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Trunk Highway 210 & Inglewood Drive Railway Crossing Improvements Project

City of Baxter, Minnesota

Utilities Commission

September 8, 2021



Overview

- Project History / Public Improvement Process
- Existing Conditions
- Proposed Improvements
- Estimated Project Costs
- City Assessment Policy
- Project Schedule



Project History

- **TH 210**

- TH 210 is currently designated an inter-regional corridor carrying eastbound and westbound traffic through the center of the City of Baxter.
- Two signalized intersections currently exist west of the major intersection with TH 371.
 - The Knollwood Drive intersection is located approximately 1.4 miles west of TH 371 and the CSAH 48 intersection is located approximately 0.7 miles west of the Knollwood Drive intersection.
 - The spacing of these signalized intersections does not meet MnDOT recommended distances and are not equally spaced to promote uniform traffic flow.
- Concern with the existing signal locations related to the commercially developed area in the southwest quadrant of TH 210 and TH 371.
 - Exiting traffic attempting to head west on TH 210 has to either backtrack southerly to the Glory Road / TH 371 intersection, or head west on Foley Road (south frontage road) for 1.2 miles to the Knollwood Drive intersection and access to TH 210.

The purpose of this report is to review the feasibility to relocate the existing signalized intersection and railroad crossing at Knollwood Drive and TH 210 to the intersection of Inglewood Drive and TH 210 and extending Inglewood Drive southerly across TH 210 and the BNSF railway, connecting to Foley Road.

The south leg on the intersection at Knollwood Drive and TH 210 will be removed, and a Reduced Conflict Intersection (RCI) constructed for traffic on the north leg of the intersection to access TH 210. The proposed improvements are being consider for construction in 2022.



Project History

- Previous transportation studies have been completed and incorporated into the City of Baxter's long range planning efforts. TH 210 is currently designated an inter-regional corridor carrying eastbound and westbound traffic through the center of the City of Baxter.
 - Benshoof & Associates, Inc. – (2002)
 - MnDOT HAC & RAC – TH 210 Corridor Management Plan (2002) (MnDOT)
 - Traffic Study for Excelsior Rd, Knollwood Drive, and Inglewood Drive (2010) (Wenck) (City of Baxter)
 - Isle Drive/Elder Drive Transportation Study (2013) (WSB) (City of Baxter)
 - City Railroad Crossing Assessment Analysis (2015) (SEH) (City of Baxter)
 - Excelsior Road Area Transportation Study (2015) (WSB) (City of Baxter)
 - Inglewood Drive Railway Crossing & Associated Roadway Improvements Feasibility Report (2018) (WSN) (City of Baxter)
 - Highway 371 Bike/Pedestrian Crossing Study (2019) (SRF/Toole Design Group) (City of Baxter)
 - (In Progress) - MnDOT District 3 TH 210 Corridor Study (2021) (Bolton and Menk) (MnDOT/City of Baxter/Crow Wing County)
- **Identifying Inglewood Drive as a west parallel corridor to TH 371**
 - In 2002, Benshoof & Associates, Inc. completed a traffic study for the TH 210 highway and railroad corridor. This study included the recommendation that the traffic signal at Knollwood Drive and TH 210 should be relocated to Inglewood Drive and TH 210.
 - In 2010 Wenck Associates, Inc. completed a traffic study for Excelsior Road, Knollwood Drive, and Inglewood Drive. This study also included the recommendation that the traffic signal at Knollwood Drive and TH 210 should be relocated to Inglewood Drive and TH 210.



Public Improvement Process

- **Feasibility Report**

- City Council to consider acceptance on September 21, 2021
- City Council to consider Ordering the Improvement Hearing on September 21, 2021

- **Improvement Hearing – October 7, 2021**

- Project generalities discussed, Estimated costs presented, Input from property owners obtained

- **City Council – October 19, 2021**

- Considers Ordering Project
- Considers Ordering the preparation of plans and specifications.

- **If project is authorized**

- Plans and Specifications Prepared
- MnDOT Federal Aid and BNSF Approvals
- Project will be bid (April 2022)
- Final Assessment Hearing (May 2022)
- Award Construction Contract (June 2022)
- Project constructed (July to October 2022)



Existing Conditions

- TH 210 and Knollwood Drive

2022 INGLEWOOD DRIVE RAILWAY CROSSING & TH 210 IMPROVEMENTS
CITY OF BAXTER

Figure #1 Existing Conditions
August 2021



Existing Conditions

- TH 210 and Inglewood Drive

2022 INGLEWOOD DRIVE RAILWAY CROSSING & TH 210 IMPROVEMENTS
CITY OF BAXTER

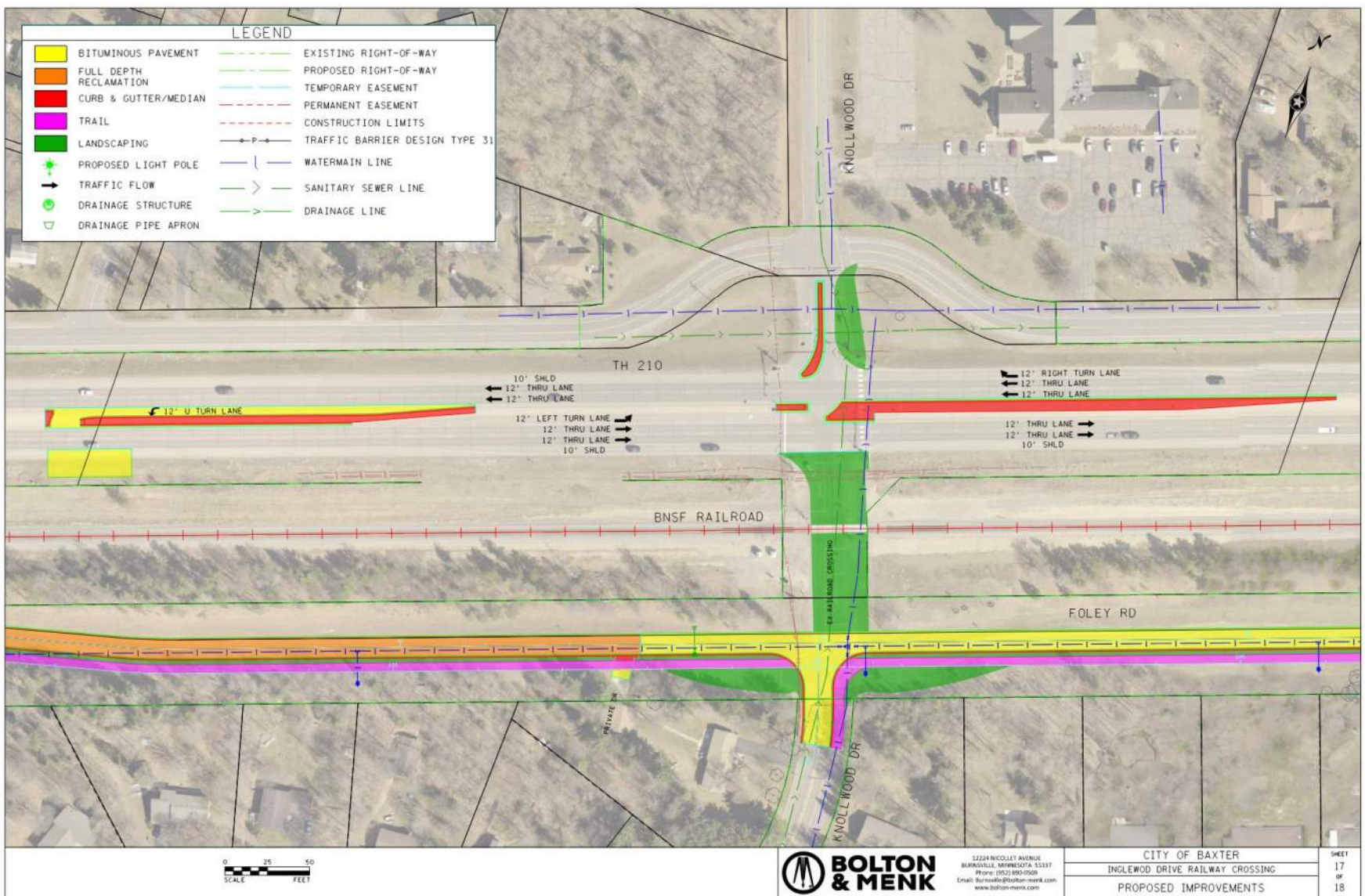
Figure #2 Existing Conditions
August 2021



Proposed Improvements

- TH 210 and Knollwood Drive
- TH 210 and Inglewood Drive
- Inglewood Drive Railway Crossing





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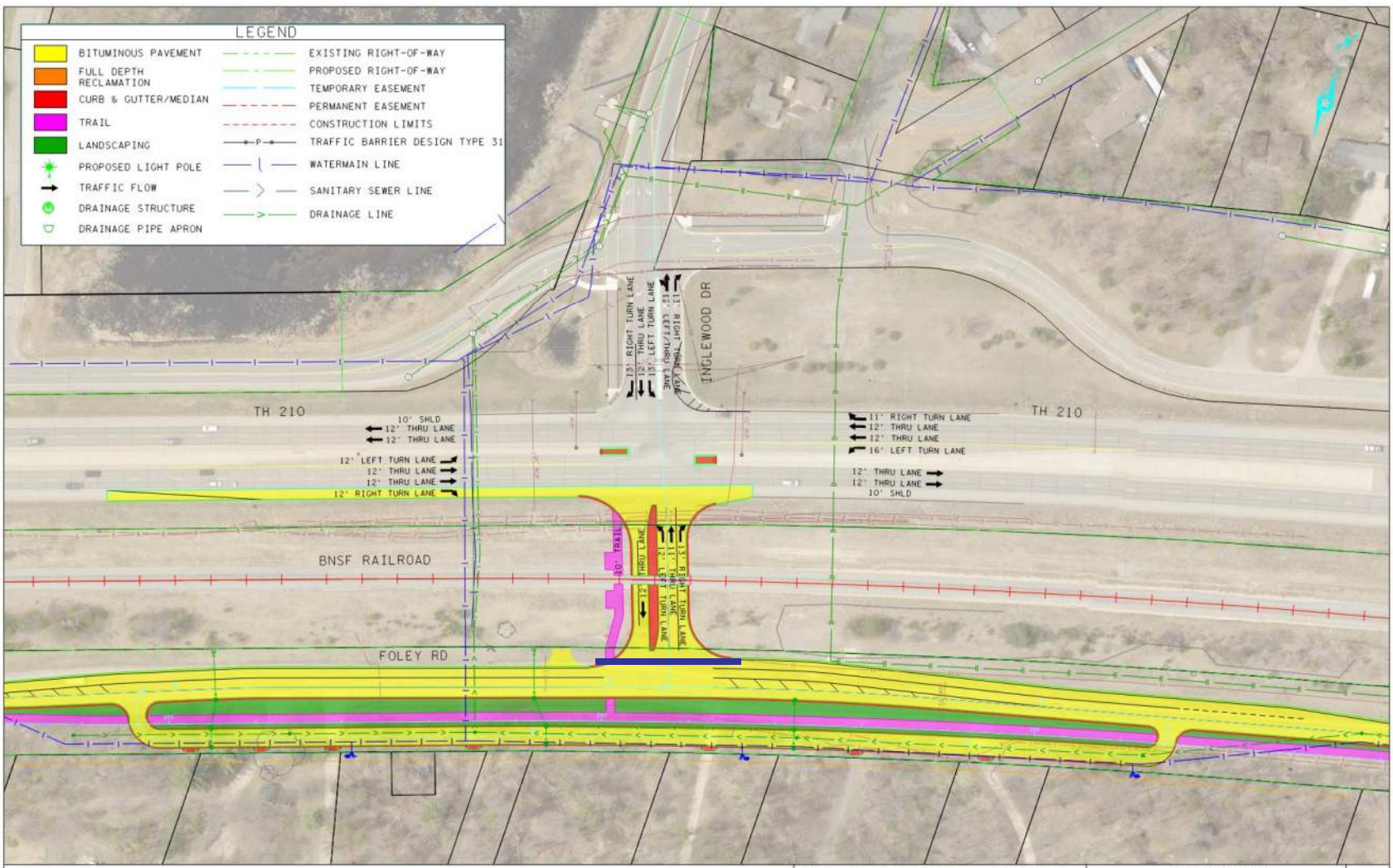


BOLTON & MENK

12224 NICOLET AVENUE
BURNINGWELL, MINNESOTA 55337
Phone: (952) 890-0509
Email: kar.mulla@bolton-menk.com
www.bolton-menk.com

CITY OF BAXTER		SHEET
INGLEWOOD DRIVE RAILWAY CROSSING		17
PROPOSED IMPROVEMENTS		OF
		18





LEGEND			
	BITUMINOUS PAVEMENT		EXISTING RIGHT-OF-WAY
	FULL DEPTH RECLAMATION		PROPOSED RIGHT-OF-WAY
	CURB & GUTTER/MEDIAN		TEMPORARY EASEMENT
	TRAIL		PERMANENT EASEMENT
	LANDSCAPING		CONSTRUCTION LIMITS
	PROPOSED LIGHT POLE		TRAFFIC BARRIER DESIGN TYPE 31
	TRAFFIC FLOW		WATERMAIN LINE
	DRAINAGE STRUCTURE		SANITARY SEWER LINE
	DRAINAGE PIPE APRON		DRAINAGE LINE

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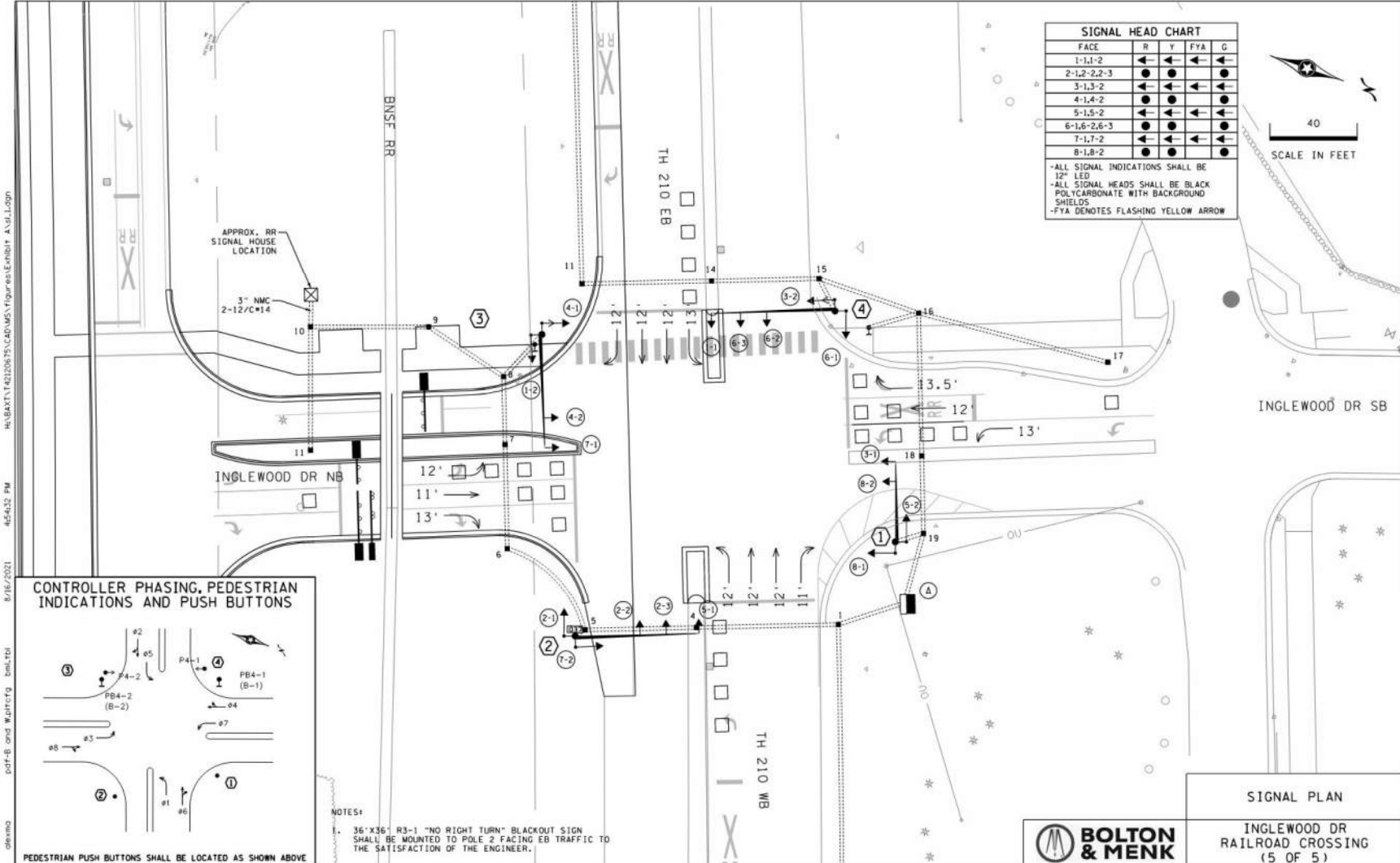


1224 NICOLLET AVENUE
BURROVILLE, MINNESOTA 55337
Phone: (952) 890-0209
Email: Bar-menk@bolton-menk.com
www.bolton-menk.com

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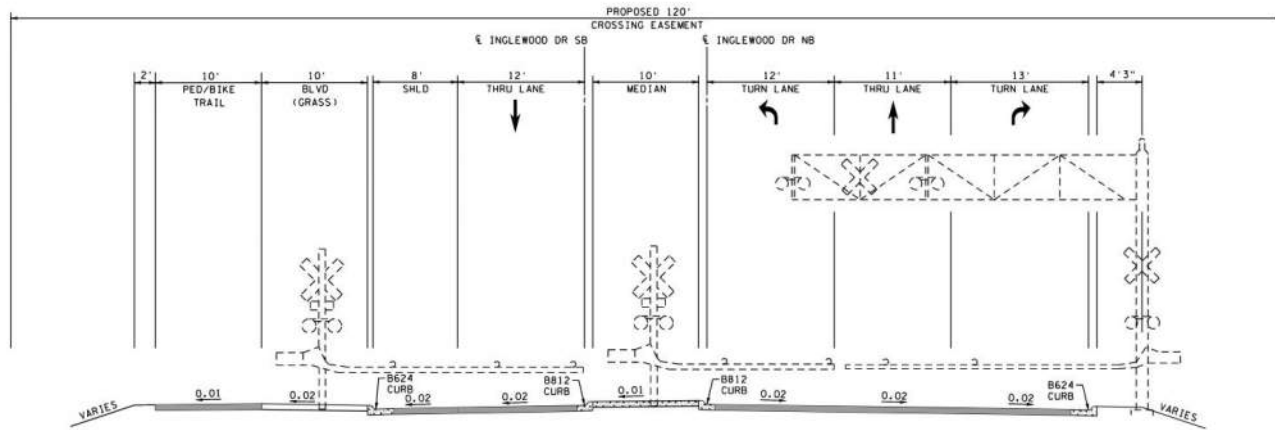
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GENERAL NOTES:

-ALL CROSS SLOPES ARE IN FT./FT.,
UNLESS OTHERWISE NOTED.

INGLEWOOD DR RAILROAD CROSSING PROPOSED TYPICAL SECTION

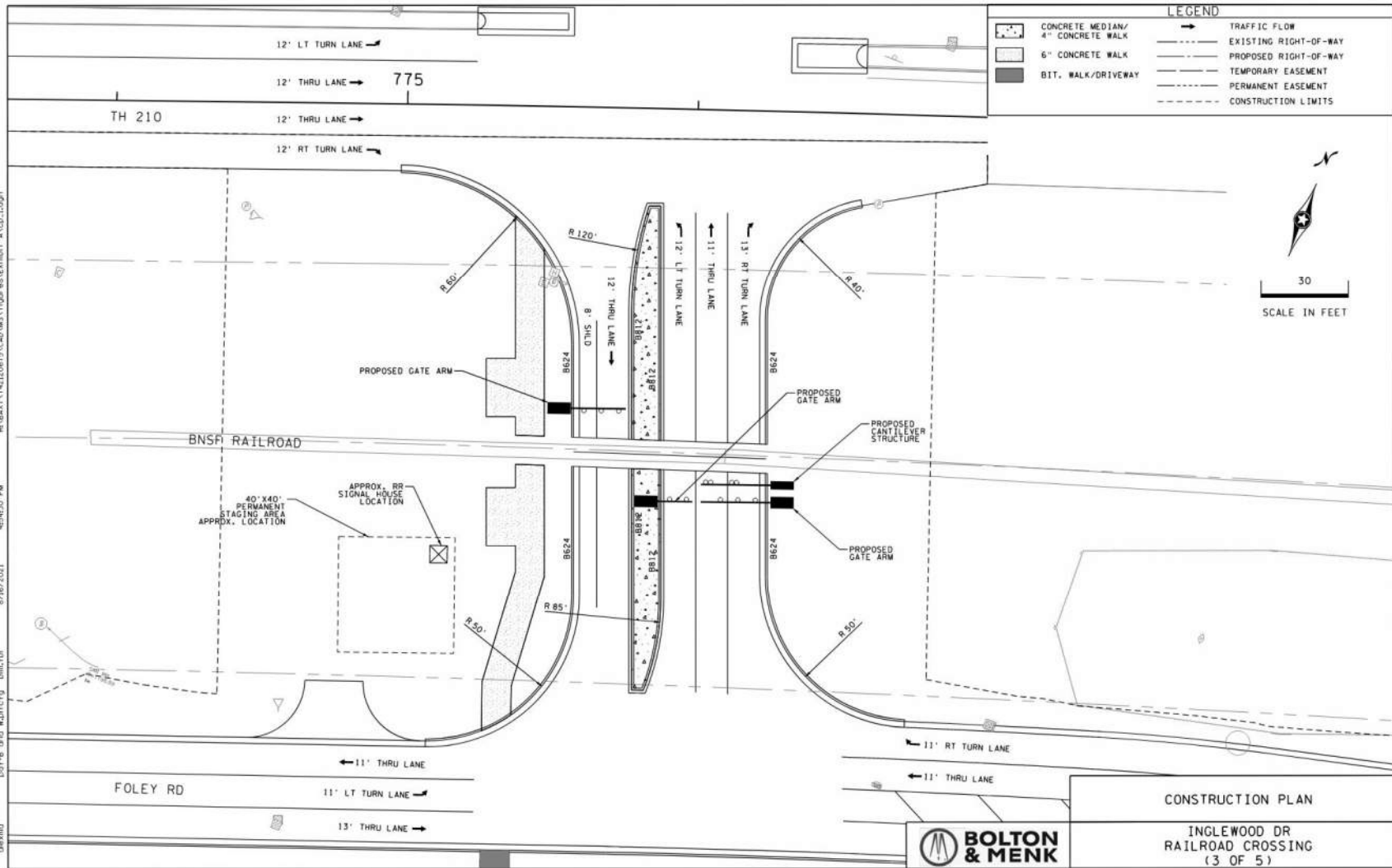


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TYPICAL SECTIONS

INGLEWOOD DR
RAILROAD CROSSING
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Estimated Project Costs

- TH 210 and Knollwood Drive Intersection = \$801,900
- TH 210 and Inglewood Drive intersection and Inglewood Drive extension from TH 210 to Foley Road = **\$950,400.***
- Burlington Northern Santa Fe railroad crossing = **\$592,000***
- Burlington Northern Santa Fe railroad crossing 20-year maintenance agreement = \$800,000.

Total Project Cost = \$3,144,300*



TH 210 and Knollwood Drive

- Estimated Cost = \$801,900
- MnDOT TH Funds = \$708,900
- City Cost = \$93,000



TH 210 & Inglewood Drive

- Estimated Cost = \$950,400
- MnDOT TH Funds = \$672,050
- City Cost = \$155,500
- Assessable Cost = \$122,850 (25% of Traffic Signal Cost)



BNSF Railway Crossing

- Estimated Cost = \$592,000
- Federal STIP Grant = \$441,600
- City Cost = \$150,400

BNSF 20-Year Construction Maintenance Agreement

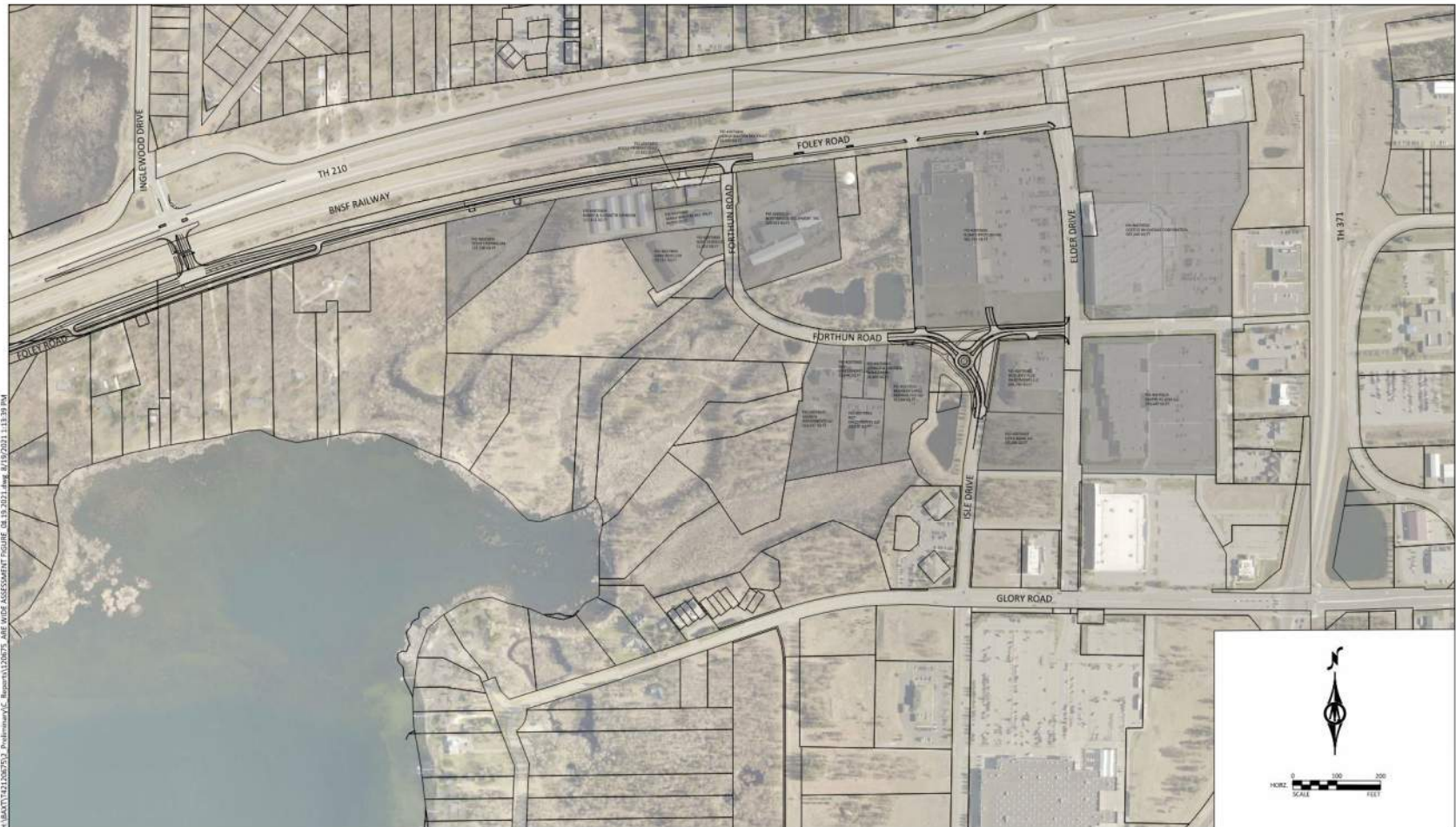
- Estimated City Cost of \$800,000



Estimated Assessment Total

- The estimated cost of the traffic signal is \$491,400 which equals an assessable amount of \$122,850. The commercial properties in the area wide assessment have a total area of 2,706,397 square feet which equates to an area wide assessment rate of \$0.0454 per square foot.
- The 20-year maintenance agreement with Burlington Northern Santa Fe is a onetime non-infrastructure city cost of \$800,000.
- Minus the 20-year BNSF maintenance cost the proposed improvements have an estimated cost of \$2,344,300 with a following breakdown:
 - MnDOT Funding = \$1,380,950
 - STIP Funding = \$441,600
 - City Cost = \$398,900 (76.5%)
 - Assessable Cost = \$122,850 (23.5%)





Preliminary Assessment Roll

INDIVIDUAL ASSESSMENT CALCULATIONS
 2022 INGLEWOOD DRIVE RAIL CROSSING AND ASSOCIATED IMPROVEMENTS
 MUNICIPAL PROJECT NO. 4121
 BAXTER, MN
 TH 210 AND INGLEWOOD DRIVE TRAFFIC SIGNAL AREA WIDE ASSESSMENT

ESTIMATED INTEREST RATE: 5.00%
 ESTIMATED DAYS BEFORE FIRST YEAR: 150
 FIRST YEAR OF ASSESSMENT: 2022

AREA WIDE ASSESSMENT
 ESTIMATED COST PER SQUARE FEET: \$0.0454

R.E. CODE	PROPERTY ADDRESS	OWNER	AREA (SQ FT)	ASSESSMENT TERM	ESTIMATED ASSESSMENT	2022 INTEREST (SEE NOTE 1)	CERTIFIED AMOUNT
40070806	6763 FOLEY ROAD	STEVEN REHNBLOM	137738	12	\$6,253.31	\$128.49	\$6,381.80
40070809	6897 FOLEY ROAD	RANDY & ELIZABETH JOHNSON	117452	12	\$5,332.32	\$109.57	\$5,441.89
40070802	6933 FOLEY ROAD	JAYCEE PROPERTIES LLC	12832	12	\$582.57	\$11.97	\$594.54
40070804	6961 FOLEY ROAD	VERNA WALTON REV TRUST	13929	12	\$632.38	\$12.99	\$645.37
40070803	6899 FORTHUN ROAD	VERNA WALTON REV TRUST	34004	12	\$1,543.78	\$31.72	\$1,575.50
40070510	7045 FOLEY ROAD	NORTHWOOD EQUIPMENT, INC	229553	12	\$10,421.71	\$214.14	\$10,635.85
40070805	13589 GROUSE DRIVE	GARY SCHEELER	70155	12	\$3,185.04	\$65.45	\$3,250.48
40070808		GARY SCHEELER	11503	12	\$522.24	\$10.73	\$532.97
40070547	7073 FORTHUN ROAD	SAZAMA INVESTMENTS LLC	113937	12	\$5,172.74	\$106.29	\$5,279.03
40070683	7115 FORTHUN ROAD, SUITE 105	BGT INVESTMENTS LLC	63637	12	\$2,889.12	\$59.37	\$2,948.49
40070664	7119 FORTHUN ROAD	DONALD & KRISTEEN WINKLEMAN	24499	12	\$1,112.25	\$22.85	\$1,135.11
40070665	7115 FORTHUN ROAD, SUITE 105	BGT INVESTMENTS LLC	23646	12	\$1,073.53	\$22.06	\$1,095.59
40070533	7153 FORTHUN ROAD	BRAINERD LAKES PREMIER DEV LLC	92099	12	\$4,181.29	\$85.92	\$4,267.21
40070604		LONG RONG LLC	97184	12	\$4,412.15	\$90.66	\$4,502.81
40070585	13495 ELDER DRIVE	INTEGRITY PLUS INVESTMENTS LLC	106799	12	\$4,848.67	\$99.63	\$4,948.30
40070660	7207 FOLEY ROAD	HOME DEPOT USA INC	581741	12	\$26,411.04	\$542.69	\$26,953.73
40070553	13650 ELDER DRIVE	COSTCO WHOLESALE CORPORATION	597244	12	\$27,114.88	\$557.16	\$27,672.03
40070529	13499 ELMWOOD DRIVE	BAXTER PS 2016 LLC	378445	12	\$17,181.40	\$353.04	\$17,534.45
			2706397		\$122,870.42	\$2,524.73	\$125,395.16



Project Schedule

- Feasibility Study Approved by City Council (September 2021)
- Improvement Hearing (October 2021)
- City Council adopts resolution ordering improvement (October 2021)
- Plans and specifications prepared
- City Council adopts resolution approving plans and specifications and authorizes advertisement for bids (April 2022)
- City Council adopts resolution ordering the assessment hearing (April 2020)
- Bids are received (May 2022)
- Assessment Hearing (May 2022)
- City Council adopts resolution accepting the assessment roll (May 2022)
- City Council awards construction contract (June 2022)
- Public Information Meeting (July 2022)
- Construction (July 2022 – October 2022)



Thank You!

- Bryan Drown, P.E.
Bolton & Menk - Project Engineer
Bryan.drown@bolton-menk.com
218-825-0684

