



CITY OF MIAMI
Capital Improvements Program

NW 14th Street Multimedia Entertainment District Streetscape Improvements, B-30694

ADDENDUM NO. 3

March 18, 2010

TO: ALL PROSPECTIVE BIDDERS:

The following changes, additions, clarifications, and deletions amend the above-captioned Bid/Contract documents, and shall become an integral part of the bid responses and the subsequent contract. Please note the contents herein and affix same to the documents you have on hand.

Change in Bid Opening Date

The original bid opening date of Monday, March 22, 2010 at 2:00 PM has been extended. The new date and time are Monday, March 29, 2010 at 3:00 PM.

Additional Information

The following Utility Work Schedules are posted on the CIP website and are part of this Addendum:

1. Comcast Utility work schedule
2. FPL Utility work schedule
3. AT&T Utility work schedule
4. TECO Gas Utility work schedule
5. Miami-Dade Sewer and Water Department work schedule
6. Utility Certification

Revised Bid Form

The Bid Form that was originally posted on February 19, 2010, has been revised and posted with this Addendum. Line Item # 4 did not list a description and has been corrected with the item listed. This form, must be used or your bid will be deemed non-responsive.

Request for Information – Pre-Bid Meeting held on March 9, 2010

Q1. Will a field Office Trailer be required for the project?

A1. No.

Q2. Will a Staging area be provided by the City?

A2. No

Q3. Will Compaction methodology of drainage structures and roadway follow DOT's or City specs?

A3. The City Specs will be followed however DOT specs will be referred too for items not identified on City Specs

Q4. Will drainage trenches be left open overnight if contractor does not complete the proposed run?

A4. All open trenches are required by City specs to be covered overnight.

Q5. Will MDWASA provide tapping to the main or tapping sleeve on the installed watermain pipes?

A5. Contractor will provide the sleeve and Tap, MDWASA will be providing the testing, the attached Addendum provides direction to the question.

Q6. If there is a discrepancy between the given Bid Form and actual quantities on the plan, which one governs?

A6. Actual items installed per plans and City specification will govern.

Additional RFI's

Note* Questions 11, 12, 13, 14 and 15 and 23 refer to attachments included with this Addendum and posted on the CIP website.

Q7. Sheet 32 shows a plan view of proposed 18" diameter pipe, but in the section detail shows pipe to be 24". Please clarify which size to consider.

A7. The correct pipe size is 18" diameter as shown in the Plan View sheet 32, Summary of Drainage Structure sheet 11 and Drainage Structure Sheet 46.

Q8. Can a detail for the pavement restoration be provided for drainage? The plans only show restoration for the water main installation.

A8. As stated in the Pre-bid meeting Bidders need to obtain a copy of the City of Miami Engineering Standards for Design and Construction. Detail Misc 35-88-6 shall be used for drainage pavement restoration.

Q9. Item 102-89-7 has no description. Please clarify.

A9. Item 102-89-7 is for Temporary Crash Cushion (Re-directive Option). Refer to FDOT Standard Index 415, Sheet 4 of 10 for additional details.

Q10. Please confirm the Class of 12 Water Main.

A10. The Pressure Class for Ductile Iron Pipe for size 4-inch through 12-inch is 350 psi.

Q11. Where are the Technical Specifications for this Bid available? Is there a Measurement and Payment section?

A11. Please refer to Water Main Plans General Note No.1, sheet W-2.

We are providing an Addendum for the Installation of Water Main (only) which includes the following

Sections:

T 1.00 Changing the Proposed Pipe Grade: Protection of Utilities and Other Facilities.

T 2.00 Measurement and Payment

Q12. There is an item on the bid form for "Excavation for Structures". The plans do not show any structure in the water system where is this item to be used?

A12. Attached is Addendum for the Installation of Water Main (only) which includes the following Sections:

T 1.00 Changing the Proposed Pipe Grade: Protection of Utilities and Other Facilities.

Q13. The plans reflect several fittings smaller than 8" but the bid form does not have an item for them. Where are these fittings to be paid for?

A13. Attached is Addendum for the Installation of Water Main (only) which includes the following Section:

T 2.00 Measurement and Payment.

Q14. The bid form has an item for 2" service pipe and an item for 2"-4.9" meter boxes, but nothing for the other service materials. Where are they to be paid for?

- A14. Same answer as above.
- Q15. Sheets WM-12 & 13 of the plans call for the connection to the existing 2" main and the new 12" main to be made by M-DWASD forces. Sheets WM-9 has the same type of interconnection but has no such notation. Who will make these interconnections?**
- A15. M-D Water and Sewer forces will make all tap 20 inch or smaller. See attached Addendum same Section as above.
- Q16. Two-inch pipe is not made in Ductile Iron. Will polyethylene be an acceptable alternative?**
- A16. Yes, refer to Miami-Dade Water and Sewer Design and Construction Standard Specifications and Details, latest edition.
- Q17. The Bid form and the plans identify several drainage manholes as Type "A". Per City of Miami standards a Type "A" manhole has a corbel. The drainage structure plans reflect a manhole without a corbel, which would be a Type "D". Which manhole is to be used?**
- A17. Bidders shall follow the Drainage Structure Plans description which matches the Summary of Drainage Structure and Bid Form.
- Q18. As significant amount of the exfiltration trench on NE 14 St is as close as 3 feet to the right-of-way. Will an easement be provided to allow excavation to a (-) 2.00 elevation?**
- A18. License Agreement will be obtained by the City Design Project Manager. An agreement is needed and not an easement.
- Q19. In some areas of 14 St the roadway is being lowered as much as 9 inches. Will there be compensation to replace manhole corbels if there is insufficient brick work to adjust the manholes?**
- A19. Bidders should include the replacement of the manhole corbels if necessary under the related bid items for Manhole (Adjust).
- Q20. Harmonization outside of Right-of-way depicted on plans what does "(requires license agreement)" mean? If this means what I think, such as an individual signed agreement with the property owner, who is responsible to acquire such license agreement.? If license agreement is not obtained what happens?**
- A20. License Agreement will be obtained by the City Design Project Manager. If license agreement is not obtained, the Contractor will be directed to adjust entrances and match existing conditions.
- Q21. The pay Item "Concrete Pavement Removal", what does this really mean sidewalk removal or is this concrete pavement in the street? If it is concrete pavement in the street how thick is it and where is it located?**
- A21. In this project this item has been included to compensate for the removal of concrete sidewalk and curb and gutter.
- Q22. The roof drains being called out on the plans to be replaced by Contractor, does the City actually wants the contractor to replace the roof drain and reconnect it to the new drainage system?**
- A22. The roof drains replacement is limited to the replacement of the existing material damaged during sidewalk reconstruction.
- Q23. Is there a specification for the roof drains that need to be replaced? Can this be provided?**
- A23. A Roof Drain detail has been attached and is part of this Addendum. The Contractor must verify and match the size of the existing roof drain.
- Q24. Please confirm that all the 6" and 4" thick concrete sidewalks are to have the "Rock Salt Finish" as per detail on LH 10.**
- A24. Yes, all 6" and 4" thick concrete sidewalk are to have the "Rock Salt Finish" as per detail on LH-10.

Q25. The paver's construction detail does not show a concrete header at the back of the sidewalk, is this correct?

A25. Yes, this is correct. The Paver-Edge material will hold the end of the pavers where it meets landscape areas. Where the pavers meet hardscape the hardscape will hold the edge.

Q26. Is there a specific small business participation goal which must be met for this project? Are we only to complete the "Subcontractor Utilization Form" for reference purposes only?

A26. There is not a specific goal to meet. The purpose of the SU form is to identify the subcontractors that will be used, verify the number of workers who are using H2B Visas, to provide information regarding the percentage of work the contractor is self-performing.

Q27. Does this project require contractor's to provide public information services, since it is located in such a high-profile area?

A27. No.

THIS ADDENDUM IS AN ESSENTIAL PORTION OF THE CONTRACT DOCUMENTS AND SHALL BE MADE A PART THEREOF.



Gary Fabrikant, Assistant Director
Capital Improvements Program

This Addendum should be signed and dated by Bidder and submitted as proof of receipt with the submission of bids. The Bidder by identifying the Addendum number in their bid proposal and by the signing and submission of their bid shall serve as proof of receipt of this Addendum.

NAME OF FIRM: _____

SIGNATURE: _____

DATE: _____

**ADDENDUM FOR THE
INSTALLATION OF
WATER MAIN**

*NORTH 14TH STREET
FROM FEC RAILROAD CROSSING TO N.E. 2ND AVENUE*

**CITY OF MIAMI
PROJECT No. B-30194**

Approved By:	Eithel M. Sierra P.E.
P.E.:	No. 55401
Date:	03-11-2010
Page(s):	1-6

T1.00 CHANGING THE PROPOSED PIPE GRADE: PROTECTION OF UTILITIES AND OTHER FACILITIES

The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.

All costs for changing the grade of the proposed *water main* upward or downward greater than 2.5 feet in order to clear existing obstructions or utilities shall be included in established bid unit prices for pipe, fittings, valves, water services, etc., plus the volume of the additional excavation necessary (that volume in excess of the additional 2.5 feet), paid under established pay item 125-1, Excavation for Structures, CY, which is limited to all excavation, backfilling, labor, equipment, profit, and overhead to perform this change in pipe grade, downward greater than 2.5 feet. No additional compensation will be allowed.

The Contractor shall backfill the trench (that volume in excess of the additional 2.5 feet) with selected backfill, as specified in Section 125-8 of the FDOT Specifications, as amended; to within 2.5 feet below the outside bottom elevation of the proposed pipe barrel, the cost of which backfill and excavation shall be included in the price for Excavation for Structures, and no additional payment shall be made for this work.

Changing the grade of the proposed *water main* by rising deflections, or the alignment by horizontal deflections will not be considered as extra work, or extra cost, to the Contractor unless specific backfilling procedure is described in the Contract Documents. Price of the pipe and fittings installation will be full compensation for all backfilling.

Where it is necessary to temporarily interrupt house or building services, the Contractor shall notify the house or building owner or occupant, both before the interruption and again immediately before service is resumed. Before disconnecting any pipes or cables, the Contractor shall obtain permission from the owner, or shall make suitable arrangements for their disconnection by the owner. The Contractor shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly as soon as the work has progressed past the point involved.

T2.00 MEASUREMENT AND PAYMENT

Payment will be made under:

Pay Item 125-1

For pipe trench overcut and utility structures excavation. The cubic yard volume of excavation is to be used as a basis of payment, and includes the material actually removed below the original ground line or stream bed. The price per cubic foot of excavation shall be full compensation for the completed work and shall include, but not be limited to, excavating to the specified depth, transporting and disposing of the unsuitable material as directed by the Engineer, placing, leveling and compacting suitable select backfill material to the level specified, and performing final cleaning, as may be necessary for the proper execution of the work.

Pay Item 400-2-15 (Contingency Item)

Concrete Class II. The quantity of concrete to be paid for will be the volume, in cubic yards in place, completed and accepted. Price and payment will be full compensation for each work related to the volume of concrete and shall include all forms, falsework, joints, weep holes, drains, pipes, conduits, bearing pads, setting anchors bolts and dowels, reinforcement, surface finish, and cleaning up, as shown in plans and M-D WASD Standard Detail G.S. 1.2. The price will also include saw cutting existing pavement, excavation, backfilling, clearing and grubbing as indicated in plans.

Pay Items 1050-11-422A, 150-11-422B, and 105011-423

For furnishing and installing ductile iron pipe (push-on and/or restrained joints) and fittings (pipe diameter less than 8-inch), which will be paid for at the unit price bid times the number of linear feet installed and accepted,

which payment shall be full compensation for furnishing all materials and installation for the water main complete except for those out in another bid and shall include but not be limited to: pipe & fittings (pipe diameter less than 8-inch), pipe bedding; excavation and backfilling; flowable fill; removal and disposal of unsuitable material; A-3 material and excavation and removal of existing material; removal and replacing miscellaneous structures; changing pipe grade; optional base, structural course "SP", prime coat, tack coat; pavement and base restoration; restoration of driveways, sidewalks, curb, gutters, concrete pavements (crosswalk), traffic separators, sprinkler systems and grassed areas; saw cutting existing pavement; exploratory and construction excavation; sheeting and shoring to control trench width; de-watering the excavation; slab covered trench restoration and desilting; transportation and handling cost delivered ditch-side; unloading the ductile iron pipe and fittings from delivery trucks at the job site (trench side) and placing the pipe and fittings into position in the trench; making thrust restrained joints; cutting and installing cast iron nipples; furnishing and installing all joint materials including thrust-resistant materials and including vegetable soap lubricant; supporting and protecting existing utilities along the route of the lines themselves; furnishing and installing gaskets to restrain pipes at location specified in the plans or required by the Engineer; tapping the main for corporation stops, if necessary; plugging and placing out of service the existing water main at location indicated on the Plans (pipe diameter less than 8-inch); removing of concrete anchors and cast iron plugs; coordinating with existing users; furnishing all materials and equipment required to and test the main; cleaning, testing and disinfecting main; replacing utilities, catch basins, manholes, grass, shrubs, mail boxes, sidewalk, concrete crosswalk, curbs, fences, walls, sprinkler systems, and shoulder, gravel and/or concrete driveway, and all other similar items, to original locations and to equal or better than original condition; other details within Contract Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; project record document and all other appurtenant and miscellaneous items and work including final cleanup for the complete and satisfactory installation.

The quantity for payment shall be the horizontal projection of the center line of the permanently installed and accepted pipe, including the length of valves and fittings along the run, measured to the nearest one-tenth of a foot from P.I. to P.I. of fittings and to the seat of the bell at the end of any particular run.

Pay Items 1050-11-424A and 1050-11-424B

For furnishing and installing ductile iron pipe (push-on and/or restrained joints), which will be paid for at the unit price bid times the number of linear feet installed and accepted, which payment shall be full compensation for furnishing all materials and installation for the water main complete except for those out in another bid and shall include but not be limited to: pipe, pipe bedding; excavation and backfilling; flowable fill; removal and disposal of unsuitable material; A-3 material and excavation and removal of existing material; removal and replacing miscellaneous structures; changing pipe grade; optional base, structural course "SP", prime coat, tack coat; pavement and base restoration; restoration of driveways, sidewalks, curb, gutters, concrete pavements (crosswalk), traffic separators, sprinkler systems and grassed areas; saw cutting existing pavement; exploratory and construction excavation; sheeting and shoring to control trench width; de-watering the excavation; slab covered trench restoration and desilting; transportation and handling cost delivered ditch-side; unloading the ductile iron pipe and fittings from delivery trucks at the job site (trench side) and placing the pipe and fittings into position in the trench; making thrust restrained joints; cutting and installing cast iron nipples; furnishing and installing all joint materials including thrust-resistant materials and including vegetable soap lubricant; supporting and protecting existing utilities along the route of the lines themselves; furnishing and installing gaskets to restrain pipes at location specified in the plans or required by the Engineer; tapping the main for corporation stops, if necessary; furnishing all materials and equipment required to and test the main; cleaning, testing and disinfecting main; replacing utilities, catch basins, manholes, grass, shrubs, mail boxes, sidewalk, concrete crosswalk, curbs, fences, walls, sprinkler systems, and shoulder, gravel and/or concrete driveway, and all other similar items, to original locations and to equal or better than original condition; other details within Contract Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; project record document and all other appurtenant and miscellaneous items and work including final cleanup for the complete and satisfactory installation.

The quantity for payment shall be the horizontal projection of the center line of the permanently installed and accepted pipe, including the length of valves and fittings along the run, measured to the nearest one-tenth of a foot from P.I. to P.I. of fittings and to the seat of the bell at the end of any particular run.

Pay Item 1050-11-922

For furnishing and installing 1-in short single, 1-in long single, 1-in short dual, 1-in long dual (copper or HDPE), 2-in short single, 2-in long single, 2-in short dual and 2-in long dual (HDPE) water services, respectively, will be paid for at the unit price bid times the number of linear feet installed and accepted. The price shall be full compensation for each complete installation, ready for service, and shall include, but not be limited to, saw cutting existing pavement, all special sheeting and shoring; including cutting and threading as required; excavating and backfilling; flowable fill; removing and disposing of unsuitable material; A-3 material and excavating and removing of existing material; removing and replacing miscellaneous structures; tapping the main; furnishing and installing the corporation stops; changing pipe service grade; furnishing and installing concrete, changing water service grade; temporary paving or driving the steel casing pipe under pavement; furnishing and installing copper or HDPE tubing, couplings, unions, service terminal fittings, and other miscellaneous fittings; installing perforated spacers and tailpieces, furnishing all materials and equipment required to and test the service line; cleaning, testing and disinfecting, permanent pavement and base restoration; flowable fill; repairing and bringing existing sidewalk, driveways and curb and gutter to equal or better than original conditions; other details within the Contract Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; and all other appurtenant and miscellaneous items and work to provide a complete, functional and satisfactory installation.

Pay items 1055-11-414; 1055-11-424; 1055-11-434; 1055-11-444

For furnishing and installing fittings to the proposed water main (for pipe diameter over 8-inch) at locations indicated in the plans. The cost will be the unit price bid for each fitting installed and accepted. The price shall be full compensation for the complete installation, ready for service, and shall include, but not be limited to: all transportation and handling cost delivered to ditch-side; changing fittings grade; excavating and backfilling; flowable fill; furnishing and installing gaskets and/or thrust blocks to restrain fittings at location specified in the plans or required by the Engineer; other details within Contract Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; A-3 material and excavation and removing existing material and all other appurtenant and miscellaneous items and work to provide a complete, functional and satisfactory installation

Pay Item 1055-11-454

For plugging and placing out of services existing (for pipe diameter over 8-inch) of existing water mains at locations indicated on the Plans. The price will be at the unit price bid for each cap or plug. The price shall be full compensation for the complete installation, ready for service and shall include, but not be limited to; plugging and placing out of service the existing water main at location indicated on the Plans; removing of concrete anchors and cast iron plugs; coordinating with existing users; saw cutting existing pavement; excavation and backfilling; removal and disposal of unsuitable material; sheeting and shoring if necessary; de-watering the excavation; pavement and base restoration; removal of existing water mains and gravity sewers in conflict with proposed construction; other details within Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; all appropriate items and work together with all other appurtenant and miscellaneous items and work to provide a complete, functional and satisfactory installation.

Pay Items 1080-11-201

Include the cost of furnishing and installing water meter box, which payment shall be full compensation for all materials and shall include but not limited to: meter box and lid, excavating and removing of existing material; assisting M-WASD force during the installation of the new meter as specified on the M-D WASD service connection details; adjusting meter box to finish grade; constructing a 3'x3'x6" reinforced concrete slab for non-sidewalk condition; repairing and bringing existing sidewalk, driveways and curb and gutter to equal or better than original conditions; removing, cleaning, loading, delivering and unloading to the M-D WASD storage yard existing water meters. Include any payment and all incidental items and labor charged by M-D WASD for connecting the new water meter service. Include all other appurtenant and miscellaneous items and work including final cleanup for the complete and satisfactory installation.

Pay Item 1080-11-203; 1080-11-303; 1080-11-403; and 1080-11-503

For furnishing and installing Tapping Sleeves and Tapping Valves complete connecting to the existing water main at the locations indicated on the Plans. The price will be at the unit price bid for each connection. The price shall be full compensation for the complete installation, ready for service and shall include, but not be limited to; all appropriate items and work including connection to the existing pipe; furnishing and installing

tapping sleeve and valve; installing valve box; pressure testing the valve in both directions prior to installation; furnishing and installing polyethylene encasement; saw cutting existing pavement, excavation, and backfilling; changing pipe or tapping valve/sleeve grade; sheeting and shoring; furnishing and installing permanent pavement and base restoration; coordinating with and assisting M-D WASH forces to perform taps; including payment of "Pipe Tapping Charges" to M-D WASH for their services; and other details within the Contract Plans and/or required by MDWASH Design and Construction Standard Specifications and Details; together with all other appurtenant and miscellaneous items and work to provide a complete, functional and satisfactory installation.

M-D WASH forces will make all taps 20-in or smaller. Taps over 20-in in nominal size shall be made by the Contractor. The Contractor shall pay M-D WASH "Pipe Tapping Charges" as follows:

<u>Tap Size</u>	<u>Value</u>
1-in	\$100.00
1 ½-in	\$110.00
2-in	\$120.00
4-in	\$340.00
6-in	\$420.00
8-in	\$485.00
12-in	\$665.00
16-in	\$1,190.00
20-in	\$1,500.00
Overtime Charge	\$95.00

M-D WASH will charge \$180.00 additional if their personnel arrive at the job site and are unable to perform the tap due to Contractors' negligence. The Contractor shall also furnish all necessary supports for the tapping crew such as excavation of the required pit for the tapping machine, and other work as required.

Pay Items 1080-11-204A; 1080-11-204B; 1080-11-304; and 1080-11-404;

For furnishing and installing valves and valve boxes, will be paid at the unit price bid times the number of valves and valve boxes installed and accepted. The price shall be full compensation for all materials and installation for the complete, tested and operational valves and shall include but not be limited to; restraining mechanical joint plug where required; riser pipe; valve box; concrete materials; all materials, labor, and equipment for testing; cutting, welding and installing valve operator extension shaft and associated components; furnishing and installing retainer glands to restrain valves at location specified in the plans or required by the Engineer; torque limiting device; tapping the flushing valve outlet to the cap fitting of the main where shown in the plans, polyethylene encasement if required; flanged joint materials; saw cutting existing pavement; changing pipe or valve grade; restoring pavement and base; all sheeting and shoring; bi-directional testing of the valves prior to installation; constructing where required, thrust blocks and support pads; concrete for valve box collar and, if required; transportation, handling cost, and unloading valves from delivery truck ditch-side; other details within the Contract Plans and/or required by MDWASH Design and Construction Standard Specifications and Details; and all other appurtenant and miscellaneous items required for a complete, functional and satisfactory installation.

Pay Item 1080-11-206

For furnishing and installing air release valve, will be paid at the unit price bid times the number of air release valve installed and accepted. The price shall be full compensation for all materials and installation for the complete, tested and operational valves as specified in Plans and/or required by MDWASH Design and Construction Standard Specifications and Details; and all other appurtenant and miscellaneous items required for a complete, functional and satisfactory installation.

Pay Item 1080-16A and 1080-16B

Include the cost of removing and disposing existing meter boxes and existing valve boxes as indicated in plans, which payment shall be full compensation for all materials and shall include but not limited to: removing

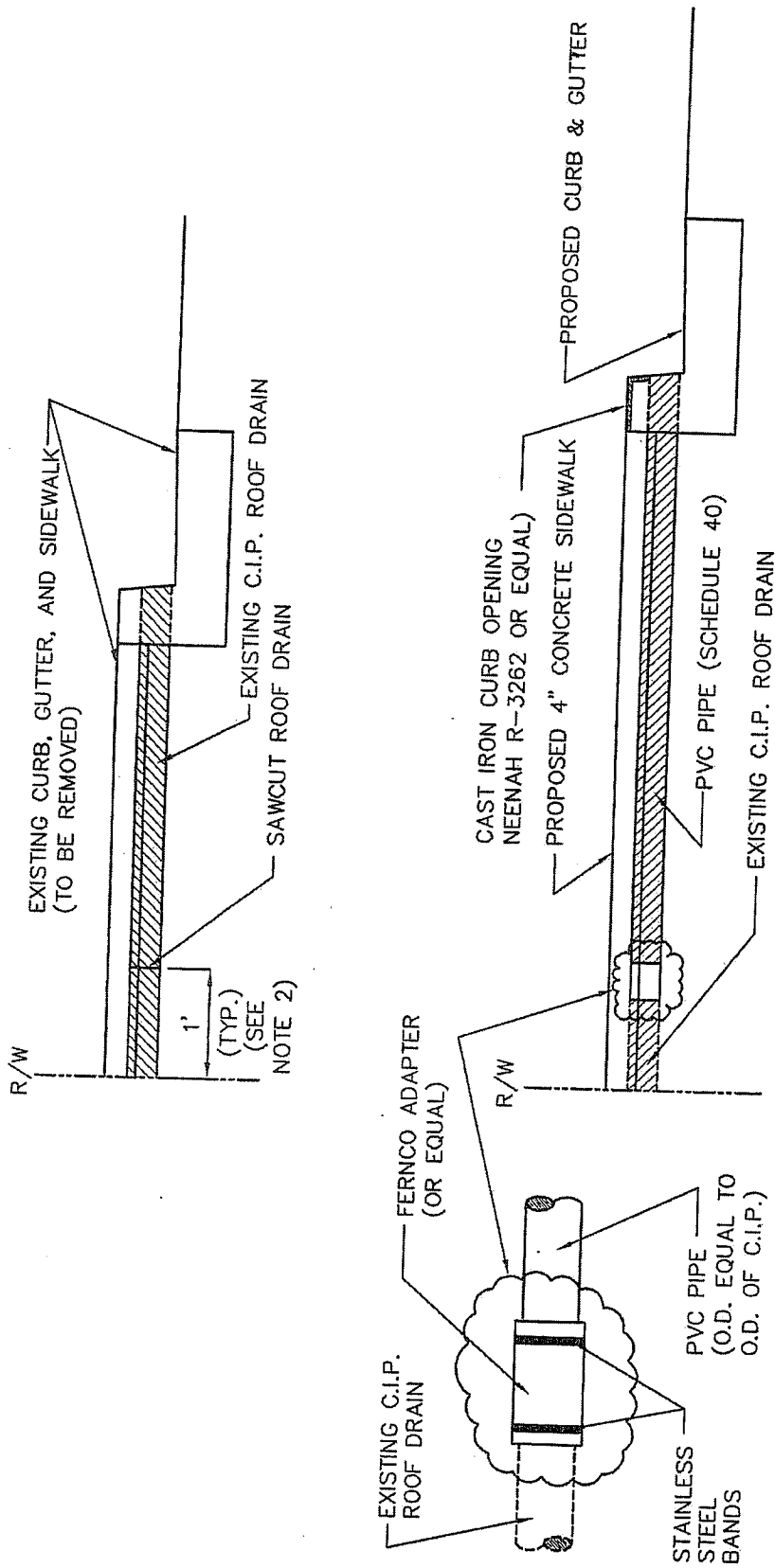
and disposing existing meters and valve boxes; cutting and removing valve riser's pipe to 18 inches below finish grade on all water mains being placed out of service; excavation; restoring any necessary base, pavement, asphalt or concrete to finish grade; and all incidental items and labor required for removing existing meters and valve boxes. Includes also all other appurtenant and miscellaneous items and work including final cleanup for the complete and satisfactory removal.

Pay Item 1644-113-08

For furnishing and installing Fire Hydrant assemblies complete. The price will be paid for at the unit price bid times the number of assemblies installed and accepted. The price shall be full compensation for all materials for the complete, tested, and operational fire hydrant, and shall include but not be limited to, all items described in the M-D WASD Standards; all required dewatering; transportation and handling cost delivered to the trench site; placing the hydrant in the trench and connecting it to the 6-in hydrant branch; installing the hydrant elbow and the concrete anchor; saw cutting existing pavement, special sheeting and shoring; including cutting and threading as required; excavating and backfilling; furnishing additional suitable backfill material, if required; furnishing and installing reinforced concrete slab, valve box and cover; permanent pavement and base restoration, if necessary; blue reflective pavement marker; repairing and bringing existing sidewalk and curb and gutter to equal or better than original conditions; lubricating the hydrants, if necessary; touch-up painting of fire hydrant, if required; making thrust resistant joints; furnishing and installing tie rods and eyebolts; any necessary pavement, asphalt or concrete, or landscape harmonization to connect to private property; other details within Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; and all other appurtenant and miscellaneous items and work to provide a complete, functional and satisfactory installation.

Pay Item 1644-900

For removal of existing Fire Hydrant assemblies complete. The price will be paid for at the unit price bid times the number of fire hydrants assemblies removed. The price shall be full compensation for removing, cleaning, loading, delivering and unloading to the M-D WASD storage yard existing fire hydrants and shall include, but not be limited to: plugging and placing out of service existing fire water line; transportation and handling costs; saw cutting existing pavement, special sheeting and shoring; including cutting and threading as required; excavation and backfilling; furnishing and installing reinforced concrete slab, permanent pavement and base restoration, if necessary; repairing and bringing existing sidewalk and curb and gutter to equal or better than original conditions; any necessary pavement, asphalt or concrete, or landscape harmonization to connect to private property; other details within Contract Plans and/or required by MDWASD Design and Construction Standard Specifications and Details; and all other appurtenant and miscellaneous items and work.



ROOF DRAIN EXTENSION DETAIL (TYPE A)

ROOF DRAIN EXTENSION DETAIL (TYPE A)
 N.T.S.