



SAWYER STREET WATER MAIN REPLACEMENT

ADDENDUM NO. 2
TO
CONTRACT DOCUMENTS
FOR

BIDDING AND CONTRACT REQUIREMENTS AND SPECIFICATIONS
VOLUME 1 OF 1

DATE: JANUARY 30, 2023

Prepared By:
PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104

SPECIFICATION UPDATES

1. **Section 00020 – Notice to Bidders.** Updated to reflect change in Bid Opening Date to February 6, 2024.
2. **Section 00410 – Bid Form.** Updated to clarify that Item W37 does not include traffic officer time.
3. **Section 01250 – Measurement & Payment.** Updated to clarify Section 1.03.T related to traffic control items, add new Section 1.03.U related to Police Detail.

ATTACHMENTS

1. Project Question Log
2. Section 00020 - Notice to Bidders - Revised
3. Section 00410 - Bid Form - Revised
4. Section 01250 - Measurement and Payment - Revised

Portland Water District

Sawyer Street – Water Main Replacement Project

Bidding – Question & Response Log

Last Revised: 1/30/23

1. **Is any of the work for this project required to be done at night?**
 - a. *Night work is not expected to be required for this project.*
2. **Please clarify what is taking place with the surface pavement for the trench restoration on all streets.**
 - a. *Sawyer Street will not require surface pavement. All other streets will require surface pavement. See notes on the Trench Detail in the Standard Details.*
3. **Is milling of any trench surface required? If so, where?**
 - a. *All streets that require surface pavement will require milling the following year. See notes on the Trench Detail in the Standard Details.*
4. **Do you have any test pit/drill information to support the quantity of 150 CY of rock excavation? How was the quantity of ledge arrived at?**
 - a. *PWD does not have any record of ledge in the area. Test pits/borings were not performed ahead of this project. The quantity of ledge is an estimate based on an assumed depth over the total length of the project.*
5. **Is there detail for item W35 that I missed? If not, please supply one**
 - a. *A detail shall be supplied with Addendum 1.*
6. **Please clarify where items W4 & W7 are to be used**
 - a. *The 12-inch HDPE is to be installed in Sawyer Street (Sheet W8). The 4-inch PVC main and 4-inch valve is related to the project work in the Boys & Girls Club parking lot (Sheet W10)*
7. **Any ledge anticipated on this project?**
 - a. *PWD does not have any record of ledge in the area. Test pits/borings were not performed ahead of this project.*
8. **Please provide an insertion valve specification.**
 - a. *The Insertion Valve has been replaced with a cut-in valve in Addendum 1. The Bid Form and Measurement & Payment Sections have been revised accordingly.*
9. **Will the DI pipe be delivered or does it need to be picked up?**
 - a. *The Contractor is responsible for coordinating with PWD and picking up the pipe stored at the PWD Pit on Gambo Road in Windham.*
10. **Where is the pipe stored?**
 - a. *Pipe for this project is stored at the PWD Pit on Gambo Road in Windham.*

11. Is Sawyer St. getting some other treatment?

- a. *PWD is completing this project ahead of anticipated paving of Sawyer Street by the City of South Portland.*

12. Can the contractor pull individual services?

- a. *PWD specifications do not have any restrictions on pulling services. Services must be meet the vertical separation requirements of the oil line in Sawyer Street.*

13. If the contractor opens a trench, do they do full pavement width?

- a. *Trench restoration should be in line with the trench restoration detail in the Standard Details. Unit items are paid as outlined in the Measurement & Payment Section within the spec.*

14. Are there any wage rates?

- a. *No.*

15. Does the contractor use saddles on HDPE?

- a. *There are no services on the proposed HDPE main.*

16. Can the contractor shutdown any side streets? Might a question for the city.

- a. *This will be better answered by the City when submitting the traffic control plan for the Street Opening Permit.*

17. The schedule of items under Schedule of Payment, a lot of them say "Schedule of Pavement" instead of "Payment,"

- a. *This will be revised in Addendum 1.*

18. Where does it indicate which sections of the existing water line are being abandoned and which are being removed?

- a. *When the existing water main falls within the trench (widths outlined in Standard Details), it should be removed. When the existing main falls outside of the trench, the main may be abandoned in place. The proposed main is within the existing trench as much as practical to minimize the amount of abandoned main.*

19. Are the fire hydrants on Front St. getting abandoned or is the red dashed just line indicating a fire line?

- a. *There is no work proposed related to the existing hydrants in Front Street.*

20. Can boring method be completed on suitable pipe application?

- a. *The standard method for installation outlined in the project is trenching. The Contractor may propose alternatives such as trenching to be reviewed by PWD.*

21. Will PWD allow for asphalt escalation?

- a. *Yes, this is outlined in the Measurement & Payment Section.*

22. Is the new DIP required to be encased in poly wrap? If yes, is the PWD supplying that with the pipe or is the contractor responsible for supplying it?

- a. *All new ductile iron main must be installed wrapped with a polyethylene encasement, which will be supplied by PWD.*

23. Could you possibly add a Mobilization Item to the bid?

- a. *Mobilization is not listed as an individual bid item but rather an incidental work item (see Section 1.02.A.20 of Section 01250 Measurement and Payments). It is up to the Contractor where to incorporate these costs into the line items within the bid.*

24. Where are you expecting the temp water system to be under?

- a. *As is typical with PWD projects, the temporary water system is not listed as an individual bid item but rather an incidental work item (see Section 1.02.A.14 of Section 01250 Measurement and Payments). It is up to the Contractor where to incorporate these costs into the line items within the bid.*

25. How are permit costs incorporated into the bid?

- a. *Permit fees are not listed as an individual bid item but rather an incidental work item (see Section 1.02.A.15 of Section 01250 Measurement and Payments). See also Section 01010 Summary of Work Item 1.03.D. It is up to the Contractor where to incorporate these costs into the line items within the bid.*

26. Who at the City should Contractors speak to regarding permit fees?

- a. *The City of South Portland Code Enforcement Department handles street opening permits.*

27. Is groundwater expected to be an issue in this area?

- a. *PWD does not have any data or record of groundwater levels in this area.*

28. Where is time associated to the police detail being capture?

- a. *The Bid Form and Measurement & Payment Sections have been revised to clarify that Flagger (Item W37) and the Police Detail (Item W38). All time associated to Police Details on site shall be billed against W38.*

29. What portions of the project require police details?

- a. *The City of South Portland has confirmed that, per their [Policy on Hiring Detail Policy Officers](#), that the only portion of the project that may require a Police Detail will be the work in Broadway. A police detail is not expected to be required for any other portion of the work.*

30. Are we able to shut down sections of Sawyer St. and detour traffic around?

- a. *This will be better answered by the City when submitting the traffic control plan for the Street Opening Permit.*

Section 00020

Notice to Bidders

Sealed bids for the construction of **Sawyer Street Water Main Replacement, South Portland** to be received by the Portland Water District, 225 Douglass Street, Portland, Maine until **3:00 p.m. local time, February 6, 2024.**

Bids may be hand delivered one (1) hour prior to Bid opening time (**from 2:00pm to 3:00pm on January 30, 2024.**) The Purchasing Agent, Wesley Gilbert, will receive Bids in person at the Nixon Training Room entrance at 225 Douglas Street, Portland, Maine 04012. Please contact Wesley in advance of drop-off at 207-774-5961 ext. 1007 or if you wish to drop off a bid earlier than the specified window. The bid opening will be hosted **in person** in the District's Nixon Training Room at the address listed above.

The work shall generally consist of, but is not necessarily limited to,

1. Installation of approximately 2,770 feet of 12-inch DI water main, 190 feet of 8-inch DI water main, and 50 feet of 6" DI water main.
2. Installation of approximately 70 feet of 12-inch HDPE water main, 190 feet of 8-inch HDPE water main, and 50 feet of 6" HDPE water main.
3. Installation of approximately 190 feet of 4-inch PVC water main,
4. Installation of temporary water main and other related appurtenances along the water main.

Electronic copies of contract documents may be obtained upon request, contact Wesley Gilbert, Purchasing Agent, 207-774-5961 ext.1007, wgilbert@pwd.org to obtain information regarding access to the files. (Paper copies are not available.)

A non-mandatory Pre-Bid Conference will be held for General Contractors **in person** at the District's Nixon Training Room (address listed above) on **Tuesday January 16, 2024 at 2:30 pm.** Attendance by Subcontractors, while encouraged, is not mandatory.

Each proposal must be accompanied by Proposal Guaranty in form of certified check or bid bond in amount of five percent (5%) of the total amount of the bid. A performance bond in an amount equal to one hundred percent (100%) of the contract price, and labor and material payment bonds in like amount will be required prior to execution of the Agreement.

Bidder agrees to begin and complete work with the time frame outlined in the Agreement.

The Bidder is responsible for determining if there are Addenda to the Project by viewing the P.W.D. project website located at www.pwd.org/construction-bids. The bidder is responsible for incorporating addenda into their Bid and referencing the number and date on Article 3 – Bidder's Representations of the Bid form. The Portland Water District will not post Bid Addenda any later than two (2) days prior to the bid opening without individually notifying all plan holders.

No bids may be withdrawn within sixty (60) days after date of opening thereof. Right is reserved to refuse or reject any or all bids or to waive any informality in proposals received and to award work at the discretion of the General Manager acting in the best interests of the Portland Water District.

-- END OF SECTION --

Section 00410

Bid Form

Portland Water District
Sawyer Street (Front to Broadway)
South Portland, Maine
2024 Water Main Replacement

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Portland Water District, 225 Douglass Street, Portland, ME 04102

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs.

E. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid

and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

- F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- G. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- I. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Bid Unit Price</u>	<u>Bid Price</u>
W1	12-inch Ductile Iron Water Main (Pipe provided by Owner)	LF	2771	\$	\$
W2	8-inch Ductile Iron Water Main (Pipe provided by Owner)	LF	187	\$	\$
W3	6-inch Ductile Iron Water Main (Pipe provided by Owner)	LF	46	\$	\$
W4	12-inch HDPE Water Main	LF	70	\$	\$
W5	8-inch HDPE Water Main	LF	186	\$	\$
W6	6-inch HDPE Water Main	LF	48	\$	\$
W7	4-inch PVC Water Main	LF	190	\$	\$
W8	12-inch Gate Valve (Valve provided by Owner)	EA	8	\$	\$
W9	8-inch Gate Valve (Valve provided by Owner)	EA	13	\$	\$
W10	6-inch Gate Valve (Valve provided by Owner)	EA	2	\$	\$
W11	4-inch Gate Valve	EA	1	\$	\$
W12	8-inch Gate Valve (Cut-in)	EA	1	\$	\$
W13	6-inch Gate Valve (Cut-in)	EA	5	\$	\$
W14	12-inch Gate Valve (Cut-in)	EA	1	\$	\$
W15	Hydrant	EA	5	\$	\$
W16	1-inch Air Release Valve	EA	3	\$	\$

W17	1-inch Copper Service - Short side	EA	26	\$	\$
W18	1-inch Copper Service - Long side	EA	1	\$	\$
W19	1-inch Copper Service - Reconnect	EA	3	\$	\$
W20	1.5-inch Copper Service - Short side	EA	2	\$	\$
W21	1.5-inch Copper Service - Reconnect	EA	1	\$	\$
W22	2-inch Copper Service - Short side	EA	1	\$	\$
W23	2-inch Copper Service - Reconnect	EA	1	\$	\$
W24	1-inch HDPE Service - Long side	EA	12	\$	\$
W25	2-inch HDPE Service - Long side	EA	1	\$	\$
W26	4-inch PVC Service	EA	1	\$	\$
W27	6-inch Ductile Iron Service - Short side	EA	1	\$	\$
W28	Gravel Borrow	CY	400	\$	\$
W29	Unsuitable Material Excavated Below Grade	CY	200	\$	\$
W30	Rock Excavation	CY	150	\$	\$
W31	Aggregate Subbase Course Type D	CY	1050	\$	\$
W32	Aggregate Base Course Type A	CY	600	\$	\$
W33	HMA Binder Course - 19MM	TON	1350	\$	\$
W34	HMA Surface Course - 9.5MM	TON	50	\$	\$

W35	Raised Sidewalk Reconstruction	SY	50	\$	\$
W36	Work Zone Traffic Control	LS	1	\$	\$
W37	Flagging	LS	1	\$	\$
W38	Police Detail	HR	16	\$	\$
W39	Foreman	HR	5	\$	\$
W40	Laborer	HR	5	\$	\$
W41	Excavator & Operator	HR	5	\$	\$
W42	Loader & Operator	HR	5	\$	\$
W43	Dump Truck & Driver	HR	5	\$	\$
Total of All Bid Prices					\$

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:
[Signature] _____

[Printed name] _____
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____
(where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

Section 01250

Measurement and Payment

PART 1 - GENERAL

1.01 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- A. All measurements for payments will be based on completed work performed in strict accordance with the drawings and specifications, and on the contract bidding and payment item schedules. All work completed under the contract will be measured by the Owner according to the methods outlined below. In cases where the payment clause in the specifications relating to any unit or lump sum price stated in the contract requires that the said unit or lump sum price cover and be considered compensation for certain work or material essential to the item, this same item will not be measured or paid for under any other pay item which may appear elsewhere in the specifications.
- B. The Contractor, in case of unit price items measured for payment, shall be paid for the actual amount of work accepted and for the actual amount of materials in place. At the end of each day's work, the Contractor's authorized representative shall meet with the Owner's representative and determine the quantities of unit price work accomplished or completed during the work day. The Owner's representative will then prepare two "Daily Quantity Reports" which shall be signed by both the Contractor's representative and the District's representative. These completed forms will provide the basis for the Contractor's partial payment requests. Items not appearing on the Daily Quantity Report will not be included for payment.

1.02 INCIDENTAL WORK

- A. Incidental work items for which separate payment is not made include (but are not limited to) the following items:
 - 1. Dewatering
 - 2. Dust Control
 - 3. Erosion control
 - 4. Traffic control plan
 - 5. Construction signs
 - 6. Trench boxes, steel and/or wood sheeting as required, including that left in place
 - 7. Clean-up
 - 8. Loaming and seeding
 - 9. Restoration of property
 - 10. Repair and replacement of utilities damaged by construction activity and corresponding proper disposal of removed materials
 - 11. Excavation under/near and/or crossing other utilities, including any equipment/supports required for that work
 - 12. Fittings (e.g., crosses, tees, bends, sleeves) shown on the Drawings
 - 13. Bonds, insurance, shop drawings, warranties and other submittals required by the contract documents

14. Temporary construction and other facilities not to be permanently incorporated into the work necessary for construction sequencing and maintenance of operations. Inclusive of but not limited to temporary water supply system and pavement restoration of temporary water supply system trenches outside the limits of payment for pavement associated with permanent water infrastructure replacements.
15. Permits not otherwise paid for or provided by the Owner
16. Facilities for storage of materials to be incorporated into the Work
17. Test pits to determine existing utility locations, soil conditions, and as required to complete the Work
18. Assessment of potential obstructions to project work (e.g., existing pipes, services, conduits, ducts, sewers, etc.) and all arrangements with owners of those obstructions to allow for the project work to take place.
19. Protection of existing trees, buildings, structures, and utilities (both public and private) including poles, signs, services to buildings, buried utilities, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind.
20. Mobilization/demobilization.
21. Clearing, grubbing, and stripping.
22. Saw cutting, removal, and disposal of existing pavement, concrete, and/or cobblestones.
23. Resetting or replacement of existing street signs
24. Pre-construction photographs/videos (as necessary).
25. Providing material for and installation of rigid foam board insulation as instructed by the Owner in areas where service pipe and/or water main is installed without proper cover or is installed within close proximity to sewer/storm manholes.

1.03 PAYMENT ITEMS

A. Items W1 to W3 - Ductile Iron Water Main

1. Method of Measurement: Linear feet as measured along the centerline of the pipe for the actual number of linear feet of pipe and fittings installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for pickup from Owner and delivery of pipe to job site, clearing, excavating, shoring and bracing, dewatering, fittings, bedding, laying and jointing, testing, removing and disposing of existing pipe and appurtenances that are being replaced, connections to existing mains and services that are remaining, select backfill, backfilling up to bottom of subbase gravel and compaction of placed materials and associated work as specified and shown on the Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts. Ductile iron water main and standard gaskets shall be provided by the Owner.
3. Schedule of Payment: Installation - 80%, Testing - 20%

B. Items W4 to W6 - HDPE Water Main

1. Method of Measurement: Linear feet as measured along the centerline of the pipe for the actual number of linear feet of pipe and fittings installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for clearing, excavating, shoring and bracing, dewatering, pipe, fittings, bedding, laying and

jointing, testing, removing and disposing of existing pipe and appurtenances that are being replaced, connections to existing mains and services that are remaining, select backfill, backfilling up to bottom of subbase gravel and compaction of placed materials and associated work as specified and shown on the Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.

3. Schedule of Payment: Installation - 80%, Testing - 20%

C. Item W7 - PVC Water Main

1. Method of Measurement: Linear feet as measured along the centerline of the pipe for the actual number of linear feet of pipe and fittings installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for clearing, excavating, shoring and bracing, dewatering, pipe, fittings, bedding, laying and jointing, testing, removing and disposing of existing pipe and appurtenances that are being replaced, connections to existing mains and services that are remaining, select backfill, backfilling up to bottom of subbase gravel and compaction of placed materials and associated work as specified and shown on the Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.
3. Schedule of Payment: Installation - 80%, Testing - 20%

D. Items W8 to W10 - Gate Valves (6-inch to 12-inch)

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, backfilling, sleeves (where required), valve box, select backfill, testing, and associated work as specified and shown on Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts. Gate valves shall be provided by the Owner.
3. Schedule of Payment: Installation - 100%

E. Item W11 - 4-inch Gate Valve

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, backfilling, valve, sleeves (where required), valve box, select backfill, testing, and associated work as specified and shown on Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.
3. Schedule of Payment: Installation - 100%

F. Items W12 to W14 – Cut in Gate Valves (6-inch to 12-inch)

1. Method of Measurement: Actual number installed

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, backfilling, valve, sleeves (where required), valve box, select backfill, testing, and associated work as specified and shown on Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts. Gate valves shall be provided by the Owner.
3. Schedule of Payment: Installation - 100%

G. Item W15 - Hydrant Assembly

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, hydrant tee, 6-inch hydrant control valve, valve box, 6-inch ductile iron pipe, hydrant, fittings, hydrant extensions (if required), removal and disposal of existing hydrant and appurtenances, thrust blocks, backfill, testing, cleanup (loam/seed and/or sidewalk restoration), and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation - 100%

H. Item W16 - Air Release Valves

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, valve, fittings, valve box, select backfill, backfilling, testing, cleanup, and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation - 100%

I. Items W17 to W23 - Copper Services

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, corporation, fittings, connection to existing service, service box, rod, curb stop, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk/curb restoration), and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation - 100%

J. Items W24 to W25 - HDPE Services

1. Method of Measurement: Actual number installed
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, corporation, fittings, connection to existing service, service box, rod, curb stop, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk/curb restoration), and associated work as specified and shown on Drawings.

3. Schedule of Payment: Installation - 100%

K. Item W26 - PVC Services

1. Method of Measurement: Actual number installed

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, tee, fittings, connection to existing service, service gate valve, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk/curb restoration), and associated work as specified and shown on Drawings.

3. Schedule of Payment: Installation - 100%

L. Item W27 - Ductile Iron Services

1. Method of Measurement: Actual number installed

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, tee, fittings, connection to existing service, service gate valve, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk/curb restoration), and associated work as specified and shown on Drawings.

3. Schedule of Payment: Installation - 100%

M. Item W28 - Gravel Borrow

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of gravel borrow installed.

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, installation and compaction of gravel borrow as directed by the Owner to replace unsuitable excavated material.

3. Schedule of Payment: Installation - 100%

N. Item W29 - Unsuitable Material Excavated Below Pipe Grade

1. Method of Measurement: Cubic yard as measured in place prior to removal for the actual number of cubic yards excavated within the limits shown on the Drawings and directed by the Owner.

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for removing unsuitable material excavated below trench grade and replacing with granular bedding material as directed by the Owner.

3. Schedule of Payment: Excavation - 100%

O. Item W30 - Rock Excavation

1. Method of Measurement: Cubic yard as measured in place prior to removal for the actual number of cubic yards excavated within the pay limits shown on the Drawings and directed by the Owner. Boulders less than two cubic yards in volume will not be measured for payment.

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, excavation, select backfill replacement, erosion control, cleanup and associated work as specified and shown on the Drawings.

3. Schedule of Payment: Excavation - 100%

P. Item W31 - Aggregate Subbase Course Type D

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of Aggregate Subbase Course Type D installed.

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for installation grading, and compaction of Aggregate Subbase Course Crushed (MDOT 703.06c) used for trench repair or as directed by the Owner.

3. Schedule of Payment: Installation - 100%

Q. Item W32 - Aggregate Base Course Type A

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of Aggregate Base Course Type A installed.

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for installation grading, and compaction of Aggregate Base Course Crushed (MDOT 703.06a) used for trench repair or as directed by the Owner.

3. Schedule of Payment: Installation - 100%

R. Items W33 & W34 - Hot Mix Asphalt (HMA) [19MM and 9.5MM]

1. Method of Measurement: The volume will be measured in place for the actual quantity of paving installed within the pay limits within the trench repair areas indicated on the drawings. The total paving volume will be converted to weight in tons by the following formula for payment under these bid items:

$$\begin{array}{ccccccc} \text{Paving Area} & \times & \text{Paving Thickness} & \times & 0.06 & = & \text{Paving Weight} \\ (\text{square yards}) & & (\text{inches}) & & & & (\text{tons}) \end{array}$$

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for placing hot bituminous pavement, milling as required, and clean up and associated work as specified and shown on the Drawings. A price adjustment (up or down) based on the variance in costs for performance graded binder will be made for this item and calculated with the following formula (based on MDOT special provision section 108.)

$$\text{Price adjustment} = (\# \text{ of tons}) \times (\text{period price} - \text{base price}) \times [\text{asphalt factor}]$$

Base Price = The price of the PG binder liquid per ton that exists on the bid opening date

Period Price = The price of the PG binder liquid per ton that exists on the paving date that uses the New England Average Selling price.

% Asphalt factor = 5.2% for 19mm, 5.6% for 12.5mm and 6.2% for 9.5mm

Liquid prices are found at:

<http://www.maine.gov/mdot/contractors/bidderinfo/asphalt.shtml>

3. Schedule of Payment: Installation - 100%

S. Item W35 - Raised Sidewalk Reconstruction

1. Method of Measurement: Square yards as measured in place for the actual number of yards of raised sidewalk restored.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for placing hot bituminous pavement as outlined in the associated detail, clean up, and associated work as specified and shown on the Drawings.
3. Schedule of Payment: Installation - 100%

T. Items W36 & W37 - Traffic Control Items

1. Method of Measurement: Lump Sum.
2. Basis of Payment: Payment of the lump sum prices established in the Bid shall be full compensation for providing work zone traffic control, traffic signs, construction signs, flaggers, and associated work as specified.
3. Schedule of Payment: Final Completion - 100%

U. Item W38 - Police Detail

1. Method of Measurement: Total hours.
2. Basis of Payment: Unit price per man-hour as stated in the Bid. Payment shall include the number of hours the designated station is occupied. The number of hours authorized for payment will be measured to the nearest ¼ hour
3. Schedule of Payment: Completion of Work - 100%

V. Items W39 & W40 - Foreman & Laborer

1. Method of Measurement: Total hours.
2. Basis of Payment: Unit price per man-hour as stated in the Bid. Payment shall include wages, benefits and overhead and profit for personnel for the purpose of performing extra work at the request of the Owner.
3. Schedule of Payment: Completion of Work - 100%

W. Items W41 to W43 - Excavator, Loader, and Dump truck

1. Method of Measurement: Total hours.

2. Basis of Payment: Unit price per hour as stated in the Bid. Payment shall include equipment and operator/driver, wages, benefits, fuel and overhead and profit for the purpose of performing extra work at the request of the Owner.
3. Schedule of Payment: Completion of Work - 100%

PART 2 – PRODUCTS

(NOT USED)

PART 3 - EXECUTION

(NOT USED)

-- END OF SECTION --