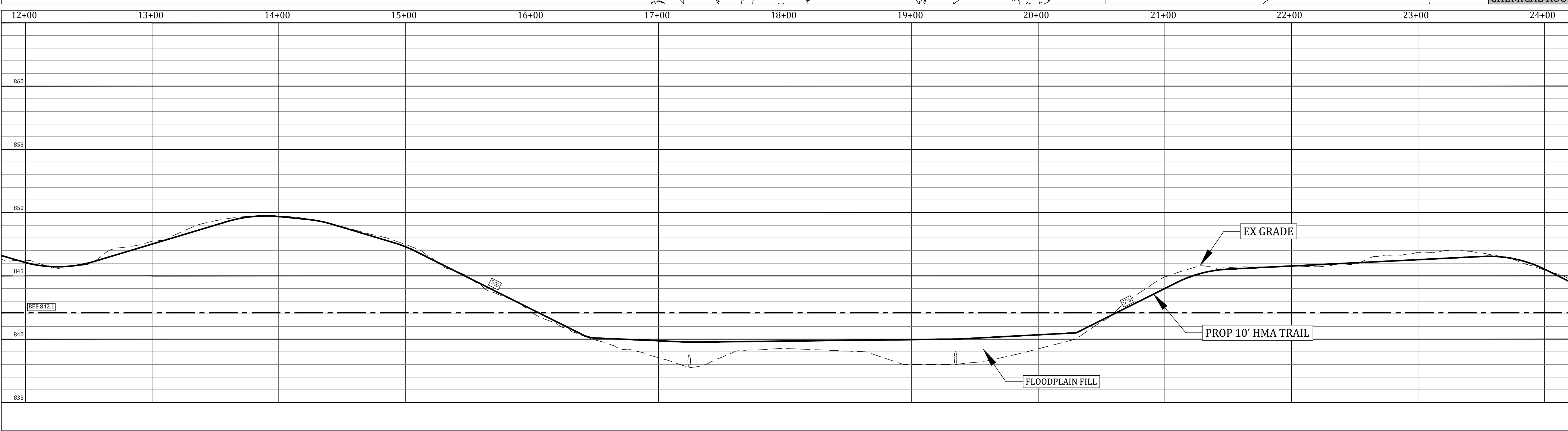


AGGREGATE SURFACE CSE - 5 TN  
 SHARED USE PATH, AGGREGATE - 10 TN  
 SHARED USE PATH, GRADING - 20 FT  
 SHARED USE PATH, HMA - 5 TN

CULV END SECT, 12 INCH - 2 EA  
 CULV, CL A, 12 INCH - 25 FT

CULV END SECT, 12 INCH - 2 EA  
 CULV, CL A, 12 INCH - 25 FT

PAY ITEMS (THIS SHEET)	
EMBANKMENT, LM	375 CYD
EXCAVATION, EARTH	500 CYD
SUBGRADE UNDERCUTTING, TYPE II	200 CYD
EROSION CONTROL, CHECK DAM, STONE	80 FT
EROSION CONTROL, SILT FENCE	1,150 FT
SHLD, CL II, 6 INCH	270 SYD
SHARED USE PATH, AGGREGATE	530 TN
SHARED USE PATH, GRADING	1,200 FT
SHARED USE PATH, HMA	320 TN
CHEMICAL ROOT INHIBITOR	12 STA



GENERAL NOTES:  
 - TRAIL TO BE CONSTRUCTED AT EXISTING GRADE, OTHER THAN TO ACHIEVE THE SPECIFIED LONGITUDINAL SLOPE  
 - EMBANKMENT, LM AND EXCAVATION, EARTH QUANTITIES ARE ESTIMATES

PINE	C.B.	CATV BOX	CATV MH	EX. SAN. MAIN
DECID.	SAN. MH	TELE. MH	LIGHT	EX. STM. (I.C.D.C.)
BUSH	STM. MH	U.P. W/ GUY WIRE	SITE BORING	EX. WTR. MAIN
STUMP	TELE. BOX	STREET SIGN	MAILBOX	PROPOSED SAN.
	WTR. MH	SIGN	P.I.	PROPOSED STM.
		F.H.	C.M.P.	PROPOSED WTR.
			G.V.	
			F.H.	
			PROPERTY LINE	
			R.O.W. (I.C.R.C., MDT)	
				PROPOSED 7' PATHWAY

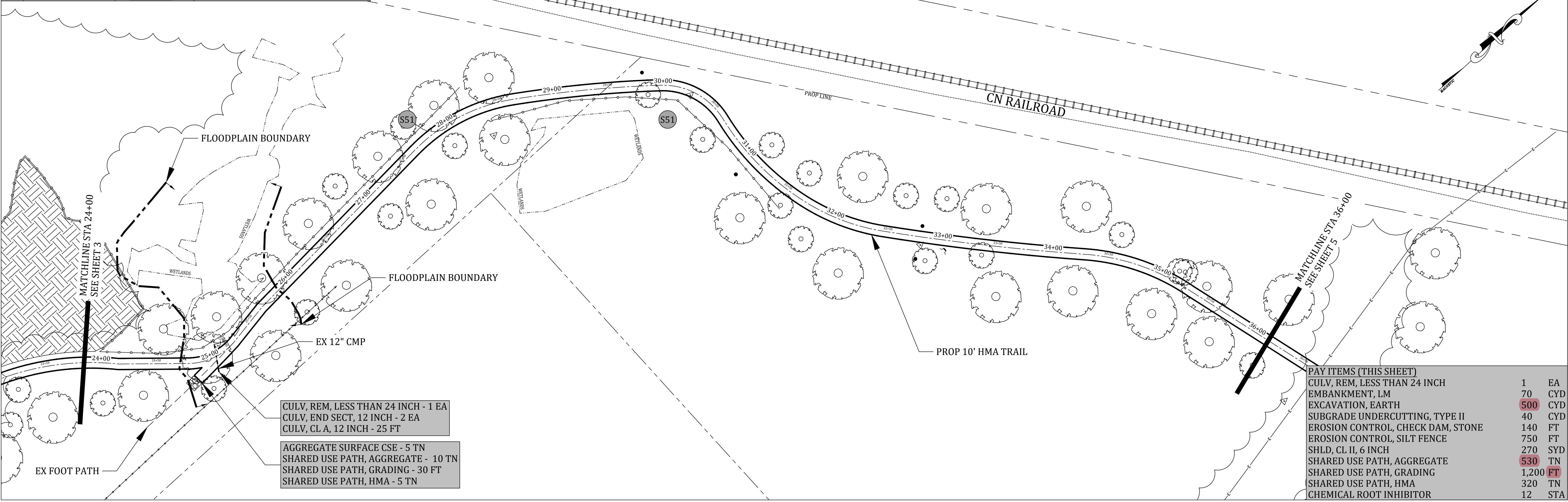
EX. SAN. MAIN	LESS BOLD
EX. STM. (I.C.D.C.)	LESS BOLD
EX. WTR. MAIN	LESS BOLD
PROPOSED SAN.	BOLD
PROPOSED STM.	BOLD
PROPOSED WTR.	BOLD

**Call 811 before you dig.**

WOLVERINE PIPE LINE COMPANY 219-844-9510

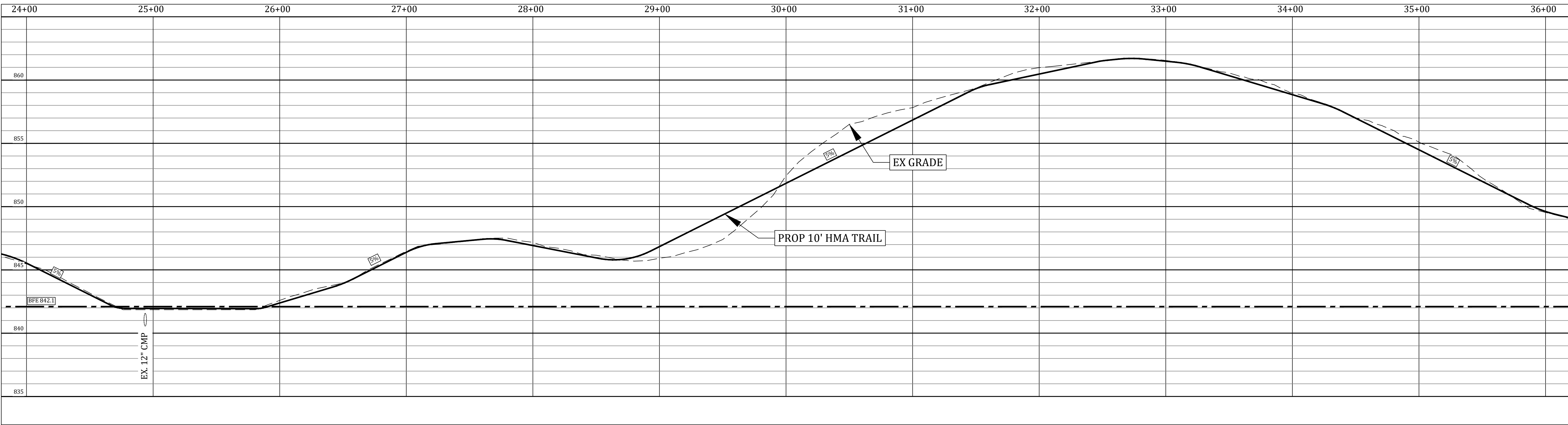
<b>Meridian Charter Township</b> <b>Ingham County, Michigan</b> <b>10' WIDE OFF-ROAD TRAIL</b>		REVISIONS: DATE BY COMMENTS: 12.28.22 NN Prelim Plan 01.23.23 NN Bid Plan 02.07.23 NN Addendum #1
MSU TO LAKE LANSING CONNECTOR TRAIL, PHASE II GRAND RIVER AVE - OKEMOS ROAD STA 12+00 - STA 24+00		SCALE: 1" = 40' HOR 1" = 4' VERT
DRAWN BY: NN 12.09.22	CHECKED BY: YI	SHEET 3 OF 7





CULV, REM, LESS THAN 24 INCH	1	EA
CULV, END SECT, 12 INCH	2	EA
CULV, CL A, 12 INCH	25	FT
AGGREGATE SURFACE CSE	5	TN
SHARED USE PATH, AGGREGATE	10	TN
SHARED USE PATH, GRADING	30	FT
SHARED USE PATH, HMA	5	TN

PAY ITEMS (THIS SHEET)		
CULV, REM, LESS THAN 24 INCH	1	EA
EMBANKMENT, LM	70	CYD
EXCAVATION, EARTH	500	CYD
SUBGRADE UNDERCUTTING, TYPE II	40	CYD
EROSION CONTROL, CHECK DAM, STONE	140	FT
EROSION CONTROL, SILT FENCE	750	FT
SHLD, CL II, 6 INCH	270	SYD
SHARED USE PATH, AGGREGATE	530	TN
SHARED USE PATH, GRADING	1,200	FT
SHARED USE PATH, HMA	320	TN
CHEMICAL ROOT INHIBITOR	12	STA



GENERAL NOTES:  
 - TRAIL TO BE CONSTRUCTED AT EXISTING GRADE, OTHER THAN TO ACHIEVE THE SPECIFIED LONGITUDINAL SLOPE  
 - EMBANKMENT, LM AND EXCAVATION, EARTH QUANTITIES ARE ESTIMATES

PINE	C.B.	CATV BOX	CATV MH
DECID.	F.H.	TELE. MH	LIGHT
BUSH		U.P. W/ GUY WIRE	SITE BORING
STUMP		STREET SIGN	MAILBOX
		SIGN	P.I.
		SAN. MH	C.M.P.
		STM. MH	C.B.
		TELE. BOX	G.V.
		WTR. MH	F.H.
			CATV (COMCAST)
			% OF ROADS
			ELEC. (CONSUMERS)
			GAS (CONSUMERS)
			TELE. (SBC)
			PROPERTY LINE
			R.O.W. (I.C.R.C., MDOT)
			EX. SAN. MAIN
			EX. STM. (I.C.D.C.)
			EX. WTR. MAIN
			PROPOSED SAN.
			PROPOSED STM.
			PROPOSED WTR.
			PROPOSED 7' PATHWAY

EX. SAN. MAIN	LESS BOLD
EX. STM. (I.C.D.C.)	LESS BOLD
EX. WTR. MAIN	LESS BOLD
PROPOSED SAN.	BOLD
PROPOSED STM.	BOLD
PROPOSED WTR.	BOLD
PROPOSED 7' PATHWAY	

**Call 811 before you dig.**

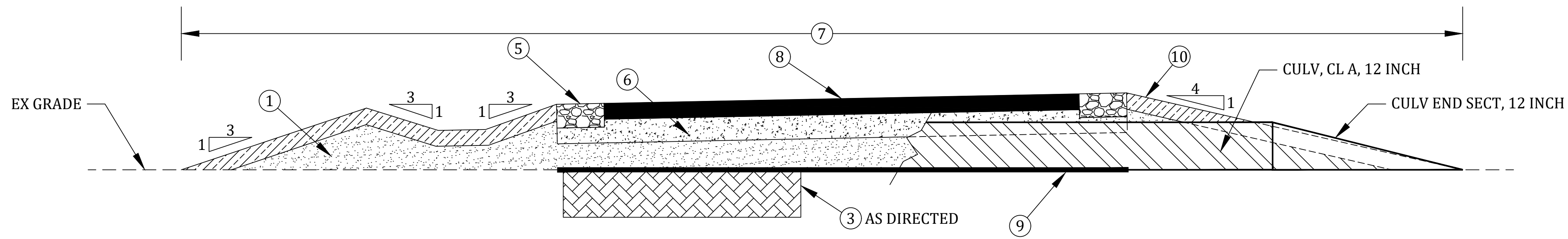
WOLVERINE PIPE LINE COMPANY 219-844-9510

<b>Meridian Charter Township</b> Ingham County, Michigan <b>10' WIDE OFF-ROAD TRAIL</b>		REVISIONS: DATE BY COMMENTS: 12.28.22 NN Prelim Plan 01.23.23 NN Bid Plan 02.07.23 NN Addendum #1
MSU TO LAKE LANSING CONNECTOR TRAIL, PHASE II GRAND RIVER AVE - OKEMOS ROAD STA 24+00 - STA 36+00		SCALE: 1" = 40' HOR 1" = 4' VERT SHEET 4 OF 7
DRAWN BY: NN 12.09.22	CHECKED BY: YI	

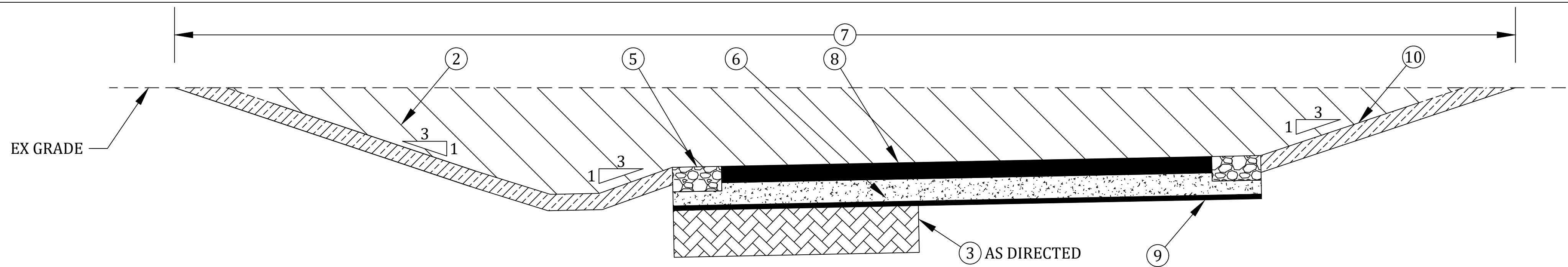




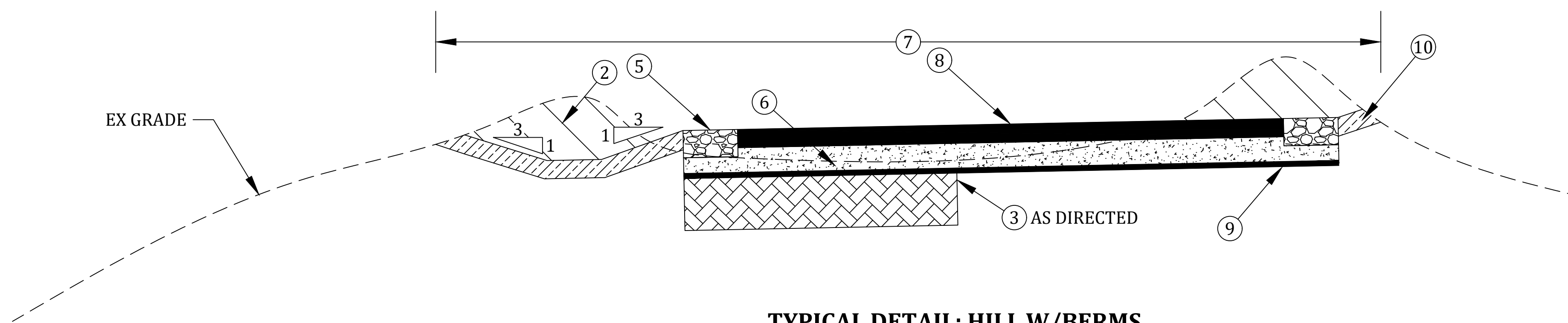




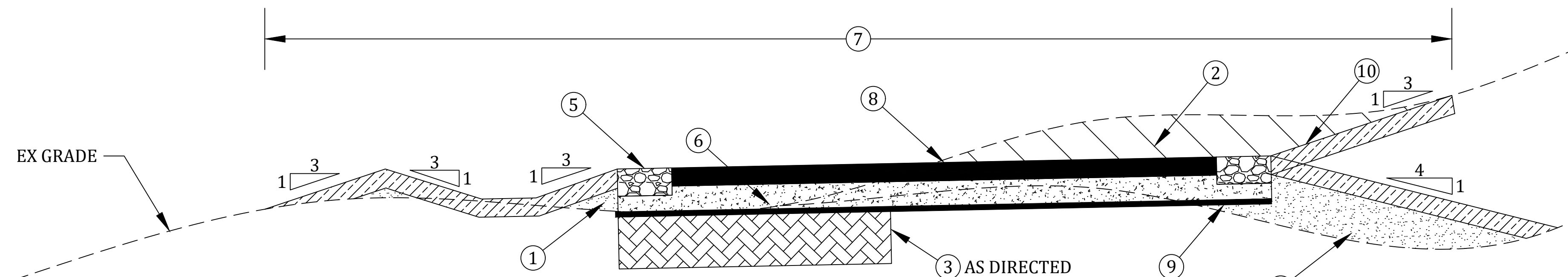
**TYPICAL DETAIL: FILL**  
 STA. 0+00 - 1+00 ; 17+00 - 20+00 ; 29+00 - 30+00 ; 100+25 - 102+75



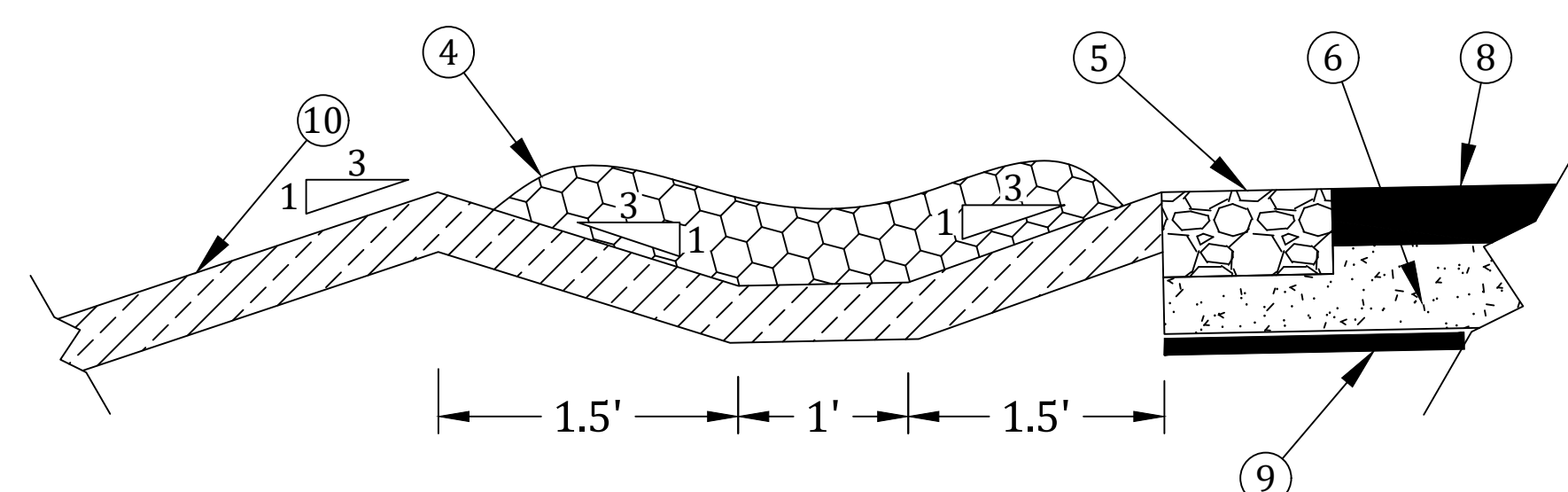
**TYPICAL DETAIL: CUT**  
 STA. 1+00 - 2+50 ; 30+00 - 31+50



**TYPICAL DETAIL: HILL W/BERMS**  
 STA. 4+00 - 7+00



**TYPICAL DETAIL: MINOR CUT/FILL TO CONSTRUCT AT/NEAR GRADE**  
 STA. 2+50 - 4+00 ; 7+00 - 17+00 ; 20+00 - 29+00 ; 31+00 - 43+00



**TYPICAL DETAIL: SWALE (POST CONSTRUCTION RUNOFF MITIGATION)**  
 STA. \*ALL\*

**PAY ITEM LEGEND:**

- ① EMBANKMENT, LM
- ② EXCAVATION, EARTH
- ③ SUBGRADE UNDERCUTTING, TYPE II
- ④ EROSION CONTROL, CHECK DAM, STONE
- ⑤ SHLD, CL II, 6 INCH (1 FOOT WIDE)
- ⑥ SHARED USE PATH, AGGREGATE (6 INCH DEEP)
- ⑦ SHARED USE PATH, GRADING
- ⑧ SHARED USE PATH, HMA
- ⑨ CHEMICAL ROOT INHIBITOR
- ⑩ SITE RESTORATION (3" SCREENED TOPSOIL)

**PAY ITEMS & QUANTITIES (MISC):**

MOBILIZATION, MAX	1	LS
TRAFFIC CONTROL	1	LS
SITE RESTORATION	1	LS

**GENERAL NOTES:**

- CROSS-SECTIONS ARE NOT TO SCALE.
- CROSS-SECTIONS ARE LOOKING DOWN-STATION.
- SALVAGE OR REMOVE EXISTING TOPSOIL WITHIN THE GRADING LIMITS, OR AS DIRECTED BY THE ENGINEER. REMOVAL AND DISPOSAL WILL BE PAID FOR AS **EXCAVATION, EARTH**.
- TOPSOIL FOR **SITE RESTORATION** MAY BE SALVAGED FROM SITE, BUT MUST BE SCREENED OR RAKED TO REMOVE 1" OR GREATER DEBRIS.
- FOR **SITE RESTORATION**, USE SEED MEETING MDOT THM MIXTURE.
- **EMBANKMENT, LM** SHALL BE CLASS II GRANULAR MATERIAL OR ASPHALT MILLINGS.
- **SHARED USE PATH, AGGREGATE** SHALL BE 21AA AGGREGATE OR ASPHALT MILLINGS.
- FOR **EMBANKMENT, LM** AND **SHARED USE PATH, AGGREGATE** THE CONTRACTOR MAY USE MILLINGS FROM THE STOCKPILE AT MERIDIAN TOWNSHIP'S SERVICE CENTER. THERE ARE MORE THAN ENOUGH MILLINGS FOR ALL OF THE FILL REQUIRED ON THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE THE LABOR AND EQUIPMENT TO LOAD AND TRANSPORT THE MILLINGS FROM THE STOCKPILE LOCATION TO THE CONSTRUCTION SITE.

**HMA APPLICATION TABLE**

COURSE	MIX TYPE	YIELD (#/SY)	BINDER	BOND COAT (GAL/SY)	TAV (%)
BASE	13A	220	58-28	0.05-0.15	4
TOP	13A	220	58-28	0.05-0.15	3

**ESTIMATED CUT/FILL QUANTITIES:**

TOTAL CUT - 2,020 CY  
 TOTAL FILL - 945 CY

Meridian Charter Township  
 Ingham County, Michigan  
 10' WIDE OFF-ROAD TRAIL

MSU TO LAKE LANSING CONNECTOR TRAIL, PHASE II  
 GRAND RIVER AVE - OKEMOS ROAD  
 TYPICAL DETAIL SHEET

REVISIONS:		
DATE	BY:	COMMENTS:
12.28.22	NN	Prelim Plan
01.23.23	NN	Bid Plan
02.07.23	NN	Addendum #1

SCALE:  
 1" = 40' HOR  
 1" = 4' VERT

SHEET 6 OF 7

DRAWN BY: NN 12.09.22

CHECKED BY: YI

**CHECK DAMS:**

- USE CHECK DAMS FOR SWALE GRADES 3-5%.
- SPACE OUT CHECK DAMS AT 20' O.C.
- USE 1-3" CRUSHED, WASHED STONE OR CONCRETE.