Amend **Section 604 - Manholes, Inlets and Catch Basins** to read as follows:

"SECTION 604 - MANHOLES, INLETS, VALVE BOXES AND PULLBOXES

604.01 Description. This work includes constructing and/or adjusting manholes, inlets, standard valve boxes, and pullboxes according to the contract.

604.02 Materials. Concrete for structures shall be of the class specified. Concrete shall conform to Section 601 - Structural Concrete. If concrete in structures is to come in direct contact with sewage or sewage gases, the Contractor shall modify the proportioning of concrete according to Section 625 - Sewer System.

Other materials shall conform to the following:

Asphalt Filler	702.07
Structural Backfill Material	703.20
Trench Backfill Material	703.21
Asphalt (Filler) Type C Asphalt	705.06(C)
Mortar for Manholes	705.08
Reinforcing Steel	709.01
Precast Concrete Units	712.06
Frames, Grates, Covers and Ladder Rungs	712.07
Pipe Collar for Valve Box	712.22
Cullet Materials for Utility Structures	717.03
Cullet Materials for Drainage Systems	717.04

When the location of manufacturing plants allows, the Engineer may inspect the plants periodically for compliance with specified manufacturing methods. The Engineer may get material samples to verify compliance with the contract. This may be the basis for acceptance of manufacturing lots regarding quality.

The condition of materials will be subject to inspection for acceptance before or during incorporation of materials into the work.

604.03 Construction Requirements.

(A) General. Concrete construction shall conform to Section 503 - Concrete Structures.

Reinforcing steel work shall conform to Section 602 - Reinforcing Steel.

A certified welder shall do the shop and field welding according to Section 501 - Steel Structures.

The Contractor may furnish and install storm drain manholes and inlets as precast units or combined precast and cast-in-place units. Units completed in place shall conform to cast-in-place construction specified in the contract. If the Contractor uses precast units or combination of precast and cast-in-place units, the Contractor shall submit shop drawings to the Engineer for acceptance before construction.

(B) Storm Drain Inlets. Construct the concrete base according to the contract. Allow the concrete to set for at least 24 hours before constructing additional material on this base. Do not remove the forms for at least 24 hours after placing the concrete. Finish the concrete while the concrete is still fresh.

The contract requires rungs at 12 inches on centers when the height of the structure is greater than 4.5 feet. Measure the height of the structure from the invert to the top of the structure.

Install one rung 16 inches from the bottom or as specified by the Engineer if the height of the structure is 4.5 feet or less. Install additional rungs when specified by the Engineer.

Place reinforcing steel for precast sections according to ASTM C 478.

(C) Setting Frames. Place the frames in the concrete according to the contract. Carefully tamp the concrete around the frame.

Set the frame in full mortar beds. Bring the mortar up around the bottom of the frame.

(D) Excavation and Backfill. Excavate and backfill according to Section 206 - Excavation and Backfill for Conduits and Structures.

(E) Reconstructing Manholes. Adjust and/or reconstruct the existing manholes to the required elevations according to the contract and as ordered by the Engineer. Adjust the manhole frame to the required grade using the same type of material used in its original construction. Carefully remove, clean, and paint the existing frame and cover with accepted asphaltum paint before reinstallation.

(F) Adjusting Valve Boxes. Adjust the valve boxes the required elevations according to the contract and as ordered by the Engineer.

Set and center the 8-inch pipe collar plumb over the valve stem. Ends of the pipe collar shall have smooth, machined edges. Backfill around the gate valve and pipe collar with trench backfill by hand. Backfill 8 inches below the surface of the ground.

Upon completion of installation, clean and paint the valve box frames and covers with one coat of accepted asphaltum paint.

Adjust the existing valve boxes to the required grade using the same type of material used in its original construction. Carefully remove, clean, and paint the existing cast iron frame and cover with accepted asphaltum paint. Cut the existing pipe collar or install a new pipe collar. Reinstall the frame and cover and pour the four inch thick concrete.

(G) Adjusting Telephone and Traffic Signal Pullboxes. Adjust the existing telephone and traffic signal pullboxes to the required elevations according to the contract and as ordered by the Engineer.

(H) Coordination with Utility Companies. The Contractor shall coordinate with the affected utility companies prior to reconstructing and/or adjusting their respective utilities, such as manholes, valve boxes, pullboxes, etc.

604.04 Method of Measurement. The Engineer will measure the accepted installation of storm drain inlets per each complete in place.

The Engineer will measure the adjustment and/or reconstruction of manholes, inlets, valve boxes, telephone pullboxes and traffic signal pullboxes per each complete in place.

The depth measurement for new storm drain inlet structures shall be the vertical measurement from the invert elevation to the top of the grating.

For reconstructed drain inlet structures, the depth measurement shall be the vertical measurement from the beginning of reconstruction shown in the contract to the top of the grating.

604.05 Basis of Payment. The Engineer will pay for the accepted installation of storm drain inlets at the contract unit price per each complete in place. The price includes full compensation for furnishing and installing frames and grates, and rungs; demolishing and/or removing and disposing of existing storm drain inlets; excavating and backfilling; placing concrete; furnishing and installing reinforcing steel, precast concrete, precast reinforced concrete walls, and cast-in-place walls vertically; grading around new drain inlets as required to drain; furnishing materials, equipment, tools, labor and all other incidentals necessary to complete the work.

The Engineer will pay for the accepted adjustment and/or reconstruction of manholes, inlets, valve boxes, telephone pullboxes and traffic signal pullboxes at the contract unit price per each complete in place. The price includes full compensation for furnishing and installing frames and grates, frames and covers, and rungs; demolishing and/or removing and disposing of existing utility boxes and/or manholes or any portions thereof; excavating and backfilling; placing concrete; furnishing and installing reinforcing steel; coordinating with affected utility companies; grading around adjusted/reconstructed drain inlets as required to drain; furnishing materials, equipment, tools, labor and other incidentals necessary to complete the work.

The Engineer will make payment under:

Pay Item	**Pay Unit**
Adjusting _____ Valve Box	Each
Adjusting _____ Pullbox	Each
Adjusting _____ Manhole	Each
Type _____ Inlet, ____ ft. to ____ ft.	Each
Adjusting Inlet with Modified Type _____ Frame and Grate	Each
Adjusting Inlet with Type _____ Frame and Grates	Each"

END OF SECTION