



SOIL BORING LOG

ROUTE FAI 55 DESCRIPTION Culvert replacement (8'x3') approx. 14 feet north of existing structure centerline. LOGGED BY SCI Date 05/11/10

SECTION _____ LOCATION East of Hamel; SE 1/4, SEC. 11, TWP. 5N, RNG. 7W

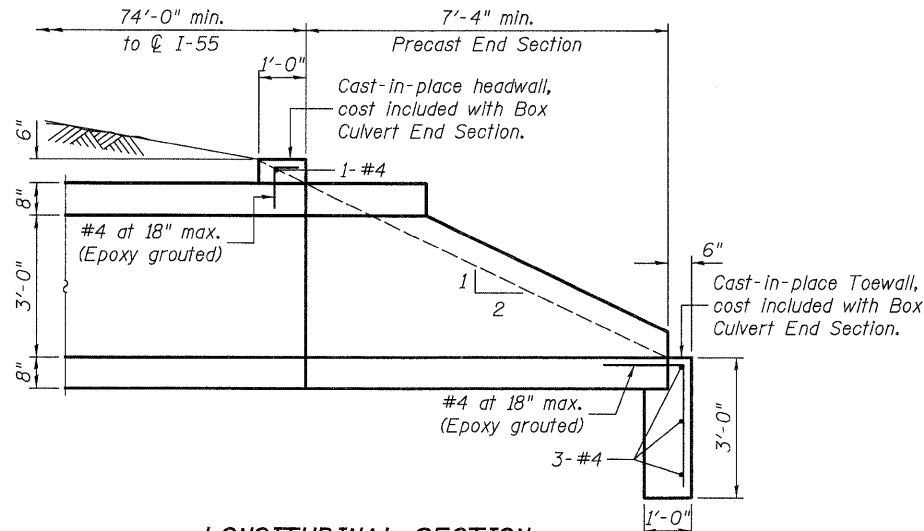
COUNTY Madison DRILLING METHOD CME 45/HSA HAMMER TYPE Automatic

STRUCT. NO. <u>060-2549 (existing)</u>	DEPT	BULGE	UCS	MOIST	Surface Water Elev. _____ ft	DEPT	BULGE	UCS	MOIST
Station <u>735+20</u>	H	S	Qu	T	Stream Bed Elev. _____ ft	H	S	Qu	T
BORING NO. <u>B-1</u>					Groundwater Elev.: _____ ft				
Station <u>735+20</u>					First Encounter _____ ft				
Offset <u>55 ft L</u>					Upon Completion _____ ft				
Ground Surface Elev. <u>543.97</u>	(ft)	(/6")	(tsf)	(%)	After _____ Hrs.	(ft)	(/6")	(tsf)	(%)

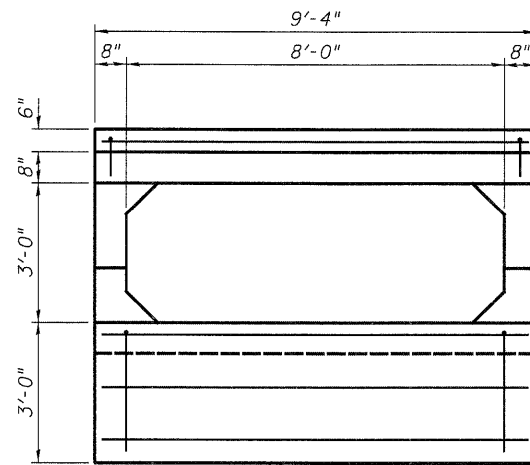
FILL: Dark brown, silty clay, trace rock (A-6)	4	2.1	18	SANDY CLAY: Brown (A-6) (continued)	7	6.2	10
FILL: Dark brown, clayey silt (A-4)	5	B		Becomes grayish brown	16	S/15	20
SILTY CLAY: Grayish brown and brown (A-7)	3	0.9	23		4		9
	2	B			9	4.3	11
	3	B			11	B	
	2	1.0	22	Becomes brown	4		9
	3	B			9	3.8	10
	3	B			13	B	
CLAY: Gray and brown, some sand (A-7)	2	2.1	22	Becomes grayish brown	3	3.5	11
	3	B			7	B	10
	3	B			10	B	
	1	1.4	21		5		7
	2	B			7	3.1	11
	3	B			10	B	
With gray, fine to medium, sand deposit on side of SPT sample.	1	0.7	19		5		7
	2	B			7	3.1	11
	2	B			10	B	
SANDY CLAY: Brown (A-6)	WH	2.0	18	Temporary benchmark located at the east end of the existing box culvert's flowline (assumed El. 100.0).	5		9
Hand penetrometer reading on top portion of SPT sample - <0.25F	1	B			9	3.2	10
	4	B			12	B	
Becomes grayish brown and brown, trace gravel (fill)	5	4.6	11		9	3.2	10
	12	S/15			12	B	
	12	S/15			12	B	

Boring terminated at 40.0 ft.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

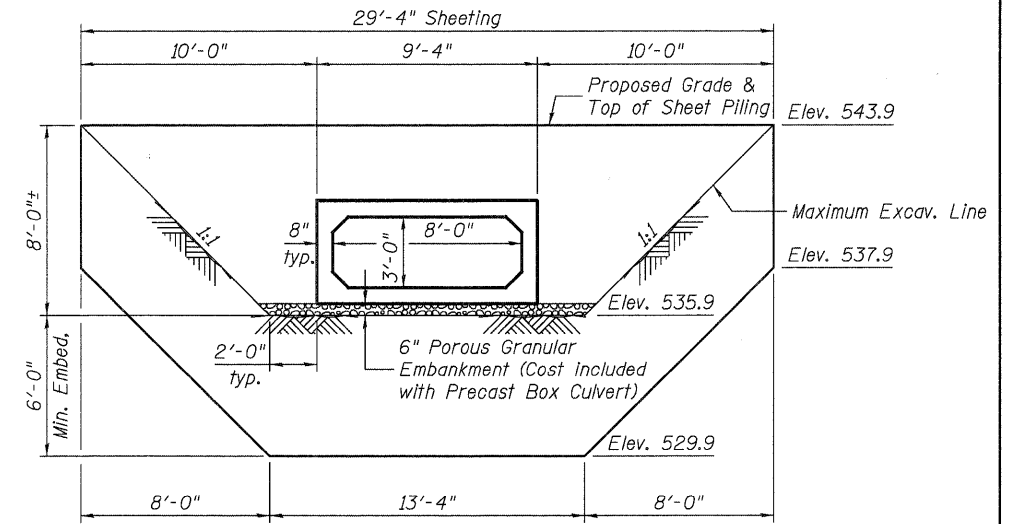


LONGITUDINAL SECTION



END VIEW

END SECTION DETAIL



CROSS-SECTION AND TEMPORARY SHEET PILING DETAILS

(Stage III/IV shown, Stage I/II similar)

Sheet Piling shall have a minimum section modulus of 3.7 in³/ft. If the contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

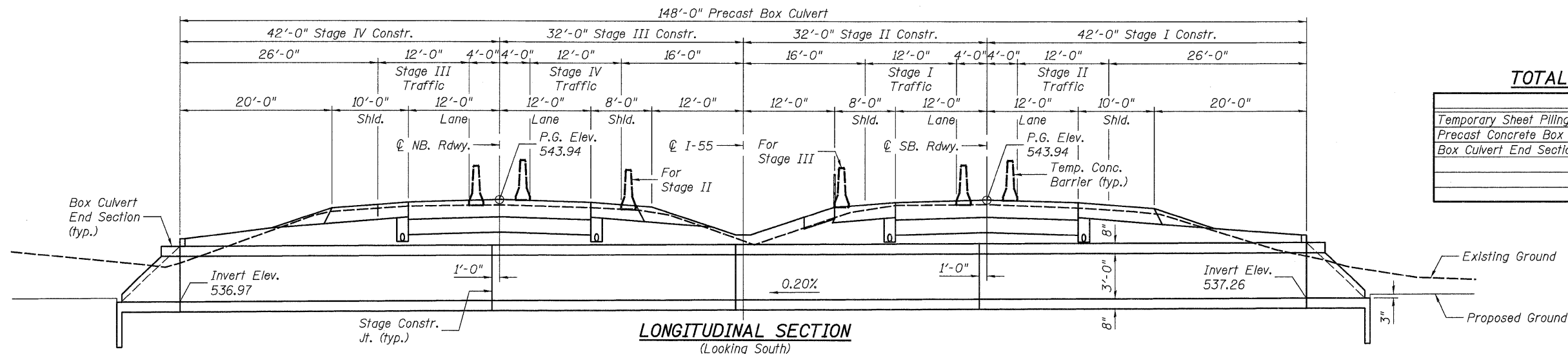
GENERAL NOTES

The Precast Concrete Box Culvert shall conform to the requirements of AASHTO M259, with a design fill height of 2 feet. The reinforcement may be based on the standards for a 8'x4' box.

Cost of Excavation and Porous Granular Embankment bedding shall be included with Precast Box Culvert.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Sheet Piling	Sq Ft	694
Precast Concrete Box Culvert 8'x3'	Foot	148
Box Culvert End Sections	Each	2



LONGITUDINAL SECTION

(Looking South)