

# Feasibility Study

## 2015 Excelsior Road Improvements

### Baxter, Minnesota

SAP No. 230-106-002  
City Project No. 4108  
SEH No. BAXTE 128763

December 16, 2014

Council Approval Date: December 16, 2014



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December 16, 2014

RE: Baxter, Minnesota  
2015 Excelsior Road Improvements  
230-106-002  
City Project No. 4108  
SEH No. BAXTE 128763

Honorable Mayor and City Council  
c/o Trevor Walter, PE  
City Engineer  
City of Baxter  
13190 Memorywood Drive  
Baxter, MN 56425

Dear Mayor and Members of the City Council:

Short Elliott Hendrickson Inc. (SEH) is pleased to present this Feasibility Report for the project referenced above. It illustrates the proposed improvements, opinions of probable cost, and preliminary assessments.

Please contact me with any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Scott D. Hedlund".

Scott D. Hedlund, PE  
Project Manager

mrh

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2015 Excelsior Road Improvements  
Feasibility Study  
Baxter, Minnesota

SAP NO. 230-106-002  
City Project No. 4108  
SEH No. BAXTE 128763

December 16, 2014

I hereby certify that this report was prepared by me or under my direct supervision,  
and that I am a duly Licensed Professional Engineer under the laws of the State of  
Minnesota.



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Scott D. Hedlund, PE  
Project Manager

Date: 12/16/14 Lic. No.: 40686

Reviewed By: Chad Katzenberger, PE Date: 12/16/14

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416 South 6th Street, Suite 200  
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# Feasibility Study

## 2015 Excelsior Road Improvements

Prepared for City of Baxter, Minnesota

### 1.0 Introduction

As authorized by the City Council, this Feasibility Report was prepared for improvements to Excelsior Road between Cypress Drive and the east City limits, and Conservation Drive from approximately 300 feet north of Excelsior Road to Fairview Road. The project location is shown on Figure 1. The improvements include installation of street, pedestrian facilities, street lighting, storm water facilities, water main, and sanitary sewer improvements.

This report contains cost estimates and design recommendations for construction of streets, pedestrian facilities, street lighting, storm water facilities, water main, and sanitary sewer improvements to Excelsior Road and Conservation Drive. This report has been developed based on field observations and discussions with City staff and Council.

### 2.0 Existing Conditions

#### 2.1 Street, Pedestrian Facilities, and Street Lighting

Excelsior Road, in the project area, is a 2-lane major collector roadway that carries approximately 9,000 vehicles per day. The pavement is in a deteriorated condition with significant transverse and longitudinal cracking visible. The roadway passes through various wetland areas on both sides of the road. The pavement is in close proximity to surface and groundwater near the Paul Bunyan State Trail Bridge (Trail Bridge). Excelsior Road has a pronounced horizontal "S-curve" between Cypress Drive and Broadmoor Drive where an open water ditch closely follows the northerly side of the road. Steel plate beam guard rail is adjacent to the north road edge through much of the curve. The open water ditch and wetlands on the north side of Excelsior Road are connected under Cypress Drive by a 4-foot tall by 8-foot wide box culvert and overflow to a 48-inch storm sewer pipe at Broadmoor Drive that flows east.

Excelsior Road has a rural section (no curb and gutter) between the Trail Bridge and Conservation Drive. The rural section extends to Baxter Drive on the northerly side of the road. It has an urban section (concrete curb and gutter) elsewhere. Excelsior Road has a 3-lane urban section west of Cypress Drive. Cypress Drive has a 4-lane divided urban section north of Excelsior Road and a 2-lane without curb and gutter section south of Excelsior Road. Cypress Drive from Excelsior Road to College Road is planned for reconstruction/extension to a 4-lane urban divided section in 2018, including a roundabout at the Cypress Drive/Excelsior Road intersection.

Excelsior Road, east of Baxter Drive and Conservation Drive, between Excelsior Road and Fairview Road, are both urban sections and are in a less deteriorated condition than Excelsior west of Baxter Drive. The City's Pavement Management Plan has these two road segments identified for mill and overlay in 2015. Conservation Drive north of Excelsior Road is a 2-lane rural section.

There is a pedestrian crosswalk flasher signal system on Excelsior Road approximately midway between TH 371 and Golf Course Drive. With this system the yellow signal indications flash continuously. The system includes crosswalk warning signs, pedestrian curb ramps, and pavement markings. The system was installed primarily to more safely connect the Mills Fleet Farm employee parking lot south of Excelsior Road with the building facility on the north side.

## **2.2 Storm Water**

There are multiple existing storm sewer systems along Excelsior Road. All the systems ultimately discharge to the Arboretum wetland complex. Multiple systems near the Cypress Drive intersection discharge to the open water ditch and wetlands on the north side of Excelsior Road. The open water ditch passes under Cypress Drive by a means of a 4-foot by 8-foot box culvert to a large wetland complex. In larger rain events, the wetland overflows to a 48-inch storm sewer pipe at Broadmoor Drive that flows east into the existing storm pond at Conservation Drive (east pond). Multiple systems at the Excelsior Road/Conservation Drive intersection discharge to the east pond. The east pond discharges east to the Northland Arboretum wetland complex. There is an existing 12-inch low flow outlet just east of the trail bridge that is intended to control the water level in the wetland north of Excelsior between Cypress Drive and Broadmoor Drive. The outlet discharges east through a 12-inch high density polyethylene (HDPE) pipe with minimal fall that parallels the south side of Excelsior Road from the trail bridge to Conservation Drive where it discharges into the east pond. The 12-inch HDPE pipe system is governed by the east pond outlet. Multiple systems near the Excelsior Road/Baxter Drive intersection discharge directly to the Arboretum wetland complex. There have been maintenance issues (blockages) in the 12-inch HDPE low flow system and the 48-inch outlet pipe. It is believed the 12-inch HDPE system is currently blocked/collapsed in some areas.

## **2.3 Sanitary Sewer**

There are sanitary sewer mains built with modern materials throughout the project area with adequately sized services that are both connected and future connections. There have been some maintenance issues in the form of backups in the gravity mains just upstream of Lift Station No. 2. The backup issue is believed to be a result of pipe/manhole geometry at the junction of multiple mains.

## **2.4 Water Main**

There is existing water main built with modern materials throughout the project area with adequately sized services, both existing and future. No maintenance issues are known with the water system in the project area.

## 3.0 Project Improvements

### 3.1 Street, Pedestrian Facilities, and Street Lighting

Street reconstruction improvements are planned for Excelsior Road between Cypress Drive and Baxter Drive. The improvements include widening from two lanes to three lanes and adding right turn lanes to improve safety along Excelsior Road. Geometric improvements also include “softening” the horizontal S-curve between Cypress Drive and Broadmoor Drive with larger radius curves.

The proposed reconstruction structural section includes 6-inches of bituminous surfacing on 6-inches of Class 6 aggregate base (see Figure 3). This section is a 10-ton design, typical for roads of similar traffic volumes and function. Subsoil corrections are anticipated for the portions of the roadway being widened and passing through wetland areas based on soil boring results. Limits will be fully determined by in-field construction observations. Borings indicate the portion of the road section above sewer and water mains was corrected at the time of the original road and utility construction.

To address property owner access restriction and traffic safety concerns related to planned future improvements to Cypress Drive, it is also proposed to add a new full access driveway to the commercial property (aka Trails Head Business Center) (see Figure 6) in the southeast quadrant of the Cypress Drive/Excelsior Road intersection.

Full Depth Reclamation (FDR) is planned for Excelsior Road from Baxter Drive to the east City Limits. This improvement type consists of grinding up the existing pavement surface and mixing it with approximately an equal thickness of the existing aggregate base below (all in one operation), shaping and compacting the mixed material, and then overlaying with bituminous surfacing. In areas with existing concrete curb and gutter that remains, the shaping and grading step includes subcutting and removing some of the aggregate/bituminous mixture in order to maintain street grades. The benefits of FDR in lieu of mill and overlay include there will be no reflective cracking (i.e. any cracks in the pavement that remains after milling will likely reflect through the new overlay within a year or two) and longer pavement life. These benefits result in improved ride quality and reduced maintenance costs. FDR does have a higher initial cost than a mill and overlay.

The proposed FDR improvements to Excelsior Road from Baxter Drive to the East City limits would include a 12-inch subcut and replacement with 6-inches of Class #6 Aggregate Base (or salvaged reclaim material) and 6-inches of bituminous surfacing. This would bring this segment to a 10-ton design, making Excelsior Road a 10-ton design from Cypress Drive to the east City limits. These improvements would be eligible for State Aid funding.

Street resurfacing improvements are planned for Excelsior Road between Baxter Drive and the east City Limits, and Conservation Drive between Excelsior Road and Fairview Road. The improvements proposed are per the City’s Pavement Management Plan and include a 1.5-inch milling of the existing pavement followed by a 2-inch bituminous overlay (mill and overlay). Appendix B includes the option of Full Depth Reclamation (FDR) in lieu of mill and overlay for these segments.

Trail improvements are planned near the Trail Bridge and along Conservation Drive. The trails would conform to the City standard of 12-foot wide bituminous surfacing. The segments near the Trail Bridge consist of providing access to the Paul Bunyan State Trail just south of the south bridge approach. The connections would extend from Cypress Drive on the west and from Fairview Road on the east. Along Conservation Drive, the trail is proposed along the west side. The Conservation Drive south trail segment extends south from Excelsior Road approximately 300 feet to the south side of the movie theater parking lot entrance. At this point a new pedestrian crossing of Conservation Drive is proposed with new curb ramps, signing and pavement markings. It is envisioned this south trail segment would someday extend to Fairview Road and then west to the Paul Bunyan State Trail. The Conservation Drive north trail segment would extend to the Arboretum parking lot, where it would also connect with the existing paved trail system. The trail improvements are being proposed to improve pedestrian safety and traffic safety.

It is also proposed to install a pedestrian flasher signal system across the west leg of the Conservation Drive/Excelsior Road intersection. The flasher system would consist of LED blinker signs and yellow signal indications mounted on signal pedestal poles, one on each side of Excelsior Road. The signs and yellow indications would flash for a predetermined amount of time when a push button (mounted on the signal poles) is pressed by someone desiring to cross the street. The flasher improvements would also include pedestrian curb ramps and pavement markings. The pedestrian crossing improvements are being proposed to improve pedestrian and traffic safety.

It is also proposed to modify the pedestrian flasher signal system by Mills Fleet Farm. The modifications would consist of adding pedestrian push buttons to the poles, switching out the controller, and reconstructing the pedestrian curb ramps and pavement markings. This would make the signal operation consistent with the proposed pedestrian flasher at the Excelsior Road / Conservation Drive intersection (i.e. the yellow indications would only flash, for a predetermined amount of time, when a push button is pressed by someone desiring to cross the street).

It is also proposed to install street lights on the north side of Excelsior Road between Cypress Drive and the east City limits. The improvements consist of 40-foot tall aluminum poles with LED light fixtures, similar to the system by the middle school. The poles would also have GFI outlets mounted 20-feet up the pole to accommodate holiday lights etc. It is planned that the future Cypress Drive/Excelsior Road roundabout would be lit with the same type of lighting system. It is envisioned that street lighting would also extend in the future along Excelsior Road from Cypress Drive to TH 371. The street lighting improvements are proposed to improve pedestrian and traffic safety along this segment of Excelsior Road that does not provide significant private lighting from adjacent parcels.

The proposed street, pedestrian facilities, and street lighting improvements are shown in Figure 2.

### **3.2 Storm Water**

The proposed storm water improvements are shown in Figure 4. The improvements are necessary to meet Minnesota Pollution Control Agency (MPCA) Construction Stormwater Permit (NPDES) requirements for treatment, City project stormwater rate control standards, address historical drainage issues in the Excelsior Road corridor, and position the City to achieve greater regional treatment goals.

The project proposes to construct a storm water treatment pond in the northwest quadrant of the Cypress Drive/Excelsior Road intersection (west pond). The west pond would discharge to the open water ditch (ditch) that runs parallel to the north side of Excelsior Road and flows east. The pond would be located to accommodate the planned future roundabout at the Cypress Drive/Excelsior Road intersection. Runoff (existing and new) from the north, south, and west legs of the Cypress/Excelsior intersection would be collected and routed to the pond by reinforced concrete pipe (RCP) and concrete catch basin/manhole storm sewer systems.

In order to construct the west pond and maintain the ditch, it is necessary to relocate the existing 4-foot x 8-foot box culvert under Cypress Drive to the north. The relocation of the ditch is proposed to continue east from the relocated box culvert. With the widening and realignment of Excelsior Road, it is necessary to relocate the ditch further north. At the Trail Bridge, the ditch currently passes between the two bridge piers immediately adjacent to Excelsior Road. The proposed ditch realignment would pass between the north bridge pier and north abutment. The ditch realignment also accomplishes a safety goal of moving the ditch away from Excelsior Road.

Runoff from the east leg of the Cypress Drive/Excelsior Road intersection (existing and new) and the existing storm sewer system south of the Cypress Drive/Excelsior Road intersection will continue to discharge to the ditch. Runoff between the Trail Bridge and Conservation Drive will continue to discharge to the adjacent wetlands with treatment accomplished by grass filtration.

Runoff at the Excelsior Road/Conservation Drive intersection and Excelsior Road between Conservation Drive and the west leg of the Baxter Drive intersection will be collected and routed to the east pond for treatment by reinforced concrete pipe (RCP) and concrete catch basin/manhole storm sewer systems. Runoff from Conservation Drive (south of Excelsior) and movie theatre storm sewer systems will also continue to be directed to the east pond for treatment.

It is proposed to reconstruct the existing 12-inch HDPE low flow bypass system that runs along the south side of Excelsior Road between the Trail Bridge and Conservation Drive. The new system would consist of an 18-inch RCP outlet on the north side of Excelsior Road just east of the trail bridge that discharges through an 18-inch RCP pipe that would bypass the east pond and reconnect with an abandoned existing 48-inch RCP discharge apron east of the east pond. This bypass is desired to be independent of the east pond to better control water levels in the wetland and watershed upstream of the wetland. The elevation of the 18-inch outlet would be set at the same elevation as the existing 12-inch outlet. These improvements are based on analysis done with the Regional Storm Water Pond Feasibility Study recently completed by HDR Inc. The pipe sizing and bypassing of the east pond are planned to achieve regional watershed treatment project goals outlined in the HDR study. The study is on file at City Hall.

The project wetland permitting will include improvements to the 12-inch HDPE system in addition to wetland fill impacts necessary for other street and storm water facility improvements.

### 3.3 Sanitary Sewer

The proposed sanitary sewer improvements are shown in Figure 5. The improvements are recommended by City sewer maintenance staff as necessary to address maintenance and backup issues east from the junction manhole in Excelsior Road north of Lift Station No. 2. The improvements consist of adding two manholes and connector gravity pipe to bypass the congested junction manhole and improve flow geometry. City staff advises these improvements have been vetted with the City's sewer model.

### 3.4 Water Main

The proposed water main improvements are shown in Figure 5. The proposed improvements include adjusting the separation and insulation of the existing water main under the relocated box culvert. No other improvements are proposed.

## 4.0 Opinion of Probable Costs

Itemized breakdowns of probable cost are presented in Appendix A. The breakdowns are presented to provide insight into the costs of various items of the total project. Total project costs are summarized in the following table.

Table 1  
Summary of Costs

Construction	\$2,382,422
Contingency	\$238,242
Engineering, Administrative, Legal, Miscellaneous	\$476,484
Right-of-Way (Land)	\$53,000
<b>Total</b>	<b>\$3,150,148</b>

## 5.0 Financial Considerations

The proposed project presented is a combination street and utility reconstruction and mill and overlay road improvements. Generally, these types of improvements are financed through special assessments to benefiting properties in the project area. The City must ultimately decide the method of financing.

Based on discussions with City staff, it is understood that project financing strategies could include any combination of Municipal State Aid, City Funds (Collector Road, Storm Water Utility, Water, Sanitary Sewer, and Trail), local option sales tax (LOST), and special assessments.

The following breakdowns are provided to assist the City in determining what portion of the total project cost the City may be responsible for. These figures are estimates and final figures would be determined at the completion of the project. Figure 6 is a map of the proposed project assessment area. A detailed breakdown of the assessments is included in the Appendix.

## 5.1 Street, Pedestrian Facilities, Street Lighting

It is the City's policy to assess benefiting properties for street reconstruction, full depth reclamation (FDR), and resurfacing (aka mill and overlay) improvements. Excelsior Road is being reconstructed between Cypress Drive and Baxter Drive. It is assumed this portion would be assessed 100 percent of the cost of a typical FDR of the existing road footprint in lieu of a reconstruction assessment as this street is a major collector. The reconstruction scope has regional benefits. The portion of Excelsior Road from Baxter Drive to the east City Limits would also be assessed 100 percent of the cost of a typical FDR of the existing footprint. Conservation Drive between Excelsior Road and Fairview Road is being milled and overlaid. The Conservation Drive segments are proposed to be assessed 100 percent of the cost of a mill and overlay. The City would pay the remaining street, pedestrian facility, and street lighting costs. A detailed breakdown of the assessments is included in Appendix A.

Estimated Cost	\$2,079,606
Estimated Assessment	\$349,379
Estimated City Cost	\$1,730,227

## 5.2 Storm Water

Based on this being a collector road project and the storm water improvements achieving a larger goal, it is assumed the City would be responsible for storm water improvement costs other than assessing 60% of curb & gutter costs.

Estimated Cost	\$1,018,284
Estimated Assessment	\$48,906
Estimated City Cost	\$969,378

## 5.3 Sanitary Sewer

The sanitary sewer improvements are of a maintenance nature for this project, isolated to one segment of pipe. Due to the nature of this project, it is assumed the City would be responsible for 100 percent of the sanitary sewer improvement costs.

Estimated Cost	\$38,608
Estimated Assessment	\$0
Estimated City Cost	\$38,608

## 5.4 Water Main

The water main improvements for this project are limited to adjusting the depth of the water main on Cypress Drive in connection with relocating the box culvert there. Thus it is assumed the City would be responsible for 100 percent of the water main costs.

Estimated Cost	\$13,650
Estimated Assessment	\$0
Estimated City Cost	\$13,650

## 5.5 Financial Summary

In summary, the totals are as follows:

Table 2  
Financial Summary

Estimated Costs	Estimated Assessments	Estimated City Cost
\$3,150,148	\$398,285	\$2,751,863

## 6.0 Feasibility and Recommendations

The project, as presented in this report, is both cost effective and feasible from an engineering standpoint. The estimated project costs are presented to assist the City in deciding the feasibility of the project from a monetary standpoint. The improvements are necessary to replace deteriorating streets in the area, improve drainage, and better facilitate new pedestrian facility installations including connections to local and regional trail systems.

Based on information presented in this report, we make the following recommendations:

1. Construct street, pedestrian facilities, lighting, utility, and storm water improvements as recommended herein.
2. Right-of-way and easements should be dedicated or retained as determined by the final project design.
3. Soil borings should be taken throughout the project limits to determine subsurface conditions such as the presence of high bedrock, soil types, and water table elevations. Final design would be subject to results of the geotechnical evaluation.
4. Review estimated costs for financial planning.
5. Schedule the proposed improvements in 2015 with the funding schedules, as required.
6. Update estimated costs, if necessary.
7. Schedule and hold public hearings and begin the formal process required for an assessment project.

---

## Figures

Figure 1 – Project Location Map

Figure 2 – Proposed Street and Pedestrian Facilities

Figure 3 – Typical Sections

Figure 4 – Proposed Stormwater Improvements

Figure 5 – Proposed Sanitary Sewer and Water Main Improvements

Figure 6 – Assessment Map

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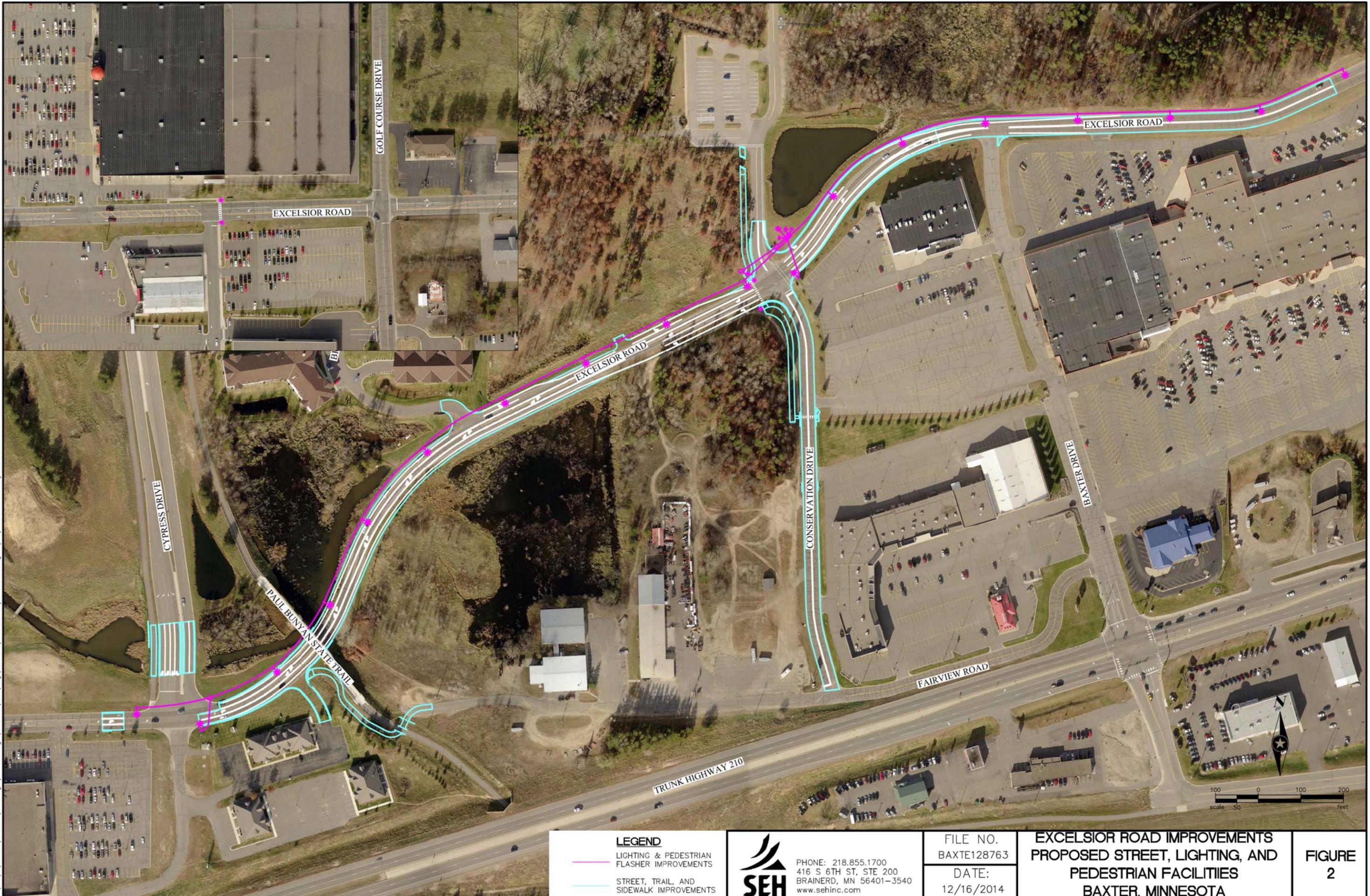
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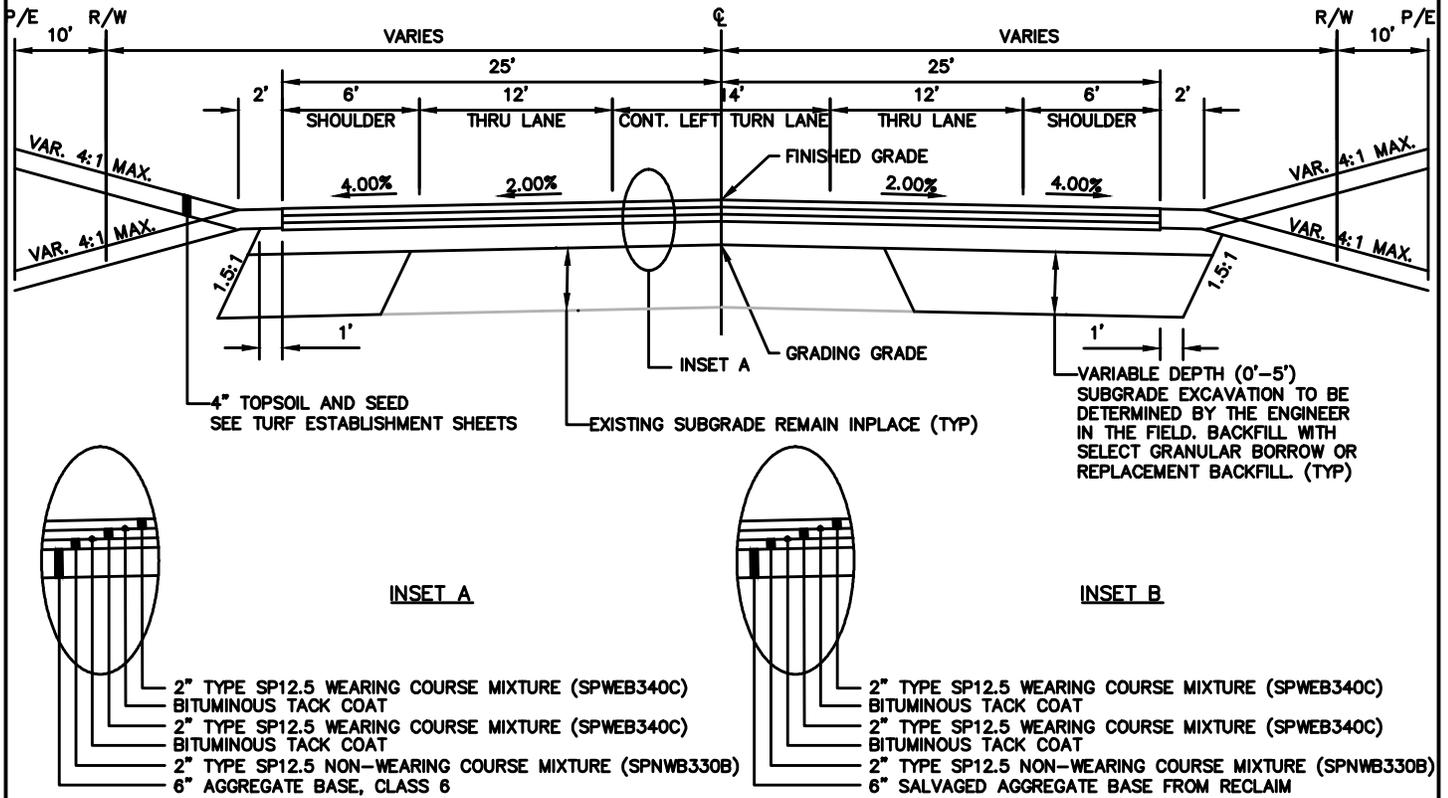
**EXCELSIOR ROAD IMPROVEMENTS  
PROJECT LOCATION MAP  
BAXTER, MINNESOTA**

**FIGURE  
NO. 1**

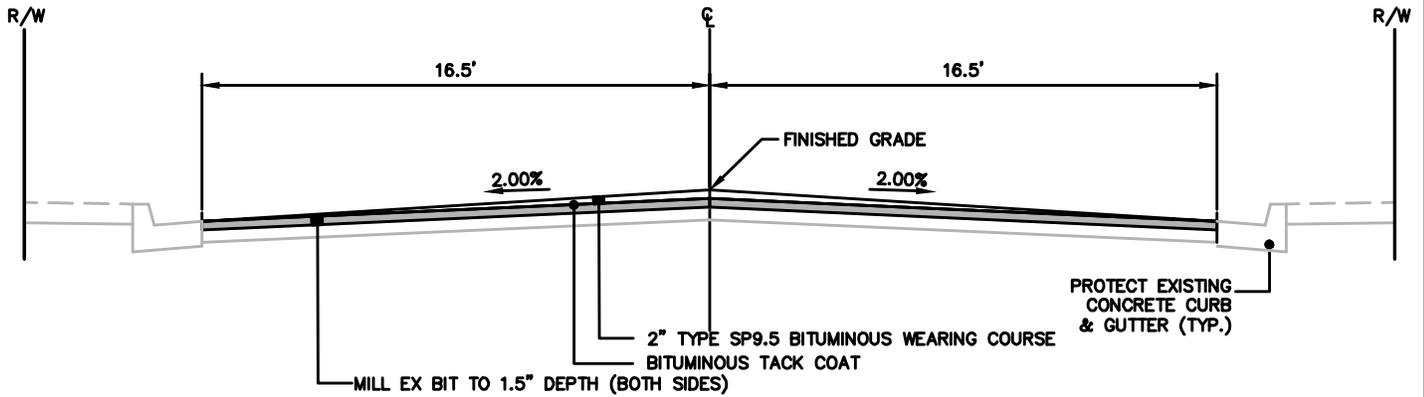
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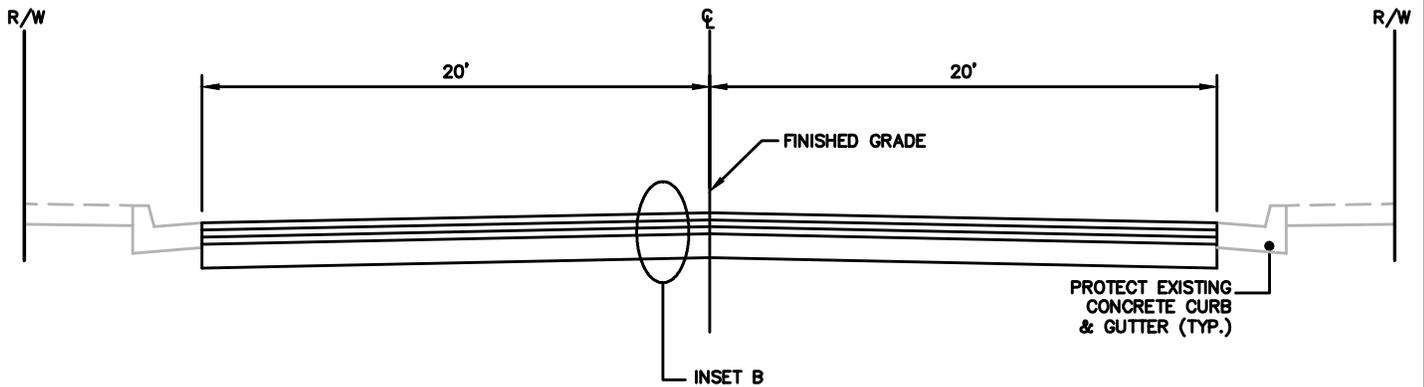
TYPICAL SECTION  
EXCELSIOR ROAD



TYPICAL SECTION  
CONSERVATION DRIVE OVERLAY



TYPICAL SECTION  
EXCELSIOR ROAD RECLAIM



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EXCELSIOR ROAD IMPROVEMENTS  
TYPICAL SECTIONS  
BAXTER, MINNESOTA

FIGURE  
NO. 3

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**LEGEND**

- STORM SEWER IMPROVEMENTS
- POND IMPROVEMENTS



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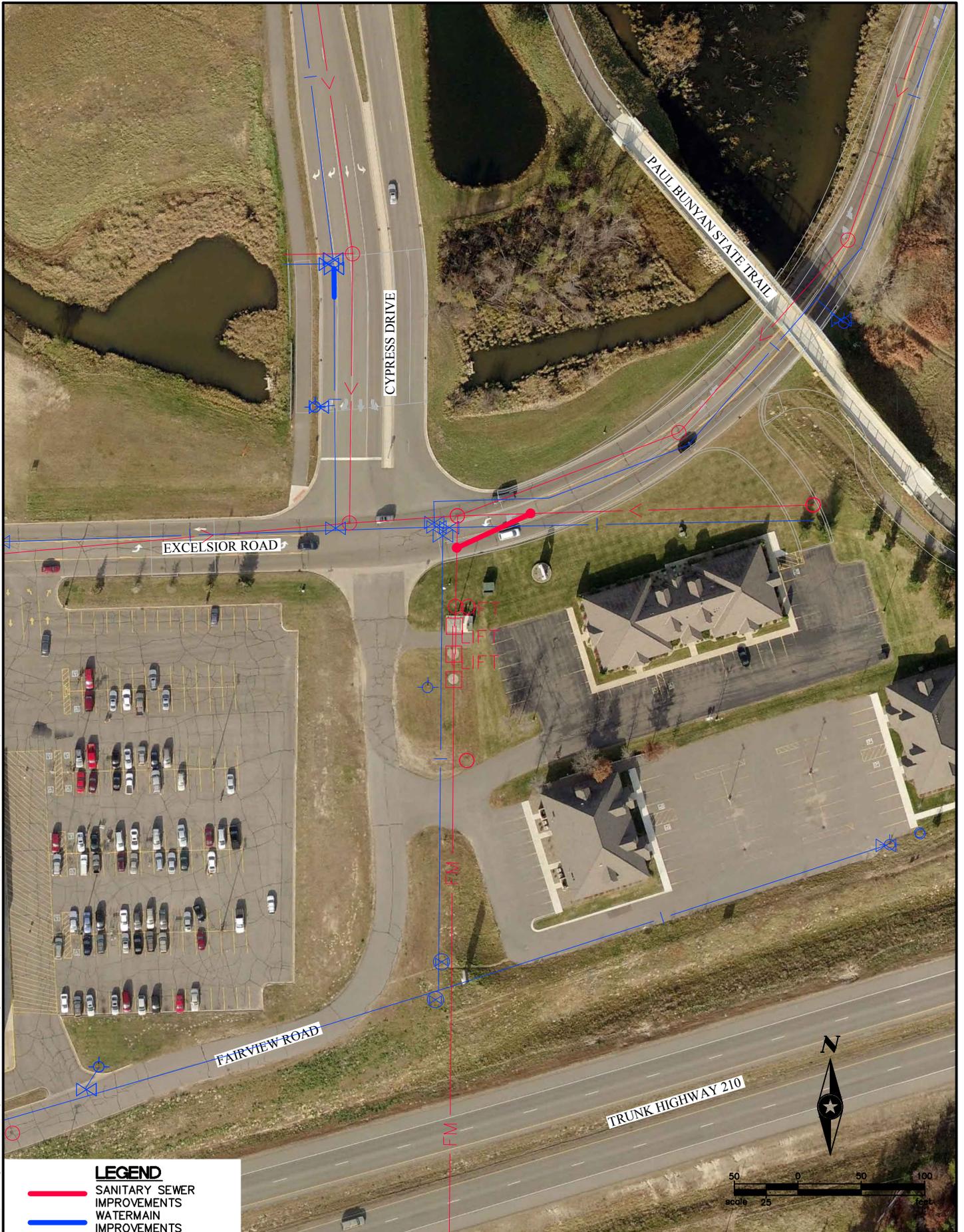
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**EXCELSIOR ROAD IMPROVEMENTS  
 PROPOSED STORMWATER  
 IMPROVEMENTS  
 BAXTER, MINNESOTA**

**FIGURE  
 4**



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- LEGEND**
- SANITARY SEWER IMPROVEMENTS
  - WATERMAIN IMPROVEMENTS



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**EXCELSIOR ROAD IMPROVEMENTS  
 PROPOSED SANITARY SEWER AND  
 WATER MAIN IMPROVEMENTS  
 BAXTER, MINNESOTA**

**FIGURE  
 NO. 5**

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LEGEND	
	RECONSTRUCTION
	MILL & OVERLAY
	RECLAIM & PAVE

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**EXCELSIOR ROAD IMPROVEMENTS  
 ASSESSMENT MAP  
 BAXTER, MINNESOTA**

**FIGURE  
 6**

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# Appendix A

Opinion of Probable Cost, Splits, and Assessments

EXCELSIOR ROAD IMPROVEMENTS  
BAXTER, MINNESOTA  
BAXTE128763

MNDOT NO.	ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASUREMENT	UNIT PRICE	RECONSTRUCT		MILL & OVERLAY		RECLAIM & PAVE (FDR)		TRAIL & SIDEWALK		STORM SEWER		STORM BASIN/DITCH		WATER		SANITARY SEWER		PEDESTRIAN CROSSING SIGNAL		LIGHTING		PROJECT TOTAL					
					ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST
2021.501	1	MOBILIZATION	LUMP SUM	\$30,000.00	0.52	\$15,600.00		\$600.00	0.02	\$600.00		\$1,500.00	0.05	\$750.00		\$1,500.00		\$4,200.00	0.14	\$420.00		\$420.00		\$300.00	0.01	\$300.00		\$300.00	1.00	\$3,000.00
2101.501	2	CLEARING	ACRE	\$3,000.00	0.09	\$270.00		\$0.00		\$0.00		\$0.00	0.17	\$510.00		\$0.00		\$0.00		0.3	\$900.00		\$0.00		\$0.00		\$0.00	0.56	\$1,680.00	
2104.502	3	CLEARING	TREE	\$150.00	2	\$300.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		1	\$150.00		\$0.00		\$0.00		\$0.00	3.00	\$450.00	
2101.506	4	GRUBBING	ACRE	\$4,000.00	0.09	\$360.00		\$0.00		\$0.00		\$0.00	0.17	\$680.00		\$0.00		\$0.00		1	\$1,200.00		\$0.00		\$0.00		\$0.00	0.56	\$2,240.00	
2101.507	5	GRUBBING	TREE	\$100.00	2	\$200.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		1	\$100.00		\$0.00		\$0.00		\$0.00	3.00	\$300.00	
2104.501	6	REMOVE SEWER PIPE (STORM)	LIN FT	\$5.00		\$0.00		\$0.00		\$0.00		\$0.00	2413	\$12,065.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	2,413.00	\$12,065.00	
2104.501	7	REMOVE SEWER PIPE (SANITARY)	LIN FT	\$10.50		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	57.00	\$598.50	
2104.501	8	REMOVE CURB AND GUTTER	LIN FT	\$2.00	2170	\$4,340.00		\$440.00	220	\$440.00	244	\$488.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	2,634.00	\$5,268.00	
2104.501	9	REMOVE GUARDRAIL	LIN FT	\$4.00	590	\$2,360.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	57.00	\$598.50	
2104.505	10	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$2.25	11382	\$25,609.50		\$0.00		\$0.00	329	\$740.25		\$0.00		\$0.00		\$0.00		1125	\$2,531.25		\$0.00		\$0.00		\$0.00	12,836.00	\$28,381.00	
2104.505	11	REMOVE CONCRETE PAVEMENT	SQ YD	\$4.25		\$0.00		\$0.00		\$0.00	6	\$25.50		\$0.00		\$0.00		\$0.00		63	\$267.75		\$0.00		\$0.00		\$0.00	69.00	\$293.25	
2104.509	12	REMOVE PERMANENT BARRICADE	EACH	\$500.00	1	\$500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	1.00	\$500.00	
2104.509	13	REMOVE WOOD POST	EACH	\$25.00	59	\$1,475.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	59.00	\$1,475.00	
2104.509	14	REMOVE DRAINAGE STRUCTURE	EACH	\$150.00		\$0.00		\$0.00		\$0.00		\$0.00	17	\$2,550.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	17.00	\$2,550.00	
2104.511	15	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	\$4.00	54	\$216.00		\$480.00	120	\$480.00	186	\$744.00	53	\$212.00		\$0.00		\$0.00		34	\$136.00		\$0.00		\$0.00		\$0.00	447.00	\$1,788.00	
2104.513	16	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$2.75	332	\$913.00		\$187.00	68	\$187.00	82	\$225.50	66	\$181.50		\$0.00		\$0.00		168	\$462.00		\$0.00		\$0.00		\$0.00	716.00	\$1,969.00	
2104.521	17	SALVAGE CHAIN LINK FENCE	LIN FT	\$10.00		\$0.00		\$0.00		\$0.00		\$0.00	50	\$500.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	50.00	\$500.00	
2104.521	18	SALVAGE WOOD FENCE	LIN FT	\$4.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		60	\$240.00		\$0.00		\$0.00		\$0.00	60.00	\$240.00	
2104.521	19	SALVAGE CONCRETE BOX CULVERT	LIN FT	\$75.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		152	\$11,400.00		\$0.00		\$0.00		\$0.00	152.00	\$11,400.00	
2104.521	20	SALVAGE PIPE SEWER (STORM)	LIN FT	\$15.00		\$0.00		\$0.00		\$0.00		\$0.00	170	\$2,550.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	170.00	\$2,550.00	
2104.523	21	SALVAGE CONCRETE BOX CULVERT END SECTION	EACH	\$650.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		2	\$1,300.00		\$0.00		\$0.00		\$0.00	2.00	\$1,300.00	
2104.523	22	SALVAGE CASTING	EACH	\$150.00		\$0.00		\$0.00		\$0.00		\$0.00	4	\$600.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	4.00	\$600.00	
2104.523	23	SALVAGE DRAINAGE STRUCTURE	EACH	\$500.00		\$0.00		\$0.00		\$0.00		\$0.00	4	\$2,000.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	4.00	\$2,000.00	
2104.523	24	SALVAGE PIPE APRON	EACH	\$350.00	1	\$350.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	1.00	\$350.00	
2104.523	25	SALVAGE COMMERCIAL SIGN	EACH	\$320.00	1	\$320.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	1.00	\$320.00	
2104.523	26	SALVAGE SIGN TYPE C	EACH	\$40.00	34	\$1,360.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		3	\$120.00		\$0.00		\$0.00		\$0.00	37.00	\$1,480.00	
2104.523	27	SALVAGE SIGN SPECIAL	EACH	\$40.00	6	\$240.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	6.00	\$240.00	
2104.603	28	ABANDON STORM SEWER	LIN FT	\$5.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	20.00	\$100.00	
2104.607	29	SALVAGE RANDOM RIPRAP	CU YD	\$18.00		\$0.00		\$0.00		\$0.00		\$0.00	20	\$100.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	20.00	\$360.00	
2104.618	30	SALVAGE BLOCK RETAINING WALL	SQ FT	\$6.00	250	\$1,500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	195.00	\$3,510.00	
2105.501	31	COMMON EXCAVATION (P)	CU YD	\$3.00	3466	\$10,398.00		\$0.00	1400	\$11,900.00	1566	\$13,911.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	250.00	\$1,500.00	
2105.507	32	SUBGRADE EXCAVATION	CU YD	\$8.00	13906	\$111,248.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	13,906.00	\$111,248.00	
2105.511	33	CHANNEL AND POND EXCAVATION	CU YD	\$15.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		4773	\$71,595.00		\$0.00		\$0.00		\$0.00	4,773.00	\$71,595.00	
2105.602	34	EXCAVATION SPECIAL (SUBGRADE POTHOLE)	EACH	\$800.00	7	\$5,600.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	7.00	\$5,600.00	
2105.607	35	EXCAVATION SPECIAL (EAST POND)	CU YD	\$20.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	3,020.00	\$60,400.00	
2105.522	36	SELECT GRANULAR BORROW (LV)	CU YD	\$14.00	9609	\$134,526.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	9,609.00	\$134,526.00	
2105.601	37	DEWATERING	LUMP SUM	\$100,000.00		\$0.00		\$0.00		\$0.00		\$0.00	0.8	\$80,000.00		\$0.00		\$0.00	0.05	\$5,000.00	0.15	\$15,000.00		\$0.00		\$0.00	1.00	\$100,000.00		
2130.501	38	WATER	M GAL	\$25.00	500	\$12,500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	500.00	\$12,500.00	
2123.501	39	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	\$150.00	10	\$1,500.00		\$225.00	1.5	\$225.00	2	\$300.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	15.00	\$2,250.00	
2211.503	40	AGGREGATE BASE, CLASS 6 (CV) (P)	CU YD	\$26.00	2868	\$74,568.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	4,050.00	\$105,300.00	
2232.501	41	RECLAIM BITUMINOUS SURFACE	SQ YD	\$1.20		\$0.00		\$3,949.20	3291	\$3,949.20	4168	\$5,001.60		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	7,459.00	\$8,950.80	
2357.502	42	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	\$3.00	1514	\$4,542.00		\$498.00	166	\$498.00	418	\$1,254.00		\$0.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	94.00	\$282.00	
2360.501	43	TYPE SP 9.5 WEARING COURSE MIX (2.C) TRAIL	TON	\$80.00		\$0.00		\$0.00		\$0.00		\$0.00	279	\$22,320.00		\$0.00		\$0.00					\$0.00		\$0.00		\$0.00	2,192.00	\$6,576.00	
2360.501	44	TYPE SP 12.5 WEARING COURSE MIX (3.C)	TON	\$70.00	3817	\$267,190.00		\$29,050.00	1044	\$73,080.00		\$0.00		\$0.00		\$0.00		\$0.00		236	\$16,520.00									

**COST SPLIT AND ASSESSMENT CALCULATIONS - WITH FULL DEPTH RECLAMATION (FDR) ON EXCELSIOR ROAD EAST OF BAXTER DRIVE AND MILL AND OVERLAY ON CONSERVATION DRIVE**

12/16/2014

EXCELSIOR ROAD IMPROVEMENTS  
BAXTER, MINNESOTA  
BAXTE128763

MNDOT NO.	ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASUREMENT	UNIT PRICE	RECONSTRUCT		MILL & OVERLAY		RECLAIM & PAVE (FDR)		TRAIL & SIDEWALK		STORM SEWER		STORM BASIN/DITCH		WATER		SANITARY SEWER		PEDESTRIAN CROSSING SIGNAL		LIGHTING		PROJECT TOTAL					
					ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST	ESTIMATED QUANTITY	TOTAL COST
2567.603	117	INSTALL WOOD FENCE	LIN FT	\$10.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	60	\$600.00		\$0.00		\$0.00		\$0.00		\$0.00		60.00	\$600.00			
2563.601	118	TRAFFIC CONTROL	LUMP SUM	\$40,000.00	0.52	\$20,800.00		\$800.00	0.02	\$800.00		\$0.00	0.05	\$2,000.00	0.15	\$6,000.00		\$0.00		\$0.00	0.01	\$400.00		\$0.00	0.01	\$400.00	0.08	\$3,200.00	1.00	\$40,000.00
2563.601	119	DETOUR SIGNING	LUMP SUM	\$10,000.00	1	\$10,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		1.00	\$10,000.00			
2564.531	120	SIGN PANELS TYPE C	SQ FT	\$35.00	163	\$5,705.00		\$0.00		\$0.00		\$0.00	45	\$1,575.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		208.00	\$7,280.00			
2564.537	121	INSTALL SPECIAL SIGN	EACH	\$500.00	1	\$500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		1.00	\$500.00			
2564.537	122	INSTALL SIGN TYPE C	EACH	\$100.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	3	\$300.00		\$0.00		\$0.00		\$0.00		\$0.00		3.00	\$300.00			
2564.537	123	INSTALL SIGN SPECIAL	EACH	\$125.00	6	\$750.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		6.00	\$750.00			
2565.616	124	PEDESTRIAN CROSSWALK FLASHER SYSTEM	EACH	\$24,400.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	1	\$24,400.00	1.00	\$24,400.00		
2565.616	125	REVISE FLASHER SYSTEM	EACH	\$2,200.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	1	\$2,200.00	1.00	\$2,200.00		
2573.502	126	SILT FENCE TYPE MS	LIN FT	\$2.00	3885	\$7,770.00		\$0.00		\$0.00		\$0.00	590	\$1,180.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		4,475.00	\$8,950.00			
2573.505	127	FLOTATION SILT CURTAIN TYPE MOVING WATER	LIN FT	\$20.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	90	\$1,800.00		\$0.00		\$0.00		\$0.00		\$0.00		90.00	\$1,800.00			
2573.512	128	TEMPORARY DITCH CHECK TYPE 3	LIN FT	\$4.50		\$0.00		\$0.00		\$0.00		\$0.00	60	\$270.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		60.00	\$270.00			
2573.53	129	STORM DRAIN INLET PROTECTION	EACH	\$150.00		\$0.00		\$0.00		\$0.00		\$0.00	50	\$7,500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		50.00	\$7,500.00			
2573.635	130	STABILIZED CONSTRUCTION EXIT	EACH	\$1,000.00	7	\$7,000.00		\$0.00		\$0.00		\$0.00	4	\$4,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		11.00	\$11,000.00			
2573.601	131	TEMPORARY EROSION CONTROL	LUMP SUM	\$2,500.00	1	\$2,500.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		1.00	\$2,500.00			
2574.508	132	FERTILIZER TYPE 3	POUND	\$1.50	427	\$640.50		\$0.00		\$0.00		\$0.00	297	\$445.50		\$0.00	710	\$1,065.00		\$0.00		\$0.00		\$0.00		1,434.00	\$2,151.00			
2574.525	133	COMMON TOPSOIL BORROW (LV)	CU YD	\$16.00	1075	\$17,200.00		\$0.00		\$0.00		\$0.00	810	\$12,960.00		\$0.00	1530	\$24,480.00		\$0.00		\$0.00		\$0.00		3,415.00	\$54,640.00			
2575.501	134	SEEDING	ACRE	\$1,000.00	1.22	\$1,220.00		\$0.00		\$0.00		\$0.00	0.85	\$850.00		\$0.00	2.03	\$2,030.00		\$0.00		\$0.00		\$0.00		4.10	\$4,100.00			
2575.501	135	SEEDING (TEMPORARY)	ACRE	\$1,000.00	1.4	\$1,400.00		\$0.00		\$0.00		\$0.00	1.07	\$1,070.00		\$0.00	2.03	\$2,030.00		\$0.00		\$0.00		\$0.00		4.50	\$4,500.00			
2575.502	136	SEED MIXTURE 22-111	POUND	\$3.00	84	\$252.00		\$0.00		\$0.00		\$0.00	65	\$195.00		\$0.00	122	\$366.00		\$0.00		\$0.00		\$0.00		271.00	\$813.00			
2575.502	137	SEED MIXTURE 25-141	POUND	\$4.00	213	\$852.00		\$0.00		\$0.00		\$0.00	85	\$340.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		298.00	\$1,192.00			
2575.502	138	SEED MIXTURE 25-151	POUND	\$4.00	56	\$224.00		\$0.00		\$0.00		\$0.00	31	\$124.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		87.00	\$348.00			
2575.502	139	SEED MIXTURE 33-361	POUND	\$30.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	128	\$3,840.00		\$0.00		\$0.00		\$0.00		128.00	\$3,840.00			
2575.502	140	SEED MIXTURE 34-181	POUND	\$100.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	3	\$300.00		\$0.00		\$0.00		\$0.00		3.00	\$300.00			
2575.505	141	SODDING TYPE LAWN	SQ YD	\$4.50	1048	\$4,716.00		\$0.00		\$0.00		\$0.00	1119	\$5,035.50		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		2,167.00	\$9,751.50			
2575.523	142	EROSION CONTROL BLANKET	SQ YD	\$1.60	6100	\$9,760.00		\$0.00		\$0.00		\$0.00	1959	\$3,134.40		\$0.00	9837	\$15,739.20		\$0.00		\$0.00		\$0.00		17,896.00	\$28,633.60			
2575.562	143	HYDRAULIC MATRIX TYPE MULCH	POUND	\$1.00	7235	\$7,235.00		\$0.00		\$0.00		\$0.00	3665	\$3,665.00		\$0.00	5075	\$5,075.00		\$0.00		\$0.00		\$0.00		15,975.00	\$15,975.00			
2582.501	144	PAVT MSSG (LT ARROW) EPOXY	EACH	\$150.00	20	\$3,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	1	\$150.00		\$0.00		\$0.00		\$0.00		21.00	\$3,150.00			
2582.501	145	PAVT MSSG (RT ARROW) EPOXY	EACH	\$150.00	6	\$900.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	2	\$300.00		\$0.00		\$0.00		\$0.00		8.00	\$1,200.00			
2582.501	146	PAVT MSSG (THRU ARROW) EPOXY	EACH	\$150.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	1	\$150.00		\$0.00		\$0.00		\$0.00		1.00	\$150.00			
2582.502	147	4" SOLID LINE WHITE-EPOXY	LIN FT	\$0.75	3982	\$2,986.50		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	483	\$362.25		\$0.00		\$0.00		\$0.00		6,265.00	\$4,698.75			
2582.502	148	4" SOLID LINE YELLOW-EPOXY	LIN FT	\$0.75	2910	\$2,182.50		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		2,910.00	\$2,182.50			
2582.502	149	4" BROKEN LINE YELLOW-EPOXY	LIN FT	\$0.75	600	\$450.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		600.00	\$450.00			
2582.502	150	4" DOUBLE SOLID LINE YELLOW-EPOXY	LIN FT	\$1.00	2092	\$2,092.00		\$1,071.00	787	\$787.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		3,950.00	\$3,950.00			
2582.502	151	24" SOLID LINE WHITE-EPOXY	LIN FT	\$10.00	16	\$160.00		\$160.00	16	\$160.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		32.00	\$320.00			
2582.502	152	24" SOLID LINE YELLOW-EPOXY	LIN FT	\$10.00	57	\$570.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		57.00	\$570.00			
2582.503	153	CROSSWALK MARKING-EPOXY	SQ FT	\$5.00	144	\$720.00		\$0.00		\$0.00		\$0.00	228	\$1,140.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		372.00	\$1,860.00			
ESTIMATED CONSTRUCTION COST					44.05%	\$1,049,499.00	1.89%	\$45,135.20	6.38%	\$152,070.10	4.53%	\$107,863.65	19.70%	\$469,225.00	13.18%	\$314,070.45	0.44%	\$10,500.00	1.25%	\$29,698.50	1.15%	\$27,300.00	7.43%	\$177,060.00	100.00%	\$2,382,421.90				
CONTINGENCY (10%)						\$104,949.90		\$4,513.52		\$15,207.01		\$10,786.37		\$46,922.50		\$31,407.05		\$1,050.00		\$2,969.85		\$2,730.00		\$17,706.00		\$238,242.19				
SUBTOTAL						\$1,154,448.90		\$49,648.72		\$167,277.11		\$118,650.02		\$516,147.50		\$345,477.50		\$11,550.00		\$32,668.35		\$30,030.00		\$194,766.00		\$2,620,664.09				
ENGINEERING (18%) ESTIMATED						\$188,909.82		\$8,124.34		\$27,372.62		\$19,415.46		\$84,460.50		\$56,532.68		\$1,890.00		\$5,345.73		\$4,914.00		\$31,870.80		\$428,835.94				
RIGHT OF WAY (LAND) ESTIMATED						\$53,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$53,000.00				
ADMINISTRATION (2%)						\$20,989.98		\$902.70		\$3,041.40		\$2,157.27		\$9,384.50		\$6,281.41		\$210.00		\$593.97		\$546.00		\$3,541.20		\$47,648.44				
<b>TOTAL PROJECT COST</b>						<b>\$1,417,348.70</b>		<b>\$58,675.76</b>		<b>\$197,691.13</b>		<b>\$140,222.75</b>		<b>\$609,992.50</b>		<b>\$408,291.59</b>		<b>\$13,650.00</b>		<b>\$38,608.05</b>		<b>\$35,490.00</b>		<b>\$230,178.00</b>		<b>\$3,150,148.47</b>				

**ASSESSMENT CALCULATIONS**

ASSESSMENT ELIGIBLE PROJECT COST - FULL DEPTH RECLAMATION - EXCELSIOR RD	\$442,546.87
ASSESSMENT ELIGIBLE FOOTAGE - FULL DEPTH RECLAMATION - EXCELSIOR RD	6306
ASSESSMENT RATE PER FOOT - FULL DEPTH RECLAMATION - EXCELSIOR RD	\$70.18
ASSESSMENT ELIGIBLE PROJECT COST - MILL & OVERLAY - CONSERVATION DR	\$58,675.76
ASSESSMENT ELIGIBLE FOOTAGE - MILL & OVERLAY - CONSERVATION DR	2018
ASSESSMENT RATE PER FOOT - MILL & OVERLAY - CONSERVATION DR	

**BASIS FOR FULL DEPTH RECLAMATION (FDR) ASSESSMENTS**  
**EXCELSIOR ROAD BETWEEN CYPRESS DRIVE AND EAST CITY LIMITS (EXISTING PAVEMENT FOOTPRINT)**  
 EXCELSIOR ROAD IMPROVEMENTS  
 BAXTER, MN  
 SEH NO. BAXTE 128763

12/16/2014

**OPINION OF PROBABLE COST**

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASUREMENT	APPROXIMATE QUANTITY	UNIT PRICE	COST	TOTAL
<b>GENERAL</b>						
1	MOBILIZATION	LUMP SUM	1.00	\$20,700.00	\$20,700.00	
2	TRAFFIC CONTROL	LUMP SUM	1.00	\$16,500.00	\$16,500.00	\$37,200.00
<b>STREET</b>						
3	SAWING BITUMINOUS PAVEMENT	LIN FT	257.00	\$3.50	\$899.50	
4	REMOVE CURB & GUTTER	LIN FT	364.00	\$2.00	\$728.00	
5	AGGREGATE BASE PREPARATION	ROAD STA	31.50	\$250.00	\$7,875.00	
6	RECLAIM BITUMINOUS SURFACE	SQ YD	15,316.00	\$2.35	\$35,992.60	
7	WEARING COURSE MIXTURE (3 1/2")	TON	3,415.00	\$70.00	\$239,050.00	
8	BITUMINOUS MATERIAL FOR TACK COAT	GAL	770.00	\$3.00	\$2,310.00	
9	CONCRETE CURB & GUTTER DES B618	LIN FT	364.00	\$13.00	\$4,732.00	
10	EPOXY PAVEMENT MARKINGS	LIN FT	9,225.00	\$1.00	\$9,225.00	
11	ADJUST FRAME & RING CASTING	EACH	11.00	\$650.00	\$7,150.00	
12	ADJUST GV BOX & EXTENSION STEM	EACH	12.00	\$275.00	\$3,300.00	\$311,262.10
				<b>TOTAL</b>	<b>\$348,462.10</b>	<b>\$348,462.10</b>
				CONTINGENCY (10%)	\$34,846.21	
				ENGINEERING (15%)	\$52,269.32	
				LEGAL, FISCAL, AND ADMINISTRATIVE (2%)	\$6,969.24	
				<b>GRAND TOTAL</b>	<b>\$442,546.87</b>	