



LEE'S SUMMIT MISSOURI

Scruggs Road Force Mains Repair Project

The emergency purchase was for the repair of the Scruggs Road Force Mains. The Scruggs Road Pump Station utilizes two forcemains, a 12-inch dry weather forcemain and an 18-inch wet weather forcemain, for pumping wastewater flows to a gravity system. Multiple failures on the 18-inch force main led to the authorization of the emergency purchase last fall. The repair method selected was lining the force mains with a specialized liner capable of withstanding the system operating pressures. The supply and installation of the liner was completed by Insituform Technologies USA, LLC under separate agreement authorized via Ordinance No. 9552 for an amount equal to \$1,246,064.95.

Separate work, including the excavation of the liner launching and receiving pits, traffic control, final pipe connections, and restoration, was provided by Wiedenmann, Inc. through emergency purchase utilizing the existing on-call contract. The emergency purchase was authorized via Ordinance No. 9553 for an amount equal to \$258,200.00. The actual was completed on a time and material basis utilizing the schedule included with the on-call contract.

This modification will adjust the emergency purchase for additional costs associated with added work with an increase of \$55,912.63 for a modified price of \$314,112.63.

The main cause of the increase in work was that upon excavation of the 18-inch force main it was noted that the location of the 12-inch force main was not as it was indicated on the record drawings. The initial intent of the project was to remove from service and line 18-inch force main while the 12-inch diameter force main remained in operation. This would minimize the limits of disturbance and bypass pumping would not be needed. During excavation of the 18-inch force main, it became apparent that the 12-inch force main was shallower and in closer proximity to the 18-inch force main. Additionally, a single straddle block restraint was used for both forcemains. Excavation of the 18-inch force main and the removal of all or a portion of the straddle block would undermine the 12-inch and a failure would result upon operation. It was determined that bypass pumping was required and both force mains would be excavated and remain out of service until the 18-inch could be lined and placed back into service. However, this resulted in an increase in costs associated with: providing loading and offloading assistance with the installation of the bypass piping, providing the material and installation of the driveway ramps for the bypass piping, increased trench widths and depths as necessary to excavate both the 12-inch and 18-inch force main, increased size



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of the new straddle block to account for the disturbed area, and full width pavement repair in lieu of a trench patch.

A description of the changes is provided below:

Description	Labor	Equipment	Material	Total
Unforeseen conditions	\$8,847.54	\$5,463.08	\$0	\$14,310.62
Location of 12" force main	\$4,656.60	\$3,902.20	\$3,238.32	\$11,797.12
Assistance with bypass pumping	\$4,190.94	\$3,511.98	\$0	\$7,702.92
Pavement restoration	\$0	\$0	\$22,101.97	\$22,101.97
Total				\$55,912.63

To summarize:

Emergency Purchase Amount: \$258,200.00

Increase: \$55,912.63

Modified Emergency Purchase Amount: \$314,112.63