch.
- 3.2.3. Provide a minimum of 1-foot overlap on each adjacent pipe section.
- 3.2.4. Overlaps and ends shall be secured with adhesive tape.
- 3.2.5. Circumferential wraps of tape or plastic tie straps shall be placed at 2-foot intervals along the barrel of the pipe to help minimize the space between the polyethylene and the pipe.
- 3.2.6. Wrap all fittings and valves in accordance with manufacturer's instructions. Tape polyethylene securely in place at valve stem and other penetrations.

3.3. FIELD QUALITY CONTROL

- 3.3.1. The pipeline trench shall not be backfilled until the installation has been observed by the Engineer.
- 3.3.2. Leakage and hydrostatic tests shall be performed on all pipe and fittings and shall comply with the provisions for testing specified in Division 2.
- 3.3.3. Joint deflection shall not exceed the maximum joint deflection as listed in CIPRA Handbook.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for ductile iron pipe is by the linear foot measured along the center line of the pipe from end to end of the pipe excluding the length measured through bells, fittings, valves, and manholes in the line of the pipe.
- 4.1.2. Measurement for fittings shall be by the unit as indicated in the Bid form and fitting not identified in the Bid form shall be measured by the pound.
- 4.1.3. Measurement for insulating pipe and associated fittings shall be by the unit as indicated in the bid form.
- 4.1.4. Measurement for Foster Adaptor shall be by the unit as indicated in the bid form.

- 4.1.5. Measurement for Polyethylene wrap shall be by the linear foot as measured along the length of the pipe and through all fittings and valves.

4.2. PAYMENT

- 4.2.1. Unit price for ductile iron pipe includes clearing; excavation (other than rock): dewatering; protecting and shoring of trench walls in accordance with OSHA Regulations; protecting existing utilities, structures, and property; saw cutting of pavement; coatings and linings; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site, unless otherwise stated in bid forms); subbase coursing; disposal of surplus and unsuitable material; restoration (other than pavement); testing and, all else incidental and necessary to complete the work.
- 4.2.2. Unit price for fitting includes clearing; excavation (other than rock): dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; restraint systems; fittings and specials; coatings and linings; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site, unless otherwise stated in bid forms); subbase coursing; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.
- 4.2.3. Unit price for insulating pipe and associated fittings shall include insulation, concrete, labor, clean up, and all else incidental and necessary to complete the work. The cost of excavation, pipe and backfill shall be included in the unit price for pipe.
- 4.2.4. Unit price for Foster Adaptor shall include supplying and installation of adaptor, all bolts and nuts, labor, equipment, clean up, and all else incidental and necessary to complete the work.
- 4.2.5. Unit price for Polyethylene wrap shall include supplying of polyethylene wrap, adhesive tape, polyethylene patch material and tie straps; installation of polyethylene wrap, tape, polyethylene patch (if required) and tie straps.
- 4.2.6. Rock excavation, select material, suitable material from off site, crushed stone bedding and pavement will be paid as separate unit prices in accordance with Part Four of their respective sections, unless otherwise noted on Bid Form.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing polyvinyl chloride (PVC) sewer pipe and fittings.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Pipe shall be polyvinyl chloride (PVC) sewer pipe with an integral bell and bell-and-spigot type rubber gasketed joint. Each integral bell joint shall consist of a formed bell complete with a single rubber gasket. Pipe shall be of the diameter shown on the drawings.
- 1.2.2. All fittings shall utilize rubber gasketed joints and be compatible with that of the pipe.
- 1.2.3. The pipe shall be located and installed to the lines and grades shown on the drawings.

1.3 REFERENCES

- 1.3.1. ASTM D 1784 - Specification for rigid poly (vinyl chloride) [PVC] compounds and chlorinated poly (vinyl chloride) [CPVC] compounds.
- 1.3.2. ASTM D 2321 - Recommended practice for underground installation of flexible thermoplastic sewer pipe.
- 1.3.3. ASTM D 3034 - Specification for Type PSM poly (vinyl chloride) [PVC] sewer pipe and fittings.
- 1.3.4. ASTM D 3212 - Specification for joints for drain and sewer plastic pipes using flexible elastomeric seals.
- 1.3.5. ASTM F 477 - Specification for elastomeric seals (gaskets) for joining plastic pipe.
- 1.3.6. ASTM F 679 - Specification for poly (vinyl chloride) [PVC] large-diameter plastic gravity sewer pipe and fittings.

1.4 SUBMITTALS

- 1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples," Division 1.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Pipe and fittings from 4" to 15" shall comply with ASTM D 3034 with a wall thickness designation of SDR 35 or be manufactured to ASTM D 3034 outside diameters and have a minimum pipe stiffness of 46 PSI pipe and fittings from 18" to 27 " shall comply with ASTM F 679 and shall have a uniform wall thickness.
- 2.1.2. Joints for PVC sewer pipe and fittings shall comply with ASTM D 3212.
- 2.1.3. Rubber gaskets for joints shall comply with ASTM F 477.
- 2.1.4. Maximum laying lengths for 4" and 6" laterals shall be 12½ ft.

PART 3 EXECUTION

3.1. HANDLING AND STORAGE

- 3.1.1. Handle pipe and fittings with care to prevent damage. Store pipe on flat surfaces so the barrels are evenly supported. If materials are stored outside for extended period of time, cover with opaque material to protect from direct sunlight.

3.2. JOINTING AND INSTALLATION

- 3.2.1. Pipe and fittings shall be installed in accordance with the manufacturer's recommendations and as specified in ASTM D 2321 as modified herein.
- 3.2.2. Field cut pipe shall have square cut ends. Remove burrs inside and outside of pipe. Bevel outside edge for insertion into the gasketed bell to match the factory bevel and mark the new full insertion depth line.
- 3.2.3. Pipe bedding shall have a minimum thickness of 6" and shall be compacted to the density shown on the drawings. The bedding shall be shaped to have contact with the pipe for an angle of at least 90°.

- 3.2.4. Suitable material for pipe embedment shall be placed and compacted in three successive courses.
- 3.2.5. Haunching material shall be placed to the spring line of the pipe and compacted by hand adjacent to the pipe and by mechanical tampers elsewhere. Sufficient material shall be worked under the haunch of the pipe to provide adequate side support. Precautions shall be taken to prevent movement of the pipe during placement of the haunch.
- 3.2.6. Material for initial backfill shall be as shown on the drawings. Initial backfill shall be placed in two stages. The first stage shall be to the top of the pipe. The second stage shall be to a point at least 12" over the top of the pipe.
- 3.2.7. Upon completion of placement of pipe embedment material for each course, the material shall be compacted to the densities shown on the drawings. Contact between the pipe and the compaction equipment shall be avoided.

3.3. TESTING

- 3.3.1. Following installation of pipe and completion of backfill to existing grade, pipe shall be tested for deflection in the presence of the engineer. Optional devices for testing include properly sized Go-No-Go Mandrell or Delectometer. Maximum allowable deflection shall be five percent. All pipes found in which the deflection exceeds five percent shall be uncovered and reinstalled at no additional expense to the owner.
- 3.3.2. Infiltration and exfiltration testing shall be in accordance with the requirements of the Section "Testing and Inspection of Gravity Lines," Division 2.

PART 4 MEASUREMENT AND PAYMENT

4.1. MEASUREMENT

- 4.1.1. Measurement for PVC sewer pipe is by the linear foot measured along the center line of the pipe from end to end of the pipe excluding the length measured through bells, fittings, valves, and manholes in the line of the pipe.
- 4.1.2. Measurement for PVC tee-wye fittings for connection of sewer services shall be by the unit.

4.2. PAYMENT

- 4.2.1. Unit price for PVC sewer pipe includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; coatings and linings; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site, unless otherwise stated in bid forms); by-pass pumping; fittings; disposal of surplus and unsuitable material; restoration (other than pavement); testing and, all else incidental and necessary to complete the work.

- 4.2.2. Unit price for PVC tee-wye fittings includes fitting; installation of fitting; labor; and all else incidental and necessary to complete the work. All work as related to excavation, backfilling, compaction, shoring, testing, etc., shall be taken into consideration within the unit price for PVC sewer pipe.

**** END OF SECTION ****

SECTION 02627
COPPER PIPE (BURIED) & NECESSARY FITTINGS

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing buried copper pipe and fittings.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Copper pipe and fittings shall be used for the potable water lines and other piping less than two (2) inches in diameter unless otherwise indicated on the drawings.
- 1.2.2. All fittings shall be compressive type.
- 1.2.3. Buried copper pipe shall be tested to the pressures shown on the drawings and in accordance with the section "Testing and Inspection of Water Mains", Division 2.
- 1.2.4. Buried copper pipe shall be Type K conforming to ASTM B88.
- 1.2.5. A tap, equal to the existing size entering the building, shall be left or made for each required service connection (as shown on plans). Taps may be made by means of a tapped coupling at proper location or by cutting with an approved tapping machine, or by use of service saddles approved by Engineer. Taps shall be of the type thread to accept a standard corporation stop as supplied by Mueller, or an approved equal. **Mechanical joint tapped tees shall be used for all taps larger than 1".**
- 1.2.6. Taps and corporation stops should be located at least 1' from pipe ends. Corporation stops shall be Mueller H-15008N ($\frac{3}{4}$ ", 1") or approved equal.
- 1.2.7. Curb stops shall be Mueller H-15209N ($\frac{3}{4}$ ", 1"), or approved equal. The curb box shall be Mueller H-10385 or approved equal.
- 1.2.8. Backflow prevention for water service shall be Watts Series 007 double check valve assembly, where noted on plans.

1.3. QUALITY ASSURANCE

- 1.3.1. All pipe shall be factory tested in accordance with the requirements of ASTM B88. All fittings shall meet or exceed AWWA C-800 Standards (latest revision).

1.4. SUBMITTALS

- 1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1.
- 1.4.2. Certified factory test results shall be submitted on pipe and fittings manufactured for this project or another project within the past six months.
- 1.4.3. List stating size and number of water services to each building, if applicable.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. Pipe and fittings shall be checked for defects prior to their incorporation in the work. All pipe and fittings found to be defective shall be promptly removed from the site.

3.2. PREPARATION

- 3.2.1. Pipe shall be swabbed or brushed out prior to installation to ensure that no foreign material gets into the finished line.

3.3. INSTALLATION/APPLICATION/ERECTION

- 3.3.1. Contractor shall obtain the size and number of water services entering into each building prior to construction of water main.
- 3.3.2. Pipe and fittings shall be installed in accordance with the manufacturer's recommendations.
- 3.3.3. New water services shall be installed from the new water main up to the point of re-connection with the existing service line. Installation of new water service shall include installing of k-copper, corporation valve, curb stop valve, curb stop valve, curb stop box, and all necessary fittings for re-connection to existing water service line. Curb stop boxes that will be located in pavement or driveway aprons shall have a water valve box installed over them.
- 3.3.4. Prior to water service switch over, homeowners shall be notified at least 24 hours in advance.
- 3.3.5. New copper line shall be backfilled with Select Material No. 4 within the road right-of-way for the entire trench depth minus topsoil and/or pavement section, and at least 12" of Select Material No. 4 outside of road right-of-way and then suitable material.

3.4. ADJUSTING AND CLEANING

3.4.1. Prior to final acceptance, the Contractor shall clean the lines of all foreign material.

PART 4 MEASUREMENT AND PAYMENT

4.1. Measurement

4.1.1. Measurement for copper pipe shall be by the un.

4.1.2. Measurement for corporation valve shall be by the unit.

4.1.3. Measurement for curb stop valve shall be by the unit.

4.1.4. Measurement for mechanical joint tapped tee shall be by the unit.

4.1.5. Measurement for curb stop box shall be by the unit.

4.2. PAYMENT

4.2.1. Unit price for copper pipe shall be by the linear foot actually installed and shall include the supplying of the k-copper pipe of the required size (3/4" to 2") to match that of the existing service line, installation of the k-copper service line, excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; all necessary fittings for connection of k-copper to itself and the existing service line; backfilling and compaction; Select Material No. 4 backfill material; disposal of surplus, unsuitable material, and all wastes; restoration (other than pavement); and, all else incidental and necessary to complete the work.

4.2.2. Unit price for corporation valve shall include supplying and installation of corporation valve; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; tapping of water line; backfilling and compaction; Select Material No. 4 backfill material; disposal of surplus, unsuitable material and all wastes; restoration (other than pavement); and, all else incidental and necessary to complete the work.

4.2.2. Unit price for curb stop valve shall include supplying and installation of curb stop valve; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; backfilling and compaction; Select Material No. 4 backfill material; disposal of surplus, unsuitable material and all wastes; restoration (other than pavement); and, all else incidental and necessary to complete the work.

- 4.2.4. Unit price for mechanical joint tapped tee for service lines over 1" in size shall include supplying and installation of tapped tee while installing water line; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; backfilling and compaction; Select Material No. 4 backfill material; disposal of surplus, unsuitable material and all wastes; restoration (other than pavement); and, all else incidental and necessary to complete the work.
- 4.2.5. Unit price for curb stop box shall include supplying and installation of curb stop box; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; tapping of water line; backfilling and compaction; Select Material No. 4 backfill material; disposal of surplus, unsuitable material and all wastes; restoration (other than pavement); and, all else incidental and necessary to complete the work.

** END OF SECTION **

SECTION 02641
VALVES, METER AND APPURTENANCES - WATER

PART 1 GENERAL

1.1. SECTION INCLUDES

1.1.1. Requirements for gate valves, meters and air release valves.

1.2. SYSTEM DESCRIPTION

1.2.1. GATE VALVES

1.2.1.1. Gate valve smaller than 3" shall be all bronze solid wedge type with rising spindle.

1.2.1.2. Gate valves shall be iron body resilient-seat type with non-rising stems. Valves shall be furnished with "O" ring type packing. **Valves shall be Mueller resilient-seat gate valves. Substitutions or equals are not allowed.**

1.2.1.3. All gate valves shall open to the left (counter-clockwise).

1.2.1.4. All gate valves shall be proportional for working pressures of 200 psi hydrostatically tested at 400 psi.

1.2.1.5. Gate valve shall be supplied with a cast iron telescoping valve box and cover. Cover shall have the word "**WATER**" cast in top.

1.3. REFERENCES

1.3.1. ASTM A 126 - Specifications for Grey Iron Castings for Valves, Flanges and Pipe Fittings, Class B.

1.3.2. ASTM A 240 - Specifications for Heat-Resisting Chromium and Chromium-nickel Stainless Steel Plate, Sheet and Strip for Fusion-Welded Pressure Vessels.

1.3.3. ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings, Class 125.

1.3.4. AWWA C110 (latest revision) - Standard for Grey Iron Ductile Iron Fittings 3-inch through 48-inch for Water and Other Liquids.

1.3.5. AWWA C111 (latest revision) - Standard for Rubber Gasket Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings.

- 1.3.6. AWWA C509 (latest revision) - Standard for Resilient Seated Gate Valves 3 through 12 NPS for Water and Other Liquids.
- 1.3.7. NSF Standard 61 - Drinking Water System Components.

1.4. SUBMITTALS

- 1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1.
- 1.4.2. Operation and maintenance data shall be submitted.

PART 2 PRODUCTS

2.1. MATERIALS

2.1.1. GATE VALVES

2.1.1.1. 3-inch and larger valves shall be as follows:

- 1. The valve body and bonnets shall be fabricated of cast iron meeting the requirement of ASTM A 126.
- 2. The valve stem shall be fabricated of bronze.
- 3. Bolts shall be electro-plated steel with hex heads and hex nuts in accordance with ASTM A 307.
- 4. The operating nut shall be fabricated of cast iron.

2.2.2. HYDRANT

- 2.2.2.1. Hydrant to conform to AWWA C502 (latest revision), AWWA Standard for Dry Barrel Fire Hydrants.
- 2.2.2.2. Hydrants shall be Mueller Super Centurion 250. No substitutions or equals are allowed.
- 2.2.2.3. Hydrant shall have 5¼" valve opening with compression shut off, opening against water pressure and breakaway traffic flange construction.
- 2.2.2.4. Inlet construction shall be 6" mechanical joint.
- 2.2.2.5. Bury length to be a minimum of 5 feet.
- 2.2.2.6. Nozzles: (2) 2½ " nozzles and (1) 4½" nozzle with national standard threads.

- 2.2.2.7. Hydrant shall open counterclockwise.
- 2.2.2.8. Hydrant nut size shall be national standard pentagon shaped operating nut measuring 1½" from point to float or come with matching cap and chain.
- 2.2.2.9. Hydrant to be painted to Owner's specifications.

2.3. FABRICATION

- 2.3.1. All valves and operators shall be fabricated complete and ready for installation when delivered.
- 2.3.2. All valves shall be marked to show name of manufacturer, the year of manufacture, maximum working pressure, and size of valve.
- 2.3.3. Valves 3-inch and larger shall be shop primed at the place of manufacture with an epoxy-polyamide primer compatible with the paint to be used in the field.

PART 3 EXECUTION

3.1. INSPECTION

- 3.1.1. All valves shall be inspected for damage or defects prior to their incorporation in the work. All valves found to be defective will be removed from site.

3.2. PREPARATION

- 3.2.1. Prior to installation of the valves, concrete and other surfaces shall be protected from jointing compounds, oil and other material used to install this work.
- 3.2.2. Prior to installation of the valves, the Contractor shall clean the body of all foreign material and operate the valve to insure it is not frozen in position.

3.3. INSTALLATION

- 3.3.1. All valves and meters shall be installed at the location and in the positions and configurations shown on the drawings.
- 3.3.2. Anchor blocks and/or clamp shall be provided as directed by the Engineer for the gate valves.
- 3.3.3. Valve boxes shall be adequate for the trench depth so that when set on the valve, the cover is level with the pavement or the completed surrounding ground, whichever is applicable.

- 3.3.4. Where ground water rises to within 2' of a fire hydrant base, the drain port shall be plugged. Any hydrant that is plugged shall be labeled in a manner satisfactory to the local Fire Department and Water Department to ensure that the hydrant is pumped out after each use.

3.4. FIELD QUALITY CONTROL

- 3.4.1. Valves, meters, hydrants, and appurtenances shall be field tested to determine that the valves operate as specified.

PART 4 MEASUREMENT AND PAYMENT

4.1. Measurement

- 4.1.1. Measurement of Gate Valves shall be by the unit.

- 4.1.2. Measurement of Hydrant shall be by the unit.

4.2. PAYMENT

- 4.2.1. Unit price for gate valve includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; valve and specials; coatings and linings; restraints and thrust blocks; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site); subbase coarsing; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.
- 4.2.2. Unit price for hydrant includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; valve and specials; coatings and linings; backfilling and compaction; select material #4 for backfill; concrete thrust block; subbase coarsing; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing restraint systems to resist axial thrust.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Install joint restraints/thrust blocks to resist axial thrust at the locations and of the size and type shown on the drawings. Unless thrust blocks are shown on the drawings, only joint restraints shall be used.
- 1.2.2. Unless otherwise shown on the drawing, joint restraints shall consist of:
1. Mechanical joint pipe with mechanical joint retainer glands
 2. "Locked" or "anchoring" type pipe and fittings as manufactured by EBAA Iron Sales, Inc. Mega-Lug Series 1100 or equal.
- 1.2.3. Length of pipe to be restrained shall be as shown on the schedule of joint restraints as shown on the drawings.
- 1.2.3. Thrust blocks shall be constructed of concrete as shown on the drawings.

1.3 REFERENCES

- 1.3.1. Bulletin No. 24 - "Outside Protection" as issued by the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts, 02269.
- 1.3.2. ASTM E18 - Test for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials.
- 1.3.3. ANSI A21.10 - Standard for Gray-Iron and Ductile Iron Fittings 2 Inches through 48 Inches for Water and Other Liquids.
- 1.3.4. New York State Department of Transportation Standard Specifications

1.4. SUBMITTALS

- 1.4.1. Submit manufacturer's certification or certified test results indicating conformance with the requirements of these specifications for retainer glands and other joint restraint materials.
- 1.4.2. Submit manufacturer's data for "locked" or "anchoring" type pipe and fittings.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Mechanical joint retainer glands shall conform to the applicable requirements on ANSI A21.10 and shall be cast of ductile iron, fitted with cup point, square headed set screw and approved by Underwriter's Laboratories, Inc. Set screw hardness, when tested in accordance with ASTM E18, shall reflect a core hardness within the range of Rockwell C42-48 and a case surface hardness of Rockwell 15N-87 (minimum).
- 2.1.2. "Locked" or "anchoring" type pipe and fittings shall conform to the contract documents.
- 2.1.3. Rods, clamps with washers, straps and other required hardware shall conform to the applicable requirements of "Figures 96. General Information" of Bulletin 24 or as otherwise approved by the Engineer, and shall be stainless steel.
- 2.1.4. Thrust blocks shall be concrete with a minimum compressive strength of 2,500 psi.

PART 3 EXECUTION

3.1. INSTALLATION

- 3.1.1. Mechanical joint retainer glands shall be installed in accordance with the manufacturer's commended installation requirements and as required by the "Schedule of Joint Restraints" as shown the drawings. Torque on the set screws shall not exceed that recommended by the manufacturer and shall be applied using an approved torque wrench.
- 3.1.2. "Locked" or "anchoring" type pipe and fittings shall be installed in accordance with the manufacturer's recommended installation procedures.
- 3.1.3. Rods, clamps with washers, straps and other required hardware shall be installed in accordance with the applicable requirements of Figures 96-1 through 96-37 in Section 96 of Bulletin 24 or as shown on the drawings.
- 3.1.4. Concrete thrust blocks shall be constructed in accordance with the applicable requirements of the NYSDOT Standard Specifications, and as shown on the drawings. All thrust blocks shall be placed against undisturbed native soil and in such a manner that the pipe and joints will be accessible for inspection or repair.

** END OF SECTION **

SECTION 02675
DISINFECTION OF WATER DISTRIBUTION SYSTEMS

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for disinfection of potable water distribution and transmission systems.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The contractor shall furnish all labor, materials, tools and equipment necessary for or incidental to the performance of the disinfection of the water line. The Contractor shall be responsible to secure a water supply for flushing and disinfection at no additional cost to the owner.
- 1.2.2. Disinfection will be conducted on all water mains, valves and fittings in the system constructed. The disinfection shall be performed in an approved manner in accordance with these Specifications and the applicable requirements of AWWA, C-651 (latest revision), except that the tablet method described in Section 5.1 of AWWA C-651 shall not be used.

1.3. REFERENCES

- 1.3.1. AWWA C-651, Standard for Disinfecting Water Mains (latest edition).

1.4. SUBMITTALS

- 1.4.1. Methods of testing shall be submitted for review one week before actual testing.

PART 2 - NOT APPLICABLE

PART 3 EXECUTION

3.1. PREVENTATIVE MEASURES DURING CONSTRUCTION

- 3.1.1. Caution shall be taken to protect pipe interiors, fittings and valves against contamination during construction. Pipe delivered for construction shall be strung so as to minimize entrance of foreign material.
- 3.1.2. When pipe laying is not in progress as, for example, at the end of the close of the day's work, all openings in the pipeline shall be closed by water tight plugs.

- 3.1.3. Joints of all pipe in the trench shall be completed before work is stopped.
- 3.1.4. If water accumulates in the trench, plugs shall remain in place until the trench is dry.
- 3.1.5. If dirt that, in the opinion of the Engineer, will not be removed by flushing operations enters the pipe, the interior of the pipe shall be cleaned and swabbed as necessary with a 5% hypochlorite disinfecting solution.

3.2. DISINFECTION PROCEDURE

3.2.1. PRELIMINARY FLUSHING

- 3.2.1.1. The main shall be flushed prior to disinfection. The flushing velocity shall not be less than 3 feet per second.

3.2.2. FORM OF CHLORINE FOR DISINFECTION

- 3.2.2.1. The most common forms of chlorine used in disinfecting solutions are liquid chlorine (gas at atmospheric pressure), calcium hypochlorite granules, and sodium hypochlorite solution.

- A. Liquid chlorine shall be used only when suitable equipment is available, and only under the direct supervision of a person familiar with the physiological, chemical and physical properties of this element, and who is properly trained and equipped to handle any emergency that may arise. The introduction of chlorine gas directly from the supply cylinder is unsafe and should not be permitted.

The preferred equipment consists of a solution feed chlorinator in combination with a booster pump for ingesting the chlorine gas/water mixture into the main to be disinfected. Direct feed container chlorinators are not recommended because their use is limited in situations where water pressure is lower than the chlorine cylinder pressure.

- B. Calcium hypochlorite contains 70% available chlorine by weight. It is either granular or tabular in form. Tablets, 6 and 9 to the ounce, are designed to dissolve slowly in water. Chlorine solution is prepared by dissolving the granules in water in a proportion required for the desired concentration.

- C. Sodium hypochlorite is supplied in strengths from 5.25 to 16 percent available chlorine. It is packaged in liquid form in glass, rubber, or plastic containers ranging in size from one quart bottles to five gallon carboys. It may also be purchased in bulk for delivery by tank truck.

The chlorine-water solution is prepared by adding hypochlorite to water. Product deterioration must be reckoned with in computing the quantity of sodium hypochlorite required for desired concentration.

3.3. APPLICATION

3.3.1. HYPOCHLORITE SOLUTIONS

- 3.3.1.1. The hypochlorite solutions shall be applied to the water main with a gasoline or electrically powered chemical feed pump designed for feeding the chlorine solutions. For small applications, the solutions may be fed with a hand pump, for example, a hydraulic test pump.
- 3.3.1.2. Feed lines shall be of such material and strength as to withstand safely the maximum pressures that may be created by the pumps. All connections shall be checked for tightness before the hypochlorite solution is applied to the main.

3.3.2. METHODS OF CHLORINE APPLICATION

3.3.2.1. CONTINUOUS FEED METHOD

This method is suitable for general application. Water from the existing distribution system or other approved sources of supply shall be made to flow at a constant, measured rate into the newly-laid pipeline. At a point not more than 10 feet downstream from the beginning of the new main, the water entering the new main shall receive a dose of chlorine, also fed at the constant, measured rate. The two rates shall be proportioned so that the chlorine concentration in the water in the pipe is maintained at a minimum of 25 mg/l available chlorine. To assure that this concentration is maintained, the chlorine residual should be measured at regular intervals in accordance with the procedures described in the current edition of Standard Methods of AWWA M12 - Simplified for Water Examination.

Table II gives the amount of chlorine residual required for each 100 ft. of pipe in various diameters. Solutions of one percent chlorine may be prepared with sodium hypochlorite or calcium hypochlorite. The latter solution requires approximately 1 lb. of calcium hypochlorite in 8.6 gallons of water. If liquid laundry bleach with 5.25% CL is used, then 4.25 gallons of water is to be mixed with 1 gallon of bleach to obtain 1 percent solution.

TABLE II
Chlorine Required to Produce 25 mg/l
Concentration in 100 ft. of pipe

Pipe Size (inch)	Volume of 100-ft. length (gallons)	100 Percent Chlorine (lb.)	1 Percent Chlo- rine Solutions (gal.)
4	65.3	.013	0.16
6	146.5	.030	0.36
8	261.0	.054	0.65
10	408.0	.085	1.02
12	588.7	.120	1.44

Note: All lines smaller than 4" shall be disinfected with the same concentration used for 4" lines per the New York State Department of Health.

During the application of the chlorine, valves shall be manipulated to prevent the treatment dosage from flowing back into the line supplying the water. Chlorine application shall not cease until the entire main is filled with the chlorine solution. The chlorinated water shall be retained in the main for at least 24 hours, during which time all valves discharge hose connections in the section shall be operated in order to disinfect the appurtenances. At the end of this 24 hour period, the treated water shall contain no less than 10 mg/l chlorine throughout the length of the main.

3.3.2.2. SLUG METHOD

This method is suitable for use with mains of large diameter for which, because of the volumes of water involved, the continuous feed method is not practical.

Water from the existing distribution system or other approved source of supply shall be made to flow at a constant, measure rate into the newly laid pipeline. The water shall receive a dose of chlorine, also fed at a constant measured rate. The two rates shall be proportioned so that the concentration in the water entering the pipeline is maintained at no less than 100 mg/l. The chlorine shall be applied continuously and for a sufficient period to develop a solid column or "slug" of chlorinated water that will as it passes along the line, expose all interior surfaces to a concentration of at least 100 mg/l for at least 3 hours. The application shall be checked at a tap near the upstream end of the line by chlorine residual measurements made according to the procedures described above.

As the chlorinated water flows past tees and crosses, related valves and discharge hose connection shall be operated as to disinfect appurtenances.

3.3.2.3. TABLET METHOD

The "tablet method" as contained in American Water Works Association Standard C-651 is not acceptable to the New York State Department of Health and shall not be used.

3.4. FINAL FLUSHING

- 3.4.1. After the applicable retention period, the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the water leaving the main is no higher than that generally prevailing in the system, or less than 1 mg/l. Chlorine residual determination shall be made to ascertain that the heavily chlorinated water has been removed from the pipeline. Heavily chlorinated water shall be de-chlorinated prior during flushing, or shall be flushed into a tanker truck for proper disposal. At no time shall heavily chlorinated water be discharged into the storm or sanitary sewer systems.

3.5. BACTERIOLOGICAL TESTS

- 3.5.1. After final flushing and before the new water main is placed in service, two consecutive sets of acceptable samples, taken at least 24 hours apart, shall be collected every 1,200 feet and from the end of the line, and at least one set from each branch in the water main. All samples shall be tested for bacteriological (chemical and physical) quality in accordance with "*Standard Methods for the Examination of Water and Wastewater*" and shall show the absence of coliform organisms; and, if required, the presence of a chlorine residual.
- 3.5.2. Samples for bacteriological analysis shall be collected in sterile bottles treated with sodium thiosulfate as required by "*Standard Methods for the Examination of Water and Wastewater*". No hose or hydrant shall be used in collection of samples. A suggested sampling tap consists of a standard corporation cock installed in the main with a copper tube goose-neck assembly. After samples have been collected, the goose-neck assembly may be removed, and retained for future use.

3.6. REPETITION OF PROCEDURE

- 3.6.1. If the initial disinfection fails to produce satisfactory samples, disinfection shall be repeated until satisfactory samples have been obtained. When the samples are satisfactory, the main may be placed in service.

3.7. PROCEDURE AFTER CUTTING INTO OR REPAIRING EXISTING MAINS

- 3.7.1. The procedures outlined in this section apply primarily when mains are wholly or partially dewatered. Leaks or breaks that are repaired with clamping devices while the mains remain full of water under pressure require no disinfection.

3.7.2. TRENCH TREATMENT

- 3.7.2.1. When an old line is opened, either by accident or by design, the excavation will likely be wet and badly contaminated from nearby sewers. Liberal quantities of hypochlorite applied to open trench areas will lessen the danger from such pollution. Tablets have the advantage in such a situation because they dissolve slowly and continue to release hypochlorite as water is pumped from the excavation.

3.7.3. MAIN DISINFECTION

- 3.7.3.1. Swabbing and Flushing: The following procedure is considered as a minimum that may be used.
- A. Swabbing with Hypochlorite Solution: The interior of all pipe and fittings used in making the repair (particularly couplings and tapping sleeves) shall be swabbed with a 1 percent hypochlorite solution before they are installed.
 - B. Flushing: Thorough flushing is the most practical means of removing contamination introduced during repairs. If valving and hydrant locations permit, flushing from both directions is recommended. Flushing shall be started as soon as the repairs are completed and continued until discolored water is eliminated.
- 3.7.3.2. Slug Method
Where practicable, in addition to the procedures of swabbing and flushing, a section of main in which the break is located shall be isolated, all service connections shut off, and the section flushed and chlorinated as described, except that the dose may be increased to as much as 300 mg/l, and the contact time reduced to as little as hours. After chlorination, flushing shall be resumed and continued until discolored water is eliminated.

3.7.4. SAMPLING

- 3.7.4.1. Bacteriological samples shall be taken after repairs to provide a record by which the effectiveness of the procedures used can be determined. If the direction of flow is unknown, samples shall be taken on each side of the main break.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirements for providing sanitary sewer service connections both gravity and low pressure connections.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Contractor shall be responsible for locating all active sewer service connections located along the sewer main to be replaced. Although a number of these connections have been shown on the plan drawings, it is the Contractor's responsibility to verify the location of all active sewer service connections regardless of what is shown on the plans. Contractor should meet with homeowners, or use other means necessary, to verify the location of active sewer laterals connected to the sewer main, to ensure that all active sewer services are reconnected to the newly proposed sewer main. Contractor shall submit to the Engineer, documentation as to how the location of all active sewer services were determined, and where the active sewer services are located. To help in this endeavor, previous sewer televising reports have been included in the rear of the contract documents.
- 1.2.2. All data relative to the locations and size of the service connections shall be recorded on forms, supplied by the Contractor, and approved by the Owner.
- 1.2.2.1. Each form shall be identified by property owner's name, street address, and lot and block number.
- 1.2.2.2. These forms shall show the location of the end of the service connection.
- 1.2.2.3. Service connections shall be signed by both the property owner and the Contractor's representative.
- 1.2.3. Contractor shall give written notice to property owners at least one week in advance of laying the street main and shall locate the connection so that it will come off the street main 90° to the curb line in order to service the property owner's lowest service elevation or at a general location desired by the property owner, unless otherwise directed or permitted by the Engineer.
- 1.2.4. Service connections shall be made for all active sewer services as shown on the drawings and where located if not shown on the drawings.

- 1.2.5. **Contractor shall install new sewer services to a point as determined by Engineer and/or Sewer Superintendent, to allow for reconnection of existing sanitary sewer services to new sanitary sewer main. Connection of new service pipe to old service pipe shall be made by connection of bell on new PVC to existing PVC line or by using a Romac Industries stainless steel Style LSS1 Repair Clamp. If existing sanitary lateral is not PVC, reconnection of line to new PVC extension shall be made with a Romac Industries stainless steel Style SS1 Transition Clamp. Fittings shall be encased in concrete unless otherwise directed by Engineer or Sewer Superintendent. The costs for supplying the additional connection fittings and concrete shall be included in the unit price for the pipe for the sewer service. Sewer piping shall conform and be installed in accordance with Section 02622 of the technical specifications.**

1.3. SUBMITTALS

- 1.3.1. Contractor shall submit for approval his intended procedure for installing service connections in accordance with the Section "Review of Contractor's Construction Procedures", Division 1.
- 1.3.2. Shop drawings for service connections shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1.

**** END OF SECTION ****

SECTION 02709
TESTING AND INSPECTING WATER LINES

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Requirement for hydrostatic and leakage testing of water mains and appurtenances.

1.2. SYSTEM DESCRIPTION

- 1.2.1. The contractor shall furnish all labor, materials, tools and equipment necessary for or incidental to the performance of the pressure/leakage test.
- 1.2.2. The Engineer will supply the test gauge or else calibrate the contractor's gauge before and after the tests.
- 1.2.3. The contractor shall be responsible to secure a water supply for flushing and testing at no additional cost to the owner.
- 1.2.4. A pressure/leakage test will be performed on all water mains, valves and fittings in the system constructed. The pressure/leakage test shall be conducted in accordance with these specifications and the applicable requirements of AWWA C600 (latest edition). Where any section of a main is provided with concrete thrust blocks, the test shall not be made until at least 5 days have elapsed after the concrete was installed.
- 1.2.5. All testing of water lines shall be done in the Engineer's or Water Department's presence and under their direction.
- 1.2.6. All individual valve sections shall be tested separately.

1.3. REFERENCE

- 1.3.1. AWWA C600 (latest edition) - Standard for the Installation of Ductile-Iron Water Mains and Their Appurtenances.

1.4. SUBMITTALS

- 1.4.1. Proposed locations to be tested and methods of testing shall be submitted for review one week before the actual testing.

PART 3 EXECUTION

3.1. TESTING PROCEDURE

- 3.1.1. The pipe, fire hydrant assemblies, and appurtenances being tested shall be flushed and entirely free from any and all debris, stones, sand and any other materials. Water used in flushing the lines shall not be discharged into clean sections of pipeline or active mains, but shall be disposed of as specified in the appropriate parts of the section "Dewatering," Division 2. Disposal of Waste Materials shall be in conformance with the requirements of the Section "Waste Materials Disposal", Division 1.
- 3.1.2. All air shall be expelled from the section to be tested by appropriate methods including the use of corporation stops at high points. After all the air has been expelled, the test pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Engineer. **The pump, pipe connections, and all necessary apparatus shall be furnished by the contractor at the Contractor's expense.**
- 3.1.3. The test pressure shall be at least one and a half times the maximum working pressure, based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge. However, in no case shall the test pressure be less than 150 pounds per square inch. Each hydrostatic test shall be held at the test pressure for a duration of at least two hours. Additional water shall be added as required to maintain the test pressure.
- 3.1.4. Concurrently with the pressure test, a leakage test shall be conducted. Leakage is defined as the quantity of water that must be added to the pipe to maintain the test pressure. Maximum allowable leakage shall be determined by the following formula:

$$\frac{SD \sqrt{P}}{L = 148,000}$$

Where,

- L = Allowable leakage, in gals/hour
- S = Length of test section, in feet
- D = Nominal diameter of pipe, in inches
- P = Average test pressure during test, in PSIG

- 3.1.5. Tolerance for test pressure shall be plus or minus 5 psi.
- 3.1.6. Where the leakage for the section tested is greater than that allowed, the contractor shall locate and repair the cause of the leak and retest the section until the leakage does not exceed the allowable.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

1.1.1. Requirements describing the testing and inspection of gravity lines.

1.2. SYSTEM DESCRIPTION

1.2.1. Visual Inspection

1.2.1.1. Upon completion of the installation of the pipe and backfilling and compacting of the trench, the pipe shall be visually inspected. This inspection shall be undertaken as the work progresses. The engineer shall be notified a week in advance of such inspection and the contractor shall provide all facilities, materials, equipment and labor required for such inspection.

1.2.1.2. All foreign material, dirt, debris or other objects found in the interior of the pipe shall be removed by the contractor. Visible defects such as broken pipe sections, improperly installed gaskets, projecting connections, cracks, visible leaks or other defects shall be noted, corrected and the pipe reinspected.

1.2.2. Infiltration/Exfiltration Testing

1.2.2.1. The engineer shall be notified two weeks in advance of infiltration/exfiltration testing.

1.2.2.2. An infiltration test shall be performed for those lines where the ground water level is at least 2 feet higher than the top of the pipe at the upstream manhole. Where ground water level is lower than two feet above the top of the pipe at the upstream manhole, an exfiltration test shall be performed. Air testing shall be used for the exfiltration test.

1.2.2.3. Rate of infiltration or exfiltration shall not exceed one-hundred gallons per mile per inch of diameter of pipe for 24 hours. Air test allows minimum amount of time for air pressure inside pipe to drop from 3.5 PSIG to 2.5 PSIG; allowable time is a function of pipe size. These requirements will be met for every test section of pipe; it is not a cumulative average over several test sections of pipe. The phrase "per mile" shall refer to the total length of main sewer, measured through manholes, plus the lengths of all connections, laterals and branches.

- 1.2.2.4. The contractor shall construct all bulkheads; provide weirs or other means of measurement, pumps, water, plugs, fittings, meters, lights, hoses and all else necessary for inspection and testings.

1.2.3. Minimum Pipe Slope

- 1.2.3.1. Pipes installed at less than the slopes shown on the drawings shall be reinstalled by the contractor to the design slope shown or the contractor shall demonstrate to the engineer's and owner's satisfaction that the design capacity and velocity can be achieved.

- 1.2.4. During the one year correction period, the system or any part thereof, may be reinspected and/or retested if it is determined by the engineer that defective materials or unsatisfactory work may exist, or that excessive leakage may be occurring. Contractor shall perform the reinspection, retesting, removal and replacement of defective work at no additional cost to the owner.

1.3. REFERENCES

- 1.3.1. ASTM F-1417-92 (reapproved 2005) – “Standard Test method for Installation Acceptance of Plastic gravity Sewer Lines Using Low-Pressure Air”.

1.4. SUBMITTALS

- 1.4.1. Certified copies of all tests and final inspection reports shall be submitted to the engineer.

PART 3 EXECUTION

3.1. PREPARATION

- 3.1.1. The pipe section being tested shall be entirely free from any and all debris, stones, sand and any other materials. Water used in flushing the lines shall not be discharged into clean sections of pipeline or active sewers, but shall be discharged as specified in the appropriate parts of the Section "Dewatering," Division 2. Disposal of debris and all other material shall be in conformance with the requirements of the Section "Waste Materials Disposal," Division 1.

3.2. FIELD QUALITY CONTROL

- 3.2.1. The first section of pipe (between two manholes) laid by each pipe crew will immediately be tested upon completion in order to check workmanship.

- 3.2.2. Lines shall be visually inspected from manhole to manhole by the engineer. The contractor shall furnish two men to assist the engineer in making the inspection. It is a condition of acceptance that all manholes be complete, the pipe be cleaned, and all lines be laid straight from manhole to manhole unless otherwise shown on the drawings. All defects noted during this inspection shall be corrected by the contractor to the satisfaction of the engineer. After correction the lines shall be reinspected.
- 3.2.3. When the gravity lines have been satisfactorily inspected visually, an infiltration or exfiltration test shall be performed.
- 3.2.4. Infiltration/exfiltration rates shall be determined on the main sewer and laterals and shall be within the allowable rate as specified. All wyes, tees and other fittings in the main sewer line and laterals shall be adequately capped or plugged to withstand the maximum anticipated head during exfiltration testing and to prevent debris, groundwater, etc., from entering during infiltration testing. All caps or plugs which "blow-out" or leak shall be replaced as often as necessary by the contractor at no additional cost to the owner until the main sewer passes the infiltration/exfiltration test. All sewers not in compliance with these requirements shall be corrected by the contractor until such time as the rate can be met. Such corrections as necessary shall be made by the contractor at no additional cost to the owner.
- 3.2.5. When performing an infiltration test, the contractor shall block off a section of the system not exceeding 1000 linear feet, and install a measuring device at the downstream end of the test section. Infiltration shall not exceed the allowable amount specified. If the actual infiltration exceeds the allowable infiltration or if there are visible signs of infiltration such as gushing or spurting streams, the contractor shall effect all repairs necessary to make the pipe sufficiently watertight. The section shall be retested until the rate of allowable infiltration is met.
- 3.2.7. Air testing shall be used instead of the water exfiltration test to measure exfiltration. The section to be tested shall be between consecutive manholes. Each end of pipe, all branches, laterals, and wyes shall be plugged and securely braced. The plug at each end of pipe shall have provision to connect an air hose. Air shall be supplied to the section and monitored so as not to exceed 5.0 PSIG. An independent air gauge and line shall be installed on the opposite plug to the air supply such that the gauge can be read at the ground surface. The air pressure shall be maintained between 4.0 and 3.5 PSIG for at least two minutes to allow air temperature to come to equilibrium with pipe walls. The air supply shall then be disconnected and the air pressure allowed to decrease to 3.5 PSIG. At 3.5 PSIG, the time shall be measured for the pressure to drop to 2.5 PSIG. The following table shows the allowable time for a loss of 1.0 PSIG at an average pressure of 3.0 PSIG.

Pipe Diam. inches	Min. Time, Min:Sec	Length For Min. Time, Ft.	Time for Longer Lengths, Sec.	Specification time for Length (L) Shown, min:sec							
				100ft	150ft	200ft	250ft	300ft	350ft	400ft	450ft
4	3:46	597	0.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	0.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342 L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470 L	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306 L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

If the actual time for a loss 1.0 PSIG is less than the allowable time shown in the above table, the contractor shall determine the source of leakage and effect all repairs necessary to make the pipe sufficiently airtight. The section shall be retested until the allowable time is met or exceeded.

3.2.8. Pipes installed at slopes less than those shown on the drawings shall be reinstalled to the slopes as shown or the contractor shall provide a design report prepared and sealed by a professional engineer showing the theoretical capacity and velocity of the pipe "as installed" based on total energy head and the pipe manufacturer's "N" value. The theoretical "as installed" velocities and capacities shall be submitted to the engineer for evaluation. If the "as installed" theoretical capacity and velocity meet the design requirements the line will be acceptable.

3.2.8.1. If the "as installed" theoretical capacity and velocity do not meet the design requirements, the contractor shall conduct a flow test to determine the velocity and capacity with the pipe flowing one-half full. If the actual velocity and capacity meet the design requirement, the line is acceptable, otherwise the line shall be re-laid to the slope as shown on the drawings.

**** END OF SECTION ****

PART 1 GENERAL

1.1. WORK INCLUDED

- 1.1.1. Requirements for permanent topsoiling, seeding and mulching.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Furnish all labor, materials, and incidentals necessary and place topsoil, finish grade, fertilize, seed, mulch, and maintain all seeded areas within the limits of the working area as shown on the Drawings and all other areas disturbed by the Contractor's operations, as determined by the Engineer and in accordance with these Specifications.

1.3. APPLICABLE REGULATIONS

- 1.3.1. The Contractor shall comply with all applicable Federal, State and Municipal laws and regulations concerning vegetative measures for erosion and sediment control specifically to the publication "New York Guidelines for Urban Erosion and Sediment Control" dated March 1988, and revised October 1991, available from the USDA - Soil Conservation Service, 100 S. Clinton Street, Syracuse, New York 13261-7172, and the publication "New York Standards and Specifications for Erosion and Sediment Control", dated July 2016, available from the New York State Department of Environmental Conservation.

PART 2 PRODUCTS

2.1. MATERIALS

2.1.1. Topsoil

- 2.1.1.1. All topsoil required for the work shall be **screened** and provided by the Contractor. Topsoil shall not be muddy in nature, or have any debris, garbage, brick, asphalt, concrete, sticks or root material within it. Screened topsoil shall not have stones over 1/2" within it, and shall be weed free.

2.1.1.2. Topsoil shall consist of natural surface soil from well drained areas. **Topsoil shall be screened** and have an organic content of not less than 4%, and no greater than 6% by weight and shall have a pH value not lower than 6.0 nor higher than 7.0. Muck soil shall not be considered topsoil. Topsoil shall be typical of the locality, free from stones over ½" in diameter, roots, sticks, trash, peat, weeds, brick, asphalt, concrete, and sod. Topsoil shall have not less than 20% fine textured material (passing the No. 200 sieve), and not more than 15% clay, and not more than 10% gravel. Topsoil containing soluble salts greater than 200 ppm shall not be used.

2.1.1.3. Lime shall be ground limestone containing not less than 85% calcium and magnesium carbonates.

2.1.2. Fertilizer - Fertilizer shall be a commercial fertilizer, 5-10-10 grade. It shall be delivered to the site in the original unopened containers each showing the manufacturer's guaranteed analysis. Store fertilizer so that when used it shall be dry and free flowing.

2.1.3. Seed Mix - Seed shall be from the same or previous year's crop; each variety of seed shall have a percentage of germination not less than 90, a percentage of purity of not less than 85, and shall have not more than 0.5% weed content. All seed shall be furnished in sealed containers bearing the dealer's guaranteed analysis. Seed which has become wet, moldy, or otherwise damaged in transit or in storage is not acceptable. The mixture shall be a sun & shade mix, and consist of seed proportioned by weight % as follows:

	% By Weight
Kentucky Blue Grass	42
Perennial Ryegrass	33
Fine Fescue	35

Seed shall be applied at the rate of either 4 Lbs/1000 square feet depending on the mixture or as directed by the Engineer.

2.1.4. Mulch - Mulch shall consist of hay or straw containing no sticks larger than ¼" in diameter, stone, clay, or other foreign material which, in the judgment of the Engineer, will prevent matting down and eventual decay and decomposition of the mulch necessary for its complete effectiveness. Mulch must contain no growth inhibiting factors and be harmless to plant life, humans and animals. Hay shall be free of noxious weed seeds and shall not be undercured, hot must, moldy, caked, decayed, very dusty, or otherwise distinctly low quality. Straw shall consist of thoroughly threshed wheat, rye or oat stalks. Application rate shall be 2 to 3 tons/acre or as directed by Engineer.

2.2. SITE PREPARATION

- 2.2.1. As needed, install erosion control practices as outlined in Section "Erosion Control", Division 1 and as required in the "New York Standards and Specifications for Erosion and Sediment Control".
- 2.2.2. Complete filling, grading and compacting, as specified, allowing for the 4" of topsoil to be added.
- 2.2.3. Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in areas that are steeper than 5%.
- 2.2.4. Remove refuse, woody plant parts, stones over 1.5" in diameter, and other litter.

PART 3 EXECUTION

3.1. PLACING OF TOPSOIL

- 3.1.1. Topsoil shall be distributed to a uniform depth of 6" to 8" over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes, or over ice, snow, or standing water puddles. Topsoil placed and graded on slopes greater than 5% shall be promptly fertilized, seeded, mulched and stabilized by "tracking" with suitable equipment. After the topsoil is placed and before it is raked to true lines and rolled, lime shall be spread evenly over the topsoil surface and thoroughly broadcast into the topsoil by heavy raking to a depth of 3".

3.2. PLACING OF FERTILIZER

- 3.2.1. Fertilizer shall be uniformly spread and immediately mixed with the upper 2" of topsoil.

3.3. PLACING OF SEED

- 3.3.1. Seed immediately after fertilizing at a rate of 4 lbs/1000 square feet or as directed by the Engineer. Seed shall be uniformly applied and lightly raked into the surface. Sow 50% of the seed in one direction and 50% in the perpendicular direction, then lightly roll the surface once and thoroughly water with a fine spray, taking care not to wash out the seed. No work of this kind shall be done when the air temperature is 32° F or less, or when the ground is frozen. The Contractor shall keep all seeded areas watered and in good condition, reseeding it if and when necessary.

3.4. MULCHING

- 3.4.1. Mulch materials as specified previously shall be furnished, hauled and evenly applied on all seeded areas or as designated by the Engineer. Mulch shall be applied at a rate of not less than 2 tons/acre nor greater than 3 tons/acre unless directed otherwise by Engineer. Mulch may be blown on slopes, the use of cutters in this equipment is permitted to the extent that at least 95% of the mulch in place on the slope shall be 6" or more in length. Mulch shall be applied the same day as seeding occurs.

3.5. WATERING

- 3.5.1. **The Contractor is required to properly water areas on a daily basis, that have been seeded, to ensure growth. The contractor shall take what ever measures are necessary to provide water, including supplying of water through tanker trucks.**

3.6. MAINTENANCE

- 3.6.1. The Contractor is required to repair or replace any seeding or mulching that is defective or becomes damaged for whatever reason. When, in the judgement of the Engineer, such defects or damages are the result of poor workmanship or failure to meet the requirements of the Specifications, then the cost of the necessary repairs or replacement shall be borne by the Contractor.

3.7. GUARANTEE

- 3.7.1. **Grassed areas shall be maintained and guaranteed for a period of 2-years from actual seeding. The Contractor shall replace any seeding or mulching that is defective or becomes damaged during the guarantee period at no additional cost to the Owner.**

PART 4 MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- 4.1.1. Measurement restoration, topsoil, seeding, mulching and watering of disturbed areas shall be Lump Sum.

4.2 PAYMENT

- 4.2.1. Lump Sum price for restoration of lawn and landscaped areas shall include screened topsoil, placing of topsoil, seed, mulch, watering, replacement of wood mulch and plantings if removed, disposal of all wastes, equipment, labor, tools, and all else incidental and necessary to complete the work.

**** END OF SECTION ****

DIVISION 3 - CONCRETE

SECTION 03051
HOT AND COLD WEATHER CONCRETING PROCEDURES

PART 1 GENERAL

1.1. DESCRIPTION

- 1.1.1. Work covered by this section includes the special steps, precautions and procedures to be employed when performing concrete work during hot or cold weather.

1.2. QUALITY ASSURANCE

- 1.2.1. Comply with the requirements of ACI 318 and with the following, except as specifically superseded by these Specifications:
- 1.2.1.1. ACI 305: Recommended Practice for Hot Weather Concreting
 - 1.2.1.2. ACI 306: Recommended Practice for Cold Weather Concreting

PART 3 EXECUTION

3.1 HOT WEATHER CONCRETING

- 3.1.1. Unless otherwise approved by the Engineer, concrete shall not be placed when the temperature is 85°F or greater.
- 3.1.2. When the temperature of the concrete approaches or exceeds 85°F, the recommended practices of ACI 305 shall be employed. All such practices shall be subject to the prior approval of the Engineer.

3.2 COLD WEATHER CONCRETING

- 3.2.1. Minimum temperature of concrete, when placed, shall be 50°F. Unless otherwise approved in writing by the Engineer, concrete shall not be placed when the ambient air temperature is below 40°F. Further, a minimum air temperature of 50°F for five days, or 60°F for three days, shall be maintained.
- 3.2.2. When so approved, the work shall be performed in accordance with ACI 306, and special precautions as set forth herein shall be employed.

- 3.2.3. When, in the opinion of the Engineer, the average ambient temperature is expected to drop below 50°F, adequate enclosure and heating shall be instituted to maintain the above minimum requirements. In addition, if the ambient temperature is expected to be below 40°F, hot water and heated aggregate shall be employed in the mix. Concrete containing ice or frozen aggregate will not be permitted. No salt, calcium chloride, other chemical, or anti-freeze compound may be used for such protection. Where the Contractor wishes to use Type III Cement (High Early Strength) concrete, the previously stated procedures may be varied, subject to review by the Engineer.
- 3.2.4. Before placing concrete in any form or on any surface, or around reinforcement, apply heat in such manner that ice and snow will completely be removed. Place no concrete on subgrade that is frozen or on one that contains frozen materials.

**** END OF SECTION ****

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Work covered by this section includes the furnishing, installation and removal of concrete forms for all cast-in-place concrete shown on the drawings.

1.2. QUALITY ASSURANCE

- 1.2.1. Comply with all the requirements of ACI 318 and in particular, the recommendations of American Concrete Institute publication ACI 347, "Recommended Practice for Concrete Formwork."
- 1.2.2. Design formwork to permit removal without damaging concrete and with sufficient strength and rigidity to sustain the dead weight of liquid concrete, together with other dead loads, live loads and other loads to which it will be subjected, without excessive deflection.
- 1.2.3. Floor and beam centering shall be crowned as required to compensate for form deformations and initial concrete sag when forms are removed.
- 1.2.4. Accurately erect formwork to the lines and dimensions shown on the drawings and straight, true, plumb and square per ACI 347.
- 1.2.5. Use clean, smooth forms, free from nicks, gouges and other defects which may affect appearance or the structural integrity of the concrete or the formwork.
- 1.2.6. Locate all built-in items and penetrations so as not to impair the strength or stability of any structural member of the formwork.

1.3. SUBMITTALS

- 1.3.1. Catalog cuts and technical data on forms, form ties and form releasing agent.

1.4. SCHEDULING

- 1.4.1. Coordinate work to allow complete installation of reinforcing steel, conduits, piping and other items of work.
- 1.4.2. Notify Engineer at least 24 hours prior to the installation of formwork and allow ample time for Engineer to inspect reinforcing steel and all other items of work to be embedded in concrete.

PART 2 PRODUCTS

2.1 MATERIALS

- 2.1.1. Forms -- "Steel-Ply" by Symons Corporation, "Formguard" (Class I High Density Plyform) by Simpson Timber Company or an approved wood or metal equal.
- 2.1.2. Form Ties -- Galvanized, "Waterseal Snap-try" by Richmond Screw Anchor Company, an equivalent manufactured by Burke Concrete Accessories, Inc., or approved equal. After ties have been snapped, the remaining metal shall be no closer than 1/2 inch from the surface.
- 2.1.3. Form Releasing Agent -- "Magic Kote" by Symons Corporation, "Burke Release" by Burke Concrete Accessories, Inc., or an approved equal.
- 2.1.4. Shores and Bracings -- Use metal type adjustable shores for supports generally. Wood shores may be used only in minor areas. Where wood shores are used, shores must be full height, without splices or use of Ellis type clamps and of adequate thickness. Provide adequate diagonal bracing in both longitudinal and transverse directions. In addition, provide adequate diagonal braces at the ends of the formwork. Extend diagonal bracing from the top to the bottom of the shores. Secure shores at the top and wedge at top or bottom, if required. Where shores rest upon the ground, provide mud sills or other bases for the support of the weight to be carried.

PART 3 EXECUTION

3.1 PREPARATION

- 3.1.1. Make all necessary field measurements to ensure precise fit of all items.
- 3.1.2. Clean all forms and coat with form releasing agent prior to each use.

3.2 INSTALLATION

- 3.2.1. Construct forms to be sufficiently tight to prevent leakage of mortar and to be able to withstand all loads without deflecting beyond allowable limits.
- 3.2.2. Set all required waterstops, pipe sleeves, frames, angles, grilles, bolts, inserts and other items required to be embedded or anchored in the concrete. Accurately set anchor bolts with a template.

- 3.2.3. Form corners of columns, girders, beams, walls projecting beyond masonry, and similar exposed corners with a chamfer by inserting 3/4 x 3/4" triangular chamfer strips within the forms, except where the drawings specifically require a chamfer of a different size or state that chamfering is to be omitted.

3.3. REMOVAL OF FORMS

- 3.3.1. Do not remove forms until the concrete has adequately set, sufficient to support its own weight. Forms shall not be removed prior to the Engineer's determination at that time.
- 3.3.2. When the forms are removed from beams and slabs, the Contractor shall immediately place adequate reshores to prevent injury to the concrete by construction loads. These shores shall remain in place for at least 14 days after the day of concrete placement. The responsibility for safe practice in this regard shall be the Contractor's.
- 3.3.3. After stripping, all ties shall be broken off so that they are at least 1 inch inside the face of concrete. The tie packets shall be patched as described in Section 03300, "Cast-in-Place Concrete."

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Work covered by this section includes the furnishing and installation of all concrete reinforcement shown on the drawings.

1.2. QUALITY ASSURANCE

- 1.2.1. Comply with all the requirements of ACI 318 and in particular, the recommendations of American Concrete Institute publication ACI 315, "Manual of Standard Practice for Detailing Reinforced Concrete Structures".

1.3. SUBMITTALS

- 1.3.1. Manufacturer's Certification that reinforcement meets Specification requirements.
- 1.3.2. Shop drawings showing dimensions, spacing, bar and mesh schedule, bending details, stirrup and support details, and other pertinent data and in accordance with ACI 315.

1.4. DELIVERY, STORAGE AND HANDLING

- 1.4.1. All deliveries shall be accompanied by detailed bills of material, which shall include information pertaining to bar size, bar mark, length of bends, total length of bar, weight of individual sets of bars, and total weight delivered for each structure. Bundles shall be color coded.
- 1.4.2. Store reinforcement off the ground, under suitable cover or in a suitable enclosure. Afford easy access for inspection and identification of materials.
- 1.4.3. Maintain all reinforcement free from all dirt, grease, scale, loose rust, oil, paint, other foreign matter and all deleterious materials. Clean all reinforcement as required to meet these conditions, and maintain such clean condition until such time as concrete is placed.

PART 2 PRODUCTS

2.1. MATERIALS

- 2.1.1. Reinforcing Bars -- Deformed bars conforming to ASTM A-615, Grade 60, including Supplementary Requirement S1. All reinforcing bars to be welded shall additionally conform with AWS D12.1 "Reinforcing Steel Welding Code".
- 2.1.2. Reinforcing Wire -- ASTM A-82.
- 2.1.3. Wire Fabric -- ASTM A-185. **Furnish in flat sheets only.**
- 2.1.4. Supporting Devices -- Galvanized or non-rusting type. Where concrete is exposed to view, chairs shall have plastic coated feet.

2.2. FABRICATION

- 2.2.1. Accurately fabricate to the details and dimensions shown on the drawings.
- 2.2.2. All bars shall be bent cold.
- 2.2.3. Bend all reinforcement in accordance with ACI 318.

PART 3 EXECUTION

3.1. INSPECTION/PREPARATION

- 3.1.1. Remove all dirt, oil, grease, paint, loose rust, and other deleterious materials from reinforcing prior to setting. Maintain reinforcing in a good, clean condition.

3.2. INSTALLATION

- 3.2.1. Accurately position all reinforcement and firmly support in place. The system of holding reinforcement in place shall insure that all steel in the top surface will not be able to move during concrete placement and shall, if necessary, support the weight of the workmen without displacement. All reinforcement shall be rigidly wired in place with adequate spacers and tie chairs. Bar supports shall be 3'-0" o.c., maximum and in accordance with ACI Detailing Manual.
- 3.2.2. Follow the bar spacing requirements of ACI, except as superseded by these Specifications and the drawings.

- 3.2.3. For concrete slabs on the ground or fill, support reinforcement on precast concrete bricks of proper thickness, or approved chairs. "Hooking-up" or "Walking-in" of any reinforcement, including mesh, will not be permitted.
- 3.2.4. Protective covers shown on the drawings, or required by ACI Code, shall be rigidly adhered to. Coordinate conduit and insert placement so as to avoid decreasing or increasing protective cover on reinforcement.
- 3.2.5. Unless otherwise shown, all reinforcement shall be continuous, lapped, splices staggered and located away from maximum stress areas. Conform to ACI-318 requirements for Class "C" splices as a minimum.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Work covered by this section includes the furnishing and installation of concrete accessories, including waterstops, expansion joints, built-in fixtures, and related items.

PART 2 PRODUCTS

2.1. EXPANSION JOINTS

- 2.1.1. For Pavements and Sidewalks (and where pre-molded bituminous joint filler is specified): "Flexcell" by Celotex Corp., "Sealtight Asphalt Expansion Joint" by W.R. Meadows, or equal.

2.2. EXPANSION JOINT FILLER

- 2.2.1. For Pavement and Sidewalks: Hot poured rubber asphalt expansion joint sealer, Meadows Sealtight "HI-SPEC," "Servicised Para-Plastic Code 2350" by W.R. Grace, or equal.

2.3. COATING

- 2.3.1. All aluminum in contact with previously placed concrete shall be coated with two coats of Koppers Bitumastic 50, equivalent by Mobil, or equal.
- 2.3.2. All aluminum surfaces to be embedded in or bonded to concrete shall be coated with zinc chromate paint per Aluminum Association recommendations.

PART 3 EXECUTION

3.1. PERFORMANCE

- 3.1.1. Insert expansion joints at the locations specified or as required. Seal shall be applied only on properly cleaned and prepared joint areas, per manufacturer's printed instructions.

** END OF SECTION **

PART 1 GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Work covered by this section includes the furnishing and installation of cast-in-place concrete where specified and as shown on the drawings.

1.2. QUALITY ASSURANCE

- 1.2.1. Comply with all recommendations and requirements of, except as specifically superseded by these Specifications, ACI Publication ACI 318, "Building Code Requirements for Reinforced Concrete," ACI 211, "Recommended Practice for Selecting Proportions for Concrete," and ACI 304, "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete."
- 1.2.2. The Contractor shall be responsible for control of quality and shall therefore perform at his expense whatever tests he may deem necessary, in addition to those specified, to control the quality of the finished product.
- 1.2.3. All testing shall be done by a certified laboratory acceptable to the Engineer. All costs of required testing shall be borne by the Contractor.

1.3. SOURCE QUALITY CONTROL

- 1.3.1. Procure concrete from a single approved central commercial batching plant conforming to "Concrete Plant Standards" of the Concrete Manufacturers Association -- automatic proportioning type.
- 1.3.2. The concrete batching plant, and the raw material, will be subject to inspections and tests performed by the Engineer and/or a testing laboratory chosen by or acceptable to the Engineer.

1.4. DESIGN MIXES

- 1.4.1. At least 35 days prior to the initial placement of concrete, submit concrete design mixes to the Engineer for his approval. Except where otherwise specified, the design of mixes shall be in accordance with ACI 211.1 and shall be prepared by a laboratory retained by the Contractor and acceptable to the Engineer.

- 1.4.2. The Engineer will approve the use of previously established design mixes if all test results, made within the last six months by a recognized testing laboratory, are positive and provide sufficient evidence of full compliance with this Specification. If the Engineer determines that insufficient documentation and test results exist, he may request additional testing, or a new design mix with complete testing.

1.5. SUBMITTALS

- 1.5.1. Name, address and telephone number of concrete supplier and the batching plant.
- 1.5.2. Concrete design mix, material test reports and other data required under paragraph 1.4. "Design Mixes".
- 1.5.3. Catalog cuts, technical data and manufacturer's recommendations on quantities, use and applications of grouts, adhesives, admixtures, hardeners, and other materials proposed for use.

1.6. DELIVERY, STORAGE AND HANDLING

- 1.6.1. Store cement off the ground in a dry, weatherproof, adequately ventilated structure with provisions to prevent the absorption of moisture.
- 1.6.2. Transport dry concrete batches from the central plant to the site in approved truck mixers. Mixers shall conform to the requirements of the Truck Mixer and Agitating Standards of the Truck Mixer Manufacturer's Bureau, with attached manufacturers plate stating capacity and drum speeds, and a drum revolution counter.

1.7. ENVIRONMENTAL REQUIREMENTS

- 1.7.1. Do not place concrete when the ambient temperature is below 40°F or when the concrete temperature exceeds 85°F. Under certain circumstances, the Engineer may approve the placement of concrete under the above conditions, provided the procedures of ACI 305 and ACI 306 are strictly adhered to.

1.8. SCHEDULING

- 1.8.1. Notify the Engineer at least 48 hours in advance of intent to place concrete.

PART 2 PRODUCTS

2.1. CEMENT

- 2.1.1. Type II Portland Cement, ASTM C-150. The cement manufacturer shall be a reputable manufacturer who has been engaged in the production of the specified materials for a period of not less than five years.

2.2. AGGREGATES

2.2.1. Fine Aggregate: ASTM C33, except Section 4.2 thereof.

2.2.2. Course Aggregate: ASTM C33, Class 4S. Course aggregate shall be clean gravel or crushed stone of 1 inch maximum nominal size, if a single design mix is used. At the Contractor's option, two design mixes may be used, with 1" maximum nominal size for concrete 12" thick and under, and 1½" maximum nominal size for concrete over 12" thick.

2.3. ADMIXTURES

2.3.1. Air Entraining: "Darex AREA" by W.R Grace, "Pozzolith MB-VR" by Master Builders, or approved equal. Air entrain all concrete. Air-entraining admixtures shall conform to "specification for air-entraining admixtures for concrete" (ASTM C-260).

2.3.2. Water Reducing: ASTM C-494 -- "Plastocrete" by Sika Chemical Corporation, "Pozzolith N" by Master Builders, or approved equal. Quantity of admixture to be added per sack of cement shall be as recommended by the approved manufacturer for general use and as required to suit actual ambient or mix temperatures. Water-reducing admixtures shall conform to "specification for chemical admixtures for concrete" (ASTM C-494).

2.4. MIXING WATER

2.4.1. Water: Water used in mixing concrete shall be fresh, clean and free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances that may be deleterious to concrete or reinforcement.

2.5. EPOXY BASED PATCHING MATERIAL

2.5.1. "Colma-Dur" by Sika Chemical Corp., "Sta-Crete #15" by Sta-Crete, Inc., or approved equal. Where moisture conditions dictate, use "Sika-Dur" by Sika Chemical Corp., or prime surfaces with "Sta-Crete #15J" by Sta-Crete, Inc., or approved equal.

2.6. NON-SHRINK GROUT

2.6.1. Non-metallic, non-gaseous grout, Meadows "Sealtight 588," Master Builders "Masterflow 713," or approved equal. For equipment bases, non-shrink grout shall be Master Builders "Embeco 636," Unisorb "V-1," or approved equal.

2.7. BONDING COMPOUND

2.7.1. For fresh concrete to hardened concrete "Sika-Dur Hi-Mod" by Sika Chemical Corp., "Weldcrete" by Larsen Products, or approved equal.

- 2.7.2. For hardened concrete to hardened concrete Epoxy bonding material, "Epoxtite Binder" by A.D. Horn, "Prebond ET-140," by Protex Industries, or approved equal.

2.8. CRACK PLUGGING MATERIAL

- 2.8.1. "Sika-Plug" by Sika Chemical Corp., "Water Plug" by Standard Dry Wall Products, "Waterstop" by Larsen Products, or approved equal.

2.9. FLOOR HARDENER

- 2.9.1. "Lapidolith" by Sonneborn, Incorporated, "Hornolith" by A.C. Horn, "Riw Flintox" by Toch Brothers, or approved equal. (Use Floor Hardener for Operations Building floor.)

2.10. CLASS A CONCRETE (all concrete to be Class A except where noted)

- 2.10.1. Compressive Strength: 4000 psi minimum at 28 days – **NO EXCEPTION.**

- 2.10.2. Slump: 4"

- 2.10.3. Air Entrainment: 6% ± TO 1% MAXIMUM

- 2.10.4. Cement/Aggregate Ratio: Such as to produce a mixture which will work readily into the corners and angles of the forms and around reinforcement but without permitting the materials to segregate or excess free water to collect on the surfaces.

- 2.10.5. Water Content: As required and stipulated in the approved design mix. The water content shall not be increased from the amount shown in the design mix unless a corresponding proportion of cement is added (at no cost to the owner).

2.11. MIXING CONCRETE

- 2.11.1. Transmit-mix concrete in accordance with ASTM C94.

- 2.11.2. Transport dry concrete batches from the batching plant and add mixing water at the project site.

- 2.11.3. Mix or agitate at drum speeds within rating plate tolerances, not exceeding the following limits:

- 2.11.3.1. Mixing: 6 rpm minimum to 18 rpm maximum.

- 2.11.3.2. Agitating: 2 rpm minimum to 6 rpm maximum.

- 2.11.4. Continue mixing until a uniform concrete is produced with a minimum of 100 revolutions to the drum, but not more than 160. The use of concrete which cannot be uniformly mixed, by mixing in 15 minutes or less, is prohibited. Mixing time to be at least 1 minute per cubic yard, but at least 5 minutes per load.
- 2.11.5 The time interval between completion of mixing and completion of discharge shall be noted in the table below. If delivery and discharge time is over the maximum time limit, load shall be rejected at Contractor's expense.

Delivery Unit	Type of Place- ment	Maximum Time (min- utes)	Notes (see below)
Non-Agitating (incl. open top units)	All	30	N/A
Agitating - Rotating Drum	Structural	90	1
Agitating - Rotating Drum	Pavement	60	1 & 2

NOTE #1: The concrete will be rejected if there is evidence of setting up in the mixer. the Engineer may reduce the total time limit in hot weather or under unusual conditions if unsatisfactory results are obtained.

NOTE #2: The Engineer may increase the allowable time to 90 minutes maximum for small or irregular sections of pavements where placing and finishing operations can be completed rapidly.

PART 3 EXECUTION

3.1. PREPARATION

- 3.1.1. Remove all wood and wood scraps, sawdust, hardened concrete, construction debris, ice, snow, and other foreign material from between forms and from other areas in which concrete will be placed.
- 3.1.2. Remove water from forms and excavations and divert flows of water to avoid washing over, under or through freshly deposited concrete.

3.2. BUILT-IN ITEMS

- 3.2.1. General: Make all necessary provisions for the forming and setting of all items to be built into concrete work. Locate items so that they will not impair the strength or stability of any structural member.

3.3. PLACING CONCRETE

- 3.3.1. Handle concrete from the mixer to forms as rapidly as possible by methods which shall prevent the separation of ingredients.
- 3.3.2. For any one placement, deposit concrete continuously in layers of such thickness, that no concrete will be deposited on previously placed concrete which has hardened sufficiently to cause the formation of cold joints. Concrete should be deposited vertically in forms, as nearly as possible in its final position, by use of conveyors, chutes, spouts, or other means acceptable to the Engineer. Free fall of concrete mix shall be limited to a maximum vertical drop of 6 feet.
- 3.3.3. Place all concrete with the aid of mechanical vibrators. Vibrators shall be of a type and design reviewed and acceptable to the Engineer, and shall be capable of transmitting to the concrete not less than 3,000 impulses per minute.
- 3.3.4. Apply vibration to the concrete for time intervals of approximately 10 seconds at points not more than 30 inches apart. Do not use vibrators to move concrete horizontally in forms.
- 3.3.5. Before depositing of new concrete on or against concrete which has set, the forms shall be re-tightened and the surface shall be cleaned of all foreign matter and laitance, flushed with water and drained.

3.4. CONSTRUCTION JOINTS

- 3.4.1. Where concrete placement must stop prior to completion of a designated section, construction joints that provide shear keys and bonding dowels shall be provided. Comply with the details shown on the drawings. Such special jointing shall be performed only with the express permission of the Engineer.
- 3.4.2. Plumb bulkheads shall be used at construction joints. They shall be arranged at right angles to the plane of stress and in areas on minimum shear, or where designated on the Plans. The bulkhead shall provide for typical construction joint features as indicated on the drawings. The surface of the concrete shall be thoroughly cleaned and all laitance removed. In addition, vertical joints shall be thoroughly roughened, wetted and drained immediately before placing of new concrete.

- 3.4.3. Provide waterstops at construction joints in watertight construction, and at construction joints of slabs and walls enclosing below-grade dry areas and all wet areas.

3.5. BONDING

- 3.5.1. Construction Joints: Before depositing new concrete against concrete which has set, clean surfaces of the set concrete, remove laitance, foreign matter and loose particles, and thoroughly re-tighten the forms against the previously placed concrete. Roughen, wet and drain all surfaces immediately before placing new concrete.
- 3.5.2. Existing Concrete Surfaces: Before depositing new concrete against existing concrete surfaces, thoroughly clean existing surfaces of all foreign matter and loose particles and coat them with bonding compound in accordance with the approved manufacturer's instructions.

3.6. CONCRETE CURING AND FINISH

- 3.6.1. Permanently exposed (meaning from one foot below designed grade and upward) surfaces shall be left smooth and true and without voids or tie holes, except for occasional small air holes. Immediately upon the removal of forms, rough joints on exposed surfaces shall be ground smooth, rubbed with carborundum blocks, and grout cleaned in an approved manner. After the removal of forms, bring irregular surfaces to reasonable smoothness by rubbing and troweling with an approved, specially prepared bonding concrete application. Tie holes shall be filled as described hereinafter. Plastering to achieve a uniform surface will not be permitted.
- 3.6.2. The surface of all finished concrete shall be kept continuously moist for a period of 7 days. Wet burlap or other means of wet curing acceptable to the Engineer shall be used for curing. Contractor may also use a curing compound. Curing compound shall be able to limit the moisture loss in a 72 hour period to not more than 0.40 kg/m² when tested in accordance with ASTM C156.
- 3.6.3. Once concrete has cured, all exposed concrete surfaces shall have 2 coats of sealer applied to protect concrete from de-icing agents.

3.7. PATCHING CONCRETE

- 3.7.1. General: As soon as forms are removed, patch and repair tie holes, poor joints, voids, stone pockets, and other surface defects.
- 3.7.2. Preparation: Do not do any patching until all honeycomb and laitance have been cut out to solid concrete. If chipping is necessary, chip areas to be patched to a depth of at least 1 inch, with edges regular and perpendicular to the surface, or slightly undercut. Thoroughly wet the prepared areas, including the area 6 inches around each prepared area, just before applying the patching mortar.

- 3.7.3. Mortar: Mortar for patching shall be of the same materials and proportions used for the concrete, except that the coarse aggregate shall be omitted and a sufficient amount of white cement shall be substituted for the grey cement in order to produce a patch whose color matches the surrounding surfaces. Mortar shall not be thicker than 1 part cement to 3 parts sand. Keep mixing water to a minimum. Re-temper mortar, without addition of water, by occasional mixing to prevent setting. Using mortar which has begun to set or is more than one hour old is not permitted.
- 3.7.4. Application of Mortar: Thoroughly compact mortar into place and screen to leave the patch slightly higher than the adjacent surface. Leave undisturbed for one to two hours to permit initial shrinkage before being finally finished to match adjoining work. Patches exceeding 1" in depth should be filled to within 1" of the surface and, after sufficient time has elapsed for shrinkage, final patching shall proceed. Keep all patches wet for at least 5 days.
- 3.7.5. Tie Holes: Except where surfaces will be epoxy coated, solidly fill all holes left by bolts or ties with mortar. Holes passing entirely through the wall shall be filled from the inside face with a device that will force mortar through to the outside face, using a stop held at the outside face to insure complete filling. Holes not passing entirely through walls shall be packed full. Strike off excess mortar flush with a cloth.

3.8. FIELD QUALITY CONTROL

- 3.8.1. **Contractor: Contractor shall be responsible for securing an ACI certified testing laboratory, acceptable to the Engineer, and paying for the following:**
- 3.8.1.1. Sampling Fresh Concrete: Take all samples in accordance with ASTM C172, except that samples of fresh concrete shall be taken from the middle two-thirds of each batch.
- 3.8.1.2. Slump Test: Slump tests, in accordance with ASTM C143, shall be performed for each batch of concrete, when additional water is added, and as directed by the Engineer. Concrete slumps shall not exceed 4". Provide cones and equipment and maintain them at the site whenever concrete is placed. Take slump test for first batch of concrete each day, at least one per truck, at least one per 10 cubic yards and one with each test cylinder.
- 3.8.1.3. Entrained Air Content: Test each batch of concrete in accordance with ASTM C231. Maintain entrained air content to within the limits specified herein. Provide the proper equipment and materials, and perform the tests at the site.

- 3.8.2.4. Compressive Strength: Make and cure one set of four 6" x 12" cylinders in accordance with ASTM C31 for each load of concrete placed. Cylinders shall be labeled in consecutive order and records shall be kept by the Contractor clearly identifying the location in the structure of the concrete for which the samples were taken. The 7 day cylinder test shall indicate a minimum strength equal to 55% for the 28 day design strength for approval of the concrete, in addition to the 28 day requirements. For each set of test cylinders, test one cylinder at 7 days, and one at 28 days.
- 3.8.1.5. Concrete Curing and Testing: If test cylinders are lost or destroyed, or if test cylinder test results yield low compressive strengths, or for any other reason the Engineer questions the adequacy of placed concrete, the concrete shall be cored and tested in accordance with ASTM C42, at no cost to the owner.
- 3.8.1.6. Sampling and Testing: It is mandatory that the approved testing laboratory perform the compressive strength tests, determine the concrete density, slump tests, entrained air tests, and make, cure, and transport concrete test cylinders.
- 3.8.2. **For truck mixed concrete, submit delivery slips to Engineer's field representative showing mix quantities of water, cement, aggregates and admixtures, and the time of departure from plant for each load.**
- 3.8.2. In the event concrete fails to meet the specified strength, air entrainment, or slump, based on test cylinder reports or other investigations as may be deemed necessary by the Engineer, the Engineer may require removal of the relevant concrete and replacement of it in accordance with standard procedures for construction jointing, at no cost to the Owner.
- 3.9. PROTECTION
- 3.9.1. Protect concrete from damage due to sun, rain, flowing water, frost, weather and mechanical injury.
- 3.9.2. Maintain concrete temperature at a minimum of 50°F for not less than 3 days, and do not expose concrete to a temperature below 40°F within 7 days after placement.
- 3.9.3. Do not subject concrete wall to lateral pressures until the supporting members are placed. Contractor is responsible for damage to or misalignment of walls resulting from earth backfilling, trapped water or other causes.
- 3.9.4. Keep wheels and treads of equipment weighing more than 2 tons, and vibratory equipment, a minimum of 8 feet away from any wall until the concrete attains its design strength. Place stake banners to prevent encroachment.

**** END OF SECTION ****

PART 1 GENERAL

1.1. WORK INCLUDED

- 1.1.1. Requirements for providing non-metallic, non-shrink grouts and special grout and mortar.

1.2. SYSTEM DESCRIPTION

- 1.2.1. Grout will be used for the following:
- 1.2.1.1. Patching and repairing existing concrete.
 - 1.2.1.2. Providing firm bearing surfaces.
 - 1.2.1.3. For leveling and aligning equipment and column base plates.

1.3. REFERENCES

- 1.3.1. CRD-C-621 (Corps of Engineers) specification for non-shrink grout.
- 1.3.2. ASTM C-109 - Test for Compressive Strength of Hydraulic Cement Mortars (Using 2" or 50MM Cube Specimens).
- 1.3.3. ASTM C-191 - Test for Time of Setting of Hydraulic Cement by Vicat Needle.
- 1.3.4. ASTM C-827 - Test for Early Volume Change of Cementitious Mixtures.

1.4. QUALITY ASSURANCE

- 1.4.1. Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production acceptable to the engineer. Manufacturer shall certify that materials meet or exceed the requirements herein.

1.5. SUBMITTAL

- 1.5.1. Contractor shall submit shop drawings in accordance with the Section "Shop Drawings and Samples," Division 1.

1.6. DELIVERY, STORAGE AND HANDLING

- 1.6.1. Deliver all materials to the job site in the original unopened containers with all labels intact and legible at time of use. Store only under conditions recommended by the manufacturers. Do not retain on the job site any material which has exceeded the shelf life recommended by its manufacturer.
- 1.6.2. Use all means necessary to protect the materials before, during, and after installation and to protect other work and materials.

PART 2 PRODUCTS

2.1. ACCEPTABLE MANUFACTURERS

- 2.1.1. Grout shall be a product of Euclid Chemical Company, W. R. Grace and Company, U.S. Grout Corp., or equal.

2.2. MATERIALS

- 2.2.1. Grouts: The grout shall be a non-metallic, non-shrink grout which, when mixed with water will harden rapidly to produce a permanent anchoring bond. It shall contain no metals nor rust of corrosion promoting agents. The material shall be prepared in accordance with the manufacturer's recommendation and shall be of a trowelable consistency. It shall also have the following properties:
- 2.2.1.1. The material shall exhibit no (0.00%) shrinkage measured by ASTM C827 in the plastic state but may exhibit slight expansion of no more than 0.02% in accordance with CRD-C 621.
- 2.2.1.2. Compressive strength - two inch cubes of this material when cured as shown shall have the following minimum compressive strengths as measured by ASTM C109.

Cure	Minimum Strength
24-hour air cure at 75°F	4000 PSI
7 day air cure at 75°F	6000 PSI
7 day air, 10 day water submersion	6000 PSI
7 day air, 24 hour water submersion (25 Cycles freeze-thaw)	6000 PSI

- 2.2.1.3. The material shall have a minimum working life of 45 to 60 minutes from the time of the water addition as measured by ASTM C191.

2.2.1.4. Pull-out strength - No. 5 concrete reinforcement bar grouted 6 inches deep in a 7/8-inch diameter hole in saturated surface dried concrete shall have a pull-out strength of 10,000 pounds.

2.2.1.5. The material shall contain not more than 0.05% chlorides or 5% sulfates.

2.2.2. Special Grout and Mortars:

2.2.2.1. Type "A" grout shall be a non-catalyzed natural aggregate, non-shrink grout and shall meet CRD-C-621. It shall be designed for use at fluid consistency, yet non-bleeding and high strength. It shall also be designed so as to be used in a plastic or damp-pack condition. Type "A" grout shall be premixed and used in proportion with water as recommended by the manufacturer.

2.2.2.2. Type "B" mortar shall be a non-shrink catalyzed metallic mortar that produces high strength, and does not need rigid confinement. It shall be premixed and used in proportion with water as recommended by the manufacturer.

2.2.2.3. Type "C" mortar shall be as type "B", but shall provide a high early strength and have optimum air-entrainment for protection against freezing and thawing.

2.2.3. Water: Water shall be clean and free from injurious amounts of oils, acid, alkali, organic matter, or other deleterious substances.

PART 3 EXECUTION

3.1. SURFACE PREPARATION

3.1.1. All defective concrete, laitance, dirt, oil, grease, and loose material shall be removed from the concrete foundation by bush hammering, chipping, or by other means until sound, clean concrete is obtained. The surface of the foundation shall be left reasonably rough but not so rough as to interfere with proper placing of the grout. The area shall then be covered as completely as possible with waterproof paper to prevent contamination prior to grouting.

3.1.2. The bottom of the equipment, column plate, anchor bolts or bridge seats shall be cleaned of all dirt, oil, grease, and loose material; these items shall be aligned and leveled in their final position and maintained in that position during grouting.

- 3.1.3. Special care shall be taken with the grout in hot or cold weather to insure proper setting and gain strength, in accordance with instructions of the manufacturer of the grouting material and by having ice or hot water available as the case may be. Enclosures are to be provided to assist in alleviating aggravating conditions of placement to an extent that the temperature of the grout up until time of set will be in about the range of 60°-80°F. Shields from the sun and high winds shall be provided when required.
- 3.1.4. Prior to grouting, the waterproof paper shall be removed and all loose dirt and foreign matter cleaned away by compressed air or other means. All oil or grease or foreign matter on the surface of the foundation, the bottom of the plate, and in the bolt holes shall be removed. The surface of the foundation slab shall be thoroughly saturated with clean water but all free water shall be removed from the surface of the bolt holes just prior to placing the grout.
- 3.1.5. Care shall be taken that machinery operating nearby does not transmit vibration to the equipment being grouted whereby the normal set, strength and bond of the grouting may be affected.

3.2. FORMS

- 3.2.1. Forms shall be built of materials of adequate strength and shall be securely anchored and shored to withstand the pressure of the grout under working conditions. Forms shall be sufficiently tight to prevent leakage and shall be caulked where necessary. Adequate clearance between forms and plates shall be allowed to work the grout into place properly.

3.3. APPLICATION

- 3.3.1. The grout shall be placed quickly and continuously to avoid undesirable effects of overworking which might result in segregation, bleeding, or breaking down of initial set.
- 3.3.2. The grout shall be placed by whatever means is most practicable, depending on the area to be grouted. The grout may be poured in place, pressure-grouted by gravity, or pumped. The use of pneumatic pressure or dry-packed grouting requires approval of the engineer.
- 3.3.3. Whatever means of placing the grout is employed, it shall be such that the grout will completely fill the space to be grouted, be thoroughly compacted, and free of air pockets.
- 3.3.4. Whenever practicable, grout shall be placed from one side only and forced across to the open side to avoid air-entrapment.

3.4. FINISHING

- 3.4.1. After the grout has acquired its initial set, all exposed edges shall be cut off vertical with the base of the equipment. These shall then be coated with solids (25% minimum) curing compound.
- 3.4.2. Where grout is to extend out beyond the bedplate or where provision must be made for side thrust, the grout which is exposed should be coated with a high solids (25% minimum) curing compound.
- 3.4.3. If leveling devices such as shims are to be removed, they shall not be disturbed for at least 48 hours after the grout has been placed. Shims shall be lightly oiled to prevent bonding to the grout.

** END OF SECTION **