



# CITY OF WAUKESHA

## Administration

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<b>Committee:</b> Board of Public Works	<b>Date:</b> 8/18/2016
<b>Common Council Item Number:</b> ID #16-1229	<b>Date:</b> 9/6/2016
<b>Submitted By:</b> Fred Abadi, Director of Public Works	<b>City Administrator Approval:</b> Kevin Lahner, City Administrator <b>KL</b>
<b>Finance Department Review:</b> Rich Abbott, Finance Director <b>RA</b>	<b>City Attorney's Office Review:</b> Brian Running, City Attorney <b>BER</b>
<b>Subject:</b> Review and act on Contract Change Order #01 with Super Western, Inc. for E. Sunset Drive Roadway Improvements	

### Details:

This Contract Change Order explains additional work to be completed by Super Western, Inc. A majority of work listed in this contract change order was a result from a water main break on Sunset Drive. Other work listed is related to the road project and will be paid for with additional quantity on contract bid prices. Waukesha Water Utility will reimburse the City for the water main replacement work.

#### Description of project changes:

##### Miscellaneous Roadwork and Drainage Items:

- |   |            |
|---|------------|
| 1. Additional Median Grate / Struct @ \$2,336.40 Lump Sum (LS)..... | \$2,336.40 |
| 2. Additional Clearing and Grubbing at \$1,000 LS .....             | \$1,000.00 |
| Sub Total   | \$3,336.40 |

##### Water Utility 12" Water Main Relay Work:

- |  |              |
|--|--------------|
| 3. 825 feet 12-Inch Water Main @ \$148.62/LF.....                    | \$122,611.50 |
| 4. Pipe relocation / staging \$1,688.54 LS .....                     | \$1,688.54   |
| 5. 62.5 feet 12-Inch Water Main across Sunset @ \$148.62/LF.....     | \$9,288.75   |
| 6. Misc. Pipe fittings and bends to cross Sunset at \$10,000 LS..... | \$9,946.73   |
| 7. Temp Road to bypass traffic to cross Sunset at \$10,000 LS .....  | \$14,583.65  |
| Sub Total  | \$158,119.17 |

Total Amount of this Change Order..... \$161,455.57

\*\* Note: City Water Utility will reimburse the City \$158,119.17 + 1% for engineering for the water main relay work.

The subject water main in this change order was uncovered by the contractor and began leaking aggressively. Waukesha Water Utility inspected the water main and determined that it had deteriorated to the point where it had to be replaced. Since public safety was an issue and the main had to be replaced immediately, the Water Utility asked to have the contractor replace the water main at an agreed upon price which was approved by the Water Utility and included in this roadway contract as an extra item that will be reimbursed by the Water Utility. The Water Utility had submitted a memorandum to their commission explaining the need for the work and is attached.



**Options & Alternatives:**

There were no other alternatives considered. This work was time sensitive and, due to public safety concerns, was immediately replaced by the contractor on site at an agreed upon price between the contractor and the Water Utility and administrated through this contract.

**Financial Remarks:**

Contract Change Order #01 - Total Expense: \$161,455.57

Acc# 0410.2004.68290 for Road – \$3,336.40

Acc# 0410.7399.68290.71430 for Water – \$158,119.17

**Note:**

The City will send Waukesha Water Utility and invoice for payment of \$158,119.17 + 1% for engineering for the water main replacement work

**Executive Recommendation:**

Recommend approval of Contract Change Order #01 with Super Western, Inc. in the amount of \$161,455.57 for E. Sunset Drive Roadway Improvements.



# Waukesha Water Utility

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## MEMORANDUM

DATE: August 10, 2016

TO: Dan Duchniak, P.E.

FROM: Kelly Zylstra, P.E.

RE: Sunset Drive (M00499) Water Main Replacement Project; Gramling to Sunset View

As you recall from the update I provided at the July water commission meeting, a water main break that occurred during reconstruction of Sunset Drive between Gramling and Sunset View revealed severe corrosion of the 12-inch ductile iron pipe installed in 1980. Originally, due to the age of the pipe, this section was not scheduled for replacement as part of the City's project.

We then had the contractor expose additional pipe in the area. Based on the initial visual inspection, the pipe appeared to be in acceptable condition. However, when our crews tried to repair the break, it became clear it was no longer structurally sound. Following a conference call with DIPRA (Ductile Iron Pipe Research Association), it appears that the combination of lack of poly wrap on the pipe and presence of the hydric soils caused the ductile iron within the water main pipe to degrade; essentially leaving only the graphite as pipe structure. Leaving this pipe in place would not have been a wise decision due to the new pavement being installed over it.

Also, based on the hydraulics of the central pressure zone system, abandoning the water main in place was not an acceptable option as it is necessary to form a loop in the system that connects Les Paul and East Ave.

Therefore, I worked with Alex and Mike at the City to develop a change order for the project to install the water main within their contract with Super Western. Super Western had subcontracted the other related water main work to Super X contractors; who we have worked with in the past. Notification to proceed was provided on July 22<sup>nd</sup>; pipe arrived on site on July 25<sup>th</sup>; the pipe was installed and tested safe for connection to the system on August 10<sup>th</sup>. This work needed to be done quickly so there were no further delays with the roadway reconstruction project. The cost of this portion of the water main work totals \$168,149.17. We are comfortable with the pricing given the comparison to recent publicly bid projects.

The remaining water main work for the Sunset roadway reconstruction project relates directly to the storm sewer portion of the City's contract with Super Western. The existing water mains, a 12-inch within the central pressure zone and a 16-inch within the reduced southeast pressure zone, were found to be in direct vertical conflict with the new culverts between Gramling and Camden Way. The water mains are not in conflict with the current storm sewers; however, the City is being required by WDNR to lower the outfall elevations resulting in a conflict. This conflict, both for depth and effect on scheduling should have been discovered during the design work performed by the City's consultant which would have allowed for this work to be bid as part of the overall project. The consultant did not identify the conflict; therefore it was identified during the construction by the contractor.

Currently, we are working closely with Mike and Super Western on the scheduling of this work as the 16-inch water main cannot be taken out of service to be lowered until the water main on Les Paul is connected and tested at Broadway; which will be approximately one month from now. Had this been identified during design,

the City could have included this information in their bidding documents, received a bid price for the offset work and adjusted their traffic control staging to avoid a scheduling delay. Super Western and their subcontractors are working on the cost estimate as there are issues related to bypass pumping the creek water that is flowing through the existing storm culverts in the area. Maintaining this flow is necessary to retain traffic flow in the area. The goal will be to complete this work in September with a continued goal of getting the roadway reconstruction finished this year.

At this time I am hoping that the City and WWU can reach an agreement on the cost sharing of this water main offset work.

There is money remaining within account 3431 of the 2016 budget for this work.

***Recommended Motion:*** Move to approve the change orders for the water main work within the City's 2016 roadway reconstruction project limits on Sunset Drive, in an amount not to exceed \$200,000.