SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 Scope of Work

- A. The following explanation of the Measurement and Payment of the bid form items is made for information and guidance. The omission of reference to any item in this description shall not, however, alter the intent of the bid form or relieve the Contractor of the necessity of furnishing such as a part of the contract.
- B. The quantities set forth in the Bid Form are approximate and are given to establish a uniform basis for the comparison of bids. The Owner reserves the right to increase or decrease the quantities of any class or portion of the work during the progress of construction in accordance with the terms of the Contract.

1.02 Engineer's Estimate of Quantities

A. The Engineer's estimated quantities for unit bid prices, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of bids. The Owner does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as Owner may deem necessary. Contractor will not be entitled to any adjustment in a unit bid price as a result of any change in an estimated quantity and agrees to accept the aforesaid unit bid prices as complete and total compensation for any additions or deductions caused by a variation in quantities as a result of more accurate measurement, or by any changes or alterations in the Work ordered by the Owner, and for use in the computation of the value of the work performed for progress payments.

1.03 DESCRIPTION

- A. The items listed in Part 2 refer to and are the same pay items listed in the Bid Proposal. They constitute all of the pay items for the completion of the Work. No separate payment will be made for additional work items necessary to complete the work; including, but not limited to:
 - Labor, materials and equipment required for tests.
 - Maintaining the existing quality of service during construction.
 - Appurtenant work required for the complete and operable system/facility intended by the City.
 - Field offices.
 - Layout surveys.
 - Job signs.
 - Sanitary and potable water supplies.
 - Power.
 - Removal of waste.

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- Watchmen.
- Bonds and Insurance.
- All other requirements of the General Conditions, Supplementary Conditions, and the General Requirements.
- B. Compensation for all such services, things and materials shall be included in the prices stipulated for the lump sum and unit pay items listed herein.

PART 2 PAY ITEMS

2.01 BASE BID

Mobilization/Demobilization- Max. 5% (Item 1)

A. Measurement and Payment

1. Payment for Mobilization/Demobilization will be made on a lump sum basis prorated throughout the duration of the project. Payment for Mobilization/Demobilization will be limited to a maximum of five percent (5) of Total Base Bid. Twenty five percent (25%) of the lump sum amount will be paid for Contractor mobilization in the first payment request and ten percent (10%) of the lump sum amount will be paid for Contractor demobilization in the final payment request. The remainder of the lump sum amount will be paid in equal increments through the scheduled duration of the project. Such payment shall be full compensation for selling and delivering to the Owner all necessary materials, equipment, supplies including installation of all materials, equipment, supplies, all other labor, excavating, filling, permit fees, taxes, mobilization, demobilization, performance and payment bond premiums, insurance, general and administration and other miscellaneous costs, overhead and profit for the project complete except for those costs specifically included in other bid items listed in the Schedule of Bid Items.

As - Built Drawings (Item 2)

A. Measurement and Payment

1. Measurement and payment for As-Built Drawings will be made on lump sum basis. Such payments shall be full compensation for including but not limited to the preparation, submittal and City acceptance of an as-built drawing of the completed work per the requirements of the City.

Environmental Compliance (Item 3)

Α.

 Measurement and payment for Environmental Compliance will be made on lump sum basis prorated on the following basis. Twenty five percent (25%) of the lump sum amount will be paid for in the first payment request and the remainder of the lump sum amount will be paid in equal increments through the scheduled duration of the project. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment and materials needed to maintain regulatory compliance during all phases of construction. Contactor shall comply with all federal, state and local water quality standards throughout the duration of the project.

A copy of the Florida Department of Environmental Protection (FDEP) permits are included in the project documents for the contractor to keep on site at all times.

Replace Loose Angle Bolts at Bulkhead (Item 4)

A. Measurement and Payment

 Measurement and payment for replacement of loose bolts at the bulkhead will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install replacements for loose angle bolts in the beam supports at the concrete bulkhead. All bolts, nuts, washers and new threaded rods will be included in this item. All hardware materials must be 316 Stainless steel as specified in the design documents.

Flat Straps w / Bolts - Bents 1 to 17.5 (Item 5)

A. Measurement and Payment

1. Measurement and payment for installation of flat straps with bolts at piling/ beam attachment will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install all straps, bolts, nuts, washers and new threaded rods needed for a new beam to pile connection as shown on the plans and as shown the design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents.

Repair Split Pile (Item 6)

A. Measurement and Payment

1. Measurement and payment for repair of split piles will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a repair to existing split piles at locations shown on the plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Replace Side Bracing at Bent 2 (Item 7)

A. Measurement and Payment

1. Measurement and payment for replacement of side bracing at bent will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to remove old bracing and hardware and furnish and install a replace side bracing at bent locations shown on the plans and in accordance with design documents. All hardware material necessary to install side brace shall be included in payment item for side bracing. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Concrete Repair Bent 3 to 4 area (Item 8)

A. Measurement and Payment

 Measurement and payment for concrete repairs to concrete base mass, between bent 3 and 4, will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish a concrete repair to the area indicated on plans and in accordance with design documents details.

Seal Conduits in Concrete Bent 3 to 4 (Item 9)

A. Measurement and Payment

 Measurement and payment for sealing of the conduit entrances into the existing concrete base mass, between bent 3 and 4, will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish a concrete seal to the conduit opening in the area indicated on plans and in accordance with design documents details.

Shim Gap at Pile/Pile Cap (Item 10)

A. Measurement and Payment

1. Measurement and payment for shimming of the gap at pile /pile cap will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a shim at the pile/pile cap at locations shown in plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Repair Concrete Beam Connection - Bent 4 (Item 11)

A. Measurement and Payment

1. Measurement and payment for repair of Concrete Beam Connection at Bent 4 will be on a Lump Sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to repair the concrete Beam connection as shown on the plans and in the contract documents. All hardware and angle materials shall be 316 Stainless steel as specified in the design documents. All wood and timber shall be pressure treated as specified in the design documents.

Repair Necked Pile (Item 12)

A. Measurement and Payment

1. Measurement and payment for repair of necked piles will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a repair to existing necked piles at locations shown on the plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Replace Cross Member at Bent (Item 13)

A. Measurement and Payment

1. Measurement and payment for replacement of cross member at bent will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to remove old bracing and hardware and furnish and install a replacement cross bracing at bent locations shown on the plans and in accordance with design documents. All hardware necessary to install cross bracing, including but not limited to nuts, bolts, washers, threaded rods, cut plates shall be included in payment item for cross bracing. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Repair Rotten Pile at Bent (Item 14)

A. Measurement and Payment

1. Measurement and payment for repair of rotten piles will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a repair to existing rotten piles at locations shown on the plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Repair Cracked Pile at Bent (Item 15)

A. Measurement and Payment

1. Measurement and payment for repair of cracked piles will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a repair to existing cracked piles at locations shown on the plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Concrete Repair Bent 14 to 15 area (Item 16)

A. Measurement and Payment

 Measurement and payment for concrete repairs to concrete base mass, between bent 14 and 15, will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish a concrete repair to the area indicated on plans and in accordance with design documents details.

Replace Brace Members at Grease Trap (Item 17)

A. Measurement and Payment

Measurement and payment for replacement of brace member at existing grease trap will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to remove old bracing and hardware and furnish and install replacement bracing members at existing grease trap location shown on the plans and in accordance with design documents. All hardware necessary to install cross bracing, including but not limited to nuts, bolts, washers, threaded rods, cut plates shall be included in payment item for replacement bracing. All temporary bracing required to keep existing grease trap in service will be included in payment item. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Repair Detached Pile at Bent 34 (Item 18)

A. Measurement and Payment

1. Measurement and payment for repair of detached piles will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install a repair to existing detached piles at locations shown on the plans and in accordance with design documents. All hardware materials shall be 316 Stainless steel as specified in the design documents. All wood and timber must be pressure treated as specified in the design documents.

Repair Existing Concrete Pile Collar (Item 19)

A. Measurement and Payment

 Measurement and payment for concrete repairs to existing concrete pile collars will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish a concrete repair to the pile collars indicated on plans and in accordance with design documents details.

Tighten all Pier Bolted Connections (Item 20)

A. Measurement and Payment

 Measurement and payment for tightening of all pier connections will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to inspect and tighten all bolted connection for complete pier. All corroded or missing connection shall be replaced and paid for under "Replace connection hardware complete" pay item listed separately.

Replace Connection Hardware Complete (Item 21)

A. Measurement and Payment

1. Measurement and payment for replacement of existing pier hardware connections complete will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary, after inspection, to replace an existing pier bolted connection for complete. All replacement connection hardware including nuts, threaded rods, bolts, and washer and cut plates shall be 316 Stainless Steel as shown in the design documents.

2.02 ADDITIVE ALTERNATE 1 - Electrical Repairs

Replace Conduit Hanger Straps - (Item 1)

A. Measurement and Payment

 Measurement and payment for hanger strap replacement will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to replace loose and missing conduit straps, including mounting hardware, on the existing electrical conduits.

Repair Conduit & Fittings at Bent 3 & 4 (Item 2)

A. Measurement and Payment

 Measurement and payment for repair of conduit and fittings at Bent 3 & 4 will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to repair broken and misaligned electrical conduit fittings in the bent 3 and 4 area.

Replace Conduit at Bent 5 & 6 (Item 3)

A. Measurement and Payment

1. Measurement and payment for repair of conduit at Bent 5 will be made on a lump sum basis. Such payments shall be full compensation for supplying the necessary manpower, equipment, materials and labor necessary to replace the broken conduit and fittings on the electrical conduit in the bent 5 area.

2.03 ADDITIVE ALTERNATE 2 - Plumbing Repairs

Fernco Coupling - Sewer Line - Bent 18 (Item 1)

A. Measurement and Payment

 Measurement and payment for Fernco Coupling on the Sanitary Sewer line be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install flexible Fernco Fittings on the sanitary sewer line underneath the pier at locations shown on plans and designated by the Engineer.

Purchase and Deliver 4 inch Backflow device-Bent 1 (Item 2)

A. Measurement and Payment

1. Measurement and payment for Replacement of 4 inch reduced pressure zone (RPZ) backflow assembly will be made on lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary purchase and deliver to site as indicated in contract documents a new 4 inch RPZ backflow assembly, including any make up couplings or sleeves and the two (2) OS &Y shutoff valves.

Replace 1.5 inch Backflow Preventer - Bent 1 (Item 3)

A. Measurement and Payment

1. Measurement and payment for replacement of the water line backflow preventer will be made on a lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to furnish and install all backflow preventer device, piping, valves and fittings on backflow device located underneath the pier in the bent 1 area. Payment shall be inclusive of furnishing all sleeves and couplings necessary to connect to existing pipe as well as two (2) plastic shutoff ball valves installed one on each side of device.

Replace Pipe Hangers (Item 4, 5, and 6)

A. Measurement and Payment

 Measurement and payment for pipe hanger replacement will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to inspect and replace all loose or missing pipe hangers including, hangers, rods, clamps and necessary hardware on utility lines (water and sewer) located underneath the pier.

2.04 ADDITIVE ALTERNATE 3 - Fire Sprinkler Repairs

Replace 6 inch Backflow Assembly (Item 1)

A. Measurement and Payment

1. Measurement and payment for Replacement of 6 inch fire line backflow assembly s will be made on lump sum basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary remove and replace with new 6 inch fire line backflow assembly, including any make up couplings or sleeves and the two (2) OS &Y shutoff valves located underneath the pier as noted. Payment shall also include any permit fees, shutdown and activation costs including fire watch activities compensation during shutdown and permit fees

Replace 6 inch pipe grooved couplings (Item 2)

A. Measurement and Payment

 Measurement and payment for Replacement of grooved couplings for six inch fire line pipe will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to remove and replace six inch grooved couplings on the existing fire line pipe.

Replace 6" Fire Line-Bents 18 to 21 (Item 3)

A. Measurement and Payment

1. Measurement and payment for Replacement of 6 inch Fire water main will be made on a linear foot basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to remove and replace corroded sections of the 6 inch fire water main underneath the pier. Payment shall also be full compensation for prep work, priming and painting of fire line water main pipe in red. Final color selection by owner.

Paint 6 inch Fire line (Item 4)-Bent 18 to 21

A. Measurement and Payment

1. Measurement and payment for Painting of new 6 inch water main will be made on a linear foot basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to paint the new the 6 inch fire water main underneath the pier. Payment shall also be full compensation for prep work, priming and painting of fire line water main pipe in red. Final color selection by owner.

Replace 6 inch 90 degree bend (Item 5)

A. Measurement and Payment

 Measurement and payment for replacement of 6 inch 90 degree bends will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to replace the corroded 90 degree bends underneath the pier as indicated.

Replace Pipe Hangers (Item 6)

- A. Measurement and Payment
 - Measurement and payment for pipe hanger replacement will be made on per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to inspect and replace loose or missing pipe hangers, including pipe hanger, rods, clamps, wood, lumber bracing, fasteners and necessary hardware to install pipe hangers on fire lines located underneath the pier.

2.05 ADDITIVE ALTERNATE 4 - Install Concrete Collars on Exist Piles

Install Concrete Collars on Existing Piles (Item 1)

- A. Measurement and Payment
- 1. Measurement and payment for installation of concrete collars on Existing Piles will be made on a per each basis. Such payments shall be full compensation for including but not limited to the necessary manpower, equipment, materials and labor necessary to install concrete collars on existing plans as indicated on the plans and the contract documents.

END OF SECTION