



architects + engineers

CONTRACT AND SPECIFICATIONS

**RIVERHEAD WATER DISTRICT  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NEW YORK**



REHABILITATION OF PLANT NO. 4  
CONTRACT G – GENERAL CONSTRUCTION

Project No: RDWD 1904

**TOWN SUPERVISOR**

Laura Jens-Smith

**TOWN COUNCIL**

Jodi Giglio  
Timothy Hubbard  
Catherine Kent  
James Wooten

**TOWN CLERK**

Diane Wilhelm

**ASSISTANT SUPERINTENDENT**

Thomas Kruger

**AUGUST 2019**

**H2M architects + engineers**

538 Broad Hollow Rd, Melville, NY 11747  
tel 631.756.8000 fax 631.694.4122

[www.h2m.com](http://www.h2m.com)

**TABLE OF CONTENTS****DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

001113	NOTICE TO BIDDERS
002113	INFORMATION FOR BIDDERS
004105	BIDDER'S DECLARATION
004116	PROPOSAL
004313	BID SECURITY
004350	APPROVAL OF SUBCONTRACTORS/SUBCONTRACT LIMITS
004355	INDEMNITY, LIMITATION OF LIABILITY
004519	NON-COLLUSIVE BIDDING CERTIFICATE
004546	VENDOR RESPONSIBILITY QUESTIONNAIRE
004547	IRAN DIVESTMENT ACT CERTIFICATION
004550	QUALIFICATION OF BIDDERS
004555	CONTRACTOR'S RESPONSIBILITY
005209	CONTRACT
007343	WAGE RATES

**DIVISION 01 - GENERAL REQUIREMENTS**

011100	SUMMARY OF WORK
011400	WORK RESTRICTIONS
012100	ALLOWANCES
012300	ALTERNATES
012500	PRODUCT SUBSTITUTION PROCEDURES
012900	PAYMENT PROCEDURES
012973	SCHEDULE OF VALUES
013100	PROJECT MANAGEMENT AND COORDINATION
013119	PROGRESS MEETINGS
013216	CONSTRUCTION SCHEDULE
013300	SUBMITTALS
014100	REGULATORY REQUIREMENTS
014223	SPECIFICATION FORMAT
014500	QUALITY CONTROL
015000	TEMPORARY FACILITIES AND CONTROLS
015719	TEMPORARY ENVIRONMENTAL CONTROLS
016100	BASIC PRODUCT REQUIREMENTS
016500	PRODUCT DELIVERY, STORAGE AND HANDLING
017500	STARTING AND ADJUSTING
017800	CLOSEOUT SUBMITTALS
017823	OPERATING AND MAINTENANCE DATA
017839	PROJECT RECORD DOCUMENTS
017843	SPARE PARTS
017900	DEMONSTRATION AND TRAINING

**DIVISION 02 - EXISTING CONDITIONS**

024130	SELECTIVE STRUCTURAL DEMOLITION
028000	ASBESTOS REMOVAL

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**

061000 ROUGH CARPENTRY  
062000 FINISH CARPENTRY

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

072200 ROOF & DECK INSULATION  
073113 ASPHALT SHINGLES  
075200 MODIFIED BITUMINOUS MEMBRANE ROOFING  
076200 FLASHING AND TRIM  
076300 SHEET METAL SPECIALTIES  
077123 GUTTERS AND DOWNSPOUTS  
079200 JOINT SEALANTS

**DIVISION 08 - OPENINGS**

081500 FIBERGLASS REINFORCED PLASTIC DOORS & FRAMES  
085400 FIBERGLASS WINDOWS  
087100 DOOR HARDWARE

**DIVISION 09 - FINISHES**

095123 ACOUSTICAL TILE CEILINGS  
096716 EPOXY FLUID-APPLIED FLOORING  
099100 PAINTING

**DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)**

230010 GENERAL MECHANICAL REQUIREMENTS  
230555 MECHANICAL SYSTEM IDENTIFICATION  
233416 EXHAUST FANS

The Town Board of Riverhead will receive bids for the Riverhead Water District at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York 11901, until 11:00 AM, on **Thursday, September 12, 2019**, at which time and place all bids will be publicly opened and read aloud for:

**Rehabilitation of Plant No. 4 - Contract G**

**H2M Project No.: RDWD1904**

Plans and specifications may be examined on or after Thursday, August 29, 2019 by visiting the Town of Riverhead website: <http://townofriverheadny.gov> and clicked on "Bid Requests". Plans and specifications are available in electronic format only from the aforementioned website.

Each proposal must be accompanied by a bid bond in the amount of five percent (5%) of the total bid, or a certified check made payable to the TOWN OF RIVERHEAD as assurance that the bid is made in good faith.

The right is reserved to reject any or all bids, to waive any informality, and to accept the lowest responsible bid.

BY ORDER OF THE TOWN BOARD  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NEW YORK

ACTING AS THE GOVERNING BODY  
OF THE RIVERHEAD WATER DISTRICT

TOWN CLERK, TOWN OF RIVERHEAD

**DATED: AUGUST 29, 2019**

**END OF SECTION 001113**

**BIDS FOR PROJECT**

The Town of Riverhead, at the Town Clerk's office, will receive SEALED PROPOSALS for:

**Riverhead Water District  
Rehabilitation of Plant No. 4 - Contract G  
H2M PROJECT NO.: RDWD1904**

**TIME AND PLACE OF BID**

Bids are to be submitted in sealed opaque envelopes and will be received by the Town of Riverhead at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York, not later than **11:00 A.M.** prevailing time, on **September 12, 2019** at which time and place they will be publicly opened and read aloud. Use of the mail shall be at the Bidder's own risk, and the Bidder shall be responsible for physical delivery of the bid at the time and place set for opening of bids.

**BID ENVELOPE**

All proposals and either the certified check or bid bond must be placed in a sealed opaque envelope bearing the Bidder's firm name and address and marked, "PROJECT NO.: RDWD 1904, REHABILITATION OF PLANT NO. 4; CONTRACT G – GENERAL CONSTRUCTION FOR THE RIVERHEAD WATER DISTRICT, TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK", but otherwise unmarked. Bid package shall include Bidder's Declaration (004105), Proposal (004116), Bid Security (004313), Approval of Subcontractors/Subcontract Limits (004350), Non-Collusive Bidding Certificate (004519), Vendor Responsibility Questionnaire (004546), Iran Divestment Act Certification (004547), Qualifications of Bidder (004550).

**PLANS AND SPECIFICATIONS**

Plans and specifications may be examined on or after AUGUST 29, 2019 by visiting the Town of Riverhead website: <http://townofriverheadny.gov> and click on "Bid Requests".

Plans and specifications are available from the aforementioned Town of Riverhead website only. All contractors who intend to submit a bid package are required to register on the web site.

**VERBAL ANSWERS**

The Town Board, its agents, servants or employees, or the Engineer, will not be responsible in any manner for verbal answers to any inquiries regarding the meaning of the contract drawings or Specifications given prior to the awarding of the contract.

**EXAMINATION OF SITE**

Bidders must satisfy themselves by personal examination of the location of the proposed work and of the actual conditions and requirements of the work and shall not, at any time after the submission of a proposal, dispute or complain of such estimate or assert that there was any misunderstanding in regard to the depth or character of excavation to be made or the nature of the work to be done.

**PROPOSAL**

The Proposal contained herein shall be used in preparing bids. Any proposal not in accordance with these instructions or containing bids not asked for may be rejected. While separate prices are required by various items under this contract, it is understood that the contract will be awarded as a whole.

As the estimates of quantities of items included in the Proposal are approximate, bidders must submit their proposals upon the following express conditions, which shall apply to and become part of each proposal received.

Bids will be compared by total amounts, which shall be the sum of the quantities multiplied by the unit price bid for the various items; due consideration being given to lump sum prices bid and for contingent items. Unbalanced bids will not be accepted.

Each bidder shall fill out in ink (in both words and figures) in the spaces provided, its unit or lump sum bid, as the case may be, for each item in the Proposal for which it is submitting a bid. If there is a discrepancy between the prices in words and figures, the prices in words shall govern as unit and lump sum prices.

A bid which does not include bids for all items in the Proposal may not be considered valid.

If the contract is not awarded by the Town Board within ninety (90) days after the receipt of bids, the obligation of the bidder under this Proposal may terminate at its option and it shall thereupon be entitled to a refund of its certified check or release of its bid bond furnished by it as security with its proposal.

### **BID BOND OR CERTIFIED CHECK**

Each proposal from a Contractor shall be accompanied by a bid bond or certified check on a solvent bank of the STATE OF NEW YORK, in the amount of five percent (5%) of the total bid. Such check shall be made payable to TOWN OF RIVERHEAD, RIVERHEAD, NEW YORK, and the amount thereof shall be the measure of liquidated damages which the Town may sustain by failure, neglect or refusal of the bidder to execute and deliver the contract, should the contract be awarded to it. The checks of all unsuccessful bidders will be returned upon the rejection of bids and the awarding of the contract; also, the check of the successful bidder will be returned upon the execution of the contract and the furnishing of the required bond.

### **NAME OF BIDDER**

Each bidder must state, in its proposal, its full name and business address, and the full name of every person, firm or corporation, interested in same, and the address of every person or firm, or president and secretary of every corporation, interested with it.

### **QUALIFICATIONS OF BIDDERS**

(1) The Town Board reserves the right to waive any informalities in, or reject any and all bids. The Board reserves the right to reject any and all bids which do not conform to the Proposal.

(2) All bidders must prove to the satisfaction of the Town Board that they are reputable, reliable and responsible, and that they possess the necessary qualifications (financial, labor, equipment and otherwise) to complete successfully the proposed work.

(3) In determining the qualifications of a bidder, the Town Board will consider its record in the performance of any contracts entered into by it for the work contemplated or of similar nature, may make such investigation as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Board all such information and data for this purpose as the Town Board may request.

(4) The Town Board shall be the sole judge of the qualifications of the bidders and of the merits thereof and reserves the right to reject any bid if the record of the bidder in the performance of contracts, payment of bills and meeting of obligations to subcontractors, material men or employees is not satisfactory to the Town Board, or if the evidence submitted by, or the investigation of, such bidders fails

to satisfy the Town Board that it is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.

### **PERFORMANCE AND MAINTENANCE BOND**

The Contractor shall furnish a Performance Bond, Labor and Materials Bond, and a two (2) year Maintenance Bond each in an amount equal to one hundred (100%) percent of the total contract price as security for its faithful performance of this contract, for the payment of all persons performing labor or furnishing materials in connection with this contract. Such bonds shall also cover any penalties, interest charges and assessments levied by any governmental unit for failure to comply with laws and/or regulations governing public work. The Maintenance Bond shall be an assurance that all work and materials provided under this contract shall be maintained for a minimum period of two (2) years. The Maintenance Bond shall be furnished following final completion, and payment under the contract. The contractor shall be required to furnish all guarantees and warranties of manufacturers of products in connection with this contract, but no manufacturer's limitation of time shall act to limit the responsibility of the contractor or its surety hereunder.

The surety must be licensed in the State of New York and have a BEST A rating, or the surety shall present information satisfactory to the TOWN/DISTRICT to permit the TOWN/DISTRICT to accept the bond.

At the time of submission of bonds or at any time thereafter, the TOWN/DISTRICT may evaluate the surety or sureties proposed, and demand a change of surety if it determines that the financial position of such surety does not provide for a proper protection of the interests of the TOWN/DISTRICT. The TOWN/DISTRICT shall be guided by its legal counsel, and insurance industry consultants in determining proper sureties for TOWN/DISTRICT public works contracts. If the TOWN/DISTRICT notifies the contractor in writing that a surety is unacceptable for any reason, then the contractor shall replace the surety and the bond in question within five (5) business days with a surety and bond deemed suitable by the said TOWN/DISTRICT. The premiums charged for all such bonds shall be a cost of the contractor and not the TOWN/DISTRICT. Upon notice to change surety being forwarded to a contractor, no further payments shall be made until a new bond in proper form naming an acceptable surety is provided.

### **SIGNATURE OF CONTRACTOR**

The bidder to whom a contract may be awarded shall attend at the office of the Town Board, with the sureties offered by it, within seven (7) days, Saturdays and Sundays excepted, after date of notification of the acceptance of its proposal, and there sign the contract in quadripartite for the work and furnish approved security for its performance.

In case of failure to do so, the bidder shall be considered as having abandoned the same, and the check accompanying its proposal shall be forfeited to the Town Board, or the penalty of the bid bond shall be invoked.

### **CONTRACTOR'S INSURANCE**

The Contractor shall not commence any work until it has obtained and had approved by the Town all of the insurance specified and required by the Contract.

The Contractor shall not permit any subcontractor to commence any operation on the site until satisfactory proof of carriage of the above required insurance has been posted with, and approved by, the Town Board.

### **RESPONSIBILITY OF BIDDER**

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress;

and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twenty-four (24) months after date of the Engineer's approval of the final payment request.

### **LABOR RATES**

The Contractor shall pay not less than the minimum hourly wage rates on this contract as established in accordance with Section 220 of the Labor Law, as shown on the Wage Schedule and Prevailing Rate Schedule, either shown on the following pages or the current prevailing rates paid at the time of construction.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: (i) plumbing and gas fitting, (ii) steam heating, hot water heating, ventilating and air conditioning apparatus and (iii) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the owner, upon a showing presented to the owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (e) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

### **APPRENTICESHIP PROGRAM**

Pursuant to Section 816-(b) of the New York Labor Law, the Riverhead Water District has adopted a Resolution related to approved apprenticeship programs. If the successful bidder's bid hereunder exceeds the sum of \$250,000.00, such bidder shall, prior to entering into a contract with the District, be required to have an appropriate apprenticeship agreement that has been registered with and approved by the Commissioner of the New York State Labor Department of Labor pursuant to the requirements found in Article 23 of the New York Labor Law. Any subcontractors under this contract shall also, in all respects, comply with these provisions.

### **COMPLETION OF WORK**

Work is required to be completed to the satisfaction of the Engineer, and in substantial accordance with the Specifications hereunto annexed and the Plans therein referred to and the Change Orders amended to the Contract.

### **RESPONSIBILITY OF CONTRACTOR**

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twenty-four (24) months after its completion and acceptance. Any progress payments made by the Town during the completion of this contract by the Contractor shall not be a waiver of the foregoing provision.

**TOWN BOARD  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NEW YORK**

**END OF SECTION 002113**

TO THE TOWN COUNCIL

RIVERHEAD WATER DISTRICT

For the furnishing and installation of materials for all work included under contract as follows:

Made this day of \_\_\_\_\_, by

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BIDDER'S DECLARATION:

The party named as Bidder declares that the only person or persons interested in this bid or proposal as principal or principals is or are named herein; and that no other person than herein named has any interest in this proposal or in the contract proposed to be taken; that this bid or proposal is made without any connections with any other person and persons making a bid or proposal for the same purpose; that the bid or proposal is in all respects fair and without collusion or fraud; that it has examined the site of the work, the contract and specifications and the drawings referred to; and has read the Information for Bidders hereto attached; and it proposed and agrees, if this proposal is accepted, it will contract in the form as approved to perform all the work mentioned in said contract and specifications; and it will accept in full payment therefore the following sums to wit.

**END OF SECTION 004105**

Board:

The undersigned hereby offers to furnish all labor, equipment, materials and appurtenances for **Rehabilitation of Plant No. 4; Contract G – General Construction**, all in accordance with the plans and specifications prepared by H2M architects + engineers for the following individual and lump sum prices:

**ITEM 1 – BONDS AND INSURANCE**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 2 – DIVISION 1 – GENERAL REQUIREMENTS**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 3 – DIVISION 1 – GENERAL ALLOWANCE**

(Written in Words): Five Thousand Dollars and 00 Cents (\$ 5,000.00 )

**ITEM 4 – DIVISION 2 – SELECTIVE DEMOLITION WORK**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 5 – DIVISION 2 – ASBESTOS REMOVAL**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 6 – DIVISION 6 – ROUGH AND FINISH CARPENTRY**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 7 – DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 8 – DIVISION 8 – OPENINGS**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 9 – DIVISION 9 – FINISHES**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 10 – EXHAUST FANS, ADAPTORS & RELATED WORK**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 11 – LIGHTING & MISCELLANEOUS ELECTRICAL WORK**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 12 – PROJECT RECORD DOCUMENTS**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ITEM 13 – PROJECT CLOSE OUT**

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

TOTAL BASE BID ( ITEMS 1 – 13 ) CONTRACT G – GENERAL CONSTRUCTION WORK  
(written in words) \_\_\_\_\_ (\$ \_\_\_\_\_ )

**Note: The RIVERHEAD WATER DISTRICT is exempt from Federal, New York State and local taxes. TOTAL AMOUNT BID shall be exclusive of all taxes.**

**ALTERNATES**

All work included under this heading shall be subject to the general conditions of the project. All construction, workmanship and finishes required by the alternates shall be as specified in the applicable Sections of the Specification's manual.

The undersigned proposes and agrees that should the following alternates be accepted and included in the contract; the amount of the TOTAL BASE BID will be revised as follows. The undersigned further agrees that should the following Alternates be accepted, the alternate bid prices indicated shall be held and honored for a period of one year from the date of contract signing.

**ADD ALTERNATE NO. 1:** Prepare existing concrete slab in Room 101 and provide new epoxy fluid applied flooring in accordance with Section 096716.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 2:** Prepare existing CMU walls in Room 101 and provide new epoxy paint in accordance with Section 099100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 3:** Prepare existing concrete slab in Room 102 and provide new epoxy fluid applied flooring in accordance with Section 096716.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 4:** Prepare existing CMU walls in Room 102 and provide new epoxy paint in accordance with Section 099100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 5:** Prepare existing concrete slab in Room 103 and provide new epoxy fluid applied flooring in accordance with Section 096716.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 6:** Prepare existing CMU walls in Room 103 and provide new epoxy paint in accordance with Section 099100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 7:** Prepare existing CMU walls in Room 104 and provide new epoxy paint in accordance with Section 099100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 8:** Prepare existing concrete slab in Pipe Trenches 001 & 002 and provide new epoxy fluid applied flooring in accordance with Section 096716.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 9:** Prepare existing concrete walls in Pipe Trench 001 & 002 and provide new epoxy paint in accordance with Section 099100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 10:** Remove and dispose of existing door and frame #102B; scrape, prep, prime and paint existing steel lintel; install new FRP door, frame and hardware in accordance with Sections 024130, 099100, 085100 and 087100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

**ADD ALTERNATE NO. 11:** Remove and dispose of existing door and frame #103; scrape, prep, prime and paint existing steel lintel; install new FRP door, frame and hardware in accordance with Sections 024130, 099100, 085100 and 087100.

(Written in Words): \_\_\_\_\_ (\$ \_\_\_\_\_ )

The Board of the Riverhead Water District reserves the right to award this contract based on either the total bid or any combination of bid items, as may be in the best interest of the Riverhead Water District. The award shall be made to the lowest responsible bidder based upon the bid items awarded. The Board reserves the right to reject any or all bids. The Board reserves the right to award this contract within forty-five (45) days of the bid opening.

Within ten (10) consecutive calendar days after the date of the Notice of Award, the bidder shall execute the contract and furnish the required bonds and insurances. The Notice to Proceed will be issued after the contract has been executed by the Owner.

All work shown and specified in the contract documents and included in this bid shall be completed within one hundred twenty (120) consecutive calendar days from the date of the Notice to Proceed.

Failure of the contractor to complete all work within the specified time will subject him to liquidated damages as set forth in the contract, in the sum of five hundred dollars (\$500.00) per day, commencing with the 121st day from the date of the Notice to Proceed.

In addition to liquidated damages, specific damages will be assessed and deducted from amounts otherwise due the contractor for additional inspection and contract management time required to be expended by the Engineer should the project be completed beyond the contract completion date. Such deduction shall be in accordance with the billing rates and fees established between H2M and the Riverhead Water District.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: I) plumbing and gas fitting, II) steam heating, hot water heating, ventilating and air conditioning apparatus, and III) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of

subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the Owner, upon a showing presented to the Owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (E) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable, or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

The contractor shall coordinate all work with the Owner to minimize disturbances to Owner operations.

The bidder represents herewith that he is aware of the working conditions, has carefully reviewed the proposal and specifications, has checked and certifies the accuracy of the bid.

The undersigned hereby acknowledges receipt of the following addenda (if any):

ADDENDUM NO.	DATED
_____	_____
_____	_____
_____	_____

Each proposal shall be accompanied by either a certified check drawn on a solvent bank with an office in the State of New York, or a bid bond equal to five percent (5%) of the total amount of the bid and payable to the Riverhead Water District. The certified check or bid bond shall specify which contract it accompanies.

**SECURITY ENCLOSED FOR THIS SECTION  
(BASE BID PLUS CONTINGENCY ITEMS)**

**YES / NO  
(Circle One)**

**PROPOSAL CERTIFICATION**

This Bid is hereby submitted by:

BIDDER: \_\_\_\_\_

BIDDER'S ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

FEDERAL I.D. NO. OR  
SOCIAL SECURITY NO.: \_\_\_\_\_

Telephone number where the contractor or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but within 24 hours of being contacted.

DAY: \_\_\_\_\_ NIGHT: \_\_\_\_\_

EMERGENCY: \_\_\_\_\_ FAX: \_\_\_\_\_

EMAIL: \_\_\_\_\_

Acknowledgement that the Qualification of Bidders section has been fully completed/executed.

---

SIGNATURE	PRINT NAME	TITLE	DATE
-----------	------------	-------	------

**END OF SECTION 004116**

Enclosed is a certified check or bid bond for five percent (5%) of the total amount of the bid as required in the foregoing "Information for Bidders".

The Bidder hereby agrees to appear with its sureties at the office of the Attorney for the Riverhead Water District, within ten (10) calendar days (weekends excepted) after due notice from the Board of the Town of Riverhead that the Contract has been awarded to it and is ready for signature; such notice to be given in writing within ninety (90) days of opening of the bids (unless a moving fee is contained on the Proposal pages, and then the last time interval of any moving fee contained on the Proposal pages); and, on the signing of such Contract by the Bidder, to furnish the indemnifying bonds as provided in the Contract Documents.

The Bidder hereby further agrees that in the event of its failure or refusal to enter into a contract in accordance with this bid within ten (10) calendar days (weekends excepted) after due notice from the Town Board that the Contract has been awarded to it and is ready for signature, as given in accordance with the Contract Documents and/or its failure to execute and deliver the bond for the full amount of the Contract price, as provided in said Contract Documents, the Bidder's check or bid bond which is herewith deposited with the Town Board shall (at the option of said Board) become due and payable as ascertained and liquidated damages for such default; otherwise, said check or bid bond will be returned to the undersigned.

The full names and residences of all persons and parties interested in the foregoing bid as principals are as follows:

<u>NAME</u>	<u>ADDRESS</u>
_____	_____
_____	_____
_____	_____

NAME OF BIDDER: \_\_\_\_\_

BUSINESS ADDRESS OF BIDDER: \_\_\_\_\_

Telephone number where the bidder or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but no later than twenty four (24) hours:

DAY: \_\_\_\_\_ EVENING: \_\_\_\_\_

DATED AT: \_\_\_\_\_ THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_\_

**END OF SECTION 004313**

**Riverhead Water District**

**Suffolk County, New York**

Bidders shall submit to the Owner the names of the Subcontractors which the Bidder proposes to use on the project. The Owner reserves the right to disapprove the use of any proposed subcontractor and in such event the Bidder shall submit the name of another Subcontractor in the like manner and in the time specified by the Owner. Such disapproval shall not result in additional costs to the Owner. The Owner reserves the right to reject any bid if the name of the proposed Subcontractors, or additional subcontractor information, is not submitted as required.

**BIDDER:**

FIRM NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PREPARED BY: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION 004350**

**1.0 - INDEMNITY**

The Contractor and all subcontractors performing work in connection with this Contract shall HOLD HARMLESS, INDEMNIFY and DEFEND the Owner and Engineer, their consultants and each of their officers, agents and employees from any liability, claims, losses or damage including reasonable costs of defense arising out of or alleged to arise from the Contractor's or subcontractor's negligence in the performance of the work described in the Contract Documents, but not including liability that may be due to the sole negligence of the Owner, the Engineer or their officers, agents and employees.

**2.0 - LIMITATION OF LIABILITY**

The Contractor and all subcontractors agree to limit the liability of the Owner and the Engineer due to the Engineer's professional negligent errors or omissions such that the total aggregate liability of the Engineer to those named shall not exceed Fifty Thousand Dollars (\$50,000) or five percent (5%) of the Contract award amount, whichever is greater.

**3.0 - NO CLAIM FOR DELAY**

The Contractor and all subcontractors agree to HOLD HARMLESS from any and all claims for loss or damages of any nature against the Owner or Engineer for delays in commencement, performance or completion of the Contract, regardless of whether said delays are, or may be, caused by the Owner, Engineer or any governmental agency.

**END OF SECTION 004355**

**NON-COLLUSIVE BIDDING CERTIFICATE**

Pursuant to Section 103-D of the General Municipal Law, the Contractor makes the following statement under penalty of perjury, and by submission of this bid or proposal, the Bidder certifies that:

(a) this bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor or potential competitor; (b) this bid or proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the opening of the bids or proposals for this project to any other bidder, competitor or potential competitor; (c) no attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal; (d) the person signing this bid or proposal certified that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder as well as to the person signing in its behalf; (e) attached hereto (if a corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signatory of the bid or proposal on behalf of the corporate bidder.

Resolved that

\_\_\_\_\_

(Name of Corporation)

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

Rehabilitation of Plant No. 4 ; Contract G – General Construction

(Name of Project)

and to include in such bid or proposal the certificate as to non-collusion required by Section 103-D of the General Municipal Law as the act and deed of said corporation; and for any inaccuracies or misstatements in such certificate, this corporate bidder shall be liable under the penalties of perjury.

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

at a meeting of its Board of Directors held on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

(Seal of the Corporation)

Secretary: \_\_\_\_\_

Respectfully submitted,

FIRM NAME: \_\_\_\_\_

FIRM ADDRESS: \_\_\_\_\_

\_\_\_\_\_  
SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION 004519**

Vendor Responsibility Questionnaire begins on the following page.

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

You have selected the For-Profit Construction questionnaire, commonly known as the “CCA-2,” which may be printed and completed in this format or, **for your convenience, may be completed online using the [New York State VendRep System](#).**

### COMPLETION & CERTIFICATION

The person(s) completing the questionnaire must be knowledgeable about the vendor’s business and operations. An owner or official must certify the questionnaire and the signature must be notarized.

### NEW YORK STATE VENDOR IDENTIFICATION NUMBER (VENDOR ID)

The Vendor ID is a ten-digit identifier issued by New York State when the vendor is registered on the Statewide Vendor File. This number must now be included on the questionnaire. If the business entity has not obtained a Vendor ID, contact the IT Service Desk at [ITServiceDesk@osc.state.ny.us](mailto:ITServiceDesk@osc.state.ny.us) or call 866-370-4672.

### DEFINITIONS

All underlined terms are defined in the “New York State Vendor Responsibility Definitions List,” found at <http://www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf>. These terms may not have their ordinary, common or traditional meanings. Each vendor is strongly encouraged to read the respective definitions for any and all underlined terms. By submitting this questionnaire, the vendor agrees to be bound by the terms as defined in the "New York State Vendor Responsibility Definitions List" existing at the time of certification.

### RESPONSES

Every question must be answered. Each response must provide all relevant information which can be obtained within the limits of the law. However, information regarding a determination or finding made in error which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required. Individuals and Sole Proprietors may use a Social Security Number but are encouraged to obtain and use a federal Employer Identification Number (EIN).

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT CONSTRUCTION (CCA-2)**

BUSINESS ENTITY INFORMATION				
<u>Legal Business Name</u>		<u>EIN</u> _____		
Address of the <u>Principal Place of Business</u> (street, city, state, zip code)		<u>New York State Vendor Identification Number</u>		
		Telephone ext.	Fax	
		Website		
Authorized Contact for this Questionnaire				
Name		Telephone ext.	Fax	
Title		Email		
Additional <u>Business Entity</u> Identities: If applicable, list any other <u>DBA</u> , <u>Trade Name</u> , <u>Former Name</u> , Other Identity, or <u>EIN</u> used in the last five (5) years, the state or county where filed and the status (active or inactive).				
Type	Name	EIN	State or County where filed	Status

I. BUSINESS CHARACTERISTICS				
1.0 <u>Business Entity</u> Type – Check appropriate box and provide additional information:				
a) <input type="checkbox"/> <u>Corporation</u> (including <u>PC</u> )	Date of Incorporation			
b) <input type="checkbox"/> <u>Limited Liability Company</u> ( <u>LLC</u> or <u>PLLC</u> )	Date Organized			
c) <input type="checkbox"/> <u>Limited Liability Partnership</u>	Date of Registration			
d) <input type="checkbox"/> <u>Limited Partnership</u>	Date Established			
e) <input type="checkbox"/> <u>General Partnership</u>	Date Established	County (if formed in NYS)		
f) <input type="checkbox"/> <u>Sole Proprietor</u>	How many years in business?			
g) <input type="checkbox"/> Other	Date Established			
If Other, explain:				
1.1 Was the <u>Business Entity</u> formed in New York State?				<input type="checkbox"/> Yes <input type="checkbox"/> No
If “No,” indicate jurisdiction where the <u>Business Entity</u> was formed:				
<input type="checkbox"/> United States	State			
<input type="checkbox"/> Other	Country			

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

<b>I. BUSINESS CHARACTERISTICS</b>			
1.2 Is the <u>Legal Business Entity</u> publicly traded?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
If “Yes,” provide the <u>CIK code</u> or Ticker Symbol:			
1.3 Is the <u>Business Entity</u> currently <u>registered to do business in New York State</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<i>Note: Select “Not Required” if the Business Entity is a Sole Proprietor or General Partnership</i>			
If “No,” explain why the <u>Business Entity</u> is not required to be <u>registered to do business in New York State</u> :			
1.4 Is the responding <u>Business Entity</u> a <u>Joint Venture</u> ? Note: If the submitting <u>Business Entity</u> is a <u>Joint Venture</u> , also submit a separate questionnaire for each <u>Business Entity</u> comprising the <u>Joint Venture</u> .	<input type="checkbox"/> Yes <input type="checkbox"/> No		
1.5 If the <u>Business Entity’s Principal Place of Business</u> is not in New York State, does the <u>Business Entity</u> maintain an office in New York State?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<i>(Select “N/A” if <u>Principal Place of Business</u> is in New York State.)</i>			
If “Yes,” provide the address and telephone number for one office located in New York State.			
1.6 Is the Business Entity a New York State certified <u>Minority-Owned Business Enterprise</u> , or <u>Women-Owned Business Enterprise</u> , or <u>New York State Small Business</u> , or federally certified <u>Disadvantaged Business Enterprise</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
If “Yes,” check all that apply:			
<input type="checkbox"/> New York State certified <u>Minority-Owned Business Enterprise</u> (MBE)			
<input type="checkbox"/> New York State certified <u>Women-Owned Business Enterprise</u> (WBE)			
<input type="checkbox"/> <u>New York State Small Business</u>			
<input type="checkbox"/> Federally certified <u>Disadvantaged Business Enterprise</u> (DBE)			
1.7 Identify each person or business entity that is, or has been within the past five (5) years, <u>Principal Owner</u> of 5.0% or more of the firm’s shares; a Business Entity Official; or one of the five largest shareholders, if applicable. <i>(Attach additional pages if necessary.)</i>			
<u>Joint Ventures</u> : Provide information for all firms involved.			
Name <i>(For each person, include middle initial)</i>	Title	Percentage of ownership (Enter 0%, if not applicable)	Employment status with the firm
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT CONSTRUCTION (CCA-2)**

II. AFFILIATE and JOINT VENTURE RELATIONSHIPS		
2.0 Are there any other <u>construction</u> -related firms in which, now or in the past five years, the submitting <u>Business Entity</u> or any of the individuals or business entities listed in question 1.7 either owned or owns 5.0% or more of the shares of, or was or is one of the five largest shareholders or a director, officer, partner or proprietor of said other firm? ( <i>Attach additional pages if necessary.</i> )		<input type="checkbox"/> Yes <input type="checkbox"/> No
Firm/Company Name	Firm/Company EIN (If available)	Firm/Company's Primary Business Activity
Firm/Company Address		
Explain relationship with the firm and indicate percent of ownership, if applicable (enter N/A, if not applicable):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting <u>Business Entity</u> has in common with this firm?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name ( <i>Include middle initial</i> )	Position/Title with Firm/Company	
2.1 Does the <u>Business Entity</u> have any <u>construction</u> -related <u>affiliates</u> not identified in the response to question 2.0 above? ( <i>Attach additional pages if necessary.</i> )		<input type="checkbox"/> Yes <input type="checkbox"/> No
Affiliate Name	Affiliate EIN (If available)	Affiliate's Primary Business Activity
Affiliate Address		
Explain relationship with the affiliate and indicate percent of ownership, if applicable ( <i>enter N/A, if not applicable</i> ):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting Business Entity has in common with this affiliate?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name ( <i>Include middle initial</i> )	Position/Title with Firm/Company	
2.2 Has the <u>Business Entity</u> participated in any <u>construction-related Joint Ventures</u> within the past three (3) years? ( <i>Attach additional pages if necessary.</i> )		<input type="checkbox"/> Yes <input type="checkbox"/> No
Joint Venture Name	Joint Venture EIN (If available)	Identify parties to the Joint Venture

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

### III. CONTRACT HISTORY

3.0 Has the Business Entity completed any construction contracts?  Yes  No

*If "Yes," list the ten most recent construction contracts the Business Entity has completed using Attachment A – Completed Construction Contracts, found at [www.osc.state.ny.us/vendrep/documents/questionnaire/ac3294s.doc](http://www.osc.state.ny.us/vendrep/documents/questionnaire/ac3294s.doc).*

*If less than ten, include most recent subcontracts on projects up to that number.*

3.1 Does the Business Entity currently have uncompleted construction contracts?  Yes  No

*If "Yes," list all current uncompleted construction contracts by using Attachment B – Uncompleted Construction Contracts, found at [www.osc.state.ny.us/vendrep/documents/questionnaire/ac3295s.doc](http://www.osc.state.ny.us/vendrep/documents/questionnaire/ac3295s.doc).*

*Note: Ongoing projects must be included.*

### IV. INTEGRITY – CONTRACT BIDDING

*Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:*

4.0 Been suspended or debarred from any government contracting process or been disqualified on any government procurement?  Yes  No

4.1 Been subject to a denial or revocation of a government prequalification?  Yes  No

4.2 Had any bid rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid?  Yes  No

4.3 Had a proposed subcontract rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid?  Yes  No

4.4 Had a low bid rejected on a government contract for failure to make good faith efforts on any Minority-Owned Business Enterprise, Women-Owned Business Enterprise or Disadvantaged Business Enterprise goal or statutory affirmative action requirements on a previously held contract?  Yes  No

4.5 Agreed to a voluntary exclusion from bidding/contracting with a government entity?  Yes  No

4.6 Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity?  Yes  No

*For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, project(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.*

### V. INTEGRITY – CONTRACT AWARD

*Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:*

5.0 Defaulted on or been suspended, cancelled or terminated for cause on any contract?  Yes  No

5.1 Been subject to an administrative proceeding or civil action seeking specific performance or restitution (except any disputed work proceeding) in connection with any government contract?  Yes  No

5.2 Entered into a formal monitoring agreement, consent decree or stipulation settlement as specified by, or agreed to with, any government entity?  Yes  No

5.3 Had its surety called upon to complete any contract whether government or private sector?  Yes  No

5.4 Forfeited all or part of a standby letter of credit in connection with any government contract?  Yes  No

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

### V. INTEGRITY – CONTRACT AWARD

**Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:**

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity/owners involved, project(s), contract number(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

### VI. CERTIFICATIONS/LICENSES

**Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:**

- |  |  |
|--|--|
| 6.0 Had a revocation or <u>suspension</u> of any business or professional permit and/or license?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6.1 Had a denial, decertification, revocation or forfeiture of New York State certification of <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> or a federal certification of <u>Disadvantaged Business Enterprise</u> status, for other than a change of ownership? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

### VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

**Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:**

- |  |  |
|--|--|
| 7.0 Been the subject of a criminal <u>investigation</u> , whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law?   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 7.1 Been the subject of:<br>(i.) An indictment, grant of immunity, <u>judgment</u> or conviction (including entering into a plea bargain) for conduct constituting a crime; or<br>(ii.) Any criminal <u>investigation</u> , felony indictment or conviction concerning the formation of, or any business association with, an allegedly false or fraudulent <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> , or a <u>Disadvantaged Business Enterprise</u> ? | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br><input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.2 Received any <u>OSHA</u> citation, which resulted in a final determination classified as <u>serious</u> or <u>willful</u> ?  | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 7.3 Had a <u>government entity</u> find a willful prevailing wage or supplemental payment violation?   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 7.4 Had a New York State Labor Law violation deemed willful?   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 7.5 Entered into a consent order with the New York State Department of Environmental Conservation, or a <u>federal</u> , state or local government enforcement determination involving a violation of <u>federal</u> , state or local environmental laws?  | <input type="checkbox"/> Yes <input type="checkbox"/> No   |

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

### VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

*Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:*

<p>7.6 Other than previously disclosed, been the subject of any <u>citations</u>, notices or violation orders; a pending administrative hearing, proceeding or determination of a violation of:</p> <ul style="list-style-type: none"> <li>• <u>Federal</u>, state or local health laws, rules or regulations;</li> <li>• <u>Federal</u>, state or local environmental laws, rules or regulations;</li> <li>• Unemployment insurance or workers compensation coverage or <u>claim</u> requirements;</li> <li>• Any labor law or regulation, which was deemed willful;</li> <li>• Employee Retirement Income Security Act (ERISA);</li> <li>• <u>Federal</u>, state or local human rights laws;</li> <li>• <u>Federal</u>, state or local security laws?</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

*For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.*

*Note: Information regarding a determination or finding made in error, which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required.*

### VIII. LEADERSHIP INTEGRITY

*If the Business Entity is a Joint Venture Entity, answer "N/A - Not Applicable" to questions in this section.*

*Within the past five (5) years has any individual previously identified or any individual currently or formerly having the authority to sign, execute or approve bids, proposals, contracts or supporting documentation on behalf of the Business Entity with any government entity been:*

<p>8.0 <u>Sanctioned</u> relative to any business or professional permit and/or license?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<p>8.1 <u>Suspended, debarred or disqualified</u> from any <u>government contracting process</u>?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<p>8.2 The subject of a criminal <u>investigation</u>, whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<p>8.3 Charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime or subject to a judgment for:</p> <p style="padding-left: 20px;">(i.) Any business-related activity, including but not limited to fraud, coercion, extortion, bribe or bribe-receiving, giving or accepting unlawful gratuities, immigration or tax fraud, racketeering, mail fraud, wire fraud, price-fixing or collusive bidding; or</p> <p style="padding-left: 20px;">(ii.) Any crime, whether or not business-related, the underlying conduct of which related to truthfulness, including but not limited to the filing of false documents or false sworn statements, perjury or larceny</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

*For each "Yes," provide an explanation of the issue(s), the individual involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.*

## NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

<b>IX. FINANCIAL AND ORGANIZATIONAL CAPACITY</b>		
9.0 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> received any <u>formal unsatisfactory performance assessment(s)</u> from any <u>government entity</u> on any contract?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the <u>government entity</u> involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.1 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liquidated damages</u> assessed over \$25,000?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the contracting party involved, the amount assessed and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.2 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liens, claims or judgments</u> over \$25,000 filed against the <u>Business Entity</u> which remain undischarged or were unsatisfied for more than 90 days? (Note: Including but not limited to tax warrants or liens. Do not include UCC filings.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the Lien holder or Claimants' name(s), the amount of the <u>lien(s)</u> and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.3 In the last seven (7) years, has the <u>Business Entity</u> or any <u>affiliate</u> initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If "Yes," provide the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the bankruptcy chapter number, the court name and the docket number. Indicate the current status of the proceedings as "Initiated," "Pending" or "Closed." Provide answer below or attach additional sheets with numbered responses.</i>		
9.4 What is the <u>Business Entity's</u> Bonding Capacity?		
a. Single Project	b. Aggregate (All Projects)	
9.5 List <u>Business Entity's</u> Gross Sales for the previous three (3) Fiscal Years:		
1st Year (Indicate year ) Gross Sales	2nd Year (Indicate year ) Gross Sales	3rd Year (Indicate year ) Gross Sales
9.6 List <u>Business Entity's</u> Average Backlog for the previous three (3) fiscal years: (Estimated total value of uncompleted work on outstanding contracts)		
1st Year (Indicate year ) Amount	2nd Year (Indicate year ) Amount	3rd Year (Indicate year ) Amount
9.7 Attach <u>Business Entity's</u> most recent annual <u>financial statement</u> and accompanying notes or complete Attachment C – Financial Information, found at <a href="http://www.osc.state.ny.us/vendrep/documents/questionnaire/ac3296s.xls">www.osc.state.ny.us/vendrep/documents/questionnaire/ac3296s.xls</a> . (This information must be attached.)		

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT CONSTRUCTION (CCA-2)**

**X. FREEDOM OF INFORMATION LAW (FOIL)**

10.0 Indicate whether any information provided herein is believed to be exempt from disclosure under the Freedom of Information Law (FOIL).  
*Note: A determination of whether such information is exempt from FOIL will be made at the time of any request for disclosure under FOIL. Attach additional pages if necessary.*

Yes  No

*If "Yes," indicate the question number(s) and explain the basis for the claim.*

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
FOR-PROFIT CONSTRUCTION (CCA-2)**

**Certification**

The undersigned: (1) recognizes that this questionnaire is submitted for the express purpose of assisting New York State government entities (including the Office of the State Comptroller (OSC)) in making responsibility determinations regarding award or approval of a contract or subcontract and that such government entities will rely on information disclosed in the questionnaire in making responsibility determinations; (2) acknowledges that the New York State government entities and OSC may, in their discretion, by means which they may choose, verify the truth and accuracy of all statements made herein; and (3) acknowledges that intentional submission of false or misleading information may result in criminal penalties under State and/or Federal Law, as well as a finding of non-responsibility, contract suspension or contract termination.

**The undersigned certifies that he/she:**

- is knowledgeable about the submitting Business Entity’s business and operations;
- has read and understands all of the questions contained in the questionnaire;
- has not altered the content of the questionnaire in any manner;
- has reviewed and/or supplied full and complete responses to each question;
- to the best of his/her knowledge, information and belief, confirms that the Business Entity’s responses are true, accurate and complete, including all attachments, if applicable;
- understands that New York State government entities will rely on the information disclosed in the questionnaire when entering into a contract with the Business Entity; and
- is under an obligation to update the information provided herein to include any material changes to the Business Entity’s responses at the time of bid/proposal submission through the contract award notification, and may be required to update the information at the request of the New York State government entities or OSC prior to the award and/or approval of a contract, or during the term of the contract.

Signature of Owner/Official \_\_\_\_\_

Printed Name of Signatory \_\_\_\_\_

Title \_\_\_\_\_

Name of Business \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_;

\_\_\_\_\_ Notary Public

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT A – COMPLETED CONSTRUCTION CONTRACTS**

**NYS Vendor ID:**

**Vendor Name:**

<b>Question 3.0: List the ten most recent construction contracts the Business Entity has completed. If less than ten, include most recent subcontracts on projects up to that number:</b>						
<b>1.</b>	Agency/Owner		Award Date	Amount	Date Completed	
	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
<b>2.</b>	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable		
	Agency/Owner		Award Date	Amount	Date Completed	
<b>3.</b>	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable		
<b>4.</b>	Agency/Owner		Award Date	Amount	Date Completed	
	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
<b>5.</b>	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable		
	Agency/Owner		Award Date	Amount	Date Completed	
<b>6.</b>	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable		
<b>7.</b>	Agency/Owner		Award Date	Amount	Date Completed	
	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
<b>8.</b>	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable		
	Agency/Owner		Award Date	Amount	Date Completed	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT A – COMPLETED CONSTRUCTION CONTRACTS**

**NYS Vendor ID:**

**Vendor Name:**

<b>Question 3.0: List the ten most recent construction contracts the Business Entity has completed. If less than ten, include most recent subcontracts on projects up to that number:</b>						
Agency/Owner	Telephone No.	Designer Architect and /or Design Engineer	Award Date	Amount	Date Completed	
<b>6.</b>	Contact Person					
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	
<b>7.</b>	Agency/Owner					
	Contact Person		Designer Architect and /or Design Engineer			
<b>8.</b>	Contact Person					
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	
<b>9.</b>	Agency/Owner					
	Contact Person		Designer Architect and /or Design Engineer			
<b>10.</b>	Contact Person					
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	
<b>10.</b>	Agency/Owner					
	Contact Person		Designer Architect and /or Design Engineer			
<b>10.</b>	Contact Person					
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT B – UNCOMPLETED CONSTRUCTION CONTRACTS**

**Vendor Name:**

**NYS Vendor ID:**

<b>Question 3.1: List all current uncompleted construction contracts:</b>									
<b>1.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount		
<b>2.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount		
<b>3.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount		
<b>4.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount		

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT B – UNCOMPLETED CONSTRUCTION CONTRACTS**

**Vendor Name:**

**NYS Vendor ID:**

<b>Question 3.1: List all current uncompleted construction contracts:</b>									
<b>5.</b>	Agency/Owner	Designer Architect and /or Design Engineer		Award Date	Completion Date				
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable					
		Total Contract Amount		Amount Sublet to others	Uncompleted Amount				
<b>6.</b>	Agency/Owner	Designer Architect and /or Design Engineer		Award Date	Completion Date				
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable					
		Total Contract Amount		Amount Sublet to others	Uncompleted Amount				
<b>7.</b>	Agency/Owner	Designer Architect and /or Design Engineer		Award Date	Completion Date				
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable					
		Total Contract Amount		Amount Sublet to others	Uncompleted Amount				
<b>8.</b>	Agency/Owner	Designer Architect and /or Design Engineer		Award Date	Completion Date				
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable	EIN of JV, if applicable					
		Total Contract Amount		Amount Sublet to others	Uncompleted Amount				

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT B – UNCOMPLETED CONSTRUCTION CONTRACTS**

**Vendor Name:**

**NYS Vendor ID:**

<b>Question 3.1: List all current uncompleted construction contracts:</b>										
<b>1.</b>	Agency/Owner			Award Date		Completion Date				
	Contact Person	Telephone No.		Designer Architect and /or Design Engineer						
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable					
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount			
<b>2.</b>	Agency/Owner			Award Date		Completion Date				
	Contact Person	Telephone No.		Designer Architect and /or Design Engineer						
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable					
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount			
<b>3.</b>	Agency/Owner			Award Date		Completion Date				
	Contact Person	Telephone No.		Designer Architect and /or Design Engineer						
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable					
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount			
<b>4.</b>	Agency/Owner			Award Date		Completion Date				
	Contact Person	Telephone No.		Designer Architect and /or Design Engineer						
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable					
			Total Contract Amount		Amount Sublet to others		Uncompleted Amount			

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT B – UNCOMPLETED CONSTRUCTION CONTRACTS**

**Vendor Name:**

**NYS Vendor ID:**

<b>Question 3.1: List all current uncompleted construction contracts:</b>									
<b>5.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount	Amount Sublet to others		Uncompleted Amount			
<b>6.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount	Amount Sublet to others		Uncompleted Amount			
<b>7.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount	Amount Sublet to others		Uncompleted Amount			
<b>8.</b>	Agency/Owner			Designer Architect and /or Design Engineer		Award Date	Completion Date		
	Contact Person	Telephone No.							
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable				
			Total Contract Amount	Amount Sublet to others		Uncompleted Amount			

**NEW YORK STATE  
VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT B – UNCOMPLETED CONSTRUCTION CONTRACTS**

**Vendor Name:**

**NYS Vendor ID:**

<b>Question 3.1: List all current uncompleted construction contracts:</b>						
<b>9.</b>	Agency/Owner			Award Date	Completion Date	
	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	
		Total Contract Amount	Amount Sublet to others	Uncompleted Amount		
<b>10.</b>	Agency/Owner			Award Date	Completion Date	
	Contact Person	Telephone No.	Designer Architect and /or Design Engineer			
	Contract No.	Prime or Sub	Joint Venture (JV) Name, if applicable		EIN of JV, if applicable	
		Total Contract Amount	Amount Sublet to others	Uncompleted Amount		

<b>Grand Total All Uncompleted Contracts</b>	<b>\$0.00</b>
--	---------------

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT C - FINANCIAL INFORMATION**

NYS Vendor ID: \_\_\_\_\_

As of Date: \_\_\_\_\_

**ASSETS**

Current Assets

1. Cash		\$	-	
				_____
2. Accounts receivable - less allowance for doubtful accounts	\$	-		
Retainers included in accounts receivable	\$	-		
Claims included in accounts receivable not yet approved or in litigation	\$	-		
Total Accounts Receivable	\$	-		
				_____
3. Notes receivable - due within one year	\$	-		
				_____
4. Inventory - materials	\$	-		
				_____
5. Contract costs in excess of billings on uncompleted contracts	\$	-		
				_____
6. Accrued income receivable				
Interest	\$	-		
Other (list) _____	\$	-		
_____	\$	-		
Total Accrued Income Receivable	\$	-		
				_____
7. Deposits				
Bid and Plan _____	\$	-		
Other (list) _____	\$	-		
_____	\$	-		
Total Deposits	\$	-		
				_____
8. Prepaid Expenses				
Income Taxes	\$	-		
Insurance	\$	-		
Other (list) _____	\$	-		
_____	\$	-		
Total Prepaid Expenses	\$	-		
				_____
9. Other Current Assets				
Other (list) _____	\$	-		
_____	\$	-		
Total Other Current Assets	\$	-		
				_____
10. Total Current Assets				\$ _____
11. Investments				
Listed securities-present market value	\$	-		
Unlisted securities-present value	\$	-		
Total Investments				\$ _____

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT C - FINANCIAL INFORMATION**

NYS Vendor ID: \_\_\_\_\_

12. Fixed Assets

Land	\$	-	
Building and improvements	\$	-	
Leasehold improvements	\$	-	
Machinery and equipment	\$	-	
Automotive equipment	\$	-	
Office furniture and fixtures	\$	-	
Other (list) _____	\$	-	
	\$	-	
<b>Total</b>			\$ -
Less: Accumulated depreciation			\$ -
<b>Total Fixed Assets - Net</b>			\$ -

13. Other Assets

Loans receivable			
Officers	\$	-	
Employees	\$	-	
Shareholders	\$	-	
Cash surrender value of officers' life insurance	\$	-	
Organization expense – net of amortization	\$	-	
Notes receivable - due after one year	\$	-	
Other (list) _____	\$	-	
	\$	-	
<b>Total Other Assets</b>			\$ -

14. TOTAL ASSETS

\$ -

---

\$ -

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT C - FINANCIAL INFORMATION**

NYS Vendor ID: \_\_\_\_\_

**LIABILITIES**

Current Liabilities

15. Accounts payable	\$	-	
16 a. Loans from shareholders - due within one year	\$	-	
16 b. Other Loans - due within one year	\$	-	
17. Notes payable - due within one year	\$	-	
18. Mortgage payable - due within one year	\$	-	
19. Other payables - due within one year			
Other (list) _____	\$	-	
_____	\$	-	
_____			
Total Other Payables - due within one year	\$	-	
20. Billings in excess of costs and estimated earnings	\$	-	
21. Accrued expenses payable			
Salaries and wages	\$	-	
Payroll taxes	\$	-	
Employees' benefits	\$	-	
Insurance	\$	-	
Other	\$	-	
Total Accrued Expenses Payable	\$	-	
22. Dividends payable	\$	-	
23. Income taxes payable			
State	\$	-	
Federal	\$	-	
Other	\$	-	
Total Income Taxes Payable	\$	-	
24. Total current liabilities	\$	-	
25. Deferred income taxes payable			
State	\$	-	
Federal	\$	-	
Other	\$	-	
Total Deferred Income Taxes	\$	-	
26. Long Term Liabilities			
Loans from shareholders - due after one year	\$	-	
Other Loans - due within one year			
Principle	\$	-	
Interest	\$	-	
Notes payable - due after one year	\$	-	
Mortgage - due after one year	\$	-	
Other payables - due after one year	\$	-	
Other (list) _____	\$	-	
_____	\$	-	
_____			
Total Long Term Liabilities	\$	-	

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE  
ATTACHMENT C - FINANCIAL INFORMATION**

NYS Vendor ID: \_\_\_\_\_

27. Other Liabilities			
Other (list) _____	\$	-	
_____	\$	-	
Total Other Liabilities _____	\$	-	
28. TOTAL LIABILITIES			\$ _____

**NET WORTH**

29. Net Worth (if proprietorship or partnership)			\$ _____
30. Stockholders' Equity			
Common stock issued and outstanding	\$	-	
Preferred stock issued and outstanding	\$	-	
Retained earnings	\$	-	
Total	\$	-	
Less: Treasury stock	\$	-	
31. TOTAL STOCKHOLDERS' EQUITY			\$ _____
32. TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY			\$ _____

**END OF SECTION 004546**

**IRAN DIVESTMENT ACT CERTIFICATION**

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 its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law.

Dated: \_\_\_\_\_

\_\_\_\_\_  
(Name of corporation or partnership)

\_\_\_\_\_  
(Signature of Individual)

\_\_\_\_\_  
(Officer stating title) (Partner)

\_\_\_\_\_  
(Print Name of Individual)

**END OF SECTION 004547**

**Riverhead Water District  
Suffolk County, New York**

The Owner may make such investigation as the Owner deems necessary to determine the responsibility of any Bidder or to determine the ability of any Bidder to perform the Work. Bidders shall furnish to the Owner all information and data required by the Owner, including complete financial data, within the time and in the form and manner required by the Owner. The Owner reserves the right to reject any bid if the evidence required by the Owner is not submitted as required or if the evidence submitted by or the investigation of any Bidder fails to satisfy the Owner that the Bidder is responsible, or is able or qualified to carry out the obligations of the Contract or to complete the Work as contemplated. At the discretion of the Owner, any bidder may be required to complete and submit the enclosed New York State Vendor Responsibility Questionnaire to assist in determining the bidder's qualifications.

The following is a list showing the name of the Owner, Location, Date of Construction, General Description of Work, Amount of the Contract and Contract Period for projects of similar nature in size, construction method and construction procedure, which have been completed by the undersigned as the prime contractor, and which have been in operation for a period of not less than one year, (minimum of five such projects).

**PROJECT NO. 1**

Owner: \_\_\_\_\_

Contact Name and Phone Number: \_\_\_\_\_

Location: \_\_\_\_\_

General Description: \_\_\_\_\_

Contract Amount: \_\_\_\_\_

Contract Period: \_\_\_\_\_

**PROJECT NO. 2**

Owner: \_\_\_\_\_

Contact Name and Phone Number: \_\_\_\_\_

Location: \_\_\_\_\_

General Description: \_\_\_\_\_

Contract Amount: \_\_\_\_\_

Contract Period: \_\_\_\_\_

**PROJECT NO. 3**

Owner: \_\_\_\_\_

Contact Name and Phone Number: \_\_\_\_\_

Location: \_\_\_\_\_

General Description: \_\_\_\_\_

Contract Amount: \_\_\_\_\_

Contract Period: \_\_\_\_\_

**PROJECT NO. 4**

Owner: \_\_\_\_\_

Contact Name and Phone Number: \_\_\_\_\_

Location: \_\_\_\_\_

General Description: \_\_\_\_\_

Contract Amount: \_\_\_\_\_

Contract Period: \_\_\_\_\_

**PROJECT NO. 5**

Owner: \_\_\_\_\_

Contact Name and Phone Number: \_\_\_\_\_

Location: \_\_\_\_\_

General Description: \_\_\_\_\_

Contract Amount: \_\_\_\_\_

Contract Period: \_\_\_\_\_

The following is a list of the major areas of construction work under this contract to be performed by subcontractors to the bidder, showing the Type of Work and the name of the Owner, Location and Date of Construction for work of similar nature in size, construction method and construction procedure, which have been completed by the undersigned, and which have been in operation for a period of not less than one year, (minimum of five such projects).

**Subcontractor Name:** \_\_\_\_\_

**Type of Work:** \_\_\_\_\_

<u>Owner</u>	<u>Contact Name</u>	<u>Phone Number</u>	<u>Location</u>	<u>Contract Amount</u>

**Subcontractor Name:** \_\_\_\_\_

**Type of Work:** \_\_\_\_\_

<u>Owner</u>	<u>Contact Name</u>	<u>Phone Number</u>	<u>Location</u>	<u>Contract Amount</u>

**Subcontractor Name:** \_\_\_\_\_

**Type of Work:** \_\_\_\_\_

<u>Owner</u>	<u>Contact Name</u>	<u>Phone Number</u>	<u>Location</u>	<u>Contract Amount</u>

**Subcontractor Name:** \_\_\_\_\_

**Type of Work:** \_\_\_\_\_

<u>Owner</u>	<u>Contact Name</u>	<u>Phone Number</u>	<u>Location</u>	<u>Contract Amount</u>

The Riverhead Water District reserves the right to reject any and all bids which do not include a completed qualifications section and/or do not meet the necessary qualifications criteria, for both prime contractor and subcontractors, as described within this qualifications section, for construction work to be performed and completed as required by the contract documents.

**BIDDER**

FIRM NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PREPARED BY: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION 004550**

It is the Contractor's responsibility to inform the Engineer in advance when a situation arises that forces the Contractor to cancel work for a given day. For example, if the Contractor informs the Engineer that he will be on the job on a certain day and then has to cancel the appointment because he cannot obtain certain materials or equipment, it is the Contractor's responsibility to inform the Engineer of these latest developments and to let him know that construction observation services will not be needed for that day.

In the event that the Engineer is not given ample warning of such a cancellation and, as a result, unnecessary time is spent sending field personnel out to the project site to observe the previously scheduled construction, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for his wasted time.

By the same token, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for any services rendered in the field or in the office regarding work that had to be performed a second time due to substandard work on the part of the Contractor on the original work.

**END OF SECTION 004555**

CONTRACT IN QUADRUPLICATE FOR \_\_\_\_\_ AT  
TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK, dated \_\_\_\_\_, 20\_\_\_\_, BY  
AND BETWEEN THE TOWN BOARD OF THE TOWN OF RIVERHEAD, SUFFOLK COUNTY,  
NEW YORK, acting for and in behalf of the RIVERHEAD WATER DISTRICT (herein called the  
TOWN \_\_\_\_\_ DISTRICT), \_\_\_\_\_ and

\_\_\_\_\_ herein called the CONTRACTOR).

WITNESSETH, that the TOWN DISTRICT and the CONTRACTOR, in consideration of the premises and of the mutual covenants, considerations and agreements herein contained, agree as follows:

This Contract is hereby awarded to the CONTRACTOR for the work and material called for under his bid in the Proposal section of the Contract and designated as Items:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

and if required by the District Engineers, Items: \_\_\_\_\_

\_\_\_\_\_

for the sum of: \_\_\_\_\_

\_\_\_\_\_(\$ \_\_\_\_\_ )

for the unit and/or lump sum price(s) as listed in the Proposal herein.

1. CONTRACT DOCUMENTS AND DEFINITIONS

The Notice to Bidders, Information for Bidders, Proposal, General Conditions, Contract, Specifications and Plans, together with any Addenda, shall form part of this Contract, and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The titles, headings, headlines and marginal notes contained herein are solely to facilitate reference to the various provisions of the contract documents and in no way affect, limit or cast light upon the interpretation of the provisions to which they refer. Whenever the term "contract documents" is used, it shall mean and include this Contract, the Plans, Specifications, any Addenda, and the Notice to Bidders, Information for Bidders, General Conditions and Proposal. In case of any conflict or inconsistency between the provisions of the Contract and those of the Specifications, the provisions of the Contract shall govern.

WORK: The term WORK, as used herein, refers to all of the work proposed to be accomplished at the site of the project and all such other work as is in any manner required to accomplish the completed project, and includes all plant, labor, materials, supplies, equipment and other facilities and acts necessary or proper for or incidental to the carrying out and completion of the terms of this Contract. The term WORK PERFORMED shall be construed to include material delivered to and suitably stored at the site of the project.

EXTRA WORK: The term EXTRA WORK, as used herein, refers to and includes all work required by the TOWN DISTRICT which, in the judgment of the Engineer, with the Town's approval, involves changes in or additions to work required by the Plans, Specifications and any Addenda in their present form.

SUBCONTRACTOR: The term SUBCONTRACTOR, as used herein, shall mean any person, firm or corporation applying labor and material for work at the site of the project, but not including the parties to this Contract.

ENGINEER: In the performance of the work, the TOWN DISTRICT shall be represented by its Consulting Engineer H2M architects + engineers (herein called the ENGINEER).

NOTICE: The term NOTICE, as used herein, shall mean and include written notice. Written notice shall be deemed to have been duly served when delivered to, or at the last known business address of, the person, firm or corporation for whom intended or to his, their, or its duly authorized agents, representatives or officers, or when enclosed in a postage prepaid wrapper or envelope addressed to such person, firm, or corporation at his, their, or its last known business address and deposited in a United States Mail Box.

DIRECTED, REQUIRED, APPROVED, ACCEPTABLE: Whenever they refer to the work, or its performance, "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of like import shall imply the direction, requirement, permission, order,

designation or prescription of the Engineer, and "approved", "satisfied", or "satisfactory", "in the judgment of", and words of like import, shall mean approved or acceptable to, or satisfactory to, in the judgment of the Engineer.

2. SCOPE OF THE WORK

The Contractor will furnish all plant, labor, material, supplies, equipment and other facilities and things necessary or proper for or incidental to, the work contemplated by this Contract as required by, and in strict accordance with, the applicable Plans, Specifications and Addenda prepared by the Engineer and/or required by and in strict accordance with, such changes as are ordered and approved pursuant to this Contract, and will perform all other obligations imposed on him by the Contract.

3. COMPENSATION TO BE PAID TO THE CONTRACTOR

A. Agreed Prices: It is understood and agreed that the Contractor will accept as payment in full the summation of products, of the actual quantities in place upon the completion of the work, as determined by the Engineer's measurements by the unit prices bid, no allowance being made for anticipated profit or for reason of variations from the estimated quantities set forth in the Proposal.

B. Extra Work and/or Changes: The TOWN DISTRICT may, at any time, by a written order, and without notice to the sureties, require the performance of such extra work or changes in the work as it may find necessary or desirable. The amount of compensation to be paid to the Contractor for any extra work, as so ordered, shall be determined as follows:

- (1) By such applicable unit prices, if any, as set forth in the contract; or
- (2) If no such unit prices are set forth, then by unit prices or by a lump sum mutually agreed upon by the TOWN DISTRICT and the Contractor; or
- (3) If no such unit prices are set forth, and if the parties cannot agree upon unit prices or a lump sum, then by actual net cost in money to the Contractor of the materials, permits, wages, or applied labor, premium for Workers' Compensation Insurance, payroll taxes required by law, rental for plant and equipment used (excluding small tools) to which total cost will be added 20 percent as full compensation for all other items of profit, costs and expenses, including administration, overhead, superintendence, insurance, insurance other than Workers' Compensation Insurance, material used in temporary structures,

allowances made by the Contractor to subcontractors, additional premiums upon the Performance Bond of the Contractor and the use of small tools.

4. TIME OF ESSENCE

Inasmuch as the provisions of this Contract relating to the time for performance and completion of the work are for the purpose of enabling the TOWN DISTRICT to proceed with the construction of a public improvement, in accordance with a predetermined program, such provisions are of the essence of this Contract.

5. COMMENCEMENT OF WORK

The Contractor agrees that he will commence work within ten (10) consecutive calendar days after signing this Contract, and that the day he commences work shall constitute the first of the consecutive calendar days allowed for completion of the work.

6. TIME FOR COMPLETION

The time for completion of this Contract shall be within the number of calendar days stated in the Bid Proposal and the date of such completion shall be the date of the certificate of completion hereinafter specified.

The TOWN DISTRICT reserves the right to order the Contractor to suspend operations when, in the opinion of the Engineer, improper weather conditions make such action advisable, and to order the Contractor to resume operations when weather and ground conditions permit. The days during which such suspension of work is in force are not chargeable against the specified completion time.

7. LIQUIDATED DAMAGES FOR DELAY

The time limit being essential to and of the essence of this Contract, the Contractor hereby agrees that the TOWN DISTRICT shall be, and is hereby authorized to deduct and retain out of the money which may be due or may become due to said Contractor under this agreement, the sum of FIVE HUNDRED DOLLARS (\$500.00) per day, which amount is hereby agreed upon, fixed and determined by the parties hereto as the LIQUIDATED DAMAGES, including overhead charges, services, inspector's wages, and interest on the money invested, that the TOWN DISTRICT will suffer by reason of such default, for each and every day during which the aforesaid work may be incomplete over and beyond the time herein stipulated for its

completion, provided, however, that the TOWN DISTRICT shall have the right to extend the time for the completion of said work.

8. EXTENSIONS OF TIME - NO WAIVER

If the Contractor shall be delayed in the completion of his work by reason of unforeseeable causes beyond his control and without his fault or negligence, including but not restricted to Acts of God or of any public enemy, acts or neglect of the TOWN DISTRICT, acts or neglect of any other Contractor, fires, floods, epidemics, quarantine restrictions, strikes, riots, civil commotion or freight embargoes, the period herein above specified for completion of his work shall be extended by such time as shall be fixed by the TOWN DISTRICT.

No such extension of time shall be considered a waiver by the TOWN DISTRICT of its right to terminate the Contract for abandonment or delay by the Contractor as hereinafter provided or relieve the Contractor from full responsibility for performance of his obligations hereunder.

9. CONTRACT SECURITY

A. The Contractor shall furnish a Performance Bond in an amount equal to one hundred percent (100%) of the total contract price as security for the faithful performance of this Contract, and for the payment of all persons performing labor or furnishing materials in connection with this Contract.

B. Additional or Substitute Bond - If, at any time, the TOWN DISTRICT shall be or become dissatisfied with any surety or sureties, then upon the Performance Bond, or if, for any other reason, such bond shall cease to be adequate security to the TOWN DISTRICT, the Contractor shall, within five (5) days after notice from the TOWN DISTRICT, substitute an acceptable bond in such form and sum, and signed by such other surety as may be satisfactory to the TOWN DISTRICT. The premiums on such bonds shall be paid by the Contractor. No further payments shall be deemed due, nor shall be made until the new surety shall have been qualified.

C. Prior to release of the Performance Bond, the Contractor shall deliver to the TOWN DISTRICT a Maintenance Bond equal to one hundred percent (100%) of the total Contract price, including all extras. This Maintenance Bond shall remain in full force and effect for a period of one (1) year after the date of the Engineer's approval of the final payment request and such bond, which shall be executed by the Contractor and issued by a reliable, solvent surety company authorized to do business in the State of New York shall guarantee to the TOWN DISTRICT that the Contractor shall promptly remedy any defects or faults that may occur within twelve (12) months after completion and acceptance of the work performed by the Contractor pursuant to this Contract.

10. CONTRACTOR'S INSURANCE

The Contractor shall not commence any work until he has obtained and had approved by the TOWN DISTRICT all of the insurance required under this Contract, as enumerated herein:

Compensation Insurance

Public Liability and Property Damage Insurance

Contractor's Protective Liability and Property Damage Insurance

Owner's (TOWN DISTRICT) and Engineer's Protective Public Liability and Property Damage Insurance

Automobile Public Liability and Property Damage Insurance

The Contractor shall not permit any subcontractor to commence any operation on the site until satisfactory proof of carriage of the above required insurance has been posted with, and approved by, the TOWN DISTRICT.

A. Compensation Insurance - The Contractor shall take out and maintain, during the life of this Contract, Workers' Compensation Insurance for all of his employees employed at the site of the project, and in any case of any of the work being sublet, the Contractor shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

B. Public Liability and Property Damage Insurance - The Contractor shall take out and maintain during the life of this Contract such Public Liability and Property Damage Insurance as shall protect him and any subcontractor performing work covered by this Contract for claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from operations under this Contract, whether such operations be by himself or by any subcontractor, or by any one directly or indirectly employed by either of them, and the amounts of such insurance shall be as follows:

- (1) Public Liability Insurance in the amount not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000.) for bodily injuries, including wrongful death to any one person, and subject to the same limit for each person in

an amount not less than ONE MILLION DOLLARS (\$1,000,000.) on account of one accident.

- (2) Property Damage Insurance in an amount not less than ONE HUNDRED THOUSAND DOLLARS (\$100,000.) for damages on account of any one accident and in an amount of not less than TWO HUNDRED THOUSAND DOLLARS (\$200,000.) for damages on account of all accidents.

C. Liability and Property Damage Insurance - The above policies for public liability and property damage insurance must be so written as to include Contractor's Protective Liability and Property Damage Insurance to protect the Contractor against claims arising from the operations of any subcontractor.

D. Owner's Protective Public Liability and Property Damage Insurance - (TOWN DISTRICT, and/or TOWN BOARD, TOWN OF RIVERHEAD as OWNER and/or H2M architects + engineers as ENGINEERS) - The Contractor shall furnish to the TOWN DISTRICT with respect to the operations he or any of his subcontractors perform, a regular Protective Public Liability Insurance Policy for and in behalf of the TOWN DISTRICT and/or TOWN BOARD, TOWN OF RIVERHEAD as OWNER and/or H2M architects + engineers, as ENGINEERS, providing for a limit of not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000.) for all damages arising out of bodily injuries to, or death of, one person and subject to that limit for each person, a total limit of ONE MILLION DOLLARS (\$1,000,000.) for all damages arising out of bodily injuries to, or death of, two or more persons in any one accident; and regular Protective Property Damage Insurance providing for a limit of not less than ONE HUNDRED THOUSAND DOLLARS (\$100,000.) for all damages arising out of injury to, or destruction of, property in any one accident and subject to that limit per accident a total (or aggregate) limit of TWO HUNDRED THOUSAND DOLLARS (\$200,000.) for all damages arising out of injury to, or destruction of property during the policy period. The insurance must fully cover the legal liability of the TOWN DISTRICT and/or TOWN BOARD, TOWN OF RIVERHEAD as OWNER and/or H2M architects + engineers, as ENGINEERS. The coverage provided under this policy must not be affected if the TOWN DISTRICT performs work in connection with the project either for, or in cooperation with, the Contractor or as an aid thereto, whether the same be a part of the Contract or separate therefrom, by means of its own employees or agents, or if the TOWN DISTRICT directs or supervises the work to be performed by the Contractor.

E. Automobile Public Liability and Property Damage Insurance - The Contractor shall take out and maintain during the life of the Contract such automobile public liability and property damage insurance as shall protect him and any subcontractor performing work covered by this Contract from claims for damages for personal injury, including accidental death as well as from claims for property damage which may arise from operations under this Contract, whether such operations be by himself or by any subcontractor, or by any one directly or indirectly employed by either of them and the amounts of such insurance shall be as follows:

- (1) Automobile Public Liability Insurance in an amount not less than FIVE HUNDRED THOUSAND DOLLARS (\$500,000.) for bodily injuries,

including wrong-ful death by any one person, and subject to the same limit for each person in an amount not less than ONE MILLION DOLLARS (\$1,000,000.) on account of one accident.

- (2) Automobile Property Damage Insurance in an amount of not less than ONE HUNDRED THOUSAND DOLLARS (\$100,000.) for damages on account of any one accident and in an amount of not less than TWO HUNDRED THOUSAND DOLLARS (\$200,000.) for damages on account of all accidents.

#### 11. PROOF OF CARRIAGE OF INSURANCE

The Contractor shall furnish the TOWN DISTRICT with certificates of each insurer insuring the Contractor or any subcontractor under this Contract, except with respect to subdivision D. of paragraph 10. In respect to this paragraph, the Contractor shall furnish the TOWN DISTRICT with the original insurance policy and a copy to the Engineer.

Both certificates, as furnished, and the insurance policy, as required, shall bear the policy numbers, the expiration date of the policy and the limit or limits of liability thereunder. Both the certificates and the policy shall be further endorsed to provide the TOWN DISTRICT and Engineer with any notice of cancellation at least ten (10) days prior to the actual date of such cancellation.

#### 12. COMPLIANCE WITH LABOR AND PENAL LAWS

The Contractor hereby expressly agrees to comply with all the provisions of the Labor Law and any and all amendments thereto, insofar as the same are applicable to this Contract. The Labor Laws, as amended, provide that no laborer, worker or mechanic in the employ of the Contractor, subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by this Contract, shall be permitted or required to work more than eight (8) hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood, or danger to life or property; that no such person shall be employed more than eight (8) hours in any day or more than five (5) days in any week, except in such emergency; that the wages to be paid for a legal day's work as hereinbefore defined, to laborers, workers, or mechanics upon the work called for under this Contract, or for any materials used upon or in connection therewith shall not be less than the prevailing rate for a day's work in the same trade or occupation in the locality within the State where such work is to be done and each laborer, worker, or mechanic employed by the Contractor, subcontractor, or other person about or upon the work shall be paid the wages herein provided; that employees engaged in the construction outside the limits of cities and villages are no longer exempt from the provisions of the Labor Laws which required the payment of the prevailing rate of wages and the eight (8) hour day.

Section 220A of the Labor Law, as amended by Chapter 472 of the Laws of 1932, provides that before payment is made by or on behalf of the State or any City, County, Town or Village or other civil division of the State, of any sums due on account of a contract for a public improvement, it is the duty of the Comptroller or the financial officer of the Municipal Corporation to require the Contractor and each and every subcontractor to file a certified statement in writing, in satisfactory form, certifying to the amounts then due and owing to any and all laborers for daily or weekly wages on account of labor performed upon the work of the Contract, setting forth therein the names of the persons whose wages are unpaid and the amount due each, respectively.

Section 220B of the Labor Law, as amended, provides that any interested person who shall have previously filed a protest in writing objecting to the payment to any Contractor or subcontractor to the extent of the amount or amounts due or to become due to him for daily or weekly wages for labor performed on the public improvement for which the Contract was entered into, or if, for any other reason, it may be deemed advisable, the Comptroller of the State or other financial officer of the Municipal Corporation may deduct from the whole amount of any payment on account thereof the sum or sums admitted by any Contractor or subcontractor in such statement or statements so filed to be due and owing by him on account of labor performed and may withhold the amount so deducted for the benefit of the laborers for daily or weekly wages, whose wages are unpaid as shown by the verified statements filed by any Contractor or subcontractor and may pay directly to any person the amount or amounts so shown to be due for such wages.

Section 220C of the Labor Law, as amended, provides the penalty for making of a false oath or verification.

Section 220D of the Labor Law provides that the advertised specifications for every Contract for the construction, reconstruction, maintenance and/or repair of highways to which the State, County, Town and/or Village is a party shall contain the provision stating the minimum rate of hourly wage that can be paid, as shall be designated by the Industrial Commissioner, to the laborers employed in the performance of the Contract, either by the Contractor, subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the Contract, and the Contract shall contain a stipulation that such laborers shall be paid not less than such hourly minimum rate of wage. Any person or corporation that willfully pays after entering into such Contract less than such stipulated minimum hourly wage scale shall be guilty of a misdemeanor and, upon conviction, shall be punished for a first offense by a fine of Five Hundred Dollars (\$500.) or by imprisonment for not more than thirty (30) days, or by both fine and imprisonment for a second offense by a fine of One Thousand Dollars (\$1,000.) and, in addition thereto, the Contract on which the violation has occurred shall be forfeited; and no such person or corporation shall be entitled to receive any sum or nor shall any officer, agent or employee of the State pay the same or authorize its payment from the funds under his charge or control to any person or corporation for work done upon any contract, on which the Contractor has been convicted of second offense in violation of the provisions of this Section.

The minimum wage rates established by the Industrial Commissioner, State of New York, for this Contract, are as set forth in the INFORMATION FOR BIDDERS.

All excavation shall be done in compliance with Article 36 of the General Business Law and notices given as provided by GBL Section 761.

13. PAYMENT OF EMPLOYEES

The Contractor and each of his subcontractors shall pay each of his employees engaged in work on this project under this Contract in full (less deductions made mandatory by law) in cash and not less often than once each week.

14. ESTIMATES AND PAYMENTS

A. Monthly: At the end of each calendar month during the progress of the work, the Contractor shall submit a payment requisition to the Engineer. The Engineer will review the requisition and prepare a payment request based on the estimated amount of work performed and the quantity of materials furnished, based on the prices set forth in the Proposal. In consideration of the work done and the materials furnished, the TOWN DISTRICT will pay or cause to be paid to the Contractor the amount estimated by the Engineer as due him less a sum equal to five percent (5%) of such amount and less such additional amount as may be necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged. The making of any such estimate or payment made thereon shall not be taken or construed as an acceptance by the Engineer or the TOWN DISTRICT of any work so estimated and paid for. The amount of the monthly estimate remaining unpaid will be retained by the TOWN DISTRICT as a guarantee that the Contractor will faithfully and completely fulfill all obligations imposed by the Contract and Specifications, and against any damages incurred by the TOWN DISTRICT by reason of any failure on the part of the Contractor to fulfill all conditions and obligations herein contained. All partial payments are subject to correction in any subsequent payment. The retained amounts shall be paid as set forth in the following subsection B.

B. Final: Thirty (30) days after the Contractor shall have substantially completed the work required of it under the Contract the Engineer will prepare an approval of Final Payment Request. Thereafter the TOWN DISTRICT will pay to the Contractor the remaining amount of the Contract balance less a sum equal to two (2) times the value of any remaining items to be completed and less an amount necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged. As the remaining items of work are satisfactorily completed or corrected, the TOWN DISTRICT shall promptly pay, upon receipt of a requisition for these items less an amount necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged.

Any claims, liens and judgments referred to in this section shall pertain to the project and shall be filed in accordance with the terms of the applicable Contract and/or applicable laws.

C. In order to secure the performance of the covenant of the Contractor, prior to release of the Performance Bond, the Contractor shall deliver to the TOWN DISTRICT a Maintenance Bond equal to one hundred percent (100%) of the total Contract price, including all extras. This Maintenance Bond shall remain in full force and effect for a period of one (1) year after the date of the Engineer's approval of the Final Payment Request and such bond, which shall be executed by the Contractor and issued by a reliable, solvent surety company authorized to do business in the State of New York shall guarantee to the TOWN DISTRICT that the Contractor shall promptly remedy any defects or faults that may occur within twelve (12) months after completion and acceptance of the work performed by the Contractor pursuant to this Contract.

D. Measurements for Payment: The Engineer shall make due measurement of the work done during the progress of the work and his estimate shall be final and conclusive evidence of the amounts of work performed by the Contractor under, and by virtue of, this agreement, and shall be taken as the full measure of compensation to be received by the Contractor. When requested by the Contractor, the Engineer shall measure, re-measure or re-estimate any portion of the work; but the expense of such re-measurement or re-estimating shall, unless material error be proved, be paid for by the Contractor.

E. Should all work not be completed and final payment request not submitted within one (1) year after the punch list has been issued, the TOWN DISTRICT will be under no obligation to make final payment.

15. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of the final payment shall be, and shall operate as a release to the TOWN DISTRICT from all claims and all liabilities to the Contractor for all things done or furnished in connection with this work, and for every act and neglect of the TOWN DISTRICT and other relating to, or arising out of, this work, excepting the Contractor's claims for interest upon the final payment, if these payments be improperly delayed. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this Contract or the Performance Bond.

16. CONSTRUCTION REPORTS

The Contractor shall submit to the Engineer prior to the commencing of any work under this Contract a detailed schedule and plan of operation, indicating the manner in which the Contractor proposes to prosecute the work, and a time schedule therefore. Such schedules are not intended to bind the Contractor to a predetermined plan or procedure, but

rather to enable the Engineer to coordinate the work of the Contractor with work required of and to be performed by others.

The Contractor shall furnish the Engineer with periodic estimates for partial payments as required elsewhere in the contract documents and, in addition thereto, will furnish the Engineer with a detailed estimate for final payment. Prior to being eligible to receive final payment under this Contract, the Contractor shall furnish the Engineer with substantial proof that all bills for services rendered and materials supplied have been paid. The enumeration of the above reports in no way relieves the Contractor of his responsibility under existing Federal or State laws of filing such other reports with agencies other than the TOWN DISTRICT as may be required by such existing laws or regulations.

## 17. INSPECTION AND TESTS

All material and workmanship shall be subject to inspection, examination and test by the Engineer and other representatives of the TOWN DISTRICT at any time during the construction and at any and all places where manufacturing of materials used and/or construction is carried on.

Without additional charge, the Contractor shall furnish promptly all reasonable facilities, labor and materials necessary to make tests so required safe and convenient.

If, at any time, before final acceptance of the entire work, the Engineer, with the TOWN DISTRICT's approval, considers necessary or advisable an examination of any portion of the work already completed, by removing or tearing out the same, the Contractor shall, upon request, furnish promptly all necessary facilities, labor and materials for such examination. If such work is found to be defective in any material respect, due to the fault of the Contractor or any subcontractor, or if any work shall be covered over without the approval or consent of the Engineer, with the TOWN DISTRICT's approval, whether or not the same shall be defective, the Contractor shall be liable for the expenses of such examination and of satisfactory reconstruction.

If, however, such approval and consent shall have been given, and such work is found to meet the requirements of this Contract, the Contractor shall be recompensed for the expense of such examination and reconstruction in the manner herein provided for the payment of costs of extra work pursuant to a Change Order signed by the TOWN DISTRICT and the Contractor.

The selection of laboratories and/or agencies for the inspection and tests of supplies, materials or equipment shall be subject to the approval of the Engineer. Satisfactory documentary evidence that the material has passed the required inspection and test must be furnished the Engineer prior to the incorporation of the material in the work.

Any rejected work shall be removed from the site of the project completely at the expense of the Contractor.

18. PLANS AND SPECIFICATIONS - INTERPRETATIONS

The Contractor shall keep at the site of the work one (1) copy of the Plans and Specifications signed and identified by the Engineer. Anything shown on the Plans and not mentioned in the Specifications or mentioned in the Specifications and not shown on the Plans shall have the same effect as if shown or mentioned respectively in both. In case of any conflict or inconsistency between the Plans and Specifications, the Plans shall govern. Any discrepancy between the figures and drawings shall be submitted to the Engineer, whose decision therein shall be conclusive.

19. SUBSURFACE CONDITIONS FOUND DIFFERENT

Should the Contractor encounter subsurface conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Engineer of such conditions before they are disturbed; the Engineer shall thereupon promptly investigate the conditions and if he finds that they materially differ from those shown on the Plans or indicated in the Specifications, he shall at once make such changes in the Plans and/or Specifications as he may find necessary.

Any increase or decrease of cost resulting from such changes will be adjusted in the manner provided herein for adjustment as to extra and/or additional work and changes shall be by Change Order executed by the TOWN DISTRICT and Contractor.

20. CONTRACTOR'S TITLE TO MATERIALS

No material or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work.

21. SUPERINTENDENCE BY CONTRACTOR

At the site of the work the Contractor shall employ a Construction Superintendent or Foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

22. PROTECTION OF WORK, PERSONS AND PROPERTY

Precaution shall be exercised at all times for the proper protection of all persons, property and work. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery equipment and all hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable law. The Contractor shall furnish entirely at his own expense any and all additional safety measures deemed necessary by the TOWN DISTRICT or its Engineer to adequately safeguard the traveling public. The Contractor shall give notice to the owners of all utilities which may serve the area and request their assistance in pre-determining the location and depth of the various pipes, conduits, manholes and other underground facilities.

The Contractor shall, at all hours of the day, safely guard and protect his own work and adjacent property from any damage and shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract documents, or by the TOWN DISTRICT or its duly authorized representatives.

The Contractor shall provide and maintain such watchers, barriers, lights, flares and other signals, at his own expense, as will effectively prevent any accident in consequence of his work for which the TOWN DISTRICT might be liable. The Contractor shall be liable for all injury or damage caused by his act or neglect, or that of his employees.

23. PATENT RIGHTS

As part of his obligation hereunder and without any additional compensation, the Contractor will pay for any patent fees or royalties required in respect to the work or any part thereof and will fully indemnify the TOWN DISTRICT for any loss on account of any infringement of any patent rights, unless prior to his use in the work of a particular process or a product of a particular manufacturer, he notifies the TOWN DISTRICT in writing that such process or product is an infringement of a patent.

24. REPRESENTATIONS OF CONTRACTOR

The Contractor represents and warrants:

A. That he is financially solvent and that he is experienced in and competent to perform the type of work involved under this Contract and able to furnish the plan, materials, supplies and/or equipment to be furnished for the work; and

B. That he is familiar with all Federal, State and Municipal Laws, ordinances and regulations which may in any way affect the work of those employed hereunder, including but not limited to any special acts relating to the work; and

C. That such work required by these contract documents as is to be done by him can be satisfactorily constructed and used for the purpose for which it is intended and that such construction will not injure any person or damage any property; and

D. That he has carefully examined the Plans, Specifications, and the site of the work, and that from his own investigation he has satisfied himself as to the nature and location of the work, the character, location, quality and quantity of surface and subsurface materials, structures and utilities likely to be encountered, the character of equipment, and other facilities needed for the performance of the work, the general local conditions which may in any way affect the work or its performance.

25. AUTHORITY OF THE ENGINEER

In the performance of the work, the Contractor shall abide by all orders and directions and requirements of the Engineer and shall perform all work to the satisfaction of the Engineer, at such time and places, by such methods, and in such manner and sequence as he may require. The Engineer shall determine the amount, quality, acceptability and fitness of all parts of the work, shall interpret the plans, specifications, contract documents and any extra work orders and shall decide all other questions in connection with the work. Upon request, the Engineer shall confirm in writing any oral orders, directions, requirements or determinations. The enumeration herein or else-where in the contract documents of particular instances in which the opinion, judgment, discretion or determination of the Engineer shall control, or in which work shall be performed to his satisfaction or subject to his approval, or inspection, shall not imply that only matters similar to those enumerated shall be so governed and so performed, but without exception all the work shall be governed and so performed. Nothing herein shall be construed to give the Contractor a claim for extra work unless prior thereto an appropriate Change Order has been executed by the TOWN DISTRICT and Contractor for such work.

26. SURVEYS

The Contractor shall provide all layouts, measurements, lines, and grades necessary for the execution of the work, and will furnish the necessary stakes and spikes for laying out such lines and grades and the unskilled labor necessary to place same and/or assist in measuring.

27. CHANGES AND ALTERATIONS

The TOWN DISTRICT reserves the right to make alterations in the location, line, grade, plans, form or dimensions of the work, or any part thereof, either before or after the commencement of the construction. If such alterations diminish the amount of work to be done, no claim for damages or anticipated profits will be warranted on the work which may be dispensed with. If such alterations increase the amount of work, such increases shall be paid for according to the quantity of work actually done and at the unit prices for such work as contained in the schedule of prices.

If such alterations decrease the amount of work, such decreases shall be a credit to the TOWN DISTRICT based on the quantity of work not performed as agreed to by the TOWN DISTRICT and the Contractor and at the unit prices for such work as contained in the Schedule of Prices.

28. CORRECTION OF WORK

All work and all materials, whether incorporated into the work or not, all processes of manufacture and all methods of construction shall be, at all times and places, subject to the inspection of the Engineer who shall be the final judge of quality, materials, processes of manufacture and methods of construction suitable for the purpose for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good and replaced and/or corrected as the case may be, by the Contractor at his own expense. Rejected materials shall immediately be removed from the site.

If, in the opinion of the Engineer, it is not desirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as, in the judgment of the Engineer, shall be equitable.

The Contractor expressly warrants that his work shall be free from any defects in materials or workmanship, and agrees to correct any defects, settlements, or shrinkages which may appear within one (1) year following the date of the final payment request. Neither the acceptance of the completed work nor payment therefor shall operate to release the Contractor or his sureties from any obligations under or upon this Contract or the Performance Bond.

29. WEATHER CONDITIONS

The Contractor will and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If any work or materials shall have been damaged or injured by reason of the failure on the part of the Contractor or any of his subcontractors to protect his, or their work, such work and materials shall be removed and replaced at the expense of the Contractor.

30. THE TOWN DISTRICT'S RIGHT TO WITHHOLD PAYMENTS

The TOWN DISTRICT may withhold from the Contractor so much of any approved payments due him as may, in the judgment of the TOWN DISTRICT, be necessary:

A. To assure the payment of just claims then due and unpaid of any persons supplying labor or materials for the work;

B. To protect the TOWN DISTRICT from loss due to defective work not remedied; or

C. To protect the TOWN DISTRICT from loss due to injury to persons or damage to the work or property of other contractors or subcontractors or others, caused by the act or neglect of the Contractor or any of his subcontractors. The TOWN DISTRICT shall have the right, as agent for the Contractor, to apply any such amount so withheld in such manner as the TOWN DISTRICT may deem proper to satisfy such claims or to secure such protection. Such application of such money shall be deemed payments for the account of the Contractor.

31. THE TOWN DISTRICT'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If:

A. The Contractor shall file for any form of bankruptcy relief or make an assignment for the benefit of creditors; or

B. A receiver or liquidator shall be appointed for the Contractor for any of his property and shall not be dismissed within twenty (20) days after such appointment, or the proceedings in connection therewith shall not be stayed on appeal within the said twenty (20) days; or

C. The Contractor shall violate any provision of this Contract; or

D. The Contractor shall fail or refuse to regard laws, ordinances, regulations, or the instructions of the Engineer and/or the TOWN DISTRICT;

then, and in any such event, the TOWN DISTRICT without prejudice to any other rights or remedy it may have, and after seven (7) days written notice to the Contractor and Contractor's Surety may terminate the employment of the Contractor and take possession of the premises and all material, tools and appliances therein, and complete the work by contract or otherwise, as the TOWN DISTRICT solely may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work (including compensation for additional managerial, engineering, administration, legal, testing and observation services and any damages for delay), such excess shall be paid to Contractor.

If the expense shall exceed the unpaid balance, the Contractor and his sureties shall be liable to the TOWN DISTRICT for such excess.

### 32. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If the work shall be stopped by order of the Court or any public authority, Federal or State agency, for a period of three (3) months through no act or fault of the Contractor or any of his agents, servants, employees, materialmen, or subcontractors, the Contractor may, upon ten (10) days notice to the TOWN DISTRICT, discontinue his performance of the work and/or terminate the Contract.

Upon termination by the Contractor the TOWN DISTRICT may take possession of the work and complete the work by Contract or otherwise, as the TOWN DISTRICT solely may deem expedient.

If the Contract is terminated by the Contractor, the liability of the TOWN DISTRICT to the Contractor shall be for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment, including reasonable profit and damages.

33. RESPONSIBILITY OF WORK

The Contractor agrees to be responsible for the entire work embraced in this Contract until its completion and final acceptance, and that any unfaithful or imperfect work that may become damaged from any cause, either by act or commission or omission to properly guard and protect the work that may be discovered at any time before the completion and acceptance shall be removed and replaced by good and satisfactory work without any charge to the TOWN DISTRICT and that such removal and replacement will be performed immediately on the requirement of the Engineer, notwithstanding the fact that it may have been overlooked by the proper inspector, and partial payment made thereon. It is fully understood by the Contractor that the inspection of the work shall not relieve him of any obligation to do sound and reliable work as herein prescribed, and that any omission to disapprove of any work by the Engineer at or before the time of a partial payment or other estimate shall not be construed to be an acceptance of any defective work.

34. USES OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

- A. To take every precaution against injury to persons or damages to property;
- B. To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any of his subcontractors, or other contractors;
- C. To place upon any of the completed work only such superimposed loads as are consistent with the safety of that portion of the work;
- D. To frequently clean up all refuse, rubbish, scrap materials and debris caused by the operations to the end that at all times the site of the work shall present a neat and orderly and workmanlike appearance;
- E. Before the Engineer's approval of the Final Payment Request, to remove all surplus material, temporary structures, plants of any description and debris of any and every nature resulting from his operations and to put the site in a neat and orderly condition.

35. POWER OF THE CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury to property and/or safety to life, the Contractor will be permitted to act as he sees fit without previous instructions from the TOWN DISTRICT. He shall notify the TOWN DISTRICT thereof immediately thereafter and any compensation claimed by the Contractor due to extra work made necessary because of his acts in such emergency shall be submitted to the TOWN DISTRICT for approval and Change Order executed by the TOWN DISTRICT and the Contractor.

Where the Contractor has not taken action but has notified the Engineer of an emergency indicating injury to persons or damage to adjoining property or to the work being accomplished under this Contract, then upon authorization from the Engineer to prevent such threatened injury or damage, he shall act as instructed by the Engineer. The amount of reimbursement claimed by the Contractor on account of any such action shall be determined in the manner provided herein for the payment of extra work and shall be incorporated into a Change Order executed by the TOWN DISTRICT and Contractor.

36. SUITS AT LAW

The Contractor shall indemnify and save harmless the TOWN DISTRICT from and against all suits, claims, demands or actions for any injury sustained or alleged to be sustained by any party or parties in connection with the construction of the work or any part thereof, or any commission or omission of the Contractor, his employees or agents or any subcontractors and in case any such action shall be brought against the TOWN DISTRICT, the Contractor shall immediately take care of and defend the same at his own cost and expense.

37. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and, if through mistake or otherwise, any such provision is not inserted or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

38. SUBLETTING, SUCCESSOR AND ASSIGNS

The Contractor shall not sublet any part of the work under this Contract, nor assign any money due him hereunder without first obtaining the written consent of the TOWN DISTRICT. This Contract shall inure to the benefit of and shall be binding upon the parties hereunder and upon their respective successors and assigns, but neither party shall assign or transfer his interest herein in whole or in part without consent of the other.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first above written.

RIVERHEAD WATER DISTRICT

BY: \_\_\_\_\_ (TOWN SEAL)  
LAURA JENS-SMITH, SUPERVISOR

\_\_\_\_\_  
CONTRACTOR

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_ (SEAL)

STATE OF NEW YORK )

) ss:

COUNTY OF SUFFOLK )

On the \_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally came LAURA JENS-SMITH, to me known, who being by me duly sworn, did depose and say that he is the duly elected SUPERVISOR of the TOWN OF RIVERHEAD, COUNTY OF SUFFOLK, NEW YORK, and that at a meeting of the Town Board of the Town of Riverhead, duly held on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, Resolution No. \_\_\_\_\_, the said Board, also acting in its capacity as the Governing Body of the Riverhead Water District, authorized the said SUPERVISOR to execute all and any contracts on behalf of the Board; that he knows the seal of said Town, and that the said Water District seal is also the seal of the Town of Riverhead; that the seal affixed to the foregoing instrument is its corporate seal; that it was affixed thereto by order of the said Board, and that he signed his name thereto and executed the said instrument on behalf of the said Water District by like order and authority.

\_\_\_\_\_  
NOTARY PUBLIC

ACKNOWLEDGMENT OF CONTRACTOR, IF A CORPORATION

STATE OF NEW YORK )

) ss:

COUNTY OF )

On this \_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally came and appeared \_\_\_\_\_, to me known, who by me being duly sworn, did depose and say that he resides at \_\_\_\_\_ that he is the \_\_\_\_\_ of \_\_\_\_\_, the Corporation described in and which executed the foregoing instrument, that he knows the seal of said corporation, that one of the seals affixed to said instrument is such seal, that it was so affixed by order of the Directors of said Corporation, and that he signed his name thereto by like order.

\_\_\_\_\_

NOTARY PUBLIC

ACKNOWLEDGMENT OF CONTRACTOR, IF A PARTNERSHIP

STATE OF NEW YORK )

) ss:

COUNTY OF )

On this \_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally came and appeared \_\_\_\_\_, to me known, and known to me to be one of the members of the firm of \_\_\_\_\_, described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same as and for the act and deed of said form.

\_\_\_\_\_

NOTARY PUBLIC

**END OF SECTION 005209**

Wage Rates begin on the following page.



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

Riverhead Water District

Steven Mirra  
H2M Group  
538 Broad Hollow Road  
Melville NY 11747

Schedule Year 2019 through 2020  
Date Requested 08/08/2019  
PRC# 2019010384

Location Riverhead  
Project ID# RDWD1904  
Project Type Architectural, electrical, and chemical upgrades to the Riverhead Water District's Plant No. 4

### PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

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

The schedule is effective from July 2019 through June 2020. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website [www.labor.ny.gov](http://www.labor.ny.gov). Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

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

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

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

#### NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: \_\_\_\_\_ Date Cancelled: \_\_\_\_\_

Name & Title of Representative: \_\_\_\_\_

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



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

## Introduction

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

## Responsibilities of the Department of Jurisdiction

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

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

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

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

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

## Hours

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.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "[4 Day / 10 Hour Work Schedule](#)" form (PW 30.1).

## Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website [www.labor.ny.gov](http://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](http://www.labor.ny.gov).

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website [www.labor.ny.gov](http://www.labor.ny.gov).

## Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

### **Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties**

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

### **Withholding of Payments**

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

### **Summary of Notice Posting Requirements**

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "[Public Work Project](#)" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers' compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

## **Apprentices**

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers 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 journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

## **Interest and Penalties**

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

## **Debarment**

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

## **Criminal Sanctions**

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

## **Discrimination**

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-

e(b) ).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c) ).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d) ).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

### **Workers' Compensation**

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

### **Unemployment Insurance**

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

Riverhead Water District

Steven Mirra  
H2M Group  
538 Broad Hollow Road  
Melville NY 11747

Schedule Year 2019 through 2020  
Date Requested 08/08/2019  
PRC# 2019010384

Location Riverhead  
Project ID# RDWD1904  
Project Type Architectural, electrical, and chemical upgrades to the Riverhead Water District's Plant No. 4

### 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 12240



# IMPORTANT NOTICE

FOR

## CONTRACTORS & CONTRACTING AGENCIES

### Social Security Numbers on Certified Payrolls

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concerns with regard to inclusion of this information on payrolls if another identifier will suffice.

For these reasons, *the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor.*

**NOTE:** This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

**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 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

# **Construction Industry Fair Play Act**

## **Required Posting For Labor Law Article 25-B § 861-d**

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site.

Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense.

The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, [www.labor.ny.gov](http://www.labor.ny.gov).

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: [dol.misclassified@labor.state.ny.us](mailto:dol.misclassified@labor.state.ny.us) .



# WORKER NOTIFICATION

(Labor Law §220, paragraph a of subdivision 3-a)

***Effective February 24, 2008***

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage rate* for their particular job classification *on each pay stub*\*. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website [www.labor.ny.gov](http://www.labor.ny.gov) or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

\* In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

# Attention Employees

## THIS IS A: **PUBLIC WORK PROJECT**

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Chapter 629 of the Labor Laws of 2007:

**These wages are set by law and must be posted at the work site. They can also be found at:**  
[www.labor.ny.gov](http://www.labor.ny.gov)

If you feel that you have not received proper wages or benefits, please call our nearest office.\*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5156		

\* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov) – click on Bureau of Labor Law.

Contractor Name: \_\_\_\_\_

Project Location: \_\_\_\_\_



# **OSHA 10-hour Construction Safety and Health Course – S1537-A**

*Effective July 18, 2008*

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

***NOTE: The OSHA 10 Legislation only applies to workers on a public work project that are required, under Article 8, to receive the prevailing wage.***

## Where to find OSHA 10-hour Construction Course

1. NYS Department of Labor website for scheduled outreach training at:

[https://labor.ny.gov/workerprotection/safetyhealth/dosh\\_training.shtm](https://labor.ny.gov/workerprotection/safetyhealth/dosh_training.shtm)

2. OSHA Training Institute Education Centers:

### **Rochester Institute of Technology OSHA Education Center**

Rochester, NY

Donna Winter

Fax (585) 475-6292

e-mail: [dlwtpo@rit.edu](mailto:dlwtpo@rit.edu)

(866) 385-7470 Ext. 2919

[www.rit.edu/~outreach/course.php3?CourseID=54](http://www.rit.edu/~outreach/course.php3?CourseID=54)

### **Atlantic OSHA Training Center**

UMDNJ – School of Public Health

Piscataway, NJ

Janet Crooks

Fax (732) 235-9460

e-mail: [crooksje@umdnj.edu](mailto:crooksje@umdnj.edu)

(732) 235-9455

<https://ophp.umdnj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~>

### **Atlantic OSHA Training Center**

University at Buffalo

Buffalo, New York

Joe Syracuse

Fax (716) 829-2806

e-mail: [mailto:japs@buffalo.edu](mailto:mailto:japs@buffalo.edu)

(716) 829-2125

[http://www.smbs.buffalo.edu/CENTERS/trc/schedule\\_OSHA.php](http://www.smbs.buffalo.edu/CENTERS/trc/schedule_OSHA.php)

### **Keene State College**

Manchester, NH

Leslie Singleton

e-mail: [lsingletin@keene.edu](mailto:lsingletin@keene.edu)

(800) 449-6742

[www.keene.edu/courses/print/courses\\_osh.cfm](http://www.keene.edu/courses/print/courses_osh.cfm)

3. List of trainers and training schedules for OSHA outreach training at:

[www.OutreachTrainers.org](http://www.OutreachTrainers.org)

# Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h took effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training “prior to the performing any work on the project.”

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.*)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

\*\*A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-485-5696.

# WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$3 million in Bronx, Kings, New York, Queens and Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.
- For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical work and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or use of a Project Labor Agreement (PLA), and must be open to public inspection.
- Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.
- The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.
- Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

## **IMPORTANT INFORMATION**

**Regarding Use of Form PW30.1  
(Previously 30R)**

**“Employer Registration for Use of 4 Day / 10 Hour Work Schedule”**

### **To use the ‘4 Day / 10 Hour Work Schedule’:**

There **MUST** be a *Dispensation of Hours (PW30)* in place on the project

***AND***

You **MUST** register your intent to work 4 / 10 hour days, by completing the PW30.1 Form.

***REMEMBER...***

The ‘4 Day / 10 Hour Work Schedule’ applies **ONLY** to Job Classifications and Counties listed on the PW30.1 Form.

Do not write in any additional Classifications or Counties.

**(Please note :** For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)

# Instructions for Completing Form PW30.1

(Previously 30R)

## “Employer Registration for Use of 4 Day / 10 Hour Work Schedule”

### ***Before completing Form PW30.1 check to be sure ...***

- There is a *Dispensation of Hours* in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

### **Instructions (Type or Print legibly):**

#### Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company’s Phone and Fax numbers; and the Company’s email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

#### Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD – Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown,NY; Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications -
  - Go to pages 2 and 3 of the form
  - Place a checkmark in the box to the right of the Job Classification you are choosing
  - Mark all Job Classifications that apply

\*\*\**Do not write in any additional Classifications or Counties.*\*\*\*

#### Requestor Information:

- Enter the name of the person submitting the registration, their title with the company , and the date the registration is filled out

#### Return Completed Form:

- **Mail** the completed PW30.1 form to: NYSDOL Bureau of Public Work, SOBC – Bldg.12 – Rm.130, Albany, NY 12240 **-OR-**
- **Fax** the completed PW30.1 form to: NYSDOL Bureau of Public Work at (518)485-1870



Bureau of Public Work Harriman
State Office Campus
Building 12, Room 130
Albany, New York 12240
Phone: (518) 457-5589 | Fax: (518) 485-1870
www.labor.ny.gov

Employer Registration for Use of 4 Day / 10 Hour Work Schedule

Before completing this form, make sure that:

- There is a Dispensation of Hours in place on the project.
The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Please type or print the requested information and then mail or fax to the address above.

Contractor Information

Company Name: FEIN:
Address:
City: State: Zip Code:
Phone No: Fax No: Email:
Contact Person:
Phone No: Fax No: Email:

Project Information

Project PRC#: Project Name/Type:
Exact Location of Project: County:
(If you are Subcontractor)
Prime Contractor Name:

Job Classification(s) to Work 4/10 Schedule: (Choose all that apply on Job Classification Checklist - Pages 3-8)
\*\*\* Do not write in any additional Classifications or Counties\*\*\*

Requestor Information

Name:
Title: Date:

Please use the list below with the number assigned to each county as a reference to the corresponding numbers listed in the following pages under **Entire Counties & Partial Counties**.

- |     |                             |     |                                 |
|-----|-----------------------------|-----|---------------------------------|
| 1.  | Albany County               | 33. | Oneida County                   |
| 2.  | Allegany County             | 34. | Onondaga County                 |
| 3.  | Bronx County                | 35. | Ontario County                  |
| 4.  | Broome County               | 36. | Orange County                   |
| 5.  | Cattaraugus County          | 37. | Orleans County                  |
| 6.  | Cayuga County               | 38. | Oswego County                   |
| 7.  | Chautauqua County           | 39. | Otsego County                   |
| 8.  | Chemung County              | 40. | Putnam County                   |
| 9.  | Chenango County             | 41. | Queens County                   |
| 10. | Clinton County              | 42. | Rensselaer County               |
| 11. | Columbia County             | 43. | Richmond County (Staten Island) |
| 12. | Cortland County             | 44. | Rockland County                 |
| 13. | Delaware County             | 45. | Saint Lawrence County           |
| 14. | Dutchess County             | 46. | Saratoga County                 |
| 15. | Erie County                 | 47. | Schenectady County              |
| 16. | Essex County                | 48. | Schoharie County                |
| 17. | Franklin County             | 49. | Schuyler County                 |
| 18. | Fulton County               | 50. | Seneca County                   |
| 19. | Genesee County              | 51. | Steuben County                  |
| 20. | Greene County               | 52. | Suffolk County                  |
| 21. | Hamilton County             | 53. | Sullivan County                 |
| 22. | Herkimer County             | 54. | Tioga County                    |
| 23. | Jefferson County            | 55. | Tompkins County                 |
| 24. | Kings County (Brooklyn)     | 56. | Ulster County                   |
| 25. | Lewis County                | 57. | Warren County                   |
| 26. | Livingston County           | 58. | Washington County               |
| 27. | Madison County              | 59. | Wayne County                    |
| 28. | Monroe County               | 60. | Westchester County              |
| 29. | Montgomery County           | 61. | Wyoming County                  |
| 30. | Nassau County               | 62. | Yates County                    |
| 31. | New York County (Manhattan) |     |                                 |
| 32. | Niagara County              |     |                                 |

### Job Classification Checklist

**(Place a checkmark by all classifications that will be using the 4/10 schedule)**

*\*\*\* Do not write in any additional Classifications or Counties\*\*\**

<b>Job Classification</b>	<b>Tag #</b>	<b>Entire Counties</b>	<b>Partial Counties</b>	<b>Check Box</b>
Carpenter – Building	276B-All	7	2, 5	
Carpenter – Building	276B-Cat	15	5	
Carpenter – Building	276-B-LIV	26, 28, 35, 59	61	
Carpenter – Building	276B-Gen	19, 32, 37	61	
Carpenter – Heavy & Highway	276HH-All	2, 5, 7		
Carpenter – Heavy & Highway	276HH-Erie	15		
Carpenter – Heavy & Highway	276HH- Gen	19, 32, 37, 61		
Carpenter – Heavy & Highway	276HH-Liv	26, 28, 35, 59		
Carpenter – Residential	276R-All	7	2, 5	
Carpenter – Building	277B-Bro	4, 54		
Carpenter – Building	277B-CAY	6, 50, 62		
Carpenter – Building	277B-CS	8, 12, 49, 51, 55	2	
Carpenter – Building	277 JLS	23, 25, 45		
Carpenter – Building	277 omh	22, 27, 33		
Carpenter – Building	277 On	34		
Carpenter – Building	277 Os	38		
Carpenter – Building	277CDO Bldg	9, 13, 39		
Carpenter – Heavy & Highway	277CDO HH	9, 13, 39		
Carpenter – Heavy & Highway	277HH-BRO	4, 6, 8, 12, ,22, 23, 25, 27, 33, 34, 38, 45, 49, 50, 51, 54, 55, 62		
Carpenter – Building	291B-Alb	1, 18, 20, 29, 42, 47, 48		
Carpenter – Building	291B-Cli	10, 16, 17		
Carpenter – Building	291B-Ham	21, 57, 58		
Carpenter – Building	291B-Sar	46		
Carpenter – Heavy & Highway	291HH-Alb	1, 10, 16, 17,18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Electrician	25m	30, 52		
Electrician – Teledata Cable Splicer	43	12, 22, 27, 33, 38	6, 9, 34, 39, 55, 59	

### Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

\*\*\* Do not write in any additional Classifications or Counties\*\*\*

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Electrician	86	26, 28	19, 35, 37, 59, 61	
Electrician	840 Teledata and 840 Z1	62	6, 34, 35, 50, 59	
Electrician	910	10, 16, 17, 23, 25, 45		
Electrical Lineman	1049Line/Gas	30, 41, 52		
Electrical Lineman	1249a	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 44, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 56, 57, 58, 59, 61, 62		
Electrical Lineman	1249a West	60		
Electrical Lineman	1249a-LT	1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 42, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 57, 58, 59, 61, 62		
Electrical Lineman	1249aREG8LT	11, 14, 36, 40, 44, 56		
Electrical Lineman	1249aWestLT	60		
Elevator Constructor	138	11, 14, 20, 36, 40, 53, 56	13, 44, 60	
Elevator Constructor	14	2, 5, 7, 15, 19, 32, 37, 61		
Elevator Constructor	27	8, 26, 28, 35, 49, 50, 51, 59, 62		
Elevator Constructor	35	1, 10, 16, 18, 21, 22, 29, 39, 42, 46, 47, 48, 57, 58		
Elevator Constructor	62.1	4, 6, 9, 12, 23, 25, 27, 33, 34, 38, 45, 54, 55	13	
Glazier	201	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Glazier	660r	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	660	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	677.1	23, 25, 26, 28, 35, 45, 50, 59, 62		
Glazier	677Z-2	6, 12, 22, 27, 33, 34, 38		
Glazier	677z3	4, 8, 9, 13, 39, 49, 51, 54, 55		
Glazier	677r.2	6, 12, 22, 27, 33, 34, 38		
Insulator – Heat & Frost	30-Syracuse	4, 6, 8, 9, 12, 22, 23, 25, 27, 33, 34, 38, 39, 49, 50, 45, 54, 55		
Laborer – Building	621b	2, 7	5	
Laborer – Building	633 bON	34		

**Job Classification Checklist**

**(Place a checkmark by all classifications that will be using the 4/10 schedule)**

\*\*\* Do not write in any additional Classifications or Counties\*\*\*

<b>Job Classification</b>	<b>Tag #</b>	<b>Entire Counties</b>	<b>Partial Counties</b>	<b>Check Box</b>
Laborer – Building	633b Cay	6		
Laborer – Building	633bOS	38		
Laborer – Building	785(7)	4	9, 13, 54	
Laborer – Building	785B-CS	8, 51	49	
Laborer – Building	7-785b	12, 55	49, 54	
Laborers – Heavy & Highway	157h/h	47	18, 29, 46	
Laborers – Heavy & Highway	190 h/h	1, 42, 58	11, 20, 46	
Laborers – Heavy & Highway	35/2h	21, 22, 27, 33	18, 29	
Laborer – Residential	621r	2, 7	5	
Laborers – Tunnel	157	47	18, 29, 46	
Laborers – Tunnel	35T	21, 22, 27, 33	18, 29	
Laborers – Tunnel	190	1, 42, 58	11, 20, 46	
Mason – Building	2TS.1	1, 10,11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Mason – Building	2TS.2	22, 23, 25, 33, 45	27	
Mason – Building	2TS.3	6, 34, 38	27	
Mason – Building	2b-on	34		
Mason – Building	2b.1	1, 11, 18, 20, 21, 29, 42, 46, 47, 48, 58	57	
Mason – Building	2b.2	22, 33	25	
Mason – Building	2b.3	6, 34	27	
Mason – Building	2b.4	38		
Mason – Building	2b.5	23	25	
Mason – Building	2b.6	45		
Mason – Building	2b.8	10, 16, 17	57	
Mason – Building	3b-Co-Z2	8, 49, 51	2	
Mason – Building	3B-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building – Residential	3B-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building	3B-Bing-Z2	4, 9, 13, 39, 54		
Mason – Building	3B-lth-Z2	12, 55		

### Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

\*\*\* Do not write in any additional Classifications or Counties\*\*\*

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Mason – Building	3B-Jam-Z2	7	2, 5	
Mason – Building – Residential	3B-Jam-Z2R	2, 4, 8, 7, 9, 12, 39, 13, 49, 51, 54, 55	5	
Mason – Building	3B-Z3	15, 32	5	
Mason – Building	3B-Z3.Orleans	37		
Mason – Residential	3B-Z3R	15, 32	5	
Mason – Residential	3B-z3R.Orleans	37		
Mason - Heavy & Highway	3h	2, 4, 8, 7, 9, 12, 13, 19, 26, 28, 35, 37, 39, 49, 50, 51, 54, 55, 59, 61, 62	5, 15, 32	
Mason – Tile Finisher	3TF-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2	2, 4, 8, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3	15, 32, 37	5	
Mason – Tile Finisher	3TF-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2R	2, 4, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3R	15, 32, 37	5	
Mason – Tile Setter	3TS-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter Residential	3TS-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter	3TS-Z2	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter Residential	3TS-Z2R	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter	3TS-Z3	15, 32, 37	5	
Mason – Tile Setter Residential	3TS-Z3R	15, 32, 37	5	
Mason – Building/Heavy & Highway	780	3, 24, 30, 31, 41, 43, 52		
Operating Engineer - Heavy & Highway	137H/H	40, 60	14	
Operating Engineer – Heavy & Highway	158-832H	2, 8, 26, 28, 35, 49, 51, 59, 62	19	
Operating Engineer – Heavy & Highway	158-H/H	1, 4, 9, 10, 11, 14, 16, 17, 18, 20, 21, 22, 29, 39, 42, 46, 47, 48, 54, 57, 58		
Operating Engineer – Heavy & Highway	158-545h	6, 12, 23, 25, 27, 33, 38, 45, 50, 55		
Painter	1456-LS	1, 3, 10, 11, 14, 16, 17, 18, 20, 21, 24, 29, 30, 31, 36, 40, 41, 42, 43, 44, 46, 47, 48, 52, 53, 56, 57, 58, 60		
Painter	150	28, 59, 62	26, 35	

### Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

\*\*\* Do not write in any additional Classifications or Counties\*\*\*

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Painter	178 B	4, 9, 54		
Painter	178 E	8, 49	51	
Painter	178 I	12, 55		
Painter	178 O	13, 39		
Painter	31	6, 22, 27, 33, 34, 50	25, 35, 38	
Painter	38.O		38	
Painter	38.W	23, 45	25	
Painter	4- Buf,Nia,Olean	2, 15, 19, 32, 37, 61	5, 7, 26, 51	
Painter	4-Jamestown		5, 7	
Sheetmetal Worker	46	26, 28, 35, 50, 59, 62		
Sheetmetal Worker	46r	26, 28, 35, 50, 59, 62		
Teamsters – Heavy & Highway	294h/h	1, 11, 18, 20, 29, 42, 46, 47, 48, 58	57	
Teamsters – Heavy & Highway	317bhh	6, 12, 50, 51, 55, 62	2	
Teamsters - Building/Heavy & Highway	456	40, 60		

## Introduction to the Prevailing Rate Schedule

### Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

#### Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

#### Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

#### Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

#### Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

#### Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

#### 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](http://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 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

**Suffolk County General Construction**

**Asbestos Worker** **08/01/2019**

**JOB DESCRIPTION** Asbestos Worker **DISTRICT 4**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**  
 Per Hour: 07/01/2019

Asbestos Worker \$ 44.00  
 Removal & Abatement Only\*

NOTE: \*On Mechanical Systems that are NOT to be SCRAPPED.

**SUPPLEMENTAL BENEFITS**

Per Hour:  
 Asbestos Worker \$ 8.70  
 Removal & Abatement Only

**OVERTIME PAY**  
 See (B, B2, \*E, J) on OVERTIME PAGE  
 Hours worked on Saturdays are paid at time and one half only if forty hours have been worked during the week.

**HOLIDAY**  
 Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8) on HOLIDAY PAGE

**REGISTERED APPRENTICES**  
 Apprentice Removal & Abatement Only:  
 1000 hour terms at the following percentage of Journeyman's rates.

1st	2nd	3rd	4th
78%	80%	83%	89%

**SUPPLEMENTAL BENEFIT**

Per Hour:  
 Apprentice Removal & Abatement \$ 8.70 4-12a - Removal Only

**Boilermaker** **08/01/2019**

**JOB DESCRIPTION** Boilermaker **DISTRICT 4**

**ENTIRE COUNTIES**  
 Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

**WAGES**  
 Per Hour: 07/01/2019 01/01/2020

Boilermaker \$ 59.17 \$ 61.24  
 Repairs & Renovations 59.17 61.24

**SUPPLEMENTAL BENEFITS**  
 Per Hour: 07/01/2019 01/01/2020  
 Boilermaker 32% of hourly 32% of hourly  
 Repair \$ Renovations Wage Paid Wage Paid  
 + \$ 25.35 + \$ 25.38

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay.

Repairs & Renovation Includes replacement of parts and repairs & renovation of existing unit.

**OVERTIME PAY**  
 See (D, O) on OVERTIME PAGE  
 Repairs & Renovation see (B,E,Q)

**HOLIDAY**  
 Paid: See (8, 16, 23, 24) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 11, 12, 15, 16, 22, 23, 24, 25) on HOLIDAY PAGE

NOTE: \*Employee must work in pay week to receive Holiday Pay.  
 \*\*Employee gets 4 times the hourly wage rate for working Labor Day.

**REGISTERED APPRENTICES**

Wage per hour:  
 (1/2) Year Terms at the following percentage of Boilermaker's Wage

1st	2nd	3rd	4th	5th	6th	7th
65%	70%	75%	80%	85%	90%	95%

Supplemental Benefits Per Hour:

Apprentice(s)	07/01/2019 32% of Hourly Wage Paid Plus Amount Below	01/01/2020 32% of Hourly Wage Paid Plus Amount Below
1st Term	\$ 19.38	\$ 19.41
2nd Term	20.24	20.26
3rd Term	21.08	21.11
4th Term	21.94	21.96
5th Term	22.79	22.82
6th Term	23.65	23.68
7th Term	24.48	24.52

NOTE: "Hourly Wage Paid" shall include any and all premium(s)

4-5

**Carpenter**

**08/01/2019**

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES**

Per hour: 07/01/2019

Piledriver	\$ 54.63
Dockbuilder	\$ 54.63

**SUPPLEMENTAL BENEFITS**

Per hour:

Journeyworker	\$ 51.63
---------------	----------

**OVERTIME PAY**

See (B, E2, O) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES**

Wages per hour

(1)year terms:

1st	2nd	3rd	4th
\$21.85	\$27.32	\$35.51	\$43.70

Supplemental benefits per hour:

All Terms:	\$ 33.97
------------	----------

8-1556 Db

**Carpenter**

**08/01/2019**

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES**

Per hour: 07/01/2019

Carpet/Resilient

Floor Coverer \$ 50.50

INCLUDES HANDLING & INSTALLATION OF ARTIFICIAL TURF AND SIMILAR TURF INDOORS/OUTDOORS.

**SUPPLEMENTAL BENEFITS**

Per hour: \$ 45.83

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (18, 19) on HOLIDAY PAGE.

Paid for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES**

Wage per hour - (1) year terms:

	1st	2nd	3rd	4th
	\$20.20	\$25.25	\$32.83	\$40.40

Supplemental benefits per hour - all apprentice terms:

\$ 31.09

8-2287

---

**Carpenter**

**08/01/2019**

---

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES**

Per Hour: 07/01/2019

Marine Construction:

Marine Diver \$ 69.22

Marine Tender 49.14

**SUPPLEMENTAL BENEFITS**

Per Hour:

Journeyworker \$ 51.58

**OVERTIME PAY**

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (18, 19) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 13, 16, 18, 19) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour:

One (1) year terms.

1st year \$ 21.85

2nd year 27.32

3rd year 35.51

4th year 43.70

Supplemental Benefits

Per Hour:

All terms \$ 33.97

8-1456MC

**Carpenter**

**08/01/2019**

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES**

Per hour: 07/01/2019

Building

Millwright \$ 54.20

**SUPPLEMENTAL BENEFITS**

Per hour:

Millwright \$ 53.66

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (18,19) on HOLIDAY PAGE.

Overtime See (5,6,8,11,13,18,19,25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES**

Wages per hour:

One (1) year terms:

1st.	2nd.	3rd.	4th.
\$29.16	\$34.46	\$39.76	\$50.36

Supplemental benefits per hour:

One (1) year terms:

1st.	2nd.	3rd.	4th.
\$34.51	\$38.16	\$42.46	\$49.12

8-740.1

**Carpenter**

**08/01/2019**

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

Per Hour: 07/01/2019

Timberman \$ 50.05

**SUPPLEMENTAL BENEFITS**

Per Hour: 07/01/2019

\$ 50.88

**OVERTIME PAY**

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.  
Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES**

Wages per hour:

One ( 1 ) year terms:

	1st	2nd	3rd	4th
	\$20.02	\$25.03	\$32.53	\$40.04

Supplemental benefits per hour:

All terms \$ 33.61

8-1556 Tm

---

**Carpenter**

**08/01/2019**

**JOB DESCRIPTION** Carpenter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Westchester

**PARTIAL COUNTIES**

Orange: South of but including the following, Waterloo Mills, Slate Hill, New Hampton, Goshen, Blooming Grove, Mountainville, east to the Hudson River.

Putnam: South of but including the following, Cold Spring, TompkinsCorner, Mahopac, Croton Falls, east to Connecticut border.

Suffolk: West of Port Jefferson and Patchogue Road to Route 112 to the Atlantic Ocean.

**WAGES**

Per hour: 07/01/2019

Core Drilling:

Driller \$ 40.44

Driller Helper

32.12

Note: Hazardous Waste Pay Differential:

For Level C, an additional 10% above wage rate per hour

For Level B, an additional 10% above wage rate per hour

For Level A, an additional 10% above wage rate per hour

Note: When required to work on water: an additional \$ 0.50 per hour.

**SUPPLEMENTAL BENEFITS**

Per hour: 07/01/2019

Driller and Helper

\$ 26.70

**OVERTIME PAY**

OVERTIME: See (B,E,K\*,P,R\*\*) on OVERTIME PAGE.

**HOLIDAY**

Paid: See (5,6) on HOLIDAY PAGE.

Overtime: \* See (5,6) on HOLIDAY PAGE.

\*\* See (8,10,11,13) on HOLIDAY PAGE.

8-1536-CoreDriller

---

**Carpenter - Building / Heavy&Highway**

**08/01/2019**

**JOB DESCRIPTION** Carpenter - Building / Heavy&Highway

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019

Carpenter

(Building) \$ 49.38

Carpenter

(Heavy Highway) \$ 49.38

"NOTE" ADD 15% to straight time hourly wage for NEW YORK STATE D.O.T. and other GOVERNMENTAL MANDATED Off-Shift Work.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

**SUPPLEMENTAL BENEFITS**

Per Hour:

Both Carpenter  
 Categories \$ 32.81

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One(1) Year Terms at the following:

Per Hour:

1st	2nd	3rd	4th	5th
\$ 23.73	\$ 27.86	\$ 29.93	\$ 32.00	\$ 33.13

Supplemental Benefits

Per Hour:

All Terms: \$ 18.10

4-Reg.Council Nass/Suff

---

**Electrician** **08/01/2019**

**JOB DESCRIPTION** Electrician

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019 03/30/2020

Electrician		
Electrical Maintenance	\$ 43.70	\$ 44.12
Traffic Signal	\$ 44.60	\$ 45.05

**"PLEASE NOTE"**

Applicable to "EXISTING ELECTRICAL SYSTEMS" including, but not limited to TRAFFIC SIGNALS & STREET LIGHTING. Not used for add-ons.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

**SUPPLEMENTAL BENEFITS**

Per Hour:

Electrician	12% of Hourly Wage Paid + \$18.52	12% of Hourly Wage Paid + \$18.60
-------------	--------------------------------------	--------------------------------------

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

**OVERTIME PAY**

See (B, E2, K, P) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One(1) Year Term(s) at the following Percentage  
 of Journeyman(s) Wage:

1st 40%	2nd 50%	3rd 60%	4th 70%	5th 80%	6th 90%
------------	------------	------------	------------	------------	------------

Supplemental Benefits:

	07/01/2019	03/30/2020
1st	3% + \$3.65	3% + \$3.65
2nd	8% + \$4.19	8% + \$4.19
3rd	9% + \$5.20	9% + \$5.20
4th	10% + \$ 6.96	10% + \$ 6.96
5th	11% + \$10.91	11% + \$10.91
6th	12% + \$14.01	12% + \$14.01

NOTE: Percentages are on "Hourly Wage Paid"  
 NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

4-25m

**Electrician** **08/01/2019**

**JOB DESCRIPTION** Electrician **DISTRICT 4**

**ENTIRE COUNTIES**  
 Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019 3/29/2020

Tree Trimmer/Remover  
 Line Clearance Specialist \$ 34.71 \$ 35.75

Groundman\* \$20.83 \$ 21.45

These rates apply to all tree trimming/removal contracts including but not limited to "Electrical Line Clearance"/"Long Island Railroad Right of Ways".

For Building Construction or Road/Highway Construction Contracts, Heavy & Highway Laborer and Operating Engineer classifications Apply.

\* Note: Groundman Classification not to exceed 20% of the company workforce on Project.

**SUPPLEMENTAL BENEFITS**

Per Hour: 07/01/2019 3/29/2020

Tree Trimmer 20.25% of Hourly 20.50% of Hourly  
 Line Clearance Specialist Wage Paid + Wage Paid +  
 and Groundman \$10.57 \$11.07

NOTE: "Hourly Wage Paid" shall include any and all premium(s) paid

**OVERTIME PAY**

See (B, E, P, S) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE

4-1049/Tree

**Electrician** **08/01/2019**

**JOB DESCRIPTION** Electrician **DISTRICT 4**

**ENTIRE COUNTIES**  
 Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019 04/26/2020

Electrician/Wireman \$ 53.00 \$ 54.00  
 HVAC Controls 53.00 54.00  
 Fire Alarms 53.00 54.00

**SUPPLEMENTAL BENEFITS**

Per Hour:	07/01/2019	04/26/2020
Electrician/Wireman (all categories)	16% of Hourly Wage Paid + \$ 27.52	16% of Hourly Wage Paid + \$ 29.16

NOTE: "Hourly Wage Paid" shall include any and all premium[s]

**OVERTIME PAY**

See (B, E, E2, Q, V) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One(1) Year Terms at the following Percentage of Journeyman(s) Wage:

1st	2nd	3rd	4th	5th	6th
35%	35%	40%	45%	60%	75%

Supplemental Benefits Per Hour:

	07/01/2019	04/26/2020
1st	3% + \$5.15	3% + \$5.15
2nd	8% + \$6.32	8% + \$6.32
3rd	9% + \$7.45	9% + \$7.45
4th	10% + \$8.74	10% + \$8.74
5th	13% + \$10.97	13% + \$10.97
6th	14% + \$17.23	14% + \$17.23

NOTE: Percentages are on "Hourly Wage Paid"

NOTE: "Hourly Wage Paid" shall include any and all premium(s).

---

**Electrician** **08/01/2019**

**JOB DESCRIPTION** Electrician

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019  
 Electrician  
 Pump & Tank \$ 41.65

**SUPPLEMENTAL BENEFITS**

Per Hour:

Electrician  
 Pump & Tank 65.25%  
 of \*Wage  
 Paid

\*Wage Paid includes any and all Premiums

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

1 Year Terms at the Following:

Per Hour:

1st Term	\$ 12.50
2nd Term	\$ 14.58
3rd Term	\$ 16.66
4th Term	\$ 18.74

5th Term \$ 24.99  
 6th Term \$ 29.16

**SUPPLEMENTAL BENEFITS**

Per Hour:

All Terms 65.25%  
 of \*Wage  
 Paid

\*Wage Paid includes any and all Premiums

4-25 Pump & Tank

**Electrician 08/01/2019**

**JOB DESCRIPTION** Electrician **DISTRICT 4**

**ENTIRE COUNTIES**  
 Nassau, Suffolk

**WAGES**

Per Hour:	07/01/2019	04/25/2020
Telephone and Intergrated Tele-Data System Electrician	\$ 37.83	\$ 38.18

This rate classification applies to ALL Voice, Data & Video work.: Excluding Fire Alarm Systems and Energy Managment Systems (HVAC Controls), in those cases the regular Electrician rate applies. To ensure proper use of this rate please call Nassau Offices at (516)228-3912 or Suffolk Offices at (631)687-4882.

**SUPPLEMENTAL BENEFITS**

Per Hour:

Tele-Data Electrician	16% of Hourly Wage Paid + \$19.16	16% of Hourly Wage Paid + \$19.85
--------------------------	---	---

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

**OVERTIME PAY**

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

4-25tela

**Electrician Lineman 08/01/2019**

**JOB DESCRIPTION** Electrician Lineman **DISTRICT 4**

**ENTIRE COUNTIES**  
 Nassau, Queens, Suffolk

**WAGES**

For Utility Distribution & Transmission Line Construction:  
 Per Hour: 07/01/2019

Lineman/Splicer	\$ 57.41
Material Man	49.95
Heavy Equip. Operator	45.93
Groundman	34.45
Flagman	25.83

For Natural Gasline Construction:  
 Per Hour: 07/01/2019 06/07/2020  
 Journeyman U.G.Mech. \$ 48.52 \$50.10

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

**SUPPLEMENTAL BENEFITS**

Per Hour:

Utility Distribution & Transmission Line Construction:

07/01/2019

All Classifications 32% of Hourly  
 Wage Paid +  
 \$ 13.09

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

Natural Gasline Construction:

Per Hour: 07/01/2019 06/07/2020

Journeyman U.G.Mech. 27.5% of Hourly 28% of Hourly  
 Wage Paid + Wage Paid +  
 \$13.94 \$14.60

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

OVERTIME for Natural Gas Mechanic:(B,G,P)

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 16, 23, 25, 26) on HOLIDAY PAGE

Same as Above for Natural Gas Mechanic.

**REGISTERED APPRENTICES**

1000 hour Terms at the following Percentage of Journeyman's Wage.

(Lineman Only)

1st 2nd 3rd 4th 5th 6th 7th  
 60% 65% 70% 75% 80% 85% 90%

SUPPLEMENTAL BENEFIT: 07/01/2019

All Terms 31% of Hourly  
 Wage Paid +  
 \$13.09

4-1049 Line/Gas

**Elevator Constructor**

**08/01/2019**

**JOB DESCRIPTION** Elevator Constructor

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**PARTIAL COUNTIES**

Rockland: Entire County except for the Township of Stony Point

Westchester: Entire County except for the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and Yorktown.

**WAGES**

Per hour:

07/01/2019 03/17/2020

Elevator Constructor \$ 66.95 \$ 69.56

Modernization & Service/Repair \$ 52.44 \$ 54.56

**SUPPLEMENTAL BENEFITS**

Per Hour:

Elevator Constructor \$ 40.93 \$ 41.92

Modernization & \$ 39.90 \$ 40.86

Service/Repairs

**OVERTIME PAY**

Constructor See ( D, M, T ) on OVERTIME PAGE.

Modern/Service See ( B, F, S ) on OVERTIME PAGE.

**HOLIDAY**

Paid: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

WAGES PER HOUR:

\*Note:1st Term is based on Average wage of Constructor & Modernization.  
 Terms 2 thru 4 Based on Journeymans wage of classification Working in.

1 YEAR TERMS:

1st Term*	2nd Term	3rd Term	4th Term
50%	55%	65%	75%

**SUPPLEMENTAL BENEFITS**

Elevator Constructor

1st Term	\$ 32.72	\$ 33.38
2nd Term	33.51	34.20
3rd Term	34.80	35.55
4th Term	36.09	36.89

Modernization &  
 Service/Repair

1st Term	\$ 32.66	\$ 33.33
2nd Term	33.13	33.82
3rd Term	34.36	35.09
4th Term	35.58	36.36

4-1

**Glazier**

**08/01/2019**

**JOB DESCRIPTION** Glazier

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

**WAGES**

Per hour: 7/01/2019

Glazier	\$ 56.25
*Scaffolding	57.25
Glass Tinting & Window Film	28.74
**Repair & Maintenance	28.74

\*Scaffolding includes swing scaffold, mechanical equipment, scissor jacks, man lifts, booms & buckets 24' or more, but not pipe scaffolding.

\*\*Repair & Maintenance- All repair & maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$100,000. All Glass tinting, window film, regardless of material or intended use, and all affixing of decals to windows or glass.

**SUPPLEMENTAL BENEFITS**

Per hour: 7/01/2019

Journeyworker	\$ 33.39
Glass tinting & Window Film	19.39
Repair & Maintenance	19.39

**OVERTIME PAY**

See (C\*,D\* E2, O) on OVERTIME PAGE. (Premium is applied to the respective base wage only.)

\* If an optional 8th hour is required to complete the entire project, the same shall be paid at the regular rate of pay. If a 9th hour is worked, then both hours or more (8th & 9th or more) will be paid at double time rate of pay.

For 'Repair & Maintenance' and 'Glass Tinting & Window Film' see (B, B2, F, P) on overtime page.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (4, 6, 16, 25) on HOLIDAY PAGE  
 For 'Repair & Maintenance' and 'Glass Tinting & Window Film' see (5, 6, 16, 25)

**REGISTERED APPRENTICES**

Wage per hour:  
 (1) year terms at the following wage rates:

	7/01/2019
1st term	\$ 19.44
2nd term	27.59
3rd term	33.35
4th term	44.77

Supplemental Benefits:  
 (Per hour)

1st term	\$ 15.86
2nd term	22.12
3rd term	24.41
4th term	28.76

8-1281 (DC9 NYC)

<b>Insulator - Heat &amp; Frost</b>	<b>08/01/2019</b>
-------------------------------------	-------------------

**JOB DESCRIPTION** Insulator - Heat & Frost

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019	01/01/2020
Insulators		
Heat & Frost	\$ 67.86	\$ 1.25/Hr. Additional

**SUPPLEMENTAL BENEFITS**

Per Hour:	
Insulators	\$ 34.06
Heat & Frost	

**OVERTIME PAY**

See (\*C, \*\*O, V) on OVERTIME PAGE  
 \* 8th Hour paid at time and one half  
 \*\* Triple time for Labor Day (If worked)

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages:  
 1 year terms Per Hour:

Hired prior to 8/21/2017				
	1st	2nd	3rd	4th
7/1/2019	\$27.14	\$33.93	\$40.72	\$50.90
Hired after 8/21/2017				
7/1/2019	\$23.75	\$30.54	\$37.32	\$44.11
Supplemental Benefits:				
Hired prior to 8/21/2017				
7/1/2019	\$13.62	\$17.03	\$20.44	\$25.55
Hired after 8/21/2017				
7/1/2019	\$11.92	\$15.33	\$18.73	\$22.14

**Ironworker** **08/01/2019**

**JOB DESCRIPTION** Ironworker **DISTRICT 9**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**  
 Per Hour: 07/01/2019

Ironworker Rigger \$ 62.84

Ironworker Stone  
 Derrickman \$ 62.84

**SUPPLEMENTAL BENEFITS**  
 Per hour: \$ 39.79

**OVERTIME PAY**  
 See (B, D1, \*E, Q, \*\*V) on OVERTIME PAGE  
 \*Time and one-half shall be paid for all work on Saturday up to eight (8) hours and double time shall be paid for all work thereafter.  
 \*\* Benefits same premium as wages on Holidays only

**HOLIDAY**  
 Paid: See (18) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 25) on HOLIDAY PAGE  
 \*Work stops at schedule lunch break with full day's pay.

**REGISTERED APPRENTICES**  
 Wage per hour:

1/2 year terms at the following hourly wage rate:

	1st	2nd	3rd	4th	5th	6th
07/01/2018	\$31.42	\$31.42	\$44.54	\$43.07	\$54.41	\$54.41
Supplemental benefits:						
Per hour:	\$19.97	\$19.97	\$30.02	\$30.02	\$30.02	\$30.02

9-197D/R

**Ironworker** **08/01/2019**

**JOB DESCRIPTION** Ironworker **DISTRICT 4**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**  
 Per Hour: 07/01/2019 1/1/2020  
 Additional  
 Ornamental \$45.15 \$ 1.25/hr  
 Chain Link Fence \$45.15  
 Guide Rail \$45.15

**SUPPLEMENTAL BENEFITS**  
 Per hour:  
 Journeyworker: \$ 56.05

**OVERTIME PAY**  
 See (B, B1, Q, V) on OVERTIME PAGE

**HOLIDAY**  
 Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**  
 1st term represents first 1-10 months, thereafter (1/2) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th
50%	55%	60%	70%	80%

Supplemental Benefits per hour:

1st Term	\$ 17.89
2nd Term	19.14
3rd Term	19.14

4th Term	48.15
5th Term	50.78

4-580-Or

---

**Ironworker**

**08/01/2019**

**JOB DESCRIPTION** Ironworker

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

PER HOUR:

07/01/2019

Ironworker:

Structural \$ 52.98

Bridges

Machinery

**SUPPLEMENTAL BENEFITS**

PER HOUR:

Journeyman \$ 77.40

**OVERTIME PAY**

See (B, B1, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 18, 19) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

WAGES PER HOUR:

6 month terms at the following rate:

1st \$26.62

2nd \$27.22

3rd - 6th \$27.83

Supplemental Benefits

PER HOUR:

All Terms \$53.60

4-40/361-Str

---

**Ironworker**

**08/01/2019**

**JOB DESCRIPTION** Ironworker

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**PARTIAL COUNTIES**

Rockland: Southern section - south of Convent Road and east of Blue Hills Road.

**WAGES**

Per hour: 07/01/2019

Reinforcing &  
Metal Lathing \$ 58.28

"Basic" Wage \$ 56.65\*\*

\*\*Overtime to be calculated on "Basic" wage

**SUPPLEMENTAL BENEFITS**

Per hour:

Reinforcing &  
Metal Lathing \$ 35.30

**OVERTIME PAY**

See (B, E, Q, \*X) on OVERTIME PAGE

\*Only \$22.00 per Hour for non worked hours

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 13, 18, 19, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

(1) year terms at the following wage rates:  
 Wages Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 26.38	\$ 30.38	\$ 35.38	\$ 37.38

SUPPLEMENTAL BENIFITS  
 Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 15.37	\$ 17.37	\$ 19.33	\$ 20.33

4-46Reinf

**Laborer - Building** **08/01/2019**

**JOB DESCRIPTION** Laborer - Building **DISTRICT 4**

**ENTIRE COUNTIES**  
 Nassau, Suffolk

**WAGES**

WAGES  
 Per Hour: 07/01/2019

Building Laborer \$ 39.40

Asbestos Abatement Workers 36.00  
 (Re-Roofing Removal see Roofer)

**SUPPLEMENTAL BENEFITS**

Per Hour:

Building Laborer \$ 29.56  
 Asbestos Abatement Worker 16.45

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE  
 See also(H)for Fire Watch on OVERTIME PAGE  
 Asbestos Worker See (B, H)

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 25) on HOLIDAY PAGE  
 Asbestos Worker see (5,6,8 & 28)

**REGISTERED APPRENTICES**

Regular Hours Work Terms  
 Term #1 1 hr to 1000hrs  
 Term #2 1001hrs to 2000hrs  
 Term #3 2001hrs to 3000hrs  
 Term #4 3001hrs to 4000hrs

Wages per hour:

1st Term	\$ 17.46
2nd Term	20.55
3rd Term	25.43
4th Term	30.41

Benifits per hour

1st Term	\$ 19.65
2nd Term	22.44
3rd Term	22.44
4th Term	22.44

4-66

**Laborer - Heavy&Highway** **08/01/2019**

**JOB DESCRIPTION** Laborer - Heavy&Highway

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Laborer (Heavy/Highway):

GROUP # 1: Asphalt Rakers, Concrete Curb Formsetters.

GROUP # 2: Asphalt Shovelers, Roller Boys and Tampers.

GROUP # 3: Basic Laborer, Power Tool(Jackhammer), Landscape Construction, Traffic Control Personnel(flaggers)

**WAGES PER HOUR:**

	07/01/2019	06/01/2020
GROUP # 1		
Total Wage Paid	\$ 52.89	Additional
"Base Wage"	\$ 45.84	\$ 3.36
GROUP # 2		
Total Wage Paid	\$ 51.43	Additional
"Base Wage"	\$ 44.48	\$ 3.30
GROUP # 3		
Total Wage Paid	\$ 47.40	Additional
"Base Wage"	\$ 40.35	\$ 3.14

NOTE: "Base Wage" for Premium/Overtime calculation Only. \$7.05 is difference between "Base" and "Total"

**SUPPLEMENTAL BENEFITS**

Per Hour:

ALL GROUPS \$ 30.86

After Forty (40)paid hours in a work week

OVERTIME PAY \$ 19.29

**OVERTIME PAY**

OVERTIME PAY

See (B, E2, F) on OVERTIME PAGE

NOTES: Premium/Overtime Pay to be calculated on "Base Wage" ONLY

Example Group# 3: \$40.35 X Time and One Half = \$60.52 + \$7.05 = \$67.57

Premium Pay of 30% of base wage for all Straight time hours on all New York State, D.O.T. and other Government Mandated Off-Shift Work.

Hazardous Material Work add an Additional 10% of base wage

**HOLIDAY**

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (1) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

1000 hour(s) Terms at the following Percentage of the "Base Wage" except

4th Term calculate at Total Wage Paid.

1st 0-1000/Hrs.	60%
2nd 1001-2000/Hrs.	70%
3rd 2001-3000/Hrs.	80%
4th 3001-4000/Hrs.	90%

Supplemental Benefits per hour:

All APPRENTICES \$ 30.86

After Forty(40) paid hours in a work Week

\$ 19.29

4-1298

**Mason**

**08/01/2019**

**JOB DESCRIPTION** Mason

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour: 07/01/2019 07/01/2020

Brick/Blocklayer \$ 61.82 Additional \$ 1.36

**SUPPLEMENTAL BENEFITS**

Per Hour:

Brick/Block Layer \$ 27.80

**OVERTIME PAY**

See (A, E, E2, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

(800 hour) Terms at the following Percentage of Journeyworkers Wage:

1st	2nd	3rd	4th	5th
50%	60%	70%	80%	90%

Supplemental Benefits per hour:

All Apprentices \$ 18.95

4-1Brk

**Mason - Building** **08/01/2019**

**JOB DESCRIPTION** Mason - Building

**DISTRICT 9**

**ENTIRE COUNTIES**

Nassau, Rockland, Suffolk, Westchester

**WAGES**

Per hour:	07/01/2019	12/02/2019	06/01/2020
		Additional	Additional
Tile Setters	\$ 58.95	\$0.88	\$0.88

**SUPPLEMENTAL BENEFITS**

Per Hour: \$ 24.56\*+ \$9.34

**OVERTIME PAY**

See (B, E, Q, V) on OVERTIME PAGE

\* This portion of benefits subject to same premium rate as shown for overtime wages.  
 Work beyond 10 hours on Saturday shall be paid at double the hourly wage rate.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wage per hour:

Tile Setters:

(750 hour) term at the following wage rate:

Term:	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
	1-750	751-1500	1501-2250	2251-3000	3001-3750	3751-4500	4501-5250	5251-6000	6001-6750	6501-7000
	\$19.73	\$24.39	\$31.20	\$35.85	\$39.19	\$42.34	\$45.70	\$50.35	\$53.02	\$56.68

Supplemental Benefits per hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 13.20	\$ 13.25	\$ 15.85	\$ 15.90	\$ 17.27	\$ 18.82	\$ 20.17	\$ 20.22	\$22.26	\$28.01 9-7/52A

**Mason - Building** **08/01/2019**

**JOB DESCRIPTION** Mason - Building

**DISTRICT 9**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

Building:			
	07/01/2019	01/01/2020	06/01/2020
Wages per hour:		Additional	Additional
		\$0.95	\$0.95
Mosaic & Terrazzo Mechanic	\$56.41		
Mosaic & Terrazzo Finisher	\$54.81		

**SUPPLEMENTAL BENEFITS**

Per hour:

Mosaic & Terrazzo Mechanic	\$ 25.11* plus \$11.13
Mosaic & Terrazzo Finisher	\$ 25.11* plus \$11.11

**OVERTIME PAY**

See (A, E, Q) on OVERTIME PAGE  
 Deduct \$6.50 from hourly wages before calculating overtime.  
 \*This portion of benefits subject to same premium rate as shown for overtime wages.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE  
 Easter Sunday is an observed holiday. Holidays falling on a Saturday will be observed on that Saturday. Holidays falling on a Sunday will be celebrated on the Monday.

**REGISTERED APPRENTICES**

Wages per hour:  
 (750 Hour) terms at the following wage rate.

	1st	2nd	3rd	4th	5th	6th	7th	8th
07/01/2019	\$ 24.95	\$ 27.43	\$ 29.94	\$ 32.42	\$ 34.94	\$ 37.41	\$ 42.40	\$ 47.40

Supplemental benefits per hour:

07/01/2019	\$ 12.56*	\$ 13.82*	\$ 15.07*	\$ 16.33*	\$ 17.58*	\$ 18.84*	\$ 21.35*	\$ 23.86*
	+\$8.82	+\$9.71	+\$10.58	+\$11.47	+\$12.34	+\$13.24	+\$15.02	+\$16.67

Apprentices hired after 07/01/2017`:  
 Wages Per hour:

	1st	2nd	3rd	4th	5th	6th
	0-1500	1501-3000	3001-3750	3751-4500	4501-5250	5251-6000
07/01/2019	\$19.73	\$25.37	\$33.84	\$39.49	\$45.13	\$50.71

Supplemental Benefits per hour:

07/01/2019	1st	2nd	3rd	4th	5th	6th
	\$8.79*	\$11.30*	\$15.07*	\$17.58*	\$20.09*	\$22.60*
	+\$3.91	+\$5.02	+\$6.68	+\$7.79	+\$8.90	+\$10.02

9-7/3

**Mason - Building** **08/01/2019**

**JOB DESCRIPTION** Mason - Building **DISTRICT 9**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

Per hour:	07/01/2019	01/01/2020	07/01/2020
Building-Marble Restoration:		Additional	Additional
		\$1.10	\$1.10
Marble, Stone & Terrazzo Polisher, etc	\$ 42.81		

**SUPPLEMENTAL BENEFITS**

Per Hour:  
 Journeyworker:

Building-Marble Restoration:  
 Marble, Stone &  
 Polisher \$ 28.06

**OVERTIME PAY**

See (B, \*E, Q, V) on OVERTIME PAGE

\*ON SATURDAYS, 8TH HOUR AND SUCCESSIVE HOURS PAID AT DOUBLE HOURLY RATE.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

1ST TERM APPRENTICE GETS PAID FOR ALL OBSERVED HOLIDAYS.

**REGISTERED APPRENTICES**

WAGES per hour:

900 hour term at the following wage:

07/01/2019	1st 1- 900	2nd 901- 1800	3rd 1801- 2700	4th 2701
	\$29.91	\$34.21	\$38.51	\$42.81

Supplemental Benefits Per Hour:

\$ 25.52	\$ 26.37	\$ 27.21	\$ 28.06
----------	----------	----------	----------

9-7/24-MP

**Mason - Building**

**08/01/2019**

**JOB DESCRIPTION** Mason - Building

**DISTRICT 9**

**ENTIRE COUNTIES**

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

**WAGES**

Wages:	07/01/2019	12/30/2019	06/29/2020
		Additional	Additional
Marble Cutters & Setters	\$ 59.44	\$0.47	\$0.95

**SUPPLEMENTAL BENEFITS**

Per Hour:

Journeyworker \$ 36.73

**OVERTIME PAY**

See (B, E, Q, V) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wage Per Hour:

7500 hour terms at the following wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1- 750	751- 1500	1501- 2250	2251- 3000	3001- 3750	3751- 4500	4501- 5250	5251- 6000	6001- 6751	6751- 7500
07/01/2019 \$23.72	\$26.69	\$29.66	\$32.65	\$36.21	\$38.59	\$41.56	\$44.55	\$50.50	\$56.47

Supplemental Benefits per hour:

1st \$21.14	2nd \$22.44	3rd \$23.76	4th \$25.04	5th \$26.35	6th \$27.65	7th \$28.95	8th \$30.24	9th \$32.84	10th \$35.43
----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	-----------------

9-7/4

**Mason - Building** **08/01/2019**

**JOB DESCRIPTION** Mason - Building **DISTRICT 9**

**ENTIRE COUNTIES**  
 Nassau, Rockland, Suffolk, Westchester

**WAGES**

Per hour:	07/01/2019	12/02/2019	06/01/2020
		Additional	Additional
Tile Finisher	\$ 45.54	\$0.73	\$0.72

**SUPPLEMENTAL BENEFITS**

Per Hour:  
 \$ 21.26\* + \$9.17

**OVERTIME PAY**

See (B, E, Q, \*V) on OVERTIME PAGE  
 \*This portion of benefits subject to same premium rate as shown for overtime wages  
 Work beyond 10 hours on a Saturday shall be paid at double the hourly wage rate.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

9-7/88A-tf

**Mason - Building** **08/01/2019**

**JOB DESCRIPTION** Mason - Building **DISTRICT 9**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

Per hour:	07/01/2019	01/01/2020	07/01/2020
Marble, Stone, etc.		Additional	Additional
Maintenance Finishers:	\$ 24.31	\$0.68	\$0.67

Note 1: An additional \$2.00 per hour for time spent grinding floor using "60 grit" and below.  
 Note 2: Flaming equipment operator shall be paid an additional \$25.00 per day.

**SUPPLEMENTAL BENEFITS**

Per Hour:  
 Marble, Stone, etc  
 Maintenance Finishers: \$ 13.72

**OVERTIME PAY**

See (B, \*E, Q, V) on OVERTIME PAGE  
 \*Double hourly rate after 8 hours on Saturday

**HOLIDAY**

Paid: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE  
 1st term apprentice gets paid for all observed holidays.

**REGISTERED APPRENTICES**

WAGES per hour:

	07/01/2019
0-750	\$16.97
751-1500	\$17.95
1501-2250	\$18.93
2251-3000	\$19.90
3001-3750	\$21.38
3751-4500	\$23.33
4501+	\$24.31

Supplemental Benefits:  
 Per hour:

0-750	\$ 13.65
751-1500	\$ 13.66
1501-2250	\$ 13.67
2251-3000	\$ 13.68
3001-3750	\$ 13.69
3751-4500	\$ 13.71
4501+	\$ 13.72

9-7/24M-MF

**Mason - Building / Heavy&Highway** **08/01/2019**

**JOB DESCRIPTION** Mason - Building / Heavy&Highway **DISTRICT 9**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES**

Per hour:	07/01/2019	12/30/2019	06/29/2020
Marble-Finisher	\$ 47.41	Additional \$0.41	Additional \$0.60

**SUPPLEMENTAL BENEFITS**

Journeyworker:  
 per hour

Marble- Finisher \$ 34.49

**OVERTIME PAY**

See (B, E, Q, V) on OVERTIME PAGE

**HOLIDAY**

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

\* Work beyond 8 hours on a Saturday shall be paid at double the rate.

\*\* When an observed holiday falls on a Sunday, it will be observed the next day.

9-7/20-MF

**Mason - Building / Heavy&Highway** **08/01/2019**

**JOB DESCRIPTION** Mason - Building / Heavy&Highway **DISTRICT 4**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019
Cement Mason	\$ 51.97

**SUPPLEMENTAL BENEFITS**

Per Hour:

Cement Mason \$ 33.71  
 Overtime Rate\* \$ 54.42

**OVERTIME PAY**

See (\*B1, Q, V) on OVERTIME PAGE

\* Applies to 9th and 10th hours and up to the 10th hour on Saturday

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

( 1 ) year terms at the following Percentage of Journeyworkers Wage.

1st Term	50%
2nd Term	60%
3rd Term	70%

Supplement Benefits per hour paid:

1st Term	\$ 16.86	OT Rate \$ 27.22
2nd Term	\$ 20.23	OT Rate \$ 32.66
3rd Term	\$ 23.60	OT Rate \$ 38.10

4-780

**Mason - Building / Heavy&Highway**

**08/01/2019**

**JOB DESCRIPTION** Mason - Building / Heavy&Highway

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

NOTE: Shall include but not limited to Precast concrete slabs (London Walks)Marble and Granite pavers 2'x 2' or larger.

Per Hour:

07/01/2019

Stone Setter \$ 64.42

Stone Tender \$ 44.89

**SUPPLEMENTAL BENEFITS**

Per Hour:

Stone Setter \$ 33.30

Stone Tender \$ 19.40

**OVERTIME PAY**

See (\*C, \*\*E, Q) on OVERTIME PAGE

\* On weekdays the eighth (8th) and ninth (9th) hours are time and one-half all work thereafter is paid at double the hourly rate.

\*\* The first nine (9) hours on Saturday is paid at time and one-half all work thereafter is paid at double the hourly rate.

**HOLIDAY**

Paid: See (\*18) on HOLIDAY PAGE

Overtime: See (5, 6, 10) on HOLIDAY PAGE

Paid: \*Must work first 1/2.

**REGISTERED APPRENTICES**

Per Hour:

Stone Setter(800 hour) terms at the following Percentage of Stone Setters wage rate per hour:

1st	2nd	3rd	4th	5th	6th
50%	60%	70%	80%	90%	100%

Supplemental Benefits:

All Apprentices \$ 20.44

4-1Stn

**Mason - Heavy&Highway**

**08/01/2019**

**JOB DESCRIPTION** Mason - Heavy&Highway

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour: 07/01/2019

Pointer, Caulkers & Cleaners \$ 53.67

**SUPPLEMENTAL BENEFITS**

Per Hour:

Pointer, Cleaners & Caulkers \$ 27.14

**OVERTIME PAY**

See (B, E2, H) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour:

One (1) year terms at the following wage rates.

1st	2nd	3rd	4th
\$ 26.36	\$ 29.42	\$ 34.80	\$ 41.93

Apprentices Supplemental Benefits:  
 (per hour paid)

\$ 14.30	\$ 18.24	\$ 20.99	\$ 21.99
----------	----------	----------	----------

4-1PCC

**Operating Engineer - Building**

**08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Building

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

**BUILDING CATEGORIES:**

**CLASS " AA "CRANES:**

ABI Machine (150,000lbs and over or 149,999lbs and under when driving steel sheet piles),Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane & Pile Driver, Vertical Drill Rig (115,000lbs and over and 114,999lbs and under).

**CLASS "A":**

ABI Machine (149,999 and under used for augering and drilling), Asphalt Spreader, Backhoe Crawler(360 swing), Barrier Machine, CAP (ice machine), Cherrypicker CAP (over 70 tons), CMI or Maxim Spreader, Concrete Pump, Directional Boring, GradAll, Grader, Hydraulic Cherrypicker/Crane (2seats), Hoist (3drum or multi platform), Laser Screed, Loading Machine (Bucket/CAP 10yrds or more), Milling Machine (Large), Pipeline Welder, Plant Engineer, Power Winch (stone setting/structural steel), Powerhouse, Scoop Carry-All Scraper (in tandem), Sideboom Tractor (includes tank work), Track Alignment Machine, Stone Spreader (self propelled), Striping Machine (long line/truck mounted), Tree Grapple, Zamboni.

**CLASS "B":**

Backhoe (other than 360), Belt Screte, Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker(under 70 Tons), Conveyor-Multi, Curb Machine (asphalt or concrete), Dinky Locomotive, Drill Rig (dowels)Fork Lift, Hoist (2 Drum), Loading Machine & Front End Loader, Mechanical Compactors (machine drawn), Mulch Machine(Machine Fed), Post Hole/Auger, Power Wincher (Not Included in Class "A"), Asphalt Roller, Hydraulic Pump with Boring Machine, Scoop, Carryall/Scaper, Skid Loader/Skid Steer/Bobcat, Trenching Machine, Vermeer Cutter, Work Boat, Inspection/Safety Boat.

**CLASS "C":**

Concrete Finish/Saw/Spreader, Dirt Roller, Hoist (1 drum), Interior Hoist, Milling Machine (small), Oiler Truck Crane (pile work), Power Broom, Vactor Truck, VacAll.

**CLASS "D":**

Boiler (thermoplastic), Concrete Breaker, Conveyer, Curing Machine, Fork Lift or Walk Behind (power operated), Generator, Hydra Hammer, Compactors (mechanical or hand operated), Maintenance Engineer (small equipment/well point/welding & burning), Mechanic (field man), Micro-Trap with Compressor, Oiler (Truck Crane Boom 100ft or more) Power Winch Truck Mounted (Stone Setter/Struct.Steel), Pin Puller, Portable Heaters, Power Buggies, Pump (double action diaphragm), Pump (4 inch or over), Pump (hydraulic/submersible) Jet Pump, Pulvi-Mixer, Ridge Cutter, Shot Blaster.

**CLASS "E":**

Batching Plant, Compressor (structural steel/2 or more battery), Generator (small), Grinder, Ground Heater, Power Grinder, Mixer with Skip, Mulching Machine (hand fed), Oiler, Pipeline Welder Helper, Power Washer, Pumps (up to 3 inch/single action 1 to 3 inches), Pump (gypsum), Root Cutter, Stump Chipper, Track Tamper, Tractor (caterpillar or wheel), Trenching Machine (hand), Welding Machine (pile work/structural steel), Deckhand on Work/Inspection/Safety Boat.

	07/01/2019	6/01/2020
Class "AA"	\$ 75.40	Additional \$ 3.50

Cranes: Boom length over 100 feet add \$ 1.00  
 " " " 150 " " \$ 1.50 " "  
 " " " 250 " " \$ 2.00 " "

" " " 350 " " \$ 3.00 " "

Class "A"	62.53	3.10
Add \$3.50 for Hazardous Waste Work		
Class "B"	59.27	2.99
Add \$2.50 for Hazardous Waste Work		
Class "C"	57.09	2.93
Add \$1.50 for Hazardous Waste Work		
Class "D"	42.98	2.50
Add \$1.00 for Hazardous Waste Work		
Class "E"	41.03	2.44

**SUPPLEMENTAL BENEFITS**

Per Hour:

All Classes	\$ 38.10
Overtime Rate	32.60

**OVERTIME PAY**

See (D, O) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 15, 16, 25) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

"NOTE" Employee must be Employed day before  
 and day after Holiday to receive Holiday Pay.

**REGISTERED APPRENTICES**

One(1) Year Terms at the following Rate:

1st Term	\$ 21.94	\$1.13
2nd Term	22.80	1.15
3rd Term	23.48	1.17

Supplemental Benefits per hour:

All Apprentices	\$ 15.64
Overtime Rate	5.60

4-138

**Operating Engineer - Building / Heavy&Highway** **08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Building / Heavy&Highway

**DISTRICT** 4

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019	08/01/2019	08/01/2020 Additional
Well Driller	\$ 37.33	\$ 38.40	3%
Well Driller Helper	32.49	33.42	3%

**Hazardous Waste Differential**

Added to Hourly Wage:

Level A	\$ 3.00	\$3.00
Level B	2.00	2.00
Level C	1.00	1.00

**Monitoring Well Work**

Add to Hourly Wage:

Level A	\$ 3.00	\$3.00
Level B	2.00	2.00

**SUPPLEMENTAL BENEFITS**

Per Hour:	07/01/2019	08/01/2019
-----------	------------	------------

Well Driller & Helper	10% of straight time rate plus \$ 12.20	10% of straight time rate plus \$ 12.25
--------------------------	--	--

Additional \$ 4.00 for Premium Time Hours Worked

**OVERTIME PAY**

See (B2, P, S) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 16, 23) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 23) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Apprentices at 12 Month Terms

Wages Per Hour:	07/01/2019	08/01/2019
1st Term	\$ 21.94	\$ 21.94
2nd Term	22.80	22.80
3rd Term	23.48	23.48

**SUPPLEMENTAL BENEFITS**

Per Hour:

1st Term	10% of Wage + \$ 5.10
2nd Term	10% of Wage + \$ 5.60
3rd Term	10% of Wage + \$ 6.60

**BENEFITS AT PREMIUM TIME**

Per Hour:

1st Term	10% of Wage + \$ 5.85
2nd Term	10% of Wage + \$ 6.60
3rd Term	10% of Wage + \$ 8.10

4-138well

**Operating Engineer - Heavy&Highway**

**08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Heavy&Highway

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

HEAVY and HIGHWAY CATEGORIES:

**CLASS "AA" CRANES:**

ABI Machine (150,000lbs and over), ABI Machine (149,000lbs and under driving steel sheets), Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane, Pile Driver.

**CLASS "A":**

ABI Machine (149,000lbs and under for Augering or Drilling), Asphalt Spreader, Backhoe Crawler (360 Swing & over 150,000lbs), Backhoe Crawler (360 Swing & under 149,000lbs), Barrier Machine, Cherrypicker Cap (over 70 tons), CMI or Maxim Spreader, Concrete Pump, Directional Boring, Grader, Gradall, Hoist (3 drum or multi-platform), Hydraulic Cherrypicker/crane (2 seats), Loading Machine (bucket 10 yds. or more), Laser Screed, Milling Machine (Large), Pipeline Welder, Plant Engineer. Power Winch-Stone Setting/Structural Steel or Truck Mounted, Powerhouse, Scoop-Carryall-Scaper in Tandem, Side Boom Tractor, Side Boom Tractor (Tank Work), Stone Spreader(self propelled), Striping Machine (long line/truck mounted), Tree Grapple, Tank Work, Track Alignment Machine.

**CLASS "B":**

Backhoe (other than 360), Belt Screte, Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker (under 70 tons), Conveter-Multi, Curb Machine Asphalt/Concrete, Dinky Locomotive, Drill Rig for Dowels, Field Mechanic, Fork Lift, Hoist (2 Drum), Loading Machine, Loading Machine (Front End), Mechanical Compactors (Machine Drawn), Mulching Machine (Machine Fed), Post Hole/Auger, Power Winch (other than structural steel), Pump Hydraulic (with boring machine), Asphalt Roller, Scoop (carry-all, scraper), Skid Loader/Steer, Vermeer Cutter, Work Boat, Inspection & Safety Boat.

**CLASS "C":**

Concrete Finish/Saw/Spreader Machines, Dirt Roller, Hoist (1 drum), Interior Hoist, Oiler Truck Crane(Pile work), Power Broom, Small Milling Machine, Vactor Truck/VacAll Truck.

**CLASS "D":**

Boiler (Thermoplastic), Concrete Breaker, Conveyor, Curing Machine, Fireman, Fork lift (walk behind), Generator, Hydra Hammer, Maintenance Engineer (small equipment/Well Point/Welding & Burning), Compactors (hand operated), Pin Puller, Portable Heaters, Power Buggies, Pulvi Mixer, Pumps (double action/4 inch and over/Hydraulic/Submersible & Jet), Ridge Cutter, Robotic Unit Operator(Trenchless Pipe Rehab-Cleaning & Television of Sewers/CCTV Inspection), Shotblaster.

**CLASS "E":**

Batching Plant (On Job Site), Compressor (structural steel/2 or more in battery), Generator(small), Grinder, Ground Heater(boilers), Power Grinder, Mixer (with skip), Mulching Machine (hand feed), Oiler, Pipeline Welder Helper, Power Washer, Pump(up to 3 inches/Gypsum/Single action 1 to 3 inches), Root Cutter, Stump Grinder, Track Tamper, Tractor (caterpillar or wheel), Trenching Machine (hand), Welding Machine (Pile Work/Structural Steel), Deckhand (on Work/Inspection/Safety Boat).

	07/01/2019	6/01/2020 Additional
Class "AA"	\$ 77.78	\$ 3.48
Cranes: Boom Length over 100 feet add \$ 1.00 per hour		
"" " 150 "" \$ 1.50 ""		
"" " 250 "" \$ 2.00 ""		
"" " 350 "" \$ 3.00 ""		
Class "A"	68.83*	3.22
*Add \$3.50 for Hazardous Waste Work.		
Class "B"	64.30*	3.07
*Add \$2.50 for Hazardous Waste Work.		
Class "C"	62.00*	3.01
*Add \$1.50 for Hazardous Waste Work		
Class "D"	47.08*	2.56
*Add \$1.00 for Hazardous Waste Work		
Class "E"	45.00	2.50

"NOTE": ADD 30% to straight time hourly wage for NEW YORK STATE D.O.T. and other GOVERNMENTAL MANDATED off-shift work.

**SUPPLEMENTAL BENEFITS**

Per Hour:

ALL CLASSES \$ 38.35

Note: OVERTIME AMOUNT 32.60

**OVERTIME PAY**

See (D, O) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 8, 15, 20, 22, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 8, 15, 20, 22, 25, 26) on HOLIDAY PAGE

"Note" Employee must be employed day before and day after a holiday to receive holiday pay.

**REGISTERED APPRENTICES**

Wage per hour:

REGISTERED APPRENTICES

One(1) Year Terms at the following Rate:

		Additional
1st Term	\$ 28.00	\$ 1.31
2nd Term	22.80	1.34
3rd Term	23.48	1.37

**SUPPLEMENTAL BENEFITS:**

APPRENTICES 15.64

Note: Overtime Amount 5.60

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Party Chief - One who directs a survey party  
 Instrument Man - One who runs the instrument and assists Party Chief  
 Rodman - One who holds the rod and in general, assists the survey party  
 Categories cover GPS & Under Ground Surveying

Per Hour: 07/01/2019  
 Heavy Highway/Building

Party Chief \$ 67.76  
 Instrument Man 51.66  
 Rodman 44.30

**SUPPLEMENTAL BENEFITS**

Per Hour:  
 Heavy Highway/Building \$ 34.23  
 Premium\*:  
 Heavy Highway/Building \$ 43.40  
 Premium\*\*:  
 Heavy Highway/Building \$ 52.56

\* Applies to instances where 1-1/2 regular rate are paid  
 \*\*Applies to instances where 2 times the rate are paid.

**OVERTIME PAY**

See (B, \*E, Q) on OVERTIME PAGE  
 \* Doubletime paid on the 9th hour on Saturday.

**HOLIDAY**

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE  
 Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

4-15D-N/S co.

**Operating Engineer - Marine Dredging**

**08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Marine Dredging

**DISTRICT 4**

**ENTIRE COUNTIES**

Albany, Bronx, Cayuga, Chautauqua, Clinton, Columbia, Dutchess, Erie, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Niagara, Orange, Orleans, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

**WAGES**

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for all equipment and operators are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour:	07/01/2019	10/01/2019
CLASS A1	\$ 39.23	\$ 40.31
Deck Captain, Leverman Mechanical Dredge Operator Licensed Tug Operator 1000HP or more.		
CLASS A2	34.96	35.92
Crane Operator (360 swing)		
CLASS B	To conform to Operating Engineer Prevailing Wage in locality where work is being performed including benefits.	
Dozer, Front Loader Operator on Land		
CLASS B1	33.93	34.86
Derrick Operator (180 swing) Spider/Spill Barge Operator Operator II, Fill Placer,		

Engineer, Chief Mate, Electrician,  
 Chief Welder, Maintenance Engineer  
 Licensed Boat, Crew Boat Operator

CLASS B2 Certified Welder	31.94	32.82
CLASS C1 Drag Barge Operator, Steward, Mate, Assistant Fill Placer	31.07	31.92
CLASS C2 Boat Operator	30.06	30.89
CLASS D Shoreman, Deckhand, Oiler, Rodman, Scowman, Cook, Messman, Porter/Janitor	24.97	25.66

**SUPPLEMENTAL BENEFITS**

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B	07/01/2019 \$11.23 plus 7.5% of straight time wage, Overtime hours add \$ 0.63	10/01/2019 \$11.88 plus 7.5% of straight time wage, Overtime hours add \$ 0.63
All Class C	\$10.93 plus 7.5% of straight time wage, Overtime hours add \$ 0.48	11.58 plus 7.5% of straight time wage, Overtime hours add \$ 0.48
All Class D	\$10.63 plus 7.5% of straight time wage, Overtime hours add \$ 0.33	11.28 plus 7.5% of straight time wage, Overtime hours add \$ 0.33

**OVERTIME PAY**

See (B2, F, R) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

**Operating Engineer - Survey Crew - Consulting Engineer** **08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Survey Crew - Consulting Engineer **DISTRICT 9**

**ENTIRE COUNTIES**  
 Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

**PARTIAL COUNTIES**  
 Dutchess: That part in Dutchess County lying South of the North City line of Poughkeepsie.

**WAGES**  
 Feasibility and preliminary design surveying, any line and grade surveying for inspection or supervision of construction.

Per hour: 07/01/2019  
 Survey Classifications

Party Chief	\$ 43.71
Instrument Man	36.43
Rodman	31.84

**SUPPLEMENTAL BENEFITS**

Per Hour:

All Crew Members: \$ 19.50

**OVERTIME PAY**

OVERTIME:.... See ( B, E\*, Q, V ) ON OVERTIME PAGE.

\*Doubletime paid on the 9th hour on Saturday.

**HOLIDAY**

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

9-15dconsult

**Operating Engineer - Trenchless Pipe Rehab**

**08/01/2019**

**JOB DESCRIPTION** Operating Engineer - Trenchless Pipe Rehab

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

IMPORTANT NOTE: This Category & Classifications are now located in  
 Operating Engineers/Heavy Highway & Laborers/ Heavy Highway.

Per Hour:

07/01/2019  
 (SEE)

Robotic Unit Operator

Operator(class D)

Technician/Boiler, Generator

Operator(classes C&D)

AM Liner/Hydra Seal

Laborer(Grp#3)

Hobas Pipe, Polyethylene Pipe or  
 Pull and Inflate Liner

Laborer(Grp#3)

**OVERTIME PAY**

**HOLIDAY**

4-138TrchPReh

**Painter**

**08/01/2019**

**JOB DESCRIPTION** Painter

**DISTRICT 8**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

**WAGES**

Per hour: 07/01/2019

Brush \$ 48.20\*

Abatement/Removal of lead based  
 or lead containing paint on  
 materials to be repainted. 48.20\*

Spray & Scaffold \$ 51.20\*

Fire Escape 51.20\*

Decorator 51.20\*

Paperhanger/Wall Coverer 50.97\*

\*Subtract \$ 0.10 to calculate premium rate.

**SUPPLEMENTAL BENEFITS**

Per hour: 07/01/2019

Paperhanger \$ 29.47

All others 27.59

Premium 30.35\*\*

\*\*Applies only to "All others" category,not paperhanger journeyworker.

**OVERTIME PAY**

See (A, H) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One ( 1 ) year terms at the following wage rate.

Per hour:	07/01/2019
Appr 1st term...	\$ 18.39*
Appr 2nd term...	24.02*
Appr 3rd term...	29.12*
Appr 4th term...	38.95*

\*Subtract \$ 0.10 to calculate premium rate.

Supplemental benefits:

Per Hour:	07/01/2019
Appr 1st term...	\$ 14.16
Appr 2nd term...	17.17
Appr 3rd term...	19.77
Appr 4th term...	24.91

8-NYDC9-B/S

**Painter**

**08/01/2019**

**JOB DESCRIPTION** Painter

**DISTRICT 8**

**ENTIRE COUNTIES**

Putnam, Suffolk, Westchester

**PARTIAL COUNTIES**

Nassau: All of Nassau except the areas described below: Atlantic Beach, Ceaderhurst, East Rockaway, Gibson, Hewlett, Hewlett Bay, Hewlett Neck, Hewlett Park, Inwood, Lawrence, Lido Beach, Long Beach, parts of Lynbrook, parts of Oceanside, parts of Valley Stream, and Woodmere. Starting on the South side of Sunrise Hwy in Valley Stream running east to Windsor and Rockaway Ave., Rockville Centre is the boundary line up to Lawson Blvd. turn right going west all the above territory. Starting at Union Turnpike and Lakeville Rd. going north to Northern Blvd. the west side of Lakeville road to Northern blvd. At Northern blvd. going east the district north of Northern blvd. to Port Washington Blvd. West of Port Washington blvd.to St.Francis Hospital then north of first traffic light to Port Washington and Sands Point, Manor HAVen, Harbour Acres.

**WAGES**

Per hour:	07/01/2019
Drywall Taper	\$ 48.20*

\*Subtract \$ 0.10 to calculate premium rate.

**SUPPLEMENTAL BENEFITS**

Per hour:	07/01/2019
Journeyman	\$ 27.59

**OVERTIME PAY**

See (A, H) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages - Per Hour: 07/01/2019

1500 hour terms at the following wage rate:

1st term	\$ 18.39*
2nd term	\$ 24.02*
3rd term	\$ 29.12*
4th term	\$ 38.95*

\*Subtract \$ 0.10 to calculate premium rate.

Supplemental Benefits - Per hour:

One year term (1500 hours) at the following dollar amount.

1st year	\$ 14.16
2nd year	\$ 17.17
3rd year	\$ 19.77
4th year	\$ 24.91

8-NYDCT9-DWT

---

**Painter - Bridge & Structural Steel**

**08/01/2019**

**JOB DESCRIPTION** Painter - Bridge & Structural Steel

**DISTRICT 8**

**ENTIRE COUNTIES**

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

**WAGES**

Per Hour:

STEEL:

Bridge Painting: 07/01/2019

\$ 49.50

+ 6.38\*

ADDITIONAL \$6.00 per hour for POWER TOOL/SPRAY, whether straight time or overtime.

NOTE: All premium wages are to be calculated on base rate per hour only.

\* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

NOTE: Generally, for Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

**SUPPLEMENTAL BENEFITS**

Per Hour:

Journeyworker: 07/01/2019

\$ 9.50

+26.05\*

\* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

**OVERTIME PAY**

See (A, F, R) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (4, 6) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wage - Per hour:

Apprentices: (1) year terms

07/01/2019

1st year \$ 23.13

2nd year 34.73

3rd year 46.30

Supplemental Benefits - Per hour:

1st year \$ 13.44

2nd year 20.16

3rd year 26.88

8-DC-9/806/155-BrSS

---

**Painter - Line Striping**

**08/01/2019**

**JOB DESCRIPTION** Painter - Line Striping

**DISTRICT 8**

**ENTIRE COUNTIES**

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

**WAGES**

Per hour:

Painter (Striping-Highway):	07/01/2019
Striping-Machine Operator*	\$ 29.93
Linerman Thermoplastic	\$ 36.06

Note: \* Includes but is not limited to: Positioning of cones and directing of traffic using hand held devices. Excludes the Driver/Operator of equipment used in the maintenance and protection of traffic safety.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

**SUPPLEMENTAL BENEFITS**

Per hour paid: 07/01/2019  
Journeyworker:

Striping-Machine operator	\$ 7.44
Linerman Thermoplastic	\$ 7.44

**OVERTIME PAY**

See (B, B2, E2, F, S) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 20) on HOLIDAY PAGE  
Overtime: See (5, 20) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One (1) year terms at the following wage rates:

07/01/2019

1st term	\$ 11.97
2nd term	17.96
3rd term	23.94

Supplemental Benefits per hour:

1st term	\$ 7.44
2nd term	7.44
3rd term	7.44

8-1456-LS

**Painter - Metal Polisher**

**08/01/2019**

**JOB DESCRIPTION** Painter - Metal Polisher

**DISTRICT 8**

**ENTIRE COUNTIES**

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

**WAGES**

07/01/2019

Metal Polisher	\$ 30.58
Metal Polisher*	31.53
Metal Polisher**	34.08

\*Note: Applies on New Construction & complete renovation

\*\* Note: Applies when working on scaffolds over 34 feet.

**SUPPLEMENTAL BENEFITS**

Per Hour: 07/01/2019

Journeyworker:

All classification \$ 7.72

**OVERTIME PAY**

See (B, E, P, T) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour:

One (1) year term at the following wage rates:

	07/01/2019
1st year	\$ 15.00
2nd year	15.00
3rd year	15.75
1st year*	\$ 17.39
2nd year*	17.44
3rd year*	18.29
1st year**	\$ 19.50
2nd year**	19.50
3rd year**	20.25

\*Note: Applies on New Construction & complete renovation

\*\* Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:

Per hour:

1st year	\$ 5.52
2nd year	5.52
3rd year	5.52

8-8A/28A-MP

**Plasterer**

**08/01/2019**

**JOB DESCRIPTION** Plasterer

**DISTRICT 9**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per hour:

	07/01/2019	08/01/2019
Building: Plasterer/Traditional & Spraying Fireproofing	\$ 45.58	\$ 54.56

**SUPPLEMENTAL BENEFITS**

Per hour:

Journeyworker	\$ 26.27	\$ 22.62
---------------	----------	----------

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages:

(per hour)

800 hours term:

	07/01/2019	08/01/2019
1st term	\$18.33	\$28.34
2nd term	\$20.62	\$30.59
3rd term	\$25.21	\$38.41
4th term	\$27.50	\$41.41
5th term	\$32.08	

6th term \$34.37

**Supplemental Benefits:**

(per hour):

(800) hours term:

	07/01/2019	08/01/2019
1st term	\$ 13.88	\$ 14.27
2nd term	\$ 14.36	\$ 15.39
3rd term	\$ 16.44	\$ 17.14
4th term	\$ 17.53	\$ 18.01
5th term	\$ 19.72	
6th term	\$ 20.81	

9-262

**Plumber**

**08/01/2019**

**JOB DESCRIPTION** Plumber

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019 5/01/2020

Plumber/  
 PUMP & TANK \$ 44.99 \$ 45.49

**SUPPLEMENTAL BENEFITS**

Per Hour:

Plumber \$ 29.14 \$ 30.64

**OVERTIME PAY**

See (B, B2, E2, Q, \*V) on OVERTIME PAGE

(V) For Sundays & Holidays if Worked Only

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One(1) Year Terms at the Following

Percentage of Journeymans wage:

1st Term	30%
2nd Term	40%
3rd Term	50%
4th Term	60%
5th Term	70%

Supplemental Benefits Per Hour:

1st Term	\$17.22	\$18.72
2nd Term	\$17.86	\$19.36
3rd Term	\$18.68	\$20.18
4th Term	\$19.06	\$20.56
5th Term	\$22.29	\$23.79

4-200 Pump & Tank

**Plumber**

**08/01/2019**

**JOB DESCRIPTION** Plumber

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour: 07/01/2019 11/01/2019 05/01/2020

Plumber \$ 52.48 \$ 52.48 \$ 52.48

**SUPPLEMENTAL BENEFITS**

Per Hour:

Plumber \$ 41.98 \$ 42.98 \$ 43.98

**OVERTIME PAY**

See (A, E, Q, \*V) on OVERTIME PAGE  
 CODE "V" is only for SUNDAYS and HOLIDAYS THAT ARE WORKED

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

One(1) Year Terms at the following percentage of Plumbers Rate:

1st Term 2nd Term 3rd Term 4th Term 5th Term  
 30% 40% 50% 60% 70%

Supplemental Benefits per hour:

	07/01/2019	11/01/2019	05/01/2020
1st Term	\$ 29.46	\$ 30.46	\$ 31.96
2nd Term	31.77	32.77	34.27
3rd Term	33.14	34.14	35.64
4th Term	34.63	35.61	37.13
5th Term	36.21	37.21	38.71

4-200

**Plumber** **08/01/2019**

**JOB DESCRIPTION** Plumber

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour:

	07/01/2019	5/01/2020
Plumber		
MAINTENANCE ONLY	\$ 34.24	\$ 34.74

Maintenance: Correction of problem(s)with the existing fixture or group of fixtures, preventive repairs or servicing of said fixtures

**SUPPLEMENTAL BENEFITS**

SUPPLEMENTAL BENEFITS

Per Hour:

Plumber		
Maintenance	\$ 20.86	\$ 22.36

**OVERTIME PAY**

See (B, B2, J) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

4-200 Maintance

**Roofer** **08/01/2019**

**JOB DESCRIPTION** Roofer

**DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour

	07/01/2019	05/01/2020
ROOFER/Waterproofeer		Additional

Total Wage to be Paid	\$ 45.00	\$ 1.50
-----------------------	----------	---------

"Base" Wage 41.00\*\*

**SUPPLEMENTAL BENEFITS**

Per Hour:

ROOFER/Waterproofeer	\$ 33.12
----------------------	----------

**OVERTIME PAY**

Per Hour:  
 NEW ROOF SEE (B,E,Q)  
 RE-ROOF SEE (B,E,E2,Q)  
 NOTE:\*\* Overtime Pay to be calculated on "BASE" Wage then add \$4.00.  
 (Example: \$41.00 x time and one half = \$61.50 + \$4.00 = \$65.50)

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 13, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

(1) Year terms at the following Percentage of Roofers/Waterproofers Wage.

1st	2nd	3rd	4th
40%	50%	70%	80%

Supplemental Benefits per hour:

07/01/2018

1st Term	\$ 9.18
2nd Term	11.35
3rd Term	23.39
4th Term	26.65

4-154

**Sheetmetal Worker**

**08/01/2019**

**JOB DESCRIPTION** Sheetmetal Worker

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES**

Per Hour: 07/01/2019

Sign Erector \$ 50.45

NOTE: Structurally Supported Overhead Highway Signs(See STRUCTURAL IRON WORKER CLASS)

**SUPPLEMENTAL BENEFITS**

Per Hour: 07/01/2019

Sign Erector \$ 46.66

**OVERTIME PAY**

See (A, F, S) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE  
 Overtime: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Per Hour:  
 6 month Terms at the following percentage of Sign Erectors wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
35%	40%	45%	50%	55%	60%	65%	70%	75%	80%

**SUPPLEMENTAL BENEFITS**

Per Hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$13.11	\$14.85	\$16.59	\$18.34	\$25.56	\$27.80	\$30.76	\$33.07	\$35.36	\$37.65

4-137-SE

**Sheetmetal Worker**

**08/01/2019**

**JOB DESCRIPTION** Sheetmetal Worker

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019	08/01/2019 Additional
Sheetmetal Worker	\$ 53.97	\$ 2.00
Temporary Operation or Maintenance of Fans	43.18	

**SUPPLEMENTAL BENEFITS**

Per Hour:	
Sheetmetal Worker	\$ 46.49
Maintenance Worker	46.49

**OVERTIME PAY**

See (B, E, E2, Q, V) on OVERTIME PAGE  
 For Maintenance See Codes B,E, Q & V

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Per Hour:Wages

Six(6) Month Terms As Follows:

1st & 2nd Term	\$ 18.93
3rd & 4th Term	24.32
5th & 6th Term	29.72
7th & 8th Term	37.81
9th Term	43.20

Per Hour: Supplemental Benifits

1st & 2nd Term	\$ 17.11
3rd & 4th Term	23.53
5th & 6th Term	27.69
7th & 8th Term	33.85
9th Term	38.13

4-28

**Steamfitter**

**08/01/2019**

**JOB DESCRIPTION** Steamfitter

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019	01/01/2020 Additional
AC Service/Heat Service	\$ 41.75	\$ 1.00

Refrigeration, A/C, Oil Burner and Stoker Service and Repair.  
 Refrigeration Compressor installation.  
 Air Condition / Heating Compressor installation up to 15hp (combined).

**SUPPLEMENTAL BENEFITS**

Per Hour

AC Service/Heat Service	\$ 17.06
-------------------------	----------

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6, 11, 15, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

1 year terms  
 Wages per hour:

1st Term	\$ 20.22
2nd Term	24.39
3rd Term	28.42
4th Term	34.31

Benefits per hour:

1st Term	\$ 11.61
2nd Term	12.65
3rd Term	13.76
4th Term	15.25

4-638B-StmFtrRef

**Steamfitter**

**08/01/2019**

**JOB DESCRIPTION** Steamfitter

**DISTRICT 4**

**ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES**

Per Hour:	07/01/2019	01/01/2020
		Additional
Sprinkler/Steam Fitter	\$ 64.56	\$ 1.00
Temporary Heat & AC Fitter	\$ 49.08	

Note: Add 15% to Hourly Wage for "Contracting Agency" Mandated Off Shift Work.

**SUPPLEMENTAL BENEFITS**

Per Hour:	07/01/2019
Sprinkler/Steam Fitter	\$ 50.43
Temporary Heat & AC Fitter	41.36

Note: Add 15% to Hourly Benefit for "Contracting Agency" Mandated Off Shift Work.

**OVERTIME PAY**

See (C, \*D, O, \*\*V) on OVERTIME PAGE

(D\*) For Temporary Heat & AC Fitter, on Fire Protection/Sprinkler contracts under \$3,000,000.00 and HVAC/Mechanical contracts under \$30,000,000.00.

(V\*\*) Benefit Amount to be paid:

Sprinkler/Steam \$ 76.30  
 Temp Heat/AC 58.36

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
 Overtime: See (5, 6, 11, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

1 year Terms at the Following:

WAGES per hour:

07/01/2019

1st Term	2nd Term	3rd Term	4th Term	5th Term
\$ 25.86	\$ 32.31	\$ 41.99	\$ 51.66	\$ 54.89

SUPPLEMENTAL BENEFIT per hour:

07/01/2019

1st Term	2nd Term	3rd Term	4th Term	5th Term
----------	----------	----------	----------	----------

\$ 20.70	\$ 25.67	\$ 33.09	\$ 40.52	\$ 43.00
Premium Time Amounts:				
\$ 30.52	\$ 38.16	\$ 49.60	\$ 61.04	\$ 64.86

4-638A-StmSpFtr

**Teamster - Asphalt Delivery** **08/01/2019**

**JOB DESCRIPTION** Teamster - Asphalt Delivery **DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour:

**Heavy Construction Work:**

Shall include the supply of Asphalt for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

**TRUCK DRIVER**

07/01/2019

Asphalt Delivery

\$ 37.545

**Light Construction Work:**

Shall include the supply of Asphalt for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots, Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

**TRUCK DRIVER**

07/01/2019

Asphalt Delivery

\$ 32.16

**SUPPLEMENTAL BENEFITS**

Per Hour:

**Heavy Construction Work**

**TRUCK DRIVER**

07/01/2019

Asphalt Delivery

\$ 46.6825

**Light Construction Work**

**TRUCK DRIVER**

07/01/2019

Asphalt Delivery

\$ 13.05

**OVERTIME PAY**

See (B, \*B2, E, \*\*I, P, \*\*\*R, \*\*\*\*U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for New York State D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T&\*U) Apply to Heavy Construction.

Note: (B2,I,T&\*U) Apply to Light Construction.

Note: (\*U) Only applies after 8 hours worked on holiday.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, \*16, \*\*25) on HOLIDAY PAGE

NOTE: (\*16) Paid at Double if Worked; (\*\*25) Paid at Double if Worked.

4-282

**Teamster - Building** **08/01/2019**

**JOB DESCRIPTION** Teamster - Building **DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour:

Truck Driver (Building Demolition & Debris)

Trailers \$ 34.61  
Straight Jobs \$ 34.31

**SUPPLEMENTAL BENEFITS**

Per Hour:

All Classifications  
07/01/2019  
\$ 34.34

**OVERTIME PAY**

See (B, E, S1) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6, 8, 11, 12, 15, 25, 26) on HOLIDAY PAGE

4-282

**Teamster - Delivery of Concrete 08/01/2019**

**JOB DESCRIPTION** Teamster - Delivery of Concrete **DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour:

**Heavy Construction Work:**

Shall include the supply of Ready-Mix Concrete for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools & Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER  
Concrete Delivery 07/01/2019  
\$ 40.005

**Light Construction Work:**

Shall include the supply of Ready-Mix Concrete for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER  
Concrete Delivery 07/01/2019  
\$ 36.005

**SUPPLEMENTAL BENEFITS**

Per Hour:

Heavy Construction Work 07/01/2019  
Concrete Delivery \$ 43.955

Light Construction Work 07/01/2019  
Concrete Delivery \$ 15.235

**OVERTIME PAY**

NOTE: Heavy Construction:B2,I  
Light Construction:B,E,P

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6, \*16, \*\*25) on HOLIDAY PAGE  
NOTE:(\*16) Paid at Double if Worked. (\*\*25) Paid at Double if Worked.

4-282ns

**Teamster - Heavy&Highway 08/01/2019**

**JOB DESCRIPTION** Teamster - Heavy&Highway **DISTRICT 4**

**ENTIRE COUNTIES**

Nassau, Suffolk

**WAGES**

Per Hour:

**Heavy Construction Work:**

Shall include the construction, improvement or modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants.

07/01/2019

Site Excavating  
(Chauffeurs)

\$ 37.545

**Light Construction Work:**

Shall include the construction, improvement and modification of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings.

Site Excavating  
(Chauffeurs)

32.16

**SUPPLEMENTAL BENEFITS**

Per Hour:

07/01/2019

Heavy Construction Work  
Chauffeurs

\$ 46.6825

Light Construction Work  
Chauffeurs

13.05

**OVERTIME PAY**

See (B, \*B2, E, \*\*I, P, \*\*\*R, \*\*\*\*U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for NEW YORK STATE D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T & \*U) Apply to Heavy Construction.

Note: (B2,I,T & \*U) Apply to Light Construction.

Note: (\*U) Only applies after 8 hours work on holiday

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, \*16, \*\*25) on HOLIDAY PAGE

NOTE:(\*16) Paid at Double if Worked. (\*\*25) Paid at Double if Worked.

4-282

---

**Welder**

**08/01/2019**

**JOB DESCRIPTION** Welder

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, 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, Schuylar, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

**WAGES**

Per hour

07/01/2019

Welder: To be paid the same rate of the mechanic performing the work.\*

\*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

**OVERTIME PAY**

**HOLIDAY**

1-As Per Trade

## Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

- ( AA ) Time and one half of the hourly rate after 7 and one half hours per day
- ( A ) Time and one half of the hourly rate after 7 hours per day
- ( B ) Time and one half of the hourly rate after 8 hours per day
- ( B1 ) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday.  
Double the hourly rate for all additional hours
- ( B2 ) Time and one half of the hourly rate after 40 hours per week
- ( C ) Double the hourly rate after 7 hours per day
- ( C1 ) Double the hourly rate after 7 and one half hours per day
- ( D ) Double the hourly rate after 8 hours per day
- ( D1 ) Double the hourly rate after 9 hours per day
- ( E ) Time and one half of the hourly rate on Saturday
- ( E1 ) Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
- ( E2 ) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- ( E3 ) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- ( E4 ) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- ( E5 ) Double time after 8 hours on Saturdays
- ( F ) Time and one half of the hourly rate on Saturday and Sunday
- ( G ) Time and one half of the hourly rate on Saturday and Holidays
- ( H ) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- ( I ) Time and one half of the hourly rate on Sunday
- ( J ) Time and one half of the hourly rate on Sunday and Holidays
- ( K ) Time and one half of the hourly rate on Holidays
- ( L ) Double the hourly rate on Saturday
- ( M ) Double the hourly rate on Saturday and Sunday
- ( N ) Double the hourly rate on Saturday and Holidays
- ( O ) Double the hourly rate on Saturday, Sunday, and Holidays
- ( P ) Double the hourly rate on Sunday
- ( Q ) Double the hourly rate on Sunday and Holidays
- ( R ) Double the hourly rate on Holidays
- ( S ) Two and one half times the hourly rate for Holidays

- ( S1 ) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- ( T ) Triple the hourly rate for Holidays
- ( U ) Four times the hourly rate for Holidays
- ( V ) Including benefits at SAME PREMIUM as shown for overtime
- ( W ) Time and one half for benefits on all overtime hours.
- ( X ) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

## Holiday Codes

### PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

### OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- ( 1 ) None
- ( 2 ) Labor Day
- ( 3 ) Memorial Day and Labor Day
- ( 4 ) Memorial Day and July 4th
- ( 5 ) Memorial Day, July 4th, and Labor Day
- ( 6 ) New Year's, Thanksgiving, and Christmas
- ( 7 ) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- ( 8 ) Good Friday
- ( 9 ) Lincoln's Birthday
- ( 10 ) Washington's Birthday
- ( 11 ) Columbus Day
- ( 12 ) Election Day
- ( 13 ) Presidential Election Day
- ( 14 ) 1/2 Day on Presidential Election Day
- ( 15 ) Veterans Day
- ( 16 ) Day after Thanksgiving
- ( 17 ) July 4th
- ( 18 ) 1/2 Day before Christmas
- ( 19 ) 1/2 Day before New Years
- ( 20 ) Thanksgiving
- ( 21 ) New Year's Day
- ( 22 ) Christmas
- ( 23 ) Day before Christmas
- ( 24 ) Day before New Year's
- ( 25 ) Presidents' Day
- ( 26 ) Martin Luther King, Jr. Day
- ( 27 ) Memorial Day
- ( 28 ) Easter Sunday





**New York State Department of Labor - Bureau of Public Work  
State Office Building Campus  
Building 12 - Room 130  
Albany, New York 12240**

**REQUEST FOR WAGE AND SUPPLEMENT INFORMATION**

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

**This Form Must Be Typed**

Submitted By:

(Check Only One)

Contracting Agency

Architect or Engineering Firm

Public Work District Office

Date:

**A. Public Work Contract to be let by:** (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address  (Check if new or change)

Telephone: ( )

Fax: ( )

E-Mail:

2. NY State Units (see Item 5)

01 DOT

02 OGS

03 Dormitory Authority

04 State University  
Construction Fund

05 Mental Hygiene  
Facilities Corp.

06 OTHER N.Y. STATE UNIT

07 City

08 Local School District

09 Special Local District, i.e.,  
Fire, Sewer, Water District

10 Village

11 Town

12 County

13 Other Non-N.Y. State  
(Describe)

3. SEND REPLY TO  check if new or change)  
Name and complete address:

Telephone:( )

Fax: ( )

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR  
THIS PROJECT :

OFFICE USE ONLY

**B. PROJECT PARTICULARS**

5. Project Title \_\_\_\_\_

Description of Work \_\_\_\_\_

Contract Identification Number \_\_\_\_\_

Note: For NYS units, the OSC Contract No. \_\_\_\_\_

6. Location of Project:

Location on Site \_\_\_\_\_

Route No/Street Address \_\_\_\_\_

Village or City \_\_\_\_\_

Town \_\_\_\_\_

County \_\_\_\_\_

7. Nature of Project - Check One:

1. New Building

2. Addition to Existing Structure

3. Heavy and Highway Construction (New and Repair)

4. New Sewer or Waterline

5. Other New Construction (Explain)

6. Other Reconstruction, Maintenance, Repair or Alteration

7. Demolition

8. Building Service Contract

8. OCCUPATION FOR PROJECT :

Construction (Building, Heavy  
Highway/Sewer/Water)

Tunnel

Residential

Landscape Maintenance

Elevator maintenance

Exterminators, Fumigators

Fire Safety Director, NYC Only

Guards, Watchmen

Janitors, Porters, Cleaners,  
Elevator Operators

Moving furniture and  
equipment

Trash and refuse removal

Window cleaners

Other (Describe)

9. Has this project been reviewed for compliance with the Wicks Law involving separate bidding?

YES

NO

10. Name and Title of Requester

**Signature**





NEW YORK STATE DEPARTMENT OF LABOR  
Bureau of Public Work - Debarment List

**LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE  
AWARDED ANY PUBLIC WORK CONTRACT**

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

**Debarment Database:** To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, or under NYS Workers' Compensation Law Section 141-b, access the database at this link: <https://applications.labor.ny.gov/EDList/searchPage.do>

**For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322**



**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****0996	A-1 CONSTRUCTION & RENOVATION INC		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		ABDUL KARIM		C/O NORTH AMERICAN IRON W 1560 DECATUR STREETRIDGWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	*****4539	ACCOMPLISHED WALL SYSTEMS INC		112 OSCAWANNA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/12/2020
DOL	DOL	*****3344	ACT INC		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC	*****6775	ADVENTURE MASONRY CORP.		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		AJ TORCHIA		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****3344	ALL CATASTROPHE CONSTRUCTION TEAM INC	ACT INC	6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****8740	ALLSTATE ENVIRONMENTAL CORP		C/O JOSE MONTAS 27 BUTLER PLACEYONKERS NY 10710	03/18/2011	03/19/2020
DOL	DOL		AMADEO J TORCHIA	TORCHIA'S HOME IMPROVEMENT	10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL		ANGELO F COKER			12/04/2018	12/04/2023
DOL	NYC		ANISUL ISLAM		C/O RELIANCE GENERAL CONS 644 OCEAN PARKWAYBROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	*****7004	ANNEX CONTRACTING LTD		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL	*****7004	ANNEX GENERAL CONTRACTING INC		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DA		ANTHONY CARDINALE		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	DOL		ANTHONY J MINGARELLI JR		C/O T & T CONCRETE INC 2560 HAMBURG TURNPIKELACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL		ANTHONY PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10323	01/23/2017	01/23/2022
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3020	APCO CONTRACTING CORP		24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	*****9232	ARKAY CONSTRUCTION INC		102-104 GREYLOCK AVENUE BELLEVILLE NJ 07109	07/15/2015	07/15/2020
DOL	NYC	*****4779	ASTORIA GENERAL CONTRACTING CORP		35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC	*****7217	ASTRO COMMUNICATIONS OF NY CORP		79 ALEXANDER AVE- STE 36A BRONX NY 10454	10/30/2015	10/30/2020
DOL	NYC	*****6046	ATLANTIC SUN CONSTRUCTION CORP		58-46 59TH AVENUE MASPETH NY 11378	05/08/2015	05/08/2020
DOL	NYC	*****6683	ATLAS RESTORATION CORP.		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	NYC		AUDLEY O'BRIEN		1273 NORTH AVENUE/#1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	NYC	*****2591	AVI 212 INC.		260 CROPSY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	DOL		AVIS R HILL		3510 HICKORY WALK LANE ELLENWOOD GA 32094	01/22/2015	01/22/2020

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	AG		AVTAR SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	AG		BALDEV SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL		BARBARA CASSIDY		7 BLENIS PLACE VALHALLA NY 10595	04/02/2015	04/02/2020
DOL	DOL		BARRY KINNEY		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	NYC	*****3915	BEACON RESTORATION INC		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC	*****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
DOL	DOL	*****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8551	BRANDY'S MASONRY		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	NYC	*****6555	BROOKLYN WELDING CORP		1273 NORTH AVENUE/ #1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	DOL	*****1449	BRRESTORATION NY INC		140 ARCADIA AVENUE OSWEGO NY 13126	09/12/2016	09/12/2021
DOL	DOL		BRUCE MORSEY		C/O KENT HOLLOW SIDING LL 29A BRIDGE STREETNEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****8809	C.B.E. CONTRACTING CORPORATION		310 MCGUINESS BLVD GREENPOINT NY 11222	03/07/2017	03/07/2022
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		CANTISANI & ASSOCIATES LTD		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC			06/12/2018	06/12/2023
DOL	DOL		CARIBBEAN POOLS		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****3812	CARMODY "2" INC			06/12/2018	06/12/2023
DOL	DOL	*****1143	CARMODY BUILDING CORP	CARMODY CONTRACTIN G AND CARMODY CONTRACTIN G CORP.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY CONCRETE CORPORATION			06/12/2018	06/12/2023
DOL	DOL		CARMODY ENTERPRISES, LTD.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY INC		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3812	CARMODY INDUSTRIES INC			06/12/2018	06/12/2023
DOL	DOL		CARMODY MAINTENANCE CORPORATION		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY MASONRY CORP		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC	*****9172	CASSIDY EXCAVATING INC		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL	*****6745	CATSKILL FENCE INSTALLATIONS INC		5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	*****8809	CBE CONTRACTING CORP		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****7655	CHAMPION CONSTRUCTION SERVICES CORP		2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	NYC		CHARLES CASSIDY JR		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		CHARLES ZIMMER JR		216 WESTBROOK STREET P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		CHRISTINE J HEARNE		C/O C.J-HEARNE CONSTRUCTIO 131 PONCE DE LEON AVE NEATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	****0671	CJ-HEARNE CONSTRUCTION CO		SUITE 204 131 PONCE DE LEON AVENUE ATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL	****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	NYC	****4468	CRAFT CONTRACTING GROUP INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	****8507	CRAFT FENCE INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	****2164	CREATIVE TRUCKING INC		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL	****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	DOL	****7761	D L MALARKEY CONSTRUCTION		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	****7888	D L MALARKEY CONSTRUCTION INC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	****5629	DAKA PLUMBING AND HEATING LLC		2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DANICA IVANOSKI		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2C SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		DARYL T RIEKS		C/O RIEKS CONTRACTING LLC 4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	NYC	****7707	DASSLE CONTRACTING INC		213-37 39TH AVE/SUITE 120 BAYSIDE NY 11360	05/08/2015	05/08/2020
DOL	DOL		DAVID MARTINEZ		C/O EMPIRE TILE INC 6 TREMONT COURTHUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL		DEBBIE STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DEDA GAZIVODAN		C/O DAKA PLUMBING AND H 2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DENNIS SCHWANDTNER		C/O YES SERVICE AND REPAI 145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		DF CONTRACTORS OF ROCHESTER, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DF CONTRACTORS, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	NYC		DIMITRIOS KOUTSOUKOS		C/O ASTORIA GENERAL CONTR 35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC		DIMITRIOS TSOUMAS		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	DOL	****3242	DONALD R. FORSAY	DF LAWN SERVICE	1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DONALD R. FORSAY		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DORIS SKODA		C/O APCO CONTRACTING CORP 24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	****7404	DOSANJH CONSTRUCTION CORP		9439 212TH STREET QUEENS VILLAGE NY 11428	02/25/2016	02/25/2021

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL		DOUGLAS L MALARKEY	MALARKEY CONSTRUCTION	64 VICTORIA DRIVE B INGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		E C WEBB		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		EARL L WILSON	WILSON BROTHER DRYWALL CONTRACTORS	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL	*****3270	EMPIRE TILE INC		6 TREMONT COURT HUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL	*****7403	F & B PAINTING CONTRACTING INC		2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DR MONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FAY MATTHEW		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FAZIA GINA ALI-MOHAMMED	C/O CHAMPION CONSTRUCTION	2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK BENEDETTO		C/O F & B PAINTING CONTRA 2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL	*****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	DOL		GALINDA ROTENBERG		C/O GMDV TRANS INC 67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	DOL		GEOFF CORLETT		415 FLAGGER AVE #302 STUART FL 34994	10/31/2018	10/31/2023
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL	*****5674	GMDV TRANS INC		67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		GREAT ESTATE CONSTRUCTION, INC.		327 STAGG ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	DOL		GREGORY S. OLSON		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	NYC	*****0346	H N H CONTRACTORS CORP		4558 BROADWAY # 6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC		HAMEEDUL HASAN		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	NYC		HARMEL SINGH		15 CLINTON LANE HICKSVILLE NY 11801	02/25/2016	02/25/2021
DOL	NYC		HAROLD KUEMMEL		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL		HENRY VAN DALRYMPLE		2663 LANTERN LANE ATLANTA GA 30349	12/01/2015	12/01/2020
DOL	DOL	*****6370	HILLIANO CONSTRUCTION & ELECTRICAL INC		354 MAGNOLIA STREET ROCHESTER NY 14611	01/22/2015	01/22/2020
DOL	DOL	*****8282	IDEMA DEVELOPMENT INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****8282	IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****7001	INTEGRATED CONSTRUCTION & POWER SYSTEMS INC		SUITE 100 2105 W GENESEE STREETS SYRACUSE NY 13219	01/06/2016	01/06/2021

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL	*****5131	INTEGRITY MASONRY, INC.	M&R CONCRETE	722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		IRENE KASELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	AG		J A M CONSTRUCTION CORP		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****4910	J V MAGIC TOUCH CORPORATION		94-25 57TH AVENUE, APT 5G ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES B RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		JAMES E RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	AG		JAMES FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL		JAMES LIACONE		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RACHEL		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RHYNDERS SR		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES SICKAU		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DOL		JASON W MILLIMAN		C/O ROCHESTER ACOUSTICAL P O BOX 799HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL	*****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JEFFREY CASSIDY		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		JEROME LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL		JESSICA WHITESIDE		C/O BRRESTORATION NY INC 140 ARCADIA AVENUEOSWEGO NY 13126	09/12/2016	09/12/2021
DOL	AG		JOHN ANTHONY MASSINO		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JOHN F. CADWALLADER		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	*****4612	JOHN F. CADWALLADER, INC.	THE GLASS COMPANY	P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	AG	*****0600	JOHNCO CONTRACTING, INC.		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE VILLALOBOS		94-25 57TH AVENUE - APT 5 ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		JOSE CHUCHUCA		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	DOL		JOSE MONTAS		27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/2020
DOL	AG		JOSEPH FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****9273	JOSEPH M LOVETRO		P O BOX 812 BUFFALO NY 14220	08/09/2016	08/09/2021
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		JOSEPH MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL		JUANA MARTINEZ		C/O LEAD CONSTRUCTION 27 BUTLER PLACE YONKERS NY 10710	03/19/2015	03/19/2020
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL	*****5062	K R F SITE DEVELOPMENT INC		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		KENNETH FIORENTINO		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL	*****9732	KENT HOLLOW SIDING LLC		29A BRIDGE STREET NEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		KEVIN BABCOCK JR		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/2019
DOL	DOL		KEVIN M BABCOCK		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/2019
DOL	DOL		KIM SOROCENSKI		C/O SOLUTION MATTERS INC 198 NORWOOD ROADPORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	DOL	*****3490	L & M CONSTRUCTION/DRYWALL INC.		1079 YONKERS AVE YONKERS NY 10704	08/07/2018	08/07/2023
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL	*****6224	LAKESIDE FIRE SPRINKLERS LLC		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	AG	*****4643	LALO DRYWALL, INC.		221 OLD FORD ROAD NEW PLATZ NY 12561	05/20/2016	05/20/2021
DOL	DOL	*****4505	LARAPINTA ASSOCIATES INC		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		LAURI MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	*****1364	LEAD CONSTRUCTION SERVICES INC		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/19/2015	03/19/2020
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	08/14/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	08/14/2017	08/14/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL		LINDSEY R CRILL		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DA	*****4460	LONG ISLAND GLASS & STOREFRONTS, LLC		4 MANHASSET TRL RIDGE NY 11961	09/06/2018	09/06/2023
DOL	AG	*****4216	LOTUS-C CORP.		81-06 34TH AVENUE APT. 6E JACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	AG		LUIS MARTINEZ	LALO	211 MAIN ST.	05/20/2016	05/20/2021

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL		M ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG	*****6957	M B DIN CONSTRUCTION INC		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	NYC	*****6317	M S QUALITY CONSTRUCTION LLC		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	DOL		M. ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	NYC		MACIEJ SONTOWSKI		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	NYC	*****9590	MACK GLASSNAUTH IRON WORKS INC		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL	*****1784	MADISON AVE CONSTRUCTION CORP		39 PENNY STREET WEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		MALARKEY'S BAR & GRILL LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****0705	MALARKEY'S PUB & GRUB LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MAREK FABIJANOWSKI		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		MARIACHI'S PIZZERIA		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		MARK MIONIS		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		MARVIN A STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		MASONRY CONSTRUCTION, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3333	MASONRY INDUSTRIES, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		MATTHEW IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL		MAURICE GAWENO		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****6416	MCCALL MASONRY		P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		MCLEAN "MIKKI BEANE"		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN "MIKKI" DRAKE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN M DRAKE-BEANE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	NYC	*****5330	METRO DUCT SYSTEMS INC		1219 ASTORIA BOULEVARD LONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	DOL	*****3368	MICEK CONSTRUCTION CO INC		20 CROSS STREET FALCONER NY 14733	12/02/2014	12/02/2019
DOL	DOL		MICHAEL A PASCARELLA		SUITE 100 2105 WEST GENESEE STREET SYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	NYC		MICHAEL HIRSCH		C/O MZM CORP 163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DOL		MICHAEL LENIHAN		1079 YONKERS AVE UNIT 4 YONKERS NY 10704	08/07/2018	08/07/2023
DOL	AG		MICHAEL RIGLIETTI		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MICHAEL WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	NYC		MILANCE HADZIC		22 CALIFORNIA AVE - STE 1	03/11/2015	03/11/2020

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL	****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	AG		MOHAMMED N CHATHA		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	DOL	****2737	MOUNTAIN'S AIR INC		2471 OCEAN AVENUE- STE 7A BROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD PERVAIZ		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC	****3613	MZM CORP		163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DA	****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	NYC	****1284	NEW AMERICAN RESTORATION INC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	DA	****6988	NEW YORK INSULATION INC		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	NYC	****4839	NEW YORK RIGGING CORP		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	NYC	****1968	NORTH AMERICAN IRON WORKS INC		1560 DECATUR STREET RIDGEWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	****6966	NORTH COUNTRY DRYWALL AND PAINT		23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL	****0065	NORTHEAST LANDSCAPE AND MASONRY ASSOC		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL	****1845	OC ERECTERS, LLC A/K/A OC ERECTERS OF NY INC.		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	NYC		ORSON ARROYO		C/O METRO DUCT SYSTEMS 12-19 ASTORIA BOULEVARDLONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	NYC	****9422	PELIUM CONSTRUCTION, INC.		22-33 35TH ST. ASTORIA NY 11105	12/30/2016	12/30/2021
DOL	DOL		PETER M PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL		PIERRE LAPORT		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	****1543	PJ LAPORT FLOORING INC		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	****6895	PROLINE CONCRETE OF WNY INC		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DA	****6817	QUADRANT METAL BUILDINGS LLC		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	NYC		RAMESHWAR ASU		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL		RANA A KAHN		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		RANTIK PARIKH		13 LORIANN ROAD WARREN NJ 07059	07/15/2015	07/15/2020
DOL	DOL	****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	DOL	****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	AG	****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	NYC	****3461	RELIANCE GENERAL CONSTRUCTION INC		644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DA		RIANN MULLER		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	DOL	****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MCGONE		8647 TUNDRY AVE	09/17/2018	09/17/2023

**NYS DOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL	*****9148	RICHARD TIMIAN	RICH T CONSTRUCTI ON	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL	*****8618	RIEKS CONTRACTING LLC		4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT BRUNO		3 GAYLORD ST AUBURN NY 13021	11/15/2016	11/15/2021
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	NYC		ROBERT GUIDO		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	DOL		ROBERT TORDELLA		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	DOL	*****3859	ROCHESTER ACOUSTICAL CORP		P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL		RODERICK PUGH		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL	*****4880	RODERICK PUGH CONSTRUCTION INC.		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	NYC		RODNEY SCOTT		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	09/16/2013	09/15/2019
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL		RYAN ALBIE		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****3347	RYAN ALBIE CONTRACTING INC		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	NYC		SABIR MUHAMMED		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC		SAEED HASAN		4558 BROADWAY #6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC	*****2117	SCOTT ELECTRICAL LLC		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL	*****9751	SCW CONSTRUCTION		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	AG		SERGIO RAYMUNDO		109 DUBOIS RD. NEW PALTZ NY 12561	05/20/2016	05/20/2021
DOL	NYC	*****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL	*****1961	SHANE BURDICK	CENTRAL TRAFFIC CONTROL, LLC.	2238 BAKER ROAD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE NOLAN		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	*****0816	SOLAR ARRAY SOLUTIONS, LLC		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL	*****4025	SOLUTION MATTERS INC		198 NORWOOD ROAD PORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	NYC	*****4934	SPHINX CONTRACTING CORP		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024

**NYSDOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL	*****9751	STEPHEN C WAGAR		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN P SUCATO		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL		STEVEN SAGGESE		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL		STEVEN TESTA		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	NYC	*****9432	SUBLINK LTD		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	*****7441	T & T CONCRETE INC		2560 HAMBURG TURNPIKE P O BOX 367LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL	*****7417	TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL	*****7417	TADCO CONSTRUCTION CORP		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		TAMMY LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	*****9852	TAP STEEL INC		ROUTE 26 3101 P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****5570	TESTA CORP		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	DOL	*****0887	THE BRINSON PAINTING CORPORATION		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATION	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	*****8174	THE DALRYMPLE CORPORATION		UNIT 278 541 10TH STREET NWATLANTA GA 30318	12/01/2015	12/01/2020
DOL	DOL	*****8174	THE DALRYMPLE GROUP LLC		289 JONESBORO RD/ STE 216 MCDONOUGH GA 30253	12/01/2015	12/01/2020
DOL	DOL		TIMOTHY A PALUCK		C/O TAP STEEL INC RTE 26 3101/ P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****0600	TOMSON ALLOYS RECYCLING INC		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DOL	*****3453	TORCHIA'S HOME IMPROVEMENT		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****6914	TRI-COUNTY RESTORATIONS & CONSTRUCTION INC		13 SUMMERSET DRIVE WALKKILL NY 12589	08/22/2014	08/22/2019
DOL	DOL		TRI-COUNTY RESTORATIONS INC		392 ROCK CUT ROAD WALDEN NY 12586	08/22/2014	08/22/2019
DOL	DOL	*****8311	TRIPLE B FABRICATING, INC.		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL	*****9407	TURBO GROUP INC		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL	*****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	NYC		VALERIE VISCONTI		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLSTON NY 11363	01/14/2019	01/14/2024
DOL	DOL		VICTOR ROTENBERG		C/O GMDV TRANS INC 67048 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE	12/13/2017	12/13/2022

**NYSDOL Bureau of Public Work Debarment List 07/22/2019**

**Article 8**

DOL	DOL		WAYNE LIVINGSTON JR	NORTH COUNTRY DRYWALL AND PAINT	23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM C WATKINS		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		WILLIAM DEAK		C/O MADISON AVE CONSTR CO 39 PENNY STREETWEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		WILLIE BRINSON		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****6195	WILSON BROTHER DRYWALL CONTRACTORS		36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL	*****4043	WINDSHIELD INSTALLATION NETWORK, INC.		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	*****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL	*****7345	YES SERVICE AND REPAIRS CORPORATION		145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		YURIY IVANIN		C/O MOUNTAIN'S AIR INC 2471 OCEAN AVENUE-STE 7ABROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	NYC		ZAKIR NASEEM		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	NYC	*****8277	ZHN CONTRACTING CORP		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022

**END OF SECTION 007343**

## PART 1 - GENERAL

## 1.01 BRIEF PURPOSE OF PROJECT / GENERAL

- A. The purpose of the project is to provide various building upgrades at the Riverhead Water District's Plant No. 4.
- B. All work shown and specified in the Contract Documents shall be the work of this Construction Contract. The Owner does not anticipate awarding other prime contracts for the project as shown.
- C. This Section provides an abbreviated summary of the work for the Construction Contract associated with the Owner's program to construct the project.

## 1.02 NOMENCLATURE

- A. Where the terms "Engineer/Architect", "Architect/Engineer", "Engineer", or "Architect" are used throughout these Contract Documents, they shall mean the firm of H2M architects + engineers as may be abbreviated by H2M or H2M Group.
- B. The terms "Contractor" and/or "Prime Contractor" where used shall refer to the individual or company who has entered into an agreement with the Owner to perform the work contained within these Contract Documents. The lack of word capitalization shall be incidental.
- C. The General Construction Contractor may be referred to as the "General Contractor", "Prime General Contractor", "Contract G Contractor" or similar wording. The lack of word capitalization shall be incidental. This Construction Contract shall be known as Contract G.

## 1.03 ABBREVIATED SUMMARY OF WORK

- A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. The contractor shall coordinate, through the Owner/Architect/Engineer, the work of their contract with any work by others.
- B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.
- C. The work includes, but is not limited to, the following:
  - 1. Roof, ceiling, window and door replacements and related miscellaneous work.
  - 2. Alternate Bid Items - see Section 012300.
  - 3. Perform daily and final cleanup.
  - 4. Project closeout submittals.
- D. All other work shown and specified in the Contract Documents.

## 1.04 PARTIAL LISTING OF SPECIFIC CONTRACT REQUIREMENTS

- A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but are not limited to, the following:
  - 1. Guidelines and requirements of the New York State Department of Environmental Conservation (NYSDEC).
  - 2. Guidelines and requirements of the local Health Department.
  - 3. Guidelines and requirements of the NYS Codes.
  - 4. Local laws and ordinances of the Riverhead Water District and the Town of Riverhead.

5. Local gas utility requirements for new services, connections, alterations and related work.

#### 1.05 PARTIAL LISTING OF OVERALL CONTRACT REQUIREMENTS

- A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but is not limited to, the following:
  1. Debris removal and daily and final cleaning up.
  2. Coordination with utility companies necessary to schedule connection of services, and management of the installation.
  3. Site utilization and management so as not to disrupt the Owner's ability to operate the existing facilities in a safe and efficient manner.
  4. Facilities to be used during the contract period that are to be used by the Owner or his representatives and others involved with constructing the project.
  5. Product and equipment storage and handling requirements.
  6. Starting and adjusting of the equipment and systems required under the project.
  7. Site safety in accordance with all applicable federal, state, and local regulations.
  8. Project submittals, meetings, testing services, schedules, shop drawings, closeout procedures and documents, manuals, as-built drawings, and final commissioning of the work shall be provided as required by the Contract.
  9. Site utilization and management so as to allow other prime contractors to perform work in conjunction with this project and to afford them equal opportunity and space to complete their contractual obligations with the Owner as solely defined by the Architect/Engineer.
  10. To not hinder the Owner's ability to deliver a safe and potable water supply.
- B. The Owner has or will award other construction contracts associated with this project.
- C. It is anticipated that work of all the contracts will coincide with work of this Contract.
- D. Each Contractor shall coordinate the work between the various construction contracts, through the Owner/Architect/Engineer, as required to complete the contract requirements in accordance with the requirements contained in Section 013100.

#### 1.06 OWNER SUPPLIED PRODUCTS AND UTILITIES

- A. The Owner will not be supplying equipment, labor, or tools for the project.
- B. The Owner will be supplying products or materials for the project as follows:
  1. Products shown on the Drawings or specified elsewhere.
- C. The Owner will pay for electricity usage. The restrictions on electrical usage shall be as follows:
  1. Power tool usage during specified working hours will only be permitted.
  2. Dewatering and trash pumps and portable heaters will not be permitted.
  3. Sump pumps, if less than 1/3 horsepower will be allowed. Only two (2) sump pumps will be permitted to operate at the same time.
  4. Power to the Owner/Architect/Engineer's trailer, if applicable.
  5. Power to help cure concrete or painting systems will not be permitted.
  6. Power to the Contractor's trailer will be permitted.
- D. The Owner reserves the right to stop paying for electrical usage at any time if, in the opinion of the Owner/Architect/Engineer, the Contractor causes excessive electrical charges or does not conserve electricity to the maximum extent possible in the opinion of the Architect/Engineer. All Contractors shall conserve electricity during the course of construction.

1.07 EXISTING CONDITIONS

- A. The Drawings show certain information that has been obtained by the Owner regarding various pipelines, structures, and utilities that exist at the location of the project both below and at grade.
- B. The Owner and the Architect/Engineer expressly disclaims all responsibility for the accuracy or completeness of the information given on the Drawings with regard to existing facilities.
- C. In the case where the Contractor discovers an obstruction not indicated on the Drawings or not described via specification reference, then the Contractor shall immediately notify the Architect/Engineer of the obstructions' existence.
- D. The Architect/Engineer will determine if the obstruction is to be relocated or removed.
- E. Compensation for this extra work will be paid for in accordance with the provisions in the Contract for "Extra Work".

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 011100**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Site access and control of areas outside of site.
- B. Contractor use of the premises.
- C. Contractor storage, parking and deliveries.
- D. Work hours, employee conduct and miscellaneous employee requirements.
- E. Contract requirements related to maintaining Owner's current operations and excess inspection required.

## 1.02 SITE ACCESS AND CONTROL

- A. The Contractor shall use the designated entrance to the site as shown on the drawings. If no site entrance is designated, the Contractor shall use an entrance designated by the Owner's Construction Representative.
  - 1. The Owner may permit, solely at the Owner's discretion, the temporary use of another entrance for site access.
  - 2. The Owner will only review requests made by the Contractor for an exception to the designated site entrance if made in writing at least 72 hours in advance of each of the times desired for use.
- B. The Contractor is to maintain the entrance area clear of materials, vehicles and any other obstacle or debris. Failure to do so will result in a minimum back charge of \$750 per occurrence.
- C. The area around the site is a residential neighborhood. The Owner intends to be a good neighbor. The Contractor shall not close any road for any period in time. The Contractor shall take whatever measures are necessary to not cause any inconvenience to the area's residents.
- D. The Contractor is responsible to employ methods to prevent construction materials and/or debris from leaving the site. The Contractor is responsible to routinely monitor the areas surrounding the site during the day as well as at the end of the work-day and to immediately clean up any area to its previous condition.
- E. The Contractor shall employ methods to prevent the transmission of dirt from vehicles driving on exposed areas of the site from reaching the surrounding roadways. The Contractor will be responsible to immediately clean the roadway, should the measures being taken by the Contractor not satisfactorily control the transmission of any dirt to the roadway.
- F. Any damages to areas outside the site, spills of soil, liquid, or any other material shall immediately be repaired, cleaned and restored to its previous condition.
- G. The Contractor shall comply with all state and local requirements for allowable weight limits of vehicles on all roads.
- H. The Owner reserves the right to back charge the Contractor for all costs associated with maintaining the grounds as well as maintaining areas outside the site, which may be disturbed by the Contractor should the Contractor fail to maintain or repair the aforementioned in a condition acceptable to the Owner.

- I. The Contractor shall maintain the premises in a safe condition throughout the construction period. Compliance with OSHA regulations and site safety shall be the responsibility of the Contractor as it relates to work of the Contract. The posting of all applicable OSHA safety signs shall be the responsibility of the Contractor.
- J. Contractor shall be responsible for protecting private property. All existing buildings, structures, shrubs, trees, lawn fixtures, sculptures and misc. equipment shall be protected at all times. Any removals or relocation of said objects, if allowed shall be as directed by the Architect/Engineer or District. Contractor shall protect all of the physical structures, property and improvements from damage by their Work and shall immediately repair or replace damage caused by construction operations, employees or equipment employed by the Contractor. All labor, materials and equipment and outside contractors that are employed by the Owner to repair damage caused by the Contractor shall be billed to the Contractor directly or withheld from money due the Contractor for work already completed.
- K. Keep all existing driveways, roads, and parking areas free and clear of materials and equipment. Do not unreasonably encumber the work area with materials and equipment.
- L. The Contractor is responsible for cleaning up the work area. Failure to maintain a clean work site daily, will result in others performing the work and the Contractor being back charged for the cleaning cost plus construction administration fees.
- M. Do not discard or dispose of any waste on-site.
- N. The Contractor shall be responsible for managing dust.

### 1.03 CONTRACTOR USE OF THE PREMISES

- A. Premises, for the purpose of this Contract, shall mean the site, buildings and other structures located within the property line or in any temporary or permanent construction easements identified on the plans.
- B. The Contractor shall use and manage the premises and the associated construction activities as follows:
  - 1. To not hinder the Owner's ability to operate their facilities.
  - 2. To allow other Prime Contractors to install their work and complete their contractual obligations in the time period specified.
  - 3. To allow for stockpiling of construction material and debris without any significant hardship, as defined by the Owner's Construction Representative, on the Owner or other contractors.
  - 4. To allow for the stockpiling of excavated soil and imported fill, when called for, without any significant hardship, as defined by the Owner's Construction Representative, on the Owner or other contractors.
  - 5. To allow utility companies to install their work.
  - 6. To allow for the delivery of equipment and materials by independent trucking companies by leaving enough space for backing in and out of areas.
  - 7. To allow for the safe, unimpeded travel way of the Owners vehicles, Owner's Construction Representative's vehicles, Architect/Engineer's vehicles, construction vehicles and heavy construction equipment about the entire site.
- C. Contractor shall maintain the premises in a safe condition throughout the construction period. Compliance with OSHA regulations and site safety shall be the responsibility of the Contractor as it relates to work of the Contract. The posting of all applicable OSHA safety signs shall be the responsibility of the Contractor.

- D. The Contractor shall provide temporary handrails, as required, for their work or for work put in place by their Contract that will require temporary handrails. Construction of temporary handrails shall be as specified in Section 015000.
- E. The Contractor shall be responsible for protecting Owner's property. All existing buildings, structures, shrubs, trees, lawn fixtures, sculptures and misc. equipment shall be protected at all times. Any removals or relocation of said objects, if allowed shall be as directed by Owner's Construction Representative.
- F. The Contractor shall protect all of the physical structures, property and improvements upon the site from damage by their Work and shall immediately repair or replace damage caused by construction operations, employees or equipment employed by the Contractor. All labor, materials and equipment and outside contractors that are employed by the Owner to repair damage caused by the Contractor shall be billed to the Contractor directly or withheld from money due the Contractor for work already completed.
- G. Immediately remove excess excavated material or relocate to areas on the site requiring placement of fill. Do not stockpile excess material on the site.
- H. Due to the limited site area available for construction, staging areas shall be relocated several times during the various stages of construction. Additional compensation for relocating staging areas, equipment and material storage, and trailers are not to be considered an extra cost to the Contractor as this is an anticipated expense that shall be considered at the time of the bid.
- I. The Contractor is responsible for cleaning up their own materials and debris. Failure to maintain a clean work site daily, will result in other performing the work and The Contractor being back charged for the cleaning cost plus construction administration fees.
- J. Use of the existing building facilities during construction is prohibited including but not limited to: toilet rooms, telephone and water fountains. The Contractor shall be fined (**\$250**) per occurrence if their employee (or subcontractor's employee) is observed disregarding these rules.
- K. Should it become necessary to access the existing building during construction hours for measurements or other non-disruptive work, the contractor shall be escorted by an Owner's Construction Representative.
- L. Refer to Section 015000 - Temporary Facilities and Controls for minimum rubbish removal requirements.
- M. Do not discard or dispose of any waste on-site.
- N. Open fires will not be permitted on the site.
- O. Install erosion control measures as indicated in the Contract. The Contractor shall confine stormwater runoff to the site.
- P. The General Contractor shall be responsible for managing dust as specified in Section 015719.

#### 1.04 CONTRACTOR STORAGE, PARKING AND DELIVERIES

- A. Contractor must provide exterior storage containers when required. Final location of storage container shall be determined by the Owner.

- B. Do not unreasonably encumber the premises with materials and equipment. Do not store material in existing buildings. Store all equipment and materials to allow the Owner's employees to operate and conduct their business safely.
- C. Confine premise storage areas to locations designated by the Owner. Immediately repair or replace damaged facilities to the satisfaction of the Owner and to a condition that existed before the damage occurred as determined by preconstruction photographs, or if photographs are unavailable, to that deemed by the Owner.
- D. No storage materials will be permitted within the buildings at any time during construction.
- E. Storage of chemicals and painting shall be outside the existing or new structures and shall follow manufacturer's guidelines.
- F. Compressed gas containers shall be properly stored and secured per OSHA, to the satisfaction of the Owner. Failure to do so will result in a **[\$250]** back charge, per occurrence.
- G. Contractor shall provide minimum of 48 hours advance written notice to the Owner's Construction Representative for deliveries of materials, site visits by inspectors, manufacturer's representatives or any other occasion that impacts the use of the site. Contractor shall be responsible for any costs that are incurred by the owner, for failure to meet previously agreed upon appointments or work schedules.
- H. Deliveries sent to the Owner will not be signed for or unloaded by the Owner. They will be directed to the construction site and if no employee is on site, the delivery will be rejected, at the contractor's expense.
- I. Night deliveries of equipment (past the designated quitting time) will not be permitted. Do not schedule trucking companies to deliver equipment or wait for the job site to open. Delivery trucks shall not obstruct the site entrance, shall not sit within the neighborhood causing an obstruction or perceived nuisance, nor be left idling on or off the site for any period of time.
- J. Parking shall be in the designated areas of the site only. All automotive type vehicles are to be locked when parked or unattended to prevent unauthorized use. Do not leave vehicles or equipment unattended with the motor running or the ignition key in place. Any vehicles or trucks in non-designated areas may be towed at contractor's expense.

#### 1.05 WORK HOURS, EMPLOYEE CONDUCT AND MISCELLANEOUS EMPLOYEE REQUIREMENTS

- A. The Contractor will be permitted to schedule working days and hours as specified in the General Terms and Conditions, if no times are specified therein then the work hours shall be Monday - Friday 8:00 am - 4:00 pm.
- B. Employees are to act in a professional manner. Any employee using inappropriate language or who is disruptive to the work environment will be banned from the site.
- C. Proper work attire is required. Shirts are to be worn at all times and no short pants are permitted.
- D. Employees shall not converse with local residents or Owner's employees.
- E. Any employee found under the influence of any drug or alcohol will be banned from the site.

1.06 CONTRACT REQUIREMENTS RELATED TO MAINTAINING OWNER'S CURRENT OPERATIONS AND EXCESS INSPECTION REQUIRED

- A. The Contractor shall schedule working days and hours as specified. The Contractor shall pay all excess costs for inspection services provided by the Owner/Architect/Engineer for working beyond the times specified.
- B. The hourly rate paid for inspection services beyond normal working hours shall be at a maximum billing rate of **[\$180]** per hour, which shall be used to compute the overtime hourly charge.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 011400**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Allowance pricing for the following items:
  - 1. Contingency Account.
- B. The Contractor shall include the cash allowances stipulated in this Section in the amount bid.
- C. Eligible costs described in this Section, and Sections referenced herein, will be the only costs paid for out of the stipulated allowances.
- D. All other costs associated with the project as specified and/or shown, including but not limited to the delivery, installation and all Contractor overhead and/or collateral expenses are to be distributed among the other portions of the work and shall be included in other bid items.

## 1.02 SUBMITTALS

- A. Make all submissions under the provisions of Section 013300.
- B. For each type of product/material specified to be furnished under allowance pricing provide documentation of the unit pricing on manufacturer's letterhead certifying pricing of the product/material.
- C. Submit additional backup information to substantiate the invoiced amount(s) as the Architect/Engineer may require for review and approval, prior to order or payment of item.
- D. Provide written breakdowns for extra work as the Owner may require.

## 1.03 CHANGES TO STIPULATED (CASH) ALLOWANCE

- A. If the actual cost of services differs from the cash allowance, then the Contract Price will be adjusted accordingly.

## 1.04 PAYMENTS TO BE MADE OUT OF CONTINGENCY ACCOUNT

- A. Include the cash allowance amount indicated in the proposal for use upon the Owner's instructions for additional improvements beyond those identified in the contract documents and for unforeseen conditions.
- B. The Owner will draw funds from the contingency account only upon prior approval by the Owner's Construction Field Representative and Architect/Engineer.
- C. Funds remaining at project closeout shall be credited to the Owner.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED

**END OF SECTION 012100**

## PART 1 GENERAL

## 1.01 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Price and Contract Time.

## 1.02 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at District's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

## 1.03 WORK FOR ALTERNATES

- A. Work for alternate items selected shall include all related materials, labor, equipment and operations necessary to conduct and complete the alternate work and all other affected work or adjacent areas.
- B. There shall be no change in time or completion date for the selected alternates, unless specified herein or approved in writing by the Architect/Engineer and Owner.
- C. Alternates and associated work shall meet all standards and specifications delineated in the Contract Documents.
- D. If any of the Alternates for preparation and painting of the interior pipe trench or first floor walls are awarded, the work is to be completed following the demolition of the existing motor control center, which is being performed under a separate contract.
- E. If any of the Alternates for preparation and installation of epoxy fluid applied flooring on the interior pipe trench or first floor slabs are awarded, the work is to be completed following the installation of the new motor control center, which is being performed under a separate contract.

## 1.04 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 - Prepare existing concrete slab floor in Room 101 and provide new epoxy fluid applied flooring in accordance with Section 096716:
- B. Alternate No. 2 - Prepare existing CMU walls in Room 101 and provide new epoxy paint in accordance with Section 099100:
- C. Alternate No. 3 - Prepare existing concrete slab floor in Room 102 and provide new epoxy fluid applied flooring in accordance with Section 096716:
- D. Alternate No. 4 - Prepare existing CMU walls in Room 102 and provide new epoxy paint in accordance with Section 099100:
- E. Alternate No. 5 - Prepare existing concrete slab floor in Room 103 and provide new epoxy fluid applied flooring in accordance with Section 096716:
- F. Alternate No. 6 - Prepare existing CMU walls in Room 103 and provide new epoxy paint in accordance with Section 099100:

- G. Alternate No. 7 - Prepare existing CMU walls in Room 104 and provide new epoxy paint in accordance with Section 099100:
- H. Alternate No. 8 - Prepare existing concrete floor slabs in Pipe Trenches 001 & 002 and provide new epoxy fluid applied flooring in accordance with Section 096716:
- I. Alternate No. 9 - Prepare existing concrete walls in Pipe Trenches 001 & 002 and provide new epoxy paint in accordance with Section 099100:
- J. Alternate No. 10 - Remove and dispose of existing door and frame #102B, scrape, prep, prime and paint existing steel lintel and install new FRP door, frame and hardware in accordance with Sections 024130, 099100, 081500 and 087100:
- K. Alternate No. 11 - Remove and dispose of existing door and frame #103, scrape, prep, prime and paint existing steel lintel and install new FRP door, frame and hardware in accordance with Sections 024130, 099100, 081500 and 087100:

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

**END OF SECTION 012300**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section includes the requirements for substitution of specified products during construction.
- B. *The Architect/Engineer will consider requests for substitutions only within **thirty (30)** days from the date of the Notice to Proceed.*
- C. Only products not specifically named in the bid are eligible for substitution in accordance with the requirements contained herein these specifications.
- D. Products named by the Bidder, at the time of bid, shall be furnished and installed and substitutions will not be considered by the Owner/Architect/Engineer for those products named in the bid.

## 1.02 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standard, select any product meeting that standard.
- B. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named which complies with the Specifications.
- C. Where products are not named, then submit products that meet the specifications.

## PART 2 - PRODUCTS

## 2.01 SUBSTITUTIONS

- A. Name - The Drawings and Specifications list acceptable manufacturers, commercial names, trademarks, brands and other product, material and equipment designations. Such names are provided to establish the required type, quality and other salient requirements of procurement.
- B. Equals - An item equal to that named or described on the Drawings or in the Specifications may be provided by Contractor if accepted by the Architect/Engineer.
- C. A request for product substitution constitutes a representation that the Contractor:
  - 1. Has investigated proposed Product and determined that it meets or exceeds the quality level of the specified Product.
  - 2. Shall provide the same warranty for the Substitution as for the specified Product.
  - 3. Shall coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner, including extra charges by material suppliers and vendors.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Shall reimburse the Owner and the Architect/Engineer for review or redesign services associated with re-approval by authorities.
  - 6. Shall reimburse the Owner for all additional engineering services claimed by the Architect/Engineer for extra services associated with the review of the Contractor's substituted item since it could not have been originally included in the Architect/Engineer's professional engineering services agreement. Reimbursement shall be based on the man-hours expended, at current billing rates.

- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- E. Substitution Submittal Procedure:
  - 1. The Contractor shall submit the REQUEST FOR SUBSTITUTION FORM for consideration including all required information.
  - 2. The Contractor shall use the form included within this Section.
  - 3. All forms shall be type written.
  - 4. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
- F. The burden to prove product equivalence rests on the Contractor.
- G. The Architect/Engineer will notify Contractor in writing of decision to accept or reject request and at that time the Contractor can make a formal submittal in accordance with the requirements contained in Section 013300.
- H. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.

## PART 3 - EXECUTION

NOT USED

**This space left intentionally blank.**

REQUEST FOR SUBSTITUTION FORM

Project: Rehabilitation of Plant No. 4 - Contract Substitution Request Number: \_\_\_\_\_  
G

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

To: \_\_\_\_\_ Date: \_\_\_\_\_

H2M Project Number: RDWD1904 Owner: Riverhead Water District

Contract Name: \_\_\_\_\_ Contract No.: \_\_\_\_\_

Specification Title: \_\_\_\_\_

Section: \_\_\_\_\_ Page: \_\_\_\_\_ Article/Paragraph: \_\_\_\_\_

Drawing No(s): \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_

Trade Name: \_\_\_\_\_ Phone #: (\_\_\_\_) \_\_\_\_\_

Installer: \_\_\_\_\_ Address: \_\_\_\_\_

Phone #: (\_\_\_\_) \_\_\_\_\_

History: \_\_\_ New product \_\_\_ 2-5 years old \_\_\_ 5-10 years old \_\_\_ More than 10 years old

Differences between proposed substitution and specified product:

\_\_\_ Point-by-point comparative data attached

Reason for not providing specified item (Attach separate sheet if necessary):

**Typical Similar Installation:**

Project: \_\_\_\_\_

Engineer / Architect: \_\_\_\_\_

Address: \_\_\_\_\_

Owner: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Submit complete installation list on separate sheets.

Proposed substitution affects other parts of Work:  No  Yes

Explain: \_\_\_\_\_

Gross Savings to Owner for accepting substitution: \$ \_\_\_\_\_

Proposed substitution changes Contract Time:  No  Yes

Add / deduct (circle): \_\_\_\_\_ days

Supporting data attached for evaluation of the proposed substitution:

Product Data  Photos  Drawings  Tests  Reports  Samples

Other (explain): \_\_\_\_\_

Attached data includes description, specifications, drawings, photographs, performance and test data adequate for evaluation of request; applicable portions of data are clearly identified.

Attached data also includes a description of changes to Contract Documents that proposed substitution will require for its proper installation.

**The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:**

1. Proposed Substitution has been fully checked and coordinated with Contract Documents.
2. Proposed Substitution does not affect dimensions shown on Drawings.
3. Proposed Substitution does not require revisions to any other Prime Contractor's work.
4. The undersigned will pay for changes to building design, including Architectural and Engineering design, detailing, and construction costs caused by requested Substitution.
5. Proposed Substitution will have no adverse affect on other trades, construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for proposed substitution.
7. The undersigned further states that the function, appearance, and quality of proposed Substitution are equivalent or superior to specified item.

**This request for product substitution also constitutes a representation that I, as the Contractor:**

1. Has investigated proposed Product and determined that it meets or exceeds the quality of the specified Product.
2. Shall provide the same warranty for the Substitution as for the specified Product.
3. Shall coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner, including extra charges by other Prime Contractors, material suppliers, and vendors.
4. Waives claims for additional costs or time extension that may subsequently become apparent.
5. Shall reimburse the Owner and the Architect/Engineer for review or redesign services associated with re-approval by authorities.
6. Shall reimburse the Owner for all additional engineering services claimed by the Architect/Engineer for extra services associated with the review of the Contractor's substituted item since it could not have been originally included in the Architect/Engineer's professional engineering services agreement. Reimbursement shall be based on the man-hours expended, at current billing rates.

Contractor's Authorized Representative (Typewritten): \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**END OF SECTION 012500**

## PART 1 - GENERAL

## 1.01 DESCRIPTION

- A. Work under this Section specifies the procedures used to process partial payments and the Final Payment Request.

## 1.02 TIME FOR COMPLETION

- A. Inasmuch as the provisions of the Contract relating to the time for performance and completion of the Work are for the purposes of enabling the Owner to proceed with the construction of a public improvement in accordance with a predetermined program, and inasmuch as failure to complete the Work within the period herein specified may result in damage or loss to the Owner, time is of the essence of the Contract.
- B. Time for completion of the Work shall be in accordance with that stipulated in the Contract Documents.
- C. The date for completion will be calculated from the date shown on the Notice to Proceed. The Contractor shall execute the Work with diligence from day to day, and complete it within the time fixed.
- D. For the purpose of defining the date of substantial completion, the Project will be considered complete when all Work covered by the Contract has been performed and all installations and equipment have been tested and are ready for permanent use. Removal of the Contractor's equipment and other minor adjustments which do not prevent use of the Project will not be a factor in establishing the date of substantial completion.
- E. Notwithstanding the foregoing, the Architect/Engineer will establish the date of substantial completion when the project is accepted and ready for operation, and no large or major items of work are as yet outstanding. At such time, the Architect/Engineer will issue a punch list, itemizing the items of work remaining. The punch list will include "minor" items only, as defined solely by the Architect/Engineer. Any prior punch lists, which include "major" or significant items, as defined by the Architect/Engineer, shall not be a criterion in establishing the date of substantial completion.

## 1.03 PARTIAL COMPENSATION

- A. At the Owner's discretion, the Contractor may receive compensation for materials and products delivered to the site yet not installed providing:
  - 1. A canceled check or paid bill from the supplier is submitted to the Architect/Engineer indicating that the Contractor has paid the supplier for the material or equipment.
  - 2. The material or piece of equipment is properly stored and protected from the elements and/or vandalism in accordance with the manufacturer's written requirements for long term storage.
  - 3. A certificate of insurance is provided for the material or piece of equipment in the event of a fire, vandalism, theft, etc.
  - 4. A bill of material is delivered to the Architect/Engineer at the time of delivery itemizing the subject material or equipment. Payment will be made for on-site material and/or equipment in the amount of 80% of the gross amount of the paid invoice. This payment will be subject to the normal retainage of the partial estimate.
  - 5. The Architect/Engineer has agreed to the pre-purchasing of the materials.
- B. The Contractor may not receive compensation for materials and products stored in the Contractor's yard or shop unless permitted by the Owner.

## 1.04 APPLICATIONS FOR PAYMENT

- A. The Contractor shall review the percentage of work completed during the payment period with the Architect/Engineer, based on the bid items in the proposal. The Architect/Engineer shall make the final decision on the percentage of work completed.
- B. The form of application for payment shall be AIA Document G702, application and certificate for payment supported by AIA Document G703, Continuation Sheet.
- C. Submit one (1) copy of each payment application, completed, signed and notarized.
- D. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- E. The payment application shall include a Contractor Invoice and an Owner Claim Voucher.
- F. Provide completed Labor Affidavit Form for each pay period included in the certified payroll reports for each payment application for both the contractor and any subcontractor(s).
- G. Submit payment application to Architect/Engineer no later than the first day of each month. Payments received after the first day of each month shall be reviewed and processed after the first day of the following month. Only one application for payment will be reviewed and processed each month.
- H. Submit certified payroll receipts for all workers and subcontractors. Payroll receipts shall be submitted with every application for payment. All payroll receipts shall be certified correct and notarized by a Notary in the State of New York. Application for Payment will not be processed unless all payroll receipts are received.
- I. Contractor shall pay all workers and have all subcontractors pay all workers the prevailing New York State Wage Rates.
- J. Owner may conduct on-site interviews with all workers to verify payments of prevailing wage rates are enforced.
- K. The Architect/Engineer shall submit the documentation along with an Architect/Engineer's Payment Report to the Owner for payment.
- L. Retainage in the amount of 5% will be held from each partial payment. Retainage will only be released upon full completion of the project and will be included in the final payment.

## 1.05 ACCEPTANCE OF FINAL PAYMENT REQUEST

- A. The Contractor shall be conclusively deemed to have accepted the Final Payment Request as a correct statement of the total liability of the Owner and of the compensation paid and to be paid to the Contractor by the Owner unless within seven (7) days after delivery of his copy of the Final Payment Request to him, the Contractor shall return such copy to the Owner together with a statement of his objections to such request and of any claim for damages or compensation in excess of the amounts shown on the Request. The acceptance by the Contractor of the Final Payment Request approved by the Owner shall constitute a release and shall discharge the Owner from all further claims by the Contractor arising out of or relating to the Contract, including but not limited to, a release from all impact costs.

## 1.06 SCOPE OF PAYMENTS

- A. The Contractor shall receive and accept the compensation as herein provided, in full payment for furnishing all materials, labor, tools, and equipment and for performing all work contemplated

and embraced under the Contract, also for all loss or damage arising out of the nature of the Work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered during the prosecution of the Work, and for all risks of every description connected with the prosecution of the Work, until its final acceptance by the Owner, also for all expenses incurred by, or in consequence of, the suspension or discontinuance of the said prosecution of the Work as herein specified, and for all actual or alleged infringements of patent, trademark, or copyright, and for completing the Work and the whole hereof, in an acceptable manner, according to the Plans, Specifications, and other Contract Documents. The payment of any partial or final estimate shall in no way or in no degree prejudice or affect the obligation of the Contractor, at his own cost and expense, to renew or replace all defects and imperfections, or damages. The Architect/Engineer shall be the judge, and the said Contractor shall be liable to the Owner for failure so to do.

**PART 2 - PRODUCTS**

NOT USED.

**PART 3 - EXECUTION**

NOT USED.

**END OF SECTION 012900**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Schedule of Values

## 1.02 SCHEDULE OF VALUES

- A. Submit for approval prior to the start of the work a Schedule of Values that indicates a breakdown of the labor, materials and equipment and other costs used in the preparation of the bid. This schedule shall be in sufficient detail to indicate separate figures for such items as excavation, concrete, equipment and all other items making up the lump sum price. The cost breakdown shall be separately itemized for each lump sum bid item in the project.
- B. Where the cost breakdown includes items for bond payment, insurance payment, job set-up, or job mobilization, these items will be paid based on paid invoices and copies of cancelled checks.
- C. Submit a Schedule of Values to the Architect/Engineer for review and approval within fifteen (15) calendar days from the date shown on the Notice to Proceed.

## 1.03 FORM OF SUBMITTAL

- A. Submit typewritten Contract Cost Breakdown on AIA Form G703 - Application and Certificate for Payment Continuation Sheet or EJCDC 1910-8-E. The Architect/Engineer reserves the right to revise the form or provide a form prepared by the Architect/Engineer.
- B. Use the Table of Contents of the Contract Specifications as a basis for format for listing costs of work for Sections under Divisions 1-48 as sections apply to work. Not all Sections need be assigned a breakout price as determined by the Architect/Engineer.
- C. Identify each line item with number and title as listed in Table of Contents.
- D. Provide dollar values for each line item for labor, overhead, profit, material, and equipment components for each category of work if requested by the Architect/Engineer.
- E. List quantities of materials specified under unit price allowances.
- F. The Schedule of Values, after approval by the Architect/Engineer, shall be the basis for the Contractor's Application for Payment.
- G. The first Application for Payment will not be reviewed prior to an approved breakdown.

## 1.04 PREPARATION OF SCHEDULE OF VALUES

- A. Breakdown schedule of values based on bid items in proposals with further breakdown below each item. In addition to the above, provide a separate line item cost below each bid item, as applicable, for each of the following items which shall be supported by proof where requested by Architect/Engineer:
  - 1. Performance and payment bonds.
  - 2. Insurance.
  - 3. Mobilization and Demobilization (Amounts shall be equal in value).
  - 4. Temporary facilities and measures as specified in Section 015000.
  - 5. Preparation of the Project Construction Schedule, and updates, as specified in Section 013300.

6. Rubbish removal and daily cleaning up. (Provide a total dollar amount and a daily rate for each calendar day during the contract period.)
7. All Cash Allowance items as contained in Section 012100.
8. Surveyor used for layout.
9. A total dollar amount for furnishing all the Operations and Maintenance Manuals specified throughout the specifications.
10. Final cleaning.

B. Show total costs including overhead and profit.

C. Provide additional details and data to substantiate the cost breakdown as requested by the Architect/Engineer.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 012973**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Work of this Section includes:
  - 1. Requests for Interpretation or for information
  - 2. Coordination between contractors, if applicable
  - 3. Administration of subcontracts
  - 4. Coordination of work with utility companies and the Owner/Architect/Engineer
  - 5. Communication and coordination requirements
  - 6. Qualifications of Contractor's job site superintendent
- B. Site staffing requirements for the Contractor's superintendent are also specified herein, the costs for which shall be included in the Contract price.

## 1.02 REQUEST FOR INTERPRETATION OR INFORMATION

- A. The Contractor shall use the Request for Interpretation/Information Form included within this Section when the Contractor feels that additional information is needed to perform the work of the Contract.
- B. The Architect/Engineer may not respond to any requests unless the form is used.
- C. The Architect/Engineer's verbal response(s) to the Contractor's formal requests, if provided, shall not constitute an official response and if acted upon by the Contractor are done so at the Contractor's own risk and liability and shall not be subject to claims for additional compensation.
- D. A signed facsimile or emailed image of the form will be accepted.
- E. The Architect/Engineer will respond in writing to the request as soon as possible.

## 1.03 COORDINATION BETWEEN CONTRACTORS

- A. During the progress of the Work, other Contractors may be engaged in performing other work or may be awarded other contracts for other work on this Project. Each Contractor shall coordinate all the work to be done with the work of each Contractor(s) through the Owner.
- B. Each Contractor shall fully cooperate with each other Contractor(s) and carefully fit its own work to that provided under other contracts as shown or specified in the Contract Documents and as may be coordinated by the Owner/Architect/Engineer.
- C. Each Contractor shall not commit or permit any act that will interfere with the timely performance of work by any other Contractor.
- D. The Contractor shall conduct his/her own operations, and to cooperate with such other parties, so as to cause as little interference as possible with the work by others.
- E. The Contractor agrees to make no claim against the Owner/Architect/Engineer for additional payment due to delays or other conditions created by the operation of others.
- F. If there is a difference of opinion as to the respective project rights of each Contractor doing the work, within the limits of or adjacent to the Project, the Owner/Architect/Engineer shall decide as to the respective rights of the various parties involved in order to secure completion of the work in a satisfactory manner. The Owner/Architect/Engineer's decision shall be final and binding on each Contractor.

- G. If any portion of the work of the Contractor, or any of his/her subcontractors, depends upon the proper execution of the work by others, the Contractor shall promptly give written notice to the Architect/Engineer of all purported defects in the installed work as renders it unsuitable for proper execution and completion of his own work. The Contractor shall further notify the Architect/Engineer of all supposed delays, in the performance of his/her work, as will affect the timely performance of his own work or the project.
- H. The Contractor's lack of notice shall constitute an acceptance by him/her that the work of others is fit and proper for the reception of the Contractor's own work, except as to defects developing in the work that could not have been reasonably foreseen.
- I. The Contractor's lack of notice shall also constitute an acceptance by him/her and an acknowledgement of the timely performance of work by other Contractors or the Owner and that no claims for additional compensation may result.
- J. If the Owner/Architect/Engineer determines that the Contractor is failing to coordinate his own work with the work of others, then the Owner shall have the right to enforce the provisions of the Contract as related to non-performance.
- K. The Owner/Architect/Engineer shall not be liable for any damages suffered by this Contractor by reason of any other Contractor's failure to comply with the directions so issued by the Owner/Architect/Engineer, or by reason of another Contractor's default in performance; it being understood that the Owner does not guarantee the continued efficiency or work production of any Contractor and by execution of the Contract, the Contractor fully understood the potential coordination problems associated with projects involving multiple prime construction contracts.
- L. The Contractor's attention is specifically directed to the fact that he may not have exclusive occupancy of the work area within the limits of the Contract. Each Contractor shall afford the Owner, other Contractors, and utilities reasonable opportunity for the storage of their materials and equipment, and the execution of their work, and shall connect and coordinate his work with theirs as required by the Contract Documents.

#### 1.04 SUBCONTRACTOR ADMINISTRATION AND COORDINATION

- A. Terms and conditions of the Contract shall be binding upon each subcontractor.
- B. Furnish each subcontractor and major equipment vendor at least one (1) copy of the Plans and Technical Specifications.
- C. Provide at least one (1) copy of each approved shop drawing to each subcontractor whose work may depend upon the contents of the shop drawing submittal. The Owner reserves the right to stop all work, without claims for delay, until such time as appropriate subcontractors are furnished with appropriate shop drawings.
- D. Each Contractor shall sequence and schedule the work of subcontractors. Coordinate construction and administration activities of subcontractors. The Architect/Engineer and Owner will not accept telephone calls, facsimiles or office visits from any subcontractors on the project. Subcontractor and vendor questions and clarifications shall be directed to the Architect/Engineer by the Contractor.
- E. The Contractor's on-site project superintendent shall inspect all the work of all of his/her subcontractors, as it is being constructed. The Contractor's subcontractor shall not be permitted to do any work on the site without the Contractor's job site superintendent also being there to inspect the work as it is being performed.

## 1.05 UTILITY COORDINATION

- A. Comply with the requirements of 16 NYCRR Part 753 - Protection of Underground Facilities. Submit a letter stating the case number.
- B. Comply with the utility coordination requirements contained in the General Conditions.

## 1.06 PUBLIC/PRIVATE UTILITIES

- A. Notify all public and private utilities in accordance with Article 20, Section 322-a of the New York State General Business Law for location and markout of existing utilities in the vicinity of the work.
- B. Repair all utilities damaged during the Work to the standards and approval of the respective utility at no cost to the Owner.

## 1.07 SPECIFIC COORDINATION REQUIREMENTS

- A. Sequence and schedule work so as not to interfere with the work by others. Coordinate the work of this Contract with the work by others. In case of conflicts due to improper coordination by the Contractor, the Owner/Architect/Engineer's resolution will be final. No compensation will be awarded for extra work required to resolve conflicts.
- B. Coordinate space requirements, supports, and installation of mechanical, electrical and plumbing work which may be indicated diagrammatically on the Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practicable. Place runs parallel with building lines. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and to facilitate repairs.
- C. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of all fixtures and outlets with finish elements and work by all other trades.
- D. Project Coordination Meetings: Participate in and attend the Project Coordination Meetings as specified below:
  - 1. The meetings will be held when so called for by the Architect/Engineer.
- E. The Contractor shall sequence and schedule work so as not to interfere with the work by others and to afford each Contractor the time to complete their contractual obligations with the Owner. Coordinate the work of this Contract with the work by others. Coordination includes, but is not limited to, the following:
  - 1. Schedule work with all trades throughout the project to prevent interference.
  - 2. Accomplish work in coordination with the other Contractors in a manner that will allow each Contractor adequate time (at the proper stage of construction as determined by the Owner/Architect/Engineer) to perform and complete the work of their contract.
  - 3. The Contractor shall annotate on each of his own shop drawings and submittals, information that is relevant to the work of others or where potential conflicts in the installed work may occur. The Contractor shall "bubble" in green ink the area of potential conflict so as to alert the reviewer.
  - 4. Each prime Contractor shall provide the Architect/Engineer with a list of shop drawings that they may require to properly coordinate the work. If a list is not provided to the Engineer within fifteen (15) calendar days from the date of the Notice to Proceed, then it shall be taken that shop drawings of other prime Contractors are not required. Each prime Contractor shall be responsible for providing the list within the time specified.

5. In case of conflicts due to improper coordination by any Contractor, the Owner/Architect/Engineer's resolution will be final. No compensation will be awarded for extra work required to resolve conflicts or to coordinate the work of all contracts.
  6. Coordinate space requirements, supports, and installation of mechanical, electrical and plumbing work which may be indicated diagrammatically on the Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practicable. Place runs parallel with building lines. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and to facilitate repairs.
  7. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of all fixtures and outlets with finish elements and work by all other trades.
- F. The Contractor shall also coordinate the work by complying with the following:
1. Construction Schedule: The Contractor shall provide a construction schedule as specified in Section 013216 - Construction Schedules.
  2. Weekly Schedule: By 3:00 PM of each Friday during the construction period, the Contractor shall fax or email a typed memo addressed to the Architect/Engineer/Owner's resident field engineer/inspector and designated office project manager summarizing the work for the following week. The memo shall also be faxed or emailed to the Owner. The memo shall briefly itemize the planned activities for the coming week. The memo shall also include a summary of expected material/equipment deliveries, concrete pours, utility tie-ins, excavated material removals and other heavy construction traffic that may impact the work activities for the coming week.
  3. Email Account: The Contractor shall maintain an email account that shall be used to improve communication. An email shall not constitute a formal advisement regarding the terms and conditions of the contract. Email shall only be considered an informal way of notifying relevant parties of project related activities.
  4. Email List: The Contractor, within five (5) calendar days from the Notice To Proceed, shall provide a list of email addresses for each major equipment supplier and local representative, if such exists. A contact person shall be provided for each email address.

#### 1.08 CONTRACTOR'S JOB SITE SUPERINTENDENT

- A. The Contractor shall employ an on-site superintendent as specified herein below. He/She shall be a full-time employee of the Contractor.
- B. The Contractor shall name the job site superintendent within five (5) days of the Notice To Proceed. A letter to the Architect/Engineer shall be provided.
- C. He/She shall have the authority to sequence and schedule the work, and to staff the project, so as not to interfere with the work by others and to complete the work daily within the time so required.
- D. The Superintendent shall have a minimum of five (5) years of experience as a job site superintendent for projects of equal size and complexity.
- E. Contract G superintendent shall not be a foreman or crew supervisor and shall be qualified and experienced person who shall act to schedule and sequence the work on a daily basis.
- F. The superintendent shall be qualified to perform the duties so required to successfully complete the work in accordance with the Contract Documents.
- G. The superintendent shall speak English. If required by the Architect/Engineer, provide a resume for the proposed superintendent that shall be typed and shall list the qualifications of the superintendent. Prior to the Contractor assigning a superintendent to the project, he may wish to arrange an interview with the Architect/Engineer to determine the proposed superintendent's

ability to properly coordinate the work through the Owner/Architect/Engineer. The Contractor shall employ a superintendent acceptable to the Owner.

THIS SPACE LEFT INTENTIONALLY BLANK.

REQUEST FOR INTERPRETATION/INFORMATION (RFI)

OWNER'S NAME: Riverhead Water District

PROJECT NAME &amp; CONTRACT DESIGNATION: Rehabilitation of Plant No. 4 - Contract G

CONSTRUCTION CONTRACT NO.: RDWD1904

Product, Item, or System:	
Request Date:	RFI No.:
Specification Section:	Paragraph Ref:
Contract Drawing Reference(s):	
Describe Request:	
Signed:	See Contractor's Attachments for Additional Description for Information
Owner/Architect/Engineer Response:	
Architect/Engineer (Printed):	See Architect/Engineer's Attachments for Additional Information
Architect/Engineer's Signature & Date	<i>Response Accepted By Contractor Contractor's Signature &amp; Date</i>
The Work shall be carried out in accordance with these supplemental instructions without change in Contract amount or Contract time for completion. Prior to proceeding with these instructions, indicate your acceptance of these instructions by signing where indicated and returning this form to the Architect/Engineer.	

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 013100**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Work of this Section includes the requirements for progress meetings.

## 1.02 PRE-CONSTRUCTION CONFERENCE

- A. The Contractor is required to attend the pre-construction conference at a location, date, and time selected by the Owner.
- B. The owner, a partner, or a corporate officer representing each Contractor shall attend the conference. The job site superintendent and office project manager for each Contractor shall also attend.
- C. The Architect/Engineer will prepare an agenda for the conference.

## 1.03 PROGRESS MEETINGS

- A. Progress meetings will be held approximately once every two (2) weeks during the project. The Owner may elect to hold meetings more or less frequently.
- B. At least seven (7) calendar days advance notice will be given by the Architect/Engineer or the date for the upcoming meeting will be set during the progress meeting.
- C. Attendance at progress meetings shall be mandatory. An amount of \$1,000 shall be deducted from the Contract Amount for each announced meeting not attended by the Contractor.
- D. The owner, a partner, or a corporate officer representing the Contractor shall attend each announced progress meeting. The job site superintendent and office project manager for each Contractor shall also attend.
- E. Subcontractors shall attend when requested by the Owner or Architect/Engineer at no cost to the Owner.
- F. Meetings will be conducted by Architect/Engineer at a location selected by the Owner, normally at or adjacent to the project site.
- G. The minimum agenda will cover:
  - 1. Review minutes of previous meetings.
  - 2. Identify present problems and resolve them.
  - 3. Plan work progress during next work period.
  - 4. Review the status of off-site fabrication and delivery schedule.
  - 5. Review shop drawings and submittal schedules.
  - 6. Review change order status.
  - 7. Review status of construction progress schedule.
  - 8. Coordinate access requirements.
  - 9. Other business related to the work.

## 1.04 OTHER MEETINGS

- A. Attend special meetings which may be required or called for by Federal, State or Local authorities, utility companies, Owner, Architect/Engineer or any other firm, person or organization related to the project.

## 1.05 CONDUCTING MEETINGS

- A. General - This paragraph covers Owner and/or Architect/Engineer meetings with Contractor and/or his subcontractors. Neither Owner nor Architect/Engineer wishes to meet solely with a subcontractor and requests for such meetings will be discouraged. If a meeting is deemed necessary, every effort will be made to have Contractor attend. If, for some reason, circumstances do not allow such, the meeting may be held, minutes of the meeting will be sent to contractor and decisions on any major questions will be reserved until contractor has been consulted. Subcontractors may accompany contractor to meetings provided contractor notifies Architect/Engineer in advance.
- B. Chairman - When Architect/Engineer/Owner attend meetings, Architect/Engineer, or his duly authorized representative, will act as chairman. Should Owner-Contractor meetings be necessary, Owner will chair such meetings.
- C. Notices - Architect/Engineer or Owner will issue notices of meetings to all parties concerned and will note, thereof, who must attend and who may attend if they so desire. When a Contractor desires a formal meeting, make a request through Architect/Engineer. Except when Architect/Engineer determines that a prompt meeting is essential, all notices will be issued at least one week in advance of the meeting date.
- D. Agenda - All parties shall inform Architect/Engineer of items desired to be discussed and Architect/Engineer will notify all parties of all items to be considered. This is to allow each party to fully prepare for the meeting. This shall not be construed to mean that other items cannot be brought up at the meetings.
- E. Time Limits - It is the intent to hold productive and efficient meetings and to keep them as short as is reasonably possible. The Chairman will be the sole judge as to whether or not further discussion on any matter is warranted and all discussions shall cease when he so orders.
- F. Minutes - Minutes of meetings will be kept, written and distributed by the Chairman or his duly authorized representative. Minutes of all meetings will be available upon request to the Chairman.
- G. Conduct - It is the intent to conduct all meetings in an orderly manner, to reasonably discuss all items and to hear and observe the rights and opinions of all parties. The Chairman will allow each party to speak, however, he reserves the right to order any individual to leave the meeting at any time for any reason.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED

**END OF SECTION 013119**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section specifies the requirements for preparing construction schedules and for keeping them up to date.
- B. Prepare a Gantt Chart type schedule and keep it up to date as specified hereinafter.
- C. All schedules shall be submitted in accordance with the requirements contained herein in Section 013300.

## 1.02 CONSTRUCTION SCHEDULE - GENERAL

- A. Coordinate the work and maintain the construction schedule. In the event actual progress begins to lag the schedule, promptly employ additional means and methods of construction to make up the lost time.
- B. Keep the construction schedule current and revise and resubmit as often as necessary to accurately reflect the conditions of the work, past progress and anticipated future progress.
- C. The construction schedule shall be completed, submitted, and deemed received by the Architect/Engineer prior to the first payment application.
- D. The schedule, when approved by the Architect/Engineer and the Owner, shall establish the dates for starting and completing work for the various portions of the Contract. It shall be the duty of the Contractor to conform to his/her own schedule and to perform the work within the time limits indicated. Failure to adhere to the approved schedule shall expose the Contractor to disputes, claims and additional costs incurred by others.
- E. Coordinate letting of subcontracts, material purchases, shop drawing submissions, delivery of materials, and sequence of operations, to conform to the schedule.

## 1.03 CONSTRUCTION SCHEDULE - GANTT CHART TYPE

- A. The schedule shall show, in detail, the proposed sequence of the work and the estimated date of starting and completing each stage of the work in order to complete the project within the contract time.
- B. Prepare the schedule in a manner so that the actual progress of the work can be recorded and compared with the expected progress.
- C. Coordinate the construction schedule with the proposed schedules of the equipment suppliers and subcontractors.
- D. The schedule shall be plotted out in color and shall be 36-inch by 40-inch. It shall contain as many sheets as are necessary to show all rolled down tasks. Partially printed schedules will not be accepted. The Contractor shall arrange to have it plotted on a color plotter suitable for the intended application.
- E. The schedule shall show the following:
  - 1. Task links/task dependency in blue ink.
  - 2. Work under the Contract in green ink.
  - 3. Work by others in blue ink.
  - 4. Milestone dates (zero duration) by a red diamond.
  - 5. The end date for each task and subtask at the end of a bar.

6. The description of all major tasks within the bar. The bar shall be red.
7. Critical path.

1.04 REVISION OF PROJECT PROGRESS SCHEDULE

- A. The Contractor shall evaluate and provide updated construction schedules monthly in accordance with job requirements. Each update shall be submitted to the Architect/Engineer for information purposes and be provided by the last Friday of every month
- B. Each Contractor shall modify his construction schedule to accommodate coordination of the construction contracts by the Owner/Architect/Engineer without claims for additional compensation or delay.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 013216**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section specifies the requirements for making submissions for the project. Electronic submissions will be required unless expressly noted otherwise.
- B. Refer to Section 013216 - Construction Schedule for the requirements concerning the submission of construction schedules and for making updates thereto.

## 1.02 IDENTIFICATION OF SUBMITTALS

- A. Each and every submission shall be provided by the Contractor and shall be accompanied by a SUBMISSION TRANSMITTAL FORM. The Contractor shall use the specimen form made a part of this Section. *Submittals not containing the form will be returned to the Contractor un-reviewed.* The Architect/Engineer will not review project submissions until such time as the form is completed in its entirety. Identify each submittal and resubmittal using the form.
- B. Each individual submittal shall be identified with a 'submission log number' as specified here in this example: 033000-01-1
  1. The Section number for which the submittal applies, followed by a dash, shall be indicated, "033000".
  2. The submittal within the Section shall be indicated by the next grouping "01". For instance and in this example, the concrete design mix may be submission "01", the waterstop catalog cut may be "02", and so on. Submittals shall be sequentially numbered within the Specification Section, i.e. 01, 02, etc.
  3. The number of times the submission was made shall be preceded by a dash and a numerical suffix as follows: "-1". In this example, the concrete design mix is being submitted for the first time. Use the number "1" for the first time it is being submitted.
  4. Subsequent submissions of the concrete design mix shall utilize the original number and a sequential numeric suffix, i.e. "2" for a resubmission, "3" for the second resubmission, and so on. Substitute the new number for the original "1".
- C. Where a layout drawing, containing different elements of the project, is being submitted and there is a question as to what the log number might be, then the Contractor shall contact the Architect/Engineer so that an agreed upon log number can be assigned.
- D. It is incumbent on the Contractor to initially assign the submission log number designation to each submission. Submissions not containing a log number, as specified above, will be returned to the Contractor un-reviewed by the Architect/Engineer.
- E. Every submittal shall also be accompanied by a Transmittal Letter (or "Speed Form") addressed to the Architect/Engineer's Project Manager as hereinafter defined.

## 1.03 COORDINATION OF SUBMITTALS

- A. Prior to submitting to the Architect/Engineer, fully coordinate all interrelated work. As a minimum, do the following:
  1. Determine and verify all field dimensions and conditions by field measuring existing conditions and the installed work of this Contract and work by others.
  2. Coordinate with all trades, subcontractors, vendors, system and equipment suppliers and manufacturers, public agencies, and utility companies and secure all necessary approvals, in writing.
- B. Make submittals in groups containing all associated items that in some way depend upon each other.

1. This also applies to color charts, as one color may not be able to be selected without the selection of other colors so as to form a color-coordinated group.
2. The Architect/Engineer may elect not to review partial or incomplete submissions, whereupon he will notify the Contractor of the additional submissions that are required before a review can be made.

#### 1.04 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates of installation to provide time for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery. The Architect/Engineer will review submittals in a manner as expedient as possible, and will generally send a written response to the Contractor within seven (7) calendar days of receipt of submittals.
- B. Submissions may be returned reviewed, unreviewed, rejected, returned conditioned upon submission of related items, or for other reasons set forth in the Contract Documents.
- C. Make submissions well in advance as the returning, rejecting or disapproval of submissions or other similar circumstances are possible and are deemed "avoidable delays". Costs for these delays or those attributed to Contractor's tardiness in making submittals shall be borne by the Contractor.
- D. **All** submittals requiring Architect/Engineer's review (except operations manuals) as required under the technical specifications of these documents shall be submitted within **FORTY FIVE (45)** consecutive calendar days after the date of the Notice to Proceed. An amount of **\$250** per calendar day shall be deducted from payment due the Contractor for **each** day that an outstanding submittal exists, said amount being the cost associated with the Architect/Engineer's review.
- E. Operation and maintenance manuals shall be submitted at least **FORTY FIVE (45)** consecutive calendar days prior to scheduled startup of the unit or system.
- F. If material or equipment is installed before it has been deemed to be in general compliance with the Contract Documents, as determined by the Architect/Engineer, the Contractor shall be liable for its removal and replacement at no extra charge and without an increase in contract time.

#### 1.05 DESTINATION OF SUBMITTALS

- A. Each submission of documents shall be accompanied by a transmittal form containing the name of the project, the contract name, the Architect/Engineer's project manager, a submittal ID number, and a description of content for the submitted items.
- B. A copy of the TRANSMITTAL FORM shall also be provided to the Architect/Engineer's inspector at the job site.
- C. Electronic submittals shall be transmitted through the Newforma® Project Center website or by email, pending instruction by the Architect/Engineer. H2M architects + engineers is using a project information application called Newforma® Project Center. One of its components is Newforma Info Exchange, a web application that facilitates sending and sharing transmittals, and file sharing.
- D. As an external team member on this project the Contractor will be required to access the H2M architects + engineers/Newforma Info Exchange website for information related to the project, including file transfers, RFI, Submittals, Action Items, and project Calendar information. The Contractor will have access to this website using any internet-capable computer running Internet Explorer or Firefox. All data transmitted through the H2M architects + engineers/Newforma Info

Exchange website is encrypted and logged. Further instructions will be provided to the Contractor after the contract is awarded.

- E. Other submissions, such as material samples or other items as instructed by the Architect/Engineer, shall be sent to the Architect/Engineer's office as follows:
- H2M architects + engineers**  
**538 Broad Hollow Road - 4th Floor East**  
**Melville, New York 11747**  
**Attention: H2M Project Manager (Named at Pre-Construction Conference or in the Notice to Proceed)**

#### 1.06 CLARITY OF SUBMITTALS

- A. All printed materials shall be neat, clean, professionally drafted by hand or by computer, clear, legible, and of such quality that they can be easily reproduced by normal photocopying.
- B. All electronic submittals shall be produced with a minimum resolution of 300 dpi.
- C. Binders of information shall be separated into groups, subsystems, or similar equipment/function. Copies not conforming to this paragraph will be returned to the Contractor without the Architect/Engineer's review.

#### 1.07 CONTRACTOR'S REPRESENTATION

- A. By making a submission, the Contractor represents that he has determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving equipment into an enclosed space, materials, catalog and model numbers and similar data and that he has checked and coordinated each submission with other work at or adjacent to the project site in accordance with the requirements contained in Section 013100 - Project Management and Coordination and the Contract Documents.
- B. Every SUBMISSION TRANSMITTAL FORM shall contain the Contractor's approval stamp and date showing that the submittal has been approved by the Contractor. The Architect/Engineer will not review submittals that have not yet been reviewed and approved by the Contractor.

#### 1.08 ENGINEER/ARCHITECT'S REVIEW

- A. Architect/Engineer will review and comment on each submission conforming to the requirements of this Section.
1. Architect/Engineer's review will be for conformance with the design concept of the project and 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, laying lengths, tolerances, interference's, for coordinating the work by others or subcontractors.
  2. The Architect/Engineer's review of a separate item, or portion of a system, does not represent a review of an assembly or system in which the item functions.
- B. The Architect/Engineer will mark submittals as follows:
1. NO EXCEPTION TAKEN (A) - No corrections, no marks. The content of this submittal has been reviewed by the Architect/Engineer and been found to be in general compliance with the Contract Documents. No further submission of this submittal is required and the information contained in the submittal may be built into the work in accordance with the Contract Documents.
  2. MAKE CORRECTIONS NOTED (B) - Minor amount of corrections. The content of this submittal has been reviewed by the Architect/Engineer and has been found in general to be in compliance with the Contract Documents. The notations made on the submittal by

the Architect/Engineer shall be incorporated into the work in accordance with the terms and conditions of the Contract Documents. No further submission of this submittal is required.

3. AMEND AND RESUBMIT (C) - The content of this submittal has been reviewed by the Architect/Engineer and this review has determined that additional data and/or modification to the submitted data or other changes are required to bring the work represented in this submittal into compliance with the Contract Documents. This submittal shall be reviewed and revised in accordance with the Architect/Engineer's comments and resubmitted to the Architect/Engineer for review. The information contained on the resubmittal shall not be incorporated into the work until the submittal is returned to the Contractor marked "NO EXCEPTION TAKEN" or "MAKE CORRECTIONS NOTED".
  4. REJECTED (D) - The content of this submittal has been reviewed by the Architect/Engineer and has been determined not to be in accordance with the requirements contained in the Contract Document and requires too many corrections or other justifiable reason. The submittal shall be corrected and resubmitted or a submittal of an alternate shall be provided. No items are to be fabricated under this mark.
  5. SUBMIT SPECIFIED ITEM (E) - The content of this submittal has been reviewed by the Architect/Engineer and this review has indicated that the work displayed in the submittal is not in compliance with the Contract Documents. The Contractor shall submit another submittal for this portion of the work, which complies with the Contract Documents.
  6. RECEIVED (R) - This submittal is accepted on the project and filed for record purposes only, in accordance with the terms and conditions of the Contract Documents. Documents marked "RECEIVED" will not be returned.
- C. No payment will be made on any item for which a submission is required if such submission:
1. has not been made,
  2. has been made but was not stamped "No Exceptions Taken" by Architect/Engineer,
  3. has been made and stamped "Make Corrections Noted", but contractor has not complied with Architect/Engineer's notes marked on the submittal,
  4. has been made and stamped "No Exceptions Taken", but item provided does not conform to the shop drawing nor to the Contract Documents.
- D. Submittals not required by these specifications will not be recognized or processed.
- E. Provide an 8-inch by 10-inch space for the Architect/Engineer's review stamp.

#### 1.09 RESUBMISSIONS

- A. Prepare new and additional submissions, make required corrections, and resubmit corrected copies until found in compliance with the Contract Documents.
- B. On, or with, re-submittals, clearly describe revisions and changes made, other than the corrections requested by Architect/Engineer, which did not appear on the previous submissions.

#### 1.10 CONTRACTOR'S RESPONSIBILITIES

- A. Architect/Engineer's review of submittals shall not relieve the Contractor of his/her responsibility for any deviation from the requirements of the Contract Documents nor relieve the Contractor from responsibility for errors or omissions in the submittals.
- B. No portion of the work requiring a submission shall be commenced until the Architect/Engineer has found the submission in general compliance with the Contract Documents.
- C. The Contractor shall provide written notification of any specification or drawing deviation.

## 1.11 EXCESS COSTS FOR ENGINEERING/ARCHITECTURAL SERVICES

- A. The Owner will charge to the Contractor, and will deduct from the partial and final payments due the Contractor, all excess engineering and architectural expenses incurred by the Owner for extra services (work) conducted or undertaken by the Architect/Engineer as stipulated below:
1. Services and other similar charges because of the Contractor's errors, omissions, or failures to conform to the requirements of the Contract Documents as related to administrative charges associated with non-compliance with the requirements for making project submissions.
  2. Services and other similar charges required to examine and evaluate any changes or alternates proposed by the Contractor and which may vary from the Contract Documents.
  3. Services and other similar charges as a result of the Contractor's proposed substitution of materials, equipment or products which require a redesign of any portion of the project, as contained in the Contract Documents at the time of bid.
  4. Services and other similar charges as a result of the Contractor's proposed substitution of products which require an engineering and/or architectural evaluation, beyond the time stipulated in Section 012500, to determine if the substituted product is equal to that specified.
  5. Services and other similar charges as a result of changes by the Contractor to dimensions, weights, sizes, voltages, phase, horsepower, materials of construction, and similar physical or operating characteristics of the product furnished which require redesign of the project in any way.
  6. Services and other similar charges for the review of resubmissions of shop drawings that have been marked as "No Exceptions Taken" or "Make Corrections Noted".
  7. Services and other similar charges for the review of shop drawings submitted more than two (2) times for the same product or portion of the work.

## 1.12 MISCELLANEOUS SUBMITTALS

- A. Provide a Submittal Schedule within seven (7) calendar days from the date of the Notice to Proceed. The Submittal Schedule shall list all submittals for the project referenced by draft log number. Provide the estimated date that the submittal will be transmitted to the Architect/Engineer for review.
- B. Within seven (7) calendar days from the date of the Pre-Construction Meeting, submit a Proposed Products List. This list shall be a complete listing of all products proposed for use, with name of manufacturer, service headquarters, trade name and model number of each product. Partial listings will not be accepted.
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

## 1.13 SUBCONTRACTOR LIST

- A. The Contractor shall submit, on AIA Form G705, within THIRTY (30) calendar days after the date of the Notice to Proceed, a list of all subcontractors, including the names of the major subcontractors that were submitted at the time of the bid.

## 1.14 MATERIAL SAFETY DATA SHEETS (MSDS)

- A. Comply with "Right to Know" requirements of Chapter 551 of Laws of New York, 1980, concerning notification of the use of toxic substances.
- B. Any product or substance used by the Contractor or its subcontractors which is listed in Subpart Z of OSHA Part 1910 Title 29 of the Code of Federal Regulations entitled "Toxic and Hazardous

Substances" shall be identified to the Owner/Architect/Engineer by the Contractor's submission of a standard Material Safety Data Sheet (MSDS) in accordance with "Right To Know" requirements.

- C. Products will not be permitted to be kept on site without a MSDS.

#### 1.15 SHOP DRAWINGS

- A. Submit shop drawings for all fabricated work, for all manufactured items and for items specifically required by the specifications.
- B. Submit one (1) electronic copy of each standard drawing, catalog cut, or other material. All shop drawings or submittals that are not in the standard 8-1/2" x 11" format shall be submitted both electronically and in paper. Samples shall be delivered directly to the office of the Architect/Engineer. The Architect/Engineer will return an electronic copy of each submittal once reviewed.
- C. Subcontractors shall submit shop drawings directly to the Contractor for checking. Thoroughly check subcontractors' shop drawings for measurements, sizes of members, details, materials, and conformance with the Contract Documents.
  - 1. Return submittals which are found to be inaccurate or in error.
  - 2. Do not submit to the Architect/Engineer until all corrections have been made.
- D. Clearly show the relationship of the various parts of the project and where the information provided on the submission depends upon field measurements and existing conditions.
- E. The Contractor shall make all measurements, confirm existing conditions, and include them on the shop drawings before making a submission to the Architect/Engineer.
- F. Submissions for a single item, or group of related items shall be complete.
- G. When submitting manufacturers' catalogs, pamphlets or other data sheets, in lieu of prepared shop drawings, clearly mark the items being submitted for review.
- H. If the shop drawings contain any departures from the contract requirements, specifically describe them in the letter of transmittal.
  - 1. Where such departures require revisions to layouts, structural, architectural, electrical, HVAC or any other changes to the work as shown, Contractor shall, at his own expense, prepare and submit revised drawings accordingly.
  - 2. Make drawings the same size as the Contract Drawings and to the same scale.

#### 1.16 SAMPLES

- A. Where required, or where requested by the Architect/Engineer, submit sample or test specimens of materials to be used or offered for use.
  - 1. Samples shall be representative, in all respects, of the material offered or intended, shall be supplied in such quantities and sizes as may be required for proper examination and tests, and shall be delivered to Architect/Engineer, prepaid, along with identification as to their sources and types of grades.
  - 2. Submit samples well in advance of anticipated use to permit the making of tests or examinations.
- B. Samples will be checked for conformance with the design and for compliance with the Contract Documents.

- C. Work shall be in accordance with the approved sample. The use of materials or equipment for which samples are requested or required to be submitted is not permitted until such time that the Architect/Engineer has completed his review.

#### 1.17 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Architect/Engineer.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation. Provide manufacturer's instructions with shop drawings.

#### 1.18 CERTIFICATIONS

- A. Submit certifications of compliance indicated in the Contract Documents.
- B. Certifications shall be complete and exact, they shall be properly authenticated by the written signature, in ink, of an owner, officer or duly authorized representative of the person, firm or organization issuing such certification and they shall guarantee that the materials or equipment are in complete conformance with the requirements of these specifications.

#### 1.19 COLORS AND PATTERNS

- A. Unless the precise color and pattern are specified, whenever a choice of color or pattern is available in a specified product, submit accurate color and pattern charts for Architect/Engineer's and Owner's review and selection.

#### 1.20 MANUFACTURER'S SERVICE CENTER

- A. The product of a manufacturer who does not maintain an adequate nearby service center and a sufficient stock of spare parts are subject to rejection by Architect/Engineer solely on that basis.
- B. With each submission, submit information on manufacturer's facilities and give complete details of his service policies and capabilities, and a general idea of the stock of spare parts available. Submit this information in the form of a certification. Also include names, addresses and telephone numbers of at least three of the service center's present customers who are in the area of the project.

#### 1.21 TEST RESULTS AND INSTALLATION

- A. Whenever field startup services are specified, the Contractor shall obtain from the manufacturer and submit to the Architect/Engineer Manufacturer Startup Reports (MSR's). The report shall detail the results of the field visit and all special conditions resulting from the startup.
- B. Whenever field or factory tests are required on materials, equipment and systems, such tests shall be performed and the test results submitted to Architect/Engineer in the form of a MSR.
- C. Do not deliver to the project or incorporate into the work any materials or equipment for which Architect/Engineer has not completed his review and found same to be in general conformance with the Contract Documents.
- D. Submit MSR's within thirty (30) calendar days after the date of the startup or factory test.

1.22 SPARE PARTS LIST

- A. Prepare a list of all spare parts specified to be provided in other Sections. Compile the total list for the purposes of reviewing actual spare parts delivered versus spare parts specified to be provided. The list shall reference the Section, model number, and quantity to be provided.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

THIS SPACE LEFT INTENTIONALLY BLANK

CONTRACTOR'S COMPANY NAME  
ADDRESS

**SUBMISSION TRANSMITTAL FORM**

**CLIENT NAME:** Riverhead Water District  
**PROJECT TITLE:** Rehabilitation of Plant No. 4 - Contract G

**H2M PROJECT NO.:** RDWD1904

Product, Item, or System Submitted:			
Submission Date:		Submission Log No.:	
Specification Section:		Paragraph Reference:	
Contract Drawing Reference(s):			
Manufacturer's Name:			
Manufacturer's Mailing Address:			
Manufacturer's Contact Information:	<i>Name</i>	( ) <i>Tel. no.</i>	<i>Email</i>
Supplier's Name:			
Supplier's Mailing Address:			
Supplier's Contact Information:	<i>Name</i>	( ) <i>Tel. no.</i>	<i>Email</i>
This item is a substitution for the specified item:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
Contractor's Approval Stamp with Signature & Date	<u>Contractor's Brief Comments or Remarks</u> (attach separate letter as needed):		
	By making this submission, we represent that we have determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving the item into the enclosed space, materials, catalog and model numbers and similar data and that we have checked and coordinated this submission with other work at or adjacent to the installed location in accordance with the requirements contained in the Contract Documents.		

**END OF SECTION 013300**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Codes
- B. Governing agencies
- C. Permits

## 1.02 CODES

- A. Comply with the requirements of the various codes referred to in these Specifications. Such codes shall be the date of the latest revision in effect at the time of receiving bids.
- B. If there is a conflict between local, state, and/or Federal regulatory requirements, seek a consultation with the State Department of Labor. Resolve conflicts to the satisfaction of the State Department of Labor prior to commencing work.
- C. Electrical Work: Conform to the requirements of the National Electrical Code (NEC) unless otherwise shown or specified. The Owner will be the sole judge of the interpretation of these rules and requirements.

## 1.03 GOVERNING AGENCIES

- A. All work shall conform to and be performed in strict accordance with all governing agencies such as, but not limited to:
  - 1. Occupational Safety and Health Act - OSHA
  - 2. State Department of Environmental Conservation
  - 3. State Building Code
  - 4. State Fire Code
  - 5. National Fire Protection Association - NFPA
  - 6. National Electrical Code
  - 7. State Plumbing Code
  - 8. New York State Energy Code
  - 9. County Department of Health
  - 10. Town Codes, Rules, Laws and Ordinances
  - 11. Sewer District Sewer Use Code
  - 12. Local Water District
  - 13. Electric Utility
  - 14. Gas Utility

## 1.04 PERMITS AND INSPECTIONS

- A. Representatives of the Owner shall have access to the work for inspection purposes. The Contractor shall provide facilities suitable to the Owner to facilitate inspections of the installed work.
- B. Obtain and pay for all permits, fees, licenses, certificates, inspections and other use charges required in connection with the work.
- C. Such permits include, but are not limited to:
  - 1. Transportation and disposal of construction debris
  - 2. Building permits that are required by the municipality where the work is located. Arrange for inspections of the work by the municipal building department before closing in the

installed work, if so required. Work will not be accepted for payment until such inspections are performed and accepted by the building department.

- D. Obtain a New York Board of Fire Underwriters inspection and certificate.

#### 1.05 LISTINGS

- A. Equipment and materials for which Underwriters' Laboratories, Inc. (UL) provides product listing service, shall be listed and bear the listing mark. Alternately, ETL Testing Laboratories, Inc. Product Safety Testing Listing is acceptable if the listed product has been tested to the applicable UL Standard.

#### 1.06 FIRE RESISTANT CONSTRUCTION MATERIALS AND ASSEMBLIES

- A. Conform to the fire rating classifications based upon the test methods and acceptance criteria in the Standard, Fire Tests of Building Construction and Materials for which Underwriters' Laboratories, Inc. (UL) provides listings.
- B. Materials and assemblies shall comply with the acceptance criteria, detailed description of the assembly, its performance in the fire test and other pertinent details such as specification of materials, Classification coverage, and alternate assembly details.
- C. Alternatively, fire resistance rating classifications by other issuing organizations listed in the Fire and Building Codes are acceptable.

#### 1.07 COORDINATION WITH ELECTRIC UTILITY COMPANY

- A. Comply with the utility company requirements for the incoming electric service.

#### 1.08 COORDINATION WITH GAS UTILITY COMPANY

- A. Comply with the gas utility company requirements including inspection for the incoming gas service.

#### 1.09 COORDINATION WITH WATER UTILITY

- A. Comply with the water utility requirements for water and fire service connections. Obtain and pay for all necessary permits from the water utility. Obtain authority to connect to the existing water mains.
- B. Pay the water utility's charges for the connections.

#### 1.10 COORDINATION WITH SANITARY SEWER UTILITY

- A. Comply with the public utility requirements for the connection of sanitary sewer lines to the public utility services. Obtain and pay for all necessary permits from public sewer department. Obtain authority to connect to their existing sanitary sewers.

#### 1.11 COORDINATION WITH TELEPHONE UTILITY COMPANY

- A. Comply with the utility company requirements for the incoming telephone service.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 014100**

## PART 1 - GENERAL

## 1.01 ABBREVIATED SUMMARY

- A. This Section explains the format of the specifications.

## 1.02 SPECIFICATION FORMAT

- A. The Specifications are generally arranged according to the Construction Specifications Institute (CSI) format. Most of the technical requirements are specified in the technical specifications of the document, which are grouped into forty-eight (48) major divisions. Most of the legal and administrative requirements are included in Division 1, General Conditions, Information For Bidders, and the Contract (agreement).
- B. Technical sections are arranged in numerical order, however section numbers may not be consecutive from section to section.
- C. Page numbering is subordinate to each section.
- D. Most sections are generally broken down into three (3) parts:
  - 1. PART 1 - GENERAL
  - 2. PART 2 - PRODUCTS
  - 3. PART 3 - EXECUTION
- E. Not all these parts may be used and in some cases, the title of some of the parts may be different than listed above. Paragraph numbers are subordinate to each part.
- F. The Contractor is advised that the format described here is flexible in nature.
  - 1. There is some overlapping of specified information between various portions of the Specifications.
  - 2. In all cases, the entire requirements of the Contract Documents for the project shall apply.
- G. Explanations:
  - 1. Many technical sections begin with a paragraph titled "SECTION INCLUDES", "DESCRIPTION", or similar wording.
    - a. In these paragraphs, a brief listing of the specified products may appear or a brief description of the work generally specified in that section is presented.
    - b. These descriptions or listings are not all inclusive, but merely are provided as an aid in locating subject matter.
    - c. In some cases special cost related items of work are called to the attention of the Contractor in these opening paragraphs.
  - 2. "RELATED SECTIONS" or "RELATED WORK" or similar wording paragraphs list or reference related work specified elsewhere in the Contract Documents. Such listing is not all inclusive, rather, they are merely an aid to the Contractor in locating some of the other Specification Sections wherein work is specified which has a particularly close interrelationship with the work specified in that section.

- a. It shall be understood that all of the Work, and all of the Specifications and other portions of the Contract Documents, are interrelated, and that the total of all requirements set forth in all of the Contract Documents shall be met.
  - b. Equipment suppliers and manufacturers shall be advised of the requirements for making submittals and delivering products, as specified in Division 1 sections, even if said sections are not referenced therein that section.
3. "REGULATORY REQUIREMENTS" or "REFERENCES" or similar wording paragraphs describe standards, laws, guidelines, regulations, and standards related to workmanship and installation of the products specified which shall be followed by the Contractor in completing the work specified therein that section as if it was written there in that section. All such requirements and references shall be latest issue in effect at the time of the bid opening.
  4. When a "GUARANTEE" or "WARRANTY" paragraph appears in the section it is calling attention to a guarantee which extends beyond the period of the Contractor's Guarantee called for in the administrative portion of the Contract Documents or it states special requirements specific to the equipment, systems or products specified in that section.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED

**END OF SECTION 014223**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Requirements for monitoring the quality of the constructed project.
- B. Work of this Section also includes services of an independent testing laboratory for quality assurance testing.
- C. The services of the testing laboratory will be paid for out of the cash allowance included by the Contractor in the price as bid in accordance with the requirements contained herein and in Section 012100 - Allowances.

## 1.02 REFERENCES

- A. ASTM C1077 - Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
- B. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- C. ASTM D4561 - Practice for Quality Control Systems for an Inspection and Testing Agency for Bituminous Paving Materials.
- D. ASTM E699 - Practice for Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E6.

## 1.03 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or workmanship that is more precise.
- C. Perform work by persons qualified to produce workmanship of specified quality.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- E. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

## 1.04 QUALITY ASSURANCE - TESTING LABORATORY

- A. In order to establish compliance with the Contract Documents, materials shall be tested, examined and evaluated before they are incorporated into the work. During and after installations, additional tests, examinations, and evaluations shall be made to determine continued compliance throughout the course of the work.
- B. Testing laboratory shall be a reputable, experienced firm that is capable of performing all of the required testing and authorized to operate in the state in which the project is located.
- C. Perform all sampling and testing in accordance with specified procedures and use the materials, instruments, apparatus, and equipment required by the codes, regulations and

standards. Where specific testing requirements or procedures are not described, perform the testing in accordance with all pertinent codes and regulations and with recognized standards for testing.

- D. In the event that samples and test specimens are not properly taken, handled, stored or delivered or if other requirements of this Section are not complied with, Architect/Engineer reserves the right to delegate any or all of this work to others, or to take whatever action deemed necessary to ensure that sampling and testing are properly accomplished, for which all costs shall be borne by Contractor.
- E. Architect/Engineer reserves the right to disapprove the use of a specific testing laboratory, even after prior approval, if the laboratory fails to meet or comply with the requirements of this Section. If this should occur, immediately discharge the testing laboratory and retain the services of a different laboratory acceptable to Architect/Engineer.
- F. The testing laboratory shall meet the following criteria:
  - 1. Be capable of performing all of the required tests.
  - 2. Be regularly engaged in performing the types of services required.
  - 3. Have adequate facilities, materials, equipment, and personnel to perform the services.
  - 4. Have an adequately trained, experienced and qualified staff.
  - 5. Have at least one registered professional engineer licensed in the state in which the project is located who shall be capable of performing field tests, supervising laboratory testing and interpreting test results. The professional engineer shall be thoroughly knowledgeable in materials, soils, asphalt paving and concrete.
  - 6. Shall be able to be on the Project site within two hours after being notified.
  - 7. Comply with the requirements of ASTM C1077, ASTM D3740, ASTM D4561, ASTM E548 and ASTM E699.
  - 8. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

#### 1.05 REFERENCE STANDARDS

- A. Conform to reference standards by date that the project was last bid.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

#### 1.06 SUBMITTALS

- A. Within fifteen (15) calendar days from the date of the Notice to Proceed, submit documentation from three (3) testing laboratories that clearly indicates experience, location, qualifications of staff, and descriptions of any limitations or restrictions of the firm.
  - 1. Include a price schedule for standard tests and a billing rate schedule for technician classifications.
  - 2. Based upon this information, the Architect/Engineer will select one firm to be the primary testing laboratory and one firm to act as a standby.
- B. Certified copies of each test report shall be mailed directly to the Architect/Engineer. The Contractor shall arrange with the laboratory to secure copies.

- C. Each report shall be in writing and shall include the testing method used, the test results, the specified results, the exact location of where the test specimens were taken, the date taken, Project identification, Contractor's name and other pertinent information required for a complete and meaningful test report.
- D. Each report shall be signed and certified by a responsible officer of the testing laboratory.
- E. E-mail reports directly to Architect/Engineer within 24 hours after the sample is taken, except in those instances when tests cannot be immediately performed because of required curing, incubation periods, or lengthy testing procedures.
- F. The laboratory shall verbally communicate test results when requested by the Architect/Engineer. This does not eliminate nor replace the requirements for a written report.

#### 1.07 SCHEDULING - LABORATORY SERVICES

- A. Except where otherwise specified, the Architect/Engineer will determine the number of samples to be taken, the date and time samples will be taken and tests made, the number and type of tests to be performed, who will collect the samples, how they will be handled and stored and when laboratory personnel are required on site.
- B. Architect/Engineer will notify Contractor of his decision to take samples and/or have tests made and provide him with the pertinent information. Contractor is responsible for notifying the testing laboratory and for having the testing performed, on schedule.
- C. In addition to the above, Contractor shall make his own arrangements for the sampling and testing of materials he proposes to incorporate into the work. This shall not be paid for out of the cash allowance.
- D. Notify Architect/Engineer at least 72 hours in advance of the times at which scheduled samples or tests will be conducted.
- E. If samples and/or tests cannot be taken or performed when required, delay the work until such time that they can be accomplished. Where possible, any work that has been installed but has not been sampled or tested as required, shall be tested by other means. Upon Architect/Engineer's request, uncover any work, which has been buried or covered, and perform special tests designated by Architect/Engineer. If the work cannot be tested by other means, Architect/Engineer may declare the work unacceptable. All costs associated with noncompliance and for special testing shall be borne by the Contractor and not be paid for out of the cash allowance.
- F. Should the testing laboratory be scheduled to take or collect samples or to perform tests, and finds that it is unable to do so as a result of delays in construction, inclement weather, or any other reason, reschedule the tasks for a date acceptable to Architect/Engineer. Costs associated with times testing laboratory is unable to perform scheduled services shall be borne by the Contractor and will not be paid for under the allowance.
- G. Plan all work and operations to allow for the taking and collection of samples and allow adequate time for the performance of tests. Delay the progress of questionable work until the receipt of the certified test reports.

#### 1.08 TESTING REQUIREMENTS

- A. Dry Paint Thickness Measurement: Perform dry paint thickness using calibrated SSPC Type 2 fixed probe gages.

## 1.09 TESTING SCHEDULE

A. Dry Paint Thickness Measurement:

1. Make five (5) separate spot measurements spaced evenly over 100 square feet of area.
2. For structures exceeding 1000 square feet of finished surface, three 100 square feet areas shall be randomly selected by the Architect/Engineer plus one 100 square foot area for each additional 1000 square feet of finished surface. This requirement shall be subject to change as required by the Architect/Engineer.

## 1.10 FIELD OBSERVATION OF CONTRACTOR'S WORK

- A. The Architect/Engineer will provide periodic observation of the Contractor's work.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

## 3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions. Verify that the existing substrate is capable of structural support or attachment of new Work being applied or attached. Examine and verify specific conditions described in individual specification sections. Verify that utility services are available, of the correct characteristics, and in the correct locations.

## 3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance. Seal cracks or openings of substrate prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

## 3.03 FIELD QUALITY CONTROL

- A. Allow representatives of the testing laboratory access to the work at all time. Provide all equipment, labor, materials, and facilities required by the laboratory to properly perform its functions. Cooperate with and assist laboratory personnel during the performance of their work.
- B. Test specimens and samples shall be taken by the person(s) designated in other Sections, or as directed by Architect/Engineer. Conduct field sampling and testing in the presence of Architect/Engineer. Provide all materials, equipment, facilities and labor for securing samples and test specimens and for performing all field-testing.

**END OF SECTION 014500**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section supplements the General Conditions.
- B. The Work of this Section includes temporary facilities, utilities, and controls to be furnished by the Contractor for this project as it is specified herein.
- C. This Section is made a part of all Construction Contracts associated with the project. It contains specific references to the particular Contractor supplying said product or service. If no reference is provided then the requirement applies to all Prime Construction Contractors.
- D. Temporary electric shall be provided by the Prime Electrical Contractor as specified in Section 015113 located in the Contract Documents for Contract E except as required herein.

## 1.02 CARE AND PLACEMENT

- A. All temporary and permanent facilities and controls and all other elements on the project site shall meet all standards of the Occupational Safety and Health Act of 1970 and subsequent revisions. The Contractor shall comply with all requirements of the Act.
- B. The Contractor shall take every precaution and shall provide such equipment and facilities as are necessary or required for the safety of its employees and persons at the site.
- C. In the event of damage to existing and/or temporary facilities then immediately make all repairs and replacements to an equal condition prior to the event.

## 1.03 QUALITY PERFORMANCE

- A. Comply with and perform all work in accordance with the requirements of local authorities and utility companies having jurisdiction, and all applicable codes, regulations and ordinances.
- B. Secure approvals from the appropriate jurisdictions and utility companies on all repairs, relocations, connections, disconnections and the Work.
- C. All barricades, warning signs, lights, temporary signals and other protective devices shall conform with "Manual on Uniform Traffic Control Devices for Streets and Highways", US Government Printing Office.

## 1.04 SUBMITTALS

- A. The Contractor shall provide a list of contact numbers as follows:
  - 1. Contractor's superintendent and office project manager (home, beeper, cellular, office, fax, trailer, and email address).
  - 2. All subcontractors.
  - 3. All utility companies.
  - 4. Emergency services such as fire department, police, and ambulance.
  - 5. Contractor shall also submit the following:
    - a. Name and qualifications of person or persons who shall be available to render first aid.
    - b. Names, addresses and telephone numbers of personnel who can be telephoned and act on behalf of Contractor in the event of emergencies or other problems requiring prompt attention during winter shutdown, holidays, nights and other periods when the Contractor's superintendent may be absent from the project site.

- B. The Contractor shall provide a sketch showing routing of temporary water service for construction purposes and for exfiltration tank testing. Provide cuts and plumber's certification for backflow device(s).

#### 1.05 CONTRACTOR'S RESPONSIBILITY

- A. The Contractor shall be responsible for the installation, performance, maintenance, and repair of all temporary facilities and controls specified herein this Section as originally provided.
- B. The Owner reserves the right to immediately correct a Contractor caused action, if in the opinion of the Owner, the situation may result in the immediate loss of life, property, and degradation of the environment. The costs for actions taken by the Owner shall be deducted from money due or to become due the Contractor. Amounts in excess shall be paid by the Contractor.
- C. If the Contractor caused situation is not deemed immediate, then the Contractor shall, within 24 hours of receipt of written and/or verbal notice, correct the defect or unsatisfactory condition.
- D. The Owner may repair, correct, replace, or install temporary facilities to correct the situation if the Contractor fails to perform within the allowed time. The costs to make the corrections shall be deducted from money due or to become due the Contractor. Amounts in excess shall be paid by the Contractor.

### PART 2 - PRODUCTS

#### 2.01 GENERAL

- A. The Owner may use temporary power lines, pipes, roadways or other facilities that the Contractor furnishes, installs, and maintains (then removes at the completion of the work), during the period of construction.
- B. The location of all temporary power lines, roadways, and other necessary temporary facilities shall be subject to the approval of the Architect/Engineer, and these shall be located and operated so as not to interfere with the operation of the facilities.

#### 2.02 WATER FOR CONSTRUCTION PURPOSES

- A. The Contractor shall obtain water from the nearest potable water source as designated by the Owner.
- B. The Owner will pay for water usage for general construction activities such as dust control and for sanitary purposes, like hand washing.
- C. Potable water, used for pipe exfiltration testing, process tank testing, storage tank testing, or elevated water storage tank testing, will not be paid for by the Owner. The Contractor shall include the costs for water for this purpose in the price as-bid.
- D. The Contractor shall install his or her own backflow prevention device at the supply point where it is connected to the Owner's system.
  - 1. The water purveyor shall approve the device.
  - 2. The device shall be tested and certified as functioning properly.
  - 3. Post the certification in a location acceptable to the water purveyor.
- E. A water meter shall also be installed on any water service lines used to supply water for exfiltration testing.

- F. The Contractor shall exercise measures to conserve water.
- G. Provide insulation and heat tracing to prevent freezing of temporary piping. Drain hoses at the end of each use.
- H. All Contractors, subcontractors, and personnel involved in the project shall be permitted to use water for construction purposes as provided under this paragraph.

### 2.03 SANITARY FACILITIES

- A. The Contractor shall provide and maintain his or her own temporary toilet facilities and enclosures.
- B. General Contractor shall provide and maintain temporary toilet facilities for use by all contractors.
- C. These facilities shall be maintained in a strictly sanitary manner and be screened from the general public.
- D. All facilities shall be in accordance with the Occupational Safety and Health Act (OSHA) standards and all other applicable local codes.
- E. The locations of such facilities shall be determined by the Architect/Engineer or the Owner .
- F. All applicable codes and regulations regarding the maintenance and method of waste disposal for these facilities will be strictly enforced. These facilities shall be of the portable type.
- G. The Owner's sanitary facilities will be available for use by any Contractor. Each Contractor shall be required to keep the facilities clean during the period of use.
- H. The Owners sanitary facility will not be available for use by the contractor.
- I. Comply with the requirements also contained in Section 015719 - Environmental Protection.

### 2.04 HEAT

- A. The Contractor shall provide and pay for heating devices and fuel as required to maintain adequate heat for specific construction operations; i.e. painting, application of coatings, etc. where so specified elsewhere in these specifications.
- B. The Contractor shall heat buildings to properly apply paint in accordance with Section 099100 requirements.
- C. Maintain minimum ambient temperature of 40 degrees F in areas where construction is in progress, unless otherwise indicated in specifications or as required by proposed working conditions and manufacturer's installation/application instructions.

### 2.05 VENTILATION

- A. The Contractor shall ventilate enclosed areas to assist in the curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors or gases.
- B. The Contractor shall ventilate buildings to safely apply paint in accordance with Section 099100 requirements.

## 2.06 BARRIERS AND PROTECTION

- A. The Contractor shall provide railings, barricades, signs, fences and other protective devices to prevent unauthorized entry to construction areas, to allow for the Owner's safe use of the site and to protect existing facilities and adjacent structures from damage from the work.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing buildings.
- C. Provide protection for plant life designated to remain.
- D. Protect vehicular traffic, stored materials, public utilities, site and structures from damage.
- E. Provide warning signs, detour signs and other traffic control devices to insure the safety of plant operators and to adequately direct traffic around the work. Illuminate barricades, obstructions, and warning signs from sunset to sunrise.

## 2.07 TEMPORARY FENCING

- A. The Contractor is responsible for performance compliance with OSHA standards.
- B. The Contractor shall provide temporary safety fence around all open excavations or other dangerous conditions on the construction site.
  - 1. All temporary safety fencing shall be designed and erected in compliance with OSHA standards, but in no case less stringent than these specifications for fencing.
  - 2. Fence is to be bright orange in color, a minimum of 4 feet high, and properly secured using 1" diameter steel pipe at 4'-0" on-center as support posts.
  - 3. Stake each support post to a depth of 18" and tamp securely into place.
  - 4. Each post shall be plumb.
  - 5. Secure fencing to posts using heavy-duty 12" long cable ties or tie wire.
  - 6. The fence and supports shall remain the property of the Contractor and be promptly removed at the appropriate time.

## 2.08 TEMPORARY HANDRAILS AND SCAFFOLDS

- A. All temporary handrailing and scaffolds shall be designed and erected in compliance with OSHA standards. The Contractor is responsible for performance compliance with OSHA standards.
- B. Handrails shall be securely installed and maintained in accordance with OSHA regulations until the permanent railing or grating has been permanently installed and approved by the Architect/Engineer.
- C. All scaffolding and platforms shall be erected in a safe and substantial manner complying with OSHA requirements.
- D. All temporary handrails and scaffolds shall be designed by a professional engineer licensed in the state where the project is being constructed.
  - 1. The design drawings and details shall be stamped by the licensed engineer and submitted for record purposes.
  - 2. The Contractor's design engineer shall visit the site to certify that the handrailing and/or scaffolds have been erected pursuant to the stamped design.
- E. The General Contractor shall protect all openings in building/structures of any type such as shafts, deck openings, and other building related chases.

## 2.09 EROSION CONTROL

- A. The Contractor shall provide measures to keep the ground surface well drained, but avoid erosion of embankments, excavations, the project site, and adjacent areas.
- B. The Contractor shall comply with all local codes, rules, and regulations concerning soil erosion.
  - 1. Use hay bales or silt fences to control erosion to the satisfaction of the Architect/Engineer and regulatory agencies. Use hay bales or silt fences to stop silt and sediment from reaching surface waters, parking lots and roads.
  - 2. Leave erosion control methods in place until ground cover is established or until date of substantial completion.
- C. The Contractor shall install erosion control measures as shown on the Drawings.
- D. Comply with the requirements also contained in Section 015719 - Environmental Protection.

## 2.10 DUST CONTROL

- A. The Contractor shall provide measures to control dust resulting from the work.
- B. Control dust at locations and in such quantities and frequencies as required to prevent dust from becoming a nuisance to the surrounding area.
- C. In the event the Contractor does not adequately provide for dust control, or should insufficient quantities of dust control agents be placed and Contractor fails to place additional quantities within 4 hours after Architect/Engineer's direction, Owner will perform the required work by whatever means deemed expedient and all expenses incurred by Owner will be charged to and paid by Contractor.
- D. Take care in selecting and applying dust control agents so as not to make roadways or walkways slippery, muddy or hazardous. Dust control agents shall be acceptable to the Architect/Engineer.
- E. The Contractor shall provide all roadways with dust control.

## 2.11 RUBBISH REMOVAL

- A. The Contractor shall be responsible for overall rubbish removal.
- B. Burning of rubbish and trash will not be permitted.
- C. The Contractor shall clean up trash as specified in Section 011400 - Work Restrictions or more often if the trash interferes with the work of others, presents a hazard or if directed by the Architect/Engineer.
- D. Dispose of rubbish and waste materials in accordance with state regulations and local ordinances.
- E. The Contractor shall also place rubbish containers at locations selected by the Architect/Engineer.
  - 1. Furnish adequately sized rubbish containers from the date of initial mobilization to the date of final payment.
  - 2. As a minimum, the Contractor shall furnish two (2) 55-gallon general trash containers. Secure the top of each container to the container.
  - 3. Secure the container itself so that it does not get blown about the site.

- F. The Contractor shall be responsible for maintaining the site free of trash.
- G. Each Contractor shall assist the General Contractor in maintaining the site free of trash and debris.
  - 1. It shall be the sole responsibility of the General Contractor to prevent trash from being blown about the site.
  - 2. Provide a worker to police the site at least for 1 hour at the end of each day that work is being undertaken by the General Contractor.

#### 2.12 SNOW REMOVAL

- A. The Contractor shall be responsible for maintaining roads, walkways, sidewalks, and parking areas/lots free of snow. Provide snow plowing during and after each snow fall equal to or greater than 1.0 inch as reported by the local weather service.
- B. Any damage resulting from the Contractor's snow clearing operations shall be immediately repaired at no additional cost to the Owner.

#### 2.13 ENCLOSURES

- A. The Contractor shall provide and maintain temporary enclosures, sheds, or fenced-in areas to accommodate protection for products, material and equipment.
- B. Store equipment that cannot be exposed to outdoors in accordance with Section 016500 - Product Delivery, Storage and Handling.

#### 2.14 SECURITY

- A. The Contractor shall provide security and facilities to protect work from unauthorized entry, vandalism and theft.
- B. Coordinate with Owner's security program, if applicable.
- C. The Contractor has full responsibility for the working area until final acceptance and payment.
- D. The Contractor shall maintain the perimeter fence that pre-existed prior to the start of construction. A temporary perimeter fence shall be required at all times during the construction and until the new perimeter fence is installed, or until the project is accepted by the Owner.
- E. It shall be the Contractor's responsibility to lock all gates to the site, and on the access road, at the end of each work day.
- F. All on-site employees shall bear, at all times, an identification badge, conspicuously worn, which shall include, at a minimum, a passport or similar size photograph, the name of the employee and the name of the company.
- G. Any employee working on site without a photo identification badge will be instructed to leave the site.
- H. All company vehicles shall be conspicuously identified, through sufficiently sized lettering on both the passenger and driver sides, with the company name, address and telephone number.
  - 1. All employee owned vehicles shall have an 8-1/2 inch by 11 inch sign with the company name, address and telephone number placed on the dashboard on the driver side.
  - 2. Vehicles may be subject to search by the Owner or owner's representatives.

3. Any vehicle that does not have the company name, address and telephone number will not be permitted on the Owners' property.
- I. Submit to the Owner a complete listing of all employees that will or might be performing work at the project site.
  1. Furthermore, provide sufficient information as may be required for the Owner to conduct background checks, in accordance with the Fair Credit Reporting Act.
  2. Background checks may be performed at the discretion of the Owner due to the sensitive nature of the work and the extensive, and sometimes unsupervised, access to Owner property and buildings.
  3. The Contractor shall be required, on request from the Owner, at any time prior to or during the work, to provide releases from its employees and officers to the Owner, H2M, and a background search firm, hired by either the Owner or H2M, to conduct background checks in accordance with the Fair Credit Reporting Act and applicable state law.

#### 2.15 PARKING

- A. Do not allow heavy construction vehicle parking on existing pavement, if existing pavement is not scheduled for replacement or restoration.
- B. Provide and maintain access to fire hydrants, building entrances, process tanks, doors and the work in general.
- C. The Contractor shall have his or her employees and subcontractors park in areas designated by the Owner/Architect/Engineer.
- D. If designated on the Contract Drawings, then only use those areas for parking.

#### 2.16 DAMAGES

- A. The Contractor, with the prior approval of the Owner/Architect/Engineer, shall promptly repair any damage, directly or indirectly caused by the Contractor's operations.
- B. All repairs shall be to the complete satisfaction of the Owner and equal in quality to that which pre-existed.

#### 2.17 FIRST AID FACILITIES & EMERGENCY TELEPHONE NUMBERS

- A. The Contractor shall provide and maintain adequately equipped first aid facilities in a location or at locations that are readily accessible to workmen, Architect/Engineer and visitors to the site.
- B. Provide at least one on-site employee who is properly trained in first aid and who shall be available to render first aid whenever construction is in progress.
- C. Provide a list of emergency telephone numbers as specified above.
- D. Post the list of emergency telephone numbers as directed by the Architect/Engineer.

#### 2.18 POLLUTION CONTROL

- A. Do not permit pollutants, such as chemicals, fuels, lubricants, calcium chloride, sewage, water containing sediments and other deleterious, poisonous, toxic or oxygen demanding substances to enter or leach into streams, lakes, wetlands, other surface waters, into groundwater, or into the air.

- B. In waters used for public water supply or used for trout, salmon or other game or forage fish spawning or nursery, control measures must be adequate to assure that turbidity in the receiving water will be increased not more than 10 standard turbidity units (s.t.u.) in the absence of other more restrictive locally established limitations, unless otherwise permitted by the State.
- C. In no case shall the classification for the surface water be violated, unless otherwise permitted by the State.
- D. In water used for other purposes, the turbidity shall not exceed State limits.

#### 2.19 REMOVALS

- A. Remove all items provided under this Section except as otherwise specified.

### PART 3 - EXECUTION

#### 3.01 PROTECTION OF EXISTING UTILITIES AND PUBLIC WORKS

- A. Maintain and protect existing utilities and public works including, but not limited to, conduits, sewers, water mains, electric and telephone conductors or conduits, and gas mains encountered during the construction.
- B. In the event that it is not possible to cross over, under, around or otherwise avoid the existing utility, the owner of the utility shall be notified that the utility must be altered or moved.
- C. In the event that damage shall result to any service pipe for water or gas, or any private or public sewer or conduit, the Contractor shall immediately, and at its own expense, repair same to the satisfaction of the Architect/Engineer.
- D. Any contents from the pipes, sewers or conduits shall be immediately removed and disposed in accordance with applicable laws.

#### 3.02 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

- A. Remove temporary above grade or buried utilities, equipment, facilities and materials, immediately following substantial completion and prior to release of retainage.
- B. Remove underground installations to a minimum depth of 2 feet.
- C. Regrade site to restore to existing slope and elevation, and restore the surface.
- D. Clean and repair damage caused by installation or use of temporary work.
- E. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- F. Remove temporary parking and access roads.
- G. Regrade area to existing slope and elevation and restore the surface to its existing condition.
- H. Final payment will not be processed until all removals have been completed to the satisfaction of the Owner/Architect/Engineer.

#### 3.03 PROTECTION OF EXISTING PROPERTY

- A. Protect existing structures and finishes during performance of the work.

- B. Protect existing trees and plants during performance of the work.
- C. Do not deposit excavated materials or store materials around trees or plants or attach guy wires to trees.

**END OF SECTION 015000**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Control of environmental pollution and damage that the Contractor must consider for air, water, and land resources in preparing a bid and while constructing the project. This Section includes management of site aesthetics, noise, solid and liquid waste and wastewater, and other pollutants that may be generated by the Contractor.
- B. Include all costs associated with environmental protection as specified herein and as specified in other Sections of these specifications in the total price bid.
- C. Comply with all provisions of the Stormwater Pollution Prevention Plan (SWPPP).

## 1.02 DEFINITIONS

- A. Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which:
  - 1. Adversely effect human health or welfare,
  - 2. Unfavorably alter ecological balances of importance to human life,
  - 3. Impact wetlands,
  - 4. Effect other species of importance to man, or;
  - 5. Degrade the utility of the environment for aesthetic, cultural, and historical purposes.
- B. Definitions of Pollutants:
  - 1. Sediment: Soil and other debris that has been eroded and transported by runoff water.
  - 2. Solid Waste: Rubbish, debris, garbage, and other discarded solid materials resulting from industrial, commercial, and agricultural operations and from community activities.
  - 3. Rubbish: Combustible and noncombustible wastes such as paper, boxes, glass and crockery, metal and lumber scrap, tin cans, and bones.
  - 4. Debris: Combustible and noncombustible wastes, such as leaves, tree trimmings, ashes, and waste materials resulting from construction or maintenance and repair work.
  - 5. Chemical Waste: Petroleum products, bituminous materials, salts, acids, alkalies, herbicides, pesticides, organic chemicals, and inorganic wastes.
- C. Sanitary Wastes:
  - 1. Sewage: Domestic sanitary sewage and human and animal waste.
  - 2. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

## 1.03 SUBMITTALS

- A. Submit the following under provisions of Section 013300:
  - 1. Environmental Protection Plan / Erosion Control Plan: After the Contract is awarded and prior to the commencement of the work, meet with the Architect/Engineer to discuss the proposed Environmental Protection Plan and to develop mutual understanding relative to details of environmental protection. Not more than twenty (20) days after the meeting, prepare and submit to the Architect/Engineer for approval, a written and/or graphic Environmental Protection Plan including, but not limited to, the following:
    - a. Methods for protection of features to be preserved within authorized work areas including trees, shrubs, vines, grasses, ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, and archeological and cultural resources.
    - b. Permits, licenses, and the location of the solid waste disposal area(s).

- c. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.
2. Prepare an Erosion Control Plan describing and showing methods for erosion control that shall be employed by the Contractor to protect adjoining wetlands.
3. Prepare a Work Area Plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan shall include measures for marking the limits of use areas. This plan may be incorporated within the Erosion Control Plan.
4. Approval of the Contractor's Environmental Protection Plan / Erosion Control Plan will not relieve the Contractor of responsibility for adequate and continued control of pollutants and other environmental protection measures.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

### 3.01 PROTECTION OF ENVIRONMENTAL RESOURCES

- A. Protect environmental resources within the project boundaries and those affected outside the limits of permanent work during the entire period of this Contract. Confine activities to areas defined by the Contract Documents.
- B. Protection of Land Resources: Prior to construction, identify all land resources to be preserved within the work area. Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, top soil, and land forms without permission from the Architect/Engineer. Do not fasten or attach ropes, cables, or guys to trees for anchorage unless specifically authorized, or where special emergency use is permitted.
- C. Work Area Limits: Prior to any construction, mark the areas that require work to be performed under this Contract. Mark or fence isolated areas within the general work area that are to be saved and protected. Protect monuments, works of art, and markers before construction operations begin. Convey to all personnel the purpose of marking and protecting all necessary objects.
- D. Protection of Landscape: Protect trees, shrubs, vines, grasses, land forms, and other landscape features shown on the drawings to be preserved by marking, fencing, or using any other approved techniques.
  1. Box and protect from damage existing trees and shrubs to remain on the construction site.
  2. Immediately repair all damage to existing trees and shrubs by trimming, cleaning, and painting with antiseptic tree paint.
  3. Do not store building materials or perform construction activities closer to existing trees or shrubs than the farthest extension of their limbs.
- E. Reduction of Exposure of Unprotected Erodible Soils: Plan and conduct earthwork to minimize the duration of exposure of unprotected soils. Clear areas in reasonably sized increments only as needed to use. Form earthwork to final grade as shown. Immediately protect side slopes and back slopes upon completion of rough grading.
  1. Temporary Protection of Disturbed Areas: Construct diversion ditches and berms to retard and divert runoff from the construction site to protected wetlands areas as defined in the Clean Water Act and federal, state and local regulations.
  2. Erosion and Sedimentation Control Devices:
    - a. Construct or install all temporary and permanent erosion and sedimentation control features as shown or specified in the Contract Documents and as required by the Owner pursuant to direction of the regulatory authority.

- b. Maintain temporary erosion and sediment control measures such as berms, dikes, drains, hay bales, erosion control fencing, sedimentation basins, grassing, and mulching, until permanent drainage and erosion control facilities are completed and operative.
  3. Manage borrow areas on and off Owner property to minimize erosion and to prevent sediment from entering nearby property, watercourses and local streets.
  4. Manage and control spoil areas on and off Owner property to limit spoil to areas shown on the Environmental Protection Plan and prevent erosion of soil or sediment from entering nearby property, watercourses or streets.
  5. Protect adjacent areas from degradation by temporary excavations and embankments.
- F. Handle and dispose of solid wastes in such a manner that will prevent contamination of the environment.
1. Place solid wastes (excluding clearing debris) in containers that are emptied on a regular schedule.
  2. Transport all solid waste off Owners' property and dispose of waste in compliance with Federal, State, and local requirements.
  3. Store chemical waste away from the work areas in corrosion resistant containers and dispose of waste in accordance with Federal, State, and local regulations.
  4. Handle discarded materials other than those included in the solid waste category as directed by the Architect/Engineer.
- G. Protection of Water Resources: Keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters and sewer systems. Implement management techniques to control water pollution by the listed construction activities that are included in this Contract.
- H. Washing and Curing Water: Do not allow wastewater directly derived from construction activities to enter water areas. Collect and place wastewater in retention ponds allowing the suspended material to settle, the pollutants to separate, or the water to evaporate.
- I. Control movement of materials and equipment during construction to prevent violation of water pollution control standards of the Federal, State, or local government.
- J. Monitor water areas affected by construction.
- K. Protection of Fish and Wildlife Resources:
1. Keep construction activities under surveillance, management, and control to minimize interference with, disturbance of, or damage to fish and wildlife.
  2. Prior to beginning construction operations, list species that require specific attention along with measures for their protection.
- L. Protection of Air Resources: Keep construction activities under surveillance, management, and control to minimize pollution of air resources.
1. Burning is not permitted on the job site. Keep activities, equipment, processes, and work operated or performed, in strict accordance with the State and Federal emission and performance laws and standards.
  2. Maintain ambient air quality standards set by the Environmental Protection Agency and State, for those construction operations and activities specified.
- M. Particulates: Control dust particles, aerosols, and gaseous by-products from all construction activities, processing, and preparation of materials (such as from asphaltic batch plants) at all times, including weekends, holidays, and hours when work is not in progress.
- N. Particulates Control: Maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and all other work areas within or outside

the project boundaries free from particulates which would cause a hazard or a nuisance. Sprinkle, chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators, or other methods are permitted to control particulates in the work area.

- O. Hydrocarbons and Carbon Monoxide: Control monoxide emissions from equipment to Federal and State allowable limits.
- P. Odors: Control odors of construction activities and prevent obnoxious odors from occurring.
- Q. Reduction of Noise: Minimize noise using every action possible. Perform noise-producing work in less sensitive hours of the day or week as directed by the Architect/Engineer. Maintain noise-produced work at or below the decibel levels and within the time periods specified in accordance with OSHA and local ordinances, whichever is more restrictive.
  - 1. Perform construction activities involving repetitive, high-level impact noise only between 8:00 a.m. and 5:00 p.m unless otherwise permitted by local ordinance or by the Architect/Engineer.
  - 2. Repetitive impact noise on the property shall not exceed the following dB limitations:
  - 3. Provide sound-deadening devices on equipment and take noise abatement measures that are necessary to comply with the requirements of this Contract, consisting of, but not limited to, the following:
    - a. Use shields or other physical barriers to restrict noise transmission.
    - b. Provide soundproof housings or enclosures for noise-producing machinery.
    - c. Use efficient silencers on equipment air intakes.
    - d. Use and maintain efficient intake and exhaust mufflers on internal combustion engines.
    - e. Line hoppers and storage bins with sound deadening material.
    - f. Conduct truck loading, unloading, and hauling operations so that noise is kept to a minimum.

**END OF SECTION 015719**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section includes the general requirements for products that are to be furnished, installed, or otherwise incorporated into the project.

## 1.02 QUALITY ASSURANCE APPLIES TO ALL PRODUCTS

- A. In addition to the Contractor's warranties and guarantees on materials and equipment required under the General Conditions of the Contract and the Technical Specifications contained hereinafter, the Contractor shall also be responsible for all materials, equipment, and products that have or is planned to be incorporated into the work.
  - 1. The Contractor shall be responsible for the finished work and that it accurately and completely complies with these Contract Documents.
  - 2. The Contractor shall be responsible for work performed by subcontractors, equipment suppliers, and material vendors.
  - 3. The Contractor shall be satisfied as to the product's performance before it is ordered for installation. At the Contractor's option, he/she shall have tested each product to determine compliance with these specifications.
- B. The Architect/Engineer may check all or any portion of the work and the Contractor shall afford all necessary assistance to the Architect/Engineer in carrying out such checks.
  - 1. Such checking by the Architect/Engineer shall not relieve the Contractor of any responsibilities for the accuracy or completeness of the work.
  - 2. Such checking is a courtesy service being provided by the Owner and does not relieve the Contractor of his/her responsibilities under this Construction Contract.
- C. If witnessed shop tests or inspections are required at the point of manufacture, the Contractor shall keep the Architect/Engineer advised as to the progress of the work to allow inspection at the proper time and place. Provide at least two (2) weeks advance notice before scheduled shop tests.
- D. Should a dispute arise as to the quality of workmanship, equipment or material performance, then the final decision regarding acceptability with these Contract Documents shall be that of the Owner.
- E. At the request of the Architect/Engineer, the Contractor shall promptly provide the services of a competent representative of the manufacturer at the project site, fully equipped and prepared to answer questions, perform tests, make adjustments and to prove compliance with the Contract Documents free of all additional charges. Proof of compliance shall be the responsibility of the Contractor, and such special visits to the project site by the manufacturer shall not be eligible under any cash allowances or stipulated man-hours necessary to startup the system and/or train the Owner as may be specified in the Technical Specifications.

## 1.03 QUALITY ASSURANCE - EQUIPMENT

- A. Erect and install products under the supervision of a competent and experienced superintendent. The method of installation, including anchorage, clearances, and tolerances for rotating assemblies, methods of support for equipment and adjacent piping, shall be as recommended by the equipment manufacturer unless detailed on the Drawings or specified.
- B. All material furnished shall be new, and guaranteed free from defects in workmanship, installation, and design.

- C. Design and fabricate equipment in conformance with ANSI, ASTM, ASME, ASHRAE, IEEE, NEC and NEMA Standards.
  - 1. Equipment shall withstand the stresses that may occur during fabrication, testing, transportation, installation and conditions of operation.
  - 2. Pumps shall conform to the requirements of the Hydraulic Institute.
  - 3. Equipment shall comply with the latest OSHA regulations and the ANSI Safety Standards.
- D. Equipment shall be products of manufacturers who produce evidence of their ability to promptly furnish any and all interchangeable replacement parts as may be needed at any time within the expected life of the equipment.
- E. Manufacturers shall also have readily available access to suitable and accurate testing facilities for performing the required shop tests.

## PART 2 - PRODUCTS

### 2.01 MATERIALS AND EQUIPMENT

- A. Equipment shall have been in successful regular operation under comparable conditions for a period of at least five (5) years.
  - 1. This time requirement does not apply when the manufacturer posts an Owner/Architect/Engineer acceptable Performance Bond or Letter of Credit for the duration of the time period that will guarantee replacement of the equipment in the event of failure.
  - 2. The bond shall be in a form that is acceptable to the Owner's legal council.
- B. The Owner reserves the right to reject any material or equipment manufacturer who, although he appears to be qualified and meets the technical requirements, does not provide satisfactory evidence indicating adequate and prompt post-installation repair and maintenance service, as required to suit the operational requirements of the Owner.
- C. Whenever it is required that the Contractor furnish materials or manufactured articles or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be of the best grade in quality and workmanship obtainable on the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required.
- D. Perform work in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.
- E. Items of any one type of material or equipment shall be the product of a single manufacturer.
  - 1. For ease of the Owner in maintaining and obtaining service for equipment and for obtaining spare parts from as few places as possible, to the maximum extent possible, use equipment of a single manufacturer.
  - 2. The Architect/Engineer reserves the right to reject any equipment from various manufacturers if suitable equipment can be secured from fewer manufacturers and to require that source of materials be unified to the maximum extent possible.
- F. Substitute equipment shall not be fabricated nor installed until after written decision to accept request is received from the Architect/Engineer.

## 2.02 CONTROL PANELS, MCC'S AND SWITCHBOARDS

- A. All control panels, motor control centers, and switchboards shall be fabricated with pilot lights, selector switches, PLC, graphics display panels, elapsed time meters and other components that shall match.
  - 1. This does not require that all components be one manufacturer, but does require that the like components be of the same manufacturer.
  - 2. The Contractor shall coordinate the shop drawing submittals to indicate that all components have been selected on this basis.
  - 3. This requires the Contractor to advise each control panel supplier that product options are limited in this regard.
- B. Replacement of unlike products delivered to the job site shall be the responsibility of the Contractor.
- C. All costs associated with the replacement shall be borne by the Contractor.

## 2.03 NAMEPLATES

- A. Each unit of equipment shall have the manufacturer's name or trademark on a stainless steel nameplate securely affixed in a conspicuous place.
- B. The manufacturer's name or trademark may be cast integrally with stamp, or otherwise permanently marked upon the item of equipment.
- C. Such other information as the manufacturer may consider necessary for complete identification shall be shown on the nameplate.

## 2.04 FABRICATIONS

- A. Insofar as possible, shop prefabricate all items complete and ready for installation.
- B. Accurately fabricate all items to the details shown on the Drawings and on the shop drawings found in compliance with the Contract Documents.

## PART 3 - EXECUTION

### 3.01 PREPARATION

- A. Prior to work under any Section, carefully inspect the work of all other prime trades and verify that all such work is in conformance with the Contract Documents and is complete to the point where the work under that Section may properly commence.
- B. Avoid the need to remove and replace work and to avoid unnecessary cutting and patching.
- C. Inspect all surfaces to be sure that they have been properly prepared before applying new work to such surfaces.
- D. Verify that all work can be installed in strict accordance with the drawings and the approved shop drawings. Immediately report discrepancies to Architect/Engineer.
- E. Do not proceed with the work under any Section until these conditions are obtained.

### 3.02 INSTALLATION

- A. Furnish and install materials and equipment in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.
- B. All work shall be done in a workmanlike manner and set to proper lines and grades. The work shall be square, plumb and/or level as the case may be.
- C. Where performance criteria are specified, do all work necessary to attain the required end results.

### 3.03 FIELD QUALITY CONTROL

- A. Neither observations by Architect/Engineer nor inspections, tests or approvals by other persons shall relieve the Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.
- B. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested or approved by some public body, the Contractor shall assume full responsibility therefore, pay all costs in connection therewith, and furnish the Architect/Engineer with the required certificates of inspection, testing or approval.
- C. The Owner reserves the right to independently perform laboratory tests on random samples of material or performance tests on equipment delivered to the site.
  - 1. These tests, if made, will be conducted in accordance with the appropriate referenced standards or specification requirements.
  - 2. The entire shipment represented by a given sample, samples or piece of equipment may be rejected on the basis of the failure of samples or pieces of equipment to meet specified test requirements.
  - 3. All rejected materials or equipment shall be removed from the site, whether stored or installed in the work, and the required replacements shall be made, all at no additional cost to Owner.

### 3.04 ADJUST AND CLEAN

- A. Upon the completion of installations, and as a condition of its acceptance, visually inspect all work, adjust all components for proper alignment and touch-up abrasions and scratches to make them completely invisible.
- B. Thoroughly examine all materials and equipment with protective or decorative finishes for defects and damage prior to being covered.
  - 1. In the case of buried items of work, restore protective surface covers so as to conform to the Contract Documents prior to being backfilled, buried or embedded, as the case may be.
  - 2. In the case of exposed items of work, for which a decorative finish is required, all scratches, discoloration's, unmatched colors, disfigurements and damages shall be repaired and touched-up so as to provide a neat, clean finish, and be uniform in color.

### 3.05 UNCOVERING WORK

- A. Unless otherwise specified or directed by Architect/Engineer, no work shall be covered until it has been observed, tested, photographed, measured, and authorized to be covered by Architect/Engineer.

- B. Tie distances to above ground physical structures as reference points to all underground utilities, conduits, pits, manholes, valves, and pipelines shall be obtained by the Contractor prior to covering the work. Immediately comply with the Architect/Engineer's direction to uncover the work if tie distances were not obtained.
- C. If any work has been covered with Architect/Engineer's consent and Architect/Engineer considers it necessary or advisable that covered work be observed or tested, the Contractor, at Architect/Engineer's request, shall uncover, expose or otherwise make available for observation, or testing as Architect/Engineer may require, that portion of the work in question, furnishing all necessary labor, material and equipment.
  - 1. If it is found that such work is defective, the Contractor shall bear all the expenses of such uncovering, exposure, observation, and testing of satisfactory reconstruction, including compensation for additional engineering services and an appropriate deductive change order shall be issued.
  - 2. If, however, such work is not found to be defective, the Contractor shall be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, testing and reconstruction if he makes a claim therefore as provided in the General Conditions.

### 3.06 DEFECTIVE WORK

- A. The repair, removal, replacement and correction of defective work is a part of this Contract and shall be promptly performed in accordance with the requirements set forth in the General Conditions or other portions of the Contract Documents. All costs in connection with the correction of defective work shall be borne by the Contractor.
- B. Products that fail to maintain the performance or other salient requirements of the Contract Documents, shows undue wear, or other deleterious effects during the maintenance period, shall be considered defective.

**END OF SECTION 016100**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. The Section includes the transportation, handling, storage and protection of products that are to be incorporated into the work.
- B. The procedures for turning equipment over to the Owner for installation by others is also included herein.

## 1.02 GENERAL

- A. Items shall be delivered as complete assemblies direct from the manufacturer with all internal wiring, piping, valving, and control devices intact except where partial disassembly is required by transportation regulations, protection of components, or where physical constraints may exist or be created for the setting of the item.
- B. Coordinate the disassembly and reassembly requirements with the manufacturer. Determine the need and extent of reassembly prior to bid.
  - 1. All labor, material and equipment costs associated with the disassembly and reassembly of the product shall be included in the Contract Price.
  - 2. Where reassembly of equipment is necessary, then the manufacturer shall provide reassembly instruction at the project site.
  - 3. A technician shall be present during the entire reassembly procedure and the manufacturer shall certify, in writing, that the unit was reassembled properly in accordance with instructions provided by the manufacturer and that all as-specified warranties remain in effect.
  - 4. The manufacturer's reassembly inspection time shall be in addition to the field service time specified and shall be included in the Contract Price. This time shall not be eligible for payment under any cash allowance item.
- C. In the case where equipment is to be installed by others, then the supplying contractor shall be responsible for its reassembly. If reassembly is necessary and the unit(s) are to be set inside an enclosure or building, reassemble the equipment inside said enclosure. The equipment once reassembled shall be turned over to the installing contractor as specified below.

## 1.03 PACKING

- A. Transport products in containers, crates, boxes or similar means such that the products are protected against damage that may occur during transportation.
- B. All parts shall be packaged separately or in container where parts of similar systems are grouped.
- C. Part numbers shall be indicated on the individual part. Use indelible ink to mark part numbers.
- D. All equipment shipments shall be included with a parts list showing a description (name) of the part and the manufacturer's part number.
  - 1. The parts list shall be shipped in a plastic zippered envelope with the words "Parts List" lettered on it in indelible ink.
  - 2. The parts list shall be placed inside the shipping container so that it is on the top of the contents.
- E. Equipment shall be shipped with storage, handling and installation instructions.

1. The Engineer reserves the right to withhold payment for equipment delivered to the site until such time as the storage, handling and installation instructions are supplied by the manufacturer.
  2. In the case where operation and maintenance manuals have been provided by the manufacturer, which includes the installation instructions, then the installation instructions shall also be included with the equipment shipment.
- F. All control panels shall be wood crated.
1. All sides of the control panel shall be covered with 3/4" plywood.
  2. The control panel number or name shall be printed on all sides of the crate in 1' high black lettering.
  3. The manufacturer's name, Contractor's name and project name shall also be printed on the front of the crate.
  4. All control panels and centers shall be packaged with three (3) copies of the approved wiring diagram inside the control panel enclosure in a separate plan holder attached to the inside door. The words "APPROVED FOR CONSTRUCTION" shall be indicated on each page of the wiring diagram.
- G. Delicate instruments and devices, reagents, chemicals, and glassware shall be shipped in packaging normally provided by the manufacturer.
- H. The Contractor shall require the manufacturer to be responsible for the proper packing of all products.

#### 1.04 SHIPPING AND DELIVERY

- A. Product deliveries shall be accompanied with a bill of lading indicating the place of origination and the Contractor's purchase order number.
- B. Inspect shipments immediately upon delivery, to assure compliance with requirements of the Contract Documents and those products are undamaged.
- C. Promptly remove damaged material and unsuitable items from the job site.
- D. Provide equipment and personnel to handle products by methods to prevent soiling; disfigurement or damage.

#### 1.05 STORAGE

- A. Store sensitive products and all spare parts in weather tight, climate controlled enclosures in an environment favorable to product.
- B. Store and protect products in accordance with the manufacturer's instructions.
- C. All other products that are to be installed underground or products such as pipe, valves, and fittings shall be stored outdoors but shall be blocked off the ground and covered with impervious sheet coverings.
- D. Store fabricated products above the ground on blocking or skids.
- E. Store loose granular materials in well-drained areas on solid surfaces to prevent mixing with foreign matter.
- F. Provide adequate ventilation to avoid condensation.

- G. In accordance with manufacturer's instructions protect bearings, couplings, shafts, rotating components, and assemblies. Protection of said equipment shall be continuous until the time the equipment is placed into permanent service.
- H. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
- I. Do not store volatile liquids in any building on site.
- J. Storage of products shall be the responsibility of the supplying contractor. The installing contractor shall take all necessary precautions to protect the equipment being furnished by others.
- K. Store with seals and labels intact and legible.

#### 1.06 EQUIPMENT INSTALLED BY OTHERS

- A. All products, except products noted on the Drawings or specified, shall be furnished and installed under this Contract.
  - 1. Only noted or specified products shall be furnished under this Contract for installation by others.
  - 2. If it is not noted on the Drawings or specified, then the product shall be furnished and installed under the Contract.
- B. The Contractor shall furnish these products to the Owner. These products shall be stored as specified above.
- C. The Owner will then advise the installing contractor that the product(s) are ready for installation.
  - 1. In the case where the product is stored in a proper enclosure, but not stored inside the building to be constructed under this project, then the installing contractor shall move the product into the building to a location adjacent to the final location shown on the Drawings.
  - 2. In all cases, the installing contractor shall be responsible for moving from storage, uncrating, anchoring, mounting and installing the product as required by the Contract Documents.
- D. The Contractor and installing contractor(s) shall be present at the time the equipment is turned over to the Owner. Immediately thereafter, the Owner will turn the product over to the installing contractor for installation.
- E. The Owner, Contractor, Architect/Engineer and the installing contractor shall inspect the condition of the product at this time.
  - 1. Any defects in the product will be noted and the Contractor will be advised to make all repairs immediately.
  - 2. The installing contractor shall still be required to install the product if the damage is deemed cosmetic by the Architect/Engineer.
  - 3. The manufacturer's installation instructions or wiring diagram shall be turned over to the installing contractor at this time by the Contractor.
  - 4. Any damage occurring to the product during moving, setting and mounting the unit(s) shall be the responsibility of the installing contractor.
  - 5. The Contractor is advised to take photographs to document the condition prior to it being turned over to the installing contractor.
  - 6. The installing contractor is advised to take photographs to document the condition prior to its acceptance.

- F. The supplied unit(s) remain the property of the Contractor until final acceptance of the work.
- G. Any damage caused to the unit(s) due to improper installation, workmanship, and non-compliance with the manufacturer's written installation instructions shall be the responsibility of the contractor who caused said damage. The burden of proof shall rest with the supplying Contractor.
- H. In the event the Contractor discovers misuse, abuse or improper installation of the unit(s) by the installing contractor, then he shall immediately notify the Architect/Engineer in writing. The Architect/Engineer will investigate the accusations and make a determination. The Architect/Engineer's determination shall be binding and agreed to by both parties.
- I. If the Architect/Engineer's determination substantiates the accusations of the Contractor, then the Contractor shall install the unit(s), the costs for which will be paid for as extra work. All costs associated with the extra work change order, including engineering and attorney fees of the Owner and Contractor will be deducted from money due the installing contractor.

#### 1.07 PROTECTION OF WORK

- A. The Contractor shall protect the installed work. All costs for protection shall be borne by the Contractor. Provide coverings as necessary to protect installed products from damage, from traffic and subsequent construction operations. Remove when no longer needed.
- B. Cover and protect equipment from dust, moisture or physical damage. Protect finished floor surfaces prior to allowing equipment or materials to be moved over such surfaces. Maintain finished surfaces clean, unmarred and suitably protected until accepted by the Owner.
- C. Additional time required to secure replacements and to make repairs will not be considered by the Architect/Engineer to justify any extension in the Contract Time of Completion. In the event of the damage, promptly make replacement and repairs to the approval of the Engineer at no additional costs.

#### PART 2 - PRODUCTS

NOT USED

#### PART 3 - EXECUTION

NOT USED

**END OF SECTION 016500**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Work of this Section includes the following:
  - 1. Starting systems
  - 2. Testing, adjusting, and balancing
  - 3. Updating of manufacturer's operations and maintenance manuals and wiring diagrams

## 1.02 STARTING SYSTEMS

- A. The Contractor shall coordinate, schedule, and sequence the start-up of various equipment and systems.
- B. Where the start-up of a system or piece of equipment is dependent upon the start-up of other system(s) or equipment, then the Contractor shall schedule and sequence the start-ups to coincide.
- C. Notify the Architect/Engineer at least 14 calendar days prior to the start-up of each item or system so that he can schedule the startup with the Owner, utilities, and other Prime Contractors.
- D. Where applicable, verify that each piece of equipment or system has been checked for proper:
  - 1. lubrication,
  - 2. drive rotation,
  - 3. belt tension,
  - 4. motor starter heater size,
  - 5. fuse size,
  - 6. water pressures,
  - 7. terminal connections,
  - 8. control sequence,
  - 9. for conditions which may cause damage or delay the start-up procedure.
- E. Verify that the equipment has been installed in accordance with the manufacturer's requirements.
- F. Complete all pre-startup checklists that may be required by the system vendor.
  - 1. In the event that start-up activities are delayed as a result of the Contractor's failure to properly check the completed installation and a manufacturer's representative is on the job site waiting for corrections to be made, then the Architect/Engineer may, at his/her sole discretion, postpone start-up until such time as the corrections have been made without any extra costs.
  - 2. The Owner may deduct from money due the Contractor the excess cost of engineering associated with having the Architect/Engineer present during the start-up.
  - 3. The deduction shall be equal to the Architect/Engineer's effective billing rate times the total number of hours delayed during the start-up activities.
- G. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- H. Verify that wiring and support components for equipment are complete and tested.
- I. Execute start-up under supervision of applicable Contractor's personnel in accordance with manufacturer's instructions.
- J. The Contractor shall have the job site superintendent present during all start-up activities.

- K. Provide manufacturer's authorized technician at the site when specified and in accordance with the requirements contained in Section 014500 - Quality Control.
- L. Submit manufacturer's start-up reports (MSR's) in accordance with Section 013300.

1.03 STIPULATED STARTUP PARTICIPATION FOR PRIME ELECTRICAL CONSTRUCTION CONTRACTOR

- A. The **Prime Electrical Construction Contractor** shall provide the services of the job site foreman or superintendent who shall participate in the startup of equipment or systems that were furnished by others so as to achieve proper and sustained service.
- B. The Prime Electrical Construction Contractor shall include in the Contract price **TWO HUNDRED FORTY (240)** man-hours of participation service exclusively dedicated for providing startup services for equipment furnished by other Contractors.
  - 1. The Owner reserves the right to receive a credit for each unused hour at the prevailing wage in effect at the time, said amount not being less than **Seventy Five Dollars (\$75)** per hour in any case.
  - 2. This service shall be provided when directed by the Architect/Engineer. Sufficient advance notice will be provided.
- C. The **Prime Electrical Construction Contractor** shall provide a separate line item in the Schedule of Values for this service.
  - 1. Provide with each requisition for payment, concerning this stipulated amount, a field report documenting the equipment item or system, date(s) of service, name of Contractor's worker(s), hour(s) worked, brief description of work performed during startup, and the prevailing wage rate paid them.
  - 2. The field report shall be signed by the Architect/Engineer's field representative.
- D. Requisitions for payment out of this stipulated amount will not be processed without an executed field report unless proof of manhours expended can be proved otherwise.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 017500**

## PART 1 - GENERAL

## 1.01 SUBMITTALS

- A. Submit the following documents to the Architect/Engineer before Substantial Completion:
1. Project Record Documents as specified in Section 017839.
  2. Operations and Maintenance Manuals prepared in accordance with Section 017823 and be updated as a result of start-up activities.
  3. Manufacturer's Start-up Reports (MSR's) for all equipment and systems where manufacturer field time is specified.
    - a. Each MSR shall be signed by the field technician(s) who attended the start-up.
    - b. If the manufacturer is taking exception to the installation or if the warranty is voided, he shall provide a statement to that effect and provide reasons and justification to explain the company's position.
  4. One binder containing original counterparts of all warranties, guarantees, bonds, or affidavits as specified in the Technical Specification Sections. These documents shall contain the original signatures and be placed in a plastic sheet protector, one document per protector.
  5. Spare parts checklist itemizing all spare parts furnished under the Contract summarized by Section.
  6. Electrical Underwriter's Certificate where the prime construction contract includes electrical construction or where this Contract is for a Prime Electrical Construction Contract.
- B. Submit the following items to the Architect/Engineer with the final application for payment:
1. Final Application for Payment prepared by the Architect/Engineer for Contractor's execution showing final amount of Contract including change orders.
  2. Maintenance Bond prepared in accordance with the Contract or General Conditions.
  3. Utility company signoffs and inspection approvals, if applicable.
  4. Federal, state, county, town and local signoffs and inspection approvals, where applicable.
- C. All documents shall be complete, signed, dated, and notarized (where applicable) and be subject to the Architect/Engineer's acknowledgment of receipt or approval.

## PART 2 - PRODUCTS

NOT USED

## PART 3 - EXECUTION

NOT USED

**END OF SECTION 017800**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section specifies the requirements for Operations and Maintenance Manuals required to be prepared by system suppliers and equipment manufacturers.
- B. The Contractor shall submit Operations and Maintenance Manuals for all equipment.
- C. Where the technical specifications call for the submission of manuals, said manuals shall be prepared in accordance with the requirements contained herein. It being understood that manuals shall be submitted for all equipment even if it is not specifically called out in the specifications.

## 1.02 MANUAL CONTENTS AND FORMAT

- A. All paper Operations and Maintenance Manuals shall be as specified hereinafter.
- B. The binder shall be 8 1/2" x 11", metal hinge, vinyl, large capacity by National or Equal. It shall show the name of the manufacturer or supplier and project name on the spine of the binder.
- C. A cover shall be provided showing the names of the Owner, Architect/Engineer, Contractor, and Manufacturer.
  - 1. It shall show the Contractor's order number and manufacturer's project number.
  - 2. The address of the manufacturer, service station telephone number, project title, contract number, and year shall also be shown.
- D. Provide tabbed color dividers for each separate product and system.
  - 1. The name of the product shall be typed on the tab.
  - 2. A separate tab shall also be provided for information such as troubleshooting instructions, spare parts list, etc.
- E. An index shall be provided in the back of the binder, with a separate tab, providing a quick way for the operator to find key and important topics contained in the manual.
- F. A separate listing for all charts, graphs, tables, figures and shop drawings shall be provided directly following the table of contents.
- G. Each manual shall contain one (1) copy of all shop drawings deemed in compliance with the Contract Documents by the Architect/Engineer submitted for the equipment or system for which the manual is prepared.
  - 1. Only these shop drawings shall be included in the manual.
  - 2. All shop drawings larger than 8 1/2" x 11" shall be folded and placed in a heavy duty, top loading plastic sheet protector with the title of the drawing showing; one (1) drawing per protector page.
- H. For systems being furnished with control panels, each manual shall contain a catalog cut for every electrical device installed inside the control panel or motor control center.
- I. Where emergency generator(s) are included as work of this Contract, the manufacturer's standard manual will be allowed if the manual clearly shows the instructions for the particular model of generator. Cross out chapters and paragraphs that do not apply to the Owner's generator.
- J. Where manuals are prepared for treatment systems for water, a process chapter, written in plain language for the operators, shall be prepared by the manufacturer providing the following:

1. A general discussion regarding the theory of the process.
  2. A specific discussion relating the theory to the project as designed and constructed. Provide capacities, sizes, loading rates, application criteria, design values, and design assumptions.
  3. Provide model numbers for equipment comprising the system.
  4. Provide figures, tables, and graphs to assist the operator in understanding the operation of the treatment system.
  5. Where operator interfaces are provided, provide step-by-step instructions for changing a process control variable such as set points.
    - a. The instructions shall be numbered and written such as "press", "hold" "scroll", etc.
    - b. Each operator interface instruction sheet shall be laminated and placed in the binder.
    - c. Another laminated sheet shall be provided and placed inside the control panel.
- K. Each manual shall contain the following as a minimum:
1. Table of contents
  2. Final version of the warranty statement approved by the Architect/Engineer
  3. Nameplate data of each component, year of installation, contract number and specification number
  4. Name, address and telephone number of the manufacturer and the manufacturer's local representative(s)
  5. Installation instructions
  6. Operation instructions including adjustments, the interrelation of components and the control sequence describing break-in, start-up, operation and shutdown
  7. Emergency operating instructions and capabilities
  8. Maintenance requirements include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair and reassembly instructions; and alignment, adjusting, balancing, and checking instructions
  9. Troubleshooting guide and corrective maintenance (repair) procedures for all electrical and mechanical equipment. These guides shall list the most frequent and common problems, together with the symptoms, possible causes of the trouble, and remedies
  10. Drawings (pictures or exploded views) which clearly depict and identify each part, suitable for assembly and disassembly of entire system and each component
  11. Wiring and control diagrams, if applicable
  12. Panelboard circuit directories including electrical service characteristics, if applicable
  13. Part list with current prices; ordering information; and recommended quantities of spare parts to be maintained in storage
  14. Charts of valve tag numbers, with location and function of each valve, keyed to the process and instrumentation diagram prepared as part of the Contract Documents
  15. Name, address, and telephone number of nearest parts supply house and nearest authorized repair service center.
  16. List of recommended spare parts and the recommended number of each per unit and per group of units.
- L. All electronic Operations and Maintenance Manuals shall be as specified hereinafter.
1. All files shall be in Adobe PDF format and submitted on compact discs.
  2. Files shall be organized by specification section and then by product.
  3. An electronic index and list of all charts, graphs, tables, figures, and shop drawings shall be included.
  4. All information provided in the paper Operations and Maintenance Manual shall be included in the electronic version.
- M. Submit one (1) copy of a preliminary draft manual at least fourteen (14) calendar days prior to the date set for start-up.
1. The Architect/Engineer will review the manual for content and compliance with these specifications.

2. Written comments will be provided, but the manual will not be returned.
  3. The manual will be used at start-up, to record changes that should be made to the final manual.
  4. The manual will be retained on the site until such time as the final, updated manual is provided.
- N. Two (2) weeks after the date the unit was placed into service and the Owner has gained beneficial use, submit five (5) paper copies and two (2) electronic copies of the final updated Operations and Maintenance Manual. Refer to Section 017500 - Starting and Adjusting for requirements related to updating the manual(s).
- O. Where installation instructions are not included with the manual, they shall be shipped at least ten (10) days prior to the date the equipment is scheduled for installation.

### 1.03 RETAINAGE

- A. The Architect/Engineer will retain from payment due the Contractor, for failure to submit manuals as specified, an amount equal to 2% of the scheduled value for the equipment or system for which the manual applies. This Contract requirement only applies when a manual is specified to be provided in the Technical Specifications for a particular system or piece of equipment.

### PART 2 - PRODUCTS

NOT USED

### PART 3 - EXECUTION

NOT USED

**END OF SECTION 017823**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. This Section includes:
  - 1. Maintenance of documents
  - 2. Recording of record information
  - 3. Submission of record documents
- B. Work of this section also includes the furnishing of underground pipeline documentation.

## 1.02 PLANS AND SPECIFICATIONS FURNISHED TO THE CONTRACTOR

- A. One (1) complete set of Contract Documents (plans, specifications and addenda) will be furnished to the Contractor in electronic portable document format (PDF).
- B. Additional sets will be furnished to the Contractor at \$250 per set.

## 1.03 MAINTENANCE OF DOCUMENTS

- A. The Contractor shall maintain at the site one (1) set of the following: drawings, specifications, addenda, change orders, approved shop drawings, test reports, operations and maintenance manuals, and shop drawing log.
- B. The Contractor shall make these documents available for use by the Owner, Architect/Engineer, regulatory agencies and other parties designated by the Owner.
- C. Provide a drawing rack for storage of plans.
- D. Maintain these documents in a clean, dry, legible condition throughout the entire contract period.

## 1.04 RECORDING OF RECORD INFORMATION

- A. Affix a stamp to each Contract Drawing and Shop Drawing reading as follows: "RECORD DOCUMENT" - "NAME OF PROJECT" - "CONTRACTOR NAME" in 2-inch high printed letters. The stamp shall be specifically prepared for this project.
- B. Keep the record documents current as the work progresses. Record information concurrent with construction progress.
- C. The Contractor shall include a lump sum amount of [\$25,000] in the bid amount for preparation of record drawings.
  - 1. Stipulated amount will be released when the record drawings have been accepted by the Architect/Engineer.
  - 2. Satisfactory evidence shall be provided by the Contractor demonstrating compliance with these specifications and said drawings have been delivered and deemed in compliance with the specifications by the Architect/Engineer.
  - 3. Progress payments will be allowed against the line item in the Schedule of Values only if record documents are considered accurate and up-to-date by the Architect/Engineer.
- D. Do not permanently conceal any work until required information has been recorded.
- E. Legibly mark the Contract Plans to record actual construction, including, but not limited to the following:
  - 1. All as-built work.

2. All approved field changes and conditions.
  3. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
  4. Location of underground conduits, boxes, devices. Wire sizes (AWG) and types installed. Number of active and spare wires in each conduit and conduit size (applicable where work involves electrical construction).
  5. Tied-down location of all underground process lines and buried valves.
- F. Shop Drawings: Maintain as record documents. Legibly mark-up to show changes made due to field conditions encountered during construction.

#### 1.05 PROJECT RECORD DOCUMENTS

- A. Maintain a complete and accurate log of control and survey work as it progresses.
- B. The General Contractor shall on completion of major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction, site work and underground facilities installed as work of Contract G.
- C. The Contractor's surveyor site drawings shall also show the location of property line perimeter fence. The property line of the site shall be indicated on the plans.
- D. The primary electric service installed by LIPA shall also be located on the record drawings prepared by the Contractor's surveyor.
- E. If applicable, the primary electric service, gas service, and communication lines installed by the respective utility shall also be located on the record drawings prepared by the Contractor's surveyor.

#### 1.06 SUBMITTAL OF RECORD DOCUMENTS

- A. The Contractor shall deliver to the Architect/Engineer three (3) full-size sets of drawings and one (1) PDF electronic copy detailing as-built chemical treatment installations, one (1) month prior to the date of startup of the plant site as outlined in the construction schedule. These shall be submitted to the Health Department by the Engineer for certification of installation and inspection. Drawings shall be submitted by the Contractor to the Architect/Engineer in accordance with the requirements of this Section.
- B. At Substantial Completion, the Contractor shall deliver one (1) preliminary record set of as-built documents to the Architect/Engineer with all changes conspicuously ballooned or otherwise emphasized.
- C. The work will not be considered substantially complete until such time as the preliminary record documents are delivered and acceptable to the Architect/Engineer. Mark this set "Preliminary Record Drawings".
- D. Prior to Final Completion, the Contractor shall conform the preliminary record drawings to the comments made by the Architect/Engineer. The Contractor shall provide one (1) set of full-scale paper as-built drawings and one (1) electronic copy in portable document format (PDF).
- E. As-built drawings shall be the same size as the Contract Drawings, with 1/2-inch margins space on three sides and a 2-inch margin on the left side for binding.
- F. Each drawing shall bear in the title box the words "FINAL RECORD DRAWINGS" and the name of the Contractor in heavy black lettering 1/2 inch high and be certified as complete and accurate.

- G. As a convenience, Architect/Engineer will make available to the Contractor electronic media of the Contract Drawings for the sole purpose of the Contractor preparing as-built drawings.
- H. Electronic media made available is without guarantee of compatibility with the Contractor's software or hardware.
  - 1. If the Contractor wishes to take advantage of this offer, the Contractor will be required to execute an indemnification and hold harmless agreement with the Architect/Engineer.
  - 2. Electronic media will be provided free of charge on disc in a zipped format.
  - 3. Electronic media shall be returned to the Architect/Engineer upon acceptance of the as-built drawings by the Owner.

#### 1.07 RELATED DOCUMENTS

- A. Provide certificate of release of liens if requested by the Architect/Engineer.

#### 1.08 UNDERGROUND PIPELINE DOCUMENTATION

- A. The installing Contractor shall document the location of all underground pipelines by taking digital photographs of the installed pipelines prior to backfilling. At least 3 digital photographs shall be taken of each pipe section before it has been backfilled.
- B. The Contractor shall provide each pipe installation crew with a digital camera capable of a 3 mega-pixel quality picture using Smart Media, Compact Flash Media, or Memory Stick cards as the media within the camera.
- C. At the end of each day that pipe has been installed, the crew foreman shall hand deliver to the Architect/Engineer the removable media.
  - 1. The Architect/Engineer will then download the photographs and delete the photographs from the media.
  - 2. The media will be returned to the crew foreman within two working days from the date it was delivered.
  - 3. The Contractor shall have at least three (3) 256 MB media cards available for this purpose to be used on a rotating basis.
- D. Installed work will not be eligible for payment until documentation is provided.
- E. In addition, the underground piping shall be marked with construction grade spray paint before the photos have been taken to indicate the pipelines in the pictures.
  - 1. The Contractor shall assign a separate paint color to each line to be shown in the picture.
  - 2. The paint color, once selected by the Contractor, shall be used for the entire run of piping.
  - 3. The marks shall be large and long enough to be visible in the picture. Where practical, spray paint the name of the contents that will be conveyed in the pipe, e.g. "POTABLE WATER", "BACKWASH EFFL."
  - 4. This requirement is necessary so that the pipe lines shown in the pictures can be easily named and referenced at a later date.

#### PART 2 - PRODUCTS

NOT USED

#### PART 3 - EXECUTION

NOT USED

#### END OF SECTION 017839

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. The Section includes the requirements for delivering spare parts specified to be furnished under the provisions of the Contract Documents.

## 1.02 QUALITY ASSURANCE

- A. Spare parts shall be delivered as complete assemblies direct from the manufacturer such that the part is fully functional and ready to be installed.

## 1.03 DELIVERY, STORAGE AND HANDLING OF SPARE PARTS

- A. Comply with the requirements of Section 016500 for packing, delivery, storage and handling requirements for all parts delivered to the site of the work.
- B. All spare parts required to be furnished under a Section of the Specifications shall be packaged in one separate box, crate or container with the words "SPARE PARTS" lettered on all sides of the container.
- C. The equipment name or system name for which the spare parts are being provided shall also be lettered on the container.
- D. A separate packing list for the spare parts shall be included in the container.
- E. The Contractor shall store all spare parts indoors immediately upon delivery of the spare parts to the site. Spare parts will not be accepted by the Owner/Architect/Engineer if the spare parts have been stored outdoors for more than 8 hours upon delivery to the site.
- F. The storage location shall be secure.

## 1.04 TURN OVER OF SPARE PARTS

- A. Spare parts shall be turned over to the Owner/Engineer approximately two (2) weeks prior to the Architect/Engineer's preparation of the Final Punch List.
  - 1. Spare parts will not be accepted until this time.
  - 2. The Certificate of Substantial Completion will not be issued until all spare parts are delivered.
- B. The following procedure shall be followed:
  - 1. The Contractor shall provide a formal letter of transmittal listing the name or description of the part, part number, model number, manufacturer (or supplier), and system component name and the Section where it was specified to be provided.
  - 2. Two (2) counterparts of the letter shall be provided.
  - 3. The Contractor shall turn each part individually over to the Owner/Architect/Engineer.
  - 4. The Owner/Architect/Engineer will initial next to the part description on each counterpart of the transmittal letter.
  - 5. The initials represent that the part was received.
  - 6. One transmittal counterpart will be returned to the Contractor.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

**END OF SECTION 017843**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Work of this Section includes the requirements for demonstrating and training of installed systems, equipment, and products.
- B. Manufacturer field services and the credit for unused service time is also included herein.

## 1.02 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual specification sections require field services to be provided, said services shall be provided by qualified, authorized and factory trained representative(s) of the manufacturer (supplier).
- B. Field services shall generally consist of:
  - 1. installation supervision,
  - 2. verify terms of the manufacturer's warranty,
  - 3. equipment and system calibration,
  - 4. startup supervision,
  - 5. and operation and maintenance instructions to the Owner's employees.
- C. Such services do not include service time to correct a factory fault, correct problems resulting from a factory wiring or control logic error, or errors caused by poor or improper installation by the Contractor.
- D. Sale representatives are not acceptable.
- E. The time specified to be provided under the specification sections shall be exclusive of travel time to and from the facility or site. For the purposes of this Contract, one (1) day shall be defined as eight (8) hours exclusive of breaks or mealtime.
- F. The times specified to be provided by the manufacturer does not relieve the manufacturer from providing sufficient service time to place the equipment or systems into satisfactory operation and to obtain the specified performance. The manufacturer shall provide, as a minimum, the times specified in the Specification Sections.
- G. Where manufacturer services are specified for control panel or control center startup, the representative shall be experienced and trained to work on and field rewire such devices.
  - 1. Field representatives for control panel startup shall understand the control sequence specified and, in the case of programmable logic controllers, are able to make revisions to the factory program using handheld programming devices or laptop computers.
  - 2. The time spent by the representative to correct a PLC program shall not be included in the time specified for startup.
  - 3. The Owner will not pay for time spent in the field to correct a PLC programming problem.
- H. If for any reason, the specified service days are not used, then the Owner shall receive a credit equal to [**\$500.00 (FIVE Hundred Dollars and Zero Cents)**] for each unused field service day specified. The Contractor shall include, as a minimum, [**\$20,000 (twenty thousand dollars and zero cents)**] in the amount bid for manufacturer supplied field service for equipment furnished and installed under Contract G. Said amount of [**\$20,000**] being equal to [**40**] days of service at [**\$500**] each day.
- I. A change order to the Contract reducing the Contract Price, by the dollar amount equivalent to the unused field service days, will be issued.

- J. Submit manufacturers' startup reports (MSR's) in accordance with the requirements contained in Section 013300 - Submittals.

### 1.03 SUBMITTALS

- A. The Contractor shall prepare a list of all manufacturer specified field time required by the technical specifications. Compile this summary listing and submit it to the Engineer for review in accordance with the requirements contained in Section 013300.
- B. Manufacturer's Startup Reports

### 1.04 QUALITY CONTROL

- A. The Contractor shall adhere to all instructions provided by the manufacturer's authorized representative.
- B. All verbal instructions necessary to satisfy performance of the equipment or the system shall be immediately provided by the Contractor. The manufacturer shall document all verbal orders in writing at a time suitable to the Contractor.
- C. All written instructions provided in operation, maintenance, and installation guides and manuals, provided by the manufacturer of such equipment and or system, shall be complied with by the Contractor.
- D. The Contractor shall comply with all manufacturer requirements such that written or implied warranties remain in full force during the time period so specified elsewhere in the technical specifications.
- E. Should manufacturer's instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- F. Actions and/or non performance by the Contractor that may void manufacturer warranties shall not constitute a release of the specified warranty, and all warranty claims made by the Owner shall be paid for by the Contractor as if the manufacturer's warranty was still in effect.

### 1.05 SCHEDULING - FIELD SERVICES

- A. The Contractor shall arrange field service on dates acceptable to the Owner and Architect/Engineer.
- B. The service visits shall be scheduled at least 2 weeks in advance so that the Owner and Architect/Engineer can adequately staff the date.
- C. Operator training will not be allowed until such time as the Manufacturer's Operation and Maintenance Manuals have been supplied and approved by the Architect/Engineer.
  - 1. The field service technician shall review the contents of the manual with designated employees of the Owner.
  - 2. Field services will not be deemed provided until the MSR is provided.

### 1.06 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel prior to date of Substantial Completion.

- B. Utilize manufacturer's and vendor's Operation and Maintenance Manuals as basis for instruction. Review contents of the manual with the Owner's personnel in detail to explain all aspects of operation and maintenance.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of the equipment or of the system.
- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- E. The Contractor shall arrange to have the manufacturer's Operation and Maintenance Manuals updated with information that has been added during start-up activities.
- F. The final manual shall contain the most recent information and reflect all operational and maintenance aspects of the final installed and functioning system or equipment component of the system.
- G. Any changes to control panel wiring diagrams or interconnection wiring schematics shall be made and new prints provided as an update to previously approved manuals.
- H. Manufacturer field time shall be as specified in individual Sections of the Technical Specifications.

**PART 2 - PRODUCTS**

NOT USED

**PART 3 - EXECUTION**

NOT USED

**END OF SECTION 017900**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Complete removal of designated building and construction items as indicated on the Contract Documents including but not limited to existing doors & frames, windows, interior finishes, and roofing systems.
- B. Identification of utilities.
- C. Disposal of materials. Salvaging of removed materials as indicated on drawings or schedule at the end of this Section.
- D. The extent of Selective Demolition Work is that Work necessary and required to facilitate the new construction indicated.
- E. Removal of Asbestos Containing Materials (ACM) is not included in this Section

## 1.02 RELATED SECTIONS

- A. Section 011100 – Summary of Work.
- B. Section 013100 – Project Management & Coordination.
- C. Section 013300 – Submittals
- D. Section 015000 – Temporary Facilities and Controls.
- E. Section 017800 – Closeout Submittals.
- F. Section 02800 – Asbestos Removal.

## 1.03 SUBMITTALS

- A. Section 013300 - Submittals: Procedures for submittals.
- B. Shop Drawings: Indicate demolition and removal sequence and location and construction of temporary work. Describe demolition removal procedures and schedule.

## 1.04 SUBMITTALS FOR CLOSEOUT

- A. Section 017800 – Closeout Submittals. Procedures for submittals.
- B. Waste manifests for all removed materials to an approved waste collection site.
- C. Project Record Documents: Accurately record actual locations of capped utilities, obstructions and unseen utilities.

## 1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable code and OSHA requirements for demolition work, safety of existing structures and dust control.
- B. Obtain required permits from authorities having jurisdiction.
- C. Notify affected utility companies before starting work and comply with their requirements.

- D. Do not close or obstruct egress width to any building or site exit.
- E. Do not disable or disrupt building fire or life safety systems without ten (10) days prior written notice to Architect/Engineer and the Owner.
- F. Do not turn off electric equipment without authorization from Owner.
- G. Conform to procedures applicable if hazardous or contaminated materials are discovered.

#### 1.06 SCHEDULING

- A. Section 013300 - Submittals: Work schedule, describe demolition removal procedures and schedule.
- B. Schedule demolition to coincide with new construction.
- C. Coordinate removal of indicated to equipment connected to drainage, plumbing and electrical systems.

#### 1.07 PROJECT CONDITIONS

- A. Indicated "Existing Construction" was obtained from existing drawings, field measurements or other information which may not reflect actual conditions. The Contractor shall verify all existing conditions and notify the Architect/Engineer of discrepancies before proceeding with the Work.
- B. Perform the removal, cutting, drilling, etc., of existing work with extreme care, and using small tools in order not to jeopardize the structural integrity of the building. Do not use jack-hammers or explosives.
- C. Conduct demolition to minimize interference with adjacent occupied spaces and site utilities.
- D. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.
- E. Provide all safety precautions necessary to protect life and property.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Provide appropriately sized dumpsters and rubbish containers for the proper and safe disposal of all debris.
- B. Provide any and all shoring and bracing which may be required for safe removal of items indicated and protection of existing structure.
- C. Materials which are damaged by the Contractor to the extent that they cannot be repaired shall be replaced by the Contractor with equal quality material at no additional cost to the Owner.

### PART 3 - EXECUTION

#### 3.01 PREPARATION

- A. Provide, erect and maintain temporary barriers at locations indicated, as required and/or as directed by OSHA guidelines.

- B. Protect existing materials and equipment, which are not to be demolished.
- C. Any finishes, equipment, structures or site features damaged as part of this work shall be replaced at no additional cost to the Owner.
- D. Prevent movement of structure; provide bracing and shoring.
- E. Provide appropriate temporary signage including signage for exit or building egress, construction work area, etc.
- F. Notify affected utility companies before starting work and comply with their requirements
- G. Mark location of horizontal and vertical utilities. There may be utilities running within the building wall cavities as well as under pavement and sidewalks.
- H. Erect and maintain weatherproof closures for exterior openings.

### 3.02 DEMOLITION

- A. Demolish in an orderly and careful manner. Protect existing supporting structural members, roof deck, finishes and equipment.
- B. Employ only skilled tradesmen to perform selective demolition. Cut work by methods least likely to damage work to the retained and adjoining work.
- C. Saw cut existing masonry walls for enlarging openings.
- D. Where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools. Core drill openings through concrete and masonry work.
- E. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.
- F. Where selective demolition terminates at a surface or finish to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even, substrate transition.
- G. Remove demolished materials from site as work progresses except where specifically noted otherwise. Do not burn or bury materials on site.
- H. Upon completion of Work, leave areas in clean condition.
- I. Remove temporary work.

### 3.03 DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent building areas or Owner's operations.
- B. Construct temporary work areas prior to any demolition work enclosing respective work from the public and Owner's staff.
- C. Cease operations immediately if structure appears to be in danger or hazardous materials are encountered. Notify Architect/Engineer. Do not resume operations until directed.
- D. Maintain protected egress and access to the Work at all times.

E. Recycle all removed materials which can be recycled.

F. Provide manifests for all disposed materials.

**END OF SECTION 024130**

## PART 1 - GENERAL

## 1.01 SCOPE OF WORK

- A. The purpose of this section is to outline the scope of work and work procedures required for the removal of asbestos containing material that is anticipated to be disturbed during the proposed demolition of the existing structure at Plant No. 3.
- B. Determination of asbestos content was based upon bulk sampling and analysis of all suspect asbestos containing materials anticipated to be disturbed during the demolition activities. The following quantities are approximate and shall be field verified by all asbestos abatement contractors before submitting their bids.
  - 1. Removal of the following asbestos-containing materials:
    - a. Plant 4: +/- 400 square feet of roof shingles.
- C. The Contractor shall be aware of all Federal (EPA and OSHA) and New York State Department of Labor (NYS DOL) regulations (ICR 56), Project Drawings and Project Documents.
- D. The Contractor shall be aware of all conditions of the Project and is responsible for field verifying quantities and locations of all ACM to be removed from the building prior to submission of any bid. Failure to do so shall not relieve the Contractor of its obligation to furnish all labor and materials necessary to perform the Work. The quantities presented in this Specification are approximate and should not be used solely as the basis for any bid. In the event that suspect materials not included in this Specification are encountered while the work is in progress, such material shall be tested for asbestos content or assumed positive for asbestos content and removed in accordance with the procedures herein. Any discovery of new ACM shall not delay the progress of the Work. Payment for any additional work shall be considered on a case-by-case basis by the Engineer.
- E. Any special job conditions, including any site-specific variances are to be obtained by the Contractor, and any fees associated with procuring these variances shall be included in the Contractor's bid.
- F. The Contractor's industrial hygiene practices during asbestos abatement will be monitored by the Owner's representative; however, the Contractor shall be responsible for monitoring his own construction safety work practices for compliance with the OSHA regulations.

## 1.02 SPECIAL JOB CONDITIONS

- A. Any special job conditions, including any site-specific variances, are to be obtained by the Contractor, and any fees associated with procuring these variances shall be included in the Contractor's bid.

## 1.03 CODES, PERMITS AND COMPLIANCE

- A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local laws, rules, and regulations pertaining to Work practices, protection of workers, authorized visitors to the site, persons, and property adjacent to the Work.
- B. Perform asbestos related Work in accordance with Federal and New York State regulations. Where more stringent requirements are specified, adhere to the more stringent requirements.
- C. State Licenses: The Contractor must maintain current licenses pursuant to the New York State Department of Labor (NYSDOL) and New York State Department of Environmental Conservation (NYSDEC) for all Work related to this Project.

## 1.04 APPLICABLE STANDARDS AND REGULATIONS

- A. The Contractor shall comply with the following codes and standards, except where more stringent requirements are shown or specified:
- B. Federal Regulations:
1. 29 CFR 1910.1001, "Asbestos" (OSHA)
  2. 29 CFR 1910.1200, "Hazard Communication" (OSHA)
  3. 29 CFR 1910.134, "Respiratory Protection" (OSHA)
  4. 29 CFR 1910.145, "Specification for Accident Prevention Signs and Tags" (OSHA)
  5. 29 CFR 1926, "Construction Industry" (OSHA)
  6. 29 CFR 1926.1101, "Asbestos, Tremolite, Anthophyllite, and Actinolite" (OSHA)
  7. 29 CFR 1926.500 "Guardrails, Handrails and Covers" (OSHA)
  8. 40 CFR 61, Subpart A, "General Provisions" (EPA)
  9. 40 CFR 61, Subpart M, "National Emission Standard for Asbestos" (EPA)
  10. 49 CFR 171-172, Transportation Standards (DOT)
- C. New York State Regulations:
1. 12 NYCRR, Part 56, "Asbestos", Industrial Code Rule 56 (DOL)
  2. 6 NYCRR, Parts 360, 364, Disposal and Transportation (DEC)
  3. 10 NYCRR, Part 73, "Asbestos Safety Program Requirements" (DOH)
  4. New York State Department of Health (NYSDOH) Training Requirements
- D. Standards and Guidance Documents:
1. American National Standard Institute (ANSI) Z88.2-80, Practices for Respiratory Protection
  2. ANSI Z9.2-79, Fundamentals Governing the Design and Operation of Local Exhaust Systems
  3. EPA 560/585-024, Guidance for Controlling Asbestos Containing Materials in Buildings (Purple Book)
  4. EPA 530-SW-85-007, Asbestos Waste Management Guidance
  5. ASTM Standard E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects."

## 1.05 SUBMITTALS

- A. Pre-Work Submittals: Within 7 days prior to the pre-construction conference, the Contractor shall submit 3 copies of the documents listed below, with 1 copy going directly to the Owner for review and approval prior to the commencement of asbestos abatement activities:
1. Contractor license issued by New York State Department of Labor.
  2. A list of Projects performed within the past two (2) years and includes the dollar value of all Projects. Provide Project references to include Owner, consultant, and air monitoring firm's name, contact persons, address, and phone number.
  3. Progress Schedule:
    - a. Show the complete sequence of abatement activities and the sequencing of Work within each building or building section.
    - b. Show the dates for the beginning and completion of each major element of Work including substantial completion dates for each Work Area, building, or phase.
  4. Project Notifications: As required by Federal and State regulatory agencies together with proof of transmittal (i.e. certified mail return receipt).
  5. Building Occupant Notification: As required by regulatory agencies.
  6. Disposal Site/Landfill Permit from applicable regulatory agency.
  7. NYS Department of Environmental Conservation Waste Transporter Permit.

- B. Project Close-out Submittals: Within 30 days of project completion, the Contractor shall submit 3 copies of the documents listed below. One set of the documents shall be forwarded to the Owner for review and approval prior to the Contractor's final payment.
  - 1. Originals of all waste disposal manifests, seals, and disposal logs.
  - 2. OSHA compliance air monitoring records conducted during the Work.
  - 3. Daily progress log, including the entry/exit log.
  - 4. A list of all Workers used in the performance of the Project, including name, social security number, NYS DOL certification number and type of certification (i.e. supervisor, asbestos handler, etc.).
  - 5. Disposal Site/Landfill Permit from applicable regulatory agency.
  - 6. Final project notifications and variances, if applicable.

#### 1.06 DELIVERY AND STORAGE

- A. Deliver non-contaminated materials to the job site in original packages with containers bearing manufacturer's name and label.
- B. Store all materials at the job site in a suitable and designated area.
  - 1. Store materials subject to deterioration/damage away from wet/damp surfaces and under cover.
  - 2. Protect materials from unintended contamination.
- C. Remove damaged or deteriorated materials from the job site. Materials contaminated with asbestos shall be disposed of as asbestos debris as herein specified.

### PART 2 - PRODUCTS

#### 2.01 PROTECTIVE CLOTHING

- A. Provide personnel utilized during the Project with disposable protective whole-body clothing, head coverings, gloves and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber for comfort but shall not be used alone. Make sleeves secure at the wrists and make foot coverings secure at the ankles using tape or provide disposable coverings with elastic wrists or tops.

#### 2.02 DISPOSAL BAGS, DRUMS, AND CONTAINERS

- A. Provide 6 mil polyethylene disposal bags printed with asbestos caution labels. Bags shall also be imprinted with U.S. Department of Transportation required markings.
- B. If the asbestos waste has the potential to damage or puncture the disposal bags, burlap sacks shall be utilized as a liner inside the polyethylene disposal bags to prevent puncture or damage to the disposal bags. In addition, 30- or 55-gallon capacity fiber or metal drums capable of being sealed air and water tight may also be used. Affix asbestos caution labels on lids and at one-third points around drum circumference to assure ready identification.
- C. Containers and bags must be labeled with the names of the waste generator and the location at which the waste was generated in accordance with 40 CFR Part 61 NESHAPS.
- D. Labeled ACM waste containers or bags shall not be used for non-ACM waste. Any material placed in labeled containers or bags, whether turned inside out or not shall be disposed of as ACM waste.

### 2.03 HEPA VACUUM EQUIPMENT

- A. All dry vacuuming performed under this contract shall be performed with High Efficiency Particulate Absolute (HEPA) filter equipped industrial vacuums conforming to ANSI Z9.2.
- B. Provide tools and specialized equipment including scraping nozzles with integral vacuum hoods connected to a HEPA vacuum with flexible hose.

## PART 3 - EXECUTION

### 3.01 GENERAL REQUIREMENTS

- A. Perform all asbestos removal Work using wet removal procedures. Dry removal procedures are not permitted.

### 3.02 WORK AREA PREPARATION

- A. Work Area preparation shall be performed in accordance with NYSDOL regulations.
- B. Remove all items attached to or in contact with ACM. HEPA vacuum and wet wipe with amended water all removed items prior to their removal from the Work Area and before the start of asbestos removal operations.

### 3.03 REMOVAL OF ASBESTOS CONTAINING MATERIALS

- A. Asbestos-containing materials shall be removed in accordance with NYSDOL and the Contract Documents.
- B. Sufficiently wet asbestos materials with a low pressure, airless fine spray of surfactant to ensure full penetration prior to material removal. Re-wet material that does not display evidence of saturation.
- C. One Worker shall continuously apply amended water while ACM is being removed.
- D. Perform cutting, drilling, abrading, or any penetration or disturbance of asbestos containing material in a manner to minimize the dispersal of asbestos fibers into the air. Use equipment and methods specifically designed to limit generation of airborne asbestos particles. All power operated tools used shall be provided with HEPA equipped filtered local exhaust ventilation.
- E. Power or pressure washers will not be allowed to be used for asbestos removal or clean-up procedures.

### 3.04 ACM WASTE CONTAINERIZING, DECONTAMINATION AND LOAD OUT PROCEDURES

- A. Packaging of ACM shall conform to OSHA Standard 29 CFR 1926.1101, DOT 49 CFR 171, 172, and 173, and EPA Standard 40 CFR Part 61 and the requirements as herein specified.
- B. The cleaned containers of asbestos material and equipment shall be placed in water tight carts with doors or tops that shall be closed and secured. These carts shall be held in the holding area pending removal. The carts shall be wet cleaned and/or HEPA vacuumed at least once each day.

## 3.05 WORK AREA CLEANING PROCEDURES

- A. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, decontamination procedures shall be followed as specified in Title 15 or ICR 56, unless otherwise stated in the variance(s) utilized by the Contractor.
- B. Following each decontamination procedure, the PM shall inspect the Work Area for effectiveness of the cleanings. If necessary, additional cleaning shall be performed by the Contractor as directed by the PM.

## 3.06 ASBESTOS WASTE

- A. Applicable Regulations: All asbestos waste shall be stored, transported and disposed of in accordance with the following regulations as applicable:
  - 1. NYS DEC 6 NYRCC part 360 and 364
  - 2. US EPA NESHAPS 40 CFR 61
  - 3. US EPA Asbestos Waste Management Guidance EPA/530-SW85

**END OF SECTION 028000**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Treated Wood Members.
- B. Miscellaneous Framing, Blocking, Furring and Sheathing.
- C. Fasteners.
- D. Framing accessories.

## 1.02 RELATED SECTIONS

- A. Section 024130 – Selective Structure Demolition.
- B. Section 062000 – Finish Carpentry.
- C. Section 076200 – Flashing and Trim.
- D. Section 081500 – Fiberglass Reinforced Plastic Doors and Frames.
- E. Section 085400 – Fiberglass Windows.

## 1.03 QUALITY ASSURANCE

- A. Lumber Grading Rules and Wood Species to be in conformance with the Voluntary Product Standards PS 20-70. Grading rule of the following associations apply to materials furnished under this section:
  - 1. Southern Pine Inspection Bureau (SPB).
  - 2. Western Wood Products Associations (WWPA).
  - 3. American Wood Preserves Bureau (AWPB).
  - 4. American Plywood Association (APA).
  - 5. National Fire Protection Agency (NFPA).
  - 6. Lumber Grading Agency by ALSC.
  - 7. Building Officials and Code Administration (BOCA).
- B. Requirements of regulatory agencies. Comply with the following:
  - 1. Fire retardant treated wood: Testing agency, UL label rating, acceptable to governing Building Officials.
  - 2. All lumber and plywood shall be grade-marked.
  - 3. In lieu of grade stamping exposed to view lumber and plywood, submit manufacturer's certificate under provisions of Section 014500 that products meet or exceed specified requirements.

## 1.04 REFERENCES

- A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- B. APA - American Plywood Association.
- C. APA/EWS - American Plywood Association - Engineered Wood Systems.
- D. AWWA - (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.

- E. WWPA - Western Wood Products Association.
- F. Lumber Grading:
  - 1. Standard Grading and Dressing Rules No. 16, current edition, for Douglas Fir, Western Hemlock, West Red Cedar, White Fir, and Sitka Spruce, published by West Coast Lumber Inspection Bureau, or
  - 2. "Current Grading Rules", issued by the Western Wood Products Association.
- G. ASTM D2559 - Adhesives for structural laminated wood products for use under exterior (wet use) exposure conditions.
- H. AITC - American Institute of Timber Construction.
- I. Extended ASTM E84 Fire Test Method, Factory Mutual Research Report J.I. 1R9Q9. AC.
- J. BOCA: 2310.2: Fire Retardant Treated Wood (1993).
- K. ASTM C1177.
- L. ASTM E136.
- M. ASTM E119.

#### 1.05 SUBMITTALS

- A. Certification:
  - 1. Pressure Treated Wood: Submit certification by treating plant stating chemicals and process used, net amount of salts retained and in conformance with applicable standards.
  - 2. Preservation Treated Wood: Submit certification for waterborne preservative that moisture content was reduced to 19% maximum, after treatment.
  - 3. Fire-Retardant Treatment: Submit certification by treating plant stating that fire-retardant treatment materials comply with governing ordinances and that treatment will not bleed through finished surfaces.

#### 1.06 PRODUCT DELIVERY, STORAGE AND PROTECTION

- A. All materials shall be inspected upon receipt at job site. No faulty or damaged materials shall be accepted. It shall be contractor's responsibility to produce finished items of work in first-class condition, free from all defects.
- B. Do not handle products in a manner which will damage, warp or distort products.
- C. Do not store products directly on the ground; protect from elements.

#### 1.07 WARRANTY

- A. Provide 30-year manufacturer's written warranty for pressure treated and fire-resistant treated wood items.
- B. Provide five-year manufacturer's warranty for exterior grade sheathing.

## PART 2 - PRODUCTS

## 2.01 MATERIALS – LUMBER AND FRAMING

- A. Materials shall meet the Federal specifications, commercial standards, product standards and these specifications, unless more restrictive requirements are indicated on drawings.
- B. All lumber for blocking, plates and nailers located within a maximum distance of 18 inches from grade or in contact with masonry or concrete shall be treated in accordance with AWPB Standards LP-2-80. All lumber shall be dried after treatment and have moisture content in each piece of 19% or less or shall conform to the applicable grading standards for the species involved. All cuts, planed surfaces, bored holes, etc., shall be treated at the jobsite by dipping or liberally brushing with same materials as specified in AWPB Standard LPA2A80. All lumber shall be grade marked. Lumber treated by any method other than AWPB Standards LP-2-80 will not be accepted.
- C. Non-Structural Light Framing: Douglas Fir Larch species, No. 2 grade, 19 percent maximum moisture content or equivalent stress grade.
- D. Miscellaneous Framing: No. 2 species, 19 percent maximum moisture content or equivalent stress grade.
- E. All interior lumber to be used for framing, blocking, furring shall be SPIB or WCLB treated with fire retardant to obtain flame spread rating of 25 or less when treated according to ASTM E-84. Treat cuts, etc. as recommended by manufacturer of flame-retardant materials.
- F. Rough hardware, nails, screws, bolts, etc., for securing lumber in place shall be commercial quality, any suitable type and finish for interior dry location, galvanized or nonferrous hardware for all exterior work and for interior work in toilets.

## 2.02 MATERIALS – SHEATHING

- A. Backing panels: APA C-D plugged, exterior type, 3/4 inch and 5/8-inch-thick, as indicated on drawings.
- B. Finish panels: APA A-B, exterior type, 3/4-inch-thick, free of knots and/or plugs on exposed side, as indicated on drawings.
- C. All plywood shall comply with APA Standards and be of thickness indicated on drawings.
- D. Moisture content of the plywood at the time of installation and at the time roofing is installed shall be less than 19 percent.

## 2.03 FASTENERS

- A. Nails and Fasteners: Hot-dipped galvanized steel in accordance with ASTM A153 for exterior, high humidity and treated wood locations, unfinished steel elsewhere.
- B. Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.
- C. Lumber to lumber: Cement coated or annular threaded nails of sufficient length to penetrate 1.25 inches into adjoining members, except as otherwise indicated.

## 2.04 ACCESSORIES

- A. Construction Adhesive: Waterproof; air cured, rubber based, cartridge dispensed, Liquid Nail 601, manufactured by Macco Adhesives, The Glidden Company, or approved equal.

## PART 3 - EXECUTION

## 3.01 VERIFICATION

- A. Verify existing conditions under provisions of Section 013100.
- B. Verify that walls and other substrates are at the proper elevations and ready to receive work of this section.

## 3.02 PREPARATION OF SURFACES

- A. Surfaces to receive new wood members shall be free of all dirt, debris, and loose materials. Exposed surfaces shall be mechanically scraped if necessary, to remove projections.
- B. Surfaces shall have no free water present in any form (rain, dew, frost, snow or ice).
- C. Contractor is responsible to inspect all exposed surfaces to see that conditions are satisfactory for installation of new work.

## 3.03 WORKMANSHIP

- A. Work shall be performed in conformance with good trade practice, recommendations of manufacturers, building codes and these specifications unless specifically indicated otherwise on the drawings and shall be well fitted and securely fastened in its proper location with nails, screws, bolts or other approved fastening devices.

## 3.04 FIRE RETARDANT

- A. Required for wood blocking and nailers.
- B. Treat to flame spread rating of 25 or less and fuel contribution of 30 or less when tested in accordance with ASTM E84. Re-dry to maximum 19 percent moisture content.
- C. Each piece of treated wood shall bear UL label of compliance.

## 3.05 CLEAN-UP

- A. Clean or replace any adjacent surfaces of materials damaged by treated lumber.

## 3.06 INSTALLATION - FRAMING

- A. Set structural members level and plumb, in correct position.
- B. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb and in true alignment until completion of erection and installation of permanent bracing.
- C. Place horizontal members flat, crown side up.
- D. Construct load bearing framing and curb members full length without splices.

- E. Double members at all openings. Space short members over and under opening to member spacing.
- F. Bridge framing in excess of 8 feet span at mid-span.
- G. Coordinate installation of adjacent construction.
- H. Warped wood members shall not be used unless they can be fastened adequately to permanently hold them in their required alignment.

### 3.07 INSTALLATION - SHEATHING

- A. Nailing pattern and spacing shall be in accordance with APA recommendations or as listed in the Building Code of New York State.
- B. Install telephone and electrical panel back boards with plywood sheathing material where required. Size the back board by 12 inches (25 cm) beyond size of electrical panel.
- C. Fasteners:
  - 1. Fastener heads shall be flush with wood surface and shall penetrate adjoining piece minimum 1.25 inches.
  - 2. The installed withdrawal resistance shall be a minimum of 100 pounds per nail.

### 3.08 SITE TREATMENT OF WOOD MATERIALS

- A. Apply preservative treatment in accordance with manufacturer's published instructions.
- B. Brush apply two coats of preservative treatment on wood in contact with cementitious materials and roofing and related metal flashings. Treat site-sawn cuts.
- C. Allow preservative to dry prior to erecting members.

### 3.09 SCHEDULE

- A. Provide nailers, blocking, furring, and reinforcement as called for in all other specified Sections, or as required in the field during construction, in accordance with the requirements of this Section.

**END OF SECTION 061000**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Includes furnishing and installation of non-custom manufactured items, including aluminum clad trim and fascia boards, all necessary mounting clips, etc., required for a complete installation.
- B. Includes installation of all finish hardware furnished in Section 087100.

## 1.02 RELATED SECTIONS

- A. Section 061000 - Rough Carpentry.
- B. Section 076200 – Flashing and Trim.
- C. Section 079200 – Joint Sealants.
- D. Section 087100 – Door Hardware.
- E. Section 099100 - Painting.

## 1.03 REFERENCES

- A. ALSC - American Lumber Standards Committee.
- B. APA - American Plywood Association.
- C. AWI - Architectural Wood work Institute.
- D. ASTM D1761 - Mechanical Fasteners in Wood.
- E. ASTM E84 - Surface Burning Characteristics of Building Materials.

## 1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details and accessories.
- C. Samples: Submit two 12-inch-long samples of aluminum on trim boards.
- D. Product Data: Submit available aluminum trim colors to Architect/Engineer for selection.

## 1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products under the provisions of 016500 and per manufacturer's instructions.
- B. Trim materials should be stored on a flat and level surface on a full shipping pallet. Handle materials to prevent damage to product edges and corners. Store materials under a protective covering to prevent jobsite dirt, moisture and residue from collecting on the boards.
- C. Protect work from moisture damage.

## 1.06 QUALITY ASSURANCE

- A. Verify that field measurements are as indicated on shop drawings.
- B. Allowable Tolerances for trim boards:
  - 1. Variation in component length: -0.00 / +1.00"
  - 2. Variation in component width:  $\pm 1/16$ "
  - 3. Variation in component thickness:  $\pm 1/16$ "
  - 4. Variation in component edge cut:  $\pm 2^\circ$
  - 5. Variation in Density -0% + 10%

## PART 2 - PRODUCTS

## 2.01 GENERAL

- A. All materials used in finished work shall be clear, free from cracks, checks, knots and other imperfections that may interfere with the proper completion of the work and, any warped or otherwise imperfect work shall be removed and replaced by parties responsible for same.
- B. Lumber Materials:
  - 1. Softwood Lumber: Pine Species, B or better, maximum moisture content of 19%,  $\frac{3}{4}$  inch thickness.

## 2.02 ACCESSORIES

- A. Adhesive: Type recommended by AWI to suit application.
- B. Bolts, nuts, washers, lags, pins and screws: of size and type to suit application.
- C. Concealed Joint Fasteners: Threaded Steel.

## PART 3 - EXECUTION

## 3.01 WORKMANSHIP

- A. First grade workmanship. Finish woodwork free of chatter marks, torn grain short finish, splits, etc. Avoid butt joints and exposed ends or edges of materials.
- B. Work shall be scribed and fit to other finished surfaces in a careful manner. Should other work be damaged or disturbed, it shall be made good at the expense of the Contractor.
- C. Verify all measurements, reinforcement and blocking at the building and examine all adjoining work on which work is dependent before beginning installation. Beginning of installation implies acceptance of existing conditions and responsibility for the same.
- D. Exposed surfaces shall be machine-sanded to an even, smooth surface, nails set, ready for finishing. All woodwork shall be dry, clean and smooth before any finishing materials are applied. All nail holes, cuts, cracks and other defects shall be treated to render them unnoticeable.

## 3.02 INSTALLATION

- A. Carefully scribe finish carpentry items. Set and secure finish carpentry items in place rigid, plumb, and square.

- B. Use purpose designed fixture attachments for mounted components.
- C. Install hardware, fixtures, and accessories supplied under other Sections for installation.
- D. Install items in accordance with manufacturer's instructions; install wood to maximum possible length, cutting and splicing shall be unacceptable.
- E. Ensure that mechanical and electrical items affecting this Section of work are properly placed, complete, and have been inspected by the Architect/Engineer prior to commencement of installation.

### 3.03 PREPARATION FOR SITE FINISHING

- A. Site Finishing: Aluminum capping. Before capping installation, prime all surfaces and ends of wood trim - refer to Section 076200.
- B. Prime and paint - refer to Section 099100.

### 3.04 ERECTION TOLERANCES

- A. Maximum Variation from True Position: 1/16-inch.
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32-inch.

**END OF SECTION 062000**

## PART 1 - GENERAL

## 1.01 DESCRIPTION

- A. Provide all labor, equipment, and materials to install flat and tapered roof insulation over the properly prepared existing wood deck substrate.

## 1.02 RELATED SECTIONS

- A. Section 013100: Project Management and Coordination.
- B. Section 061000: Rough Carpentry.
- C. Section 075200: Modified Bituminous Membrane Roofing.
- D. Section 076200: Metal Flashing and Trim.
- E. Section 079200: Joint Sealants.

## 1.03 REFERENCES

- A. ASTM C-165 Test Method for Measuring Compressive Properties of Thermal Insulation
- B. ASTM C-208 Specifications for Cellulosic Fiber Insulating Board
- C. ASTM C-209 Test Method for Cellulosic Fiber Insulating Board
- D. ASTM C-272 Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions
- E. ASTM C-518 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- F. ASTM C-578 Specification for Rigid, Cellular, Polystyrene Thermal Insulation
- G. ASTM C-728 Specification for Perlite Thermal Insulation Board
- H. ASTM D-5 Test Method for Penetration of Bituminous Materials
- I. ASTM D-1622 Test Method for Apparent Density of Rigid Cellular Plastics
- J. ASTM D-2126 Test Method for Response of Rigid Cellular Plastics to Thermal Humid Aging
- K. NRCA National Roofing Contractors Association, Chicago, IL
- L. SMACNA Sheet Metal and Air Conditioning Contractor's National Association
- M. FS HH-I-1972 Insulation Board, Polyisocyanurate
- N. FS LLL-1-535B Insulation Board, Thermal (Perlite)

## 1.04 SUBMITTALS

- A. Submit under provisions of Section 01330 - Submittals.
- B. Provide manufacturer's current product literature, installation specification data and detail sheets for each product. Provide Material Safety Data Sheets (MSDS) for all products

containing "Hazardous Materials" as defined on lists issued by both the Federal and State governments. Maintain copies of MSDS sheets at the jobsite.

- C. Provide approval letters from insulation manufacturer for use of their insulation within this particular roofing system type. Provide a 12" x 12" sample of each insulation type.
- D. Submit manufacturer's shop drawings indicating complete installation details of tapered insulation system, including identification of each insulation block, sequence of installation, insulation block layout, drain locations, roof slopes, thicknesses, crickets and saddles. Drawings shall also include outline of roof, complete board layout of components and thickness for the completed insulation system.
- E. Certifications:
  - 1. Submit roof manufacturer's certification that insulation installation method is acceptable to the roof manufacturer.
  - 2. Submit roof manufacturer's certification that insulation furnished is acceptable to roofing manufacturer as a component of the roofing system and is eligible for roofing manufacturer's warranty.
  - 3. Submit certification that insulation and fastening system furnished is Tested and Approved by an independent testing laboratory for I-90 Wind Uplift Requirements and ASTM E-108 Class 1A fire classification. Insulation installation shall comply with FM Loss Prevention Data Sheet I-29 patterns for specified wind uplift resistance.

#### 1.05 QUALITY ASSURANCE

- A. Comply with local, state and federal regulations, safety standards and codes. Use the strictest document when a conflict arises. Schedule work to coincide with commencement of installation of new roofing system.
- B. Whenever specification items found herein are less stringent than Manufacturers' requirements, Manufacturers' requirements shall be followed, and the Architect/ Engineer shall be notified before proceeding.
- C. The responsibility for proper installation of all components of the roofing system lies with the Contractor. The Contractor shall inform the Architect of any conditions detrimental to the quality of construction or long-term performance of the roofing system and shall not proceed with the work until the conditions are corrected.
- D. The Contractor selected for this work must be approved by the primary materials Manufacturer or approved equal and is capable of providing the specified Manufacturer's guarantee.
- E. Applicator Qualifications: Company specializing in roof deck insulation application, with minimum of 5 years documented experience certified by roofing system manufacturer.
- F. Comply with Factory Mutual System Approval Guide to provide FMRC-Approved roof assembly meeting Class IA-90 (FM Standard 4470) requirements for fire resistance and wind uplift in accordance with FM Loss Prevention Data Sheets 1-28 and 1-29 and Underwriter's Laboratories, Inc. (UL) Class A Fire Hazard Classification.
- G. Products and equipment requiring or using Chlorofluorocarbons (CFC's) during the manufacturing process will not be permitted.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials in accordance with Section 016500 Material and Equipment. Follow manufacturer's printed instructions in handling and storing products.

- B. All materials shall be delivered to the job in original unopened containers or bundles and stored in a place protected from the elements and from damage by tampering.
- C. Store all insulation materials in a manner to protect them from the wind, sun and moisture damage prior to and during installation. Any insulation that has been exposed to any moisture shall be immediately removed from the project site.
- D. Store materials off the ground in a watertight, ventilated enclosure. Any warped, broken or wet insulation boards shall be immediately removed from the site.
- E. Proceed with insulation work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.

## PART 2 - PRODUCTS

### 2.01 APPROVED EQUAL

- A. Contractor shall submit any product not specified prior to the award date in accordance with Section 013300 to the Architect in order for the product to be considered for approval.

### 2.02 INSULATION MATERIALS

- A. Provide thicknesses of insulation required to meet the minimum 1/8-inch pitch indicated; provide combination of types and thicknesses to provide a complete system:
  - 1. Flat and Tapered Polyisocyanurate Roof Insulation
    - a. Insulation design must be provided by roof system manufacturer.
      - 1) Qualities: Factory manufactured, closed cell polyisocyanurate foam core bonded to heavy duty glass fiber mat facers.
      - 2) Board Size: Minimum 4' x 4', Thickness: Minimum 1".
  - 2. Source
    - a. E'NRG'Y-2 by NRG Barriers, Inc.
    - b. Ultra Gard Gold II by Schuller Roofing Systems.
    - c. GAFTEMP Isotherm R by GAF.
    - d. Pre-approved Equal.
  - 3. Requirements
    - a. ASTM E-108 Class 1A
    - b. I-90 Uplift
    - c. Federal Specification HH-I-1972, Class I
  - 4. Physical Properties
    - a. Dimension Stability: ASTM D-2126, 2% max.
    - b. Compressive Strength: ASTM D-1621, 25 psi min.
    - c. Vapor Permeability: ASTM E-96, 1 perm max.
    - d. Foam Core Density: ASTM D-162, 2.0 pcf min.
    - e. Water Absorption: ASTM C-20, <1%
    - f. R-Factor HR per inch Thickness ASTM C-518, 5.6 design value.

### 2.03 RELATED MATERIALS

- A. Fiber cant and tapered edge strips: Preformed rigid insulation units of sizes/shapes indicated, matching insulation board or of perlite or organic fiberboard, as per the approved manufacturer.
  - 1. Acceptable Manufacturers:
    - a. Johns Manville
    - b. Garland Company, Inc.
    - c. Celotex

- d. International Permalite, Inc.
  - e. Pre-approved Equivalent
- B. Protection Board: Premolded semi-rigid composition board, GP DensDeck or equal 3/4" thick.
- C. Asphalt: ASTM D-312, Type III Steep Asphalt.

### PART 3 - EXECUTION

#### 3.01 INSPECTION OF SURFACES

- A. Roofing contractor shall be responsible for preparing an adequate substrate to receive insulation.
1. Verify that work which penetrates roof deck has been completed.
  2. Verify that wood nailers are properly and securely installed.
  3. Examine surfaces for defects, rough spots, ridges, depressions, foreign material, moisture, and unevenness.
  4. Do not proceed until defects are corrected.
  5. Do not apply insulation until substrate is sufficiently dry.
  6. Broom clean substrate immediately prior to application.
  7. Use additional insulation to fill depressions and low spots that would otherwise cause ponding water.

#### 3.02 PREPARATION

- A. The entire roof surface shall be swept free of all dust, dirt, grime, debris or other foreign material. Conduct daily NRCA deck dryness test. Report findings daily to Architect/Engineer.
- B. Thoroughly clean and reseal all exposed metal joints and penetrations to result in a watertight seal. The repair of damaged roof deck shall be performed prior to system installation.
- C. Ensure roof deck is clean and dry, continuous, and ready for application of roofing system.

#### 3.03 ROOF INSULATION INSTALLATION

- A. Insulation shall be laid with edges parallel to the roof edges.
- B. Insulation boards shall be laid in a cross pattern. Joints (staggered) with the joints between the long dimensions of the boards continuous.
- C. Space roof Insulation 1/4" from all vertical flashing.
- D. No more insulation shall be laid than can be completely covered in a day's work.
- E. Remove and replace any wet insulation. Roofing shall not be applied over wet insulation.
- F. Offset the joints of subsequent insulation layers a minimum of 6" over the underlying insulation layer.
- G. Install preformed forty-five (45) degree cant strips at junctures of vertical surfaces. Provide preformed, tapered edge strips at perimeter of edges of roof that do not terminate at vertical surfaces. Tape joints of insulation as per manufacturer's requirements.
- H. Install new 1/4:12 tapered perlite crickets/saddle as needed to insure positive water flow at locations indicated. Comply with manufacturer's guidelines for proper installation of tapered insulation.

- I. Fully Adhered Attachment:
  1. Install one layer of rigid insulation board with end joints staggered so all open joints will be eliminated. Each insulation board shall be butt firmly against adjoining panels. All open joints shall be eliminated.
  2. Approved protection board three quarter (3/4") inch thickness shall be installed over insulation.
  3. All insulation shall be neatly cut and fitted around all through-roof projections. The boards shall be cut to fit one quarter (1/4") inch away from the vertical surface.

#### 3.04 WATER CUT-OFF

- A. At the end of each day's work, provide temporary water cut-offs at the edge of the insulation. Remove cut-offs when work commences.
- B. Remove water cut-offs before proceeding with work.

#### 3.05 APPLICATION OF CANT STRIP

- A. Install four inch by four-inch perlite cant strips at the juncture of all vertical surfaces and roof where there are no expansion joints. Where 4" cant strips will not fit, use the largest practical size. Cant strips shall be set into adhesive or hot, steep asphalt over the secured insulation, depending on roofing system.

#### 3.06 CLEANING

- A. Remove debris and cartons from roof deck. Leave insulation clean and dry, ready to receive roofing membrane.
- B. Remove adhesive or bituminous markings from finished surfaces. In areas where finished surfaces are soiled by tar or any other source of soiling caused by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their instructions. Repair or replace defaced or disfigured finishes caused by work of this section.

**END OF SECTION 072200**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Granular surfaced fiberglass asphalt shingle roofing.
- B. Leak barrier and roof deck protection and all other items essential to the completeness of the roofing installation, though not specifically specified, shall be provided for a watertight installation meeting the manufacturer's warranty requirements.
- C. Metal flashings, ridge vent, starter shingles and all accessories essential to the completeness of the roofing installation.

## 1.02 RELATED SECTIONS

- A. Section 061000 – Rough Carpentry.
- B. Section 076200 - Flashing and Trim.
- C. Section 077123 - Gutters and Downspouts.

## 1.03 REFERENCES

- A. ASTM A653/A653M – Steel Sheet, Zinc Coated or Zinc-Iron Alloy Coated by the Hot-Dip Process.
- B. ANSI/ASTM B209 - Aluminum Alloy Sheet and Plate.
- C. ANSI/ASTM D226 - Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- D. ANSI/ASTM D3018 - Class A - Asphalt Shingles Surfaced with Mineral Granules.
- E. ASTM D3462 – Standard Specification for Asphalt Shingles made from Glass Felt and Surfaced with Mineral Granules.
- F. ASTM D3161 Type 1 – Wind Resistance of Asphalt Shingles.
- G. ASTM A361 - Sheet Steel, Zinc Coated (Galvanized) by the Hot Dip Process for Roofing and Siding.
- H. ASTM D4586 – Asphalt Roof Cement, Asbestos-Free.
- I. ASTM B370 - Copper Sheet and Strip for Building Construction.
- J. ASTM D2218 – impact Resistance of Prepared Roof Covering materials.
- K. ASTM D7158 – Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/ Uplift Resistance Method).
- L. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance and Transmission of Materials Using Integrating Spheres.
- M. National Roofing Contractors Association - NRCA Steep Roofing Manual.
- N. Asphalt Roofing Manufacturers Association – ARMA.

- O. UL 580 - Tests for Wind Uplift Resistance of Roof Assemblies.
- P. UL 997 – Wind Resistance of Prepared Roof Covering Materials.
- Q. UL 790 - Tests for Fire Resistance of Roof Covering Materials.

#### 1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data indicating material characteristics, performance criteria, colors, and limitations including Energy Star acceptance.
- C. Shop Drawings: Indicate specially configured metal flashings, jointing methods and locations, fastening methods and locations, and installation details.
- D. Samples: Submit two sample boards indicating the manufacturer's full line of available colors. Submit two full size sample shingles indicating size, texture, color and overall appearance.
- E. Manufacturer's Instructions: Indicate preparation required and installation procedures.
- F. Certificate of Compliance: Provide a Certificate of Compliance from an independent laboratory indicating that the asphalt fiberglass shingles made in normal production meet or exceed the following requirements:
  - 1. ASTM E 108/UL 790 Class A Fire Resistance
  - 2. ASTM D 3161/UL 997 Wind Resistance
  - 3. ASTM D 3462
- G. Manufacturer's written certification indicating roofing applicator qualifications comply with those necessary to obtain specified warranty.
- H. Sample warranty for review.

#### 1.05 QUALITY ASSURANCE

- A. Roof system shall be an integrated system providing single source responsibility from the manufacturer.
- B. Manufacturer Qualifications: Company specializing in manufacturing the roofing system products specified in this section, with a minimum of 25 years' experience.
- C. Installer Qualifications: Certified and trained by the shingle manufacturer for steep slope installation, certified to install enhanced warranty projects, such as GAF Master Elite Roofing Contractor, CertainTeed Master Shingle Applicator Wizard or approved equal.
- D. Perform work in accordance with NRCA Steep Roofing Manual.
- E. A final inspection is to be conducted by a manufacturer's roofing inspector.

#### 1.06 REGULATORY REQUIREMENTS

- A. Conform to applicable code(s) for UL 790 Class A fire resistance and ASCE 7, UL 997 and UL 580 wind uplift for shingle types specified.

## 1.07 DELIVERY, STORAGE AND HANDLING

- A. Store products under the provisions of Section 016500, and in accordance with manufacturer's instructions.
- B. Store all products in manufacturers unopened, labeled packaging until they are ready for installation. Store products in a covered, ventilated area, at a temperature not more than 110 degrees Fahrenheit, do not store near stream pipes, radiators, or direct sunlight.
- C. Store bundles on a flat surface. Maximum stacking height shall not exceed manufacturer's recommendations. Store rolls on ends.

## 1.08 ENVIRONMENTAL REQUIREMENTS

- A. Do not install eave edge protection and shingles when ambient temperatures are below 50°F (10°C).

## 1.09 PROTECTION

- A. It shall be the Contractor's responsibility to respond immediately to correction of roof leakage during construction. A four (4) hour time limit shall be given from the time of notification of emergency conditions. In the event of water penetration during rain or a storm, the Contractor shall provide for repair or protection of the building contents and interior. If the Contractor does not respond or cannot be contacted, the Owner will effect repairs or emergency action and the Contractor shall be back charged for all expenses and damages, if any.
- B. Protect the building and the contents of the building from all risks resulting from the work. Contractor shall be sufficiently prepared to expediently install a temporary membrane to protect areas of incomplete roofing in the event of rain.
- C. Contractor must take every precaution to prevent interior leakage, materials from falling into the interior, or other such occurrences.
- D. Do not load or permit any part of structure to be loaded with a weight that will endanger its safety or cause damage. Confine equipment, storage of materials and debris and the operations and movements of workmen within any limits as indicated or as directed by the Owner.

## 1.10 WARRANTY

- A. Provide to the Owner a complete system warranty from the manufacturer such as GAF WeatherStopper Golden Pledge Warranty, CertainTeed SureStart Plus 5-Star Warranty or approved equal. Contractor must be a GAF Certified Master Elite Contractor, CertainTeed Master Shingle Applicator Wizard or approved equal.
  - 1. Material defects: Warranty shall provide 100% non-prorated coverage for materials and labor for 40 years.
  - 2. Workmanship errors: Warranty shall provide 100% coverage for workmanship errors for the first 20 years.
  - 3. In addition to the requirements listed above, the installer must register and pay for this warranty. The Warranty will be issued and accepted only if the project passes the manufacturer's final inspection.

## 1.11 EXTRA MATERIALS

- A. Furnish under provisions of Section 016500.

- B. Provide extra shingles of each color specified in unopened packages, capable of covering 2 percent of covered area.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS - ASPHALT SHINGLES

- A. GAF Materials Corporation, 1361 Alps Road, Wayne, NJ 07470.
- B. CertainTeed Corporation, P.O. Box 860, Valley Forge, PA 19482.
- C. Or approved equal.

### 2.02 MATERIALS

- A. GAF Timberline Ultra HD Lifetime High Definition Shingles, super heavyweight, granule surfaced, self-sealing asphalt shingle, reinforced with fiberglass Micro Weave core and Stain Guard protection which prevents pronounced discoloration from blue-green algae through formulation/blends of granules. Architectural laminate styling provides a wood shake appearance with a 5" or 5-5/8" exposure and features GAF's patented High Definition color blends and enhanced shadow effect. Color and pattern as selected by Owner from manufacturer's full range of colors available.
- B. CertainTeed Landmark Premium Shingles, 300 pounds per square, composed of a fiberglass mat base with ceramic coated colored/UV resistant mineral service granules across entire face of the shingle tightly embedded in carefully refined, water resistant asphalt. The two pieces of the shingle are firmly laminated together in a tough asphaltic cement, and are self-sealing, algae-resistant construction. Architectural laminate styling provides a wood shake appearance with a 5" or 5-5/8" exposure and features CertainTeed's Max Def color blends and enhanced shadow effect. Color and pattern as selected by Owner from manufacturer's full range of colors available.
- C. Or approved equal.

### 2.03 ACCESSORIES

- A. Hip and Ridge Shingles: High profile self-sealing ridge cap shingle matching the color of selected roof shingle.
- B. Starter Strip: Pre-cut self-sealing starter shingle with factory applied adhesive, designed for premium roof shingles matching the color of selected roof shingle.
- C. Leak Barrier: Self-adhering, self-sealing, bituminous leak barrier surfaced with fine, skid-resistant granules. Install leak barrier at valleys and around dormers, sidewalls, firewalls, chimneys, plumbing vents, and skylights.
- D. Shingle Underlayment: Premium, water repellent, breather type roofing underlayment meeting ASTM D226 and D4869.
- E. Roofing Cement: Asphalt Plastic Roofing Cement meeting the requirements of ASTM D4586, Type I or Type II, asphalt type with mineral fiber components, free of toxic solvents, capable of setting within 24 hours at temperatures of 75 F (24 C) and 50% RH.
- F. Ridge Vent: Flexible rigid plastic ridge ventilator designed to allow the passage of hot air from attics, while resisting snow infiltration and for use in conjunction with eave/soffit ventilation products.

- G. Soffit Vents: As specified in Section 076300 – Sheet Metal Specialties.
- H. Nails: Standard round wire, zinc-coated steel or aluminum; 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch (9mm) to 7/16 inch (11mm) in diameter. Length must be sufficient to penetrate into solid wood at least 3/4 inch (19mm) or through plywood or oriented strand board by at least 1/8 inch (3.18mm).
- I. Metal Flashing: As specified in Section 076200 – Flashing and Trim. 20-inch (510 mm) width minimum; shop precoated with silicone coating of clear color, a non-corroding metal drip edge must be used at eaves and at rake edges.

#### 2.04 FLASHING

- A. Form flashings to protect roofing materials from physical damage and shed water.
- B. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of flashings minimum 1/4 inch (6 mm) on underside.
- D. Apply bituminous paint on concealed surfaces of flashings.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Verify existing site conditions under provisions of Section 013100.
- B. Verify that roof penetrations are in place and flashed to deck surface.
- C. Verify roof openings are correctly framed prior to installing work of this Section.
- D. Verify deck surfaces are clean, dry and smooth, free of moisture, ridges, warps or voids, and suitable for installation of roof system.
- E. Beginning of installation means installer accepts existing conditions and substrate.

#### 3.02 PREPARATION

- A. Examine existing roof deck surface to receive new roof system for moisture damage, unevenness, irregularities and deflection that would affect quality and execution of work. If deck surface is not suitable for receiving new roofing, or if structural integrity of deck is suspect, immediately notify Architect/Engineer.
- B. Areas of existing roof deck that are damaged or deteriorated shall be inspected by Architect/Engineer and roofing manufacturer's representative. Repair areas as directed in accordance with manufacturer's instructions.
- C. Fill knot holes and surface cracks with latex filler at areas of bonded eave protection.
- D. Broom clean deck surfaces thoroughly.

#### 3.03 INSTALLATION – RIDGE VENT

- A. Install ridge vent along entire length of ridges.

- B. Cut continuous vent slots through the sheathing, stopping 6 inches from each end of the ridge. On roofs without ridge board, make slot 1 inch wide on either side of the peak (2 inches overall) and on roofs with ridge board, make two slots 1-3/4 inches wide one on each side of the peak (3-1/2 inches overall).
- C. Install ridge vent material along the full length of the ridge, including uncut areas. Butt ends of ridge vent material and join using roofing cement.

### 3.04 INSTALLATION - UNDERLAYMENT

- A. Install flat and without wrinkles in accordance with manufacturer's instructions.
- B. Eaves:
  - 1. Install eave metal flashing tight with fascia boards; lap joints 2 inches (51mm) and seal with plastic cement or high-quality urethane sealant; nail at the top of the flange.
  - 2. On all roofs install leak barrier up the slope from eaves edge a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall". Lap ends 6 inches (152mm) and bond.
- C. Valleys:
  - 1. Install leak barrier at least 36 (914mm) inches wide and centered on the valley. Lap ends 6 inches (152mm) and seal.
  - 2. Where valleys are indicated to be "open valleys", install metal flashing over leak barrier before roof deck protection is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 inches (457 mm) on center just beyond edge of flashing so that nail heads hold down the edge.
- D. Hips and Ridges:
  - 1. Install leak barrier along entire lengths. If ridge vents are to be installed, position the leak barrier so that the ridge slots will not be covered.
- E. Roof Deck:
  - 1. Install underlayment over a clean dry deck; install sheets horizontally so water sheds.
  - 2. Install leak barrier at eaves, valleys, rakes, skylights, dormers and other vulnerable leak areas.
  - 3. Lay underlayment over deck and overlap 12" at side laps and 12" at end laps. Fasten side and end laps 12" o.c. and middle of the roll 24" o.c. Completely cover all side laps, end laps and fasteners with tape.
  - 4. Lap underlayment over leak barrier in valley at least 6 inches.
  - 5. Apply tape over all fasteners at the center of the roll to prevent rain or snow from entering at the fasteners.
- F. Penetrations:
  - 1. Vent pipes: Install a 24-inch square piece of leak barrier membrane lapping over roof deck underlayment; seal tightly to pipe.
  - 2. Vertical walls: Install leak barrier membrane extending at least 6 inches up the wall and 12 inches on to the roof surface. Lap the membrane over the roof deck underlayment.
  - 3. Skylights and roof hatches: Install leak barrier membrane from under the built-in counter flashing and 12 inches on to the roof surface lapping over roof deck underlayment.
  - 4. Chimneys: Install leak barrier membrane around entire chimney extending at least 6 inches up the wall and 12 inches on to the roof surface. Lap the membrane over the roof deck underlayment.
  - 5. Rake edges: Install metal edge flashing over leak barrier membrane and roof deck underlayment; set tight to rake boards; lap joints at least 6 inches and seal with plastic cement; secure with nails. On all roofs install leak barrier up the slope from eaves edge

along rake a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall".

### 3.05 INSTALLATION - METAL FLASHING

- A. Weather lap joints minimum 2 inches (50 mm) and seal weather tight with plastic cement.
- B. Secure in place with nails at 12 inches (300 mm) on center. Conceal fastenings.
- C. Flash and seal work projecting through or mounted on roofing with plastic cement, weather tight.
- D. Install flashing in cast reglet or cut in place reglet. Seal with single component butyl sealant as specified in Section 079200.
- E. Coordinate installation of roof mounted components or work projecting through roof with weather tight placement of counter flashings.
- F. Install ridge vent per manufacturer's instructions.

### 3.06 INSTALLATION - ASPHALT SHINGLES

- A. Install shingles in accordance with manufacturer's instructions.
- B. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully and by cutting and not breaking over ridge or bundles. Handle carefully in hot weather to avoid scuffing the surfacing or damaging the shingle edges.
- C. Placement and Nailing:
  - 1. Along rakes and eaves install starter strip containing sealant or cement to underlayment and each other in a 4" width of asphaltic roof cement. Secure with 6 nails.
  - 2. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
  - 3. Each shingle shall be securely nailed with six (6) min. 1<sup>2</sup> long, large head galvanized roofing nails. Nailing points shall be one nail (1<sup>2</sup>) one inch, (8<sup>2</sup>) eight inch and (14<sup>2</sup>) fourteen inch from each end and 5-5/8<sup>2</sup> from bottom of shingle.
  - 4. Consult the application instructions for proper shingle offset. Laterally offset shingles from the existing keyways to avoid waves or depressions caused by excessive dips in the roofing materials. Using the bottom of the tab, align subsequent courses.
  - 5. Project first course of shingles 3/4 inch (19 mm) beyond fascia boards.
  - 6. Extend shingles 1/2 inch (13 mm) beyond face of gable edge fascia boards.
  - 7. At ridges, install ridge cap shingles over vent material, maintaining 5-inch (127 mm) weather exposure. Do not drive nails home, leaving 3/4<sup>2</sup> (19 mm) slot open between ridge and roof shingles. Place ridge cap shingles to avoid exposed nails and in accordance with manufacturer's instructions.
- D. Valleys:
  - 1. Install valleys using the closed cut valley method. Run the first course of shingles from the higher roof slope across the valley at least 12 inches.
  - 2. Run succeeding courses of shingles from the lower roof slope across the valley at least 12 inches and nail not closer than 6 inches to the center of the valley.
  - 3. Apply a 2-inch-wide strip of plastic cement under ends of shingles, sealing them to the metal flashing.
  - 4. Run shingles from the upper roof slope into the valley and trim 2 inches from the center line.

- E. Penetrations: All penetrations are to be flashed according to manufacturer, ARMA and NCRA application instructions and construction details.
- F. Skylights and Roof Hatches: Skylights and roof hatches are to be installed with pre-fabricated metal flashings specifically designed for the application of the unit. Consult the manufacturer of the skylight or roof hatch for specific installation recommendations.
- G. Complete installation to provide weather tight service.

### 3.07 FIELD QUALITY CONTROL

- A. Avoid breaking shingles by separating carefully and avoiding dropping. Take extra precautions and handle carefully in hot or cold weather.
- B. Field inspection will be performed under provisions of Section 014500. Schedule required manufacturer inspections required for warranty.

### 3.08 PROTECTION

- A. Protect finished work under provisions of Section 015000. Provide temporary protective sheeting over uncovered deck surfaces at the end of the day.
- B. Do not permit traffic over finished roof surface.
- C. Replace any shingles damaged during the course of the work at no additional cost to the Owner.

**END OF SECTION 073113**

## PART 1 - GENERAL

## 1.01 DESCRIPTION

- A. It is the intent of this specification to install a long-term, quality roof system that meets or exceeds all current NRCA guidelines as stated in the most recent edition of the NRCA Roofing and Waterproofing Manual. Work Included:
1. New fully adhered modified bitumen roofing system.
  2. New vapor barrier fully adhered to wood roof deck.
  3. Install new flat and tapered polyisocyanurate to the existing deck structure as specified. A 1/2-inch ASTM C-728 UL FM approved cover board will then be installed.
  4. Base and wall flashing.
  5. Roofing accessories, copings, and incidentals.
  6. Twenty (20) year total no dollar limit (NDL) roofing system warranty from manufacturer.
  7. Approved Roofing System shall meet or exceed the wind load requirements as outlined within Chapter 15 and 16 of the Building Code of New York State.
- B. Related Documents:
1. All Division 1 Specifications apply to the work of this section as fully as though repeated herein.
  2. All Roofing manufacturer requirements including, but not necessarily limited to, pertinent portions of their specifications and general requirements and recommendations apply to the work of this section as fully as though repeated herein.

## 1.02 RELATED SECTIONS

- A. Section 061000: Rough Carpentry.
- B. Section 072200: Roof and Deck Insulation.
- C. Section 076200: Flashing and Trim.
- D. Section 079200: Joint Sealants.

## 1.03 REFERENCES

- A. ASTM D-41: Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing
- B. ASTM D-312: Specification for Asphalt Used in Roofing
- C. ASTM D-451: Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products
- D. ASTM D-1079: Terminology Relating to Roofing, Waterproofing and Bituminous Materials
- E. ASTM D-1227: Specification for Emulsified Asphalt Used as a Protective Coating for Roofing
- F. ASTM D-1863: Specification for Mineral Aggregate Used as a Protective Coating for Roofing
- G. ASTM D-2178: Specification for Asphalt Glass Felt Used as a Protective Coating for Roofing
- H. ASTM D-2822: Specification for Asphalt Roof Cement
- I. ASTM D-2824: Specification for Aluminum-Pigmented Asphalt Roof Coating

- J. ASTM D-4601: Specification for Asphalt Coated Glass Fiber Base Sheet Used in Roofing
- K. ASTM D-5147: 1991 Test Method for Sampling and Testing Modified Bituminous Sheet Materials
- L. ASTM D-6162: Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements
- M. ASTM D-6163: Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements
- N. ASTM E-108: Test Methods for Fire Test of Roof Coverings
- O. FM: Factory Mutual
- P. NRCA: National Roofing Contractors Association
- Q. UL: Underwriters Laboratories
- R. WH: Warnock Hersey

#### 1.04 SUBMITTALS

- A. Submit prior to Job Start. Submit under provisions of Section 013300.
- B. Shop Drawings: Indicate setting plan for insulation, layout of roofing seams, direction of laps and base flashing details. Joint or termination detail conditions, conditions of interface with other materials and special requirements or instructions, etc. Provide roof drain component sizes, rough-in requirements, service sizes, and finishes.
- C. Product Data: Provide Data for all items to be installed under this specification including but not limited to membrane materials and base flashing materials.
- D. Samples: Upon request of the Architect/Engineer
  1. Base sheet (12"x12")
  2. Roof Ply (12"x12")
  3. Cap sheet (12"x12")
  4. Sheet metal products
  5. Roof Insulation (12"x12")
  6. Fiber cant strip (12"x full profile)
- E. Material Safety Data Sheets (MSDS) for all products contain-ing "Hazardous Materials" as defined on lists issued by both the Federal and State governments. Maintain copies of MSDS sheets at the job site.
- F. Approved applicator certification letter(s) from roof manufacturer documenting current ap-proval.
- G. Current product literature, installation specification and details, and special precautions required for installing the membrane. Where roofing or flashing requirements vary from those described herein or on details, highlight on shop drawings and/or specification to describe proposed modifications prior to job start.

- H. Prior to job start, submit manufacturer's certificates of Factory Mutual (FM) 1A-90 Approval, IA-150 Approval, Standard 4470 Approval, and Underwriters Laboratories (UL) E-108 Class 1A listing for proposed roof system.
- I. Prior to job start, submit manufacturer's certificates of the roofing compliance and certification that all materials are manufactured in the United States.
- J. For all modified bituminous sheet roofing, include independent test data according to ASTM designation D-5147-91 "Standard Test Methods for Sampling and Testing Modified Bituminous Sheet Material", substantiating that materials comply with specified requirements.
- K. Prior to job start, submit a copy of manufacturer's warranty for review.
- L. Make any other required submittals in accordance with General Conditions and Division 1 specification sections.

#### 1.05 QUALITY ASSURANCE

- A. Comply with local, state and federal regulations, safety standards and codes. Use the strictest document when a conflict arises.
- B. It is the intent of this specification to provide a roof system with an external fire rating. The descriptions given below are general descriptions. The insulation, protection board, and other components shall be required by the membrane manufacturer to provide a Class A fire resistance rating.
- C. Contractor shall be responsible for meeting fire regulations. A certified fire extinguisher of adequate size shall be located at the asphalt kettle and elsewhere as required.
- D. Whenever specification items found herein are less stringent than Manufacturers' requirements, Manufacturers' requirements shall be followed, and the Architect/ Engineer shall be notified before proceeding.
- E. Special precautions are necessary when installing the roof system at temperatures below 45F to insure satisfactory application and performance.
- F. The responsibility for proper installation of all components of the roofing system lies with the General Contractor. The Contractor shall inform the Architect/Engineer of any conditions detrimental to the quality of construction or long-term performance of the roofing system and shall not proceed with the work until the conditions are corrected.
- G. The Contractor selected for this work must be approved by the primary materials Manufacturer or approved equal and is capable of providing the specified Manufacturer's guarantee.
- H. Manufacturer Qualifications: Roofing system manufacturer shall have a minimum of 12 years' experience in manufacturing bitumen roofing products in the United States.
- I. Applicator Qualifications: Company specializing in modified bituminous roof application, with minimum of 6 years documented experience certified by roofing system manufacturer.
- J. Single Source Responsibility: Roofing system materials and components (consisting of, but not limited to membranes, insulations, metal edge, and copings) shall be supplied and warranted by system manufacturer for specified roofing system warranty and shall be in compliance with specified regulatory requirements.

- K. Installer's Field Supervision: Require Installer to maintain a full-time Supervisor/Foreman on job site during all phases of bituminous sheet roofing work and at any time roofing work is in progress, proper supervision of workmen shall be maintained. A copy of the specification shall be in the possession of the Supervisor/Foremen and on the roof at all times.
- L. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.
- M. Regulatory Requirements for Roof Assembly:
- N. Comply with Factory Mutual System Approval Guide to provide FMRC-Approved roof assembly meeting Class IA-90 (FM Standard 4470) requirements for fire resistance and wind uplift in accordance with FM Loss Prevention Data Sheets 1-28 and 1-29.
- O. Underwriter's Laboratories, Inc. (UL): Class A Fire Hazard Classification.
- P. Any substitutions must be made prior to award date. Complete review submittal must be sent to the Architect/Engineer for approval.

#### 1.06 REQUIRED MEETINGS

- A. Pre-Installation Conference: Prior to beginning work, a pre-application conference will be held at the job site. Those required to attend will be the Architect/Engineer, General Contractor, the Sheet Metal and other applicable Subcontractors, and a representative of the Roofing Manufacturer.
  - 1. Agenda:
    - a. Tour, inspect and discuss condition of substrate, parapet walls, curbs, penetrations and other preparatory work performed by other trades.
    - b. Review roofing system requirements (Drawings, Specifications and other Contract Documents).
    - c. Review required submittals, both completed and yet to be completed.
    - d. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
    - e. Review requirements for Manufacturer's Roofing Quality Control Inspector inspections, other inspections, testing, certifying, and material usage accounting procedures.
    - f. Review weather and forecasted weather conditions, and procedures for coping with unfavorable conditions, including possibility of temporary roofing.
    - g. Review safety precautions relating to roofing installation.
    - h. Review regulatory requirements.
    - i. Review procedures for protection of building, building components, and completed roof system.
    - j. Proposed installation procedures and any additional items related to the total roof system.
  - 2. Inspections:
    - a. Inspections shall be conducted by a dedicated technical representative by the manufacturer. Sales and Marketing personnel do not qualify. Inspection reports shall be submitted by the roofing contractor to the Architect/Engineer.
    - b. The inspector shall provide job site inspections on a daily basis, keep the Architect/Engineer informed as to the progress and quality of the work as observed with a progress/ completion report that will include a photo analysis, report in writing any failure or refusal of the Contractor to correct unacceptable work or practices called to his attention, and confirm after completion that the manufacturer has

observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

- c. Upon completion of all specified work items, a final roof inspection shall be performed with the following in attendance: Manufacturer's Technical Representative, General Contractor, Construction Manager, Architect/Engineer and any applicable Subcontractors. Any discrepancies or incomplete work shall be documented by technical representative in a "roofing punch list" which is to be submitted to the Architect/Engineer for distribution to General Contractor.

#### 1.07 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, handle and protect products to site under provisions of Section 016500.
- B. On packaged asphalt, all cartons shall be imprinted with Manufacturer's name, ASTM type, flash point, and EVT. For bulk asphalt, type, flash point, and EVT shall be included on bill of lading accessible at the job site. Asphalt delivered in bulk containers shall be stored at a temperature at least 250F below the Finished Blowing Temperature.
- C. Wet materials shall not be applied nor shall roofing application proceed during wet weather or when moisture is on roof surface.
- D. Deliver materials to jobsite on pallets in original, unopened packaging with legible labels. Package labels shall indicate product name, production date, product code and testing agency.
- E. Store materials in dry, protected areas in upright position. When stored outdoors, store on pallets above ground and cover top and all sides with suitable protective sheet or tarpaulin, not double-stack pallets on the job site. Shrink-wrap packaging is not intended for long-term jobsite storage and shall be removed upon arrival at jobsite and replaced with a watertight breathable covering.
- F. Select and handle materials and equipment in such a way as to avoid damage to materials, existing construction, or applied roofing.
- G. All materials must be protected from damage during transit, handling, storage and installation. Protect foam insulation from direct exposure to sunlight.
- H. All flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow precautions outlined by material manufacturer/supplier.
- I. Any wet, damaged or defective material shall be marked and removed from the job site by Contractor that same day. This material shall promptly be replaced at no cost to the Owner.
- J. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.

#### 1.08 PROTECTION

- A. Protect the building and the contents of the building from all risks resulting from the work. Contractor shall be sufficiently prepared to expediently install a temporary membrane to protect areas of incomplete roofing in the event of rain.
- B. Contractor must take every precaution to prevent interior leakage, materials from falling into the interior, or other such occurrences.
- C. Do not load or permit any part of structure to be loaded with a weight that will endanger its safety or cause damage. Confine equipment, storage of materials and debris and the operations and movements of workmen within any limits as indicated or as directed by the Owner.

- D. Sequence installation of modified bituminous sheet roofing with related units of work specified in other sections to ensure that roof assemblies including roof accessories, flashing, trim and joint sealers are protected against damage from effects of weather, corrosion and adjacent construction activity.

#### 1.09 PROJECT CONDITIONS OR SITE CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather when ambient temperature is below 40°F.
- B. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is occurring.
- C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- D. Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.

#### 1.10 GUARANTEE AND WARRANTY

- A. Section 017800 – Closeout Documents: Procedure for closeout submittals.
- B. Contractors Warranty Agreement.
  - 1. For a two-year period from the date of completion and Owner acceptance, Contractor agrees to inspect and make necessary repairs to defects or leaks in the roof and flashings. Emergency leaks will be attended to within twenty-four (24) hours from receipt of notice from the Owner. As soon as weather permits, Contractor will restore affected areas to standards of this contract without voiding the Manufacturer guarantee and repair any damages from these leaks without cost to the Owner, except for leaks caused by abuse to roof by others or by abnormal weather conditions such as lightning, severe hail, or other unusual climatic phenomena. This warranty must be submitted to the manufacturer and Owner, in writing, before final payment is released for the project.
  - 2. If, 24 hours after notification of roof leakage, Contractor has not responded, Owner shall have the right, without invalidating his warranties and at the expense of the Contractor, to make any emergency temporary repairs that are required in order to protect the building and its contents from damage due to roof leakage.
- C. Manufacturer Guarantee
  - 1. Submit to the Owner, No Dollar Limit (NDL) guarantee covering any and all repairs/replacements to keep the roof, including the field and flashing, watertight for period of twenty (20) years beginning at the time substantial completion of the roofing system with no exclusions or stipulations requiring periodic reviews. Cost of this guarantee shall be borne by the Contractor. Guarantee shall include the membranes, flashings, insulation, penetration flashings and gravel stops/fascia.
  - 2. Membrane manufacturer will provide an annual inspection for the life of the warranty.
  - 3. This guarantee shall be executed solely by the Roofing Manufacturer to cover any and all costs for repairs necessary to stop leaks which are a result of the following:
    - a. Deterioration of the roofing membrane, base flashing or roof insulation, gravel stops and coping resulting from ordinary wear and tear by the elements.
    - b. Workmanship on the part of the approved Roofing Contractor in application of the roofing membrane or base flashing system.
    - c. Blisters, fish mouths, bare spots, ridges, or wrinkles in the roofing membrane.
    - d. Splits or cracks in the roofing membrane not caused by structural movement.
    - e. Slippage of the roofing membrane or base flashing.

## PART 2 - PRODUCTS

## 2.01 ACCEPTABLE MANUFACTURER SYSTEM

- A. Johns Manville.
- B. Tremco.
- C. The Garland Company.
- D. Or approved equal submitted under provisions of Section 013300.

## 2.02 MATERIALS

- A. Roofing Substrate (Deck Preparation)
  - 1. Material: existing wood deck.
  - 2. Thoroughly clean, fill, and reseal all exposed joints, fastener holes, spaces, penetrations in deck surface and around perimeter to result in a watertight seal. Use Sonoborne TP60 and a latex filler approved by the manufacturer and submitted to architect for approval.
- B. Roofing system
  - 1. The Modified Bitumen System shall be comprised of the following major components and have a UL Class A rating and a FM IA-90 and 1A-150 rating.
- C. Modified bituminous roofing work includes but is not limited to:
  - 1. Vapor retarder - Minimum two plies of approved ASTM D-2178 Type VI glass fiber roofing felt set in hot bitumen and flood coat.
  - 2. Hot bitumen will consist of ASTM D-312 Type III steep asphalt having the following characteristic:
    - a. Softening Point 185°F - 205°F
    - b. Flash Point 500°F
    - c. Penetration @ 77°F 15-35 units
    - d. Ductility @ 77°F 2.5 cm
    - e. Softening Point 203°F - 221°F
    - f. Flash Point 525°F
    - g. Penetration @ 77°F 50-70 units
    - h. Ductility @ 77°F 50 cm
    - i. Elongation 1100%
    - j. Flexibility (1" Mandrel) Pass 0°F
  - 3. Base Ply & Base Flashing Ply: DynaBase or equal ASTM D- 6163 Type I, Grade S.
    - a. Properties: Finished membrane 90 mils thickness, tested in accordance with ASTM D-5147.
    - b. Tensile Strength MD 90 lbf/in CMD 70 lbf/in
    - c. Tear Strength MD 100 lb/in. CMD 90 lb/in.
    - d. Elongation MD 4.0% CMD 4.0%
    - e. Dimensional Stability MD 0.20% CMD 0.20%
  - 4. Modified Membrane: Mineral surfaced – fire rated; 160 mil SBS (Styrene-Butadiene-Styrene) mineral surfaced rubber modified roofing membrane reinforced with a dual fiberglass scrim and polyester mat. Johns Manville – DynaKap FR or approved equal.
    - a. Properties: Finished membrane 160 mils thickness, tested in accordance with ASTM D-5147.
    - b. Tensile Strength MD 150 lbf/in CMD 105 lbf/in
    - c. Tear Strength MD 150 lb/in. CMD 125 lb/in.

- d. Elongation MD 4.0% CMD 4.0%
- e. Dimensional Stability MD 0.20% CMD 0.20%
- 5. Modified Flashing Ply: Mineral surfaced DynaFlex or equal ASTM D-6221 Type I Grade G.
  - a. Properties: Finished membrane 160 mils thickness, tested in accordance with ASTM D-5147.
  - b. Tensile Strength MD 190 lbf/in CMD 150 lbf/in
  - c. Tear Strength MD 225 lb/in. CMD 200 lb/in.
  - d. Elongation MD 4.0% CMD 4.0%
  - e. Dimensional Stability MD 0.20% CMD 0.20%
- 6. Mineral surfaced membranes: Mineral surfaced modified membrane does not require additional surfacing. Roofing granules shall meet the requirements of ASTM D-451 and/or be recommended by the membrane manufacturer. Loose granules for bleed out shall match size and color of granulated membrane sheet.

### 2.03 BITUMINOUS MATERIALS

- A. Asphalt Primer: V.O.C. compliant, ASTM D-41.
- B. Asphalt Roofing Mastic: V.O.C. compliant, ASTM D-2822, Type II.
- C. Interply Adhesive: ASTM Specifications D-312 Type III.
- D. Modified Flashing Cement: MBR Flashing Cement, two-component, elastomeric adhesive specially formulated to be compatible with SBS modified products.

### 2.04 RELATED MATERIALS

- A. Roof Insulation: Reference Section 072200 - Roof and Deck Insulation for requirements.
- B. Copings, prefabricated metal curbs, vent extensions & collars, roof drains, expansion joints, etc. shall all be provided by the roof membrane manufacturer.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrate surfaces to receive modified bitumen sheet roofing system and associated work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected in a manner acceptable to Roof System Manufacturer. Commencement of roof application over any section will denote acceptability by Contractor of any section's readiness to receive roofing and he will be responsible for any corrective work, which may be occasioned by his having started over an unsatisfactory surface.

### 3.02 GENERAL PREPARATION

- A. New cant strips shall be installed at all vertical junct-ures where expansion joints are not present.
- B. The entire roof surface shall be swept free of all dust, dirt, grime, debris or other foreign material. Conduct daily NRCA deck dryness test. Repot findings daily to Architect/Engineer.
- C. Rooftop equipment shall be installed to accommodate proper installation of new roofing and flashing materials. Securement of units through horizontal metal flash-ing surfaces shall utilize 1/4" solid neoprene gaskets. Securement through vertical surfaces shall utilize appropriate screws through steel/neoprene washers placed at max. 12" O.C. or min. 2 per side.

- D. Thoroughly clean and reseal all exposed metal joints and penetrations to result in a watertight seal.

### 3.03 GENERAL APPLICATION REQUIREMENTS

- A. Roofing shall not be applied unless correct asphalt application temperatures can be maintained to obtain good embedment and adhesion.
- B. Operations shall not be conducted when water in any form is present on deck, such as rain, dew, ice, frost or snow.
- C. Precautions shall be taken to keep materials clean, dry and free of damage.
- D. Do not start application of more materials each day than can be completed within the same day.
- E. At the end of the day, edge-seal the finished portion of the roofing system completed that day with fabric or felt set into hot bitumen or plastic cement. Remove edge seals prior to the start of the next day's work.
- F. Start roofing work in dry weather only and without threat of immediate inclement weather. Keep the roofed area of the building watertight each day as the work progresses.
- G. Use only materials and procedures that are proper and suitable for the slopes and for the underlying materials to which they are attached.
- H. Restrict traffic on completed areas to a minimum. Do not store material or equipment on newly completed areas.
- I. To avoid displacement of asphalt and interply voids, ensure that no heavy objects are placed on the membrane. Use all means necessary to protect the membrane before, during, and after installation. In the event of damage or asphalt misplacement, immediately make all repairs and/or replacements necessary to the satisfaction of the Architect at no additional cost. Work all felts from the up-slope side; do not walk on/over felts freshly laid in asphalt.
- J. Approved and operable fire extinguishers shall be on hand at all times on the roof. All additional requirements of OSHA Safety Regulations will be followed.
- K. Interply moppings of hot asphalt shall be continuous and applied at the specified rate. Application methods shall ensure that all plies are completely embedded in asphalt. Broom in all plies immediately after being laid.
- L. All attached insulation must be covered with the completed roof membrane system at the end of each day's work. All roof terminations and openings shall be made waterproof at the end of each day's work.
- M. Phasing of roof membrane application or temporary membrane is not acceptable.
- N. Membrane shall be installed in final form on a day-to-day basis.
- O. Do not use any wet or damaged materials.
- P. Bitumen Heating Equipment shall be thermostatically controlled. Equipment must be clean and in sufficiently good operating condition to perform specified work.
- Q. Remove bitumen saturated mops from the roof at the end of each workday.

- R. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.
- S. Insurance/Code Compliance: Where required, install and test the roofing system to comply with governing regulation and specified insurance requirements.
- T. Protect other work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore other work damaged by installation of the modified bituminous roofing system work.
- U. Asphalt Bitumen Heating: Heat and apply bitumen according to EVT Method as recommended by NRCA. Asphalt heating equipment shall be equipped with an accurate thermostat and thermometer. Do not raise temperature above minimum normal fluid-holding temperature necessary to attain EVT (plus 5°F at point of application) more than 1 hour prior to time of application. Determine flash point, finished blowing temperature, EVT, and fire-safe handling temperature of bitumen either by information from manufacturer or by suitable test. Do not exceed recommended temperature limits during bitumen heating. Do not heat to a temperature higher than 25° below flash point. Discard bitumen that has been held at temperature exceeding finishing blowing temperature (FBT) for more than 3 hours. Keep kettle lid closed except when adding bitumen. Cold weather application requires the use of insulated supply lines and equipment to minimize temperature drop from the kettle or tanker to the point of application. Materials shall not be applied when foaming, blistering, or bubbling of the hot bitumen occurs. Remove any materials applied when such activity occurs.
- V. Bitumen Mopping Weights: For interply mopping, apply bitumen at the rate of approximately 25 lb. of bitumen per roof square. For a flood coat, apply bitumen at the rate of approximately 60-70 lb. of bitumen per square (plus or minus 25 percent on a total job average basis).
- W. Substrate Joint Penetrations: Prevent bitumen from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.
- X. Apply roofing materials as specified herein unless recommended otherwise by manufacturer's instructions. Keep roofing materials dry before and during application. Do not permit phased construction. Complete application of roofing plies, modified sheet and flashing in a continuous operation. Begin and apply only as much roofing in one day as can be completed that same day.

#### 3.04 WATER CUT-OFF

- A. At the end of each day's work, provide temporary water cut-offs at the edge of the insulation. Remove cut-offs when work commences.
- B. Water cut-offs shall be comprised of at least one layer of No. 15 organic felt embedded in a solid uniform mopping of hot steep asphalt applied at a rate of 30 lbs. per 100 sq. ft. The No. 15 organic felt shall be lapped a minimum of 6" onto the deck. Remove water cut-offs before proceeding with work.

#### 3.05 APPLICATION OF VAPOR BARRIER

- A. Using the appropriate ply sheet, apply a piece 18" wide, then over that, a full width piece. Install (1) one felt in 33 lb. per sq. of bitumen shingled uniformly over the prepared substrate. Shingle in proper direction to shed water on each large area of roofing.
- B. The vapor barrier is to be applied full width, overlapping the preceding felt by 4". Cover the substrate at all locations.

- C. Vapor Barrier shall be shingled in, free of buckles, fish mouths or voids.

### 3.06 APPLICATION OF BASE PLYS

- A. Using the appropriate ply sheet, apply a piece 18" wide, then over that, a full width piece. Install (1) one felt in 33 lb. per sq. of bitumen shingled uniformly over the prepared substrate. Shingle in proper direction to shed water on each large area of roofing. Repeat for second ply.
- B. Plys shall be shingled in, free of buckles, fish mouths or voids.
- C. Ply sheets shall be applied so that the flow of water is over or parallel to, but never against, the lap.
- D. Lap ply sheet ends eight inches. Stagger end laps twelve inches minimum.
- E. Extend plies two inches beyond top edges of cants at wall and projection bases.
- F. Install base flashing ply to all perimeter and projection details.
- G. Embed the full 36" width of each ply sheet in hot asphalt applied within the EVT range, at the nominal rate of 33 lbs. per 100 sq. ft.
- H. When "rolling in" by hand, the mopping asphalt shall be kept within 6 feet of the roll.
- I. Mop shall be kept full and flow asphalt on the roof. Do not scrub with mop.
- J. Do not "glaze in" ply sheet during the interim between surfacing.
- K. Cut and repair any fish mouths, wrinkles, tears, buckles or other damage in any ply on a ply-for-ply basis. No dry laps shall be permitted.
- L. Extend all ply sheets to the top of the cant strip, solidly adhered without bridging or buckling. Extend ply sheets down over all wood blocking covering completely, secure in place.
- M. Relax all rolls prior to installation

### 3.07 APPLICATION OF MODIFIED MEMBRANE SURFACING SHEET

- A. Roof surface shall be clean, free of dust, dirt or moisture when surfacing sheet is applied.
- B. Cut surfacing sheet into 12' to 18' lengths.
- C. The modified membrane shall then be solidly bonded to the base layers with specified asphalt at the rate of 25 to 30 lbs. per 100 square feet. Asphalt application temperature should be about 208F above the EVT.
- D. It is recommended that surfacing sheet be flopped into place. Tension shall be placed on the ends of the surfacing sheet lengths as they are flopped into place to ensure that the sheet lays flat in the asphalt.
- E. Surfacing sheet shall be applied free of buckles, wrinkles, blisters, fish mouths or voids of any type between the sheet and the mopping asphalt.
- F. Surfacing sheet shall be applied over and parallel to the underlying roofing and lapped so that the flow of water is over or parallel to, but never against, the laps.

- G. The roll must push a puddle of asphalt in front of it with asphalt slightly visible at all side laps. Care should be taken to eliminate air entrapment under the membrane.
- H. Apply pressure to all seams to ensure that the laps are solidly bonded to substrate.
- I. Subsequent rolls of modified shall be installed across the roof as above with a minimum of 4" side laps and 8" end laps. The end laps shall be staggered. The modified membrane shall be laid in the same direction as the underlayers, but the laps shall not coincide with the laps of the base layers.
- J. Apply asphalt no more than five feet ahead of each roll being embedded.
- K. Extend membrane 4" beyond top edge of all cants in full mopping of the specified asphalt as shown on the drawings.
- L. End laps shall be broken not less than 36" apart.
- M. Brooming in may be necessary under certain conditions to ensure bond between asphalt and sheet. Extend cap sheet over all wood blocking, secure in place.
- N. For clean, finished surface, embed loose granules into overrun of hot asphalt at side and end laps while still hot.
- O. Weather conditions, such as temperature, wind, sun, etc. must be given consideration when the temperatures get below 50°F, as cracking, wrinkles, non-adhesion and fish mouths are more likely to occur. The pre-cutting and stacking of surfacing sheet will reduce application problems in these instances.
- P. Apply mineral surfacing at areas where bitumen spills out over surfacing sheet. Mineral surfacing shall be dry and placed in a manner required to form a compact, embedded overlay. To aid in proper embedment, mineral surfacing may be lightly rolled provided that there is not damage to the built-up roofing membrane.

### 3.08 COLD WEATHER APPLICATION

- A. Roof applications below 50°F require special precautions to ensure proper performance of the roofing system. Comply fully with manufacturer guidelines for cold weather applications in temperatures below 50°F.

### 3.09 FLASHING INSTALLATION

- A. General:
  - 1. Flashing shall not be applied until the roof membrane (excluding surfacing) has been laid. Provide temporary seal at ply terminations until installation of flashing.
  - 2. All sheet metal that will come in contact with bituminous materials shall be primed with an asphaltic primer and allowed to dry before applying bitumen.
  - 3. Comply with all applicable manufacturer's guidelines, instructions and requirements relating to preparation and application of all flashing components.
  - 4. All curb, wall and parapet flashings shall be sealed with an application of mastic and mesh on a daily basis. No condition should exist that will permit moisture entering behind, around or under the roof or flashing membrane.
  - 5. Prepare all walls, penetrations and expansion joints to be flashed and where shown on the drawings with asphalt primer at the rate of 100 square feet per gallon. Allow primer to dry tack free.

6. The modified membrane will be used as the flashing membrane and will be adhered to an underlying base flashing ply with specified asphalt unless otherwise noted in these specifications and nailed off 8" O.C. at all vertical surfaces.
  7. The entire sheet of flashing membrane must be solidly adhered to the substrate.
  8. Seal all vertical laps of flashing membrane with a three-course application of Flashing Bond and fiberglass mesh.
  9. Counter flashing, cap flashings, expansion joints, and similar work to be coordinated with modified bitumen roofing work are specified in other sections.
  10. Roof accessories, miscellaneous sheet metal accessory items, and other devices are to be coordinated with the roofing system work.
- B. Metal Roof Coping:
1. Inspect the nailer to assure proper attachment and configuration.
  2. Run all plies over the edge. Assure coverage of all wood nailers. Fasten plies with bitumen and ring shank nails 8" O.C.
  3. Install continuous cleat, fasten 6" O.C.
  4. The Install new metal coping hooked to continuous cleat and set in bed of roof cement.
- C. Surface Mounted Flashing:
1. Minimum flashing height is 8". Maximum flashing height is 24". Prime vertical wall at a rate of 100 square feet per gallon and allow to dry.
  2. Set cant in bitumen. Run all field plies over cant a minimum of 2".
  3. Install base flashing ply covering wall with 6" on to field of roof set in bitumen.
  4. The second ply shall be a modified flashing ply installed over the base flashing ply 9" on to field of roof in bitumen. All vertical seams will receive a three-course application of mastic and mesh allowed to cure and aluminize.
  5. Apply butyl tape to wall behind flashing. Secure termination bar through flashing, butyl tape and into wall.
  6. Secure counter flashing set on butyl tape above flashing 8" O.C., caulk top of counter flashing.
  7. Completely bond all flashings to the underlying surface without any looseness, bubbles, or voids. Remove and re-place any loose flashing materials.
  8. All vertical seams of base flashing must be coated with min. 2" bead of 2-part flashing cement.
- D. Curb Detail:
1. Minimum curb height is 8". Prime vertical at a rate of 100 square feet per gallon and allow to dry. Raise existing curbs with pressure treated 2x4 or wood blocking if adequate height does not exist.
  2. Set cant in bitumen. Run all plies over cant a minimum of 2".
  3. Install base flashing ply covering curb with 6" on to field of roof.
  4. The second ply shall be a modified flashing ply installed over the base flashing ply 9" on to field of roof. Attach top of membrane to top of curb and nail 8" O.C. All vertical seams will receive a three-course application of mastic and mesh allowed to cure and aluminize.
  5. Install pre-manufactured counter flashing with fasteners and neoprene washers or per manufacturer's recommendations.
  6. Set equipment on neoprene pad and fasten as required by equipment manufacturer.

### 3.10 MISCELLANEOUS WORK ITEMS

- A. At curbed equipment with no counter flashing, or where integral unit counter flashing provides less than 2" overlap onto the base flashing, provide new 24-gauge metal counter flashing insert as needed to extend counter flashing so as to provide a 3" minimum overlap onto the base flashing.

- B. Install new 1/4:12 tapered perlite crickets/saddle as needed to insure positive water flow at locations indicated. Comply with manufacturer's guidelines for proper installation of tapered insulation.

### 3.11 CLEANING

- A. Remove bituminous markings from finished surfaces.
- B. In areas where finished surfaces are soiled by tar or any other source of soiling caused by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their instructions.
- C. Repair or replace defaced or disfigured finishes caused by work of this section.

### 3.12 FINAL INSPECTION

- A. At completion of roofing installation and associated work, meet with Installer, installer of associated work, Owner, roofing system manufacturer's representative and other representatives directly concerned with performance of roofing system.
- B. Walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish copy of list to each party attending.
- C. The Roofing System Manufacturer reserves the right to request a thermographic scan of the roof during final inspection to determine if any damp or wet materials have been installed. The thermographic scan shall be provided by the Roofing Contractor at a negotiated price.
- D. If core cuts verify the presence of damp or wet materials, the Roofing Contractor shall be required to replace the damaged areas at his own expense.
- E. Repair or replace (as required) deteriorated or defective work found at time above inspection to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- F. The Contractor is to notify the Architect/Engineer upon completion of corrections.
- G. Following the final inspection, acceptance will be made in writing by the material manufacturer.

### 3.13 PROTECTION

- A. Where traffic must continue over finished roof membrane, protect surfaces.

**END OF SECTION 075200**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Sheet metal flashing, flashing accessories, flashing sleeves and collars at mechanical and plumbing items, which extend through the roof or wall surfaces.
- B. Fastening hardware such as nails, screws, reglet wedge blocks, etc.
- C. Sheet metal capping over wood trim.

## 1.02 RELATED WORK

- A. Section 061000 – Rough Carpentry
- B. Section 062000 – Finish Carpentry
- C. Section 073113 – Asphalt Shingles
- D. Section 079200 – Joint Sealants

## 1.03 REFERENCES

- A. ASTM A-446 Specification for Steel Sheet
- B. ASTM B-209 Specification for Aluminum Sheet
- C. ASTM B-221 Specification for Aluminum Extruded Shapes
- D. FS QQ-L-201 Specification for Lead Sheet
- E. ASTM A792 Steel Sheet, Aluminum-Zinc Alloy-Coated, by the Hot-Dip Process
- F. ASTM B32 Solder Metal
- G. ASTM B209 Aluminum and Alloy Sheet and Plate
- H. ASTM B486 Paste Solder
- I. ASTM D226 Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
- J. ASTM D486 Asphalt Roof Cement, Asbestos-free
- K. FS O-F-506 Flux, Soldering, Paste and Liquid
- L. WH Warnock Hersey International, Inc., Middleton, WI.
- M. FM Loss Prevention Data Sheet
- N. NRCA National Roofing Contractors Association – Roofing Manual
- O. SMACNA Architectural Sheet Metal Manual

## 1.04 SUBMITTALS

- A. Section 013300 Submittal Procedures.

- B. Product Data: Submit manufacturer's literature of all materials specified herein to Architect/Engineer for approval in accordance with requirements described in General Requirements. Obtain approval from Architect/Engineer in writing prior to delivery and installation.
- C. Shop Drawings: Submit shop drawings for all metal flashing and trim. Submitted shop drawings shall include, but shall not be limited to the following:
  - 1. Dimensioned drawings of all metal flashing at roof and wall penetrations and at changes and terminations of roofing and wall materials. Indicate proposed material, gauge and accessories.
  - 2. Indicate material profile, jointing pattern, jointing details, method of lapping joints, providing for expansion and turning corners, fastening methods, flashing terminations, and other installation details.
- D. Samples: Submit two samples 12 inches long illustrating typical gauge, external corner, internal corner, junction to vertical dissimilar surface, flashing and capping material and finish.

#### 1.05 QUALITY CONTROL

- A. Fabricator and Installer: Company specializing in sheet metal flashing work with 6 years' experience. Provide documentation of experience with a minimum of twelve references for custom fabrication work upon request.
- B. Reference standards
  - 1. Comply with details and recommendations of SMACNA Manual for workmanship, methods of joining, anchorage, provisions for expansion, etc.
- C. Manufacturer's Warranty
  - 1. Pre-finished metal material shall require a written 20-year non-prorated warranty covering fade, chalking and film integrity. The material shall not show a color change greater than 5 NBS color units per ASTM D-2244 or chalking excess of 8 units per ASTM D-659. If either occurs material shall be replaced per warranty, at no cost to the Owner.
- D. Contractor's Warranty
  - 1. The Contractor shall provide the Owner with a notarized written warranty assuring that all sheet metal work including caulking and fasteners to be watertight and secure for a period of five years from the date of final acceptance of the building. Warranty shall include all materials and workmanship required to repair any leaks that develop and make good any damage to other work or equipment caused by such leaks or the repairs thereof.

#### 1.06 DELIVERY, STORAGE AND PROTECTION

- A. Deliver and store materials in manufacturer's original, unopened containers or packages with labels intact and legible under the provisions of Section 016500.
- B. Stack pre-formed and pre-finished material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Prevent contact with materials, which may cause discoloration or staining. Materials shall be stored in a safe, dry place.

#### 1.07 GENERAL REQUIREMENTS

- A. Proper Surfaces: Surfaces to which roofing and flashings are to be applied shall be even, smooth, sound, thoroughly clean and dry, and free from all defects that might affect the

application. Report any unsatisfactory surfaces to Architect/Engineer in writing, prior to commencing work.

- B. Accessories: All accessories or other items essential to the completeness of the metal flashing installation, though not specified, shall be provided. All such items, unless otherwise indicated on drawings or specified, shall be of same material as the item to which applied. Nails, screws and bolts shall be of the types best suited for the purpose intended and shall be of a composition that is compatible with the metal that it will contact.
- C. Dissimilar Materials: Where materials come in contact with dissimilar metals, an insulating paint or tape shall be applied between the dissimilar metals to prevent electrolysis between the two materials.
- D. Workmanship: Except as otherwise indicated on drawings or specified, the workmanship of metal flashing work, method of forming joints, anchoring, cleating, provisions for expansion, etc. shall conform to the standard details and recommendations of the following:
  - 1. The Aluminum Association.
  - 2. Federal Specifications.
  - 3. ASTM.
  - 4. Architectural Sheet Metal Manual, latest edition as published by the Sheet Metal and Air Conditioning Contractors National Association, Inc.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Flashing, counter flashing, flashing associated with mechanical and plumbing items and material for trim capping.
  - 1. Material: Continuous sheet, ASTM B209, .040-inch thickness. Coil stock will not be permitted. Provide proper size material to cap scheduled items, 20-inch (510 mm) width minimum for roof flashing.
  - 2. Mill finish for all roof penetration flashing.
  - 3. Finish – shop precoated with Kynar 500 or Hylar 5000 baked enamel finish.
  - 4. Flashing Nails: Standard round wire roofing type, hot dipped zinc coated steel; minimum 19/64-inch (7.54 mm) head diameter and 0.104-inch (0.356 mm) shank diameter; of sufficient length to penetrate through roof sheathing into wood sub-strate. Screws, bolts and nuts for fastening aluminum sheet metal work shall be made of aluminum alloys 6061-T6. Washers of similar material shall be used to prevent tearing of sheet metal.
- B. Aluminum Sill: .040 aluminum continuous sheet sill, where indicated on drawings.
- C. Aluminum Capping: .032 Aluminum sheet material, color as selected by Owner.
- D. Nails for fastening aluminum sheet metal work shall be made of aluminum alloys 6062 or 5056 meeting Federal Specification FF-N-105, Type 2, Style 20. Screws, bolts and nuts for fastening aluminum sheet metal work shall be made of aluminum alloys 6061-T6. Washers of similar material shall be used to prevent tearing of sheet metal.

### 2.02 ACCESSORIES

- A. Sealant: Specified in Section 079200 – Joint Sealants.
- B. Slip Sheet: Resin paper.

### 2.03 FABRICATION

- A. Form sections true to shape, accurate in size, square and free from distortion or defects.
- B. Fabricate cleats, interlockable with sheet.
- C. Form pieces in longest possible lengths, in single-length sheets. Short lengths or splices will be unacceptable.
- D. Hem exposed edges on underside ¼ inch, miter and seam corners.
- E. Fabricate vertical faces with bottom edge formed outward ¼ inch and hemmed to form drip.
- F. Form corners from one piece with 18-inch minimum legs. Solder joints.
- G. Prime and paint all wood trim scheduled to receive capping.
- H. Form flashings to protect roofing materials from physical damage and to shed water. Seal metal joints.
- I. Apply bituminous paint on concealed surfaces of flashings.

### PART 3 - EXECUTION

#### 3.01 FABRICATION

- A. All metal flashing and trim work shall be fabricated in strict accordance with the detailed drawings and with best trade practices. Ends of fabricated sheets shall be fastened to make joints watertight and still provide for expansion and contraction. Lines and angles shall be sharp and true. Plane surfaces shall be free from waves and buckles. No oil canning shall be accepted in finished work. Seams shall be watertight.

#### 3.02 EXAMINATION

- A. Section 013100 – Project Management and Coordination: Verification of existing conditions before starting work. Inspect all surfaces to which metal or metal accessories are to be installed. Do not install metal work unless such surfaces are sound, dry, clean and free of defects that might be detrimental to the metal work. Report any unacceptable conditions to the Architect/Engineer in writing before commencing work.
- B. Protect contact areas of dissimilar metals with heavy asphalt or other approved coating, specifically made to stop electrolytic action.
- C. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets are in place, and nailing strips located.
- D. Verify membrane termination and base flashings are in place, sealed, and secure.
- E. Beginning of installation means acceptance of existing conditions.
- F. Field measure site conditions prior to fabricating work.

#### 3.03 INSTALLATION

- A. Flashing shall be installed in strict accordance with trade practices. Completed installation shall be true to line with shapes undistorted, not damaged, and with properly shaped angles. Provide

expansion joints and other means for relieving stresses from expansion and contraction of the material.

- B. Install work watertight, without waves, warps, buckles, fastening stress, or distortion, allowing for expansion and contraction.
- C. All accessories or other items essential to the completeness of sheet metal installation, whether specifically indicated or not, shall be provided and of the same material as item to which applied.
- D. Flashing set into masonry shall be sealed with mortar. Tool joints tight and smooth.
- E. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- F. Seal joints watertight.
- G. Prime paint all wood trim scheduled to receive capping.

#### 3.04 MANUFACTURED SHEET METAL SYSTEMS

- A. Installing Contractor shall be responsible for determining if the sheet metal systems are in general conformance with roof manufacturer's recommendations and warranty requirements.
- B. Furnish and install manufactured sheet metal systems in strict accordance with manufacturer's printed instructions.

#### 3.05 SHOP FABRICATED SHEET METAL

- A. Installing Contractor shall be responsible for determining if the sheet metal systems are in general conformance with roof manufacturer's recommendations and warranty requirements.
- B. Metal work shall be shop fabricated to configurations and forms in accordance with recognized sheet metal practices.
- C. Hem exposed edges. Angle bottom edges of exposed vertical surfaces to form drip.
- D. All corners for sheet metal shall be lapped with adjoining pieces fastened and set in sealant.
- E. Install sheet metal to comply with Architectural Sheet Metal manual, Sheet Metal and Air Conditioning Contractor's National Associations, Inc.

#### 3.06 ERECTION TOLERANCES

- A. Maximum Variation from Alignment: 1/8 inch.

#### 3.07 GUARANTEE

- A. The Contractor shall guarantee that all materials and workmanship provided by this section shall be guaranteed free of defects for a period of five (5) years from date of acceptance. Any defects arising within this period shall be promptly corrected without additional cost. This is in addition to the manufacturer's warranty.

**END OF SECTION 076200**

## PART 1 - GENERAL

## 1.01 DESCRIPTION

- A. This section covers the roll formed, prefinished interlocking soffit panels including all panels, clips, standard J channels, one-piece corners, conversion trim, edging, tracks, fasteners, channels and any other accessories required to install the soffit panels.

## 1.02 RELATED WORK

- A. Section 061000 – Rough Carpentry.
- B. Section 062000 – Finish Carpentry.
- C. Section 076200 – Flashing and Trim.
- D. Section 079000 – Joint Sealants.

## 1.03 SUBMITTALS

- A. Submit erection/shop drawings for each product specified showing all erection procedures, supports, anchorage and accessories required.
- B. Submit metal color chips for metal soffit panel system.

## 1.04 WARRANTY

- A. Provide 20-year warranty for materials, system and finish.

## PART 2 - PRODUCTS

## 2.01 2.01 - APPROVED MANUFACTURERS

- A. Atas Aluminum Corp., Allentown, PA.
- B. AEP-Span, Harrisburg, PA
- C. Or Approved Equal.

## 2.02 MATERIALS

- A. Soffit Panel:
  - 1. The soffit panels shall be Wind-Lok MP120 and MPV Soffit Panels, roll formed from prefinished .032 aluminum. Panels shall be 7/16" thick and 12" wide and shall be interlocking to create a smooth, finish surface.
  - 2. Panels shall have a UL Class 90 Uplift Rating.
- B. Accessories:
  - 1. All Standard J channels, one-piece corners, conversion trim, edging, starter cleats, splice caps and all accessories required for the installation of a complete soffit system. Accessories shall be roll formed, prefinished, smooth textured, .032 aluminum. Where specific existing conditions do not allow for factory forming the contractor shall bend sheets of similar thickness and finish aluminum accessories on site with product manufactured and supplied by Atlas International, Inc.
- C. Finish:

1. All exposed soffit panels, trim and accessories shall have a full-strength Fluoropolymer KYNAR 500 finish system.
- D. Finish Colors, Fluoropolymer KYNAR 500:
  1. Soffit Panels: White to match existing.
  2. Accessories: White to match existing.

### 2.03 ACCESSORIES

- A. Eave Transitions, Closure Strips: Same material, gauge and finish of soffit as supplied by the manufacturer.
- B. Trim: Same material, gauge and finish of soffit as supplied by the manufacturer.
- C. Coil Stock: Same material, gauge and finish of soffit as supplied by the manufacturer.
- D. Framing: ASTM A446, Type A, 18-gauge galvanized steel framing as approved by the manufacturer.
- E. Fasteners: Galvanized fasteners of size and length required to withstand applied loads as supplied by the manufacturer.

## PART 3 - EXECUTION

### 3.01 INSPECTION

- A. The Contractor shall examine the existing structure and related supports prior to installation of any soffit panels and shall not proceed with installation of the system until proper preparation has been completed and any defects are corrected.

### 3.02 ERECTION

- A. Install soffit panels, accessories and support per manufacturer's instructions. System shall allow for quick and easy installation and have a special lock which prevents slipping of the panel.
- B. Erection of the soffit panels must be started correctly, and the sections held true to line. Horizontal lines are to be straight and level and vertical lines plumb.
- C. Soffit panel ribs shall be installed perpendicular to the fascia.
- D. Install flashing and trim as required to achieve positive drainage. Hem all exposed edges of flashing, trim or closer strips.

### 3.03 DISSIMILAR MATERIALS

- A. Where aluminum materials come in contact with dissimilar metals, an insulating paint or tape shall be applied between the aluminum and the dissimilar metal.

## **END OF SECTION 076300**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Aluminum gutters, downspouts and accessories.

1.02 RELATED SECTIONS

- A. Section 062000 – Finish Carpentry.
- B. Section 073113 – Asphalt Shingles
- C. Section 076200 – Flashing and Trim.

1.03 REFERENCES

- A. ASTM B32 - Solder Metal.
- B. ASTM B209 - Aluminum and Aluminum Alloy Sheet and Plate.
- C. SMACNA - Architectural Sheet Metal Manual.

1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data on prefabricated components.
- C. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations and installation details.
- D. Samples: Submit two samples, 6 inches (150 mm) long, illustrating component design, finish, color and configuration.

1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable code(s) for size and method of rain water discharge.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 016500.
- B. Stack preformed and prefinished material to prevent twisting, bending or abrasion, and to provide ventilation. Slope to drain.
- C. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.07 COORDINATION

- A. Coordinate work under provisions of Section 013100.

## PART 2 - PRODUCTS

## 2.01 MATERIALS

- A. Aluminum: ASTM B209, 3003 alloy, H14 temper; 0.032-inch-thick (ogee); mill finish interior, shop precoated Kynar 500 or Hylar 5000 finish, color white.

## 2.02 COMPONENTS

- A. Gutters: SMACNA style profile seamless, 6" ogee profile.
- B. Downspouts: SMACNA rectangular profile seamless 3"x4".

## 2.03 ACCESSORIES

- A. Anchorage Devices: Type recommended by fabricator.
- B. Gutter Supports: Hidden hangers at 30" o.c.
- C. Downspout Supports: Straps.
- D. End Caps, Elbows: Fabricate to gutter profile.
- E. Fasteners: Aluminum finish exposed fasteners same as flashing metal.
- F. Splash Blocks: Provide precast concrete splash blocks at the termination of each downspout at grade.
- G. Primer: Zinc chromate type.
- H. Protective Backing Paint: Bituminous.

## 2.04 FABRICATION

- A. Form gutters and downspouts of profiles and sizes indicated in accordance with approved shop drawings.
- B. Fabricate with required connection pieces.
- C. Form sections square, true and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints.
- D. Hem exposed edges of metal.
- E. Solder shop formed metal joints. After soldering, remove flux. Wipe and wash solder joints clean. Weather seal joints.
- F. Fabricate gutter and downspout accessories; seal watertight.

## 2.05 FINISHES

- A. Apply bituminous protective backing on surfaces in contact with dissimilar materials.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are ready to receive work.

3.02 INSTALLATION

- A. Install gutters, downspouts and accessories in accordance with manufacturer's instructions and approved shop drawings.
- B. Slope gutters 1/8 inch per foot minimum to leader locations.
- C. Seal metal joints watertight.
- D. All gutters to be fastened maximum 30 inches o.c.

**END OF SECTION 077123**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Sealants and joint backing.
- B. Perimeter of wall openings, joints and ends.
- C. Joints of all material requiring caulking or sealants and to prevent water, moisture, and air infiltration.
- D. Perimeter of piping/wall and/or floor.
- E. Intersections of different materials requiring caulking and sealants.

## 1.02 REFERENCES

- A. ASTM C1193 – Standard Guide for Use of Joint Compounds.
- B. ASTM C920 – Standard Specification for Elastomeric Joint Sealants.
- C. ASTM C834 – Standard Specification for Latex Sealants.
- D. ASTM D1056 - Flexible Cellular Material - Sponge or Expanded Rubber.
- E. SWRI (Sealant, Waterproofing and Restoration Institute) - Sealant and Caulking Guide Specifications.

## 1.03 SUBMITTALS

- A. Submit under provision of Section 013300.
- B. Manufacturer's complete descriptive data and color availability.
- C. Manufacturer's installation instructions: Indicate special procedures, surface preparation, and perimeter conditions requiring special attention.
- D. Submit schedule of all conditions and joints requiring caulking and sealant proposed for each condition.

## 1.04 QUALITY ASSURANCE

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. All work shall be performed by a qualified caulking and sealant contractor, who has specialized in this type of work for a minimum of five (5) years. Provide a minimum of five (5) references to the engineer for review and approval.

## 1.05 PERFORMANCE REQUIREMENTS

- A. Install sealants to prevent air and moisture from infiltrating or migrating from the building exterior to the interior.

## 1.06 PROTECTION

- A. Mask surrounding surfaces.

- B. Protect sealants until cured.

#### 1.07 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

#### 1.08 COORDINATION

- A. Coordinate the work with all sections referencing this section.

#### 1.09 WARRANTY

- A. The products covered under this Section shall be covered by the manufacturer's standard 5-year warranty and include coverage for installed sealants and accessories which fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

### PART 2 - PRODUCTS

#### 2.01 SEALANT MANUFACTURERS

- A. Sealants shall be manufactured by Bostik, TPI, 3M, Dow Corning or equal.

#### 2.02 SEALANTS

- A. Acrylic latex sealant (Interior): ASTM C920, paintable grade; single component, solvent curing, non-staining, non-bleeding, non-sagging.
- B. Polyurethane sealant (Exterior): ASTM C920, multi-component, chemical curing, non-staining, non-bleeding, non-sagging.
- C. Caulking compounds shall be non-staining. Selection based upon manufacturer's recommendations for type of surface material and submitted to the Architect/Engineer for approval.
- D. Butyl: One-part butyl non-sagging, FSTT-5-1657.
- E. One Part Silicone: ASTM C920, Type 5, Grade HS, Class 75, vertical surfaces.
- F. Backing material shall be inserted into joint to the proper depth to allow for the proper balance of joint and sealant dimensions. Avoid excessive longitudinal stretching of rods during installation.

#### 2.03 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint cleaner: Non-corrosive and non-staining type, as recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint backing: Round, closed cell polyethylene foam rod, oversized 50% larger than joint width; as recommended by sealant manufacturer; and compatible with sealant.
- D. Bond breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

## PART 3 - EXECUTION

## 3.01 EXAMINATION

- A. Verify that substrate surface and joint openings are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant.

## 3.02 PREPARATION

- A. Remove loose materials and foreign matter which might impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Protect elements surrounding the work of this section from damage or disfiguration.
- E. Apply masking tape. Do not allow tape to touch surface to which caulking, or sealant is to be applied.

## 3.03 INSTALLATION

- A. Perform installation in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Install sealant to achieve performance requirements, in accordance with manufacturer's instructions.
- D. Measure joint dimensions and size material to achieve required 2:1 width/depth ratios.
- E. Install joint backing to achieve a neck dimension no greater than 1/3 of the joint width.
- F. Remove masking tape immediately after tooling of sealant is accomplished and before surface skin has started to form.
- G. Install bond breaker where joint backing is not used.
- H. Install sealant free of air pockets, foreign embedded matter, ridges and sags.
- I. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- J. Apply sealant in continuous uniform bed.
- K. Tool joints concave, flush with surface of adjoining material.
- L. Match color of sealant to adjoining material.

## 3.04 CLEANING

- A. Comply with the requirements of Section 017423.
- B. Clean adjacent soiled surfaces.

3.05 PROTECTION OF FINISHED WORK

- A. Protect sealants until cured and until project completion.

**END OF SECTION 079200**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Fiberglass Reinforced Plastic (FRP) fire rated and non-rated flush doors and frames.
- B. Reinforcement, anchorage, accessories and attachment items, trim, shims and closures.
- C. Factory preparation for hardware.

## 1.02 RELATED SECTIONS

- A. Section 061000 – Rough Carpentry.
- B. Section 079200 – Joint Sealants.
- C. Section 087100 – Door Hardware.
- D. Section 099100 - Painting.

## 1.03 REFERENCES

- A. NYS Uniform Fire Prevention and Building Code.
- B. Accessible and Usable Buildings and Facilities CABO/ANSI A117.1-1992.
- C. ASTM D 523 - Standard Test Method for Specular Gloss.
- D. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position.
- E. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- F. ASTM E 152 - Standard Methods of Fire Tests of Door Assemblies.
- G. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
- H. SDI 100 - Recommended Specifications for Steel Doors and Frames.
- I. UL 305 - Standard for Panic Hardware.

## 1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Shop Drawings: Drawings shall fully describe and locate all items being furnished and shall include large scale details of principal construction features and internal reinforcement. Indicate frame elevations, hardware, reinforcement, anchor types and spacing, location of cut-outs for hardware, and finishes.
- C. Product Data: Indicate frame and door configuration and finishes.
- D. Submit color and texture chips of FRP door and frame colors and textures for selection by Owner. The selected color shall pigment both the gel-coat and exterior laminate.
- E. Submit samples of finished materials, door section and exposed fastening devices for approval upon the Owner or Architect's request.

- F. Calculations: Submit calculations for fiberglass composite door, verifying theoretical limits of thermal warpage based upon the exposure temperature differential.
- G. Closeout: Submit warranty documents specified herein.

#### 1.05 PROJECT CONDITIONS

- A. Examine contract documents with respect to work indicated or required under this Section to ensure its completeness. Notify Architect of deficiencies in construction where attachment of the work of this Section is concerned. Contractor is responsible to coordinate hardware function and operation with all required system components.
- B. Coordinate the work with frame opening construction, door and hardware installation.

#### 1.06 QUALIFICATIONS

- A. The manufacturer of the items herein shall have been regularly engaged in the manufacture and installation of the complete assembly specified herein for a period of no less than five (5) years. Upon request of the Owner or Architect, working samples and list of similar installations shall be submitted before approval.
- B. Except when so described, the manufacture and fabrication must originate in that manufacturer's plant or plants.
- C. The use of different finished components from more than one source of manufacture will not be acceptable.
- D. Contractor with five (5) years documented experience installing FRP doors and frames. Contractor shall submit five (5) references for projects completed within the last two (2) years.

#### 1.07 SITE STORAGE AND PROTECTION OF MATERIALS

- A. Comply with the requirements contained in Section 016500 - Product Delivery, Storage, and Handling.
- B. Any scratches or disfigurement caused in shipping or handling are to be promptly cleaned and touched up per manufacturers recommendations, and materials are to be properly stored on planks or dunnage, out of water, and covered to be protected from damage due to any cause.
- C. Doors shall have their wrappings or coverings removed upon arrival at the building site and shall be stored in a vertical position, spaced by blocking to permit air circulation between them.
- D. Provide packaging, separators, banding, spreaders and paper wrappings as required to completely protect all frames during transport and storage.
- E. Remove defective or damaged material from project site within 24 hours.
- F. Acclimate doors and frames to site conditions for a minimum of 24 hours before installation.

#### 1.08 PERFORMANCE REQUIREMENTS

- A. ASTM E84/NFPA 255: Door faces shall have a Class A rating with a flame spread of 25, or less, and a smoke developed rating of 450, or less.
- B. Wind Loading: Design and reinforce doors and frames to withstand wind loading pressures indicated on the structural drawings.

## 1.09 WARRANTY

- A. Furnish a written warranty covering repair of defects in materials, installation, and workmanship developing during the specified period at no extra cost to the Owner for the following:
  - 1. Doors and frames shall have a lifetime guarantee against failure due to corrosion from the specific environment named at the time of purchase.
  - 2. Doors and frames shall be guaranteed for ten years against failure due to materials and workmanship, including warp, separation or de-lamination, and expansion of the core.
  - 3. Hardware shall be warranted to be free of defects in both workmanship and materials for a period of one year.

## PART 2 - PRODUCTS

## 2.01 MANUFACTURERS

- A. Chem-Pruf Door Co., Ltd.; P.O. Box 4560, Brownsville, Texas 78523, Toll Free (800) 444-6924, Fax: 956-544-7943, Website: [www.chem-pruf.com](http://www.chem-pruf.com).
- B. Fib-R-Dor, a Div. of Chase Doors, Inc.; 1721 East 5th Street, North Little Rock, AR 72114. Toll Free: (800) 342-7367, Fax: 501-758-9496. Website: [www.fibrdor.com](http://www.fibrdor.com).
- C. Special-Lite; PO Box 6, Decatur, Michigan 49045, Toll Free: (800) 821-6531, Fax (800) 423-7610, website: [www.special-lite.com](http://www.special-lite.com). Model AF-100.
- D. Or pre-approved equal.

## 2.02 MATERIALS

- A. Fiberglass Reinforced Plastic (FRP) DOORS:
  - 1. Thickness: 1-3/4 inches.
  - 2. Thermal Insulating Value: 'R' factor 11.
  - 3. Construction:
    - a. Core: End-grain balsa wood, resin-impregnated.
    - b. Door Plates: Molded in one continuous piece, resin reinforced with hand-laid glass fiber mat, nominal 1/8-inch-thick, minimum 15-mil gel-coated surface.
    - c. Door Edges: Minimum 3 layers resin-reinforced glass fiber mat, nominal 3/8-inch-thick, machine tooled.
  - 4. Sizes: Indicated on drawings.
  - 5. Door Plates: 1/8-inch-thick, molded in one continuous piece, starting with a 25-mil gelcoat of the color specified, integrally molded with at least two layers of 1.5 ounce per square foot fiberglass mat and one layer of 18 ounces per square yard woven roving. This will yield a plate weight of 0.97 lbs. per square foot at a ratio of 30/70 glass to resin.
  - 6. Finish: Flush, smooth gloss surface, minimum value of 88 in accordance with ASTM D 523.
    - a. Color and texture: To be selected by Owner from manufacturer's full line.
- B. Fiberglass Frames:
  - 1. Construction: One-piece pultruded fiberglass reinforced plastic, minimum 1/4-inch wall thickness, jamb-to-head joints mitered and reinforced with FRP clips and stainless-steel fasteners; conforming to SDI requirements for performance equivalent to 16 gage steel frames.
  - 2. Frame profile: as Indicated on drawings.
  - 3. Sizes: as Indicated on drawings.
  - 4. Finish: Satin Co-Extruded finish, with true and consistent color throughout frame thickness.

5. Color: To be selected by Owner from manufacturer's full line.
- C. Frame Anchors: Manufacturer's standard stainless-steel expansion anchors for existing openings, and stainless-steel masonry tee anchors for new construction. Provide jamb anchors within 18 inches of top and bottom each frame and at 24 inches on center in between.
- D. Door Hardware: Specified in Section 087100.
- E. Accessories:
  1. Rubber silencers at interior doors.
  2. Sizes: Indicated on drawings.

### 2.03 FABRICATION

- A. Fiberglass Reinforced Plastic (FRP) Doors:
  1. Minimum glass fiber to resin ratio: 30 percent.
  2. Mortise for lockset, and recess for strike plate in lock stile.
  3. Embed steel reinforcement for hinges in fiberglass matrix; provide for hinge leaf recesses in hinge stile.
  4. Astragals shall be full height, fully fastened to face of active leaf.
- B. Fiberglass Frames:
  1. Mortise for lock strike, and recess for strike plate in lock jamb.
  2. Reinforce for hinges and other required hardware.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Field verify that opening sizes and tolerances are acceptable. Beginning of installation means installer accepts existing conditions and substrate.

### 3.02 INSTALLATION

- A. Install doors and frames in accordance with ANSI/SDI 100 and manufacturer's instructions plum, level, and square.
- B. Coordinate installation of doors with installation of frames and hardware specified in Section 087100.
- C. Install frames plumb, level, square, and rigidly secured in the opening.
- D. Adjust doors to fit snugly and close without sticking or binding.
- E. Coordinate with masonry construction for anchor placement.
- F. Protect materials to prevent scratching, twisting, and denting or otherwise damaging.
- G. Caulk interior and exterior perimeter of frames.
- H. Shim frames every 12 to 16 inches.
- I. Secure frame with appropriate anchors and hardware.
- J. Set all entrance saddles in mastic.

- K. Install and adjust all hardware and adjust to achieve quiet and smooth operation.
- L. Install all weather-stripping.

### 3.03 ERECTION TOLERANCES

- A. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.
- B. Maximum Clearances: 1/8 inch at jambs and heads, 1/4 inch at meeting stiles of pairs of doors, 1/4 inch between door bottom and finished floor or threshold.

### 3.04 ADJUSTING

- A. Adjust work under provisions of Section 017500.
- B. Adjust door and hardware for quiet, smooth and balanced door movement.

### 3.05 PROTECTION AND CLEANING

- A. Upon completion of the work, all protection (including coatings) shall be removed and the exposed surfaces of the work cleaned and left in perfect condition free of smears, scratches and abrasions. Repair or replace damaged materials as directed by Architect / Engineer.

**END OF SECTION 081500**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Provide Fiberglass single hung windows and all associated accessories, hardware and components in accordance with the Contract Documents and as required to provide a complete installation.

## 1.02 RELATED SECTIONS

- A. Section 061000 – Rough Carpentry.
- B. Section 079200 - Joint Sealants.
- C. Section 085656 - Security Window Screens.
- D. Section 099100 - Painting.

## 1.03 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
  - 1. AAMA 502 - Voluntary Specification for Field Testing of Windows and Sliding Doors.
  - 2. AAMA 613 - Voluntary Performance Requirements and Test Procedures for Organic Coatings on Plastic Profiles.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM C 1036 – Standard Specification for Flat Glass.
  - 2. ASTM C 1048 - Heat-Treated Flat Glass--Kind HS, Kind FT Coated and Uncoated Glass.
  - 3. ASTM D 3656 - Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Yarns.
  - 4. ASTM E 283 - Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Difference Across the Specimen.
  - 5. ASTM E 330 – Structural Performance of Exterior Windows, Curtain Walls, and Doors by uniform Static Air Pressure Difference.
  - 6. ASTM E 547 - Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential.
  - 7. ASTM E 774 – Specification for Sealed Insulated Glass Units.
- C. Screen Manufacturers Association (SMA):
  - 1. SMA 1201 - Specifications for Insect Screens for Windows, Sliding Doors and Swinging Doors.
- D. Window and Door Manufacturers Association (WDMA):
  - 1. ANSI/AAMA/NWWDA 101/I.S.2 - Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.

## 1.04 PERFORMANCE REQUIREMENTS

- A. Window units shall be designed to comply with ANSI/AAMA/NWWDA 101/I.S.2.:
  - 1. Single Hung: H-LC-PC-50 specifications
- B. Window Air Leakage, ASTM E 283: Window air leakage when tested at 1.57 psf (25 mph) shall be 0.25 cfm/ft<sup>2</sup> of frame or less.
- C. Window Water Penetration, ASTM E 547: No water penetration shall occur through window when tested under the following static pressures:

1. Single Hung: H-LC-PC-50 at 7.5 psf
- D. Structural Performance, ASTM E330: Units shall comply when tested at the following:
  1. Single Hung: H-LC-50 at 75 psf
  2. Frames: 34,000 psi tensile strength

#### 1.05 SUBMITTALS

- A. Submit in accordance with Section 013300.
- B. Product Data: Submit manufacturer's product data, including installation instructions and procedures for care of finished surfaces for each product specified.
- C. Shop Drawings: Submit manufacturer's shop drawings, indicating dimensions, construction, component connections and locations, anchorage methods and locations, hardware locations, direction of operable parts, typical jamb, head and sill conditions, special mullion reinforcement details and installation details.
- D. Samples: Submit samples as follows:
  1. Fiberglass extrusions, 12 inches long.
  2. Fiberglass Color Chips for windows & hardware finishes from manufacturer's full line of available colors.
  3. 12 inch by 12-inch glass sample for obscure glass 3/4" insulated unit.
- E. Quality Assurance/Control Submittals: Submit the following:
  1. Performance Data: Provide manufacturer's published performance data for specified products.
- F. Contract Closeout Submittals: Submit the following:
  1. Warranty documents specified herein.
  2. Owner's Manual: Bound manual clearly identified with project name, location, and completion date. Identify type and size of units installed. Provide recommendations for periodic inspections, care, and maintenance. Identify common causes of damage with instructions for temporary repair.

#### 1.06 QUALITY ASSURANCE

- A. Factory Testing: Factory test individual standard operable windows for air infiltration in accordance with ASTM E 283, to ensure compliance with this specification.
- B. Installer Qualifications: Utilize an installer certified by the manufacturer and having demonstrated a minimum of 5 years' experience on projects of similar size and complexity.
- C. Mockup:
  1. Provide sample installation for field testing window performance requirements and to determine acceptability of window installation methods.
  2. Approved mockup shall represent minimum quality required for the Work.
  3. Approved mockup shall remain in place within the Work.

#### 1.07 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials under the provisions of Section 016500.
- B. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

- C. Delivery: Deliver materials to site undamaged in manufacturer's or sales branch's original, unopened containers and packaging, with labels clearly identifying manufacturer and product name. Include installation instructions.
- D. Store materials in accordance with manufacturer's instructions, off ground and under cover. Protect materials from weather, direct sunlight, and construction activities.
- E. Store window units in an upright position in a clean and dry storage area above ground and protect from weather.
- F. Handling: Protect materials and finish during handling and installation to prevent damage.

#### 1.08 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimension of openings by field measurement before fabrication. Record measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.
- B. Install units in strict accordance with manufacturer's safety and weather recommendations.

#### 1.09 WARRANTY

- A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.
- B. Window glass shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of twenty (20) years from the date of original purchase.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURER

- A. Integrity Windows and Doors, Fargo, North Dakota; Toll Free (800) 533-6898; Website [www.integritywindows.com](http://www.integritywindows.com)
- B. Pella Corporation, 102 Main Street, Pella, Iowa; Toll Free (800) 54-PELLA; Website [www.pella.com](http://www.pella.com).
- C. Or approved equal.

#### 2.02 PRODUCT

- A. Integrity Ultrex Single Hung Windows.
- B. Pella Impervia Single Hung Windows.
- C. Or approved equal.
  - 1. Factory-assembled window with sash installed in frame.
  - 2. Frame and Sash Material: Pultruded-fiberglass material, reinforced with interlocking mat.

#### 2.03 MATERIALS

- A. Frame:
  - 1. Type: Block frame.
  - 2. Overall Frame Width 3-inches; Overall Frame Depth: 2-inches.

3. Nominal Wall Thickness of Fiberglass Members: 0.070-inch to 0.077-inch.
  4. Frame Corners: Mitered, joined and bonded with thermoset polyurethane adhesive, nylon corner lock, and mechanically fastened.
  5. Sill: Fitted with weep valve assemblies.
  6. Jambs: Factory-drilled, counter-bored, installation screw holes.
- B. Sash:
1. Nominal Wall Thickness of Fiberglass Members: 0.070-inch to 0.077-inch.
  2. Composite sash thickness: 15/16-inches.
  3. Vent Sash: Operating sash tilt to interior for cleaning or removal of exterior.
  4. Sash Corners: Mitered, bonded and sealed with injected thermoset polyurethane adhesive.
- C. Glazing:
1. Float Glass: ASTM C 1036, Quality 1.
  2. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 774
  3. Tempered Glass: ASTM C 1048.
  4. Type: Polyurethane reactive (PUR) hot-melt glazed, 11/16-inch thick, insulating glass, multi-layer Low-E coated with argon, tempered where required by drawings and code.
  5. Glazing Seal: Silicone bedding at exterior and a glazing boot to interior.
  6. Glazing shall be obscured in factory where noted on plans.
- D. Weather Stripping:
1. Single Hung Bottom Sash: Foam filled bulb.
  2. Single Hung Top Sash: Hollow vinyl bulb.
  3. Single Hung Interlock: Rigid ABS with flexible hollow bulb.
- E. Insect Screens:
1. Compliance: ASTM D 3656 and SMA 1201.
  2. Screen Cloth: Half-size with black, vinyl-coated, 18/16 mesh, fiberglass screen cloth set in aluminum frame fitted to outside of window.
  3. Complete with necessary hardware.
  4. Screen Frame Finish: Baked enamel, color to match window exterior.

#### 2.04 HARDWARE

- A. Lock:
1. Type: High pressure zinc die-cast self-aligning, cam-action lock and keeper.
  2. Windows 36 Inches high or Greater: 2 locks.
  3. Standard Finish: Match window interior.
- B. Balances:
1. Galvanized steel block-and-tackle balances.

#### 2.05 TOLERANCES

- A. Windows shall accommodate the following opening tolerances:
1. Vertical Dimensions Between High and Low Points: Plus 1/4-inch, minus 0 inch.
  2. Width Dimensions: Plus 1/4-inch, minus 0 inch.
  3. Building Columns or Masonry Openings: Plus or minus 1/4-inch from plumb.

#### 2.06 FINISH

- A. Exterior and Interior Finish: Factory-applied baked on paint, comply with AAMA 623 performance requirements, color as selected by Owner from manufacturer's standard colors.

## 2.07 ACCESSORIES AND TRIM

- A. Flashing/Sealant Tape:
  - 1. UV resistant aluminum-foil-backed butyl window and door flashing tape.
  - 2. Maximum Total Thickness: 0.013-inch.
  - 3. Verify sealant compatibility with sealant manufacturer.
- B. Exterior Perimeter Sealant: See Section 079200.
- C. Insulating-Foam Sealant: Dow Chemical Great Stuff Window and Door Insulating Foam Sealant.
  - 1. Low-pressure, polyurethane window and door insulating-foam sealant.
- D. Installation Accessories:
  - 1. Factory installed brackets at head, sill and jambs.
  - 2. J-channel, frame expander & receivers.
  - 3. Mullion kit: Standard mullion kit for field assembly of related units available in horizontal, vertical and 2-wide and/or 2-high configurations. Kit includes: Instructions, interior and exterior mull covers, mull plugs and brackets.

## PART 3 - EXECUTION

## 3.01 EXAMINATION

- A. Verification of Conditions: Before Installation, verify openings are plumb, square, and of proper dimension as required for installation. Report unsuitable conditions to the Architect/Engineer before proceeding.
- B. Acceptance of Conditions: Beginning of installation confirms acceptance of existing conditions.

## 3.02 INSTALLATION

- A. Installation shall comply with the instructions and recommendations of the window manufacturer and approved shop drawings.
- B. Remove unit components, parts, accessories, and installation guides from carton. Inspect unit components and verify that components are not damaged and that parts are included before disposing of carton.
- C. Install units level, plumb, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- D. Install windows to be weather-tight and freely operating. Maintain alignment with adjacent work.
- E. Integrate window system installation with exterior water-resistant barrier using flashing/sealant tape. Apply and integrate flashing/sealant tape with water-resistant barrier using watershed principles in accordance with window manufacturer's instructions.
- F. Place interior seal in shim space around window perimeter to maintain continuity of building thermal and air barrier using insulating foam sealant. Do not overfill.
- G. Seal window to exterior masonry with sealant and related backing materials at perimeter of assembly. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 079200 Joint Sealants.

- H. Install accessory items as required.

### 3.03 SITE TOLERANCES

- A. Adjust operation, insect screens, hardware, and accessories for a tight fit at contact points and for smooth operation and weather tight closure.
- B. Windows shall accommodate the following opening tolerances:
  1. Horizontal Dimensions Between High and Low Points: Plus 1/8-inch, minus 0 inch.
  2. Width Dimensions: Plus 1/8-inch, minus 0 inch.
  3. Building Columns or Masonry Openings: Plus or minus 1/8-inch from plumb.

### 3.04 CLEANING

- A. Clean in accordance with Section 017423 units using cleaning material and methods specifically recommended by window manufacturer.
- B. Remove labels, excess sealants, glazing materials, dirt, visible markings and other substances.
- C. Avoid damaging protective coatings and finishes. Do not use harsh cleaning materials or methods that would damage finish or glass.
- D. Protect unit surfaces from masonry cleaning solution that could damage insulation glass panels or hardware.
- E. Remove debris from work site and properly dispose of debris.

### 3.05 PROTECTION

- A. Protect installed work from damage due to subsequent construction activity on the site.

**END OF SECTION 085400**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Hardware for all new doors.
- B. Accessories and miscellaneous trim.

## 1.02 RELATED SECTIONS

- A. Section 062000 – Finish Carpentry.
- B. Section 081500 – Fiberglass Reinforced Plastic Doors and Frames.

## 1.03 REFERENCES

- A. American National Standards Institute (ANSI);
  - 1. ANSI A156.3 - National Standard for Exit devices.
  - 2. ANSI A156.4 - National Standard for Door Controls - Closers.
  - 3. ANSI A156.6 - National Standard for Architectural Door Trim.
  - 4. ANSI A156.13 - National Standard for Mortise Locks & Latches.
- B. National Fire Protection Association (NFPA):
  - 1. NFPA 80 - Fire Doors and Windows.
  - 2. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
  - 3. NFPA 252 - Fire Tests of Door Assemblies.
- C. Underwriters Laboratories (UL):
  - 1. UL 10B - Fire Tests of Door Assemblies.
  - 2. UL 305 - Panic Hardware.

## 1.04 GENERAL REQUIREMENTS

- A. Keying:
  - 1. General - Locks must incorporate a security system to ensure that keys are used during construction will not open doors after District occupancy. Coordinate permanent locks with District's standard keying.
  - 2. Construction Keys and Inserts - Permanent cylinders with construction inserts are to be assembled into and shipped with all exterior-door locksets. Construction keys are to be shipped with the door locks. Construction insert-extractor keys are to be shipped to the Owner via Registered Mail. Prior to substantial completion, the Contractor shall collect all construction keys and, in the presence of the Owner or Engineer, remove the construction inserts from the lock cylinders and give all construction keys and inserts to the Owner or Engineer.

## 1.05 SUBMITTALS

- A. Comply with the requirements contained in Section 013300.
- B. Product Data: Submit manufacturers' technical product data for each item of hardware. Include whatever information may be necessary to show compliance with requirements and include instructions for installation and for maintenance of operating parts and finishes. Hardware sets will not be considered for approval without technical product data.

- C. Hardware Schedule: Submit final hardware schedule in manner indicated below. Coordinate hardware with doors, frames and related work to ensure proper size, thickness, hand, function and finish of hardware.
1. Final Hardware Schedule Content: Based on finish hardware indicated, organize hardware schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:
    - a. Type, style, function, size and finish of each hardware item.
    - b. Name and manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of hardware set cross-referenced to indications on Drawings both on floor plans and in door and frame schedule.
    - e. Explanation of all abbreviations, symbols, codes, etc. contained in schedule.
    - f. Mounting locations for hardware.
    - g. Door and frame sizes and materials.
    - h. Keying information.
    - i. Coordination with access control system.
  2. Submittal Sequence: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames) which is critical in the project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by finish hardware, and other information essential to the coordinated review of hardware schedule.
- D. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory prepared for the installation of hardware. Upon request, check shop drawings of such other work, to confirm that adequate provisions are made for proper location and installation of hardware.

#### 1.06 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver, store and handle materials in accordance with the requirements of Section 016500.
- B. Packing and marking: Package each item of hardware and each lock set separately in individual containers, complete with necessary screws, keys, instructions, and installation template for spotting mortising tools. Mark each container, identifying installation location of each item. Keep knobs suitably covered during construction period.

#### 1.07 QUALITY ASSURANCE

- A. Coordinate the work with other directly affected Sections involving manufacture or fabrication of internal reinforcement for door hardware and recessed items.
- B. Coordinate Owner's keying requirements during the course of the Work. Furnish the Owner with ten (10) keys. Key all door cylinders to match Owner's master cylinder.
- C. Perform work in accordance with the following requirements:
  1. ANSI A117.1
  2. NFPA 101.
  3. NFPA 80.
  4. NFPA 252.
  5. UL 10B.
  6. UL 305.
- D. Regulatory Requirements:
  1. Conform to applicable code for requirements applicable to doors and frames.

2. Conform to ANSI A117.1-2003 "Accessible and Useable Buildings and Facilities" for mounting heights and locations of accessories.
- E. Manufacturer: Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.
- F. Supplier: A recognized architectural finish hardware supplier, with warehousing facilities, who has been furnishing hardware to similar projects for a period of not less than 10 years, and who employs an experienced Architectural Hardware Consultant (AHC) to prepare the hardware schedule submittal and who is available, at reasonable times during the course of the work, for consultation about project's hardware requirements.

#### 1.08 WARRANTY

- A. Provide manufacturer's standard minimum one-year warranty for all hardware.

#### 1.09 MAINTENANCE PRODUCTS

- A. Provide special wrenches and tools applicable to each different or special hardware component.
- B. Provide maintenance tools and accessories supplied by hardware component manufacturer.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS (GENERAL)

- A. Bolts, screws and other fastenings required for the application of the finish hardware shall be of size and type to fit requirements and shall be of same material and finish as the exposed parts of the hardware that they fasten.
- B. Door hardware: Hand of lock shall be as required. If door hand is changed by proper bulletin or change order before hardware is delivered, furnish such hardware items at no additional expense to Owner.
- C. Strikes: Furnish curved lip strikes with dust box of sufficient length to protect trim on all locks or latches.
- D. Silencers: Use three at single doors, four at pairs of doors on interior frames.
- E. All locks, locksets, latch sets, and bolts shall conform to Federal Specification FF-H-106a/ANSI. All locks shall accept interchangeable, removable cores.
- F. Finishes: Refer to the individual hardware headings for finish designations.

#### 2.02 DOOR HARDWARE

- A. Lockset: Corbin Russwin ML2000 Series mortise lock or approved equal with Lustra lever handle, LWA trim and Best removable core cylinders keyed to District's system. US26D finish, function as noted.
- B. Exit Device: Sargent 8813ETB for single door and Sargent 8904ETB for active leaf of pair of doors, or approved equal, US32D finish.
- C. Hinges - Exterior: Stainless steel 4-1/2" x 4-1/2" heavy weight ball bearing, non-rising stainless-steel pin, Model T4A3386 4.5 X 4.5 NRP, manufactured by McKinney or approved equal, stainless steel machine screws furnished by hinge manufacturer.

- D. Hinges - Interior: Stainless steel 4-1/2" x 4-1/2" standard weight ball bearing, non-rising stainless-steel pin, Model TA2714 4.5 X 4.5, manufactured by McKinney or approved equal, stainless steel machine screws furnished by hinge manufacturer.
- E. Closer - Exterior: Parallel arm application, extra duty hold open, UNI-7500H, 689 finish with SRI pretreatment coating, manufactured by Norton or approved equal.
- F. Closer – Interior Doors: Parallel arm application, extra duty hold open, UNI-7500H, 689 finish with SRI pretreatment coating, manufactured by Norton or approved equal, mount closer on less public side of door.
- G. Overhead Stop: Model 6-series-652 as manufactured by Rixson or approved equal.
- H. Flush Bolts: Inactive leaf of double doors, Model FB01M-26D UL Listed for Metal Doors, metal door extension, flush bolts as manufactured by McKinney or approved equal. Shim and wear plate shall be furnished by hardware manufacturer, top and bottom of door.
- I. Dustproof Strike: Model DPS3-26D as manufactured by McKinney or approved equal.
- J. Astragal: Steel doors use 12-gauge stainless steel, FRP doors use FRP, 2 inches wide, edges rounded, factory finish, supplied by door manufacturer.
- K. Exterior Saddle: Aluminum Model S483AV x opening width as manufactured by Reese or approved equal.
- L. Interior Saddle: Aluminum Model S405A x opening width as manufactured by Reese or approved equal.
- M. Wall Stop: Wall mount as indicated in hardware sets WS03, 626 finish manufactured by McKinney or approved equal.
- N. Weather-stripping: Model 373SS as manufactured by Reese or approved equal mounted with stainless steel self-tapping screws, min. 8" on center.
- O. Door Sweep: Model MCK18061CNB as manufactured by McKinney or approved equal, mounted with stainless steel self-tapping screws, min. 8" on center
- P. Provide matching strikes, screws and brackets for all hardware.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Verify that doors and frames are ready to receive work and dimensions are as indicated.

#### 3.02 INSTALLATION

- A. Where not specified under other sections to be performed by manufacturer or suppliers, machine, fit and drill metal doors.
- B. Prepare doors of various types to receive hardware, using templates and instructions provided with the hardware items for jobsite work.
- C. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute, except as

specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by the Architect/Engineer.

1. Conform to requirements of ANSI A117.1-2003 "Accessible and Useable Buildings and Facilities"
- D. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division-9 sections. Do not install surface mounted items until finishes have been completed on the substrate.
- E. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units which are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- G. Set thresholds for exterior doors in full bed of butyl rubber or polyisobutylene mastic sealant.

### 3.03 ADJUSTING

- A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.
- B. Clean adjacent surfaces soiled by hardware installation.
- C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- D. Instruct Owner's Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

### 3.04 PROTECTION OF FINISHED WORK

- A. Do not permit adjacent work to damage hardware or finish.

### 3.05 HARDWARE SETS

- A. Coordinate the Hardware Schedule with the Door Schedule on the Contract Drawings, each set to have:

#### SET 1

- 3 ea. Interior Hinges
- 1 ea. Exit Device
- 1 ea. Interior Closer
- 1 ea. Interior Saddle

#### SET 2

- 3 ea. Interior Hinges
- 1 ea. Lockset (Storeroom) ANSI No. F07
- 1 ea. Interior Closer

- 1 ea. Interior Saddle
- 1 ea. Wall Stop

SET 3

- 6 ea. Exterior Hinges
- 1 ea. Exit Device
- 1 ea. Exterior Closer
- 1 ea. Overhead Stop
- 2 ea. Flush Bolts
- 1 ea. Dustproof Strike
- 1 ea. Astragal
- 1 ea. Exterior Saddle
- 1 ea. Weather-stripping
- 2 ea. Door Sweep

**END OF SECTION 087100**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. 2-foot x 2-foot acoustical ceilings complete with suspension systems and related accessories. Acoustical units, suspension system, grid system and wall moldings shall be furnished by a single manufacturer, for a complete ceiling system.
- B. It shall be the contractor's responsibility to coordinate with all other trades and other contractors hired by the Owner including the electrical contractor. Contractor shall remove and replace ceiling panels as required. It shall be the ceiling contractor's responsibility to furnish a finished ceiling with no broken, scarred, marked, or soiled ceiling panels following the total completion of the project. Contractor shall assume removal replacement of up to 20% of ceilings installed.

## 1.02 RELATED SECTIONS

- A. Section 061000 - Rough Carpentry.
- B. Section 072100 - Thermal Insulation.
- C. Section 099100 – Painting.
- D. Division 23 – HVAC.
- E. Division 26 - Electrical.

## 1.03 REFERENCES

- A. Job conditions, preparatory work, and installation techniques shall be in accordance with Acoustical Materials Association Installation Recommendations.
- B. Acoustical units shall be as described in the current edition of the Acoustical Materials Association Performance Data Bulletin.
- C. American Society for Testing and Materials (ASTM):
  - 1. ASTM C 635 - Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
  - 2. ASTM C 636 - Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
  - 3. ASTM E 84 Test Method for Surface Burning Characteristics of Building Materials.
  - 4. ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Material.
  - 5. ASTM E 580 - Specification for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels in Areas Requiring Seismic Restraint.
  - 6. ASTM A 1008 Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
  - 7. ASTM A 641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
  - 8. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
  - 9. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
  - 10. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum.
  - 11. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems.
  - 12. ASTM E 1264 Classification for Acoustical Ceiling Products.

13. ASTM E 1477 Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers.
  14. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- D. ASCE 7 Standard - American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
  - E. CISCA 0-2 - Ceilings and Interior Systems Construction Association Recommendations for Direct-Hung Acoustical Tile and Lay-In Panel Ceilings, Seismic Zones 0-2.

#### 1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data on metal grid system, components, acoustic tile units and accessories.
- C. Samples: Submit two 6" x 6" samples of each ceiling type, illustrating material and finish of acoustic units.
- D. Submit to the Architect/Engineer for approval scaled shop drawings showing layout of suspension system and tile, incorporating light fixtures, grilles and other items mounted through or on acoustical ceiling.
- E. Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry an approved independent laboratory classification of NRC, CAC, and AC.

#### 1.05 QUALITY ASSURANCE

- A. Single Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.
- B. Installer Qualifications: Company specializing in performing work of this Section with minimum 5 years documented experience.
- C. Install components to withstand seismic loads in accordance with the Building Code of New York State, Section 1621 for Category C.
- D. Regulatory Requirements: Surface Burning Characteristics in Accordance with ASTM E 1264 for Class A finish:
  1. Flame Spread: Less than 25.
  2. Smoke Developed: Less than 50.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Materials shall be delivered and stored under the provisions of 016500.
- B. Deliver acoustical ceiling units to project site in original, unopened packages, labeled so as to allow easy identification.
- C. Follow manufacturer's instructions on storage of materials; store materials in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.

- D. Prior to installation, store acoustical units for 24 hours minimum at same temperature and relative humidity as space where Work will be installed.
- E. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

#### 1.07 ENVIRONMENTAL CONDITIONS

- A. Section 016500 – Product Delivery, Storage and Handling: Environmental conditions affecting products on site.
- B. Maintain uniform temperature of minimum 60 degrees F and maximum 80 degrees F and maximum humidity of 75 percent prior to, during, and after acoustic unit installation.
- C. Do not subject ceiling system to chemical fumes, vibrations, moisture or condensation, excessive humidity, or excessive dirt or dust buildup.
- D. The ceilings must be maintained to avoid excessive dirt or dust buildup that would provide a medium for microbial growth on ceiling panels. Microbial protection does not extend beyond the treated surface as received from the factory and does not protect other materials that contact the treated surface such as supported insulation materials.

#### 1.08 PROJECT CONDITIONS

- A. Section 013100 – Project Management and Coordination.
- B. Sequence work to ensure acoustic ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- C. Install acoustic units after all interior wet work is complete and dry.
- D. Rigidly secure acoustical ceiling system including integral mechanical and electrical components with maximum deflection of 1/36".

#### 1.09 WARRANTY

- A. Provide manufacturer's 30-year system warranty to withstand relative humidity without sagging, warping, mold/mildew, bacteria or rust.

#### 1.10 EXTRA MATERIALS

- A. Section 017800 – Closeout Submittals.
- B. Provide minimum 10 percent of total acoustic unit area of each type of tile to Owner in unopened packages.

### PART 2 - PRODUCTS

#### 2.01 STANDARD OF QUALITY

- A. The following acoustic tile specification is based upon products as manufactured by Armstrong World Industries, Incorporated, Lancaster, PA (800) 448-1405. Substitutions shall be considered during bidding as stipulated in section 013300.
- B. Provide acoustical ceiling system including tile, grid suspension system and all accessories manufactured by a single manufacturer.

## 2.02 ACOUSTIC PANELS

- A. Type "ACT" 24" x 24" x 5/8" Armstrong Ceramaguard Fine Fissured perforated square lay-in #607, white, mineral fiber composition, Humiguard Plus and Antimicrobial BioBlock Plus.
- B. Ceiling Attenuation Class (CAC) of 38, Light Reflectance (LR) of 0.82 and Noise Reduction Class (NRC) of 0.55.
- C. Recycled Content: Manufactured from minimum 65 percent recovered slag.

## 2.03 SUSPENSION SYSTEM

- A. Type Armstrong 15/16" Prelude Plus XL fireguard exposed Tee grid, Color: White
- B. Suspension system shall not be less in size and strength than required to support itself and shall be increased in size and strength as necessary to support the light fixtures, acoustical units and related items without deflecting more than 1/36" of the span when tested as a simple beam, ends free.
  - 1. Grid: ASTM C 635, intermediate duty, steel exposed T; nominal 1-inch width; stab-in connections. ASTM E580, galvanized steel with baked polyester paint finish. Main beams and cross tees in accordance with the Building Code of New York State, Section 1621 for Category C as described in ESR-1308.
  - 2. Accessories: Stabilizer bars, beam end retaining clips, hold down clips, and splices.
  - 3. Support System: Main runners, cross tees, spacer bars, variable placement tees, grid adapters, and components shall be of cold rolled steel with a protective coating.
  - 4. Edge Moldings: Moldings and channel moldings nominal 15/16-inch x 15/16-inch hemmed (#7809), shall be of cold rolled steel with a protective coating of standard (white) factory applied and in accordance with the Building Code of New York State, Section 1621 for Category C as described in ESR-1308.
  - 5. Recycled Content: Manufactured from minimum 20 percent recycled steel.
  - 6. Attachment devices, wire hanger and ties in accordance with the Building Code of New York State, Section 1621 for Category C.

## 2.04 HANGERS

- A. Suspension wire attached to power actuated fasteners shall be 12 gauge galvanized pre-straightened wire to support a maximum of 16 sq. ft. of ceiling and 8 gauge galvanized pre-straightened wire to support a ceiling area exceeding 16 sq. ft. No hanger shall support more than 24 sq. ft. of ceiling.
- B. Types of power actuated fasteners shall be subject to the approval of the manufacturer for the type of ceiling installed.

## 2.05 ACCESSORIES

- A. Provide all accessories, as required or recommended by manufacturer for use/condition including, spacers, hold downs, and wall moldings.
- B. Touch up Paint: Type and color to match acoustic and grid units.
- C. Sealant for Perimeter Moldings: Specified in Section 079200.

## PART 3 - EXECUTION

## 3.01 EXAMINATION

- A. Section 013100 – Project Management and Coordination: Verification of existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.
- C. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

## 3.02 INSTALLATION

- A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.
- B. Install ceiling system per manufacturer's instructions and in accordance with the Building Code of New York State, Section 1621 to support ceiling and applied fixture loads. Provide hanger wire at all four corners of each light fixture. If acceptable to authority having jurisdiction, fixed attachment may be accomplished by pop-riveting the runner to the wall molding.
- C. Install ceiling tile in accordance with tile layouts shown on Reflected Ceiling Plans and approved shop drawings.
- D. Contractor to coordinate work closely with electrical and mechanical trades in order to establish and maintain clearances with a minimum of conflict.
- E. Refer to Acoustical Materials Bulletin LXXII (1962) for installation and materials standards.
- F. Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- G. Hanger spacing to fall not more than 4'-0" o.c., not more than 2' 0" from ends, and not more than 4'-0" o.c. between ends of main runners and as required to support other work resting in or on ceiling. All four corners of all light fixtures must be supported with hanger wire.
- H. The presence of a hanger wire within 3 inches of an expansion relief joint as called for in ASTM C 636 shall be required in addition to the requirements of the Building Code of New York State, Section 1621.2.5.
- I. Where conditions prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- J. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- K. Do not eccentrically load system or produce rotation of runners.
- L. Perimeter Molding:
  - 1. Install edge molding at intersection of ceiling and vertical surfaces into bed of acoustic sealant at walls.
  - 2. Use longest practical lengths.
  - 3. Overlap and rivet corners.

4. Provide at junction with other interruptions.
  5. To be same material and style as grid system.
  6. To be manufactured by the same manufacturer as grid system.
- M. Wall moldings shall be provided at the perimeter of all rooms and shall be securely fastened to walls or as indicated. Finish channel corner plates shall be used at all exterior corners. Channel flanges shall be cut, the web bent, and flanges overlapped to form interior corners.

### 3.03 INSTALLATION – ACOUSTIC UNITS

- A. Install acoustic units in accordance with manufacturer's instructions.
- B. Install acoustical panels in coordination with suspended system, with edges resting on flanges of main runner and cross tees. Cut and fit panels neatly against abutting surfaces. Support edges by wall moldings.
- C. Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
- D. Lay directional patterned units one way. Fit border trim neatly against abutting surfaces.
- E. Install units after above ceiling work is complete.
- F. Install acoustic units level, in uniform plane, and free from twist, warp, and dents.
- G. Cutting Acoustic Units:
  1. Cut and field paint exposed edges to fit irregular grid and perimeter edge trim.
  2. Cut and field paint exposed edges of field cut units.
  3. Double cut and field paint exposed edges of tegular or recessed units.

### 3.04 CLEANING

- A. Tile and trim shall be clean and without blemish at time of acceptance.
- B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members.
- C. Replace damaged and broken panels.
- D. At the completion of the finished acoustical ceiling work, remove all rubbish from the building, leaving floors broom clean. Excess material, scaffolding, tools and other equipment shall be removed from the building and job site.

### 3.05 CONSTRUCTION TOLERANCES

- A. Section 014500 - Quality Control: Tolerances.
- B. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- C. Local kinks or bends shall not be made in hanger wires as a means of leveling main runners. Wire hanger loops shall be tightly wrapped and sharply bent to prevent any vertical movement or rotation of the member within the loops.
- D. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

### END OF SECTION 095123

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Work of this Section shall be included in the Bid Form as Alternate Bid Items.
- B. Epoxy floor coating system with integral cove base.
- C. Surface preparation.

## 1.02 REFERENCES

- A. ASTM D3363 - Hardness Testing.
- B. ASTM D1044 - Resistance of Transparent Plastic Materials to Abrasion.

## 1.03 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns and colors available.
- B. Manufacturer's Installation Instruction: Indicate special procedures and perimeter conditions requiring special attention.
- C. Upon request, provide six-inch-long sample demonstrating floor and cove base final product.

## 1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products as per manufacturer's instructions.
- B. Store materials in a dry, secure area.
- C. Maintain minimum temperature at 55°F.
- D. Store materials for three days prior to installation in area of installation to achieve temperature stability.

## 1.05 ENVIRONMENTAL REQUIREMENTS

- A. Maintain ambient temperature required by manufacturer three days prior to, during and 24 hours after installation of materials.

## 1.06 WARRANTY

- A. Provide 5-year manufacturer's warranty.
- B. Warranty: Include coverage against flooring delamination from substrate and degradation of surface finish.

## 1.07 MAINTENANCE DATA

- A. Submit maintenance data.
- B. Maintenance Data: Include maintenance procedures, recommended maintenance materials, procedures for stain removal, repairing surface and suggested schedule for cleaning.

## PART 2 - PRODUCTS

## 2.01 MANUFACTURERS

- A. Dur-A-Quartz as manufactured by Dur-A-Flex.
- B. Ceramic Carpet #400 as manufactured by Sherwin Williams.
- C. Or approved equal.

## 2.02 MATERIALS

- A. Floor Coating: 100% solids epoxy resin.
  - 1. Compressive Strength: ASTM C579 - 12,500 psi.
  - 2. Hardness: ASTM D2240 - 75 - 90; D.
- B. Aggregate: Quartz, ASTM D451, manufactured by 3M Company or approved equal; color as selected by Architect/Engineer from manufacturer's full line.
- C. Top Coat – Dur-A-Flex Poly-Thane 2 or Sherwin Williams GP4638 Urethane Seal Coat.

## 2.03 ACCESSORIES

- A. Primers and Fillers: Waterproof; types recommended by flooring manufacturer.
- B. Expansion Joints/Joint Fillers: Types recommended by floor-ing manufacturer for specific application.

## PART 3 - EXECUTION

## 3.01 EXAMINATION

- A. Verify that surfaces are smooth and flat with maximum variation of 1/4-inch in 10-feet and are ready to receive work.
- B. Verify existing finishes and chemicals on concrete floors have been removed and the slab prepared in accordance with manufacturer instructions.

## 3.02 PREPARATION

- A. Prepare surface as per manufacturer's recommendations.
- B. Vacuum clean substrate.
- C. Apply primer as per manufacturer's recommendations.

## 3.03 INSTALLATION FLOORING

- A. Apply floor coating system in accordance with manufacturer's instructions. Form integral ¼ inch radius cove base 4 inches high with same materials as floor coating. Apply three finish coats minimum and spread aggregate uniformly.
- B. Install expansion joints and/or joint filler as per manufacturer's instructions.

3.04 PROTECTION OF FINISHED WORK

- A. Protect finished work until work is complete and cured.
- B. Prohibit traffic on floor finish for 48 hours after installation, or as per manufacturer's instructions.
- C. Barricade area to protect flooring until fully cured.

**END OF SECTION 096716**

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Painting, sealing and filling.
- C. The work described in this section includes, but is not limited to the following:
  - 1. Concrete and concrete block walls.
  - 2. Miscellaneous walls and surfaces, as indicated on painting schedule, plans and details.
  - 3. Rough and finish carpentry.
  - 4. Steel lintels and miscellaneous steel fabrications.
  - 5. Exposed pipes and conduits.
  - 6. Metal access panels, miscellaneous trim and surfaces not prefinished or excluded specifically.
  - 7. All items provided by other specification sections and/or indicated on contract drawings that are not pre-finished or that are furnished in prime coats.
- D. All sections or work referencing this section.
- E. Items not included:
  - 1. Anodized aluminum or stainless-steel surfaces.
  - 2. Prefinished surfaces.
  - 3. Exposed pipes and booster pumps, see Section 099744.

## 1.02 RELATED SECTIONS

- A. Section 061000 – Rough Carpentry
- B. Section 062000 – Finish Carpentry
- C. Section 079200 - Joint Sealants

## 1.03 REFERENCES

- A. Nysdec: voc compliance.
- B. ASTM D16 – Definitions of Terms Relating to Paint, Varnish, Lacquer and Related Products.
- C. ASTM D3359 – Standard Test Methods for Measuring Adhesion by Tape Test.
- D. ASTM D7091 – Standard Practice for Nondestructive Measurement of Dry Film Thickness.
- E. NACE (National Association of Corrosion Engineers) – Industrial Maintenance Painting.
- F. NPCA (National Paint and Coatings Association) – Guide to U.S. Government Paint Specifications.
- G. PDCA (Painting and Decorating Contractors of America) – Painting – Architectural Specifications Manual.
- H. SSPC (Society for Protective Coatings) – Steel Structures Painting Manual.

## 1.04 SUBMITTALS

- A. Submit product data under provisions of Section 013300.
- B. Product Data: Provide data on all finishing products to be used.
- C. Provide schedule indicating all surfaces to be painted, type of primer and finish paint, surface preparation and color to Architect prior to application. Provide manufacturers product number and description.
- D. Samples:
  - 1. Submit two sets of paper chip samples, illustrating range of colors available for each surface finishing product scheduled.
- E. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.
- F. Submit material safety data sheets (MSDS).

## 1.05 QUALITY ASSURANCE

- A. The Contractor shall either verify in writing that he intends to apply the products listed or shall submit for approval a list of comparable materials of another listed approved manufacturer. This submittal shall include full identifying product names, descriptive literature, catalog numbers, and color samples.
- B. Consideration will only be given to Suppliers who can demonstrate that their paint system complies with these specifications having had successful and documented experience of the size, quality, performance and reliability to that specified, and who can successfully demonstrate this criteria to the Architect/Engineer.
- C. Manufacturer: Company specializing in manufacturing the products specified in this section with a minimum 5 years documented experience.
- D. Applicator: Company specializing in performing the work of this section with minimum 5 years documented experience and approved by the manufacturer.
- E. No claim by the Contractor as to the unsuitability or unavailability of any material specified, or his unwillingness to use same, or his inability to produce first class work with same, will be entertained.

## 1.06 ENVIRONMENTAL REQUIREMENTS

- A. Conform to the applicable code(s) for flame and smoke ratings requirements for finishes.
- B. Conform to New York State Code for Volatile Organic Compound (VOC) Content.
- C. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- D. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer. Do not apply exterior coatings when unfavorable weather conditions are forecast within 24 hours of application.
- E. Apply exterior paint only when temperature exceeds 50 degrees F or as otherwise required by manufacturer and drying conditions are good and predicted to remain so for at least 24 hours.

- F. Apply interior paint only when inside space and surface temperatures exceed 60 degrees F or as required by manufacturer and will be maintained above that point until paint has dried. Provide and maintain application temperatures for all finishes.
- G. Provide minimum lighting levels of 80-foot candles (860 1x) measured mid-height at substrata surface.

#### 1.07 DELIVERY, STORAGE AND PROTECTION

- A. Deliver, store and handle products under the provisions of Section 016500.
- B. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- C. Container label to include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- D. Store paint at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.
- E. Do not allow product to freeze.

#### 1.08 PROJECT CONDITIONS

- A. Section 013100 – Project Management and Coordination.
- B. Sequence application to the following:
  - 1. Do not apply finish coats until paintable sealant is applied.
  - 2. Do not apply sealant or primer until surfaces are properly prepared.

#### 1.09 EXTRA MATERIALS

- A. Furnish under provisions of Section 017800. Supply minimum 1 gallon of each color, type, and surface texture used; store where directed.
- B. Label each container with color, type, texture, room locations, in addition to the manufacturer's label.

#### 1.10 PROTECTION OF OTHER WORK

- A. The Contractor shall furnish and lay drop cloths in all areas where painting is being done to protect floors and other work from damage. He shall be responsible for any damage to other work and shall replace any materials which have been damaged to such an extent that they cannot be restored to their original condition.
- B. Protect all finished surfaces by covering or by removing and replacing, in case of small items such as hardware.

#### 1.11 JOB CONDITIONS

- A. Before painting is started in any area, the area shall be cleaned, and excessive dust shall be removed from all areas to be painted. After painting operations begin in a given area, clean only with commercial vacuum cleaning equipment.

- B. Adequate illumination and ventilation shall be provided in all areas where painting operations are in progress.

#### 1.12 INSPECTION OF SURFACES

- A. Before starting any work, surfaces to receive paint finish shall be examined carefully for defects which cannot be corrected by the procedures specified herein and which might prevent satisfactory painting results. Work shall not proceed until such damages are corrected.
- B. The commencing of work shall be construed as acceptance of the surfaces, and thereafter this Contractor shall be fully responsible for satisfactory work as required herein.

#### 1.13 COOPERATION WITH OTHER TRADES

- A. This work shall be scheduled and coordinated with other trades and shall not proceed until other work and/or job conditions are as required to achieve satisfactory results.
- B. The Contractor shall examine the specifications for the various other trades and shall thoroughly familiarize himself with all their provisions regarding painting. All surfaces that are left unfinished by the requirements of other sections except "Items not Included" in this Section, shall be painted or finished as part of the work covered by this Section.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS - PAINT

- A. The following requirements listed in this specification are based upon products as manufactured by Tnemec and Sherwin-Williams and are provided as the standard of quality for the basis of the bid. Substitutions shall be considered during bidding as stipulated in Section 013300.

#### 2.02 PAINT MATERIAL

- A. Refer to the attached schedule for a listing of the appropriate surfaces for each paint material. The following are the types of materials that shall be used:
  1. Modified Aromatic Polyurethane Primer:
    - a. Tnemec Series 1 Omnithane or Sherwin-Williams B65A14 Corothane I Mio-Zinc
  2. Polyamidoamine Epoxy:
    - a. Tnemec Series V69 Hi-Build Epoxoline II or Sherwin-Williams B58-600 Macropoxy 646 Fast Cure Epoxy
  3. Aliphatic Acrylic Polyurethane:
    - a. Tnemec Series 73 Endura-Shield or Sherwin-Williams B65-350 Hi-Solids Polyurethane
  4. 100% High Solids, Hi-Build Amine Epoxy:
    - a. Tnemec 280 Tneme-Glaze or Sherwin-Williams B62-210 Dura-Plate UHS
  5. Waterborne Cementitious Acrylic Filler:
    - a. Tnemec Series 130 Envirofill or Sherwin-Williams B42W200 Cement-Plex 875
  6. Modified Polyamine Epoxy:
    - a. Tnemec Series 201 Epoxoprime or Sherwin-Williams B58WQ510 Corobond 100 Epoxy
  7. Modified Polyamine Epoxy:
    - a. Tnemec Series 215 Surfacing Epoxy or Sherwin-Williams B58W910 Steel Seam FT-910
  8. Modified Polyamine Epoxy:
    - a. Tnemec Series 22 Epoxoline or Sherwin-Williams B62-210 Dura-Plate UHS
  9. Self-Crosslinking Hydrophobic Acrylic:

- a. Tnemec Series 115 Uni-Bond DF or Sherwin-Williams B66W1 DTM Primer/Finisher
- 10. HDP Acrylic Polymer:
  - a. Tnemec Series 1028 Enduratone or Sherwin-Williams B66-350 Sher-Cryl HPA
- B. Colors shall be as selected by the Owner and Architect/Engineer.
- C. Gloss levels for paints required are as follows (ref. National Paint & Coatings Association - NPCA):
 

<u>Sheen Level</u>	<u>Test Method</u>	<u>Gloss Range</u>
Flat	85-degree meter	Below 15
Eggshell	60-degree meter	5 to 20
Satin	60-degree meter	15 to 35
Semi-Gloss	60-degree meter	30 to 65
Gloss	60-degree meter	Over 65
- D. Coatings shall be ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogenous coating, good flow and brushing properties, capable of drying or curing free of streaks or sags.

### 2.03 MIXING

- A. Mixing or tinting shall be done at factory.
- B. Site mixing will be prohibited.

### 2.04 APPLICATION EQUIPMENT

- A. Application equipment items are not required to be new, but they shall be adequate and commensurate for the work and work-manship required herein.

### 2.05 ACCESSORIES MATERIALS

- A. Provide all required ladders, scaffolding, drop cloths, mask-ings, scrapers, tools, sandpaper, dusters, cleaning solvents, and remove waste as required to perform the work and achieve the results specified herein. Materials not specifically indicated but required to achieve the finishes specified shall be of commercial quality and as recommended by the manufacturer.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Section 013100 – Project Management and Coordination: Verification of existing conditions before starting work.
- B. Verify the surfaces and substrate conditions are ready to receive Work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- D. Test shop applied primer for compatibility with subsequent cover materials.
- E. Do not begin work until surfaces to receive paint are dry, firm, sound, clean and free of defects or blemishes which would adversely affect the quality or appearance of the finished work.

- F. Verify items are ready to receive finishes. Beginning of work means Contractor accepts existing substrata and surface conditions.
- G. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:
  - 1. Masonry and Stucco: 12 percent.
  - 2. Concrete: 8 percent.

### 3.02 PREPARATION - GENERAL

- A. Protect finished surfaces and equipment.
- B. Correct defects and clean surfaces which affect work of this section. Remove any coatings that exhibit loose surface defects.
- C. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- D. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- E. Uncoated Ferrous Surfaces: Remove scale by wire brushing; wash clean with solvent. Apply treatment of phosphoric acid solution. Prime paint after repairs.
- F. Shop Primed and Existing Previously Painted Steel Surfaces: Sand and scrape to remove loose paint and rust, power tool clean, feather edges; clean surfaces with solvent. Prime bare steel surfaces.
- G. Surface Appurtenances: Remove or mask electrical plates, hardware, light fixture trim, escutcheons, fittings, and all other surfaces to be protected from paint prior to preparing surfaces or finishing.
- H. Surfaces: Correct defects and clean surfaces which affect work of this section. Remove or repair existing coatings that exhibit surface defects.
- I. Follow manufacturer's recommendations for preparing surfaces to be primed and painted.
- J. Mask, cover or remove surfaces to be protected from paint. Protect electrical, plumbing and mechanical equipment and systems not to be painted.
- K. Provide adequate lighting.
- L. Clean and sand surfaces to be painted.
- M. Clean and remove scale, oil or grease from ferrous metal surfaces.
- N. Protect finished surfaces and equipment.

### 3.03 EXAMINATION – ADDITIONAL REQUIREMENTS

- A. Before painting is started in any area, the area shall be cleaned, and excessive dust shall be removed from all areas to be painted. After painting operations begin in a given area, clean only with commercial heavy-duty vacuum cleaning equipment.
- B. All concrete shall be finished as specified prior to paint application.

- C. Adequate illumination and ventilation shall be provided in all areas where painting operations are in progress.
- D. Before starting any work, surfaces to receive paint finish shall be examined carefully for defects which cannot be corrected by the procedures specified herein and which might prevent satisfactory painting results. Work shall not proceed until such damages are corrected.
- E. The commencing of work in a specific area only shall be construed as acceptance of the surfaces, and thereafter the Contractor's applicator shall be fully responsible for satisfactory work as required herein.

#### 3.04 PREPARATION – ADDITIONAL REQUIREMENTS

- A. All surfaces shall be prepared as specified in the attached schedule. Surface preparation of steel shall be in accordance with SSPC - Chapter 2 - Surface Preparation Specifications.
- B. Galvanized surfaces: Remove surface contamination and oils, lightly sand and wash with solvent. Apply coat of etching primer.
- C. Uncoated ferrous surfaces: Remove scale by wire brushing and wash clean with solvent. Apply treatment of phosphoric acid solution. Prime paint after repairs.
- D. Shop primed and existing previously painted steel surfaces: Sand and scrape to remove loose paint and rust, power tool clean, feather edges; clean surfaces with solvent. Prime bare steel surfaces.
- E. Masonry: All joints shall be tooled slightly concave. After erection, all mortar splatter shall be removed, and all voids and holes shall be patched and leveled flush with the surrounding surfaces and be bagged to simulate surrounding texture. All masonry shall be installed with the intent that it will be painted.
- F. Concrete: All exposed concrete shall be installed with the intent that it will be painted. All bug holes and honeycombed areas shall be patched as specified in Section 033000.
- G. Surface appurtenances: If allowed by the Architect/Engineer, remove or mask electrical plates, hardware, light fixture trim, escutcheons, fittings, and all other surfaces to be protected from paint prior to preparing surfaces or finishing. Refer to paragraph 1.01 (B).
- H. Surfaces: Correct defects and clean surfaces, which affect work of this Section. Remove or repair existing coatings that exhibit surface defects.
- I. Do not paint over UL Labels, manufacturer installed equipment nameplates, factory installed nameplates and equipment identification plates.

#### 3.05 APPLICATION

- A. Application of paint shall be in accordance with SSPC - Chapter 5 - Paint Application Specifications.
- B. It is the intent that the above brand names and types of material will give complete coverage with uniform appearance. If any additional coat is necessary for complete coverage and appearance, it shall be done at no additional cost.
- C. All paints to be new stock, delivered to job unopened. Prepare surfaces properly for receiving paint; protect adjacent surfaces not to be painted.

- D. Use of sprays may be permissible, upon prior approval by the Owner.
- E. All work shall be carefully done by skilled mechanics. Finished surfaces to be uniform in thickness, coverage, gloss, finish and color, and free from brush marks. All coats shall be thoroughly dry before applying succeeding coats.
- F. Apply products in accordance with manufacturer's instructions. Do not apply finishes to surfaces that are not dry.
- G. Do not apply finish coats until paintable sealant is applied.
- H. Do not apply sealant or primer until surfaces are properly prepared.
- I. Spray, roller and/or brush may be used as appropriate for the various conditions, but the specified dry film thicknesses must be provided.
- J. Thicknesses listed in the Schedule for High Build Coatings can be obtained in one coat by spray, but not necessarily by brush or roller.
- K. The specified DFT shall hold precedence over whatever recommendations are made for other supplier's products.
- L. Minimum air and surface temperature for application of epoxy coatings shall be maintained at 60 degrees F unless otherwise noted on the manufacturer's product data sheet.
- M. Minimum air and surface temperature for 100% solids by volume epoxy coatings shall be 70 degrees F. Optimum temperature of unopened 100% solids epoxy shall be 75 degrees F. Minimum temperature of unopened 100 solids epoxy shall be 60 degrees F.
- N. Heat shall be supplied by equipment that delivers clean, warm air into the space to be coated. Heat shall not be supplied by devices that give off exhaust fumes such as carbon dioxide or carbon monoxide into the area to be coated. The purpose of this requirement is to prevent the coatings from yellowing during application and cure.
- O. Sand surfaces lightly between coats to achieve required finish.
- P. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- Q. Prime concealed surfaces and cut ends of interior and exterior woodwork with primer paint.
- R. Apply materials to obtain:
  - 1. Owners and Architect/Engineer's satisfaction and approval.
  - 2. Smooth uniform appearance.
  - 3. Complete coverage.
  - 4. Match with approved color sample.
  - 5. Work free of runs, sags and skips.
  - 6. Sharp, clean edges where finishes or colors change.
  - 7. Surfaces free of defects and damage at time of acceptance.
- S. Fill nail holes and cracks after prime coat. Fill minor imperfections prior to final coats.
- T. Sand metal, wood and drywall between coats.

- U. Paint PVC pipe in accordance with recommendations of the paint manufacturer and apply primer.

### 3.06 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Paint shop primed equipment.
- B. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- C. Prime and paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, except where items are shop finished.
- D. Paint exposed conduit and electrical equipment occurring in finished areas.
- E. Paint both sides and edges of plywood backboards of electrical and telephone equipment before installing equipment.
- F. Color code equipment, piping, conduit, and exposed duct work in accordance with other Sections.

### 3.07 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under the provisions of Section 014500.
- B. Dry Film Thickness Testing: Owner will engage the services of a qualified testing and inspecting agency to inspect and test coatings for dry film thickness.
  - 1. Contractor shall touch up and restore coated surfaces damaged by testing.
  - 2. If test results show that dry film thickness of applied coating does not comply with coating manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with coating manufacturer's written recommendations.

### 3.08 PROTECTION

- A. Protect adjacent areas from splattering of paint.
- B. Protect painted coating from damage or discoloration until project is accepted by Owner.

### 3.09 CLEAN UP

- A. Clean work under the provisions of 017423.
- B. Collect waste materials, which may constitute a fire hazard, place in closed metal containers, and remove daily from site.
- C. Install finished items removed by this Section. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.
- D. Remove masking and protective covering.
- E. Leave factory finish surfaces clean and free of paint.
- F. Clean adjacent area of any paint not scheduled to receive painted coating.
- G. Remove tools, rubbish, equipment and unused material.

## 3.10 SCHEDULE

- A. Ferrous Metals, Interior (including, but not limited to, structural AND miscellaneous steel)
  - 1. Shop Surface Preparation - SSPC-SP6/NACE No.3, Commercial Blast Cleaning.
  - 2. Field Surface Preparation - SSPC-SP1 "Solvent Cleaning" and "Low Pressure Water Clean" (as necessary) in accordance with SSPC-SP WJ-4 / NACE WJ-4 to remove all forms of surface contamination and any formations of zinc oxide. Power tool clean all damages to shop applied primer in accordance with SSPC-SP3 "Power Tool Cleaning" and apply spot coat of designated field primer.
  - 3. Shop Primer – Series 1 Omnithane at 2-3 mils or Corothane I Mio-Zinc at 3-4 mils.
  - 4. Field Primer – Series V69 Epoxoline II at 3-5 mils or Macropoxy 646 at 3-5 mils in finish color.
  - 5. Finish (2 coats) – Series V69 Epoxoline II at 3-4 mils each or Macropoxy 646 at 3-4 mils each.
  
- B. Ferrous Metals, exterior (including, but not limited to, structural AND miscellaneous steel)
  - 1. Shop Surface Preparation - SSPC-SP6/NACE No.3, Commercial Blast Cleaning.
  - 2. Field Surface Preparation - SSPC-SP1 "Solvent Cleaning" and "Low Pressure Water Clean" (as necessary) in accordance with SSPC-SP WJ-4 / NACE WJ-4 to remove all forms of surface contamination and any formations of zinc oxide. Power tool clean all damages to shop applied primer in accordance with SSPC-SP15 "Commercial Grade Power Tool Cleaning" and apply spot coat of designated field primer.
  - 3. Shop Primer – Series 1 Omnithane at 2-3 mils or Corothane I Mio-Zinc at 3-4 mils.
  - 4. Field Primer – Series 1 Omnithane at 2-3 mils or Corothane I Mio-Zinc at 3-4 mils.
  - 5. Field Intermediate – Series V69 Epoxoline II at 3-5 mils or Macropoxy 646 at 3-5 mils in finish color.
  - 6. Finish (2 coats) – Series 73 Endura-Shield III at 2-3 mils or Hi-Solids Polyurethane at 3-4 mils each.
  
- C. Galvanized Metals
  - 1. Surface Preparation – Per manufacturer's recommendations
  - 2. Prime Coat – Series 115 Uni-Bond DF at 2-4 mils or Pro-Cryl Universal Primer at 2-4 mils.
  - 3. Finish (2 Coat) - Series 1028 Enduratone at 2-3 mils or Sher-Cryl HPA at 2-3 mils each.
  
- D. Existing Metals, Interior (including, but not limited to, structural AND miscellaneous steel)
  - 1. Surface Preparation – SSPC-SP1 "Solvent Cleaning" and "Low Pressure Water Clean" (as necessary) in accordance with SSPC-SP WJ-4 / NACE WJ-4 to remove all forms of surface contamination and any formations of zinc oxide. Power tool clean all damages to shop applied primer in accordance with SSPC-SP3 "Power Tool Cleaning" and apply spot coat of designated field primer.
  - 2. Field Primer – Series V69 Epoxoline II at 3-5 mils or Macropoxy 646 at 3-5 mils in finish color.
  - 3. Finish (2 coats) – Series V69 Epoxoline II at 3-4 mils or Macropoxy 646 at 3-5 mils each.
  
- E. Block walls, interior
  - 1. Surface Preparation - Remove all loose mortar, mortar splatter and mortar protrusions. Ensure all surfaces are dry and free of dust and other construction residues. Allow curing for 28 days.
  - 2. Block Filler – Series 130 Envirofill, 60-80 sf/gal or Cement-Plex 875, 60-80 sf/gal.
  - 3. Finish (2 coats) – Series 280 Tneme-Glaze at 7-10 mils or Dura-Plate UHS at 7-10 mils each. Finish surface shall be uniformly smooth to the touch, free of voids and cleanable.
  
- F. Concrete, interior
  - 1. Surface Preparation - Prepare all surfaces in accordance with SSPC-SP13 / NACE No.6 removing all loose material, laitance, curing compounds, hardners, sealers and other

contaminates. Establish surface profile in accordance with ICRI 310.2R CSP 3 – 5. Level all protrusions and fill all voids, bug holes or other cavities with a filler or surfacer approved by the coating manufacturer. Allow curing for 28 days.

2. Field Primer – Series 201 Epoxoprime at 5-7 mils or Corobond 100 Epoxy Primer at 5-6 mils in finish color.
  3. Finish (2 coats) – Series 280 Tneme-Glaze at 7-12 mils or Dura-Plate UHS at 7-10 mils each. Finish surface shall be uniformly smooth to the touch, free of voids and cleanable.
- G. Exposed pipes and conduits, metal doors and frames, mechanical grilles, convectors, etc.
1. Surface Preparation – SSPC-SP1 “Solvent Cleaning” followed by abrasive sanding.
  2. Field Primer – Series 115 Uni-Bond DF at 2-4 mils or Pro-Cryl Universal Primer at 2-4 mils.
  3. Finish (2 coats) – Series 1028 Enduratone at 2-3 mils or Sher-Cryl HPA at 2-3 mils each.

**END OF SECTION 099100**

## PART 1 - GENERAL

## 1.01 DESCRIPTION OF WORK

- A. This section describes the general requirements for all mechanical items and systems required by the Contract Documents.
- B. Comply with all Contract Requirements, General Conditions, Supplementary Conditions and Division 1 Sections applying to or affecting the Work of Division 23.
- C. Unless specifically dimensioned, the Work shown on the Drawings is in diagrammatic form only to show general arrangement.
- D. Include, in the Work, all accessories and appurtenances, necessary and integral, for the intended operation of any system, component or device, as such systems, components and devices are specified.
- E. Do not install pipe or conduit through ductwork.
- F. If the pipe or duct size shown on the Drawings does not match the connection size of the equipment that it is connected to, provide the necessary transition pieces at the piece of equipment.
- G. Do not use or allow to be used asbestos or asbestos-containing materials on this project. Be rigorous in assuring that all materials, equipment, systems and components thereof do not contain asbestos. Any deviations from this requirement shall be remedied at the Contractor's expense without regard to prior submittal approvals.

## 1.02 RELATED DOCUMENTS

- A. The General Conditions and General Requirements Division 1 apply to the Work of this Section.

## 1.03 REFERENCE STANDARDS

- A. Compliance with the following codes and standards shall be required:
  - 1. Codes, Rules and Regulations of the State of New York
  - 2. USAS USA Standards Institute (Formerly ASA)
  - 3. AMCA Air Moving and Conditioning Association
  - 4. ADC Air Diffusion Council
  - 5. NEMA National Electrical Manufacturers Association
  - 6. FM Factory Mutual
  - 7. NFPA National Fire Protection Association
  - 8. ASTM American Society for Testing Materials
  - 9. UL Underwriters Laboratories, Inc.
  - 10. NEC National Electrical Code
  - 11. ASME American Society of Mechanical Engineers
  - 12. ANSI American National Standards Institute
  - 13. OSHA Occupational Safety and Health Act
  - 14. BSA Board of Standards and Appeals
  - 15. MEA Materials and Equipment Acceptance
  - 16. DEC New York State Department of Environmental Conservation - 6 NYCRR Part 613 Handling and Storage of Petroleum
  - 17. ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers.
  - 18. AWWA American Water Works Association

19.	MSS	Manufacturer's Standardization Society of the Valve and Fitting Industry
20.	ARI	American Refrigeration Institute
21.	SMACNA	Sheet Metal and Air Conditioning Contractor's National Association
22.	TEMA	Tubular Exchanger Manufacturers Association
23.	F.S. or FED	Spec. Federal Specification
24.	ASA	Acoustical Society of America
25.	NACE	National Association of Corrosion Engineers
26.	ASSE	American Society of Sanitary Engineers
27.	International Building Code	
28.	International Fire Code	
29.	International Existing Building Code	
30.	International Fuel Gas Code	
31.	International Plumbing Code	
32.	International Energy Conservation Code	
33.	International Mechanical Code	
34.	New York State Industrial Code Rules	
35.	IRI	Industrial Risk Insurers
36.	AGA	American Gas Association
37.	AABC	American Air Balance Council
38.	NEBB	National Environmental Balancing Bureau
39.	AWS	American Welding Society

#### 1.04 DEFINITIONS

- A. "Provide" means furnish and install, complete the specified material, equipment or other items and perform all required labor to make a finished installation.
- B. "Furnish and install" has the same meaning as given above for "Provide."
- C. Refer to General Conditions for other definitions.

#### 1.05 ABBREVIATIONS

- A. Reference by abbreviation may be made in the Specifications and the Drawings in accordance with the following list:
  - 1. HVAC Heating, Ventilating and Air Conditioning
  - 2. CM Construction Manager
  - 3. AC Air Conditioning
  - 4. H & V Heating and Ventilating
  - 5. AWG American Wire Gauge
  - 6. BWG Birmingham Wire Gauge
  - 7. USS United States Standard
  - 8. B & S Brown & Sharpe
  - 9. OS & Y Outside Screw and Yoke
  - 10. IBBM Iron Body Brass Mounted
  - 11. WSP Working Steam Pressure
  - 12. PSIG Pounds per Square Inch Gauge
  - 13. PRV Pressure Reducing Valve
  - 14. GPM Gallons per Minute
  - 15. MBH Thousand BTU per hour
  - 16. BTU British Thermal Units
  - 17. WG Water Gage
  - 18. LB Pound (Also shown as: #)
  - 19. ASME American Society of Mechanical Engineers

- 20. ASTM American Society for Testing Materials
  - 21. ABMA American Boiler Manufacturers Association
  - 22. ASA American Standards Associates
  - 23. MER Mechanical Equipment Room
- See Drawings for additional abbreviations

#### 1.06 REVIEW OF CONTRACT DOCUMENTS AND SITE

- A. Give written notice with the submission of bid to the Architect/Engineer of any materials or apparatus believed inadequate or unsuitable, in violation of laws, ordinances, rules or regulations of Authorities having jurisdiction, and any necessary items of work omitted. In the absence of such written notice it is mutually agreed that the Contractor has included the cost of all required items in his proposal for a complete project.
- B. Contractors shall acknowledge that they have examined the Plans, Specifications and Site, and that from his own investigations he has satisfied himself as to the nature and location of the Work; the general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials; availability of labor, utilities, roads and uncertainties of weather; the composition and condition of the ground; the characters quality and quantity of subsurface materials to be encountered; the character of equipment and facilities needed preliminary to and during the execution of the Work; all federal, state, county, township and municipal laws, ordinances and regulations particularly those relating to employment of labor, rates of wages, and construction methods; and all other matters which can in any way affect the Work or the cost thereof under this Contract. Any failure by the Contractor to acquaint himself with the available information concerning these conditions will not relieve him from the responsibility for successfully performing the Work.
- C. Owner assumes no responsibility for any understanding or representation made during or prior to the negotiation and execution of this Contract unless such understanding or representations are expressly stated in the Contract and the Contract expressly provides that the responsibility, therefore, is assumed by the Owner.

#### 1.07 MEASUREMENTS

- A. Base all measurements, both horizontal and vertical from established bench marks. Make all Work agree with these established lines and levels. Verify all measurements at site; and check the correctness of same as related to the Work.

#### 1.08 LABOR AND MATERIALS

- A. Provide all materials and apparatus required for the Work of new and first-class quality. Furnish, deliver, arrange, erect, connect and finish all materials and equipment in every detail, so selected and arranged as to fit properly into the building spaces.
- B. Remove all materials delivered, or work erected, which does not comply with Drawings or Specifications, and replace with proper materials, or correct such work as directed, at no additional cost to the Owner.

#### 1.09 COVERING OF WORK

- A. Do not cover up or hide from view any duct, piping, fitting, or other work of any kind before it has been examined or approved by the Architect/Engineer and/or other authority having jurisdiction over the same. Remove and correct immediately any unacceptable or imperfect work or unauthorized or disapproved materials discovered immediately after being disapproved.

## 1.10 PROTECTION

- A. Protect the Work and material of all trades from damage and replace all damaged material with new.
- B. Protect work and equipment until the Work is finally inspected, tested, and accepted; protect the Work against theft, injury or damage; and carefully store material and equipment received on site which is not immediately installed; close open ends of work with temporary covers or plugs during construction to prevent entry of foreign material.
- C. Preserve all public and private property, along and adjacent to the Work, and use every precaution necessary to prevent damage or injury thereto. Use suitable precautions to prevent damage to pipes, conduits and other underground structures or utilities, and carefully protect from disturbance or damage all property marks until an authorized agent has witnessed or otherwise referenced their location, and do not remove them until directed.

## 1.11 CUTTING AND PATCHING

- A. Provide all cutting and rough patching required for the Work. Perform all finish patching.
- B. Furnish and locate all sleeves and inserts required before the floors and walls are built, pay the cost of cutting and patching required for pipes where sleeves and inserts were not installed in time, or where incorrectly located. Provide all drilling required for the installation of hangers.
- C. Punch or drill all holes cut through concrete slabs or arches from the underside. Do not cut structural members without the approval of the Architect/Engineer. Perform all cutting in a manner directed by the Architect/Engineer.
- D. Do not do any cutting that may impair strength of building construction. Do not drill any holes, except for small screws, in beams or other structural members without obtaining prior approval. All Work shall be done in a neat manner by mechanics skilled in their trades and as approved.

## 1.12 SUBMITTALS

- A. Submit for review, shop drawings for all materials and equipment furnished and installed under this Contract. Submissions shall include but not be limited to:
  - 1. Ductwork layout drawings, air devices and accessories
  - 2. Breeching layout drawings
  - 3. Piping and equipment layout drawings.
  - 4. Piping materials, valves, hangers, supports and accessories
  - 5. Automatic temperature control equipment, diagrams and control sequences
  - 6. Equipment, fixtures, and appurtenances
  - 7. Insulation
  - 8. Rigging Plan - Include the name of the rigging company; a layout drawing that details the crane with its outriggers extended outward. Provide dimensions showing how rigging operations will affect the road and parking lines being used, the type of crane and its specification including crane arm height, lift capacity, crane reach.
- B. Reports
  - 1. Compliance with listings and approvals for equipment and for fire ratings.
  - 2. Acceptance certificates from inspecting agencies.
  - 3. Complete printed and illustrated operating instructions in report format.
  - 4. Manufacturer's performance tests of equipment.
  - 5. Field pipe and duct testing reports.
  - 6. Field operating test results for equipment.

7. Performance report on the balancing of air and water systems.
  8. Performance reports for vibration isolation equipment.
  9. Manufacturer's reports on motorized equipment alignment and installation.
- C. Specific references to any article, device, product or material, fixture or item of equipment by name, make or catalog number shall be interpreted as establishing a basis of cost and a standard of quality. All devices shall be of the make and type listed by Special Agencies, such as the Underwriters' Laboratories, and where required, approved by the Fire Department.

#### 1.13 SPACE ALLOTMENTS AND SUBSTITUTIONS

- A. The space allotments and equipment layouts on the Drawings are based on the manufacturer's model indicated or scheduled as the "Basis of Design". Ensure that any equipment that is submitted other than the "Basis of Design" will fit in the space allotment and will provide the necessary maintenance clearances as recommended by the manufacturer. If maintenance clearances are not met, pay for any changes such that maintenance clearances will be met.
- B. Bear all costs associated with re-layout of the equipment, changes to piping/ductwork, and other changes as required if approved equipment other than the "Basis of Design" equipment is purchased. This shall also include any structural steel modifications and structural steel design changes. Submit, at no cost to the Owner, a steel design stamped by a structural engineer licensed in the state in which the Work is to be performed for structural modifications that must be made resulting from the use of equipment other than the "Basis of Design" or not specified.

#### 1.14 PAINTING

- A. Prime paint all bare supplemental steel, supports and hangers required for the installation of Division 23 Work in accordance with "Painting" Specification Section. Touch up welds of galvanized surfaces with galvanizing primer.

#### 1.15 MATERIAL SAFETY DATA SHEETS

- A. Submit material safety data sheets (MSDS) for all chemicals, hydraulic fluids, seal oils, lubricating oils, glycols and any other hazardous materials used in the performance of the Work, in accordance with the US Department of Labor, Occupational Safety and Health Administration (OSHA) hazard communication and right-to-know requirements stipulated in 29 CFR 1910.1200 (g).

#### 1.16 MOTORS AND STARTERS

- A. Provide new NEMA Standard electric motors, sized and designed to operate at full load and full speed continuously without causing noise, vibration, and temperature rise in excess of their rating. Provide motors with a service factor of at least 1.15.
- B. Equip motors for belt driven equipment with rails with adjusting screws for belt tension adjustment. Weather protect motors exposed to the weather.
- C. Install high efficiency electric motors for air handling units, relief fans, and exhaust fans.
- D. Provide all motors for use with Variable Frequency Drives with "high efficiency inverter duty" insulation class "F" with class "B" temperature rise and that conform to or exceed the International Energy Conservation Code or the Federal EP Act of 1992 requirements for efficiency.
- E. Provide stainless steel nameplates, permanently attached to the motor, and having the following information as a minimum:

1. Manufacturer
  2. Type
  3. Model
  4. Horsepower
  5. Service Factor
  6. RPM
  7. Voltage/Phase/Frequency
  8. Enclosure Type
  9. Frame Size
  10. Full-Load Current
  11. UL Label (where applicable)
  12. Lead Connection Diagram
  13. Bearing Data
  14. Efficiency at Full Load.
- F. Provide motors whose sound power levels do not exceed that recommended in NEMA MG 1-12.49.
- G. Provide motors with drive shafts long enough to extend completely through belt sheaves when sheaves are properly aligned and balanced.
- H. Protect motor starters on equipment located outdoors in weatherproof NEMA 4X enclosures.
- I. Provide weatherproof NEMA 4X disconnect switches when located outdoors.
- J. Motor Characteristics:
1. 120V/1/60 Hz, 208V/1/60 Hz or 240V/1/60 Hz: Capacitor start, open drip-proof type, ball bearing, rated 40 C. continuous rise.
  2. 208V/3/60 Hz, 240V/3/60 Hz or 460/3/60 Hz: NEMA B, normal starting torque, single speed, squirrel-cage type, open drip-proof, rated 40 C continuous rise, with ball bearings rated for B-10 life of 100,000 hours and fitted with grease fittings and relief ports. Provide motors with aluminum end brackets with steel inserts in bearing cavities.

#### 1.17 ACOUSTICAL PERFORMANCE OF EQUIPMENT AND SYSTEMS

- A. Install the Work in such a manner that noise levels from operation of motor driven equipment, whether airborne or structure-borne, and noise levels created by or within air handling equipment and air distribution and control media, do not to exceed sound pressure levels determined by the noise criteria curves published in the ASHRAE guide.
- B. Acoustical Tests
1. Owner may direct the Contractor to conduct sound tests for those areas he deems too noisy.
  2. If NC level exceeds the requirements of the Contract Documents due to improper installation or operation of mechanical systems, make changes or repairs to bring noise levels to within required levels.
  3. Retest until specified criteria have been met.

#### 1.18 OPERATING AND MAINTENANCE INSTRUCTIONS

- A. Instructions and Demonstration for Owner's Personnel
1. Provide operating and maintenance instruction to the Owner when project is completed and all HVAC equipment serving the building is ready to be turned over to the Owner.
  2. Turn over the HVAC equipment to the Owner only after the final testing and proper balancing of HVAC systems.

3. Instruct the Owner's personnel in the use, operation and maintenance of all equipment of each system.
4. The above instruction requirements are in addition to that specified for specific equipment or systems. Conform to specified requirements if more stringent or longer instruction is specified for specific equipment or systems.

#### 1.19 CODES, RULES, PERMITS & FEES

- A. Give all necessary notices, obtain all permits and pay all government sales taxes, fees, and other costs, in connection with the Work. Unless indicated otherwise, fees for all utility connections, extensions, and tap fees for water, storm, sewer, gas, telephone, and electricity will be paid directly to utility companies and/or agencies by the Owner. File all necessary plans, prepare all documents and obtain all necessary approvals of all governmental departments having jurisdiction; obtain all required certificates of inspection for the Work and deliver same to the Owner's Representative before request for acceptance and final payment for the Work.
- B. Conform to the requirements of the NFPA, NEC, FM, UL and any other local or State codes which may govern.

#### 1.20 RECORD DRAWINGS

- A. During the progress of the Work, make a record set of drawings of all changes by which the actual installation differs from the Drawings.
- B. Create all record drawings in AutoCAD version 2002 or later in .dwg format. Upon completion of the Work, submit to the Architect/Engineer for approval three complete sets of hard copies of the record drawings, of the same size as the Drawings for approval. Upon approval by the Architect/Engineer furnish the Owner a CD copy of the record drawings along with one hard copy for his records.

### PART 2 - PRODUCTS

NOT USED

### PART 3 - EXECUTION

#### 3.01 CLEANING AND ADJUSTING

- A. Cleaning
  1. Blow out, clean and flush each system of piping and equipment, to thoroughly clean the systems.
  2. Clean all materials and equipment; leave in condition ready to operate and ready to receive final finishes where required.
  3. Clean the operating equipment and systems to be dust free inside and out.
  4. Clean concealed and unoccupied areas such as plenums, pipe and duct spaces and equipment rooms to be free of rubbish and dust.
- B. Adjusting
  1. Adjust and align equipment interconnected with couplings or belts.
  2. Adjust valves of all types and operating equipment of all types to provide proper operation.
  3. Clean all strainers after system cleaning and flushing and again before system startup.
- C. Lubrication
  1. Lubricate equipment as recommended by the manufacturer, during temporary construction use.
  2. Provide complete lubrication just prior to acceptance.

- D. Permanent Equipment Operating During Construction
  - 1. Use only in same service as the permanent applications.
  - 2. Use disposable filters during temporary operation.
  - 3. Replace expendable media, including belts used for temporary operation and similar materials just prior to acceptance of the Work.
  - 4. Repack packing in equipment operated during construction just prior to system acceptance, using materials and methods specified by the equipment manufacturer.
- E. Retouch or repaint equipment furnished with factory finish as required to provide same appearance as new.
- F. Tools
  - 1. Provide one set of specialized or non-standard maintenance tools and devices required for servicing the installed equipment.

### 3.02 EQUIPMENT BASES, PLATFORMS AND SUPPORTS

- A. Provide supporting platforms, steel supports, anchor bolts, inserts, etc., for all equipment and apparatus provided.
- B. Obtain prior approval for installation method of structural steel required to frame into building structural members for the proper support of equipment, conduit, etc. Welding will be permitted only when approved by the Architect/Engineer.
- C. Submit shop drawings of supports to the Architect/Engineer for approval before fabricating or constructing.
- D. Provide leveling channels, anchor bolts, complete with nuts and washers, for all apparatus and equipment secured to concrete pads and further supply exact information and dimensions for the location of these leveling channels, anchor bolts, inserts, concrete bases and pads.
- E. Where supports are on concrete construction, take care not to weaken concrete or penetrate waterproofing.

### 3.03 ACCESSIBILITY

- A. Install valves, dampers and other items requiring access conveniently and accessibly located with reference to the finished building.

### 3.04 USE OF EQUIPMENT

- A. The use of any equipment, or any part thereof, even with the Owner's consent, is not an indication of acceptance of the Work on the part of the Owner, nor shall it be construed to obligate the Owner in any way to accept improper work or defective materials.

### 3.05 MODIFICATIONS OF EXISTING WORK

- A. Coordinate the Work with all other contractors and provide necessary dimensions for all openings. Provide all cuts and openings which are necessary for the Work for passage of piping and ductwork
- B. Upon completion, remove all temporary piping and equipment, shoring, scaffolds, etc., and leave all areas clean and free from material and debris resulting from the Work performed under this Section. Provide rough patching in areas required.

## 3.06 EQUIPMENT INSTALLATION

- A. Locate and set equipment anchor bolts, dowels and aligning devices for equipment requiring them.
- B. Level and shim the equipment; coordinate and oversee the grouting work.
- C. Perform field assembly, installation and alignment of equipment under direct supervision provided by the manufacturer or with inspections, adjustments and approval by the manufacturer.
- D. Alignment and Lubrication Certification for Motor Driven Apparatus
  - 1. After permanent installation has been made and connections have been completed, but before the equipment is continuously operated, have a qualified representative of the equipment manufacturer inspect the installation and report in writing on the manufacturer's letterhead on the following:
    - a. Whether shaft, bearing, seal, coupling, and belt drive alignment and doweling is within the manufacturer's required tolerances so that the equipment will remain aligned in the normal service intended by the Contract Documents and that no strain or distortion will occur in normal service.
    - b. That all parts of the apparatus are properly lubricated for operation.
    - c. That the installation is in accordance with manufacturer's instructions.
    - d. That suitable maintenance and operating instructions have been provided for the Owner's use.
    - e. Make any corrections to items that are required or recommended based on the manufacturer's inspection and have the equipment re-inspected.
- E. Belt Drives
  - 1. V-belt drives - a driving and driven sheave grooved for belts of trapezoidal cross-section. Construct belts of fabric and rubber so designed so as not to touch the bottom of the grooves, the power being transmitted by the contact between the belts and V-shaped groove sides. Design drives for a minimum of 150 percent of motor horsepower. Provide companion type driven sheaves.
  - 2. Select drives to provide for 12-1/2 percent variation in speed, plus or minus, from specified speed. Provide all motors with adjustable sheaves except where indicated otherwise in the Specifications or on the Drawings.
  - 3. Install all fans with adjustable pitch sheaves on their drive motors. Select sheaves to provide air quantities under specified conditions. Put air systems into operation, and determine as a result of the completed air balance the actual size of sheaves required to produce specified air quantities on installed systems. The adjustable pitch sheaves shall then be replaced with the proper size fixed sheaves. Remove adjustable pitch sheaves from premises. Provide fixed motor sheaves manufactured by Wood's.
  - 4. Where indicated on the Drawings or specified, provide spare motor, bearings, and belts.
- F. Machinery Guards
  - 1. Protect motor drives by guards furnished by the equipment manufacturer or in accordance with the Sheet Metal and Air Conditioning Contractors National Association's Low Pressure Duct Manual. Provide guards of all types approved as acceptable under OSHA Standards.
- G. Equipment Start-up
  - 1. Require each equipment manufacturer to provide qualified personnel to inspect and approve equipment and installation and to supervise the start-up of the equipment and to supervise the operating tests of the equipment.
  - 2. If a minimum number of hours for start-up and instruction are not stated with the equipment specifications, these shall be 2 full 8-hour working days as a minimum.

3. Advise Owner of start-up at least 72 hours in advance.

### 3.07 CLOSEOUT PROCEDURES

- A. General Operating and Maintenance Instructions: Arrange for each installer of operating equipment and other work that requires regular or continuing maintenance, to meet at the site with the Owner's personnel to provide necessary basic instructions in the proper operation and maintenance of the entire Work. Where installers are not expert in the required procedures, include instruction by the manufacturer's representatives.
- B. Where applicable, provide instruction and training, including application of special coatings systems, at manufacturer's recommendation.
- C. Provide a detailed review of the following items:
  1. Maintenance manuals
  2. Record documents and catalog cuts for each piece of equipment.
  3. Spare parts and materials
  4. Tools
  5. Lubricants
  6. Fuels
  7. Identification systems
  8. Control sequences
  9. Hazards
  10. Cleaning
- D. Warranties, bonds, maintenance agreements, and similar continuing commitments.
- E. Demonstrate the following procedures:
  1. Start-up
  2. Shut-down
  3. Emergency operations
  4. Noise and vibration adjustments
  5. Safety procedures
  6. Economy and efficiency adjustments
  7. Effective energy utilization.
- F. Prepare instruction periods to consist of approximately 50% classroom instruction and 50% "hands-on" instruction. Provide minimum instruction periods as follows:

<b>Systems or Equipment</b>	<b>Training Time (Hours)</b>
Chillers	16 hrs.
Cooling Towers	16 hrs.
Roof Top Units	8 hrs.
Air Handlers	8 hrs.
Boilers and Burners	16 hrs
DDC Control System	24 hrs.
All other equipment	4 hrs. (each)

Note: Consult individual equipment specification sections for additional training requirements.

- G. Prepare a written agenda for each session and submit for review and approval. Include date, location, purpose, specific scope, proposed attendance and session duration.

- H. Record training sessions in digital format, format as selected by the Owner. Turn over digital files to the Owner after training has been completed.

**END OF SECTION 230010**

## PART 1 - GENERAL

## 1.01 DESCRIPTION OF WORK

- A. This Section describes the marking and identification materials for identifying mechanical equipment, ductwork and piping systems.
- B. Mark and identify all mechanical equipment, ductwork and piping systems described herein, and as shown and specified in the Contract Documents.

## 1.02 REFERENCES

- A. ANSI A13.1 - Scheme for the Identification of Piping Systems.
- B. Z53.1 - Safety Color Code for Marking Physical Hazards.
- C. OSHA 29 CFR 1910 - Subpart J, General Environmental Controls

## 1.03 SUBMITTALS

- A. Identification Scheme - Submit scheme of identification codes.
- B. Steam Trap Schedule - Submit steam trap schedules listing proposed steam trap number, location, type, sizes and service.
- C. Valve Schedules - Submit valve chart and schedule, including valve tag number, location, function, and valve manufacturer's name and model number.
- D. Samples - Submit samples of tags, attachments, labeled and identified.
- E. Equipment Schedules - Submit mechanical equipment schedules, listing proposed equipment numbers, and their location and function.
- F. Product Data: Provide manufacturers catalog literature for each product required.

## PART 2 - PRODUCTS

## 2.01 APPROVED MANUFACTURERS

- A. Seton
- B. Bunting
- C. W.H. Brady Company

## 2.02 VALVE TAGS

- A. Provide valve tags for all valves installed for this project. Valve tags shall be constructed of brass with stamped letters and service designation tag size minimum 1-1/2 inches (38 mm) diameter with smooth edges, brass S hook.
- B. Valve tags shall be permanently stamped and marked with a service designation, normal valve position, and an identifying number as large as possible. Each valve shall have a separate and distinct number coordinated with the service designations shown on the Drawings and the Owners existing valve numbering system. Coordinate with the Architect/Engineer and Owner before finalizing the valve tag numbering system.

### 2.03 STEAM TRAP TAGS

- A. Provide steam trap tags for all steam traps installed for this project. Steam trap tags shall be constructed of brass with stamped letters and service designation tag size minimum 1-1/2 inches (38 mm) diameter with smooth edges, brass S hook.
- B. Each steam trap tag shall be permanently stamped and marked with a service designation and a unique identifying number as large as possible.
- C. Each trap shall have a separate and distinct number coordinated with the service designations shown on the Drawings and the Owners existing trap numbering system. Coordinate with the Architect/Engineer and Owner before finalizing the trap tag numbering system.

### 2.04 PIPE MARKERS

- A. All accessible piping installed indoors for this project, insulated and uninsulated shall be identified with wraparound pipe markers. Pipe markers shall be factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering. "Accessible" piping shall include exposed piping, and piping located above lay-in ceilings. Markers shall include system name, flow arrow, and color code and pipe diameter.
- B. All piping installed outdoors for this project, insulated and uninsulated, shall be identified with wraparound pipe markers. Pipe markers shall be factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering. The marker shall be printed with weather-resistant ink.
- C. Where pipes are too small or not readily accessible for application of pipe markers, a brass identification tag at least 1 ½ inches in diameter, with depressed ½ inch high black letters and numerals, shall be securely fastened at locations specified for pipe markers.
- D. See pipe marker schedule for size requirements of pipe markers.

### 2.05 MECHANICAL EQUIPMENT MARKERS

- A. Identify all mechanical equipment, bare or insulated, installed in the rooms or on the roof, by means of lettered and numbered nameplate (not stenciled) identifying the equipment and service. Refer to the Drawings for equipment identifications. Nameplates shall be aluminum with permanent 1 ½ inch high white letters on a black background, mechanically affixed and installed in a readily visible location on the equipment. Coordinate the final equipment designation with the Owner.
- B. In addition to markers, all mechanical equipment shall be furnished with the manufacturer's identification plate showing the name of equipment, manufacturer's name and address, date of purchase, model number and performance data.

### 2.06 DUCT WORK IDENTIFICATION

- A. Provide full air distribution system identification at each side of a wall penetration, in a mechanical room, at all changes in direction and at no more than 50 foot intervals. Provide arrows identifying direction of flow.
- B. Fire damper or Smoke damper access points shall be permanently identified on the exterior by a label having letters not less than 0.5 inch in height reading: SMOKE DAMPER or FIRE DAMPER.
- C. Identification shall be preprinted labels.

- D. Letter Size: 1-1/2 inches in height.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. Apply piping system markers and valve tags in the following locations:
1. Adjacent to each valve and fitting.
  2. At each branch location and riser take-off
  3. At each side of a pipe passage through floors, walls, ceiling and partitions.
  4. At each pipe passage to and from underground areas.
  5. Every 20 feet on all horizontal and vertical pipe runs.
- B. Provide arrow markers showing direction of flow incorporated into or adjacent to each piping system marker. Use double-headed arrows if flow is in both directions.
- C. Apply all piping system markers where view is unobstructed; markers and legends shall be clearly visible from operating positions.
- D. Apply all tags and piping system markers in accordance with the manufacturer's instructions. Do not attach tags to valve handle such that the normal or emergency operation of the valve will be hindered.

#### 3.02 LAY IN CEILING TILES AND ACCESS DOORS

- A. Provide a lettered and numbered nameplate for each access door indicating the mechanical equipment that the door provides access too.
- B. Where VAV boxes, hot water reheat coils, or other mechanical devices are installed above a lay-in ceiling tile system, provide and install color coded thumb tabs to mark the location of the equipment above the ceiling.

#### 3.03 SCHEDULES

- A. Pipe Marker Letter Size Schedule:

Outside diameter of insulation or pipe Inches	Letter height Inches	Color field Inches
3/4 to 1-1/4	1/2	8
1-1/2 to 2	3/4	8
2-1/2 to 6	1 - 1/4	12
8 to 10	2 - 1/2	24
Over 10	2	24

**END OF SECTION 230555**

## PART 1 - GENERAL

## 1.01 DESCRIPTION OF WORK

- A. Provide exhaust fans, as specified herein, of sizes and capacities scheduled and in locations shown on drawings.

## 1.02 REFERENCE CODES AND STANDARDS

- A. AMCA 99 - Standards Handbook
- B. AMCA 210 - Laboratory Methods of Testing Fans for Rating
- C. AMCA 300 - Reverberant Room Method for Sound Testing of Fans
- D. ASHRAE Handbook, HVAC Applications Volume "Sound and Vibration Control"
- E. UL listed and labeled.

## 1.03 SUBMITTALS

- A. Shop Drawings - Show fan layout, housing, materials, gauges, dimensions, weights and installation details
- B. Product data - Manufacturer's fan performance (data includes cfm, rpm, bhp, motor nameplate data, tip speed, outlet velocity and static pressure) and sound performance (data includes sound power level ratings by octave bands) as tested in accordance with AMCA Standards 210 and 300.
- C. Fan performance curves - Submit curves for all fans with system performance shown, and for plus or minus 10 percent and plus or minus 20 percent change in fan rpm. Curves shall include plotted rpm, horsepower, cfm, static pressure, and fan surge line and operating point.
- D. Certified AMCA Ratings - Submit ratings for air and sound performance.
- E. UL Listing - Submit listing if specified.

## 1.04 QUALITY ASSURANCE

- A. Factory balance each fan statically and dynamically, test run before shipment, and key fan wheel to fan shaft. Fans shall operate quietly and without pulsation or vibration. Conduct sound power level tests for each type fan at the factory in accordance with AMCA 300.
- B. Fans shall operate in the stable range of their performance curves.
- C. The fan external static pressures shown in the schedules are those required by the ductwork and apparatus, and do not include the internal and intake fan losses, inlet vanes or integral outlet dampers, inlet screens, outlet velocity heads or drive losses.
- D. Factory performance test each fan assembled in or as part of apparatus specified to be performance tested. Test shall display scheduled performance characteristics, using certified, calibrated testing instruments provided by the manufacturer of the apparatus.
- E. All fan performance ratings shall be based up on factory tests performed in accordance with AMCA 210. One fan of each type specified shall have actual factory performance tests performed prior to shipment. All fans shall be certified by AMCA and carry its seal.

## PART 2 - PRODUCTS

## 2.01 CENTRIFUGAL DOWNBLAST FANS

- A. Roof mounted exhaust fans shall be of the downblast direct drive type.
- B. The fan housing shall fan housing shall consist of the motor cover, shroud, curb cap and lower windband, and shall be constructed of heavy-gauge aluminum. Housing shall have a rigid internal support structure and leakproof design. The fan shroud shall be one-piece with a rolled bead for extra strength, which directs exhaust air downward. The low windband shall be one piece with formed edges for added strength and the curb cap shall include prepunched mounting holes to ensure correct attachment to the roof.
- C. The fan wheel shall be centrifugal, non overload, backward-inclined, constructed of aluminum and shall include a wheel cone carefully matched to the inlet cone for precise running tolerances. Wheels shall be statically and dynamically balanced.
- D. Motors shall be permanently lubricated and carefully matched to the fan loads. Motors shall be readily accessible for maintenance. Motors shall be mounted on true vibration isolators, out of the airstream. Each vibration isolator shall be sized to match the weight of each fan.
- E. A NEMA 1 disconnect switch shall be provided as standard. Factory wiring shall be provided from motor to the handy box.
- F. All fans shall bear the AMCA Certified Ratings Seal for both sound and air performance.
- G. Each fan shall bear a permanently affixed manufacturer's nameplate containing the model number and individual serial number for future identification.
- H. Fans shall be manufactured by Greenheck or approved equal.
  - 1. Exhaust Fan in Well No. 4-1 Room shall be Model G-090-VG, by Greenheck (2 total)
  - 2. Exhaust Fan in Well No. 4-2 Room shall be Model G-095-VG, by Greenheck (1 total)
  - 3. Curb adapet and reducer shall be installed as required to facilitate installation of exhaust fans in locations show on the drawings.
  - 4. Ductwork to proposed exhaust fans shall be installed in accordance with manufacturer recommendations.

## PART 3 - EXECUTION

## 3.01 GENERAL

- A. Install fans, including all necessary structural supports and bracing as scheduled and located on the contract drawings in accordance with manufacturer's instructions and approved submittals.
- B. Connect duct to fans to allow for straight and smooth air flow.
- C. Provide flexible connections (minimum of 4") between fan and duct.
- D. Install fan level: +/- 5 degrees vertical. Final installation shall be free of all leaks from both fan and associated ductwork.

## 3.02 START-UP, TESTING, DEMONSTRATION

- A. Start-up fans after checkout to insure proper alignment and phased electrical connections.

- B. Test fans individually and as part of system.
- C. Insure fans are properly interlocked with supply fans and with control system.
- D. Demonstrate operation to Owner and instruct maintenance personnel in operation of equipment.

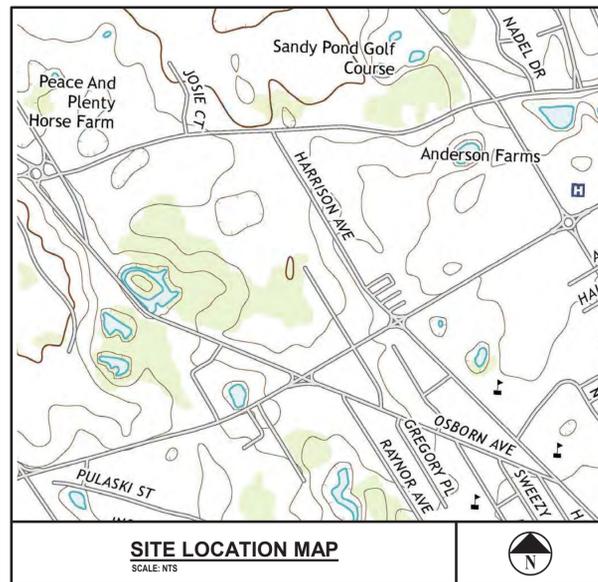
**END OF SECTION 233416**

# Riverhead Water District

Town of Riverhead  
Suffolk County, New York

## Rehabilitation of Plant No. 4 Contract G - General Construction

RDWD 1904  
AUGUST 2019



### TOWN SUPERVISOR

Laura Jens-Smith

### TOWN COUNCIL

Jodi Giglio  
Timothy Hubbard  
Catherine Kent  
James Wooten

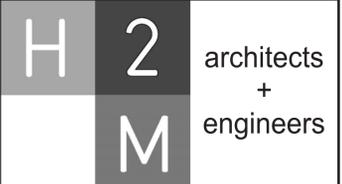
### TOWN CLERK

Diane Wilhelm

### ASSISTANT SUPERINTENDENT

Thomas Kruger

PROJECT SHEET LIST	
Sheet No.	Sheet Name
T0.0	TITLE SHEET
A0.0	GENERAL NOTES, ABBREVIATIONS AND LEGENDS
A0.1	NEW YORK STATE CODE ANALYSIS
D1.0	DEMOLITION PLANS
D2.0	DEMOLITION ELEVATIONS
D2.1	DEMOLITION ELEVATIONS
A1.0	PIPE TRENCH PLAN
A1.1	FIRST FLOOR PLAN, SCHEDULE AND NOTES
A1.2	FIRST FLOOR REFLECTED CEILING PLAN
A1.3	ROOF PLAN
A2.0	BUILDING ELEVATIONS
A2.1	BUILDING ELEVATIONS
A3.0	DETAILS
A4.0	DOOR AND WINDOW SCHEDULES AND DETAILS



538 Broad Hollow Road, 4th Floor East  
Melville, NY 11747  
631.756.8000 • www.h2m.com



DESIGNED BY: KRG	DRAWN BY: REH	CHECKED BY:	REVIEWED BY:
PROJECT No: RDWD 1904	DATE: AUGUST 2019	SCALE: AS SHOWN	

CLIENT  
**Riverhead Water District**  
  
Rehabilitation of Plant No. 4  
  
1124 Osborn Avenue  
Riverhead, NY 11901  
  
Dist:600 Sect:101 Block:03 Lot:001

STATUS  
**FINAL BID DOCUMENT**

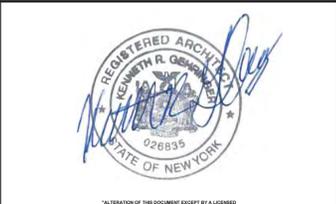
DRAWING No. **T0.0** SHEET No. **1**  
OF **14**





CONSULTANTS:


MARK	DATE	DESCRIPTION



DESIGNED BY: KRG	DRAWN BY: REH	CHECKED BY:	REVIEWED BY:
PROJECT No: RDWD 1904	DATE: AUGUST 2019	SCALE:	AS SHOWN

**Riverhead Water District**

**Rehabilitation of Plant No. 4**



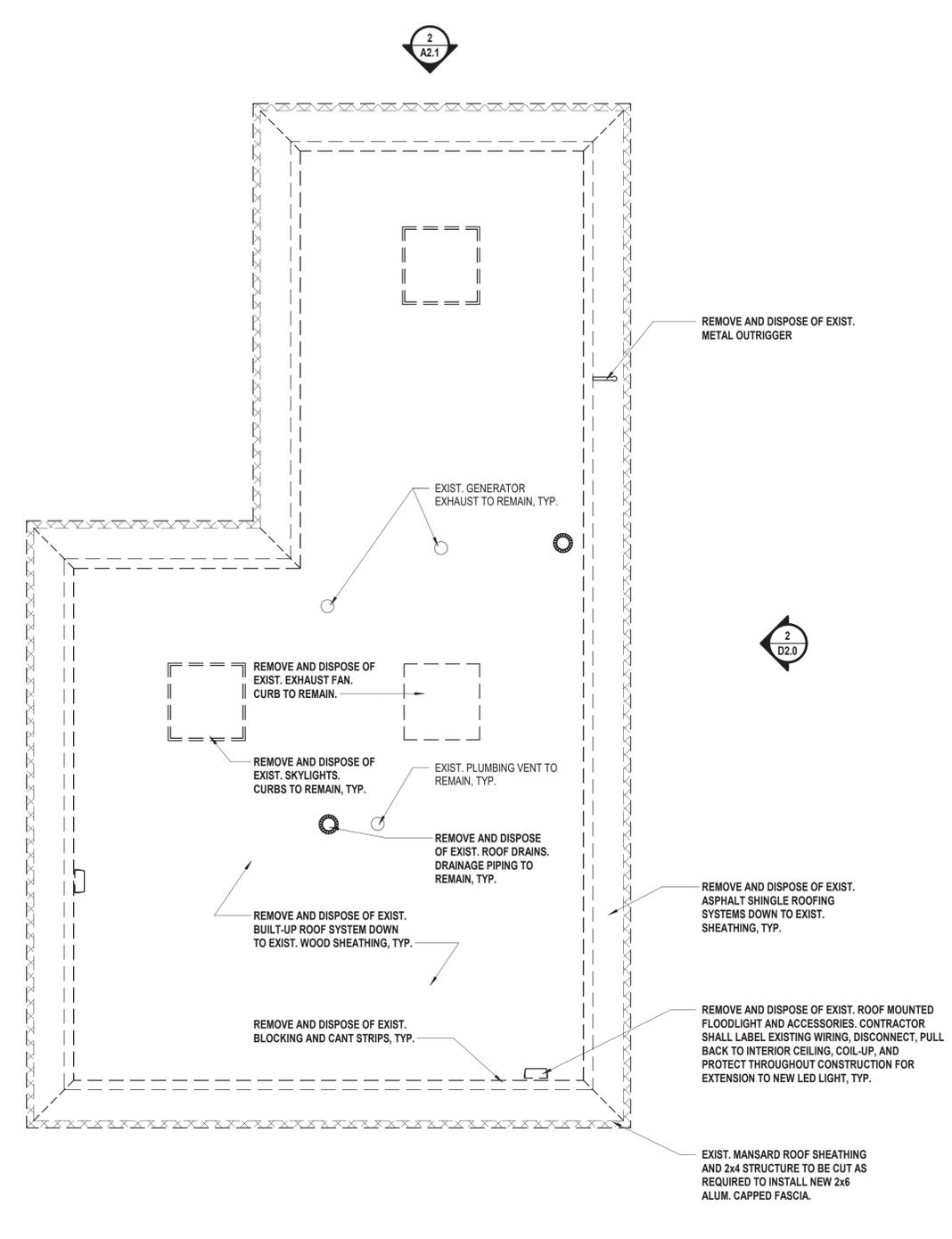
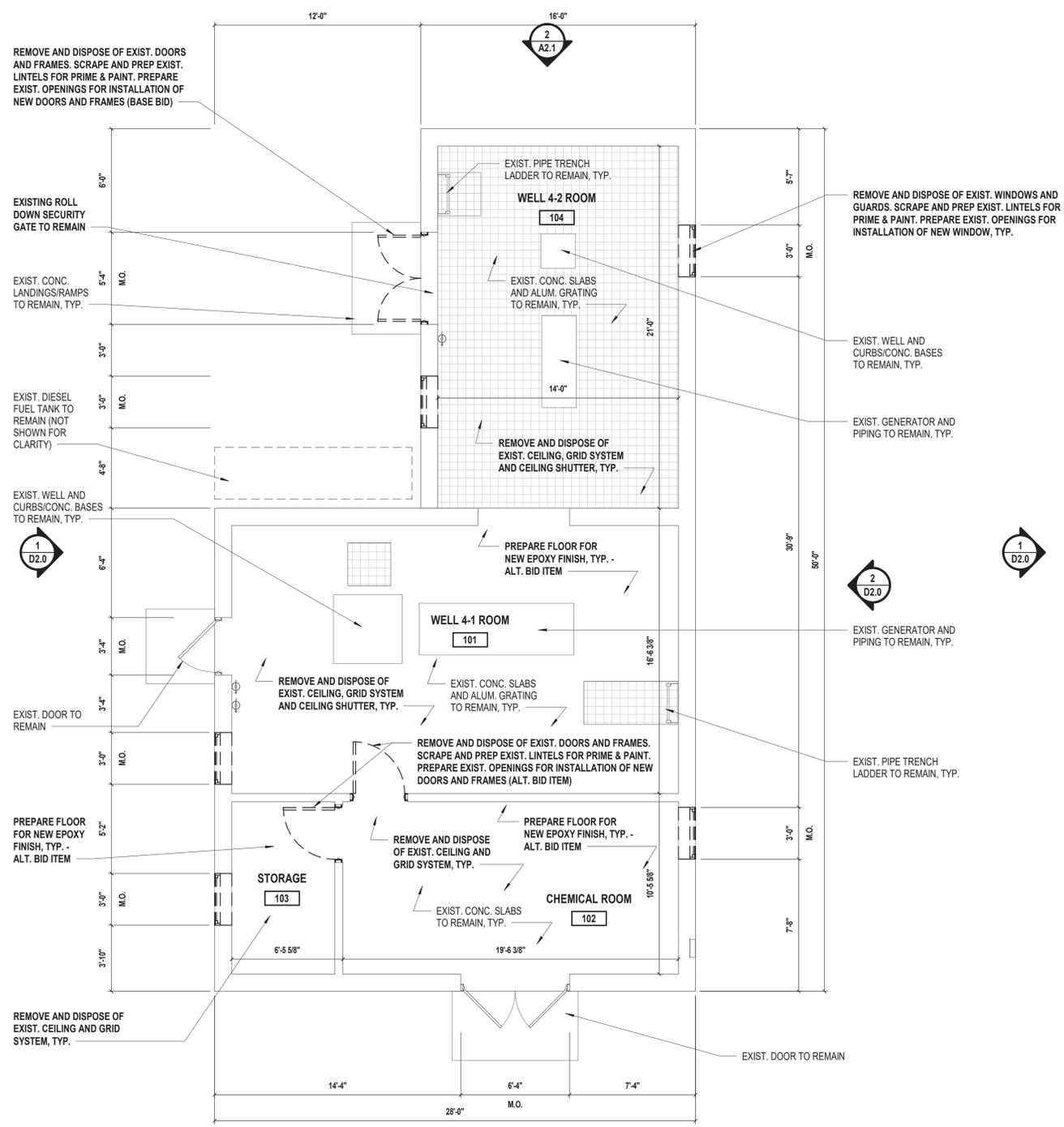
1124 Osborn Avenue  
Riverhead, NY 11901  
Dist:600 Sect:101 Block:03 Lot:001

CONTRACT  
**CONTRACT G  
GENERAL CONSTRUCTION**

STATUS  
**FINAL BID DOCUMENT**

SHEET TITLE  
**DEMOLITION PLANS**

DRAWING No.  
**D1.0**  
SHEET No.  
**4**  
OF  
**14**





CONSULTANTS:

MARK	DATE	DESCRIPTION



DESIGNED BY: <b>KRG</b>	DRAWN BY: <b>REH</b>	CHECKED BY:	REVIEWED BY:
PROJECT No: <b>RDWD 1904</b>	DATE: <b>AUGUST 2019</b>	SCALE:	<b>AS SHOWN</b>

CLIENT  
**Riverhead Water District**

**Rehabilitation of Plant No. 4**



**1124 Osborn Avenue  
Riverhead, NY 11901**

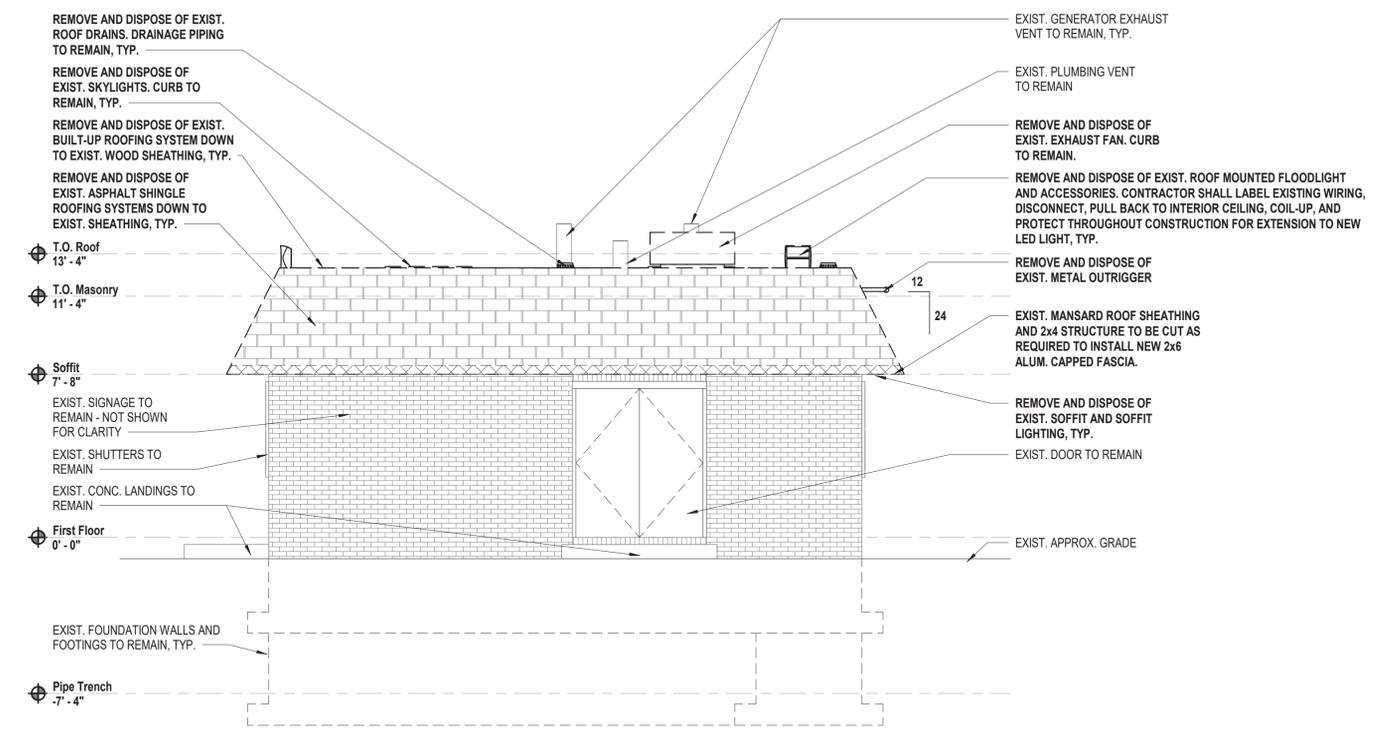
**Dist:600 Sect:101 Block:03 Lot:001**

CONTRACT  
**CONTRACT G  
GENERAL CONSTRUCTION**

STATUS  
**FINAL BID DOCUMENT**

SHEET TITLE  
**DEMOLITION ELEVATIONS**

DRAWING No. **D2.1** SHEET No. **6**  
OF **14**



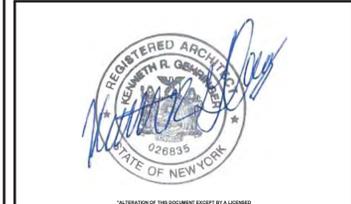
**1 Demolition Elevation**  
SCALE: 1/4" = 1'-0"



- GENERAL PLAN NOTES:**
1. FINISH FLOOR ELEVATION IS ESTABLISHED AT EL. 0'-0"
  2. SEE ROOM FINISH SCHEDULE FOR CEILING HEIGHTS ABOVE FINISH FLOOR.
  3. COORDINATE THE WORK REQUIRED ON THIS DRAWINGS WITH THE WORK OF ALL OTHER TRADES AND SPECIFICATIONS.
  4. ALL ITEMS DETAILED OR SPECIFIED TO RUN IN OR ATTACHED TO WALLS AND CEILING ARE TO BE CONCEALED OR RECESSED U.N.O.

CONSULTANTS:

MARK	DATE	DESCRIPTION



DESIGNED BY: KRG	DRAWN BY: REH	CHECKED BY:	REVIEWED BY:
PROJECT No: RDWD 1904	DATE: AUGUST 2019	SCALE:	AS SHOWN

CLIENT  
**Riverhead Water District**

Rehabilitation of Plant No. 4



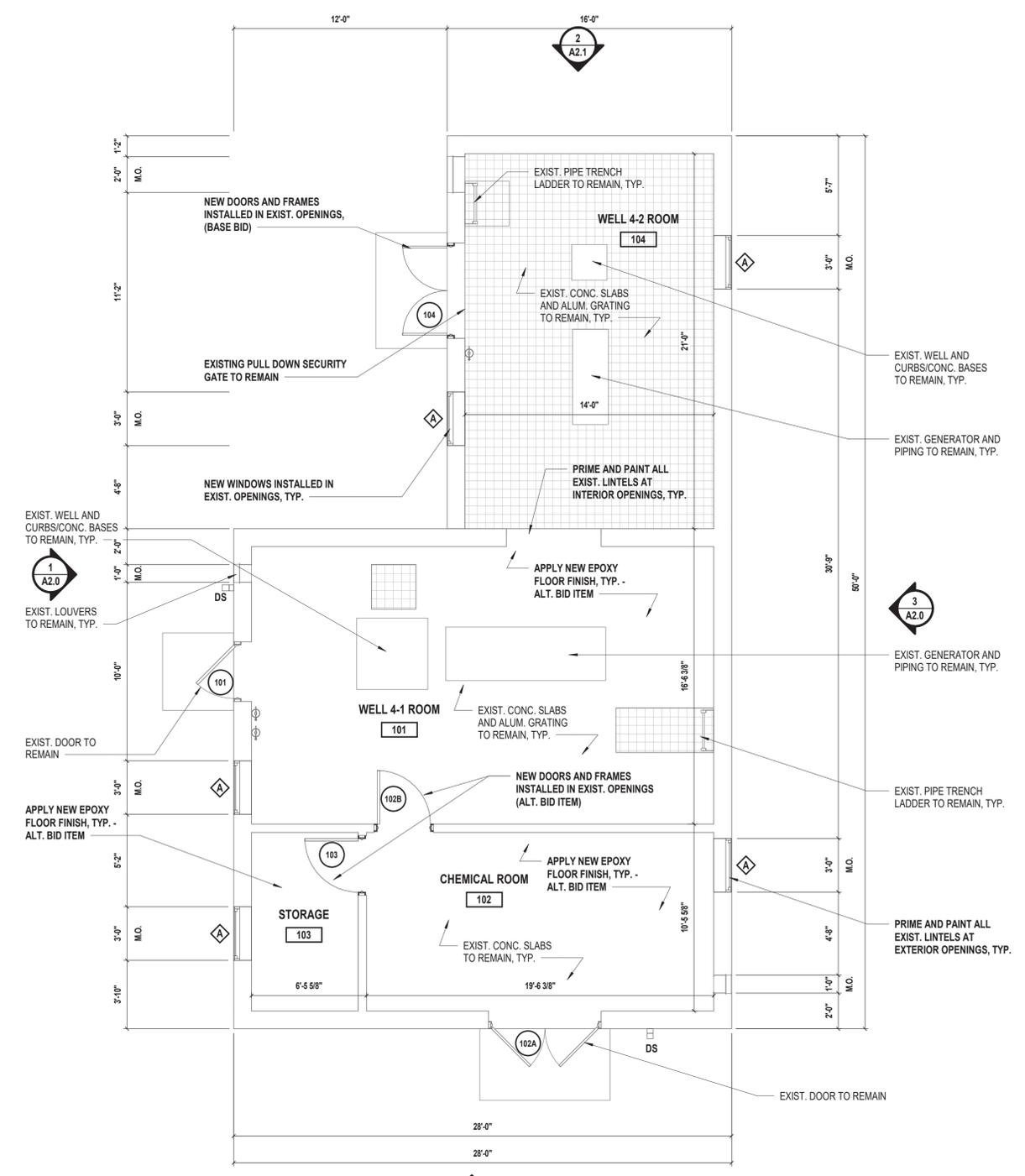
1124 Osborn Avenue  
Riverhead, NY 11901  
Dist:600 Sect:101 Block:03 Lot:001

CONTRACT  
**CONTRACT G  
GENERAL CONSTRUCTION**

STATUS  
**FINAL BID DOCUMENT**

SHEET TITLE  
**FIRST FLOOR PLAN,  
SCHEDULE AND NOTES**

DRAWING No. **A1.1**  
SHEET No. **8**  
OF **14**



NOTE:  
SCRAPE, PREP, PRIME AND EPOXY  
PAINTING OF EXISTING WALLS IS AN  
ALTERNATE BID ITEM, TYP. FOR ALL

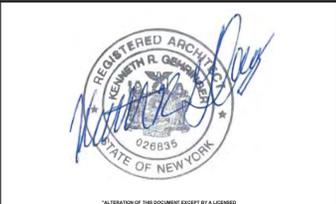
**1 First Floor Plan**  
SCALE: 1/4" = 1'-0"

NOTE: ALL EQUIPMENT AND PIPING NOT SHOWN FOR CLARITY

ROOM NUMBER	ROOM NAME	FLOOR MATL.	FLOOR FIN.	FLOOR BASE	WALLS								CEILING			COMMENTS
					NORTH		EAST		SOUTH		WEST		MATL.	FIN.	HGT.	
					MATL.	FIN.	MATL.	FIN.	MATL.	FIN.	MATL.	FIN.				
001	PIPE TRENCH	EXIST. CONC.	EPOXY	EPOXY	EXIST. CONC.	EPOXY PNT.	EXIST. CONC.	EXIST.	6' - 10"	EPOXY FINISHES AS ALTERNATES						
002	PIPE TRENCH	EXIST. CONC.	EPOXY	EPOXY	EXIST. CONC.	EPOXY PNT.	EXIST. CONC.	EXIST.	6' - 10"	EPOXY FINISHES AS ALTERNATES						
101	WELL 4-1 ROOM	EXIST. CONC.	EPOXY	EPOXY	EXIST. CMU	EPOXY PNT.	ACP	2x2	11' - 0"	EPOXY FINISHES AS ALTERNATES						
102	CHEMICAL ROOM	EXIST. CONC.	EPOXY	EPOXY	EXIST. CMU	EPOXY PNT.	ACP	2x2	10' - 0"	EPOXY FINISHES AS ALTERNATES						
103	STORAGE	EXIST. CONC.	EPOXY	EPOXY	EXIST. CMU	EPOXY PNT.	ACP	2x2	10' - 0"	EPOXY FINISHES AS ALTERNATES						
104	WELL 4-2 ROOM	EXIST. GRATING	EXIST. GRATING	-	EXIST. CMU	EPOXY PNT.	ACP	2x2	11' - 0"	EPOXY FINISHES AS ALTERNATES						

CONSULTANTS:

MARK	DATE	DESCRIPTION



DESIGNED BY: KRG	DRAWN BY: REH	CHECKED BY:	REVIEWED BY:
PROJECT No: RDWD 1904	DATE: AUGUST 2019	SCALE:	AS SHOWN

**Riverhead Water District**

**Rehabilitation of Plant No. 4**



1124 Osborn Avenue  
Riverhead, NY 11901

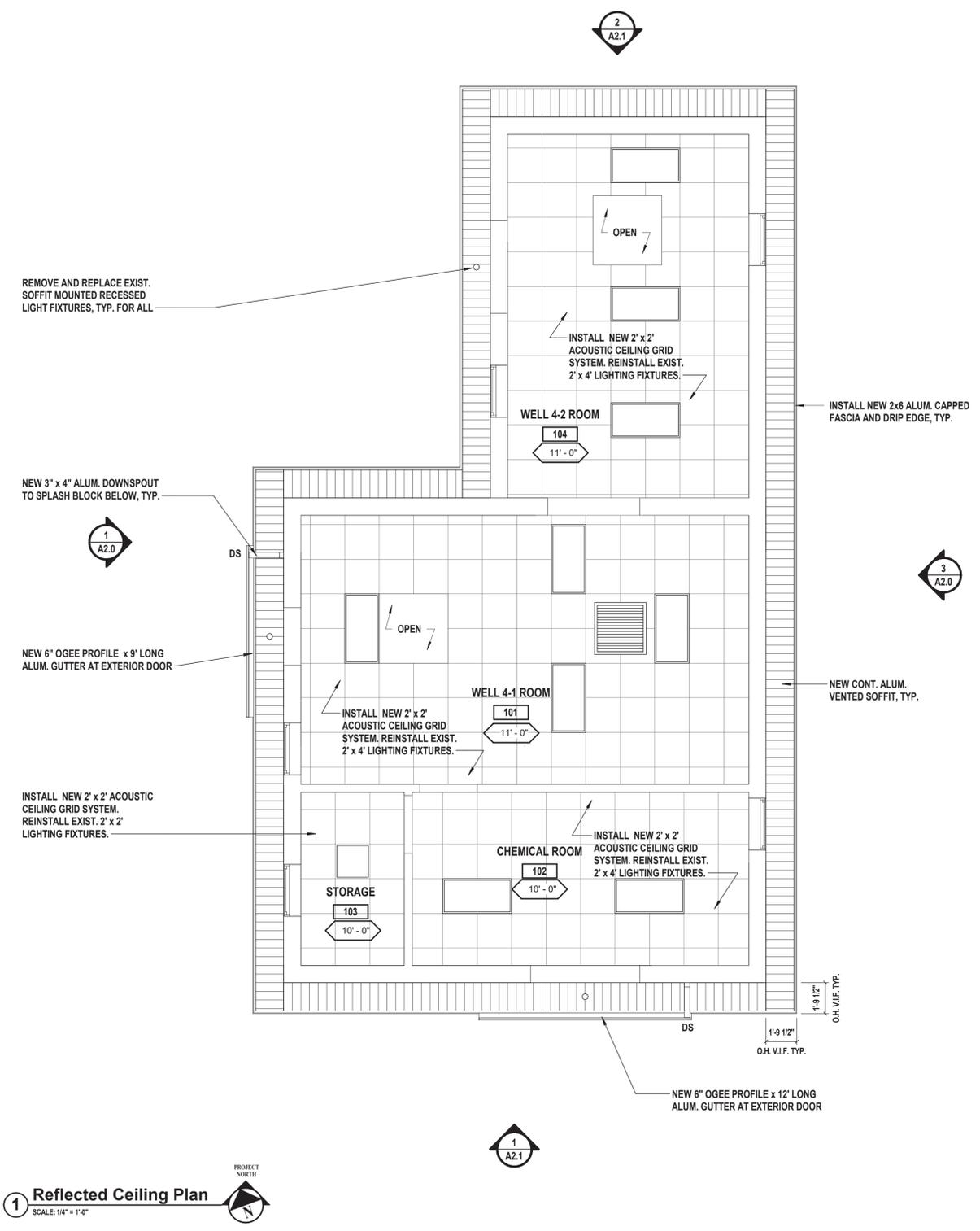
Dist:600 Sect:101 Block:03 Lot:001

**CONTRACT G  
GENERAL CONSTRUCTION**

**FINAL BID DOCUMENT**

**FIRST FLOOR REFLECTED  
CEILING PLAN**

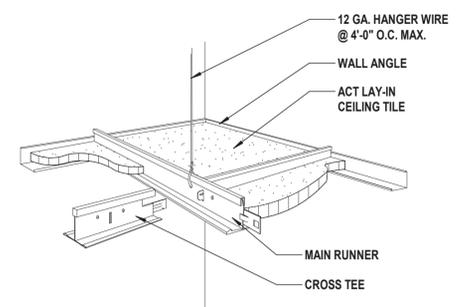
DRAWING No. **A1.2**  
SHEET No. **9**  
OF **14**



**CONTRACT 'G' ELECTRICAL NOTE:**  
CONTRACTOR SHALL REMOVE AND REPLACE EXIST. SOFFIT MOUNTED RECESSED LIGHT FIXTURES WITH NEW LED SOFFIT MOUNTED RECESSED LIGHT FIXTURE MANUFACTURED BY LITHONIA LIGHTING, MODEL No: LDN6SQ 40/20 LS6AR LSS MVOLT EL WL. CONTRACTOR SHALL LABEL EXISTING WIRING, DISCONNECT, PULL BACK TO INTERIOR CEILING, COIL-UP, AND PROTECT THROUGHOUT CONSTRUCTION FOR EXTENSION TO NEW LED LIGHT. CONTRACTOR SHALL CORE DRILL EXISTING EXTERIOR WALL AS REQ'D TO ROUTE FEED TO NEW LIGHT RECESSED IN SOFFIT. CONTRACTOR SHALL INTERFACE NEW LIGHTING FIXTURES WITH EXISTING EXTERIOR SOFFIT MOUNTED LIGHTING CONTROLS. COORDINATE EXACT LOCATION OF NEW LED LIGHT FIXTURES IN FIELD WITH OWNER AND ENGINEER, TYP. FOR ALL

**REFLECTED CEILING PLAN LEGEND**

- EXIST. LIGHT FIXTURES
- EXIST. 3' x 3' EXHAUST GRILL
- ACP - 2'x2' SUSPENDED ACOUSTICAL CEILING SYSTEM
- CEILING OR SOFFIT HEIGHT



**2 ACT Detail**  
SCALE: 1/4" = 1'-0"

**1 Reflected Ceiling Plan**  
SCALE: 1/4" = 1'-0"

C:\Users\lguzman\Documents\RDWD1904\_Central19\_A\lguzman.rvt









