

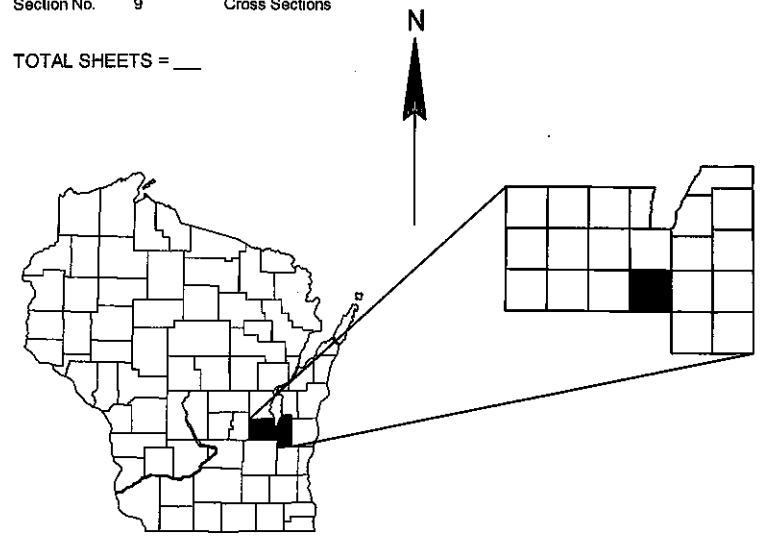
PROJECT ID: 10982
 WITH: N/A

COUNTY: Fond du Lac

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 = ___



FOND DU LAC COUNTY HIGHWAY COMMISSION

PLAN OF PROPOSED IMPROVEMENT

CTH B over Parsons Creek

BRIDGE RECONSTRUCTION

Byron Township

COUNTY PROJECT NUMBER
10982

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT

STRUCTURE B-20-3837
STA 100+00

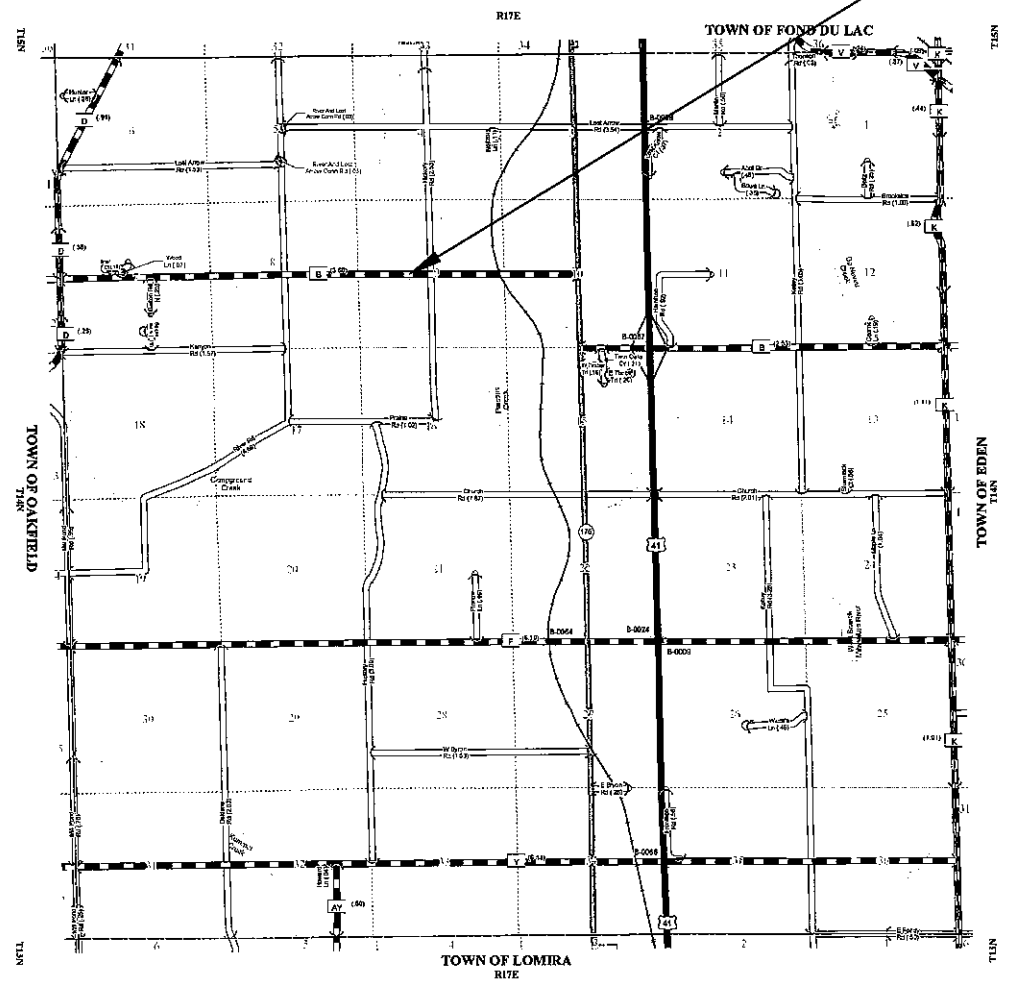
DESIGN DESIGNATION

A.A.D.T.	2005	=	780
A.A.D.T.	_____	=	_____
D.H.V.	_____	=	_____
D.D.	_____	=	_____
T.	_____	=	_____
DESIGN SPEED	_____	=	55
ESALS	_____	=	_____

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW RW LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
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	



Byron Township
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0 MI.

FOND DU LAC COUNTY
HIGHWAY COMMISSION

PREPARED BY: *Paul M. Spohnholz*
County Highway Engineer Date: 6/24/2009

APPROVED BY: *Stan Jankowski*
County Highway Commissioner Date: 6/25/2009

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor _____
 Designer _____
 Project Manager _____
 Regional Examiner _____
 Regional Supervisor _____
 C.O. Examiner _____

APPROVED FOR THE DEPARTMENT
DATE: _____ (Signature)

GENERAL NOTES

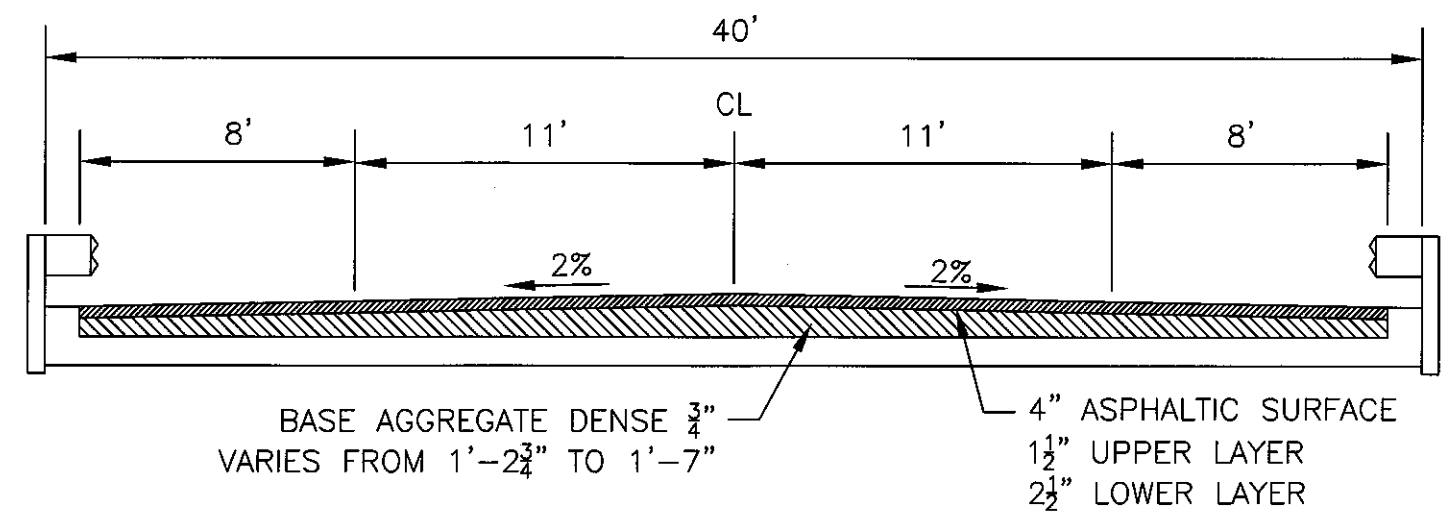
Gremmer & Associates, Inc., 93 South Pioneer Rd, Suite 300,
Fond du Lac, WI 54935 prepared Plan and Profile, Hydraulic Data,
Subsurface Exploration, and Cross Sections.

UTILITIES

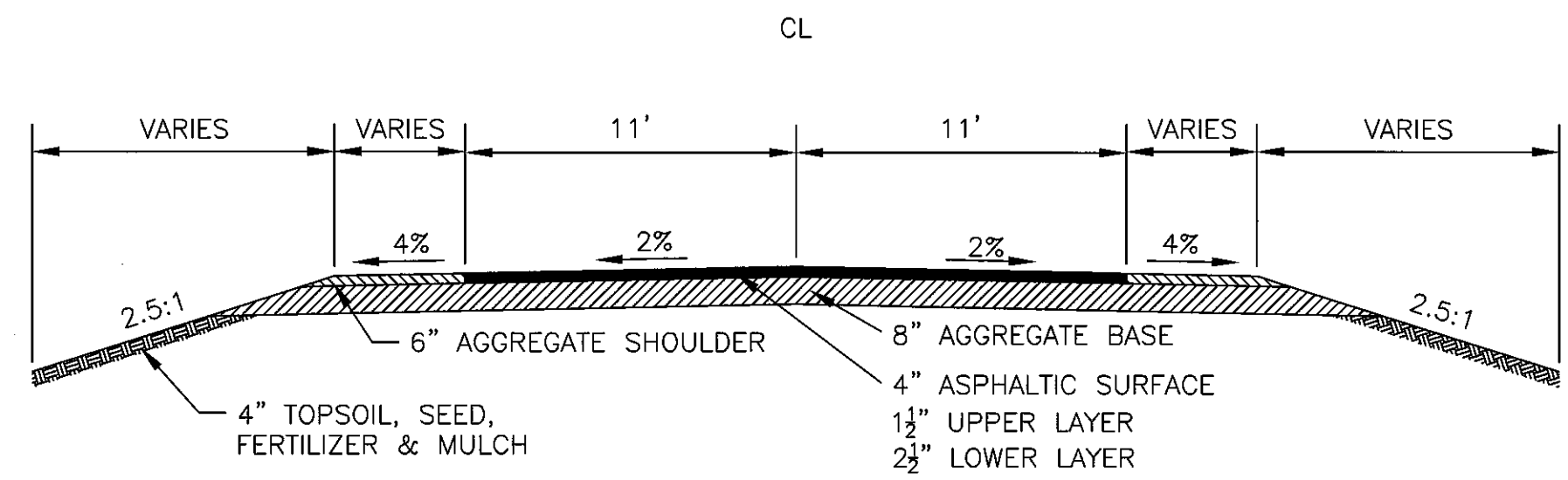
Alliant Energy
Bob Platt
bobplatt@alliantenergy.com
920-322-6687



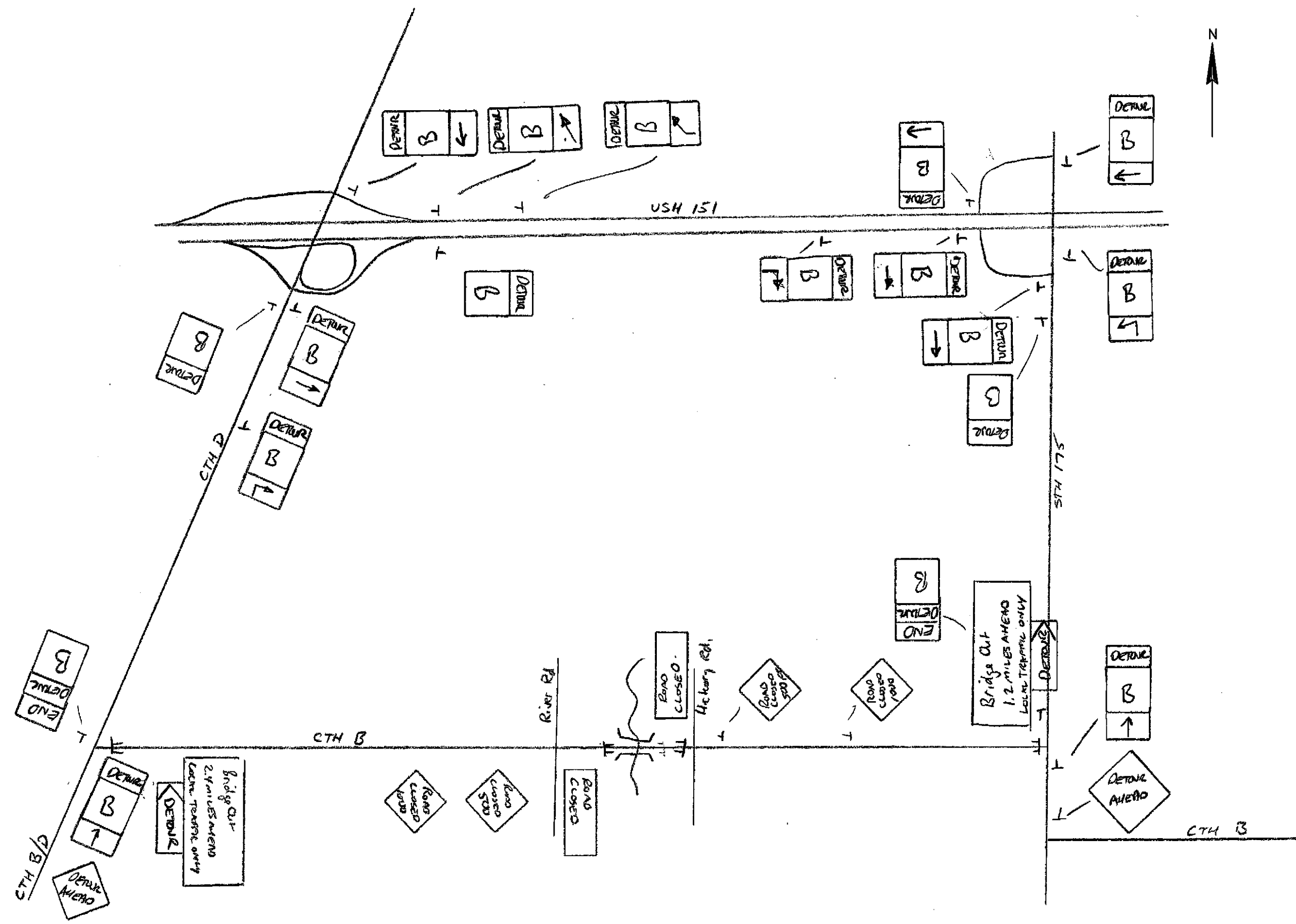
Call 811 or (800) 242-8511
www.DiggersHotline.com



TYPICAL FINISHED SECTION
 CTH B
 STA 99+90 - STA 100+20



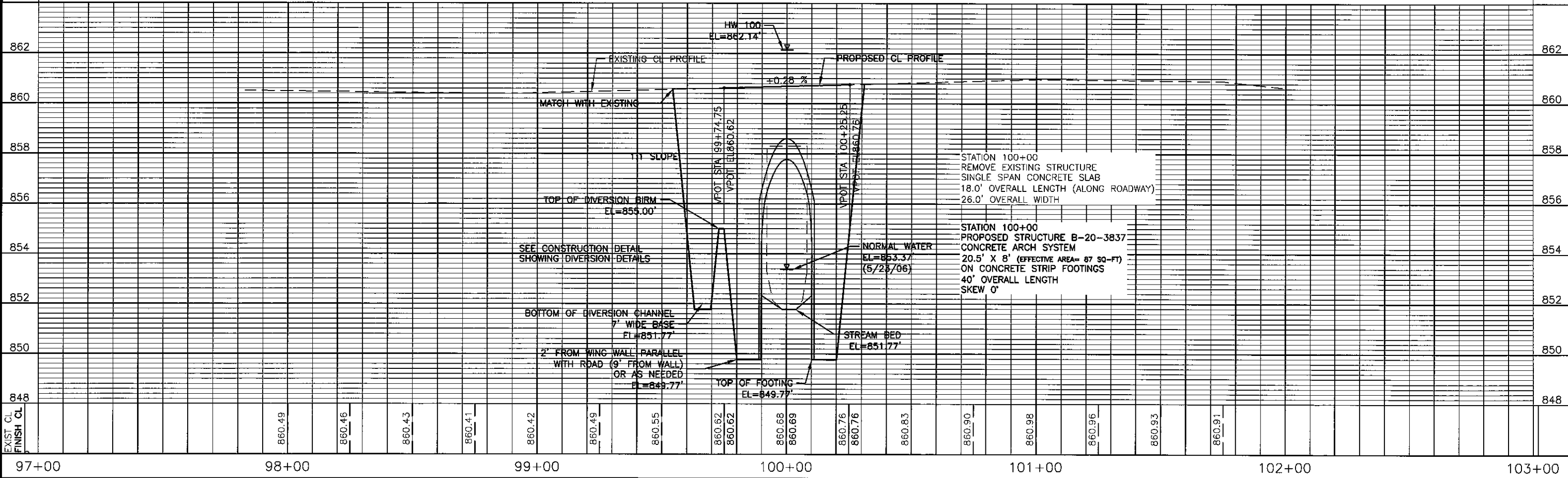
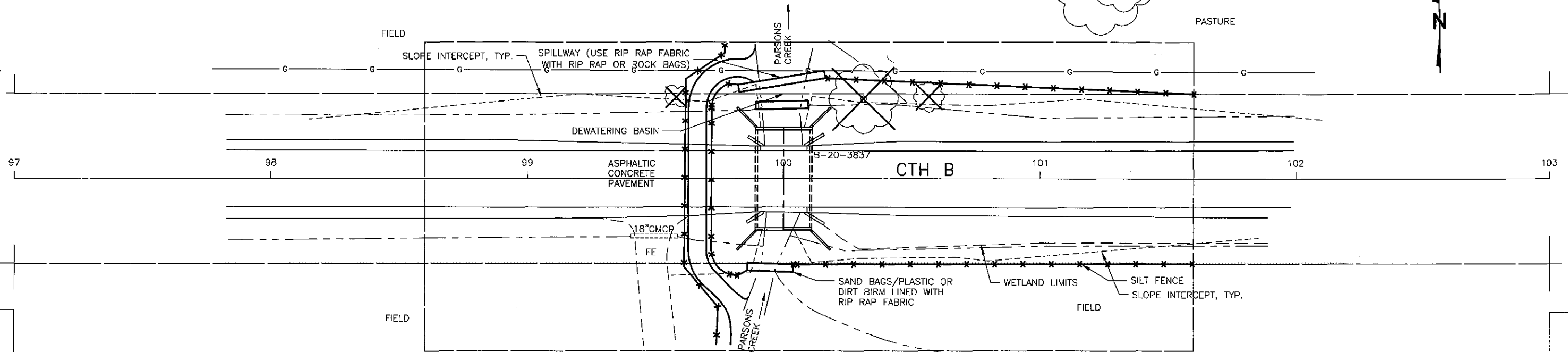
TYPICAL FINISHED SECTION
 CTH B
 STA 99+20 - STA 99+90
 STA 100+20 - STA 101+20



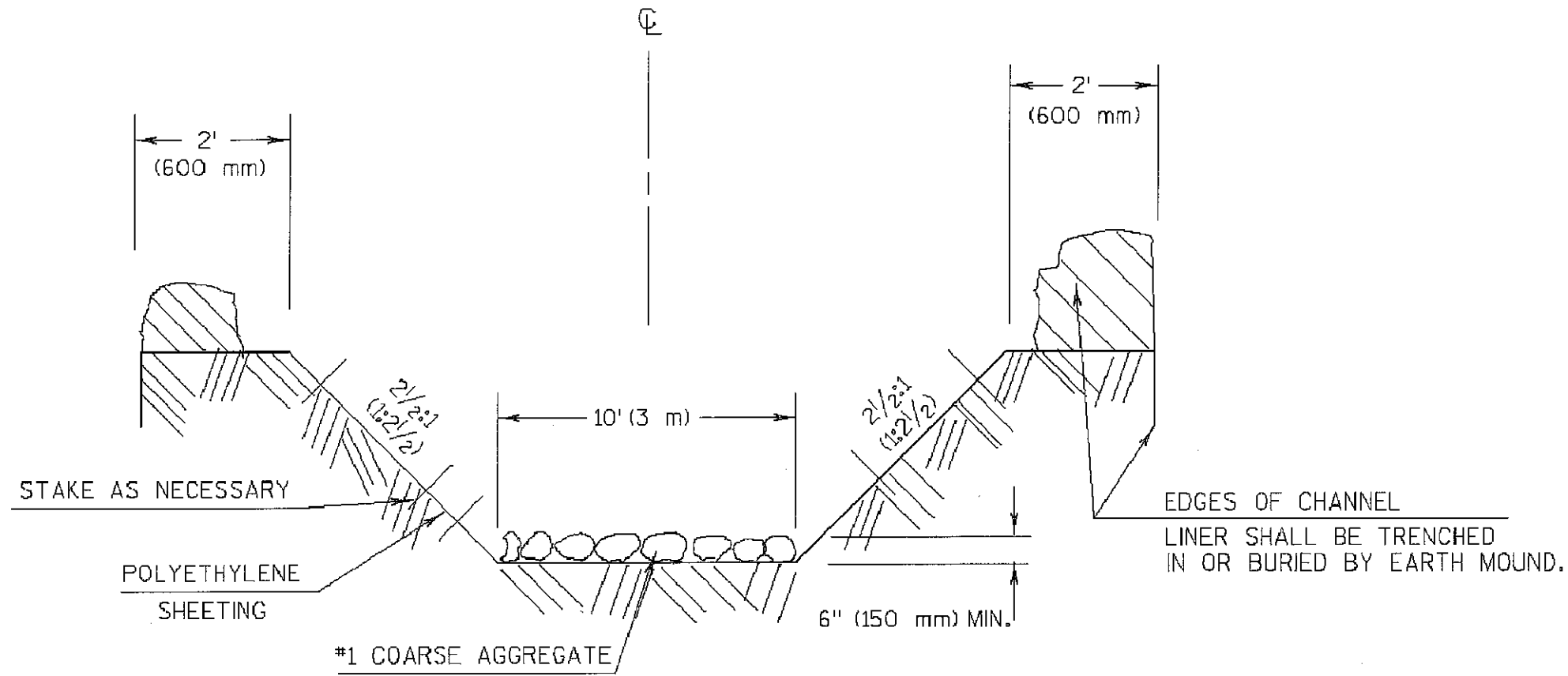
BENCH MARKS

BM	DESCRIPTION	ELEVATION
A	TIMBER SPIKE IN 27" TREE, 75' N. OF CTH B, 125' E. OF BRIDGE OVER PARSONS CREEK	860.59
3K31	BRONZE WDOT DISK IN CONC, 164' S. OF CTH B, E. SIDE OF HICKORY RD.	863.04

**VERTICAL DATUM REFERENCED TO NAVD88.



PROJECT NUMBER: 10982 HWY: CTH B COUNTY: FOND DU LAC EROSION CONTROL AND DIVERSION CHANNEL PLAN SHEET NO: 2.4 E



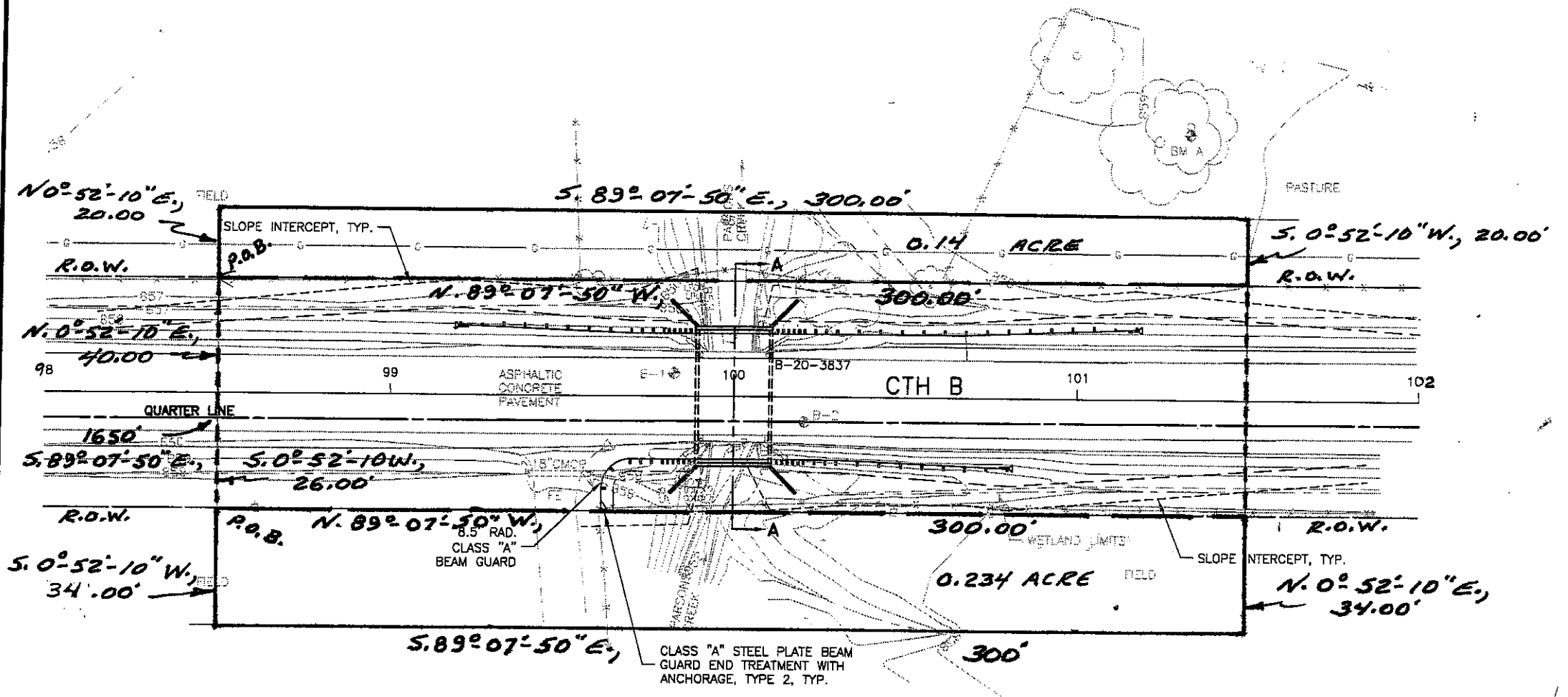
TYPICAL SECTION OF TEMPORARY CHANNEL CHANGE

ESTIMATE OF QUANTITIES

Pay Item No.	Description	Unit	Qty
203.0200	Removing Old Structure STA 100+00	LS	1
204.0100	Removing Pavement	SY	208
206.1000	Excavation for Structures Bridges B-20-3837	LS	1
210.0100	Backfill Structure	CY	350
305.0110	Base Aggregate Dense 3/4-Inch	TON	114
305.0500	Shaping Shoulders	STA	5
455.0605	Tack Coat	GAL	15
465.0105	Asphaltic Surface (Lower Layer)	TON	40
465.0105	Asphaltic Surface (Upper Layer)	TON	24
502.0100	Concrete Masonry Bridges	CY	43
505.0105	Bar Steel Reinforcement Bridges	LB	1378
521.0118	Culvert Pipe Corrugated Steel 18-Inch	FT	20
	Steel Plate Beam Guard End Section Rounded	EA	2
614.0305	Steel Plate Beam Guard Class A	LF	400
614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EA	4
615.0300	Guard Posts Timber	EACH	67
625.0100	Topsoil	SY	800
628.1504	Silt Fence	LF	560
628.2004	Erosion Mat Class 1 Type B	SY	800
630.0110	Seed Mixture No. 10	LB	15
643.0100	Traffic Control	LS	1
643.2000	Traffic Control Detour	LS	1
646.0103	Pavement Marking Paint 4-Inch	LF	30
690.0150	Sawing Asphalt	LF	44
606.0100	Riprap Light	CY	40
645.0130	Geotextile Fabric Type R	SY	365
	Tree Removal	EA	3
	Precast Three-sided Bridge Structure Installed	LS	1

3

3

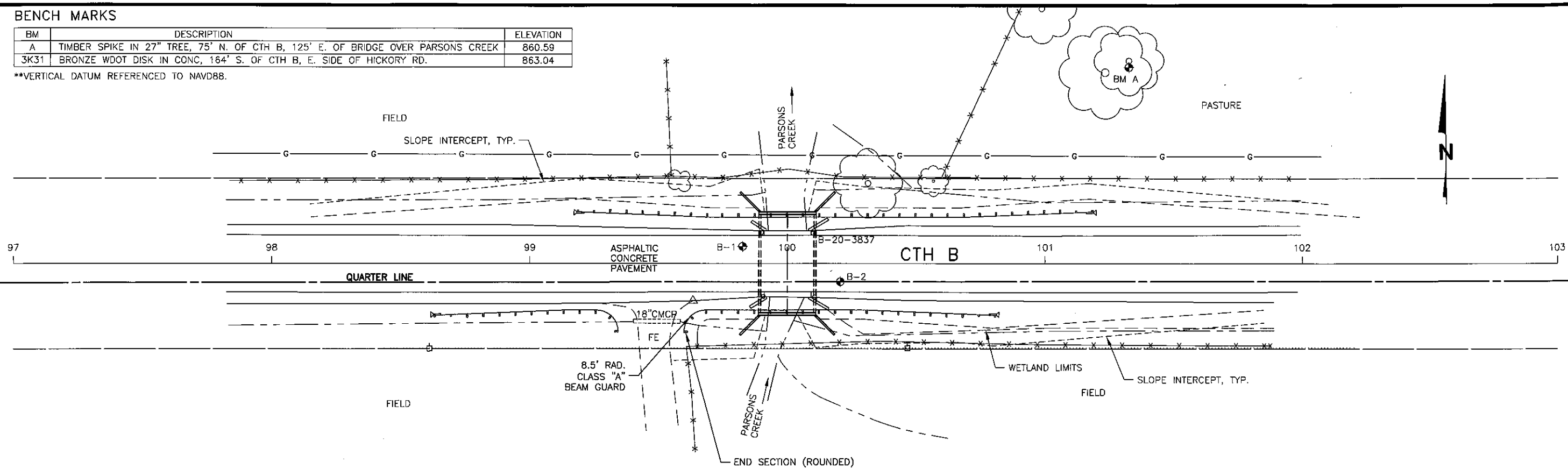


PROJECT NUMBER: 10982	HWY: CTH B	COUNTY: FOND DU LAC	RIGHT OF WAY PLAT	SHEET NO: 4.1	E
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BENCH MARKS

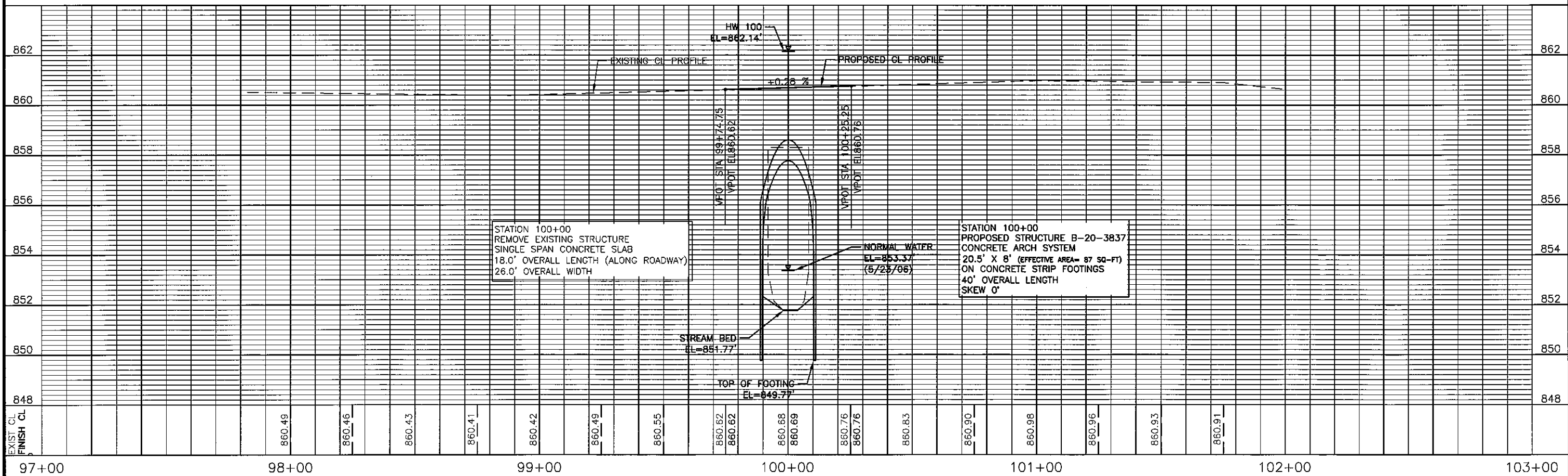
BM	DESCRIPTION	ELEVATION
A	TIMBER SPIKE IN 27" TREE, 75' N. OF CTH B, 125' E. OF BRIDGE OVER PARSONS CREEK	860.59
3K31	BRONZE WDOT DISK IN CONC, 164' S. OF CTH B, E. SIDE OF HICKORY RD.	863.04

**VERTICAL DATUM REFERENCED TO NAVD88.

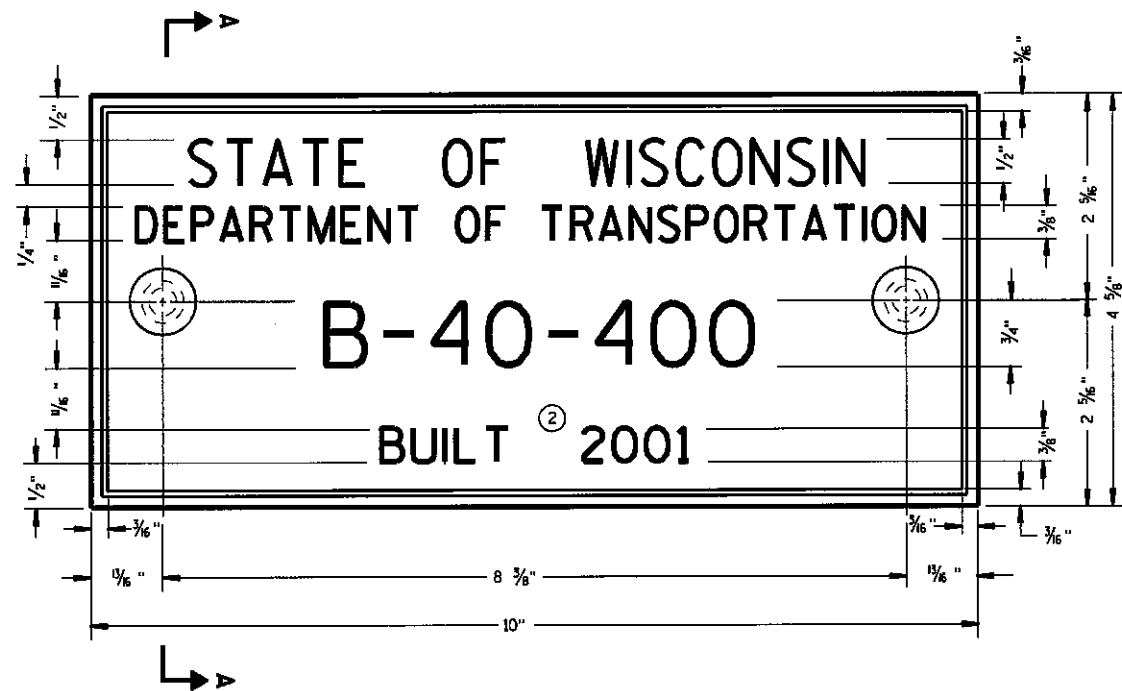


5

5



PROJECT NUMBER: XXXX-XX-XX HWY: CTH B COUNTY: FOND DU LAC PLAN & PROFILE SHEET NO: 5.1 E

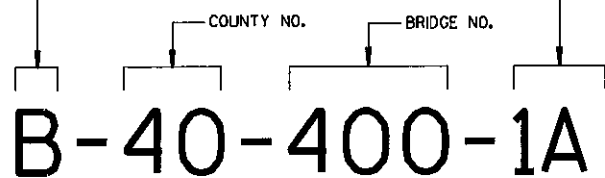


TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SMALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

UNIT NO. FOR MULTIPLE
UNIT BRIDGE



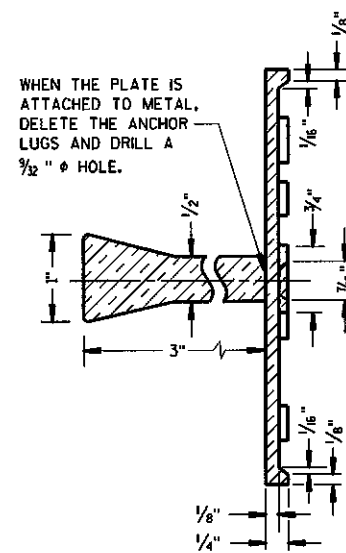
NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

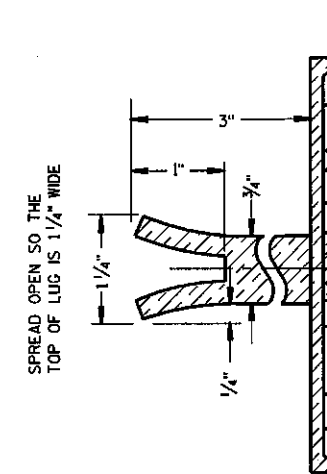
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

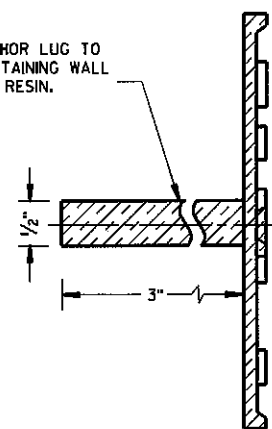


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

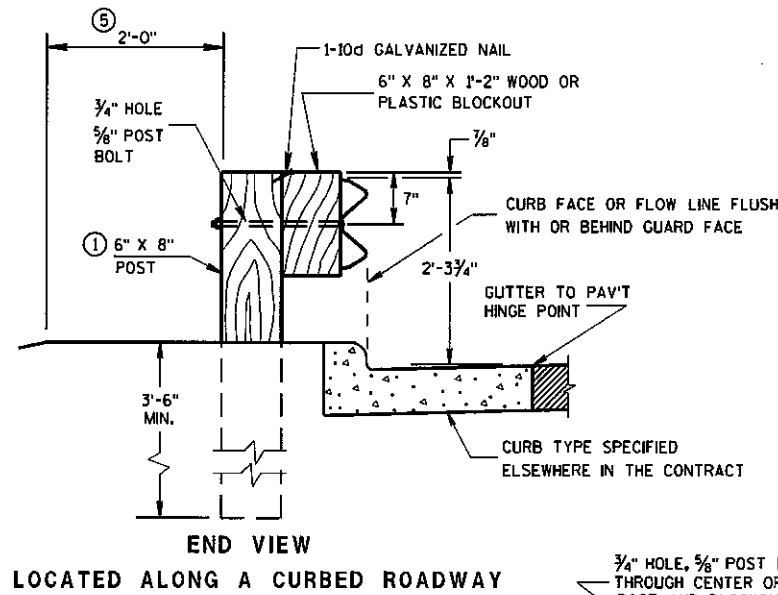
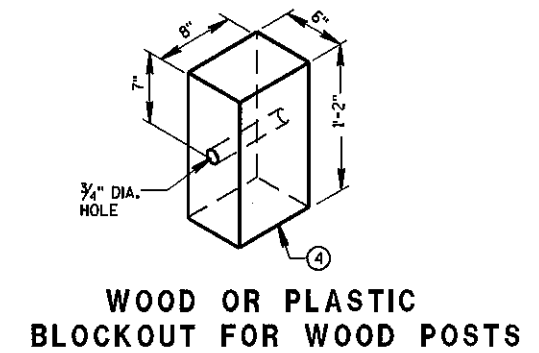
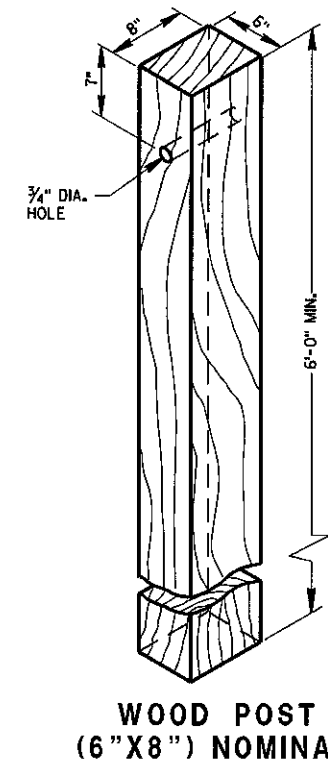
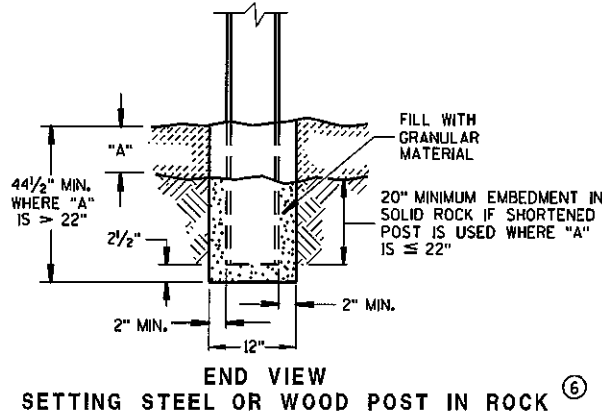
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2/26/07 DATE	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

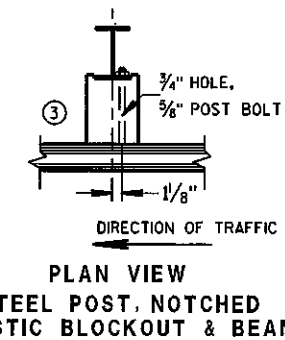
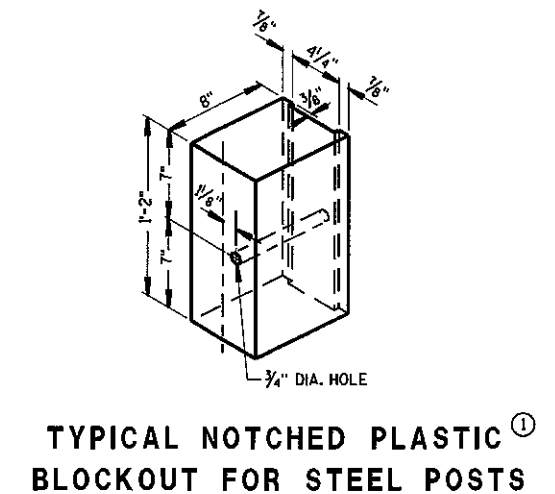
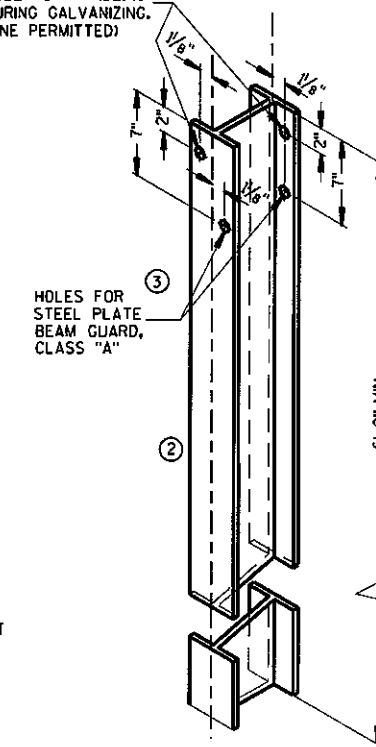
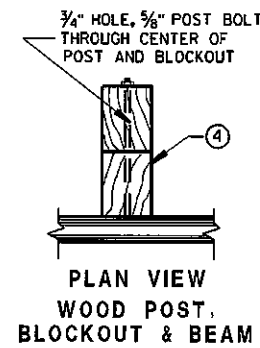
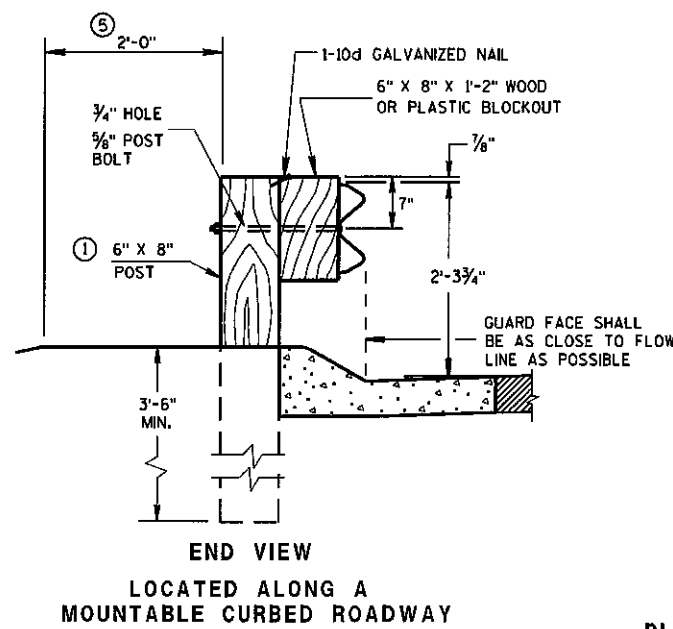
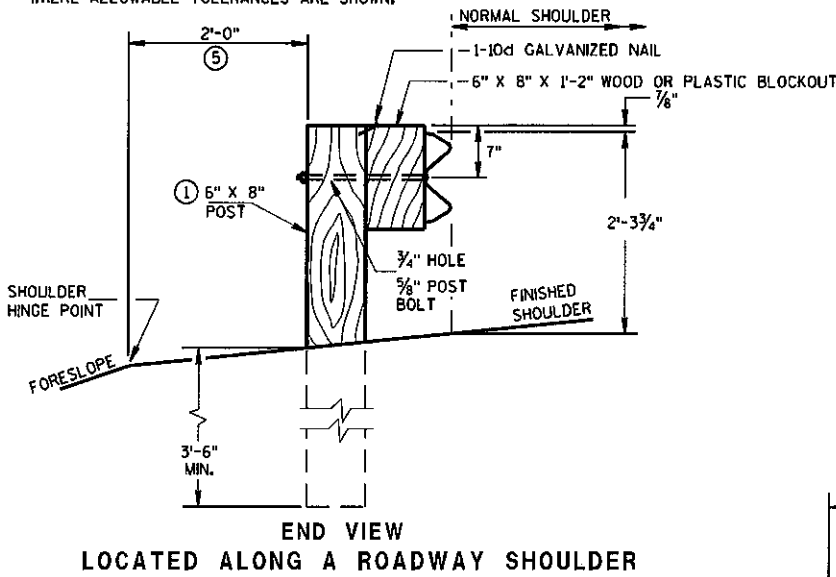
- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SHELTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ WHEN SPECIFIED IN THE PLANS, THE SHOULDER HINGE POINT MAY BE BETWEEN THE FRONT FACE OF THE POST AND 2 FEET BEHIND THE BACK OF THE POST, IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK. INCREASE POST DEPTH TO PROVIDE A MINIMUM EMBEDMENT OF 4'-6" WHERE THE SHOULDER HINGE POINT IS LOCATED BETWEEN THE FRONT FACE OF THE POST AND 2 FEET BEHIND THE BACK OF THE POST.
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



OPTIONAL 1/8" DIA. HOLE FOR HANDLING DURING GALVANIZING. (ONE PERMITTED)

WOOD POST
(6" X 8") NOMINAL



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES 3/8" DIAMETER EXCEPT AS NOTED

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS

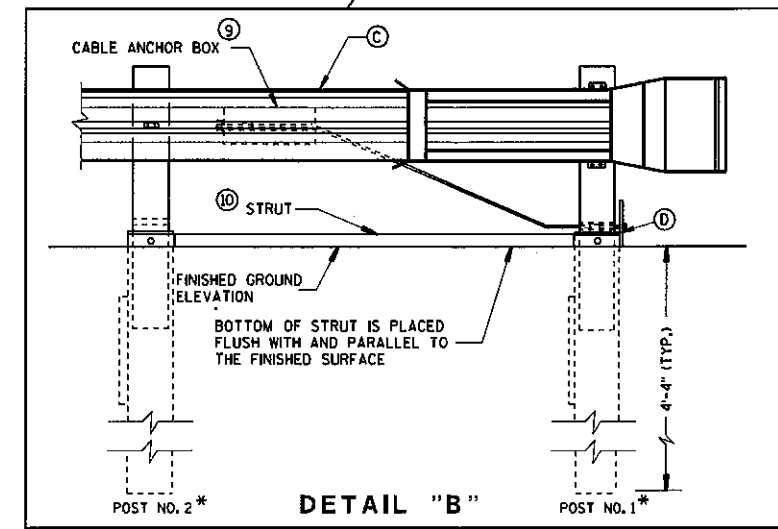
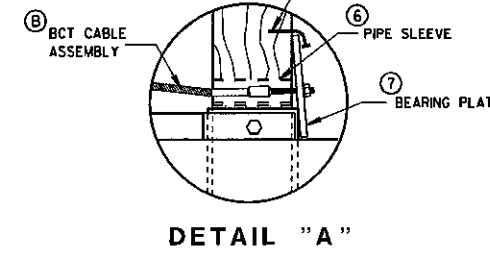
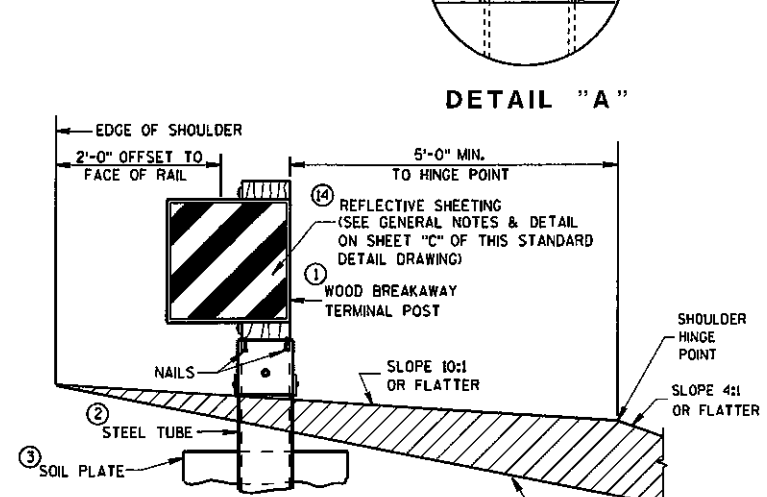
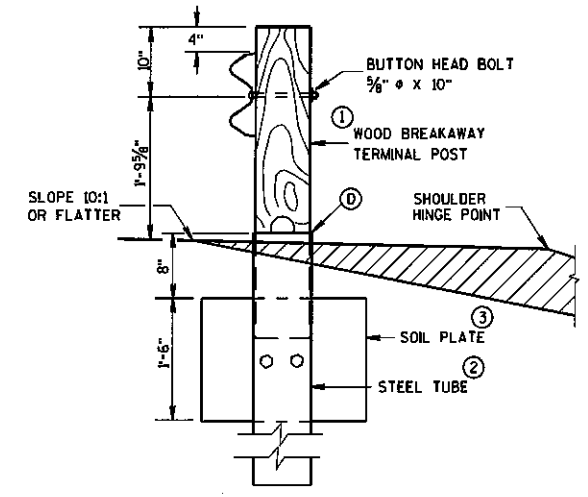
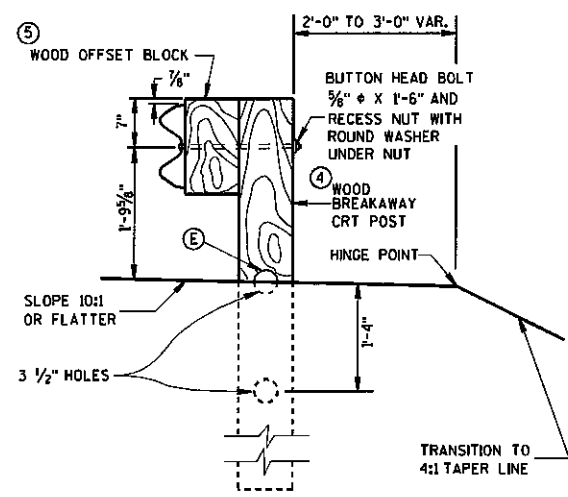
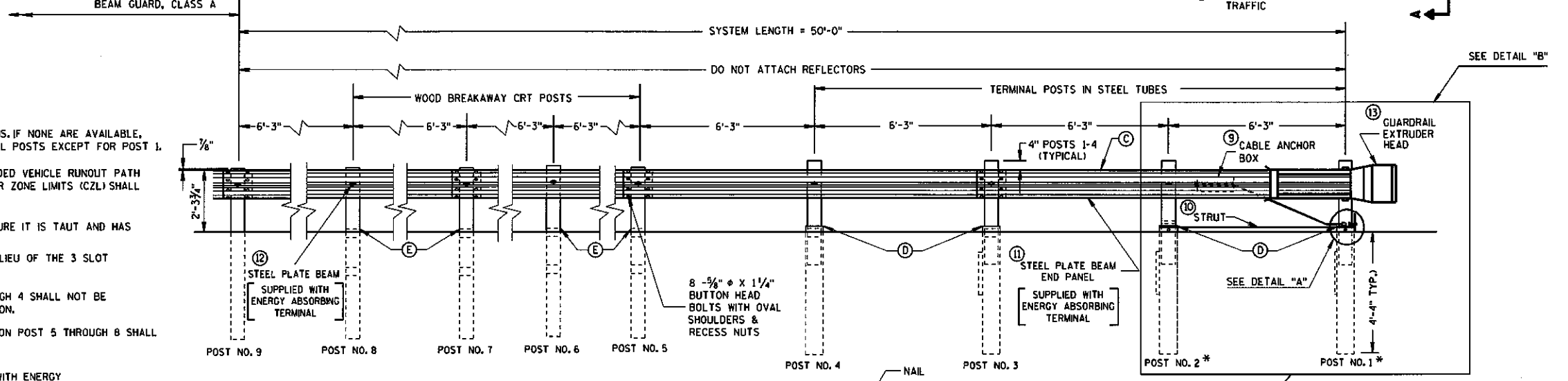
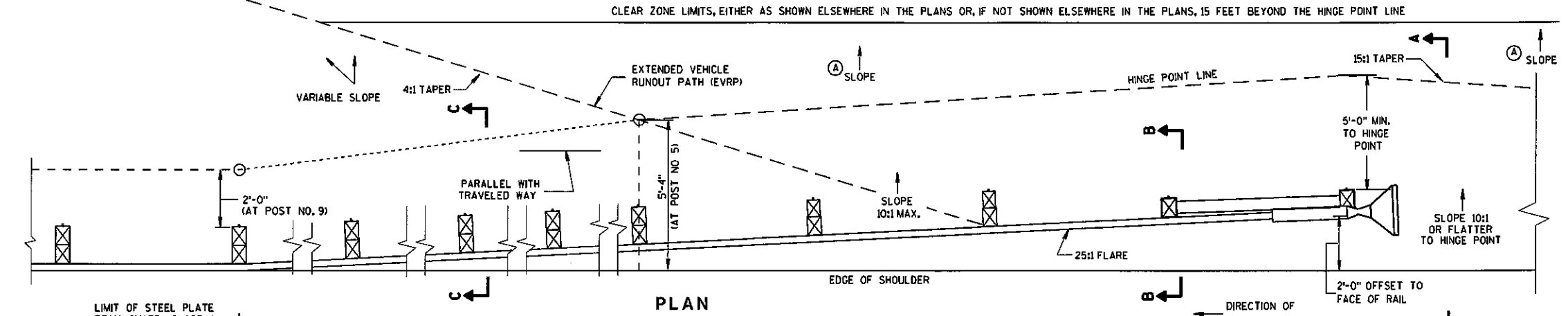
NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5/2" X 7/2" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X 1/4"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL 5/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

- ① THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- ② AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- ③ THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.
- ④ THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- ⑤ THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.



**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

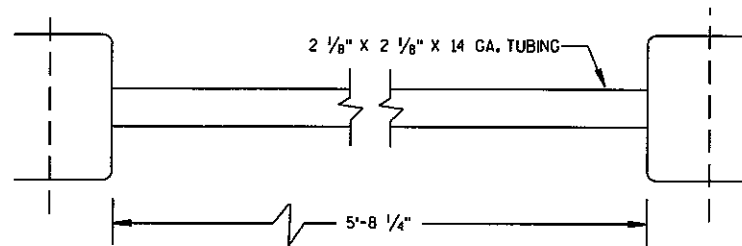
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

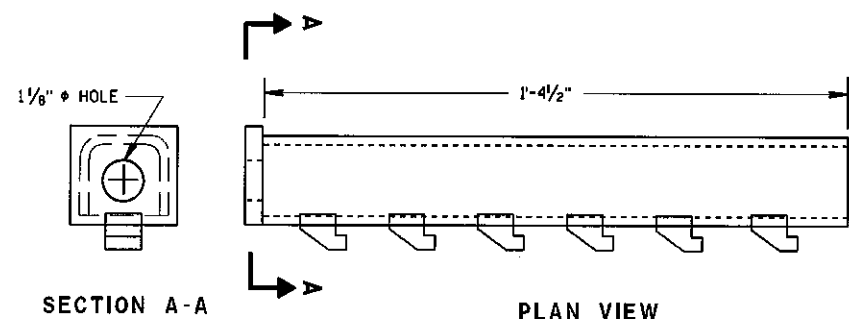
6

S.D.D. 14 B 24-50

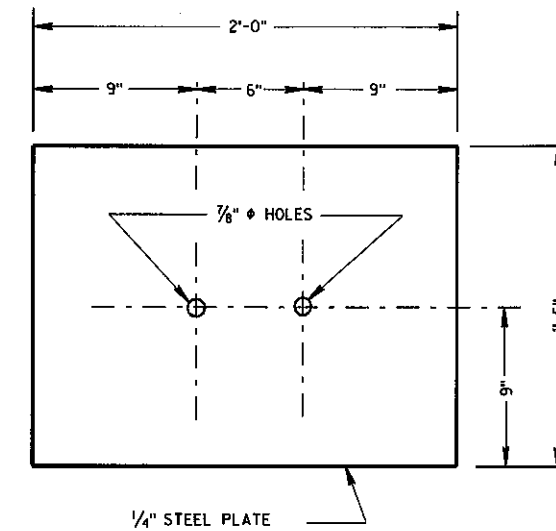
S.D.D. 14 B 24-50



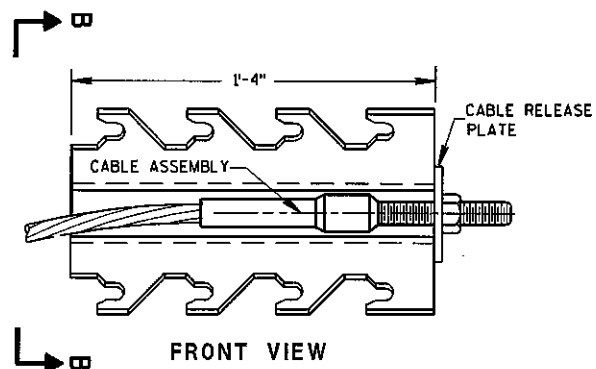
STRUT DETAIL (SKT-350)



CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)

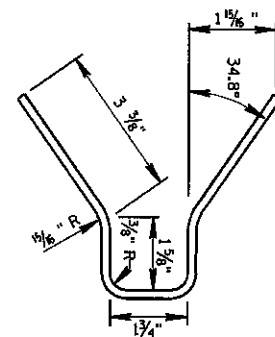


SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

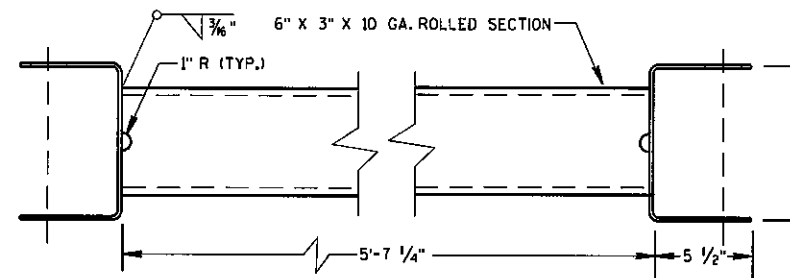


CABLE ANCHOR BOX (SKT-350)

(SKT-350)

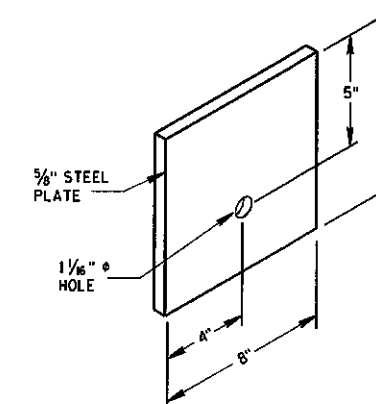


SECTION B-B



STRUT DETAIL (ET-2000/ET-2000 PLUS)

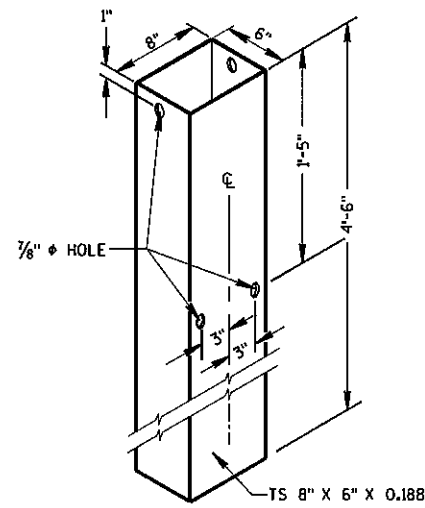
(ET-2000/ET-2000 PLUS)



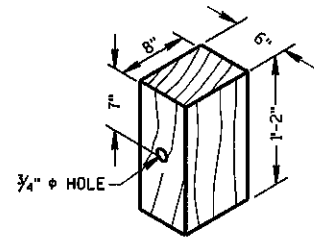
STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

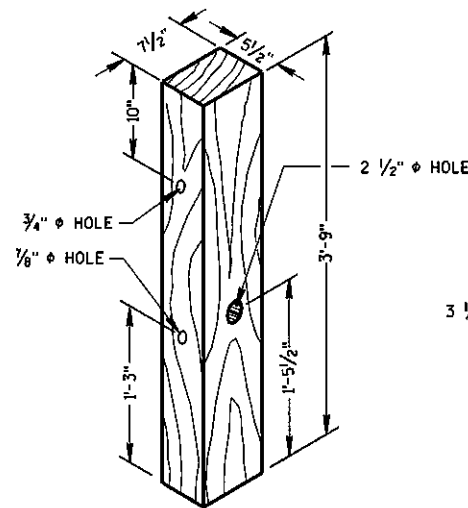
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



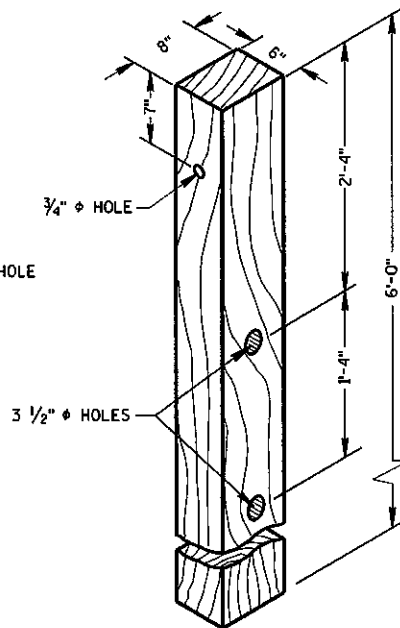
STEEL TUBE
(POSTS NO. 1-4)
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



WOOD OFFSET BLOCK
REQD. AT ALL POSTS EXCEPT POST NO'S 1 & 2



TERMINAL POST
(POSTS NO. 1-4)



CRT POST
(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS

GENERAL NOTES

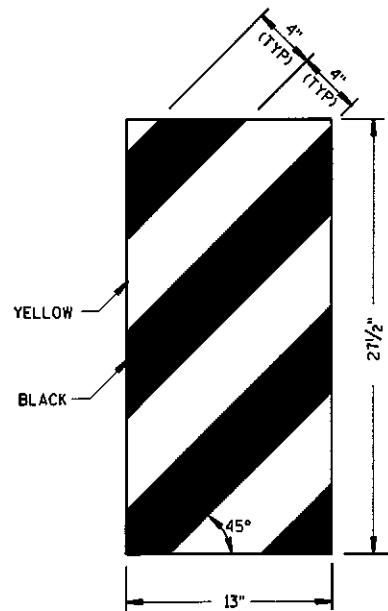
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS AND MANUFACTURERS INSTRUCTIONS.

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIETARY PRODUCT MATERIALS.

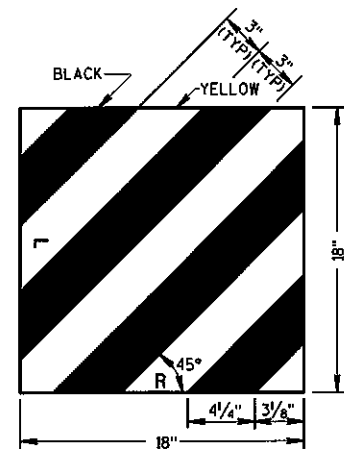
STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-94, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



ET-2000 PLUS ONLY



ET-2000 AND SKT-350

REFLECTIVE SHEETING DETAILS

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11-14-08

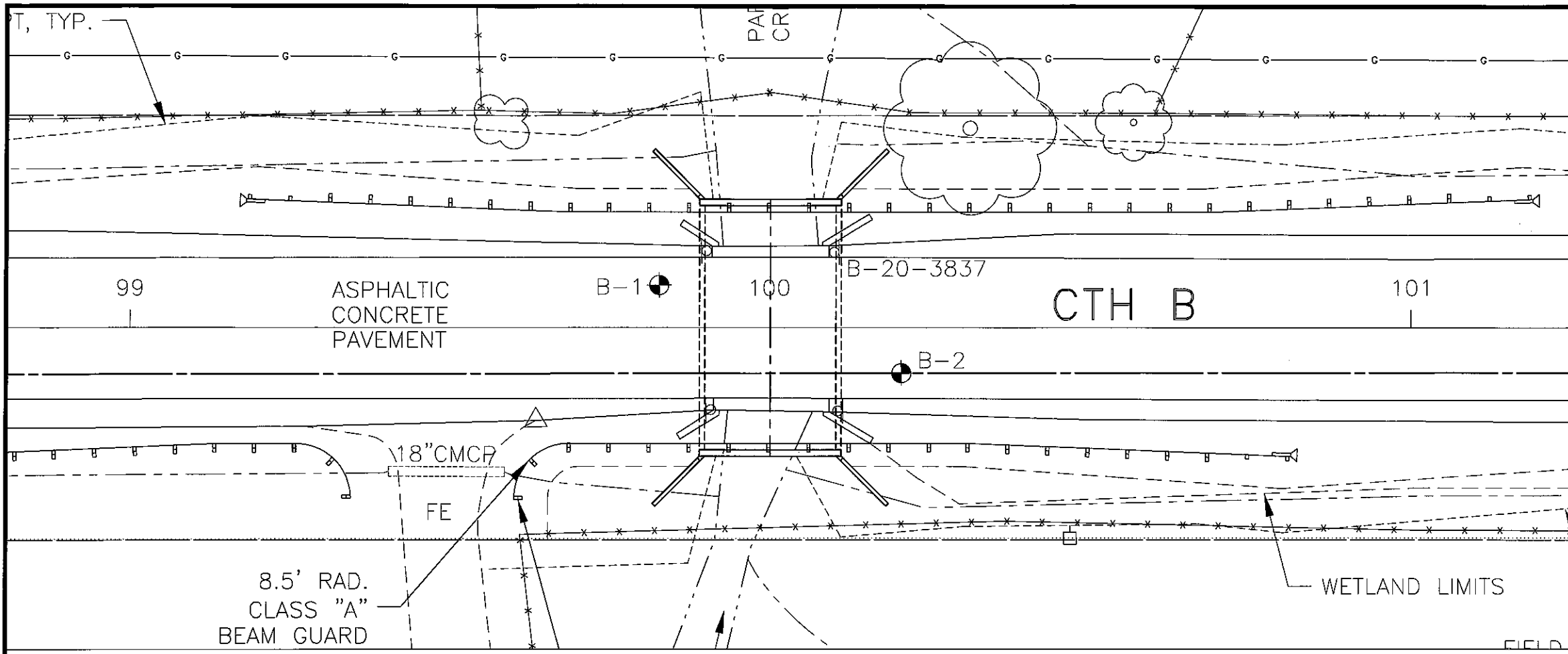
DATE

FHWA

/s/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER



PROJECT NUMBER
XXXX-XX-XX

ABBREVIATIONS

F --- FINE M --- MEDIUM C --- COARSE
 WS --- WEATHERED SO --- SOUND

MATERIAL SYMBOLS

	TOPSOIL		SILT		SANDSTONE
	SAND		PEAT		LIMESTONE
	GRAVEL		CLAY		IGNEOUS ROCK

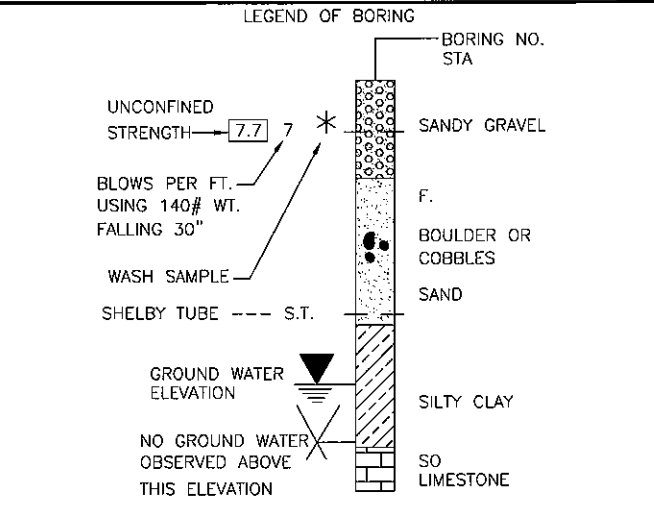
LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION

95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

7 AVERAGE BLOWS PER FOOT

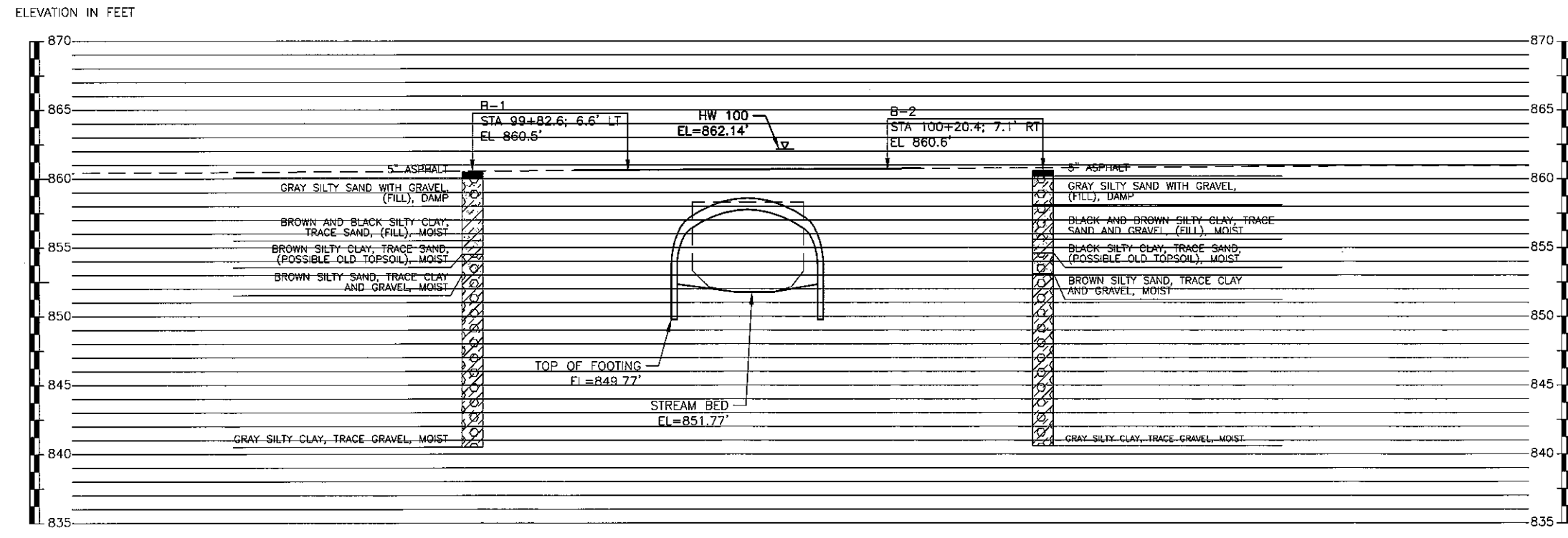
REFUSAL 95/6



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.



8

8

DRAWN BY: AJS PLANS CK'D: RJA

SUBSURFACE EXPLORATION

SHEET 3

JAN 2007

HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.

GENERAL NOTES

FOR WINGWALL
INSERT DETAILS,
SEE SHEET 3

THE PRECAST REINFORCED CONCRETE 3-SIDED FLAT TOPPED CULVERT SHALL CONFORM TO ALL REQUIREMENTS OF THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2009 EDITION, AND ADDITIONAL HY-SPAN SYSTEM REQUIREMENTS AND PLANS FOR THE PROJECT.

THE DESIGN SHALL CONFORM TO THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2007, 4TH EDITION.

MINIMUM CONCRETE STRENGTH FOR PRECAST UNITS SHALL BE 5000 PSI AT 28 DAYS. ALL CONCRETE SHALL BE AIR ENTRAINED. PRECAST UNITS MAY BE ERECTED WHEN FOOTING CONCRETE IS 7 DAYS OLD (MINIMUM) AND REACHES A STRENGTH OF AT LEAST 3000 PSI.

REINFORCEMENT SHALL BE DEFORMED BARS CONFORMING TO AASHTO M31 OR M322 GRADE 60.

MINIMUM COVER FOR ALL REINFORCING STEEL SHALL BE 2" FROM EXTERIOR FACE OF PRECAST PANELS UNLESS NOTED OTHERWISE.

LEGS SHALL BE WEDGED IN PLACE PRIOR TO GROUTING. SLAB KEYS AND FOOTING KEYS AT LEGS SHALL BE FILLED WITH NON-SHRINK GROUT.

FOR NAME PLATE DETAILS SEE CONTRACT PLANS SHEET 6, S.D.D. 12 A 3-9.

JOINTS BETWEEN ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A $\frac{3}{4}$ " BEVELED EDGE.

DESIGN LOADING:

- * SELF WEIGHT DEAD LOAD
- * HL-93 LIVE LOAD AND 25% FOR IMPACT FOR 1'-11" COVER.
- * 288 PSF SUPERIMPOSED DEAD LOAD FOR 2'-0" OF COVER INCLUDING PAVEMENT.
- * MAXIMUM DESIGN VERTICAL REACTION = 11.31 KIPS/ FT.
- * MAXIMUM DESIGN HORIZONTAL REACTION = 2.63 KIPS/LIN. FT.
- * MAXIMUM ALLOWABLE FOUNDATION PRESSURE = 3000 PSF.

CONTRACTOR SHALL MAINTAIN SPAN DIMENSION THRU ENTIRE CONSTRUCTION PERIOD BY MEANS OF WEDGES, CABLE TIES OR STRUTS AT LEGS.

CREST PRECAST INC., HYSAN AND ABNA ENGINEERING SHALL NOT BE RESPONSIBLE FOR GUARDRAIL DESIGN, SOIL ADEQUACY OR SCOUR PROTECTION DESIGN.

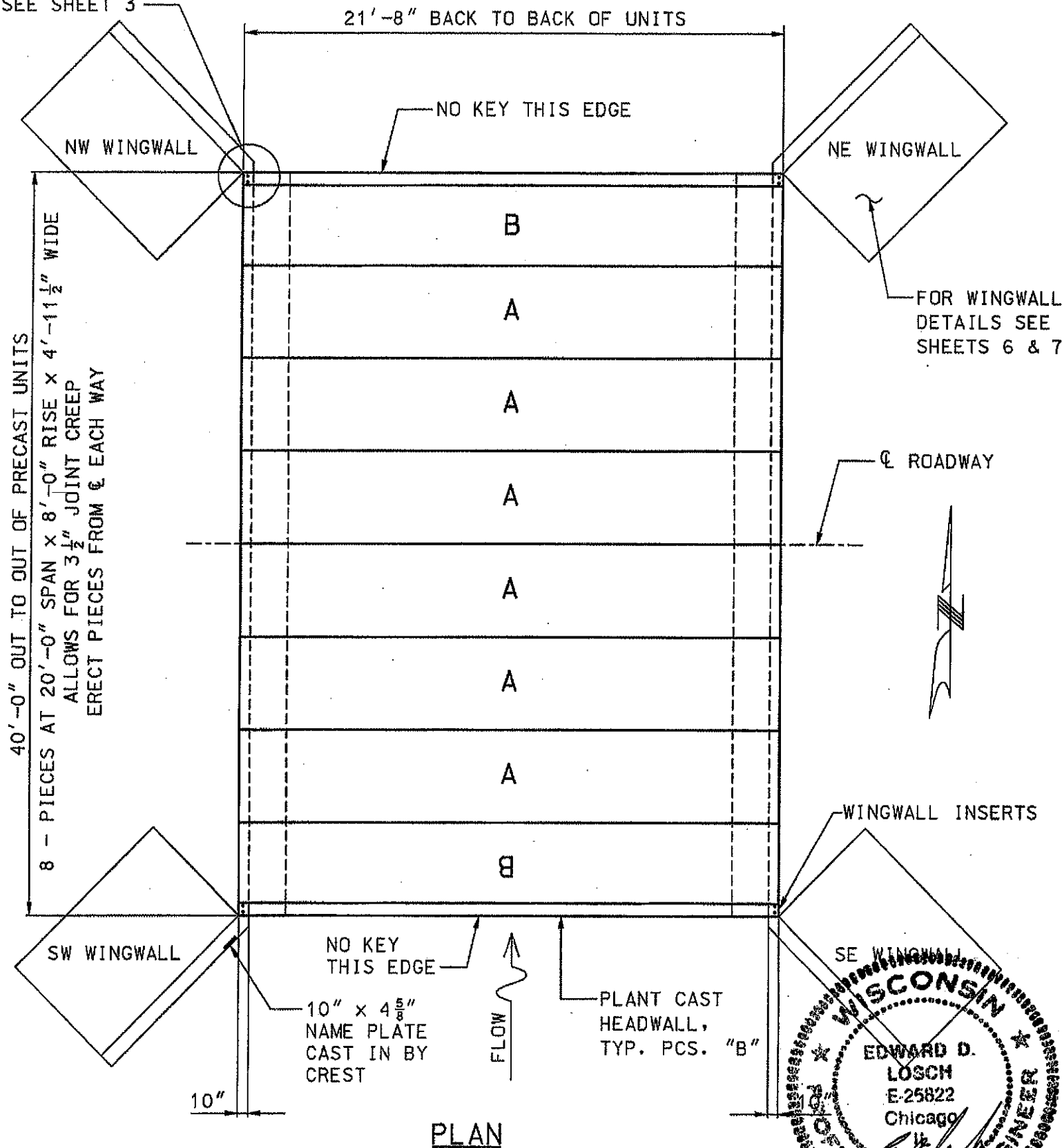
COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982 BRYON, WISCONSIN
STRUCTURE NO. B-20-3837 COUNTY FOND DU LAC

3-SIDED CULVERT PLAN AND NOTES

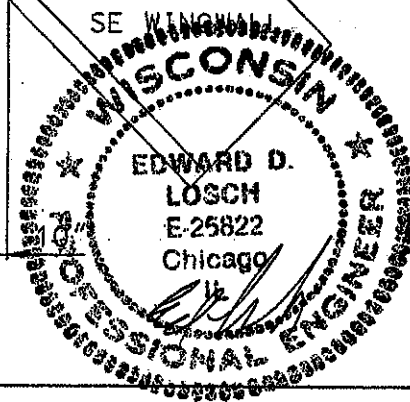
SPAN 20' x RISE 8'-0" x WALL 10"

DATE: 4/29/2009

SHEET 1 OF 7



PLAN



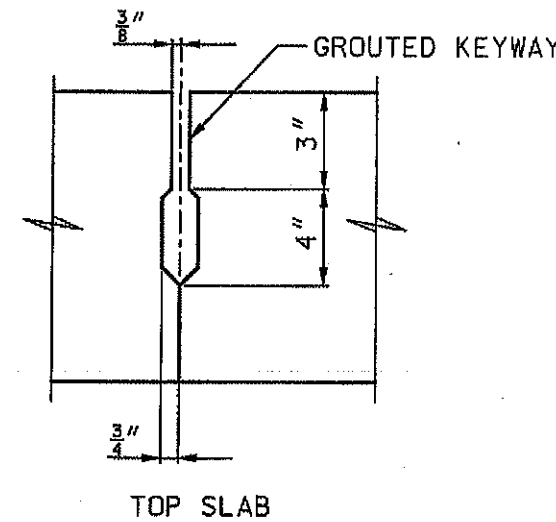
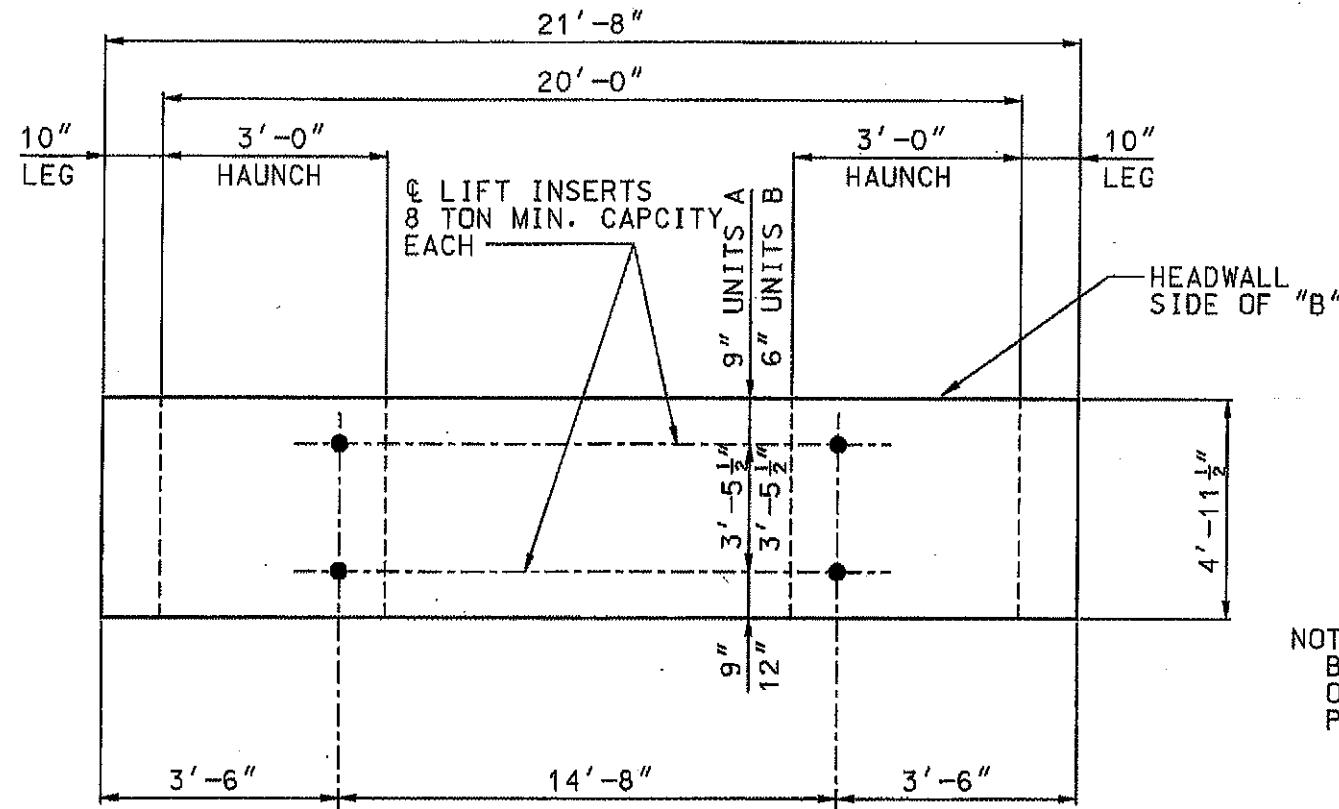
J:\2009\085 Fond du Lac\Cadd\Design\PLAN AND ELEVATION.DGN

HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.

STEEL AREAS
DEFORMED BARS

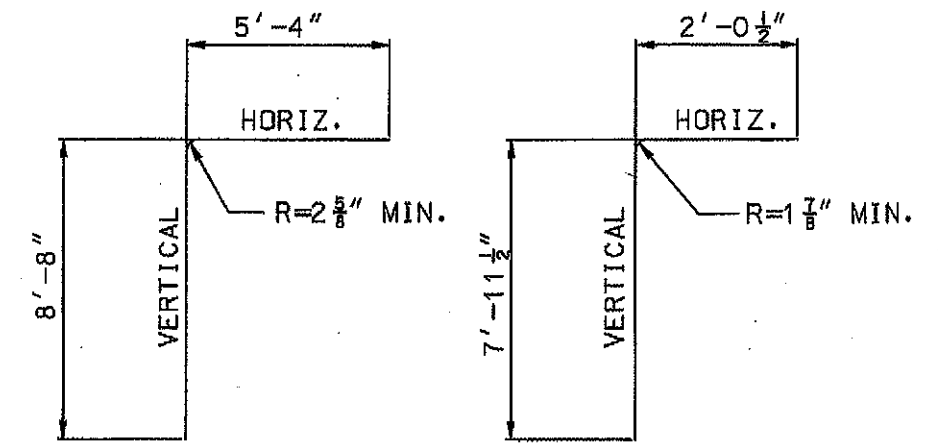
ACTUAL STEEL USAGE

AS1	.795 IN ²	13-#5 @ 4 5/8" CTS.	x 21'-0" STR.
AS2S	.300 IN ²	20-#4 @ 8" CTS.	x 4'-8" STR.
AS2H	.300 IN ²	8-#4 @ 8" CTS.	x 4'-8" STR.
AS3	.300 IN ²	42-#4 @ 8" CTS.	x 4'-8" STR.
AS4	1.144 IN ²	13-#6 @ 4 5/8" CTS.	x 21'-0" STR.
AS5	1.558 IN ²	26-#7 @ 4 5/8" CTS.	x 14'-0" BENT
AS6	.240 IN ²	44-#4 @ 10" CTS.	x 4'-8" STR.
AS7	.398 IN ²	14-#5 @ 9 1/4" CTS.	x 10'-0" BENT
AS8	.573 IN ²	14-#6 @ 9 1/4" CTS.	x 5'-0" STR.



JOINT DETAIL

NOTE: AFTER ERECTION JOINTS SHALL BE FILLED WITH NON-SHRINK GROUT. OMIT KEY ON EXTERIOR FACES OF PIECES MARKED "B".



#7 AS5

#5 AS7

BENT REBAR DETAIL

BILL OF MATERIAL

NO. PCS. REQ'D.	CONCRETE	WEIGHT
8 PIECES *	7.0 CY/PC	15.2 TONS/PC
* 8 PCS. @ 4'-11 1/2" ±		
LAY LENGTH = 40'-0"		

HL93 DESIGN 1.92' AVERAGE COVER
PIECES WITH HEADWALLS WEIGH 17.9 TONS EACH

COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982 BRYON, WISCONSIN
STRUCTURE NO. B-20-3837 COUNTY FOND DU LAC

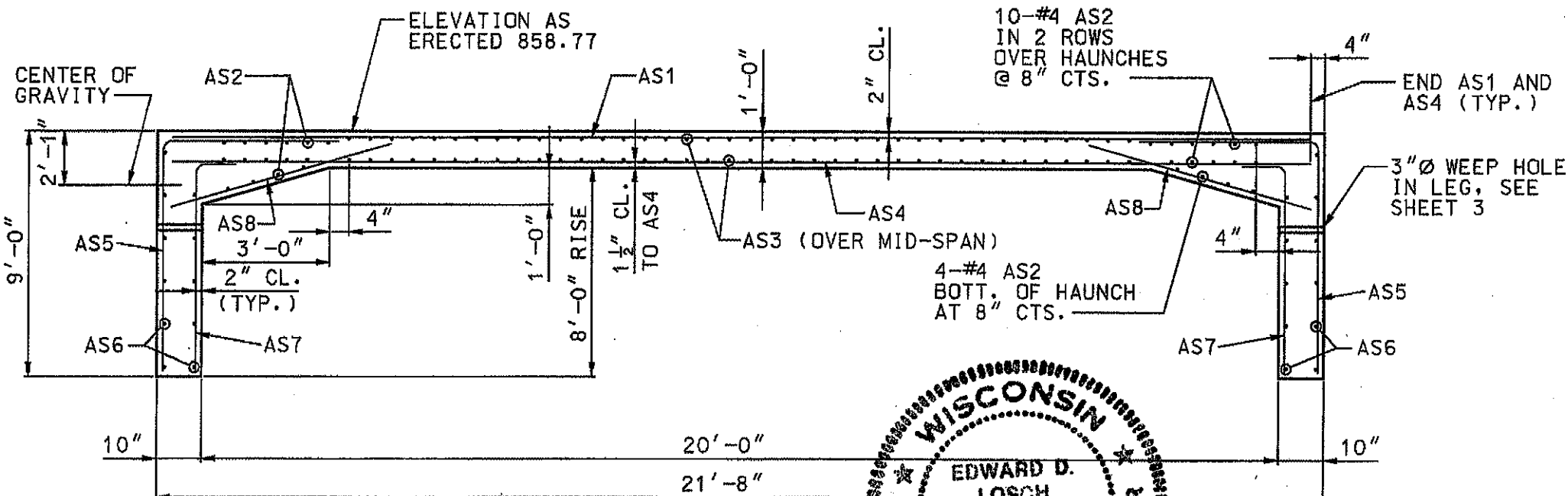
3-SIDED CULVERT REINFORCEMENT

SPAN 20' x RISE 8'-0" x WALL 10"

DATE: 4/29/2009

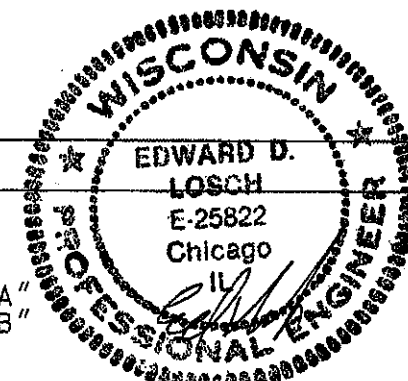
SHEET 2 OF 7

PLAN



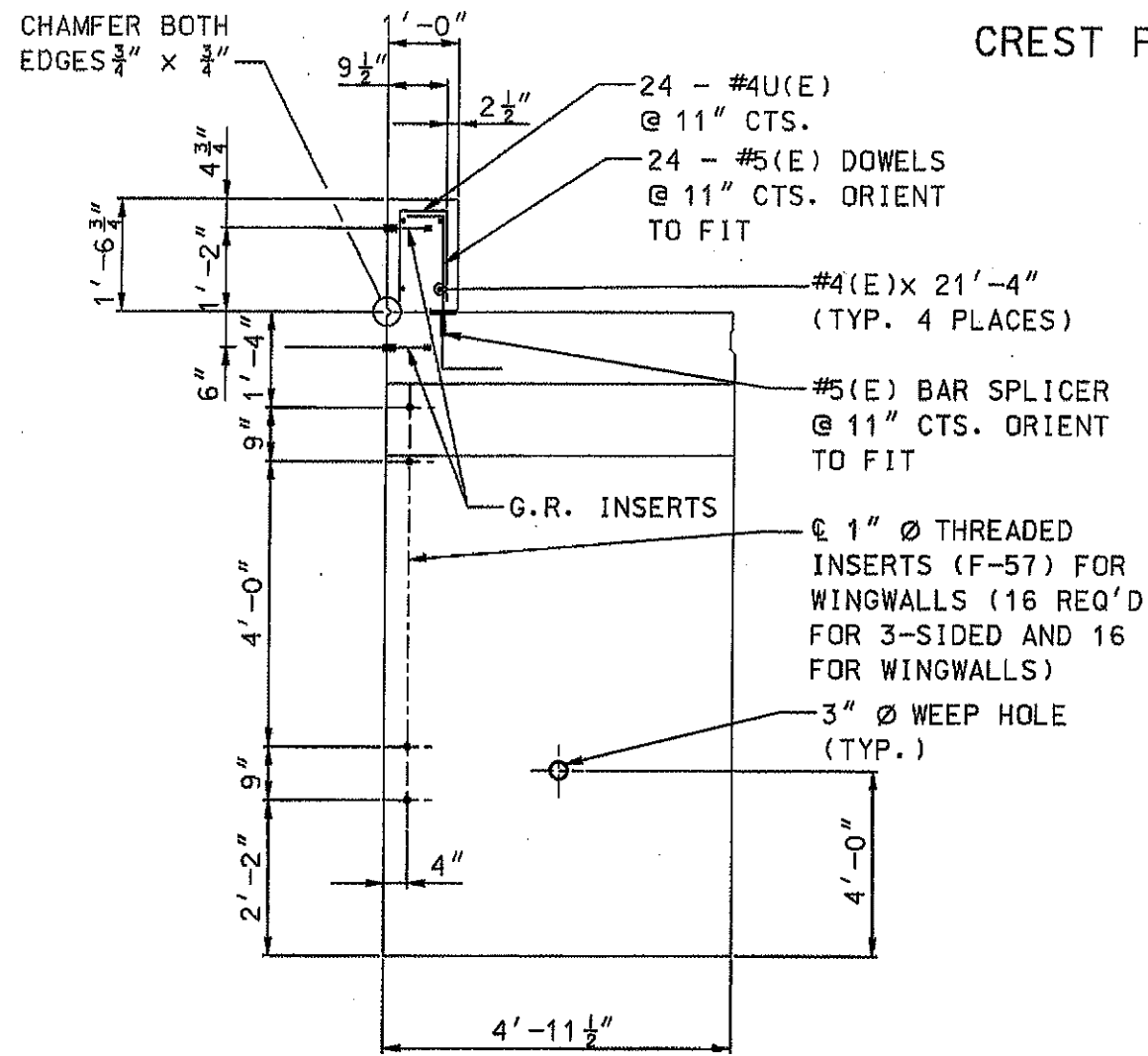
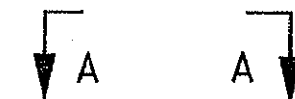
ELEVATION

6 PIECES - MARK "A"
2 PIECES - MARK "B"



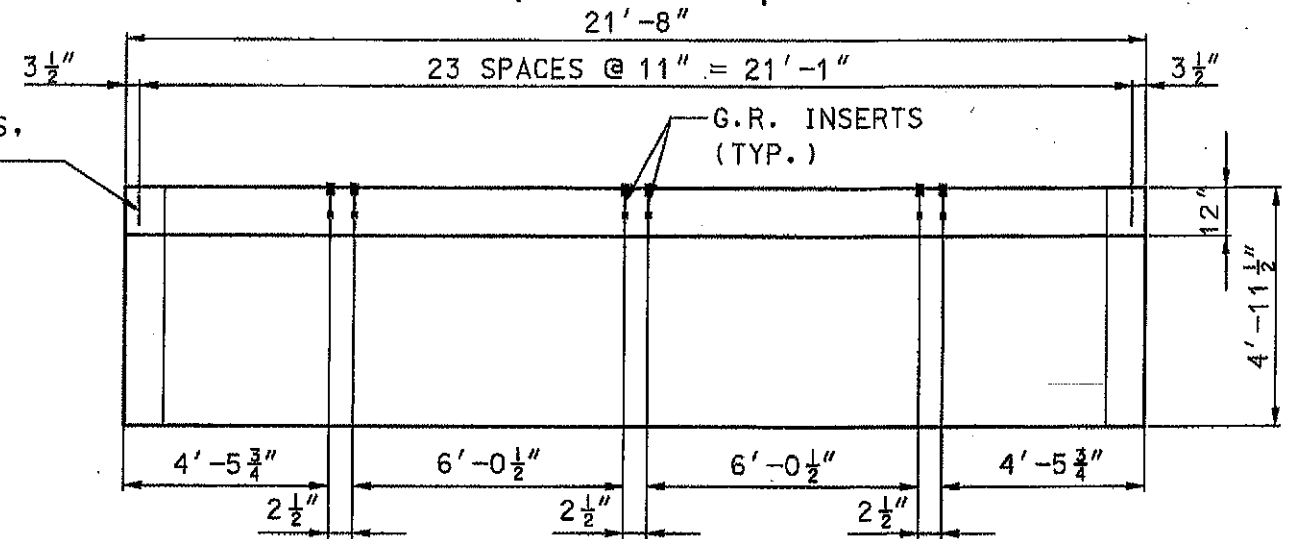
J:\2009\095_Fond du Lac\Cadd\Design\CULVERT REINF.DGN

HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.

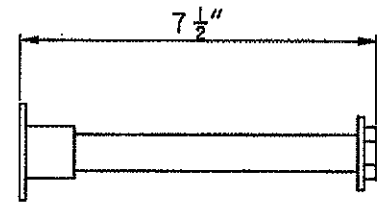


END ELEVATION OF FASCIA UNIT

BAR SPLICERS, DOWELS, AND #4U (TYP.)

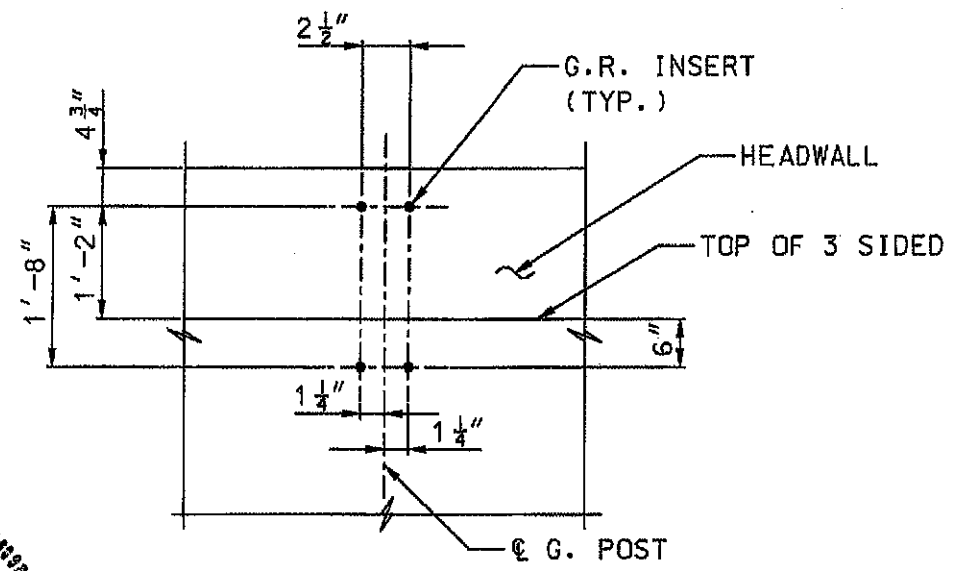


PLAN

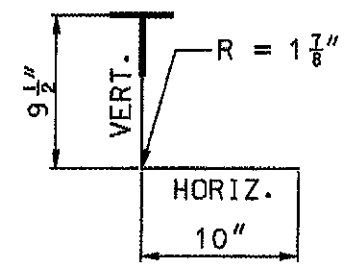


DAYTON/SUPERIOR F-54
DUCTILE EMBED G.R.
INSERT $\frac{5}{8}'' \times 7 \frac{1}{2}''$
ELECTROPLATED

24 REQ'D.

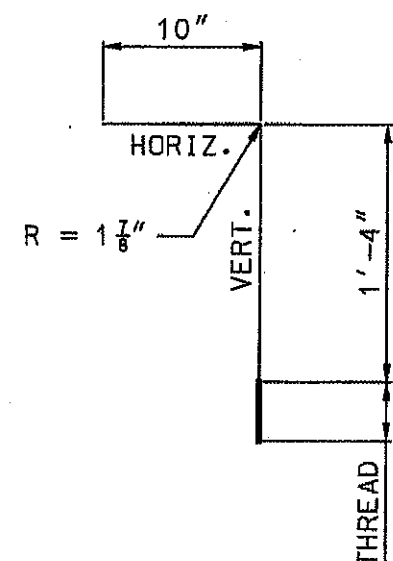


SIDE VIEW A-A



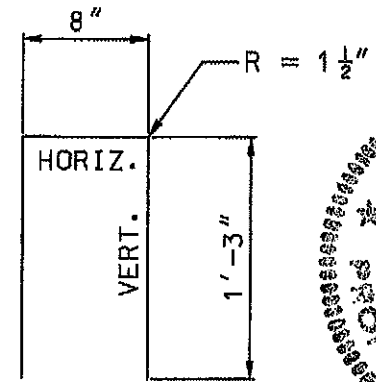
#5(E) BAR SPICER FOR HEADWALL

48 REQ'D.



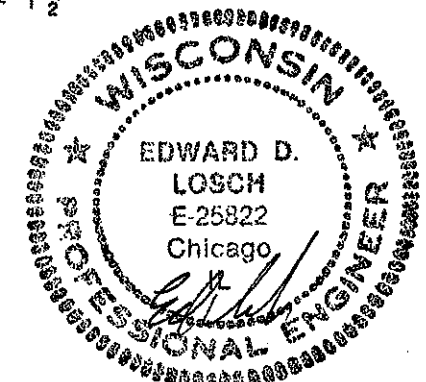
#5(E) BAR DOWEL FOR HEADWALL

48 REQ'D.



#4U(E) BAR FOR HEADWALL

48 REQ'D.



COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982 BRYON, WISCONSIN
STRUCTURE NO. B-20-3837 COUNTY FOND DU LAC

HEADWALL DETAILS

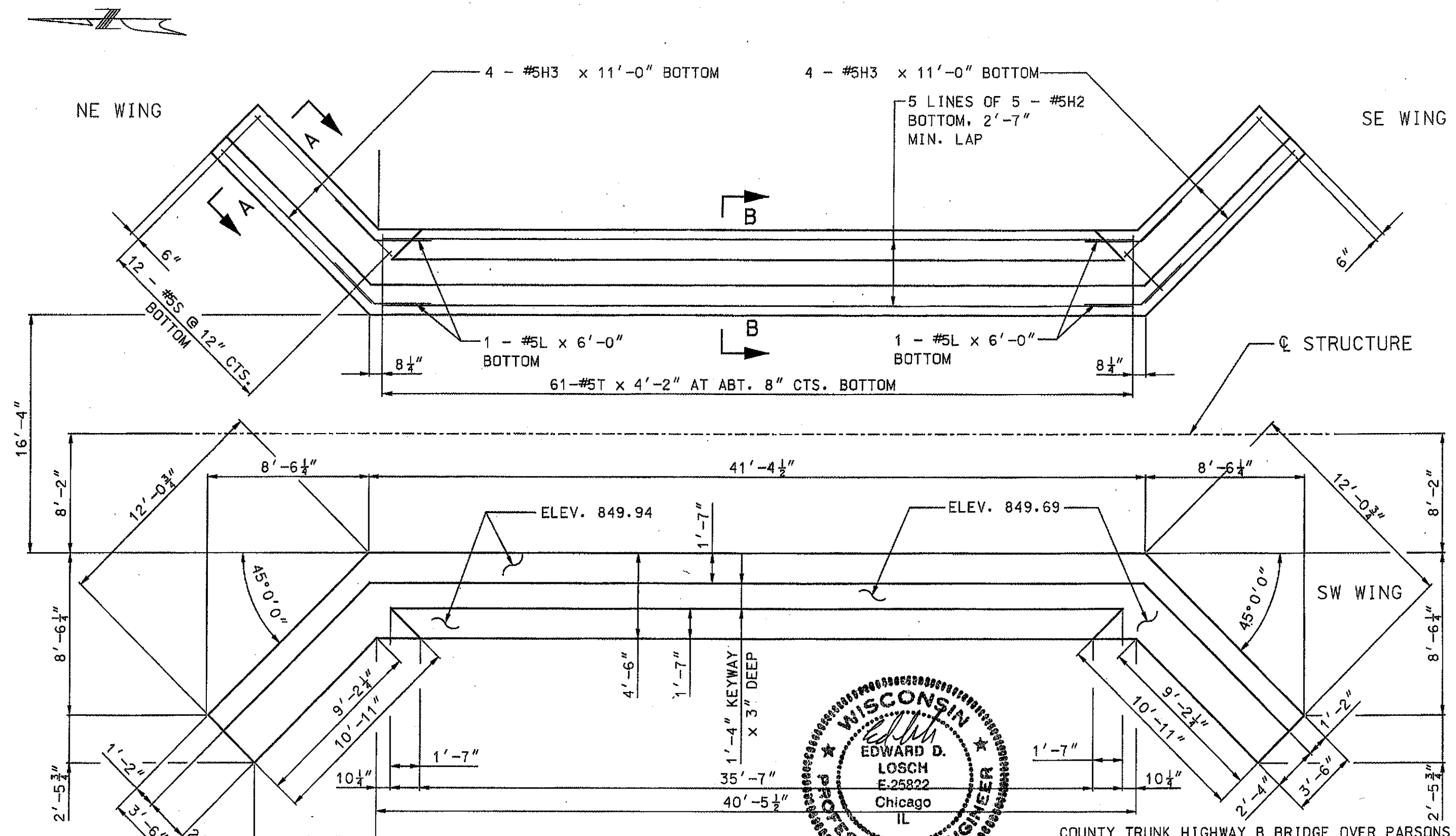
SPAN 20' x RISE 8'-0" x WALL 10"

DATE: 4/29/2009

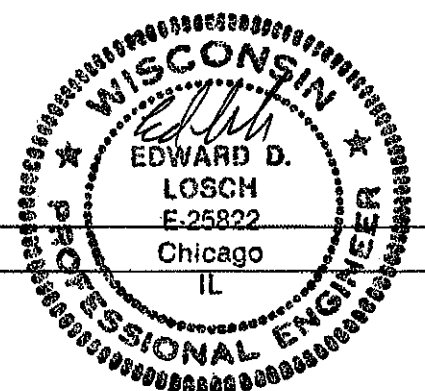
SHEET 3 OF 7

J:\2009\095_Fond du Lac\Cadd\Design\HEADWALL_DETAILS.dgn

HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.



NOTE:
REINFORCEMENT IS SYMMETRICAL
ABOUT THE CL OF STRUCTURE
LAYOUT INCLUDES A NOMINAL
AMOUNT FOR CONSTRUCTION
TOLERANCES



COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982
STRUCTURE NO. B-20-3837
BRYON, WISCONSIN
COUNTY FOND DU LAC

FOUNDATIONS

SPAN 20' x RISE 8'-0" x WALL 10"

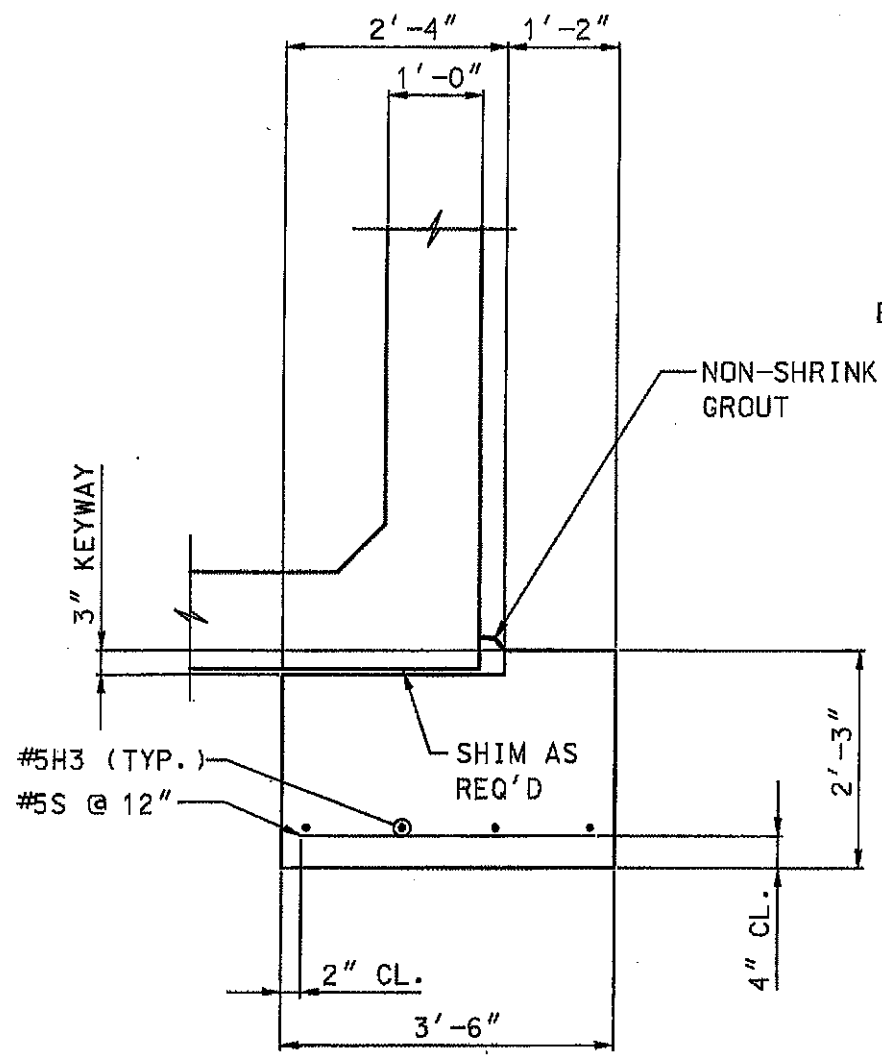


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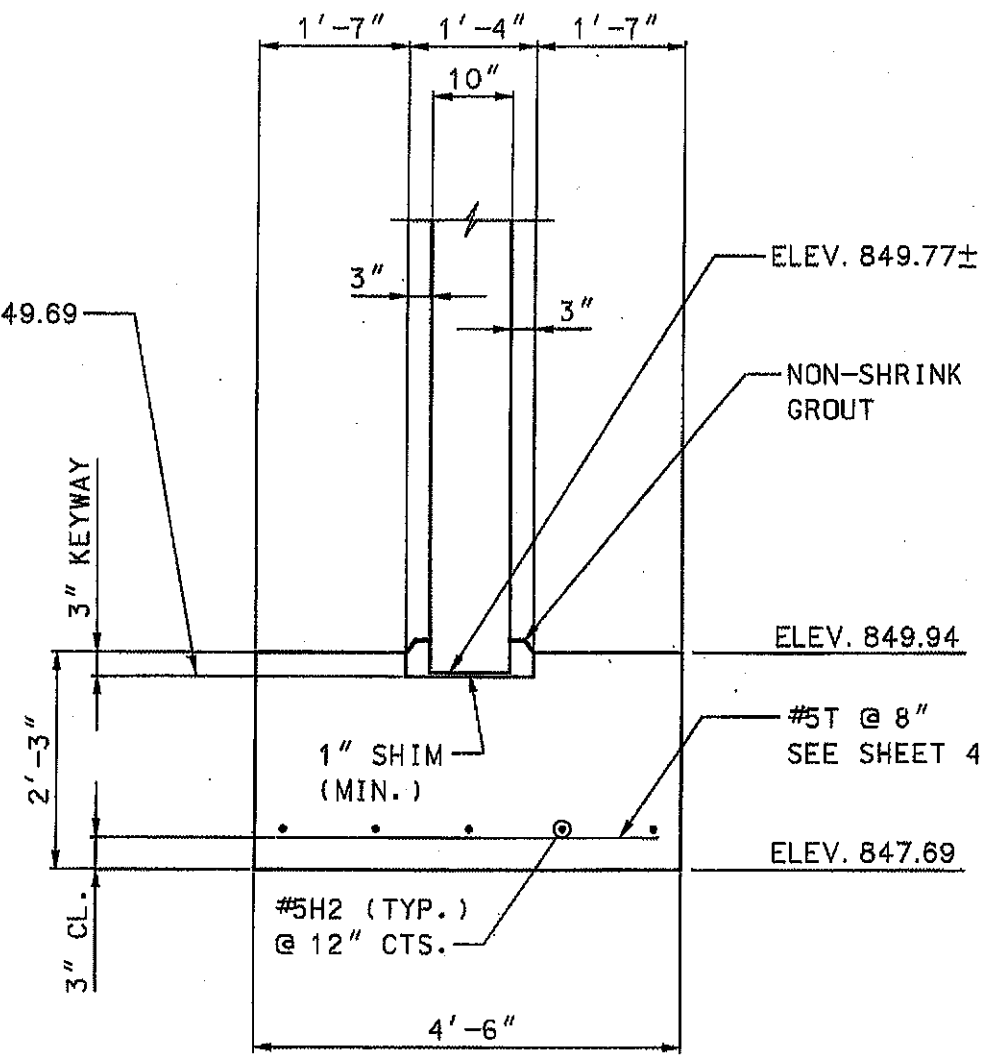
SHEET 4 OF 7

J:\2009\095 Fond du Lac\Cadd\Design\PLAN FOR WINGWALL FOUNDATION.dgn

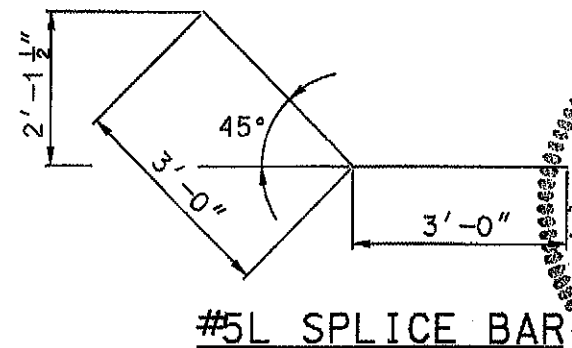
HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.



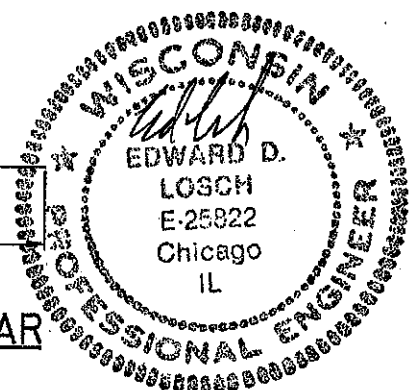
SECTION A-A
(WING)



SECTION B-B
(3-SIDED)



#5L SPLICE BAR



BILL OF MATERIAL			
REINFORCING STEEL			
SIZE	NUMBER	LENGTH (FT)	WEIGHT (LBS)
#5H3	8	11'-0"	92
#5T	61	4'-2"	265
#5H2	10	21'-9"	227
#5L	4	6'-0"	25
#5S	24	3'-2"	80
TOTAL REINFORCING STEEL			689
CONCRETE			
CONCRETE PER FOOTING PER FOUNDATION			21.5 CU YD

DESIGN CONCRETE STRENGTH FOR FOOTING
= 3,000 PSI @ 28 DAYS OR MINIMUM
MATERIAL STRENGTH AS REQ'D BY WISDOT

COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982 BRYON, WISCONSIN
STRUCTURE NO. B-20-3837 COUNTY FOND DU LAC

FOUNDATION SECTIONS
SPAN 20' x RISE 8'-0" x WALL 10"

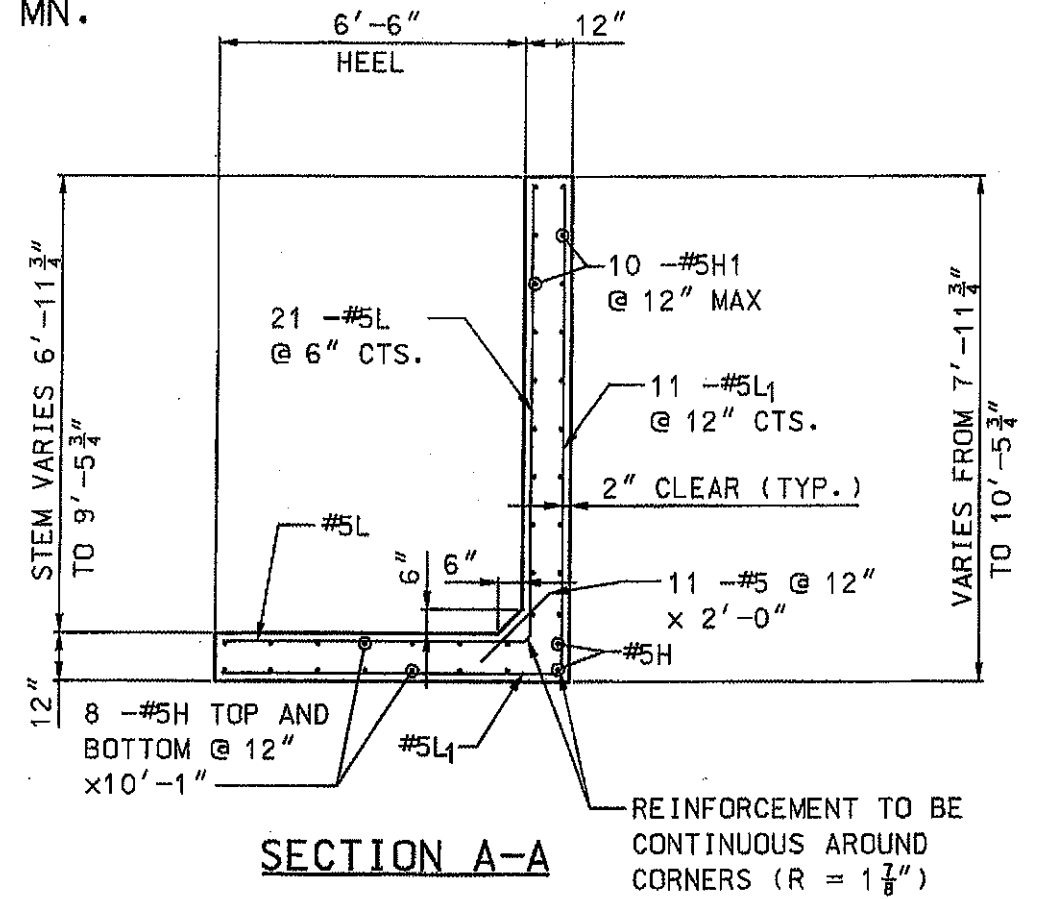
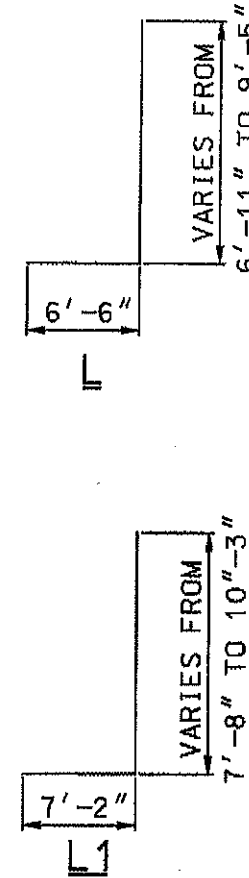
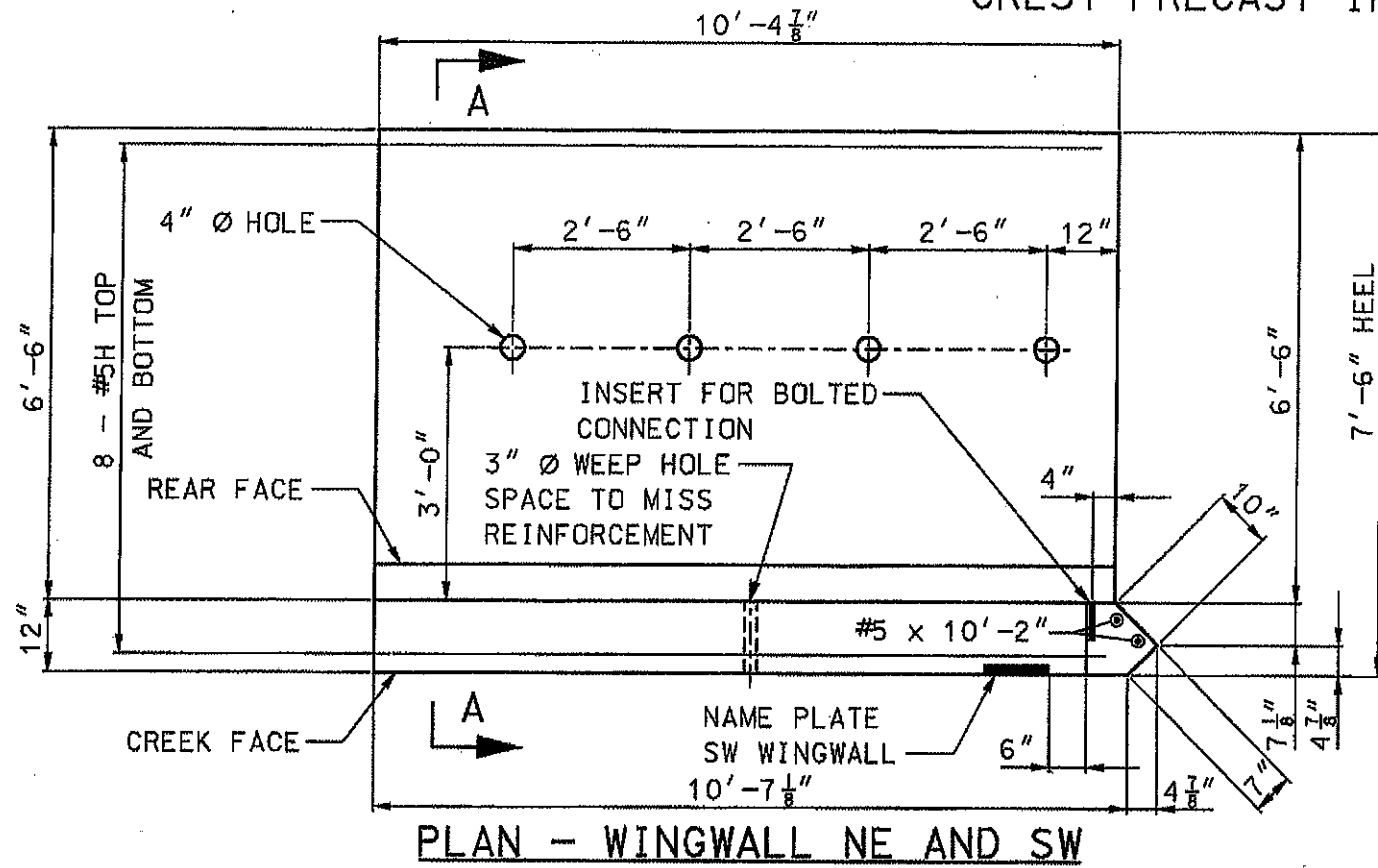


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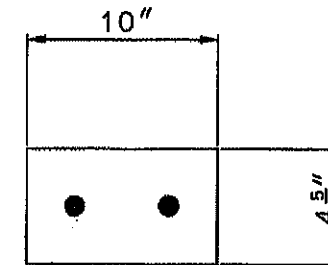
SHEET 5 OF 7

J:\2009\095 Fond du Lac\Cadd\Design\SECTIONS FOR WINGWALL FOUNDATION.dgn

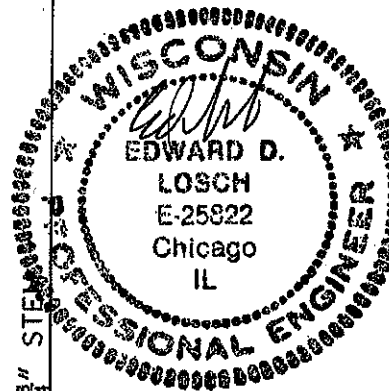
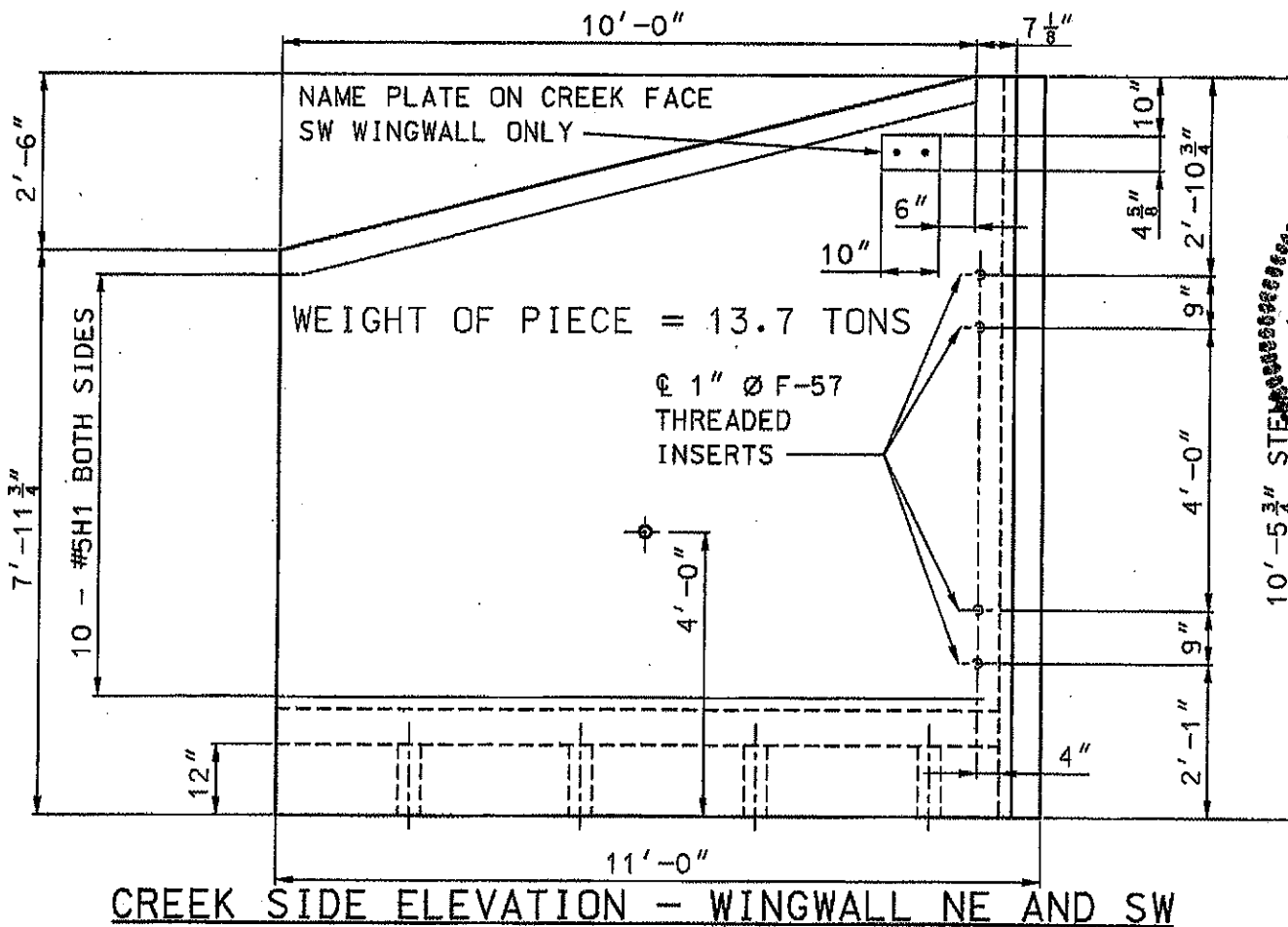
HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.



MAKE 2 PIECES THUS



NAME PLATE - 1 REQ'D, SW WINGWALL



4 F-57 INSERTS
REQ'D PER PIECE.

COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982 BRYON, WISCONSIN
STRUCTURE NO. B-20-3837 COUNTY FOND DU LAC

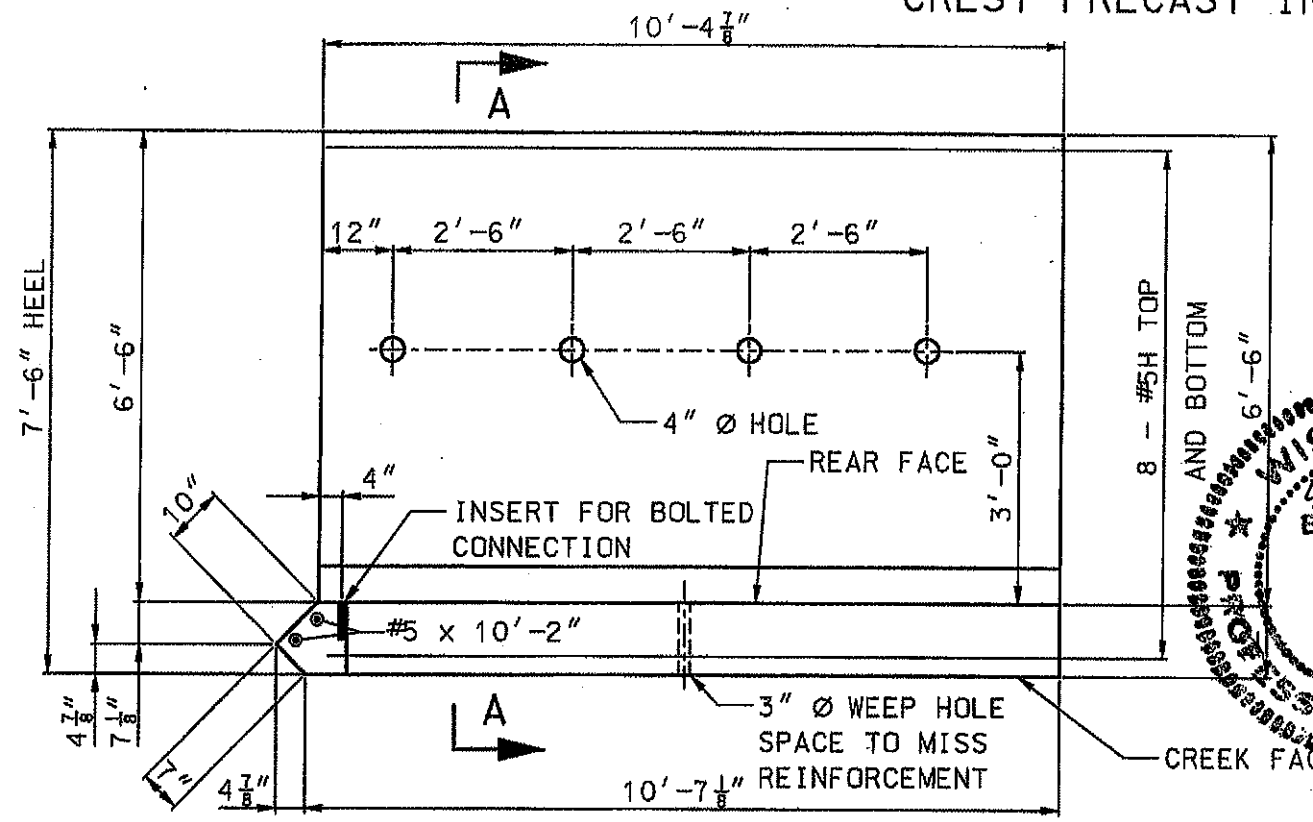


NE & SW WINGWALLS
SPAN 20' x RISE 8'-0" x WALL 10"

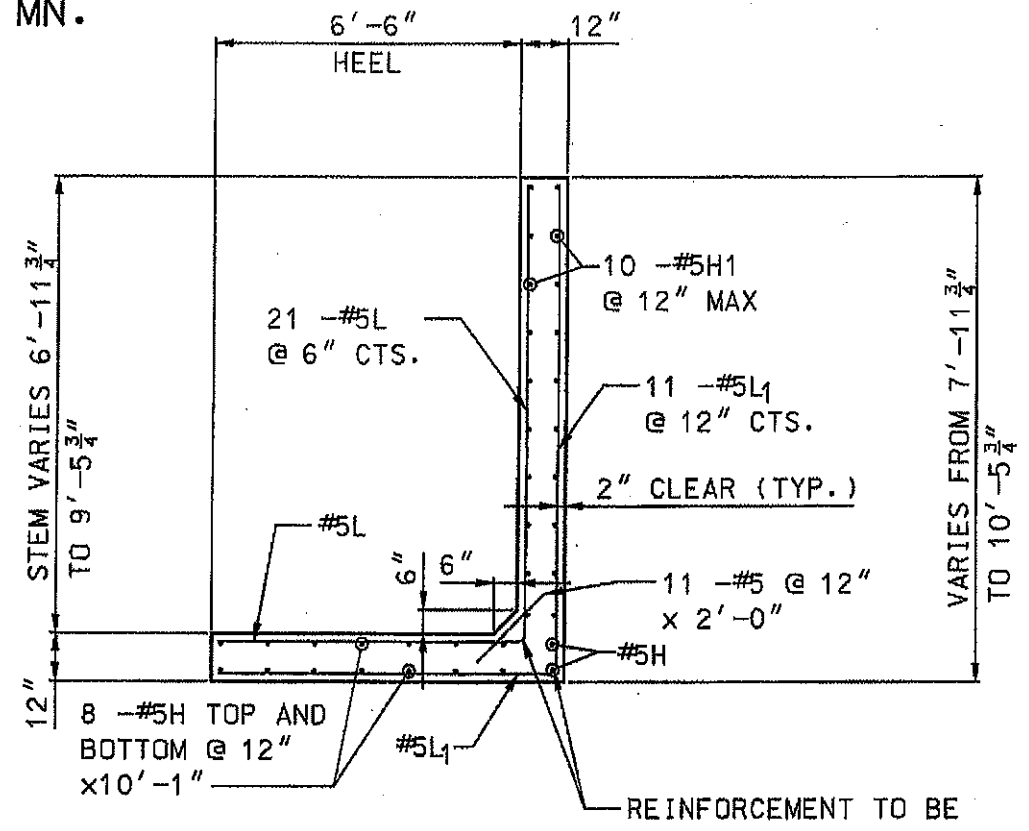
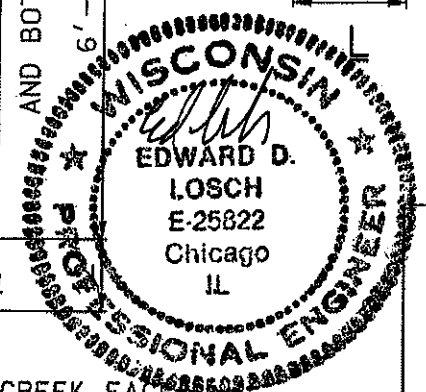
DATE: 4/29/2009

SHEET 6 OF 7

HY-SPAN INDUSTRIES
CREST PRECAST INC., La CRESCENT MN.

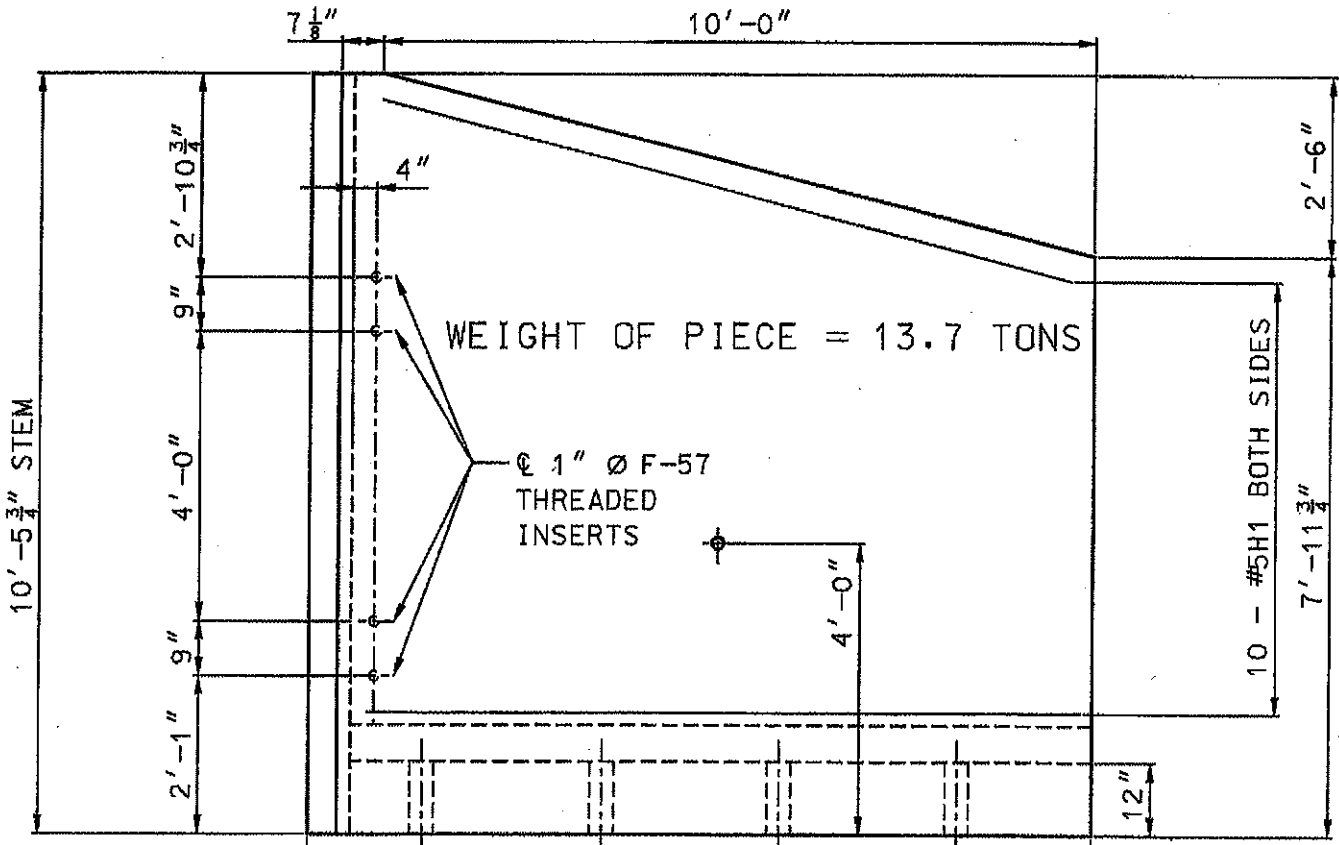


PLAN - WINGWALL NW AND SE

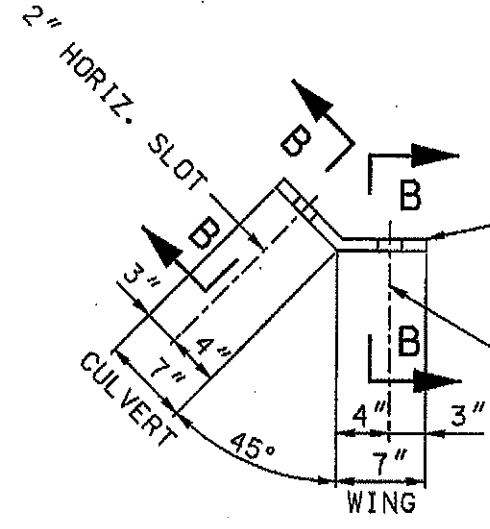


SECTION A-A

REINFORCEMENT TO BE CONTINUOUS AROUND CORNERS (R = 1 7/8")

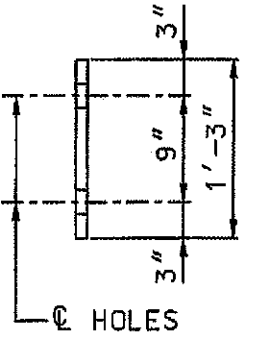


CREEK SIDE ELEVATION - WINGWALL NW AND SE



ELEVATION

MAKE 2 PIECES THUS



SECTION B-B

8 P'S REQ'D (TOTAL)

4 F-57 INSERTS
REQ'D PER PIECE.

COUNTY TRUNK HIGHWAY B BRIDGE OVER PARSONS CREEK
PROJECT #10982
STRUCTURE NO. B-20-3837
BRYON, WISCONSIN
COUNTY FOND DU LAC

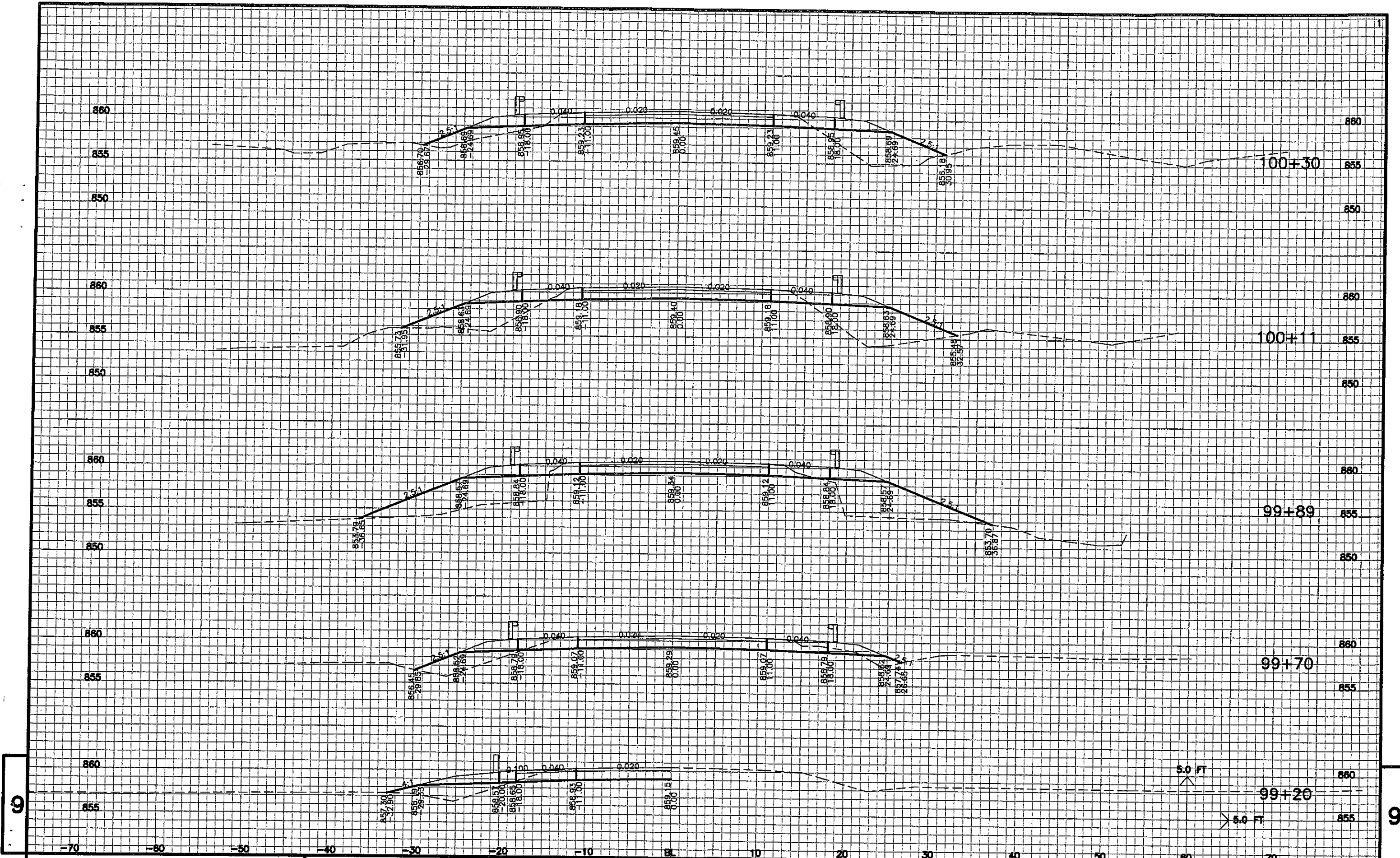
NW & SE WINGWALLS
SPAN 20' x RISE 8'-0" x WALL 10"



DATE: 4/29/2009

SHEET 7 OF 7

J:\2009\095 Fond du Lac\Cadd\Design\WINGWALL - NW AND SE.dgn



PROJECT NO:

HWY: CTH B

COUNTY: FOND DU LAC

CROSS SECTIONS

SHEET NO:

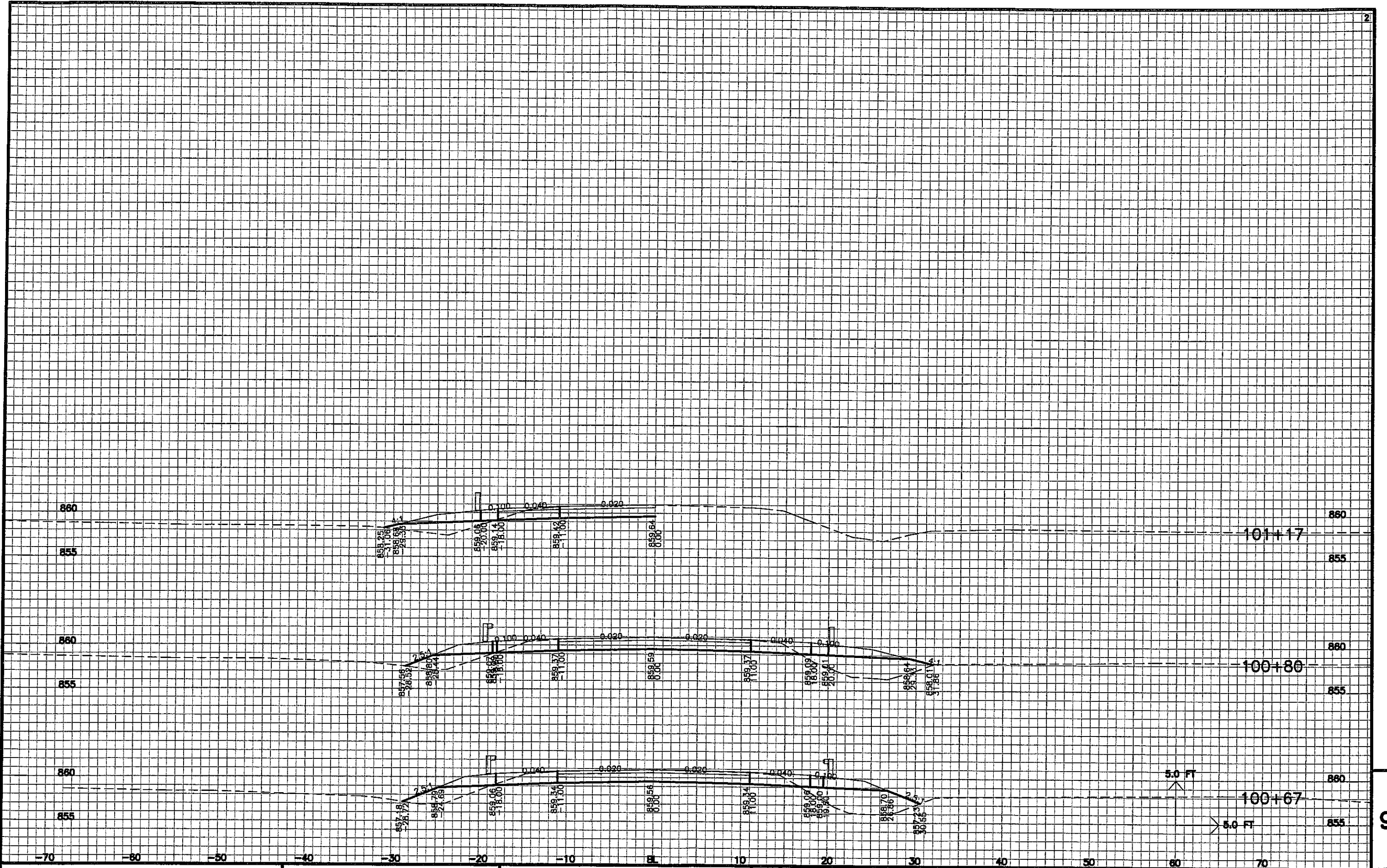
FILE NAME: CTHB_XS.DWG

PATH: S:\CURRPROJ\FONDUCO\CTHB_CULVERT\ACAD\

PLOTTED ON 09 FEB 2007 AT 14:00:29 BY GAAJS

PLOTSCALE: 1 = 2 (HALF SIZE)

E



9

9