

Business Item 2014 – 39

Adoption of the Facility Plan for St. Bonifacius L24 System Sanitary Sewer Improvements, MCES Project No. 808200

Scott Dentz, Manager Interceptor Engineering and Design

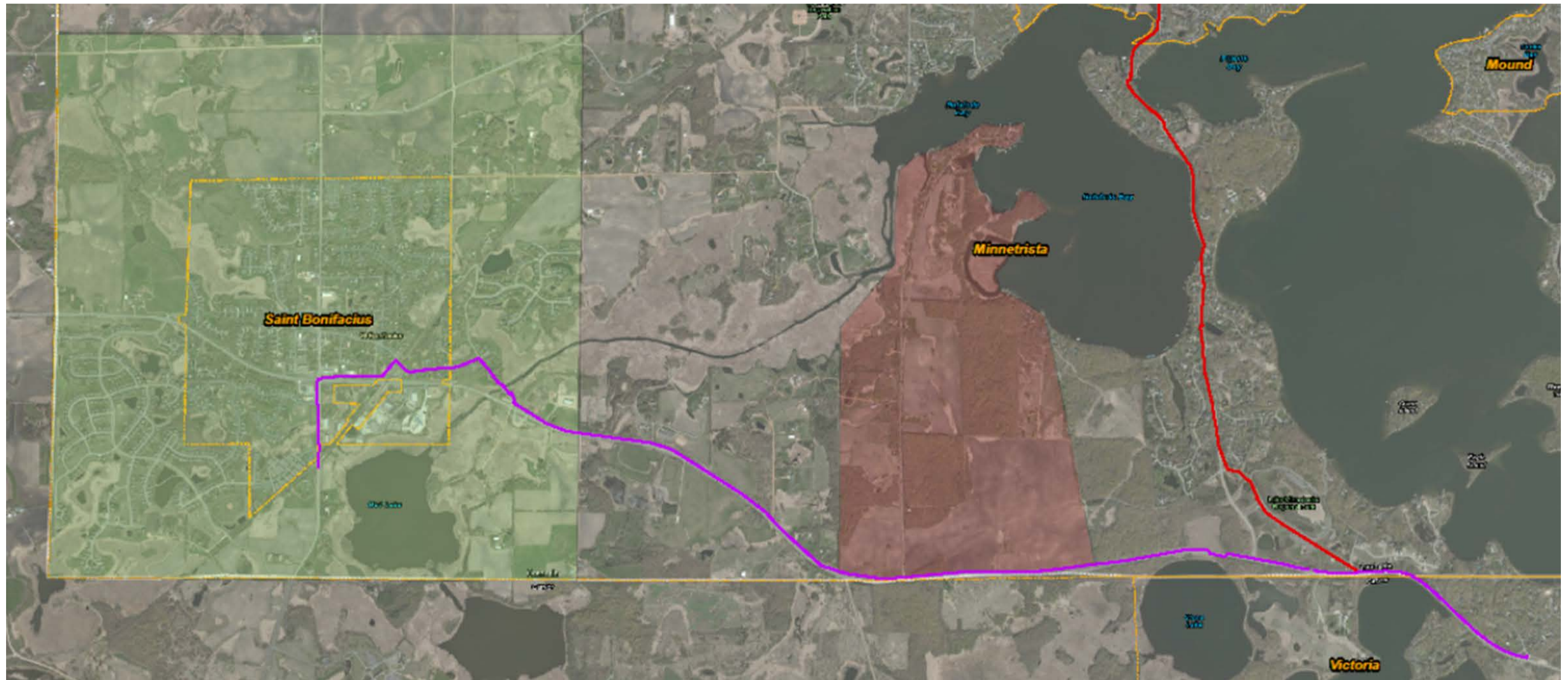
Environment Committee

February 11, 2014



Lift Station L24/Interceptor 7020 System Service Area

- St. Bonifacius & Portions of Minnetrista



February 11, 2014

Existing Conditions

Lift Station L-24	Forcemain Sewer	Gravity Sewer
<ol style="list-style-type: none"> 1. Near Capacity 2. Undersized Wet Well 3. Degradation of Concrete and Corrosion of Metal Pipes and Stairs 	<ol style="list-style-type: none"> 1. 44 Year Old Ductile Iron Pipe 2. Near End of Service Life 3. Inadequate Capacity 5. Deterioration of Air Release Valves and Structures 4. One Pipe System, No Redundancy 5. Only Source of Wastewater Service to Planning Area 	<ol style="list-style-type: none"> 1. Deterioration of Concrete Pipe 2. Needs Rehabilitation



Alternative Evaluation Criteria

- **Meet Project Objectives**

- Improve System Reliability
- Reduce Operation and Maintenance Issues
- Accommodate Future Growth
- Maintain Environmental Protection

- **Implementation Impacts**

- Environmental
- Community
- Permitting
- Property Acquisition
- Costs

Ratings of Alternatives

Criteria	Do Nothing	Rehabilitate Existing Facilities	Construct New Facilities
Meet Project Objectives			
Improve System Reliability	No	No	Yes
Reduce Operation and Maintenance Issues	No	Yes	Yes
Accommodate Future Growth	No	No	Yes
Maintain Environmental Protection	No	No	Yes
Implementation Impacts			
Environmental	None	Short Term	Short Term
Community	None	Short Term	Short Term
Permitting	Not Required	Required	Required
Property Acquisition	Not Required	Not Required	Required
Construction Costs	Lowest	Medium	Highest

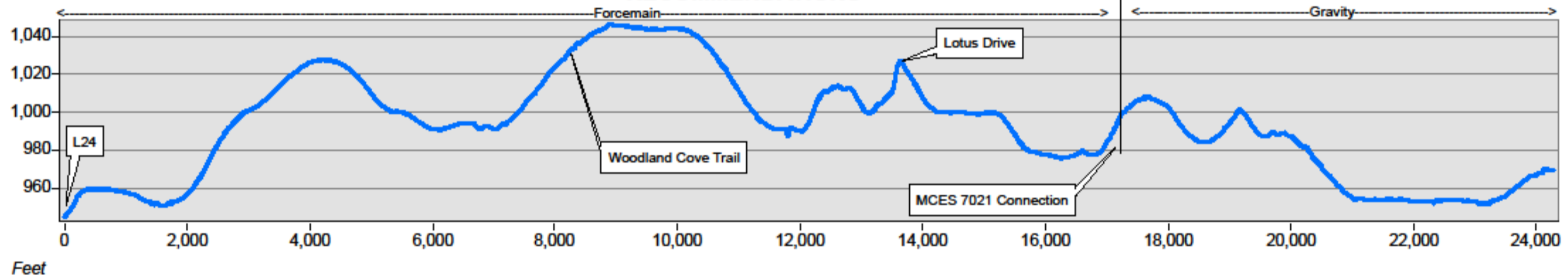
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Recommended Project

- Replace lift station at or near existing site
- Construct Dual force mains
 - Parallel to existing route from L-24 to Woodland Cove area
 - New route from Woodland Cove to MCES 7021 connection
- Rehabilitate existing gravity sewer downstream of new force main connection



RECOMMENDATIONS

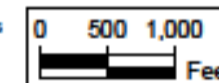


SOURCE OR NOTES:

- 1. Horizontal Coordinate System: Hennepin County, Minnesota
- 2. Horizontal Datum: NAD83
- 3. Vertical Datum: NAVD88
- 3. Location: St. Bonifacius, MN

LEGEND

- | | | | |
|-------------------------|----------------------------------|-------------------------------------|------------|
| — Alternate Route B | Wetlands | ■ Freshwater Emergent Wetland | ■ Lake |
| — MCES Interceptor 7020 | ■ Estuarine and Marine Deepwater | ■ Freshwater Forested/Shrub Wetland | ■ Other |
| — MCES Interceptor 7021 | ■ Estuarine and Marine Wetland | ■ Freshwater Pond | ■ Riverine |
| — Municipal Boundaries | | | |



This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.



METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES

FIGURE ES-1
RECOMMENDATIONS
ST. BONIFACIUS L24 SYSTEM
DRAFT FACILITY PLAN
DATE: JANUARY 2014

Path: X:\MS\IE\2013\13M059-00\GIS\mxd\figureES-1.mxd Date: 12/19/2013

February 11, 2014

