

## **Report to Council of Non-Bid Public Works Construction Project Completed Using City Staff**

**Project:** St. Paul Ave Water Main Installation (MUNIS Project No. 13623)

**Date:** 10/7/2021

**Agency:** Water Utility

**Final Cost:** \$104,346.51

### **Background**

Madison Water Utility (MWU) self-performed non-bid work on St. Paul Ave on the two blocks between Rethke Ave and Powers Ave, installing approximately 860 feet of new water main. Within the project limits, there was a gap in the distribution system with one long dead end, and an old and undersized 2-in copper water main.

MWU crews replaced the 2-inch copper main and connected the distribution gap with 8-inch ductile iron water main. In addition three customers on the 2-inch water main had their service laterals re-connected to the new 8-inch main. These improvements increased redundancy in the system, resolved a fire flow deficiency and improved water quality by linking dead end water mains.

This report is intended to inform the Mayor and Common Council and to satisfy the requirements of Wisconsin Statute 62.15(14).

### **Scope of Work**

Work required to furnish and install a total of 800 feet of new 8-inch water main, 60 feet of 6-inch water main, two new hydrants and three service reconnections included:

- Mobilization of staff, materials and equipment
- Maintenance of traffic controls
- Excavation of trench for placement of new water main
- Installation of new ductile iron water mains, fittings and appurtenances
- Flushing and testing of new main prior to putting in service
- Disconnection/reconnection of service laterals from the old main to the new main
- Backfilling of trench with native material and imported select fill
- Installation of a temporary road patch
- Restoration, clean-up and demobilization

### **Recycling and Waste Disposal**

- Approximately 645 tons of original soil was excavated. Four hundred and twenty tons of materials was reused and 225 tons was landfilled due to its unsuitability for road construction.

### **Cost Detail**

Final project cost was \$104,346.51. This cost equates to \$121.55 per foot of water main installed. Line items costs are provided on the following page.

PROJECT NAME: ST. PAUL AVE WATER MAIN INSTALLATION  
PROJECT NUMBER: 13623

**MADISON WATER UTILITY**  
**PROJECT COST ANALYSIS**

<b>ACCOUNT</b>	<b>AMOUNT</b>
LABOR	\$59,556.66
LABOR BURDEN	\$7,152.65
PAYROLL BENEFITS	\$9,361.17
PAYROLL TAXES	\$2,626.90
MATERIALS <sup>1</sup>	\$7,508.95
EQUIPMENT	\$10,972.50
TOOLS	\$2,079.78
TRANSPORTATION	\$3,812.90
PERMITS	\$1,275.00
<b>TOTAL:</b>	<b>\$104,346.51</b>

NOTE:

1: Includes Materials, Accounts Payable, Stores & Inventory