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CONTRACT AND SPECIFICATIONS

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



**CONTRACT D – DISTRIBUTION SYSTEM
MAINTENANCE, INSTALLATION AND
EMERGENCY SERVICES**

Project No: RDWD 14-05

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DECEMBER 2014

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RIVERHEAD WATER DISTRICT
 CONTRACT AND SPECIFICATIONS
 CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
 AND EMERGENCY SERVICES

H2M PROJECT NO.: RDWD 14-05

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The Town Board of Riverhead will receive bids for MAINTENANCE AND EMERGENCY SERVICES CONTRACTS for the Riverhead Water District at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York 11901, by 11:00 AM on Tuesday, December 9, 2014, at which time and place all bids will be publicly opened and read aloud for:

CONTRACT C – CONTROL MAINTENANCE AND EMERGENCY SERVICES

CONTRACT E – ELECTRICAL MAINTENANCE AND EMERGENCY SERVICES

**CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
AND EMERGENCY SERVICES**

Specifications may be examined and obtained on or after November 26, 2014 by visiting the Town of Riverhead website: www.townofriverheadny.gov and click on "Bid Requests".

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 informalities, 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

DIANE WILHELM, TOWN CLERK

DATED: NOVEMBER 26, 2014

BIDS FOR PROJECT

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

CONTRACT C – CONTROL MAINTENANCE AND EMERGENCY SERVICES
CONTRACT E – ELECTRICAL EQUIPMENT MAINTENANCE AND EMERGENCY SERVICES
**CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
AND EMERGENCY SERVICES**

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 AM on Tuesday, December 9, 2014 at which time and place the bids will be publicly opened and read aloud. Use of the mails shall be at the Bidder's own risk. The Bidder shall be responsible for physical delivery of the bid at the time and place set for delivery 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 14-05
CONTRACT C – CONTROL MAINTENANCE AND EMERGENCY SERVICES or
CONTRACT E – ELECTRICAL EQUIPMENT MAINTENANCE AND EMERGENCY SERVICES or
**CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
AND EMERGENCY SERVICES**

FOR THE RIVERHEAD WATER DISTRICT, TOWN OF RIVERHEAD,
SUFFOLK COUNTY, NEW YORK",

but otherwise unmarked. Bid package shall include Proposal sheets (P-A, P-B, P-C, and P-D), Qualifications of Bidder sheets (QB), Approval of Subcontractor sheets (ASSL), Iranian Investment Activities Certification, and the New York State Uniform Contracting Questionnaire.

PLANS AND SPECIFICATIONS

Specifications may be examined and obtained on or after November 26, 2014 by visiting the Town of Riverhead website: www.townofriverheadny.gov and click on "Bid Requests".

All contractors must leave their names, phone numbers and correct mailing addresses upon receipt of the Specifications.

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.

Electrical work will be performed at the Riverhead Water District well plant, water storage tank and booster plant sites. Bidders shall be generally familiar with conditions that may be encountered.

PROPOSAL

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

As the estimates of quantities of items stated in the Proposal are approximate only, bidders are required to submit their proposal upon and in the following express conditions, which shall apply and become part of every proposal received.

Bids will be compared by total amounts, said total amount being the sum of the products of the quantities multiplied by the unit price bid for the various items, with due consideration being given to the lump sum prices bid for any contingent or optional 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 said Proposal for which it is submitting a bid. If there is any discrepancy between the prices in words and figures, the prices in words shall govern as unit and lump sum prices.

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

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, materialmen 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.

MAINTENANCE BOND

The Contractor shall furnish a one (1) year Maintenance Bond in an amount equal to one hundred (100%) percent of the total yearly final 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 one (1) year after the end of each year of the contract. The Maintenance Bond shall be furnished following each final annual completion, and annual final 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 twelve (12) 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.

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 twelve (12) 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

TOWN OF RIVERHEAD / RIVERHEAD WATER DISTRICT

SUFFOLK COUNTY

NEW YORK

The Town/District may make such investigation as the Town/District 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 Town/District all information and data required by the Town/District, including complete financial data, within the time and in the form and manner required by the Town/District. The Town/District reserves the right to reject any bid if the evidence required by the Town/District is not submitted as required or if the evidence submitted by or the investigation of any Bidder fails to satisfy the Town/District 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 Town/District, any bidder may be required to complete and submit the enclosed New York State Uniform Contracting 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>
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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 Town/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: _____

IRANIAN INVESTMENT ACTIVITIES CERTIFICATION

(To be completed by the Bidder and submitted with the bid)

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: _____ 2014

(Name of corporation or partnership)

(Individual)

(Officer stating title) (Partner)

TOWN OF RIVERHEAD / RIVERHEAD WATER DISTRICT

SUFFOLK COUNTY

NEW YORK

Bidders shall include in the Qualifications (QB) portion of this contract, the names of the Subcontractors that the Bidder proposes to use on the project. The Town/District 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 Town/District. Such disapproval shall not result in additional costs to the Town/District. The Town/District reserves the right to reject any bid if the name of the proposed Subcontractors, or additional subcontractor information, is not submitted as required.

The Contractor shall not make subcontracts totaling a dollar amount that is more than 25% of the total contract price. The Town/District may, at its own discretion, in writing, modify these requirements where the Town/District determines it is in the best interest of the Town/District.

BIDDER

FIRM NAME: _____

ADDRESS: _____

PREPARED BY: _____

SIGNED BY: _____

TITLE: _____

INDEMNITY, LIMITATION OF LIABILITY

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.

RIVERHEAD WATER DISTRICT
CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
AND EMERGENCY SERVICES
H2M PROJECT NO.: RDWD 14-05

TO THE TOWN COUNCIL

TOWN OF RIVERHEAD
RIVERHEAD, NEW YORK

For the furnishing and installing 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 proposes 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:

PROPOSAL

CONTRACT D – DISTRIBUTION SYSTEM
MAINTENANCE, INSTALLATION AND
EMERGENCY SERVICES
H2M PROJECT NO.: RDWD 11-01

RIVERHEAD WATER DISTRICT
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK
BID DATE: DECEMBER 9, 2014

CONTRACT D SCOPE OF WORK AND PROPOSAL

I. Location of Work

Various locations across the service area of the Riverhead Water District , including plant and water storage tank sites, public right-of-ways, easements, private communities, etc. within the Town of Riverhead, New York.

II. Scope of Work

1. Perform scheduled and emergency distribution system maintenance, repair, and restoration services for the Riverhead Water District in accordance with the requirements stipulated herein and all prevailing federal, state, and local safety and labor regulations.
2. Services may include but not be limited to water main break repair, installation and repair of service lines, valve replacement, hydrant replacement, water main replacement, installation of water service lines, installation of new water main and pavement repairs.
3. ***Work will be performed on an as-needed basis when authorized by the Water District in writing.*** The District will fax or e-mail a work order outlining the location and nature of work to be performed.
4. Scheduled maintenance or repair is non-emergency work and will be scheduled by the District at least 48 hours in advance of the start of the work.
5. Emergency service shall be provided to the Water District on a request basis. For emergency service the Contractor shall report to the site in need of service within three (3) hours after notification from the Water District.
6. Notification from the Water District may also be via phone call (for emergency work) and a fax/email transmission of the work order for the service requested. A copy of the work order form is included in Appendix A.
7. Contractor will be required to maintain the proper insurance as specified herein. Contractor shall guarantee workmanship and materials for a period of one (1) year upon completion of the work on equipment repairs, maintenance or replacement.
8. The Contractor shall arrange for all mark outs related to the work.

III. Specifications

This contract is for the provision of water distribution maintenance and service, both scheduled and emergency in the Town of Riverhead.

1. Work and materials authorized by the Water District, shall conform to the Detailed Specifications sections in Appendix B.

PROPOSAL

CONTRACT D – DISTRIBUTION SYSTEM
MAINTENANCE, INSTALLATION AND
EMERGENCY SERVICES
H2M PROJECT NO.: RDWD 11-01

RIVERHEAD WATER DISTRICT
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK
BID DATE: DECEMBER 9, 2014

2. The Contractor shall have sufficient qualified personnel and equipment to provide emergency service within three (3) hours of notification.
3. Scheduled maintenance must be completed in a timely fashion.
4. Contractor shall be required to provide written notification on the number of hours worked and a description of the work within 48 hours of providing service. Failure to provide this written account may subject the Contractor not being reimbursed for a portion or all of the claimed effort.
5. Routine and emergency service is expected to center around, but not be limited to, the repair of the District's water distribution system in public right-of-ways, roadways and on plant sites. Work shall be performed on water main, fire hydrants, valves, water services, meter pits and the like. Work may also include the installation of new water service stubs and/or the furnishing and installation of new water mains within the existing distribution system.
6. Invoices submitted to the District for payment must be itemized to show hourly labor rate, total labor hours, and material charges. When any single item of material costs in excess of \$500.00, the Contractor must include a copy of the Contractor's original material invoice. An additional 15% of this cost for handling, profit, and overhead may be added to that item's cost. **Invoice payment will not be made without this information.**
7. Contractor shall comply with all OSHA regulations relative to safe operations for his work, the safety of his workers, District / Town personnel, inspectors, and pedestrians. All employees must have completed the OSHA 40 hour course.
8. Certain facilities may require contractor to enter confined space to perform the work required. The contractor shall employ personnel trained in confined space safety and shall be responsible for supplying all equipment necessary for entering and working within a confined space.
9. Contractor shall abide by the New York State Department of Transportation standards and the Manual of Uniform Traffic Control Devices in establishing the maintenance and protection of traffic on all public roadways. In some instances a traffic control plan and details may be required by the governing road agency. In these cases these details shall be provided by the contractor at no additional costs to the Town/District.
10. Road opening permits for scheduled work shall be secured by and in the name of the contractor. All costs for securing of said permits to be the responsibility of the contractor.
11. The contractor is responsible for the establishment of meetings between themselves, the Water District and local road agency prior to final restoration. Limits of the final restoration shall be agreed upon prior to completion. The contractor risks forfeiture of a portion of payment for any final restoration performed without prior agreement of Water District.
12. By December 31 of each calendar year, the bidder shall provide the Town with a Maintenance Bond equal to one hundred percent (100%) of the total value of the work performed in the prior year. The Maintenance Bond shall remain in full force and effect for a period of one (1) year after the date of the bond
13. The 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 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.

PROPOSAL

CONTRACT D – DISTRIBUTION SYSTEM
MAINTENANCE, INSTALLATION AND
EMERGENCY SERVICES
H2M PROJECT NO.: RDWD 11-01

RIVERHEAD WATER DISTRICT
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK
BID DATE: DECEMBER 9, 2014

IV. Duration of Contract

Contract duration is from January 1, 2015 through December 31, 2015 with options for two (2) successive one (1) year periods (January 1, 2016 through December 31, 2016 and January 1, 2017 through December 31, 2017) at the discretion of the Town Board.

V. Payment

1. The Contractor, when authorized in writing by the Water District, will only be reimbursed for the actual labor and equipment provided and actual materials furnished and installed.
2. Payment will be made in accordance with the unit pricing schedule established in Section VI of this document.
3. Labor and equipment reimbursement (where hourly rates are applied) will be based on the actual time spent at the work location.
4. Mobilization to the work site shall be paid in accordance with the lump sum amount under either Item 1A (non-emergency) or Item 2A (emergency). The item shall include all costs associated with labor transportation to and from the work site, tools and small equipment necessary to perform the work and any other related mobilization costs.
5. The contractor shall provide the District with an invoice for work performed within 30 days of completion of service.
6. The Riverhead Water District / Town of Riverhead will not compensate the contractor for fuel surcharges.
7. The cost of the Maintenance Bond shall be reimbursed to the contractor upon its acceptance from the Town. The contractor shall not be eligible for overhead or profit to be paid on the bond and shall provide the Town with copies of invoicing from its Surety upon submission of reimbursement. The cost of the Maintenance Bond will be paid out of Item 34 with no mark-up assessed.
8. Mobilization to the work site shall be paid in accordance with the lump sum amount under Item 1. The item shall include all costs associated with labor transportation to and from the work site, tools and small equipment necessary to perform the work and any other related mobilization costs.
9. Failure of the contractor to provide appropriate billing to the District within ninety (90) days of completion of service may subject contractor to forfeiture of payment without notice from the Town/District.

PROPOSAL

CONTRACT D – DISTRIBUTION SYSTEM
 MAINTENANCE, INSTALLATION AND
 EMERGENCY SERVICES
 H2M PROJECT NO.: RDWD 11-01

RIVERHEAD WATER DISTRICT
 TOWN OF RIVERHEAD
 SUFFOLK COUNTY, NEW YORK
 BID DATE: DECEMBER 9, 2014

VI. Bidders' Proposal / 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 or 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 bid documents hereto attached; and it proposes and agrees, if this proposal is accepted, it will contract in the form as approved to perform all the work mentioned in said bid documents; and it will accept in full payment therefore the following sums to wit.

A. Labor Price Schedule:

Item No.	Description	Unit Price Schedule		
		Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
1A	Basic minimum (non-emergency) charge. Lump sum per work order to and from site.	\$	\$	\$
1B	Basic minimum emergency charge. Lump sum per work order to and from site.	\$	\$	\$
2A	Foreman - Straight time hourly labor rate (7:30AM to 4:30PM Weekdays).	\$	\$	\$
2B	Foreman - Overtime hourly labor rate.	\$	\$	\$
3A	Laborer - Straight time hourly labor rate (7:30AM to 4:30PM Weekdays).	\$	\$	\$
3B	Laborer - Overtime hourly labor rate.	\$	\$	\$
4A	Equipment Operator - Straight time hourly labor rate (7:30AM to 4:30PM Weekdays).	\$	\$	\$
4B	Equipment Operator - Overtime hourly labor rate.	\$	\$	\$
5A	Truck Driver - Straight time hourly labor rate (7:30AM to 4:30PM Weekdays).	\$	\$	\$
5B	Truck Driver - Overtime hourly labor rate.	\$	\$	\$
6A	5 man crew – Straight time daily rate (normal working hours Weekdays). Crew shall include Foreman, 2 Laborers, Operator, Driver, Utility Truck, Backhoe/Excavator, Dump Truck	\$	\$	\$
6B	6 man crew – Straight time daily rate (normal working hours Weekdays). Crew shall include Foreman, 3 Laborers, Operator, Driver, Utility Truck, Backhoe/Excavator, Dump Truck	\$	\$	\$

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 MAINTENANCE, INSTALLATION AND
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6C	7 man crew – Straight time daily rate (normal working hours Weekdays). Crew shall include Foreman, 4 Laborers, Operator, Driver, Utility Truck, Backhoe/Excavator, Dump Truck	\$	\$	\$
----	---	----	----	----

(Note: attach appropriate rate schedule if your company utilizes more than one labor rate classification. In addition, provide additional equipment, material and / or service charge schedules as necessary).

Crew size shall be based upon the minimum manpower effort necessary to complete the work. The Water District has the right to dictate the size of the crew necessary to complete the work associated with the task order. Should the District deem that the crew size is excessive for the work the Contractor will be notified immediately and shall make no charge to the Owner for the excessive effort. The minimum crew shall consist of a foreman and a laborer.

The Water District shall reserve the right to authorize payment based on the unit price schedule provided under Items 2 through 5, based on the daily rate provided under Item 6 or a combination of them all.

B. Equipment:

Item No.	Description	Unit Price Schedule		
		Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
7	Utility truck with compressor, pumps, jack hammers and tools - hourly rate	\$	\$	\$
8	Backhoe / Excavator - hourly rate	\$	\$	\$
9	Payloader - hourly rate	\$	\$	\$
10	Large cutting wheel/drum type milling machine - hourly rate	\$	\$	\$
11	Dump truck - hourly rate	\$	\$	\$
12	Asphalt Roller - hourly rate	\$	\$	\$
13	Traffic control arrow board - daily rate	\$	\$	\$
14	Attenuator Truck – daily rate	\$	\$	\$
15	Lighting for night work – hourly rate	\$	\$	\$
16	Tapping Machine - hourly rate	\$	\$	\$
17	Jacking Equipment including machine, tracks, augers, operator and all necessary equipment – daily rate	\$	\$	\$
18	Directional Boring Machine including vacuum truck, operator and all necessary equipment – daily rate	\$	\$	\$

Do not include any manpower effort in this section except where noted.

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C. Miscellaneous Tasks:

Item No.	Description	Unit Price Schedule		
		Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
19	Furnish & Installation of 18" diameter x 3/8" thick welded steel casing including material cost, welding machine with operator and casing spacers - price per liner foot (◆)	\$	\$	\$
20a	Hydrant Replacement - unit price (◆)	\$	\$	\$
20b	Hydrant Replacement w/ new branch valve - unit price (◆)	\$	\$	\$
21	Saw Cutting Pavement - per lf (◆◆)	\$	\$	\$
22	Removal and legal disposal of unsuitable excavated material - per cy (◆)	\$	\$	\$
23	Furnish and deliver Clean Fill - per cy (◆)	\$	\$	\$
24	Temporary Asphalt Paving Hot or Cold Patch (up to 4 inches thick) - per sy (◆)	\$	\$	\$
25a	Repave Town Roads in accordance with Town of Riverhead Highway Dept. requirements (asphalt base & asphalt top) - per sy (◆)	\$	\$	\$
25b	Repave Town Roads in accordance with Town of Riverhead Highway Dept. requirements (finished concrete pavement up to 6" thick) include reinforcing - per sy (◆)	\$	\$	\$
25c	Repave Suffolk County Roads in accordance with Suffolk County DPW requirements (asphalt base & asphalt top) - per sy (◆)	\$	\$	\$
25d	Repave New York State Composite Roads in accordance with NYSDOT standard details (concrete base up to 8" thickness & asphalt top) including reinforcing, insulation, dowels, etc. - per sy (◆)	\$	\$	\$
25e	Repave New York State Asphalt Roads in accordance with NYSDOT standard details (asphalt base up to 6" thickness & asphalt top) - per sy (◆)	\$	\$	\$
26a	Concrete Sidewalks with mesh - per sf (◆)	\$	\$	\$
26b	Concrete D/way Aprons w/ mesh *per sf (◆)	\$	\$	\$

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26c	Concrete Curb (Town or County) - per lf (◆)	\$	\$	\$
26d	Concrete Curb (State) - per lf (◆)	\$	\$	\$
26e	Belgian Block Curb - per lf (◆)	\$	\$	\$
27	Dewatering of trenches - per hour (◆)	\$	\$	\$
28a	Furnish and install 6" water service stub including connection to existing water main, 2" blow-off, testing and sampling (costs for material and restoration to be included under respective bid items) – per unit (◆◆)	\$	\$	\$
28b	Furnish and install 8" water service stub including connection to existing water main, 2" blow-off, testing and sampling (costs for material and restoration to be included under respective bid items) – per unit (◆◆)	\$	\$	\$
28c	Furnish and install 10" water service stub including connection to existing water main, 2" blow-off, testing and sampling (costs for material and restoration to be included under respective bid items) – per unit (◆◆)	\$	\$	\$
29a	Furnish and install 1-1/2" domestic water service including corporation, saddle, curb stop with box, extension rod, meter pit, lid, meter yoke with accessories, unions and OMNI C2 water meter with remote read accessories (including up to 60 liner feet of Type 'K' soft copper tubing) – per unit (◆)	\$	\$	\$
29b	Furnish and install 2" domestic water service including corporation, saddle, curb stop with box, extension rod, meter pit, lid, meter yoke with accessories, unions and OMNI C2 water meter with remote read accessories (including up to 60 liner feet of Type 'K' soft copper tubing) – per unit (◆)	\$	\$	\$
29c	Furnish and install 4" water service including 7'-0" x 7'-0" O.D. DT-201 precast meter vault with hatch, access ladder with safety climb, vault accessories, (3) 4" resilient seat gate valves, mechanical joint fittings, 4" class 52 ductile iron piping, 2" blow-off, OMNI C2 water meter with remote read accessories, testing and sampling – per unit (◆)	\$	\$	\$

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29d	Furnish and install 6" water service including 7'-0" x 7'-0" O.D. DT-201 precast meter vault with hatch, access ladder with safety climb, vault accessories, (3) 6" resilient seat gate valves, mechanical joint fittings, 6" class 52 ductile iron piping, 2" blow-off, OMNI F2 water meter with remote read accessories, testing and sampling – per unit (◆)	\$	\$	\$
29e	Furnish and install 8" water service including 7'-0" x 7'-0" O.D. DT-201 precast meter vault with hatch, access ladder with safety climb, vault accessories, (3) 8" resilient seat gate valves, mechanical joint fittings, 8" class 52 ductile iron piping, 2" blow-off, OMNI F2 water meter with remote read accessories, testing and sampling – per unit (◆)	\$	\$	\$
29f	Furnish and install 10" water service including 7'-0" x 7'-0" O.D. DT-201 precast meter vault with hatch, access ladder with safety climb, vault accessories, (3) 10" resilient seat gate valves, mechanical joint fittings, 10" class 52 ductile iron piping, 2" blow-off, OMNI F2 water meter with remote read accessories, testing and sampling – per unit (◆)	\$	\$	\$
30a	Furnish & Install 6" cement-lined ductile iron pipe (Class 52) including gaskets, wedges, excavation & compaction – per linear foot (◆)	\$	\$	\$
30b	Furnish & Install 8" cement-lined ductile iron pipe (Class 52) including gaskets, wedges, excavation & compaction – per linear foot (◆)	\$	\$	\$
30c	Furnish & Install 10" cement-lined ductile iron pipe (Class 52) including gaskets, wedges, excavation & compaction – per linear foot (◆)	\$	\$	\$
30d	Furnish & Install 12" cement-lined ductile iron pipe (Class 52) including gaskets, wedges, excavation & compaction – per linear foot (◆)	\$	\$	\$

(◆) - Include labor, equipment and materials for complete installation. (Do not include costs related to restoration items. Such costs will be reimbursed under the appropriate bid item).

- i. Under the bid price for Items 28A & 28B, the costs included under this item are the costs of labor and equipment to excavate and connect to existing water mains, installation of new main up to the property line, backfill and MPT. Costs for pipe, fittings and valves shall be paid under their respective bid item under Section D.
- ii. Under the bid items for Item 29C through 29e the bid price shall include all costs for labor, equipment and material to install the new water service from the property line in including all items specified in accordance with the standard detail included in the Appendix.

(◆◆) - Labor and equipment to complete the item including excavation, backfilling and compaction. (Do not include costs related to material or restoration items. Such costs will be reimbursed under the appropriate bid item).

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D. Materials (Furnished and Delivered – labor and equipment for installation is reimbursed under items in other Sections):

Item No.	Description	Unit Price Schedule		
		Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
31	Mechanical Joint Ductile Iron Fittings (C153) – per pound	\$	\$	\$
32a	4-inch stainless steel wrap around repair clamp – price per unit	\$	\$	\$
32b	6-inch stainless steel wrap around repair clamp – price per unit	\$	\$	\$
32c	8-inch stainless steel wrap around repair clamp – price per unit	\$	\$	\$
32d	10-inch stainless steel wrap around repair clamp – price per unit	\$	\$	\$
32e	12-inch stainless steel wrap around repair clamp – price per unit	\$	\$	\$
33a	6-inch resilient seat gate valve with retainer glands, gaskets, and three piece ductile iron sliding type box – per unit	\$	\$	\$
33b	8-inch resilient seat gate valve with retainer glands, gaskets, and three piece ductile iron sliding type box – per unit	\$	\$	\$
33c	10-inch resilient seat gate valve with retainer glands, gaskets, and three piece ductile iron sliding type box – per unit	\$	\$	\$
33d	12-inch resilient seat gate valve with retainer glands, gaskets, and three piece ductile iron sliding type box – per unit	\$	\$	\$
34	Percent mark-up for overhead and profit on invoiced parts and materials not covered under a particular bid item - * Fixed * Not to exceed 15%			

Note – The price of retainer glands, bolts, rods & associated hardware shall be included in the bid price for valves and fittings with MJ connections.

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E. Bid Comparison:

Item No.	Description	Number of Units	Total Price		
			Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
1A	Basic minimum (non-emergency) charge.	4 each	\$	\$	\$
1B	Basic minimum emergency charge	2 each	\$	\$	\$
2A	Foreman - Straight time labor rate	8 hr	\$	\$	\$
2B	Foreman - Overtime labor rate.	4 hr	\$	\$	\$
3A	Laborer - Straight time labor rate	8 hr	\$	\$	\$
3B	Laborer - Overtime hourly labor rate.	4 hr	\$	\$	\$
4A	Operator - Straight time labor rate	8 hr	\$	\$	\$
4B	Operator - Overtime labor rate.	4 hr	\$	\$	\$
5A	Truck Driver - Straight time labor rate	8 hr	\$	\$	\$
5B	Truck Driver - Overtime labor rate.	4 hr	\$	\$	\$
7	Utility truck & tools - hourly rate	8 hr	\$	\$	\$
8	Backhoe / Excavator - hourly rate	8 hr	\$	\$	\$
10	Large cutting wheel/drum type milling machine - hourly rate	8 hr	\$	\$	\$
11	Dump truck - hourly rate	8 hrs	\$	\$	\$
12	Asphalt Roller - hourly rate	8 hrs	\$	\$	\$
21	Saw Cutting Pavement – per lf	50 l.f.	\$	\$	\$
25a	Repave Town Roads (asphalt base & asphalt top) - per square yard	40 sy	\$	\$	\$
25c	Repave Suffolk County Roads (asphalt base & asphalt top) - per sy	20 sy	\$	\$	\$
25d	Repave New York State Composite Roads - per sy	20 sy	\$	\$	\$
25e	Repave New York State Asphalt Roads (asphalt base & top) - per sy	20 sy	\$	\$	\$
30a	6-inch cement-lined ductile iron pipe (Class 52) – per linear foot	50 lf	\$	\$	\$

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Item No.	Description	Number of Units	Total Price		
			Jan. 1, 2015 through Dec. 31, 2015	Jan. 1, 2016 through Dec. 31, 2016	Jan. 1, 2017 through Dec. 31, 2017
30b	8-inch cement-lined ductile iron pipe (Class 52) – per linear foot	50 lf	\$	\$	\$
31	Mechanical Joint Ductile Iron Fittings (C153) – per pound	100 lbs	\$	\$	\$
32b	6-inch stainless steel wrap around repair clamp – price per unit	2 units	\$	\$	\$
32c	8-inch stainless steel wrap around repair clamp – price per unit	2 units	\$	\$	\$
34a	6-inch gate valve with box – per unit	2 units	\$	\$	\$
34b	8-inch gate valve with box – per unit	2 units	\$	\$	\$
Subtotal: <i>(Bid comparison continued on next page)</i>			\$	\$	\$

F. Notes:

- ◆ Quantities provided are estimates only and will vary. Actual equipment and material cost will vary based on work authorized in writing by the Water District. The Water District will issue a purchase order for each specific work order.
- ◆ The qualified bidder will be required to provide the appropriate references (5 minimum) and documentation of qualifications.
- ◆ The Town Board reserves the right to award work that serves in the best interest to the Riverhead Water District. **Unbalanced bids will be rejected.**
- ◆ The Town Board / Water District reserves the right to award this contract to multiple entities based on what is in their best interest. If awarded to multiple entities, it is at the District’s discretion as to which entity they elect to perform selected work orders and will act in their best interest.
- ◆ The option to extend the contract an additional year (from January 1, 2016 through December 31, 2016) or two (from January 1, 2017 through December 31, 2017) can be exercised solely at the discretion of the Riverhead Town Board. Should the Town Board decide to renew the contract for an additional period, written authorization will be provided by the Riverhead Water District.
- ◆ The Water District reserves the right to do some of the work with its own personnel, and this contract is only for the additional work it cannot or will not handle.
- ◆ Where work is requested by the District that it is not included under the bid items provided, the District will request a separate proposal. This District is under no obligation to accept this proposal and reserves the right to perform the work themselves or secure the services of an outside contractor.
- ◆ The Water District retains the discretion to develop and separately bid other projects with an element of the type of work under this contract.

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- ◆ The basic minimum service charges shall include all costs for the contractor to mobilize the entire crew to and from the work site. The basic minimum service charge will be paid once per work order regardless of the numbers of days or hours it takes to complete the work.
- ◆ Emergency service is defined as work requiring a response from the contractor within three (3) hours of request by the District. The emergency service charge will be paid once per emergency service request.
- ◆ The District will reimburse the contractor for the expense of the maintenance bond. The cost of the maintenance bond (dollar for dollar) will be reimbursed by the District upon receipt. The maintenance bond will cover all work performed in that year and will be dated to begin coverage at the end of current contract term.
- ◆ The Town/District reserves the right to award this contract based on either the total bid or any combination of items. The Town/District reserves the right to award the bid to multiple entities. The Town/District reserves the right to reject any or all bids.
- ◆ Within ten (10) days (Weekends and legal holidays excepted) after acceptance of this bid by the Town/District, the bidder shall execute the contract. The bidder shall furnish the required bonds and insurances to the water district's attorney within the same time frame.
- ◆ 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 contractor shall coordinate all work with the District to minimize disturbances to District operations.

G. Bidder Information and Certification:

Company Name: _____

Address: _____

Telephone Number: _____ Fax Number: _____

Emergency Number: _____ Email: _____
_____ Email: _____

Federal I.D. or SS Number: _____

Authorized Representative Signature Title

Print Name Date

BID SECURITY

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

The Bidder hereby agrees to appear with its sureties at the office of the legal council for the Riverhead Water District within ten (10) days (Weekends and legal Holidays excepted) after due notice from the Town Board that the contract has been awarded to it and is ready for signature; such notice to be given in writing within thirty (30) days of opening of the bids.

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) days (Weekends & legal Holidays 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 Information for Bidders and/or its failure to execute and deliver the bond for the full amount of the contract price, as provided in said Information for Bidders, 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:

NAME	ADDRESS
_____	_____
_____	_____
_____	_____

NAME OF BIDDER: _____

BUSINESS ADDRESS OF BIDDER: _____

DATED AT: _____ THE _____ DAY OF _____, 20 ____.

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 certified 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 certifies that he/she has fully informed him or herself regarding the accuracy of the statements contained in this certification and, under 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) that attached hereto (if a corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signatory of this bid or proposal on behalf of the corporate bidder.

Resolve that _____ be authorized
NAME OF CORPORATION

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

CONTRACT D – DISTRIBUTION SYSTEM MAINTENANCE, INSTALLATION
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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 such 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: _____

RESPECTIVELY SUBMITTED:

Firm Name: _____

Address: _____

Signed By: _____

Title: _____

CONTRACT

CONTRACT IN QUADRUPLICATE FOR Contract D – Distribution Maintenance, Installation and
Emergency Services

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 for the sum of:

_____ (\$ _____)

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

CONTRACT

1. CONTRACT DOCUMENTS AND DEFINITIONS

The Notice to Bidders, Information for Bidders, Proposal, Contract, 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, any Addenda, and the Notice to Bidders, Information for Bidders, and Proposal. In case of any conflict or inconsistency 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 with the Town's approval, involves changes in or additions to work required.

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.

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 Town/District.

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, Town/District standards 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.

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 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 15 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 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.

CONTRACT

5. COMMENCEMENT OF WORK

The Contractor agrees that he will commence work in accordance with contract periods described herein.

6. TIME FOR COMPLETION

The time for completion of this Contract shall be in accordance with contract periods described herein. The TOWN DISTRICT reserves the right to order the Contractor to suspend operations when improper weather conditions make such action advisable, and to order the Contractor to resume operations when weather and ground conditions permit.

~~7. PENALTY FOR DELAY~~

~~_____ The Contractor shall be penalized for not completing the work within the agreed to time frame set in the work order. Penalty may include overhead charges, services, inspector's wages, that the TOWN DISTRICT will suffer by reason of such delay, 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 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.

CONTRACT

9. CONTRACT SECURITY

At the completion of each contract year, the Contractor shall deliver to the TOWN DISTRICT a Maintenance Bond equal to one hundred percent (100%) of the total value of work performed under this contract. 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 annual 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) 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.

CONTRACT

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 ONE MILLION DOLLARS (\$1,000,000.) 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 TWO MILLION DOLLARS (\$2,000,000.) 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, providing for a limit of not less than ONE MILLION DOLLARS (\$1,000,000.) 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 TWO MILLION DOLLARS (\$2,000,000.) 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. 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.

CONTRACT

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 ONE MILLION DOLLARS (\$1,000,000.) 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 TWO MILLION DOLLARS (\$2,000,000.) 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.

FUEL SURCHARGES: The Town/District will not pay any type of fuel surcharge. Any fuel surcharges added will be deleted from any payments made to the vendor.

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.

CONTRACT

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 are established by the Industrial Commissioner, State of New York, for this Contract. It is the contractors responsibility to ensure wages are paid in accordance with latest revision.

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

CONTRACT

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. Scheduled or Emergency Work: Upon completion of the work required under each work order, the Contractor shall submit to the District a payment request with the appropriate invoicing. 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 due to him. The making of any such estimate or payment made thereon shall not be taken or construed as an acceptance by the TOWN DISTRICT of any work so estimated and paid for. All payments are subject to correction in any subsequent payment.

B. Preventive Maintenance Assessment: Upon completion of the work required under the Preventive Maintenance Assessment, the Contractor shall submit to the District a payment request with the appropriate invoicing. 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 due to him. The making of any such estimate or payment made thereon shall not be taken or construed as an acceptance by the TOWN DISTRICT of any work so estimated and paid for. All payments are subject to correction in any subsequent payment. Partial payments will be accepted.

C. Maintenance Bond: At the end of each contract period, the contractor shall submit to the Town a one year Maintenance Bond for the full value of the work performed during the contract period. The TOWN/DISTRICT will reimburse the Contractor for said bond based on a dollar for dollar value.

15. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of the final payment for each work order 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.

16. INSPECTION AND TESTS

All material and workmanship shall be subject to inspection, examination and test by the TOWN DISTRICT or their representative 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 TOWN DISTRICT's 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

CONTRACT

the fault of the Contractor or any subcontractor, 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.

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 Town/District. Satisfactory documentary evidence that the material has passed the required inspection and test must be furnished the Town/District 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.

17. 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.

18. SUPERINTENDENCE BY CONTRACTOR

Contractor shall designate a contact person to whom emergency calls and work orders shall be directed. At the site of the work the Contractor shall designate a mechanic who shall have full authority to act for the Contractor.

19. 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 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.

CONTRACT

20. 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.

21. 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 Contract 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.

22. 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.

23. 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.

CONTRACT

24. 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 Town/District, 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 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.

25. 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.

26. 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.

27. 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

CONTRACT

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 TOWN DISTRICT; or

E. The Contractor is deemed non-responsive

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.

28. 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.

29. 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 Town/District Engineer, notwithstanding the fact that it may have been overlooked by the proper inspector, and partial payment made thereon. It is fully

CONTRACT

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.

30. 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. 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.

31. 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 Town/District 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 Town/District to prevent such threatened injury or damage, he shall act as instructed by the Town/District. 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.

32. 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.

CONTRACT

33. 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.

34. 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.

CONTRACT

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

CONTRACT

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

APPENDIX A

WORK ORDER FORM

WORK ORDER FORM

To: _____

W.O. # _____

Fax No.: _____

Date: _____

Address: _____

Time: _____

**Re: Riverhead Water District
Contract D - Distribution System Maintenance, Installation and Emergency Services
Contract No.: RDWD 14-05**

Dear [*Contractor*]:

This will confirm that your firm has been assigned the following work under the above referenced contract:

- Emergency Status (3 hour response time required)
- Non-Emergency Status (Time stipulation below)

Commence On or After: _____

Complete Work by: _____

Work Description: _____

Please sign below to confirm that you have received and accepted this assignment and that you agree to complete the work in accordance with the above schedule.

Very truly yours,

Riverhead Water District

Mark Conklin

AGREED AND CONSENTED:

Contractor

P.O. # _____

Date

APPENDIX B

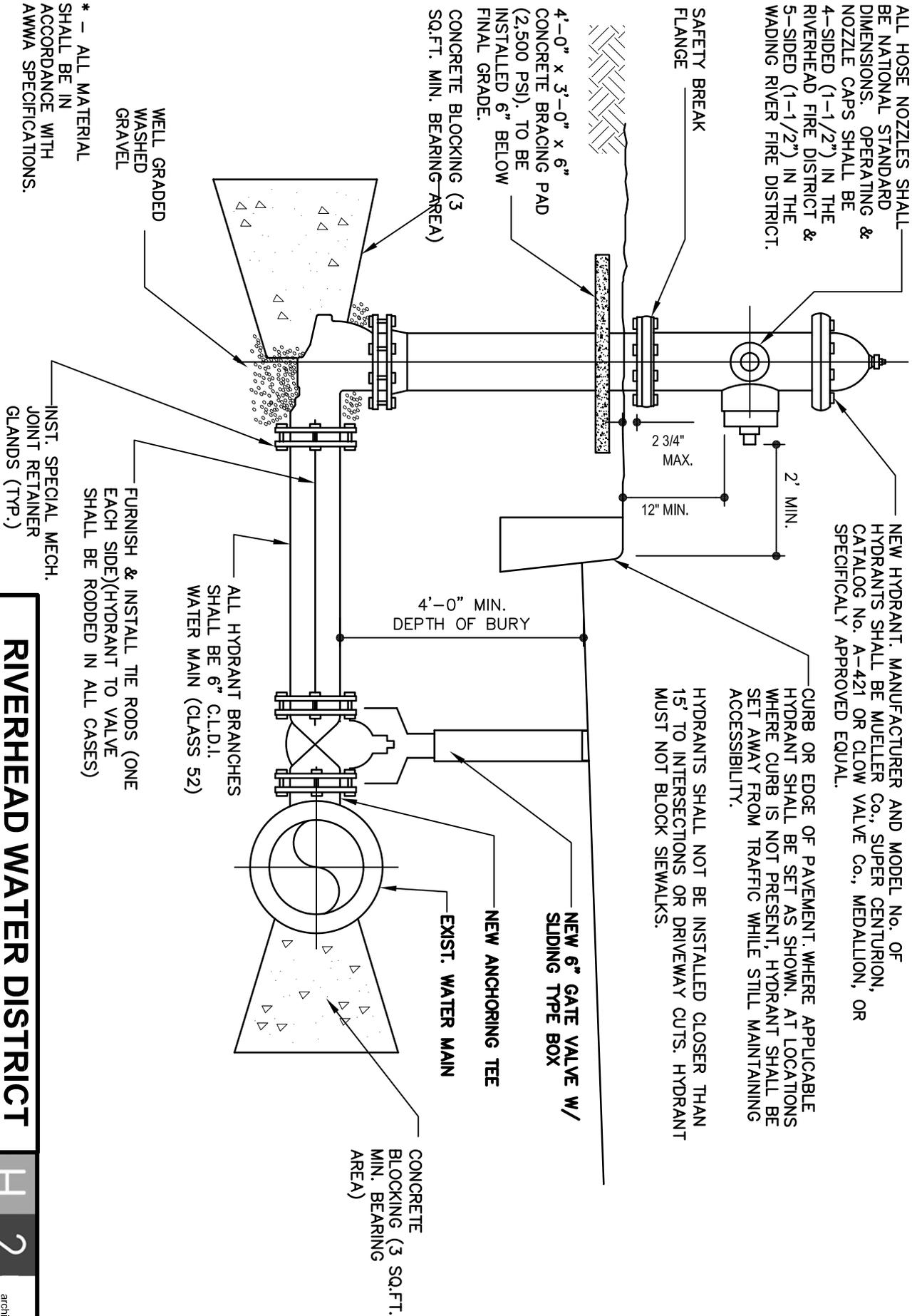
STANDARD DETAILS

ALL HOSE NOZZLES SHALL BE NATIONAL STANDARD DIMENSIONS. OPERATING & NOZZLE CAPS SHALL BE 4-SIDED (1-1/2") IN THE RIVERHEAD FIRE DISTRICT & 5-SIDED (1-1/2") IN THE WADING RIVER FIRE DISTRICT.

NEW HYDRANT, MANUFACTURER AND MODEL No. OF HYDRANTS SHALL BE MUELLER Co., SUPER CENTURION, CATALOG No. A-421 OR CLOW VALVE Co., MEDALLION, OR SPECIFICALLY APPROVED EQUAL.

CURB OR EDGE OF PAVEMENT, WHERE APPLICABLE HYDRANT SHALL BE SET AS SHOWN. AT LOCATIONS WHERE CURB IS NOT PRESENT, HYDRANT SHALL BE SET AWAY FROM TRAFFIC WHILE STILL MAINTAINING ACCESSIBILITY.

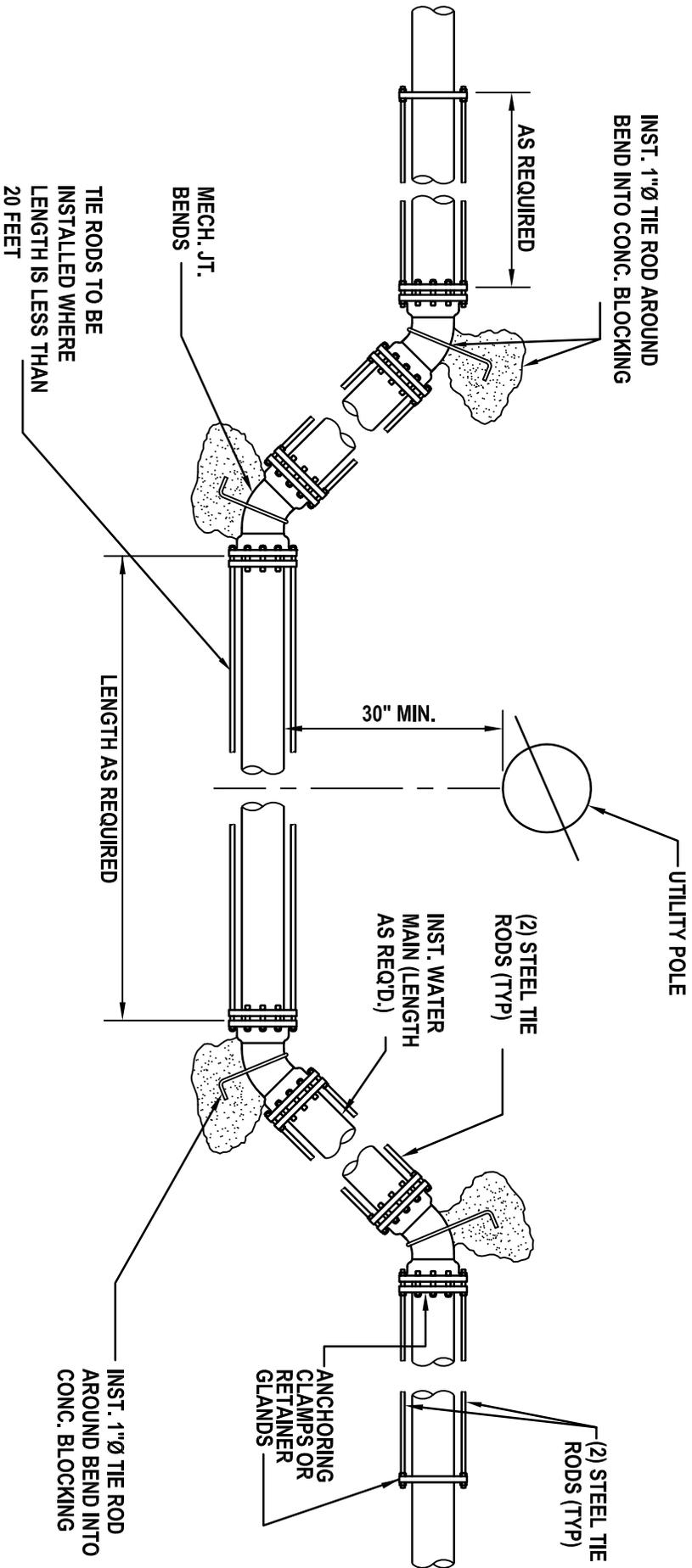
HYDRANTS SHALL NOT BE INSTALLED CLOSER THAN 15' TO INTERSECTIONS OR DRIVEWAY CUTS. HYDRANT MUST NOT BLOCK SEWALKS.



RIVERHEAD WATER DISTRICT TYPICAL HYDRANT INSTALLATION DETAIL



architects + engineers
 Malville, NY Albany, NY
 New City, NY Poughkeepsie, NY

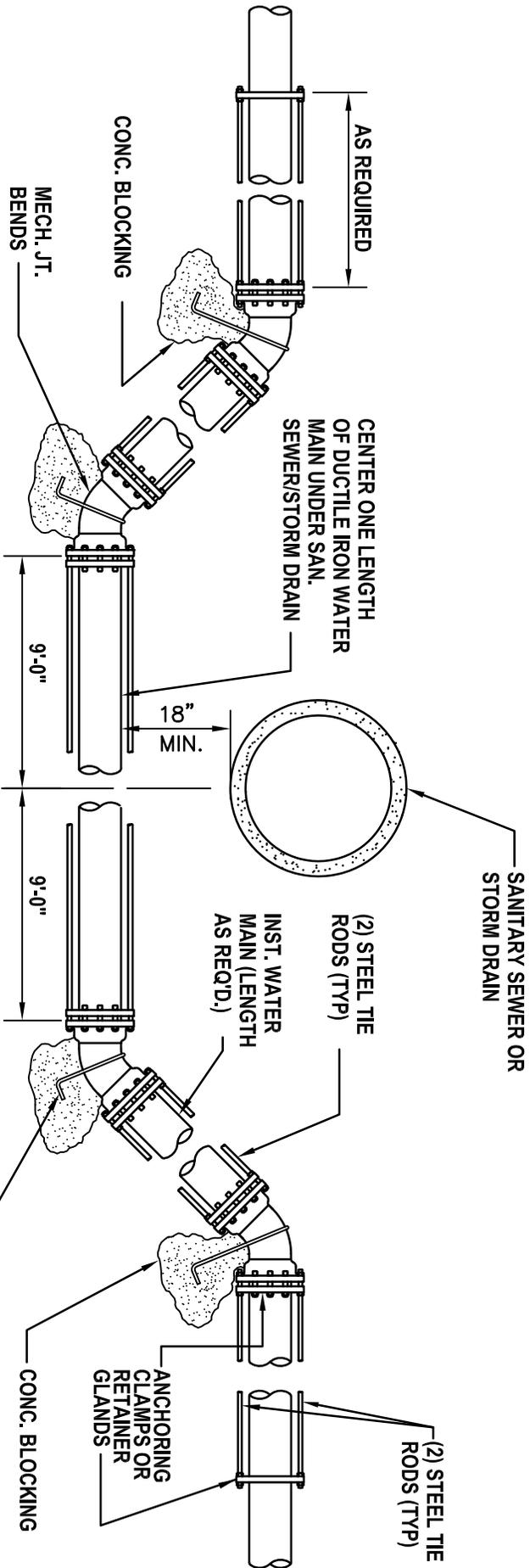
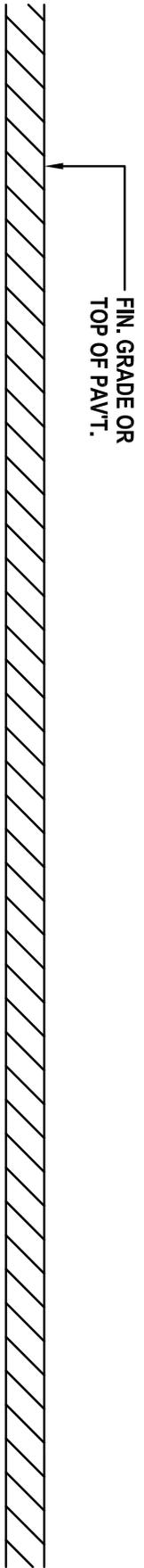


HORIZONTAL OFFSET DETAIL
NO SCALE

**RIVERHEAD WATER DISTRICT
TYPICAL HORIZONTAL
OFFSET DETAIL**

**H 2
M**

architects + engineers
 Malville, NY Albany, NY
 New City, NY Poughkeepsie, NY

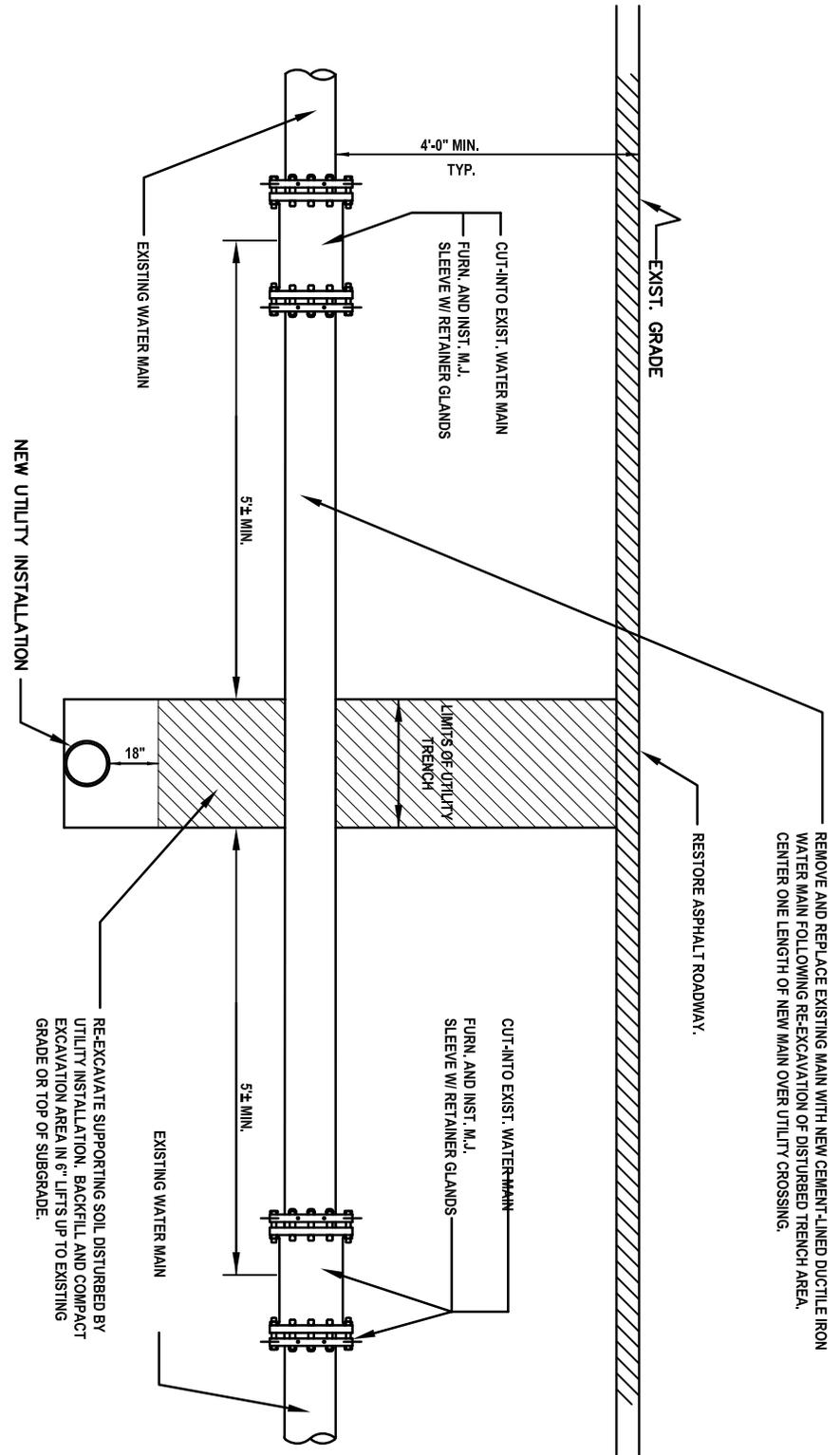


WATER/DRAIN OR SEWER CROSSING DETAIL

**RIVERHEAD WATER DISTRICT
TYPICAL OFFSET DETAIL**

H 2 M

architects + engineers
 Mahlis, NY Albany, NY
 New City, NY Parsippany, NJ

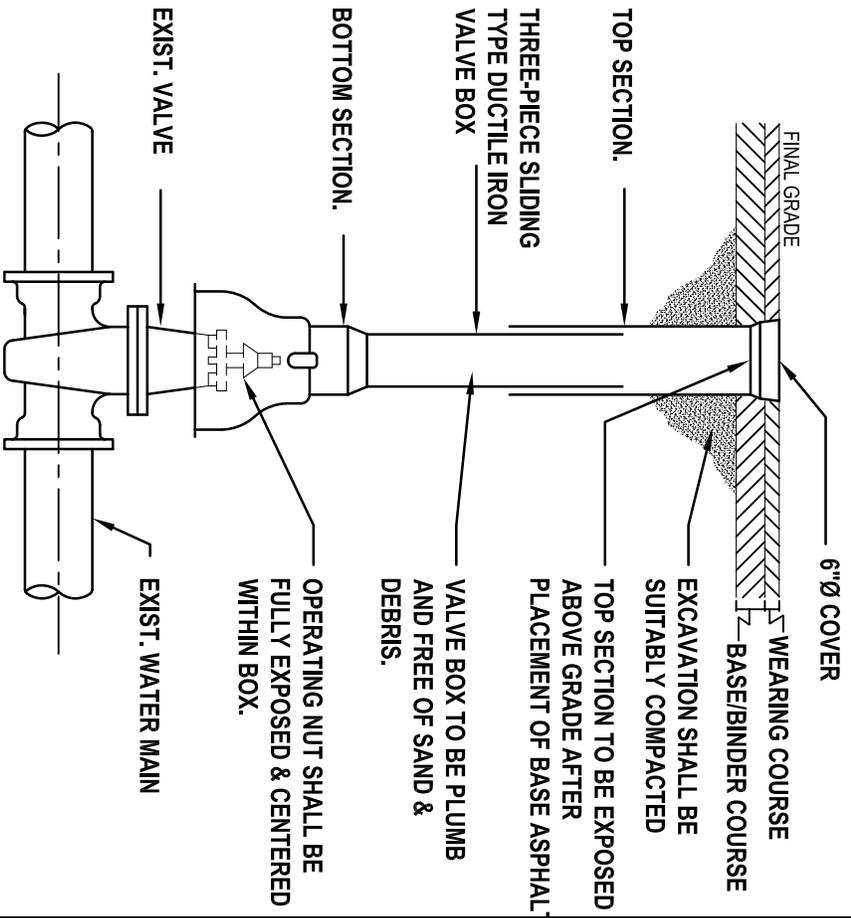


UTILITY CROSSING UNDER WATER MAIN
NOT TO SCALE

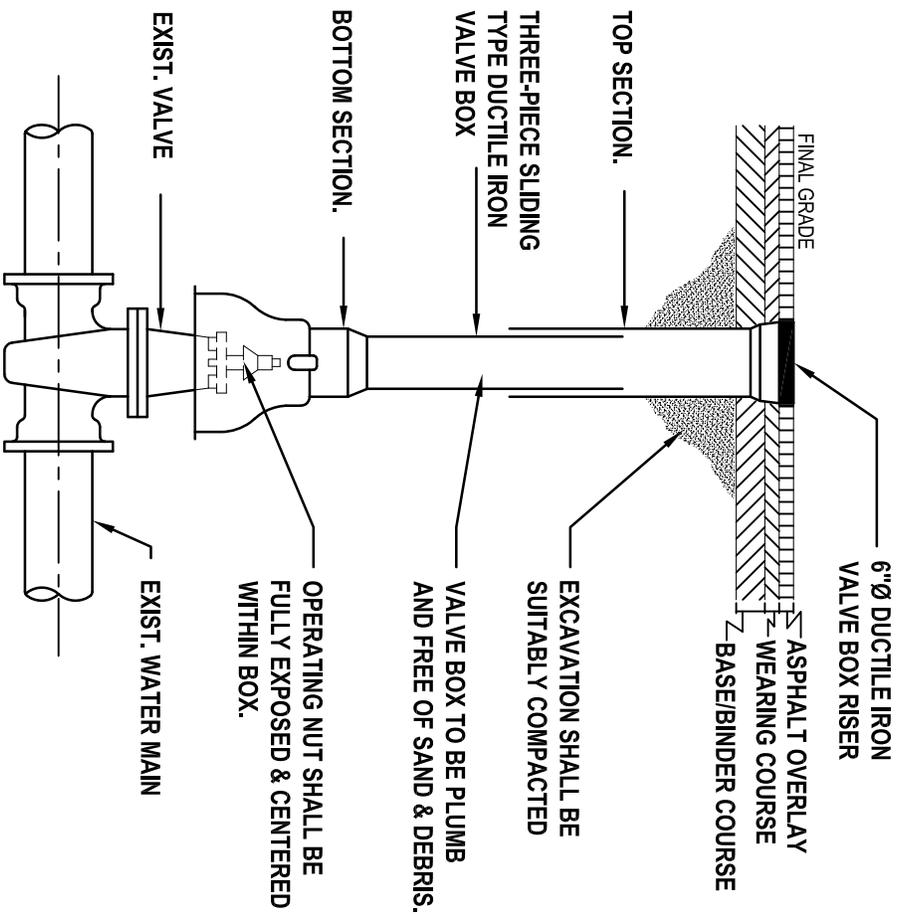
RIVERHEAD WATER DISTRICT
TYPICAL UTILITY
CROSSING DETAIL

H 2
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architects + engineers
Malville, NY Albany, NY
New City, NY Poughkeepsie, NY



METHOD 'A' - INITIAL PAVING
NO SCALE



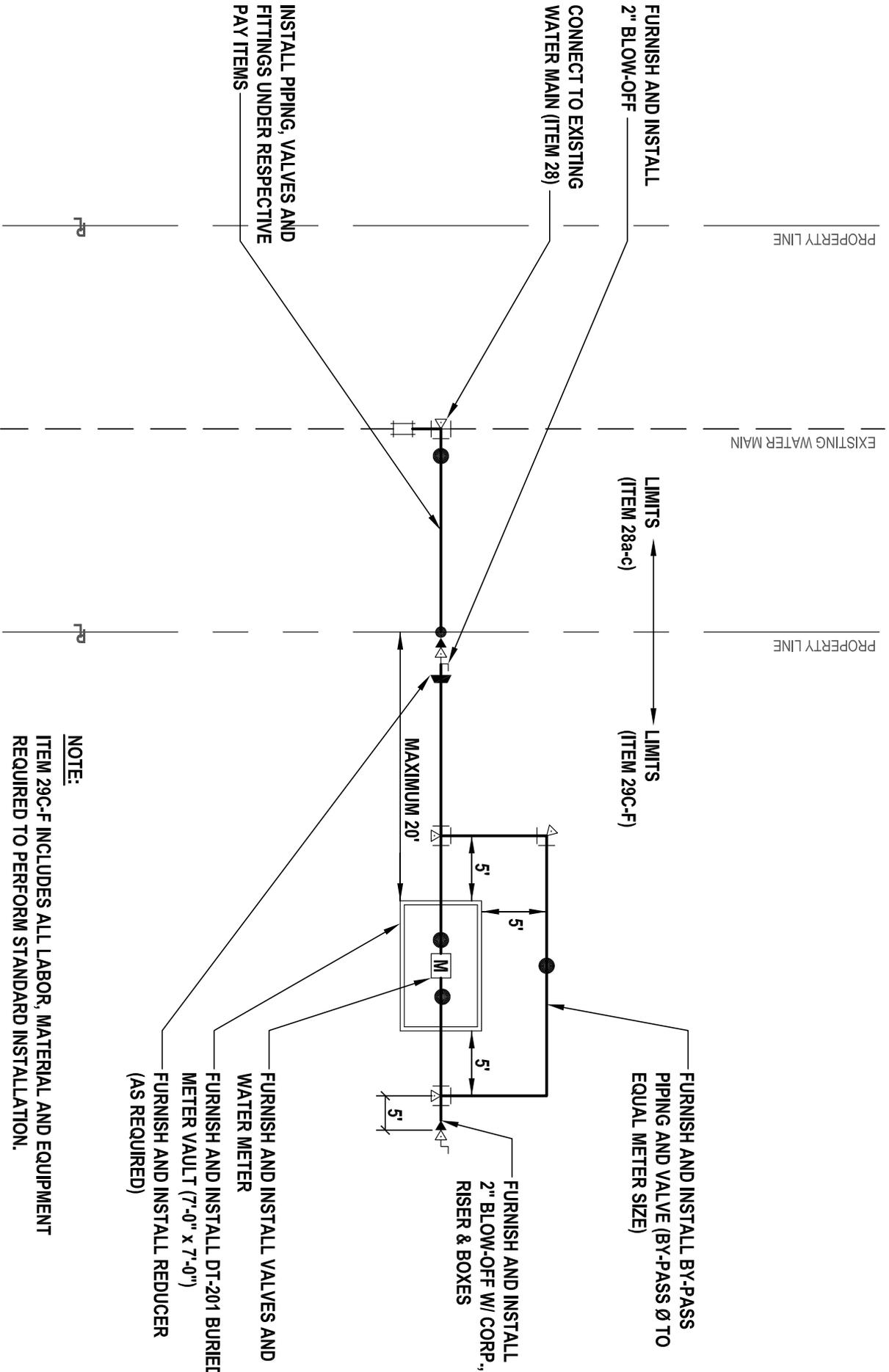
METHOD 'B' - REPAVING
NO SCALE

**RIVERHEAD WATER DISTRICT
TYPICAL VALVE BOX
INSTALLATION DETAIL**



architects + engineers

Maitlis, NY Albany, NY
New City, NY Parsippany, NJ



NO SCALE

NOTE:
 ITEM 29C-F INCLUDES ALL LABOR, MATERIAL AND EQUIPMENT
 REQUIRED TO PERFORM STANDARD INSTALLATION.

**RIVERHEAD WATER DISTRICT
 TYPICAL WATER SERVICE
 APPLICATION INSTALL DETAIL**



architects + engineers
 Malville, NY Albany, NY
 New City, NY Patsippany, NJ

APPENDIX C

TECHNICAL SPECIFICATIONS

PART 1 - GENERAL

1.01 - SECTION INCLUDES

- A. Copper piping and accessories
- B. Corporation stops
- C. Curb stops
- D. Extension services boxes
- E. Meter pits & covers
- F. Yoke bars & meter setters
- G. Water meters

1.02 - RELATED SECTIONS

- A. Section 312333 - Trenching
- B. Section 331100 – Water Utility Distribution Piping
- C. Section 331300 – Disinfection of Water Utility Distribution

1.03 - REFERENCES

- A. ASME B42 - Seamless Cooper Pipe.
- B. ASME B16.22 - Wrought Copper and Bronze Solder-Joint Pressure Fittings.
- C. ASTM B42 - Seamless Cooper Pipe.
- D. ANSI/AWWA C800 – Underground Service Line Valves and Fittings
- E. ANSI/NSF Standard 61, Drinking Water System Components

1.04 - QUALITY ASSURANCE

- A. Perform work in accordance with the Water District's requirements.
- B. All brass valves and fittings installed on a potable water supply line shall be made of "low-lead" materials and have a maximum lead content of 0.25 percent by weight. All low lead brass fittings

shall be stamped or embossed with a mark indicating that the product is manufactured from low-lead alloys.

PART 2 - PRODUCTS

2.01 - COPPER PIPING AND ACCESSORIES

- A. All underground copper piping, for potable water shall be soft annealed Type "K" ANSI H-23.1 with fittings per ANSI A-40.2.
- B. Straight couplings shall be as manufactured by MUELLER COMPANY No. H-15403 or specifically approved equal and be used only to connect new copper to existing. Couplings shall not be used between the corporation stop and reconnection point unless the length of copper exceeds one hundred feet for $\frac{3}{4}$ or 1 inch or 60 feet for 1- $\frac{1}{2}$ or 2 inch.
- C. Insulated adaptor shall be installed on the outlet side of the meter yoke on 1 inch water services only. Insulated adaptor shall be as manufactured by MUELLER COMPANY No. H-35428 or specifically approved equal.

2.02 – CORPORATION STOP

- A. Corporation stops shall be MUELLER COMPANY No. H-15008 for 1-inch and No. H-15023 for 1- $\frac{1}{2}$ and 2 inch. Ball valve type corporation stops may be utilized if pre-approved by Water District. Specifically approved equal shall be as manufactured by the FORD METER BOX COMPANY.
- B. Water service bronze body with AWWA standard thread inlet and copper AWWA outlet, complete with straight coupling nuts.
- C. A service saddle shall be utilized on all taps greater than 1-inch. Service saddle shall be Type F3202 as manufactured by FORD METER BOX COMPANY or MUELLER COMPANY, No. DR-2-S-XXXX-CC-150/200.

2.03 – CURB STOPS

- A. All curb stops shall be by MUELLER COMPANY, No. H-15202. Ball valve curb stops may also be utilized if pre-approved by the Water District. Specifically approved equal shall be as manufactured by the FORD METER BOX COMPANY.
- B. All metal parts shall be constructed of water service bronze. The curb stop shall have a combined tee and cap and an inverted tapered key with 1/4-inch hole drilled in cap for attaching a stationary rod. The valve shall open to the left (counterclockwise).

2.04 – EXTENSION SERVICE BOXES

- A. Extension service boxes with stationary rod (for 1-inch curb stop) to be Buffalo/Gardiner style extension size 94-E or 94-F or specifically approved equal. Heavy duty extension service boxes with heavy duty rods shall be used on all 1-¹/₂ and 2 inch water services.
- B. Extension service boxes shall be constructed of extra grade gray iron cover and base, steel extension pipe, with a small arch pattern base for 1/2-inch through 1-inch curb stops; adjustment between 4 and 5 feet; complete with stationary inside stop rod; one-piece lid for removal with spanner wrench.

2.05 – METER PITS & COVERS

- A. The meter pit shall be 24 inch diameter by 48 inches tall with a tapered top to 21 inches for 1 inch water services and for 36 inches and 48 inches tall for 1-1/2 and 2 inch water services. All pits shall be constructed of Thermoplastic, notched (3 x 4 inch) 180 degrees with anti setting flanges. In addition, pit wall thickness shall be no greater than 0.7 inches and no less than 0.3 inches.
- B. The pit cover shall be constructed of ductile iron and shall have a 1-³/₄ inch drilled hole capable of accepting the remote read pad.
- C. Meter pit covers and lids for 24 inch diameter pits shall be as manufactured by FORD METER BOX COMPANY, Model No. A4-T for covers and Model No. WA3L-T for the lids (11-¹/₂ inch opening). Meter pit covers and lids for 30 inch diameter pits shall be as manufactured by FORD METER BOX COMPANY, Model No. MC-30-T for covers and Model No. RML-11T for the lid.

2.06 – YOKE BARS & METER SETTERS

- A. 1-Inch Water Service:
 - 1. The 1 inch yoke bar shall be installed at a height that will allow for 15 to 18 inches of clearance between the top of the meter and the meter pit lid, or 22 to 25 inches of clearance between the top of the yoke and the meter pit lid. The 1 inch yoke bar shall be as manufactured by FORD METER BOX COMPANY, No. Y504. Yoke bar shall contain expansion coupling as manufactured by FORD METER BOX COMPANY, No. EC-4. Expansion couplings shall not be installed at the time of installation and instead delivered to the Water District office.
 - 2. A 90 degree angle valve as manufactured by FORD METER BOX COMPANY, No. AV92-444W shall be installed on the inlet side of the yoke bar.
 - 3. A 90 degree angle check valve as manufactured by FORD METER BOX COMPANY, No. HA91-444D shall be installed on the outlet side of the yoke bar.

B. 1-¹/₂ Inch Irrigation Service:

1. The 1-1/2 inch copper meter setter shall be as manufactured by MUELLER COMPANY, Catalog No. B-2423-2, or specifically approved equal. Riser height, dimension "B" shall be 24 inches unless otherwise stated. Adjustable dimension "A" shall be 13 inches. A bypass is not required or permitted.

C. 2-Inch Water Service:

1. The 2 inch copper meter setter shall be as manufactured by MUELLER COMPANY, Catalog No. B-2423-99000, or specifically approved equal. Riser height, dimension "B" shall be 24 inches unless otherwise stated. Adjustable dimension "A" shall be 15-¹/₄ inches. A 1 inch elevated bypass with lockable ball valve is required. Meter Setter shall be specially ordered with a 2 inch angle dual check valve with meter flange on the outlet side of the setter.

2.07 – WATER METER

- A. The 1-inch water meter shall be as manufactured by SENSUS TECHNOLOGIES, INC., SR2 Displacement Type with Touch Read System equipment. The meter shall utilize AWWA standard meter flanges.
- B. The 1-¹/₂ inch water meter shall be as manufactured by SENSUS TECHNOLOGIES, INC., Model OMNI T2 with Touch Read System equipment. The meter shall utilize AWWA standard meter flanges. The meter and AMR hardware shall be supplied by the Contractor.
- C. The 2 inch water meter shall be as manufactured by SENSUS TECHNOLOGIES, INC., Model OMNI C2 with Touch Read System equipment. The meter shall utilize AWWA standard meter flanges. The meter and AMR hardware shall be supplied by the Contractor.

PART 3 - EXECUTION

3.01 - INSTALLATION

- A. Notify all consumers before reconnection (if required) and also immediately prior to shutdown. The actual shutdown shall be kept to a minimum. Before tapping, the pipe shall be thoroughly cleaned by removing all dirt and scale. The main shall be tapped on the side facing the house. All copper service pipes shall be installed at 4'-6" minimum cover with slack left at the corporation stop.

The Contractor shall furnish and install all materials and incidentals as outlined herein including the copper tubing, complete from the new corporation stop up to and through the meter pit. The

new installation shall include the corporation stop, saddle, 'K'-copper, curb stop with box & extension rod, meter pit with cover, meter (1-¹/₂ and 2 inch only) and all appurtenances, including all types of restoration within roadway and on private property.

- B. The curb box shall be centered over the curb stop and shall be plumb with the cover slightly above grade.
- C. In making cuts in copper service pipe, the most modern equipment shall be used to produce a square cut. The tubing, after cutting, shall be cut square, burrs removed and reamed. Fittings, sockets and tube ends shall be thoroughly cleaned to a bright finish. All solder joints shall be fluxed using either 95/5 tin/antimony or silver solder. NO LEAD SOLDER WILL BE PERMITTED.
- D. On completion of the service connection, the corporation stop shall be left on.
- E. All new copper service piping crossing existing drain lines shall be installed at a 4'-6" minimum cover wherever possible. In areas where 4'-6" cover cannot be maintained, the Contractor will be allowed to cross the drain line with an absolute minimum cover of 3'-6", otherwise the new service shall be installed under the drain, etc. All new services installed with cover between 3'-6" and 4'-6" due to drain interference, etc., shall be wrapped with felt wrapping and tar paper or other approved frost wrap protection. A minimum of ten-foot horizontal separation shall be maintained between the new water service and any sanitary sewer facilities including; pipes, tanks and pools.
- F. The Contractor shall take all necessary precautions to minimize damage to any underground utility. Damage to any utility shall be immediately repaired and the cost of such repair shall be the responsibility of the Contractor. No water service shall be accepted which has been installed through any storm drain, etc.

3.02 - FIELD QUALITY CONTROL

- A. Flush new service line prior to installing meter.
- B. Before piping is concealed, recheck it for leaks.

END OF SECTION

PART 1 - GENERAL

1.01 - SECTION INCLUDES

- A. Cement-Lined Ductile Iron Pipe.
- B. Special Castings; Mechanical Joint Fittings.
- C. Buried Gate Valves & Valve Boxes.
- D. Repair Clamps.

1.02 - RELATED SECTIONS

- A. Section 312333 - Trenching.
- B. Section 331300 - Disinfection of Water Utility Distribution.

1.03 - REFERENCES

- A. ANSI/AWWA C104 - Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.
- B. ANSI/AWWA C110 - Ductile Iron and Grey Iron Fittings.
- C. ANSI/AWWA C111- Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- D. ANSI/AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast for Water Service.
- E. ANSI/AWWA C153 - Ductile-Iron Compact Fittings for Water Service.
- F. ANSI/AWWA C500 - Metal Seated Gate Valves for Water Supply Service.
- G. ANSI/AWWA C509 – Resilient Seated Gate Valves for Water Supply Service.
- H. ANSI/AWWA C600 - Installation of Ductile Iron Water Mains and Their Appurtenances.
- I. ANSI/AWWA C800 - Underground Service Line Valves and Fittings.
- J. ANSI/NSF Standard 61, Drinking Water System Components

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with the local water utility company requirements.
- B. The tone-out, mark-out, locating and verification of existing utilities on private property and within public Right-of-Ways are the responsibility of the Contractor. All known utilities and facilities shall be verified by test holes or other means prior to commencing water main installation. No compensation will be paid to the Contractor for lost time due to improper or inadequate utility investigation.
- C. The Contractor shall conform to the standard traffic requirements of the New York State Manual of Uniform Traffic Control Devices for work in Public Roadways.

1.06- DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to site in accordance with contract.
- B. Deliver and store valves in shipping containers with labeling in place.

PART 2 - PRODUCTS**2.01 - PIPE**

- A. Cement-Lined Ductile Iron Pipe (**Special Class 52**): ANSI/AWWA C151 and ANSI/AWWA C104, with the following accessories:
 - 1. Joints: ANSI/AWWA C111, rubber gasket for push-on pipe; mechanical joint with rods and retainer glands for fittings.
 - 2. Lubricant for Joints: Nontoxic; shall not support the growth of bacteria; shall have no deteriorating effects on the gasket or pipe material.

2.02 – SPECIAL CASTINGS

- A. Material & Manufacturers
 - 1. Fittings: ANSI/AWWA C110/C153
 - 2. Ductile iron fittings will be utilized on this project unless indicated otherwise on the Drawings.
 - 3. Ductile iron fittings shall have a pressure rating of 350 psi.

4. All fittings shall be manufactured by TYLER UNION, SIGMA, or specifically approved equal.
- B. Mechanical Joint: mechanical joint fittings shall be used with "push-on" joint pipe with the joint conforming to ANSI Specification A21.11-2007 or latest revision or AWWA Specification C111-07 or latest revision.
1. Rubber gaskets shall be used at each end for joining mechanical joint pipe. Rubber gaskets shall be vulcanized styrene butadiene rubber that is free of porous areas, foreign materials and visible defects. No reclaimed rubber shall be used. The size, mold number, gasket manufacturer's mark, the letters "MJ" and the year of manufacture shall be molded in the rubber.
 2. Retainer glands shall be required for all mechanical joints and shall be as manufactured by TYLER UNION, SIGMA, EBAA IRON, INC. or specifically approved equal. Wedge type joint restrainers may also be utilized.
 3. Concrete blocking shall be applied on all pipe lines 4-inch in diameter and larger at all hydrants, tees, plugs, caps, and at bends deflecting 22-1/2 degrees or more. Blocking shall be placed between solid ground and the fitting to be anchored. The blocking shall be so placed that the pipe and fitting joints will be accessible for repair.
 4. Concrete for Thrust Blocks: Normal Portland Cement Concrete; air entrained; 4,000 psi (27.5 MPa) minimum strength at 28 days.
 5. The Contractor shall install 3/4-inch steel tie rods on mechanical joint fittings. The tie rods shall be threaded through the bolt holes in the flange and secured by nuts attached to the rod using spacers. More than one length of pipe on each side of the fitting may require restraint. For all vertical bends, 3/4-inch diameter tie rods and pipe clamps or retainer glands shall be provided in addition to the concrete blocking specified above for bends deflecting 22-1/2 degrees or more.

2.03 – BURIED VALVES

- A. Acceptable Gate Valve Manufacturers (Up to 12"):
1. MUELLER COMPANY.
 2. CLOW VALVE COMPANY.
 3. KENNEDY VALVE.

- B. Acceptable Butterfly Valve Manufacturers (greater than 12")
1. MUELLER COMPANY Lineseal XP II, Catalog No. B-3211-20.
 2. Specifically approved equal.
- C. All vertical gate valves up to and including 12-inch diameter shall conform to AWWA Specification C509-01 or latest revision, and shall be specified as follows:
1. Material: Iron body, bronze mounted.
 2. Pressure: 250 psi minimum working pressure.
 3. Wedge: Cast iron wedge with urethane rubber coating (encapsulated). The rubber/metal bond shall be tested to meet ASTM D429-73.
 4. Stem: Forged bronze, non-rising stem with two "O" ring seals.
 5. Wrench Nut: Two-inch square (at base) wrench nut opening to the left or counterclockwise.
 6. Mechanical Joint Ends: Mechanical joint ends complete with all joint accessories including rubber gaskets.
 7. Painting: The body and bonnet shall be coated with a fusion coating both interior and exterior to meet AWWA Standard C550-05.
 8. Markings: Markings shall be cast on the bonnet or body of each valve, and shall show the manufacturer's name or mark, the year the valve casting was made, the size of the valve, and the designation of working water pressure for 4 to 12-inch valves.
- D. All butterfly valves shall conform to AWWA Specification C504-06 or latest revision, and shall be specified as follows:
1. Material: Iron body, bronze mounted.
 2. Pressure: 200 psi minimum working pressure.
 3. Shaft: The valve shaft shall be a one-piece unit extending through the valve bearings into the valve disc. The shaft shall be 18-8 stainless steel, Type 302, 303, 304, and 316 or if carbon steel, with 18-8 stainless steel journals.
 4. The disc movement shall be 90 degrees open to shut. Discs shall be of cast iron conforming to ASTM A48, Class 40, or if alloy cast iron, conforming to ASTM A436, Type 1 or 2. Disc edge shall have Type 316 stainless steel seating surface.

5. Valve seats shall provide tight shutoff 200 psi upstream, zero psi downstream pressure differential. Rubber seats mounted on the disc and shall be retained without metal hardware. Rubber seats mounts on valve bodies shall be cemented and clamped, bonded or vulcanized to the valve body. Rubber seats shall be of new natural or synthetic rubber.
6. Valves shall be fitted with sleeve type bearings contained in the hubs of the valve body. A bearing shall be provided on the shaft outboard of the shaft seal or in the operator housing to protect the shaft seal from thrust forces developed in the operating mechanisms. Each valve shall be equipped with either one or two thrust bearings set to hold the valve disc securely in the center of the valve seat. Sleeve and other bearings fitted into the valve body proper shall be of self-lubricating materials and shall have a coefficient of friction not higher than 0.25.
7. Where shafts project through the valve body for operator connection, a shaft seal shall be provided. Seals shall be split "V" type or "O" ring type. "O" ring type shall be contained in a removable corrosion-resistant recess. Seals shall be of a design allowing replacement without removing the valve shaft.
8. Manual operation shall be provided with totally enclosed gearing, with stop-limiting devices for the open and closed positions. Actuators shall be totally enclosed and shall produce full output torque requirements throughout entire travel with an input torque no greater than 150 foot pounds.

E. Valve Boxes

1. Acceptable Manufacturers are TYLER UNION, SIGMA or CLOW VALVE COMPANY.
2. Valve boxes shall be three-piece cast iron, 5-1/4 inch shaft, sliding type, with cast iron covers with "WATER" cast on the covers.
3. Valve boxes shall have the following sizes and base dimensions:
 - 6 and 8-inch gate valves - No. 6 round (14-3/8 inch diameter, 11 inches high)
 - 10 and 12-inch gate valves - No. 8 round (17-1/4 inch diameter, 11 inches high)

F. Acceptable repair clamp manufacturers:

1. FORD METER BOX COMPANY Style FS1 for operating range up to 0.40", 4" to 12" diameter.
2. FORD METER BOX COMPANY Style FS2 for operating range up to 0.80", 4" to 16" diameter.

3. FORD METER BOX COMPANY Style FS3 for operating range up to 1.20", 16" and larger diameter.
4. Or a specifically approved equal.

PART 3 - EXECUTION

3.01 - PREPARATION

- A. Remove scale and dirt, on inside and outside, before assembly.
- B. Prepare pipe connections to equipment with flanges or unions.

3.02 - BEDDING

- A. Hand trim excavation for accurate placement of pipe to elevations indicated.
- B. Place bedding material at trench bottom; level fill materials in one continuous layer not exceeding 6 inches in compacted depth; compact to 95 percent maximum dry density
- C. Backfill around sides and to top of pipe with fill, tamped in place and compacted to 95 percent maximum dry density.
- D. Maintain optimum moisture content of bedding material to attain required compaction density.

3.03 - INSTALLATION - PIPE

- A. Maintain a 10 foot (3 m) horizontal separation and an 18 inch (460 mm) vertical separation of water main from all storm and sanitary sewer facilities. The Contractor shall install the water main with the minimum cover indicated in the Contract Documents. The Contractor shall verify the depth of any existing service laterals to the structures prior to crossing of same. In the event the minimum cover cannot be maintained with an 18-inch clearance between the top of the lateral and the water main due to the slope of the existing service lateral, the Contractor shall either (a) reduce the cover ONLY at the sewer lateral crossing to an absolute minimum of four feet, or (b) cross under the existing sewer lateral with a minimum clearance of 18-inches.
- B. Pipe trenches shall be of minimum width and allow six (6) inches on each side of the bell with sufficient width to allow straight alignment of pipe and provide sufficient room for jointing as required and to allow the backfill to be placed as specified.

- C. Trench widths shall not exceed the following authorized widths:
- i. Less than 12-inches diameter mains: 30 inches
 - ii. 12-inch & 16-inch diameter mains: 42 inches
- D. Pavement removal shall be kept to a minimum and not exceed the preceding authorized widths. Sawing, drilling or chipping shall be used to ensure the breakage of pavement along straight lines. Final restoration limits shall not exceed the specified widths
- E. Install pipe to indicated elevation to within tolerance of 1/2 inch (13 mm).
- F. The Contractor must have experienced personnel in his employ to perform the cut-ins and connections to the existing water mains and have available equipment necessary for cutting ductile iron, cast iron, asbestos cement and miscellaneous piping in the existing distribution system.
- G. Install and test ductile iron piping and fittings to ANSI/AWWA C600.
- H. Route pipe in straight line where possible. Joint deflections are permitted as outlined in ANSI/AWWA C600 or latest revision.
- I. At each joint, two (2) serrated silicon bronze wedges shall be driven into the rubber gasket after the pipe is pushed into place. The wedges shall be installed on opposite sides of the joint on a horizontal plane. Both wedges shall be started in together and driven with a hammer with blows on alternate sides so as not to displace the spigot end to one side of the pipe.
- J. Establish elevations of buried piping to ensure not less than 4 feet of cover.
- K. Form and place concrete for thrust blocks at each elbow or change of direction of pipe.

Pipe Size	Bearing Area			
	Dead End or Tee	90 Degree Bend	45 Degree Bend	22½ Degree Bend
4 in	1 ft ²	1½ ft ²	¾ ft ²	½ ft ²
6 in	2 ft ²	3 ft ²	2 ft ²	1 ft ²
8 in	4 ft ²	5½ ft ²	3 ft ²	1½ ft ²
10 in	6 ft ²	8½ ft ²	4½ ft ²	2½ ft ²
in9 ft ²	12 ft ²	6½ ft ²	3½ ft ²	2½ ft ²
> 16 in	15 ft ²	22 ft ²	12 ft ²	6 ft ²

- L. The Contractor shall restore, replace and/or reposition all decorative lawn ornaments, and miscellaneous items disturbed during water main installation including but not limited to the following: boulders, brick driveway pavers, fences, signs, irrigation sprinklers, shrubs and trees.

3.04 – PRESSURE TESTING

- A. Expel all air from piping system, including pipe, valves and appurtenances. All new water mains shall be pressure tested at 150 psi or 1.5 times line pressure, whichever is greater. The pressure test shall be held for a minimum of two hours with no signs of leakage.
- B. Remove and replace any defective pipe, fittings, valves, and appurtenances. Repeat pressure test until satisfactory to District.

3.05 - INSTALLATION - VALVES

- A. Set valves on solid bearing.
- B. Contractor is responsible for ensuring that all valve boxes are plumb and centered over the operating nut until after final asphalt restoration is complete.

3.06 - DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

- A. Flush and disinfect system in accordance with Section 331300.
- B. Two consecutive negative sets of bacteriological samples are required. Following the “COOK” period, the main shall be blown-off or flushed prior to bacteriological testing. The mains shall be flushed again following satisfactory completion of the pressure test(s). The first sample(s) shall be taken a minimum of 24 hours after flushing operations are completed. The second sample(s) shall be taken at least 24 hours after the first, and shall be representative of the water that has been in the pipe for 24 hours.

3.07 - NOTIFICATIONS

- A. The District shall be notified at least 24 hours in advance and immediately prior to any of the following:
 - 1. Commencing work or starting again after more than a 72-hour shutdown.
 - 2. Admitting water to a new section.

3. Flushing or blowing off water mains.
4. Chlorination of water mains.
5. Shutting down water mains or service to consumers. Consumers should also be informed at least 24 hours in advance and immediately prior to shutting down service.
6. Disinfection and reconnection of house services.
7. The permanent shutting down of existing water mains or house services.

3.08 - FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed in accordance with District requirements.
- B. Leakage testing shall be in accordance with ANSI/AWWA C600.
- C. Compaction testing will be performed in accordance with ANSI/ASTM D1557.
- D. If tests indicate work does not meet specified requirements, remove work, replace and retest at no cost to Owner.

END OF SECTION

PART 1 - GENERAL

1.01 - SECTION INCLUDES

- A. Fire Hydrant Assemblies – Owner provided.
- B. Fire Hydrant Repair and Maintenance
- C. Fire Hydrant Flushing

1.02 - RELATED SECTIONS

- A. Section 312333 - Trenching.
- B. Section 331100 - Water Utility Distribution Piping.
- C. Section 331300 - Disinfection of Water Utility Distribution.

1.03 - REFERENCES

- A. ANSI/AWWA C502 – Dry Barrel Fire Hydrants.

1.04 - QUALITY ASSURANCE

- A. Perform work in accordance with the local water utility company requirements.

1.05 - DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to site in accordance with contract.

PART 2 - PRODUCTS

2.01 - MANUFACTURERS - HYDRANTS

- A. MUELLER Co., Super Centurion 250, Catalog Number A421.
- B. CLOW VALVE COMPANY, Medallion

2.02 - HYDRANTS

- A. Hydrant: ANSI/AWWA C502, dry barrel type, inside dimension of 6 inches) minimum, with minimum 4.75 inch diameter valve seat opening; minimum net water area of barrel not less than 190% of valve opening; 6 inch mechanical joint inlet connection with accessories, gland bolts and rubber gaskets.
- B. Hydrant Extensions: Fabricate in multiples of 6 inches with rod and coupling to increase barrel length. Where the District specifically authorizes the use of hydrant extensions in lieu of bends, the Contractor shall furnish and install a hydrant extension of proper length including drip rod and stem section.
- C. Hose and Steamer Connection: Two 2-1/2 inch diameter hose nozzles conforming to NATIONAL STANDARD dimensions (7-1/2 threads per inch) and one 4-1/2 inch pumper nozzle conforming to NATIONAL STANDARD dimensions (4 threads per inch).
- D. Operating and outlet nozzle caps shall be square (4 sided) in shape, 1-1/2 inches flat to flat dimension at the base and open to the left or counterclockwise within the Riverhead or Jamesport Fire District; pentagonal (5 sided) in shape, 1-1/2 inches point to flat at the base and open to the left or counterclockwise in the Manorville or Wading River Fire District. A clearly visible arrow and the word "OPEN" shall be cast in relief on the top of the hydrant. Nozzle caps shall be attached with non-kinking chains.
- E. The Contractor shall review the specifications regarding hydrant requirements with the various Fire Districts (Riverhead, Jamesport, Manorville or Wading River) prior to performing any hydrant repair or replacement.
- F. Where hydrant assemblies are required to be relocated, the work includes tunneling or restoring existing curb and relocating entire assembly to location indicated on Contract plans.
- G. The Contractor shall excavate and remove existing hydrant, branch, valve and tee. All hydrants removed shall be delivered to the District. The Contractor shall use extreme care so as not to crack the hydrant or hydrant shoe.
- H. Finish: One coat of primer and two coats of enamel shall be applied to all hydrants. All dirt, grease, rust or other contaminants shall be removed from the hydrant surface prior to painting. Colors shall be orange barrel with reflective tops and caps.

PART 3 - EXECUTION

3.01 - INSTALLATION - HYDRANTS

- A. Set hydrants plumb and locate pumper nozzle perpendicular to roadway.
- B. Set hydrants to grade, with nozzles at least 17 inches aboveground.
- C. Attach hydrant control valve to anchoring tee unless otherwise directed by Owner.
- D. Provide a drainage pit surrounding the hydrant 36 inches square by 24 inches deep filled with 1 inch diameter washed gravel. The stone shall be placed to a point 1 foot above the bottom flange.
- E. Brace elbow of hydrant with 4,000 psi minimum concrete having a minimum bearing area of 3 sq ft against unexcavated earth.

3.02 - FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed in accordance with District requirements.

END OF SECTION

PART 1 - GENERAL

1.01 - SECTION INCLUDES

- A. Disinfection of water piping, valves and components.

1.02 - REFERENCES

- A. ANSI/AWWA B300 - Standard for Sodium and/or Calcium Hypochlorite.
- B. ANSI/AWWA B301 - Standard for Liquid Chlorine.
- C. ANSI/AWWA C651 - Standard for Disinfection of Water Distribution Facilities.

1.03 - PROJECT RECORD DOCUMENTS

- A. Bacteriological, Chemical and Organic Chemical Report: Record:
 - 1. Date issued, project name and testing laboratory name, address and telephone number.
 - 2. Time and date of water sample collection.
 - 3. Name of person collecting samples.
 - 4. Test locations.
 - 5. Initial and 24-hour disinfectant residuals in ppm.
 - 6. Coliform bacteria and chemical test results.
 - 7. Certification that water conforms or fails to conform to New York State drinking water standards.
 - 8. Laboratory Director's signature and authority.

1.04 - QUALITY ASSURANCE

- A. Perform work in accordance with ANSI/AWWA C651.

1.05 - QUALIFICATIONS

- A. Testing Firm: Laboratory specializing in testing potable water systems, approved by the New York State Department of Health.

1.06 - REGULATORY REQUIREMENTS

- A. Conform to Recommended Standards for Water Works and applicable codes or regulations for performing the work of this Section.

- B. Water quality to conform to New York State drinking water standards after completion of disinfection.

PART 2 - MATERIALS

2.01 - DISINFECTION CHEMICALS

- A. ANSI/AWWA B300, Hypochlorite.
- B. ANSI/AWWA B301, Liquid Chlorine.

PART 3 - DISINFECTION & TESTING

3.01 - EXAMINATION

- A. Verify that all piping systems have been cleaned, inspected and pressure tested.

3.02 - EXECUTION

- A. Provide required equipment to perform the work of this Section. The Owner will provide the water required for the initial disinfection and filling of the piping, and valves, etc. The Contractor shall pay for the water required for any subsequent filling of these systems based on the Owner's retail water rate.
- B. The preferred method of chlorinating the new water mains is the continuous feed method using calcium hypochlorite granules in accordance with Section 4.4.3 of AWWA C651-05. Granules shall be placed at a minimum in accordance with Table 1 of the applicable Section. The slug method of chlorination is also acceptable and shall be performed in accordance with Section 4.4.4 of AWWA C651-05. The use of tablets for disinfection is prohibited.
- C. The use of calcium hypochlorite granules specifically intended for swimming pool use is prohibited. The Contractor shall utilize only those chemicals which are NSF 60/AWWA approved for disinfection.
- D. The newly laid main shall be properly chlorinated to at least 200 ppm (mg/l) for a minimum of 24 hours, to ensure the chlorine residual at the pipe extremities and at other representative points after the retention period, is at least 200 ppm (mg/l). Treated water shall be retained in the pipe long enough to destroy all non-spore-forming bacteria.
- E. After completion of retention period, new mains shall be flushed in order to eliminate residual chlorine with a suitable quantity of sodium bisulfite, sodium sulfide or sodium thiosulfate prior to disposal. Bacteria samples may not be collected until a chlorine residual representative of the existing Riverhead Water District distribution system is achieved. New mains shall be flushed at a velocity of no less than 2.5 ft/sec.

- F. Collect samples 24 & 48-hours after flushing disinfectant and refilling with potable water. Samples shall not be collected if a chlorine residual inconsistent with that of the existing distribution system is present. Any portion of the sample set which tests positive for total coliform and/or e-coli bacteria constitutes failure of the entire set with no exceptions.
- G. The Contractor shall collect water samples from each dead-end and at a frequency of one sample per every thousand feet of water main installed.
- H. Fire hydrants are not an acceptable sampling point. Where possible, the Contractor shall utilize sampling taps for the reconnection of the existing or installation of new service lines.

- I. If water quality in system does not meet the requirements of the Suffolk County Department of Health Services for potable water, the Contractor shall re-chlorinate or take other steps necessary to provide acceptable water quality. Samples shall be collected and analyzed after each attempt.

3.03 - QUALITY CONTROL

- A. Test samples in accordance with ANSI/AWWA C651-05 and Suffolk County Department of Health requirements. Minimum sampling frequency shall be as described in Section 3.02-G.
- B. Should positive bacteria sample results be obtained, the section of test main shall be thoroughly flushed, re-chlorinated and left to stand for a minimum of 24-hours. The main shall again be flushed to clear the chlorinating water and left to stand a minimum of four (4) hours prior to re-sampling for bacteria.

END OF SECTION

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