



PROCUREMENT DEPARTMENT

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Bid Addendum

PWC Number:	PWC2324019
Bid Title :	Water Main Replacement from Robeson Street to Winslow
Bid Opening Date and Time:	Thursday, December 14, 2023 at 4:00 P.M. ET.
Addendum Number:	II
Addendum Date:	December 12, 2023
Procurement Advisor:	Victoria McAllister, Procurement Manager
	procurement@faypwc.com

- 1. Acknowledgement of this addendum must be done on the Bid Summary page listed within the bid package.
- 2. The solicitation is hereby modified as follows:
 - M1. SECTION C- ADMINISTRATIVE PROVISIONS, 01025- MEASUREMENT AND PAYMENT Section C-Administrative Provisions has been amended to include the 01025 – Measurement and payment section. The section has been attached to this addendum.

M2. SECTION A- PROJECT SPECIFICS, 0300- BID PRICING FORM

The bid pricing form has been modified to correct minor clerical errors. The revised bid form attached to this addendum is the version that <u>*must*</u> be used.



DIVISION 1 01025 – MEASUREMENT AND PAYMENT

The purpose of this Section is to define the methods of measurement and payment for each of the unit prices and/or lump sum prices listed in the Bid Form, which are required to construct the Work.

The unit price and/or lump sum price bid shall be full compensation for the work required under each bid item, which shall include all incidental costs relative thereto. Certain items of work are specified and/or shown as a detail in the Contract Documents; bid prices shall include all items of work required to furnish and/or install each in accordance with the Project requirements, whether specifically stated or itemized in the Measure and Payment description. No payment will be made for stored materials.

Article 1 – INCIDENTAL ITEMS

- 1.01 Mobilization
 - A. Payment for mobilization shall be made at a lump sum price up to 3% of Total Bid Price for each schedule.
 - B. A mobilization pay item shall include all initial costs incurred prior to beginning work on this Contract, including but not limited to permits, licenses, fees, insurance, bonds, etc., as well as mobilization and demobilization of personnel and equipment up to 3% of the Total Bid Price.
 - C. Payment shall be made in two (2) equal installments. The actual costs of bonds and insurance will be considered in the initial payment request provided that cost documentation, suitable to the Project Engineer, is furnished by the Contractor. Any outstanding balance of the mobilization and demobilization Pay item will be payable when the Project is determined to be 10% complete as indicated by the approved progress payments (less cost of mobilization).
- 1.02 Traffic Plan and Traffic Control
 - A. Payment for preparation and implementation of the Traffic Control Plan shall be made at the lump sum price as listed in the Bid Form.
 - B. Work shall include all costs for labor, supervision, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to preparation and implementation of a Traffic Control and Pedestrian Protection Management Plan, installation, adjustments, maintenance, signage, signals, and accessories to perform all operations required to control traffic (vehicular and pedestrian) related to all the work throughout the project site, and throughout the project duration. The Contractor shall coordinate his activities so as to minimize disruption of traffic and inconvenience to residents and the general public.

- C. All such traffic control and protection of pedestrian devices shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and approved by the City of Fayetteville.
- D. Payment under the lump sum price bid shall be made on a monthly basis based on actual estimated percentage of work completed and maintained as determined by the Project Coordinator or Project Engineer. No additional payment shall be made for any other Work due to inadequate or improperly maintained measures.
- E. PWC, and the COF reserve the right to relocate and/or remove such non-conforming signs and devices, setup proper signage to ensure public safety and deduct all costs for these items which may be incurred by PWC. The Contractor shall make no claim for such work performed.
- 1.03 Erosion and Sedimentation Control
 - A. Payment for the installation and maintenance of erosion and sedimentation controls shall be made at the lump sum price as listed in the Bid Form.
 - B. A Sediment and Erosion Control Pay item shall include all costs for labor, supervision, materials, equipment, tools, and other incidentals, not specifically covered in other bid items to install and maintain sediment and erosion control measures for compliance with the state and local requirements, and the Contract Documents and in accordance with state and local requirements. These items shall include but not limited to furnishing, installing, and maintenance of silt fence, temporary sedimentation control devices, rip-rap, rock check dams, temporary seeding, gravel construction entrances, filter fabric, integral straw, culled wood matting, inlet protection, removal, cleanup, disposal and any other erosion control devices as may be required by the appropriate regulatory agencies throughout the project site, throughout the project duration.
 - C. Prospective bidders are advised that erosion and sedimentation control will be strictly enforced, and any failure to conform to required standards is considered a right precedent to PWC to deny payment. The Contractor shall be responsible for all fines levied due to improper erosion and sediment control measures to include all costs incurred by City of Fayetteville and/or Fayetteville Public Works Commission necessary to bring a non-conforming site into compliance.
 - D. The cost for the permanent riprap streambank stabilization shall be paid for under Paragraph 1.16 Structural Streambank Stabilization
 - E. No additional payment will be made for removal of soil and debris from drainage structures, features, or reconditioning grading that is part of the normal maintenance activities. No additional payment shall be made for any other work due to inadequate or improperly maintained measures.
 - F. Pay item will be payable when the Project is determined to be 10% complete as indicated by the approved progress payments (less cost of mobilization). The remaining balance will be paid once the restoration of the area is completed. The

Contractor shall provide documentation (invoices, etc.) with their payment application to support the amount requested.

- 1.04 Clearing and Grubbing
 - A. Measurement shall be based upon the acre of clearing and grubbing. Measurement shall be the nearest one-tenth of an acre of clearing and grubbing completed. Payment shall be made at the applicable unit price per acre as listed in the Bid Form. No payment will be made for clearing and grubbing beyond the areas designated on the Contract Drawings.
 - B. The unit price shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to felling trees, stump removal and disposal off-site, cutting trees in pulpwood length and stacking on or off easement areas if required, disposing of all trimmings, removing and disposing off-site all logs, branches, trunks, root mats, brush, vegetation, debris from clearing and grubbing operations and all other incidental materials not to be re-used in the work.
 - C. Grinding of trees (i.e., Shinn cutting) is an acceptable means of clearing, in lieu of felling trees. However, the tree stumps shall be excavated, removed, and properly disposed. The saw dust and shredded remnants from the grinding process shall be evenly dispersed throughout the cleared area, not stockpiled into one large pile. The material left from the grinding can be mixed in with the backfill material.

Areas containing and requiring cutting and removal of weeds, grass, grain annual or perennial plants, or saplings less than one inch in diameter shall not be measured and paid for as Clearing and Grubbing.

- D. No payment will be made for clearing and grubbing beyond the areas designated on the Contract Drawings.
- 1.05 Select Material (Backfill)
 - A. This item shall be measured by cubic yards of select material as defined in PWC Technical Specification 02222 Excavation and Backfilling. The actual quantity considered for payment shall be 75% of the volume indicated on the submitted truck tickets. PWC reserves the right to verify the actual amount of material in place. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to furnishing and installing select material to provide proper suitable backfill material compacted and in place as measured, removal and proper disposal of unusable material. The PWC Project Coordinator shall approve the use of select material within the limits of this project.
 - C. Borrow excavation material shall be supplied by the Contractor from approved borrow areas located off-site. Materials utilized on-site within the Project limits or free

haul limit (defined as a two-mile radius from the project site) will not be considered for payment as borrow excavation.

- D. Disposal of unsuitable and/or suitable excavated material will not be paid for as a separate bid item.
- 1.06 Remove and Replace Curb & Gutter Concrete
 - A. Measurement shall be based upon the linear footage of actual curb and gutter removed and replaced. Measurement shall be along the bottom of the gutter near the face of the curb, excluding catch basin openings. Payment shall be made at the applicable Contract unit price.
 - B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to removing and disposing of existing curb and gutter, furnishing, hauling, and placing all materials, fine grading the subgrade, backfilling behind the curb with topsoil, adding soil amendments, expansion joints, forms, and curing.
- 1.07 Undercut Excavation
 - A. This item shall be measured by cubic yards of unsuitable material excavated below the bedding limit line of four (4) inches below the pipe. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. Measurement shall be calculated as the authorized depth multiplied by the appropriate width as follows:
 - 1. Depth of the undercut shall be determined solely by the PWC Project Coordinator.
 - 2. Width of the undercut for pipes shall be the internal diameter of the pipe plus two (2) feet
 - 3. Width of the undercut for utility structures (vaults, manholes, etc.) shall be the external diameter/dimension of the structure plus two (2) feet.
 - C. The unit price under this item shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to the removal and disposal of unsuitable soil, furnishing and placing stone bedding material and all other incidentals necessary to complete the work.
 - D. Payment under this item will not be made without prior authorization by the PWC Project Coordinator. No payment for undercut will be made for over-excavation by error or where proper dewatering methods are not in place for trench and/or excavation stabilization.

- 1.08 Remove and Replace Concrete Sidewalk
 - A. This item shall be measured by square yards with a depth of five (5) inches or matching existing concrete thickness, whichever is greater. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The designated number of square yards to be removed shall be as directed by the PWC Project Coordinator. Measurement shall be made to the nearest one-tenth square yard.
 - C. The unit price under this item shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to saw cutting and removal of the existing sidewalk, removing and disposing of excess or unsuitable materials off-site, furnishing, hauling, fine grading the sub-grade, compaction, expansion joint materials, curing and placing all materials, and forms. Replacement of the sidewalk shall be to existing or better condition
- 1.09 Replace Gravel Driveways and Parking Lots
 - A. This item shall be measured by square yards of gravel driveways and parking lots complete and in place. Measurement shall be made to the nearest one-tenth square yard total. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price under this item shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to furnishing stone, hauling, fine grading sub grade, backfilling, placing all materials to restore gravel driveways and parking lots.
 - C. The Contractor shall install six (6) inches of aggregate base course (ABC). Replacement of gravel driveways and parking lots shall be to existing or better condition.
- 1.10 Asphalt Patch in Driveways and Parking Lots
 - A. This item shall be measured by square yards of asphalt pavement, complete and accepted. Measurement of this item shall be made to the nearest one-tenth square yard total. Payment shall be made at the applicable unit price per square yard as listed in the Bid Form.
 - B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to re-cutting pavement to straight uniform widths parallel and perpendicular to the road with no jagged edges, removal and disposal of re-cut asphalt off site, re-compaction, removing and disposing of excess soil base course, re-compaction of pavement sub-grade, placement and compaction of temporary ABC stone to pavement grade, maintaining stone at pavement grade until removal of temporary stone for paving, transitions as required, adjusting

castings as required, tack coat, placing and compacting of asphalt material, reinstating pavement markings, and cleanup.

- C. If a patched area exhibits signs of settling within the warranty period, the Contractor shall remove asphalt, re-compact base and sub-base, dispose of unsuitable material off-site and re-patch any areas of settlement at no expense to PWC.
- D. Patching under this item shall be performed in accordance with PWC Detail M.4 and in accordance with Technical Specification 02575 Driveway Replacement.

1.11 Temporary Asphalt Patch in Robeson Street

- A. This item shall be measured by square yards of asphalt pavement, complete and accepted. Measurement of this item shall be made to the nearest one-tenth square yard total. Payment shall be made at the applicable unit price per square yard as listed in the Bid Form.
- B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to re-compaction, removing and disposing of excess soil base course, re-compaction of pavement sub-grade, placement and compaction of temporary ABC stone to pavement grade, maintaining temporary stone at pavement grade, removal of temporary stone for paving, transitions as required, adjusting castings as required, tack coat, placing and compacting of asphalt material, reinstating pavement markings, cleanup, all labor, materials, tools, equipment, and incidentals necessary to complete the work.

1.12 Permanent Asphalt Patch in Robeson Street

- A. This item shall be measured by square yards of asphalt pavement, complete and accepted. Measurement of this item shall be made to the nearest one-tenth square yard total. Payment shall be made at the applicable unit price per square yard as listed in the Bid Form.
- B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work. The work including but not limited to re-cutting pavement to straight uniform widths parallel and perpendicular to the road with no jagged edges, removal and disposal of re-cut asphalt off site, re-compaction, removing and disposing of excess soil base course, re-compaction of pavement sub-grade, placement and compaction of temporary ABC stone to pavement grade, maintaining stone at pavement grade until removal of temporary stone for paving, transitions as required, adjusting castings as required, tack coat, placing and compacting of asphalt material, reinstating pavement markings, and cleanup.
- C. If a patched area exhibits signs of settling within the warranty period, the Contractor shall remove asphalt, re-compact base and sub-base, dispose of unsuitable material off-site and re-patch any areas of settlement at no expense to PWC.

- D. The asphalt types and depths shall be as indicated in the NCDOT encroachment agreement under item no. 86 (secondary routes). For reference, the pavement types and depths are summarized as follows:
 - 1. 2.0" of S 9.5 B (ACSC) Asphalt Concrete Surface Course the same day as cut is made
 - 2. 3.0" of I 19.0 B (ACIC) Asphalt Concrete Intermediate Course
 - 3. 5.0 inches of B25.0 B (ACBC) Asphalt Concrete Base Course

Mill the existing pavement surface to a depth of 2.0" and a width of 25.0' on each side of the cut to key in the patch with the existing pavement surface.

- E. Payment for this item will not be made until applicable test reports have been submitted to the PWC Project Engineer and approved for acceptance.
- 1.13 Permanent Seeding
 - A. Measurement shall be by acres of exposed ground that is covered by an appropriate seed mixture. Measurement shall be nearest one tenth (1/10) of an acre. This item shall apply to seeding within easements and along rights-of-way. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to soil preparation, pest control, disease control, anchoring, placing soil amendments, topsoil, grading, raking, seeding, fertilizing, mulching, crimping, watering, protection of turf areas, maintenance, and re-seeding if required.
 - C. Seeding shall be placed in accordance with Technical Specification 02930 Seeding.
 - D. No payment will be made for areas outside of permanent and temporary easements and along rights-of-way.
- 1.14 Permanent Sod
 - A. This item shall be measured by square yards of sod complete and, place and accepted. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items necessary to complete the work, including but not limited to soil preparation, anchoring, furnishing sod, placing sod, providing topsoil as necessary, grading, raking, pest and disease control, soil amendments, fertilizing, maintaining, removal and replacement of dying sod, watering, and reseeding if required.

- C. Stripping of topsoil for sodding will not be measured and paid as a separate bid item and shall be considered incidental to this item. Work shall include stripping, stockpiling, spreading, leveling, supplemental topsoil, filling, grading, and compaction of suitable topsoil.
- D. All sod shall be placed in accordance with Technical Specification 02931 Sod.
- E. No payment will be made for placing sod beyond the areas designated on the Contract Drawings or by the PWC Project Engineer. No payment will be made for resolding.
- 1.15 Remove and Replace Chain Link Fence
 - A. This item shall be measured by actual linear feet of fencing removed and replaced. Gates will be included in the linear foot price. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price under this item shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work, including but not limited to removal of the existing fencing and associated foundations, proper disposal, installation and maintenance of the temporary fencing, installation of the new fencing, fittings, posts, truss rod, brace rails, fence fabric, excavation, concrete, barbed wire, and connecting to the existing fencing.
 - C. The Contractor shall remove and properly dispose of the existing fencing, provide temporary fencing to secure access to the property, and install new fencing upon completion of the work.
 - D. This pay item pertains only to the security fence surrounding the property on Robeson Street. Removal and replacement of other fencing shall be incidental to the project. No additional payment will be made for removal or replacement of other fencing.
- 1.16 Furnish and Install Structural Stream Bank Stabilization
 - A. This item shall be measured by square yards of Class 2 rip-rap stabilization, complete and accepted. Payment shall be made at the applicable Bid price.
 - B. The unit price under this item shall include all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to furnishing and installing slope stabilization where indicated on the Contract Drawings. The work shall include, but not limited to proper preparation of the surface including select backfill and compaction as necessary, installation of geotextile fabric in accordance with manufacturer's specifications, placement of Class II stone rip-rap, removal and proper disposal of unusable material.

Article 2 – WATER CONSTRUCTION ITEMS

- 2.01 Furnish and Install Water Main by Bore & Jack
 - A. This item shall be measured by actual linear feet of steel casing installed. Payment shall be made at the applicable unit price as listed in the Bid Form.

- B. The unit price under this item shall include all costs for labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to completely install the steel casing pipe and the RJDI water main pipe inside of the casing pipe as specified on the Contract Drawings and in accordance with PWC standards. The work shall include, but not limited to obtaining access to launching and target pits, cutting and removal of pavement as required, excavation, shoring, removal and disposal of excess unsuitable material off site, bedding material, horizontal and vertical controls, bore steering mechanisms, installation of the casing and main pipes at the specified line and grade, coordination with Railroad, backfill, compaction, furnishing and installing marker posts, casing spacers, and casing end closures.
- C. The Contractor shall comply with all requirements for construction within the rightsof-way of Railroad.
- D. The Contractor shall be responsible for completing the installation, all required testing, proper alignment, and grade of the installed main, and all other items related to proper installation.
- E. Installation of the water main shall be accomplished in accordance with PWC Technical Specifications: 02660 Water Distribution and 02301 Boring and Jacking.
- F. No payment for installation of the casing and water main shall be made until all required tests are satisfactorily completed
- 2.02 Furnish and Install Water Main by Open Trench- 12-inch RJDI
 - A. Measurement shall be by the actual linear feet of water main installed by open trench, including all necessary fittings. Payment shall be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all costs for labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to install the water main and fittings as specified on the Contract Drawings and in accordance with PWC standards. The work shall include, but not limited to cutting and removal of pavement as required, excavation, shoring, dewatering, removal, and disposal of excess unsuitable material off site, bedding material, installation of the pipe at the specified line and grade, tracing wire, thrust blocking as required, backfill and compaction.
 - C. All pipe segments installed must have passed the detailed compaction requirements in order to be considered for payment.
 - D. The Contractor shall be responsible for completing the installation, all required compaction testing, proper alignment of the installed main, and all other items related to proper installation.
 - E. No payment for will be made under this item until all required testing has been satisfactorily completed.

- 2.03 Furnish and install new 10" Class 53 Factory Restrained Joint Ductile Iron Water Main and Aerial Crossing
 - A. Payment for the installation of the new aerial crossing shall be made at the lump sum price as listed in the Bid Form.
 - B. The lump sum price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to furnish and install new 10-inch, Class 53, factory restrained ductile iron water main and pier supports along Water Main Alignment 'B' as shown on the Contract Drawings. The work shall include, but not limited to installation of the piles to the required depth, saddles, straps, bolts, nuts, welding, fabrication, galvanizing the piles and associated steel, beams and piles, mobilization and demobilization of the pile driver hammer, all cutting, drilling, fastening of the beams, piles, and straps, connection to the existing water main, water main pipe, fittings, excavation, shoring, removal and disposal of excess unsuitable material off site, pipe bedding material, installation of the pipe at the specified line and grade, backfill, and compaction.
 - C. Installation of the aerial crossing shall be in accordance with PWC requirements and as outlined in these Contract Documents. Installation of the water main shall be accomplished in accordance with PWC Specification 02660 Water Distribution.
 - D. No payment for will be made under this item until all required testing has been satisfactorily completed.
- 2.04 Furnish and Install New Tapping Sleeve & Valve
 - A. This item shall be measured by actual count, complete and in place. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all costs for labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to install the tapping sleeves and valves as specified on the Contract Drawings and in accordance with PWC standards. The work shall include, but not limited to, excavation, shoring, removal, and disposal of excess unsuitable material off site, thrust blocking as required, valve boxes, concrete protection rings, concrete collars, tracing wire, backfill, and compaction.
 - C. No payment for will be made under this item until all required testing has been satisfactorily completed.
- 2.05 Furnish and Install New Gate Valve
 - A. This item shall be measured by actual count of new gate valves installed complete and in place. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all costs for labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to install the

specified gate valve and valve box as indicated on the Contract Drawings and in accordance with PWC Standards. The work shall include, but not limited to, cutting and removal of pavement as required, excavation, shoring, removal, and disposal of excess unsuitable material off site, removal of old valve where identified on drawings, valve boxes, concrete protection rings, tracing wire, backfill, and compaction.

- C. No payment for will be made under this item until all required testing has been satisfactorily completed.
- 2.06 Furnish and Install New Vacuum/Air Release Valve
 - A. This item shall be measured by actual count, complete and in place. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to install a vacuum/air release valve as indicated on the Contract Drawings and in accordance with PWC standards. The work shall include, but not limited to cutting and removal of pavement as required, excavation, shoring, removal, and disposal of excess unsuitable material off site, bedding material, installation of manhole and manhole fittings, coatings, tracing wire, backfill, and compaction.
 - C. No payment for will be made under this item until all required testing has been satisfactorily completed.
- 2.07 Furnish and Install New 2-inch Blow Off
 - A. This item shall be measured by actual count, complete and in place. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to install the specified blow-off assembly as indicated on the Contract Drawings and in accordance with PWC Standards. The work shall include, but not limited to cutting and removal of pavement as required, excavation, shoring, removal, and disposal of excess unsuitable material off site, bedding material, installation of blow-off assembly, backfill, and compaction.
- 2.08 Remove and Replace 1-inch Water Services
 - A. This item shall be measured by actual count, complete and in place. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to remove the existing services and install new services as indicated on the Contract Drawings and in accordance with PWC Standards. The work shall include, but not limited to cutting and plugging the existing lateral at the existing main, removing the existing meter box, connecting the

new tailpiece to the customer side utilizing brass fittings, furnishing, and installing new meter boxes, corporations, saddles, lock valves, fittings, cutting and removal of pavement, removal and disposal of excess unsuitable material off site, backfill, and compaction.

- C. Installation of 1-inch water services shall be in accordance with PWC standard detail W.24 utilizing 1-inch Type-K copper tubing. All connections to the customer side of the meter shall be completed by the Contractor.
- 2.09 Cut & Plug/Abandon Existing Water Main
 - A. This item shall be measured by actual count. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to "kill-out" the existing water mains, as indicated on the Contract Drawings and in accordance with PWC Standards. The work shall include, but not limited to excavation, cutting and removal of pavement, removal, and disposal of unsuitable material off site, backfill, compaction, and concrete.
 - C. All work shall be in accordance with PWC standard detail W.22, and as approved by PWC.
- 2.10 Grout Fill/Abandon Existing Water Main in Railroad R/W
 - A. Payment for the under this item shall be paid for at the lump sum price as listed in the Bid Form.
 - B. The lump sum price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to abandon the existing water main within the railroad right-of-way by grout fill or by removal of the pipe as indicated on the Contract Drawings. The work shall include, but not limited to removal of the pipe and support piers, cutting, and plugging the water main, removal of fittings as necessary, excavation, backfill, proper disposal of the materials, grout, pumps, hoses and fittings, and coordination with CSX.
 - C. Grouting and removal of the water main shall occur after PWC has accepted the new water main and laterals.
- 2.11 Abandon Existing Aerial Water Main Crossing
 - A. Payment for the under this item shall be paid for at the lump sum price as listed in the Bid Form.
 - B. The lump sum price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to remove and properly dispose of the existing aerial crossing as shown on the Contract Drawings. The work shall include, but not limited to disconnecting the existing pipe at the coupling, cutting, and plugging the main at the existing 10" valve, removal of the

existing pipe, removal of fittings, excavation, backfill, proper disposal of the materials, and all necessary coordination with PWC.

- 2.12 Abandon Existing Valve
 - A. This item shall be measured by actual count. Payment will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to properly abandon the existing valves, as specified on the Contract Drawings. The work shall include, but not limited to excavation, cutting and removal of pavement, removal, and disposal of excess unsuitable material off site, backfill, compaction, fittings, turning off existing valve, plugging existing valve and all necessary fittings, removal of valve boxes as required.

2.13 Sterilization and Testing

- A. This item shall be measured by actual linear feet of new main tested, sterilized, and accepted. Payment under this item will be made at the applicable unit price as listed in the Bid Form.
- B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to test and sterilize the new main, services, and appurtenances in accordance with these Contract Documents, and all applicable standards, laws, and regulations. The work shall include but not limited to furnishing test equipment, installation of temporary taps for testing and/or disinfection, coordination with the PWC Project Coordinator, required sterilization and testing on the water mains, laterals, and appurtenances, removal of all unnecessary taps and fittings upon completion of the work, and legal disposal of hazardous chemicals from the site.
- C. The Contractor shall pressure test and disinfect the new water main, laterals, and appurtenances in accordance with PWC standards and all applicable standards, laws, and regulations, prior to placing them into service. The PWC Project Coordinator shall be present for all testing. When the main is tested for sterilization, the PWC Project Coordinator shall take a sample to the PWC lab to verify disinfection.

Article 3 – SANITARY SEWER CONSTRUCTION ITEMS

- 3.01 Remove and Replace Sewer Main
 - A. This item shall be measured by actual linear feet of new main tested, sterilized, and accepted. Payment under this item will be made at the applicable unit price as listed in the Bid Form.
 - B. The unit price shall include all labor, materials, equipment, tools, and incidentals not specifically covered in other bid items, necessary to remove the existing sewer main pipe and install new pipe as specified on the Contract Drawings and in accordance with PWC standards. The work shall include but not limited to cutting and removal of pavement, excavation, backfill, compaction, removal of the existing sewer, control of

the existing sewer flow, installation of the pipe at the specified line and grade, coring the existing manhole, installing flexible boot connectors, connecting to the existing sewer pipe using approved couplings, bedding material, removal, and disposal of excess unsuitable material off site,

Article 4 – ALLOWANCES

- 4.01 Contingency
 - A. Measurement: Lump sum basis.
 - B. This line item shall be used only upon issuance of a Change Order, a Work Change Directive, or a Field Order by PWC for work not included in other items. The amount paid will be negotiated as per procedures in the General Conditions.
 - C. Any unused portion of the allowance remaining at the completion of the Contract shall revert to PWC as a credit.
 - D. PWC reserves the right to delete the allowance from the Contract prior to award.

Line Item #		Reference to Section 01025-Robeson to Winslow Measurement & Payment Description	Estimated Quantity	Unit	Unit Price	Extended Price		
	INCIDENTAL ITEMS							
1	1.01	Mobilization	1	L.S.				
2	1.02	Traffic Plan and Traffic Control	1	L.S.				
3	1.03	Erosion and Sedimentation Control	1	L.S.				
4	1.04	Clearing and Grubbing	0.4	AC				
5	1.05	Select Material (Backfill)	70	C.Y.				
6	1.06	Remove and Replace Curb & Gutter – Concrete	30	L.F.				
7	1.07	Undercut Excavation	15	C.Y.				
8	1.08	Remove and Replace Concrete Sidewalk	17	S.Y.				
9	1.09	Replacement of Gravel Driveways and Parking lots	210	S.Y.				
10	1.10	Asphalt Patch in Driveways and Parking Lots	150	S.Y.				
11	1.11	Temporary Asphalt Patch in Robeson St.	25	S.Y.				
12	1.12	Permanent Asphalt Patch in Robeson St.	20	S.Y.				
13	1.13	Permanent Seeding	0.2	AC				
14	1.14	Permanent Sod	27	S.Y.				
15	1.15	Remove and Replace 6' Chain Security Link Fence	130	L.F.				
16	1.16	Slope Stabilization	285	S.Y.				
BASE WATER CONSTRUCTION ITEMS								
17	2.01	Install Water Main by Bore & Jack – 12-inch Factory RJDI with 24-inch Steel Casing	150	L.F.				
18	2.02	Install Water Main by Open Trench – 12-inch RJDI	394	L.F.				
19	2.02	Install Water Main by Open Trench – 12-inch DI	94	L.F.				

20	2.02	Install Water Main by Open Trench – 10-inch RJDI	5	L.F.			
21	2.03	New 10" Class 53 Factory RJDI Water Main and Aerial Crossing Along Water Main Alignment 'B'	1	LS			
22	2.04	New 10-inch Tapping Sleeve & Valve	1	EA			
23	2.05	New 12-inch Gate Valve	3	EA			
24	2.06	New Vacuum/Air Release Valve	1	EA			
25	2.07	New 2-inch Blow Off	1	EA			
26	2.08	Remove and Replace 1" Water Service	1	EA			
27	2.09	Cut & Plug/Abandon Existing Water Main	1	EA			
28	2.10	Grout Fill/Remove Exist. Water Main in Railroad R/W	1	L.S.			
29	2.11	Abandon Existing Aerial Water Main Crossing	1	L.S.			
30	2.12	Abandon Existing Valve	2	EA			
31	2.13	Sterilization and Testing	643	L.F.			
		BASE SEWER CONSTRUCTION ITEMS					
31	3.01	Remove and Replace Sewer Main – 8-inch DI	21	L.F.			
ALLOWANCES							
32	4.01	Contingency	1	L.S.	30,000	30,000	