



**OTSEGO COUNTY ROAD COMMISSION
M-32 HMA Shoulder Widening & Repair**

NOTICE TO BIDDERS

MDOT and the Otsego County Road Commission invites qualified contractors to bid the following work:

M-32 HMA shoulder widening & repair.

All proposals must be in sealed envelopes, plainly marked **M-32 Shoulder Widening & Repair** and include the **Bidder's Name**. Bids must be on the attached bid sheet and signed. All unmarked bids will be rejected.

If mailed through the postal service, bids must arrive at the Gaylord Post Office Box by 1:00 p.m. on Wednesday, August 31, 2024.

Mail to: Otsego County Road Commission
P.O. Box 537
Gaylord, MI 49734-0537

If delivered, bids must arrive at the physical address of the Otsego County Road Commission by 2:00 p.m. on Monday, August 5, 2024. (Closed noon-12:15 for lunch):

Otsego County Road Commission
669 West McCoy Road
Gaylord, MI 49735

The bid opening will be at 3:00 p.m. on Monday, August 5, 2024.

**PROJECT INFORMATION & BID PROPOSAL
M-32 HMA SHOULDER WIDENING & REPAIR, OTSEGO COUNTY**

Page 1 of 6

PROJECT LOCATION

The project is located on M-32 beginning (POB) approximately 0.66 miles south of Turtle Lake Road and ending (POE) approximately 115 feet west of Meridian Line Road, in Chester and Charlton Townships, Otsego County.

SCOPE OF WORK

The proposed HMA shoulder widening on M-32 (CS 69022) includes milling the shoulder (1.5 inches deep by 4.5 feet wide) beginning 13.5 feet left or right from the M-32 centerline and placing **HMA, 5EL** (1.5 inches deep by 3.5 feet wide) as shown in the typical section and where denoted on the Project Location Map, and Field Log. The proposed HMA shoulder widening applies where the existing HMA lanes are 11 feet wide with 3 feet wide HMA shoulders.

Minor work on M-32 includes HMA shoulder repairs with widening at four locations where denoted on the Project Location Map and Field Log. Mill the existing HMA and gravel shoulder (3 inches deep by 6.5 feet wide) beginning 11 feet left or right of the M-32 centerline and place **HMA, 5EL** in one course (3 inches deep by 6 feet wide). The proposed HMA shoulder repairs with widening applies where the existing HMA lanes are 11 feet wide with 3 feet wide HMA shoulders.

The HMA application rate will be 165 lb/syd at the widening locations and 330 lb/syd at the shoulder repair locations with widening. The PG Binder is 58-28. Apply a bond coat at a rate of 0.05 – 0.15 gal/syd at the edge of the milled HMA prior to placing the proposed HMA material. The Contractor will provide a mix design to MDOT for review and approval.

The Contractor is responsible for removing the milled material off site. Maintaining traffic will be provided by MDOT (arrow boards, signs, flaggers, and grabber cones). Shoulder grading will be completed by MDOT. MDOT will stake out the locations of the proposed work. All work will be completed in accordance with the Michigan Department of Transportation 2020 Standard Specifications for Construction. All work specified will be paid as a Lump Sum.

PROJECT QUANTITIES. Quantities are provided for informational purposes only. The Contractor is responsible for verifying the work items and quantities. No additional compensation will be paid for increases in quantities or additional incidental items necessary to complete the work. All completed work will be measured and paid as one lump sum.

<u>Work Items</u>	<u>Quantity</u>	<u>Unit</u>
Mobilization, Max. _____	1	LSUM
Milling (1.5 inches deep x 4.5 feet wide)	33,100	Syd
Milling (3 inches deep x 6.5 feet wide)	1,400	Syd
HMA, 5EL (1.5 inches deep x 3.5 feet wide)	2,900	Ton
HMA, 5EL (3 inches deep x 6 feet wide)	250	Ton

TOTAL LUMP SUM BID _____

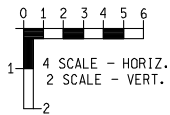
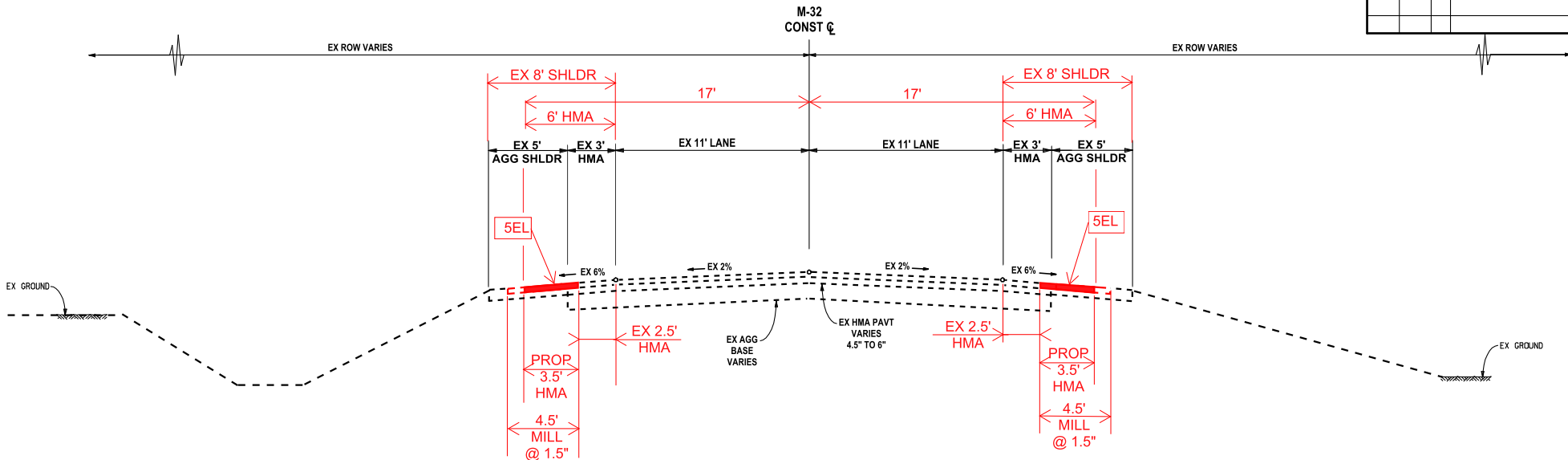
COMPANY NAME: _____

ADDRESS: _____

AUTHORIZED SIGNATURE: _____ **DATE** _____

The Michigan Department of Transportation reserves the right to reject any and all bids.

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



M-32 WIDENING TYPICAL

IDENT NO.	ITEM	RATE PER SYD	PERFORMANCE GRADE
5EL	HMA, 5EL	165#	58-28

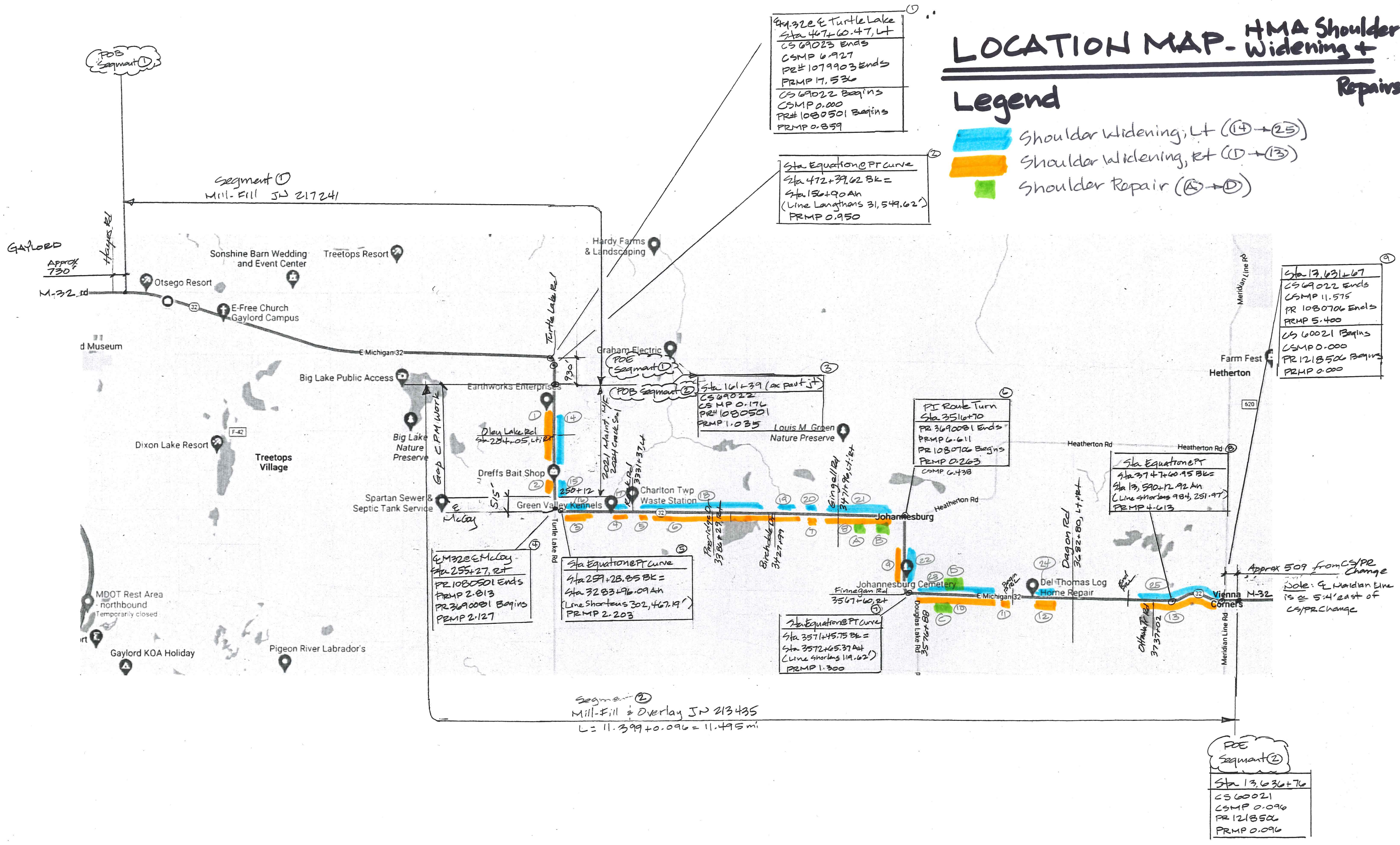
Note: Existing pavement markings are not centered about the centerline of M-32, resulting in variable width HMA lanes and HMA shoulders. Ensure that the proposed HMA shoulder widening results in an 11 feet wide HMA lane and 6 feet wide HMA shoulder. In 2025, the widened locations will receive a 1.5 inch HMA overlay.

	TYPICAL CROSS SECTIONS			
	DATE 7/3/24	CONT. SEC. 69022	JOB NO.	DESIGN UNIT
				SHEET NO. R.O.W CONST.

LOCATION MAP - HMA Shoulder Widening + Repairs

Legend

- Shoulder Widening, Lt (14 → 25)
- Shoulder Widening, Rt (1 → 13)
- Shoulder Repair (A → D)



Sta 467+60.47, Lt
 CS 69023 Ends
 CSMP 6.927
 PR# 1079903 Ends
 PRMP 17.526
 CS 69022 Begins
 CSMP 0.000
 PR# 1080501 Begins
 PRMP 0.859

Sta Equation @ PT Curve
 Sta 472+39.62 BK =
 Sta 150+90.4h
 (Line Lengths 31,549.62')
 PRMP 0.950

Sta 13,631+67
 CS 69022 Ends
 CSMP 11.575
 PR 1080706 Ends
 PRMP 5.400
 CS 60021 Begins
 CSMP 0.000
 PR 1218506 Begins
 PRMP 0.000

Sta 161+39 (ax part j)
 CS 69022
 CSMP 0.176
 PR# 1080501
 PRMP 1.035

PI Route Turn
 Sta 3516+70
 PR 3690081 Ends
 PRMP 6.611
 PR 1080706 Begins
 PRMP 0.263
 CSMP 6.438

Sta Equation @ PT
 Sta 374+70.95 BK =
 Sta 13,590+12.92 Ah
 (Line Shortens 984, 251.97')
 PRMP 4.613

Sta 255+27, Rt
 PR 1080501 Ends
 PRMP 2.813
 PR 3690081 Begins
 PRMP 2.127

Sta Equation @ PT Curve
 Sta 259+28.85 BK =
 Sta 3283+96.09 Ah
 (Line Shortens 302, 467.19')
 PRMP 2.203

Sta Equation @ PT Curve
 Sta 357+45.75 BK =
 Sta 3572+65.37 Ah
 (Line Shortens 119.62')
 PRMP 1.300

Segment 2
 Mill-Fill & Overlay JN 213435
 L = 11.399 + 0.096 = 11.495 mi

POE Segment 2
 Sta 13,636+76
 CS 60021
 CSMP 0.096
 PR 1218506
 PRMP 0.096

Approx 509 from CS/PR Change
 Note: C-Median Line is ± 5.4' east of CS/PR Change

FIELD LOG - HMA Shoulder Widening & Repairs

CONTROL SECTION: 69022
 JOB NUMBER: M-32: south of Turtle Lake to west of Meridian Line Rd
 PREPARED BY: Mikada 4/27/24
 DATE: 4/27/24
 CHECKED BY: _____
 DATE: _____

STA	DESC, LT	shld	lane	OT	lane	OT	DESC, RT	CONST / 25	
161+39	(POBJN 213435) w/HMA curb Ex part jt, approx 930' south of Turtle Lake Rd	8	-	11	-	11	w/HMA curb Ex part jt, approx 930' south of Turtle Lake Rd	(POBJN 213435)	
185+76		8	11	-	11	8	End ex HMA curb (before Earthworks Enterprise north drive)		
186+46		8	11	-	11	8	Begin ex shldr taper		
187+66	End HMA curb, north side of HMA Rd	8	11	-	11	5			
187+90	Begin ex shldr taper	8	11	-	11			Note: Part markings are not centered about 4'	
188+15	End " " "	3	11	-	11	3			
204+05	(Oley Lake Rd)	3	11	-	11	3	(Oley Lake Rd)		
234+58	Begin ex shldr taper	3	11	-	11	3	Begin ex shldr taper		
234+84	End " " ; Begin ex HMA curb	8	11	-	11	8	End " " ; Begin ex HMA curb		
238+11	Begin ex shldr taper; End ex HMA curb	8	11	-	11	8	Begin ex shldr taper; End ex HMA curb		
238+36	End " " " "	3	11	-	11	3	End " " " "		
247+24		3	11	-	11	3	Begin " " " "		
247+54		3	11	-	11	8	End " " " "		
249+50	Begin ex shldr & lane taper	3	11	-	11	8	Begin lane taper		
250+2	Ex part jt (2021 Const) Begin M/E	↓	↓	-	↓	8	Ex part jt (2021 Const) Begin M/E	2025 Begin M/E	
250+25	End ex shldr & lane taper	8	12	-	12	8	End ex lane taper		
255+27		3	12	12	-	13.5	(McCoy Rd)		
259+28.85 PM	Sta Equation @ PT McCoy Curve								
3283+96.09 AM	(Line shortens 302,467.19)	8	5	12	-	12	-	3	
3285+29	Ex part jt	10	-	12	-	12	-	3	
3286+67	End shldr taper; End 2025 M/E	3	-	11	-	11	-	3	
3300+75	Begin ex shldr taper	3	11	-	11	3	Begin ex shldr taper; End 2025 M/E	2025 Begin M/E	
3300+92	Begin ex shldr taper	3	11	-	11	8	End ex shldr taper; Begin ex HMA curb		
3301+02	End ex shldr taper; Begin ex HMA curb	8	11	-	11	8			
3317+01	End ex HMA curb; Begin ex shldr taper	8	11	-	11	8			
3317+16	End ex shldr taper	3	11	-	11	8			
3322+06		3	11	-	11	8	End ex HMA curb; Begin shldr taper		
3322+14		3	11	-	11	3	End ex shldr taper		
3327+26	Begin ex shldr taper	3	11	-	11	3	Begin ex shldr taper		
3327+41	End ex shldr taper; Begin ex HMA curb	8	11	-	11	8	End ex shldr taper; Begin ex HMA curb		
3331+37	(Rock Rd)	8	11	-	11	8			
3332+54		8	11	-	11	8	End ex HMA curb; Begin ex shldr taper		
3332+74		8	11	-	11	3	End ex shldr taper		
3335+70		8	11	-	11	3	Begin ex shldr taper		
3335+90		8	11	-	11	8	End ex shldr taper; Begin HMA curb		

HMA Shldr Widening 1

HMA Shldr Widening 2

HMA Shldr Widening 3

HMA Shldr Widening 4

HMA Shldr Widening 5

HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

FIELD LOG - HMA Shoulder Widening & Repairs

ENGINEERING CALCULATIONS

CONTROL SECTION: 69022
 JOB NUMBER: N/A Maintenance H-32
 PREPARED BY: K Mikula
 DATE: 4/28/24
 CHECKED BY: [Blank]
 DATE: [Blank]

STA	DESC, LT	HMA WIDTH						DESC, RT
		shld	RTL Lane	Lane	CTL	Lane	RTL shld	
3343+08		8	11	-	11	8	End of HMA curb; Begin shldr taper	
3343+18	End HMA curb; shldr taper	8	11		11	3	End of shldr taper	
3343+28	End of shldr taper	3	11		11	3		
3386+29		3	11		11	3	Pineridge Dr	
3398+07		3	11		11	3	Grandview Dr	
3421+11	Begin of Passing flare taper	3	0	11		3		
3423+79		3	11	11		3	Coolwater Ave	
3427+99		3	11	11		3	Birchdale Dr	
3432+76	End of Passing flare taper	3	0	11		3		
3440+14	Begin of shldr taper	3	11		11	3		
3440+34	End of shldr taper	8	11		11	3		
3441+87		8	11		11	3	Begin of shldr taper	
3442+12		8	11		11	8	End of shldr taper; Begin of HMA curb	
3452+14	End of HMA curb; Begin of concrete overlay	8	11		11	8	End of 2025 overlay; Begin 2025 M/F	
3460+78	End of concrete overlay; Begin of shldr taper	8	11		11	3	End 2025 M/F; Begin 2025 overlay	
3460+98	End of shldr taper	3	11		11	3		
3462+56	Begin of shldr taper	3	11		11	3		
3462+62	End of shldr taper; HMA curb	8	11		11	3		
3462+86		8	11		11	3	Begin of shldr taper	
3462+98		8	11		11	8	End of shldr taper; Begin of HMA curb	
3467+63		8	11		11	8	End of HMA curb; Begin of shldr taper	
3467+73		8	11		11	3	End of shldr taper	
3468+50	End of HMA curb; Begin of shldr taper	8	11		11	3		
3468+60	End shldr taper	3	11		11	3		
3471+96	Gingell Rd	3	11		11	3	Gingell Rd	
3488+48		3	11		11	3	Begin of shldr repair; HS 10276	
3493+98		3	11		11	3	End of shldr repair	
3501+25		3	11		11	3	Begin of shldr repair	
3501+90		3	11		11	3	End of shldr repair	
3507+15	End prep shldr widening; Begin M/F	3	11	8	11	3/10	End of HMA shldr; Begin of concrete overlay; Begin of Family #	
3516+70	PI Route turn (Maple St)	-	-	11	11	-	PI Route turn	
3525+32		-	-	11	11	-	Rowan Ave	
3536+28	End CTL; (South of RTL Taper School)	3	0	11	0	11	3	End CTL; Begin overlay
3540+88	Ex part jt (2021) (End 2025 overlay)	3	11	-	11	3	Ex part jt (2021) (End 2025 overlay)	
3553+30	Begin of shldr taper	3	11	-	11	3		
3553+80	End of shldr taper; no HMA curb	8	11	-	11	3		
3561+26	Ex part jt (2021) (cond) Begin RTL shldr taper; Begin M/F 2025	3/4	0	11	-	11	3	Ex part jt (2021) (near crossing) Begin M/F 2025

HMA Shldr Widening

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HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

HMA Shldr Widening

FIELD LOG - HMA Shoulder Widening & Repairs

CONTROL SECTION	JOB NUMBER	N/A - Maintenance	PREPARED BY	DATE	CHECKED BY	DATE			
69022	MA-32: South of Turtle Lake to West of Meridian Line Rd		Hikula	7/3/24					
STA	DESC, LT	shld	RTL Lane	Lane	CTL	Lane	RTL Lane	shldr	DESC, RT
3567+60		3	11	11	-	11	11	APP	(Finnegan Rd)
3571+45.75 BK	Sta Equation @ PT Curve Finnegan								
3572+65.37 AH	(Line shortens 119.62')	3	11	11	-	11	-	3	
3574+95	End RTL taper (End 2025 M/F, Begin Overlay)	3	0	11	-	11	-	3	End 2025 M/F, Begin Overlay
3576+88		3		11		11		3	Douglas Lake Rd
3583+14		3		11		11		3	Begin Prop. Shldr. repair
3590+14		3		11		11		3	End prop. shldr. repair
3592+12	Begin prop shldr repair	3		11		11		3	
3597+12	(Field verify 500') End prop shldr repair	3		11		11		3	
3621+76	Begin ex shldr. taper	3		11		11		3	Begin ex. shldr. taper
3621+95	End ex. shldr. taper	8		11		11		3	End ex shldr. taper; Begin ex. HMA curb
3629+57		8		11		11		8	End HMA curb; Begin shldr. taper
3629+90	Ex man box, 4' Lt cover	8		11		11		3	End ex shldr. taper
3632+68		8		11		11		3	Begin ex shldr. taper
3633+12	Begin ex C/G; (End 2025 Overlay; Begin M/F)	8		11		11		8	End ex shldr. taper; Begin ex conc C/G; (End 2025 Overlay; Begin M/F)
3663+06	End ex C/G; (End 2025 Overlay; Begin M/F)	8	11	11	-	11	11	8	End C/G; ex shldr. taper; (End 2025 Overlay; Begin M/F)
3663+51	End ex shldr. taper	3	11	11		11	11	3	End ex. shldr. taper
3668+78	Begin ex shldr. taper	3	11	11	-	11	11	3	
3669+16	End ex shldr. taper; guardrail	8	11	11	-	11	11	3	
3673+24		8	11	11	-	11	11	3	Begin ex shldr. taper
3673+75	Begin C/G; (End 2025 Overlay; Begin M/F)	8	11	11	-	11	11	8	End shldr. taper; Begin conc C/G; (End 2025 Overlay; Begin M/F)
3682+80	(Dragon Rd)	8	11	11	-	11	11	8	(Dragon Rd)
3731+00	End ex C/G; ex shldr. taper; (End 2025 Overlay; Begin M/F)	8	-	11	-	11	-	8	End C/G; shldr. taper; (End 2025 Overlay; Begin M/F)
3731+45	End ex shldr. taper	3		11		11		3	End ex. shldr. taper
3737+02		3		11		11		3	(Ottawa Trail Rd)
3747+60.95 BK	Sta Equation @ PT of large curve								
13,590+12.92 AH	(Line shortens 984.251.97')	3		11		11		3	Note: Ex part m/kg for lane & 12' lanes, 2' effective HMA shldr; correct '25 const
13,627+24		3		11		11	0	3	Begin ex. RTL taper
13,628+62		3		11		11	11	3	End RTL taper
13,630+60	Begin ex shldr. taper; (End 2025 Overlay; Begin M/F)	3		11		11	11	3	Begin ex. shldr. taper; (End 2025 Overlay; Begin M/F)
13,630+96	End ex shldr. taper; Begin conc C/G	0	14	11		11	14	0	End ex shldr. taper; Begin conc. C/G
13,631+72.39	(Meridian Line Rd)	0	14	11		11	14	0	(Meridian Line Rd)
13,634+75	End ex. conc. C/G	0	14	11		11	14	0	
13,635+30		0	14	11		11	14	0	End conc. C/G
13,635+48	Begin ex lane & snowmobile shldr. taper; X-ring	0	14	11		11	14	0	Begin ex lane & snowmobile shldr. taper; X-rings
13,636+55	End ex lane & shldr. taper	3	0	11		11	0	3	End ex lane & shldr. taper
13,636+76	Ex part J+ (POE JN213435 125 const)	3	-	11		11	-	3	Ex part J+ (POE JN213435 125 const)

HMA Shldr. Widening

HMA Shldr. Widening

HMA Shldr. Widening

HMA Shldr. Widening

HMA Shldr. Widening

HMA Shldr. Widening