

### TD-3 Group: High System Summary

**Project Identifier:** TD-3 Group

**CIP Budget:** \$2,840,000

**Project Name:** TD-3a, 3b, 3c, 3d, 3e

**Funding Source:** Rates

**PROJECT DESCRIPTION (TD-3 GROUP):** This group of projects includes replacement of transmission and distribution infrastructure within the High System with appropriately-sized pipe consisting of materials suitable to each area's underground conditions.

**NEED OR JUSTIFICATION (TD-3 GROUP):** These water main replacement projects will improve distribution system hydraulic efficiency across the High Service Level to meet peaking demands and increased fire protection capacity to critical supply areas and customers. These replacement main projects will provide a 12-inch looped distribution system to critical customers such as the Lewis and Clark State College and the St. Joseph Regional Medical Center.

In addition to providing increased fire protection capacity, the projects will replace aging undersized infrastructure that are prone to leaking, system outages and corrosion. Hydraulic modeling of the distribution system during peak day system demands plus the required fire flow capacity, provided data showing this area of the distribution system to be unable to meet International Fire Code (IFC) Standards. These projects will significantly improve fire flow to the college and medical center, which are currently supplied by an undersized looped 4,6-inch distribution system.

### INDIVIDUAL HIGH SYSTEM PROJECTS

**Project Identifier:** TD-3a (High Service Level)

**CIP Budget:** \$633,000

**Project Name:** 12-inch Replacement Main, in  
4th Avenue from 6th Street to  
St. Johns Way

**Funding Source:** Rates

**PROJECT DESCRIPTION:** This project replaces approximately 2,212 ft. of 4, 6-inch cast iron water main located in 4<sup>th</sup> Avenue from 6<sup>th</sup> Street to St. Johns Way with 12-inch PVC water main. The estimated cost of replacement is estimated at \$633,000 which includes the following markups: 6% sales tax, 15% contractor overhead/profit, 20% construction contingency and 20% engineering and administrative expense.

<b>Project Identifier:</b>	<b>TD-3b (High Service Level)</b>	<b>CIP Budget:</b>	<b>\$532,000</b>
<b>Project Name:</b>	<b>12-inch Replacement Main, in 6th Avenue and Prospect Avenue</b>	<b>Funding Source:</b>	<b>Rates</b>

**PROJECT DESCRIPTION:** This project replaces approximately 1,762 ft. of 4,6-inch cast iron water main located in 6<sup>th</sup> Avenue and Prospect Avenue from 4<sup>th</sup> to 8<sup>th</sup> Avenue with 12-inch PVC water main. The estimated cost of replacement is estimated at \$532,000 which includes the following markups: 6% sales tax, 15% contractor overhead/profit, 20% construction contingency and 20% engineering and administrative expense.

<b>Project Identifier:</b>	<b>TD-3c (High Service Level)</b>	<b>CIP Budget:</b>	<b>\$895,000</b>
<b>Project Name:</b>	<b>12-inch Replacement Main, in 3rd Street from 8th Avenue to 16th Avenue</b>	<b>Funding Source:</b>	<b>Rates</b>

**PROJECT DESCRIPTION:** This project replaces approximately 2,806 ft. of 6, 8-inch cast iron and converse steel water main located in 3<sup>rd</sup> Street from 8<sup>th</sup> Street to 16<sup>th</sup> Street with 12-inch PVC water main. The estimated cost of replacement is estimated at \$895,000 which includes the following markups: 6% sales tax, 15% contractor overhead/profit, 20% construction contingency and 20% engineering and administrative expense.

<b>Project Identifier:</b>	<b>TD-3d (High Service Level)</b>	<b>CIP Budget:</b>	<b>\$525,000</b>
<b>Project Name:</b>	<b>12-inch Replacement Main, in 16th Avenue from 3rd Street to 7th Street</b>	<b>Funding Source:</b>	<b>Rates</b>

**PROJECT DESCRIPTION:** This project replaces approximately 2,081 ft. of 4, 6, 8-inch cast iron and converse steel water main located in 16<sup>th</sup> Avenue from 3<sup>rd</sup> Street to 7<sup>th</sup> Street with 12-inch PVC water main. The estimated cost of replacement is estimated at \$525,000 which includes the following markups: 6% sales tax, 15% contractor overhead/profit, 20% construction contingency and 20% engineering and administrative expense.

<b>Project Identifier:</b>	<b>TD-3e (High Service Level)</b>	<b>CIP Budget:</b>	<b>\$255,000</b>
<b>Project Name:</b>	<b>12-inch Replacement Main, in 5th Street from 3rd Avenue to F Street</b>	<b>Funding Source:</b>	<b>Rates</b>

**PROJECT DESCRIPTION:** This project replaces approximately 1,020 ft. of 6-inch cast iron water main located in 5<sup>th</sup> Street from 3<sup>rd</sup> Avenue to F Street with 12-inch PVC water main. The estimated cost of replacement is estimated at \$255,000 which includes the following markups: 6% sales tax, 15% contractor overhead/profit, 20% construction contingency and 20% engineering and administrative expense.