

ND 17

Major Rehabilitation and Widening

OCTOBER 2022

NORTH
Dakota | Transportation
Be Legendary.™

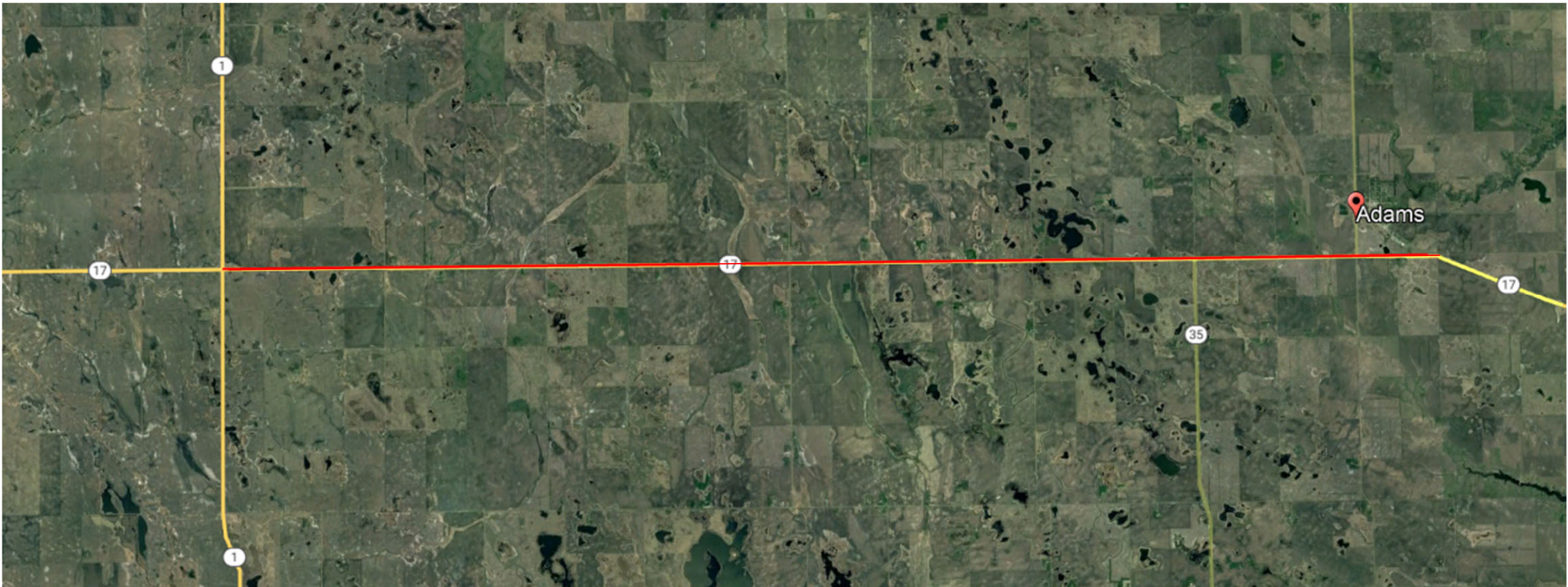


Purpose and Need



- Width
 - minimum is 26' wide.
 - Currently 25' wide
- Load constrained
 - Required 8-ton load limit
 - Currently restricted to 7-ton
- Rapid Deterioration of Roadway
 - Overlaid in 2010, 5-year deterioration resulted in another overlay in 2018

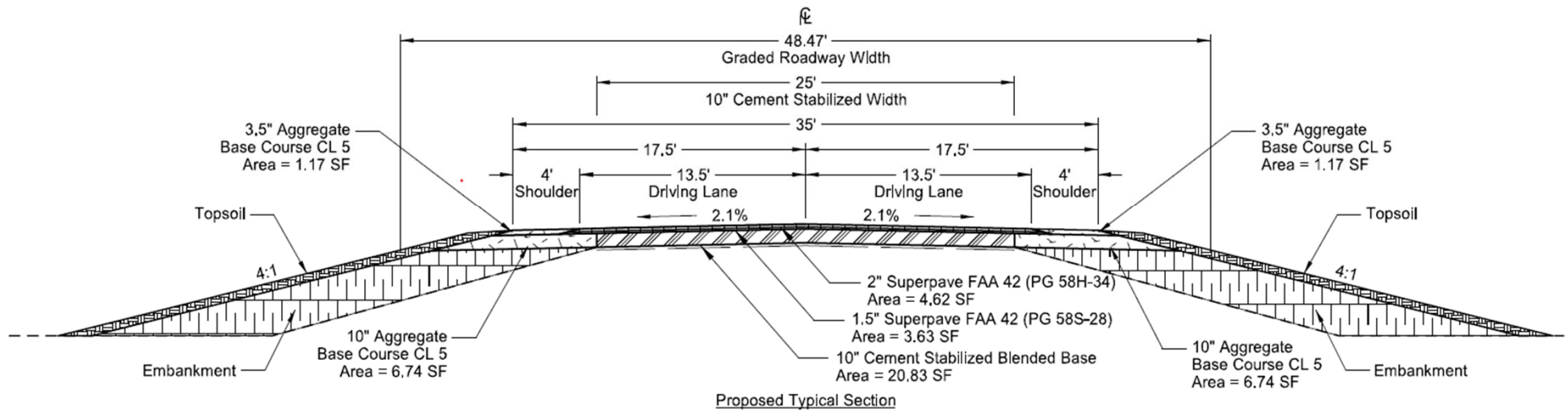
Project Limits map – ND1 to Adams



Scope of project



- Widening
- Full Depth Reclamation and cement stabilized base
- Hot Mix Asphalt Overlay
- Box culvert extension and/or replacement

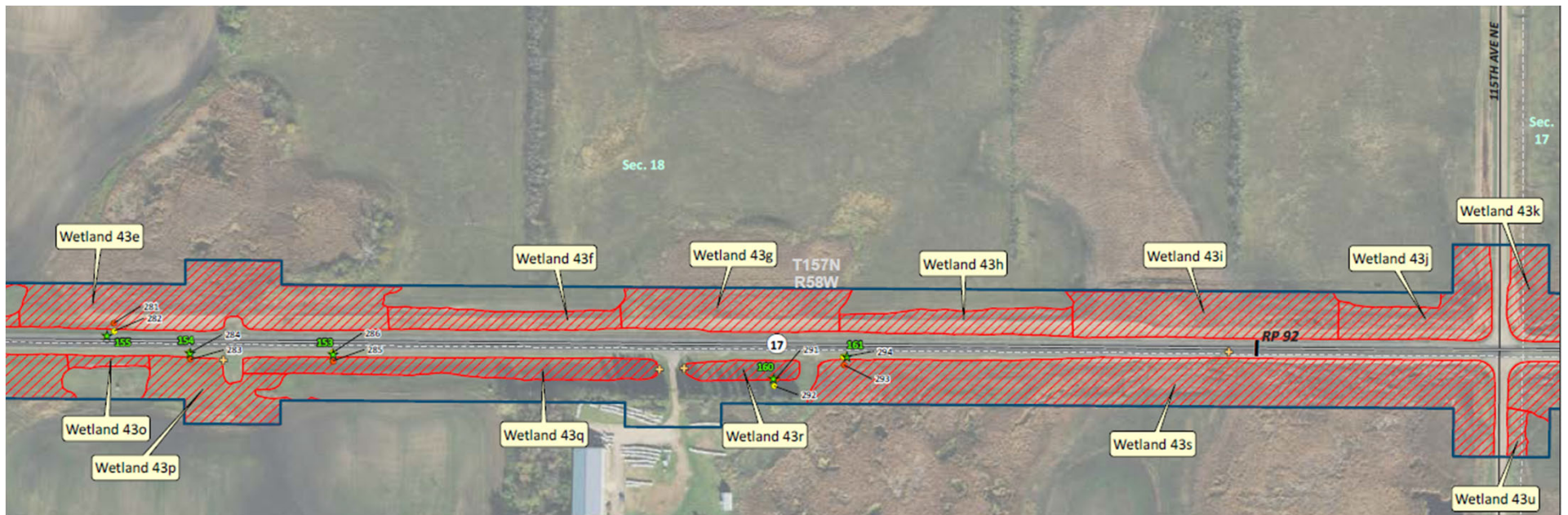


- Land Acquisition Process
- Rural Approach Reconstruction Agreements (RAMA)
- Brochure available with landowner's rights, privileges, and obligations
(Available on NDDOT website)

Wetland Impacts



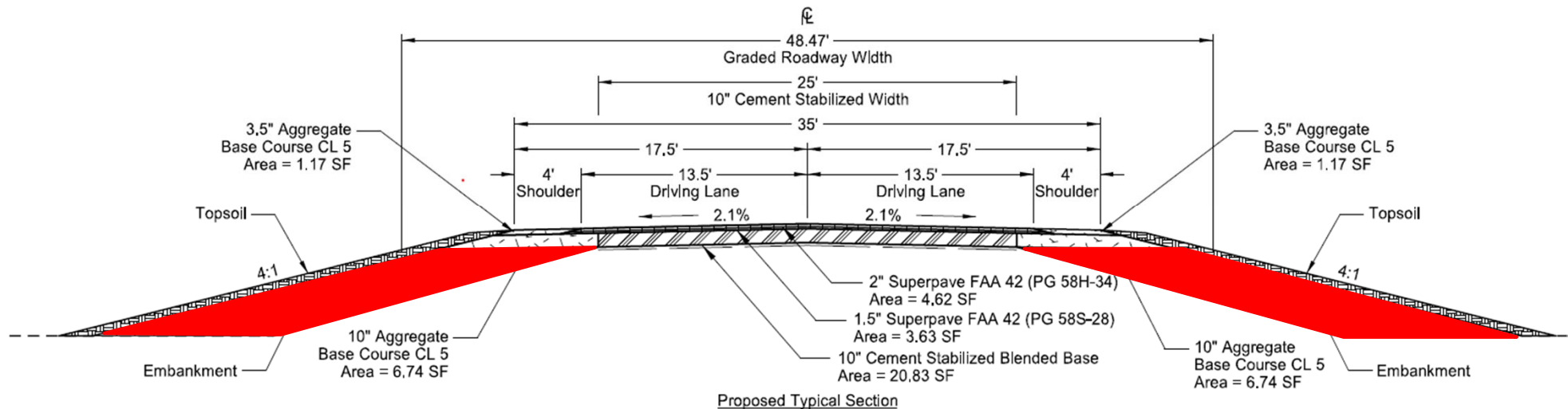
- Delineated wetlands
- mitigation area needed
- Property owners interested in selling land for mitigation contact me



Borrow Sources



- Roadway widening will require new embankment
- Property owners interested in selling dirt for embankment contact me



Traffic Operations Study



- Existing and future LOS
- Right and Left Turn lane warrants
- Crash Trends

Table 8 – Existing Traffic Operation Results

Intersection of ND-17 w/	Peak	Approach LOS				Intersection LOS ¹
		EB	WB	NB	SB	
ND-1	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 22	AM	A	A	A	A	A
	PM	A	A	A	A	A
ND-35	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 16	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 11A	AM	A	A	-	A	A
	PM	A	A	-	A	A

1. All study intersections are Side Street Stop controlled; therefore, the intersection LOS is shown as the worst minor approach.

Table 9 – 2045 Traffic Operation Results

Intersection of ND-17 w/	Peak	Approach				Intersection
		EB	WB	NB	SB	
ND-1	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 22	AM	A	A	A	A	A
	PM	A	A	A	A	A
ND-35	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 16	AM	A	A	A	A	A
	PM	A	A	A	A	A
County Road 11A	AM	A	A	-	A	A
	PM	A	A	-	A	A

1. All study intersections are Side Street Stop controlled; therefore, the intersection LOS is shown as the worst minor approach.

Traffic Operations Study



- Existing and future LOS
- Right and Left Turn lane warrants
- Crash Trends

Table 11 – ND-17 Left Turn Lane Warrants

Intersection of ND-17 w/	Mainline Left Turn Direction	Major Road ADT (2022)	Future Road ADT (2045)	Required Left Turn Volume	Existing Left Turn Volume	Future Left Turn Volume	Left Turn Lane Warranted?
ND-1	EB	380	510	N/A	71	100	No
	WB	300	400	N/A	18	25	No
County Rd 22	EB	300	400	N/A	4	6	No
	WB	350	470	N/A	6	8	No
ND-35	EB	500	750	N/A	0	0	No
	WB	670	890	N/A	40	56	No
County Rd 16	EB	480	640	N/A	57	80	No
	WB	350	470	N/A	2	3	No
County Rd 11A	EB	380	510	N/A	10	14	No

* The NDDOT Traffic Manual does not warrant left turn lanes on two-lane highways for speeds greater than 50mph if the mainline AADT is less than 1000 vpd.

Table 12 – ND-17 Right Turn Lane Warrants

Intersection of ND-17 w/	Mainline Left Turn Direction	Major Road ADT (2022)	Future Road ADT (2045)	Required Right Turn Volume	Existing Right Turn Volume	Future Right Turn Volume	Right Turn Lane Warranted?
ND-1	EB	380	510	N/A	24	34	No
	WB	300	400	N/A	47	66	No
County Rd 22	EB	300	400	N/A	3	4	No
	WB	350	470	N/A	26	37	No
ND-35	EB	500	750	N/A	10	14	No
	WB	670	890	N/A	5	7	No
County Rd 16	EB	480	640	N/A	0	0	No
	WB	350	470	N/A	4	6	No
County Rd 11A	WB	380	510	N/A	90	127	No

* The NDDOT Traffic Manual does not warrant right turn lanes on two-lane highways for speeds greater than 50mph if the mainline AADT is less than 1000 vpd.

Traffic Operations Study



- Existing and future LOS
- Right and Left Turn lane warrants
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Table 13 – Crash History Details

Crash Location	Crash Type	Vehicle 1 Direction	Vehicle 2 Direction	Injury Severity	Month/Year	Contributing Factor(s)
ND-1 Intersection	Overturn / Rollover	SB	N/A	PDO	03/18	None listed
ND-1 Intersection	Angle	EB	NB	PDO	10/19	Driving too fast for weather conditions
150' east of 108 th Avenue	Run-Off-Road	EB	N/A	Incapacitating	12/18	Lost control of vehicle
500' west of ND-35	Overturn / Rollover	EB	N/A	Incapacitating	02/18	Alcohol
118 th Avenue Intersection	Sideswipe Same Direction	WB	WB	PDO	05/18	Improper passing
Railroad Crossing West of County Rd 11A	Fixed Object	EB	N/A	PDO	12/18	Failure to stop. Crashes into lowered crossing gates
100' east of County Rd 11A	Overturn / Rollover	EB	N/A	Possible Injury	06/19	Alcohol

Traffic Operations



- Recommendations
 - Reduce skew in intersection
 - Standard Max: 75°
 - Current Intersection 35°
- Decision Factors
 - Crash History – None
 - Traffic Volumes – Low
 - Public Opinion – Share your opinion



Proposed Schedule



**Proposed
Bid Ready
Date:**
11/1/2023

**Proposed
Bid Date:**
March/April
2024

**Construction
Proposed
to begin:**
Spring 2024

Comments



The comment period will be open for 15 days.
Comments and/or Questions can be submitted:



Email to
adam.mcgill@
kljeng.com



Mail to:
Adam McGill
4585 Coleman St
Bismarck, ND
58503



Phone:
218-516-3364