

PROJECT ID: 4160-04-71
WITH: N/A

COUNTY: OUTAGAMIE

ORDER OF SHEETS

SECTION NO.	1	TITLE
SECTION NO.	2	TYPICAL SECTIONS AND DETAILS
SECTION NO.	3	ESTIMATE OF QUANTITIES
SECTION NO.	3	MISCELLANEOUS QUANTITIES
SECTION NO.	4	RIGHT OF WAY PLAT
SECTION NO.	5	PLAN AND PROFILE
SECTION NO.	6	STANDARD DETAIL DRAWINGS
SECTION NO.	7	SIGN PLATES
SECTION NO.	8	STRUCTURE PLANS
SECTION NO.	9	COMPUTER EARTHWORK DATA
SECTION NO.	9	CROSS SECTIONS

TOTAL SHEETS = ____



CTH 'CE' DESIGN DESIGNATION

A.D.T. (2010)	27,100
A.D.T. (2030)	38,000
D.H.V. (2030)	4,370
D.D.	50/50
T. (% OF A.D.T.)	3.0
SPEED LIMIT	45 MPH

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	---
REFERENCE LINE	---
EXISTING CULVERT	---
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA	---

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

FEDERALLY FUNDED

PLAN OF PROPOSED IMPROVEMENT

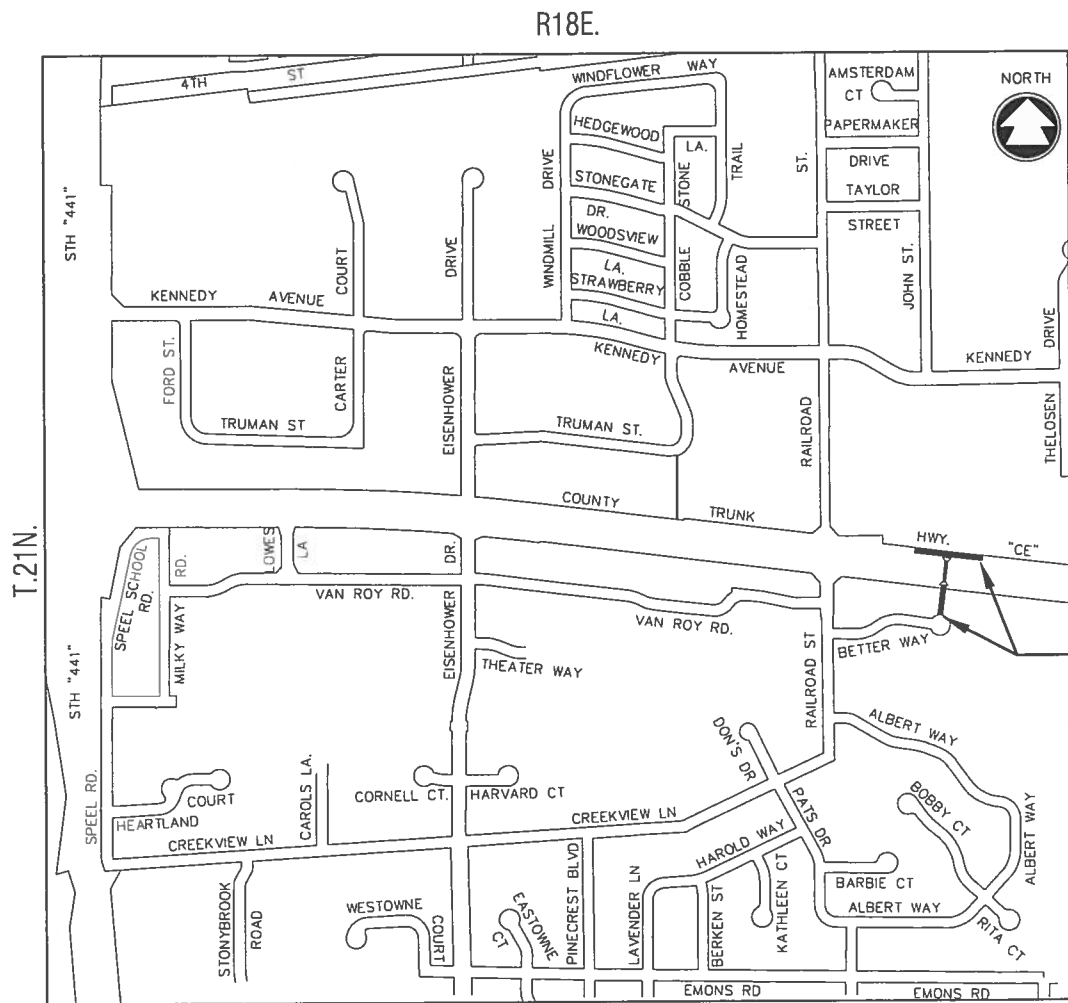
CTH CE UNDERPASS

RAILROAD STREET - CTH N

OUTAGAMIE COUNTY

STATE PROJECT NUMBER

4160-04-71



PROJECT LOCATION

LAYOUT
SCALE 0 1/2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.180 MILES

STATE PROJECT

4160-04-71

FEDERAL PROJECT

PROJECT

CONTRACT

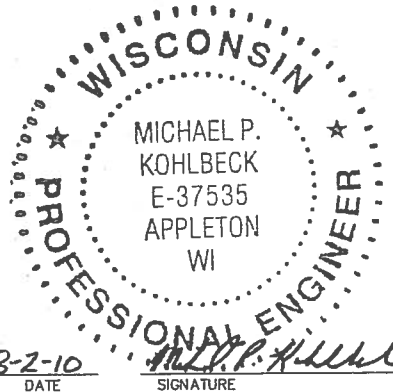
RECEIVED

JAN 20 2011

OUTAGAMIE COUNTY
HIGHWAY DEPT

ORIGINAL PLANS PREPARED BY

McMAHON
ENGINEERS ARCHITECTS



8-2-10
DATE

SIGNATURE

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

ORG DATE : _____

Originator : _____

PLOT SCALE : _____

WSDOT/CAODS SHEET 10

CE-25

GENERAL NOTES

BEARINGS AND COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, OUTAGAMIE COUNTY. THE COORDINATES SHOWN ARE GROUND COORDINATES AND ARE TO BE USED AS GROUND VALUES.

NO MONUMENTS WILL BE PLACED AT THE LIMITS OF THE TEMPORARY LIMITED EASEMENTS (T.L.E.'S).

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE AND ARE BASED ON UTILITY LOCATES OBTAINED FROM THE UTILITIES WHEN THE SURVEY DATA WAS COLLECTED PRIOR TO THE FINAL DESIGN OF THE PROJECT. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT SHOWN ON THE PLAN SHEETS OR CROSS SECTIONS.

WHEN THE QUANTITIES OF BASE AGGREGATE DENSE AND HMA PAVEMENT ARE MEASURED FOR PAYMENT BY THE TON, THE THICKNESS AS SHOWN ON THE TYPICAL SECTIONS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATION OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE ELEVATIONS SHOWN ON THE CROSS SECTIONS ARE FINISHED SUBGRADE ELEVATIONS AT EDGES OF SUBGRADE, PROPOSED BREAK POINTS, DITCH FLOWLINES AND SLOPE INTERCEPTS.





ALL DISTURBED AREAS NOT OTHERWISE SURFACED SHALL BE RESTORED WITH SALVAGED TOPSOIL, FERTILIZER, SEED AND EROSION MAT OR MULCH.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

ALL RADII SHOWN ON THE PLAN SHEETS ARE TO FINISHED EDGE OF PAVEMENT.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM COMMON EXCAVATION. THE FACTOR USED FOR EXPANDING THE FILLS TO COMPLETE THE VOLUME OF MATERIAL REQUIRED IS 30% FOR COMMON EXCAVATION

STANDARD ABBREVIATIONS AND SYMBOLS

ADJ.	ADJUST	NOR.	NORMAL
ASPH	ASPHALT	P.E.	PRIVATE ENTRANCE
AVE.	AVENUE	P.G.L.	PROFILE GRADE LINE
	BENCH MARK	P.I.	POINT OF INTERSECTION
B-B	BACK TO BACK OF CURB	P.T.	POINT OF TANGENCY
B.A.D.	BASE AGGREGATE DENSE	P.V.C.	POINT OF VERTICAL CURVATURE
B.O.C. or B/C	BACK OF CURB	P.V.I.	POINT OF VERTICAL INTERSECTION
 or CL	CENTERLINE	P.V.T.	POINT OF VERTICAL TANGENCY
CONC.	CONCRETE	P/L	PROPERTY LINE
C.M.P.	CORRUGATED METAL CULVERT PIPE	PLE	PERMANENT LIMITED EASEMENT
C.T.H.	COUNTY TRUNK HIGHWAY	PVT.	PAVEMENT
CL.	CLASS	PED.	PEDESTAL
	DELTA	R or RAD	RADIUS
D.	DEGREE OF CURVE	R.C.P.	REINFORCED CONCRETE PIPE
DW	DRIVEWAY	RECON.	RECONSTRUCT
E.	EAST	REQ'D	REQUIRED
EB	EASTBOUND	R/L	REFERENCE LINE
E-MAT	EROSION MAT	REM.	REMOVE
ELEV	ELEVATION	R/W	RIGHT OF WAY
EOP	EDGE OF PAVEMENT	RD.	ROAD
EOR	END OF RADIUS	RT.	RIGHT
EXIST.	EXISTING	S.	SOUTH
F-F	FACE TO FACE OF CURB	SAN	SANITARY SEWER
FL	FLOWLINE	SB	SOUTH BOUND
GRAV	GRAVEL	S.D.D.	STANDARD DETAIL DRAWING
GV	GAS VALVE	S.I.	SLOPE INTERCEPT
HDPE	HIGH DENSITY POLYETHYLENE CULVERT PIPE	STA.	STATION
HE	HIGHWAY EASEMENT	S.T.H.	STATE TRUNK HIGHWAY
HMA	HMA	STA.	STATION
H.P.	HIGH POINT	SW	CONCRETE SIDEWALK
HYD.	HYDRANT	T.I.	TEMPORARY INTEREST
L.	LENGTH OF CURVE	TLE	TEMPORARY LIMITED EASEMENT
L.V.C.	LENGTH OF VERTICAL CURVE	TYP.	TYPICAL
L.S.	LANDSCAPING	V.C.	VERTICAL CURVE
LT.	LEFT	WB	WESTBOUND
MH	MANHOLE	W	WATERMAIN
MAX	MAXIMUM	WV	WATER VALVE/SHUTOFF
MIN	MINIMUM		HYDRANT W/AUXILIARY VALVE
NB	NORTH BOUND		LIGHT POLE
NO.	NUMBER		

VILLAGE OF KIMBERLY

RICK HERMUS
DIRECTOR OF PUBLIC WORKS
1940 BUCHANAN STREET
LITTLE CHUTE, WI 54140
(920) 788-7395

DESIGN CONTACT

MIKE KOHLBECK
McMAHON
1445 McMAHON DRIVE
NEENAH, WI 54956
(920) 751-4200

DNR LIAISON

DAVE BOUGIE
NORTHEAST REGION
STORM WATER MANAGEMENT SPECIALIST
2984 SHAWANO AVE
GREEN BAY, WI 54307-0448
(920) 662-5124

UTILITIES

DARBOY SANITARY DISTRICT NO. 1
STEVE LAMERS
N398 COUNTY ROAD N
APPLETON, WI 54915
(920) 788-6048

TIME WARNER CABLE
VINCE ALBIN
352D DESTINATION DRIVE
APPLETON, WI 54915
(920) 831-9249

WE-ENERGIES (ELECTRIC)
JIM QUINN
800 S. LYNNDALDE DRIVE
APPLETON, WI 54914
(920) 380-3401

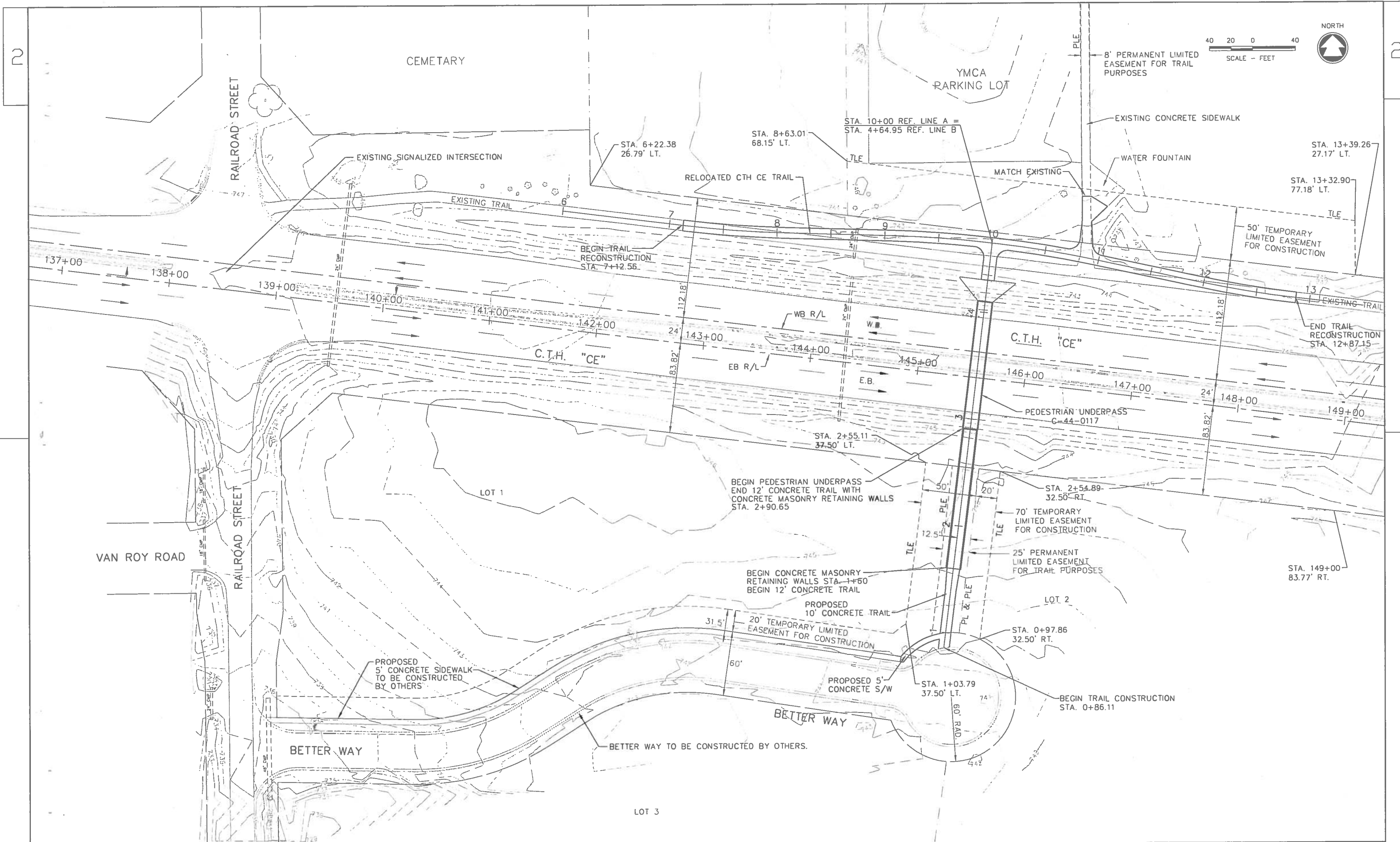
AT&T WISCONSIN
CHRIS SABOURIN
221 WEST WASHINGTON STREET
4TH FLOOR
APPLETON, WI 54913
(920) 735-3252

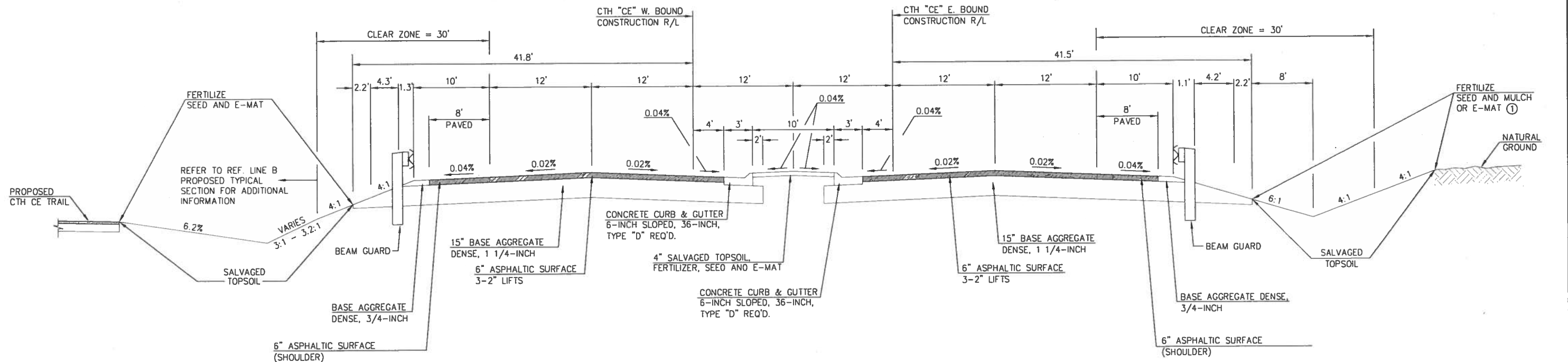
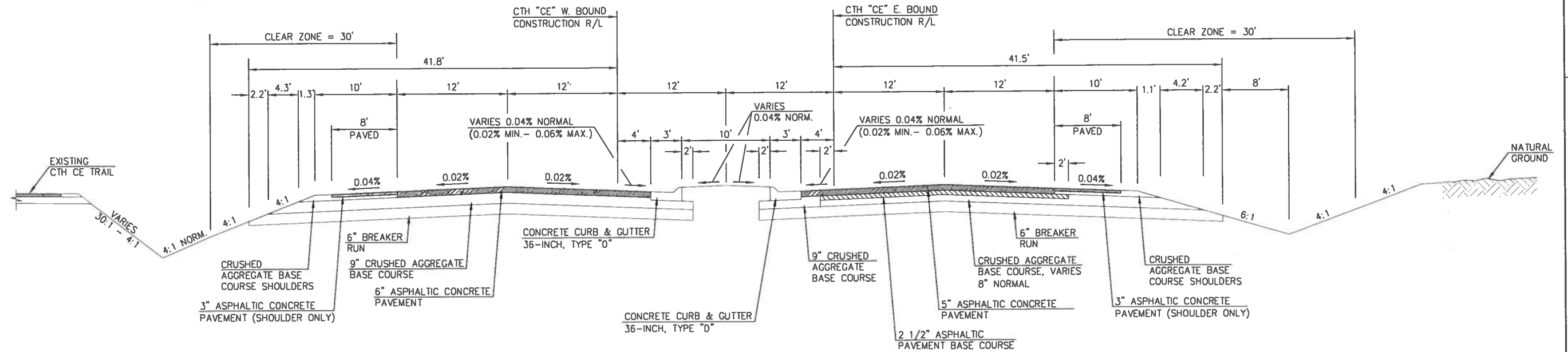


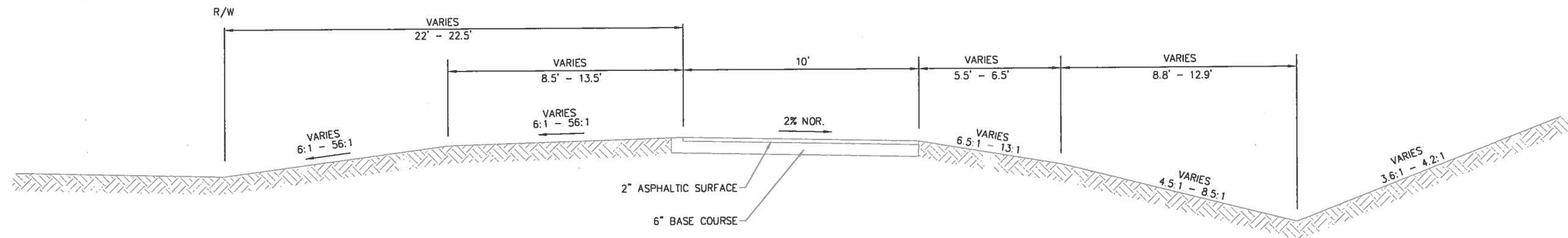
Toll Free (800) 242-8511
Milwaukee Area (414) 258-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .26	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .80											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA= 1.26 ACRES
TOTAL OISTRUBED AREA= 1.26 ACRES

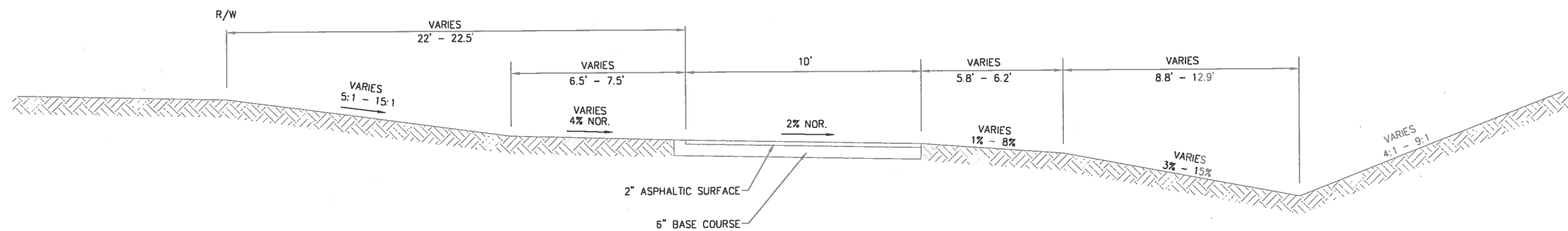






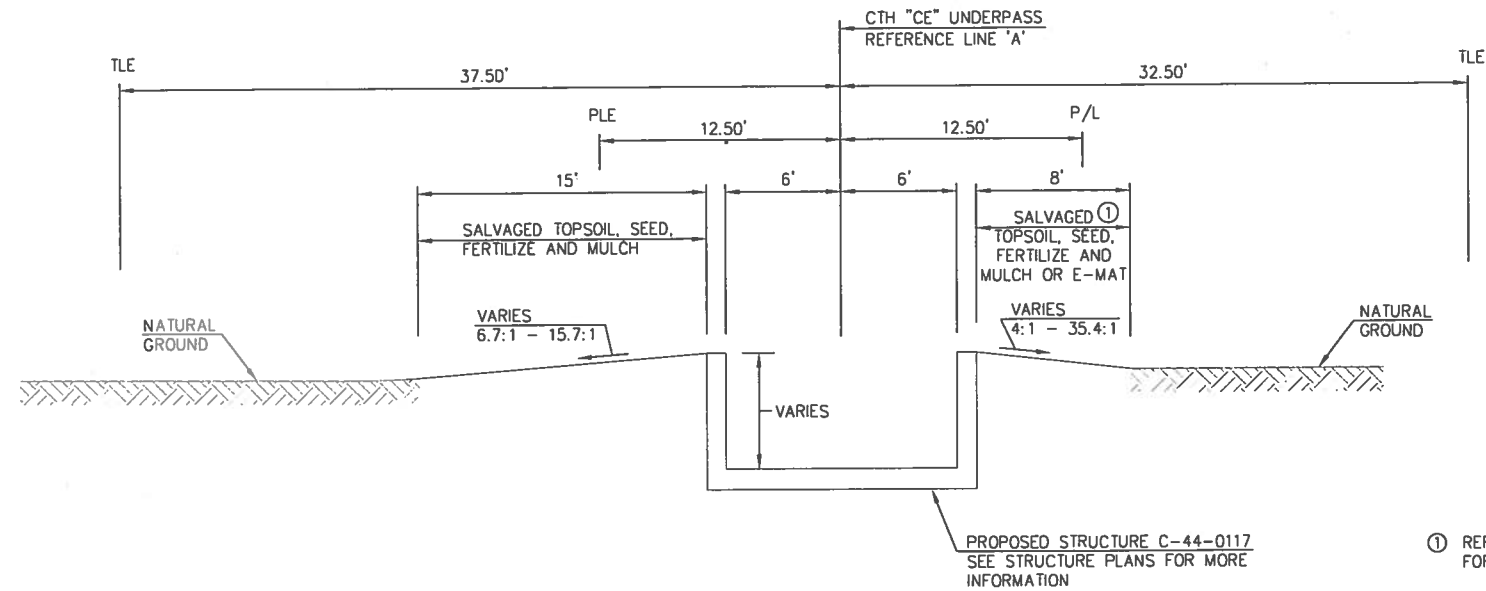
CTH CE TRAIL - EXISTING TYPICAL SECTION

STA. 7+12.56 - STA. 10+85.75



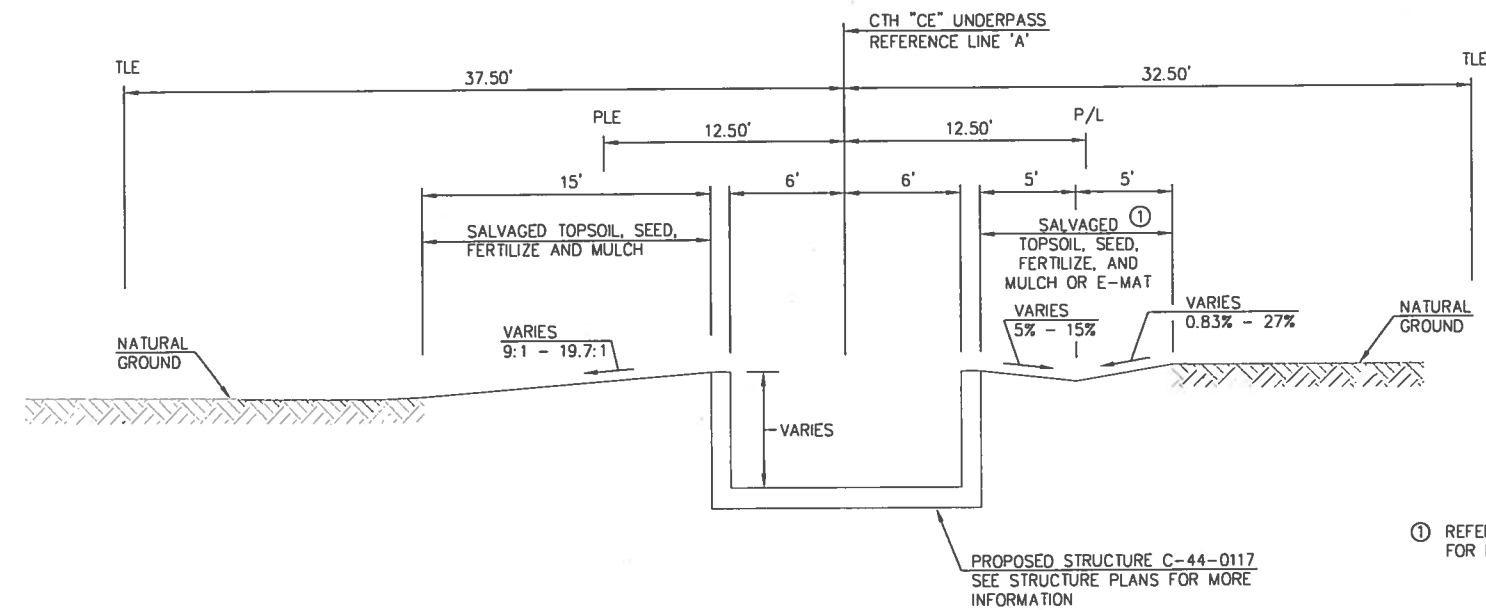
CTH CE TRAIL - EXISTING TYPICAL SECTION

STA. 10+85.75 - STA. 12+87.15



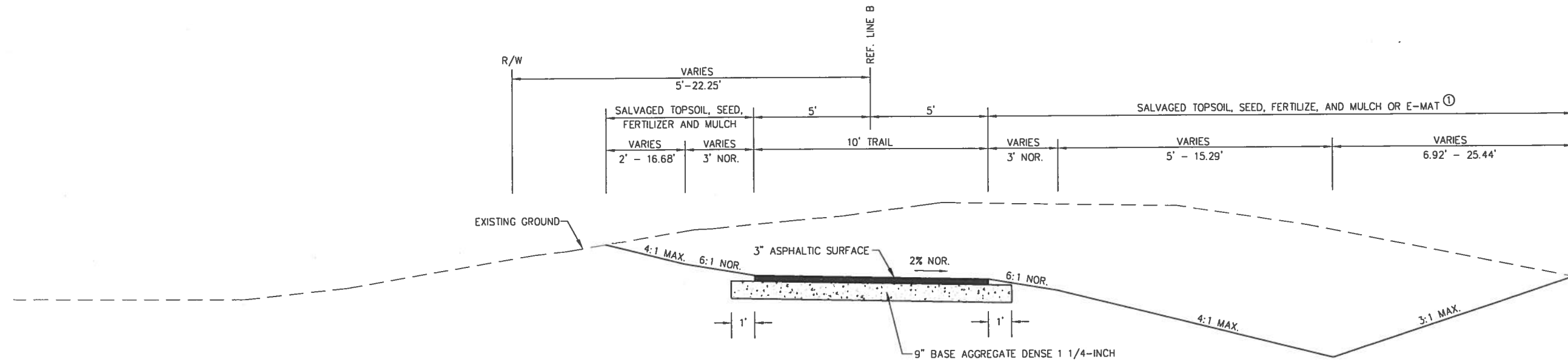
PROPOSED TYPICAL SECTION - BETTER WAY CONNECTION

STA. 1+60 - STA. 1+90
STA. 2+50 - STA. 2+90.65



PROPOSED TYPICAL SECTION - BETTER WAY CONNECTION

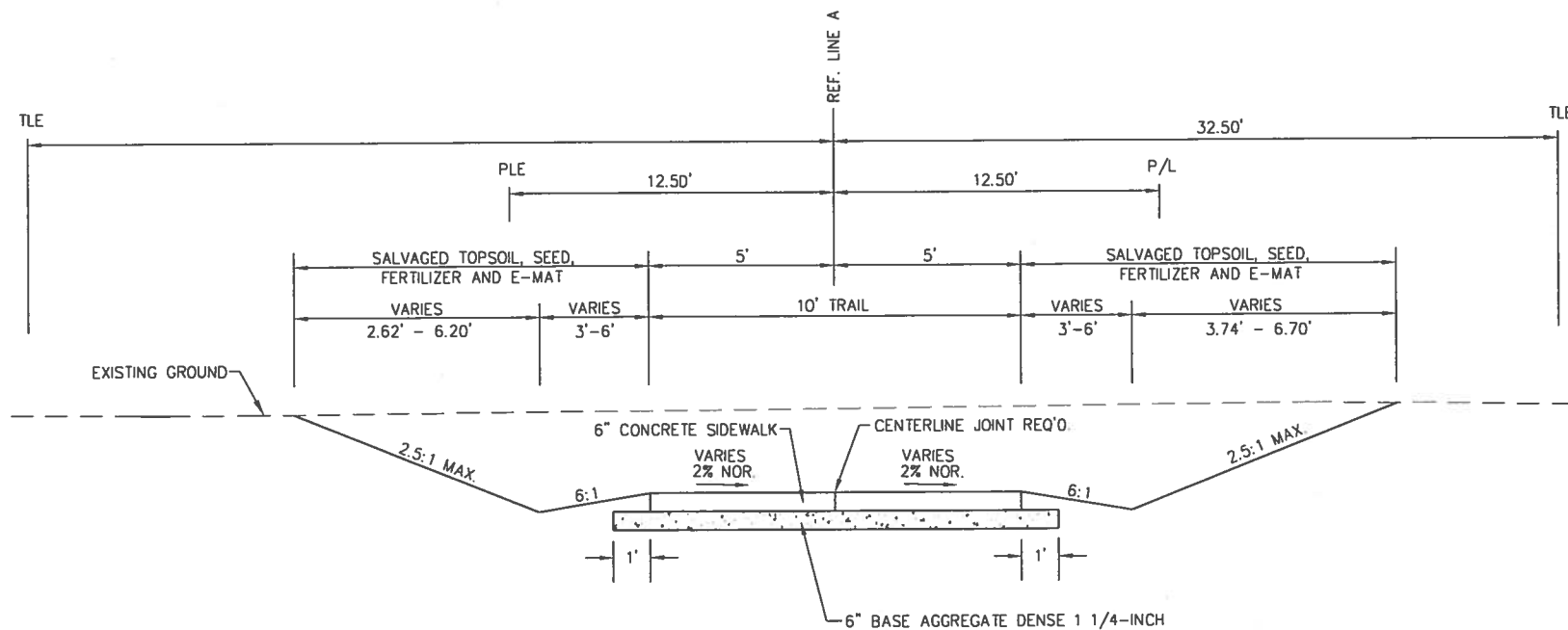
STA. 1+90 - STA. 2+50



PROPOSED TYPICAL TRAIL SECTION
CTH 'CE' TRAIL (REF. LINE B)

STA. 7+12.56 - STA. 12+87.15

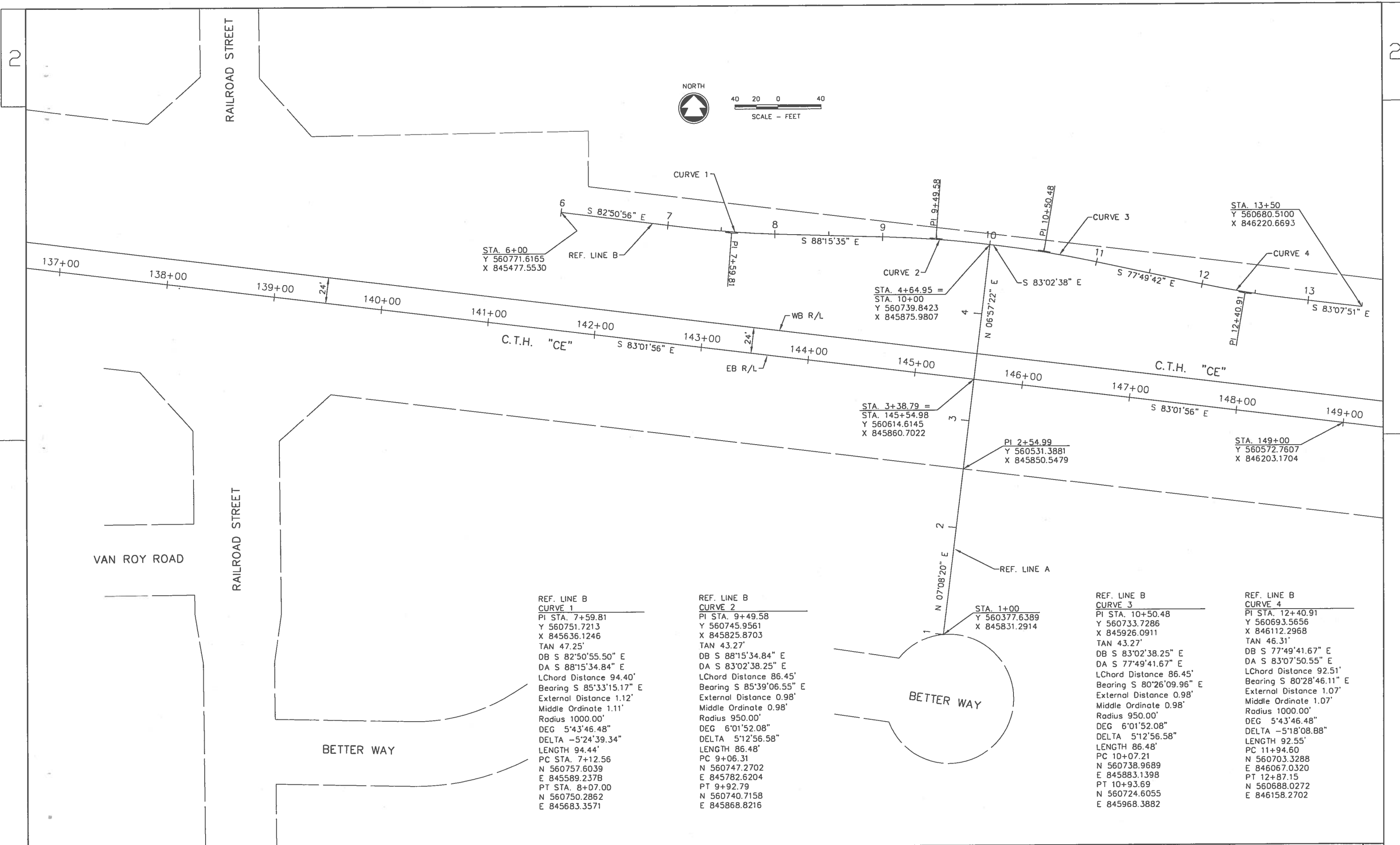
① REFER TO "PERMANENT EROSION CONTROL DETAIL & PERMANENT SIGNING" FOR LOCATIONS OF MULCH AND E-MAT

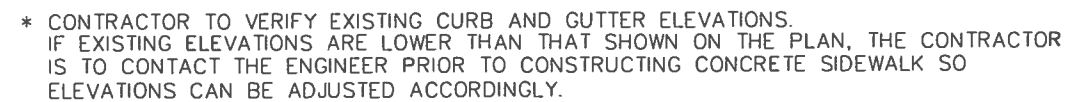


PROPOSED TYPICAL TRAIL SECTION
BETTER WAY CONNECTION (REF. LINE A)

STA. 0+86.11 - 1+60

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20 10 0 20
SCALE - FEET



STA. 4+64.95 REF. LINE A =
STA. 10+00.00 REF. LINE B

SLOPE INTERCEPT

ABANDONED FIBER OPTIC LINE

REMOVE CMP

EXISTING TRAIL (ASPH.)

EXISTING TRAIL (ASPH.)

REF. LINE B

EW 2

EW 1

SLOPE INTERCEPT

BASE AGGREGATE DENSE 3/4"

GRAVEL SHOULDER

PAVED SHOULDER

+05.00

SAWING ASPHALT REQ'D

SAWING CONCRETE REQ'D

MH 3

SLOPE INTERCEPT

*STEEL PLATE BEAM GUARD
CLASS A REQ'D, E.A.T. REQ'D

GRAVEL SHOULDER

PAVED SHOULDER

10'

SAWING ASPHALT REQ'D

SAWING CONCRETE REQ'D

C.T.H. "CE"

GRASS MEDIAN

GRASS MEDIAN

24'

112.18'

143+00

144+00

145+00

146+00

147+00

148+00

EBRL AND CTH CE CONSTRUCTION R/L

EBRL AND CTH CE CONSTRUCTION R/L

PAVED SHOULDER

+05.00

GRAVEL SHOULDER

BASE AGGREGATE DENSE 3/4"

10'

83.82'

*STEEL PLATE BEAM GUARD
CLASS A REQ'D, E.A.T. REQ'D

MH 2

INLET 2

SLOPE INTERCEPT

83.82'

ABANDONED WATERMAIN
8-INCH

SLOPE INTERCEPT

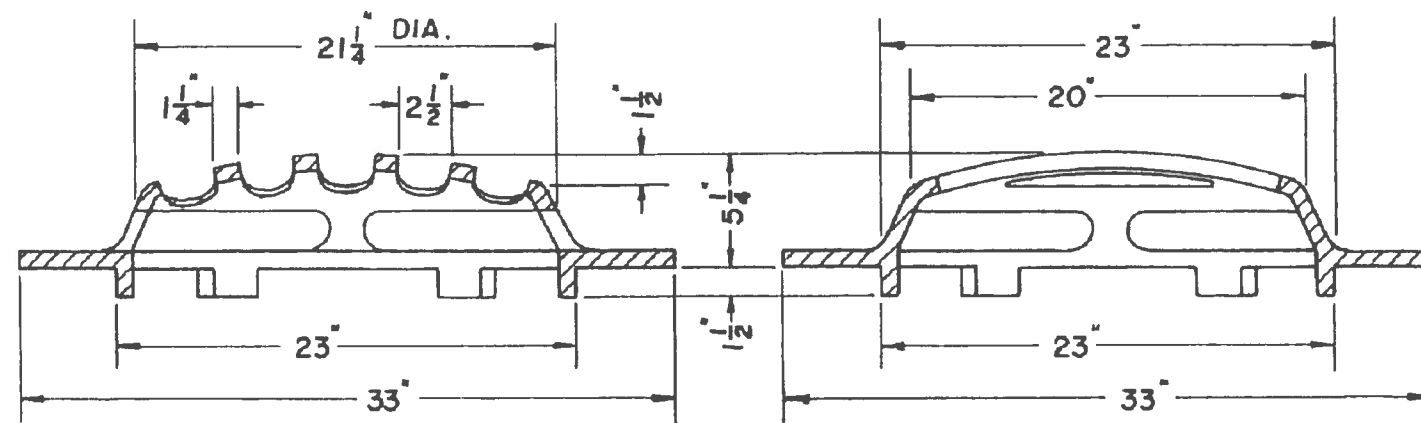
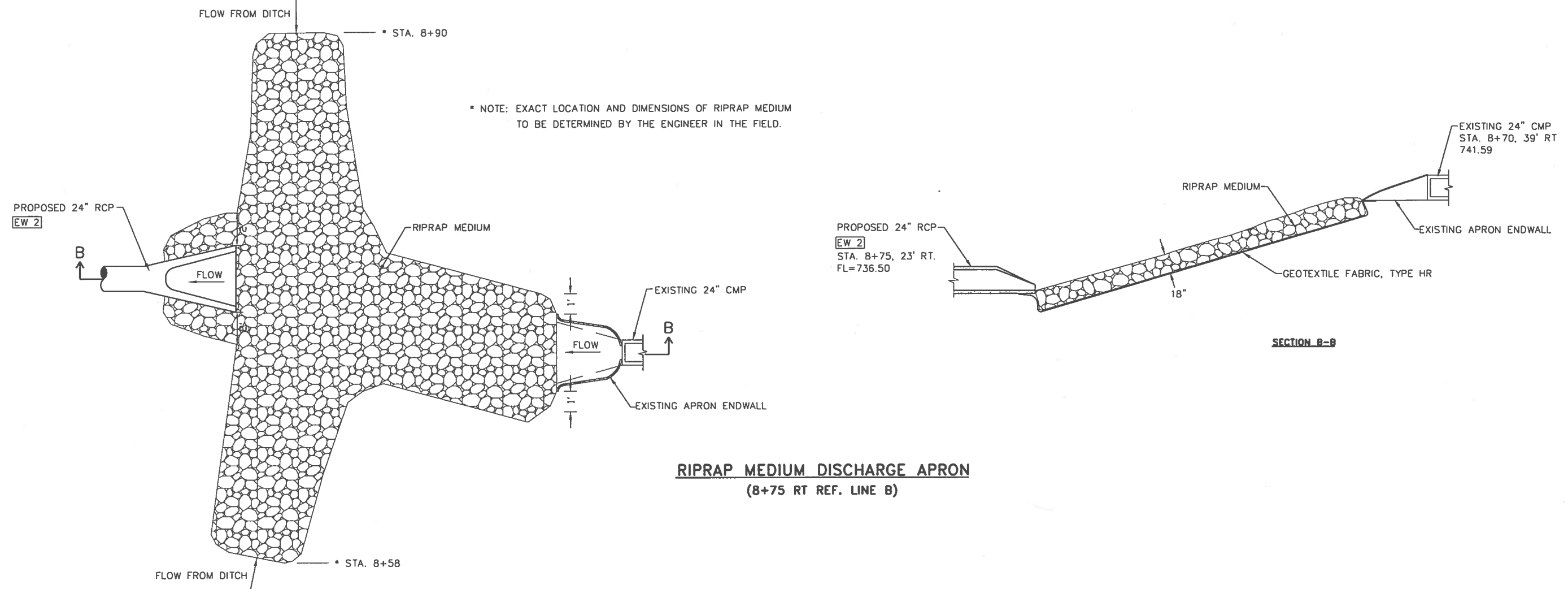
REF. LINE A

PROPOSED STRUCTURE C-44-0117
SEE STRUCTURE PLANS FOR MORE
INFORMATION



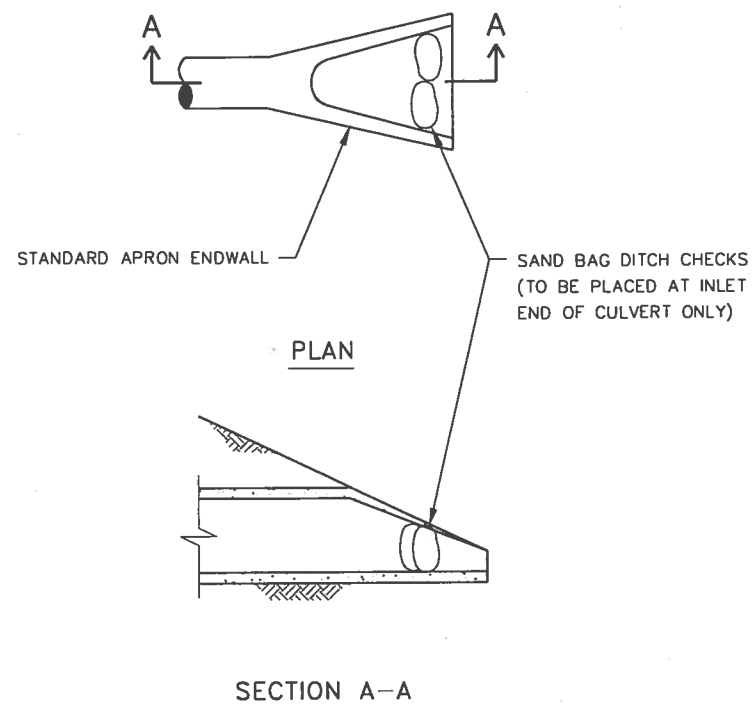
6" ASPHALTIC SURFACE
15" BASE AGGREGATE DENSE 1 1/4"
SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION

*STEEL PLATE BEAM GUARD OVER LOW FILL CULVERTS
CLASS A REQ'D OVER STRUCTURE.
REFER TO STANDARD DETAIL DRAWING.



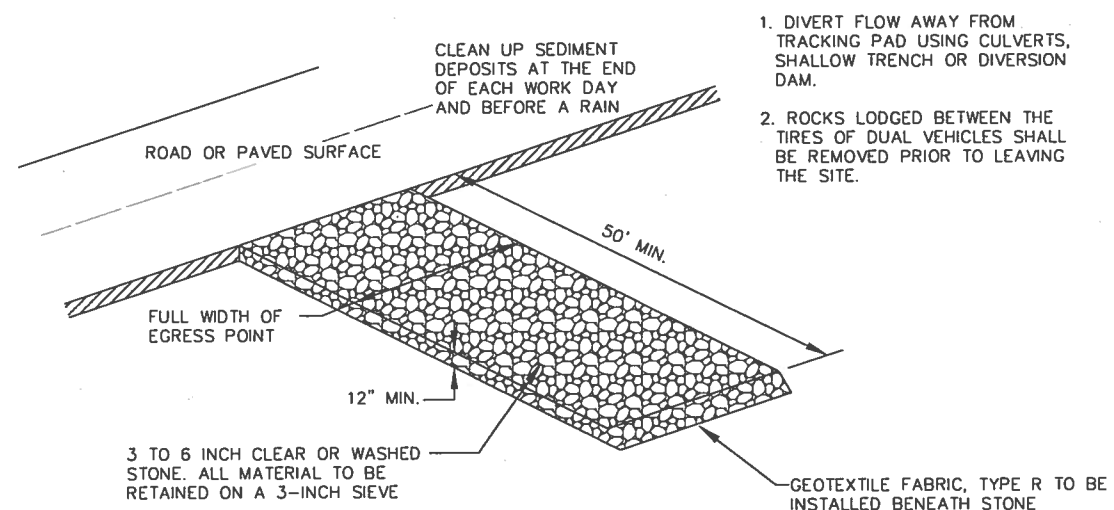
INLET COVER, TYPE A SPECIAL
WEIGHT = 196 LBS.



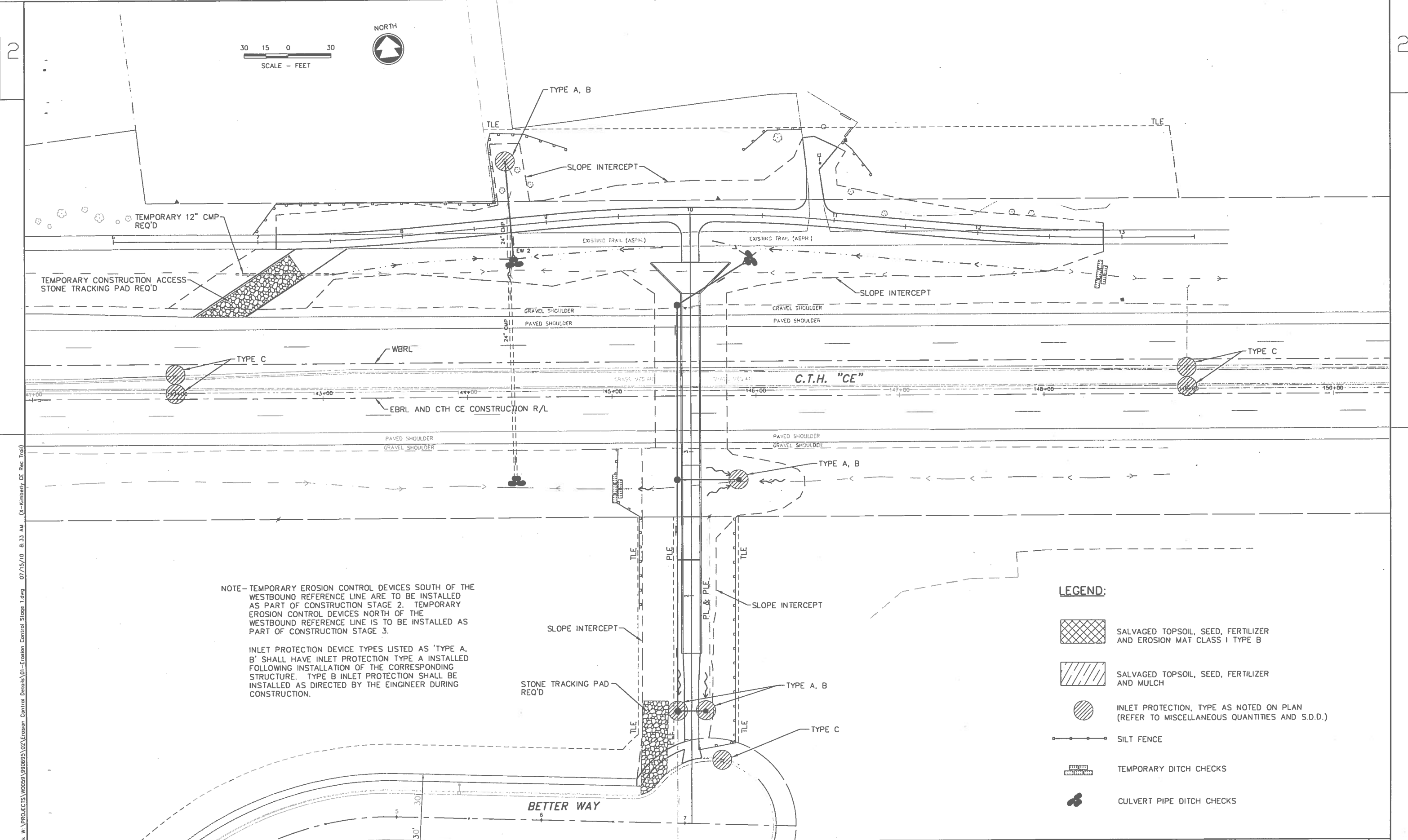


CULVERT PIPE DITCH CHECKS

EW 1 AND EW 2



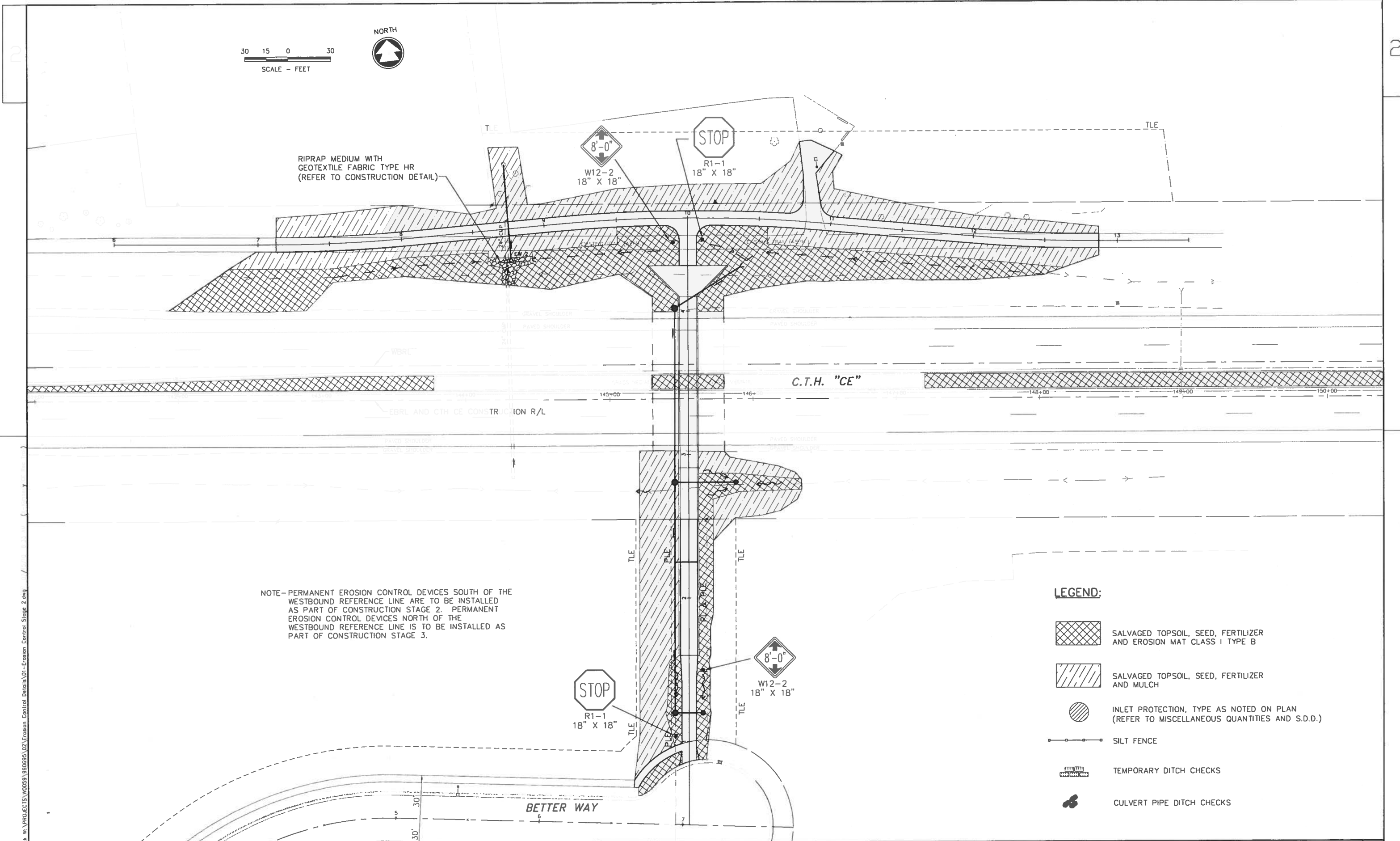
STONE TRACKING PAD DETAIL



NOTE- TEMPORARY EROSION CONTROL DEVICES SOUTH OF THE WESTBOUND REFERENCE LINE ARE TO BE INSTALLED AS PART OF CONSTRUCTION STAGE 2. TEMPORARY EROSION CONTROL DEVICES NORTH OF THE WESTBOUND REFERENCE LINE IS TO BE INSTALLED AS PART OF CONSTRUCTION STAGE 3.

INLET PROTECTION DEVICE TYPES LISTED AS 'TYPE A, B' SHALL HAVE INLET PROTECTION TYPE A INSTALLED FOLLOWING INSTALLATION OF THE CORRESPONDING STRUCTURE. TYPE B INLET PROTECTION SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.

- LEGEND:**
- SALVAGED TOPSOIL, SEED, FERTILIZER AND EROSION MAT CLASS I TYPE B
 - SALVAGED TOPSOIL, SEED, FERTILIZER AND MULCH
 - INLET PROTECTION, TYPE AS NOTED ON PLAN (REFER TO MISCELLANEOUS QUANTITIES AND S.D.D.)
 - SILT FENCE
 - TEMPORARY DITCH CHECKS
 - CULVERT PIPE DITCH CHECKS



RIPRAP MEDIUM WITH
GEOTEXTILE FABRIC TYPE HR
(REFER TO CONSTRUCTION DETAIL)

8'-0"
W12-2
18" X 18"

STOP
R1-1
18" X 18"

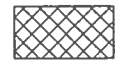
C.T.H. "CE"

NOTE-PERMANENT EROSION CONTROL DEVICES SOUTH OF THE
WESTBOUND REFERENCE LINE ARE TO BE INSTALLED
AS PART OF CONSTRUCTION STAGE 2. PERMANENT
EROSION CONTROL DEVICES NORTH OF THE
WESTBOUND REFERENCE LINE IS TO BE INSTALLED AS
PART OF CONSTRUCTION STAGE 3.

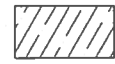
STOP
R1-1
18" X 18"

8'-0"
W12-2
18" X 18"

LEGEND:



SALVAGED TOPSOIL, SEED, FERTILIZER
AND EROSION MAT CLASS I TYPE B



SALVAGED TOPSOIL, SEED, FERTILIZER
AND MULCH



INLET PROTECTION, TYPE AS NOTED ON PLAN
(REFER TO MISCELLANEOUS QUANTITIES AND S.D.D.)



SILT FENCE

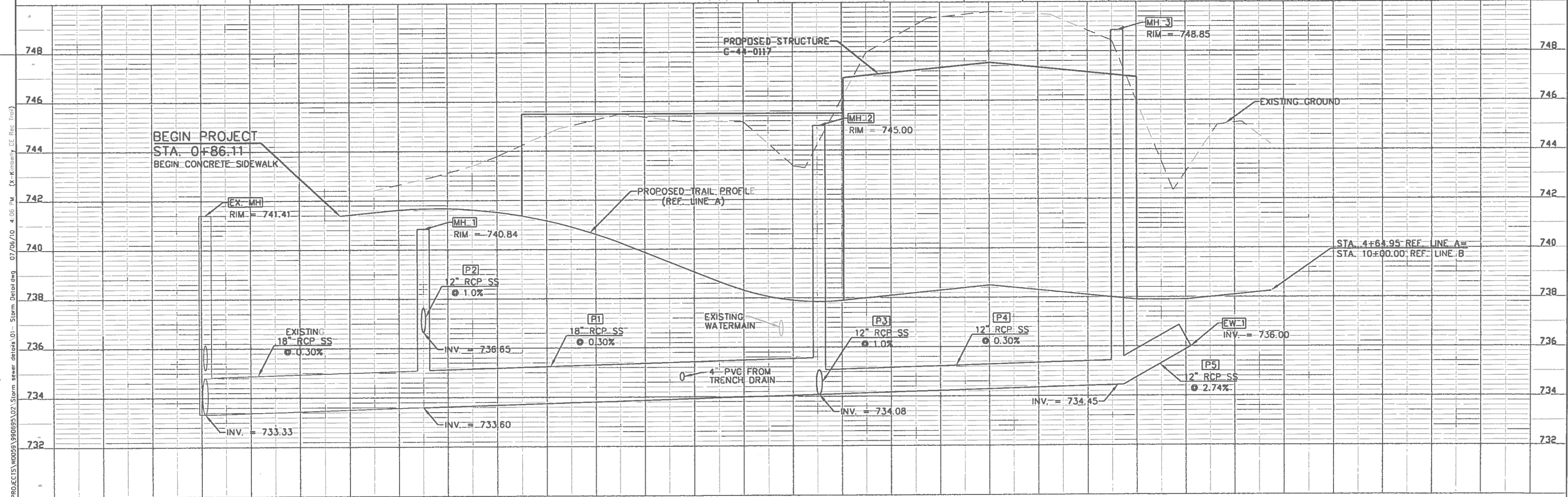
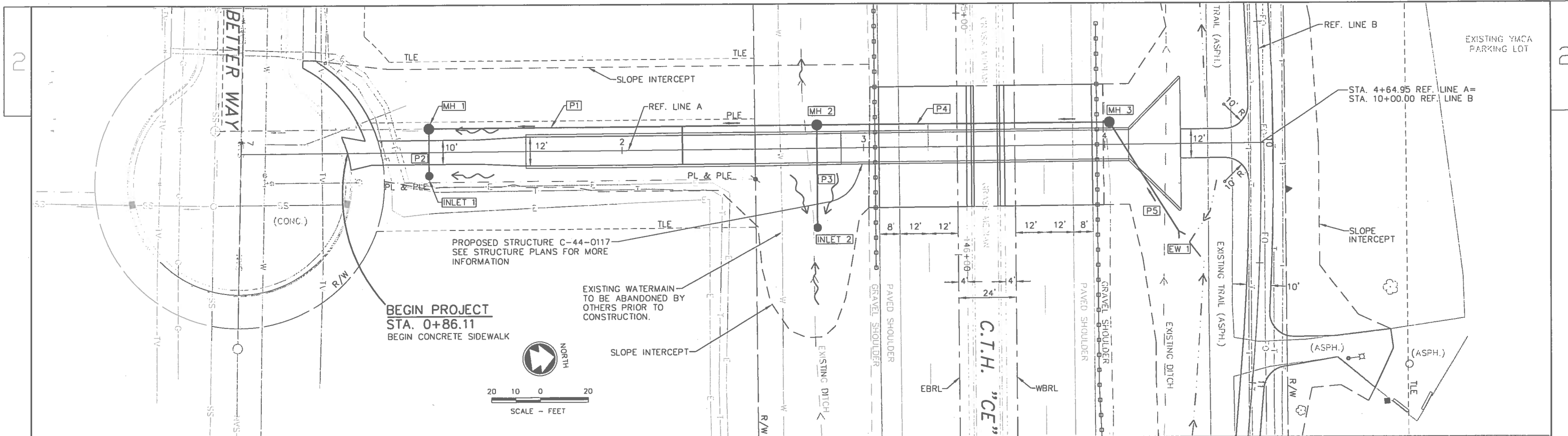


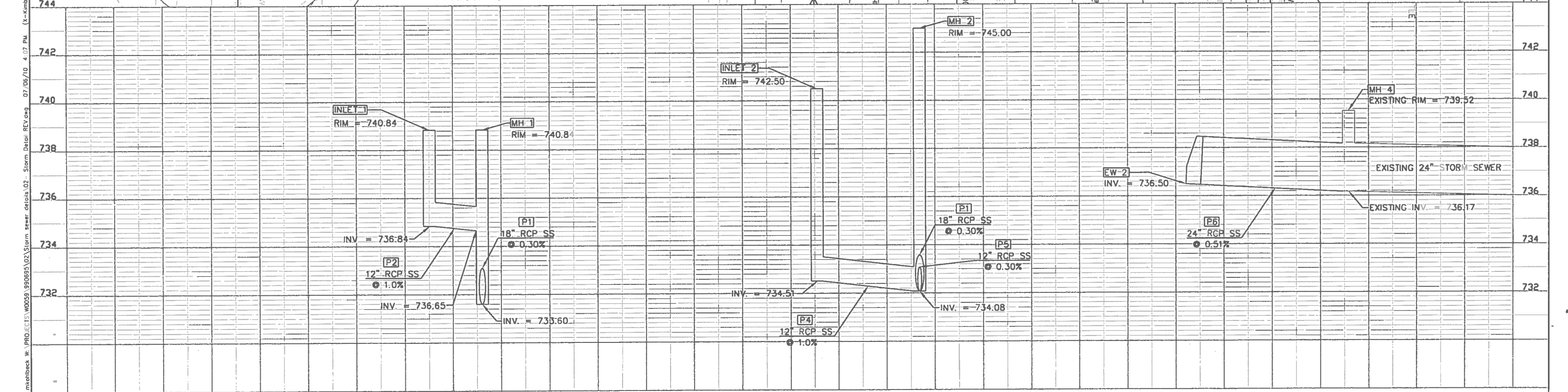
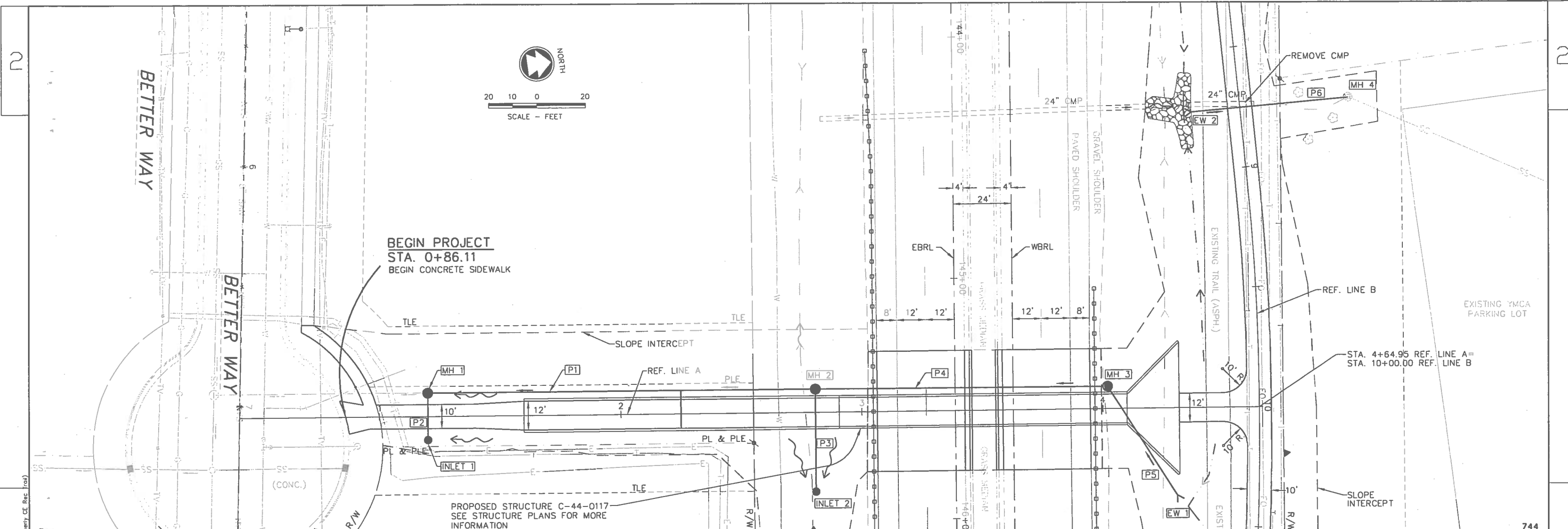
TEMPORARY DITCH CHECKS



CULVERT PIPE DITCH CHECKS

BETTER WAY





mkohlbeck w:\PROJECTS\W0059\990695\02\Quantities\MISC QUANTITIES.dwg 07/07/10 3:07 PM

3

CLEARING AND GRUBBING

LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
8+71.50 LT, REF. LINE B	4	4
8+83.00 LT, REF. LINE B	4	4
11+10, 21' LT, REF. LINE B	4	4
11+35, 8' LT, REF. LINE B	4	4
PROJECT TOTALS	16	16

REMOVING SMALL PIPE CULVERTS
203.0100

STATION	LOCATION	EACH	REMARKS
8+75, REF. LINE B	CROSS CULVERT	1	24" X 28' CMP
PROJECT TOTAL		1	

REMOVING ASPHALTIC SURFACE
204.0110

STATION	LOCATION	S.Y.	DESCRIPTION
140+76 LT - 143+77.50 LT	CTH CE	430	TEMP. CROSSOVER REMOVAL
147+20 LT - 150+55 LT	CTH CE	567	TEMP. CROSSOVER REMOVAL
PROJECT TOTAL *		997	

REMOVING CURB & GUTTER
204.0150

STATION	LOCATION	L.F.
145+30 - 145+80, CTH CE	EASTBOUND MEDIAN	50
145+30 - 145+80, CTH CE	WESTBOUND MEDIAN	50
140+76 - 143+77.50, CTH CE	WESTBOUND MEDIAN	301
140+76 - 143+77.50, CTH CE	EASTBOUND MEDIAN	302
147+38.50 - 150+44, CTH CE	WESTBOUND MEDIAN	306
147+20 - 150+55, CTH CE	EASTBOUND MEDIAN	335
PROJECT TOTAL		1344

EARTHWORK SUMMARY

LOCATION	205.0100 EXCAVATION COMMON C.Y.	FILL C.Y.	*EXPANDED FILL C.Y.	MASS HAUL (WASTE) C.Y.	DESCRIPTION
1+00 - 1+60, REF. LINE A	112	1.5	2	110	
7+12.56 - 12+87.15, REF. LINE B BETTER WAY CONNECTION	3763 18	-	-	3763 18	
TEMP. CROSSOVER STA. 140+76 - STA. 143+77.50	174	-	-	174	STAGE 1 CONSTRUCTION
TEMP. CROSSOVER STA. 147+38.50 - STA. 150+44	227	-	-	227	STAGE 1 CONSTRUCTION
TEMP. CROSSOVER STA. 140+76 - STA. 143+77.50	-	40	52	-52	STAGE 4 RESTORATION
TEMP. CROSSOVER STA. 147+38.50 - STA. 150+44	-	59	77	-77	STAGE 4 RESTORATION
TEMP. CONSTRUCTION ACCESS STA. 6+58 RT - 7+31 RT, REF. LINE B	-	160	208	-208	
PROJECT TOTALS	4294	260.5	339	3955	

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
145+30 - 145+80 LT, CTH CE	GRAVEL SHOULDER	30	-
145+30 - 145+80 RT, CTH CE	GRAVEL SHOULDER	30	-
4+31.65 - 4+59.95, REF. LINE A	TRAIL / STRUCTURE TRANSITION	-	23
0+86.11 - 1+60, REF. LINE A	SIDEWALK	-	34
7+13 - 12+87, REF. LINE B	TRAIL	-	383
10+85 LT, REF. LINE B	TRAIL / YMCA TRANSITION	-	45
145+30 - 145+80 LT, CTH CE	CTH CE EB RECONSTRUCTION	-	222
145+30 - 145+80 RT, CTH CE	CTH CE WB RECONSTRUCTION	-	222
-	BETTER WAY SIDEWALK	-	12
140+76 - 143+77.50 LT, CTH CE	TEMPORARY CROSSOVER	-	286
147+20 - 150+00 LT, CTH CE	TEMPORARY CROSSOVER	-	378
PROJECT TOTALS		60	1605

DRILLED TIE BARS
416.0610

LOCATION	DESC	EACH
145+30 CTH CE	WB MEDIAN CURB AND GUTTER	2
145+30 CTH CE	EB MEDIAN CURB AND GUTTER	2
145+80 CTH CE	WB MEDIAN CURB AND GUTTER	2
145+80 CTH CE	EB MEDIAN CURB AND GUTTER	2
140+76 CTH CE	WB MEDIAN CURB AND GUTTER	2
140+76 CTH CE	EB MEDIAN CURB AND GUTTER	2
143+77.50 CTH CE	EB MEDIAN CURB AND GUTTER	2
143+77.50 CTH CE	WB MEDIAN CURB AND GUTTER	2
147+20 CTH CE	EB MEDIAN CURB AND GUTTER	2
147+38.50 CTH CE	WB MEDIAN CURB AND GUTTER	2
150+44 CTH CE	WB MEDIAN CURB AND GUTTER	2
150+55 CTH CE	EB MEDIAN CURB AND GUTTER	2
PROJECT TOTAL		24

NOTE:
TIE BARS REQ'D BETWEEN EXISTING CURB & GUTTER
AND PROPOSED CURB & GUTTER, 1'-6" C-C

ASPHALTIC ITEMS

STATION TO STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	455.0605 TACK COAT GAL
145+30 - 145+80, CTH CE	EB LANES	70	-	10
145+30 - 145+80, CTH CE	WB LANES	70	-	10
7+12.56 - 12+87.15, REF. LINE B	ASPHALT TRAIL	110	-	-
4+31.65 - 4+59.95, REF. LINE A	ASPHALT TRAIL	7	-	-
10+85 LT, REF. LINE B	ASPHALT TRAIL (TRANSITION)	14	-	-
140+76 - 143+77.50, CTH CE	TEMPORARY CROSSOVER	-	120	-
147+20 - 150+55, CTH CE	TEMPORARY CROSSOVER	-	156	-
140+76 - 143+77.50, CTH CE	*WB LANES	24	-	2
140+76 - 143+77.50, CTH CE	*EB LANES	24	-	2
147+38.50 - 150+44, CTH CE	*WB LANES	25	-	2
147+20 - 150+55, CTH CE	*EB LANES	25	-	2
PROJECT TOTALS		369	276	28

CULVERT PIPE TEMPORARY 12-INCH
520.4012

STATION TO STATION	LOCATION	L.F.
6+85 RT. - 7+52 RT.	REF. LINE B	68
PROJECT TOTAL		68

CONCRETE CURB & GUTTER, TYPE D

STATION TO STATION	LOCATION	601.0557 6-INCH SLOPED 36-INCH LF
145+30 - 145+80	CTH CE, WB MEDIAN	50
145+30 - 145+80	CTH CE, EB MEDIAN	50
140+76 - 143+77.50	CTH CE, WB MEDIAN	301
140+76 - 143+77.50	CTH CE, EB MEDIAN	302
147+20 - 150+55	CTH CE, EB MEDIAN	335
147+38.50 - 150+44	CTH CE, WB MEDIAN	306
PROJECT TOTAL		1344

3

CONCRETE SIDEWALK 6-INCH
602.0415

STATION TO STATION	LOCATION	S.F.	REMARKS
0+86.11 - 1+60	REF. LINE A BETTER WAY	761 217	TRAIL 5' CONCRETE SIDEWALK
PROJECT TOTAL		978	

CURB RAMP DETECTABLE WARNING FIELD YELLOW
602.0505

STATION	LOCATION	S.F.
0+87.50	REF. LINE A	16
PROJECT TOTAL		16

RIPRAP MEDIUM & GEOTEXTILE FABRIC HR

STATION	LOCATION	RIPRAP MEDIUM 606.0200	GEOTEXTILE FABRIC TYPE HR 645.0120
		CY	SY
8+75 RT, REF. LINE B	CTH CE DITCH	17	52
PROJECT TOTALS		17	52

STORM SEWER SUMMARY

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	OUTLET ELEVATION	608.0312	608.0318	608.0324	SLOPE %	REMARKS
					RCPSS CLASS III 12-INCH L.F.	RCPSS CLASS III 18-INCH L.F.	RCPSS CLASS III 24-INCH L.F.		
P1	MH2	MH1	734.08	733.60		161		0.30	
P2	INLET 1	MH1	736.84	736.65	20			0.95	
P3	INLET 2	MH2	734.51	734.08	43			1.00	
P4	MH3	MH2	734.45	734.08	121			0.31	
P5	EW1	MH3	736.00	734.45	51			2.77	*
P6	EW2	MH4	736.50	736.17		60		0.51	*
PROJECT TOTALS					235	161	60		

* JOINT TIES REQUIRED - NON-BID ITEM, FOR INFORMATIONAL PURPOSES ONLY.

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE
PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS.

STORM SEWER STRUCTURES

STRUCTURE NO.	STATION	LOCATION	ENDWALLS		MANHOLES 611.0201 TYPE 1 EACH	INLETS 611.0301 TYPE 1 EACH	INLET COVERS SPV.0060.05 TYPE A SPECIAL EACH		MANHOLE COVERS 611.0530 TYPE J EACH		RIM ELEVATION	FLOWLINE OF STRUCTURE	STRUCTURE DEPTH
			522.1012 12-INCH EACH	522.1024 24-INCH EACH									
MH1	1+20.00, REF. LINE A	11' LT.			1		1				740.84	733.60	6.74
INLET 1	1+20.00, REF. LINE A	11' RT.				1	1	1			740.84	736.84	3.50
MH2	2+81.00, REF. LINE A	10' LT.			1				1		745.00	734.08	9.67
INLET 2	2+81.00, REF. LINE A	33' RT.				1	1	1			742.50	734.51	7.49
MH3	4+02.00, REF. LINE A	10' LT.			1				1		748.85	734.45	13.15
EW1	4+32.00, REF. LINE A	38.6' RT.	1								--	736.00	--
EW2	8+75, REF. LINE B	23' RT.		1							--	736.50	--
PROJECT TOTALS			1	1	3	2	3		2				

LOCATION IS TO CENTER OF STRUCTURE FOR MANHOLES AND TYPE 1 INLETS

LOCATION IS TO CENTER OF INFLOW POINT FOR ENDWALLS

FLOW LINE OF STRUCTURE = LOWEST PIPE FLOW LINE ELEVATION ENTERING STRUCTURES

FLOW LINE OF STRUCTURE = CENTER OF INFLOW POINT FOR ENDWALLS

RIM ELEVATION = FINISHED FLOWLINE OF CASTING AT TYPE 1 INLETS WITH TYPE A SPECIAL CASTINGS

RIM ELEVATION = TOP OF CASTING FOR STRUCTURES WITH TYPE J MANHOLE CASTINGS

STRUCTURE DEPTH = RIM ELEVATION MINUS FLOW LINE OF STRUCTURE MINUS 6" FOR TYPE 1 MANHOLES AND TYPE 1 INLETS WITH TYPE A SPECIAL CASTINGS

STRUCTURE DEPTH = RIM ELEVATION MINUS FLOW LINE OF STRUCTURE MINUS 15" FOR TYPE 1 MANHOLES WITH TYPE J MANHOLE CASTINGS

STEEL PLATE BEAM GUARD CLASS A
614.0305

STATION	LOCATION	L.F.
144+55 RT - 146+05 RT	CTH CE	150
145+05 RT - 146+55 RT	CTH CE	150
PROJECT TOTAL		300

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
614.0370

STATION	LOCATION	EACH
144+05 RT - 144+55 RT	CTH CE	1
146+55 LT - 147+05 LT	CTH CE	1
PROJECT TOTAL		2

WATER
624.0100

STATION TO STATION	LOCATION	MGAL
0+61.74 - 3+02.90	REF. LINE A	2
6+38 - 12+87.15	REF. LINE B	2
140+76 - 150+55	CTH CE	2
PROJECT TOTALS		6

3

LANDSCAPING SUMMARY

STATION	LOCATION	625.0500	627.0200	628.2004	629.0210	630.0140	630.0200
		SALVAGED TOPSOIL	MULCHING	EROSION MAT CLASS I TYPE B	FERTILIZER TYPE B	SEEDING MIXTURE NO. 40 LB.	SEEDING TEMPORARY LB.
		S.Y.	S.Y.	S.Y.	CWT.		
0+61.74 LT. - 3+02.90 LT.	REF. LINE A	705	609	96	0.45	13	10
0+87 RT. - 3+02.90 RT.	REF. LINE A	484	194	290	0.31	9	7
6+38 RT. - 12+87.15 RT.	REF. LINE B	2132	632	1500	1.34	39	29
7+12.56 LT. - 12+87.15 LT.	REF. LINE B	1045	1045	-	0.66	19	14
145+30 - 145+80	CTH CE	56	-	56	0.04	1	1
140+76 LT - 143+77.50 LT	CTH CE	240	-	240	0.15	5	4
147+20 LT - 150+55 LT	CTH CE	360	-	360	0.23	7	5
UNDISTRIBUTED	PROJECT LIMITS	502	248	254	0.32	24	18
PROJECT TOTALS		5524	2728	2796	3.50	117	88

SILT FENCE

STATION TO STATION	LOCATION	628.1504 SILT FENCE L.F.	628.1520 SILT FENCE MAINTENANCE L.F.
0+90 RT. - 2+55 RT.	REF. LINE A	185	185
1+90 LT. - 3+02 LT.	REF. LINE A	100	100
6+96 LT. - 9+20 LT.	REF. LINE B	285	285
10+35 LT. - 10+73 LT.	REF. LINE B	50	50
11+00 LT. - 11+24 LT.	REF. LINE B	30	30
PROJECT TOTALS		650	650

3

INLET PROTECTION

STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH
142+00 LT.	CTH CE			2
149+00 LT.	CTH CE			2
0+86 RT.	REF. LINE A		1	1
1+20 LT.	REF. LINE A	1	1	1
1+20 RT.	REF. LINE A	1	1	1
2+81 RT.	REF. LINE A	1	1	1
8+75 LT.	REF. LINE B	1	1	
PROJECT TOTAL		4	4	5

DITCH CHECKS

STATION	LOCATION	628.7504 TEMPORARY L.F.	628.7550 CULVERT PIPE EACH	REMARKS
144+33.50 RT.	CTH CE		1	EXISTING 24" CMP
145+00 RT.	CTH CE	9		CTH CE DITCH
8+18 RT.	REF. LINE B	9		CTH CE DITCH
8+75 RT.	REF. LINE B		1	24" RCP STORM SEWER
10+38.50 RT.	REF. LINE B		1	12" RCP STORM SEWER
11+30 RT.	REF. LINE B	9		CTH CE DITCH
12+88 RT.	REF. LINE B	9		CTH CE DITCH
PROJECT TOTAL		36	3	

PERMANENT SIGNING QUANTITIES

SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE (W x H) IN	634.0809 POSTS TUBULAR STEEL 2 x 2-INCH x 9.5-FT EACH	637.0202 SIGNS REFLECTIVE TYPE II SF
01	1+04	REF LINE A - 9.25' LT	R1-1	STOP	18 x 18	1	1.86
02	1+50	REF LINE A - 9.75' RT	W12-2	LOW CLEARANCE	18 x 18	1	2.25
03	4+48	REF LINE A - 10.25' LT	W12-2	LOW CLEARANCE	18 x 18	1	1.86
04	4+50	REF LINE A - 10.25' RT	R1-1	STOP	18 x 18	1	2.25
PROJECT TOTALS						4	8.22

MOUNTING HEIGHTS SHALL BE 4-5 FT FROM THE EDGE OF PAVEMENT TO BOTTOM EDGE OF SIGN

TRAFFIC CONTROL

STAGE	SERVICE PERIOD (DAYS)	643.0900		643.0420 BARRICADES TYPE III		643.0300		643.0705 WARNING LIGHTS TYPE A		643.0715 WARNING LIGHTS TYPE C	
		(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)
1	3	49	147	4	12	91	273	8	24	20	60
2	35	60	2100	8	280	140	4900	16	560	85	2975
3	46	73	3358	8	368	126	5796	16	736	68	3128
4	7	49	343	4	28	91	637	8	56	20	140
PROJECT TOTALS		231	5948	24	688	448	11606	48	1376	193	6303

3

PAVEMENT MARKING

STATION TO STATION	LOCATION	646.0106	646.0106	646.0106
		EPOXY 4-INCH (EDGE LINE, YELLOW)	EPOXY 4-INCH (EDGE LINE, WHITE)	EPOXY 4-INCH (LANE LINE, WHITE)
		L.F.	L.F.	L.F.
145+30 - 145+80	CTH CE, WB LANES	50		
145+30 - 145+80	CTH CE, EB LANES		50	13
150+43 - 154+19	CTH CE, WB LANES	50		89
144+15.00 - 147+16.00	CTH CE, WB LANES			75
140+47 - 141+60	CTH CE, EB LANES	113		
142+92.50 - 144+05.50	CTH CE, WB LANES	113		
142+40 - 150+43	CTH CE, WB LANES		803	
147+25 - 148+39	CTH CE, WB LANES	113		
149+71 - 150+84	CTH CE, EB LANES	113		
141+34 - 142+20	CTH CE, WB LANES	86		
142+77 - 143+88	CTH CE, EB LANES	111		
146+92.50 - 147+98.50	CTH CE, EB LANES	106		
149+31 - 150+51	CTH CE, WB LANES	120		
PROJECT TOTALS		975	853	177
646.0106 TOTAL PAVEMENT MARKING EPOXY 4-INCH=		2005		

SAWING ASPHALT
690.0150

STATION	LOCATION	L.F.	DESCRIPTION
145+30	CTH CE	37	WB MATCH POINT
145+30	CTH CE	37	EB MATCH POINT
145+80	CTH CE	37	WB MATCH POINT
145+80	CTH CE	37	EB MATCH POINT
7+12.56	REF. LINE B	10	TRAIL MATCH POINT
12+87.15	REF. LINE B	10	TRAIL MATCH POINT
10+74.20 - 10+98.00 LT	REF. LINE B	26	MATCH POINT (YMCA)
140+76 - 143+77.50	CTH CE, WB LANES	305	CROSS OVER RESTORATION
140+76 - 143+77.50	CTH CE, EB LANES	306	CROSS OVER RESTORATION
147+38.50 - 150+44	CTH CE, WB LANES	310	CROSS OVER RESTORATION
147+20 - 150+55	CTH CE, EB LANES	339	CROSS OVER RESTORATION
PROJECT TOTAL		1454	

SAWING CONCRETE
690.0250

STATION	LOCATION	L.F.	DESCRIPTION
145+30	CTH CE	6	EB & WB MEDIAN C&G
145+80	CTH CE	6	EB & WB MEDIAN C&G
140+76	CTH CE	6	EB & WB MEDIAN C&G
143+77.50	CTH CE	6	EB & WB MEDIAN C&G
147+20	CTH CE	3	EB MEDIAN C&G
147+38.50	CTH CE	3	WB MEDIAN C&G
150+44	CTH CE	3	WB MEDIAN C&G
150+55	CTH CE	3	EB MEDIAN C&G
PROJECT TOTAL		36	

UTILITY LINE OPENING
SPV.0060.04

STATION	LOCATION	QUANTITY EACH
UNDISTRIBUTED	PROJECT 4160-04-71	2
PROJECT TOTAL		2

TEMPORARY PAVEMENT MARKING & REMOVING PAVEMENT MARKINGS

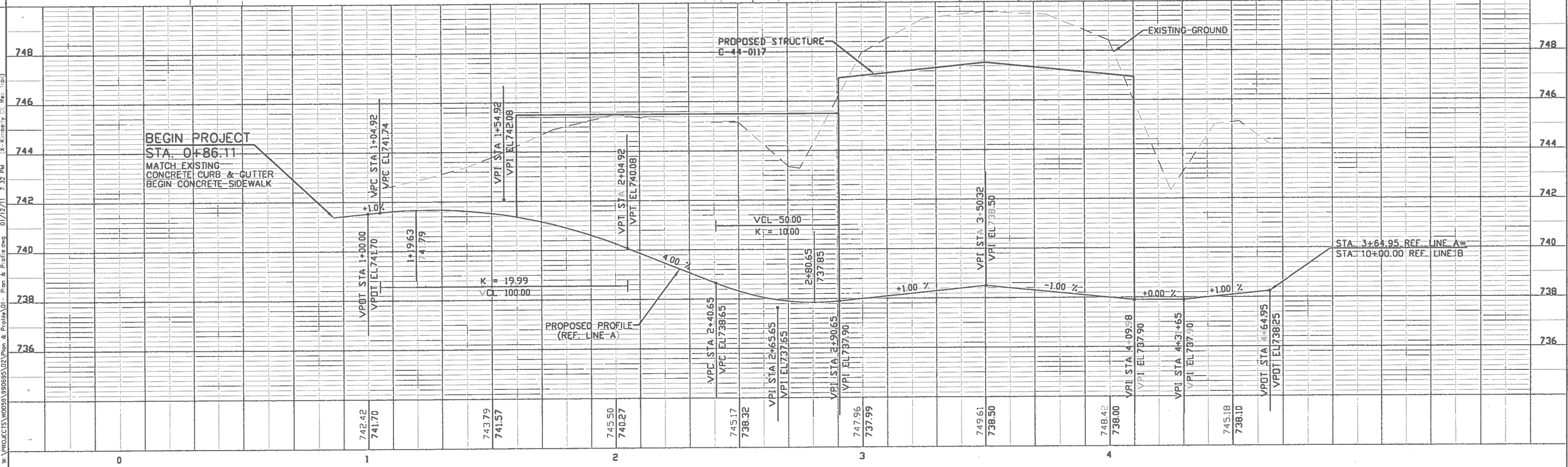
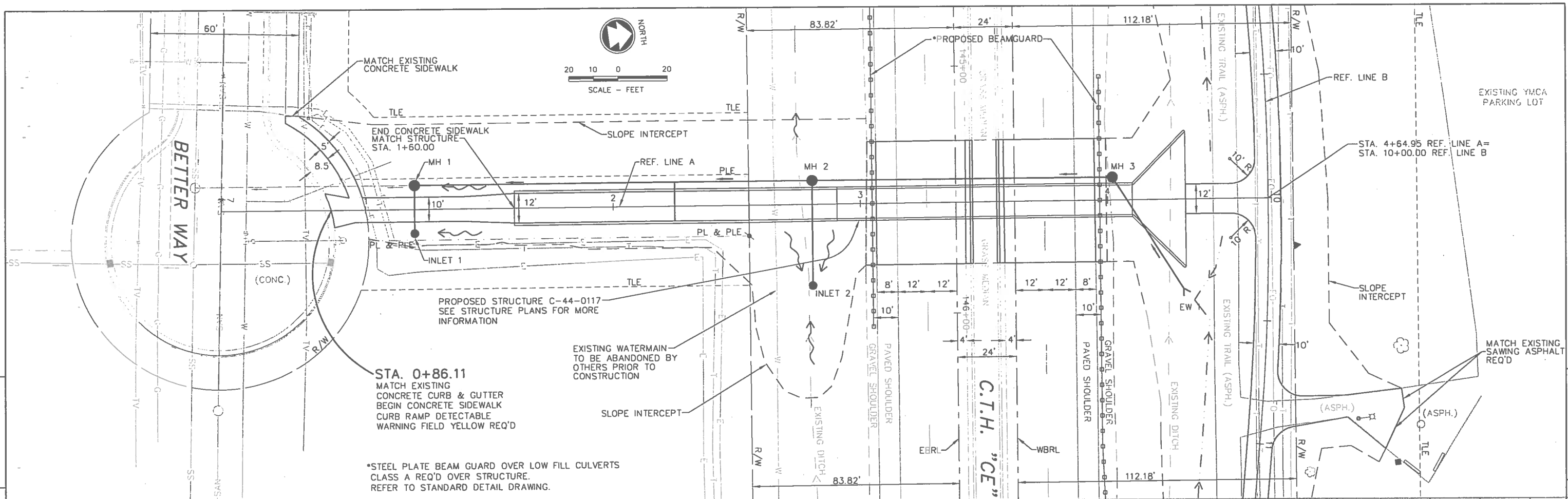
STATION TO STATION	STAGE	LOCATION	649.0400	649.0400	649.0400	649.0801	649.1200	646.0600
			REMOVABLE TAPE 4-INCH (YELLOW)	REMOVABLE TAPE 4-INCH (WHITE)	REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)	REMOVABLE TAPE 8-INCH	STOP LINE REMOVABLE TAPE 18-INCH	REMOVING PAVEMENT MARKINGS
			L.F.	L.F.	L.F.	L.F.	L.F.	L.F.
132+94.25 - 136+10.25	1	CTH CE, EB LANES	--	316	--	--	--	--
139+20.33 - 140+20.33	1	CTH CE, WB LANES	100	--	--	--	--	--
139+20.33 - 140+20.33	1	CTH CE, WB LANES	--	--	--	100	--	--
151+00 - 153+44.70	1	CTH CE, WB LANES	245	--	--	--	--	63
134+90.25 - 136+09.25	2	CTH CE, EB LANES	--	119	--	--	--	--
136+09.25 - 137+09.25	2	CTH CE, EB LANES	--	--	--	100	--	--
140+37.50 - 149+71.00	2	CTH CE, EB LANES	--	937	--	--	--	--
140+47.00 - 144+56.50	2	CTH CE, EB LANES	412	--	--	--	--	--
146+74.00 - 150+84.00	2	CTH CE, EB LANES	412	--	--	--	--	--
143+39.70 - 144+56.50	2	CTH CE, WB LANES	117	--	--	--	--	--
146+74.00 - 152+88.00	2	CTH CE, WB LANES	615	--	--	--	--	--
144+56.50 - 146+74.00	2	CTH CE, EB & WB LANES	--	--	435	--	--	--
142+40.00 - 150+43.00	2	CTH CE, WB LANES	--	804	--	--	--	--
140+47.00 - 141+60.00	2	CTH CE, EB LANES	--	--	--	--	--	113
142+40.00 - 150+43.00	2	CTH CE, WB LANES	--	--	--	--	--	803
142+92.50 - 144+05.50	2	CTH CE, EB LANES	--	--	--	--	--	113
144+15.00 - 147+16.00	2	CTH CE, EB LANES	--	--	--	--	--	75
147+25.00 - 148+39.00	2	CTH CE, EB LANES	--	--	--	--	--	113
149+71.00 - 150+84.00	2	CTH CE, EB LANES	--	--	--	--	--	113
150+43.00 - 151+00.00	2	CTH CE, WB LANES	--	--	--	--	--	13
132+94.25 - 136+10.25	3	CTH CE, EB LANES	--	316	--	--	--	--
139+37.00	3	CTH CE, WB LANES	--	--	--	--	12	--
139+37.00 - 146+83.00	3	CTH CE, EB & WB LANES	--	--	1526	--	--	--
140+35.80 - 142+77.00	3	CTH CE, WB LANES	--	243	--	--	--	--
141+47.25 - 154+19.00	3	CTH CE, WB LANES	--	1275	--	--	--	--
146+83.00 - 150+51.00	3	CTH CE, WB LANES	370	--	--	--	--	--
141+34.00 - 142+20.00	3	CTH CE, WB LANES	--	--	--	--	--	86
142+77.00 - 143+88.00	3	CTH CE, WB LANES	--	--	--	--	--	111
146+92.50 - 147+98.50	3	CTH CE, WB LANES	--	--	--	--	--	106
149+31.00 - 150+51.00	3	CTH CE, WB LANES	--	--	--	--	--	120
153+44.70 - 154+19.00	3	CTH CE, WB LANES	--	--	--	--	--	13
138+48.00 - 139+37.00	3	CTH CE & RAILROAD ST INTER.	--	--	--	60	--	--
132+94.25 - 136+10.25	4	CTH CE, EB LANES	--	316	--	--	--	--
139+20.33 - 140+20.33	4	CTH CE, WB LANES	100	--	--	--	--	--
139+20.33 - 140+20.33	4	CTH CE, WB LANES	--	--	--	100	--	--
PROJECT TOTALS			2371	4326	1961	360	12	1842
649.0400 TOTAL REMOVABLE TAPE 4-INCH=			8658					

STONE TRACKING PAD
SPV.0060.06

STATION	LOCATION	EACH
0+62 LT - 1+27 LT	REF. LINE A	1
6+58 RT - 7+31 RT	REF. LINE B	1
PROJECT TOTAL		2

PVC SDR 35, 4-INCH
SPV.0090.02

STATION	LOCATION	QUANTITY L.F.	DESCRIPTION
2+25	REF. LINE A	4	TRENCH DRAIN TO PIPE RUN P1
2+80.65	REF. LINE A	3	TRENCH DRAIN TO PIPE RUN P3
PROJECT TOTAL		7	

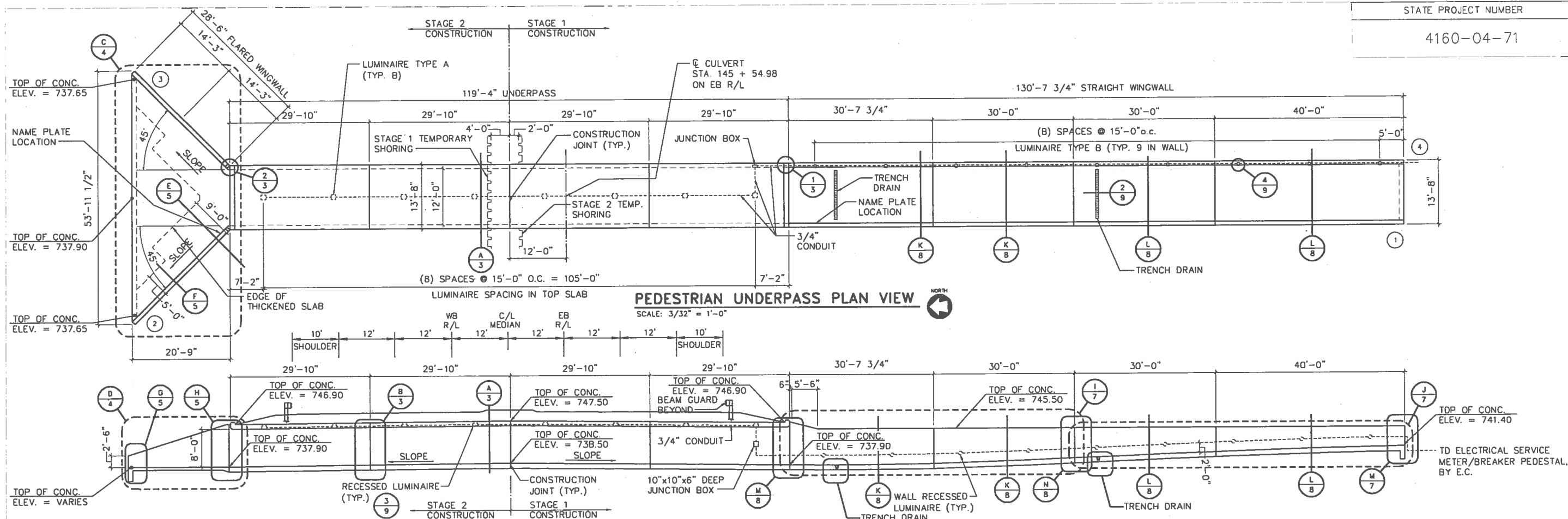


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STATE PROJECT NUMBER

4160-04-71



NOTES

1. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
2. THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-44-0117" SHALL BE THE EXISTING GROUND LINE.
3. WHEN STRUCTURE BACKFILL IS REQUIRED: ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACK FILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION WITHIN THE LENGTH OF THE UNDERPASS.
4. 8" BACKFILL COARSE AGGREGATE SIZE NO. 1 SHALL BE PLACED BENEATH THE ENTIRE STRUCTURE. BACKFILL COARSE AGGREGATE SIZE NO. 1 SHALL BE 8" THICK BELOW ALL CONCRETE TO THE LIMITS OF THE STRUCTURE.
5. RUBBERIZED MEMBRANE WATERPROOFING SHALL BE 18" WIDE AND LOCATED ON ALL CONSTRUCTION JOINTS.

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION: M213.

DESIGN DATA

LIVE LOAD: - HL93
DESIGN RATING - HL93
EARTH LOAD: - DESIGNED FOR 2.0 FT. FILL DEPTH
ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY - $f'_c = 3,500$ psi
HIGH STRENGTH BAR STEEL REINFORCEMENT - $f_y = 60,000$ psi
TRAFFIC DATA:
ADT (2010) - 27,100
ADT (2030) - 38,000
OHV (2030) - 4,370
D.D. - 50/50
T (% OF ADT) - 3.0
SPEED LIMIT - 45 MPH

TOTAL ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	UNDERPASS	FLARED WINGWALL	STRAIGHT WINGWALL	TOTALS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS (C-44-0117)	L.S.	—	—	—	1
504.0100	CONCRETE MASONRY CULVERTS	C.Y.	185	39	123	347
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB.	34,230	4,080	14,760	53,070
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	103	10	50	163
210.0100	BACKFILL STRUCTURE	C.Y.	—	—	—	1,750
209.0300.S	BACKFILL COARSE AGGREGATE SIZE NO. 1	C.Y.	—	—	—	102
652.0105	CONDUIT RIGID METALLIC - 3/4"	L.F.	125	—	135	260
SPV.0060.03	JUNCTION BOX - 10x10x6	EA.	1	—	—	1
655.0615	ELECTRICAL WIRE LIGHTING 10AWG	L.F.	400	—	430	830
656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL	L.S.	—	—	—	1
SPV.0060.02	LIGHTING UNITS WALKWAY - RECESSED CEILING LUMINAIRE	EA.	8	—	—	8
SPV.0060.01	LIGHTING UNITS WALKWAY - WALL RECESSED LUMINAIRE	EA.	—	—	9	9
SPV.0090.01	TRENCH DRAIN COVER	L.F.	—	—	20	20
206.6010.S	TEMPORARY SHDRING STRUCTURE C-44-0117	L.S.	—	—	—	1
	NON-BIO ITEMS	UNIT	UNDERPASS	FLARED WINGWALL	STRAIGHT WINGWALL	TOTALS
	FILLER - SEAL ALL EXPOSED HORIZ. & VERTICAL SURFACES OF 1/2" & 3/4" FILLER WITH JOINT SEALER	SIZE				1/2", 3/4"

LIST OF DRAWINGS

1. PEDESTRIAN UNDERPASS PLAN & SECTION
2. SOIL BORINGS
3. PEDESTRIAN UNDERPASS TRANSVERSE SECTION & SECTIONS
4. WINGWALL REINFORCEMENT PLAN AND ELEVATION
5. WINGWALL SECTIONS AND CULVERT SECTIONS
6. WINGWALL BILL OF BARS
7. WINGWALL ELEVATIONS
8. WINGWALL SECTIONS
9. DETAILS



NO.	DATE	REVISION	BY
Plans Prepared By			
McMAHON ENGINEERS ARCHITECTS			
WISDOT BUREAU OF STRUCTURES			
APPROVED			
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE C-44-0117			
CTH CE PEDESTRIAN UNDERPASS			
COUNTY	OUTAGAMIE	VILLAGE	KIMBERLY
DESIGN SPEC.	AASHTO LRFD DESIGN SPEC. 4th EDITION	LOAD	HL-93
DESIGNED BY	MOB	DESIGN CK'D.	MOB
DRAWN BY	SEG	PLANS CK'D.	MOB
PED. UNDERPASS PLAN & SECTION			SHEET 1 OF 9

I.D. _____ date: _____

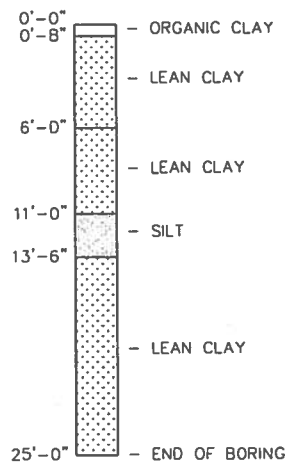
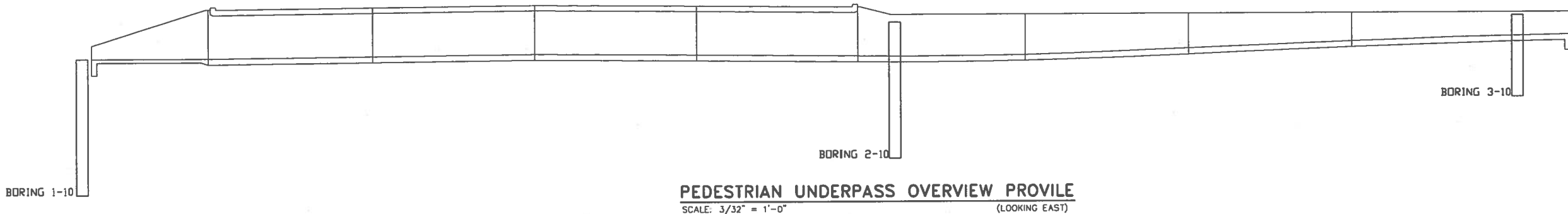
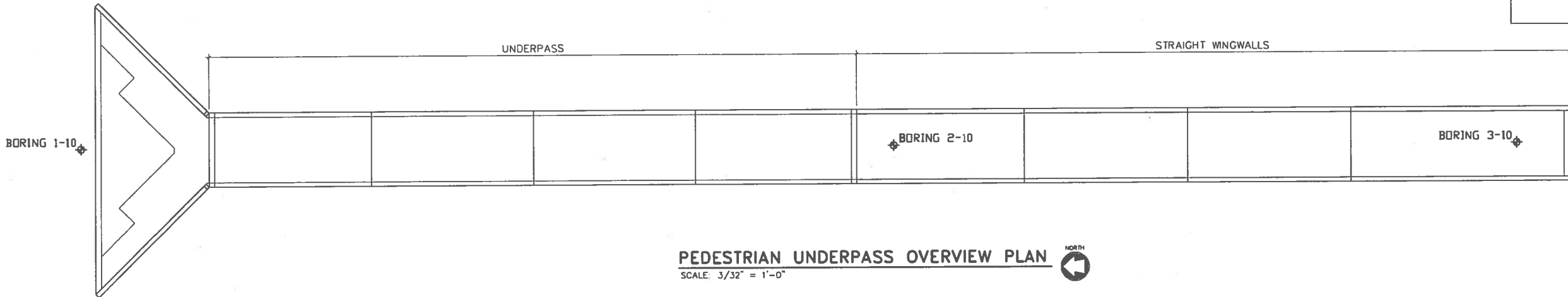
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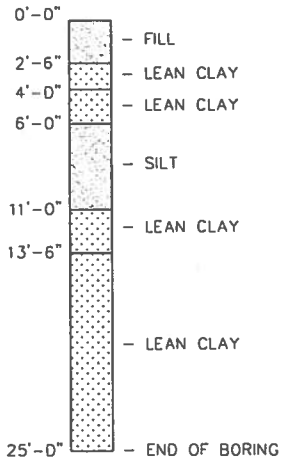
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STATE PROJECT NUMBER

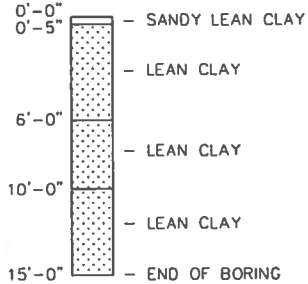
4160-04-71



SOIL BORING 1-10



SOIL BORING 2-10



SOIL BORING 3-10

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEC	PLANS CK'D MOB
DETAILS			SHEET 2 OF 9
			CTH CE

8

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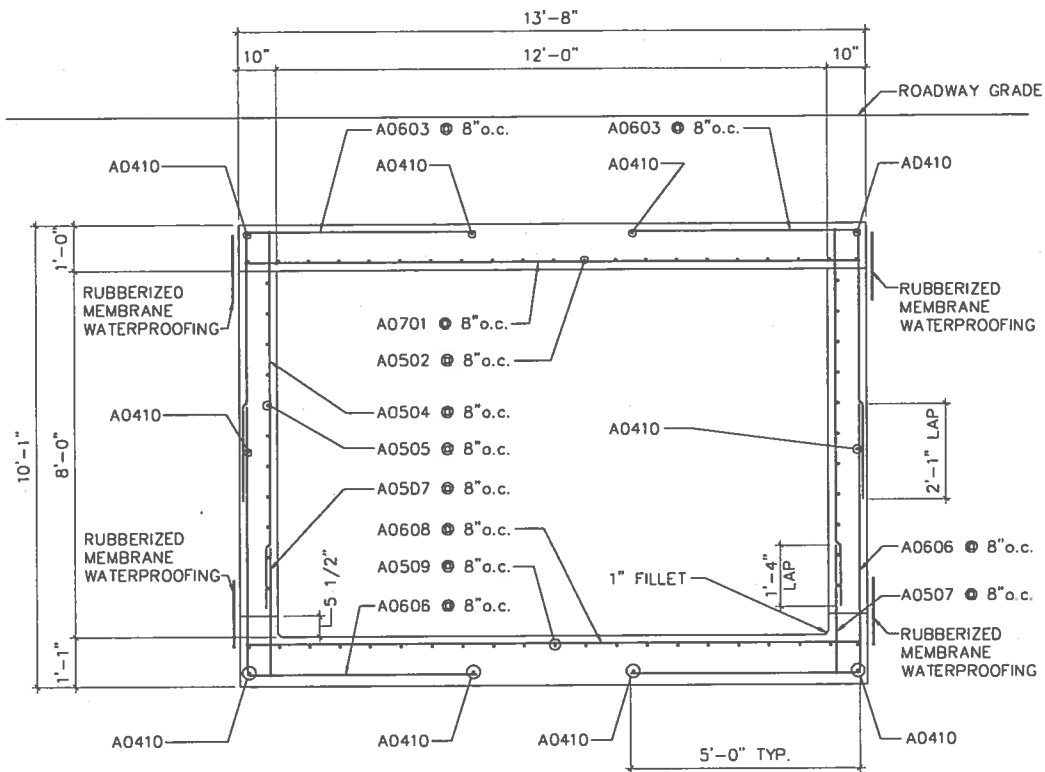
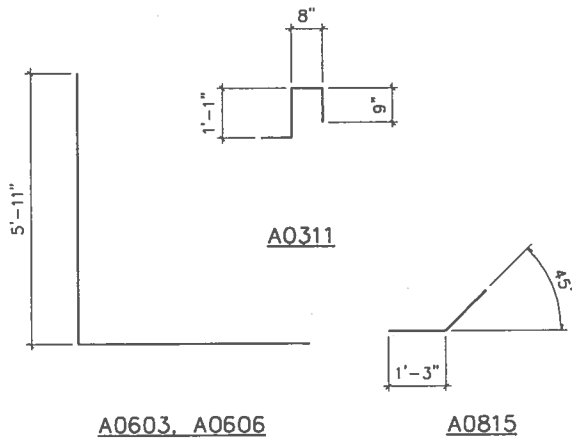
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08

BILL OF BARS					
BAR MARK	NO. REQ'D.	LENGTH	BENT	SERIES	LOCATION
A0701	179	13'-4"			TRANSVERSE BARS - TOP SLAB
A0502	84	29'-6"			LONGITUDINAL BARS - TOP SLAB
A0603	358	10'-11"	X		BENT BARS - TOP SLAB
A0504	358	9'-8"			VERTICAL BARS - WALLS
A0505	88	29'-6"			HORIZONTAL BARS - WALLS
A0606	358	10'-11"	X		DOWEL BARS - WALL OUTSIDE FACE
A0507	358	2'-8"			DOWEL BARS - WALL INSIDE FACE
A0608	179	13'-4"			TRANSVERSE BARS - BOTTOM SLAB
A0509	84	29'-6"			LONGITUDINAL BARS - BOTTOM SLAB
A0410	40	29'-6"			STABILIZING BARS
A0311	42	3'-2"	X		HEADER
A0412	4	13'-4"			HEADER
A0513	120	4'-0"			CONSTRUCTION JOINT
A0514	26	4'-0"			ENDS OF UNDERPASS
A0815	2	2'-6"	X		SMDDTH BAR - CULVERT TO FLARED WINGWALL
A0816	2	2'-6"			SMOOTH BAR - CULVERT TO STRAIGHT WINGWALL

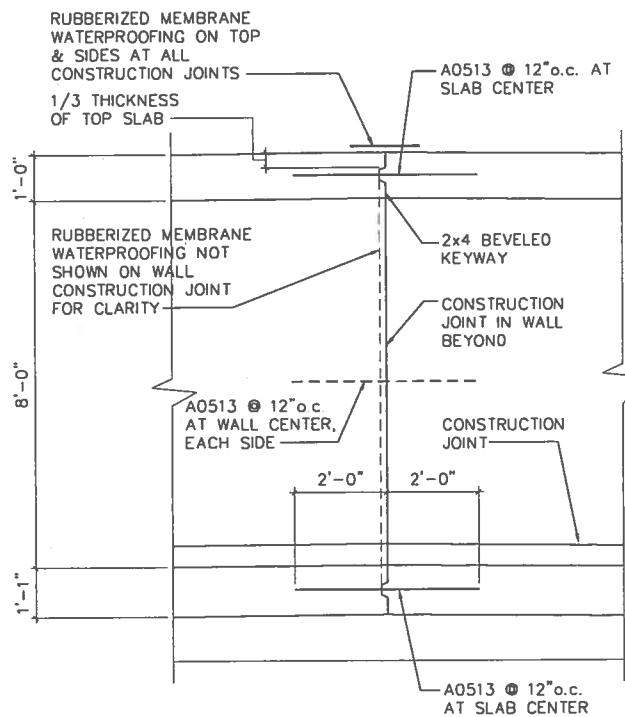
BAR NOTES

- THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- DIMENSIONS IN BENDING DETAILS ARE "OUT TO OUT" OF BAR.
- THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).



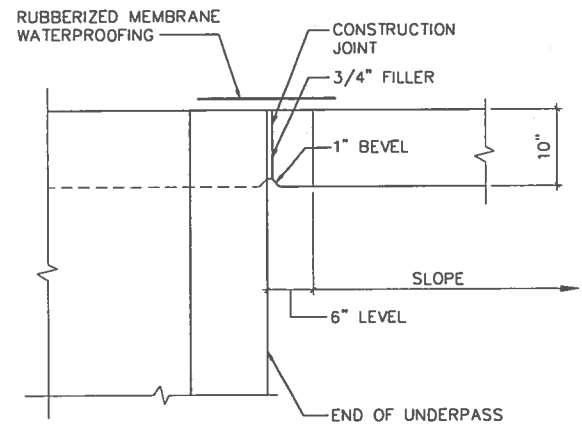
PEDESTRIAN UNDERPASS - TRANSVERSE SECTION

SCALE: 1/2" = 1'-0"



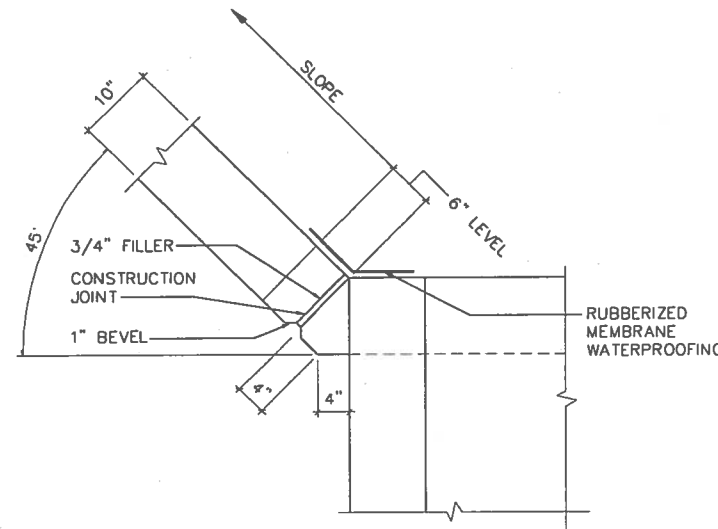
PARTIAL CULVERT SECTION

SCALE: 1/2" = 1'-0"



WINGWALL TO UNDERPASS DETAIL 1

SCALE: 1" = 1'-0"



WINGWALL TO UNDERPASS DETAIL 2

SCALE: 1" = 1'-0"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEG	PLANS CK'D. MOB
PED. UNDERPASS TRAN. SECTION		SHEET 3 OF 9	
		CTH CE	

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STATE PROJECT NUMBER

4160-04-71

BAR SERIES TABLE

BAR MARK	NO. REQUIRED	LENGTH
C0401	(1) SERIES OF 30 BARS	13'-10" TO 52'-6"
C0403	(2) SERIES OF 23 BARS	5'-2" TO 19'-10"
C0509	(2) SERIES OF 42 BARS	1'-9" TO 8'-1"
C0412	(2) SERIES OF 22 BARS	8'-3" TO 1'-9"
C0414	(4) SERIES OF 4 BARS	6'-4" TO 23'-7"

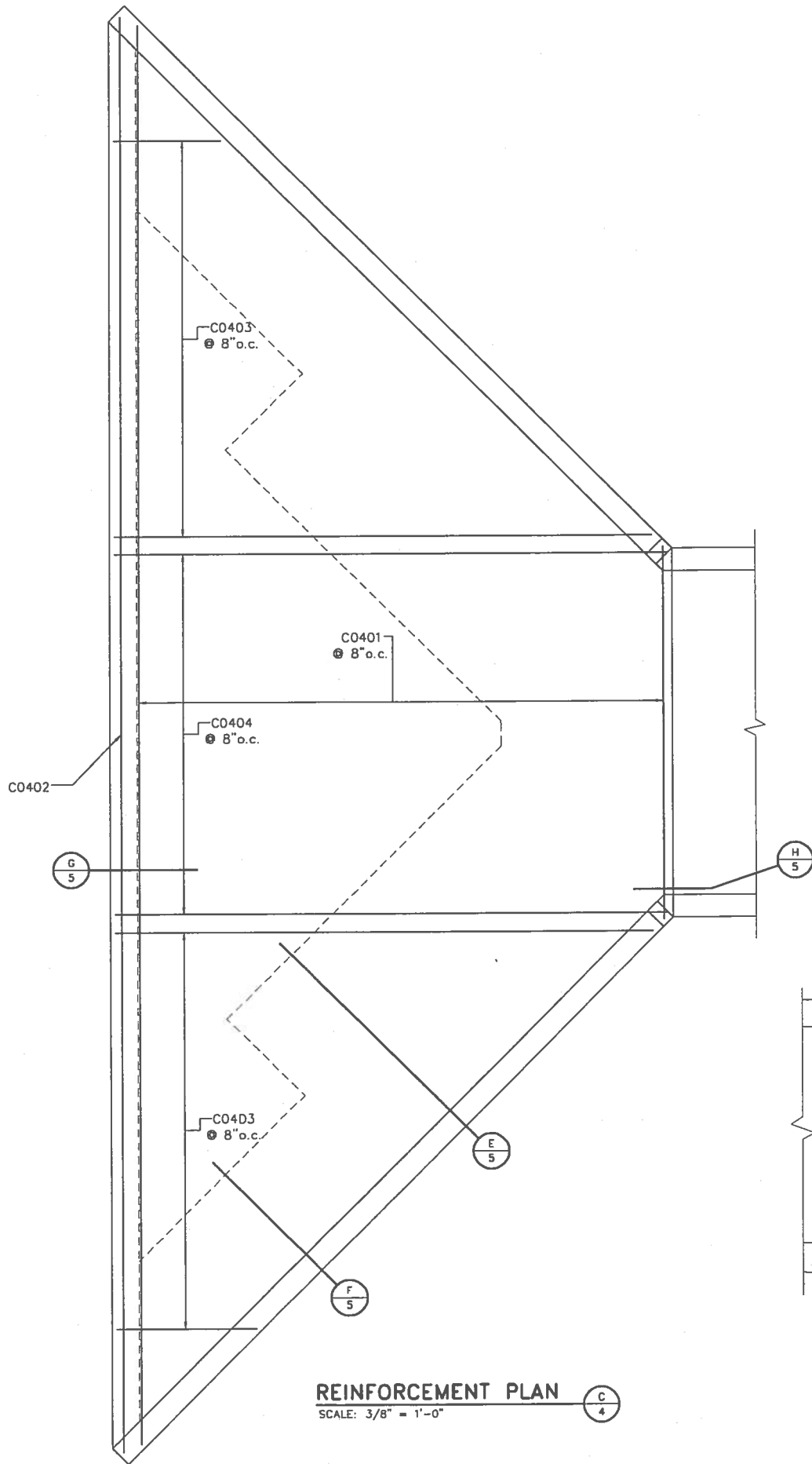
NOTE: BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS

BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
C0401	30	33'-2"		△	TRANSVERSE - FLARED WINGWALL BASE SLAB
C0402	1	53'-2"			TRANSVERSE - FLARED WINGWALL BASE SLAB
C0403	46	12'-6"		△	LONGITUDINAL - FLARED WINGWALL BASE SLAB
C0404	21	20'-5"			LONGITUDINAL - FLARED WINGWALL BASE SLAB
C0605	44	13'-2"	X		DOWEL BARS - WALL OUTSIDE FACE
C0506	42	7'-11"	X		DOWEL BARS - WALL OUTSIDE FACE
C0407	4	28'-2"			STABILIZING BARS
C0408	2	14'-0"			STABILIZING BARS
C0509	84	4'-11"		△	VERTICAL BARS - WALL OUTSIDE FACE
C0510	2	8'-3"			VERTICAL BARS - WALL OUTSIDE FACE
C0411	44	3'-5"	X		DOWEL BARS - WALL INSIDE FACE
C0412	44	5'-0"		△	VERTICAL BARS - WALL INSIDE FACE
C0413	8	28'-2"			HORIZONTAL BARS - WALL OUTSIDE FACE
C0414	16	15'-0"		△	HORIZONTAL BARS - WALL OUTSIDE FACE
C0515	4	28'-11"	X		DIAGONAL BARS - WALL
C0416	4	53'-2"			CUTOFF WALL
C0417	54	3'-6"	X		CUTOFF WALL

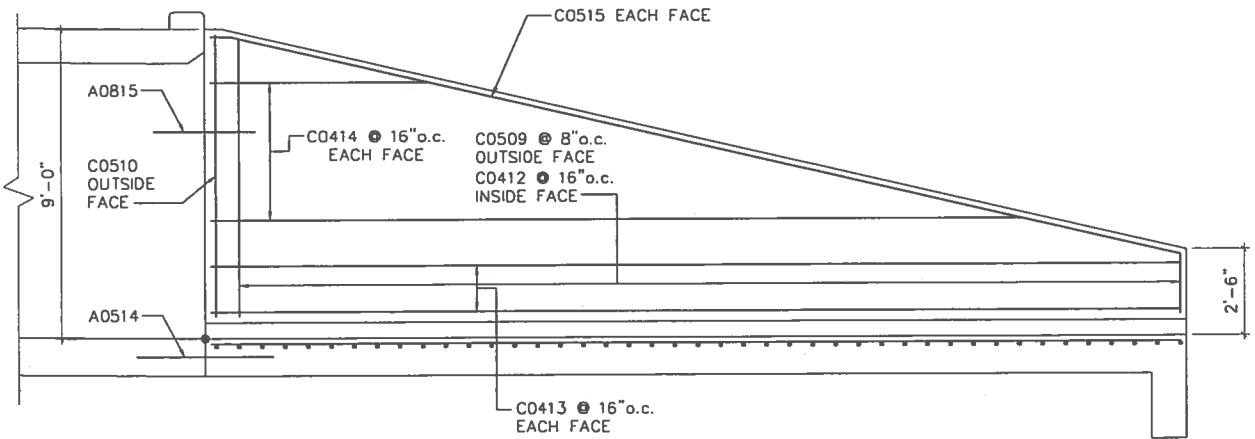
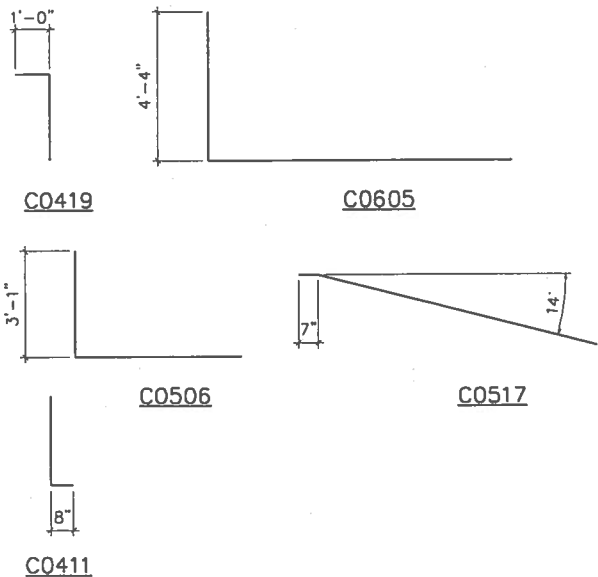
BAR NOTES

- THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- DIMENSIONS IN BENDING DETAILS ARE "OUT TO OUT" OF BAR.
- THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).
- △ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



REINFORCEMENT PLAN

SCALE: 3/8" = 1'-0"



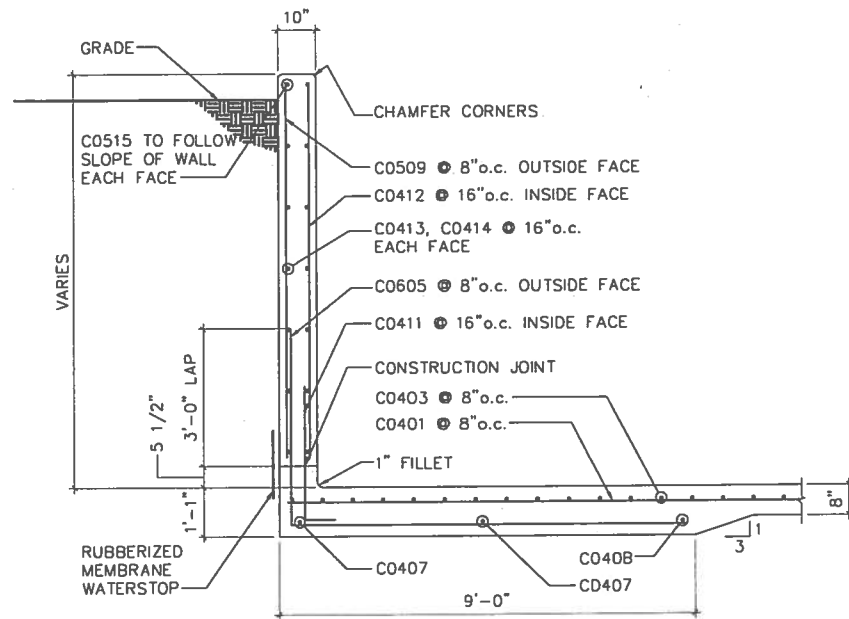
WING WALL ELEVATION

SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEG	PLANS CK'D. MOB
WINGWALL REINF. PLAN & SECTION		SHEET 4 OF 9	
		CTH CE	

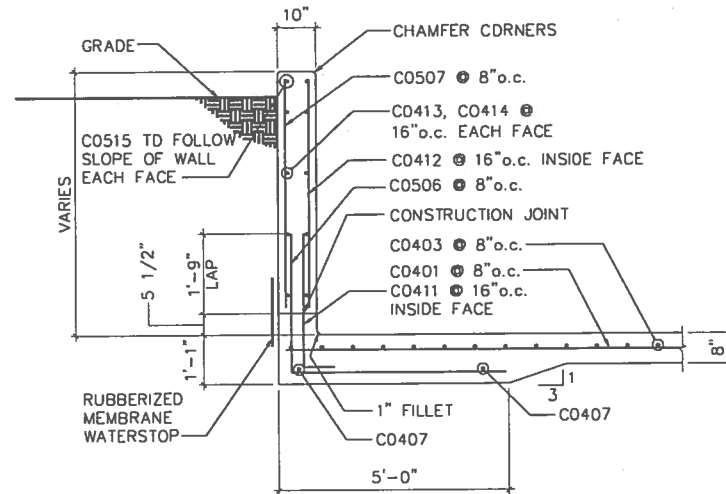
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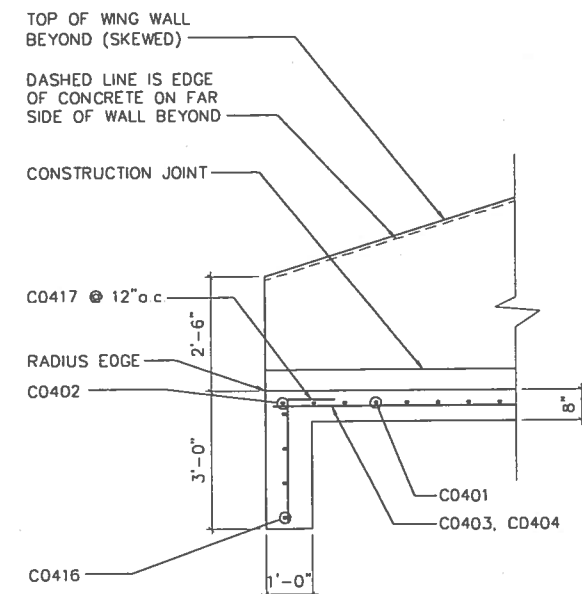
WINGWALL SECTION

SCALE: 1/2" = 1'-0"

E
5

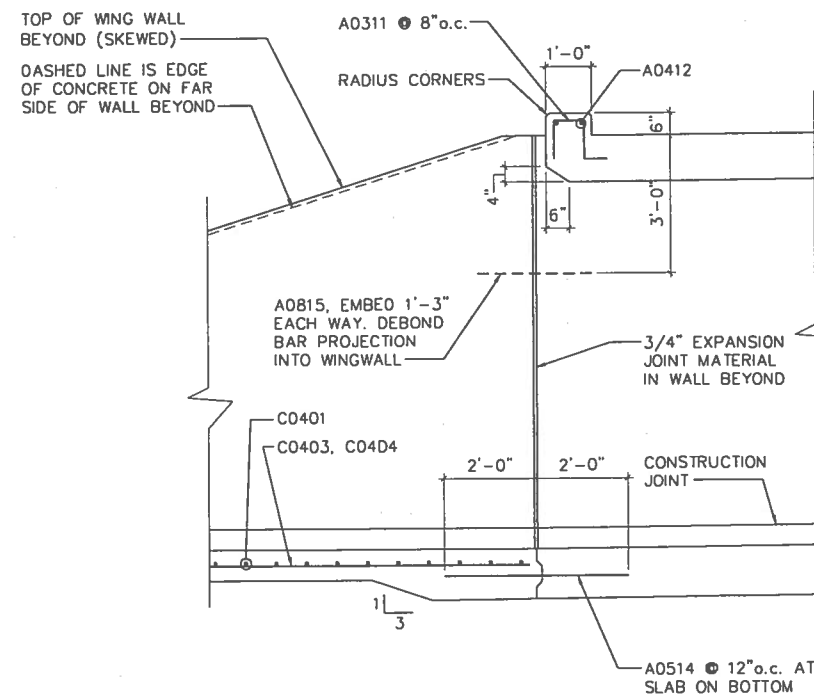
WINGWALL SECTION

SCALE: 1/2" = 1'-0"

F
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PARTIAL CULVERT SECTION

SCALE: 1/2" = 1'-0"

G
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PARTIAL CULVERT SECTION

SCALE: 1/2" = 1'-0"

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEG	PLANS CK'D. MOB
WINGWALL & CULVERT SECTION		SHEET 5 OF 9	
		CTH CE	

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8

BILL OF BARS					
BAR MARK	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
B0401	196	13'-4"			TRANSVERSE - STRAIGHT WINGWALL BASE SLAB
B0402	21	30'-4"			LONGITUDINAL - STRAIGHT WINGWALL BASE SLAB
B0403	42	29'-8"			LONGITUDINAL - STRAIGHT WINGWALL BASE SLAB
B0404	21	39'-8"			LONGITUDINAL - STRAIGHT WINGWALL BASE SLAB
B0405	4	30'-4"			STABILIZING BARS
B0406	8	29'-8"			STABILIZING BARS
B0407	4	39'-8"			STABILIZING BARS
B0608	182	12'-1"	X		DOWEL BARS - WALL OUTSIDE FACE
B0509	210	8'-5"	X		DOWEL BARS - WALL OUTSIDE FACE
B0510	18	7'-6"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0511	44	6'-10"			VERTICAL BARS - WALL OUTSIDE FACE
B0512	30	6'-9"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0513	30	6'-7"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0514	30	6'-3"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0515	30	5'-11"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0516	90	5'-0"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0517	30	4'-3"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0518	90	3'-9"		△	VERTICAL BARS - WALL OUTSIDE FACE
B0419	202	3'-5"	X		DOWEL BARS - WALL INSIDE FACE
B0420	10	7'-6"		△	VERTICAL BARS - WALL INSIDE FACE
B0421	22	6'-10"			VERTICAL BARS - WALL INSIDE FACE
B0422	14	6'-9"		△	VERTICAL BARS - WALL INSIDE FACE
B0423	2	6'-8"			VERTICAL BARS - WALL INSIDE FACE
B0424	16	6'-7"		△	VERTICAL BARS - WALL INSIDE FACE
B0425	14	6'-3"		△	VERTICAL BARS - WALL INSIDE FACE
B0426	16	5'-11"		△	VERTICAL BARS - WALL INSIDE FACE
B0427	46	5'-0"		△	VERTICAL BARS - WALL INSIDE FACE
B0428	16	4'-3"		△	VERTICAL BARS - WALL INSIDE FACE
B0429	44	3'-9"		△	VERTICAL BARS - WALL INSIDE FACE
B0430	2	3'-4"			VERTICAL BARS - WALL INSIDE FACE
B0431	16	30'-4"			HORIZONTAL BARS - WALL EACH FACE
B0432	28	29'-8"			HORIZONTAL BARS - WALL EACH FACE
B0433	8	39'-8"			HORIZONTAL BARS - WALL EACH FACE
B0534	4	8'-8"	X		HORIZONTAL BARS - WALL EACH FACE
B0435	4	29'-3"			HORIZONTAL BARS - WALL EACH FACE
B0436	4	7'-2"			HORIZONTAL BARS - WALL EACH FACE
B0437	4	12'-9"			HORIZONTAL BARS - WALL EACH FACE
B0538	4	30'-4"			HORIZONTAL BARS - TOP OF WALLS
B0539	8	29'-8"			HORIZONTAL BARS - TOP OF WALLS
B0540	4	39'-8"			HORIZONTAL BARS - TOP OF WALLS
B0541	80	4'-0"			CONSTRUCTION JOINT
B0442	4	13'-4"			CUTOFF WALL
B0443	14	3'-6"	X		CUTOFF WALL
B0444	28	5'-6"	X		TRENCH DRAIN

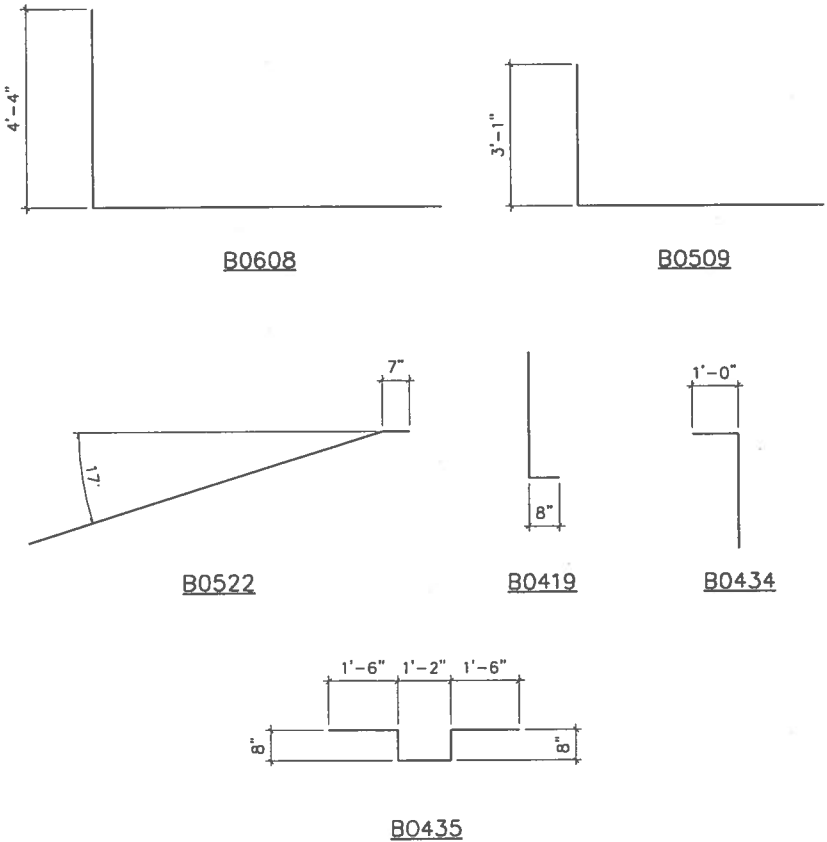
BAR SERIES TABLE

BAR MARK	NO. REQUIRED	LENGTH
B0510	(2) SERIES OF 9 BARS	6'-10" TO 8'-3"
B0512	(2) SERIES OF 15 BARS	6'-8" TO 6'-10"
B0513	(2) SERIES OF 15 BARS	6'-5" TO 6'-8"
B0514	(2) SERIES OF 15 BARS	6'-1" TO 6'-5"
B0515	(2) SERIES OF 15 BARS	5'-8" TO 6'-1"
B0516	(2) SERIES OF 45 BARS	4'-5" TO 5'-8"
B0517	(2) SERIES OF 15 BARS	4'-1" TO 4'-5"
B0518	(2) SERIES OF 45 BARS	3'-4" TO 4'-1"
B0420	(2) SERIES OF 5 BARS	6'-10" TO 8'-3"
B0422	(2) SERIES OF 7 BARS	6'-8" TO 6'-10"
B0424	(2) SERIES OF 8 BARS	6'-5" TO 6'-8"
B0425	(2) SERIES OF 7 BARS	6'-1" TO 6'-5"
B0426	(2) SERIES OF 8 BARS	5'-8" TO 6'-1"
B0427	(2) SERIES OF 23 BARS	4'-5" TO 5'-8"
B0428	(2) SERIES OF 8 BARS	4'-1" TO 4'-5"
B0429	(2) SERIES OF 22 BARS	3'-4" TO 4'-1"

NOTE: BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR NOTES

- THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- DIMENSIONS IN BENDING DETAILS ARE "OUT TO OUT" OF BAR.
- THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).
- △ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEG	PLANS CK'D. MOB
WINGWALL BILL OF BARS		SHEET 6 OF 9	
		CTH CE	

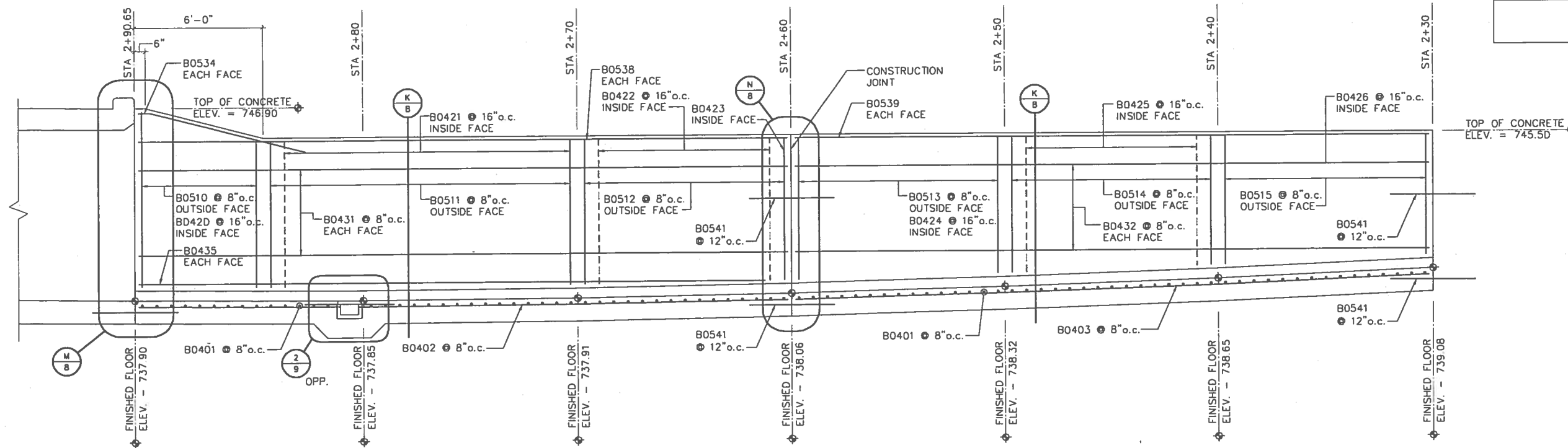
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STATE PROJECT NUMBER

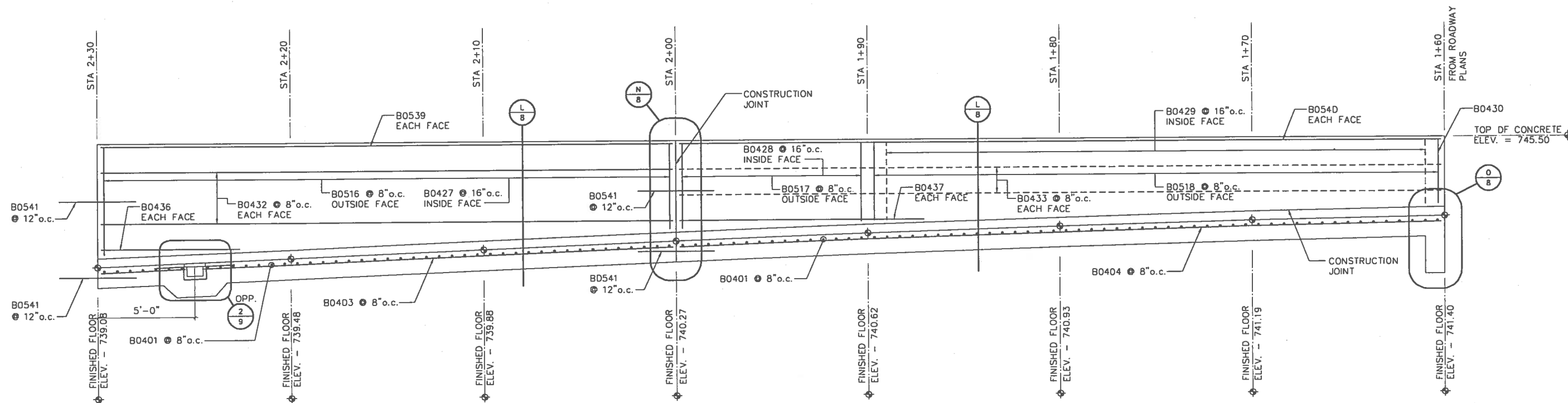
4160-04-71



WINGWALL ELEVATION

SCALE: 3/8" = 1'-0"

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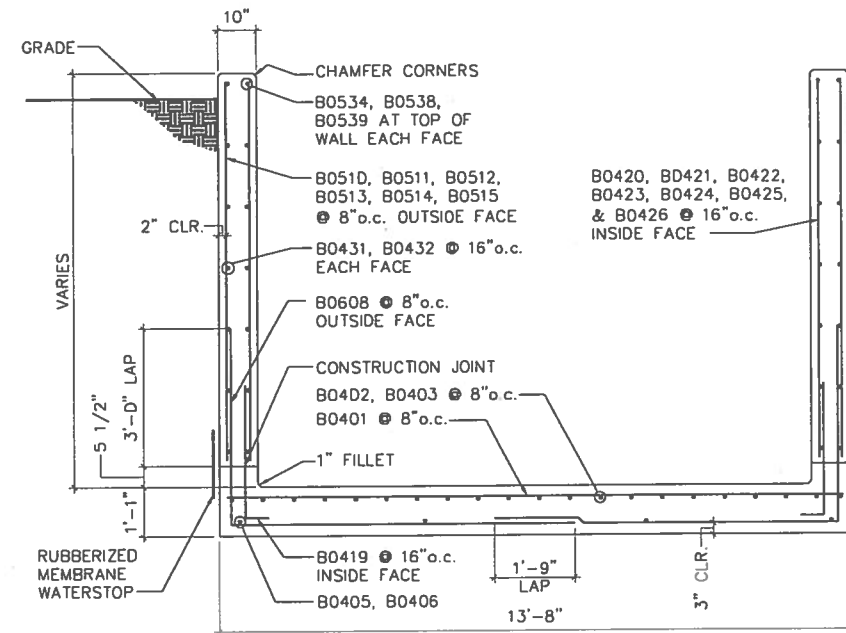
WINGWALL ELEVATION

SCALE: 3/8" = 1'-0"

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7

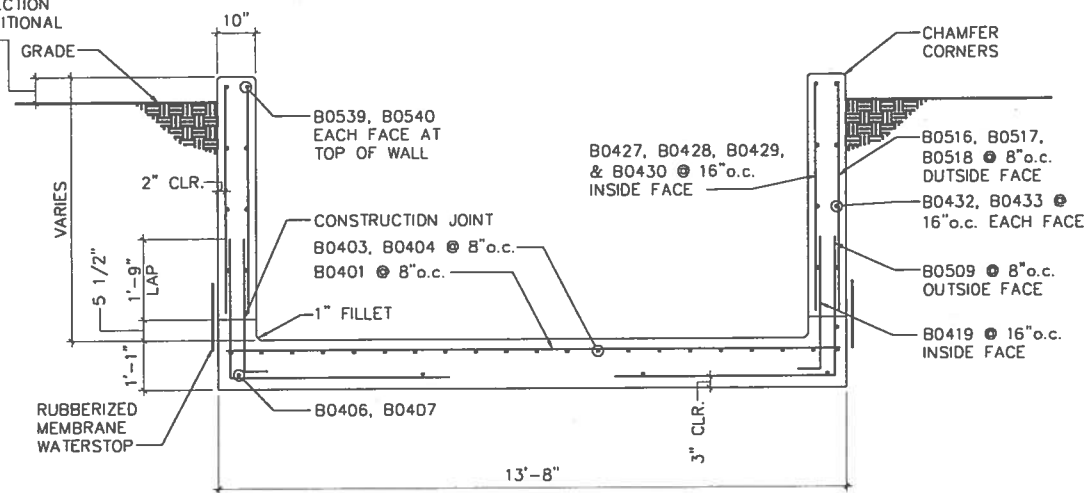
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY		SEG	PLANS CK'D. MOB
WINGWALL ELEVATIONS		SHEET 7 OF 9	
		CTH CE	

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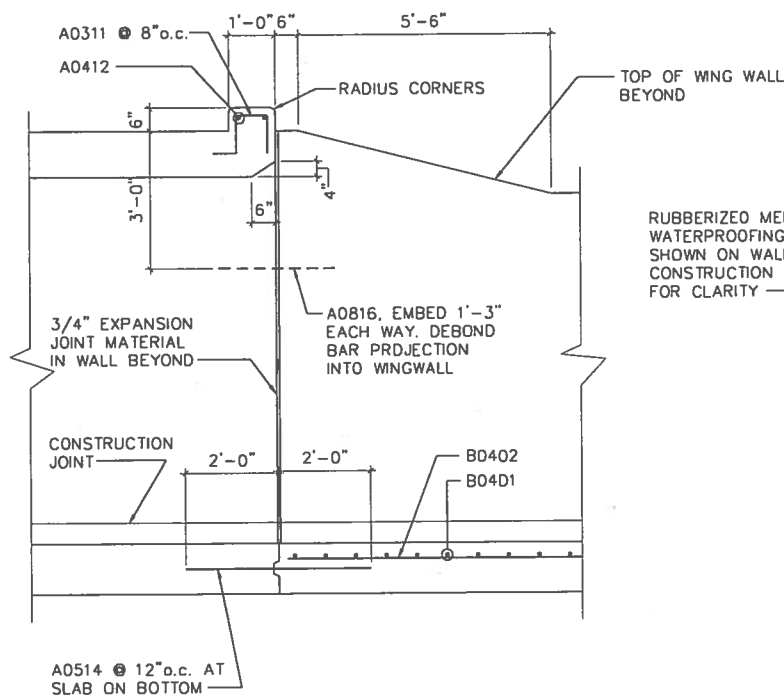
WINGWALL SECTION

SCALE: 1/2" = 1'-0"

K
8VARIES - SEE ROADWAY
PLANS CROSS SECTION
SHEETS FOR ADDITIONAL
INFORMATIONVARIES - SEE ROADWAY
PLANS CROSS SECTION
SHEETS FOR ADDITIONAL
INFORMATION

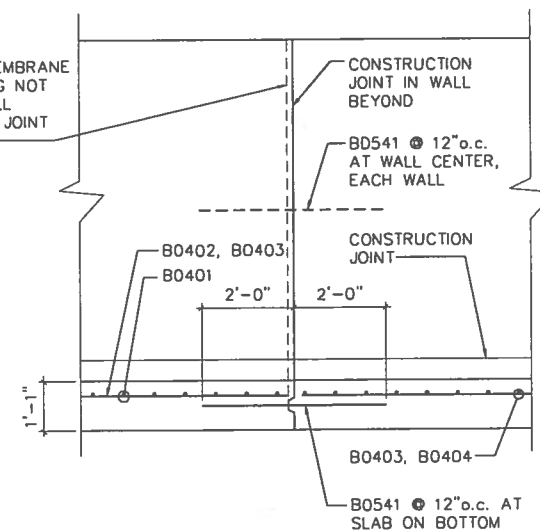
WINGWALL SECTION

SCALE: 1/2" = 1'-0"

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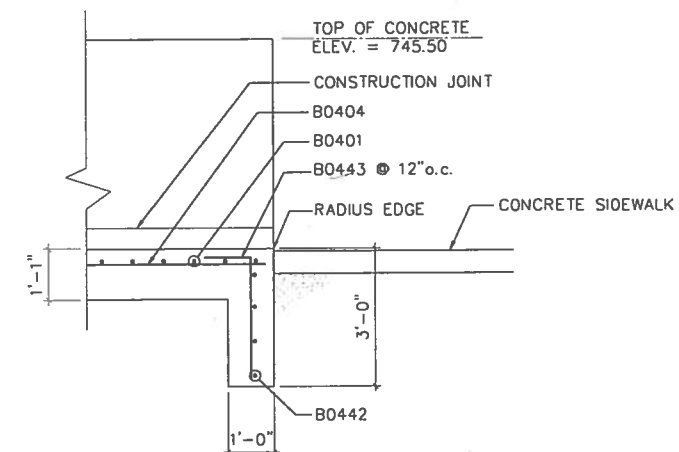
PARTIAL CULVERT SECTION

SCALE: 1/2" = 1'-0"

M
8TOP OF WING WALL
BEYONDRUBBERIZED MEMBRANE
WATERPROOFING NOT
SHOWN ON WALL
CONSTRUCTION JOINT
FOR CLARITY

PARTIAL CULVERT SECTION

SCALE: 1/2" = 1'-0"

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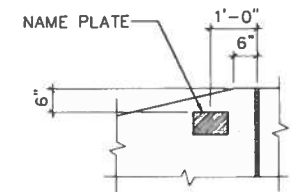
PARTIAL CULVERT SECTION

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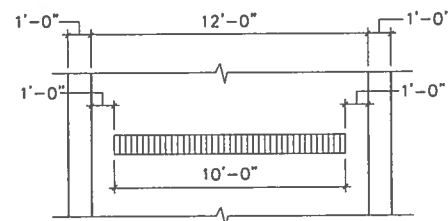
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE 4160-04-71			
DRAWN BY		SEG	PLANS CK'D. MOB
WINGWALL SECTIONS			SHEET 8 OF 9
			CTH CE

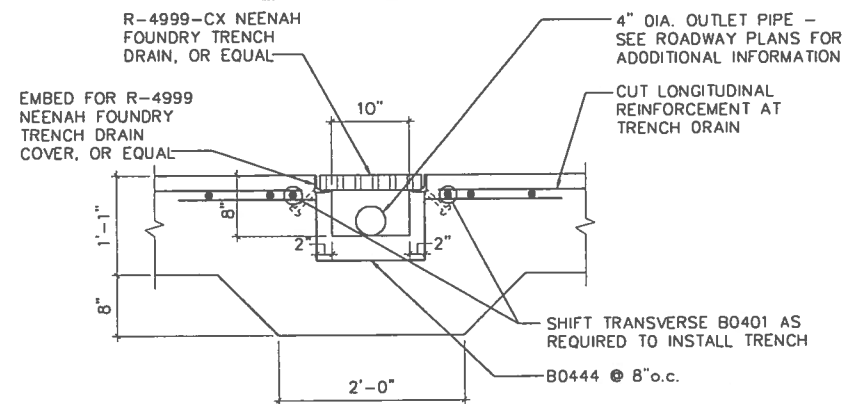
1. RECESSED LUMINAIRES, JUNCTION BOX, AND NO CONDUIT SHALL BE CAST INTO THE CONCRETE SLAB OR WALLS AND NOT SURFACE MOUNTED.
2. JUNCTION BOX LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD.
3. CONTROL:
 - A. PROVIDE PHOTOCELL. MOUNT TO EXTERIOR OF METER/BREAKER POESTAL.
 - B. PROVIDE 120V, 15A CONTROL RELAY. WIRE SUCH THAT PHOTOCELL CONTACT ENERGIZES THE RELAY COIL. WIRE LIGHTS TO BE SWITCHED BY THE RELAY CONTACT.
4. WIRING:
 - A. PROVIDE DNE CIRCUIT FOR TUNNEL LIGHTS. PROVIDE A SEPARATE CIRCUIT FOR WALKWAY LIGHTS.
 - B. USE MINIMUM #10 AWG. THWN COPPER CIRCUIT CONDUCTORS, WITH MINIMUM #12 EQUIPMENT GROUNDWIRE.
 - C. EXPOSED CONDUIT: USE RIGID GALVANIZED STEEL CONDUIT. (MINIMUM SIZE 3/4").
 - D. CONCRETE ENCASED CONDUIT: USE RIGID GALVANIZED STEEL CONDUIT, OR PVC CONDUIT (MINIMUM SIZE 3/4").
4. LUMINAIRES:
TYPE A: REBELLE CAT.# 8000-CP-70S-120-CTG-CG-BZ, OR EQUAL
TYPE B: REBELLE CAT.# 1573R-70S-LV-BZ, OR EQUAL
5. SEE SPECIAL PROVISIONS.



NAME PLATE LOCATION
WING 1 ONLY

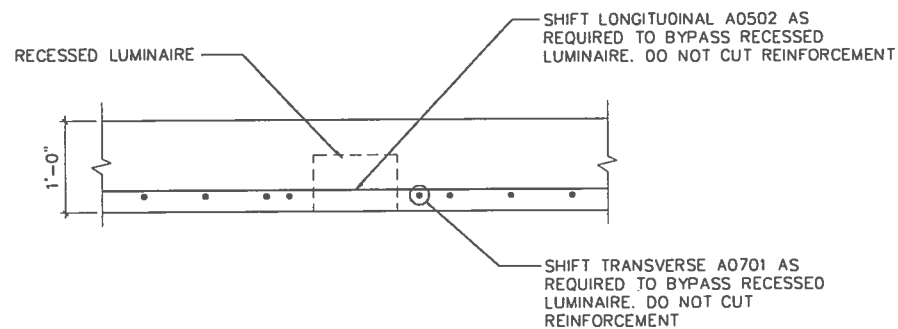


TRENCH PLAN



TRENCH DRAIN DETAIL

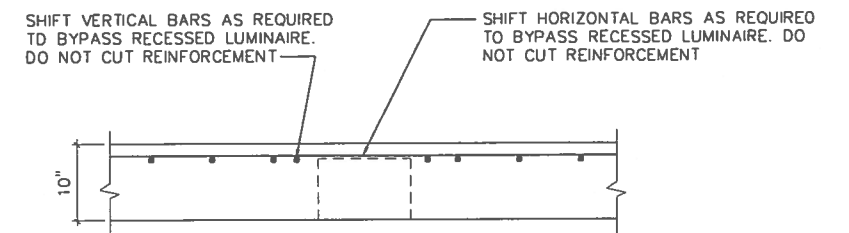
SCALE: 1" = 1'-0"



TOP SLAB RECESSED LUMINAIRE DETAIL

SCALE: 1" = 1'-0"

(TYPE A)



PLAN VIEW

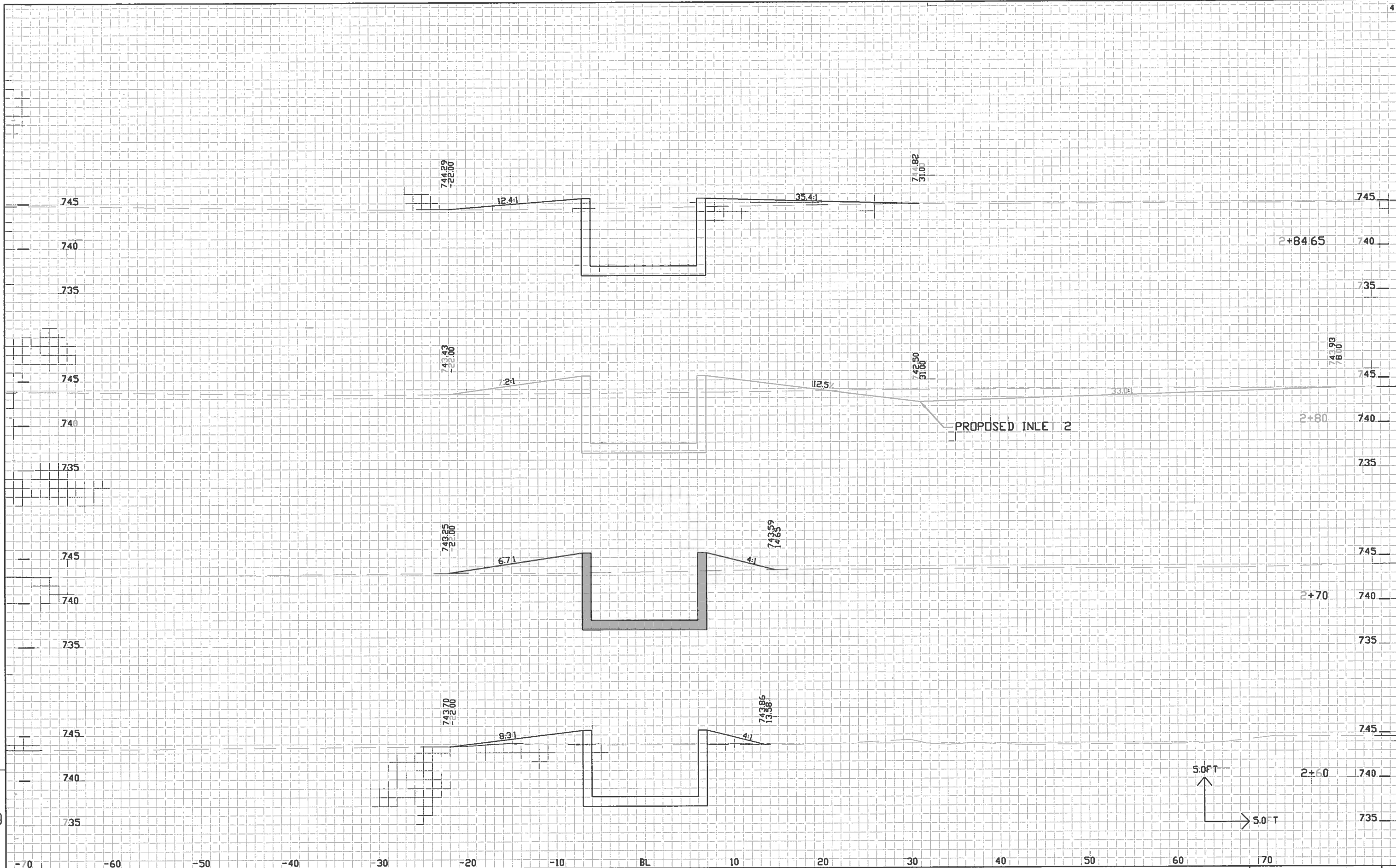
WALL RECESSED LUMINAIRE DETAIL

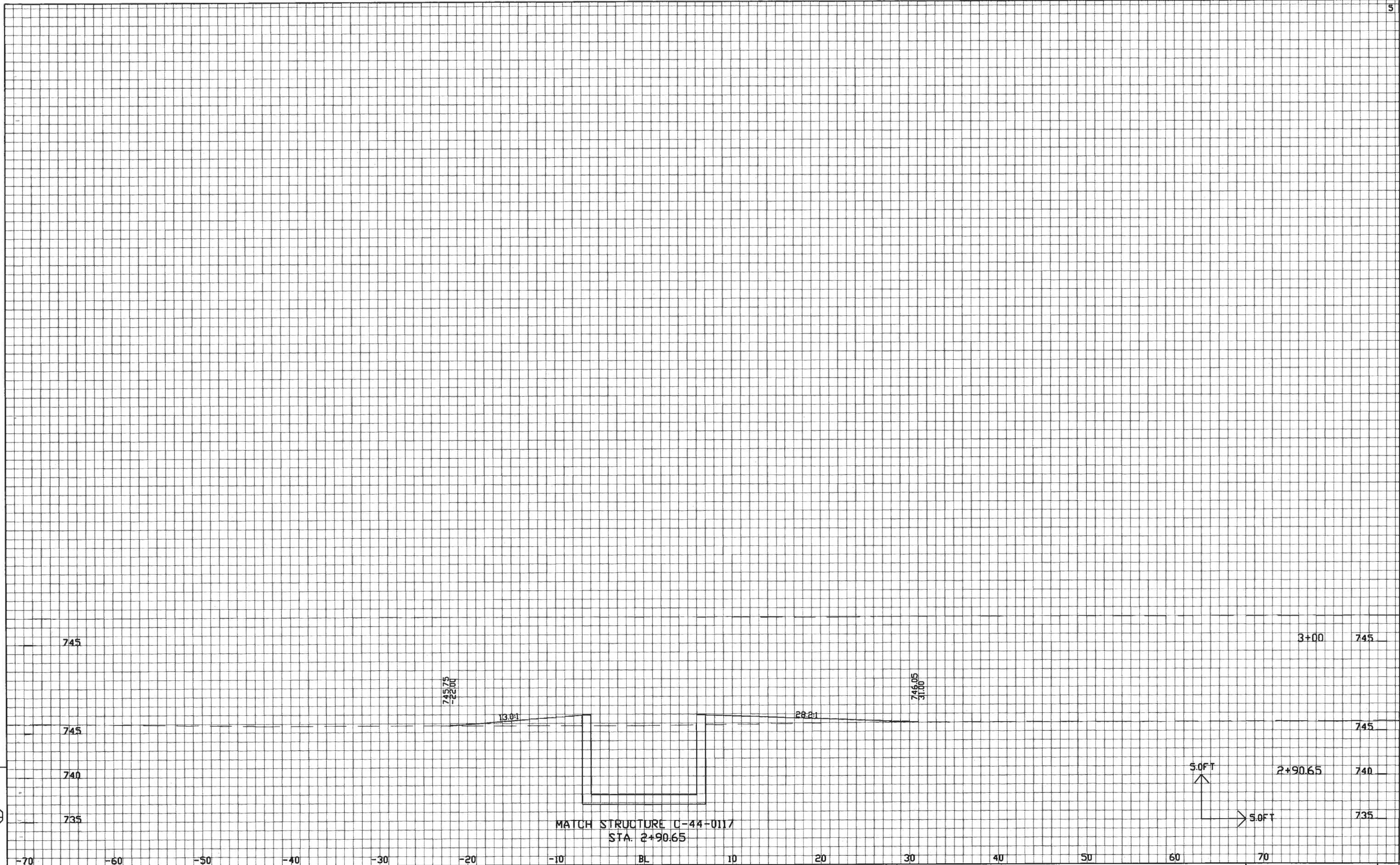
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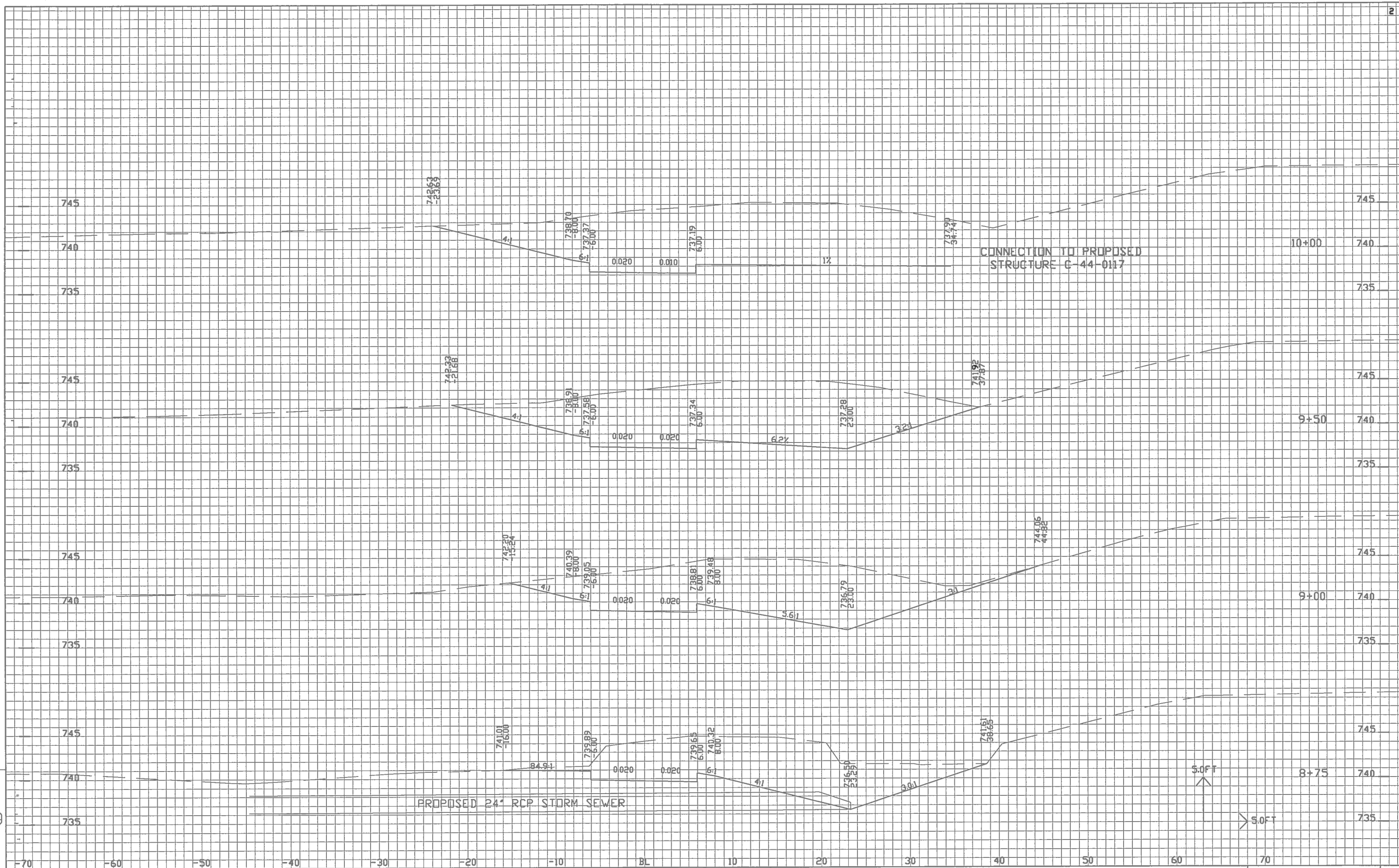
(TYPE B)

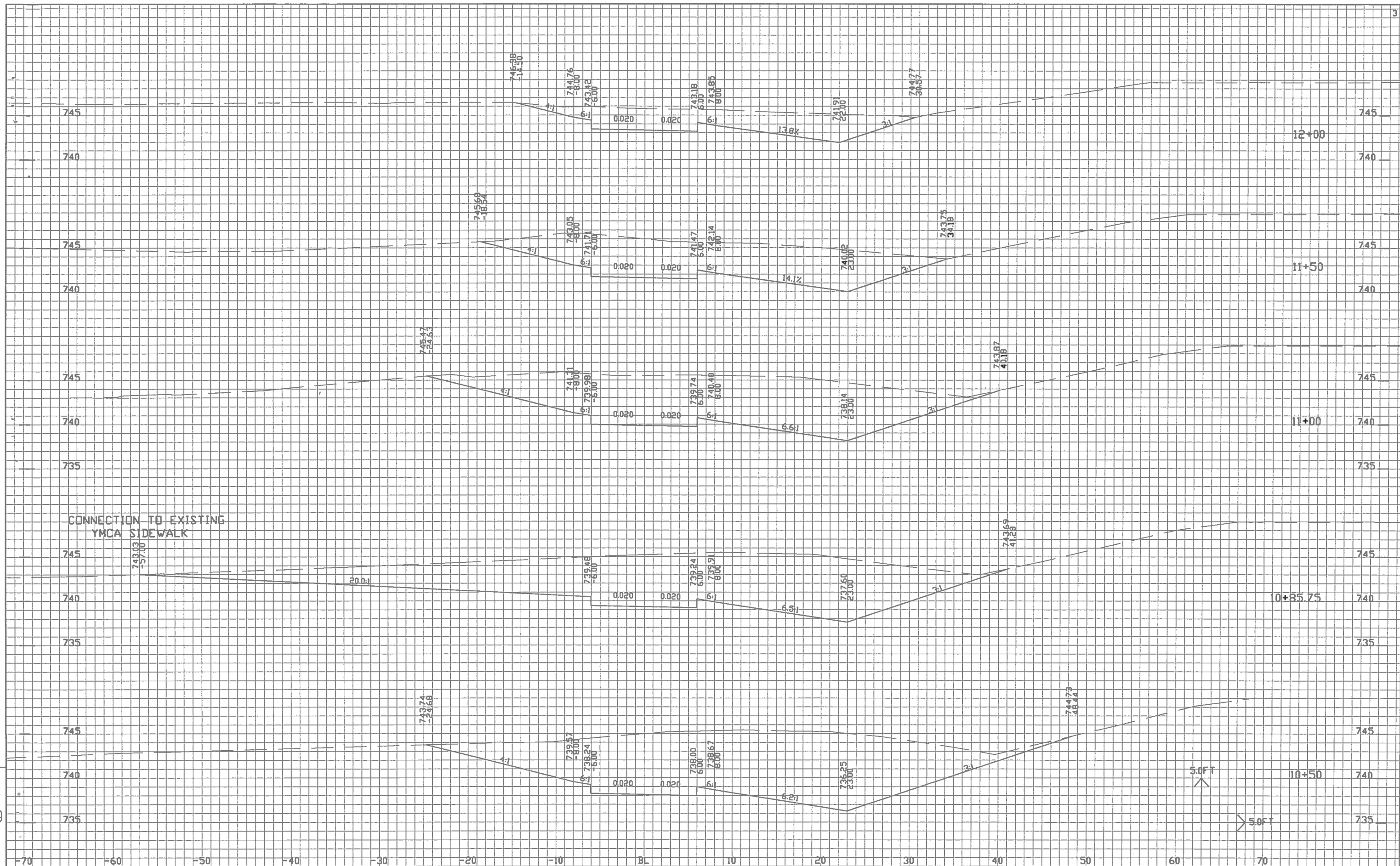
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-44-0117			
DRAWN BY SEG		PLANS C'D. MOB	
DETAILS		SHEET 9 OF 9	
		CTH CE	

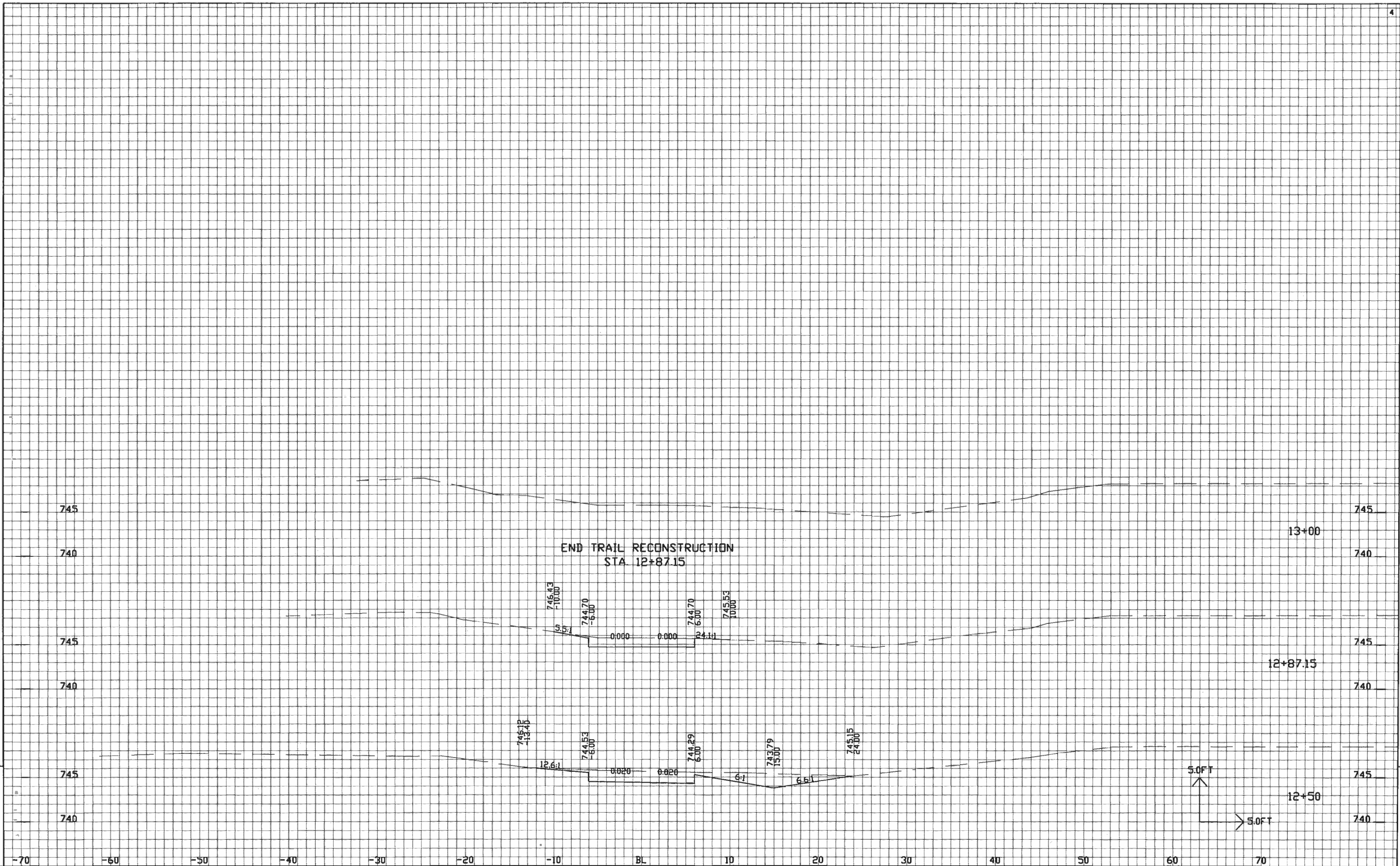


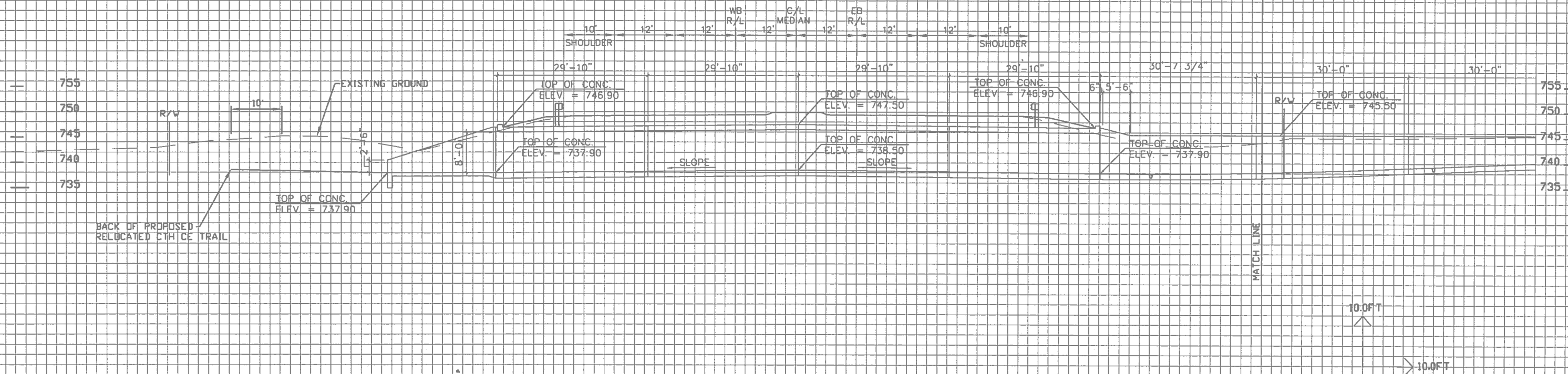
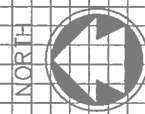


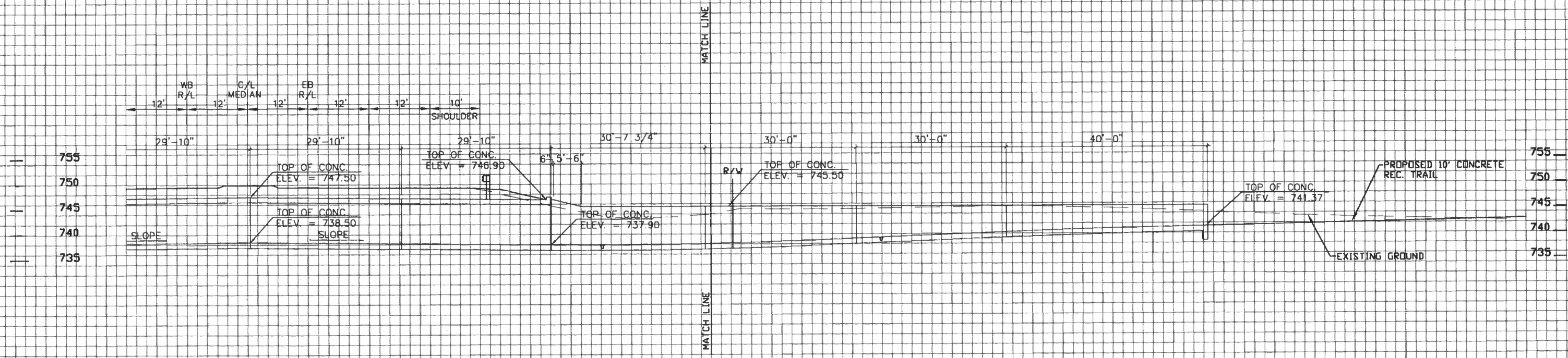
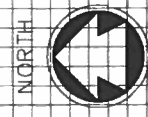












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