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Water and Sewer Improvement District 2014-1

Michigan, North Dakota

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Consulting Engineering • Land Surveying

North Dakota

Minot

West Fargo

Minnesota

Fergus Falls

Wadena

Overview

- History of existing water and sewer systems
- Need for Project
- Scope of Proposed Project
- Financing
- Existing and Proposed Water and Sewer Rates
- Environmental Issues

History of Existing Sewer System

1. Existing Sewer Mains

- Nearly all mains relined/replaced in 2009

2. Existing Manholes

- Mostly concrete/ not part of 2009 project

3. Lift Stations

- Little work since beginning of operations

4. Wastewater Treatment Facility

- Updated in 2009

History of Existing Water System

1. Wells/Water Treatment Plant
 - Good Condition
2. Water Tower
 - Approximately 60-70 Years in Service
3. Water Mains
 - PVC Replacement Early 1990s

Need for Project – Sewer

- Condition of Existing Main Lift Station
 - Safety Issues
 - Age
 - Maintainability
- Condition of Select Manholes
 - Deterioration Near Surface
 - Bottom Portion Structurally Sound

Michigan Main Lift Station



Exterior View to North

Michigan Main Lift Station



Vent Piping

Michigan Main Lift Station



Interior of Building

Michigan Main Lift Station



Lifting Frame

Michigan Main Lift Station



Dry Pit Access Hatch

Michigan Main Lift Station



Wet Pit Access Hatch

Manhole Deterioration



Manhole Cone/Adjustment Rings

Need for Project – Water

- Water Meters
 - Reliability
 - Age
- Curb Stops
 - Non-Functioning Locations
 - Buried Locations

Scope of Proposed Project

- Replace Water Meters
- Replace Selected Curb Stops
- Rehabilitate Selected Manholes
- Replace Main Lift Station
- Total Preliminary Project Cost: \$501,000

Financing

- Rural Development
 - Administers a Loan/Grant Program for Rural Communities to Assist with Water and Waste Disposal Projects.
- City Eligibility
 - Qualify for a 30% to 45% Grant
 - Low Interest Loan – 3.75% Current Rate

Financing

- Rural Development Grant:
 - \$150,300 (30%)
 - \$225,450 (45%)
- Rural Development Loan:
 - \$350,700 (70%)
 - \$275,550 (55%)

Financing

City Bond Payment Per Year:

- \$350,700 – 30 year RD Loan @ 3.75%
- \$275,550 – 30 year RD Loan @ 3.75%

Grant Percentage	<u>30%</u>	<u>45%</u>
City Debt Service	\$19,670	\$15,460
<u>Emergency & Extension (10%)</u>	<u>\$1,967</u>	<u>\$1,546</u>
Total	\$21,637	\$17,006

Financing

Financing Options

1. Rates
2. Special Assessments
3. Sales Tax

Financing

User Rate Example

- Cost for User Per Month
= Monthly City Bond Payment / Number of Users

Monthly Bond Payment Calculation

- 30% Grant
= \$21,637 / 12 months = \$1,803 per month
- 45% Grant
= \$17,006 / 12 months = \$1,417 per month

Financing

- Cost for User Per Month

30% Grant

= \$1,803 / 181 users = \$9.96 per month

45% Grant

= \$1,417 / 181 users = \$7.83 per month

Financing

Special Assessments

- Not the Typical Method of Repayment
- Will Have to Complete the Assessment Process
- USDA Loan for Sewer Projects Requires Special Assessments as Backing for the Bond

Financing

- City Sales Tax

Current City Sales Tax – 1.5%

2010 – \$30,446

2011 – \$31,033

2012 – \$34,316

2013 – \$27,010 (10 months)

Financing

- City Sales Tax – 30% Grant Example
0.5% Sales Tax Portion ~ \$10,000
Monthly Rates Portion ~ \$11,637
Monthly Account per User ~ \$5.36

Financing

- City Sales Tax – 45% Grant Example
0.5% Sales Tax Portion ~ \$10,000
Monthly Rates Portion ~ \$7,006
Monthly Account per User ~ \$3.25

Environmental Issues

- Agencies contacted:

ND DOT, ND Game & Fish, State Water Commission, NRCS, State Historical Society, ND Parks & Recreation, US Army CORPS of Engineers, US Fish & Wildlife, ND Department of Health, ND Division of Community Services

- Environmental Issues:

Questions?

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