

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
TOWNS OF RYEGATE, BARNET,
WATERFORD & ST. JOHNSBURY
COUNTY OF CALEDONIA

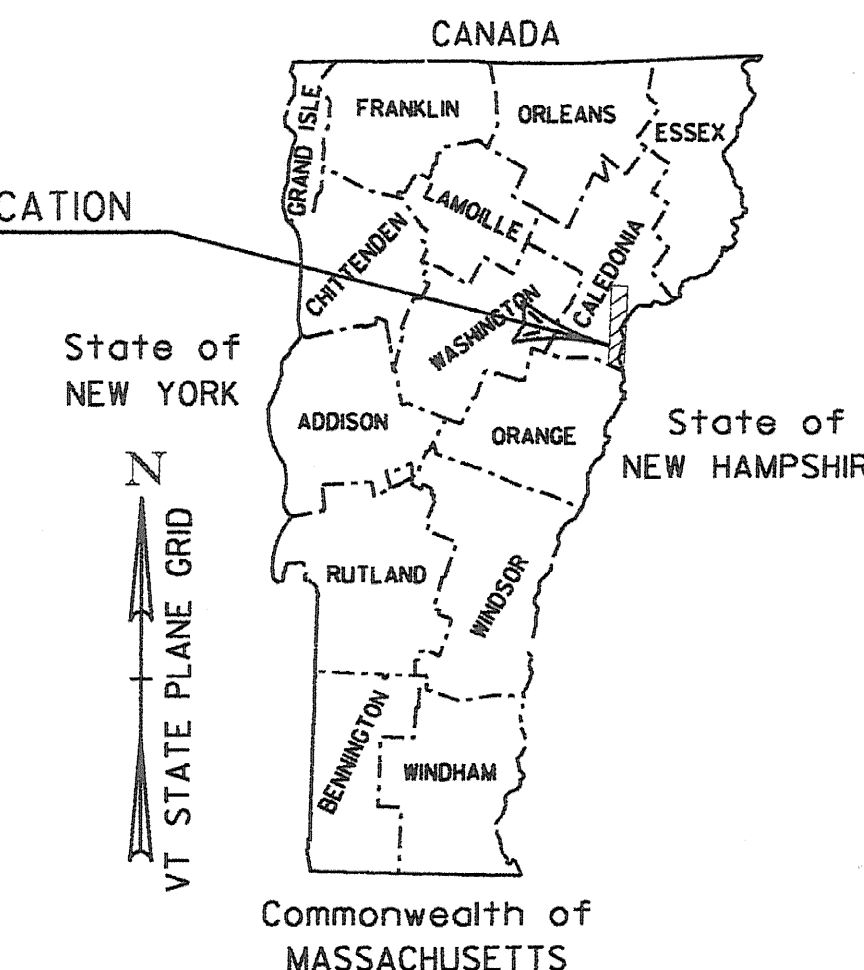
INTERSTATE ROUTE 91 - SIGNS

BEGINNING AT THE NEWBURY / RYEGATE TOWN LINE (MM 110.96)
AND EXTENDING APPROXIMATELY 28.89 KM (17.95 MI)
TO MM 128.91, IN THE TOWN OF ST. JOHNSBURY

LENGTH OF ROADWAY 28 888 METERS = 17.95 MILES = 28.89 KILOMETERS
LENGTH OF PROJECT 28 888 METERS = 17.95 MILES = 28.89 KILOMETERS

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REMOVAL OF EXISTING
SIGNS AND PLACEMENT OF NEW SIGNS AND ASSOCIATED ELEMENTS ALONG THE
PROJECT LENGTH, RAMPS, AND INTERCHANGES.

PROJECT LOCATION
IM 091-2(73)



TRAFFIC DATA

NORTHBOUND SOUTHBOUND
INTERSTATE 91
2000 ADT = 2300+/- 2000 ADT = 2300+/-

RECORD PLANS

CONTRACTOR: F.R. LAFAYETTE, INC. - ESSEX JUNCTION, VT
RESIDENT ENGINEER: JIM FOREST
CONSTRUCTION BEGAN: APRIL 23, 2007
CONSTRUCTION COMPLETE: APRIL 25, 2008
RECORD PLANS BY: JIM FOREST & C. PIERCE

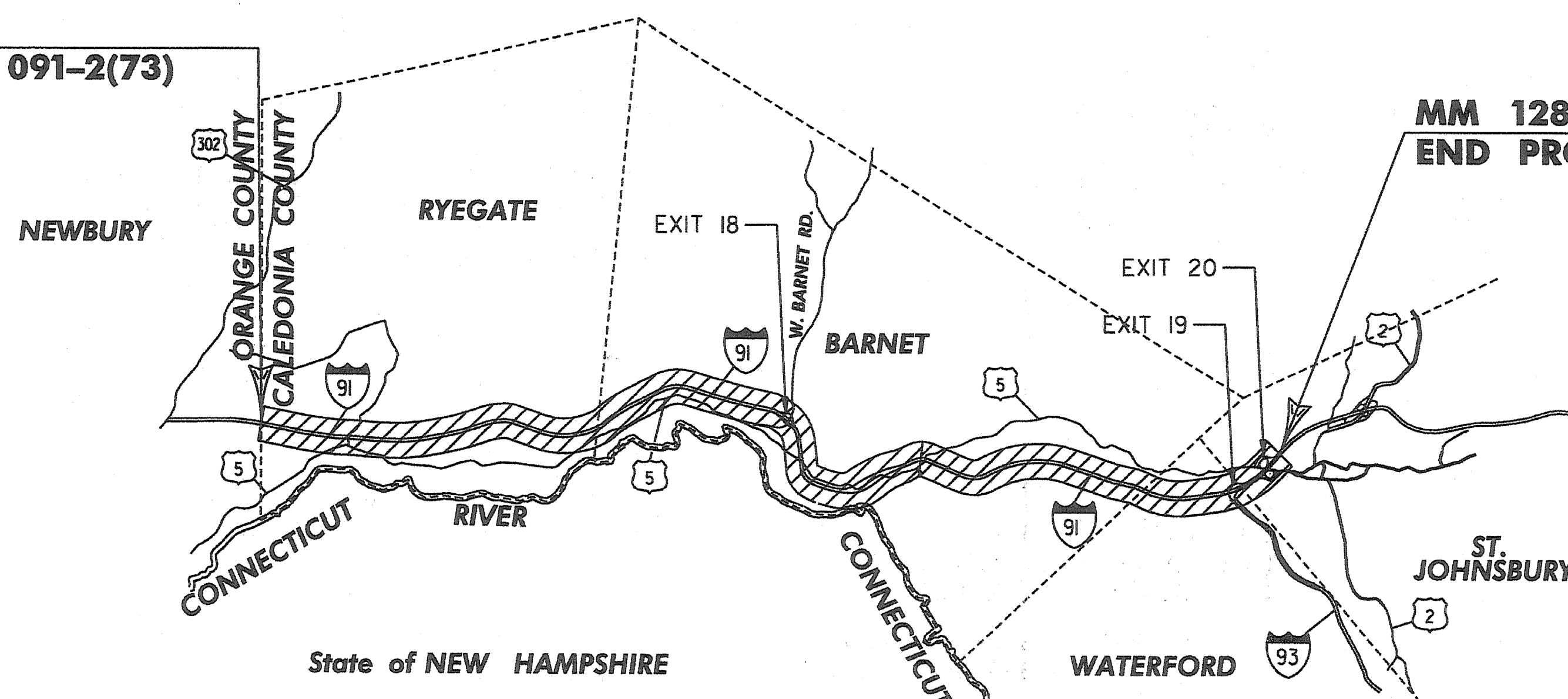
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY
THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY *James A. Forest* RESIDENT ENGINEER
DATE 05-24-10

NOTE: Any further information concerning final quantities, amounts or other details
relative to this project may be found at Central Files in the electronic archives.

MM 110.960
BEGIN PROJECT IM 091-2(73)

MM 128.910
END PROJECT IM 091-2(73)

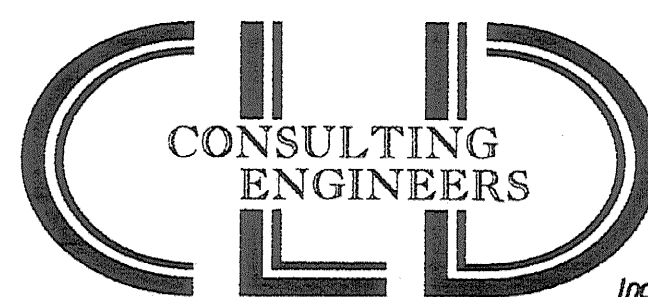


CONVENTIONAL SYMBOLS

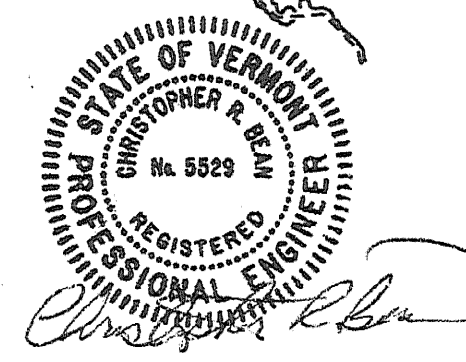
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : N/A
SURVEYED DATE : N/A

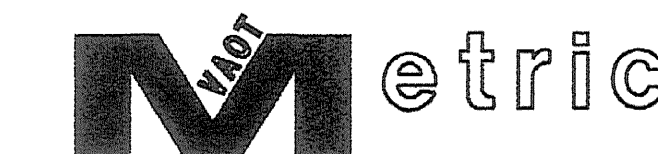
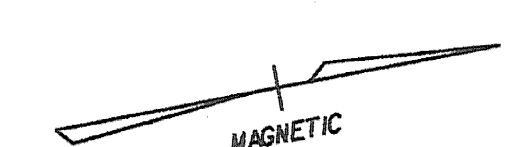
DATUM
VERTICAL N/A
HORIZONTAL N/A



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Maine • New Hampshire • Vermont



1 0 1 2 KILOMETER
SCALE



UNLESS NOTED OTHERWISE
STATIONS ARE IN MILES
ELEVATIONS ARE IN METERS
DIMENSIONS ARE IN MILLIMETERS

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING
CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY
ADMINISTRATION OR THE DIRECTOR OF PROGRAM
DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE
WITH THESE PLANS AND THE STANDARD SPECIFICATIONS
FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISIONS AND SUCH REVISED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED *Mark D. Kubiter* DATE 1-16-07

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED *James V. Bell* DATE 11-20-2006

PROJECT MANAGER : ROGER THOMPSON

PROJECT NAME : RYEGATE - ST. JOHNSBURY

PROJECT NUMBER : AC IM 091-2 (73)

SHEET 1 OF 88 SHEETS

INDEX OF SHEETS



INDEX OF STANDARD PLANS

STD	DATE	DESCRIPTION
D-4	06/01/94	FLUSHING BASINS, END SECTION, ELBOWS - TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIA - EXTENSION SERVICE BOX AND CURB STOP - CORRUGATED PIPE ELBOW
E-100	01/02/04	CONSTRUCTION APPROACH SIGNS
E-100A	01/02/04	SIDE ROAD CONSTRUCTION - APPROACH SIGNS
E-101	05/30/03	CONSTRUCTION SIGN DETAILS
E-102	06/30/03	CONSTRUCTION SIGN DETAILS
E-102A	05/01/04	CONSTRUCTION SIGN DETAILS
E-103	03/01/04	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY - ONE LANE CLOSED
E-106	03/01/04	TRAFFIC CONTROL - MISCELLANEOUS DETAILS
E-107	06/30/03	DELINEATION, BARRICADES AND DETOURS FOR - U-TURNS ON DIVIDED HIGHWAY
E-107A	08/08/95	BREAKAWAY BARRICADE DETAILS
E-110	08/08/95	MAJOR MAINTENANCE OPERATION LANE CLOSURE
E-120	08/08/95	STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY
E-121	08/08/95	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD
E-123	03/16/04	GUIDE SIGN PLACEMENT - MISCELLANEOUS DETAILS
E-126	02/01/00	TYPICAL FREEWAY INTERCHANGE SIGNING
E-127	08/08/95	ROUTE MARKINGS AT RURAL INTERSECTIONS
E-130	08/08/95	TYPE "B" GUIDE SIGN, ATTACHMENT DETAILS
E-131	08/08/95	GUIDE SIGN DETAILS
E-132	08/18/95	GENERAL MOTORIST SERVICE SIGN DETAILS
E-133	08/08/95	SERVICE SIGN DETAILS
E-135	08/18/95	INTERSTATE ROUTE MARKER SIGN DETAIL
E-136A	08/08/95	U.S. ROUTE MARKER SIGN DETAILS
E-136B	08/08/95	STATE ROUTE MARKER SIGN DETAILS
E-139	05/01/04	MILEMARKER DETAILS - INTERSTATE
E-141	09/20/95	REGULATORY SIGN DETAILS
E-142	09/20/95	REGULATORY SIGN DETAILS
E-143	06/15/04	REGULATORY SIGN DETAILS
E-144	03/29/99	REGULATORY SIGN DETAILS
E-145B	12/23/94	REGULATORY SIGN DETAILS - LANE USE CONTROL SIGNS
E-146	09/20/95	REGULATORY SIGN DETAILS
E-150	05/01/04	WARNING SIGN DETAILS
E-151	05/01/04	WARNING SIGN DETAILS
E-152	05/01/04	WARNING SIGN DETAILS
E-153	05/01/04	WARNING SIGN DETAILS
E-154	05/01/04	WARNING SIGN DETAILS
E-155	05/01/04	WARNING SIGN DETAILS
E-160	05/20/99	FLANGED CHANNEL STEEL SIGN POST
E-161	08/18/95	W-SHAPED STEEL SIGN POST
E-162	05/20/99	TUBULAR ALUMINUM SIGN POST
E-163	05/20/99	TUBULAR STEEL SIGN POST
E-164	05/20/99	SQUARE STEEL SIGN POST
E-191	02/01/99	PAVEMENT MARKING DETAILS
E-192	10/12/00	PAVEMENT MARKING DETAILS
E-193	08/18/95	PAVEMENT MARKING DETAILS
E-197	04/01/05	DELINEATOR PLACEMENT TYPICAL
E-199	04/01/05	DELINEATOR AND MILEPOST MOUNTING ON BRIDGE RAIL
G-1	01/03/00	STEEL BEAM GUARDRAIL (50MPH & OVER) - HEAVY DUTY STEEL BEAM GUARDRAIL TWISTED END TERMINAL - ANCHOR FOR STEEL BEAM RAIL
G-1D	01/03/00	STEEL BEAM GUARDRAIL (40MPH & LESS) - HEAVY DUTY STEEL BEAM GUARDRAIL STEEL BEAM MEDIAN BARRIER - ANCHOR FOR STEEL BEAM RAIL
G-19	11/15/02	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS

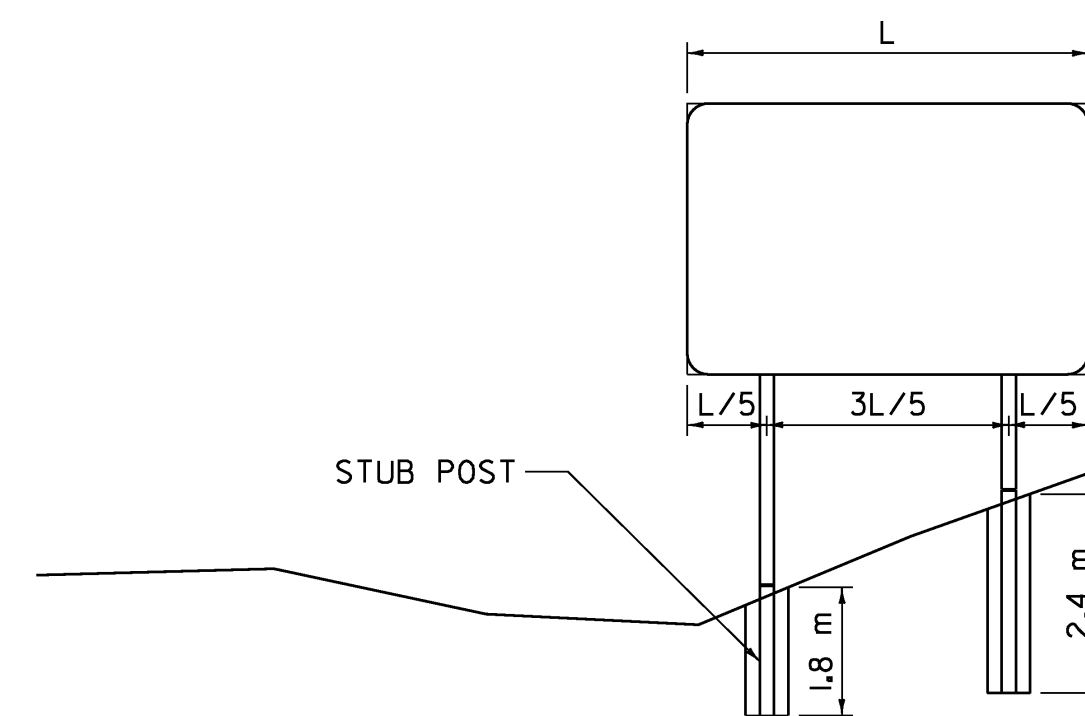
INDEX OF SHEETS

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PROJECT NAME:	RYEGATE-ST. JOHNSBURY		
PROJECT NUMBER:	IM 091-2(73)		
FILE NAME:	indexRyegate.xls	PLOT DATE:	10/16/06
PROJECT LEADER:	CRB	DRAWN BY:	JCS
DESIGNED BY:	JAW	CHECKED BY:	DAM
CLD REF. NO.:	97-0194	SHEET	2 OF 88

GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2003, AND ITS LATEST REVISIONS.
- ALL SIGNS WITHIN THE PROJECT LIMITS ARE TO BE REPLACED UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER. ALL NEW SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS, MUTCD, APPLICABLE VTRANS E-SERIES STANDARDS OR AS DIRECTED BY THE ENGINEER.
- TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH APPLICABLE VTRANS E-SERIES STANDARDS AND PART 6 OF THE MUTCD OR AS DIRECTED BY THE ENGINEER.
- TEXT LAYOUT DIMENSIONS AND DESIGN OF SYMBOLS FOR STANDARD SIGNS NOT DETAILED ON THESE PLANS OR IN THE E-SERIES STANDARDS CAN BE FOUND IN THE LATEST PUBLICATION OF THE MUTCD STANDARD HIGHWAY SIGNS.
- THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE PERMITS PRIOR TO CONSTRUCTION AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY CAUSED BY THE CONTRACTOR, AT THE SOLE COST OF THE CONTRACTOR.
- THINNING AND TRIMMING MAY BE REQUIRED AT VARIOUS SIGN LOCATIONS THROUGHOUT THE PROJECT. THIS WORK SHALL INCLUDE REMOVAL OF ANY TREES, SHRUBS OR OVERGROWTH NECESSARY FOR PLACEMENT OF SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID UNDER ITEM 201.31, "THINNING AND TRIMMING (FOR SIGNS)".
- THE CONTRACTOR SHALL ERECT NEW POSTS AND MOUNT NEW SIGNS BEHIND EXISTING SIGNS PRIOR TO REMOVING THE OLD SIGN AND POSTS, WHERE APPLICABLE, OR AS DIRECTED BY THE ENGINEER.
- THE ABBREVIATIONS "OUT" AND "MED" REFER TO LOCATIONS OUTSIDE OF THE NORTHBOUND OR SOUTHBOUND INTERSTATE BARREL OR IN THE MEDIAN, RESPECTIVELY. ANY REFERENCE TO "LEFT" AND/OR "RIGHT" REFERS TO THE DIRECTION OF STATIONING AND NOT THE DIRECTION OF TRAFFIC.
- DELINEATORS: NEW MAINLINE DELINEATORS WITH OR WITHOUT MILEPOST PLAQUES ARE NOT SHOWN ON THE PLANS. REFER TO STANDARD E-197 AND DETAILS ON NEXT SHEET FOR GENERAL PLACEMENT AND SPACING CRITERIA. AN ESTIMATED QUANTITY OF DELINEATORS W/STEEL POSTS AND REMOVAL OF EXISTING DELINEATORS HAS BEEN INCLUDED. DELINEATORS TO BE REMOVED SHALL NOT BE CUT BUT SHALL BE COMPLETELY REMOVED FROM THE GROUND.
- EXISTING MILEMARKERS ON STATE HIGHWAYS OR FOR RAMP ARE TO BE SALVAGED AND INSTALLED ON POSTS FOR NEW SIGNS OR RETAINED IF ON SEPARATE POSTS OR AS DIRECTED BY THE ENGINEER. THE MILEMARKER LOCATIONS ARE NOT DEPICTED ON THE PLANS. PAYMENT FOR ATTACHING TO NEW POSTS IS INCIDENTAL TO OTHER CONTRACT PAY ITEMS.
- ALL STATIONING ALONG RAMP AND STATE/TOWN HIGHWAYS IN MILES ARE APPROXIMATE ONLY. REFER TO STANDARD SHEETS FOR APPROPRIATE SIGN PLACEMENT GUIDELINES.



W-SHAPE FOOTING DETAIL

NOTES

- THE LONGER CONCRETE FOOTINGS SHALL BE USED AT POST LOCATIONS ON STEEP SIDE SLOPES AS IDENTIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- FORMS/TUBES FOR THE LONGER CONCRETE FOOTINGS SHALL BE SMOOTH. CORRUGATED PIPE SHALL NOT BE USED.
- REFER TO VTRANS STANDARD E-161 FOR ADDITIONAL NOTES AND DETAILS REGARDING CONCRETE FOOTINGS.
- PAYMENT FOR THE LONGER CONCRETE FOOTINGS SHALL BE PAID FOR UNDER ITEM 675.41, "FOUNDATION FOR W-SHAPE STEEL POSTS, 600mm (MOD. - 2.4 m FOUNDATION)."

**SEEDING FORMULA
RURAL AREAS**

% MASS.	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREeping RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFoil	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS AND SHALL BE FREE OF ALL NOXIOUS SEED.

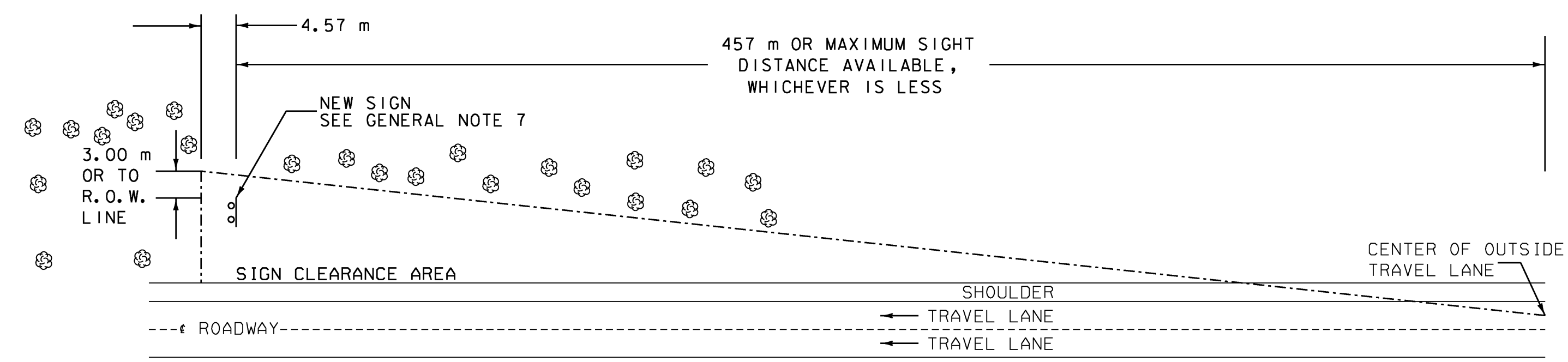
SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

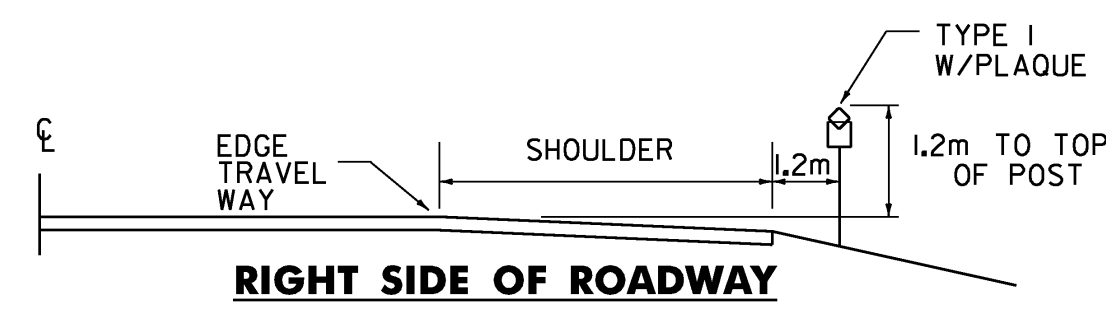
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.



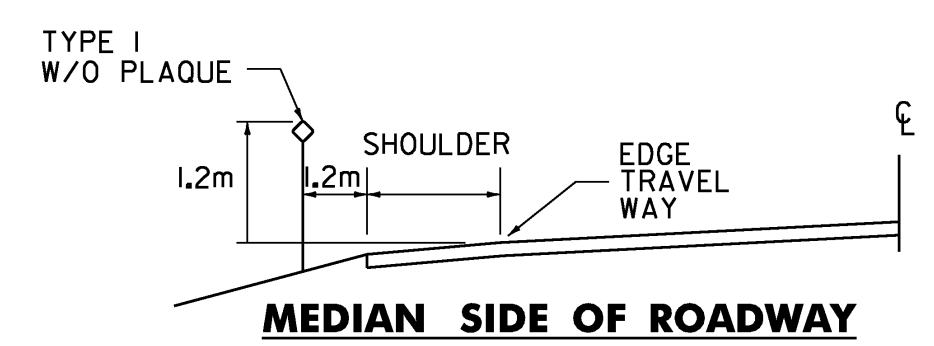
THE CONTRACTOR SHALL REMOVE ALL WOODY STEMMED GROWTH INCLUDING BRUSH, SAPLINGS, TREE LIMBS GROWING WITHIN OR PROJECTING INTO THE CLEARANCE AREA AND DOWN TO GROUND LEVEL OR AT LEAST 3.05 m BELOW THE BOTTOM OF THE SIGN, WHICH EVER IS LESS. PAYMENT WILL BE FOR ITEM 201.31 THINNING AND TRIMMING (FOR SIGNS) AND PAID FOR PER EACH SIGN ASSEMBLY LOCATION.

THINNING AND TRIMMING DETAIL (INTERSTATE)

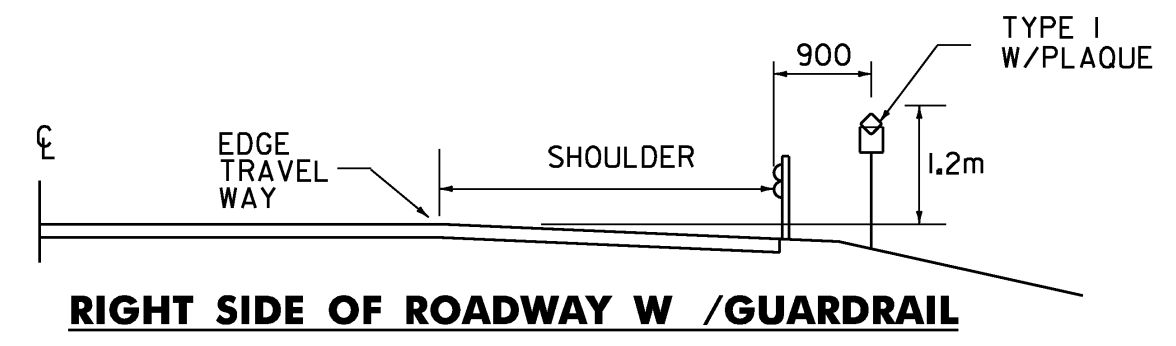
GENERAL NOTES & MISCELLANEOUS DETAILS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	
		PROJECT NUMBER: IM 091-2(73)
	FILE NAME: 97194s-gennotes.dgn	PLOT DATE: 12/13/2006
	PROJECT LEADER: CRB	DRAWN BY: JCS
	DESIGNED BY: DAM	CHECKED BY: DAM
	CLD REF. NO.: 97-0194	SHEET 3 OF 88



RIGHT SIDE OF ROADWAY



MEDIAN SIDE OF ROADWAY



RIGHT SIDE OF ROADWAY W /GUARDRAIL

TYPICAL PLACEMENT OF TYPE I DELINEATORS AND MILEPOSTS ON DIVIDED HIGHWAY

TYPE I DELINEATORS WITH WHITE REFLECTOR UNITS AND APPROPRIATE MILEPOST PLAQUES SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF DIRECTION OF TRAVEL THE DIVIDED HIGHWAYS BETWEEN MILEMARKERS.

THE TYPE I DELINEATORS WITH OR WITHOUT MILEPOST PLAQUES SHALL BE OMITTED ALONG DECELERATION AND ACCELERATION LANES, BUT THE SUCCEEDING SPACING SHALL BE AS IF THE DELINEATORS HAD BEEN ERECTED CONTINUOUSLY AND SHALL BE SO INDICATED.

THE LOCATION OF TYPE I DELINEATORS AND MILEPOSTS ARE TO BE COMPUTED AND MARKED IN THE FIELD BY THE ENGINEER IN ACCORDANCE WITH THE LATEST REVISION OF THE AGENCY'S "POLICY ON LOCATION MARKING FOR VERMONT DIVIDED HIGHWAYS."

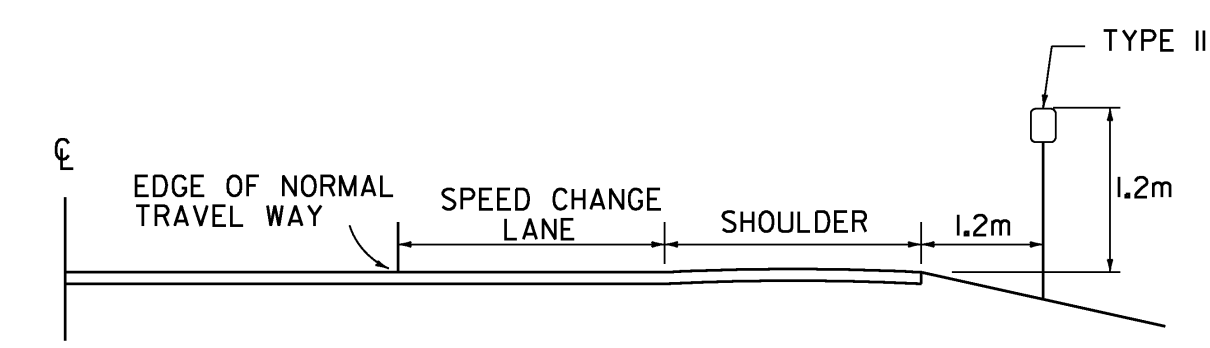
TYPE I YELLOW DELINEATORS WITHOUT MILEPOST PLAQUES SHALL BE ERECTED CONTINUOUSLY ALONG THE LEFT OR MEDIAN SIDE OF DIVIDED HIGHWAYS, CONTINUED AT APPROXIMATELY THE SAME SPACING THROUGH INTERCHANGES AND REST AREAS WHERE THERE MAY NOT BE ANY TYPE I DELINEATORS ON THE RIGHT SIDE. PLACEMENT OF TYPE I DELINEATORS SHALL BE FOLLOWED ON THE LEFT AS ON THE RIGHT, THE SAME LATERAL TYPE I DELINEATORS WITHOUT MILEPOST PLAQUE SHALL BE INSTALLED ON INTERSTATE RAMP AS SHOWN ON THE PLANS.

TYPE I DELINEATORS USED AT U-TURNS SHALL BE PLACED WHERE THE RADII MEETS THE TANGENT OF THE MAINLINE.

TYPE III DELINEATORS

TYPE III DELINEATORS WILL BE TYPE I DELINEATORS WITH AN ADDITIONAL RED REFLECTIVE UNIT MOUNTED ON THE REVERSE SIDE. THEY SHALL BE ERECTED ON THE RIGHT AND LEFT SIDE OF THE RAMP AS SHOWN ON THE PLANS.

TYPE III DELINEATORS SHALL BEGIN 15.2 m FROM THE WRONG WAY SIGNS AND EXTEND EVERY 15.2 m TO A POINT NOT LESS THAN 7.6 m FROM THE DIVIDED HIGHWAY. SEE STANDARD E-197.

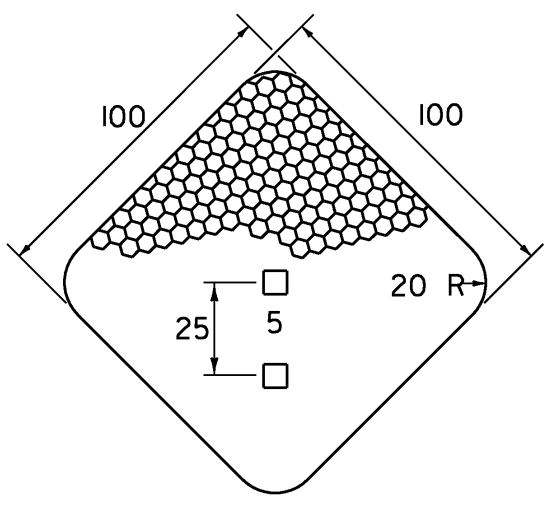


TYPICAL PLACEMENT OF TYPE II DELINEATORS ON SPEED CHANGE LANES

TYPE II DELINEATORS SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF THE DECELERATION AND ACCELERATION LANES AT 30 m INTERVALS INCLUDING GUARDRAIL SECTIONS. THE DELINEATORS SHALL START AT THE BEGINNING OF THE TAPER AND END AT THE NOSE OF THE EXIT OR ENTRANCE GORE. THEY SHALL HAVE WHITE REFLECTOR UNITS.

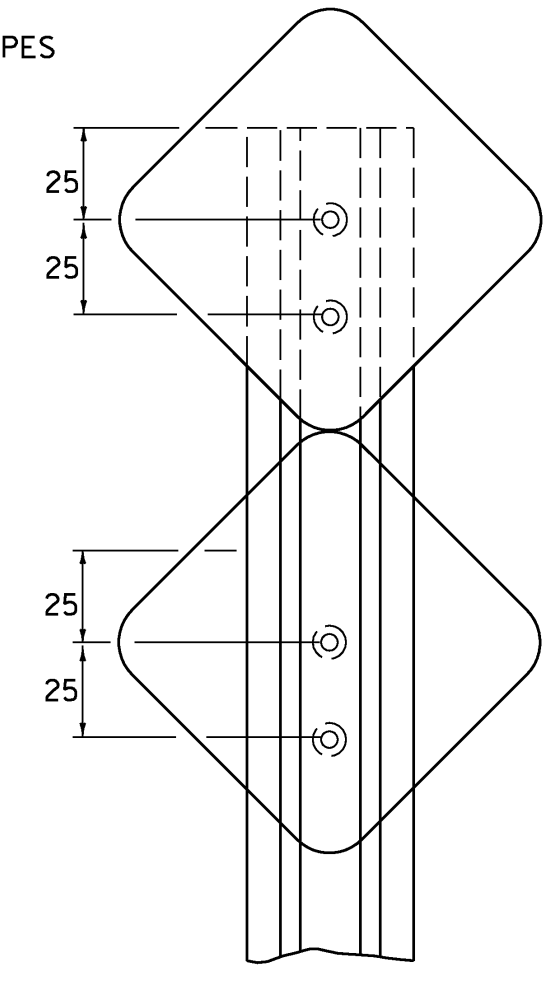
NOTES

- FOR MOUNTING DELINEATORS AND MILEPOSTS ON BRIDGES, SEE STANDARD E-199
- MILEPOST PLAQUES WITH OR A WITHOUT REFLECTOR UNIT SHALL BE MOUNTED ON THE POST WITH TWO OR THREE 5 mm DIA. BY 37.5 mm LONG ALUMINUM BOLTS WITH 12.5 mm DIA. ALUMINUM VANDAL RESISTANT NUTS, OR 5 mm DIA. BY 37.5 mm LONG VANDAL RESISTANT FASTENERS.
- DELINEATOR POSTS SHALL BE 3 kg/m FLANGE CHANNEL A MINIMUM OF 2.4 METERS LONG.
- DELINEATOR POSTS SHALL HAVE A MINIMUM EMBEDMENT OF 750 mm IN THE GROUND.
- WHEN USING DELINEATORS AND MILEPOSTS ON STEEP SLOPES (1 ON 2 OR STEEPER) OR ERODED SOILS ADD 300 mm FOR GREATER STABILITY.

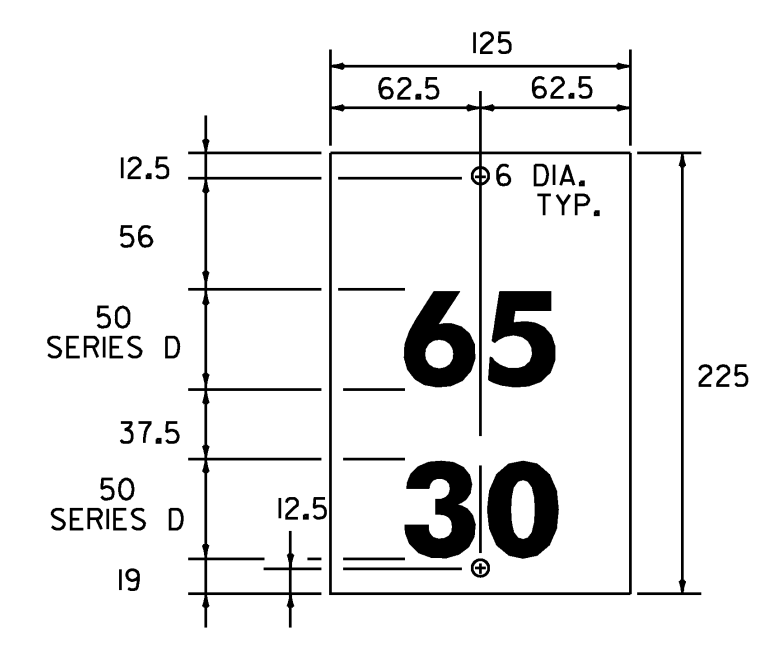
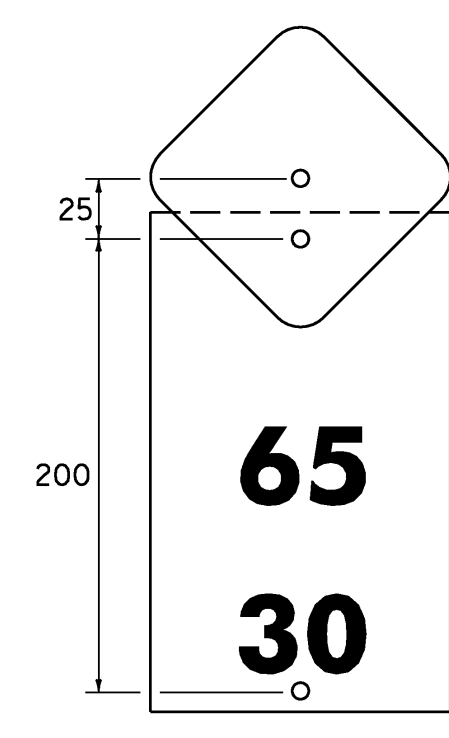


DELINEATOR REFLECTIVE SHEETING UNIT

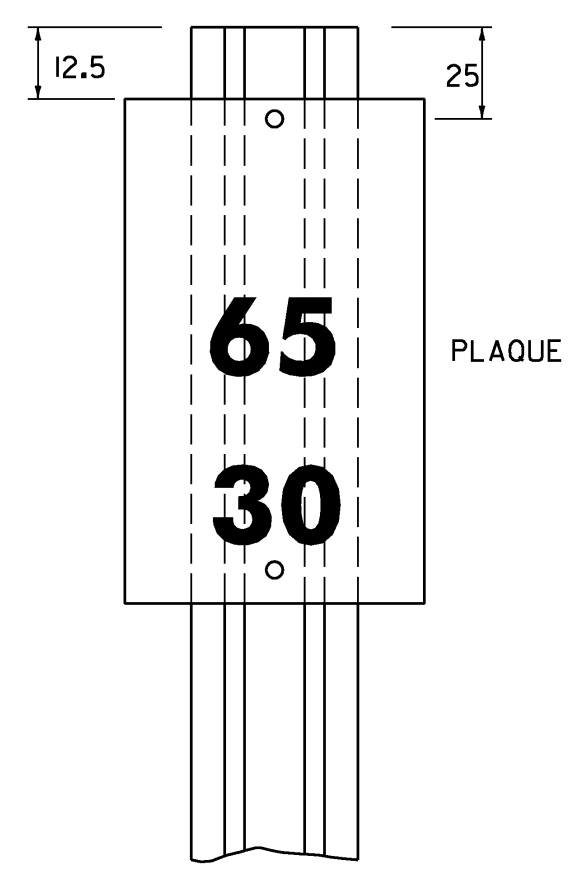
MATERIAL FOR RETROREFLECTIVE SHEETING FOR DELINEATORS SHALL BE A 1.60-mm ALUMINUM BACKING WITH A WHITE ASTM TYPE III, OR RED/YELLOW SHALL BE TYPE VII, TYPE VIII OR TYPE IX.



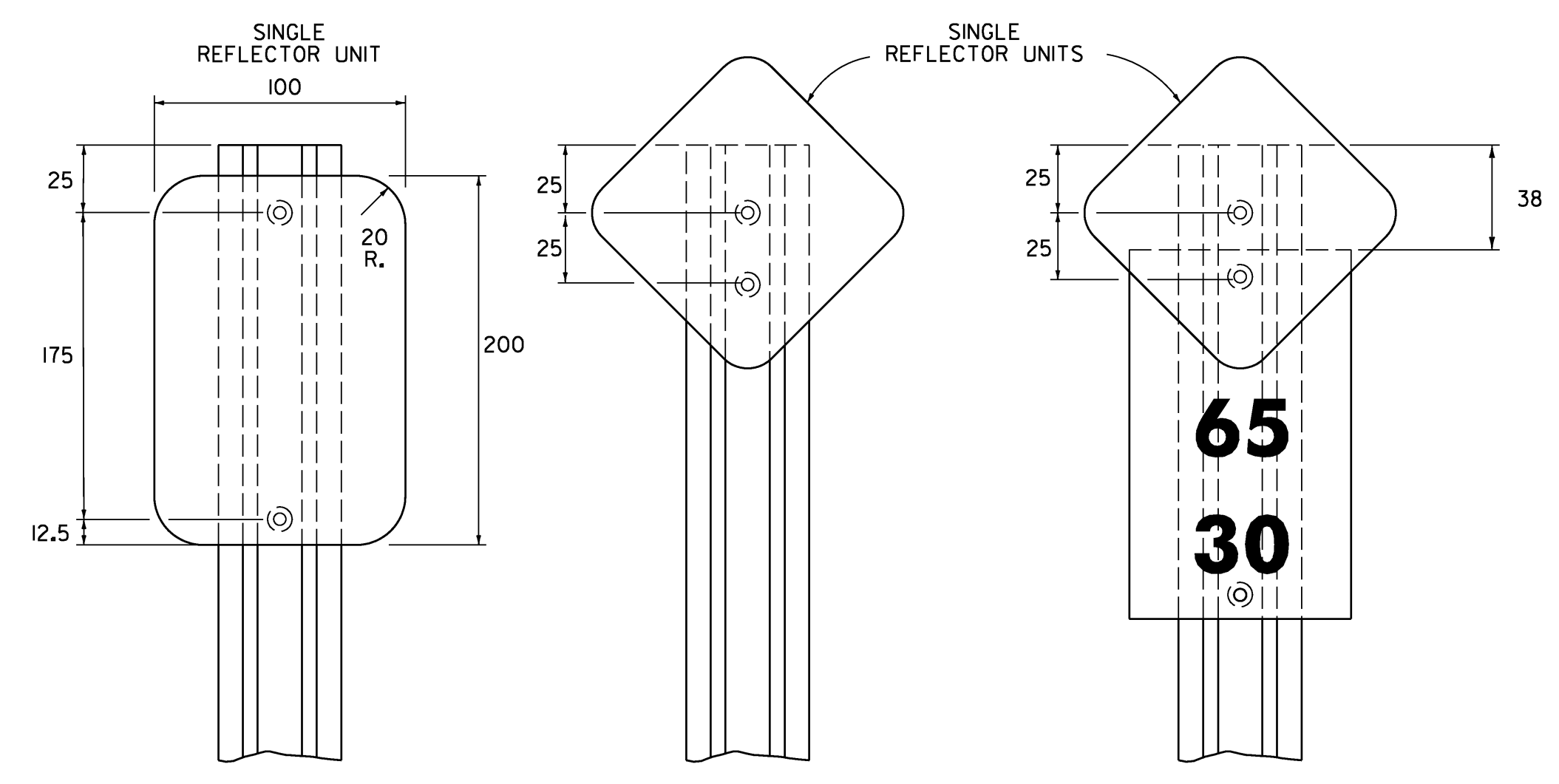
TYPE I AT U-TURNS



MILEPOST PLAQUE



PLAQUE



TYPE II

TYPE I WITHOUT PLAQUE

TYPE I WITH PLAQUE

DELINEATORS WITH REFLECTIVE SHEETING

DELINEATOR AND MILEPOST DETAILS	PROJECT NAME: RYEGATE-ST. JOHNSBURY
	PROJECT NUMBER: IM 091-2(73)
	FILE NAME: 97194s-gennotes.dgn
	PLOT DATE: 12/15/2006
	PROJECT LEADER: CRB
	DRAWN BY: JCS
	DESIGNED BY: DAM
	CHECKED BY: DAM
	CLD REF. NO.: 97-0194
	SHEET 4 OF 88

QUANTITY SHEET



SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								ROADWAY	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								7			7		EACH	THINNING AND TRIMMING (FOR SIGNS)	201.31	-			
								22			22		CM	EARTH BORROW	203.30	-			
														BEGN OPTION AA					
								10			10		M	300 mm CAAP 1.52 mm (68 mm X 12 mm)	601.0205	-			
								10			10		M	300 mm PCCSP 1.63 mm (68 mm X 12 mm)	601.0405	-			
								10			10		M	300 mm RCP CLASS III	601.0805	-			
								10			10		M	300 mm CPEP	601.0905	-			
														END OPTION AA					
								4			4		EACH	YIELDING MARKER POSTS	619.17	-			
								190			190		M	STEEL BEAM GUARD RAIL (GALVANIZED)	621.20	7.6			
								2			2		EACH	MANUFACTURED TERMINAL SECTION (FLARED)	621.505	-			
								2			2		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-			
								875			875		HR	UNIFORMED TRAFFIC OFFICERS	630.10	8			
								175			175		HR	FLAGGERS	630.15	2			
										1	1		LS	FIELD OFFICE-ENGINEERS	631.10	-			
										1	1		LS	TESTING EQUIPMENT - CONCRETE	631.16	-			
										1	1		LU	FIELD OFFICE - TELEPHONE (N.A.B.I.)	631.25	-			
								1			1		LS	MOBILIZATION / DEMOBILIZATION	635.11	-			
								1			1		LS	TRAFFIC CONTROL	641.10	-			
								4			4		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	EST			
								2			2		EACH	PORTABLE ARROW BOARD	641.16	EST			
								4			4		KG	SEED	651.15	4			
								29			29		KG	FERTILIZER	651.18	4			
								.5			.5		T	AGRICULTURAL LIMESTONE	651.20	3			
								.5			.5		T	HAYMULCH	651.25	3			
								26			26		CM	TOPSOIL	651.35	.5			
								255			255		SM	TRAFFIC SIGNS, TYPE A	675.20	.34			
								336			336		SM	TRAFFIC SIGNS, TYPE B	675.21	.27			
														BEGN OPTION BB					
								1348			1348		M	FLANGED CHANNEL SIGN POST	675.301	-			
								1348			1348		M	SQUARE TUBE SIGN POSTS AND ANCHOR	675.341	-			
														END OPTION BB					
								5481			5481		KG	W-SHAPE STEEL SIGN POSTS	675.31	-			
								350			350		KG	TUBULAR ALUMNUM SIGN POSTS	675.32	.1			
								5915			5915		KG	TUBULAR STEEL SIGN POSTS	675.33	1			
								23			23		EACH	FOUNDATION FOR W-SHAPE STEEL POSTS, 600 MM DIAMETER	675.41	-			
								9			9		EACH	FOUNDATION FOR W-SHAPE STEEL POSTS, 600 MM DIAMETER (MOD.-2.4m FOUND.)	675.41	-			
								121			121		EACH	FOUNDATION FOR TUBULAR STEEL POSTS	675.43	-			
								471			471		EACH	REMOVING SIGNS (TYPE A)	675.50	-			
								39			39		EACH	REMOVING SIGNS (TYPE B)	675.50	-			

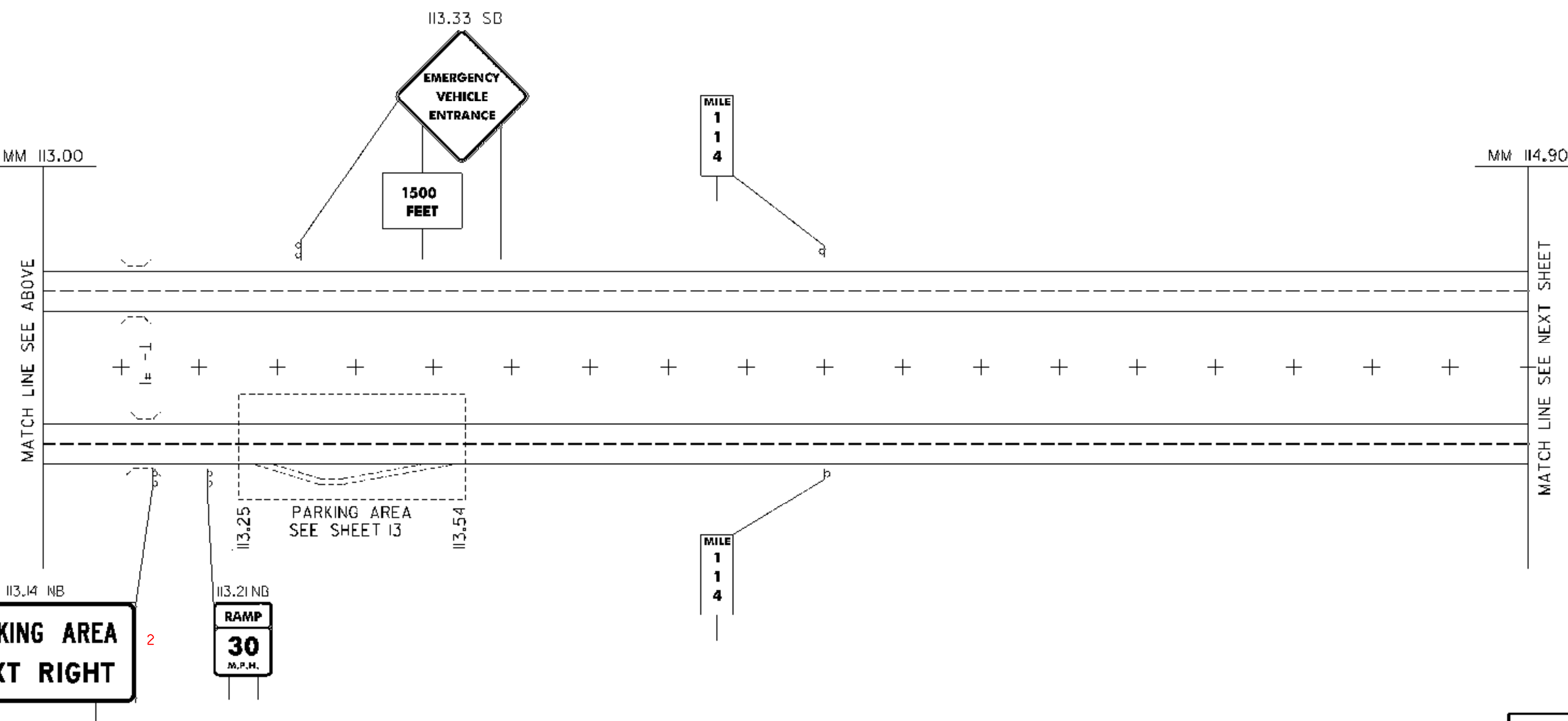
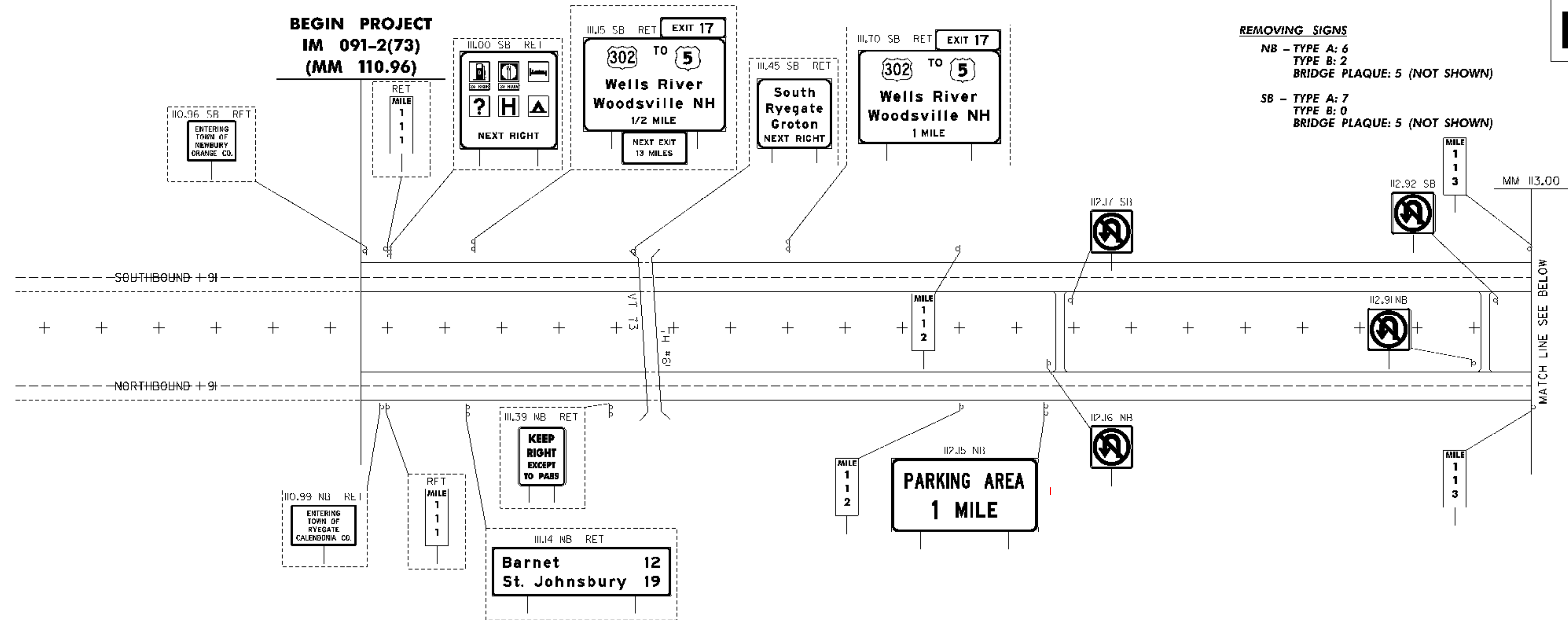
PROJECT NAME: RYEGATE-ST. JOHNSBURY
 PROJECT NUMBER: IM 091-2(73)
 FILE NAME: qssRyegate.xls PLOT DATE: 12/12/2006
 PROJECT MANAGER: CRB DRAWN BY: PTS
 DESIGNED BY: DAM CHECKED BY: PTS
 QUANTITY SHEET #1 SHEET 5 OF 88

BEGIN PROJECT
IM 091-2(73)
(MM 110.96)

REMOVING SIGNS

NB - TYPE A: 6
 TYPE B: 2
 BRIDGE PLAQUE: 5 (NOT SHOWN)

SB - TYPE A: 7
 TYPE B: 0
 BRIDGE PLAQUE: 5 (NOT SHOWN)



LEGEND

RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

EXISTING SIGNS

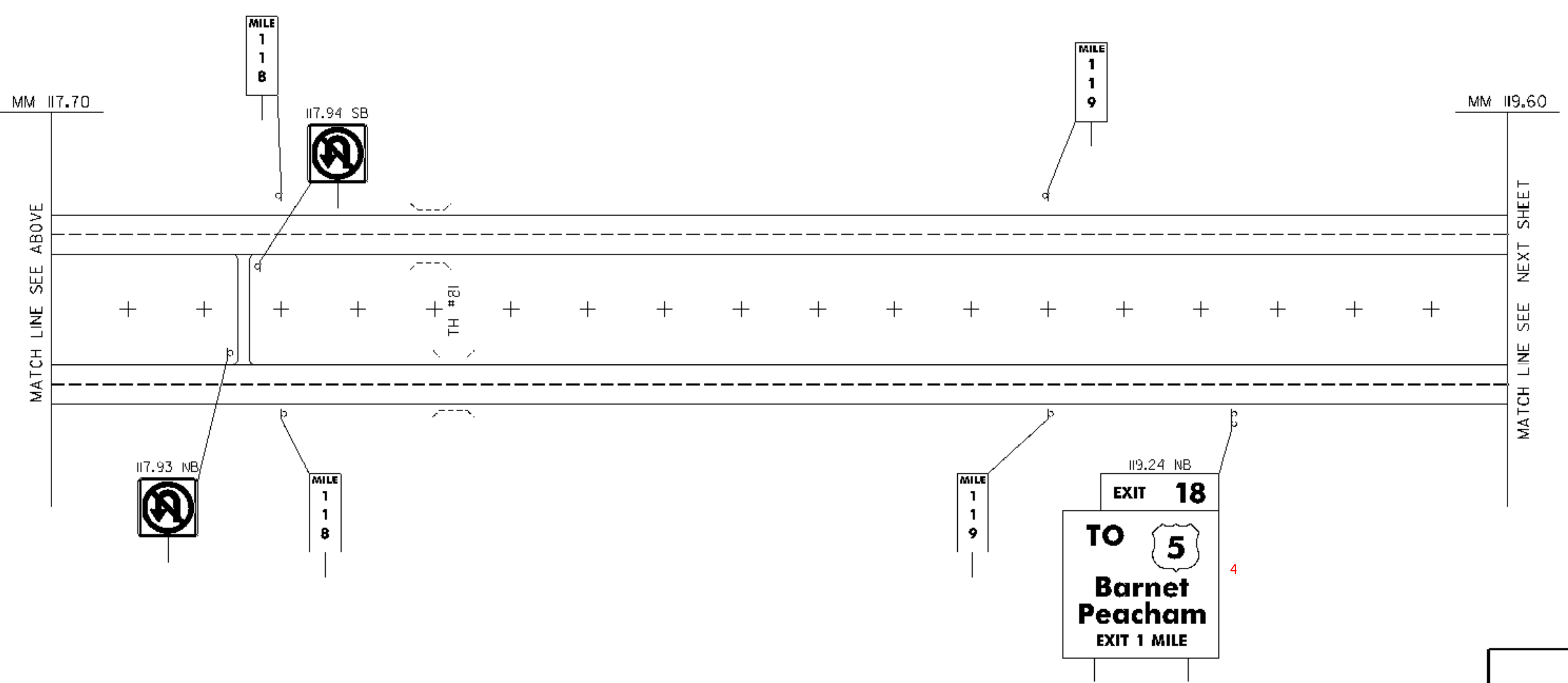
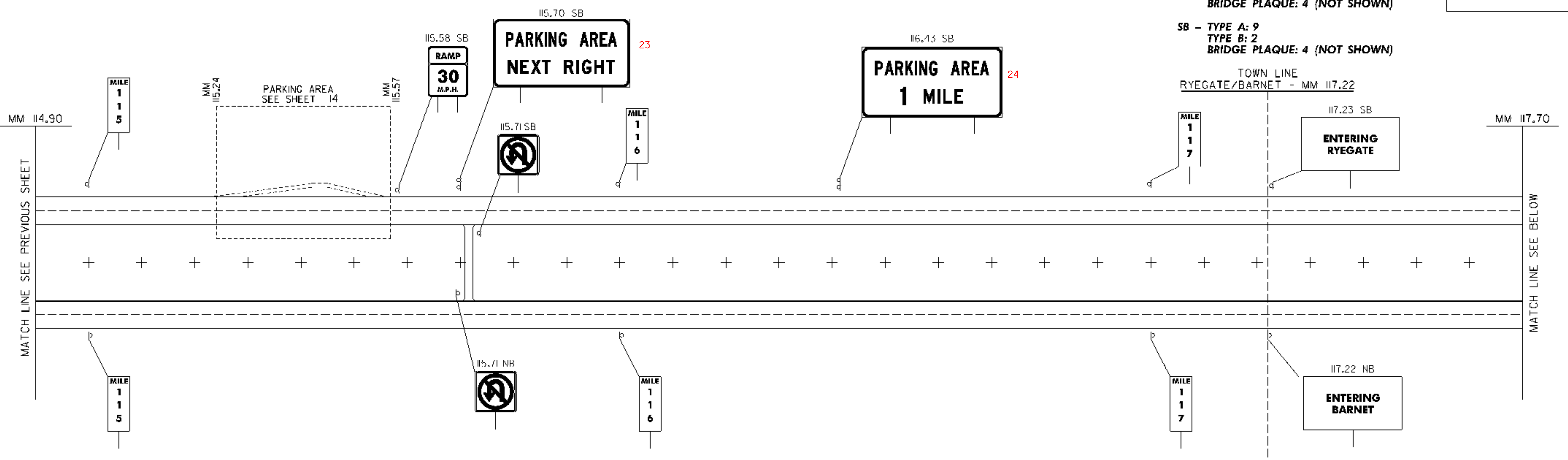
PROJECT NAME: RYEGATE-ST. JOHNSBURY
 PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-m1.dgn
 PROJECT LEADER: CRB
 DESIGNED BY: DAM
 CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
 DRAWN BY: JCS
 CHECKED BY: DAM
 SHEET 6 OF 88

REMOVING SIGNS
 NB - TYPE A: 9
 TYPE B: 1
 BRIDGE PLAQUE: 4 (NOT SHOWN)
 SB - TYPE A: 9
 TYPE B: 2
 BRIDGE PLAQUE: 4 (NOT SHOWN)

TOWN LINE
 RYEGATE/BARNET - MM 117.22



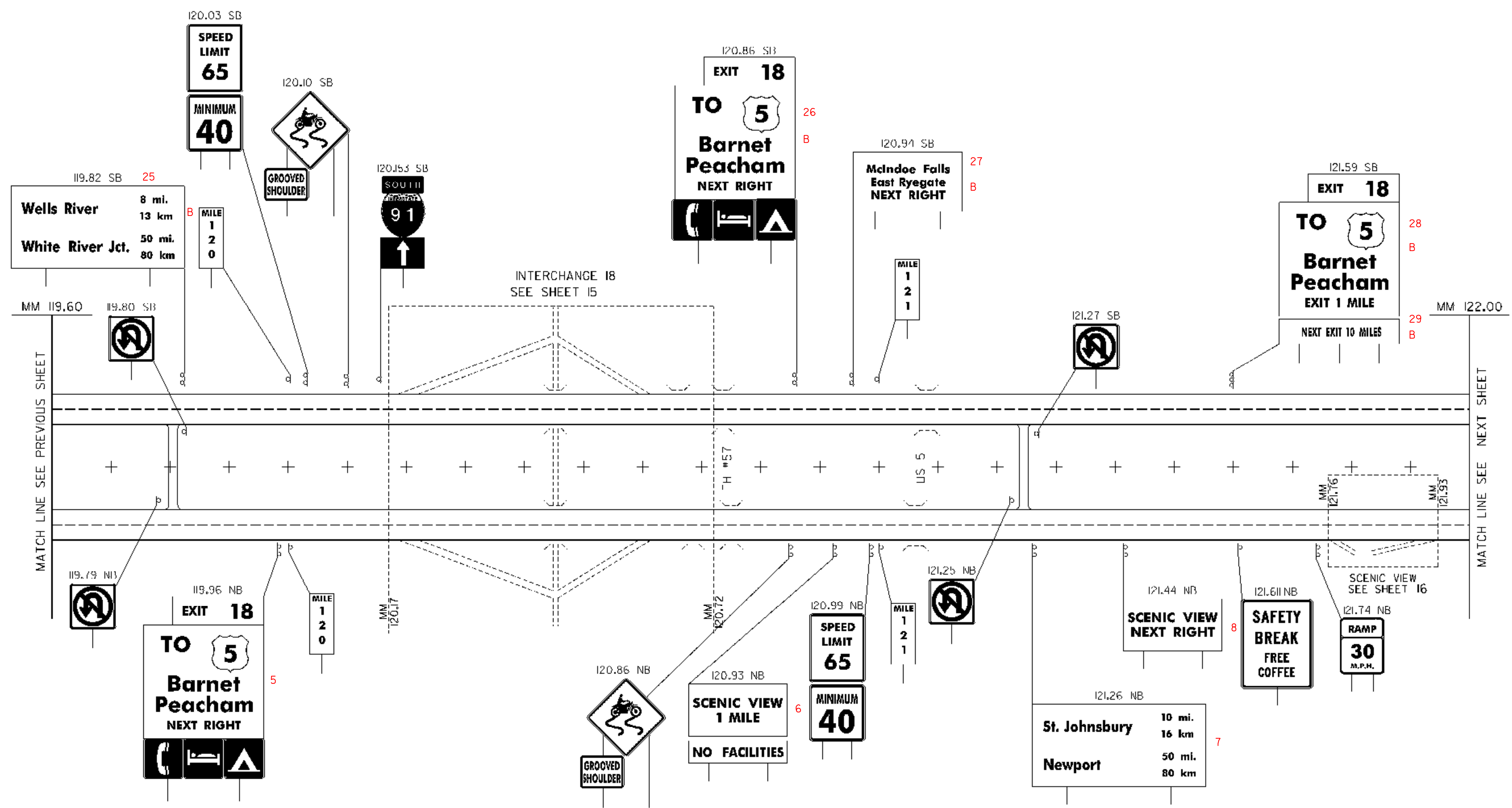
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

EXISTING SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-ml.dgn	CHECKED BY: DAM
	DESIGNED BY: DAM	SHEET 9 OF 88
	CLD REF. NO.: 97-0194	

REMOVING SIGNS

NB - TYPE A: 15
 TYPE B: 4
 BRIDGE PLAQUE: 2 (NOT SHOWN)

SB - TYPE A: 17
 TYPE B: 4, 5
 BRIDGE PLAQUE: 2 (NOT SHOWN)



ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

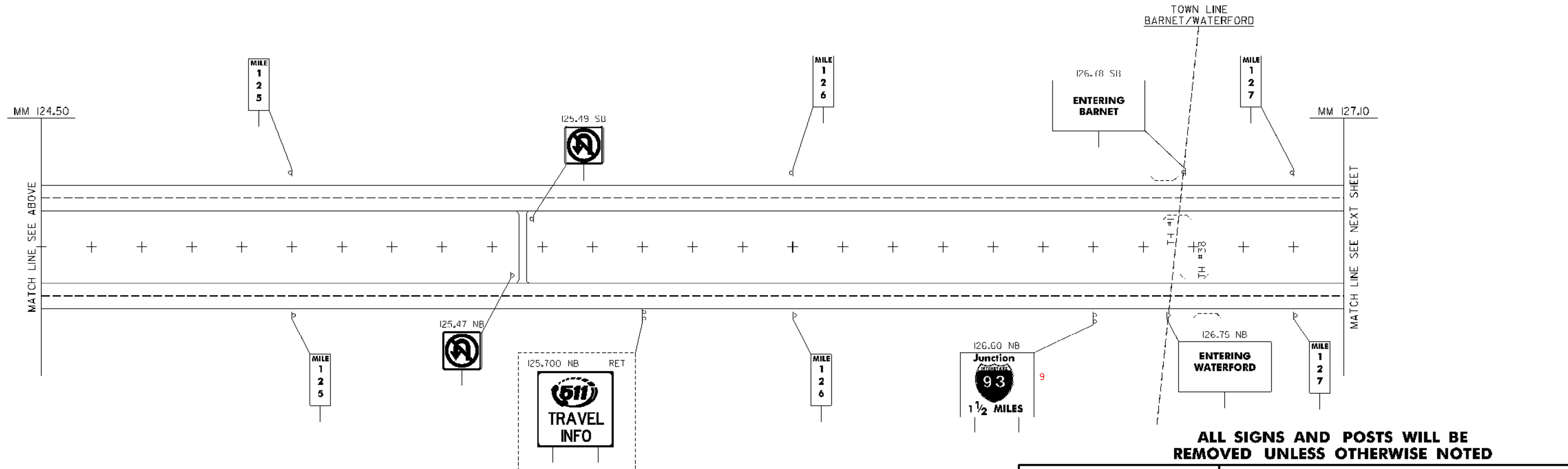
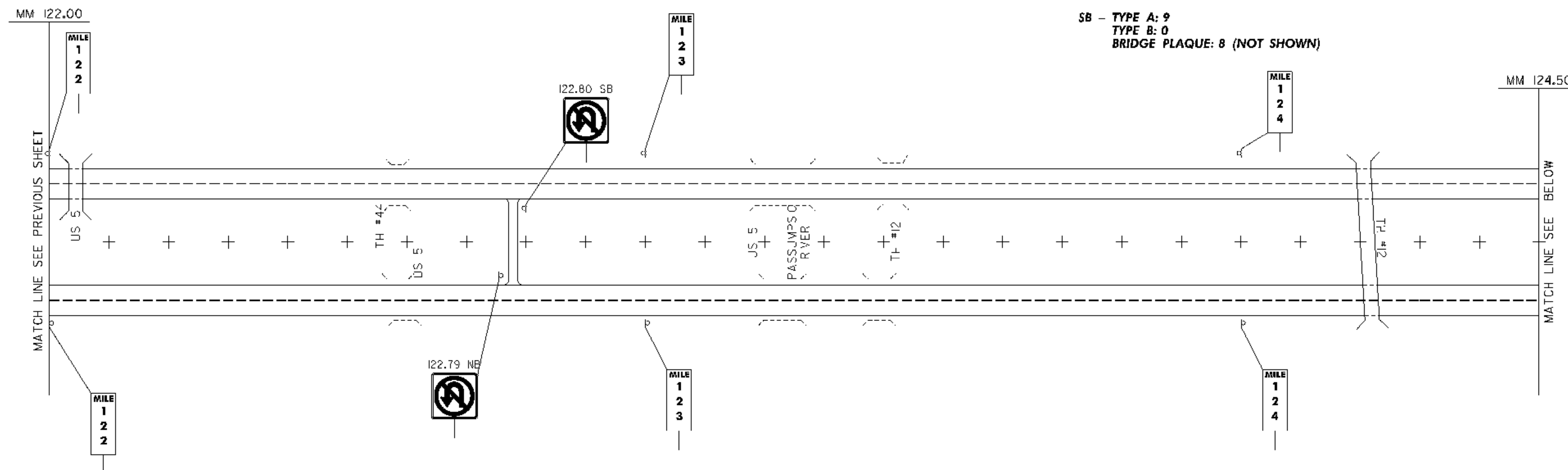
EXISTING SIGNS

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-m1.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	DAM
CLD REF. NO.:	97-0194
PLOT DATE:	12/13/2006
DRAWN BY:	JCS
CHECKED BY:	DAM
SHEET	10 OF 88

REMOVING SIGNS

NB - TYPE A: 9
 TYPE B: 1
 BRIDGE PLAQUE: 7 (NOT SHOWN)

SB - TYPE A: 9
 TYPE B: 0
 BRIDGE PLAQUE: 8 (NOT SHOWN)



ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

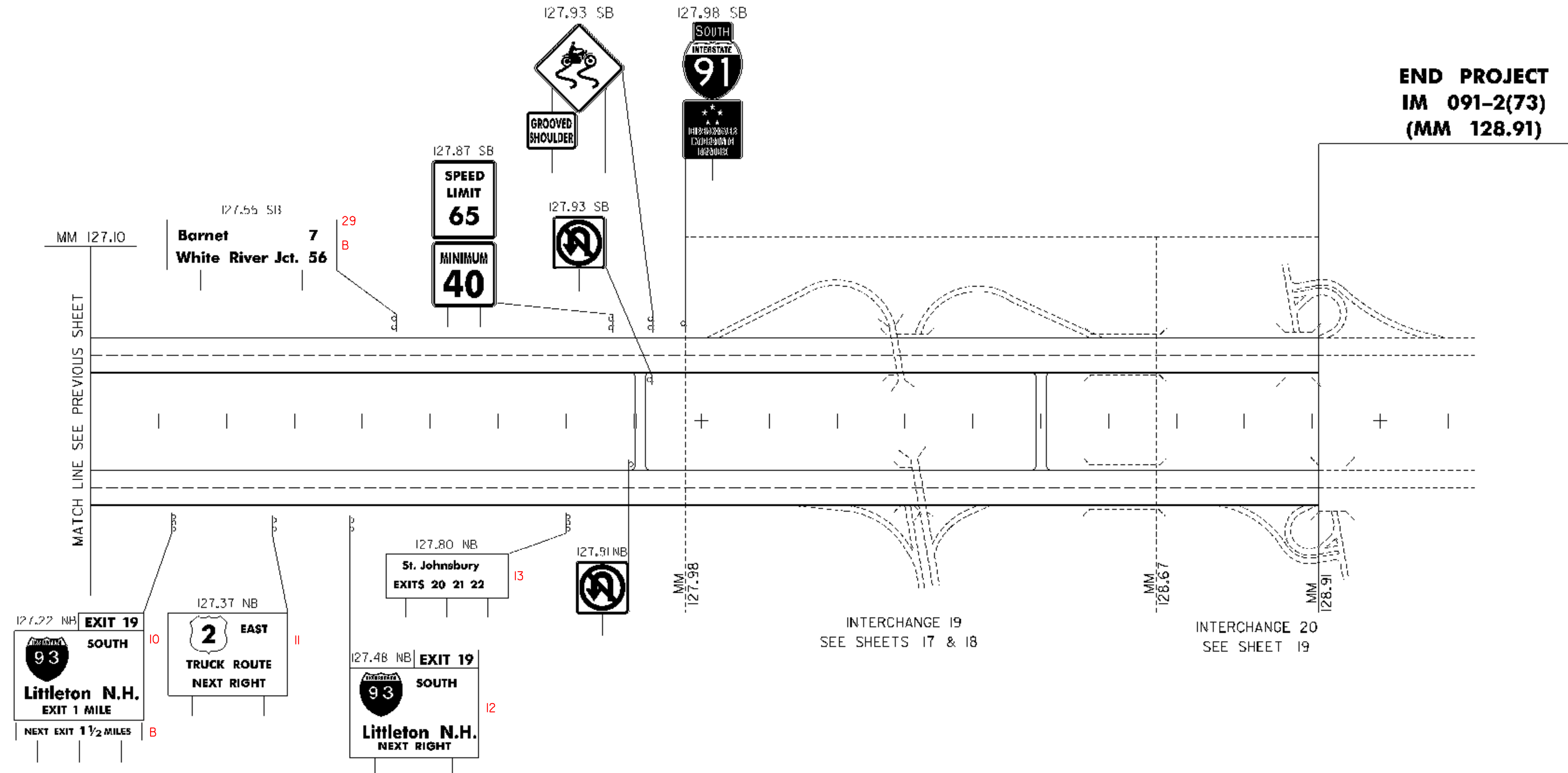
EXISTING SIGNS

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-m1.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	DAM
CLD REF. NO.:	97-0194
PLOT DATE:	12/13/2006
DRAWN BY:	JCS
CHECKED BY:	DAM
SHEET	11 OF 88

REMOVING SIGNS

NB - TYPE A: 3
TYPE B: 5

SB - TYPE A: 8
TYPE B: 1



ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

EXISTING SIGNS

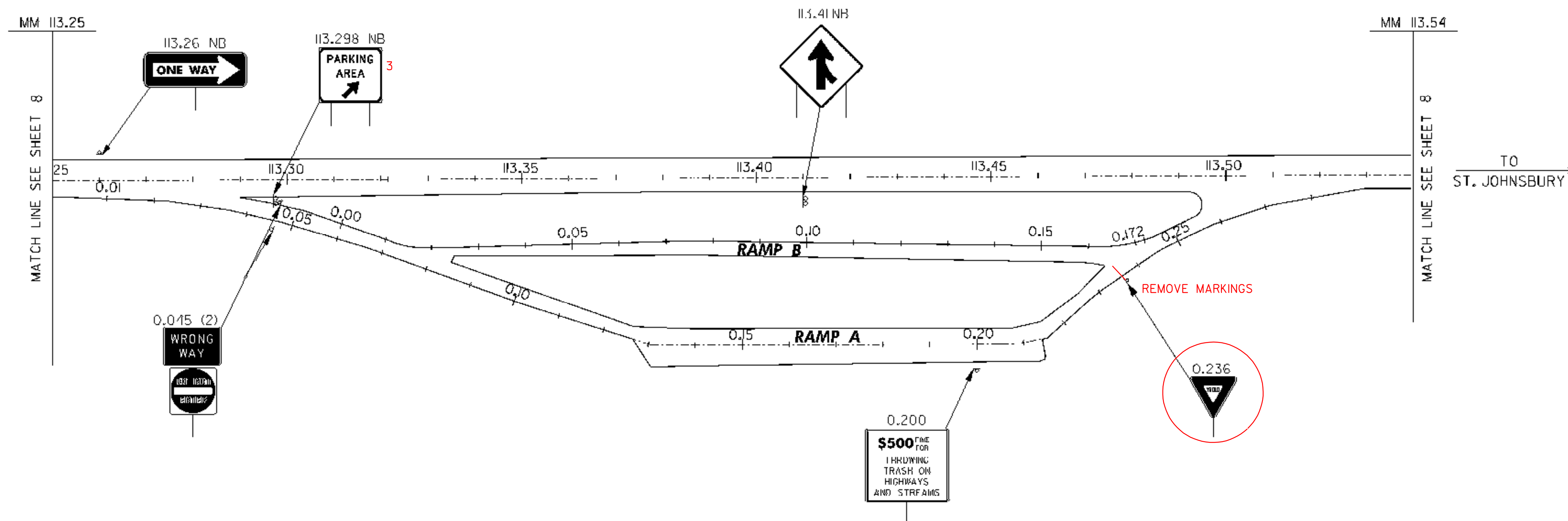
PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-m1.dgn
PROJECT LEADER: CRB
DESIGNED BY: DAM
CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 12 OF 88

REMOVING SIGNS

TYPE A: 8
TYPE B: 1



LEGEND

----- RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**PARKING AREA
113.39 I-91 NB
EXISTING SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY

PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-ra.dgn

PROJECT LEADER: CRB

DESIGNED BY: DAM

CLD REF. NO.: 97-0194

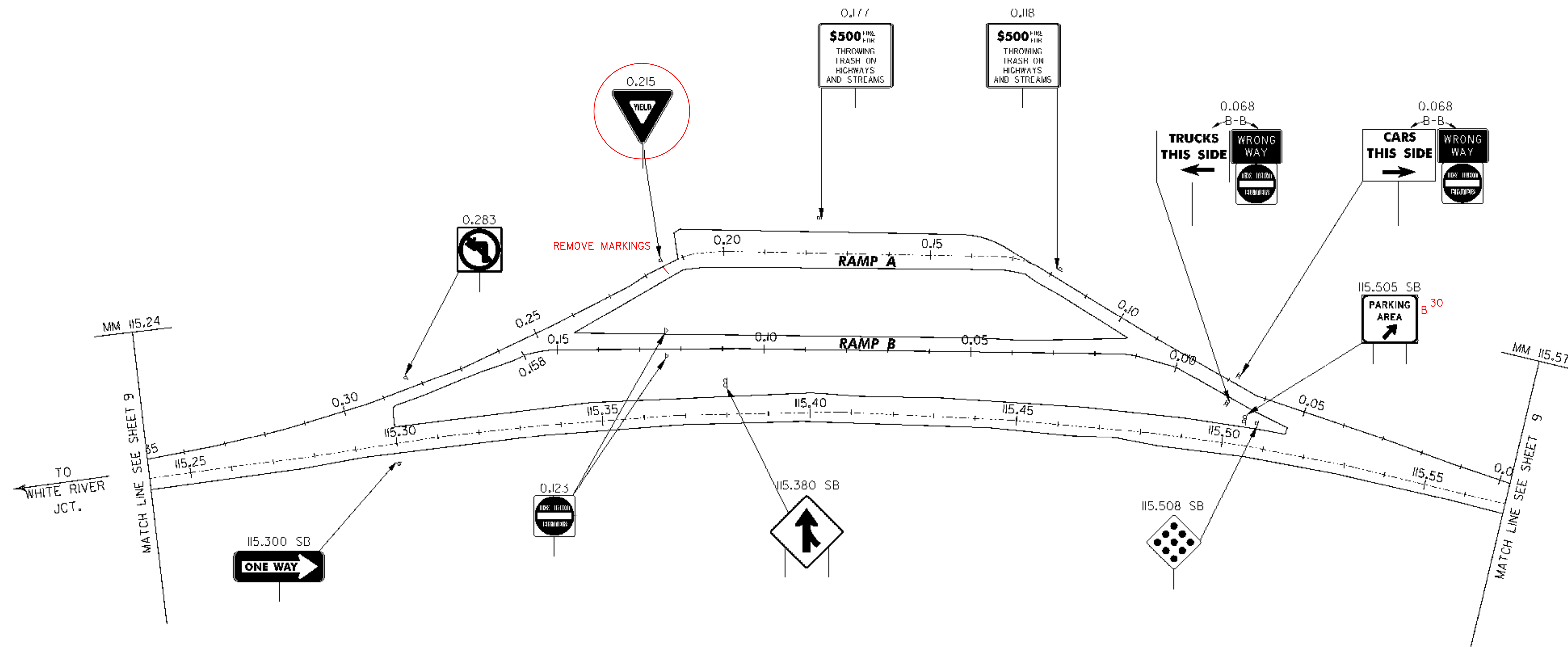
PLOT DATE: 12/13/2006

DRAWN BY: JCS

CHECKED BY: DAM

SHEET 13 OF 88

REMOVING SIGNS
 TYPE A: 15
 TYPE B: 1



LEGEND

RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

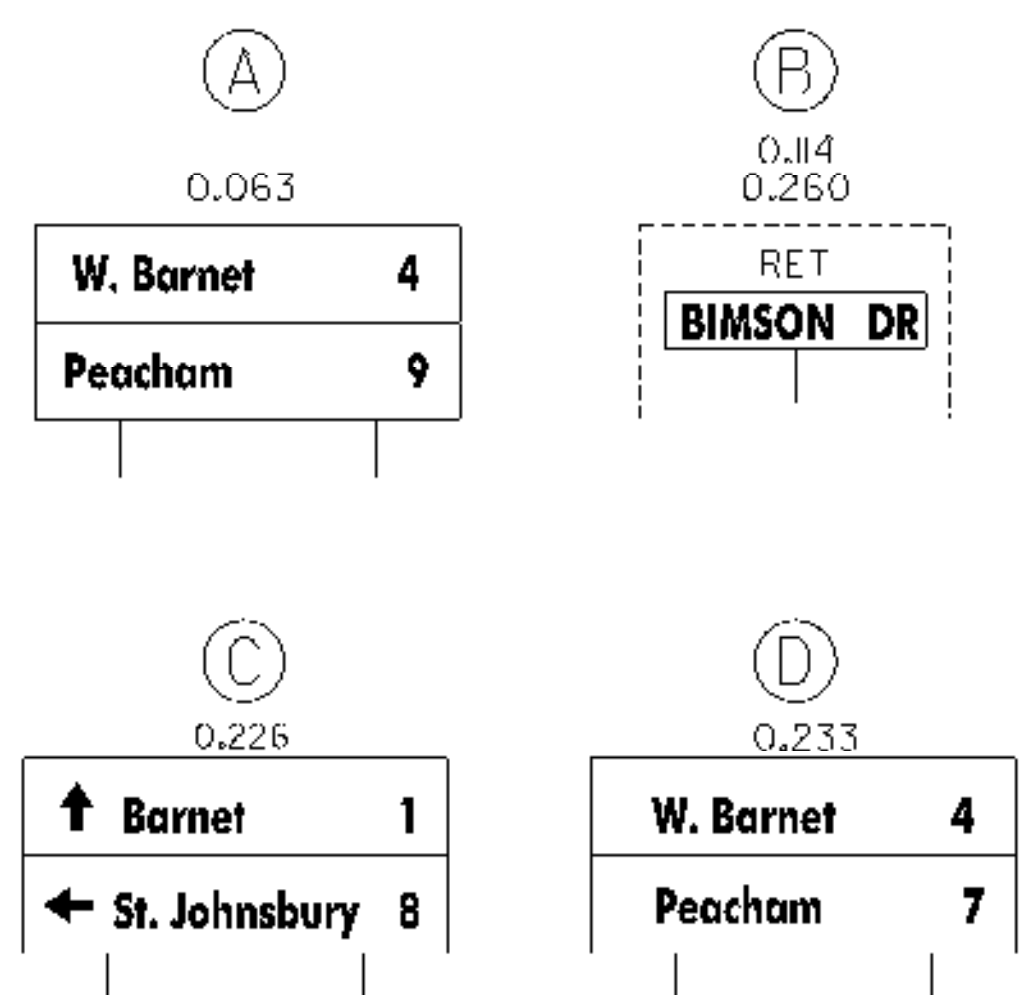
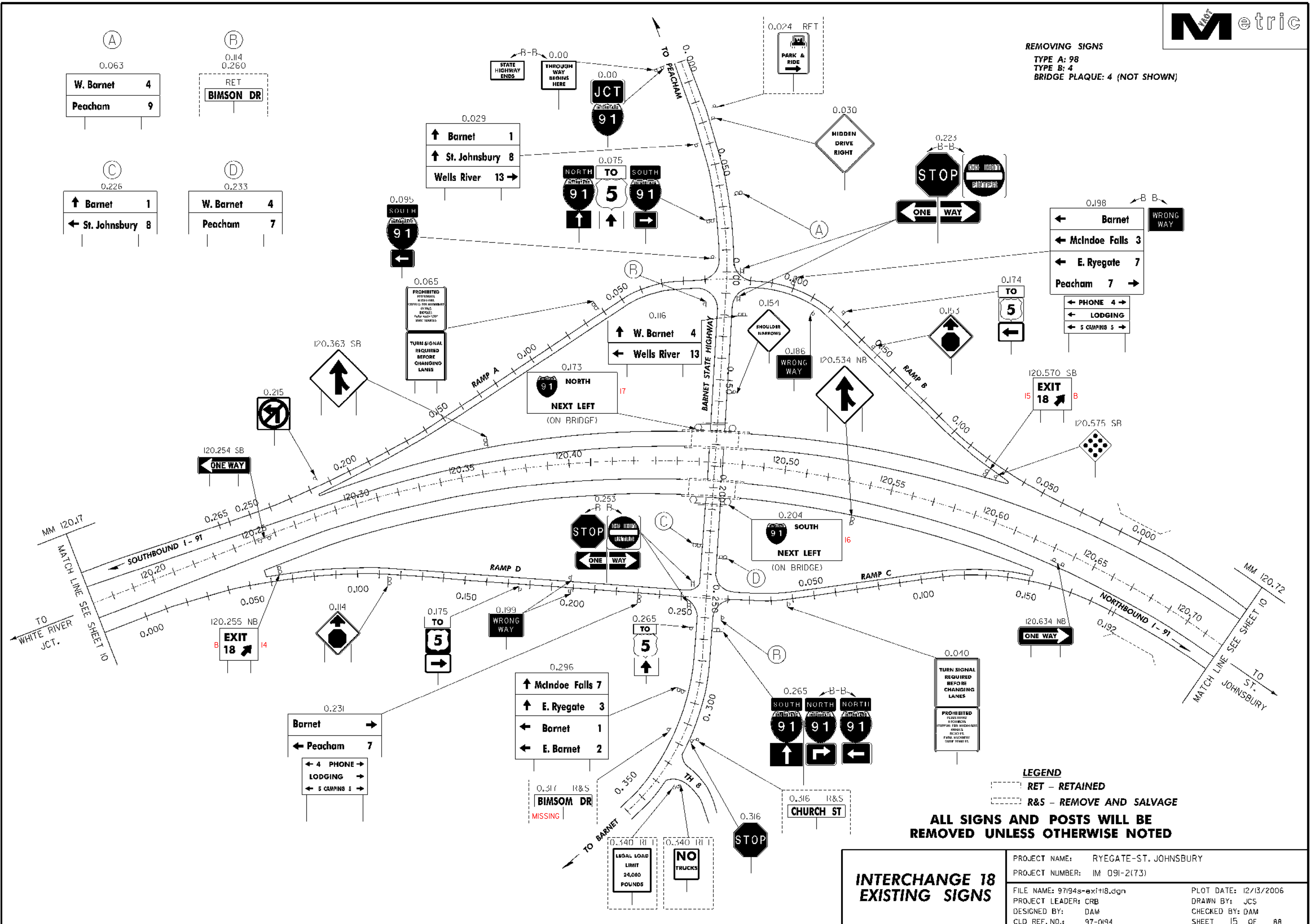
**PARKING AREA
 115.40 I-91 SB
 EXISTING SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
 PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-rd.dgn
 PROJECT LEADER: CRB
 DESIGNED BY: DAM
 CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
 DRAWN BY: JCS
 CHECKED BY: DAM
 SHEET 14 OF 88

REMOVING SIGNS
 TYPE A: 98
 TYPE B: 4
 BRIDGE PLAQUE: 4 (NOT SHOWN)



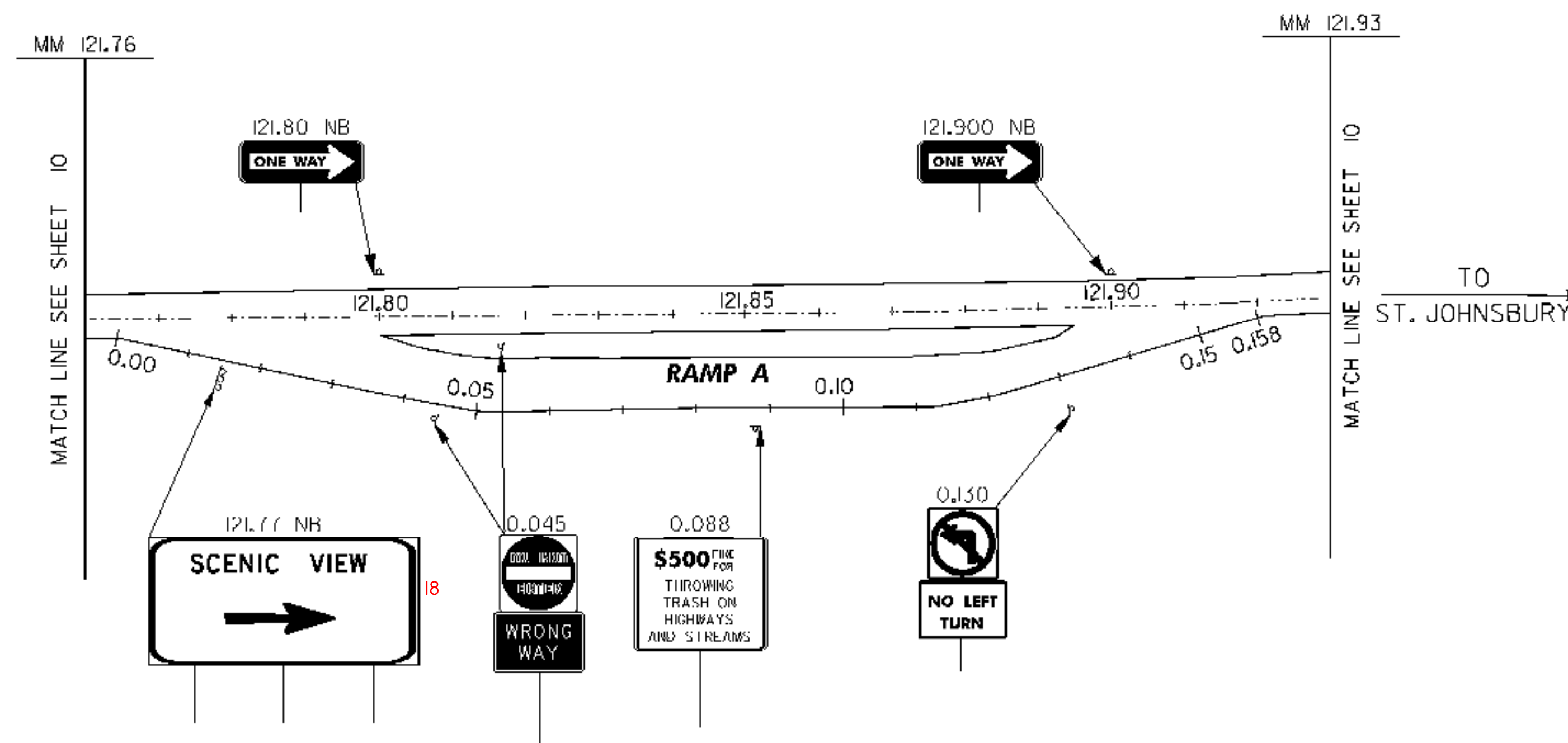
LEGEND
 RET - RETAINED
 R&S - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

INTERCHANGE 18 EXISTING SIGNS

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(173)
FILE NAME:	97194s-exit18.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	DAM
CLD REF. NO.:	97-0194
PLOT DATE:	12/13/2006
DRAWN BY:	JCS
CHECKED BY:	DAM
SHEET	15 OF 88

REMOVING SIGNS
 TYPE A: 9
 TYPE B: 1



LEGEND

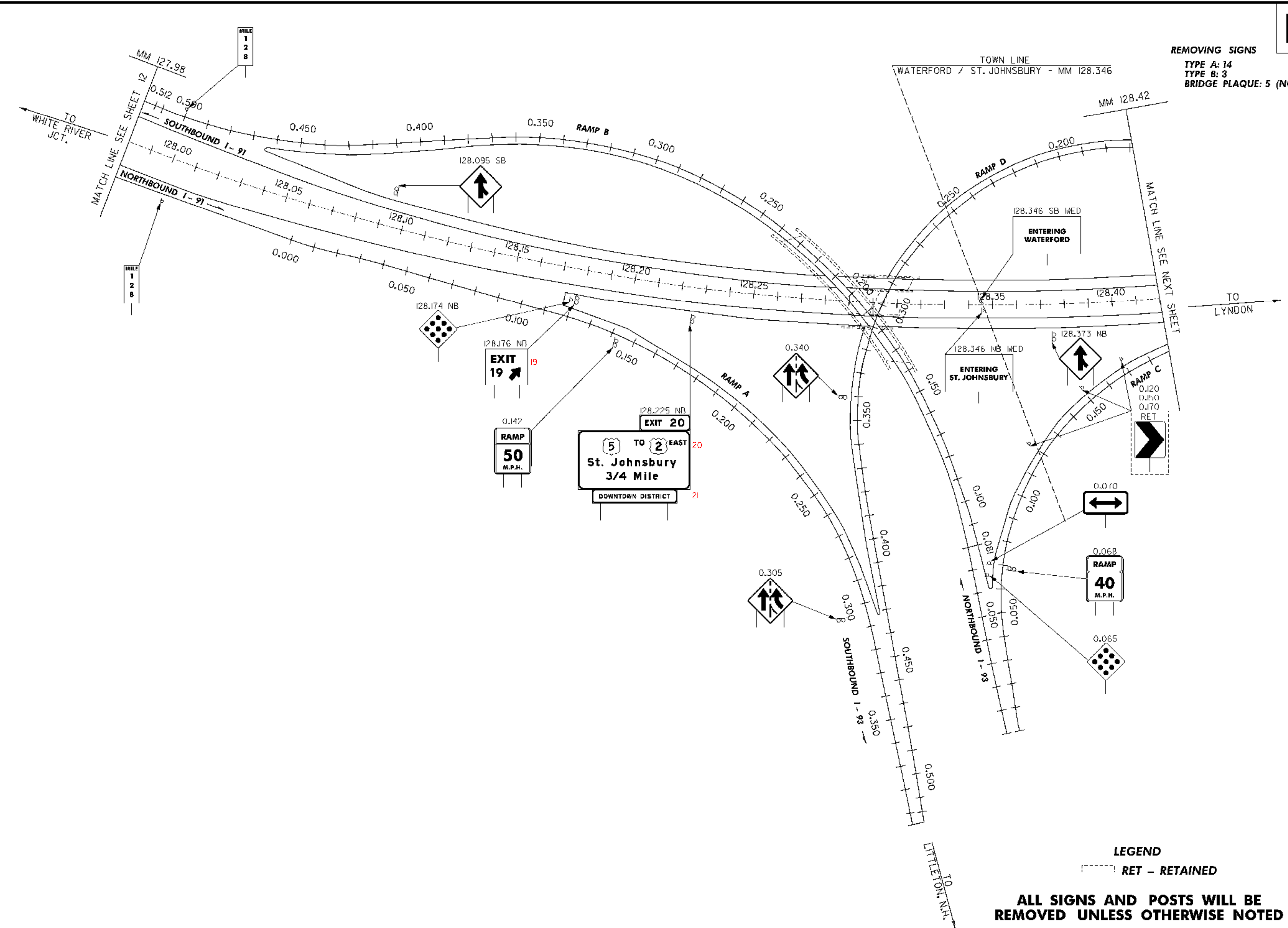
RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**SCENIC VIEW
 121.83 I-91 NB
 EXISTING SIGNS**

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-ra.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	DAM
CLD REF. NO.:	97-0194
PLOT DATE:	12/13/2006
DRAWN BY:	JCS
CHECKED BY:	DAM
SHEET	16 OF 88

REMOVING SIGNS
 TYPE A: 14
 TYPE B: 3
 BRIDGE PLAQUE: 5 (NOT SHOWN)



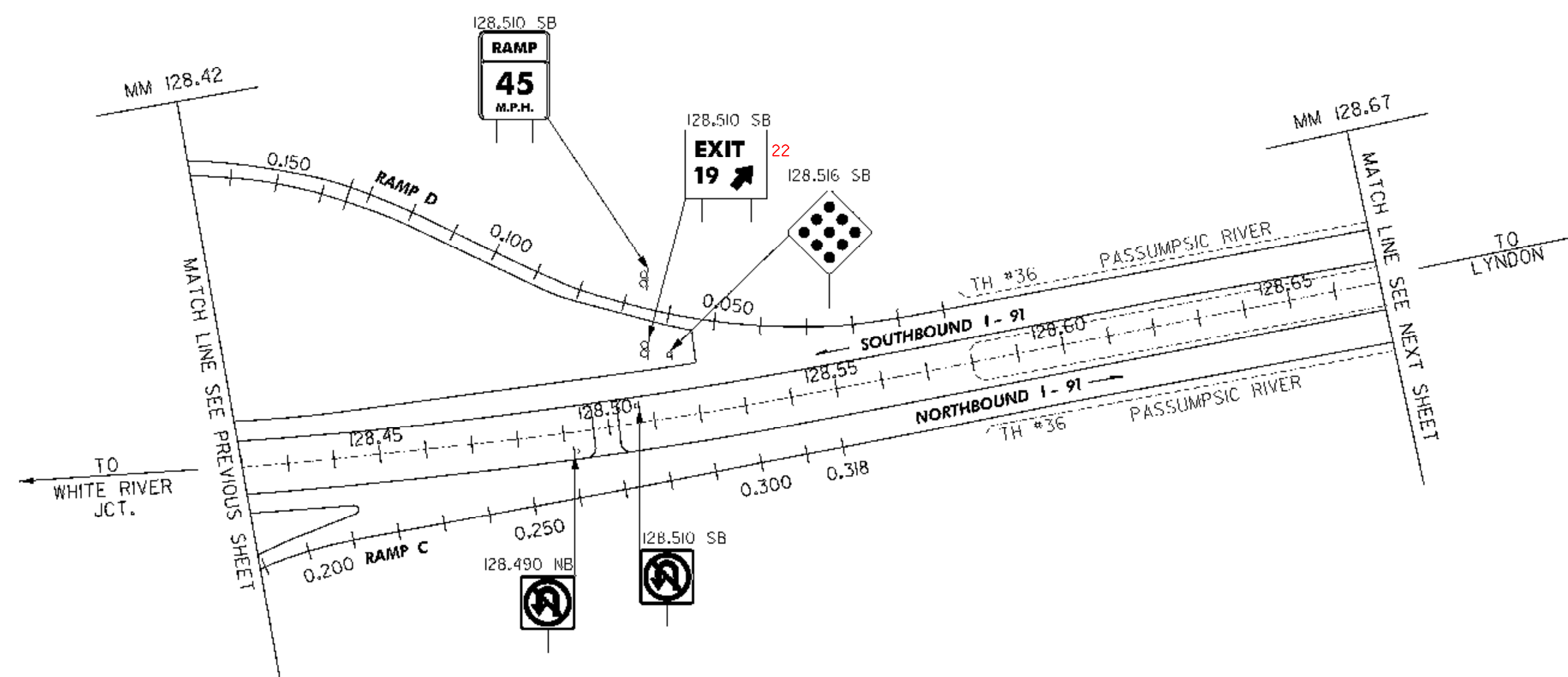
LEGEND
 [Dashed Box] RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

INTERCHANGE 19 EXISTING SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-exit19.dgn	CHECKED BY: DAM
	DESIGNED BY: DAM	SHEET 17 OF 88

REMOVING SIGNS

TYPE A: 4
 TYPE B: 1
 BRIDGE PLAQUE: 1 (NOT SHOWN)



LEGEND

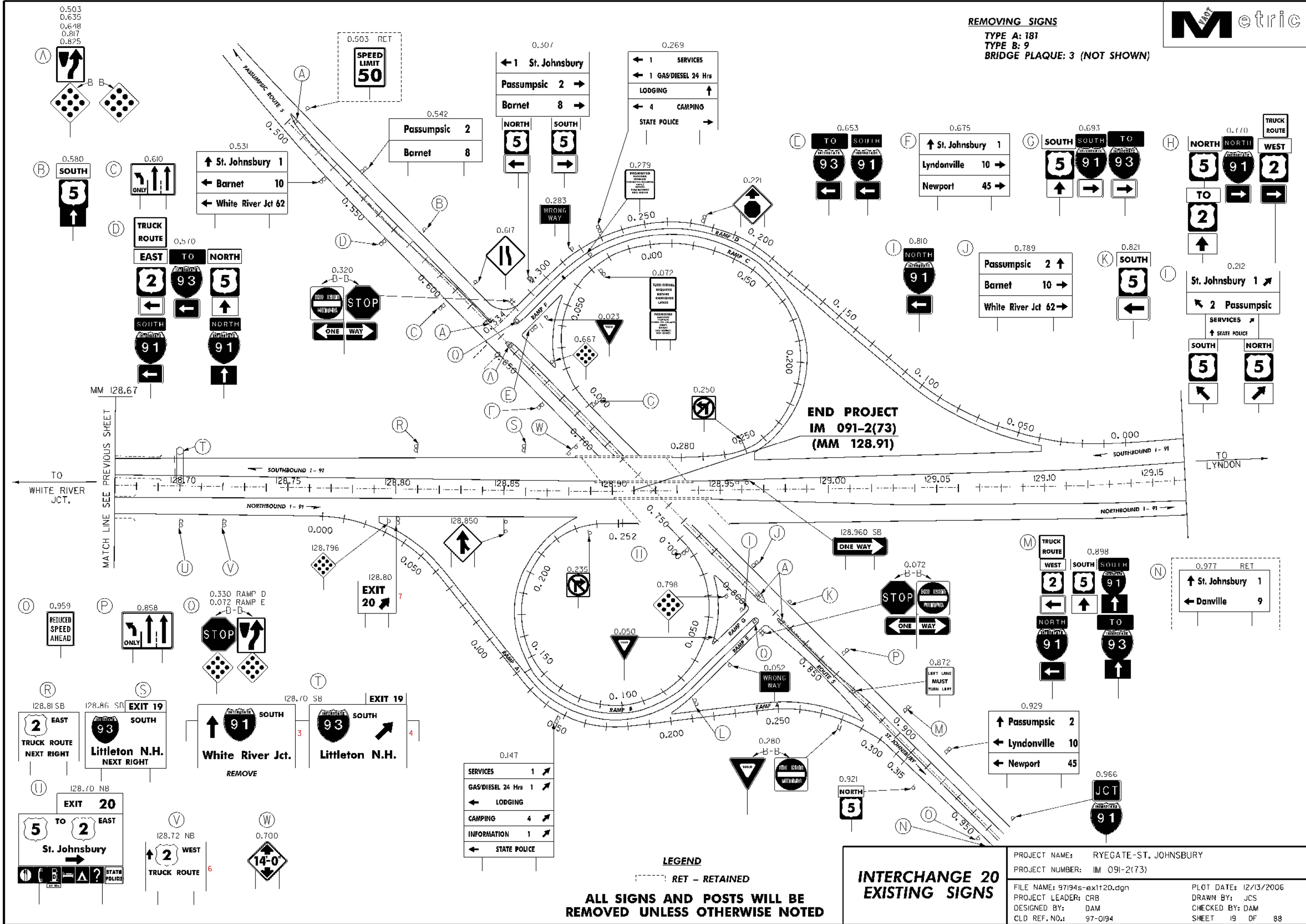
[Dashed Box] RET - RETAINED

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**INTERCHANGE 19
 EXISTING SIGNS**

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-exit19.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	DAM
CLD REF. NO.:	97-0194
PLOT DATE:	12/13/2006
DRAWN BY:	JCS
CHECKED BY:	DAM
SHEET	18 OF 88

REMOVING SIGNS
 TYPE A: 181
 TYPE B: 9
 BRIDGE PLAQUE: 3 (NOT SHOWN)



END PROJECT
 IM 091-2(73)
 (MM 128.91)

SERVICES	1	↗
GAS/DIESEL 24 Hrs	1	↗
LODGING		↗
CAMPING	4	↗
INFORMATION	1	↗
STATE POLICE		↗

LEGEND

--- RET - RETAINED

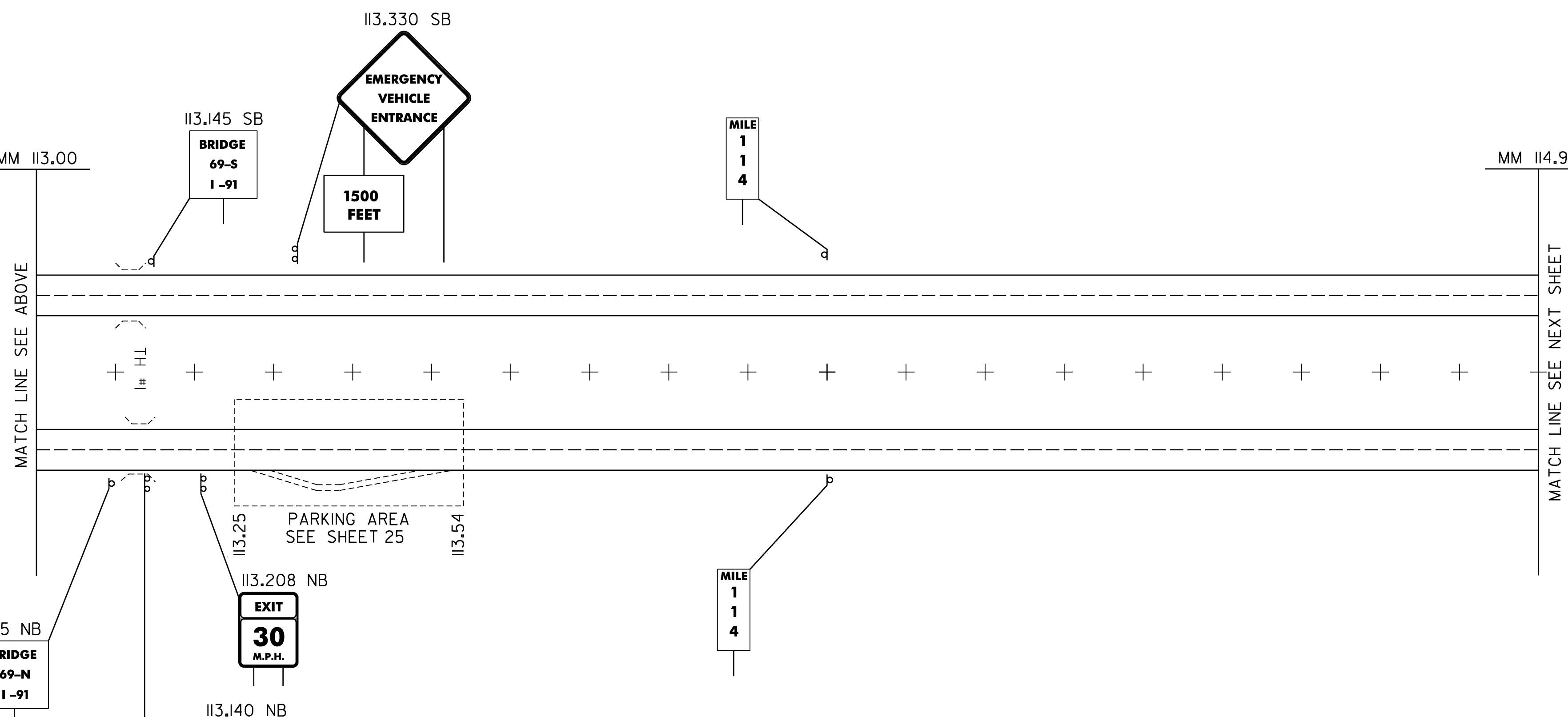
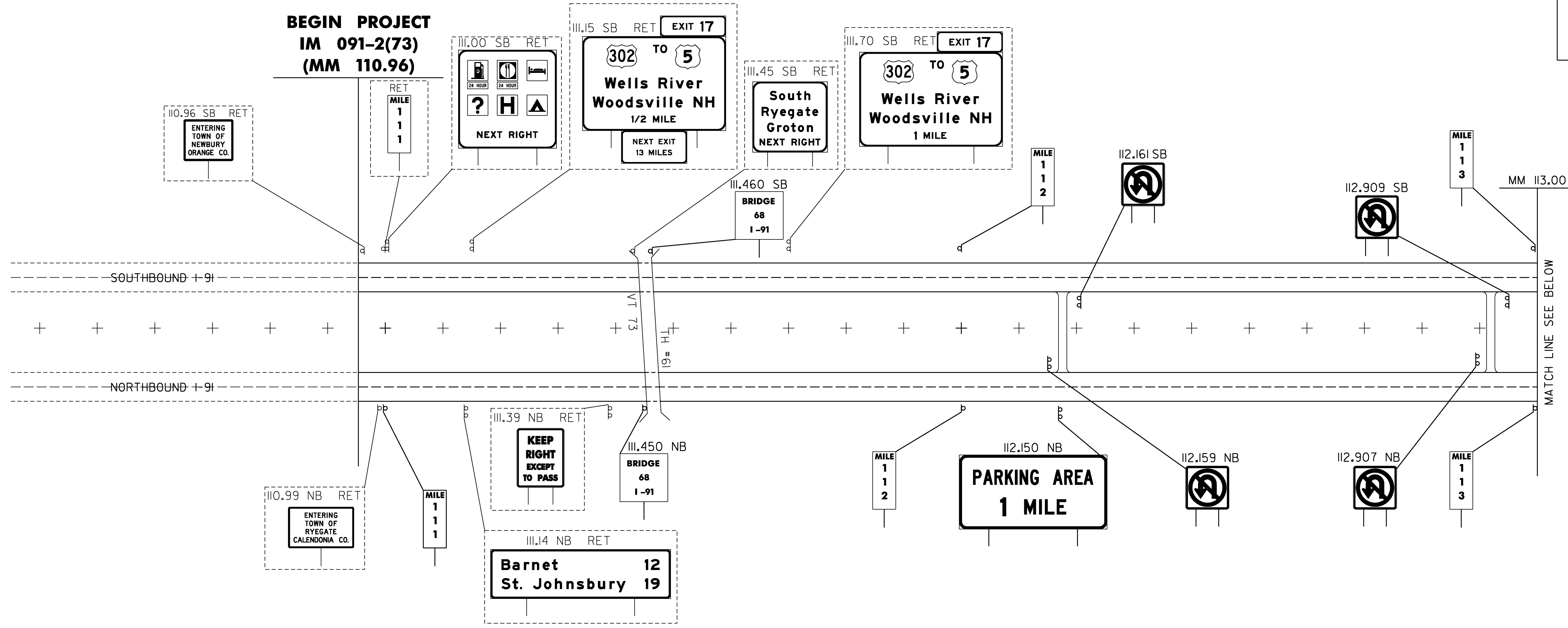
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

INTERCHANGE 20
EXISTING SIGNS

PROJECT NAME:	RYEGATE-ST. JOHNSBURY	PLOT DATE:	12/13/2006
PROJECT NUMBER:	IM 091-2(73)	DRAWN BY:	JCS
FILE NAME:	97194s-ex1120.dgn	CHECKED BY:	DAM
PROJECT LEADER:	CRB	CLD REF. NO.:	97-0194
DESIGNED BY:	DAM	SHEET	19 OF 88



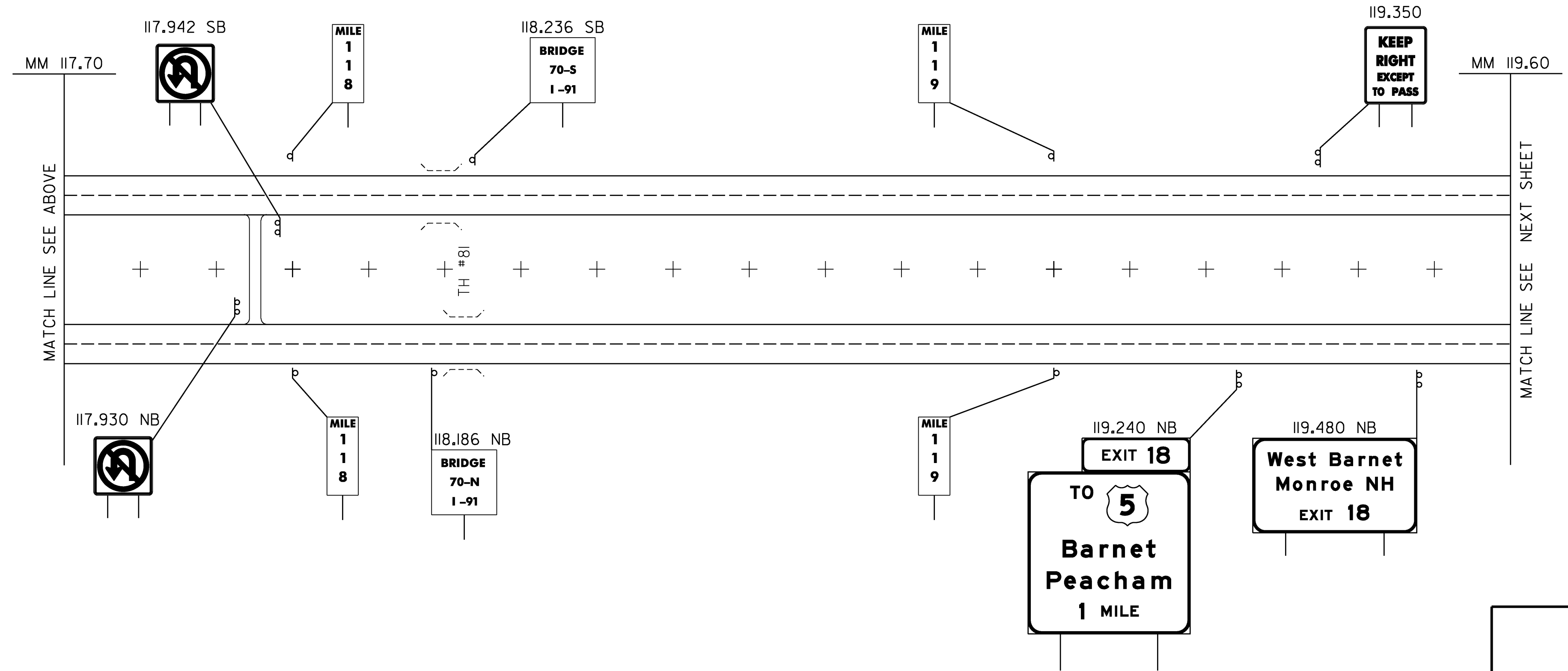
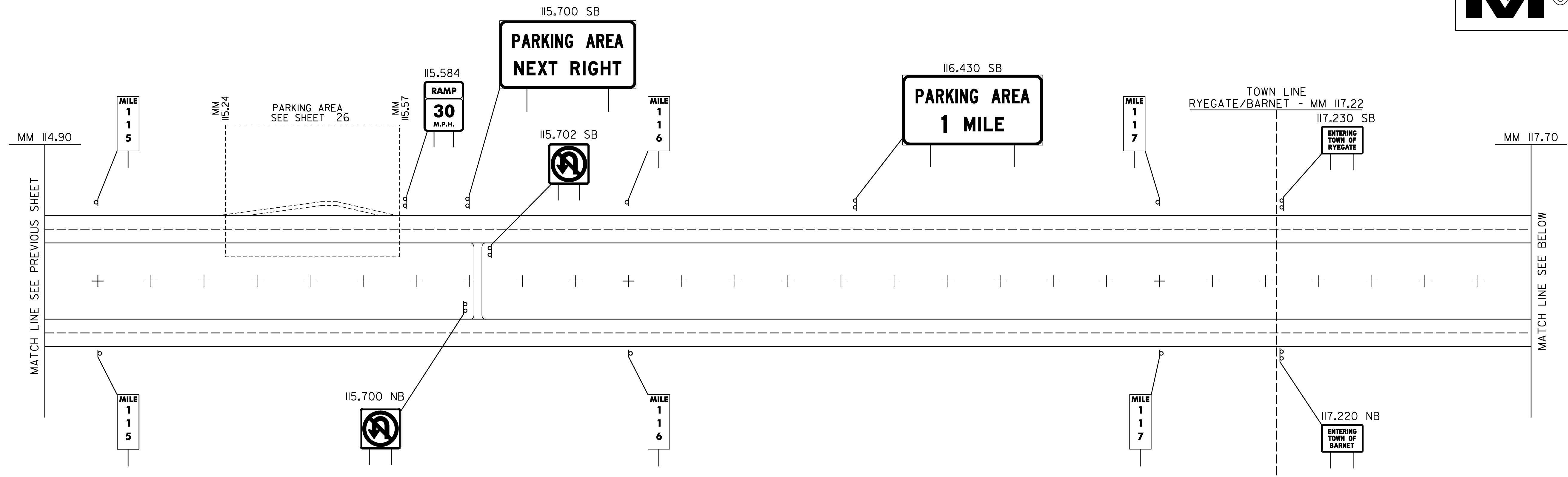
**BEGIN PROJECT
IM 091-2(73)
(MM 110.96)**



LEGEND
RET - RETAINED

**ALL SIGNS AND POSTS ARE
NEW UNLESS OTHERWISE NOTED**

NEW SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY
	PROJECT NUMBER: IM 091-2(73)
	FILE NAME: 97194s-ml.dgn
	PLOT DATE: 12/13/2006
	PROJECT LEADER: CRB
	DESIGNED BY: DAM
	CLD REF. NO.: 97-0194
	DRAWN BY: JCS
	CHECKED BY: DAM
	SHEET 20 OF 88



ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

NEW SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-ml.dgn	CHECKED BY: DAM
	DESIGNED BY: DAM	SHEET 21 OF 88
	CLD REF. NO.: 97-0194	

A
119.603 SB
Wells River 12
White River Jct 50

B
120.940 SB
NEXT RIGHT

119.860 SB
SPEED LIMIT 65
MINIMUM 40

119.955 SB
GROOVED SHOULDER

120.049 SB
SOUTH INTERSTATE 91
FREEBORN BRIDGE

120.125 SB
EMERGENCY STOPPING ONLY

120.736 SB
BRIDGE 73-S 1-91

121.113 SB
BRIDGE 74-S 1-91

121.200 SB
EXIT 18
TO 5
Barnet Peacham 1/2 MILE
NEXT EXIT 10 MILES

121.450 SB
McIndoe Falls East Ryegate
EXIT 18

121.700 SB
EXIT 18
TO 5
Barnet Peacham 1 MILE

MM 119.60
MATCH LINE SEE PREVIOUS SHEET

MM 122.00
MATCH LINE SEE NEXT SHEET

119.800 NB
NO LEFT TURN

119.802 SB
NO LEFT TURN

121.252 NB
NO LEFT TURN

121.254 SB
NO LEFT TURN

119.731 NB
EXIT 18
TO 5
Barnet Peacham 1/2 MILE
NEXT EXIT 10 MILES

119.950 NB
NEXT RIGHT

120.170 NB
EXIT 18
TO 5
Barnet Peacham

120.750 NB
BRIDGE 73-N 1-91
120.810 NB
EMERGENCY STOPPING ONLY

120.930 NB
SCENIC VIEW 1 MILE

120.981 NB
GROOVED SHOULDER

121.440 NB
SCENIC VIEW NEXT RIGHT

121.744
EXIT 30 M.P.H.

MILE 120
120

MILE 121
121

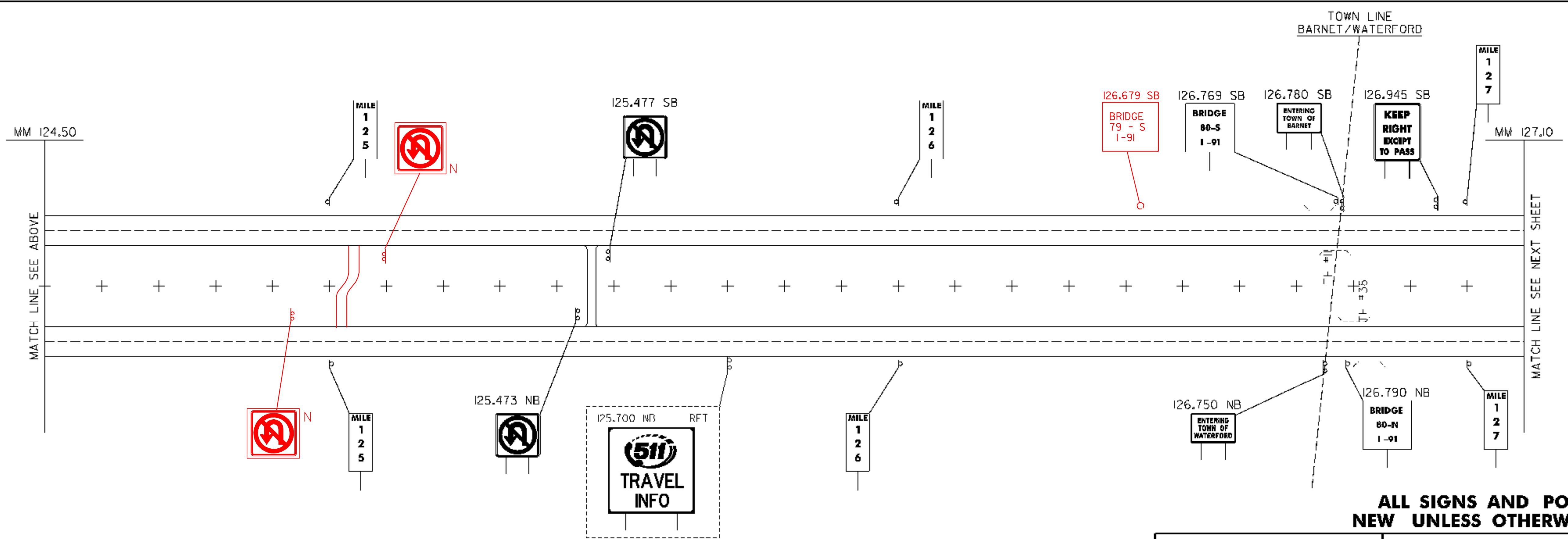
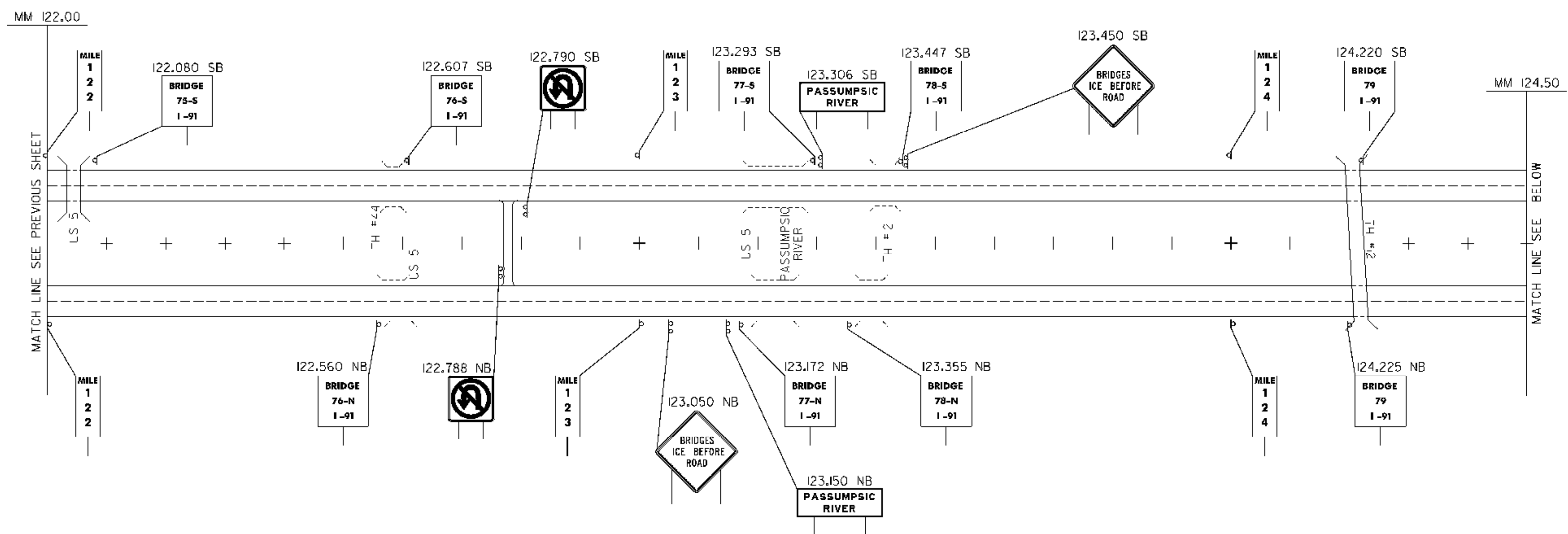
C
120.884 NB
NORTH INTERSTATE 91
FREEBORN BRIDGE

D
121.087 NB
SPEED LIMIT 65
MINIMUM 40

E
121.260 NB
ST. Johnsbury 9
Newport 53

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

NEW SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY
	PROJECT NUMBER: IM 091-2(73)
	FILE NAME: 97194s-ml.dgn
	PLOT DATE: 12/13/2006
	PROJECT LEADER: CRB
	DESIGNED BY: DAM
	CLD REF. NO.: 97-0194
	DRAWN BY: JCS
	CHECKED BY: DAM
	SHEET 22 OF 88



ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

NEW SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-m.dgn	CHECKED BY: DAM
	DESIGNED BY: DAM	SHEET 23 OF 88
	CLD REF. NO.: 97-0194	

127.195 SB
Barnet 8
White River Jct 58

127.507 SB
SPEED LIMIT 65
MINIMUM 40

127.602 SB
GROOVED SHOULDER

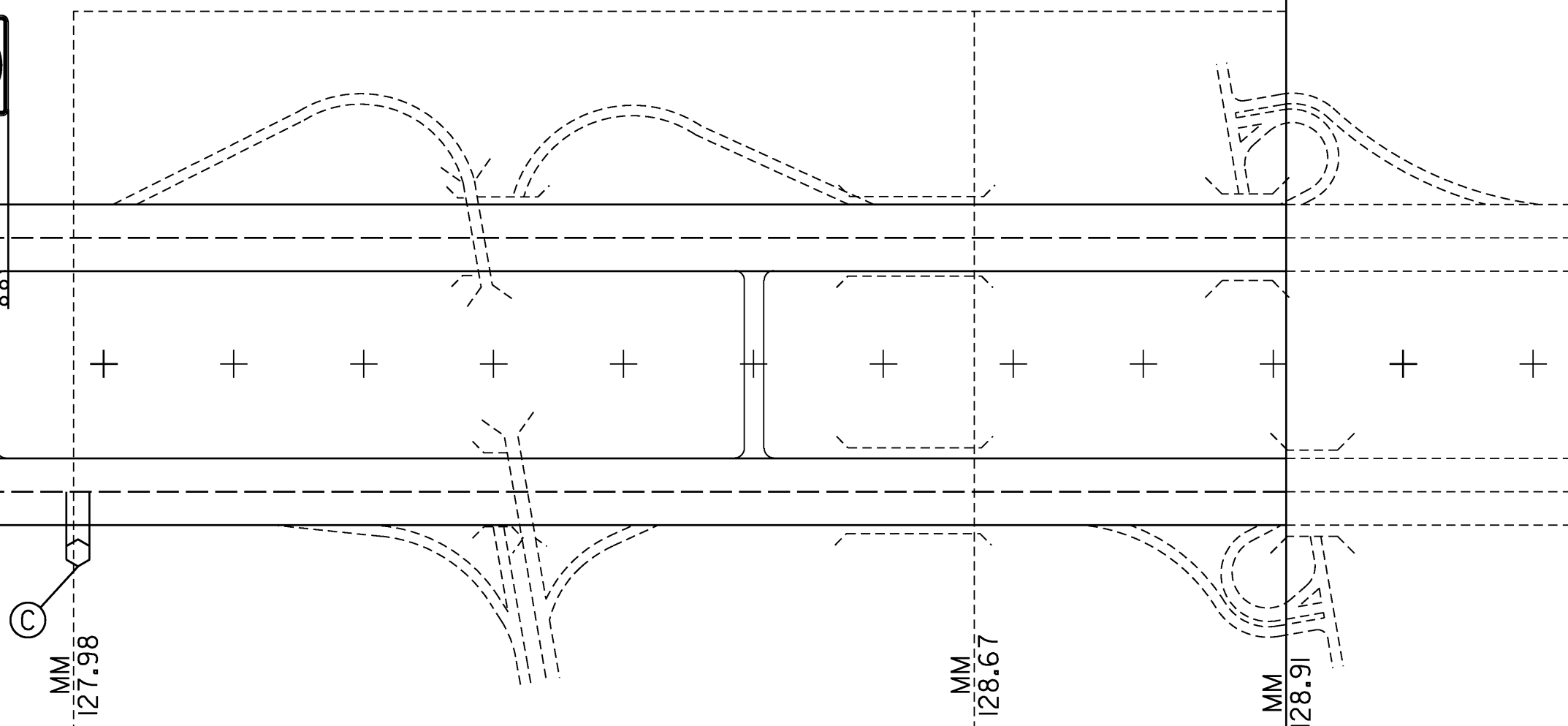
127.696 SB
SOUTH INTERSTATE 91
BEEHIVE STATE ROUTE 2

127.772 SB
EMERGENCY STOPPING ONLY

END PROJECT
IM 091-2(73)
(MM 128.91)

MM 127.10
MATCH LINE SEE PREVIOUS SHEET

127.925 SB
No Right Turn sign



INTERCHANGE 19
SEE SHEETS 29 & 30

INTERCHANGE 20
SEE SHEET 31

127.628 NB
EXIT 19
SOUTH
Littleton NH
1/2 MILE

127.800 NB
St. Johnsbury
EXITS 20, 21, 22

127.903 NB
No Right Turn sign

OVERHEAD TRAFFIC
SIGN SUPPORT, CANTILEVER

127.220 NB
EXIT 19
SOUTH
Littleton NH
1 MILE

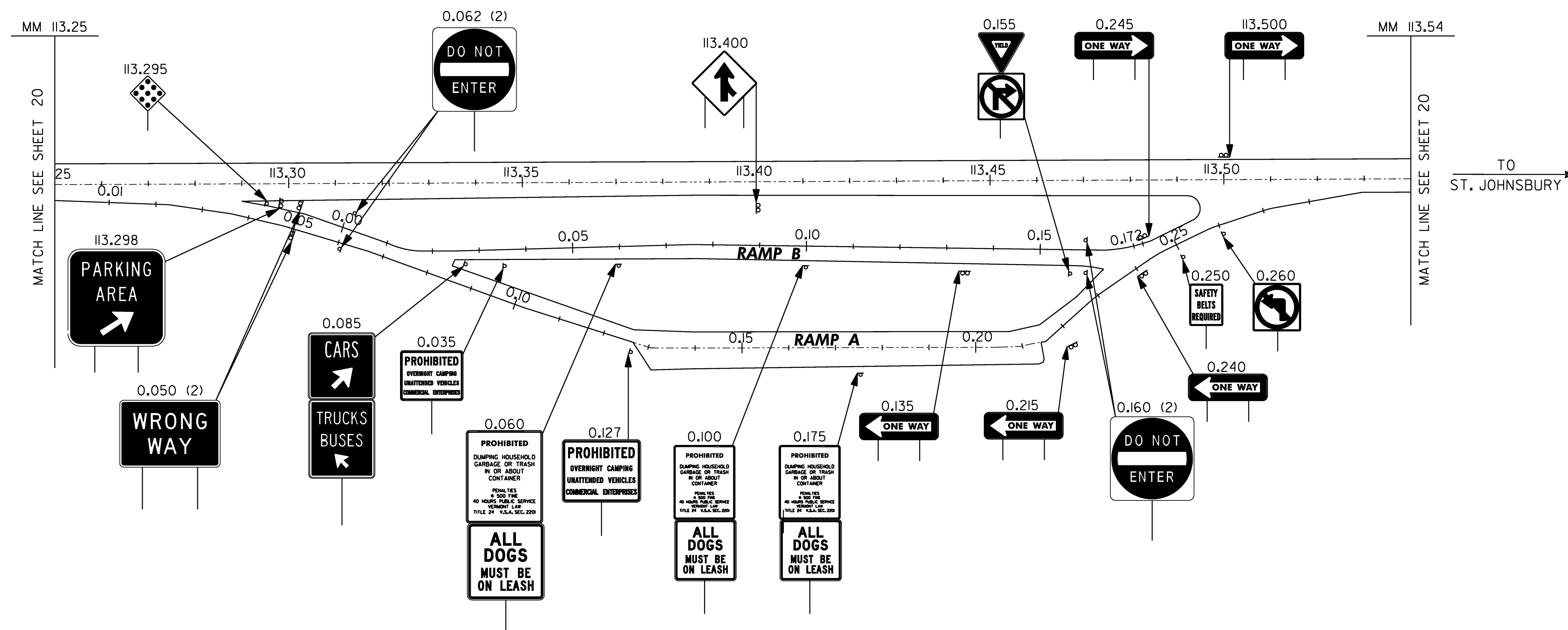
127.420 NB
TRUCK ROUTE
EXIT 19 TO 2 EAST
EXIT 21 2 WEST

127.980 NB
EXIT 19
SOUTH
Littleton NH

OVERHEAD TRAFFIC
SIGN SUPPORT, CANTILEVER

ALL SIGNS AND POSTS ARE
NEW UNLESS OTHERWISE NOTED

NEW SIGNS	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	DESIGNED BY: DAM	CHECKED BY: DAM
	FILE NAME: 97194s-ml.dgn	CLD REF. NO.: 97-0194
		SHEET 24 OF 88



LEGEND

--- RET - RETAINED

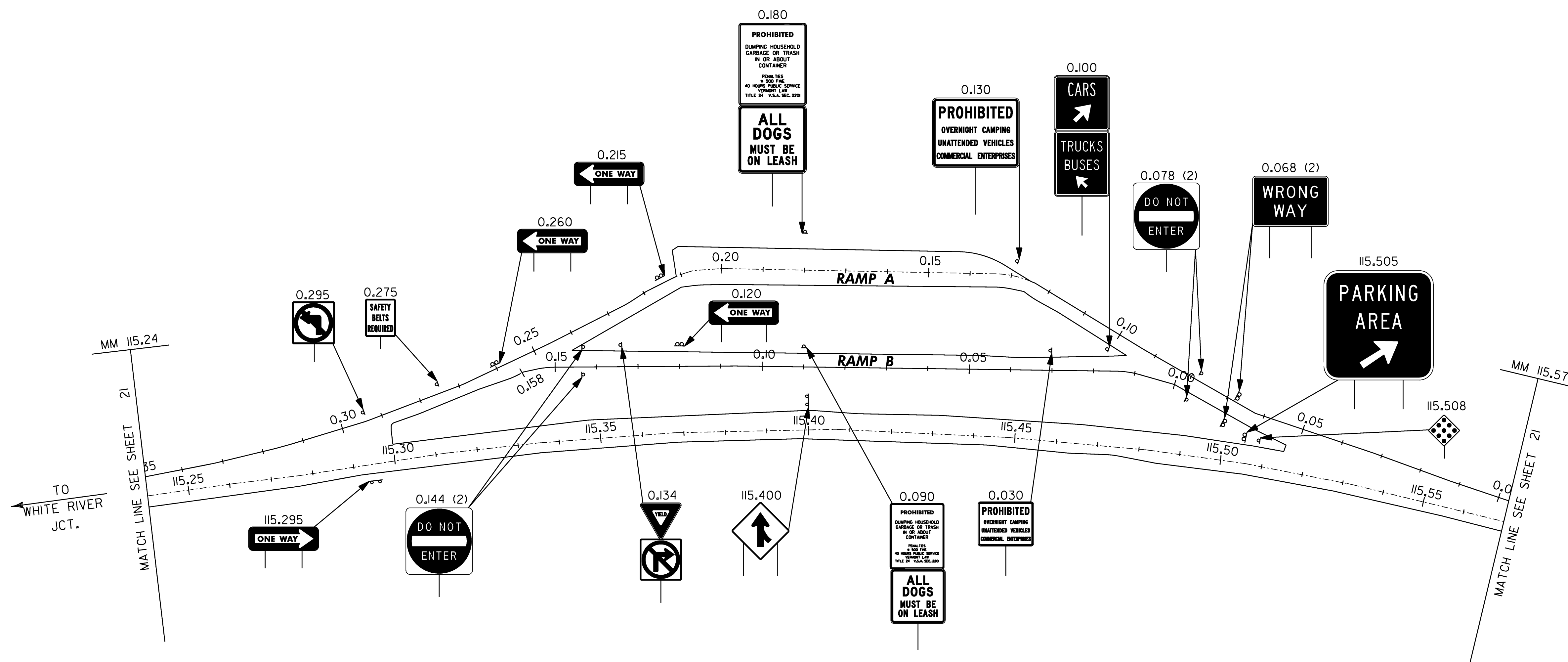
**ALL SIGNS AND POSTS ARE
NEW UNLESS OTHERWISE NOTED**

**PARKING AREA
113.39 I-91 NB
NEW SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-ra.dgn
PROJECT LEADER: CRB
DESIGNED BY: DAM
CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 25 OF 88



LEGEND

--- RET - RETAINED

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

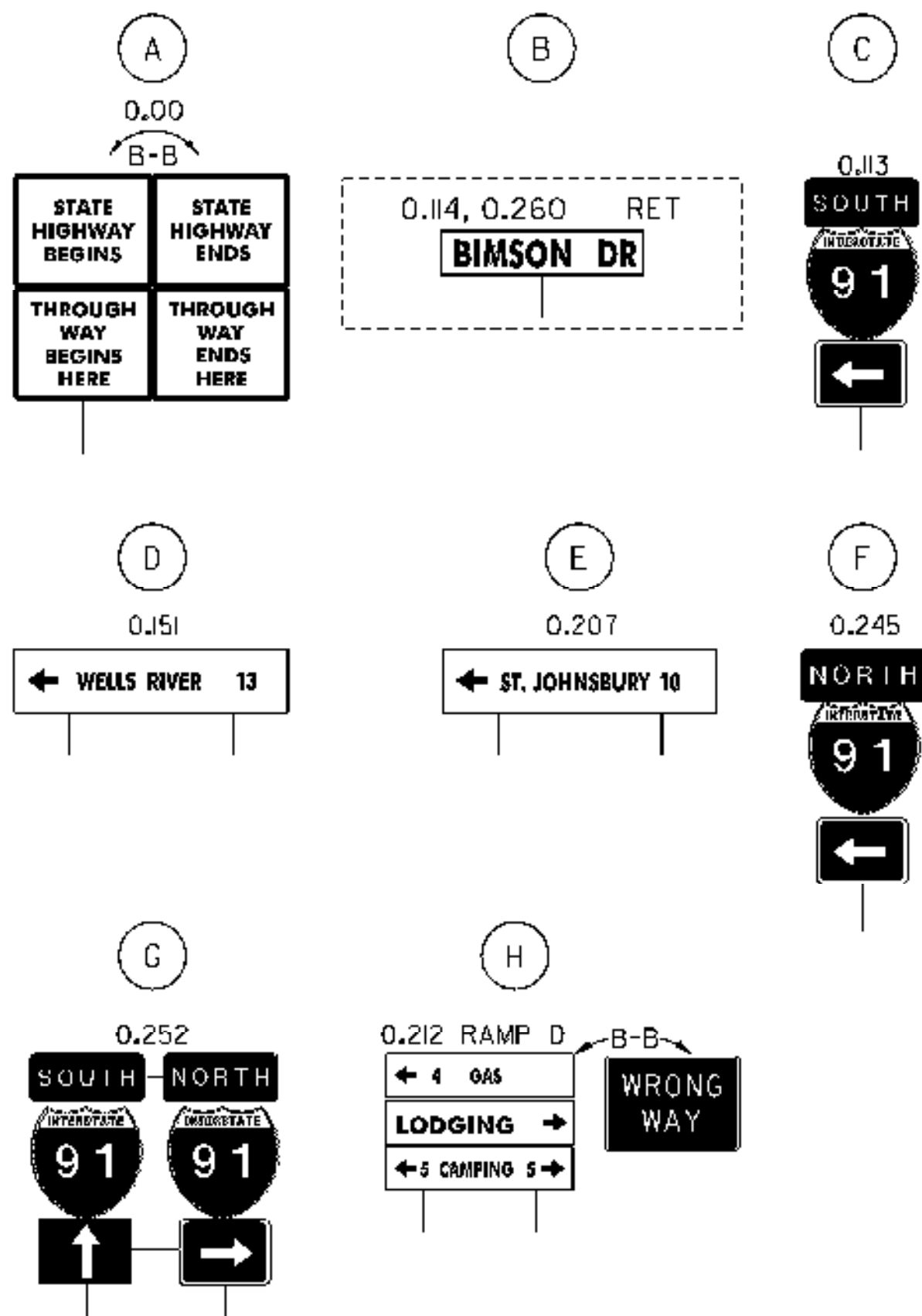
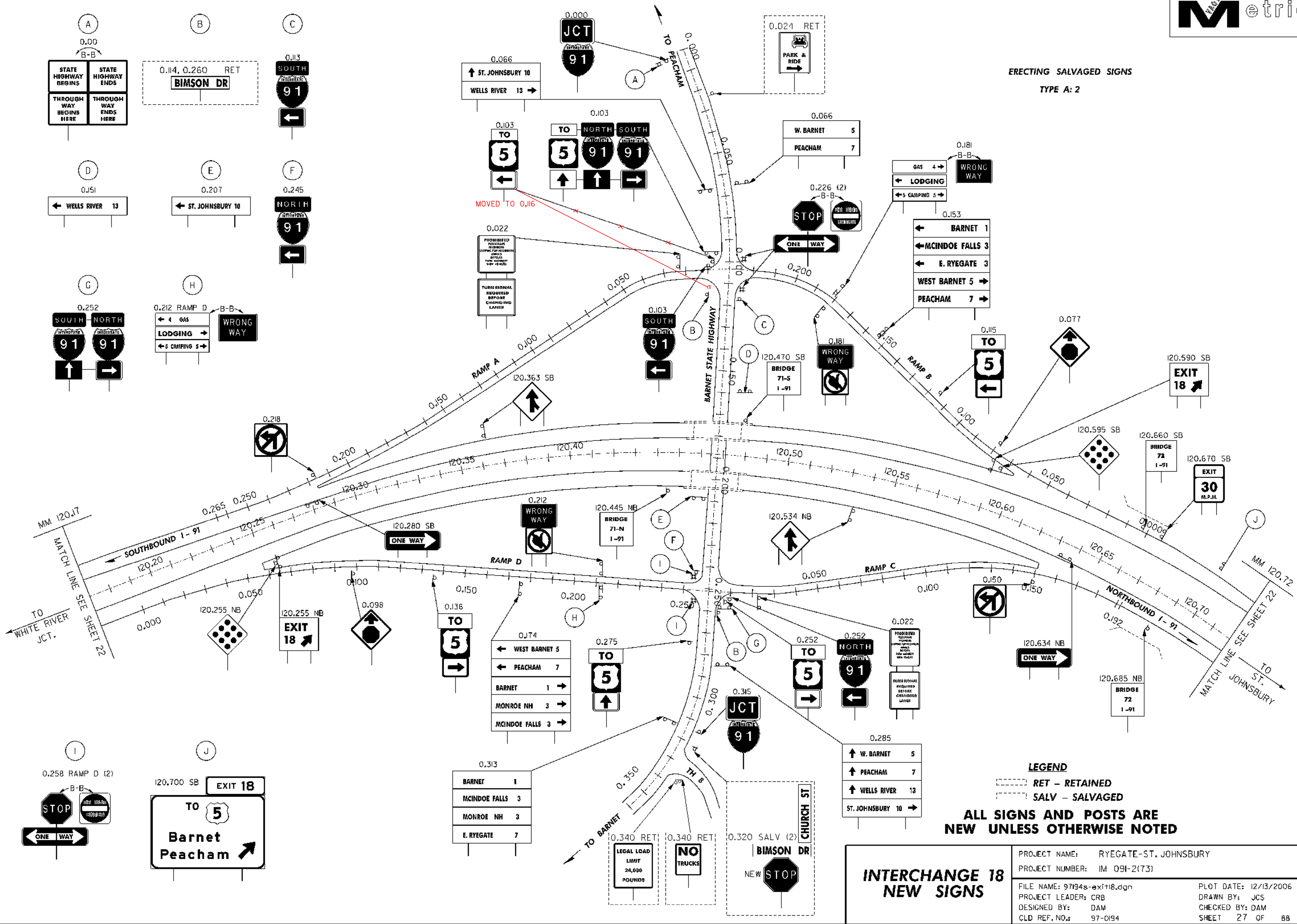
**PARKING AREA
115.40 I-91 SB
NEW SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-ra.dgn
PROJECT LEADER: CRB
DESIGNED BY: DAM
CLD REF. NO.: 97-0194

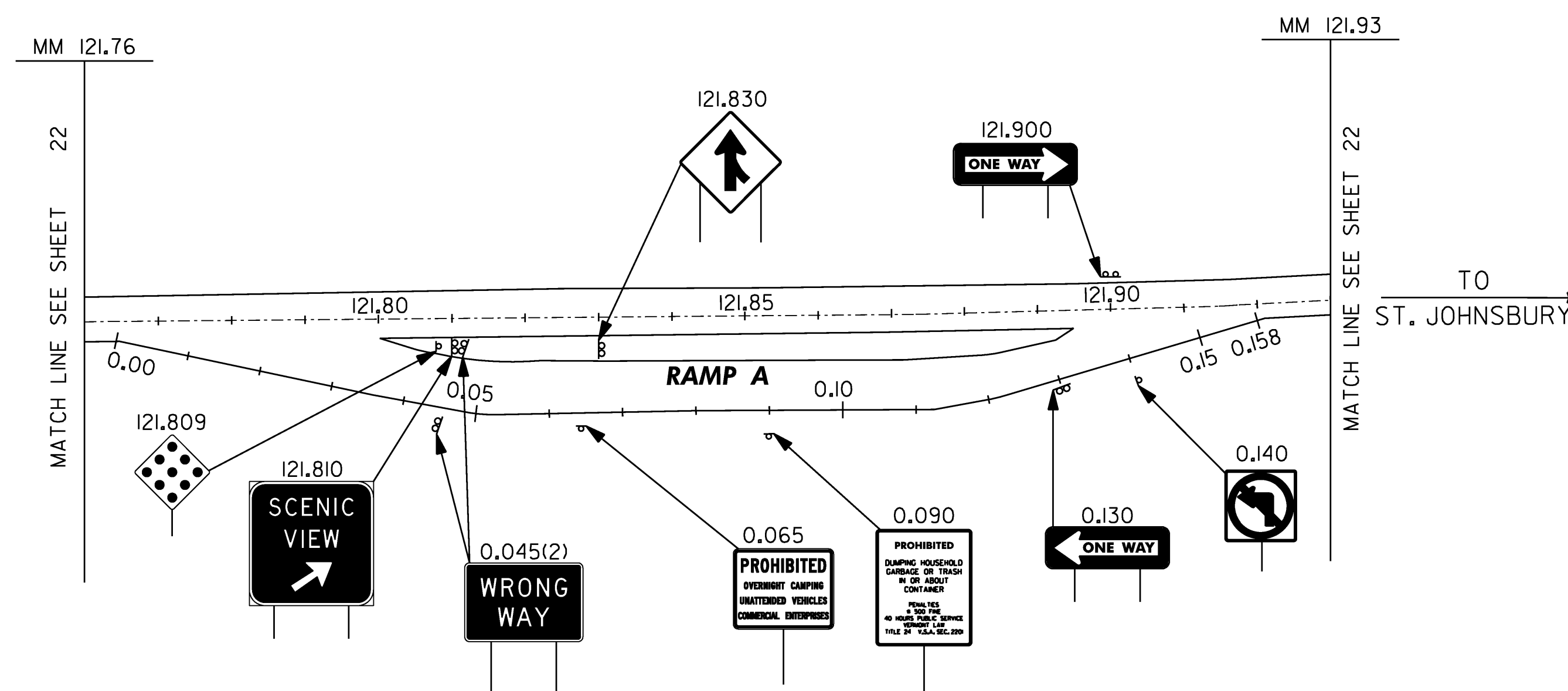
PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 26 OF 88

ERECTING SALVAGED SIGNS
TYPE A: 2



LEGEND
 --- RET - RETAINED
 --- SALV - SALVAGED
ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

INTERCHANGE 18 NEW SIGNS		PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLLOT DATE: 12/13/2006
		PROJECT NUMBER: IM 091-21731	DRAWN BY: JCS
		FILE NAME: 97194s-exit18.dgn	CHECKED BY: DAM
		DESIGNED BY: DAM	SHEET 27 OF 88
		CLD REF. NO.: 97-0194	



LEGEND

----- RET - RETAINED

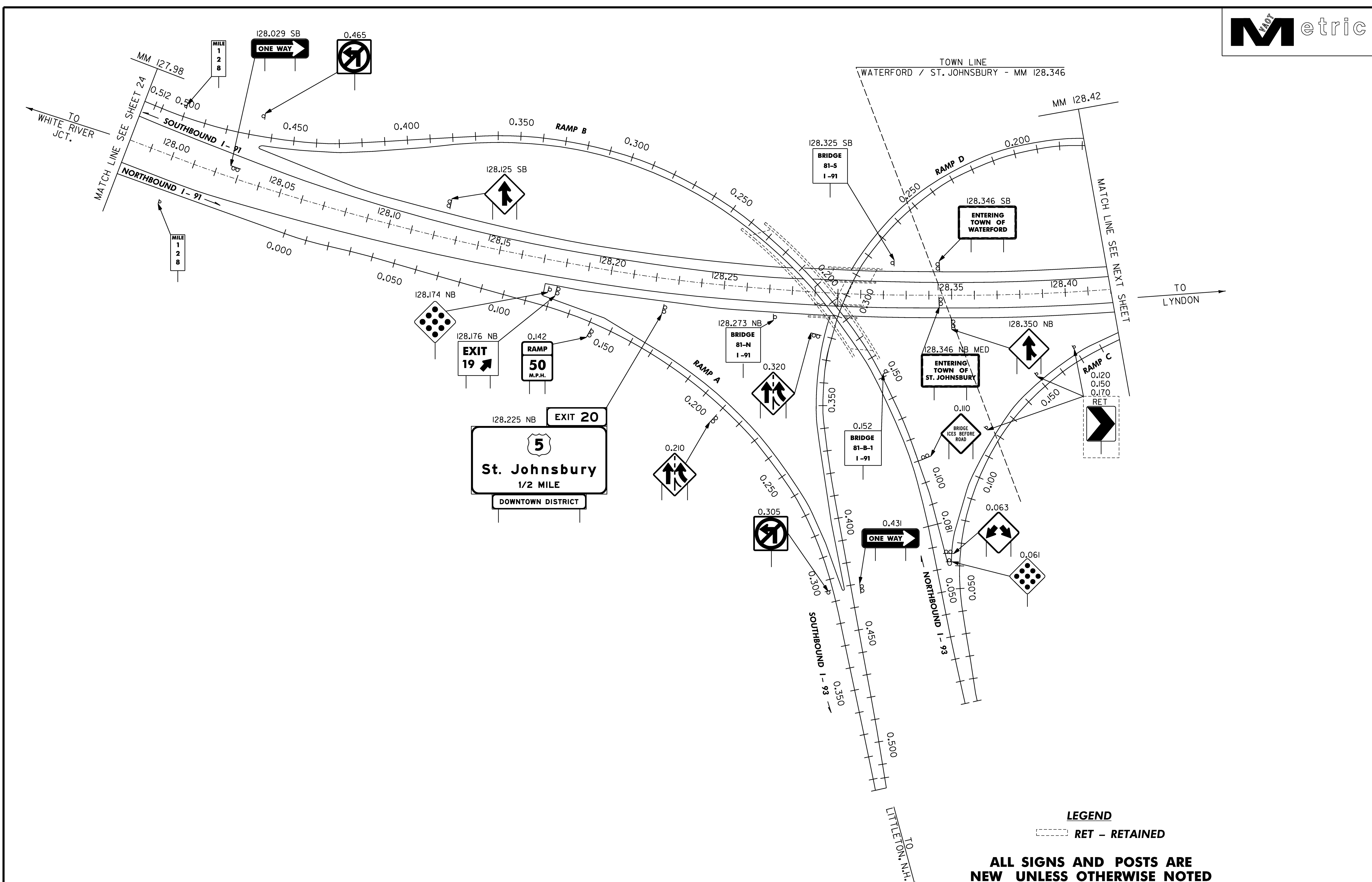
**ALL SIGNS AND POSTS ARE
NEW UNLESS OTHERWISE NOTED**

**SCENIC VIEW
121.83 I-91 NB
NEW SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-ra.dgn
PROJECT LEADER: CRB
DESIGNED BY: DAM
CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 28 OF 88



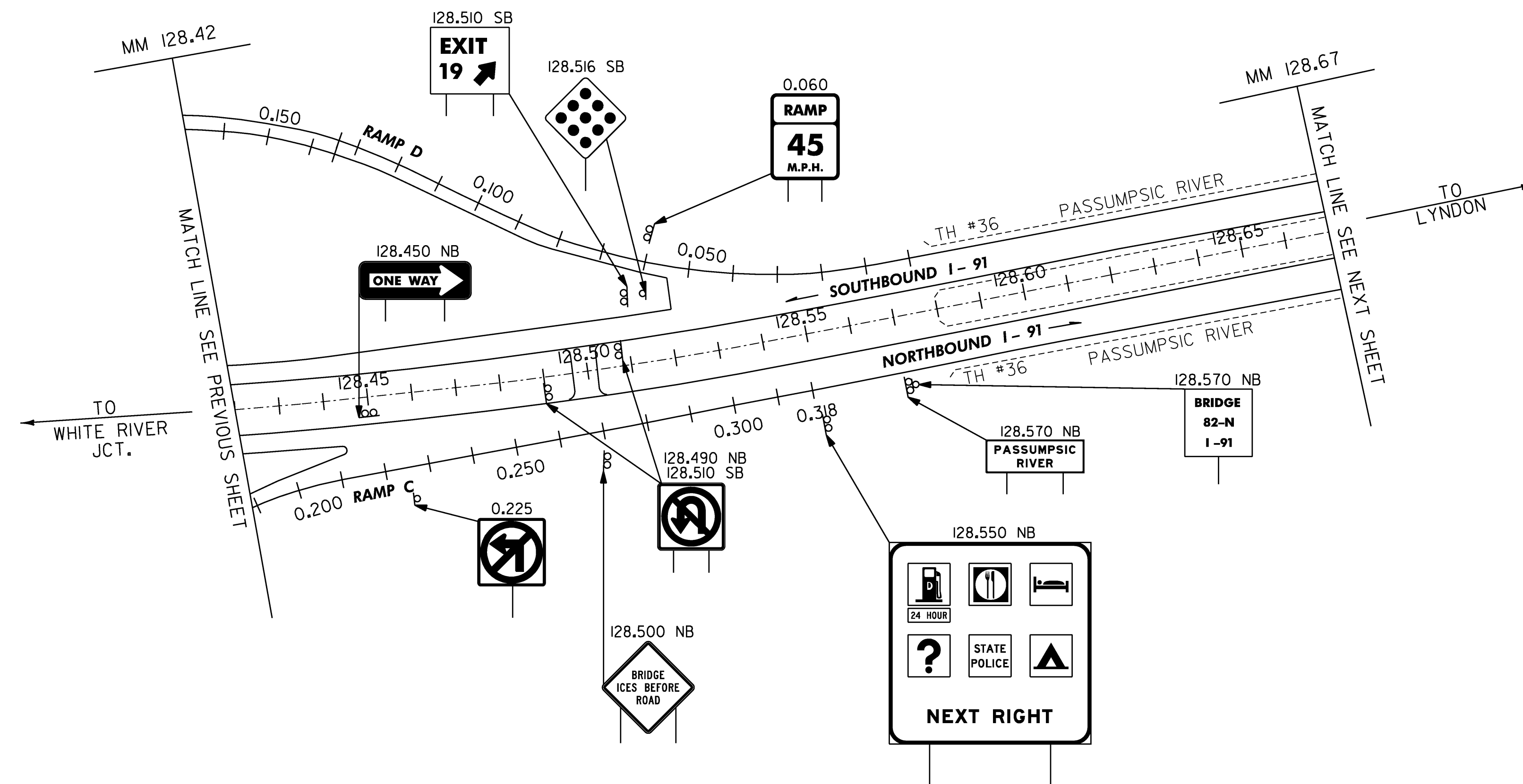
LEGEND

RET - RETAINED

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

**INTERCHANGE 19
NEW SIGNS**

PROJECT NAME:	RYEGATE-ST. JOHNSBURRY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-exit19.dgn
PLOT DATE:	12/13/2006
PROJECT LEADER:	CRB
DRAWN BY:	JCS
DESIGNED BY:	DAM
CHECKED BY:	DAM
CLD REF. NO.:	97-0194
SHEET	29 OF 88



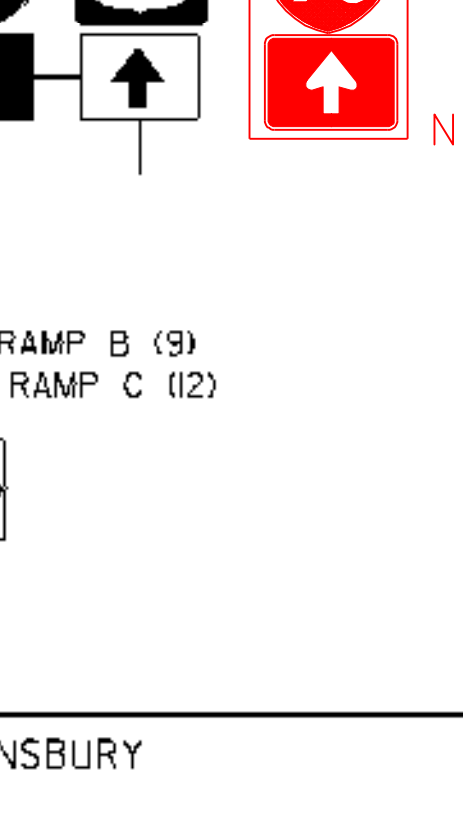
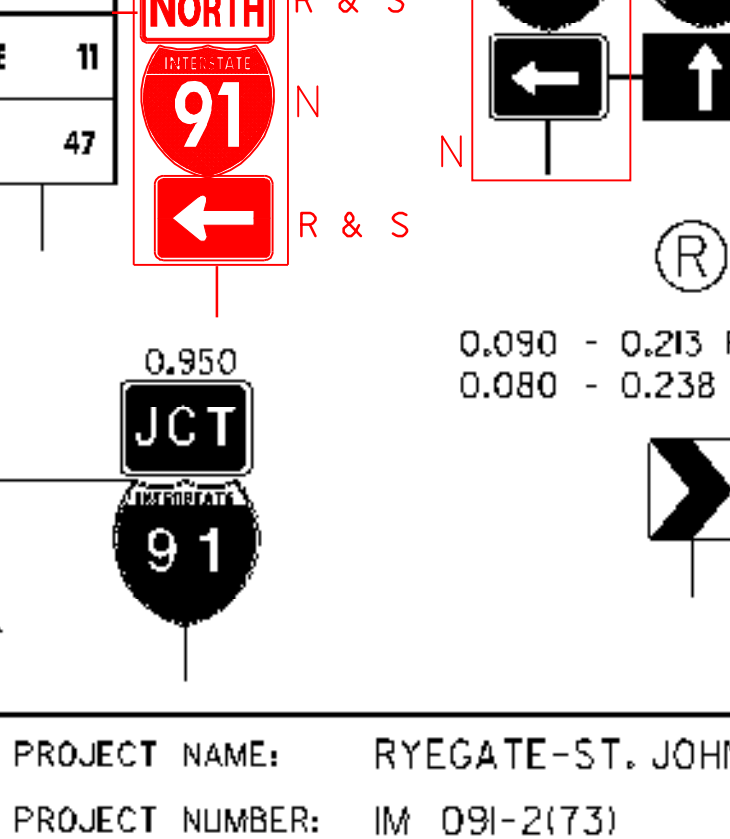
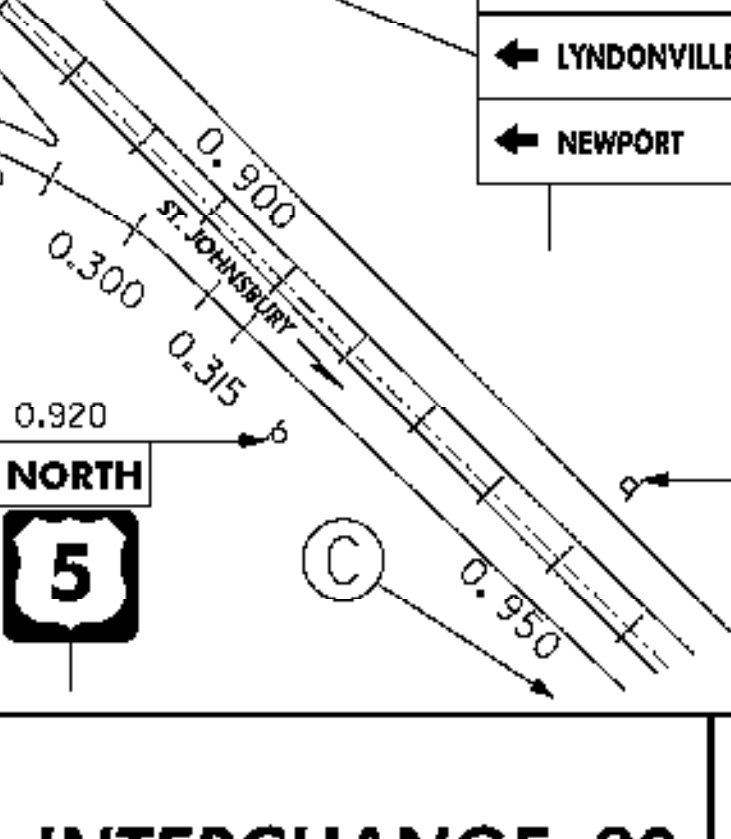
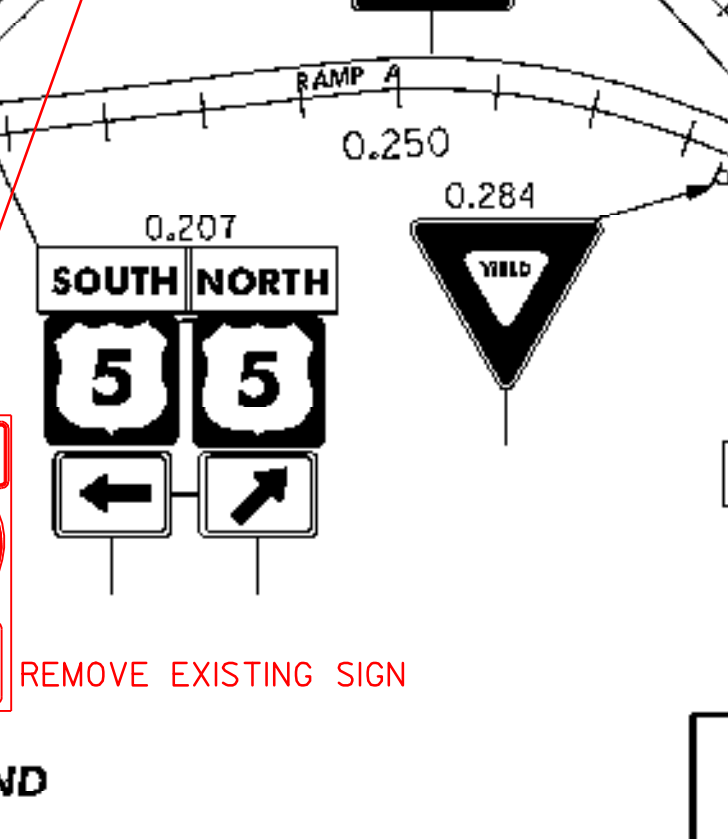
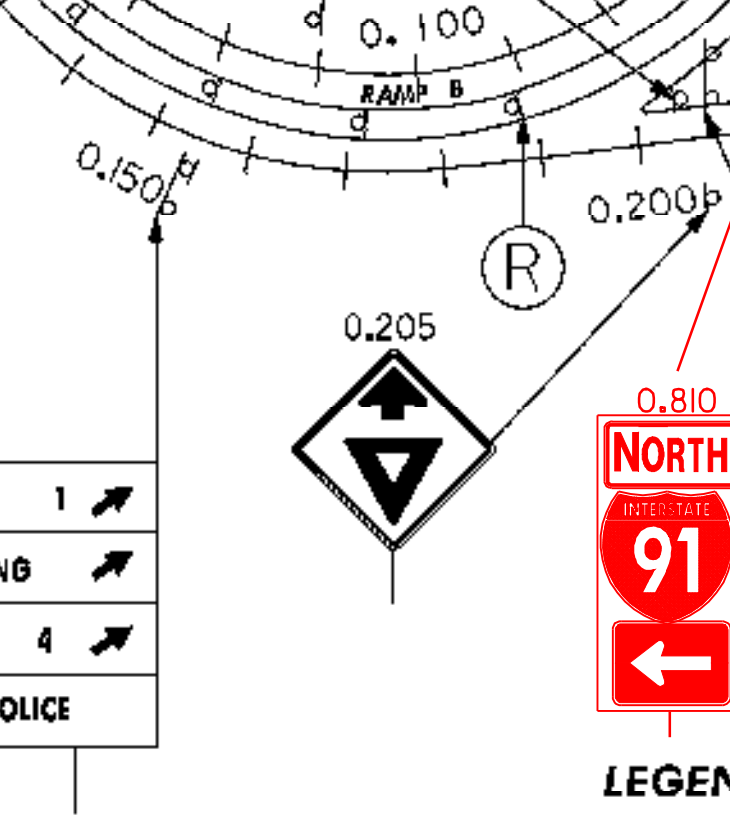
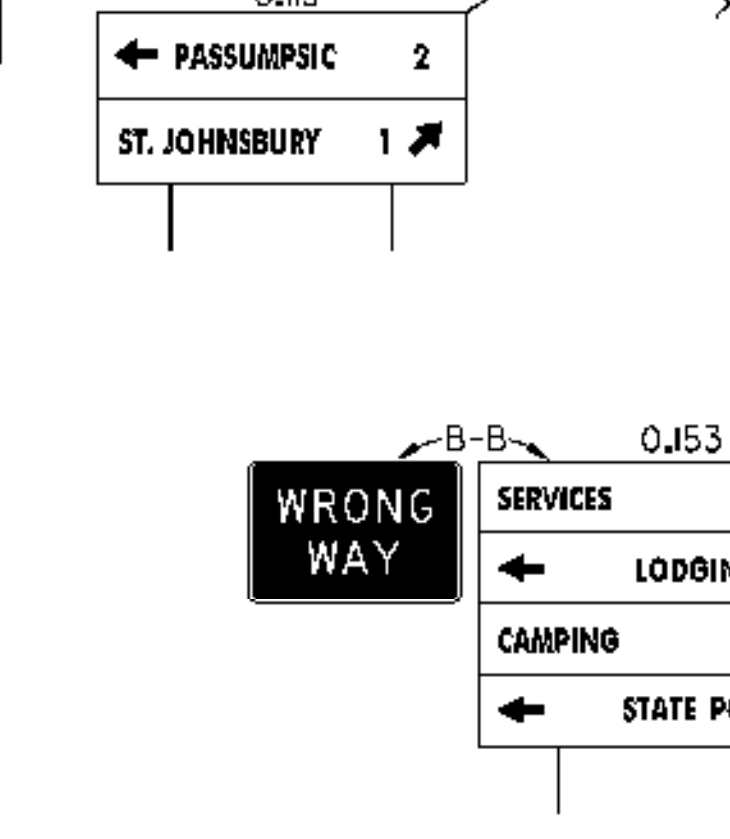
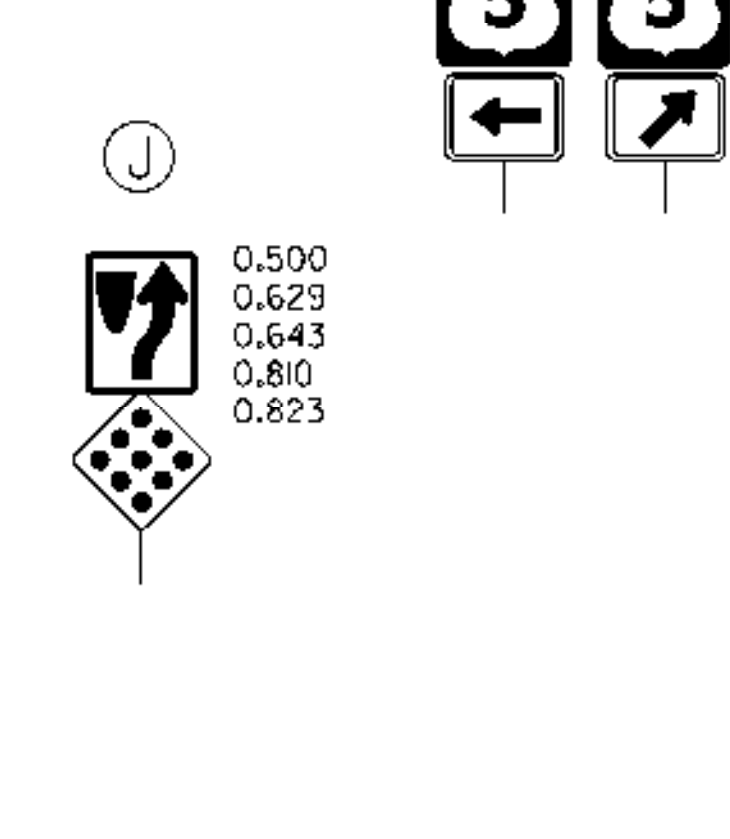
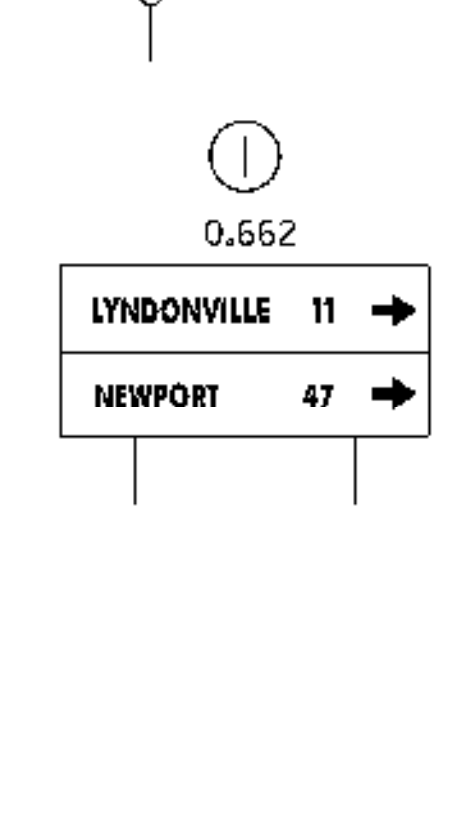
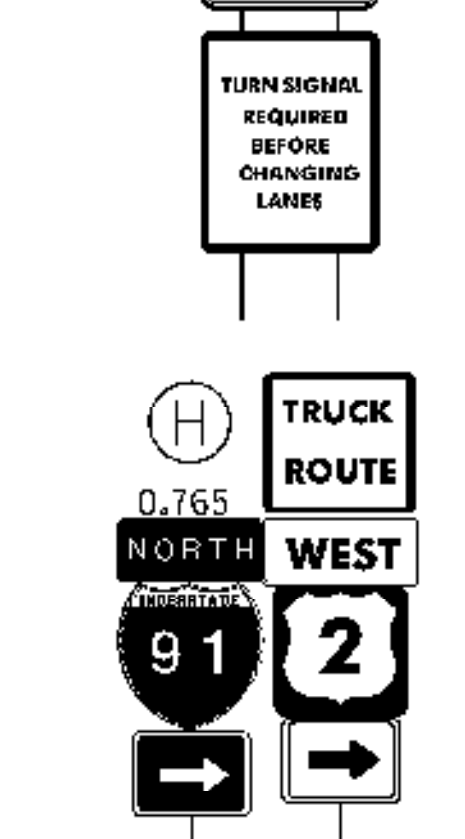
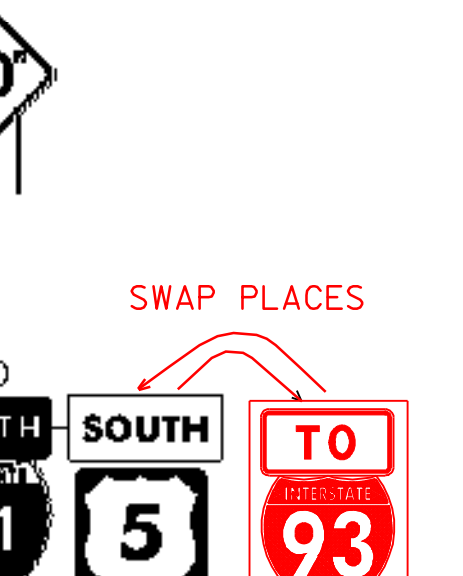
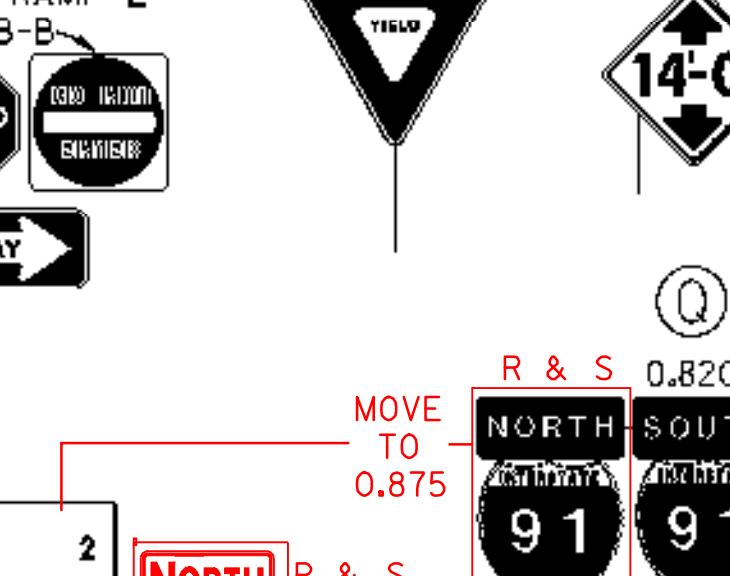
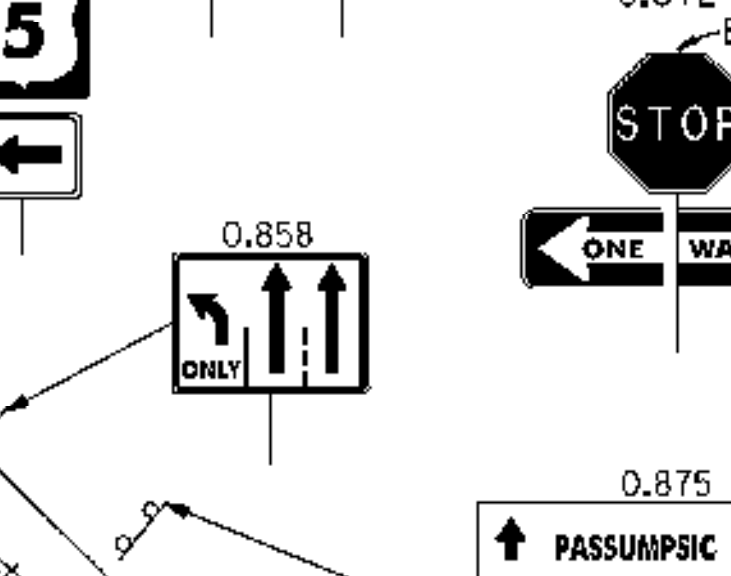
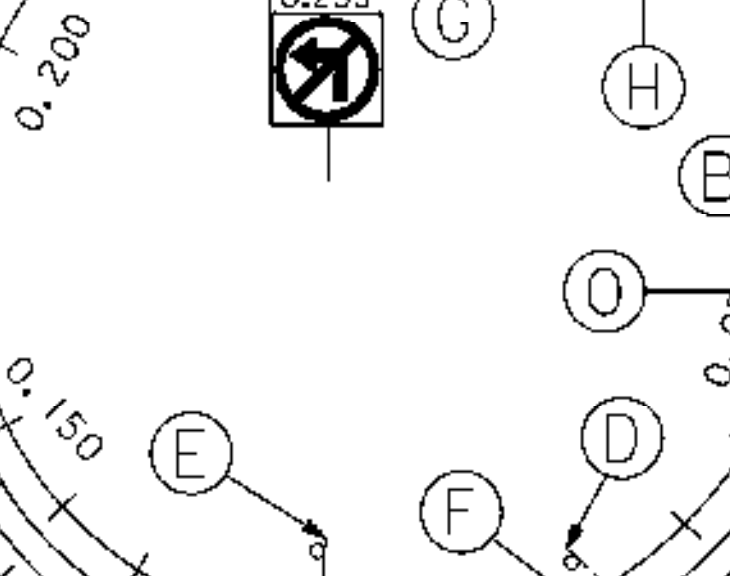
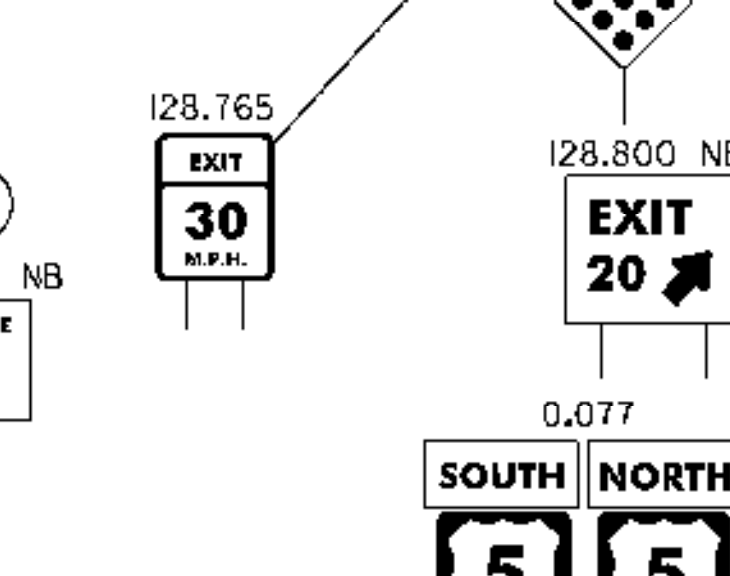
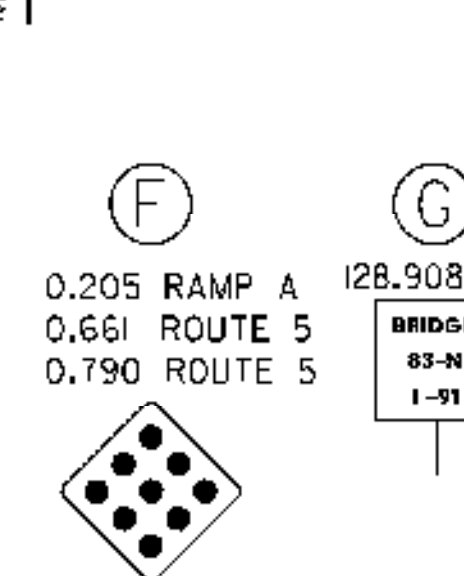
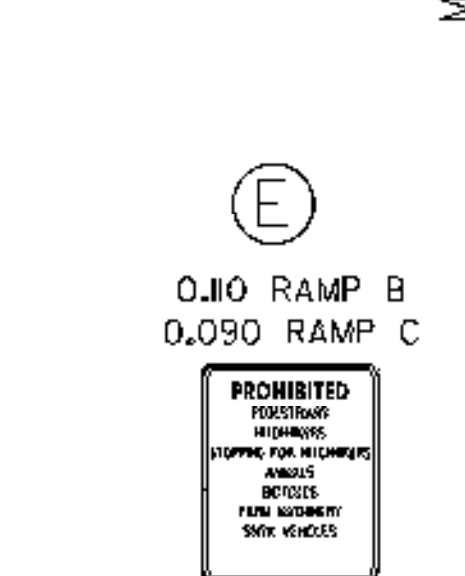
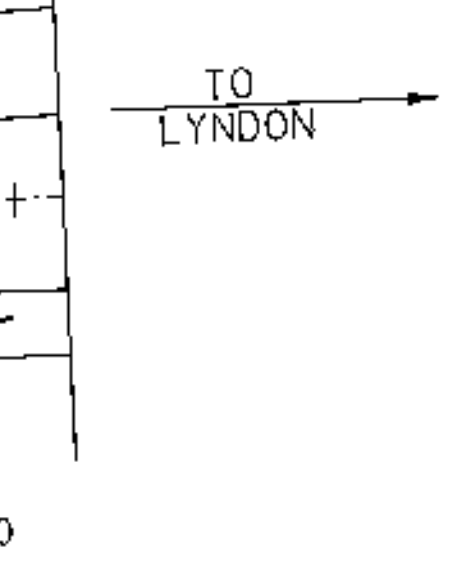
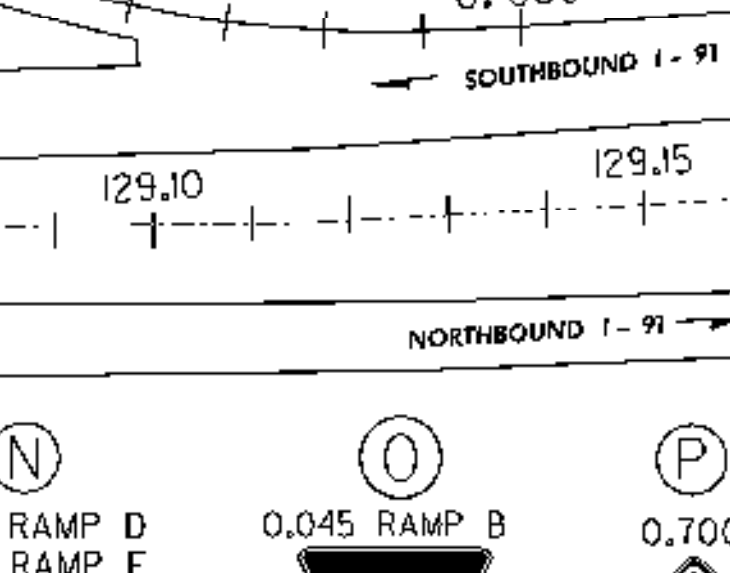
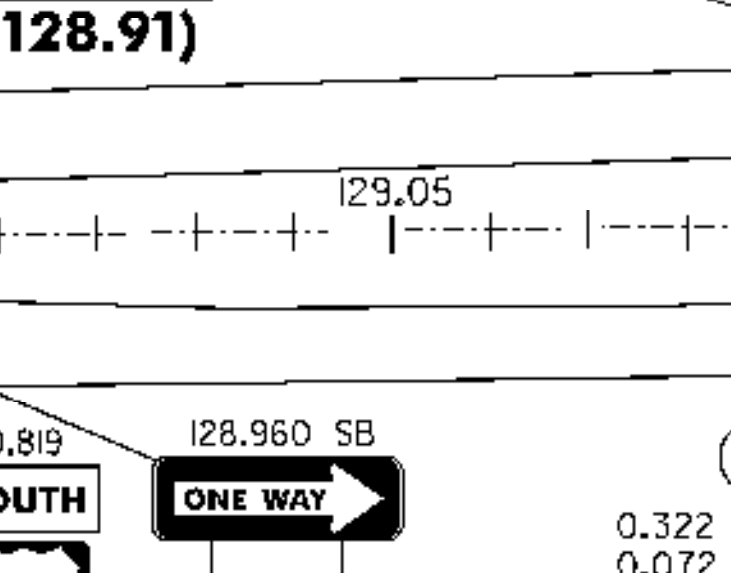
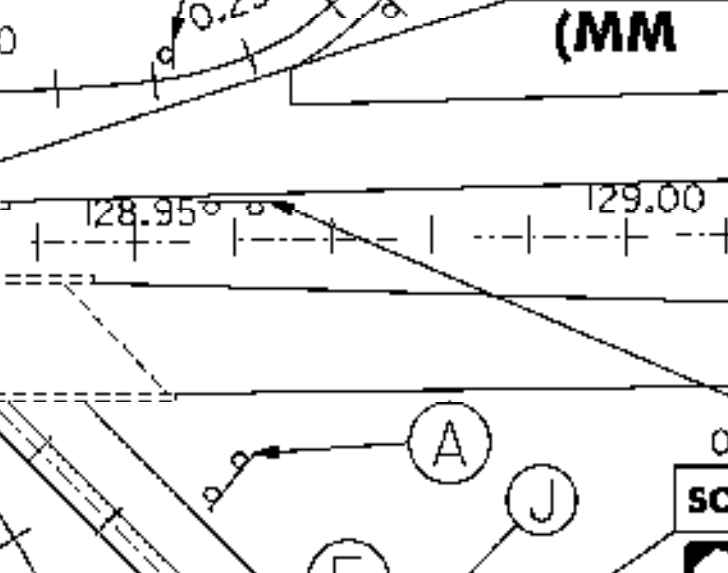
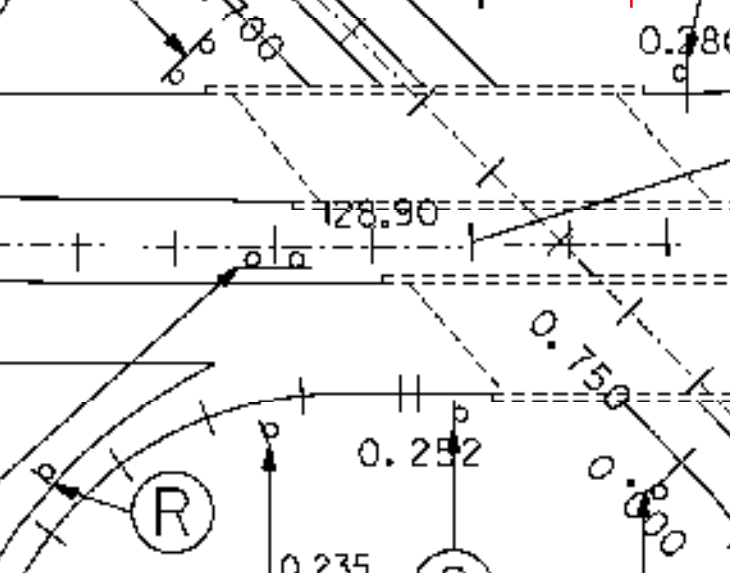
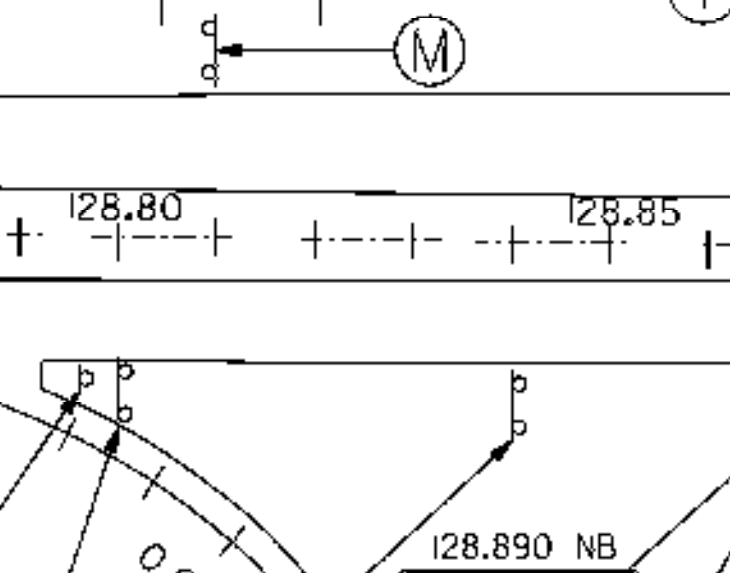
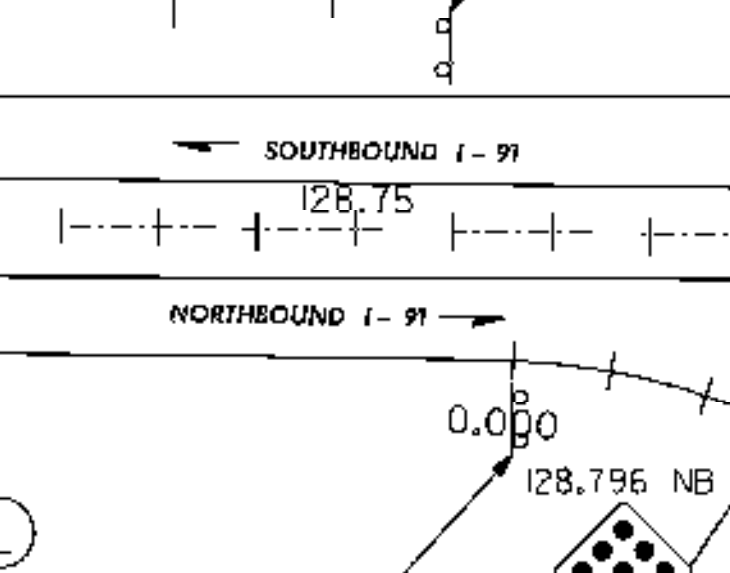
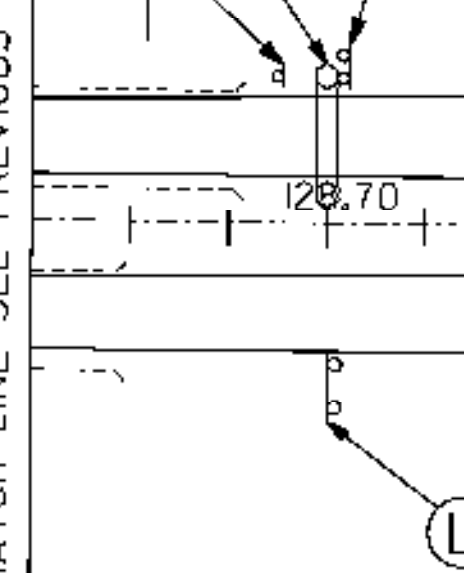
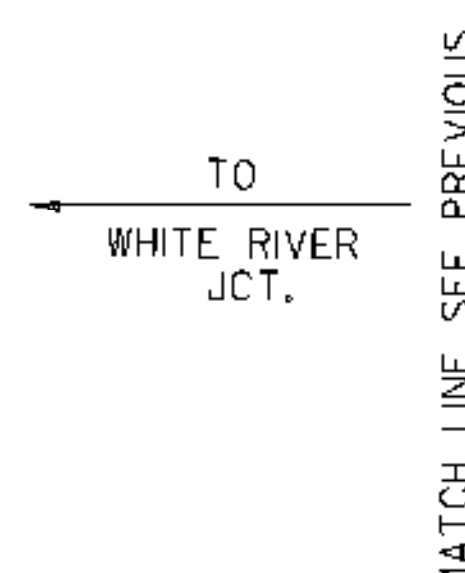
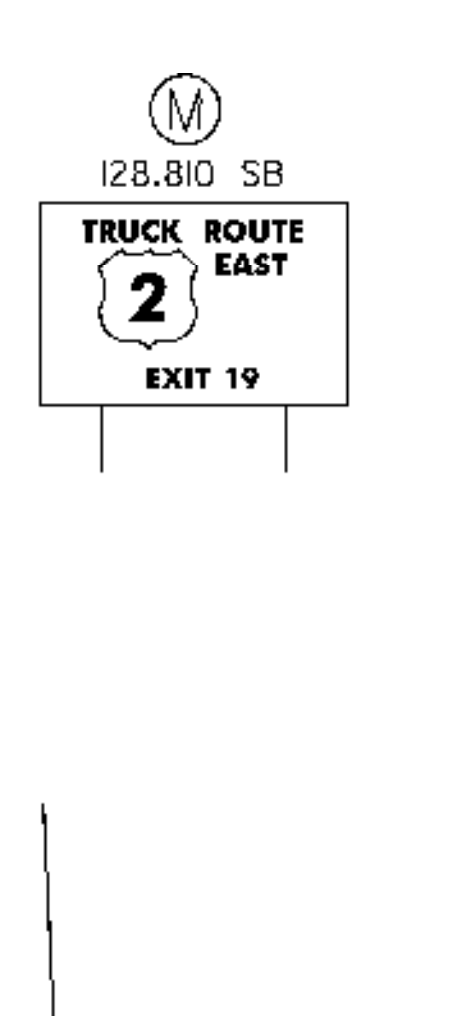
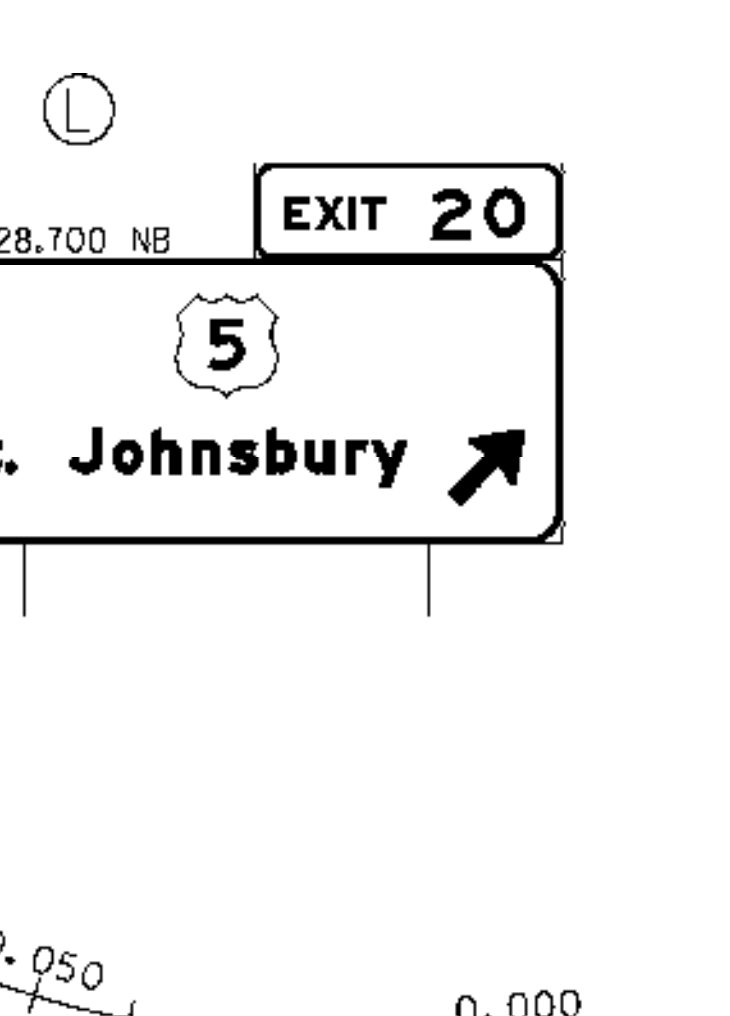
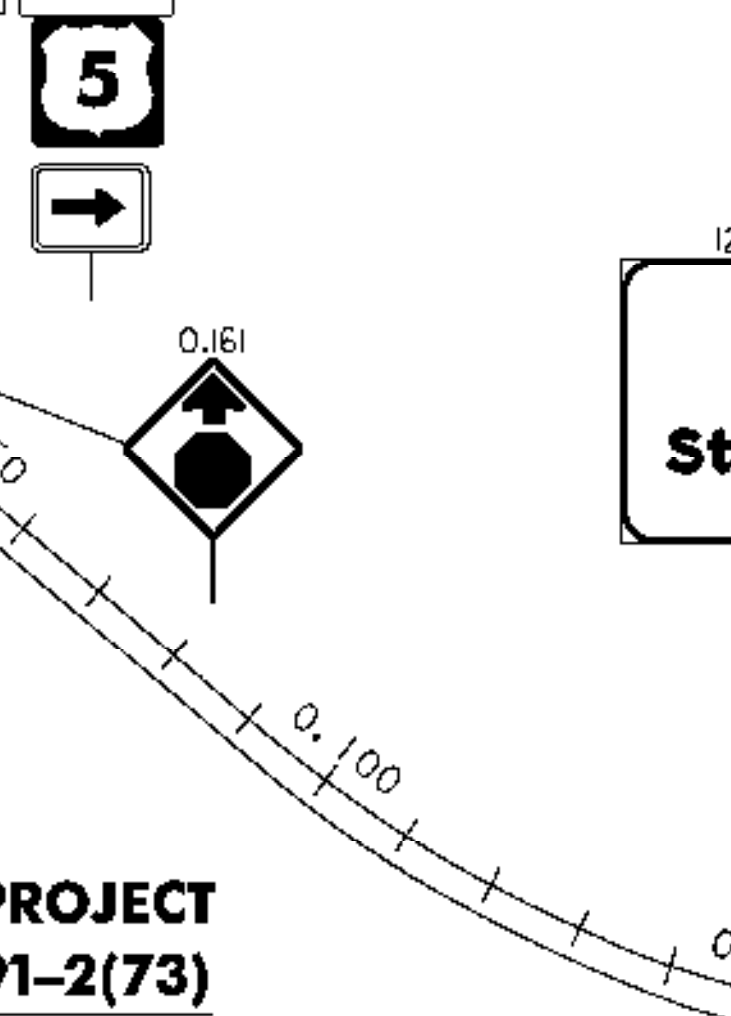
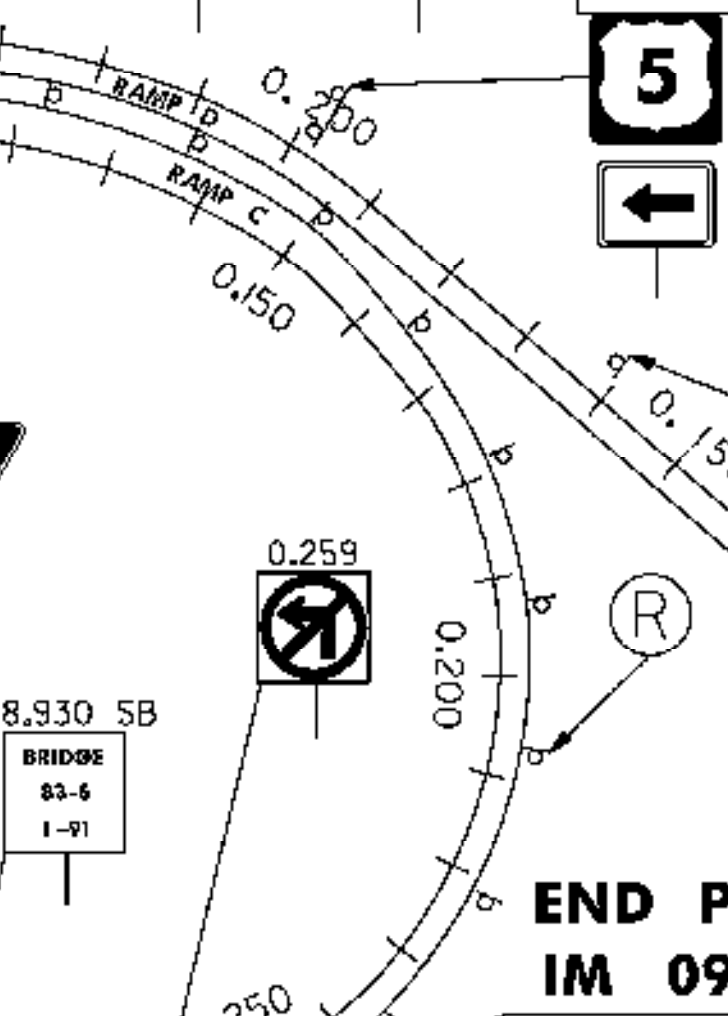
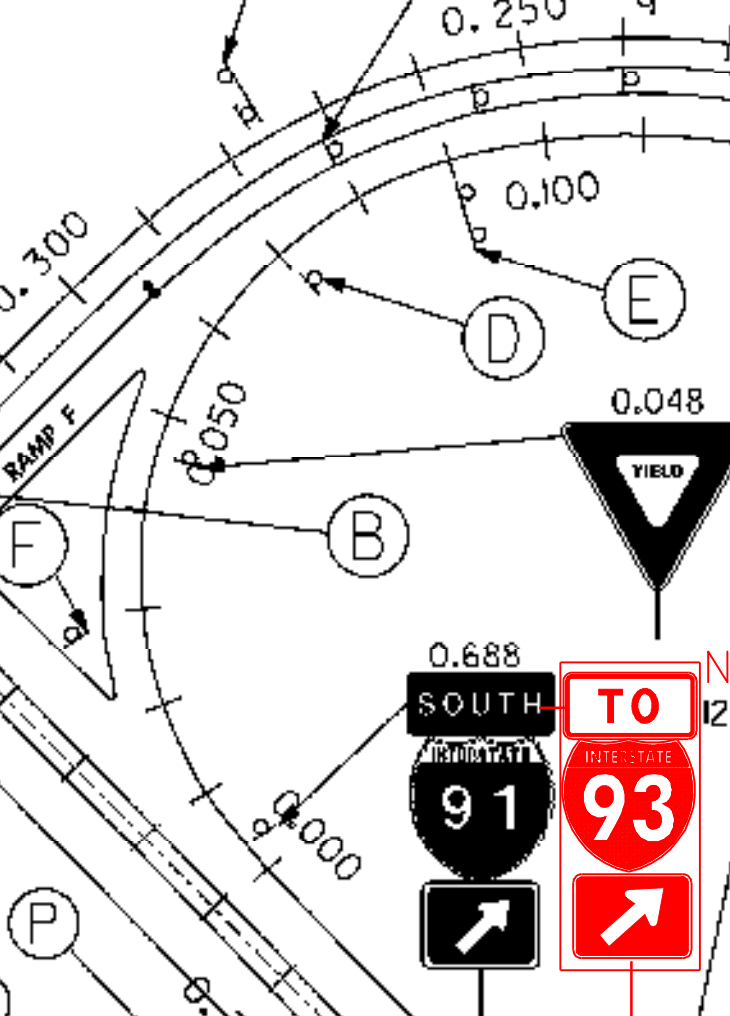
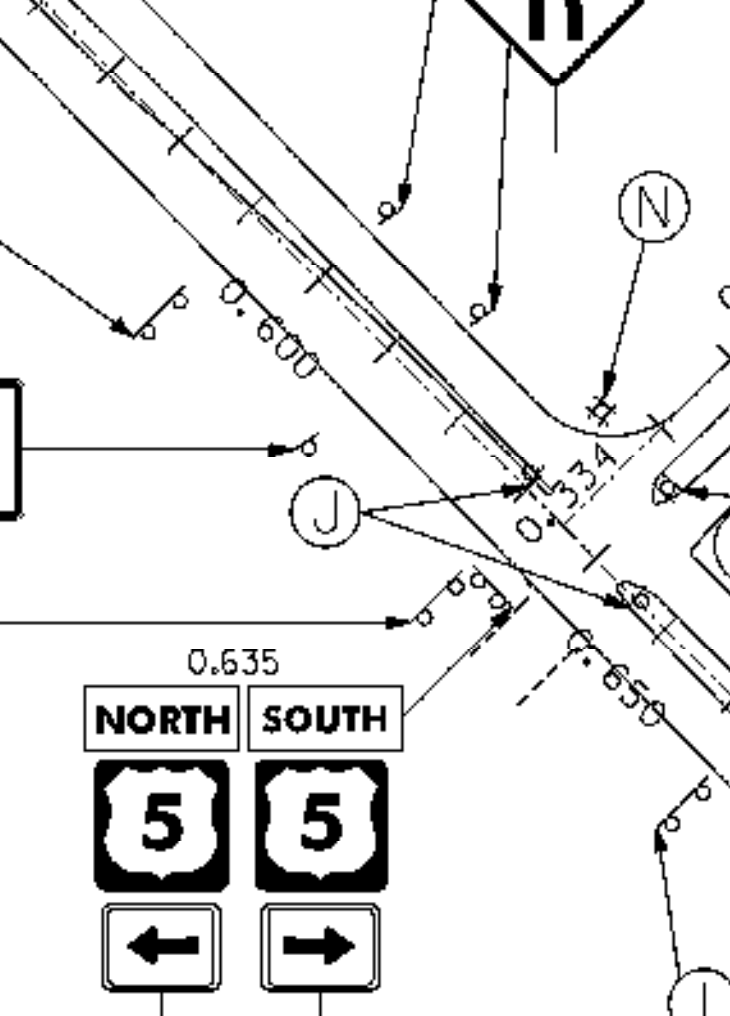
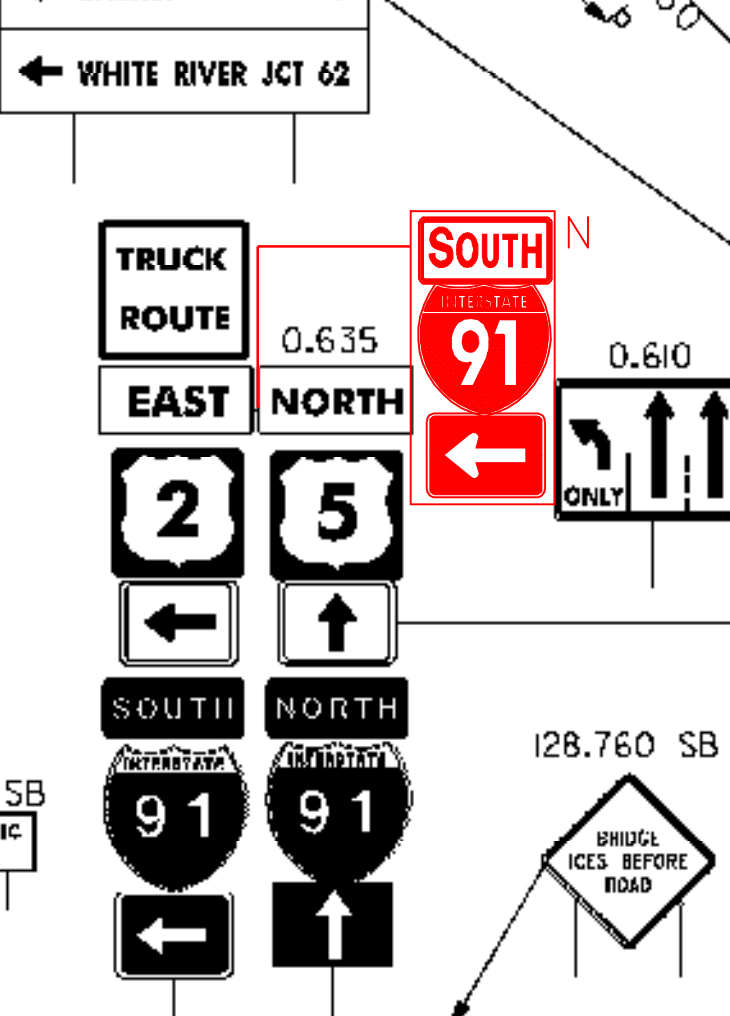
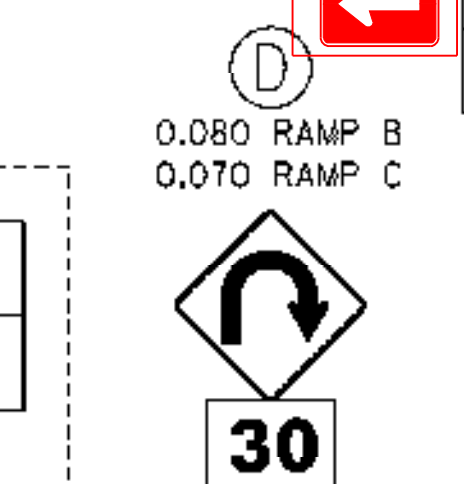
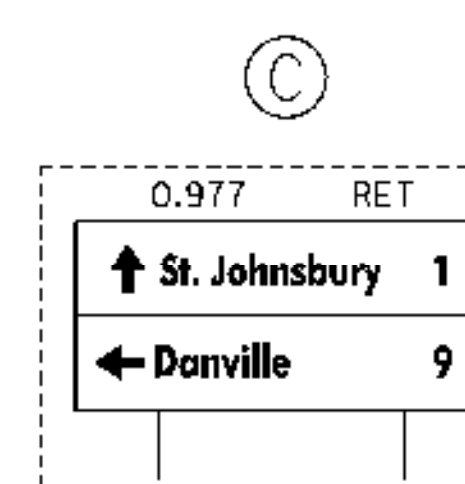
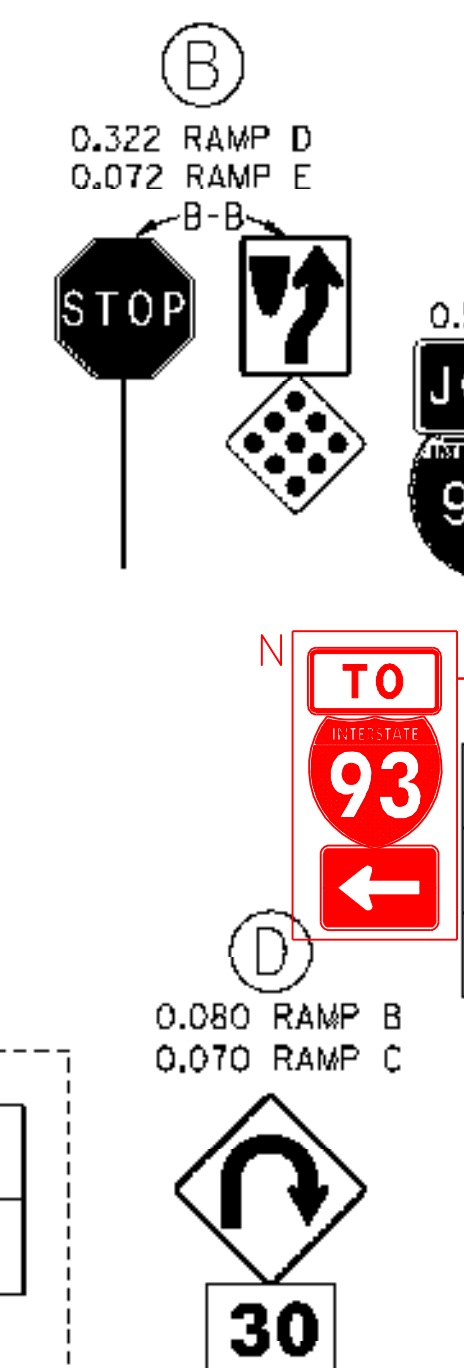
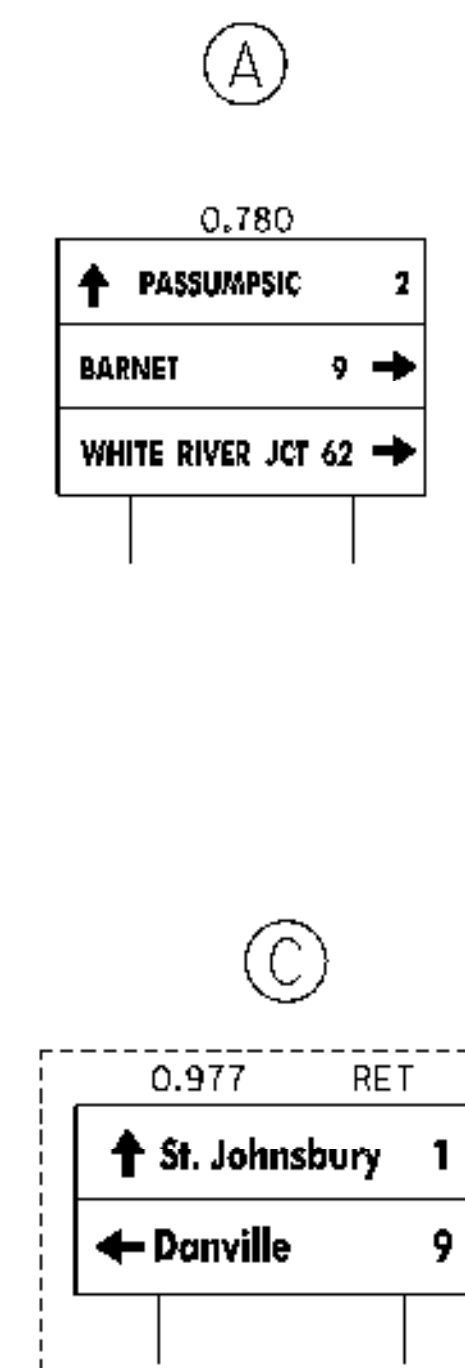
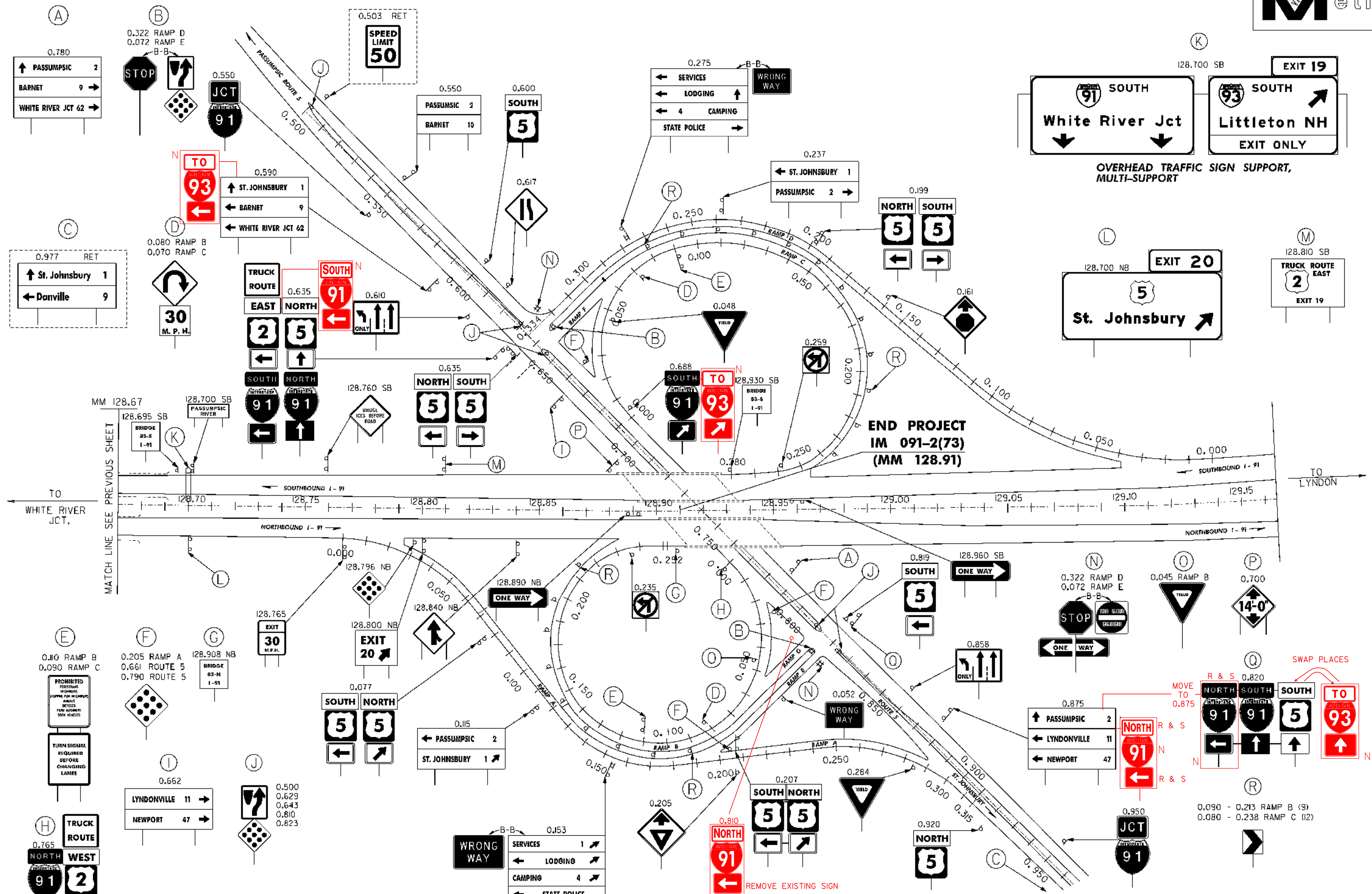
LEGEND

RET - RETAINED

**ALL SIGNS AND POSTS ARE
NEW UNLESS OTHERWISE NOTED**

**INTERCHANGE 19
NEW SIGNS**

PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-exit19.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 30 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	



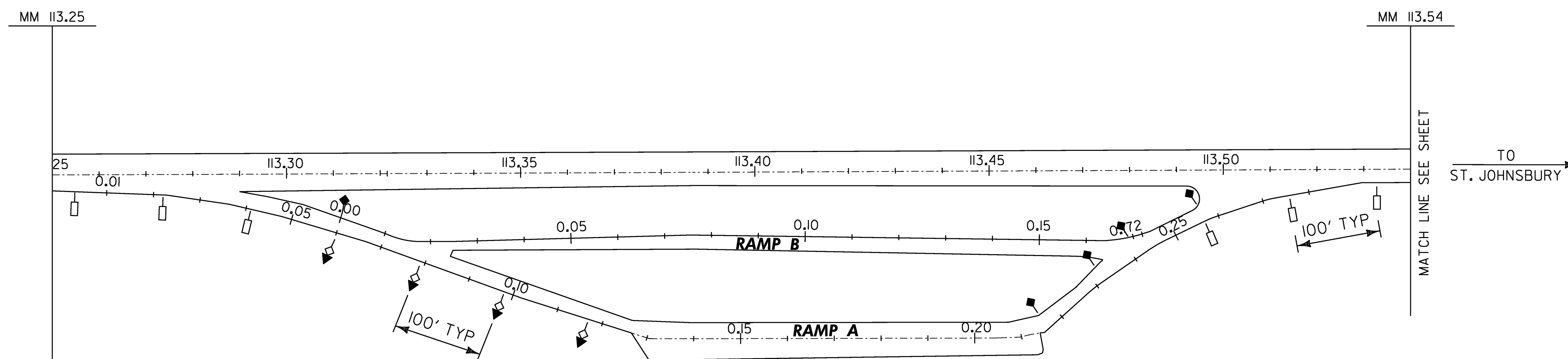
LEGEND
--- RET - RETAINED
ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

**INTERCHANGE 20
NEW SIGNS**

PROJECT NAME: RYEGATE-ST. JOHN SBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-exi+20.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 31 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	

Decel. lane taper begins at 113.17 ±
620' from Gore
Use 7 Type II Delineators

Accel. lane taper ends at 113.63 ±
700' from Gore
Use 8 Type II Delineators



LEGEND

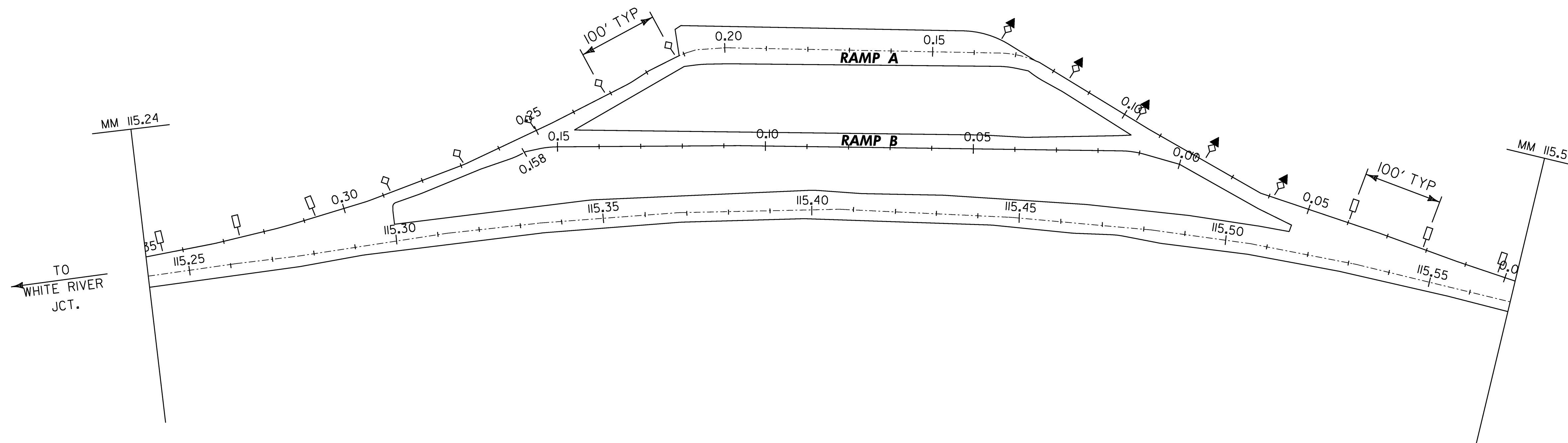
- ◇ TYPE I (WHITE)
- ◆ TYPE I (YELLOW)
- TYPE II (WHITE)
- ◆ TYPE III (RED ON BACK, WHITE)
- ◆ TYPE III (RED ON BACK, YELLOW)

**PARKING AREA
113.39 I-91 NB
DELINEATOR LAYOUT**

PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-ra.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 32 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	

Accel. lane taper ends at 115.136 ±
865' from Gore
Use 9 Type II Delineators

Decel. lane taper begins at 115.59 ±
375' from Gore
Use 4 Type II Delineators

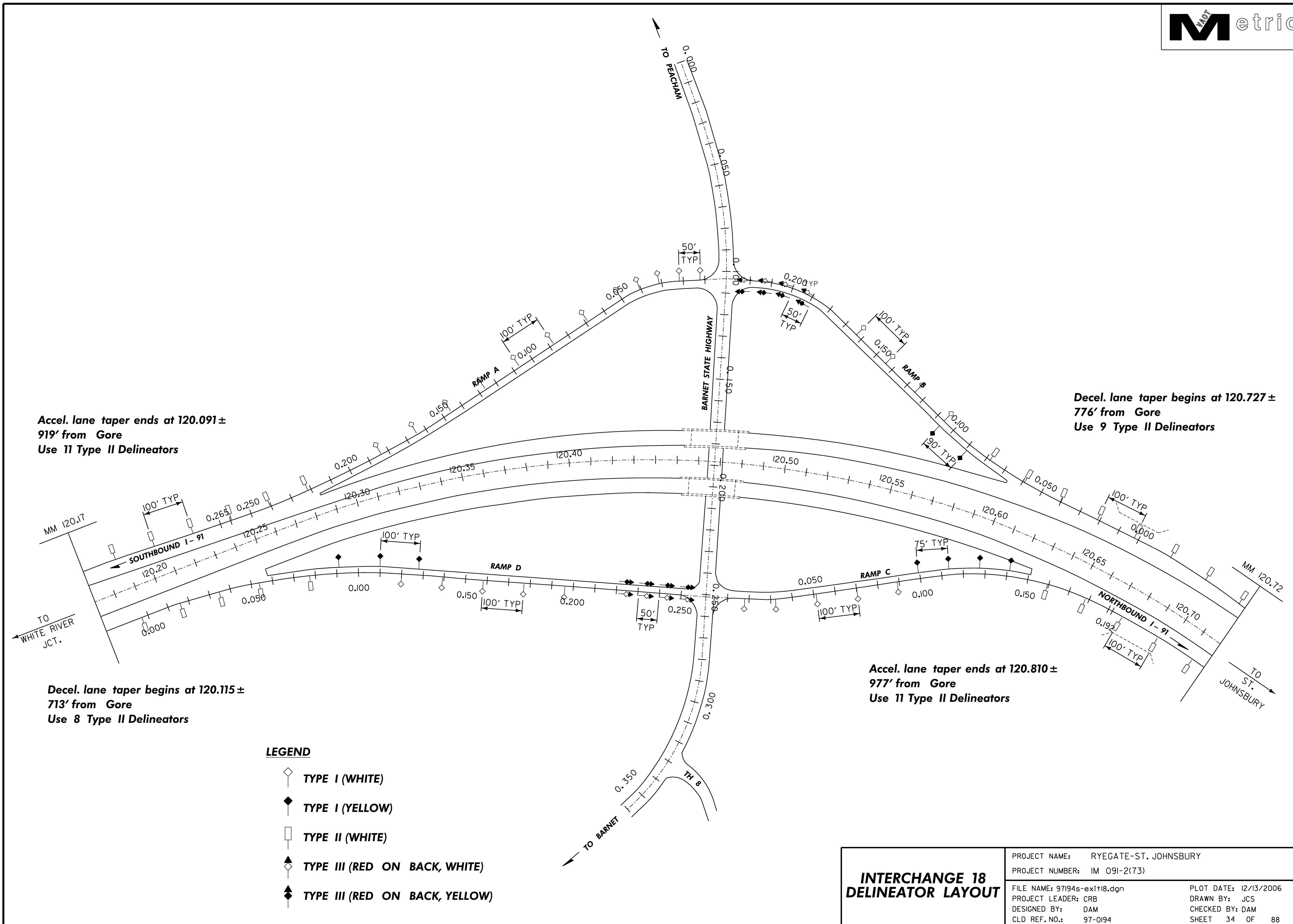


LEGEND

- ◇ TYPE I (WHITE)
- ◆ TYPE I (YELLOW)
- TYPE II (WHITE)
- ◆ TYPE III (RED ON BACK, WHITE)
- ◆ TYPE III (RED ON BACK, YELLOW)

**PARKING AREA
115.40 I-91 SB
DELINEATOR LAYOUT**

PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-ra.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 33 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	



Accel. lane taper ends at 120.091±
919' from Gore
Use 11 Type II Delineators

Decel. lane taper begins at 120.727±
776' from Gore
Use 9 Type II Delineators

Decel. lane taper begins at 120.115±
713' from Gore
Use 8 Type II Delineators

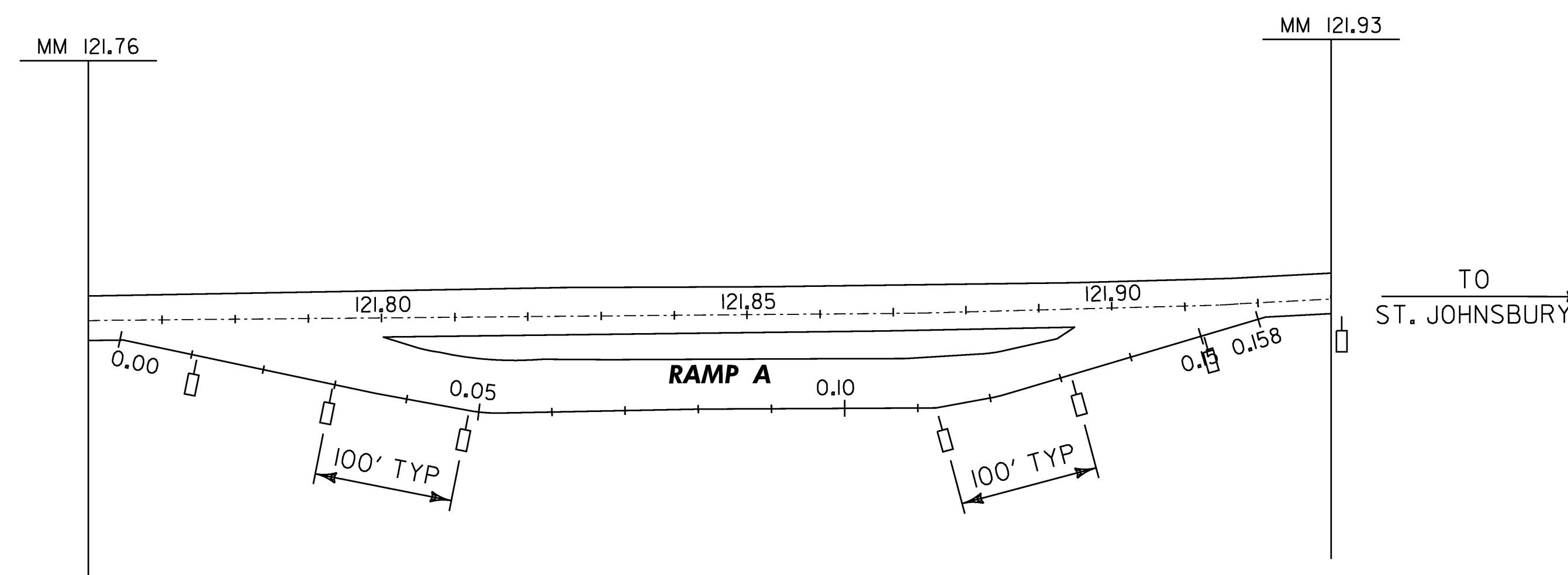
Accel. lane taper ends at 120.810±
977' from Gore
Use 11 Type II Delineators

- LEGEND**
- TYPE I (WHITE)
 - TYPE I (YELLOW)
 - TYPE II (WHITE)
 - TYPE III (RED ON BACK, WHITE)
 - TYPE III (RED ON BACK, YELLOW)

INTERCHANGE 18 DELINEATOR LAYOUT	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-exit18.dgn	CHECKED BY: DAM
	CLD REF. NO.: 97-0194	SHEET 34 OF 88

Decel. lane taper begins at 121.682 ±
660' from Gore
Use 7 Type II Delineators

Accel. lane taper ends at 122.00 ±
550' from Gore
Use 6 Type II Delineators

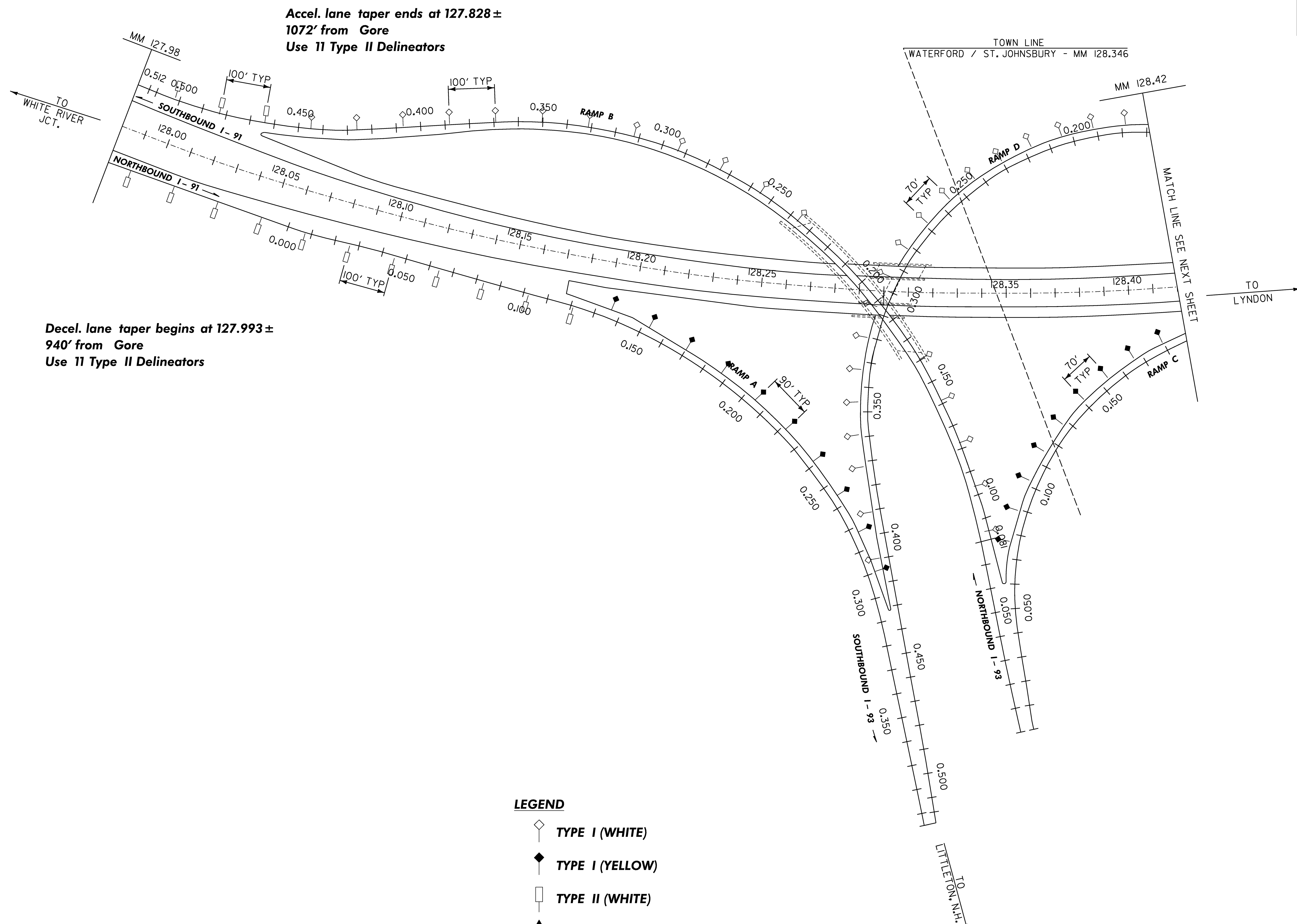


LEGEND

- ◇ TYPE I (WHITE)
- ◆ TYPE I (YELLOW)
- TYPE II (WHITE)
- ◆ TYPE III (RED ON BACK, WHITE)
- ◆ TYPE III (RED ON BACK, YELLOW)

**SCENIC VIEW
121.83 I-91 NB
DELINEATOR LAYOUT**

PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-ra.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 35 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	

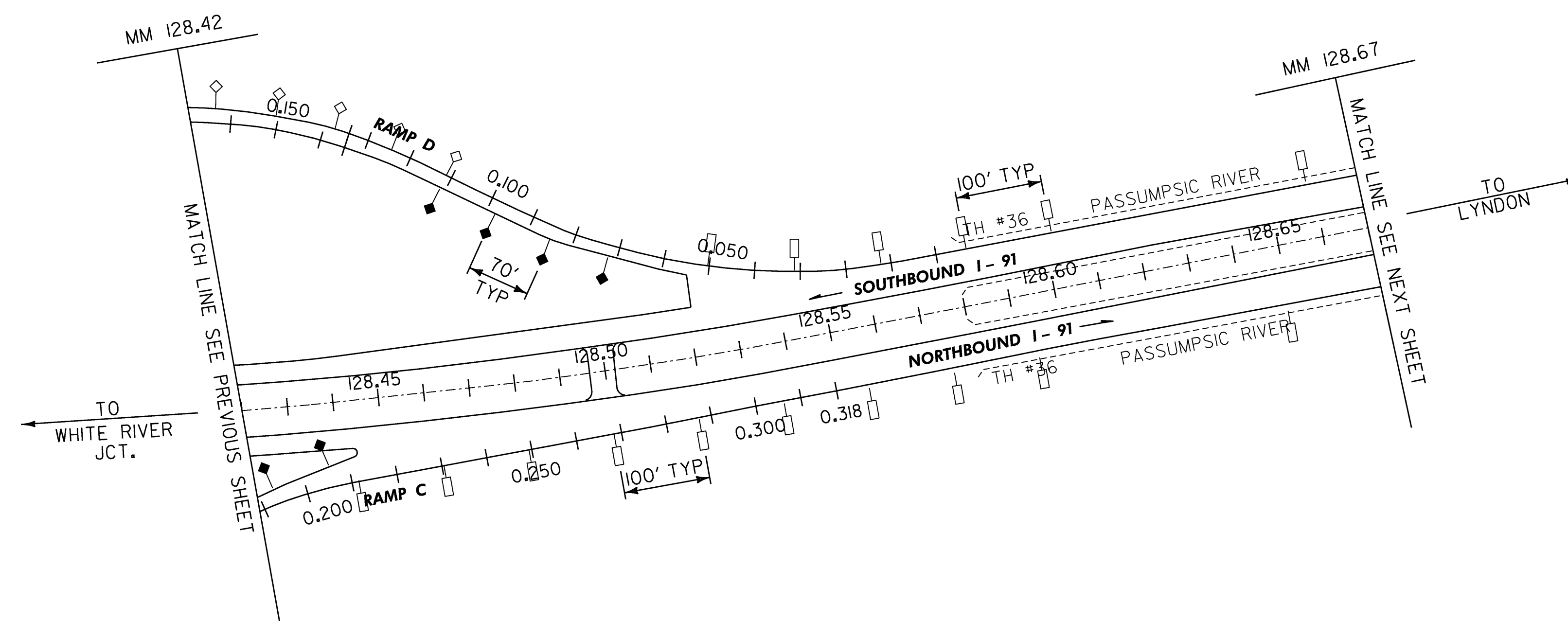


Decel. lane taper begins at 127.993 ±
940' from Gore
Use 11 Type II Delineators

Accel. lane taper ends at 127.828 ±
1072' from Gore
Use 11 Type II Delineators

- LEGEND**
- ◇ TYPE I (WHITE)
 - ◆ TYPE I (YELLOW)
 - TYPE II (WHITE)
 - ◆ TYPE III (RED ON BACK, WHITE)
 - ◆ TYPE III (RED ON BACK, YELLOW)

INTERCHANGE 19 DELINEATOR LAYOUT	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-exit19.dgn	CHECKED BY: DAM
	PROJECT LEADER: CRB DESIGNED BY: DAM CLD REF. NO.: 97-0194	SHEET 36 OF 88

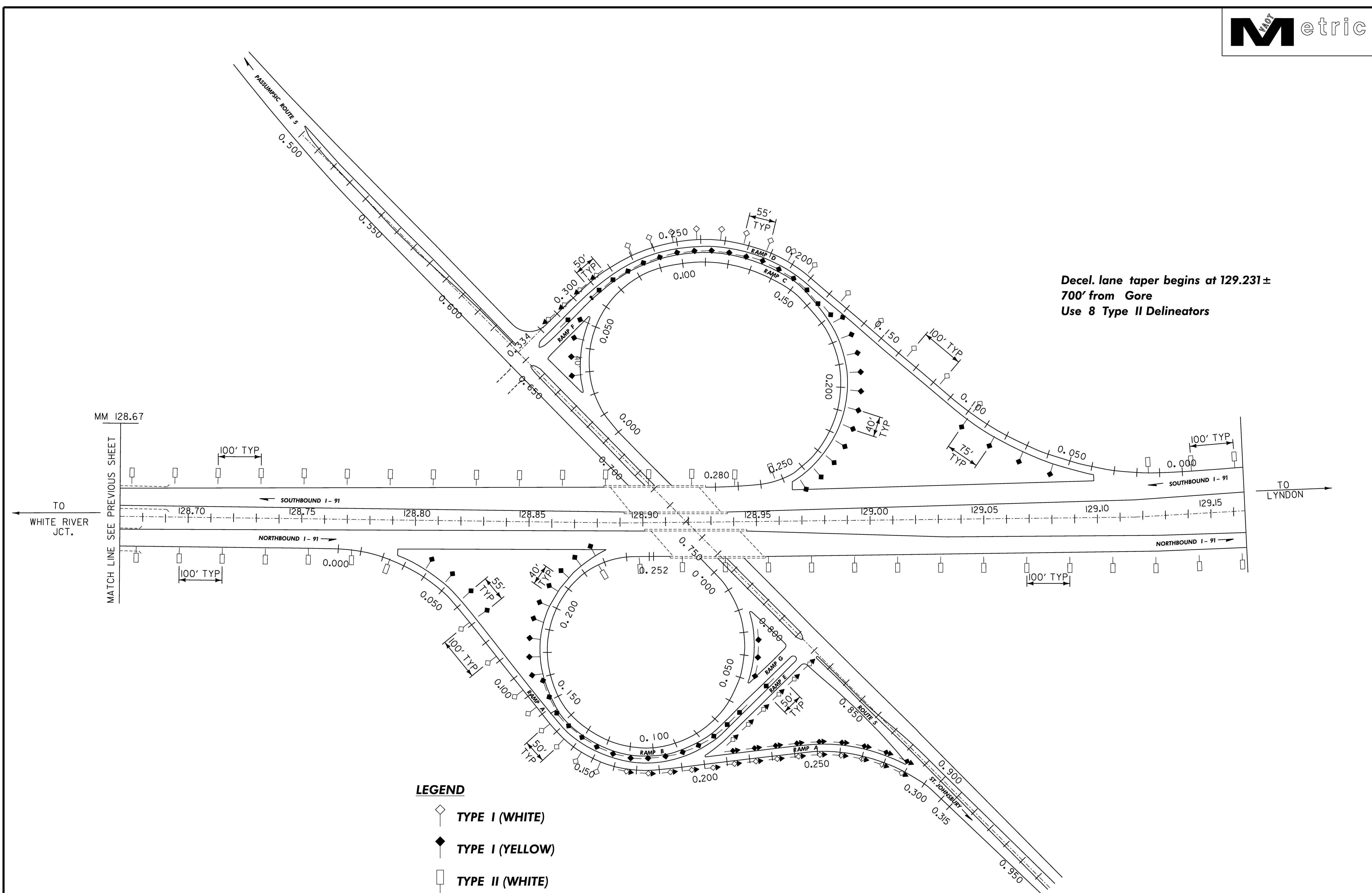


LEGEND

- ◇ TYPE I (WHITE)
- ◆ TYPE I (YELLOW)
- TYPE II (WHITE)
- ▲ TYPE III (RED ON BACK, WHITE)
- ◆ TYPE III (RED ON BACK, YELLOW)

**INTERCHANGE 19
DELINEATOR LAYOUT**

PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
FILE NAME: 97194s-exit19.dgn	CHECKED BY: DAM
PROJECT LEADER: CRB	SHEET 37 OF 88
DESIGNED BY: DAM	
CLD REF. NO.: 97-0194	



Decel. lane taper begins at 129.231±
 700' from Gore
 Use 8 Type II Delineators

- LEGEND**
- ◇ TYPE I (WHITE)
 - ◆ TYPE I (YELLOW)
 - TYPE II (WHITE)
 - ◆ TYPE III (RED ON BACK, WHITE)
 - ◆ TYPE III (RED ON BACK, YELLOW)

INTERCHANGE 20 DELINEATOR LAYOUT	PROJECT NAME: RYEGATE-ST. JOHNSBURY
	PROJECT NUMBER: IM 091-2(73)
FILE NAME: 97194s-exit20.dgn	PLOT DATE: 12/13/2006
PROJECT LEADER: CRB	DRAWN BY: JCS
DESIGNED BY: DAM	CHECKED BY: DAM
CLD REF. NO.: 97-0194	SHEET 38 OF 88

TRAFFIC SIGN SUMMARY SHEET 2



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST RETAIN	NO. OF POSITIONS	NEW SIGN POSTS														REMARKS	SIGN DETAIL											
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)					W-SHAPE STEEL				FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER					
											kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125		FTG SIZE	600	750	MASS				POST SIZE				
115.700 NB MED		1	900	900	0.81				2			8.54	X	X	X												R3-4	E-143								
116.000 NB		1	300	1200	0.36				1			3.66	X	X	X												D10-3	E-139								
117.000 NB		1	300	1200	0.36				1			3.66	X	X	X												D10-3	E-139								
117.220 NB		1	900	600	0.54				2			9.76	X	X	X												I-2	E-131								
117.930 NB MED		1	900	900	0.81				2			8.54	X	X	X												R3-4	E-143								
118.000 NB		1	300	1200	0.36				1			3.66	X	X	X												D10-3	E-139								
118.186 NB		1	150	250	0.04				1			2.44	X	X	X												VD-701	78								
119.000 NB		1	300	1200	0.36				1			4.27	X	X	X												D10-3	E-139								
119.240 NB		1	2400	750	1.80																						E1-5	E-131								
		1	3600	3600		12.96			2												2	364.85	352	W200X26.6	POSTS	Bolt Tension 108.8 kN	13.716m	72								
119.480 NB		1	3900	2250		8.78			2												2	215.33	215	W150X18	BOLT TENSION	53.4 kN	11.963	72								
119.731 NB		1	2400	750	1.80																						E1-5	E-131								
		1	3600	3450		12.42																						73								
		1	2400	1200		2.88			2												2	320.26	339	W200X26.6	E2-1a Bolt Tension	100.8 kN		E-131								
119.800 NB MED		1	900	900	0.81				2			9.15	X	X	X												R3-4	E-143								
119.950 NB		1	3600	3600		12.96			2												2	358.75	384	W200X26.6	Bolt Tension	85.5 kN		73								
118.82 NB												2.44	X																							
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".										0.0	2.6	54.7	2.6	54.7	0.0	EA.	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
										4.88			51.24			56.12																				
										56.12			m			kg			EA.																	
										-57.3			-57.3			0.0				0																
										0.0			0.0			0.0				8				0		1290										
										1259.19																										
										PROJECT NAME: RYEGATE-ST. JOHNSBURY										PROJECT NUMBER: IM 091-2(73)																
										FILE NAME: tsssRyegate.xls										PLOT DATE: 12/12/06																
										PROJECT LEADER: CRB										DRAWN BY: JCS																
										DESIGNED BY: PTS										CHECKED BY: DAM																
										CLD REF. NO.: 97-0194										SHEET 40 OF 88																

TRAFFIC SIGN SUMMARY SHEET 3



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSITIONS	NEW SIGN POSTS														REMARKS	SIGN DETAIL			
		E (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			FR SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										kg/m	4.5	3.4	44	50	63	75	100	100MD	75	90	100	125	FTG. SIZE					600
120.000 NB	MILE 120	1	300	1200	0.36				1			4.27	X		X	X										D10-3	E-139	
120.170 NB	EXIT 18	1	2400	750	1.80																				E1-5	E-131		
120.265 NB	TO (5) Barnet Peacham	1	4650	3000		13.95			2										2	474	448	W200X31.3			Bolt Tension 126.3 kN SEE FOOTING DETAIL ON SHEET 3	73		
120.265 NB	EXIT 18	1	450	450	0.20				1			2.44	X		X	X										OM-1	E-150	
120.265 NB	EXIT 18	1	1800	1500		2.70			2										2	91.27	X				E5-1a	E-131		
120.445 NB	BRIDGE 72-N I-91	1	150	250	0.04				1			2.44	X		X	X										VD-701	78	
120.534 NB	↑	1	1200	1200	1.44				2										2	95.58	X				W4-1	E-150		
120.634 NB MED	ONE WAY	1	900	300	0.27				2			8.53	X		X	X										R6-1R	E-142	
120.685 NB	BRIDGE 72 I-91	1	150	250	0.04				1			2.44	X		X	X										VD-701	78	
120.750 NB	BRIDGE 73-N I-91	1	150	250	0.04				1			2.44	X		X	X										VD-701	78	
120.810 NB	EMERGENCY STOPPING ONLY	1	1200	900	1.08				2										2	84.39	X				R8-7	E-142		
120.884 NB	NORTH	1	750	375	0.28																					M3-1	E-135	
	INTERSTATE 91	1	900	900	0.81																					M1-1	E-135	
	VERMONT STATE DEPARTMENT OF TRANSPORTATION	1	900	900	0.81				1										1	55.97	X					M1-10	E-135	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".		SHEET TOTALS		m2	m2	EA.	m2			m	m	m	EA.	kg	kg	kg	EA.	kg	kg	kg	kg	EA.	EA.	kg				
		7.17	16.65	0	0.00					22.6				0.0	0.0	0.0	7	327.21	301.9	327.21	0.0	0.0	474					

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: fsss Ryegate.xls
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

PLOT DATE: 12/12/06
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 41 OF 88

TRAFFIC SIGN SUMMARY SHEET 7

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL										
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)					W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
											17	30	45	44	50	63	75	100	100MD	75	90	100	125		FTG SIZE		POST SIZE								
128.320 -128.273 NB		1	150	250	0.04				1				2.44 X 2.44		X		X													VD-701	78				
128.346 NB MED		1	900	600	0.54				2				8.53 X		X		X													I-2		E-131			
128.350 NB		1	1200	1200	1.44				2											2	90.41 X								W4-1		E-150				
128.450 NB MED		1	900	300	0.27				2				8.53 X		X		X												R6-1R		E-142				
128.490 NB MED		1	900	900	0.81				2				8.53 X		X		X												R3-4		E-143				
128.500 NB		1	1200	1200	1.44				2											2	80.94 X								W8-13		E-150				
128.550 NB		1	3600	3600		12.96			2											2				367 375	W200X26.6				BOLT TENSION 85.4 kN SEE FOOTING DETAIL ON SHEET 3	75					
128.570 NB		1	900	600	0.54				2				8.53 X		X		X												I-3		E-131				
128.570 NB		1	150	250	0.04				1				2.44 X		X		X												VD-701	78					
128.700 NB		1	2400	750	1.80																								E1-5		E-131				
		1	5400	2400		12.96			2											1 2				289.94 273	W200X26.6				BOLT TENSION 85.4 kN 10.90m	75					
128.765 NB		1	1200	1500	1.80				2											2	98.16 X								W13-2		E-150				
128.796 NB		1	450	450	0.20				1				2.44 X		X		X												OM-1		E-150				
128.800 NB		1	1800	1500		2.70			2											2	97.30 X								E5-1a		E-131				
128.840 NB		1	1200	1200	1.44				2											2	92.13 X								W4-1		E-150				
128.890 NB MED		1	900	300	0.27				2				8.53 X		X		X												R6-1R		E-142				
128.908 NB		1	150	250	0.04				1				2.44 X		X		X												VD-701	78					
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										m		m		m		EA.		kg		kg		kg		kg		EA.		EA.		kg					
										0.0	10.4	42.6	10.4	42.6	0.0	0	0.0	0.0	0.0	436.4	0.0	0.0	0.0												
										57.3									458.94			656.94													
										m		m		EA.		kg		EA.		kg		EA.		EA.		kg									
SHEET TOTALS										10.67	28.62	0.1	0.00						10	436.4	4	0	648												

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: tsssRyegate.xls
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

PLOT DATE: 12/12/06
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 45 OF 88

TRAFFIC SIGN SUMMARY SHEET 8

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST RET. AIN	NO. OF POSITIONS	NEW SIGN POSTS													REMARKS	SIGN DETAIL									
		E	A	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER						
										kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125		FTG. SIZE				MASS	POST SIZE	FR. SIGN			
111.460 SB		1	150	250	0.04				1	2.44	X	X		X													VD-701	78					
112.000 SB		1	300	1200	0.36				1	4.27	X	X	X														D10-3	E-139					
112.161 SB MED		1	900	900	0.81				2	8.53	X	X	X														R3-4	E-143					
112.663 SB TO 128.204 SB		9	150	250	0.36				9	27.45	X	X	X													VD-701	NOT SHOWN ON PLANS.	78					
112.909 SB MED		1	900	900	0.81				2	8.53	X	X	X														R3-4	E-143					
113.000 SB		1	300	1200	0.36				1	4.27	X	X	X														D10-3	E-139					
113.145 SB		1	150	250	0.04				1	2.44	X	X	X														VD-701	78					
113.330 SB		1	1200	1200	1.44																						VW-544	77					
		1	600	450	0.27				2												98.16	X					W16-2						
114.000 SB		1	300	1200	0.36				1	4.27	X	X	X														D10-3	E-139					
115.000 SB		1	300	1200	0.36				1	4.27	X	X	X														D10-3	E-139					
115.295 SB MED		1	900	300	0.27				2	8.53	X	X	X														R6-1R	E-142					
115.400 SB		1	1200	1200	1.44				2												91.27	X					W4-1	E-150					
115.505 SB		1	2250	1950	4.39				2												127.47	X						72					
115.508 SB		1	450	450	0.20				1	2.44	X	X	X														OM-1	E-150					
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										m		m		EA.		kg		EA.		kg		EA.		EA.		kg							
										0.0	31.3	41.8	31.3	41.8	0.0	0	0.0	0.0	0.0	177.5	140.2	0.0	0.0										
										75.0		73.1		73.1		0.0		6		287.7		0		0									
										75.0		73.1		73.1		0.0		6		287.7		0		0									

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME	fsssRyegate.xls	PLOT DATE	12/12/06
PROJECT LEADER	CRB	DRAWN BY:	JCS
DESIGNED BY:	PTS	CHECKED BY:	DAM
CLD REF. NO.:	97-0194	SHEET	46 OF 88

TRAFFIC SIGN SUMMARY SHEET 10

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETURN	NO OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL												
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL FTG SIZE			FR SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER							
											kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90		100	125	600				750	MASS	POST SIZE				
119.955 SB		1	1200	1200	1.44																						VW-397	77							
		1	600	450	0.27				2									96.43	X								VP-396	77							
120.000 SB		1	300	1200	0.36				1			4.27	X	X	X												D10-3	E-139							
120.049 SB		1	750	375	0.28																						M3-3	E-135							
		1	900	900	0.81																						M1-1	E-135							
		1	900	900	0.81				1									57.69	X								M1-10	E-135							
120.125 SB		1	1200	900	1.08				2									20.00	X								R8-7	17' 6" 16' 6"	E-142						
120.280 SB MED		1	900	300	0.27				2			8.53	X	X	X												R6-1R	E-142							
120.363 SB		1	1200	1200	1.44				2																		W4-1	E-150							
120.470 SB		1	150	250	0.04				1			2.44	X	X	X												VD-701	78							
120.590 SB		1	1800	1500		2.70			2																		E5-1a	E-131							
120.595 SB		1	450	450	0.20				1			2.44	X	X	X												OM-1	E-150							
120.660 SB		1	150	250	0.04				1			2.44	X	X	X												VD-701	78							
120.670 SB		1	1200	1500	1.80				2																		W13-2	E-150							
120.700 SB		1	2400	750	1.80																						E1-5	E-131							
		1	4650	3000		13.95			2																				6.325 2 5.182	306.06 341 W200X26.6	BOLT TENSION 100.6 kN SEE FOOTING DETAIL ON SHEET 3	20.75 17.0	73		
120.736 SB		1	150	250	0.04				1			2.44	X	X	X													VD-701	78						
										m	m	m	m	m	m	EA	kg	kg	kg	kg	kg	kg	kg	kg	kg										
										0.0	10.5	12.2	10.5	12.2	0.0	0	22.8	0.0	0.0	414.9	0.0	0.0	0.0												
										22.6			20.00			433.97			306.06																
										m	m	EA	m2	EA	EA	kg	EA	kg	EA	EA	kg														
										22.7	22.7	0	10.68	16.65	0	22.8	9	434	2	0	341														
										SHEET TOTALS																									

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD.
POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME	fsssRyegate.xls	PLOT DATE	12/12/06
PROJECT LEADER:	CRB	DRAWN BY:	JCS
DESIGNED BY:	PTS	CHECKED BY:	DAM
CLD REF. NO.:	97-0194	SHEET	48 OF 88

TRAFFIC SIGN SUMMARY SHEET 12

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS NO. OF POSITIONS	NEW SIGN POSTS													REMARKS	SIGN DETAIL					
		E A	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)				W-SHAPE STEEL		FR S I G N E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90	100		125	FTG SIZE				POST SIZE
122.080 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
122.607 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
122.790 SB MED		1	900	900	0.81			2	8.53	X	X	X														R3-4	E-143	
123.000 SB		1	300	1200	0.36			1	3.66	X	X	X														D10-3	E-139	
123.293 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
123.306 SB		1	900	600	0.54			2	8.53	X	X	X													I-3	POST 14' 0" 4.27m 14' 0" 4.27m	E-131	
123.447 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
123.460 SB		1	1200	1200	1.44			2																			17' 6" 18' 3"	77
124.000 SB		1	300	1200	0.36			1	4.27	X	X	X														D10-3	E-139	
124.220 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
125.000 SB		1	300	1200	0.36			1	3.66	X	X	X														D10-3	E-139	
125.477 SB MED		1	900	900	0.81			2	8.53	X	X	X														R3-4	E-143	
126.000 SB		1	300	1200	0.36			1	3.66	X	X	X														D10-3	E-139	
126.769 SB		1	150	250	0.04			1	2.44	X	X	X														VD-701	78	
126.780 SB		1	900	600	0.54			2	9.54	X	X	X														I-2	E-131	
126.945 SB		1	1200	1500	1.80			2																		VR-132	17' 6" 18' 0"	77

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: tssRyegate.xls PLOT DATE: 12/12/06
PROJECT LEADER: CRB DRAWN BY: JCS
DESIGNED BY: PIS CHECKED BY: DAM
CLD REF. NO.: 97-0194 SHEET 50 OF 88

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD.
POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".

SHEET TOTALS	m2	m2	EA.	m2	EA.	m	EA.	kg	EA.	EA.	kg	EA.	EA.	kg
	7.62	0.00	0	0.00		71.4	0	41.92	0	0	0	0	0	

TRAFFIC SIGN SUMMARY SHEET 14

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL					
		E	A	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)				W-SHAPE STEEL			DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										1.7	3.0	4.5	44	50	63	75	100	100MD	75	90	100		125	FTG. SIZE	600			750
128.510 SB		1	1800	1500			2.70		2																E5-1a	SIGN DESTROYED IN AN ACCIDENT REPLACED WITH NEW SIGN		E-131
128.510 SB MED		1	900	900	0.81				2			8.53		X		X										R3-4		E-143
128.516 SB		1	450	450	0.20				1			2.44		X		X										OM-1		E-150
128.209												2.44		X		X												
128.695 SB		1	150	250	0.04				1			2.44		X		X										VD-701		78
128.700 SB		1	900	600	0.54				2			8.53		X		X										I-3	2 - 14' POSTS	E-131
128.700 SB O/H		1	2400	750	1.80																					E1-5		E-131
		1	6000	3000			18.00																			OVERHEAD TRAFFIC SIGN SUPPORT, MULTI - SUPPORT ON SHEET 86		76
		1	4700	3000			14.10																					
128.760 SB		1	1200	1200	1.44				2																	W8-13	16' 0" 16' 3"	E-150
128.810 SB		1	3000	2550			7.65		2														2	255.11 252	W150X18	Bolt Tension 53.4 kN	14.173 m	76
128.930 SB		1	150	250	0.04				1			2.44		X		X										VD-701		78
128.960 SB MED		1	900	300	0.27				2			8.53		X		X										R6-1R		E-142
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										<p>m m m m m m m EA. kg kg kg kg kg kg kg kg kg kg kg</p> <p>0.0 7.9 28.5 7.9 28.5 0.0 0 23.6 0.0 0.0 81.4 0.0 0.0 0.0 93.00</p> <p>35.4 19.0 93.00</p>												<p>PROJECT NAME: RYEGATE-ST. JOHNSBURY PROJECT NUMBER: IM 091-2(73)</p>						
<p>SHEET TOTALS</p>										<p>m2 m2 EA. m2 m m kg EA. kg EA. EA. kg</p> <p>5.14 42.45 0 0.00 36.4 36.4 23.6 2 93.00 81.4 2 0 252</p>												<p>FILE NAME: fsssRyegate.xls PLOT DATE: 12/12/08 PROJECT LEADER: CRB DRAWN BY: JCS DESIGNED BY: PTS CHECKED BY: DAM CLD REF. NO.: 97-0194 SHEET 52 OF 88</p>						

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST TYPE	NO. OF POSITIONS	NEW SIGN POSTS														REMARKS	SIGN DETAIL							
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)					W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											1.7	3.0	4.5	44	50	63	75	100	100MCD	75	90	100	125		FTG. SIZE		POST SIZE					
PARK AREA 113.39 NE 0.050 RAMP ALT		1	900	600	0.54				2		8.54	X	X	X														R5-1a	E-143			
0.050 RAMP ART		1	900	600	0.54				2		8.54	X	X	X														R5-1a	E-143			
0.062 RAMP ALT		1	750	750	0.56				1		4.27	X	X	X														R5-1	E-143			
0.062 RAMP ART		1	750	750	0.56				1		4.27	X	X	X														R5-1	E-143			
0.085 RAMP ALT		1	600	600	0.36																							VD-10R	77			
		1	600	750	0.45				1		4.88	X	X	X														VD-239L	77			
0.127 RAMP ART		1	750	600	0.45				1		4.27	X	X	X														VR-032	E-144			
0.175 RAMP ART		1	600	900	0.54																							VR-278	E-144			
		1	600	600	0.36				1		4.88	X	X	X														VR-648	E-144			
0.215 RAMP ART		1	900	300	0.27				2		8.54	X	X	X														R6-1L	E-142			
0.240 RAMP ART		1	900	300	0.27				2		8.54	X	X	X														R6-1L	E-142			
0.245 RAMP ALT		1	900	300	0.27				2		8.54	X	X	X														R6-1R	E-142			
0.250 RAMP ART		1	600	750	0.45				1		4.27	X	X	X														77				
0.260 RAMP ART		1	600	600	0.36				1		4.27	X	X	X														R3-2	E-143			
0.035 RAMP B RT		1	750	600	0.45				1		4.27	X	X	X														VR-032	E-144			
0.060 RAMP B RT		1	600	900	0.54																							VR-278	E-144			
		1	600	600	0.36				1		4.88	X	X	X														VR-648	E-144			
										m	m	m	m	m	m	EA.	kg	kg	kg	kg	kg	kg	kg	kg	kg	EA.	EA.	kg				
										0.0	0.0	73.4	0.0	73.4	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
										83.0																						
										m	m	m	EA.	EA.	kg	EA.	kg	EA.	EA.	kg												
										73.4	0.00	0.00	0	0	0.0	0	0.0	0	0	0	0	0	0	0								
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".										SHEET TOTALS		m2	m2	EA.	m2		m	m	kg	EA.	kg	EA.	EA.	kg								
										7.33		0.00	0	0.00		73.4	0.00	0.00	0	0	0	0	0									
										PROJECT NAME: RYEGATE-ST. JOHNSBURY		PROJECT NUMBER: IM 091-2(73)		FILE NAME: fssRyegate.xls		PLOT DATE: 12/12/06		PROJECT LEADER: CRB		DRAWN BY: JCS		DESIGNED BY: PTS		CHECKED BY: DAM		CLD REF. NO.: 97-0184		SHEET 53 OF 88				

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST RETAIN	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL				
		E	A	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
										kg/m	1.7	3.0	4.5	44	50	63	ANCHOR SLEEVE	75	100	100MD	75	90	100					125	FTG SIZE
PARK AREA 113.39 NE 0.100 RAMP B RT		1	600	900	0.54																							VR-278	E-144
		1	600	600	0.36				1		4.88	X	X	X														VR-648	E-144
0.135 RAMP B RT		1	900	300	0.27				2		8.54	X	X	X														R6-1L	E-142
0.155 RAMP B RT		1			0.35																							R1-2 900X900X800	E-146
		1	600	600	0.36				1		4.88	X	X	X														R3-1	E-143
0.160 RAMP B LT		1	750	750	0.56				1		4.27	X	X	X														R5-1	E-143
0.160 RAMP B RT		1	750	750	0.56				1		4.88	X	X	X														R5-1	E-143
0.0																												27.45	
PARK AREA 115.40 SE 0.068 RAMP A LT		1	900	600	0.54				2		8.54	X	X	X														R5-1a	E-143
0.068 RAMP A RT		1	900	600	0.54				2		8.54	X	X	X														R5-1a	E-143
0.078 RAMP A LT		1	750	750	0.56				1		4.27	X	X	X														R5-1	E-143
0.078 RAMP A RT		1	750	750	0.56				1		4.27	X	X	X														R5-1	E-143
0.100 RAMP A LT		1	600	600	0.36																							VD-10R	77
		1	600	750	0.45				1		4.88	X	X	X														VD-239R	77
0.130 RAMP A RT		1	750	600	0.45				1		4.27	X	X	X														VR-032	E-144
0.180 RAMP A RT		1	600	900	0.54																							VR-278	E-144
		1	600	600	0.36				1		4.88	X	X	X														VR-648	E-144
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										<p>67.1</p> <p>67.1</p> <p>67.1</p>														<p>PROJECT NAME: RYEGATE-ST. JOHNSBURY PROJECT NUMBER: IM 091-2(73)</p>					
SHEET TOTALS		m2	m2	EA	m2					m	m	m	EA	kg	kg	kg	EA	kg	EA	EA	kg								
SHEET TOTALS		7.36	0.00	0	0.00					60.6	60.6	60.6	0	0.0	0.0	0.0	0	0.0	0	0	0								

TRAFFIC SIGN SUMMARY SHEET 17



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POS.	NEW SIGN POSTS														REMARKS	SIGN DETAIL														
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL				FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER										
											kg/m	3.0	4.5	44	50	63	A	R	S	EA	kg	kg	kg		EA	kg				kg	kg	kg	EA	EA	kg				
PARK AREA 115.40 SE 0.215 RAMP A RT		1	900	300	0.27				2			8.54	X	X	X													R6-1L	E-142										
0.260 RAMP A RT		1	900	300	0.27				2			8.54	X	X	X													R6-1L	E-142										
0.275 RAMP A RT		1	600	750	0.45				1			4.27	X	X	X													77											
0.295 RAMP A RT		1	600	600	0.36				1			X	X	X														R3-2	E-143										
0.030 RAMP B RT		1	750	600	0.45				1			4.27	X	X	X													VR-032	E-144										
0.090 RAMP B RT		1	600	900	0.54																							VR-278	E-144										
		1	600	600	0.36				1			4.88	X	X	X													VR-648	E-144										
0.120 RAMP B RT		1	900	300	0.27				2			8.54	X	X	X													R6-1L	E-142										
0.134 RAMP B RT		1			0.35																							R1-2 900X900X900	E-146										
		1	600	600	0.36				1			4.88	X	X	X													R3-1	E-143										
0.144 RAMP B LT		1	750	750	0.56				1			4.27	X	X	X													R5-1	E-143										
0.144 RAMP B RT		1	750	750	0.56				1			4.27	X	X	X													R5-1	E-143										
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										<p>PROJECT NAME: RYEGATE-ST. JOHNSBURY PROJECT NUMBER: IM 091-2(73)</p>										<p>FILE NAME: tss5Ryegate.xls PROJECT LEADER: CRB DESIGNED BY: PTS OLD REF. NO.: 97-0194</p>										<p>PLOT DATE: 12/12/06 DRAWN BY: JCS CHECKED BY: DAM SHEET 55 OF 88</p>									
SHEET TOTALS		m2	m2	EA.	m2						m	m	m	EA.	kg	kg	kg	EA.	kg	EA.	EA.	kg																	
		4.80	0.00	0	0.00						49.7	49.7	0.0	0	0.0	0.0	0.0	0	0.0	0	0	0																	

TRAFFIC SIGN SUMMARY SHEET 18

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST RETAINANCE	NEW SIGN POSTS													REMARKS	SIGN DETAIL						
		E (mm)	H (mm)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			FRAME SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
									1.7	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125		FTG. SIZE				MASS	POST SIZE	
INT #18		1	900	900	0.81																				VR-046		E-142		
		1	900	900	0.81				2									97.3	X							VR-002		E-142	
0.218 RAMP A RT		1	600	600	0.36				1		4.27	X	X	X												R3-2		E-143	
0.077 RAMP B RT		1	900	900	0.81				1		4.88	X	X	X												W3-1a		E-150	
0.115 RAMP B RT		1	600	300	0.18																					M4-5		E-136A	
		1	600	600	0.36																					M1-4		E-136A	
		1	525	375	0.20				1		4.27	X	X	X												M6-1		E-136A	
0.153 RAMP B RT		1	1800	300	0.54																					D1-1a		E-123	
		1	1800	300	0.54																					D1-1a		E-123	
		1	1800	300	0.54																					D1-1a		E-123	
		1	1800	300	0.54																					D1-1a		E-123	
		1	1800	300	0.54				2									93.0	X							D1-1a		E-123	
0.181 RAMP B LT		1	900	600	0.54																					R5-1a		E-143	
		1	600	600	0.36				2		9.76	X	X	X												R9-4a		E-143	
0.181 RAMP B RT		1	1800	250	0.45																						VD-502G		E-133
		1	1370	190	0.26																						BACK TO BACK R5-1a		E-143
		1	1800	250	0.45																						VD-502L		E-133
		1	1800	250	0.45				2									16.77	X							VD-502C	14' 0" 14' 6"	E-133	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".																													
SHEET TOTALS																													

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: fsssRyegate.xls
PLOT DATE: 12/12/06

PROJECT LEADER: CRB
DRAWN BY: JCS

DESIGNED BY: PTS
CHECKED BY: DAM

CLD REF. NO.: 97-0194
SHEET 56 OF 88

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST	NO. OF POSITIONS	NEW SIGN POSTS														REMARKS	SIGN DETAIL												
		E	A	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL			TUBULAR ALUMINUM			TUBULAR STEEL				W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER									
										1.7	3.0	4.5	44	50	63	75	100	100MM	75	90	100	125	FTG. SIZE		MASS	POST SIZE			600	750	FR	SI	GA	ME			
INT.#18 0.226 RAMP B L T	 	1	750	750	0.56																														R1-1 BACK TO BACK	E-143	
		1	900	300	0.27				1		4.27	X	X	X																				R5-1 BACK TO BACK	E-143		
		1	900	300	0.27																													R6-1L BACK TO BACK	E-142		
0.226 RAMP B R T	 	1	750	750	0.56																													R1-1 BACK TO BACK	E-143		
		1	900	300	0.27						4.27	X	X	X																				R5-1 BACK TO BACK	E-143		
		1	900	300	0.27				1																									R6-1L BACK TO BACK	E-142		
0.022 RAMP C R T		1	900	900	0.81																													VR-046	E-142		
		1	900	900	0.81				2																									VR-002	E-142		
0.150 RAMP C R T		1	600	600	0.36				1		4.88	X	X	X																				R3-2	E-143		
0.098 RAMP D R T		1	900	900	0.81				1		4.88	X	X	X																				W3-1a	E-150		
0.136 RAMP D R T		1	600	300	0.18																													M4-5	E-136A		
		1	600	600	0.36																													M1-4	E-136A		
		1	525	375	0.20				1		4.88	X	X	X																				M6-1	E-136A		
0.174 RAMP D R T		1	1800	300	0.54																														D1-1a	E-123	
		1	1800	300	0.54				2		X	X	X																					D1-1a	E-123		
		1	1800	300	0.54																														D1-1a	E-123	
		1	1800	300	0.54																														D1-1a	E-123	
		1	1800	300	0.54				2																										D1-1a	E-123	
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										<p>EA. 0 kg 0.0 kg 0.0 kg 0.0</p>										<p>EA. 2 kg 101.59 kg 90.4</p>										<p>PROJECT NAME: RYEGATE-ST. JOHNSBURY PROJECT NUMBER: IM 091-2(73)</p>							
<p>SHEET TOTALS</p>										<p>m2 9.55 m2 0.00 EA. 0 m2 -0.00</p>										<p>m -32.0 m 32.0</p>										<p>EA. 2 kg 22.95</p>		<p>EA. 0 EA. 0 kg 0</p>		<p>FILE NAME: tsssRyegate.xls PROJECT LEADER: CRB DESIGNED BY: PTS CLD REF. NO.: 97-0194</p>		<p>PLOT DATE: 12/12/06 DRAWN BY: JCS CHECKED BY: DAM SHEET 57 OF 88</p>	

TRAFFIC SIGN SUMMARY SHEET 21



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST R.E.T.A.I.N.	NO. OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL						
		E.A.	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90		100	125	FTG SIZE				MASS
INT #18 0.066 BSH RT	↑ ST. JOHNSBURY 10	1	1800	300	0.54																				D1-1a	E-123			
	WELLS RIVER 13 →	1	1800	300	0.54				2			9.15	X	X	X											D1-1a	E-123		
0.114 0.103 BSH RT	TO NORTH SOUTH	1	600	300	0.18	0.36																			M4-5	E-136A			
		1	600	300	0.18	0.36																			M3-1	E-135			
		1	600	300	0.18	0.36																			M3-3	E-135			
	5 91 91	1	600	600	0.36	0.72																			M1-4	E-136A			
		1	600	600	0.36	0.72																			M1-1	E-135			
		1	600	600	0.36	0.72																			M1-1	E-135			
	↑ ↑ →	1	525	375	0.20	0.40																			M6-3	E-136A			
		1	525	375	0.20	0.40			2								94.72	X						#3	M6-3	E-135			
		1	525	375	0.20	0.40																			M6-1	E-135			
0.103 BSH RT	TO	1	600	300	0.18																				M4-5	E-136A			
	5	1	600	600	0.36																				M1-4	E-136A			
	←	1	525	375	0.20				1			4.88	X	X	X											M6-1	E-136A		
0.103 BSH RT	SOUTH	1	600	300	0.18																					M3-3	E-135		
	91	1	600	600	0.36																					M1-1	E-135		
	←	1	525	375	0.20				1			4.88	X	X	X											M6-1	E-135		
0.113 BSH LT	SOUTH	1	600	300	0.18																					M3-3	E-135		
	91	1	600	600	0.36																					M1-1	E-135		
	←	1	525	375	0.20				1			4.88	X	X	X											M6-1	E-135		
0.151 BSH LT	← WELLS RIVER 13	1	1800	300	0.54				2			8.54	X	X	X											D1-1a	E-123		

NEW SIGNS WERE STOLEN AFTER AN ACCIDENT NEW ONES ORDERED & INSTALLED

MOVED TO 0.114 RT

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".

SHEET TOTALS	m2	m2	EA.	m2	m	m	kg	EA.	kg	EA.	EA.	kg
	6.06	0.00	0	0.00	29.8	29.8	0.0	2	94.72	0	0	0

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: tsssRyegate.xls PLOT DATE: 12/12/06
PROJECT LEADER: CRB DRAWN BY: JCS
DESIGNED BY: PTS CHECKED BY: DAM
OLD REF. NO.: 97-0194 SHEET 59 OF 88

TRAFFIC SIGN SUMMARY SHEET 23

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSITIONS	NEW SIGN POSTS													REMARKS	SIGN DETAIL					
		E	HEIGHT	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (m.m)			TUBULAR ALUMINUM DIA (m.m)			TUBULAR STEEL DIA (m.m)					W-SHAPE STEEL		FR SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125		FTG. SIZE	600				750
INT.#18 0.285 BSH LT		1	1800	300	0.54																					D1-1a	E-123		
		1	1800	300	0.54																					D1-1a	E-123		
		1	1800	300	0.54																					D1-1a	E-123		
		1	1800	300	0.54				2												87.82	X				D1-1a	E-123		
0.313 BSH RT		1	1800	300	0.54																					D2-1	E-123		
		1	1800	300	0.54																					D2-1	E-123		
		1	1800	300	0.54																					D2-1	E-123		
		1	1800	300	0.54				2												93.00	X				D2-1	E-123		
0.315 BSH LT		1	525	375	0.20																					M2-1	E-135		
		1	600	600	0.36				1		4.88	X	X	X												M1-1	E-135		
0.320 BSH LT																													
			600	150	0.09																								
		1	750	750	0.56				1		4.2	X	X	X													R1-1	E-143	

TRAFFIC SIGN SUMMARY SHEET 25



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST R/SALVAGE LINE	NO OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL					
		E	HEIGHT (mm)	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)				W-SHAPE STEEL			FR FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90	100		125	FTG SIZE	600			
INT.#19 0.142 RAMP A RT		1	1200	1500	1.80				2																W13-3	E-150		
0.210 RAMP A RT		1	1200	1200	1.44				2																W4-3	E-155		
0.305 RAMP A RT		1	600	600	0.36				1		4.27	X	X	X											R3-2	E-143		
0.061 RAMP B RT		1	450	450	0.20				1		2.44	X	X	X											OM-1	E-150		
0.063 RAMP B RT		1	1200	1200	1.44				2																W12-1			
0.110 RAMP B RT		1	1200	1200	1.44				2																W8-13	E-150		
0.162 RAMP B RT		1	150	250	0.04				1		2.44	X	X	X											VD-701	78		
0.465 RAMP B RT		1	600	600	0.36				1		4.27	X	X	X											R3-2	E-143		
0.225 RAMP C RT		1	600	600	0.36				1		4.27	X	X	X											R3-2	E-143		
0.060 RAMP D RT		1	1200	1500	1.80				2																W13-3	E-150		
0.320 RAMP D RT		1	1200	1200	1.44				2																W4-3	E-155		
0.431 RAMP D LT		1	900	300	0.27				2		4.27	X	X	X											R6-1R	E-142		
0.350 RT RAMP D									1		2.44	X																
INT.#20 0.077 RAMP A RT		1	600	300	0.18																				M3-3	E-136A		
		1	600	300	0.18																				M3-1	E-136A		
		1	600	600	0.36																				M1-4	E-136A		
		1	600	600	0.36																				M1-4	E-136A		
		1	525	375	0.20																				M6-1	E-136A		
		1	525	375	0.20				2		9.75	X	X	X											M6-2	E-136A		

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD.
POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".

SHEET TOTALS	m2	m2	EA.	m2		m	m	EA.	kg	kg	kg	EA.	kg	kg	kg	EA.	EA.	kg
	12.43	0.00	0	0.00		36.9	36.9	6	70.8	275.54	264.6	0	0	0	0	0	0	

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME	tsss Ryegate.xls	PLOT DATE	12/12/06
PROJECT LEADER	CRB	DRAWN BY:	JCS
DESIGNED BY:	PTS	CHECKED BY:	DAM
CLD REF. NO.:	97-0194	SHEET	63 OF 88

TRAFFIC SIGN SUMMARY SHEET 26



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST RETAINANCE	NO. OF POSITIONS	NEW SIGN POSTS														REMARKS	SIGN DETAIL					
		E (mm)	H (mm)	"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL				SQUARE STEEL			TUBULAR ALUMINUM			TUBULAR STEEL					W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										1.7	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125	FTG. SIZE		POST SIZE					
INT.#20 0.115 RAMP A RT		1	1800	300	0.54																						D1-1a	E-123		
		1	1800	300	0.54				2		8.53	X	X	X													D1-1a	E-123		
0.153 RAMP A RT	 	1	1800 1370	250 190	0.45 0.26																						VD-502S	E-133		
		1	900	600	0.54																						R5-1a	E-143		
		1	1800 1370	250 190	0.45 0.26																						VD-502L	E-133		
		1	1800 1370	250 190	0.45 0.26																						VD-502C	E-133		
		1	1800 1370	250 190	0.45 0.26				2									82.66	X								VD-502SP	E-133		
0.205 RAMP A LT		1	450	450	0.20				1		2.44	X	X	X													OM-1	E-150		
0.205 RAMP A RT		1	900	900	0.81				1		4.88	X	X	X													W3-2a	E-150		
0.207 RAMP A LT	 	1	600	300	0.18																						M3-3	E-136A		
		1	600	300	0.18																						M3-1	E-136A		
	 	1	600	600	0.36																							M1-4	E-136A	
		1	600	600	0.36																							M1-4	E-136A	
			1	525	375	0.20				2		9.75	X	X	X														M6-1	E-136A
1			525	375	0.20																							M6-2	E-136A	
0.284 RAMP A RT		1			0.35				1		4.88	X	X	X														R1-2 900X900X900	E-146	
0.045 RAMP B RT		1			0.35				1		4.27	X	X	X														R1-2 900X900X900	E-146	

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".	SHEET TOTALS		m2	m2	EA.	m2				m	m	m	EA.	kg	kg	kg	EA.	kg	EA.	EA.	kg	PROJECT NAME: RYEGATE-ST. JOHNSBURY PROJECT NUMBER: IM 091-2(73)				
			-6.64	0.00	0	0.00				34.8	33.9		0	0.0	0.0	0.0	2	82.66	79.1	0	0	0	FILE NAME	fsssRyegate.xls	PLOT DATE	12/12/06
																							PROJECT LEADER	CRB	DRAWN BY:	JCS

DESIGNED BY:	PTS	CHECKED BY:	DAM
OLD REF. NO.:	97-0194	SHEET	64 OF 88

TRAFFIC SIGN SUMMARY SHEET 28

MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL																
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER											
											1.7	3.6	4.5	44	50	63	75	100	100MD	75	90		100	125	FTG SIZE				600	750	MASS	POST SIZE							
INT.#20 0.237 RAMP D RT		1	1800	300	0.54																					D1-1a	E-123												
		1	1800	300	0.54				2		8.53	X	X	X												D1-1a	E-123	POSTS 14' 0" 14' 0" 8.53m											
0.275 RAMP D RT		1	1800 1370	250 190	0.45 0.26																					VD-502S	E-133												
		1	1800 1370	250 190	0.45 0.26																					VD-502L	E-133												
		1	1800 1370	250 190	0.45 0.26																					VD-502C	E-133												
		1	1800 1370	250 190	0.45 0.26				2									87.01	X							VD-502SP	E-133												
0.322 RAMP D RT		1	750	750	0.56																					R1-1	E-143												
		1	750	750	0.56																					R5-1	E-143												
		1	900	300	0.27				1		4.27	X	X	X												R6-1L	E-142												
		1	900	300	0.27																					R6-1R	E-142												
0.322 RAMP D LT		1	750	750	0.56																					R1-1	E-143												
		1	600	750	0.45																					R4-7	E-144												
		1	450	450	0.20				1		4.27	X	X	X												OM-1	E-150												
0.052 RAMP E RT		1	900	600	0.54				2		8.53	X	X	X												R5-1a	E-143												
0.072 RAMP E RT		1	750	750	0.56																					R1-1	E-143												
		1	750	750	0.56																					R5-1	E-143												
		1	900	300	0.27				1		4.27	X	X	X												R6-1L	E-142												
		1	900	300	0.27																					R6-1R	E-142												
0.072 RAMP E LT		1	750	750	0.56																					R1-1	E-143												
		1	600	750	0.45																					R4-7	E-144												
		1	450	450	0.20				1		4.27	X	X	X												OM-1	E-150												
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".</p>										m		m		EA.		m		EA.		kg		EA.		EA.		kg		EA.		EA.		kg		EA.		EA.		kg	
										0.0	0.0	31.5	0.0	31.5	0.0	0	0.0	0.0	0.0	79.1	0.0	0.0	0.0																
										34.1		31.5		0		0.0		79.1		0		0		0		0		0		0		0		0					
										8.94		9.70		0.00		0		0.00		2		79.1		0		0		0		0		0		0					

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: fsssRyegate.xls
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

PLOT DATE: 12/12/06
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 66 OF 88

TRAFFIC SIGN SUMMARY SHEET 29



MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST R/S ALT V/A I/N	NO OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL							
		E/A	WIDTH (mm)	HGBHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL		FND- ACTION	FRG. SIZE	MASS	POST SIZE	F R A M E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											1.7	3.0	4.5	44	50	63	75	100	100MD	75	90	100	125									600
INT.#20 0.500 RTE 5 MED.		1	600	750	0.45																							R4-7	E-144			
		1	450	450	0.20				1			4.27	X	*	*													OM-1	E-150			
0.550 RTE 5 LT	PASSUMPSIC 2	1	1800	300	0.54																							D2-1	E-123			
	BARNET 10	1	1800	300	0.54				2			9.54	X	*	*													D2-1	E-123			
0.560 RTE 5 RT	JCT	1	525	375	0.20																							M2-1	E-135			
	91	1	600	600	0.36				1			4.27	X	*	*													M1-1	E-135			
0.590 RTE 5 RT	↑ ST. JOHNSBURY 1	1	1800 600	300 300	0.54 0.18																							D1-1a	E-123			
	← BARNET 9	1	1800 600	300 600	0.54 0.36																							D1-1a	E-123			
	← WHITE RIVER JCT 82	1	1800 525	300 375	0.54 0.20				2																			D1-1a	E-123			
0.600 RTE 5 LT	SOUTH	1	600	300	0.18																							M3-3	E-136A			
	5	1	600	600	0.36				1			4.88	X	*	*													M1-4	E-136A			
0.610 RTE 5 RT		1	1200	750	0.90				2			8.54	X	*	*													VR-927	E-145B			
0.617 RTE 5 LT		1	900	900	0.81				1			4.27	X	*	*													W4-2	E-151			
0.629 RTE 5 MED.		1	600	750	0.45																							R4-7	E-144			
		1	450	450	0.20				1			4.27	X	*	*													OM-1	E-150			
												m		m		m		EA.		kg		kg		kg								
												0.0		0.0		43.7		0.0		43.7		0.0		76.9		0.0		0.0		0.0		
												40.0												194.64								
												m		m		kg		EA.		kg		EA.		EA.		kg						
												43.7		43.7		0.0		2		76.9		0		0		0						
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISIONS "SIGN POST DESIGN GUIDELINE".																																

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILENAME	tsssRyegate.xls	PLOT DATE	12/12/06
PROJECT LEADER:	CRB	DRAWN BY:	JCS
DESIGNED BY:	PTS	CHECKED BY:	DAM
CLD REF. NO.:	97-0194	SHEET	67 OF 86

TRAFFIC SIGN SUMMARY SHEET 31



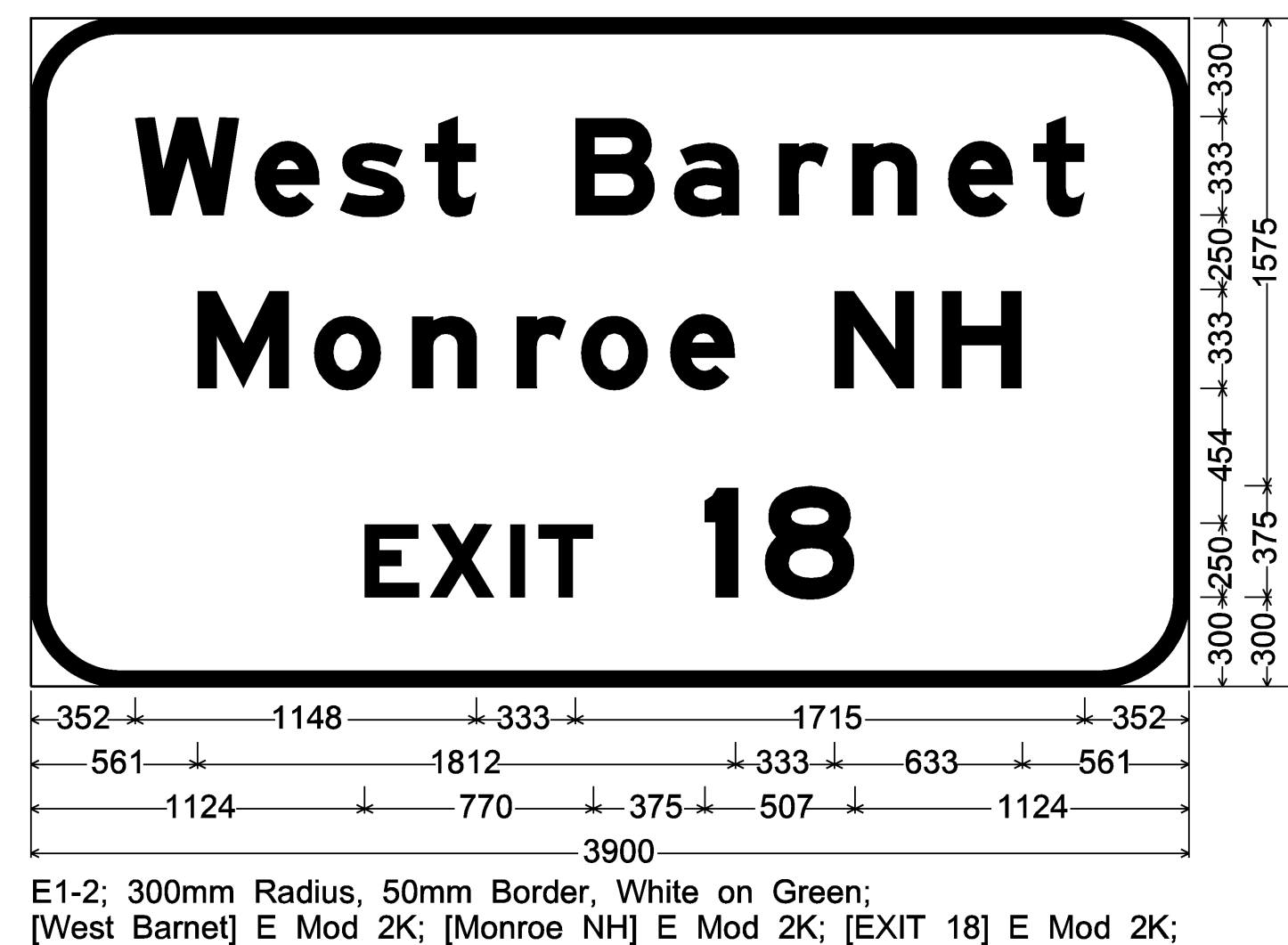
MILE MARKER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST RETURN SALVAGE	NO. OF POSITIONS	NEW SIGN POSTS												REMARKS	SIGN DETAIL							
		E	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM DIA (mm)			TUBULAR STEEL DIA (mm)			W-SHAPE STEEL			DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
											kg/m	3.0	4.5	44	50	63	75	100	100MD	75	90		100	125	FTG SIZE			600	750	MASS
INT #20 0.688 RTE 5 LT		1	600	300	0.18																						M3-3	E-135		
		1	600	600	0.36																						M1-1	E-135		
		1	525	375	0.20				1			4.88	X	X												M6-2	C.O. #1 ADDED SIGNS	E-135		
0.700 RTE 5 RT		1	900	900	0.81				1			4.27	X	X													W12-2	E-155		
0.765 RTE 5 RT		1	600	450	0.27																						R14-1			
		1	600	300	0.18																						M3-1	E-135		
		1	600	300	0.18																						M3-4	E-136A		
		1	600	600	0.36																						M1-1	E-135		
		1	600	600	0.36																						M1-4	E-136A		
		1	525	375	0.20				2																		M6-1	E-135		
		1	525	375	0.20																						M6-1	E-136A		
0.780 RTE 5 LT		1	1800	300	0.54																							D1-1a	E-123	
		1	1800	300	0.54																							D1-1a	E-123	
		1	1800	300	0.54				2																			D1-1a	E-123	
0.790 RTE 5 RT		1	450	450	0.20				1			2.44	X	X														OM-1	E-150	
0.810 RTE 5 MED.		1	600	750	0.45																							R4-7	E-144	
		1	450	450	0.20				1			4.27	X	X														OM-1	E-150	
0.819 RTE 5 LT 0.810 RTE 5 RT		1	600	300	0.18																							M3-3	E-136A	
		1	600	600	0.36							4.88	X														M1-4	C.O. #1 ADDED SIGNS	E-136A	
		1	525	375	0.20				1			4.88	X	X														M6-1	E-136A	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE".												m	m	m	m	m	m	EA	kg	kg	kg									
												0.0	2.7	17.4	2.7	17.1	0.0	0	0.0	0.0	0.0									
												30.5																		
												19.8																		
												0.0																		
												4																		
												185.4																		
												0																		
												0																		
												0																		
SHEET TOTALS			m2	m2	EA	m2						m	m	m	EA	kg	kg	kg	EA	EA	kg									
			6.51	0.00	0	0.00						19.8	19.8	0.0	4	185.4	0	0	0											

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)
FILE NAME: fsssRyegate.xls PLOT DATE: 12/12/06
PROJECT LEADER: CRB DRAWN BY: JCS
DESIGNED BY: PTS CHECKED BY: DAM
CLD REF. NO.: 97-0194 SHEET 69 OF 88

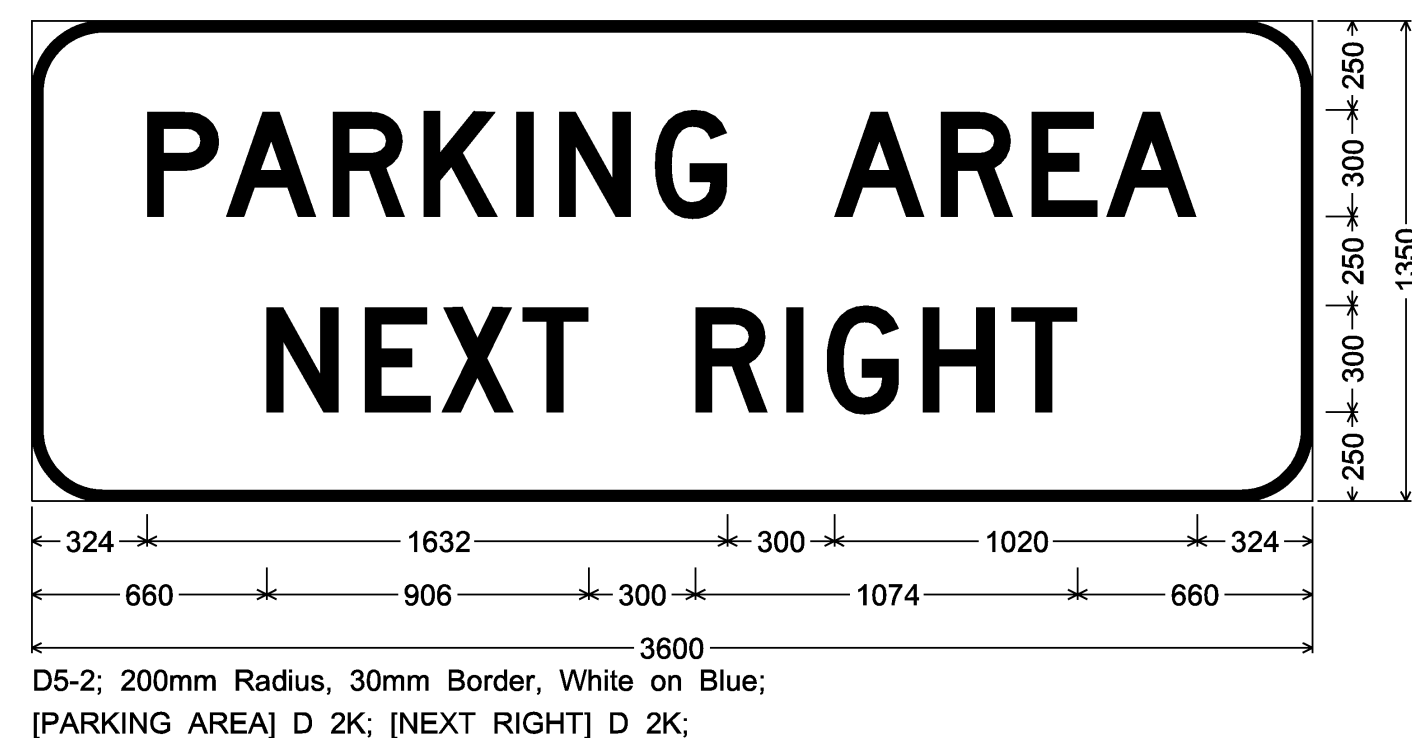
M.M. 113.298 NB
M.M. 115.505 SB



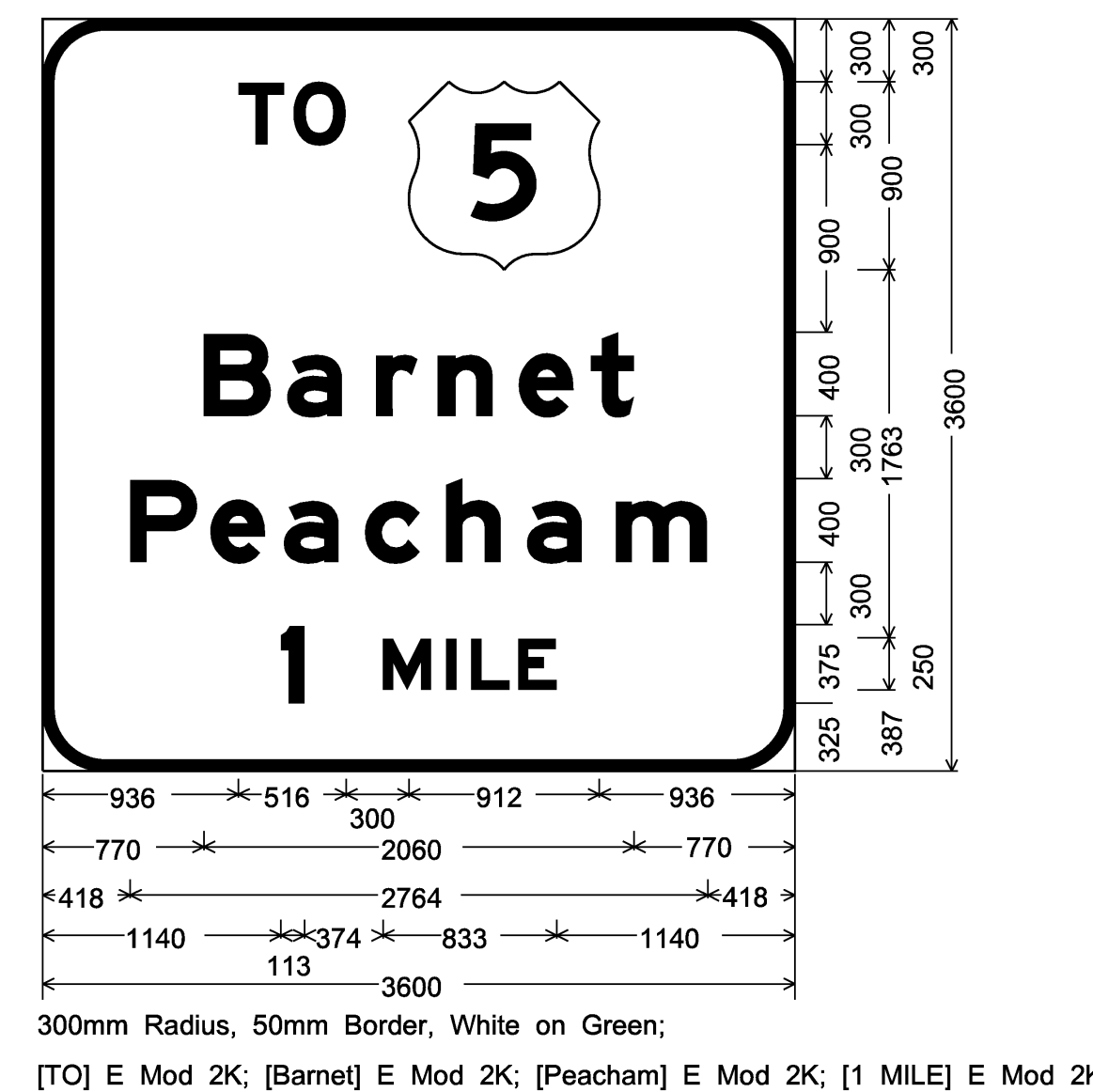
M.M. 119.480 NB



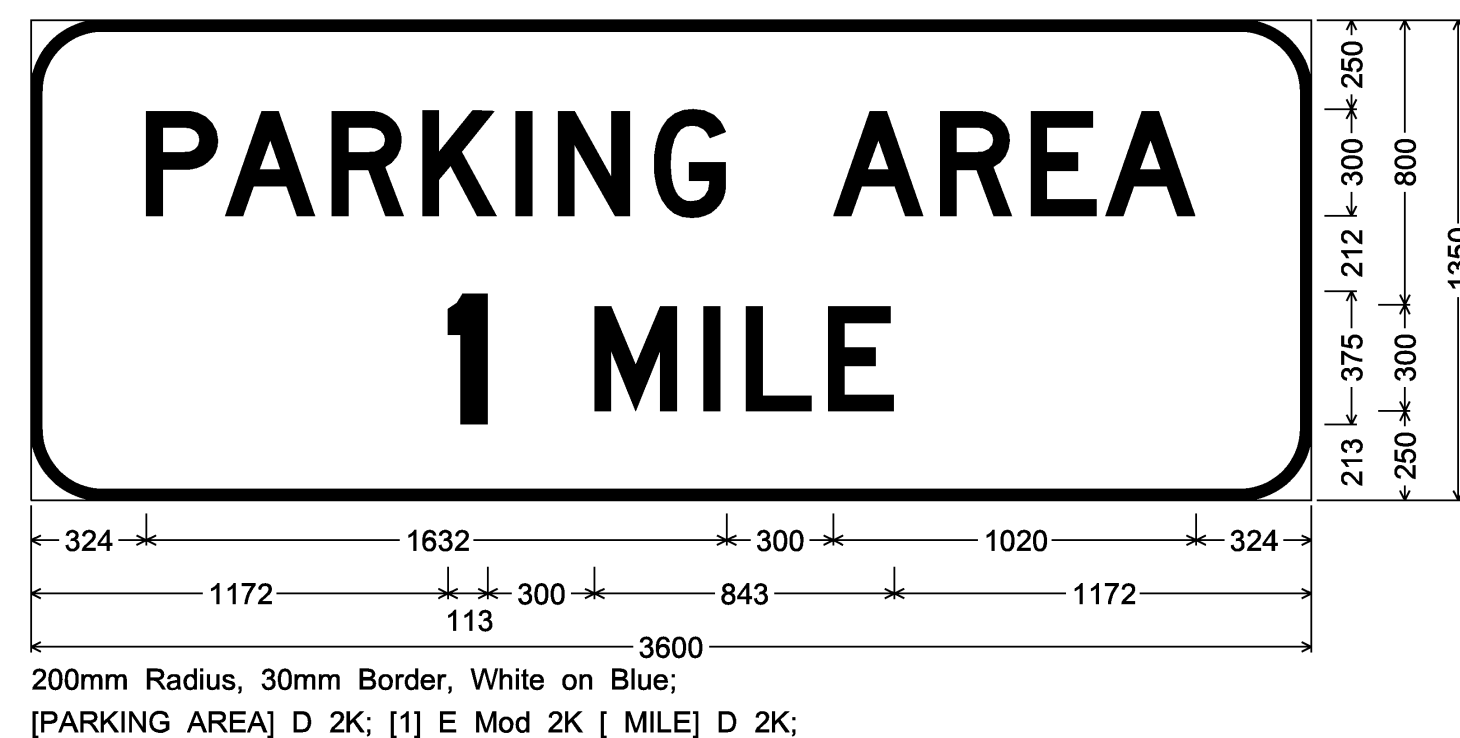
M.M. 113.140 NB
M.M. 115.700 SB



M.M. 119.240 NB
M.M. 121.700 SB



M.M. 112.150 NB
M.M. 116.430 SB



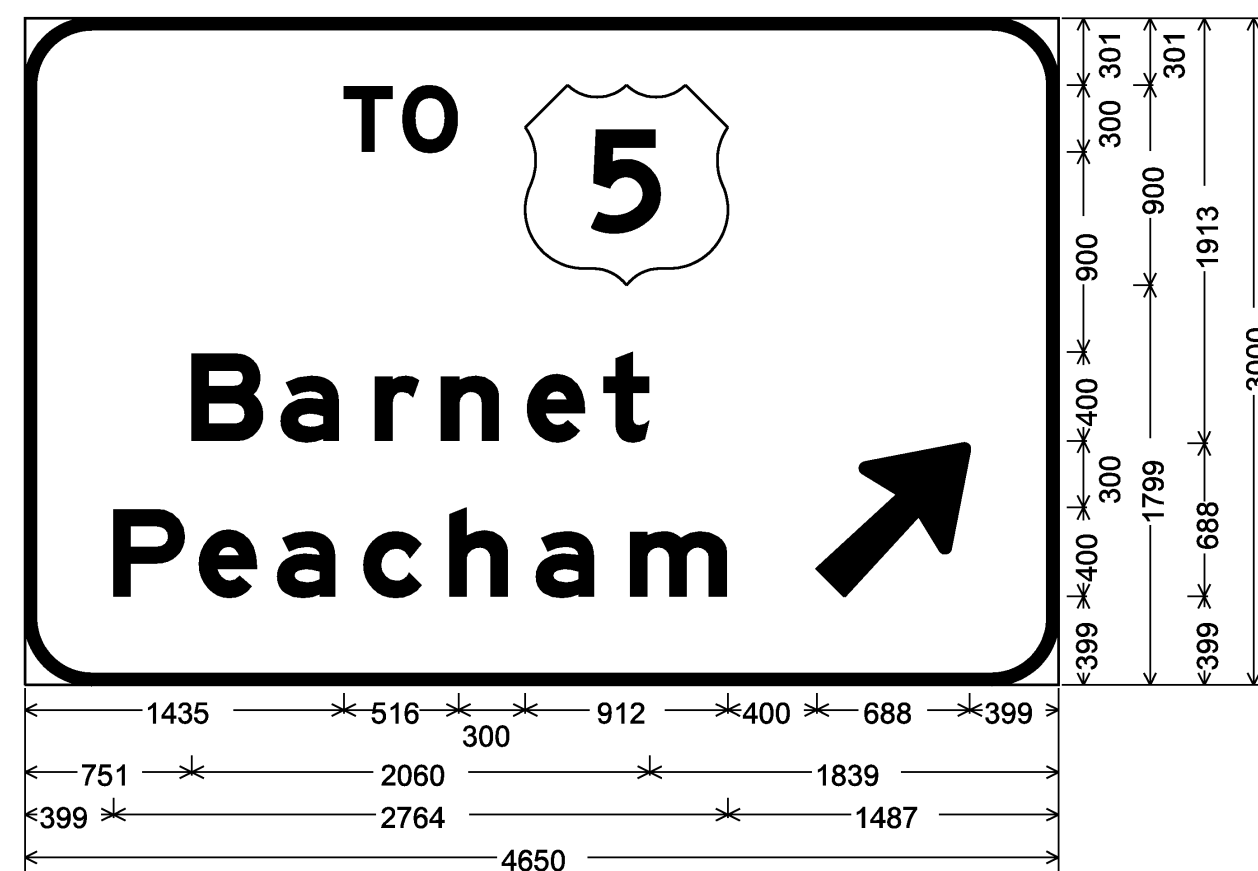
GENERAL SIGN DETAIL NOTES

1. THE NOTE BELOW EACH SIGN DETAIL INCLUDES THE CORNER RADII, BORDER WIDTH, TEXT COLOR, BACKGROUND COLOR AND TEXT SERIES TO BE USED.
2. COLORS: UNLESS NOTED OTHERWISE, WHITE ON GREEN AND WHITE ON BLUE SIGNIFIES REFLECTORIZED WHITE TEXT ON A REFLECTORIZED GREEN OR BLUE BACKGROUND, RESPECTIVELY. BLACK ON YELLOW AND BLACK ON WHITE SIGNIFIES BLACK TEXT ON A REFLECTORIZED YELLOW OR WHITE BACKGROUND, RESPECTIVELY. ALL COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY AASHTO AND APPROVED BY THE FHWA.
3. TEXT LAYOUT DIMENSIONS ARE BASED ON THE STANDARD ALPHABETS SPACING CHARTS FOUND IN THE MUTCD "STANDARD HIGHWAY SIGNS" PUBLICATION. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES WHICH AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VTRANS' TRAFFIC AND SAFETY SECTION BEFORE FABRICATION.
4. UNLESS NOTED OTHERWISE, THE DESIGN/DIMENSIONS FOR SYMBOLS SHOWN ON THESE SIGNS CAN BE FOUND IN VTRANS' STANDARDS OR IN THE STANDARD HIGHWAY SIGNS PUBLICATION.
5. FOR GUIDE SIGN ROUTE MARKER DETAILS SEE STD'S E-135, E-136A AND E-136B
6. THE NOTE BELOW EACH GUIDE SIGN DETAIL SPECIFIES APPROPRIATE ARROW LENGTHS WHEN APPLICABLE. FOR ARROW DIMENSIONS REFER TO GUIDE SIGN ARROW DETAILS IN THE STANDARD HIGHWAY SIGNS PUBLICATION.

SIGN DETAIL SHEET 1

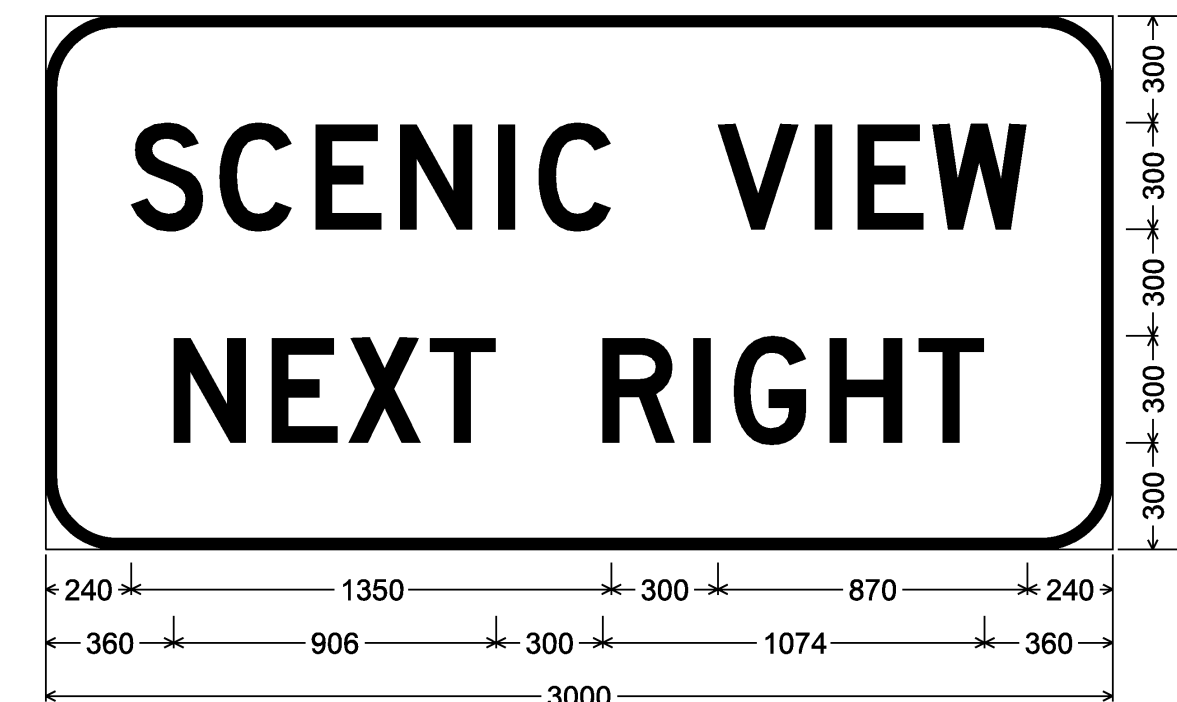
PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 09I-2(73)
FILE NAME: 97194s-details.dgn PLOT DATE: 12/13/2006
PROJECT LEADER: CRB DRAWN BY: JCS
DESIGNED BY: PTS CHECKED BY: DAM
CLD REF. NO.: 97-0194 SHEET 72 OF 88

M.M. 120.170 NB
M.M. 120.700 SB



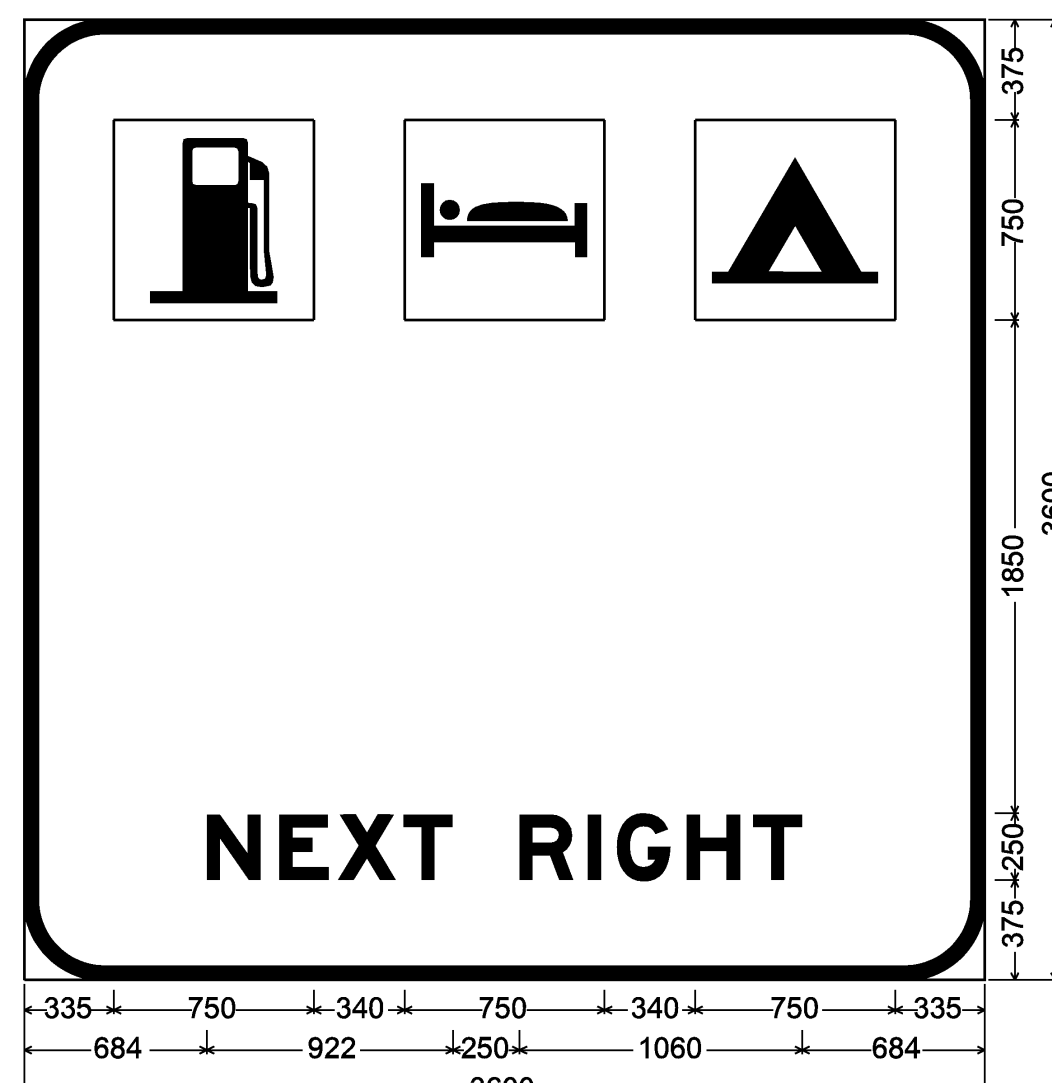
300mm Radius, 50mm Border, Black on Green;
[TO] White E Mod 2K; [Barnet] White E Mod 2K; [Peacham] White E Mod 2K; Arrow 160 - 875mm 45° White;

M.M. 121.440 NB



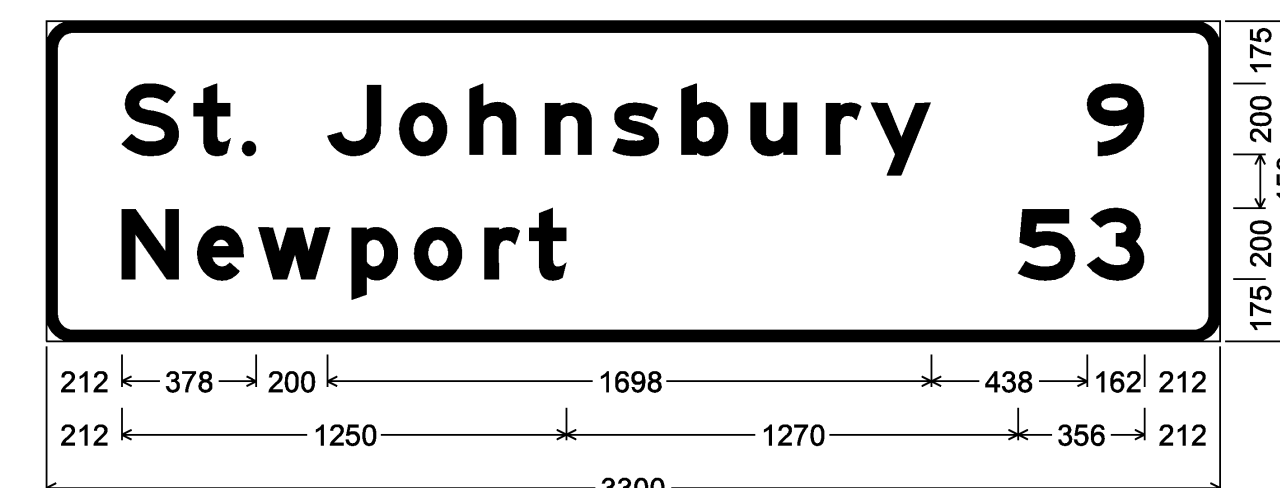
D5-1b; 200mm Radius, 30mm Border, White on Blue;
[SCENIC VIEW] D 2K; [NEXT RIGHT] D 2K;

M.M. 119.950 NB
M.M. 120.940 SB



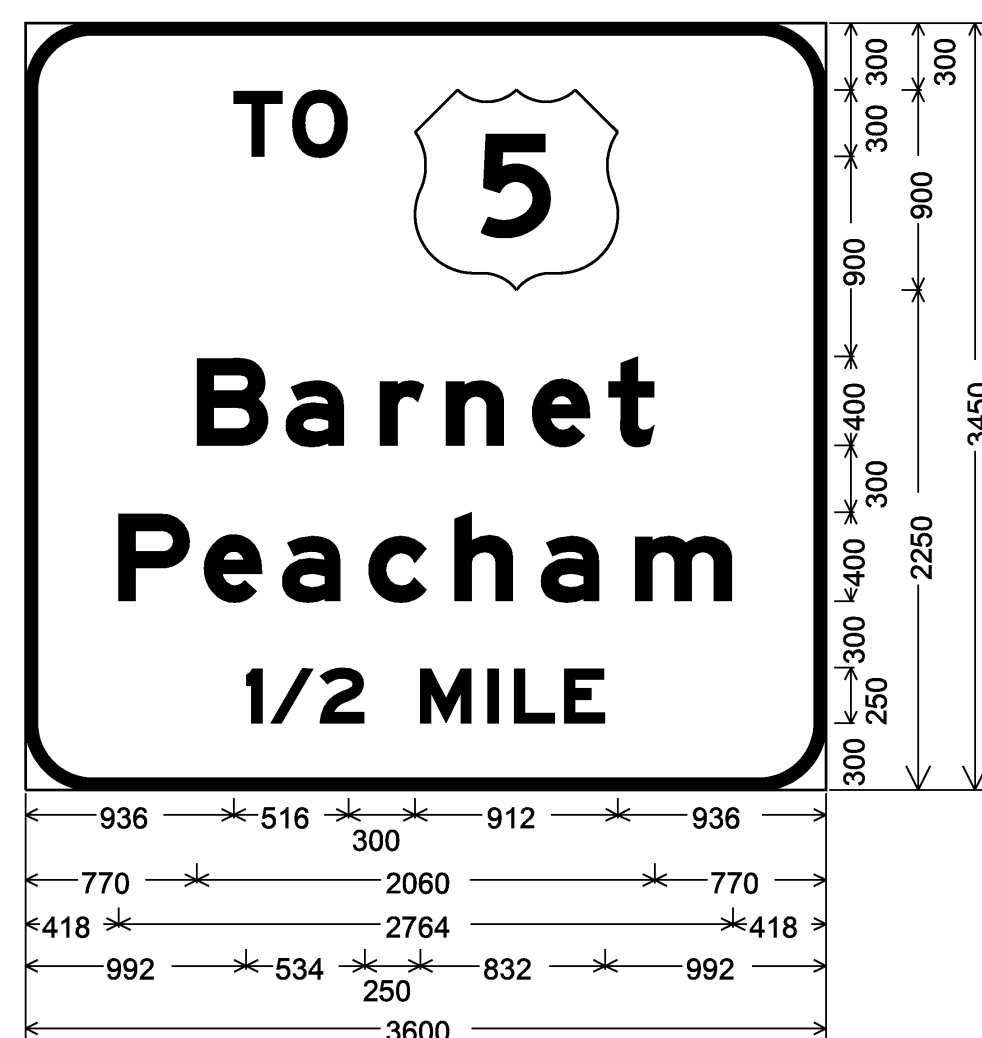
300mm Radius, 50mm Border, White on Blue;
[NEXT RIGHT] E Mod 2K;

M.M. 121.260 NB



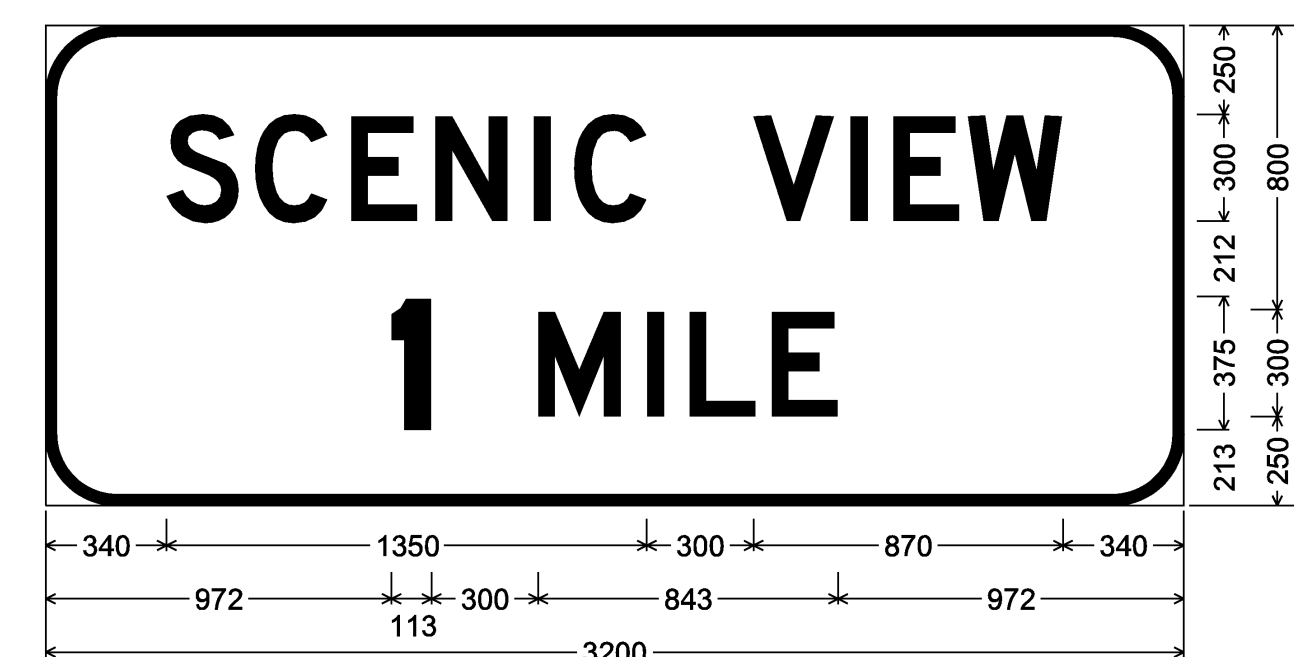
75mm Radius, 30mm Border, White on Green;
[St. Johnsbury] E Mod 2K; [9] E Mod 2K; [Newport] E Mod 2K;
[53] E Mod 2K;

M.M. 119.731 NB



300mm Radius, 50mm Border, White on Green,
[TO] E Mod 2K; [Barnet] E Mod 2K; [Peacham] E Mod 2K; [1/2 MILE] E Mod 2K;

M.M. 120.930 NB



200mm Radius, 30mm Border, White on Blue;
[SCENIC VIEW] D 2K; [1] E Mod 2K [MILE] D 2K;

SEE GENERAL SIGN DETAIL NOTES ON SHEET 72.

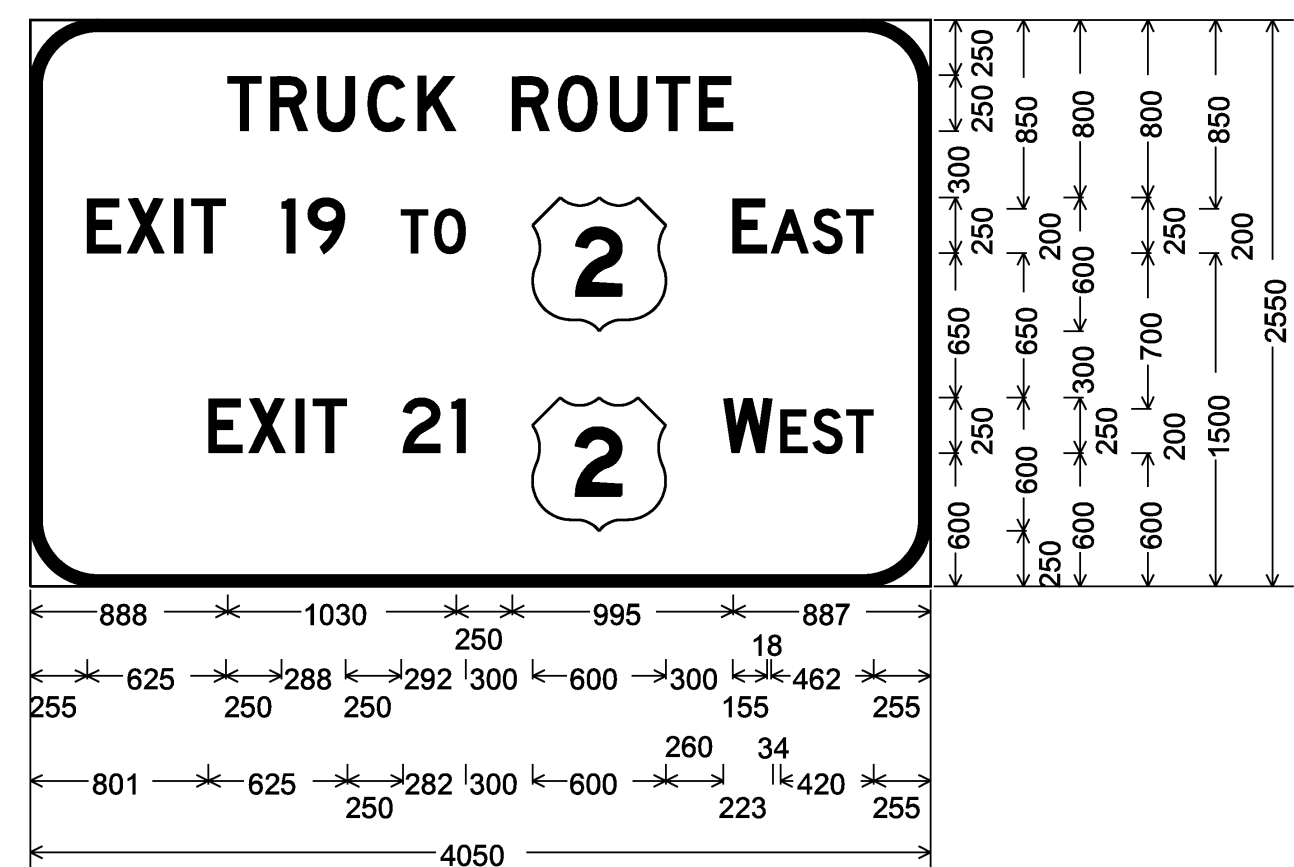
**SIGN DETAIL
SHEET 2**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 09I-2(73)

FILE NAME: 97194s-details.dgn
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

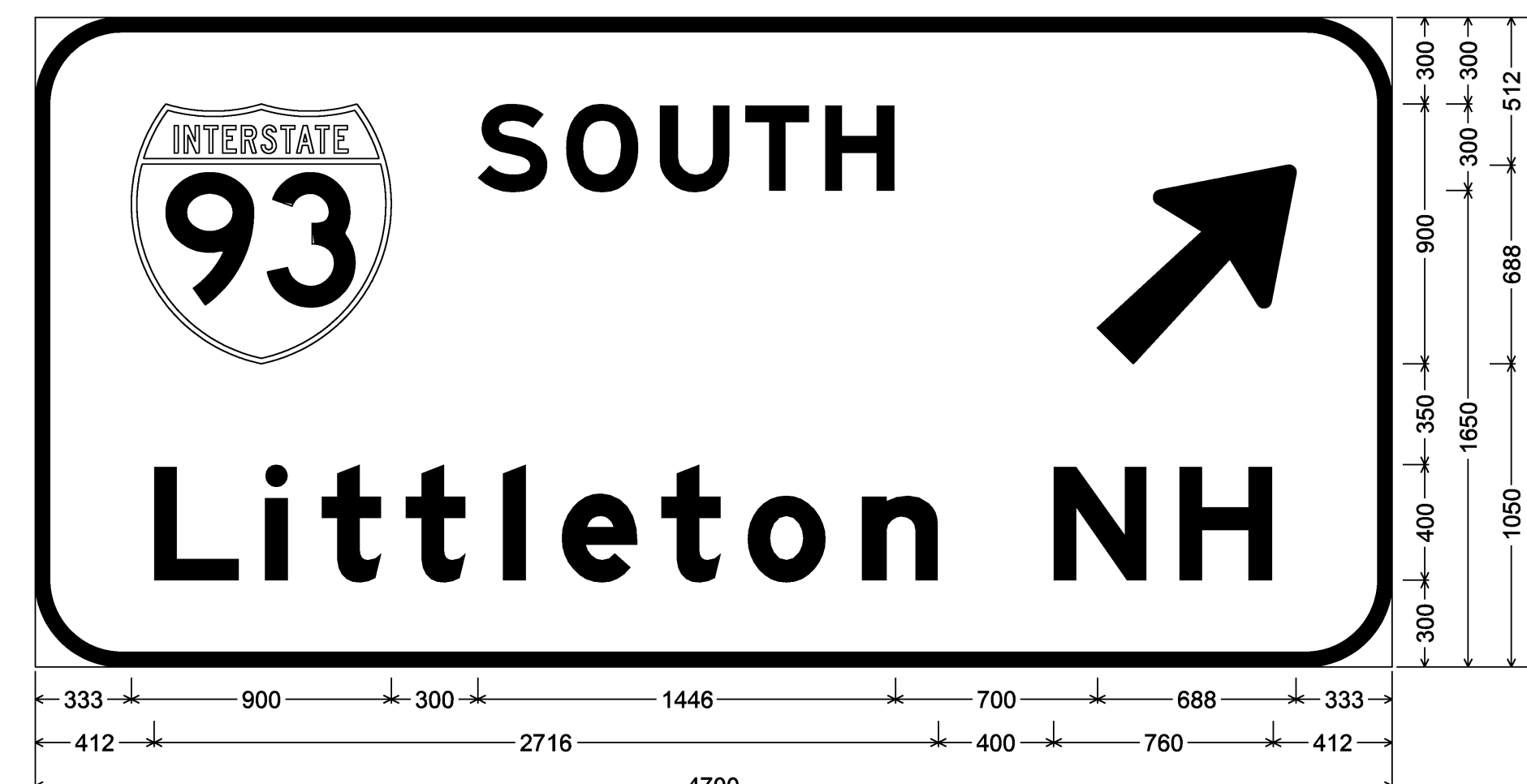
PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 73 OF 88

M.M. 127.420 NB



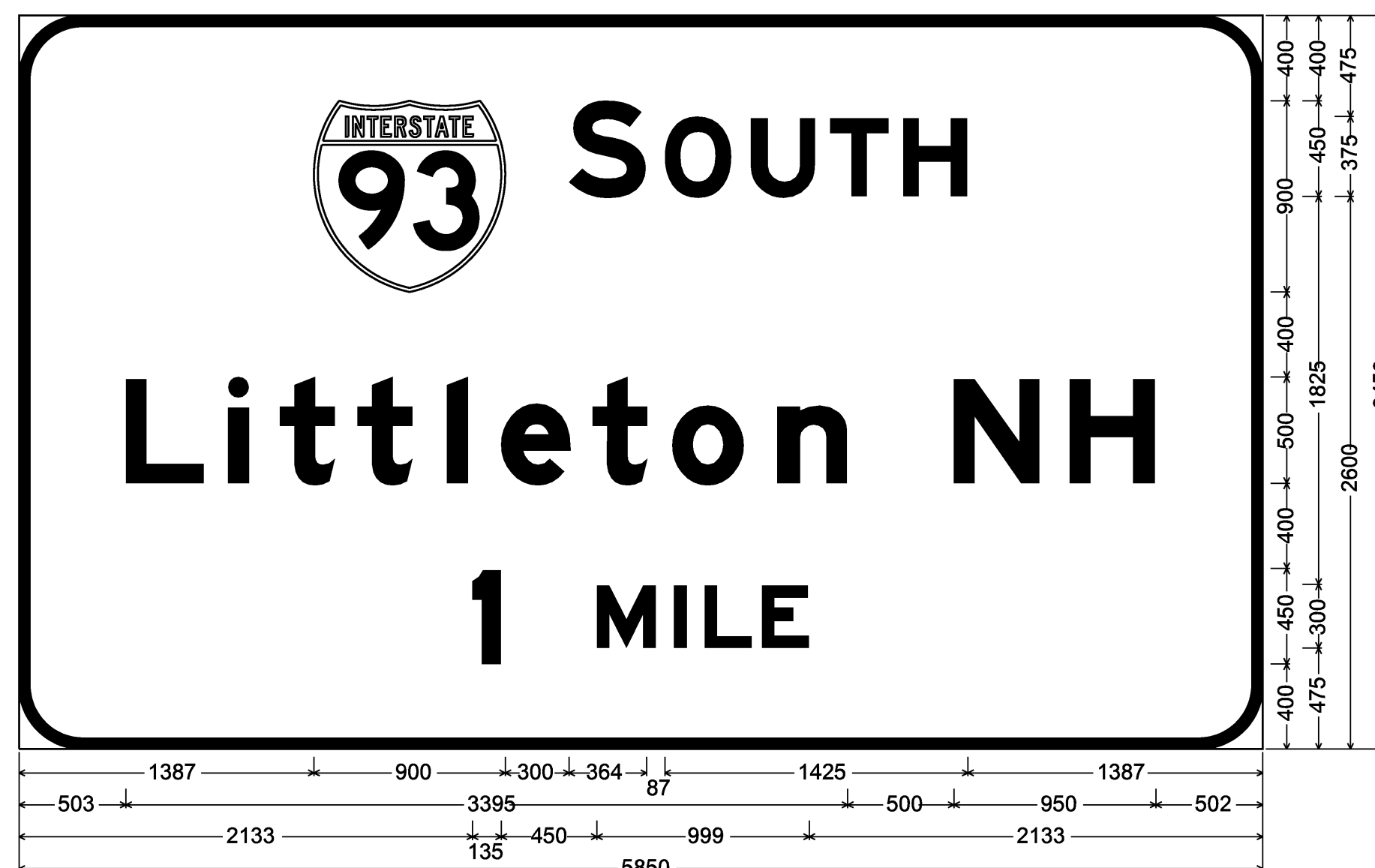
300mm Radius, 50mm Border, White on Green; [TRUCK ROUTE] D 2K; [EXIT 19 TO] D 2K; [EAST] D 2K; [EXIT 21] D 2K; [WEST] D 2K;

M.M. 127.980 NB OVERHEAD



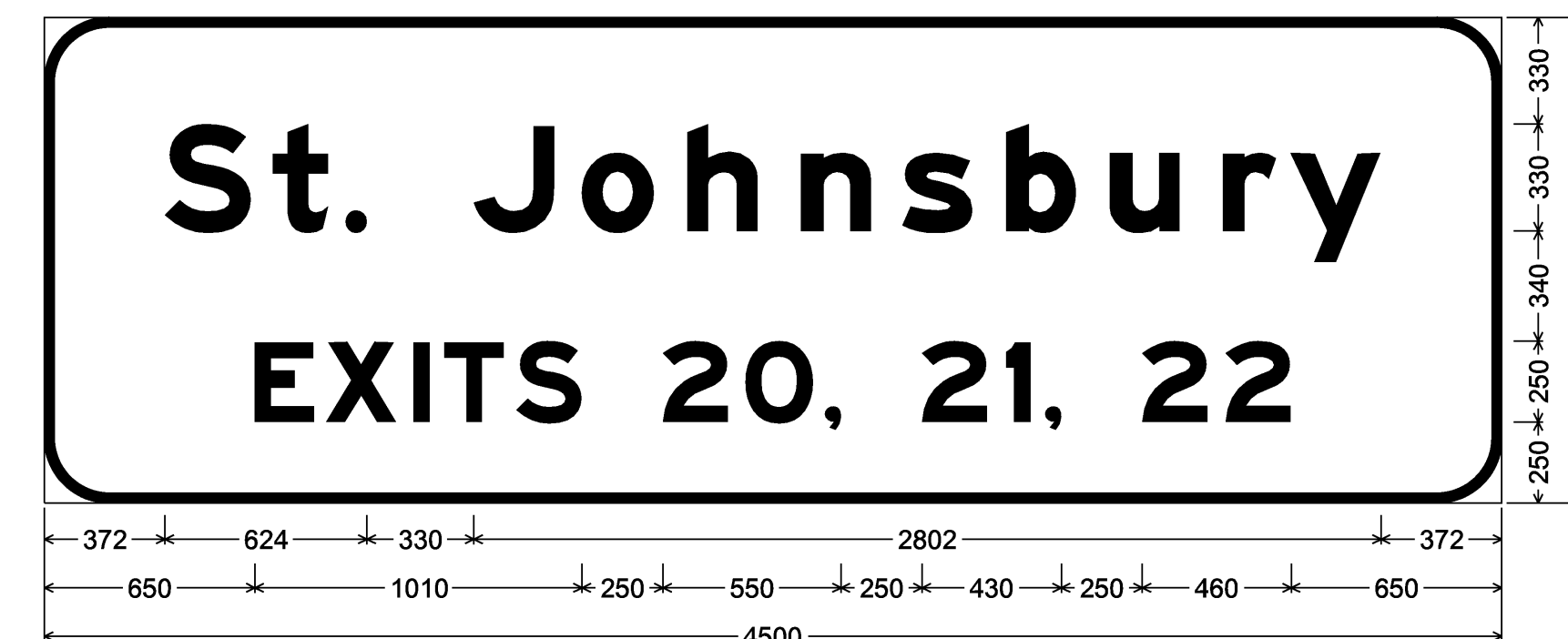
Main Panel; 300mm Radius, 50mm Border, White on Green; [SOUTH] E Mod 2K; Arrow 160 - 875mm 45°; [Littleton NH] E Mod 2K;

M.M. 127.220 NB



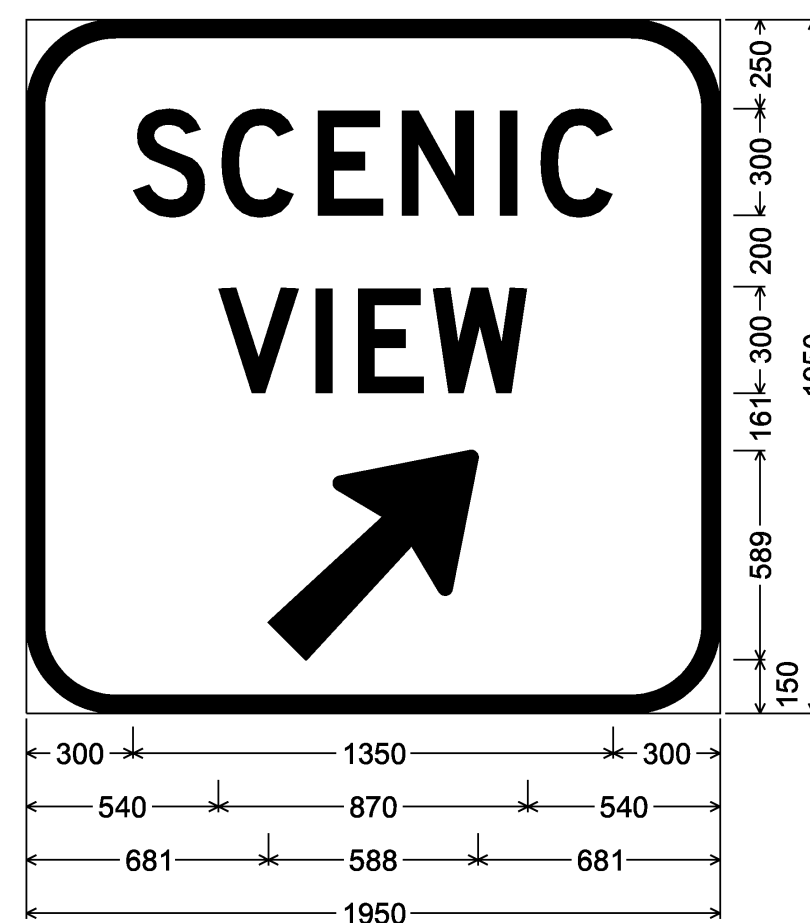
300mm Radius, 50mm Border, White on Green; [SOUTH] E Mod 2K; [Littleton NH] E Mod 2K; [1 MILE] E Mod 2K;

M.M. 127.800 NB



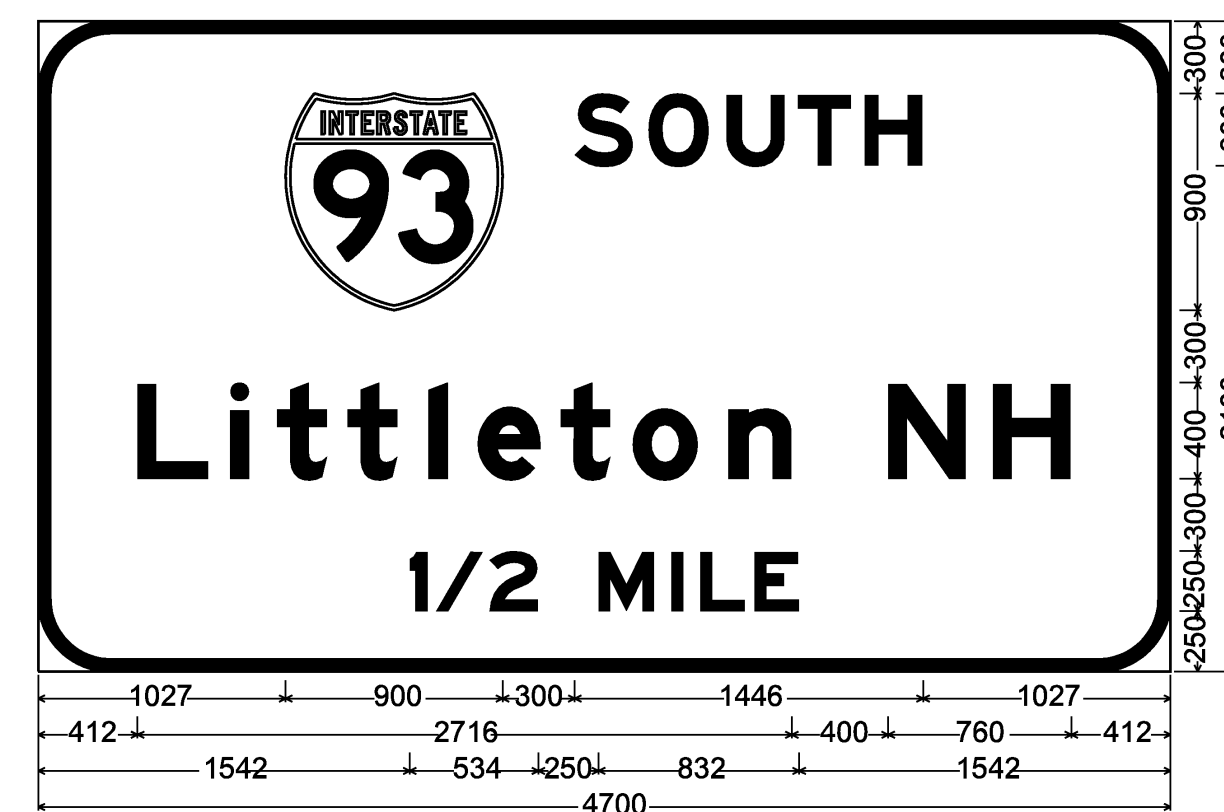
200mm Radius, 30mm Border, White on Green; [St. Johnsbury] E Mod 2K; [EXITS 20, 21, 22] E Mod 2K;

M.M. 121.810 NB



VTrans E-131; 250mm Radius, 50mm Border, White on Blue; [SCENIC] D 2K; [VIEW] D 2K; Arrow 133 - 750mm 45°;

M.M. 127.628 NB OVERHEAD



300mm Radius, 50mm Border, White on Green; [SOUTH] E Mod 2K; [Littleton NH] E Mod 2K; [1/2 MILE] E Mod 2K;

SEE GENERAL SIGN DETAIL NOTES ON SHEET 72.

SIGN DETAIL SHEET 3

PROJECT NAME: RYEGATE-ST. JOHNSBURY

PROJECT NUMBER: IM 09I-2(73)

FILE NAME: 97194s-details.dgn

PROJECT LEADER: CRB

DESIGNED BY: PTS

CLD REF. NO.: 97-0194

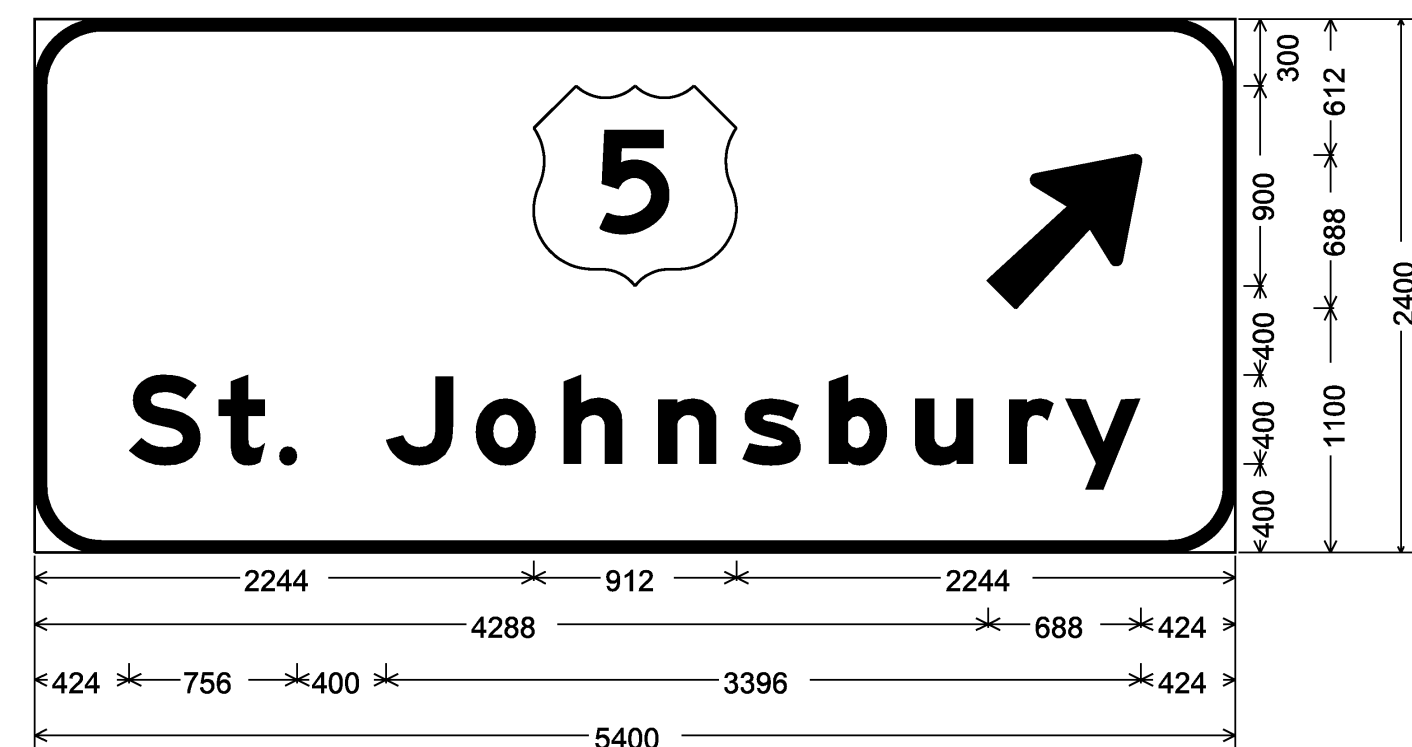
PLOT DATE: 12/13/2006

DRAWN BY: JCS

CHECKED BY: DAM

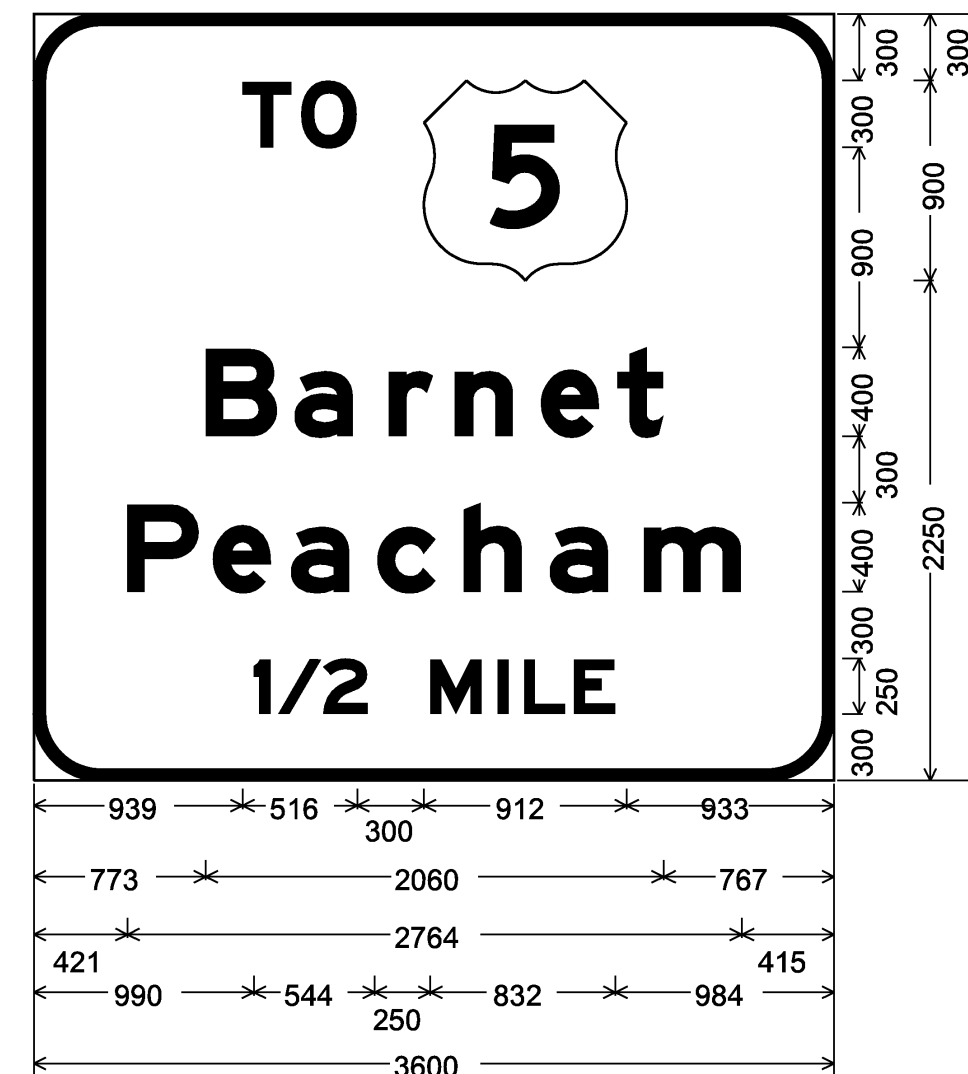
SHEET 74 OF 88

M.M. 128.700 NB



300mm Radius, 50mm Border, White on Green;
Arrow 160 - 875mm 45°; [St. Johnsbury] E Mod 2K;

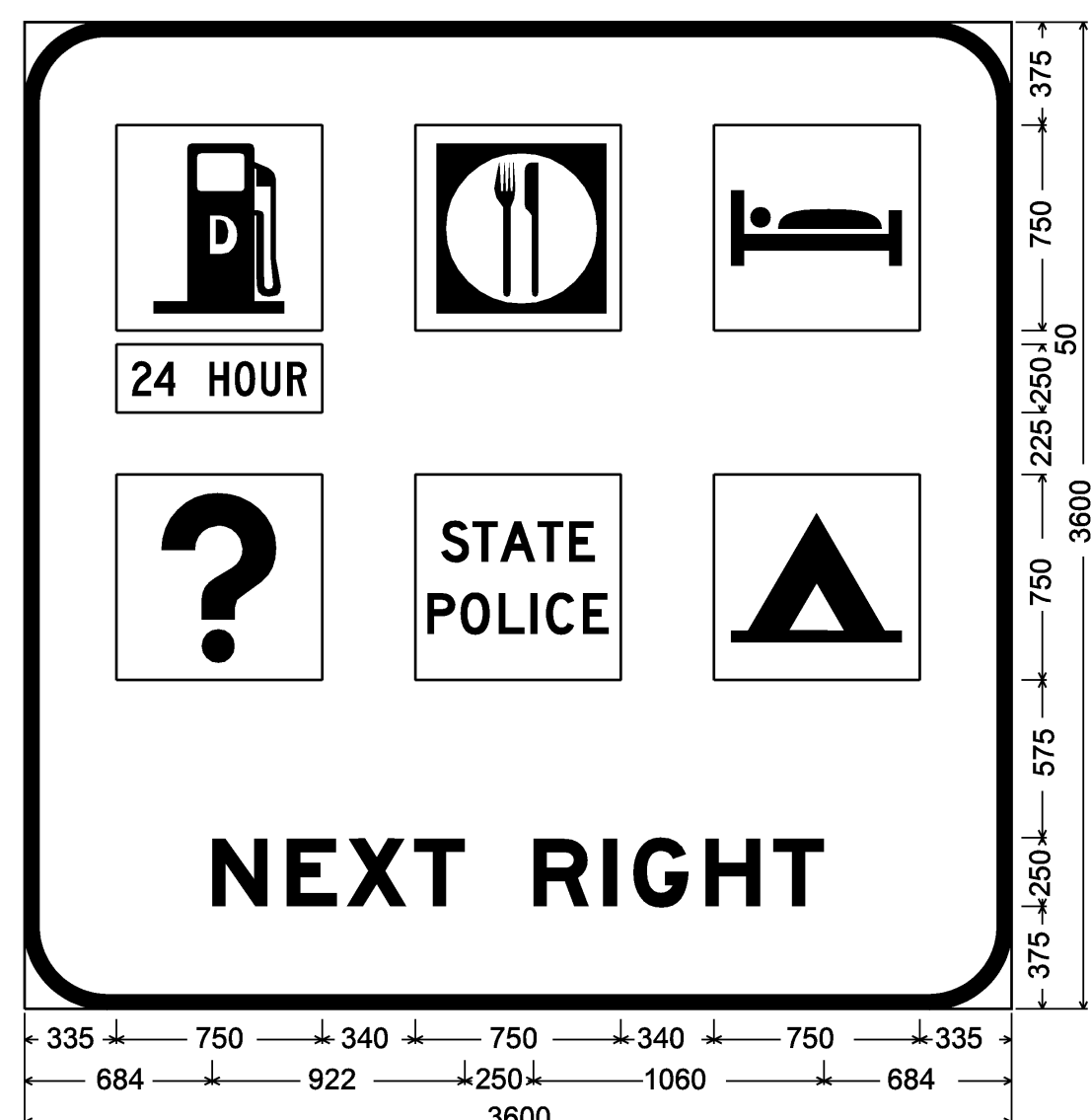
M.M. 121.200 SB



300mm Radius, 50mm Border, White on Green;
[TO] E Mod 2K; [Barnet] E Mod 2K; [Peacham] E Mod 2K; [1/2 MILE] E Mod 2K;

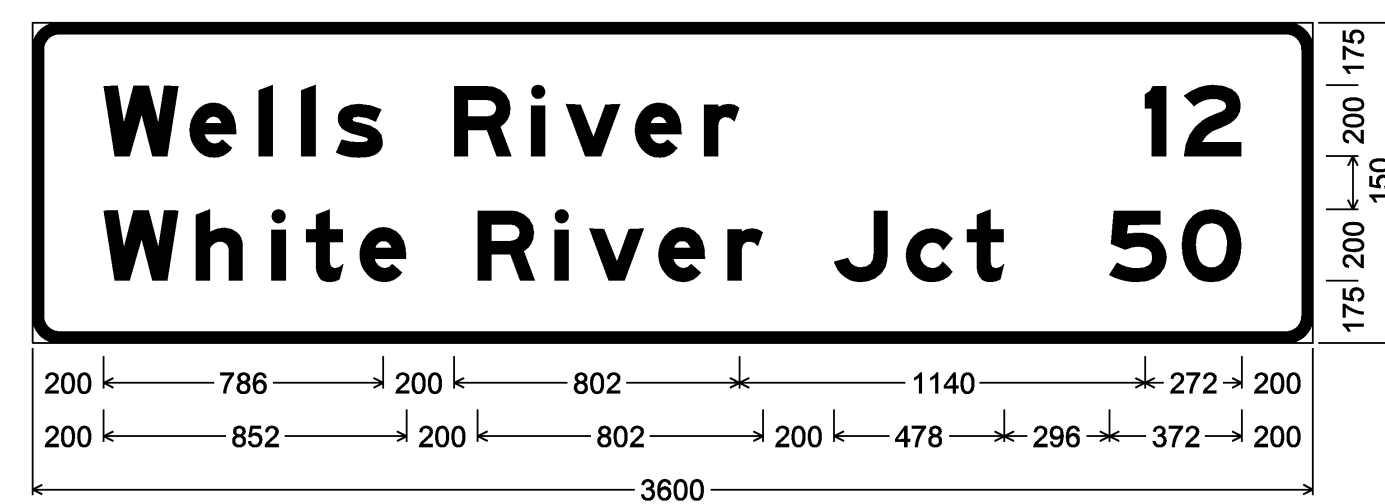


M.M. 128.550 NB



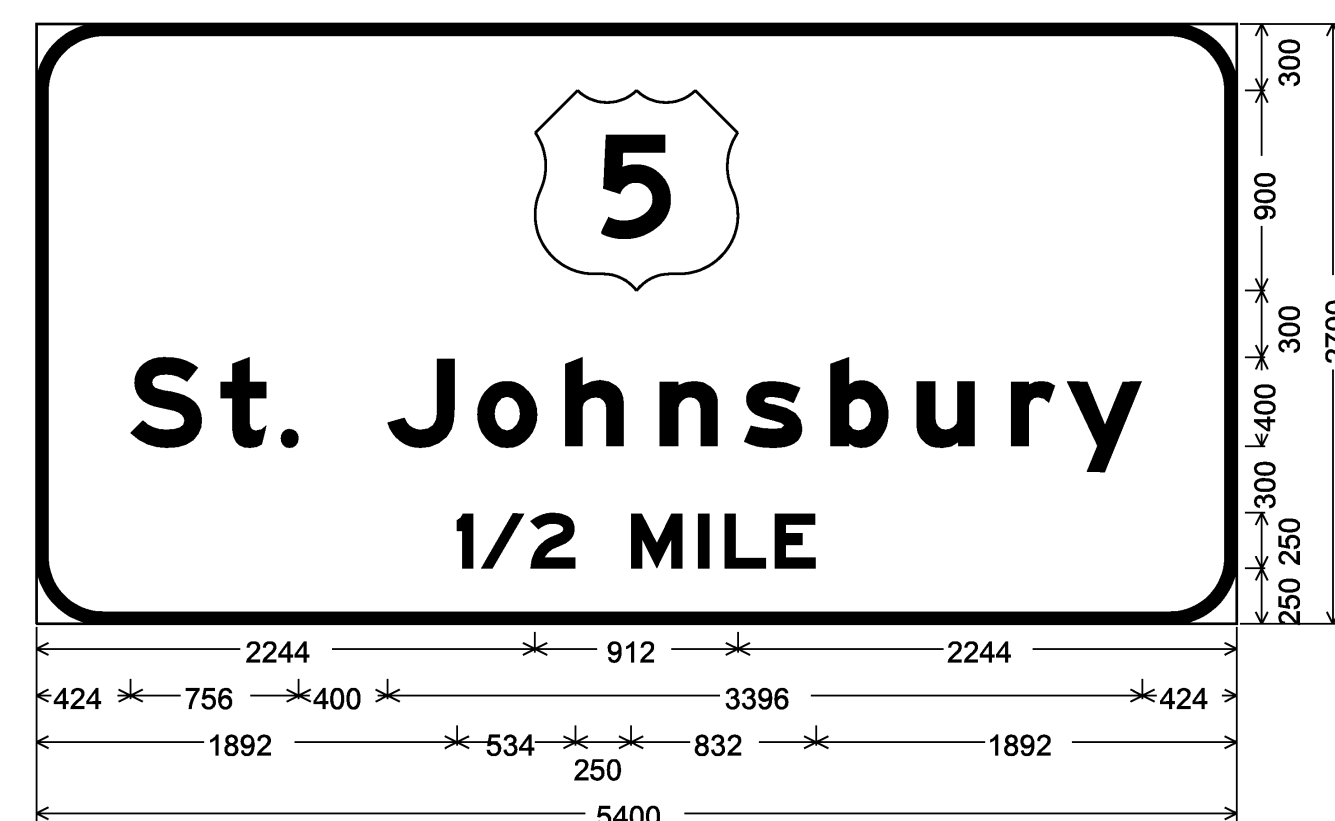
300mm Radius, 50mm Border, White on Blue;
[NEXT RIGHT] E Mod 2K;

M.M. 119.603 SB

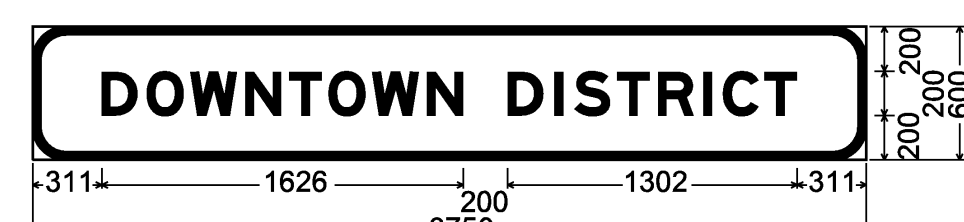


75mm Radius, 30mm Border, White on Green;
[Wells River] E Mod 2K; [12] E Mod 2K; [White River Jct] E Mod 2K; [50] E Mod 2K;

M.M. 128.225 NB



300mm Radius, 50mm Border, White on Green;
[St. Johnsbury] E Mod 2K; [1/2 MILE] E Mod 2K;



150mm Radius, 35mm Border, White on Green;
[DOWNTOWN DISTRICT] E Mod 2K;

SEE GENERAL SIGN DETAIL NOTES ON SHEET 72.

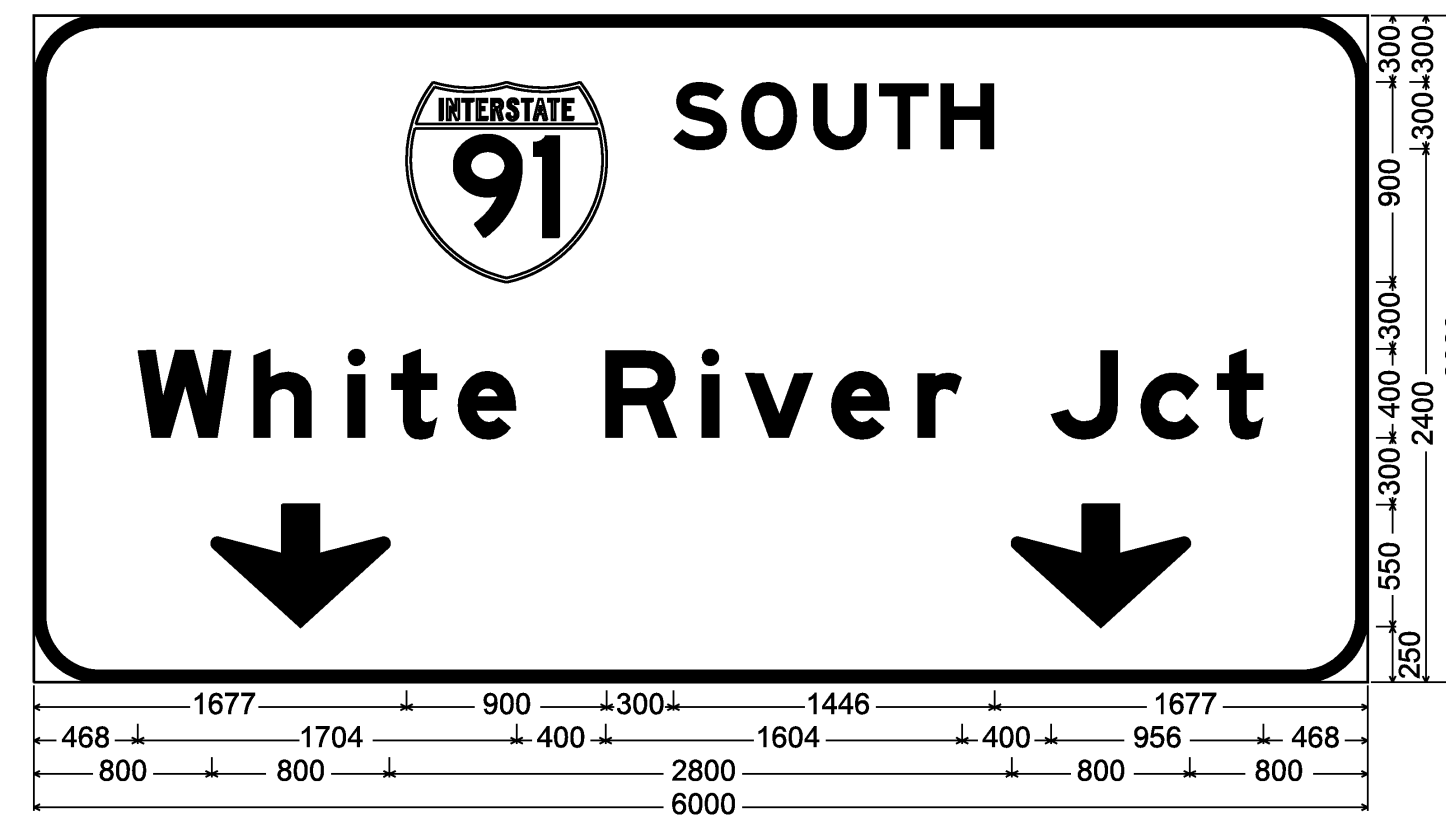
**SIGN DETAIL
SHEET 4**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

FILE NAME: 97194s-details.dgn
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

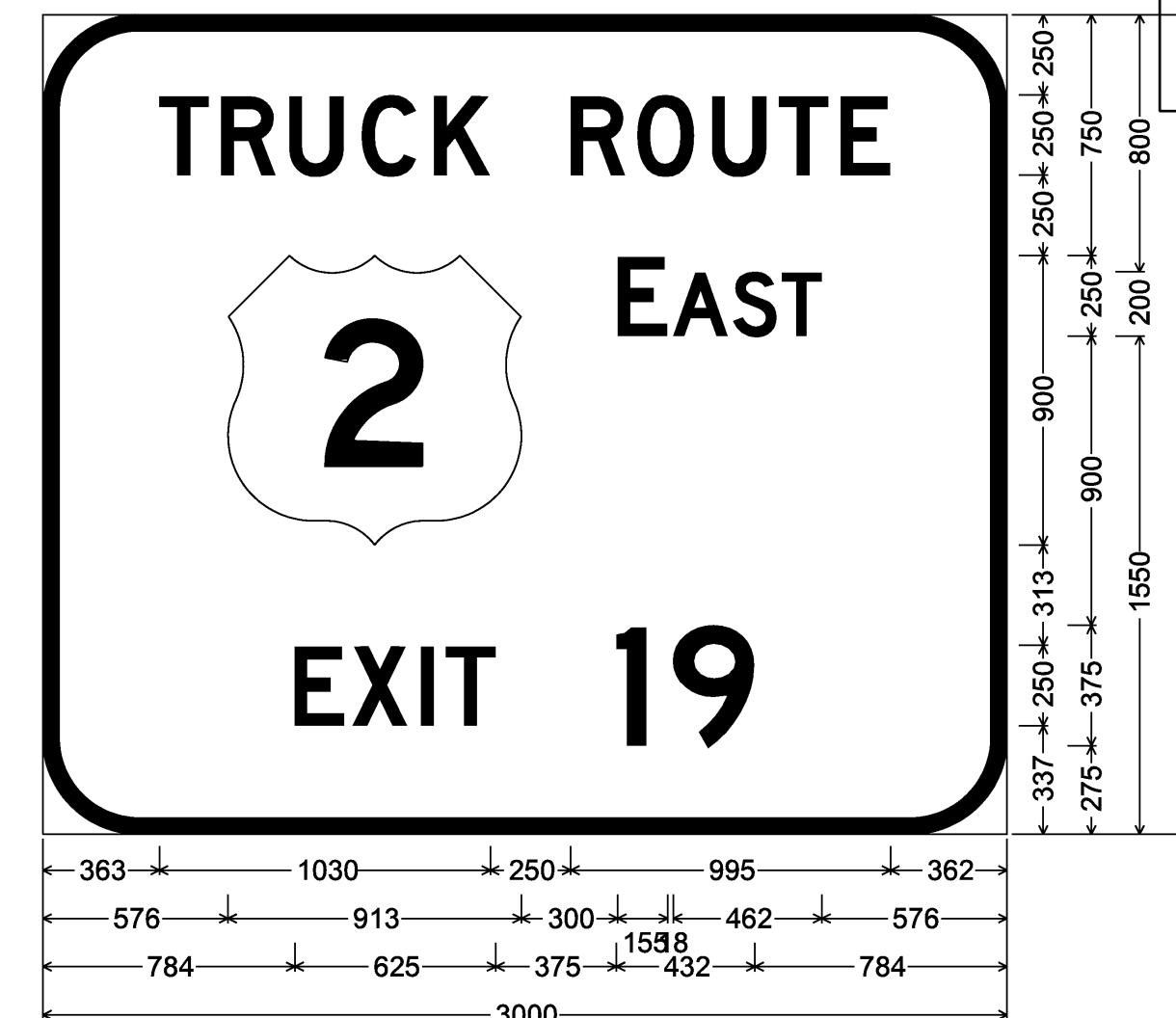
PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 75 OF 88

M.M. 128.700 SB
OVERHEAD



300mm Radius, 50mm Border, White on Green;
[SOUTH] E Mod 2K; [White River Jct] E Mod 2K; Down Arrow 550mm 270°; Down Arrow 550mm 270°;

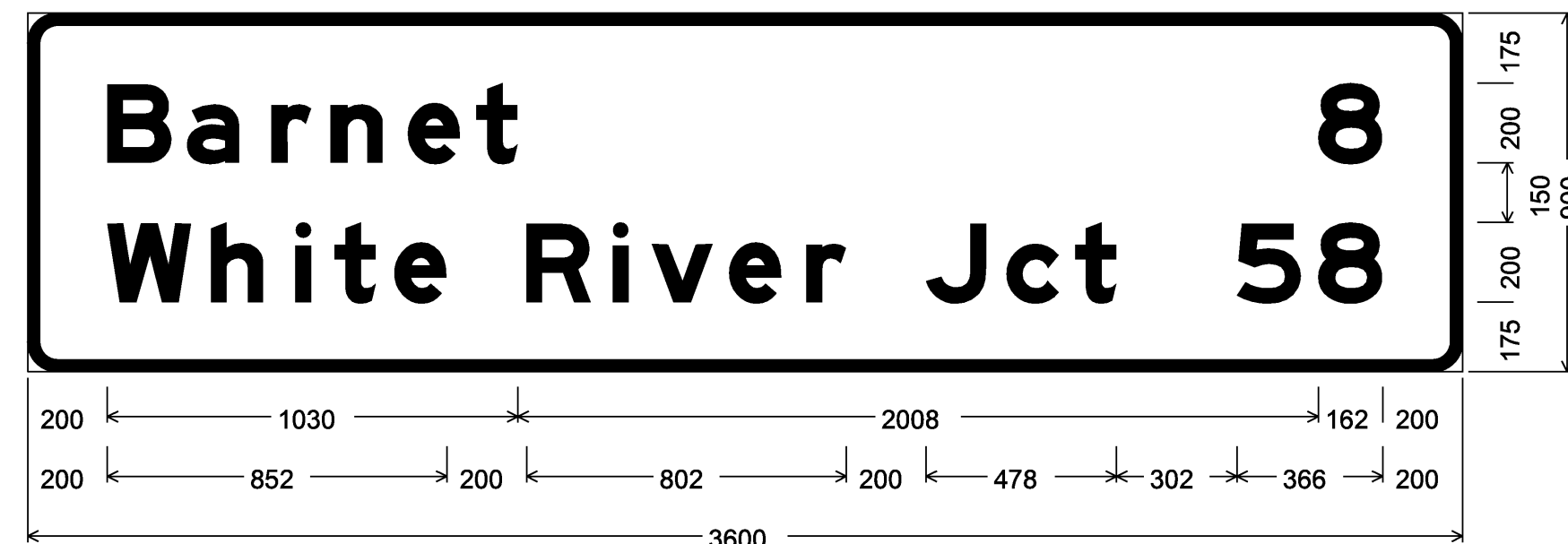
M.M. 128.810 SB



300mm Radius, 50mm Border, White on Green;
[TRUCK ROUTE] D 2K; [EAST] D 2K; [EXIT 19] D 2K;

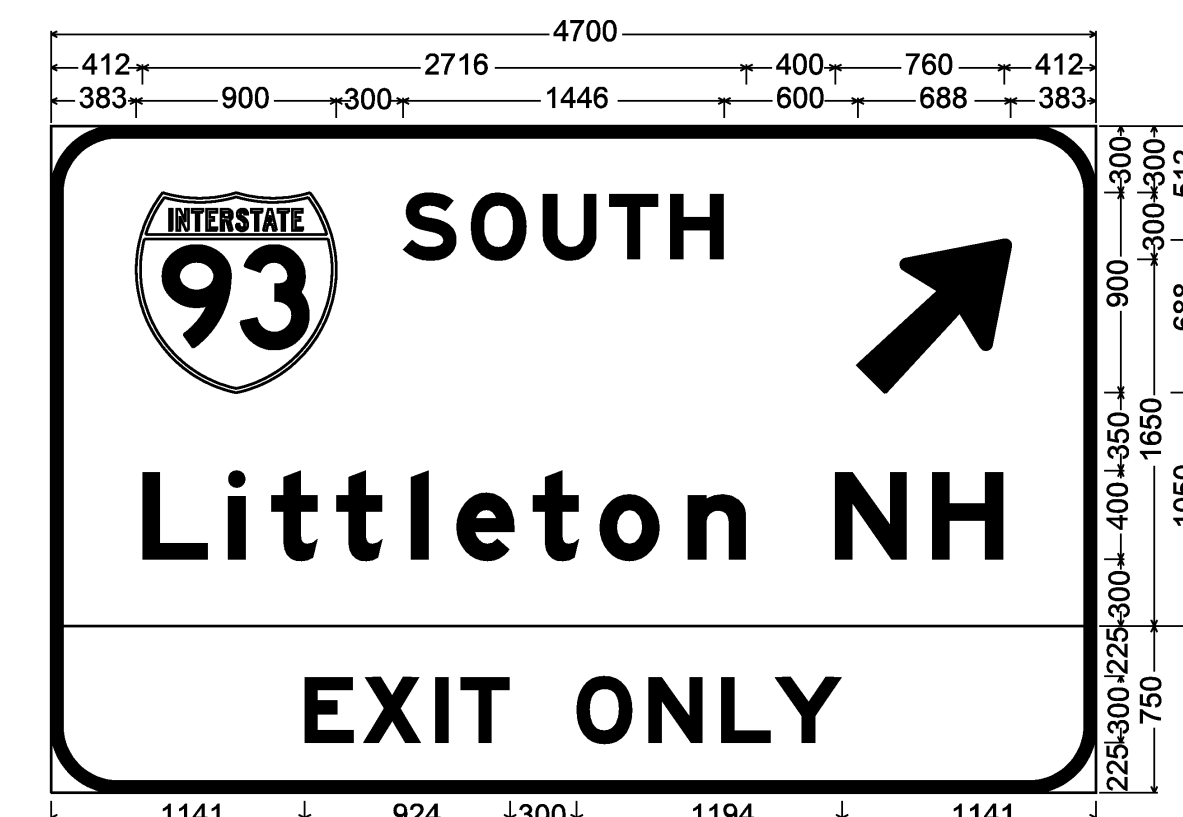


M.M. 127.195 SB



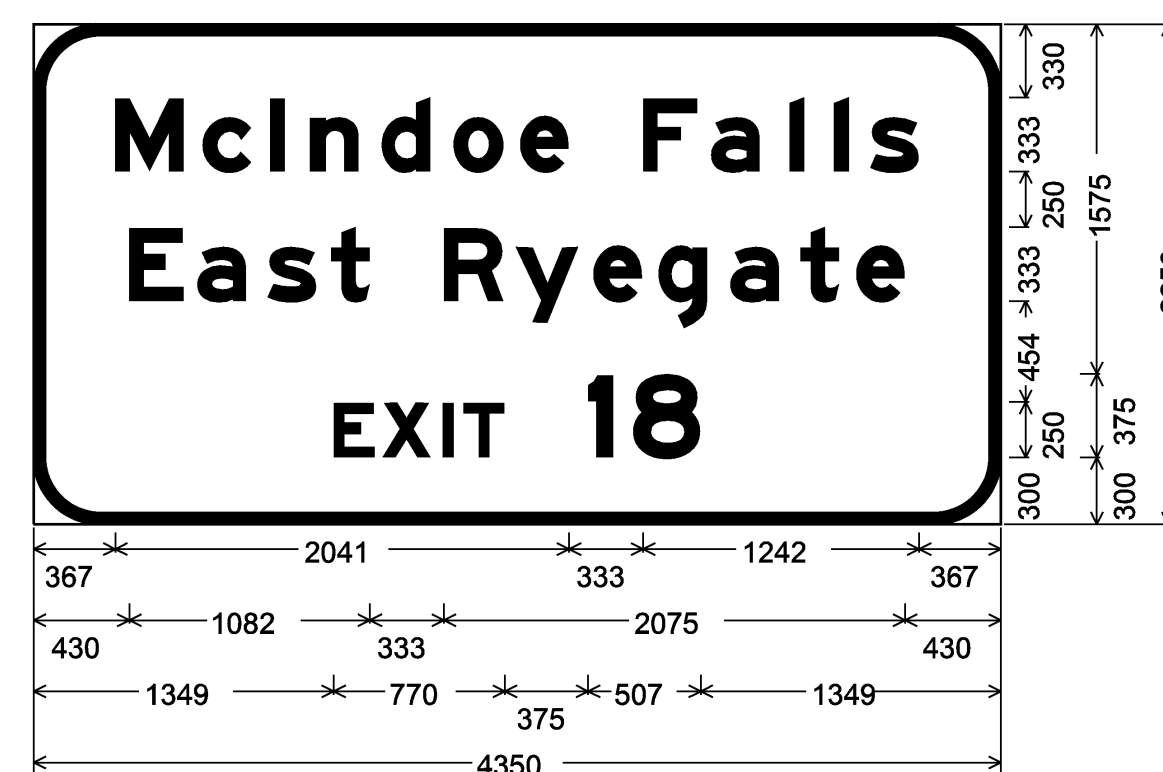
75mm Radius, 30mm Border, White on Green;
[Barnet] E Mod 2K; [White River Jct] E Mod 2K; [8] E Mod 2K; [58] E Mod 2K;

M.M. 128.700 SB
OVERHEAD



Main Panel: 300mm Radius, 50mm Border, White on Green;
[SOUTH] E Mod 2K; Arrow 160 - 875mm 45°; [Littleton NH] E Mod 2K;
Split Color, 300mm Radius, 50mm Border, Black on Yellow;
[EXIT ONLY] E Mod 2K;

M.M. 121.450 SB



E1-2; 300mm Radius, 50mm Border, White on Green;
[McIndoe Falls] E Mod 2K; [East Ryegate] E Mod 2K; [EXIT 18] E Mod 2K;

SEE GENERAL SIGN DETAIL NOTES ON SHEET 72.

**SIGN DETAIL
SHEET 5**

PROJECT NAME: RYEGATE-ST. JOHNSBURY

PROJECT NUMBER: IM 09I-2(73)

FILE NAME: 97194s-details.dgn

PROJECT LEADER: CRB

DESIGNED BY: PTS

CLD REF. NO.: 97-0194

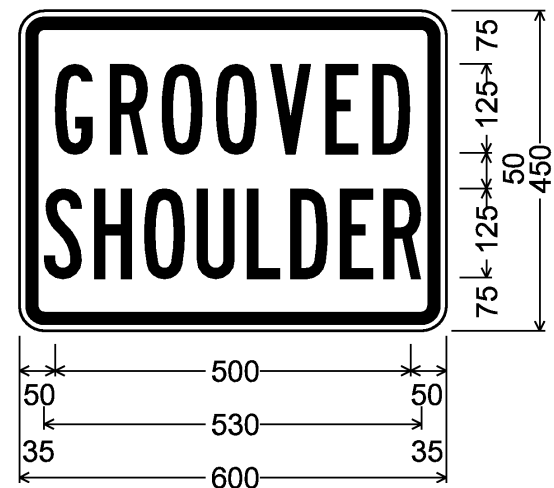
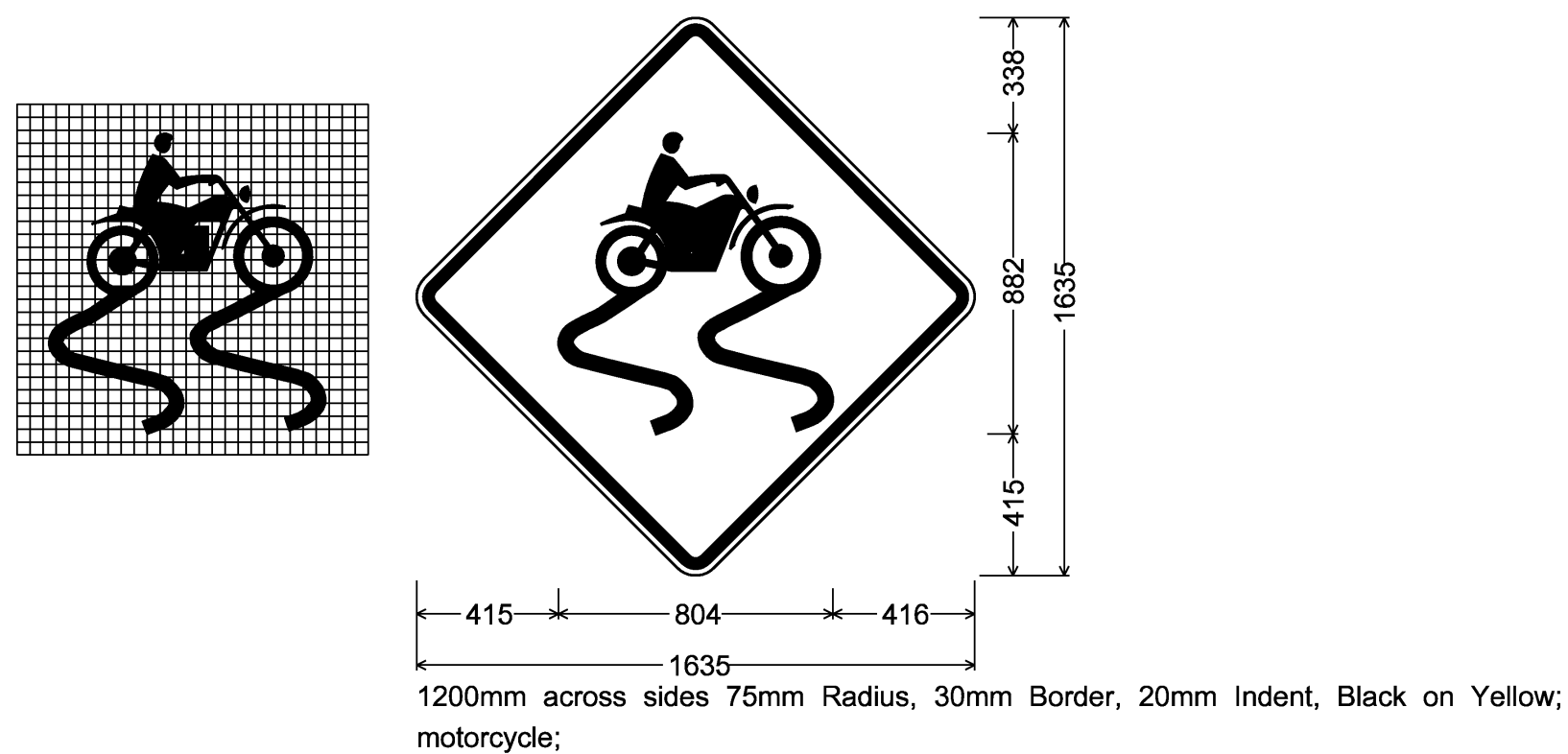
PLOT DATE: 12/13/2006

DRAWN BY: JCS

CHECKED BY: DAM

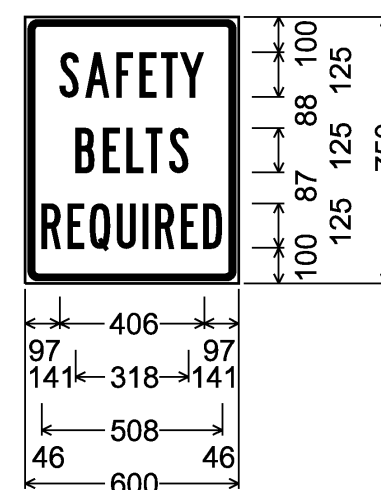
SHEET 76 OF 88

MISC.

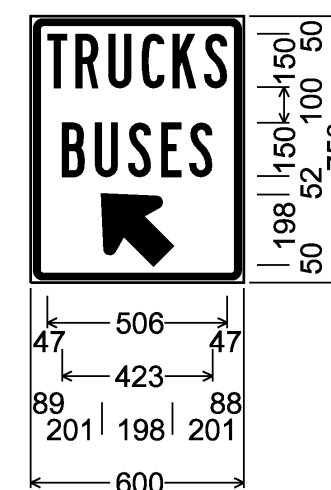


35mm Radius, 15mm Border, 10mm Indent, Black on Yellow;
[GROOVED] B;
[SHOULDER] B 70% spacing;

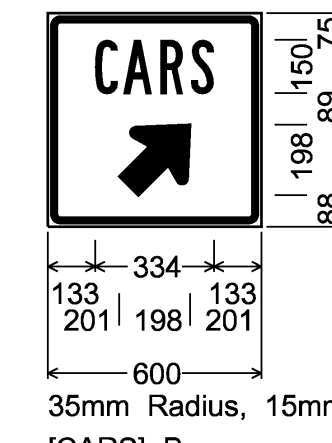
PARKING AREA
SCENIC VIEW



35mm Radius, 15mm Border, 10mm Indent, Black on White;
[SAFETY] B;
[BELTS] B;
[REQUIRED] B 80% spacing;

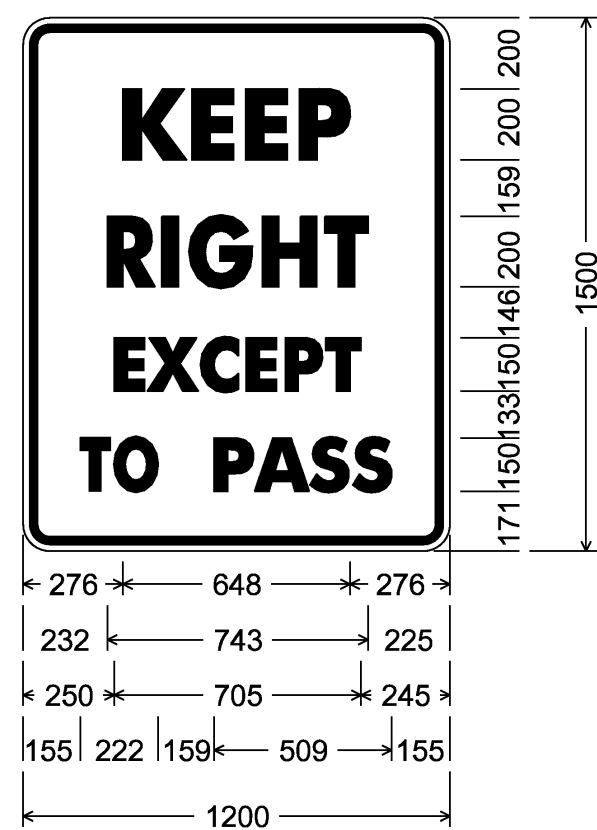


35mm Radius, 15mm Border, 10mm Indent, White on Blue;
[TRUCKS] B;
[BUSES] B;
Standard Arrow Custom 243mm X 214mm 135°;



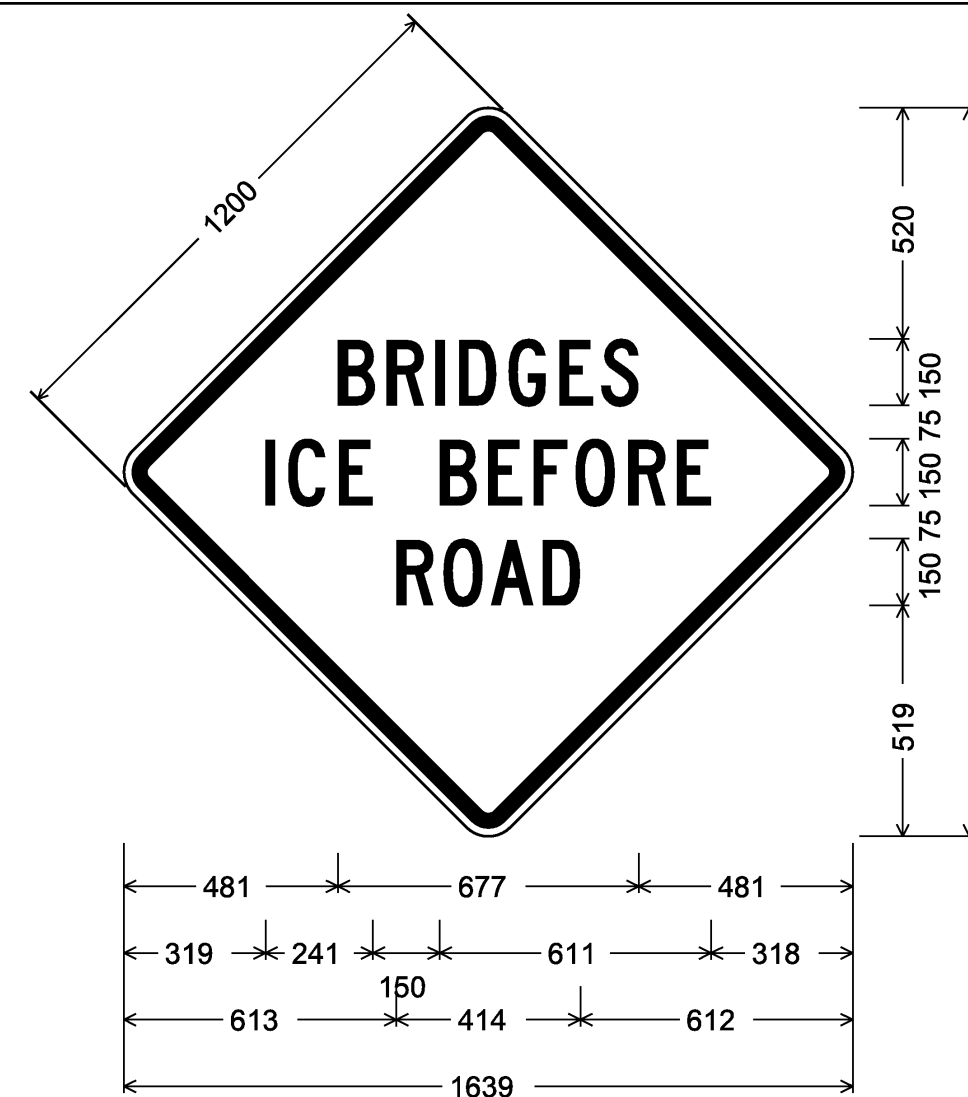
35mm Radius, 15mm Border, 10mm Indent, White on Blue;
[CARS] B;
Standard Arrow Custom 243mm X 214mm 45°;

MISC.



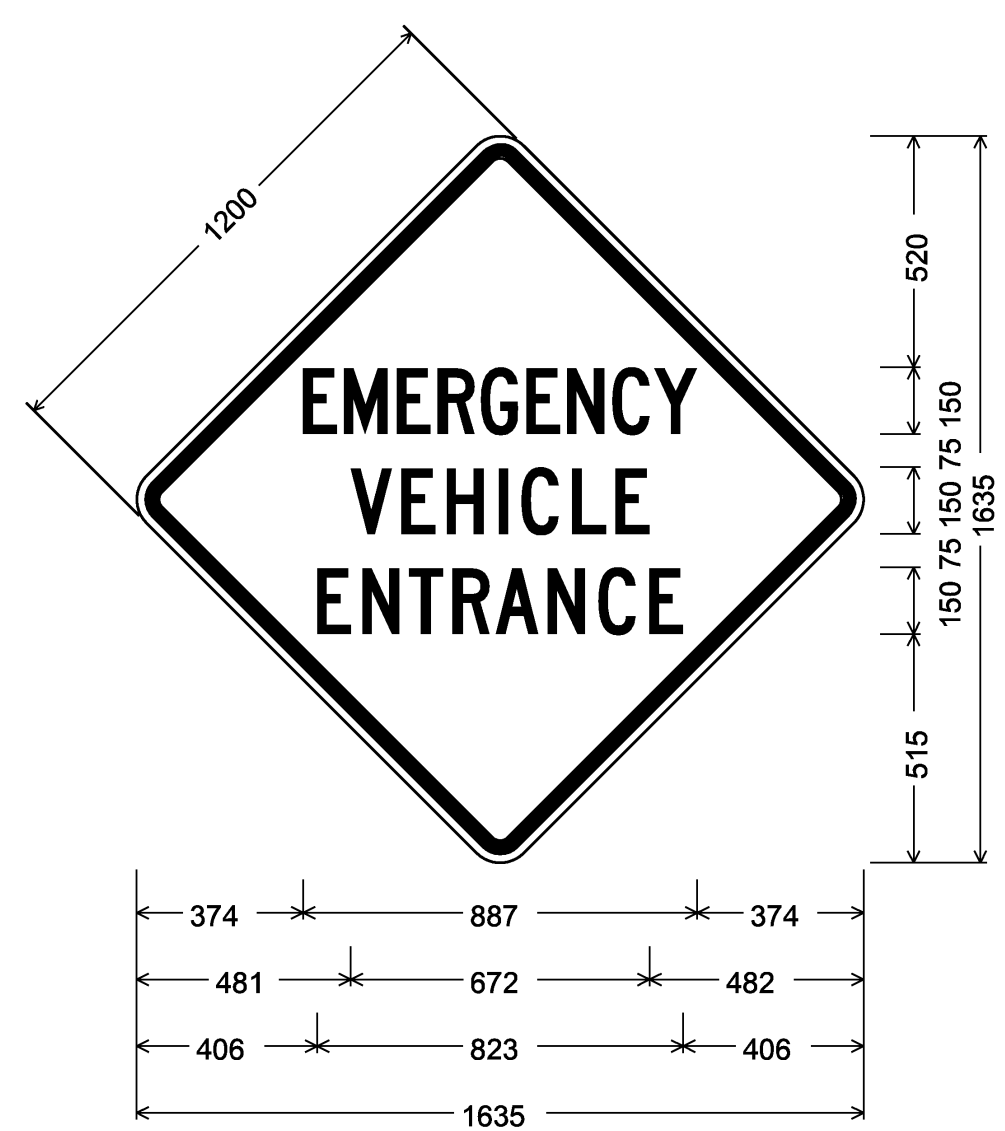
VR-132;
75mm Radius, 22mm Border, 20mm Indent, Black on White;
[KEEP] D, [RIGHT] D
[EXCEPT] D, [TO] D, [PASS] D

MISC.



1200mm across sides 70mm Radius, 30mm Border, 20mm Indent, Black on Yellow;
[BRIDGES] C 2K;
[ICE BEFORE] C 2K; [ROAD] C 2K;

MISC.



1200mm across sides 75mm Radius, 30mm Border, 20mm Indent, Black on Yellow;
[EMERGENCY] C 2K 60% spacing;
[VEHICLE] C 2K; [ENTRANCE] C 2K;

SEE GENERAL SIGN DETAIL NOTES ON SHEET 72.

**SIGN DETAIL
SHEET 6**

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 09I-2(73)

FILE NAME: 97194s-details.dgn
PROJECT LEADER: CRB
DESIGNED BY: PTS
CLD REF. NO.: 97-0194

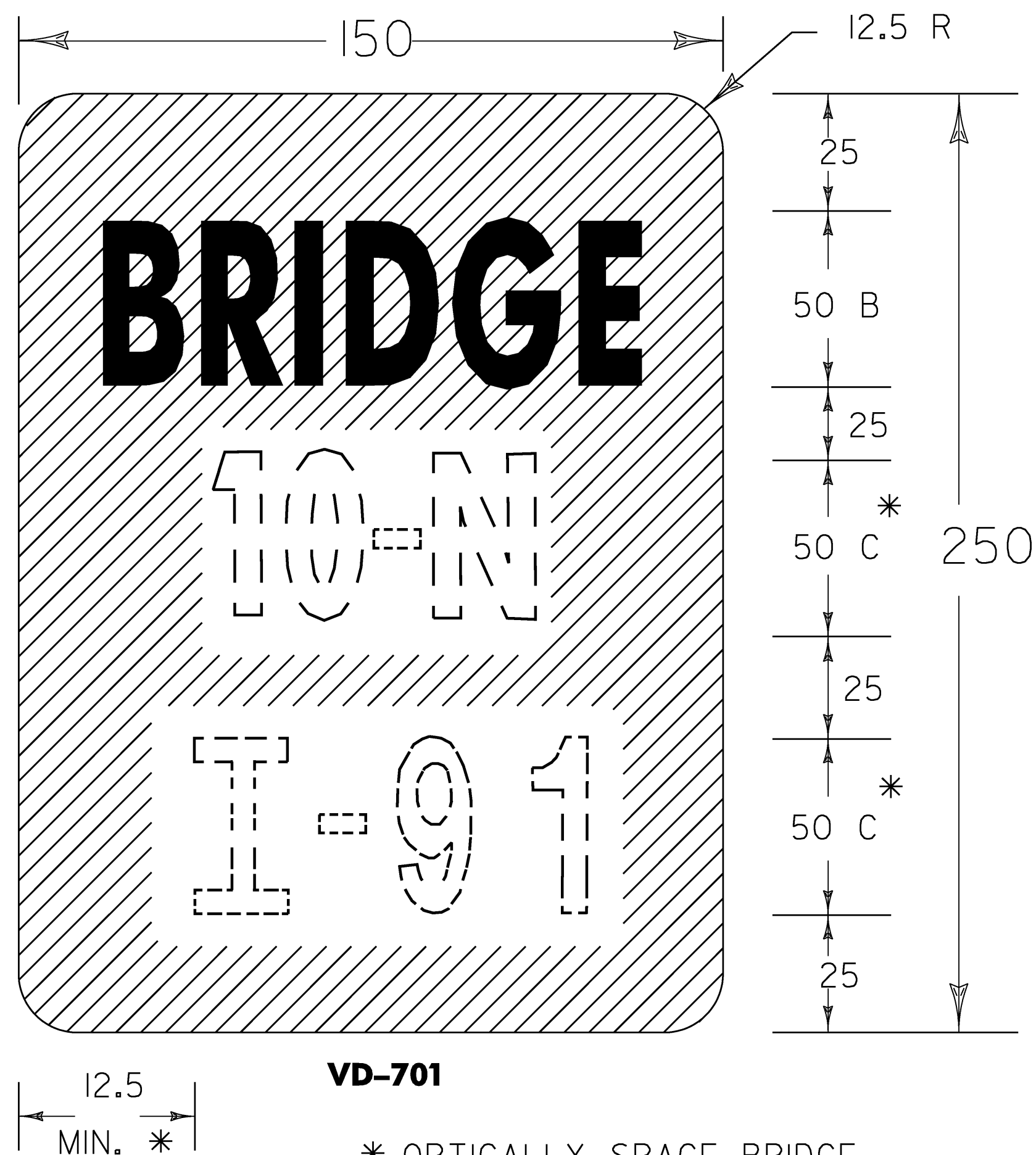
PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 77 OF 88

I-91

50

HYPHEN DETAIL

FOR EXAMPLE, ROUTE NUMBERS
SHALL APPEAR AS: I-91, US5, VT22

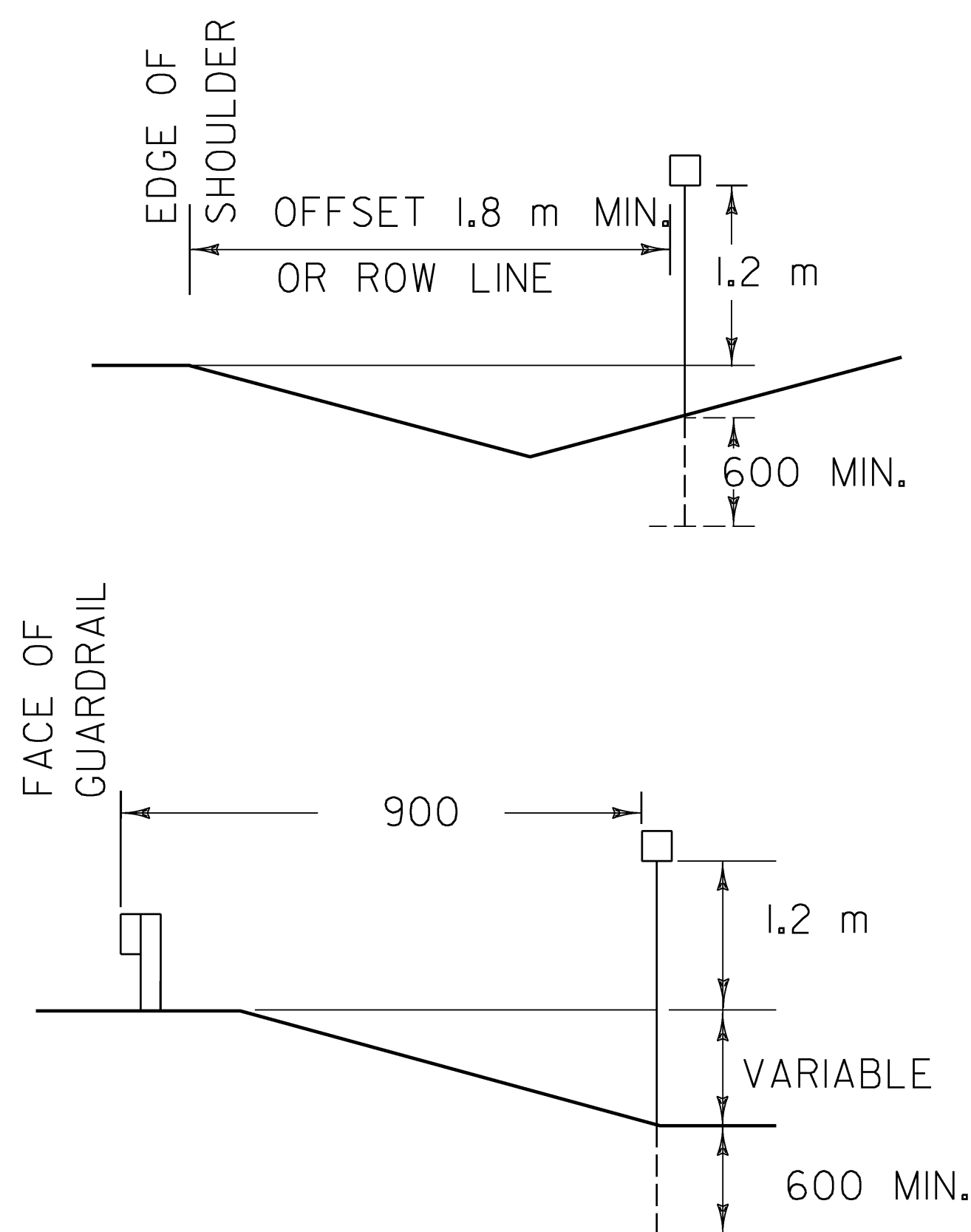


VD-701

* OPTICALLY SPACE BRIDGE
AND ROUTE NUMBERS.
SERIES B LETTERS MAY
BE USED TO MAINTAIN
VISUAL INTEGRITY.

THE FOLLOWING BRIDGES ARE NOT SHOWN ON THE PLANS
BUT REQUIRE NEW PLAQUES. QUANTITIES FOR REMOVAL OF
EXISTING PLAQUES AND INSTALLATION OF NEW PLAQUES AND
POSTS HAVE BEEN ESTIMATED.

NB		SB	
112.563	68-1	112.563	68-1
112.941	68-3N	112.964	68-4S
114.181	69-4	114.181	69-4
118.032	69-14	118.032	69-14
118.131	69-15	118.131	69-15
118.940	70-4N	118.964	70-4S
122.514	75-1N	122.564	75-1S
126.740	79-7N	126.679	79-7S
128.204	80-2	128.204	80-2



NOTES:

- GENERAL:**
DOTTED LINES AND NUMERALS INDICATE TEXT THAT VARIES.
- MATERIAL:**
THE SIGN BASE MATERIAL SHALL BE 1mm FLAT SHEET ALUMINUM.
- COLORS:**
THE SIGN SHALL HAVE A RETROREFLECTORIZED WHITE TEXT ON RETROREFLECTORIZED GREEN BACKGROUND. THE COLORS SHALL CONFORM WITH THOSE FOUND IN STANDARD COLOR TOLERANCE CHARTS AS APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- RETROREFLECTIVITY WILL BE EQUAL TO OR EXCEEDING ASTM TYPE III.
- LETTERING:**
LETTERS AND DIGITS SHALL CONFORM WITH THE STANDARD ALPHABETS FOR HIGHWAY SIGNS AS PRINTED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- POSTS:**
FLANGED CHANNEL STEEL 3 kg/m POSTS OR 45 mm SQUARE STEEL WITH 50 mm ANCHOR SHALL BE USED. POST SHALL BE A MINIMUM OF 2.4 m.

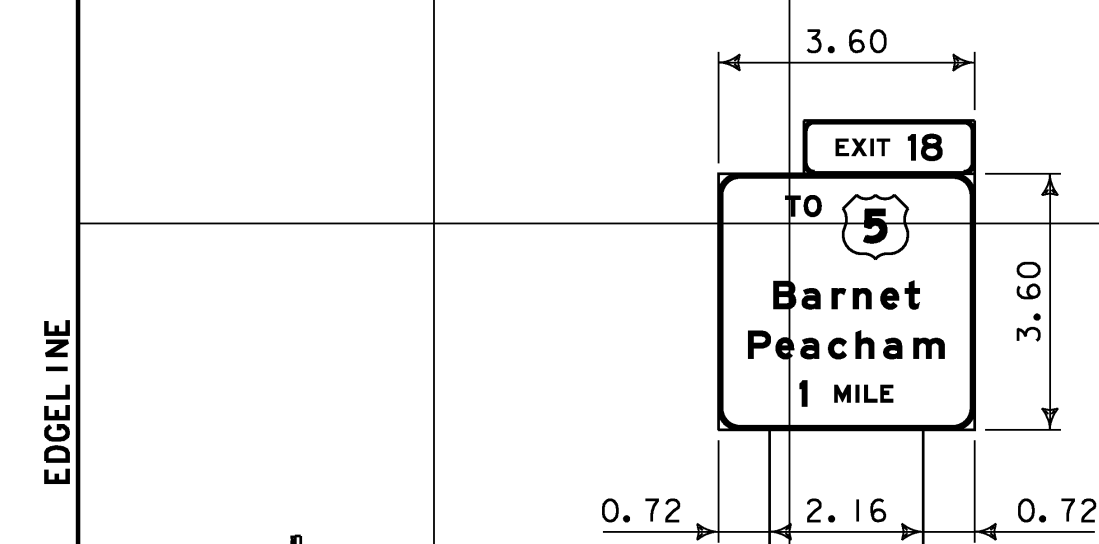
BRIDGE PLAQUE DETAIL

**SIGN DETAIL
SHEET 7**

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-details.dgn
PLOT DATE:	12/13/2006
PROJECT LEADER:	CRB
DRAWN BY:	JCS
DESIGNED BY:	DAM
CHECKED BY:	DAM
CLD REF. NO.:	97-0194
SHEET	78 OF 88

M.M. 119.240 NB

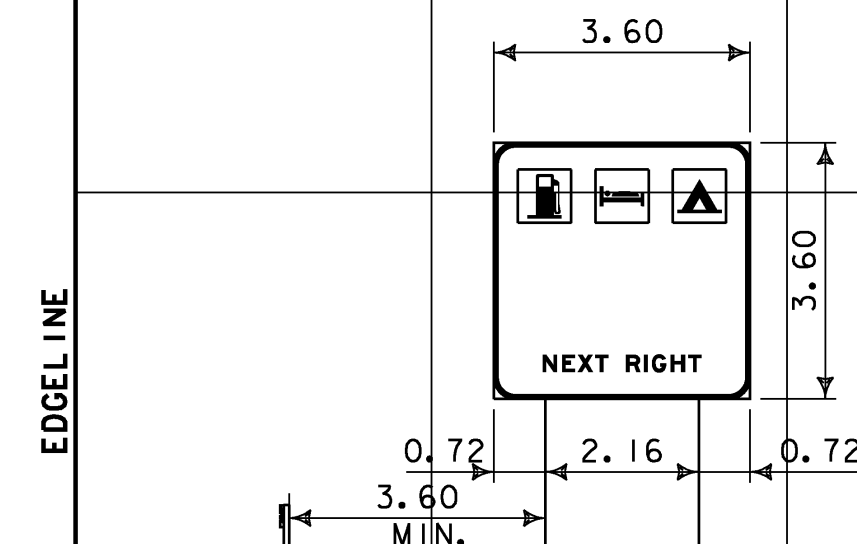
CABLE GUARDRAIL



LT. POST - 6.610 m
MID POST -
MID POST -
RT. POST - 6.610 m

M.M. 119.950 NB

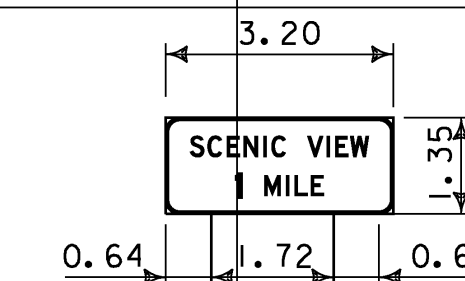
CABLE GUARDRAIL



LT. POST - 6.894 m
MID POST -
MID POST -
RT. POST - 7.520 m

M.M. 120.930 NB

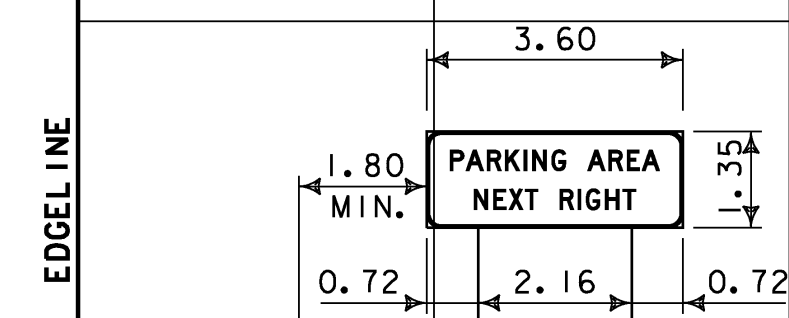
EDGE LINE



LT. POST - 5.298 m
MID POST -
MID POST -
RT. POST - 5.857 m

M.M. 113.140 NB

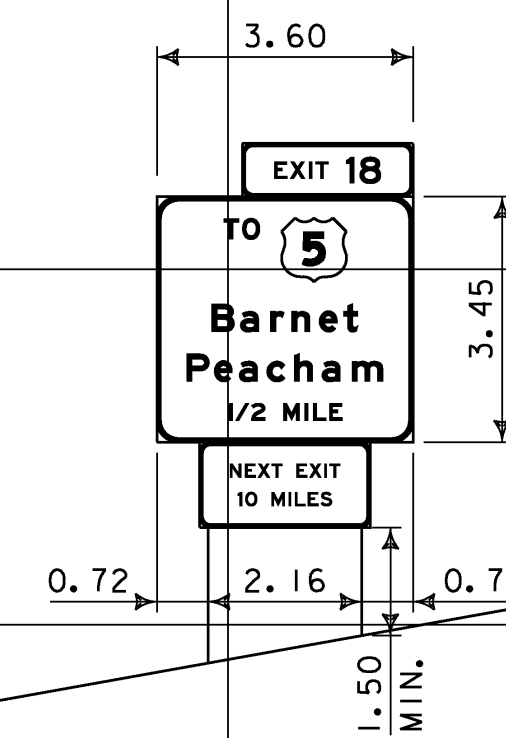
BRIDGE RAIL



LT. POST - 4.130 m
MID POST -
MID POST -
RT. POST - 4.584 m

M.M. 119.731 NB

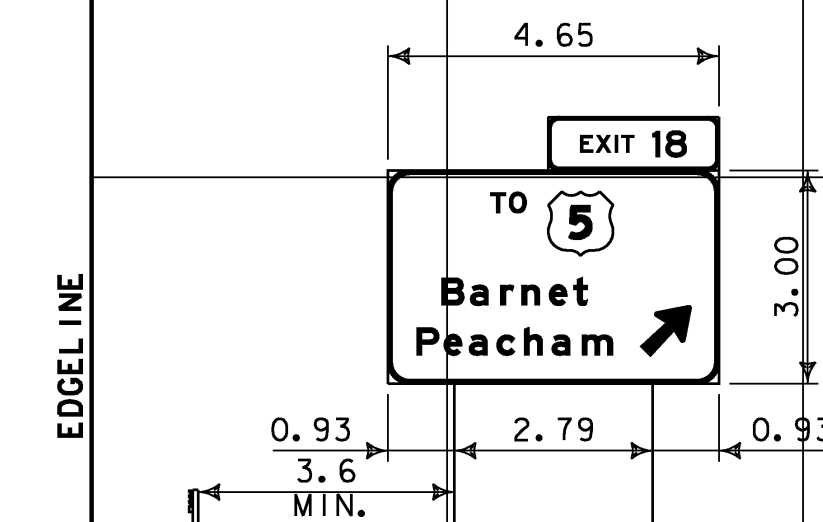
EDGE LINE



LT. POST - 6.558 m
MID POST -
MID POST -
RT. POST - 6.171 m

M.M. 120.170 NB

CABLE GUARDRAIL

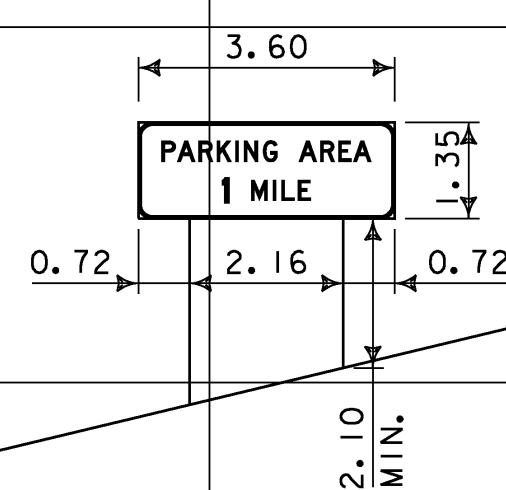


LT. POST - 6.556 m
MID POST -
MID POST -
RT. POST - 7.728 m

SEE FOOTING DETAIL IN MISC. DETAILS

M.M. 112.150 NB

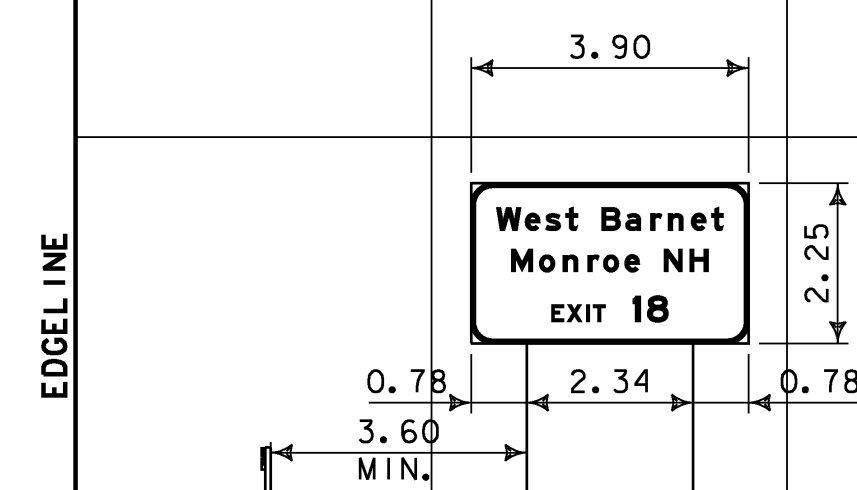
EDGE LINE



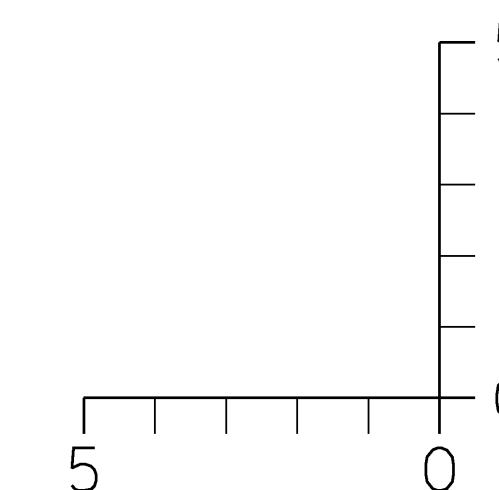
LT. POST - 3.968 m
MID POST -
MID POST -
RT. POST - 3.450 m

M.M. 119.480 NB

CABLE GUARDRAIL



LT. POST - 5.589 m
MID POST -
MID POST -
RT. POST - 6.315 m



DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE. REFER TO STANDARD SHEETS FOR PLACEMENT GUIDELINES.

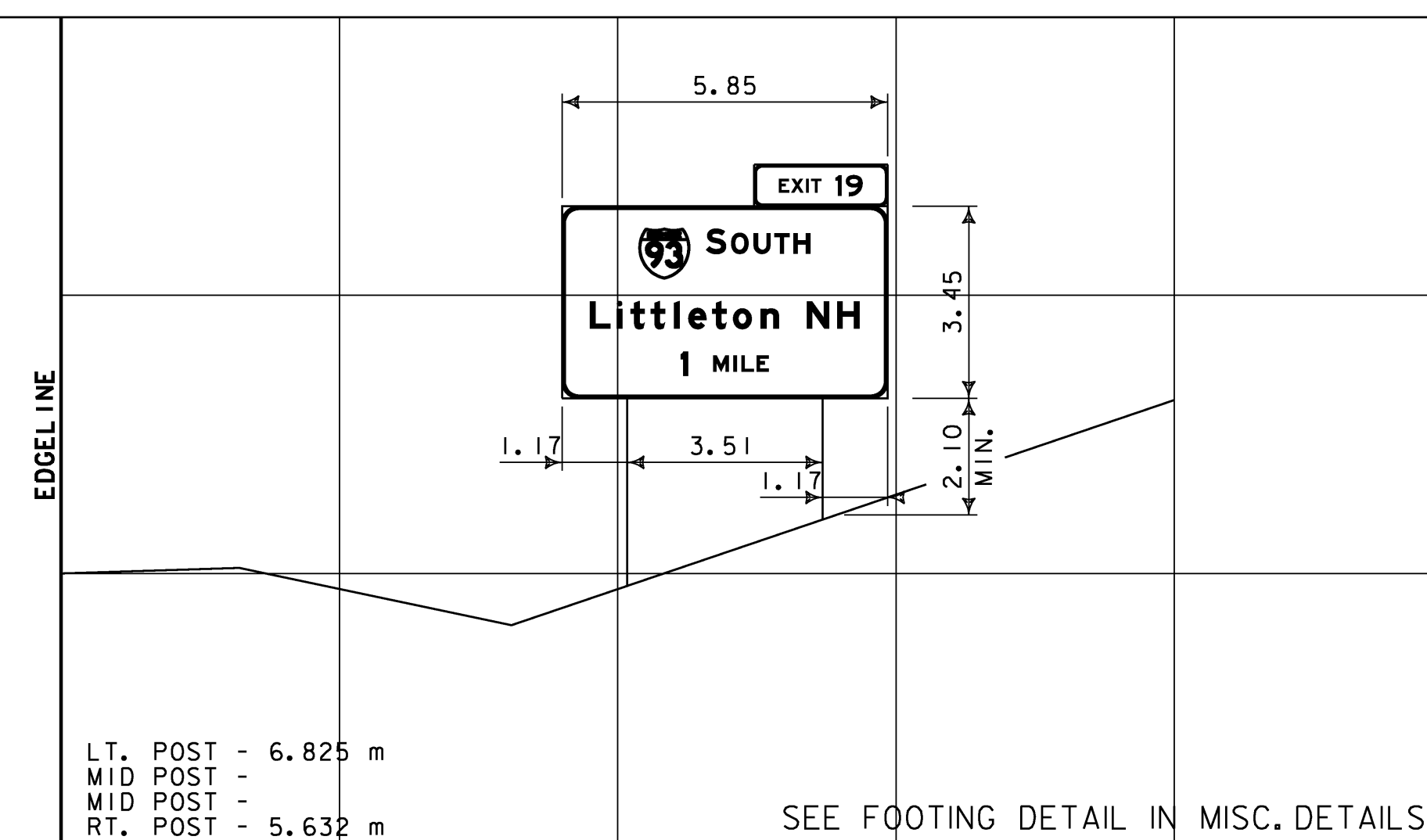
SIGN CROSS SECTION SHEET 1

PROJECT NAME: RYEGATE-ST. JOHNSBURY
PROJECT NUMBER: IM 091-2(73)

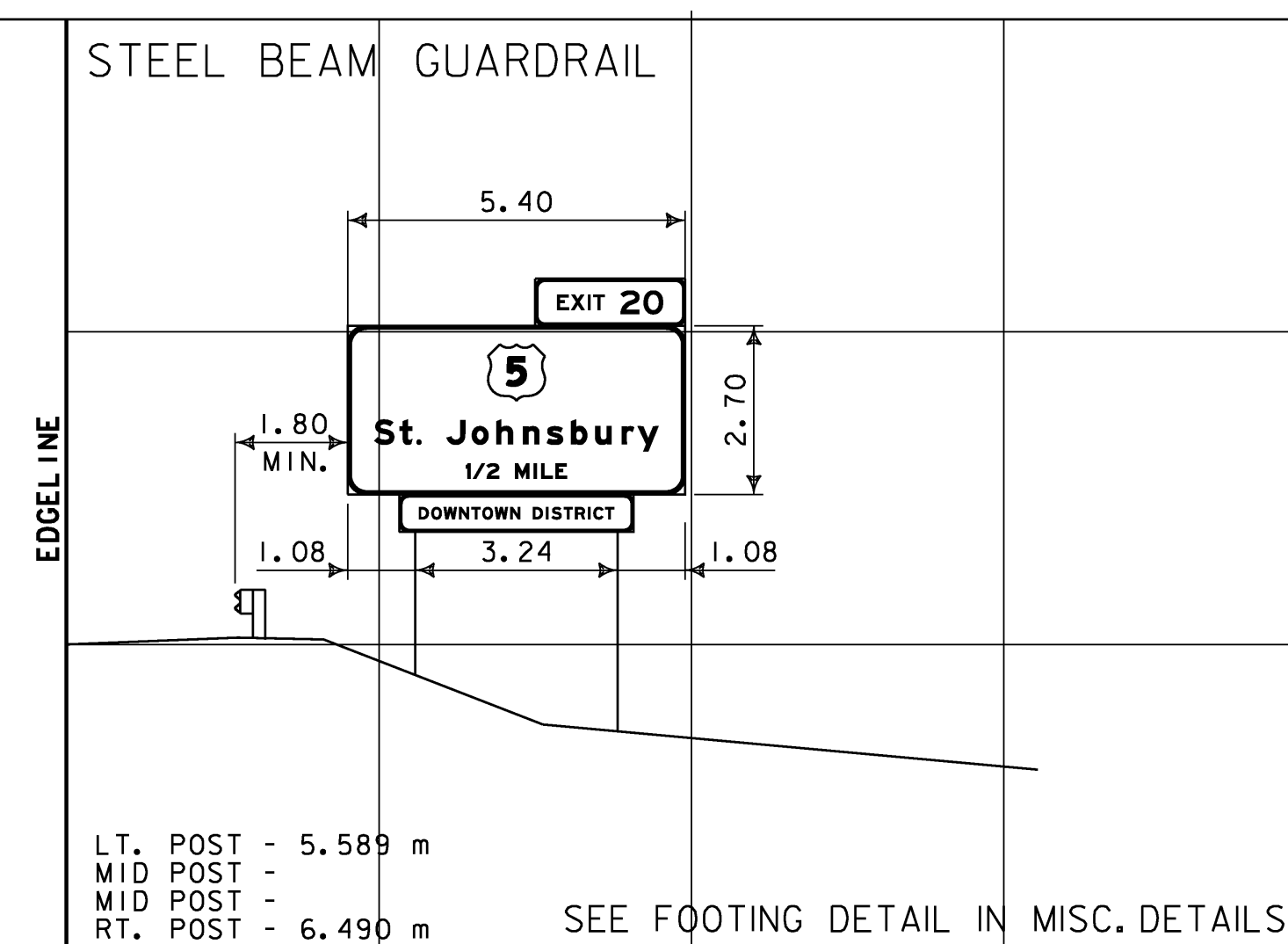
FILE NAME: 97194s-xs.dgn
PROJECT LEADER: CRB
DESIGNED BY: DAM
CLD REF. NO.: 97-0194

PLOT DATE: 12/13/2006
DRAWN BY: JCS
CHECKED BY: DAM
SHEET 79 OF 88

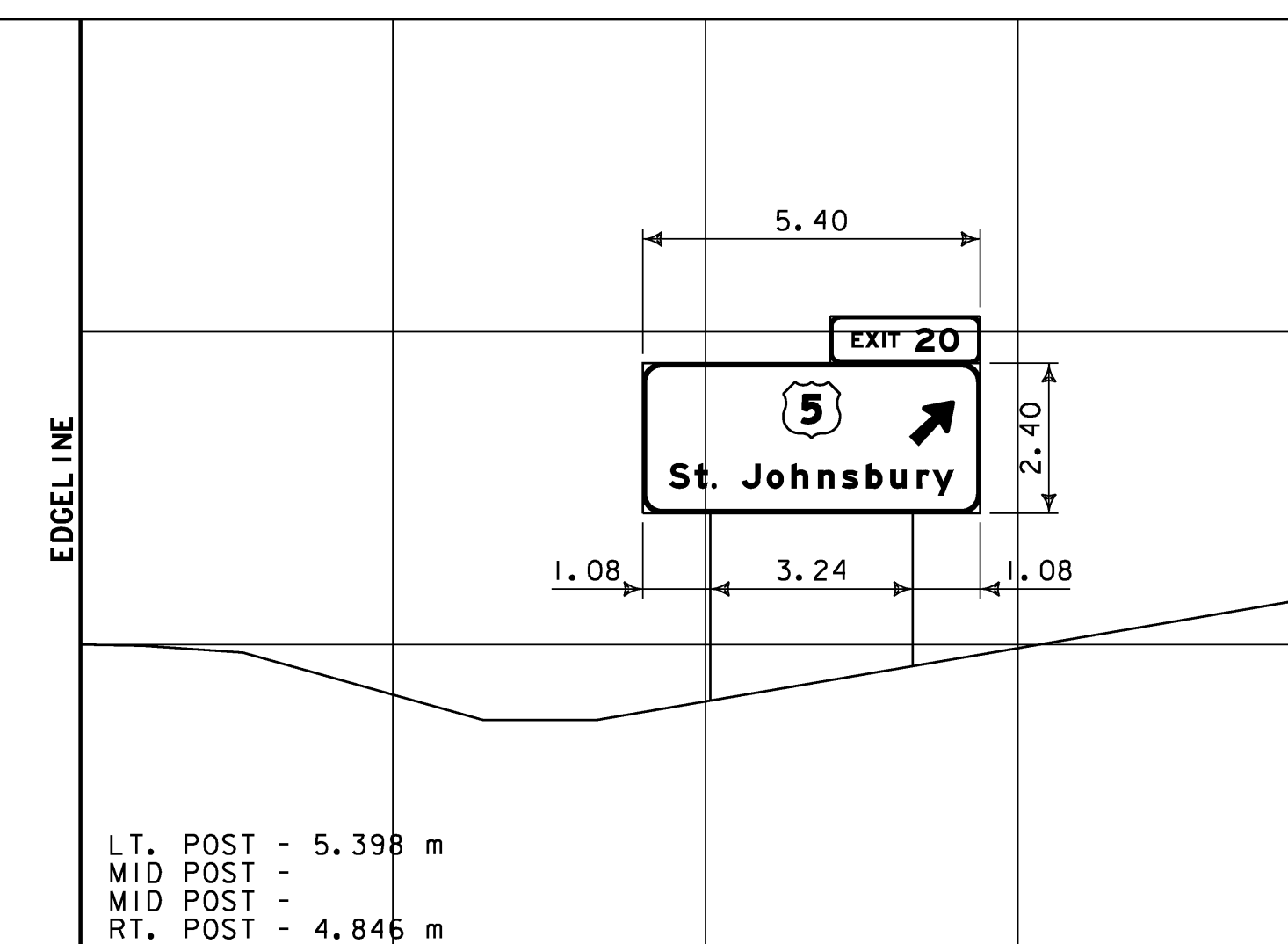
M.M. 127.220 NB



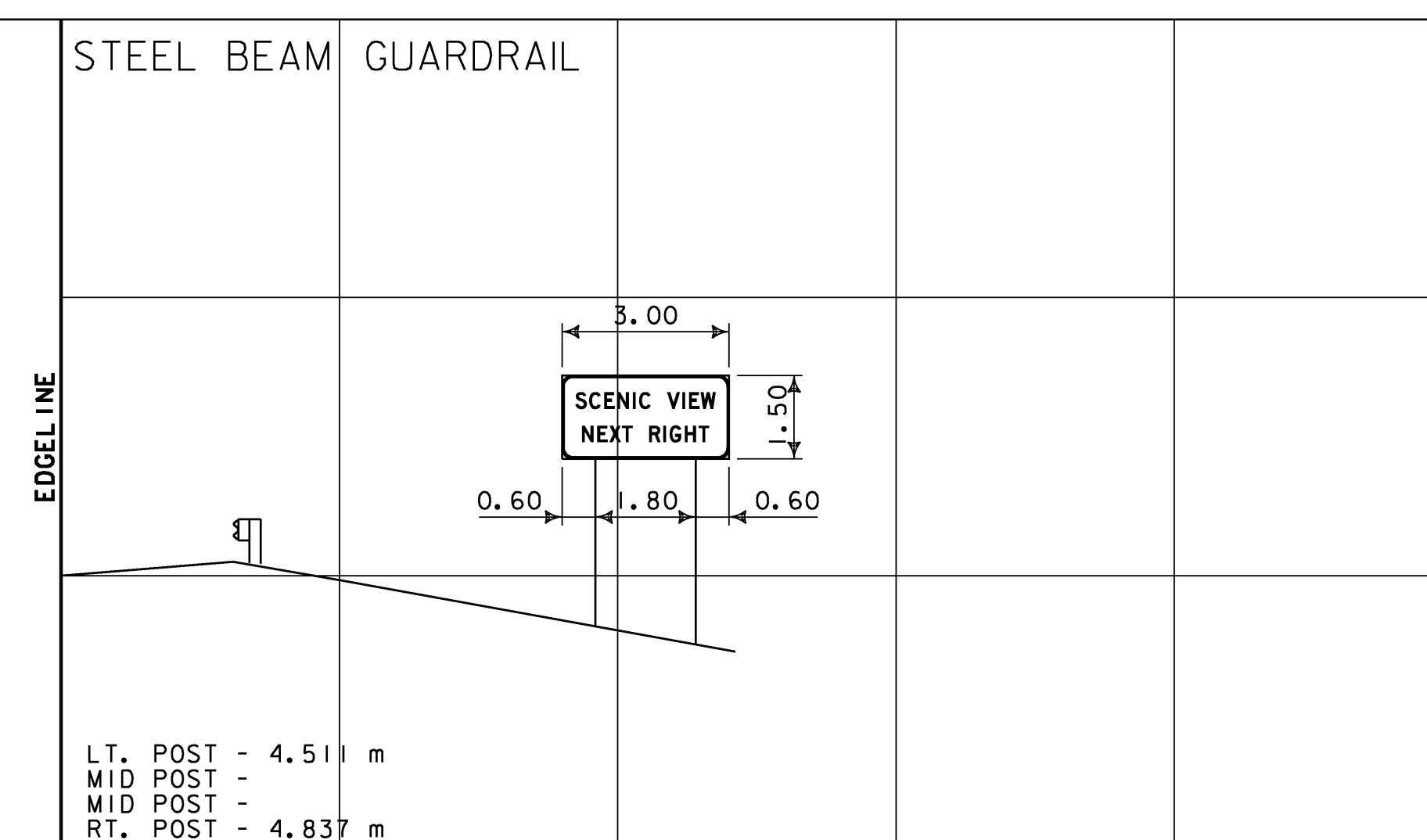
M.M. 128.225 NB



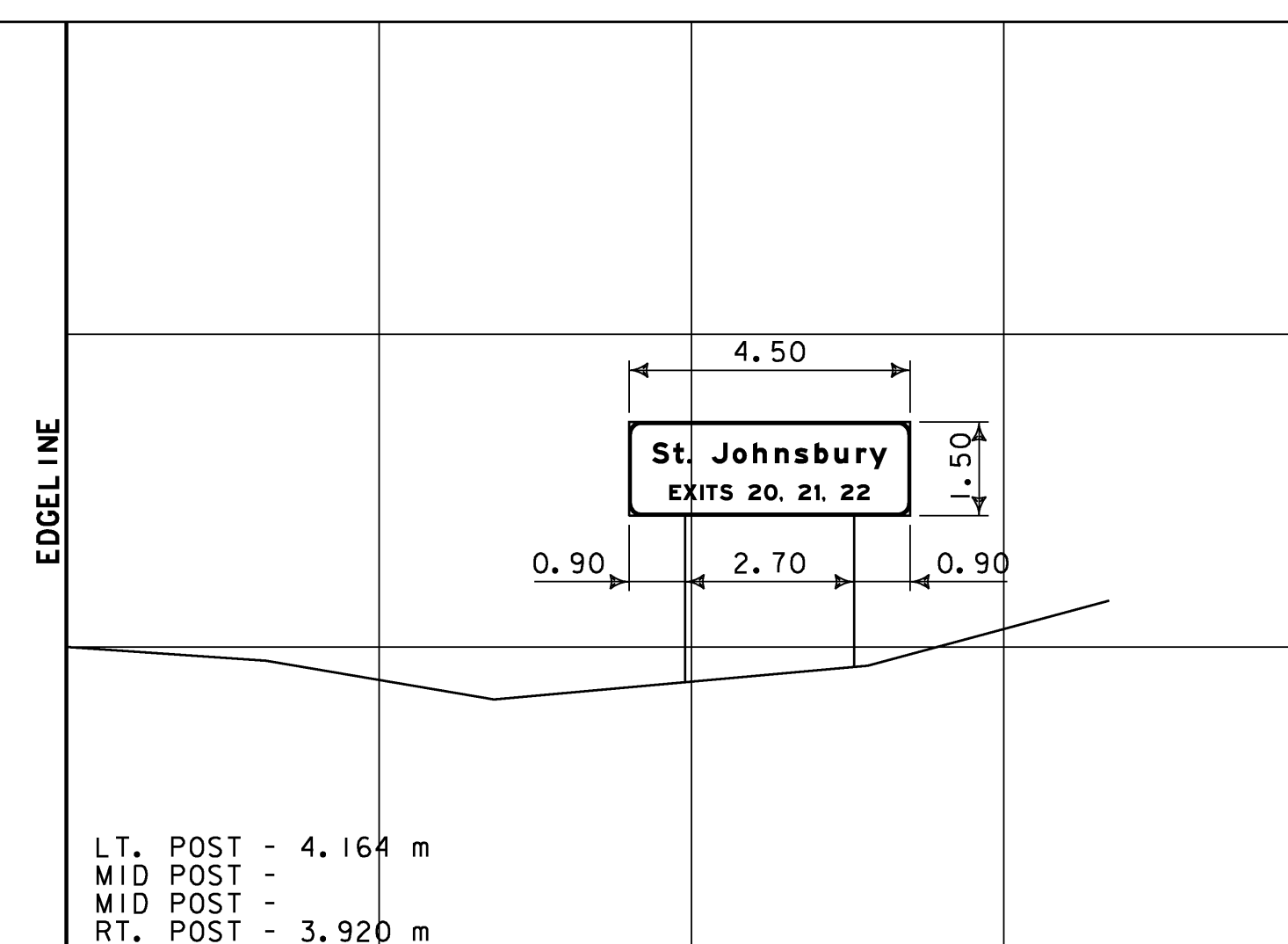
M.M. 128.700 NB



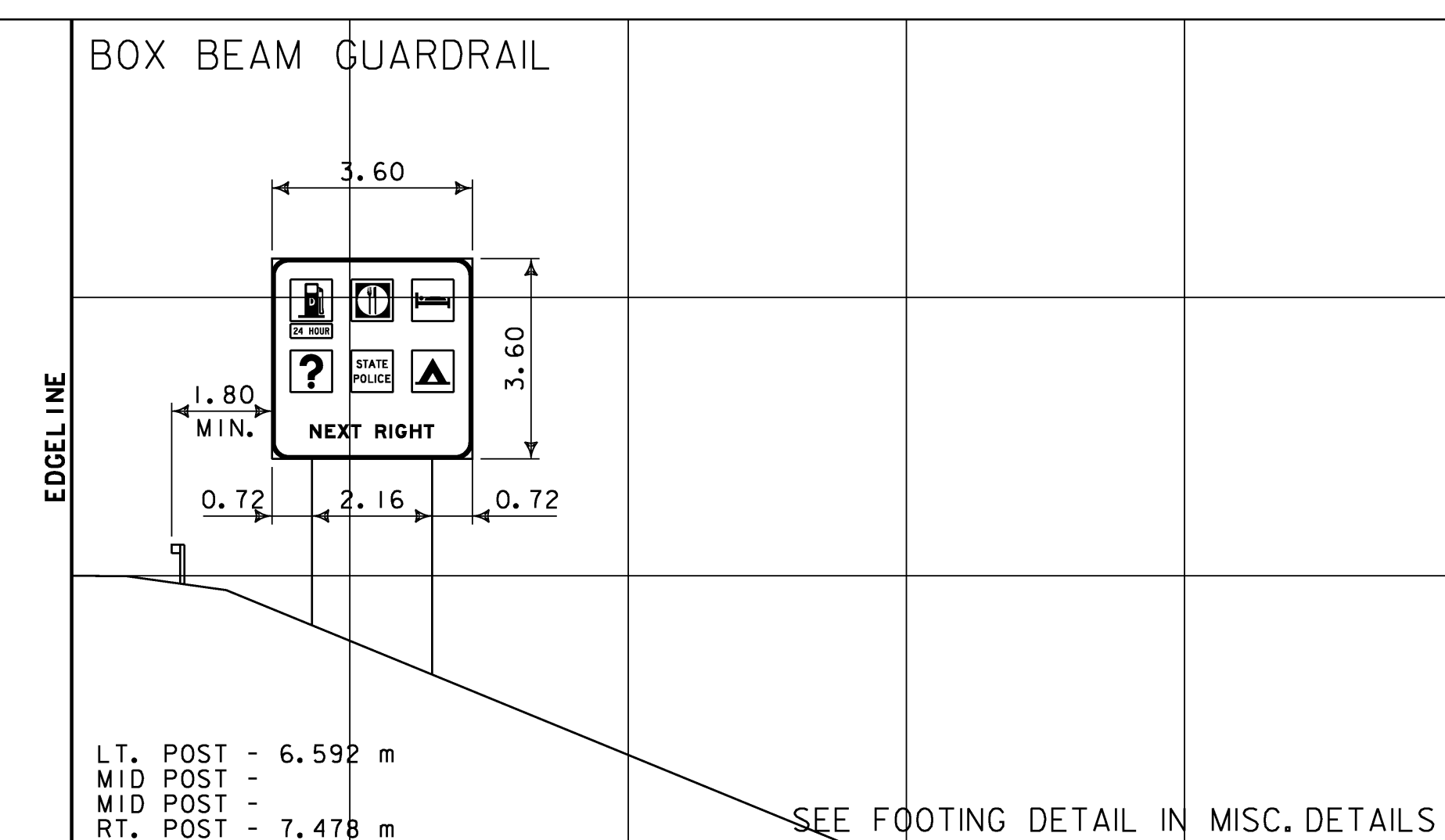
M.M. 121.440 NB



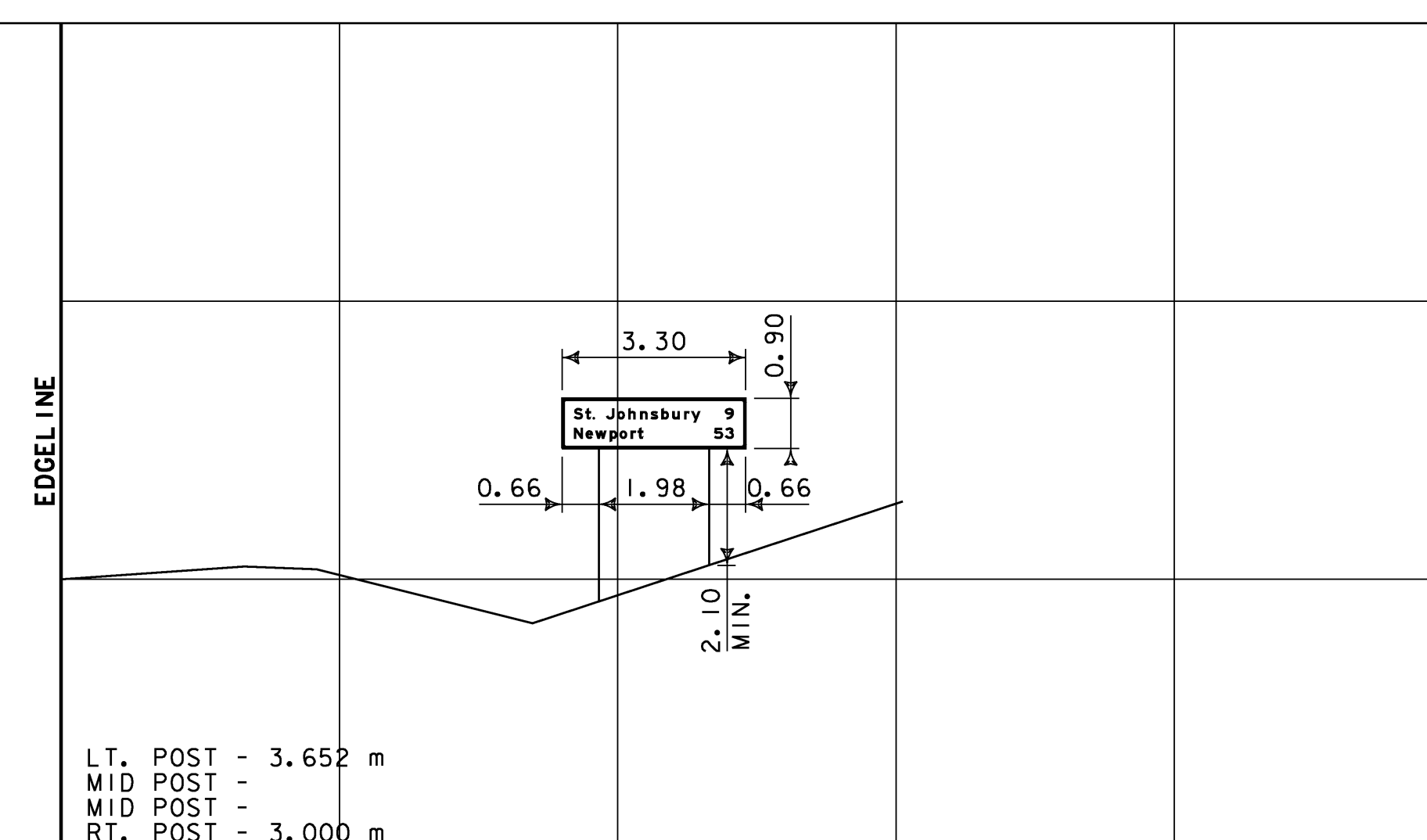
M.M. 127.800 NB



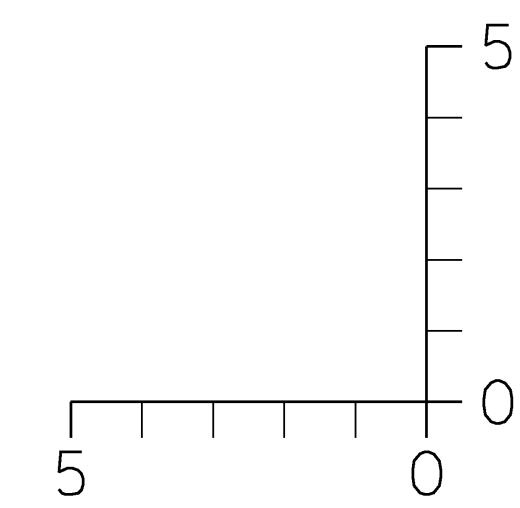
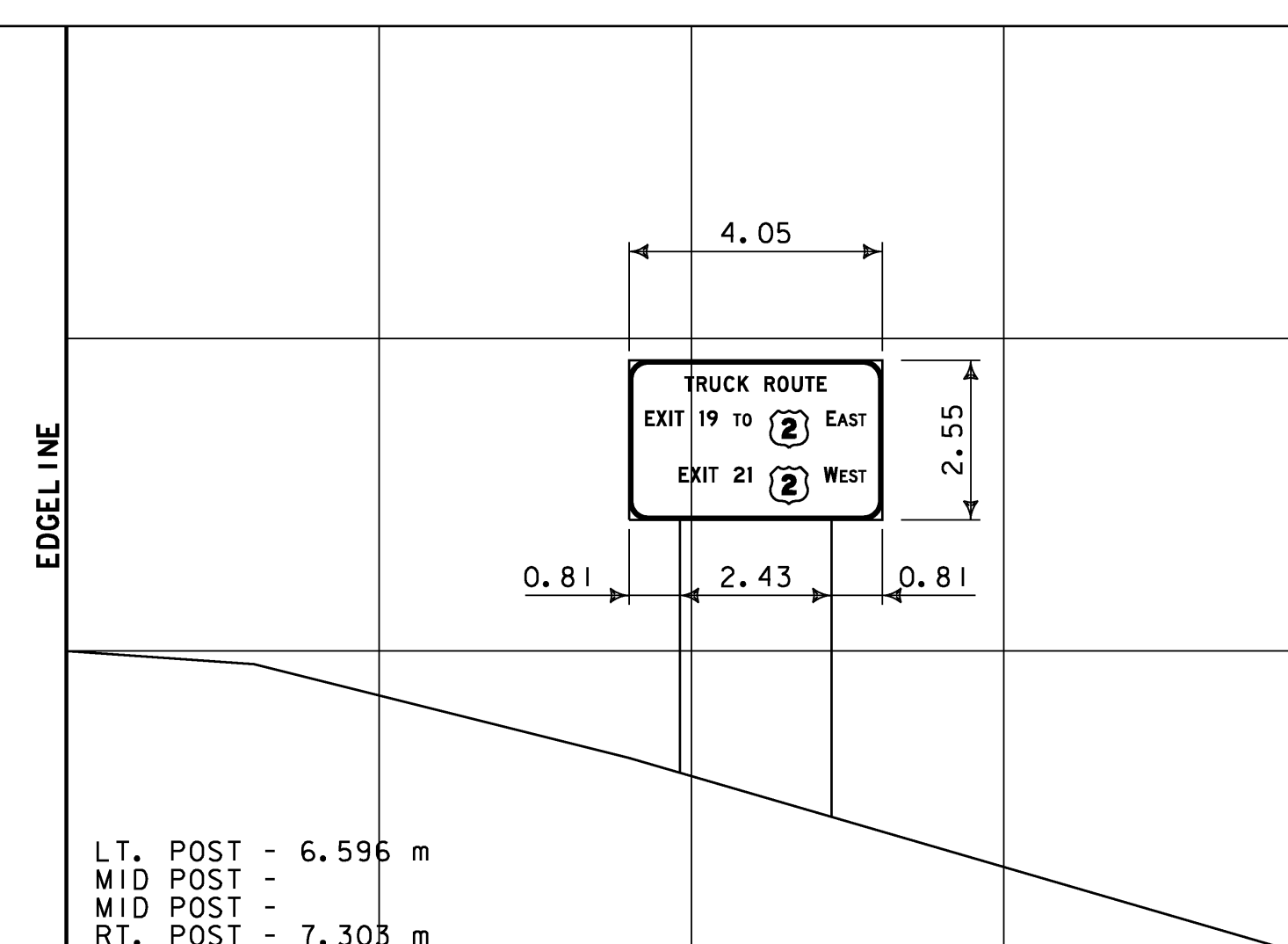
M.M. 128.550 NB



M.M. 121.260 NB



M.M. 127.420 NB

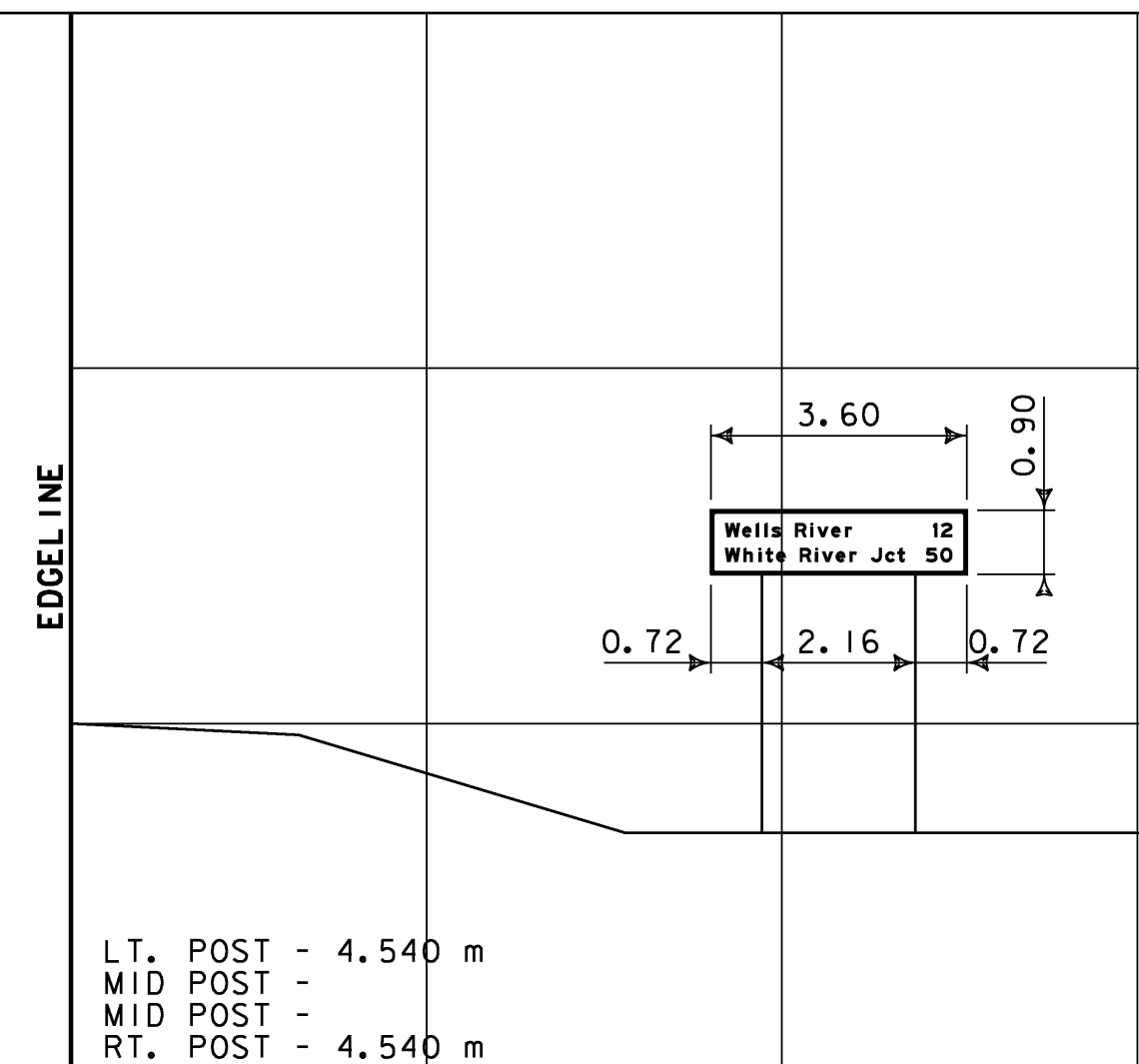


DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE. REFER TO STANDARD SHEETS FOR PLACEMENT GUIDELINES.

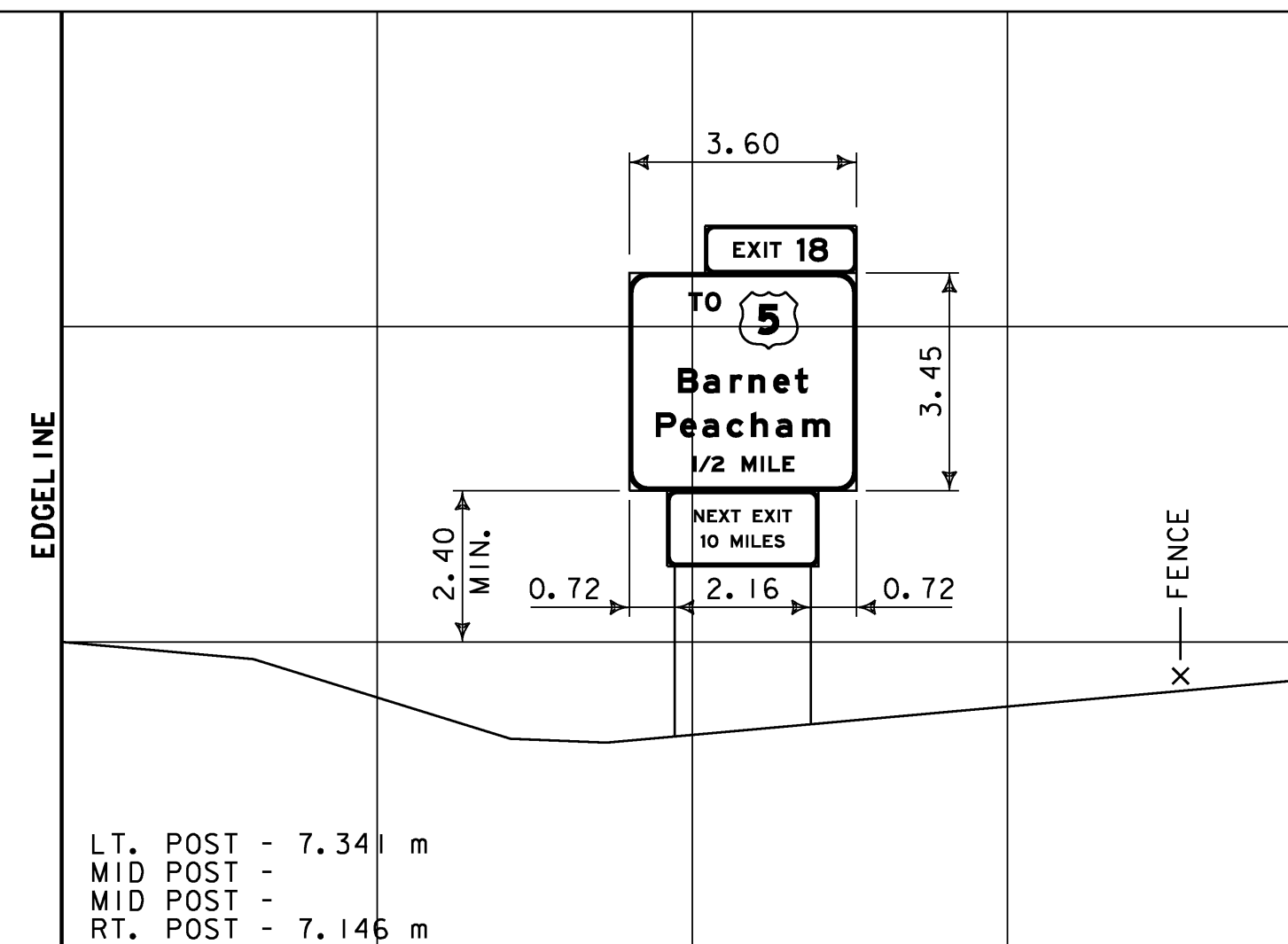
SIGN CROSS SECTION SHEET 2

PROJECT NAME:	RYEGATE-ST. JOHNSBURY
PROJECT NUMBER:	IM 091-2(73)
FILE NAME:	97194s-xs.dgn
PLOT DATE:	12/13/2006
PROJECT LEADER:	CRB
DRAWN BY:	JCS
DESIGNED BY:	DAM
CHECKED BY:	DAM
CLD REF. NO.:	97-0194
SHEET	80 OF 88

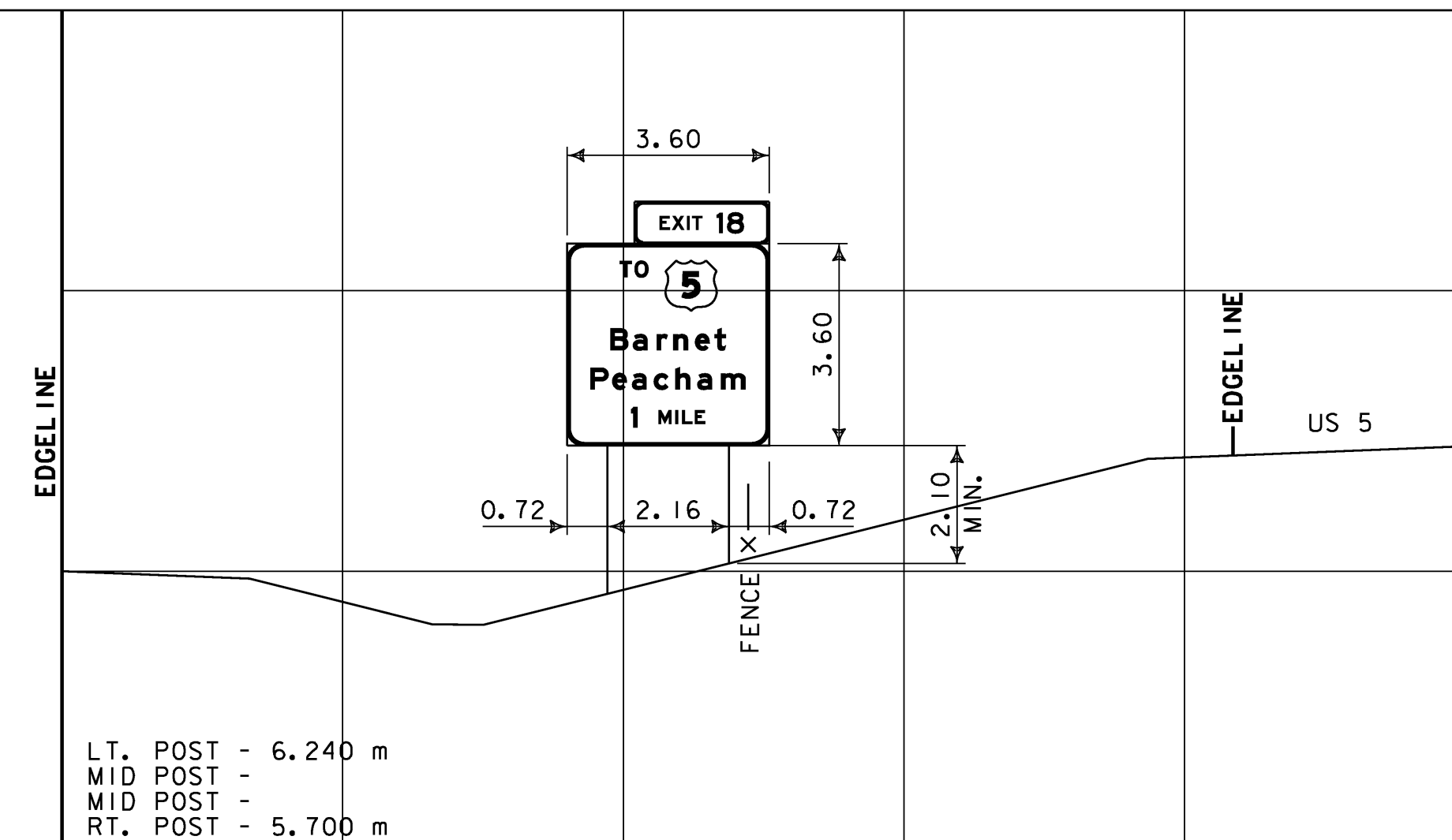
M.M. 119.603 SB



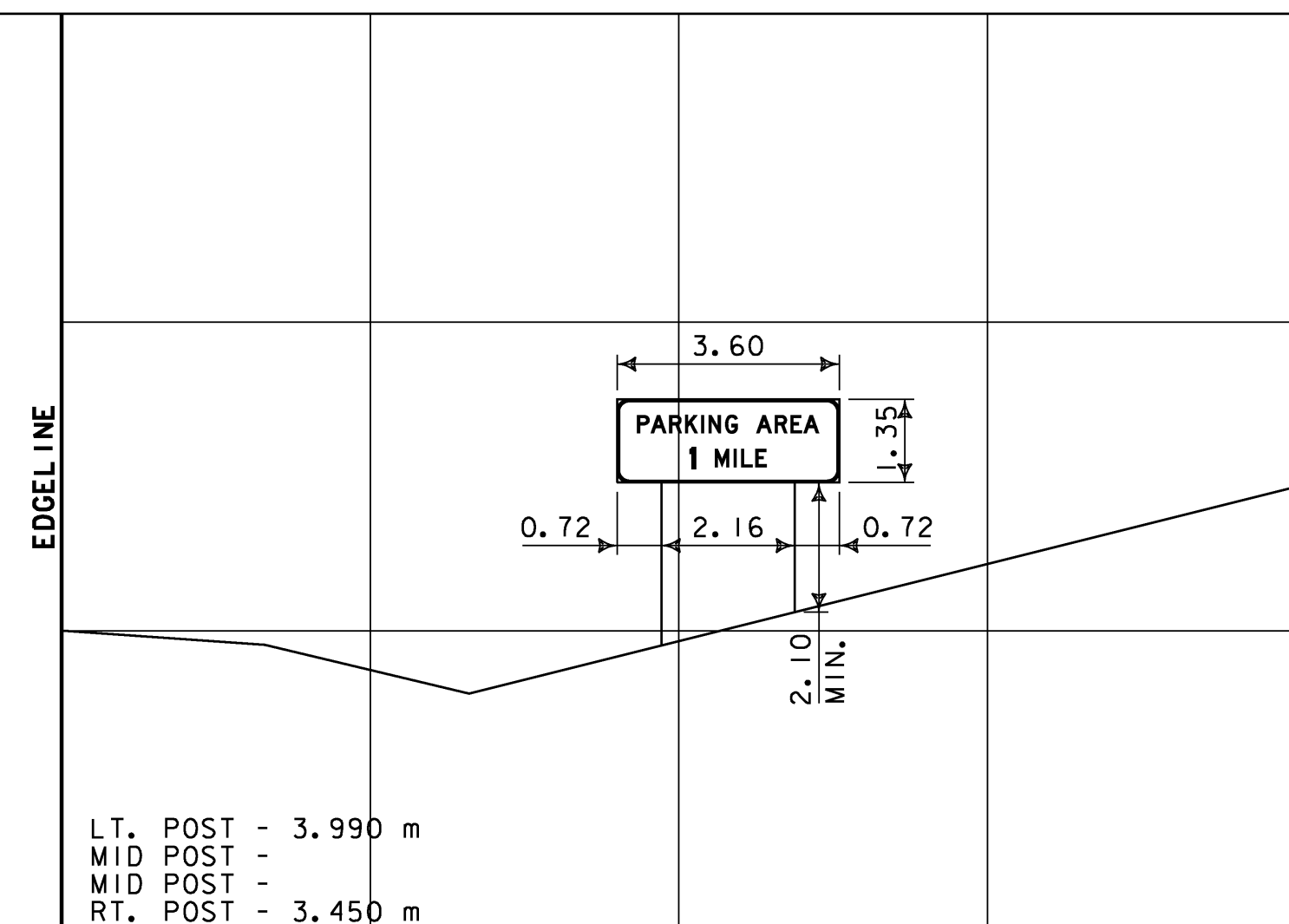
M.M. 121.200 SB



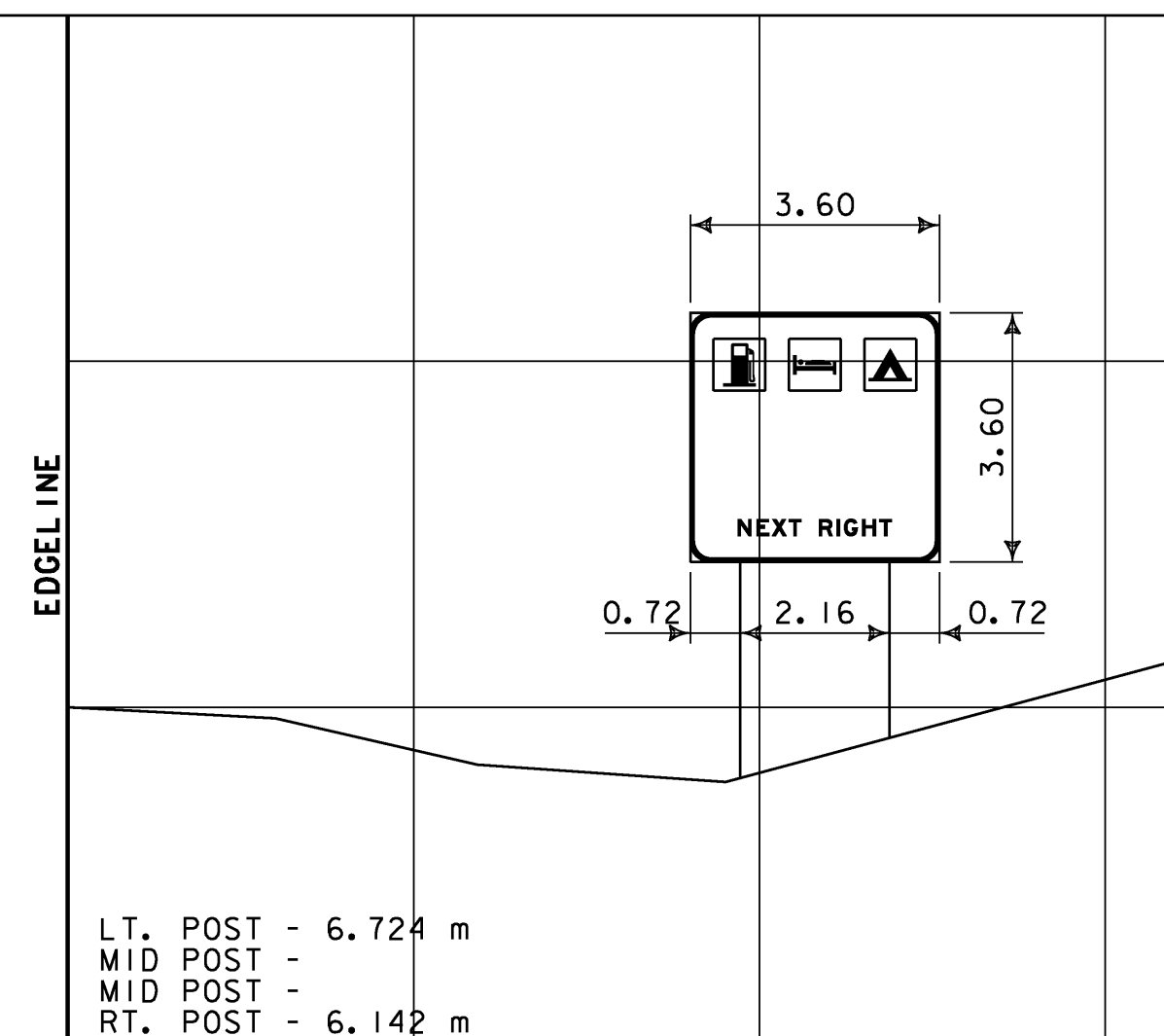
M.M. 121.700 SB



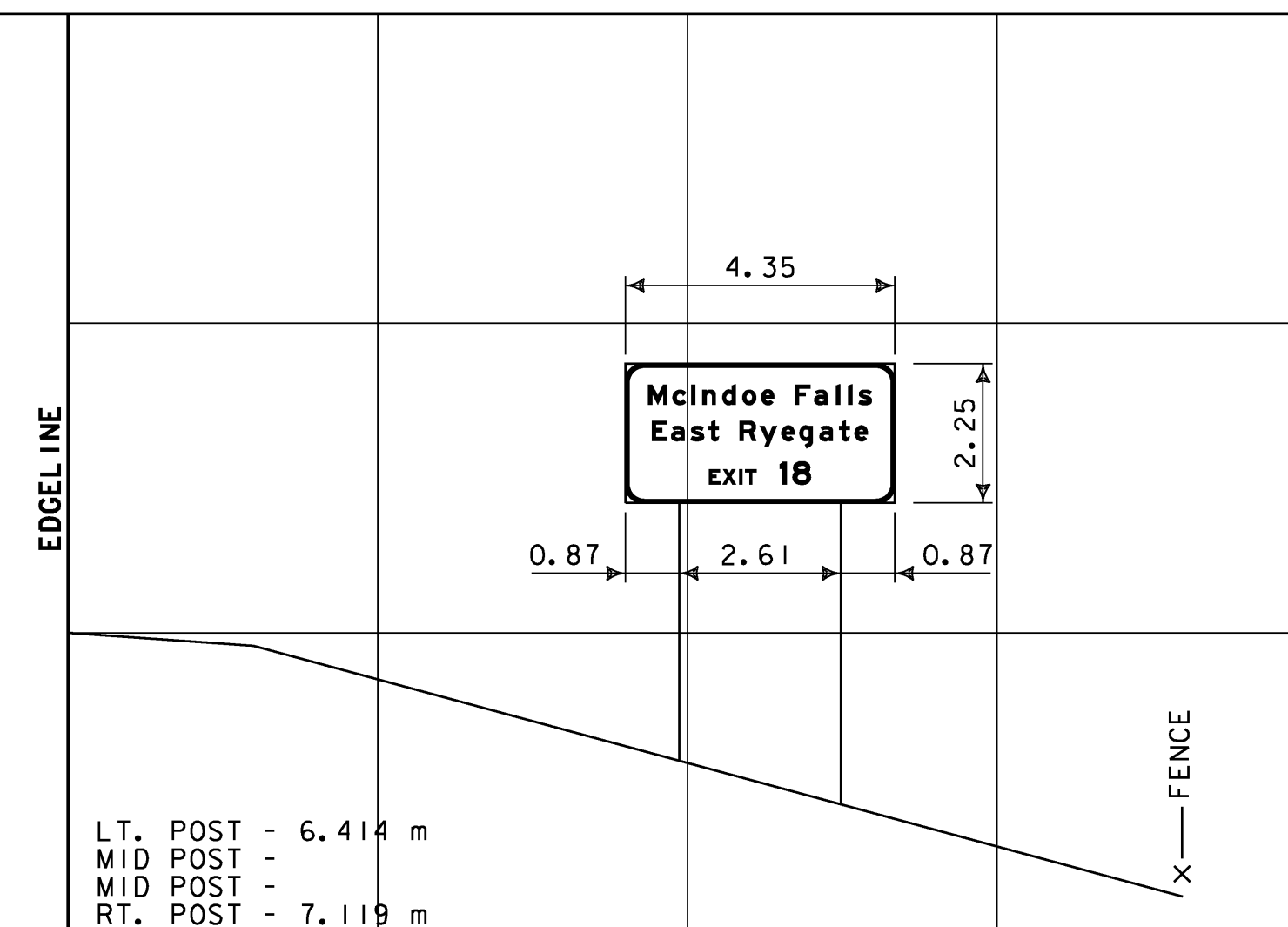
M.M. 116.430 SB



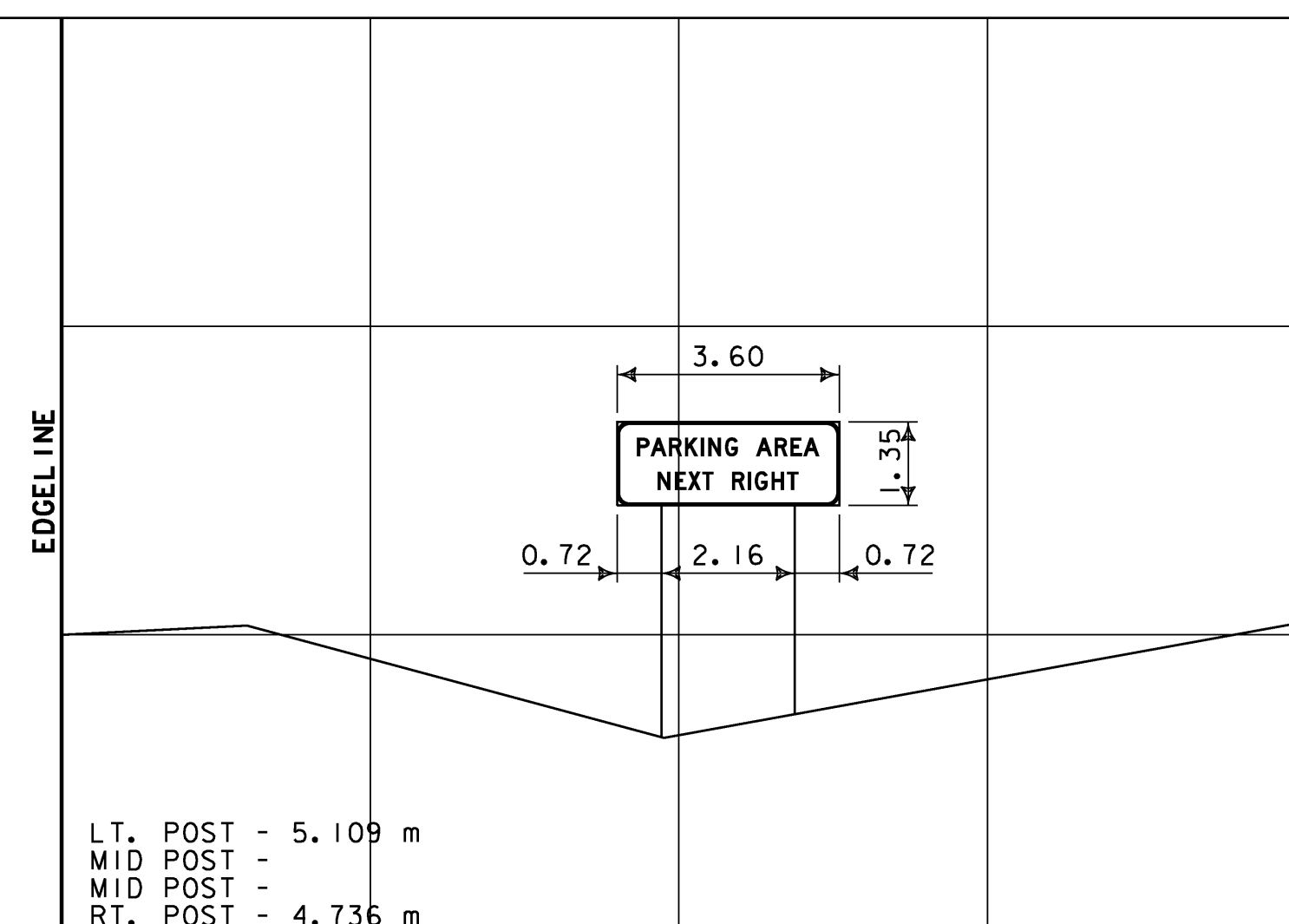
M.M. 120.940 SB



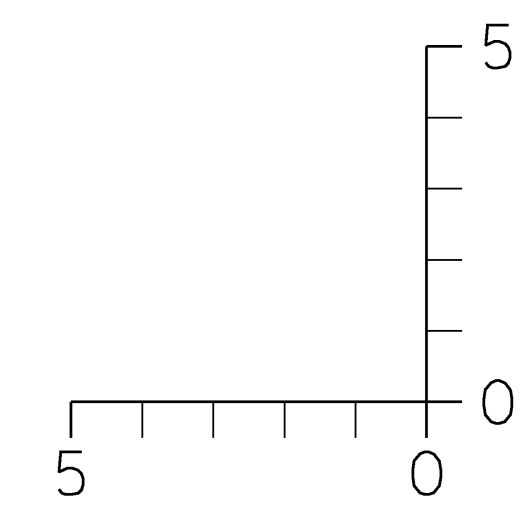
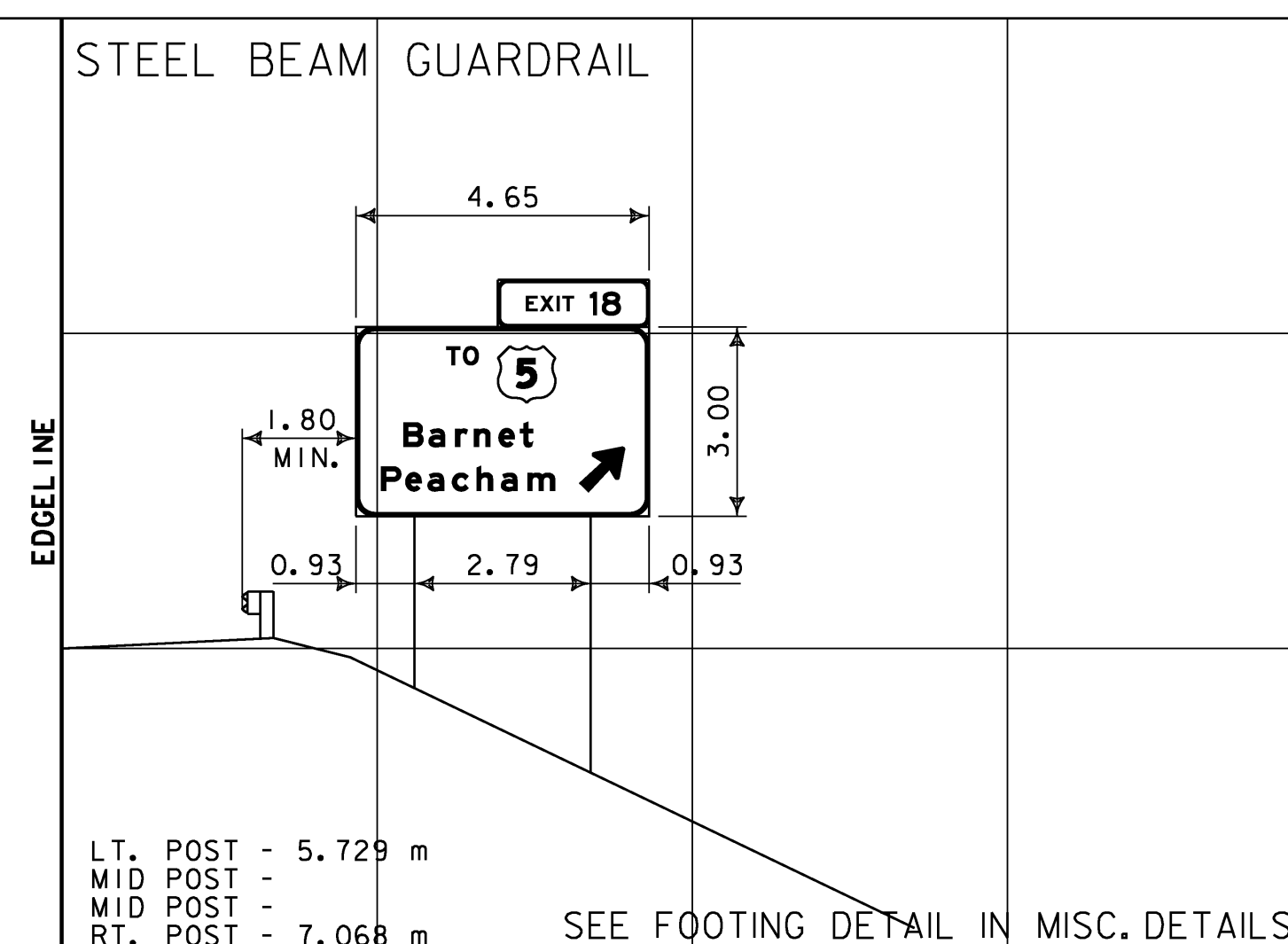
M.M. 121.450 SB



M.M. 115.700 SB



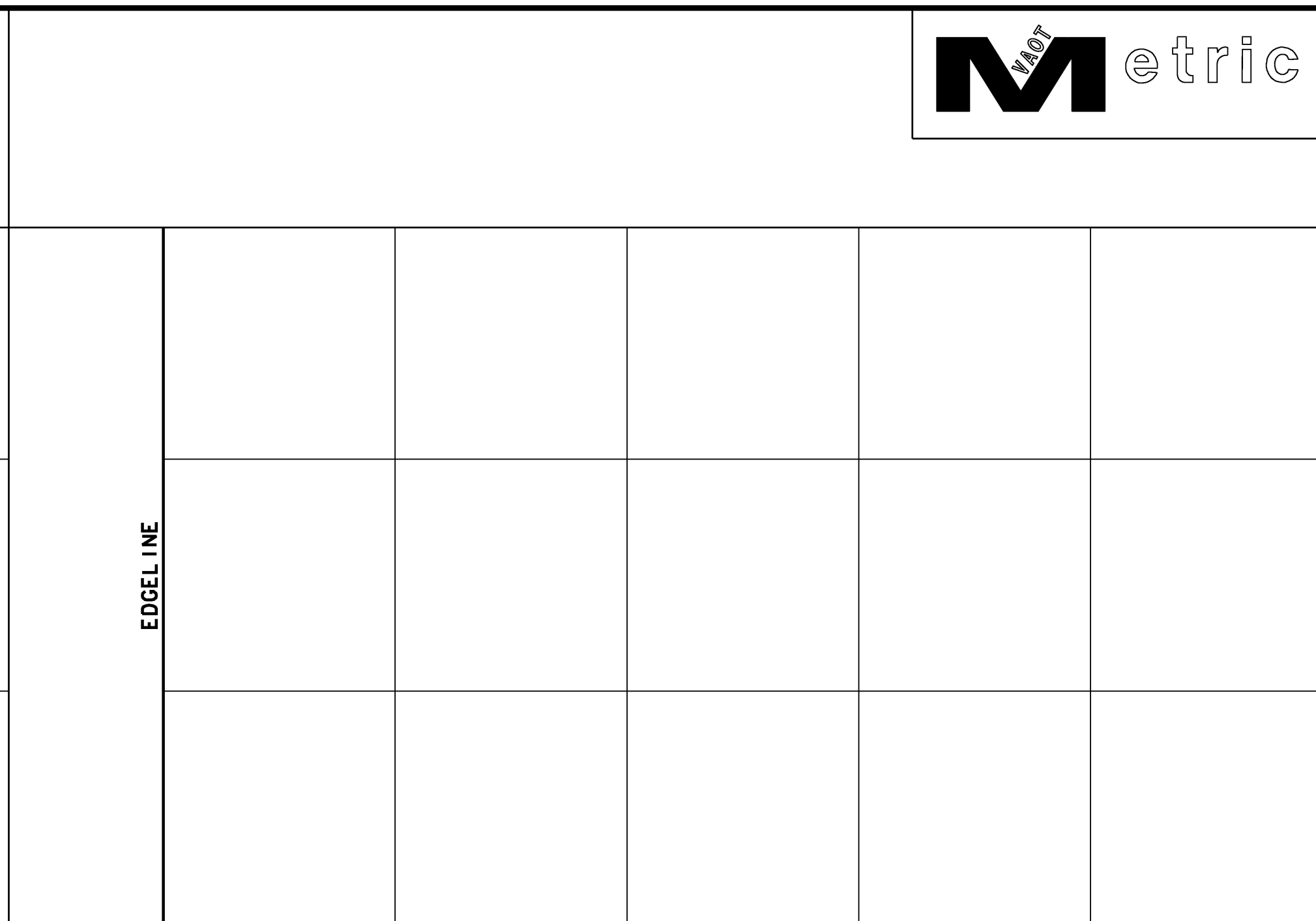
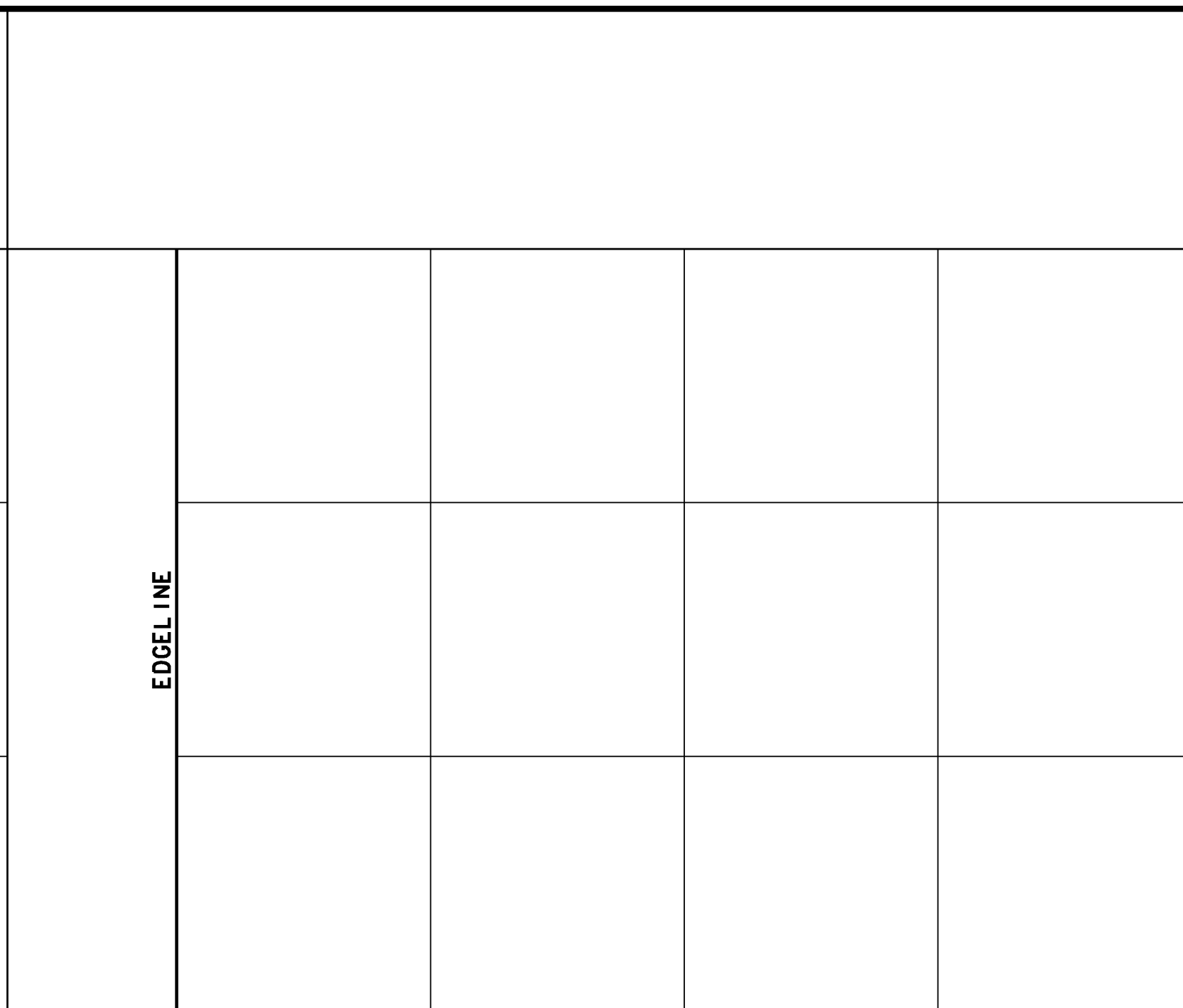
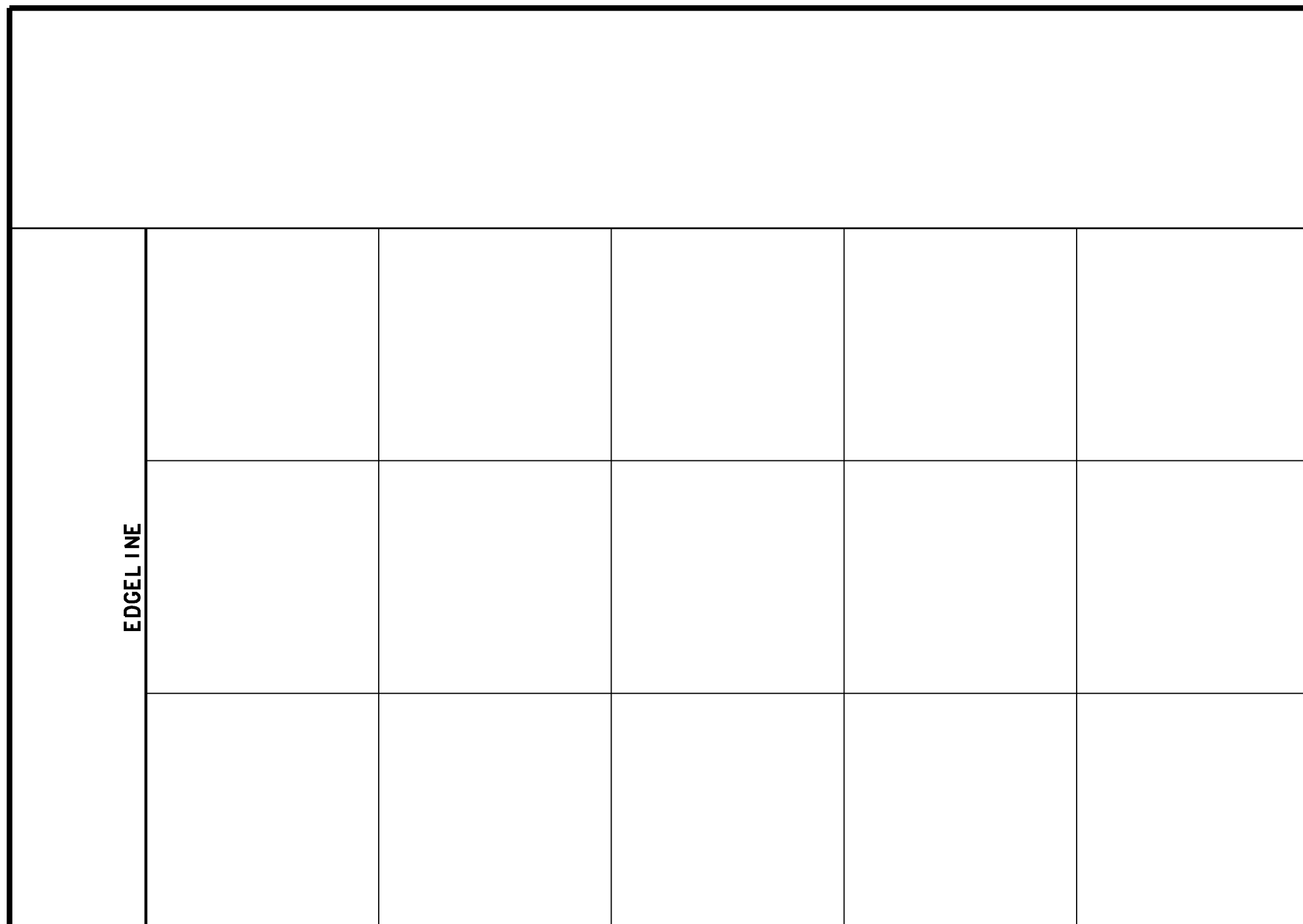
M.M. 120.700 SB



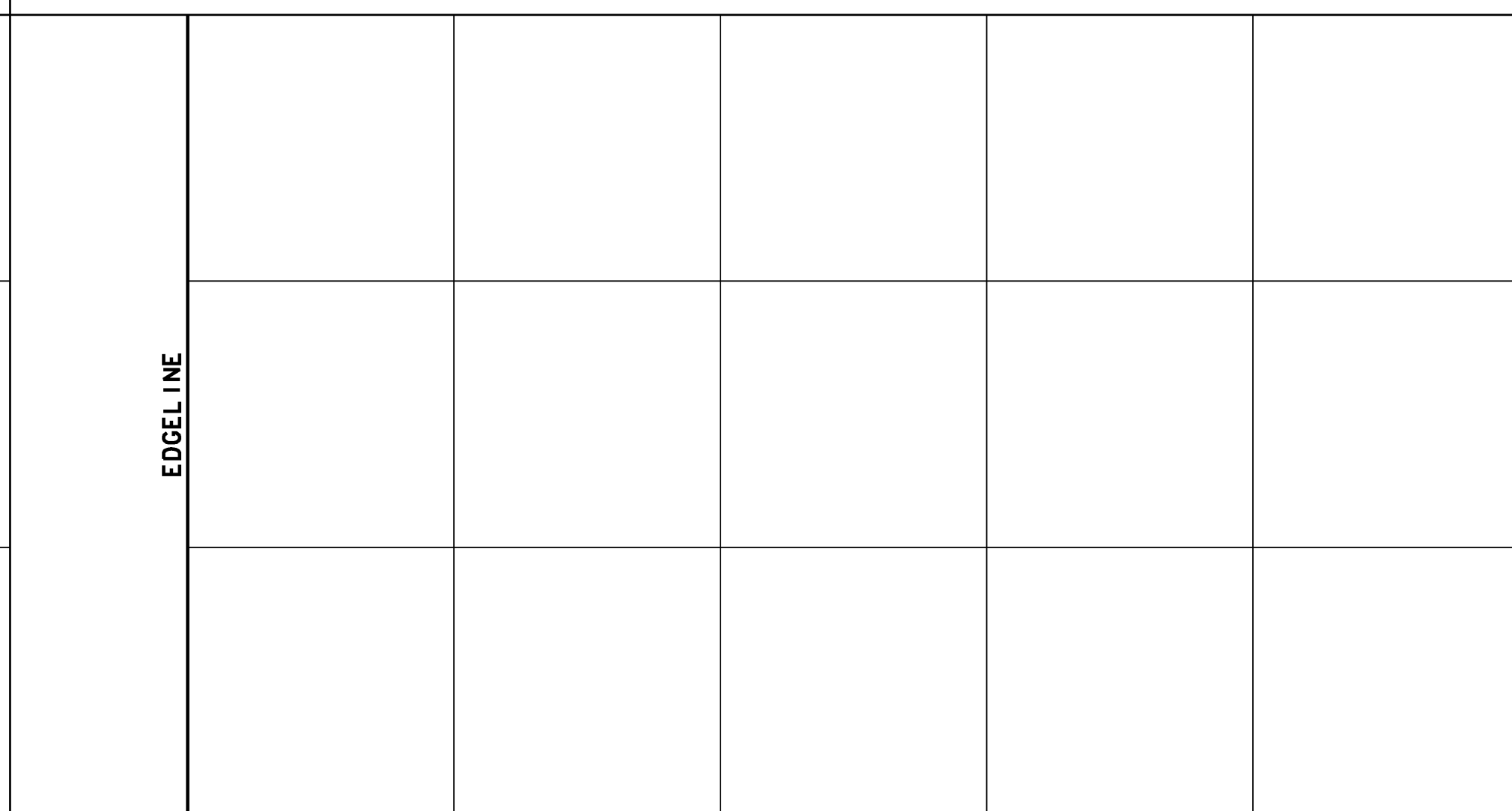
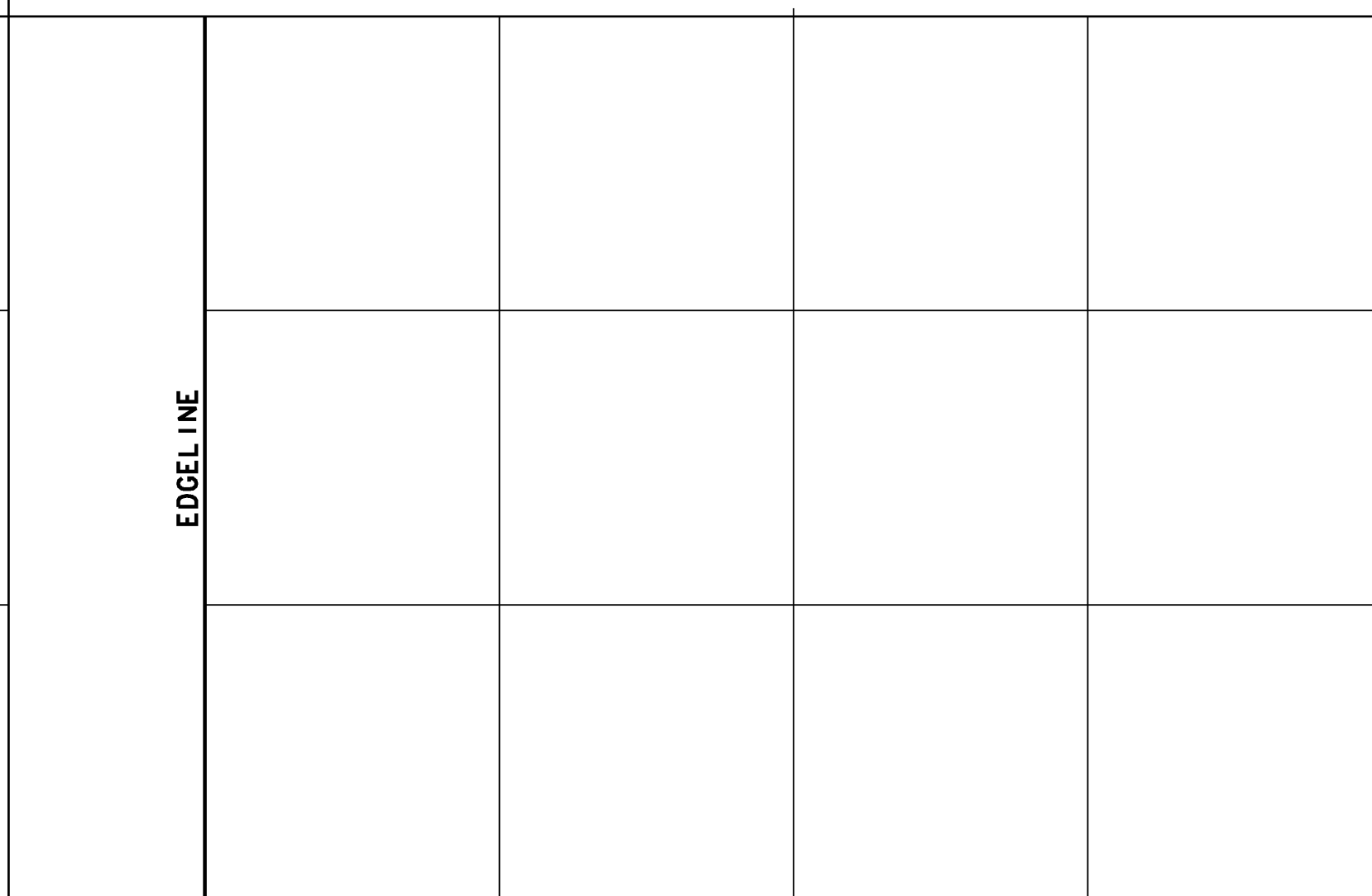
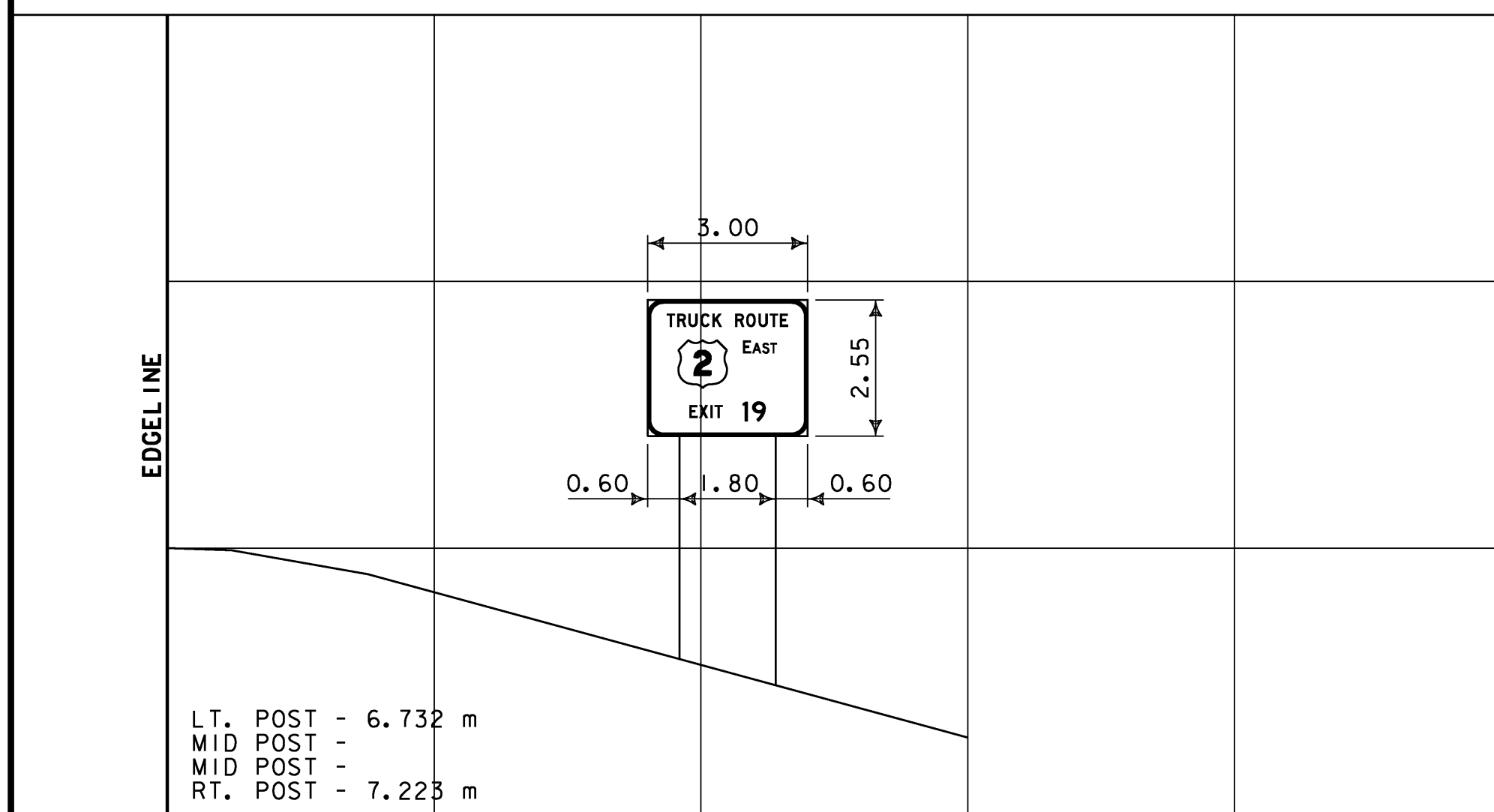
DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE. REFER TO STANDARD SHEETS FOR PLACEMENT GUIDELINES.

SIGN CROSS SECTION SHEET 3

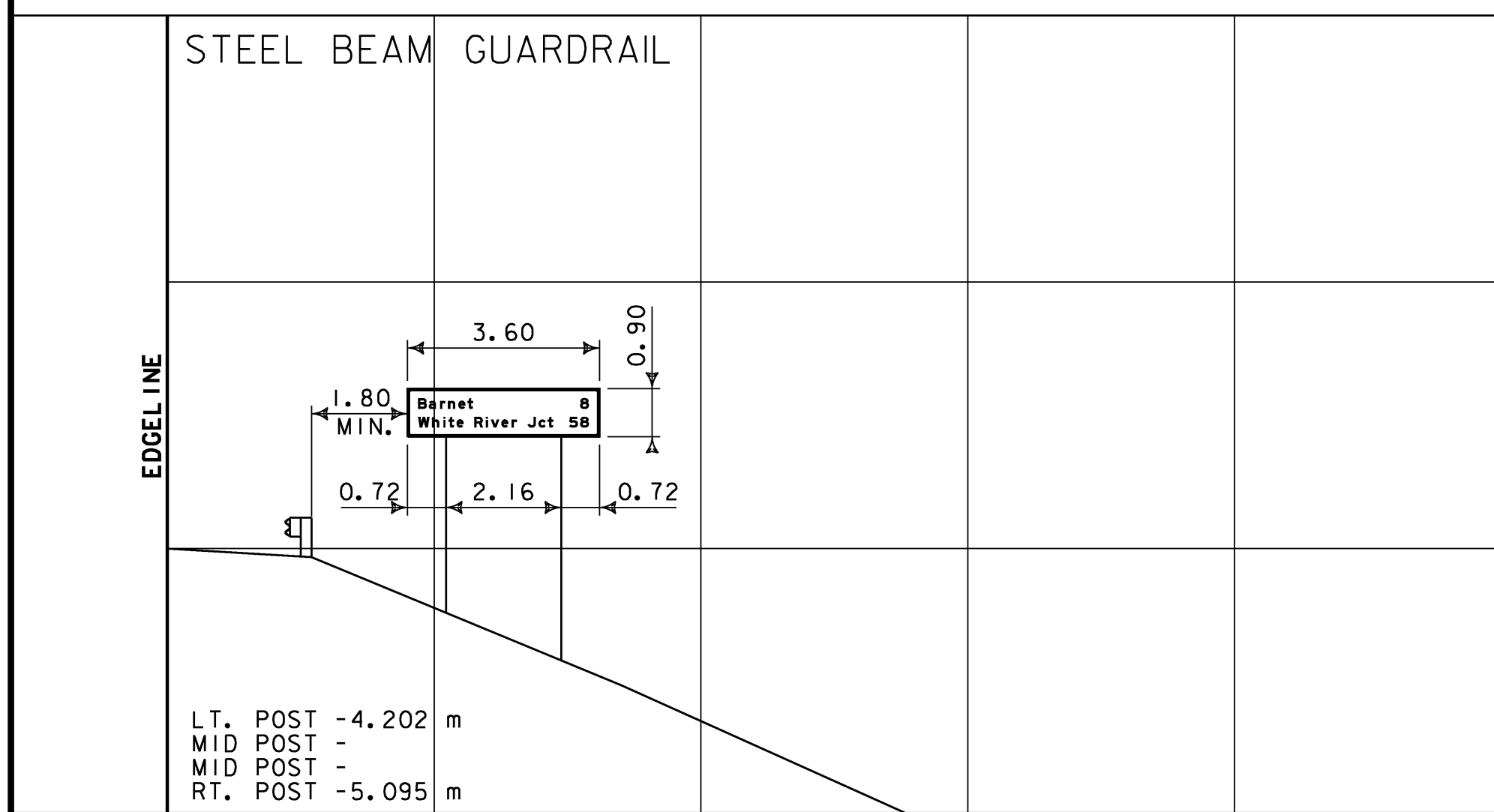
PROJECT NAME:	RYEGATE-ST. JOHNSBURY	PLOT DATE:	12/13/2006
PROJECT NUMBER:	IM 091-2(73)	DRAWN BY:	JCS
FILE NAME:	97194s-xs.dgn	DESIGNED BY:	DAM
		CLD REF. NO.:	97-0194
		CHECKED BY:	DAM
		SHEET	81 OF 88



M.M. 128.810 SB



M.M. 127.195 SB



DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE. REFER TO STANDARD SHEETS FOR PLACEMENT GUIDELINES.

SIGN CROSS SECTION SHEET 4	PROJECT NAME: RYEGATE-ST. JOHNSBURY	PLOT DATE: 12/13/2006
	PROJECT NUMBER: IM 091-2(73)	DRAWN BY: JCS
	FILE NAME: 97194s-xs.dgn	CHECKED BY: DAM
	PROJECT LEADER: CRB	SHEET 82 OF 88
	DESIGNED BY: DAM	
	CLD REF. NO.: 97-0194	

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", DATED 2001, WITH CURRENT MODIFICATIONS.
2. OVERHEAD SIGN/SIGNAL SUPPORTS SHALL CONFORM TO AASHTO'S PUBLICATION ENTITLED "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", DATED 2001 OR ITS LATEST EDITION.
3. ADDITIONAL DESIGN CRITERIA ARE AS FOLLOWS:
 CONCRETE $f_c = 10 \text{ MPa}$ $f'_c = 25 \text{ MPa}$
 REINFORCING $f_s = 165 \text{ MPa}$ (GRADE 420)
 FOOTING SOIL PRESSURE : 145 kPa (MAXIMUM)

 WIND LOAD AND ICE LOAD PER AASHTO "STANDARD SPECIFICATIONS"
4. ANCHOR BOLTS
 FOUR STAINLESS STEEL ANCHOR BOLTS WITH TWO HEXAGON NUTS, ONE WASHER AND ONE LOCK WASHER PER BOLT SHALL BE FURNISHED WITH EACH POLE. ANCHOR BOLT PLATES, WHEN USED, SHALL ALSO BE STAINLESS STEEL. SEE SUB-SECTION 714.09.
5. FLANGE BOLTS
 ALL FLANGE BOLTS AND HEX NUTS SHALL BE HIGH STRENGTH STEEL AND SHALL CONFORM TO ASTM A 325M. THE FLANGE BOLTS SHALL BE CAPABLE OF RESISTING 133% OF THE FULL DESIGN STRESS OF THE TUBE AT ITS YIELD STRENGTH STRESS.
6. HORIZONTAL AND VERTICAL MEMBERS
 STEEL TUBES SHALL BE FORMED AND WELDED WITH ONE CONTINUOUS LONGITUDINAL WELD ONLY. AFTER FORMING AND WELDING THEY SHALL BE COLD ROLLED TO ENSURE UNIFORMITY OF SIZE AND SMOOTHNESS OF WELD. THEY SHALL HAVE A MINIMUM YIELD STRENGTH OF 330 MPa. THERE SHALL BE NO TRANSVERSE WELDING EXCEPT AT THE FLANGE CONNECTIONS AND POLE BASE PLATES, WHERE THE TUBES SHALL TELESCOPE THE FLANGES AND PLATES AND BE CONTINUOUSLY WELDED BOTH SIDES INSIDE AND OUT TO WITHSTAND THE FULL TRANSFER OF THE BENDING STRENGTH TO THE BOLTS.
7. GALVANIZING
 ALL STEEL COMPONENTS, EXCEPT CONCRETE REINFORCING AND STAINLESS STEEL HARDWARE, ARE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. THE ASSEMBLIES SHALL BE DESIGNED AND FABRICATED TO PERMIT GALVANIZING ON ALL INTERIOR AND EXTERIOR SURFACES AND SHALL BE FREE OF POCKETS AND OTHER STRUCTURAL OBSTRUCTIONS THAT WILL NOT PERMIT PROPER DEPOSITION OF ZINC COATING. GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A 123 M AND ASTM A 153 M.
8. WELDING
 A. ALL DESIGN DETAILS, WORKMANSHIP, PROCEDURES AND INSPECTION SHALL CONFORM WITH SUB-SECTION 506.10.
 B. ALL WELDS SHALL BE AT LEAST AS STRONG AS THE MATERIAL(S) BEING WELDED.
9. FOOTINGS
 A. FOOTINGS SHALL BE DESIGNED TO RESIST LOADS EQUAL TO, OR GREATER THAN, THE MAXIMUM LOADS THAT THE POLE IS DESIGNED FOR.
 B. THREE TYPES OF FOUNDATIONS, AS OUTLINED IN AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2) SECTION 1.8.2 (C) SHALL BE ALLOWED.
 1. DRILLED SHAFTS,
 2. SPREAD FOOTINGS AND
 3. PILES.
 C. DRILLED SHAFT FOOTINGS SHALL BE POURED IN DRILLED SHAFTS AGAINST UNDISTURBED MATERIAL. THE TOP 600 mm OF SOIL SHALL BE NEGLECTED FOR DESIGN PURPOSES.

- D. AS AN ALTERNATIVE TO THE DRILLED HOLES, FOOTINGS MAY BE POURED IN EXCAVATED HOLES USING THE PROPER FORMS, WHICH MUST BE REMOVED. THE EXCAVATED HOLES SHALL BE AT LEAST 600 mm CLEAR OF THE FOOTING SIDES AND 300 mm DEEPER THAN THE FOOTING. CARE SHALL BE TAKEN TO AVOID EXCAVATING AROUND THE TOP OF THE FOOTING. THE BACKFILL MATERIAL SHALL BE COMPACTED AS DESCRIBED IN SUB-SECTION 204.12. DESIGN LIMITS AS FOR AUGERED FOOTING APPLY.
- E. WHERE THE DESIGN DEPTH OF A FOOTING CANNOT BE OBTAINED DUE TO UNFORSEEN FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN A REVISED FOOTING DETAIL FROM THE ENGINEER.
- F. ANY BACKFILL PLACED ADJACENT TO THE FOOTING SHALL BE GRANULAR MATERIAL MEETING THE REQUIREMENTS FOR GRANULAR BACKFILL FOR STRUCTURES, SUB-SECTION 704.08. CONCRETE FOR FOOTING SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE, CLASS B, SECTION 501, STRUCTURAL CONCRETE. GROUT MATERIAL SHALL BE NON-SHRINKING MORTAR CONFORMING TO SUB-SECTION 707.03 (MORTAR TYPE IV).
- G. SIGNALS/SIGNS SHALL BE INSTALLED AND LEVELED AND POLES SHALL BE PLUMB PRIOR TO PLACING GROUT UNDER POLE BASE.
10. SHOP DRAWINGS (6 COPIES OF EACH) SHALL BE SUBMITTED TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION, STRUCTURES SECTION FOR APPROVAL PRIOR TO FABRICATION. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:
 A. DETAILED DRAWING OF EACH COMPONENT OF THE STRUCTURE.
 B. MATERIAL SPECIFICATION FOR EACH COMPONENT OF THE STRUCTURE, EITHER BY COMPLETE SPECIFICATION OR REFERENCE TO APPLICABLE ASTM STANDARDS.
 C. NOTATION OF PROJECT NAME, PROJECT NUMBER, ROUTE NUMBER AND STRUCTURE STATIONING (TO BE INCLUDED ON EACH SHEET).
 D. DETAILS FOR LOCATION OF SIGNS/SIGNALS AND ATTACHMENT HARDWARE FOR THE SUPPORT STRUCTURE.
 E. ALL ELEVATIONS AND DIMENSIONS NECESSARY TO PROVIDE A COMPLETE SET OF RECORD PLANS.
 F. DEAD LOAD DEFLECTION AND CAMBER INFORMATION.
 G. WELDING DETAILS AND PROCEDURES ARE REQUIRED FOR ALL WELDS. PROCEDURES SHALL BE SUBMITTED FOR APPROVAL WITH REFERENCE TO EACH WELD IDENTIFIED ON THE SHOP DRAWINGS. (SEE SUB-SECTION 506.10)
11. EACH OVERHEAD TRAFFIC SIGNAL/SIGN SUPPORT SHALL BE GROUNDED. THE GROUND SHALL CONSIST OF:
 A) AN INTERNAL GROUND LUG OPPOSITE THE HAND HOLE;
 B) A 13,30 mm² (MIN.) SOFT DRAWN COPPER GROUNDING ELECTRODE CONDUCTOR.
 C) A 16 X 2400 (MIN.) COPPER CLAD GROUNDING ELECTRODE. THE RESISTANCE TO GROUND SHALL BE 25 OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES MAY BE REQUIRED (MINIMUM SPACING SHALL BE 1800 mm).
 WHERE A POWER SERVICE, METER AND DISCONNECT ARE ATTACHED TO A POLE, THERE SHALL BE A CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE METER AND DISCONNECT WHICH MAY RUN INTERNAL TO THE UPRIGHT, THROUGH THE DN16 FLEXIBLE TUBING IN THE CONCRETE BASE TO THE REQUIRED GROUNDING ELECTRODE(S). THE GROUNDING ELECTRODE CONDUCTOR FROM THE POLE GROUNDING LUG, CONTROLLER CABINET AND/OR LUMINAIRE MAY ATTACH TO THIS CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT. THE CONTRACTOR SHALL PERFORM A RESISTANCE TO GROUND TEST ON THE CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT AND PROVIDE A WRITTEN STATEMENT TO THE AREA ELECTRICAL INSPECTOR THAT THE GROUNDING ELECTRODE CONDUCTOR IS CONTINUOUS FROM THE SERVICE METER AND DISCONNECT AND THE RESISTANCE TO GROUND IS 25 OHMS OR LESS.
12. THE COST OF SIGNAL/SIGN SUPPORTS, INCLUDING ALL HARDWARE, SIGN BRACKETS, FOOTINGS AND LUMINAIRE ARMS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 677.12, 677.13 OR 678.15, WHICHEVER IS APPLICABLE. THESE COMPONENTS SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF SECTIONS 677, 678 AND 679.
13. HORIZONTAL MEMBERS SHALL BE CAMBERED AND THE VERTICAL POLES BACK-RAKED (WHERE APPLICABLE) TO THE ANTICIPATED DEAD LOAD DEFLECTION PLUS THE CAMBER, IF ANY, SPECIFIED ON THE PLANS.

14. AN EQUIVALENT ALTERNATE DESIGN MAY BE SUBSTITUTED FOR THE DETAILS AND MATERIALS SHOWN.
15. THE DETAILS OF DESIGN FOR THE STRUCTURE AND FOOTINGS ARE TO BE SUPPLIED BY THE CONTRACTOR AND/OR BY THE MANUFACTURER. THE STRUCTURE SHALL BE DESIGNED TO RESIST THE MAXIMUM LOADING AS OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2). ALL DETAILS OF THE STRUCTURE AND THE FOOTING SHALL BE CHECKED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF VERMONT PRIOR TO SUBMITTAL OF THE SHOP DRAWINGS TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION.
16. IN ADDITION TO THE SHOP DRAWINGS OUTLINED IN NOTE 10, THE CONTRACTOR SHALL SUBMIT ALL DESIGN CALCULATIONS TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION, STRUCTURES SECTION, SHOWING THE FOLLOWING INFORMATION FOR EACH OF THE VERTICAL AND HORIZONTAL COMPONENTS OF THE STRUCTURE AND FOOTING:
 A. THE DESIGN AXIAL AND SHEAR FORCES AND BENDING AND TORSIONAL MOMENTS.
 B. THE DESIGN AXIAL, BENDING AND SHEAR STRESSES AND THE COMBINED STRESS RATIO.
 C. VIBRATION AND FATIGUE CALCULATIONS AS SET FORTH IN SECTION 9 OF THE AASHTO PUBLICATION REFERENCED IN NOTE 2.
 D. THE ALLOWABLE AXIAL, BENDING, AND SHEAR STRESSES.
 E. ITEMS A, B AND D SHALL BE SHOWN FOR EACH OF THE GROUP LOADINGS (I, II AND III) AND FOR THE BASIC WIND LOAD APPLIED TO THE TWO CASES OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2) SECTION 1.2.5 (D)(4).
 F. FAILURE TO SUPPLY THE PROPER DESIGN INFORMATION SHALL BE CAUSE FOR REJECTION OF THE STRUCTURE.
 G. A MINIMUM OF FOUR (4) WEEKS SHALL BE REQUIRED FOR REVIEW BY THE STATE OF VERMONT AGENCY OF TRANSPORTATION STRUCTURES ENGINEER IN ACCORDANCE WITH SUBSECTION 105.03.
17. THE CONTRACTOR/MANUFACTURER SHALL BE RESPONSIBLE FOR COMPLETION OF THE STRUCTURE AND FOOTING DATA ON THE DETAIL SHEET(S).
18. FOR INSTALLATIONS WHERE BOTH "EXISTING" AND "FUTURE" CONDITIONS ARE SHOWN, THE SUPPORTS SHALL BE DESIGNED FOR THE MORE SEVERE OF THE TWO LOADING CONDITIONS. THE INFORMATION OUTLINED IN NOTE 16 ABOVE SHALL BE PROVIDED FOR BOTH THE LOADING CONDITIONS.
19. NOT USED.
20. BASE PLATES SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER, HEIGHT, YIELD STRENGTH, GAUGE AND THE HORIZONTAL MEMBER DIAMETER, LENGTH, YIELD STRENGTH AND GAUGE. ALTERNATELY, THE INFORMATION MAY BE STAMPED ON A METAL TAG RIVETED TO THE POLE NEAR THE HANDHOLE.

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.



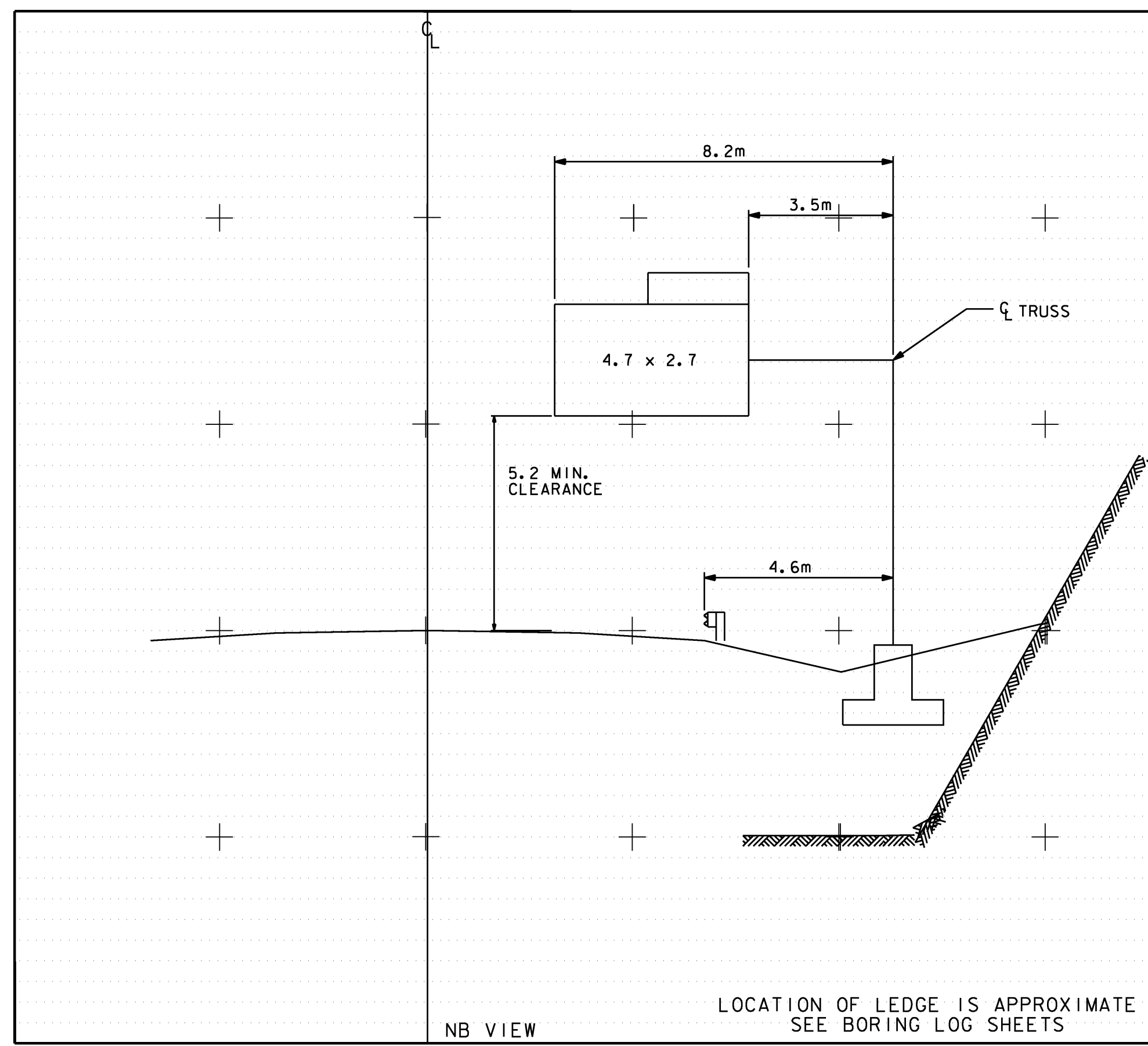
ORIGINAL PREPARED - JUNE 13, 1997		
DATE	REVISIONS	BY

**CANTILEVER / OVERHEAD
SIGN
SUPPORT NOTES**

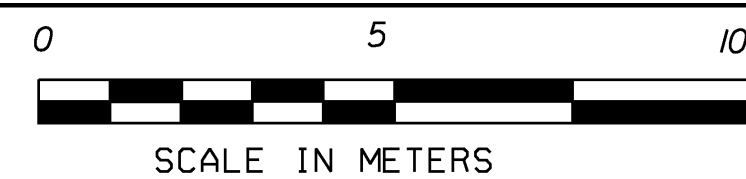
PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 DESIGN SUPERVISOR _____ DATE _____
 PROJ. _____

 TRAFFIC SHEET NO. _____ OF _____
 SHEET 83 OF 88 SHEETS

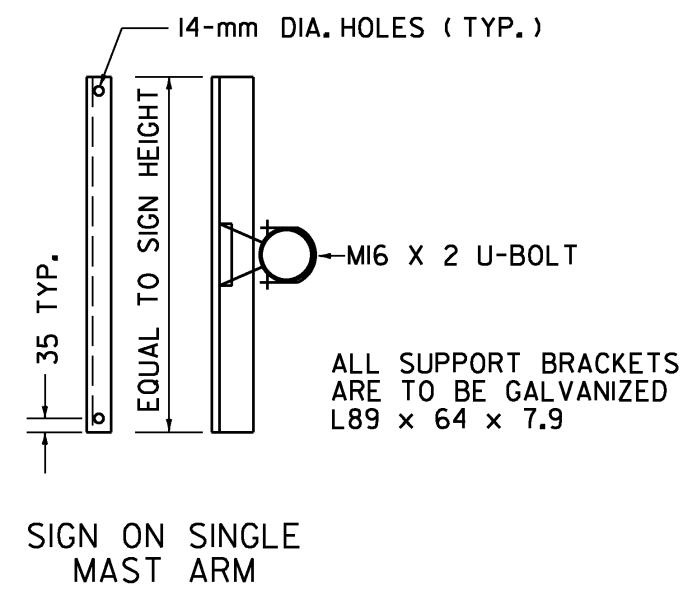
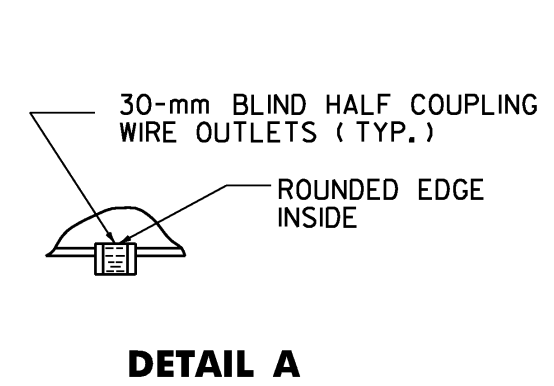
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(SEE SHEET 24 FOR LOCATION PLAN)

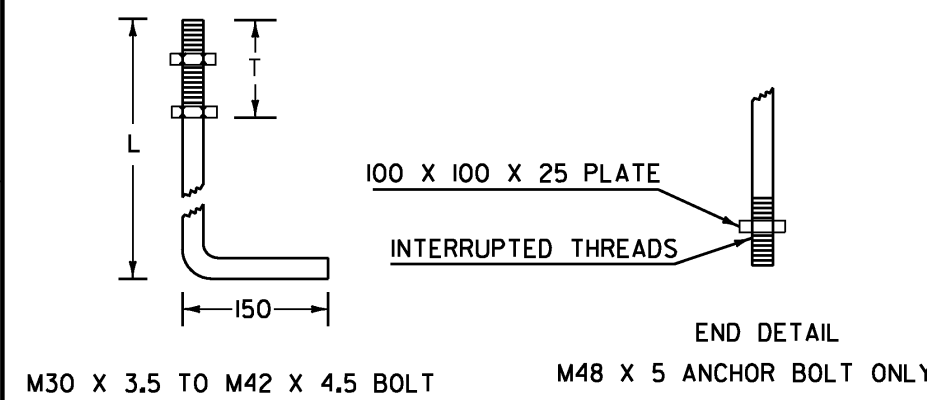


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-5

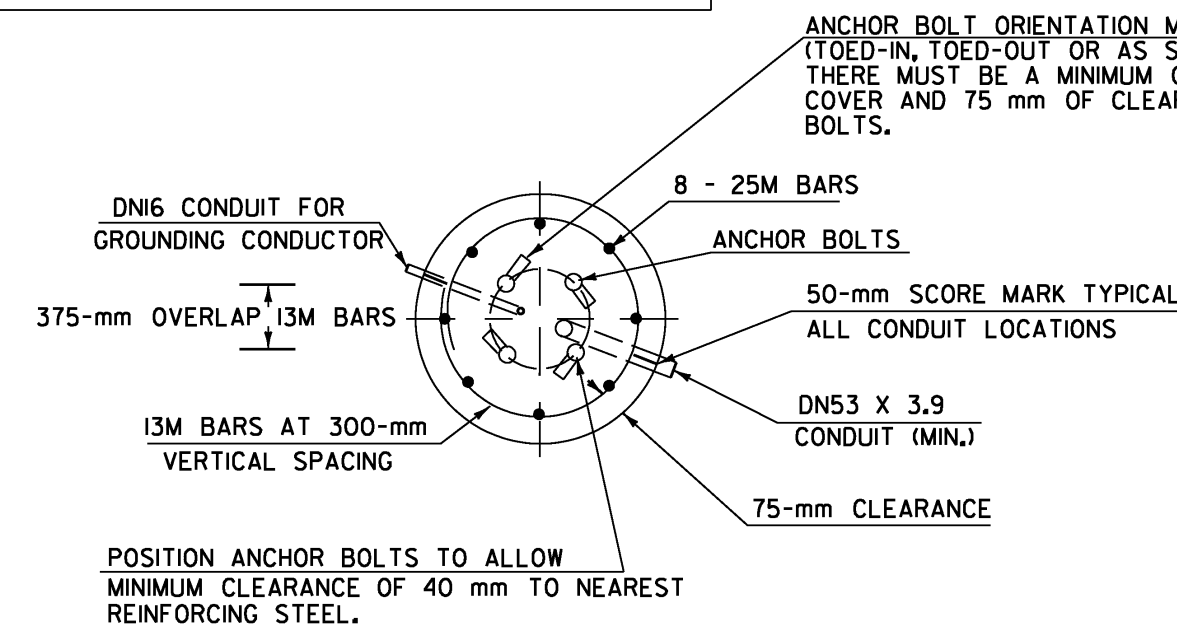


SIGN BRACKET DETAILS

ANCHOR BOLT DETAIL			
SIZE	L (mm)	T (mm)	
M30 X 3.5 X 1200	1050	200	
M36 X 4 X 1500	1350	230	
M42 X 4.5 X 2250	2100	230	
M48 X 5 X 2400	2400	230	

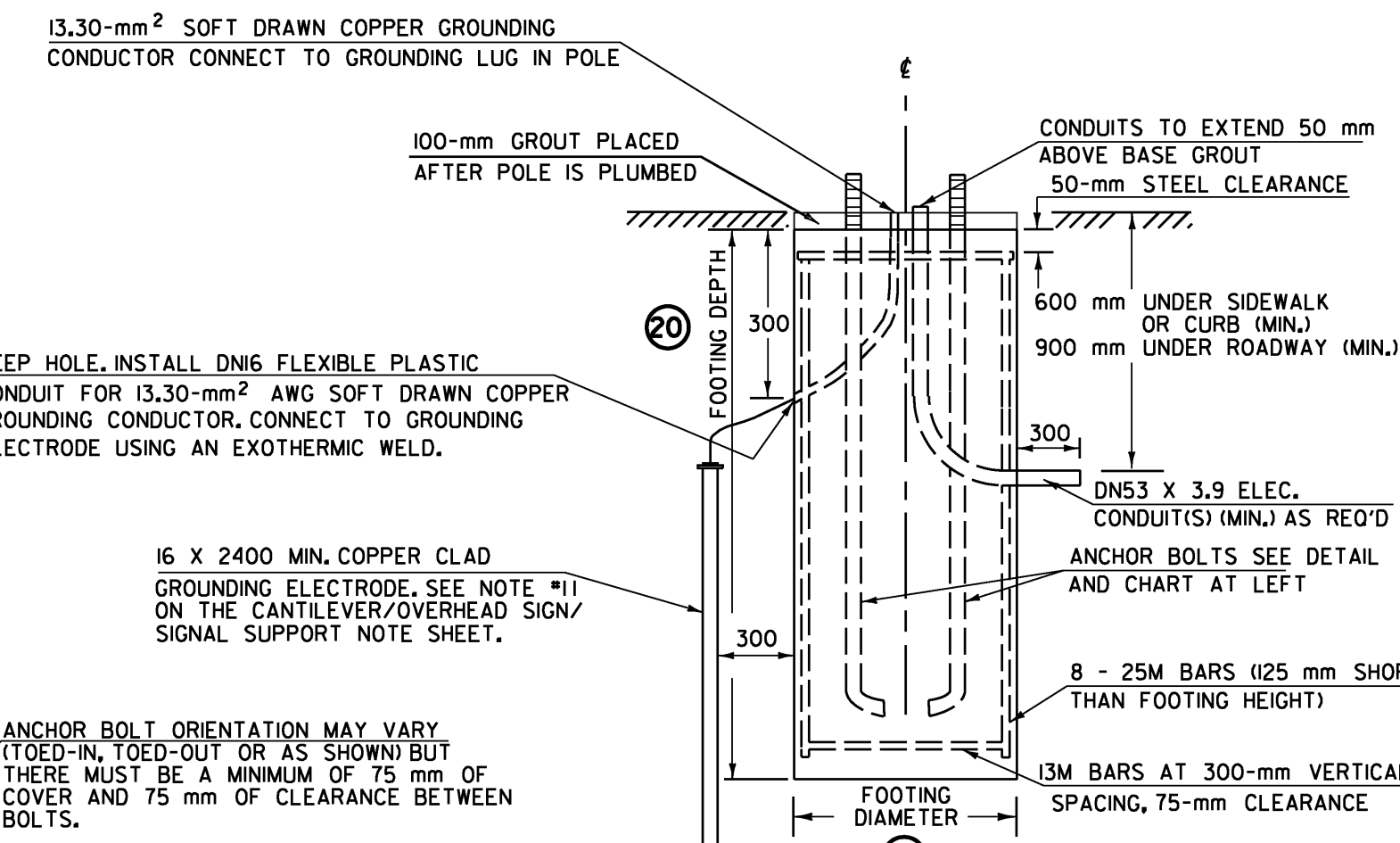


ANCHOR BOLT DETAIL

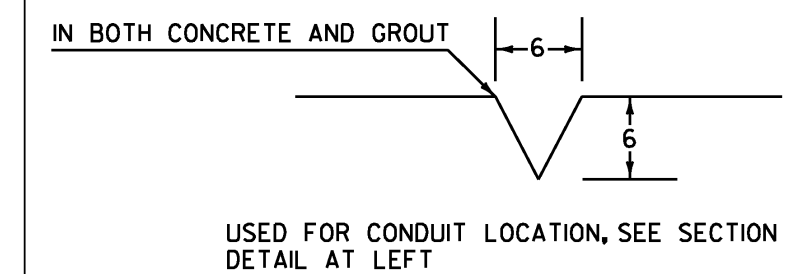


CANTILEVER FOOTING DETAIL

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)



ELEVATION

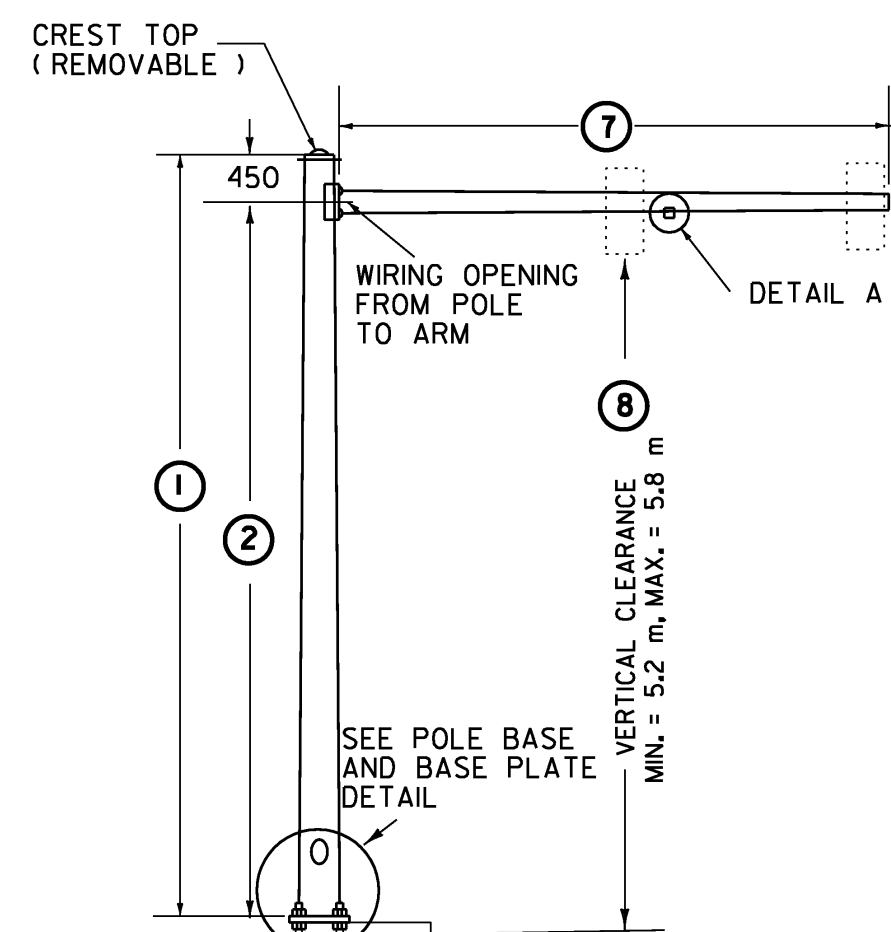


50-mm SCORE MARK DETAIL

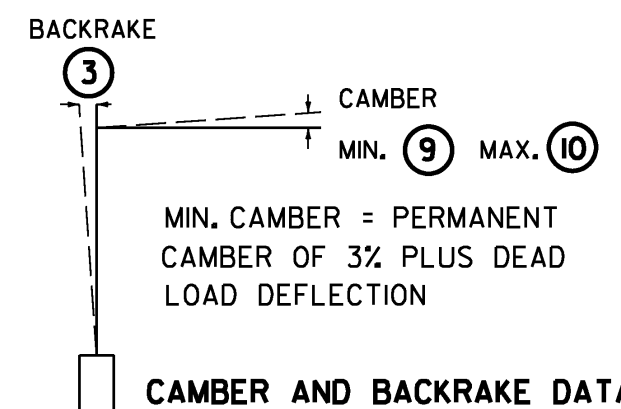
NOTES: OVERHEAD SIGN BRIDGE CROSS SECTION

- SEE CANTILEVER / OVERHEAD SIGN / SIGNAL SUPPORTS NOTE SHEET FOR ADDITIONAL INFORMATION.
- MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 3 m IN HEIGHT.
- STREET LIGHTING IS OPTIONAL, SEE PLAN SHEETS OR SECTION.
- MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 5.2 m.

- POLE BASE DIAMETER (4)
- POLE WALL THK. (5)
- POLE TAPER RATE (6)
- ARM DIAMETER (11)
- ARM WALL THK. (12)
- ARM TAPER RATE (13)



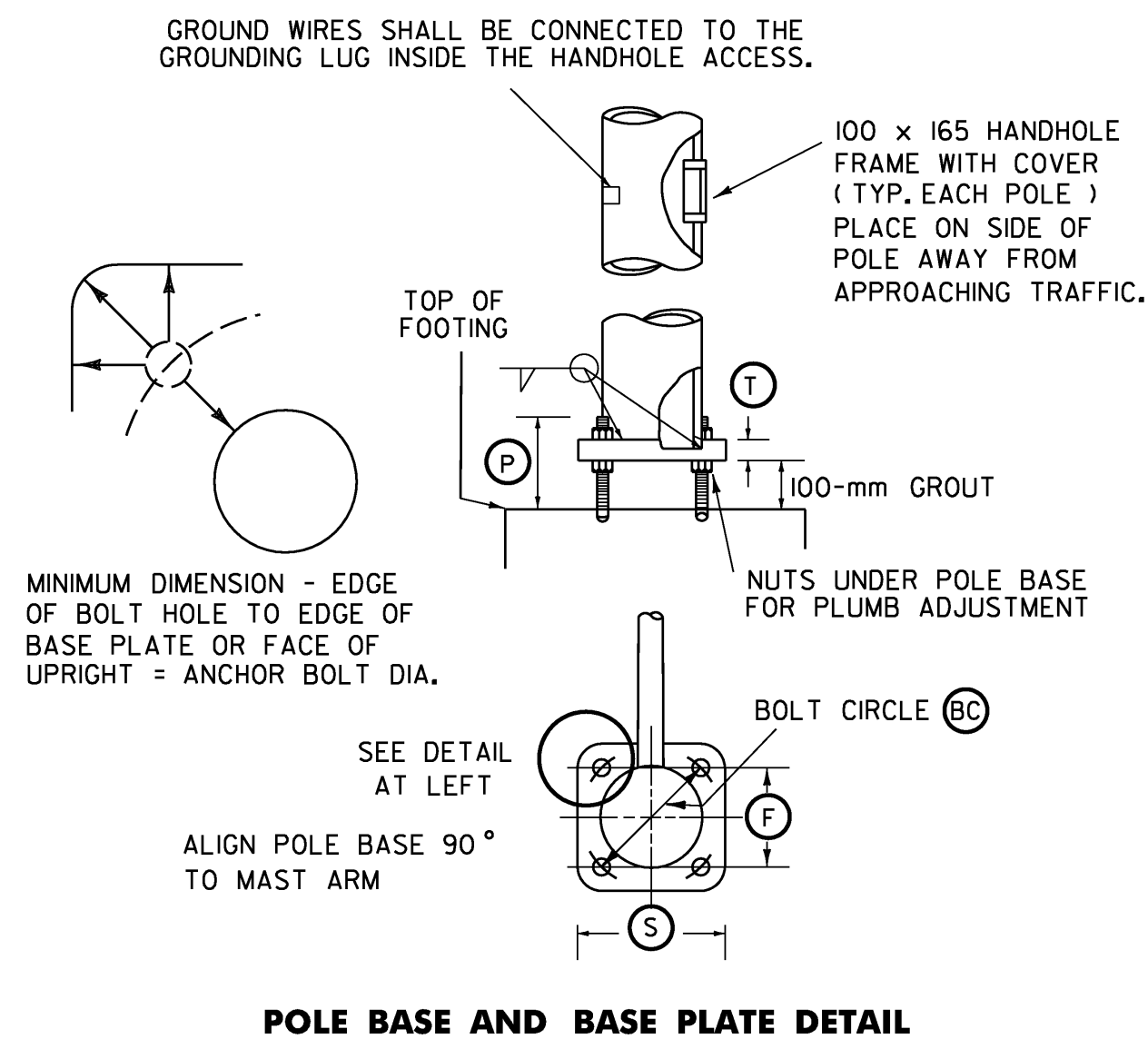
TYPE A



CAMBER AND BACKRAKE DATA

SEE SHEET(S) FOR CROSS SECTIONS

STRUCTURE DIMENSIONS																															
POLE TYPE	POLE DATA						ARM DATA						LIGHTING DATA				FOOTING DATA		BASE PLATE / BOLT DATA												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(BC)	(F)	(S)	(T)	(P)	ANCHOR BOLT SIZE					



POLE BASE AND BASE PLATE DETAIL



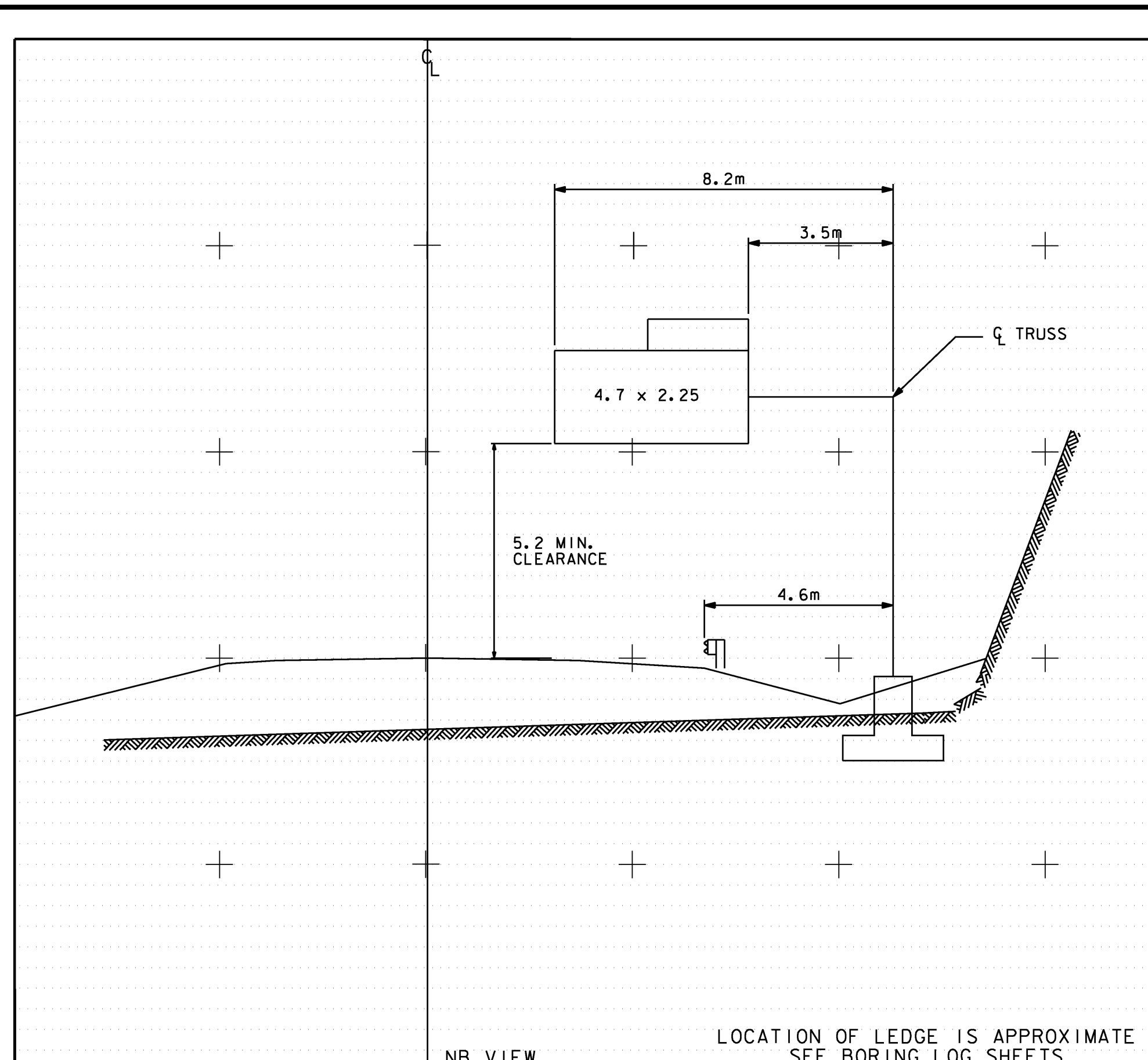
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

DATE	REVISIONS	BY

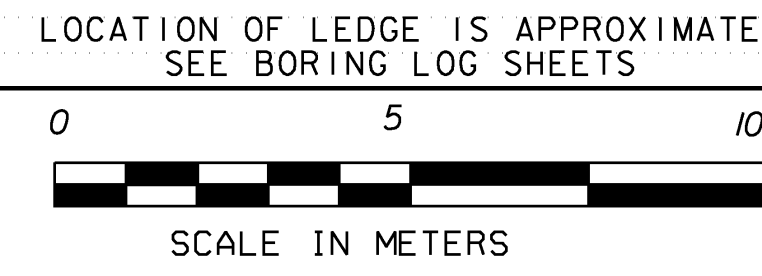
OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET #1

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 DESIGN SUPERVISOR _____ DATE _____
 PROJ. **M.M. 127.628 NB**
 TRAFFIC SHEET NO. _____ OF _____
 SHEET 84 OF 88 SHEETS

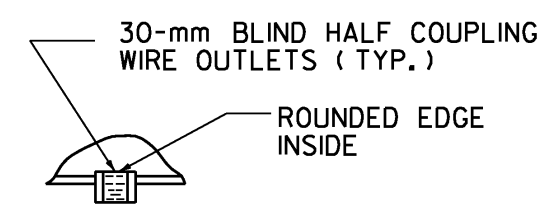
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(SEE SHEET 24 FOR LOCATION PLAN)

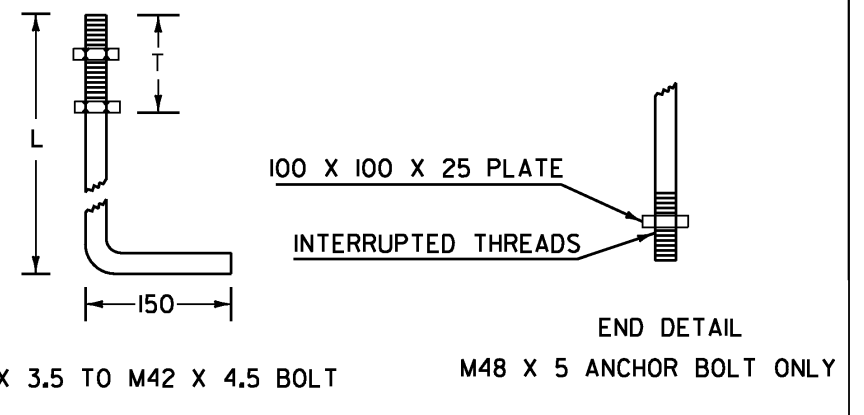


+10
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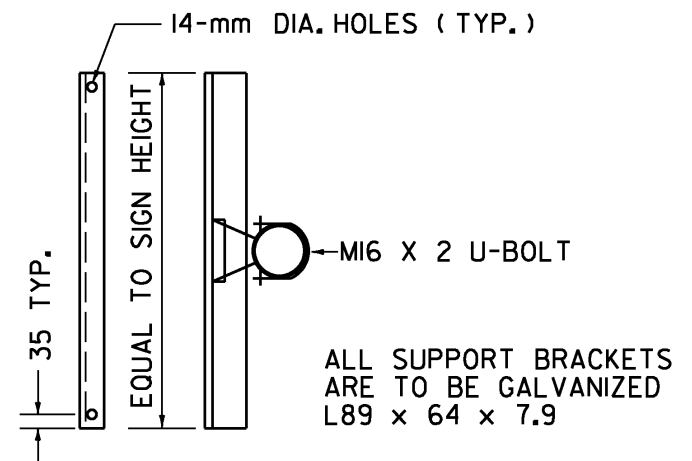


DETAIL A

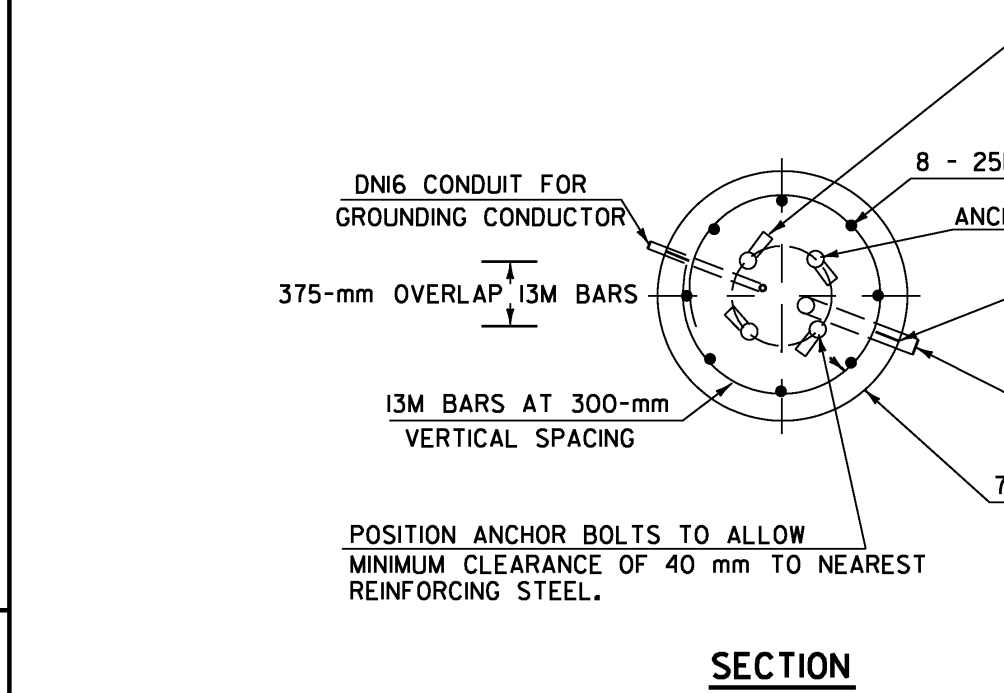
ANCHOR BOLT DETAIL			
SIZE	L (mm)	T (mm)	
M30 X 3.5 X 1200	1050	200	
M36 X 4 X 1500	1350	230	
M42 X 4.5 X 2250	2100	230	
M48 X 5 X 2400	2400	230	



ANCHOR BOLT DETAIL

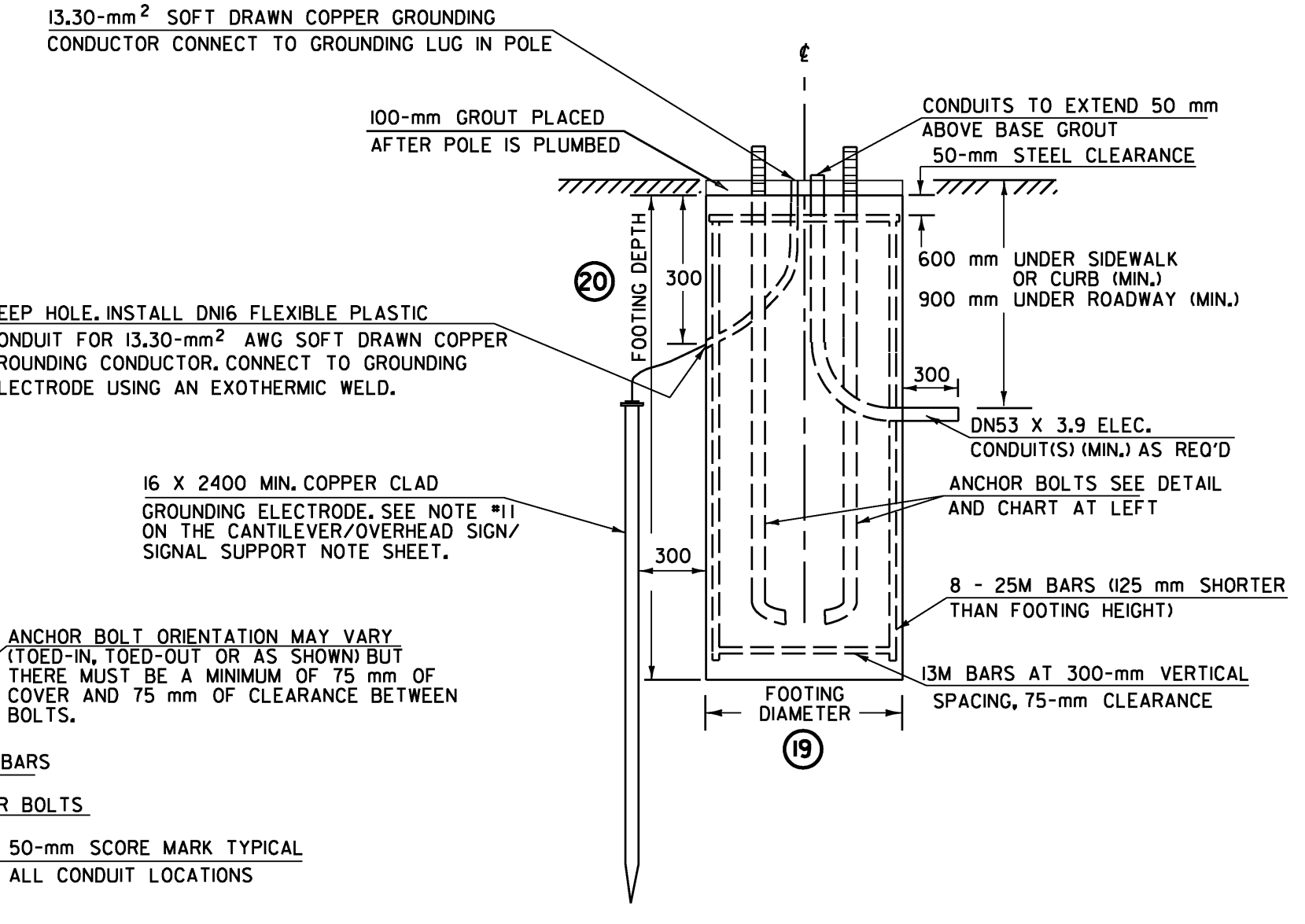


SIGN BRACKET DETAILS

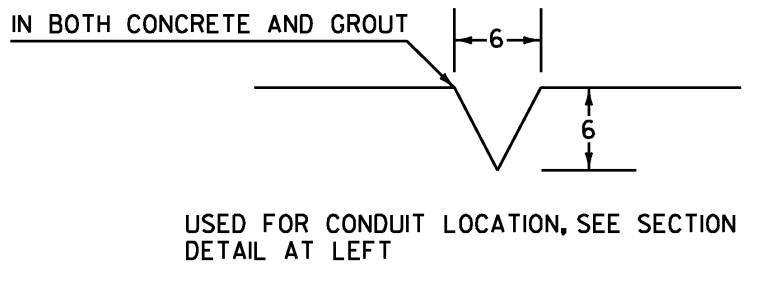


CANTILEVER FOOTING DETAIL

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)



ELEVATION

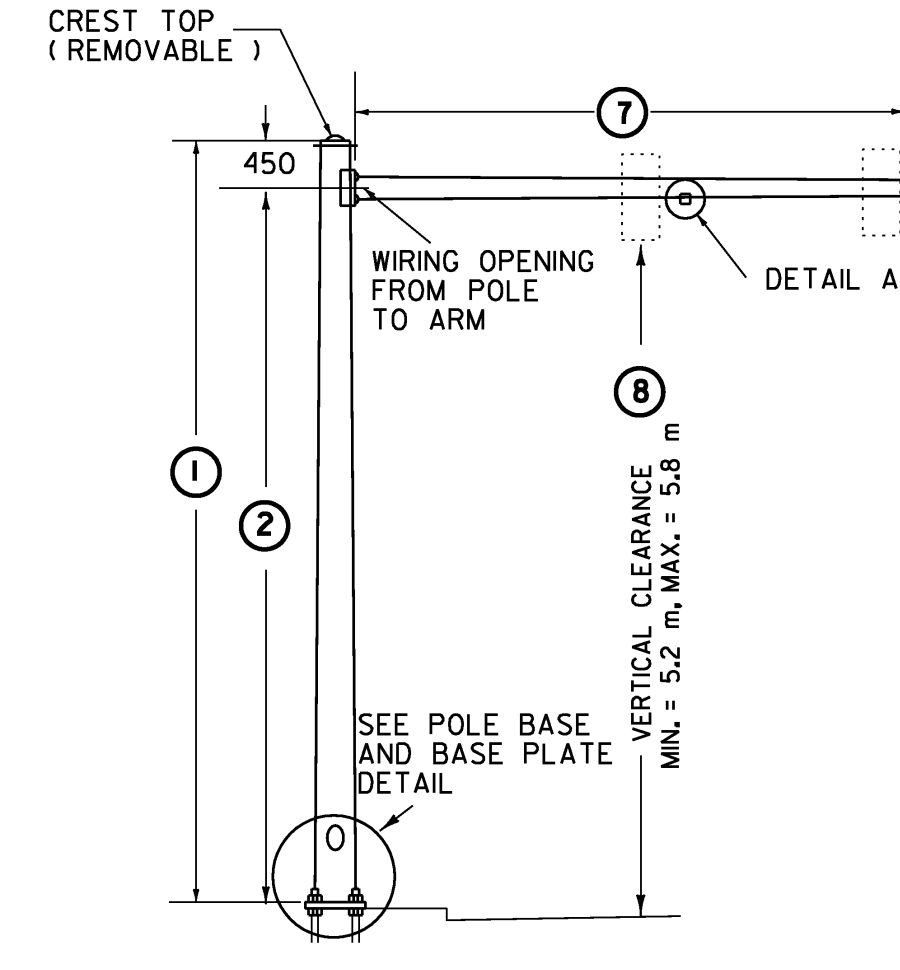


50-mm SCORE MARK DETAIL

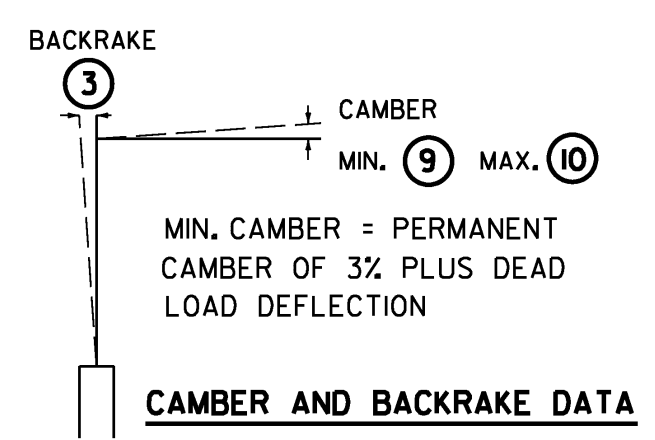
- NOTES:**
- SEE CANTILEVER / OVERHEAD SIGN / SIGNAL SUPPORTS NOTE SHEET FOR ADDITIONAL INFORMATION.
 - MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 3 m IN HEIGHT.
 - STREET LIGHTING IS OPTIONAL, SEE PLAN SHEETS OR SECTION.
 - MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 5.2 m.

OVERHEAD SIGN BRIDGE CROSS SECTION

- POLE BASE DIAMETER (4)
- POLE WALL THK. (5)
- POLE TAPER RATE (6)
- ARM DIAMETER (11)
- ARM WALL THK. (12)
- ARM TAPER RATE (13)



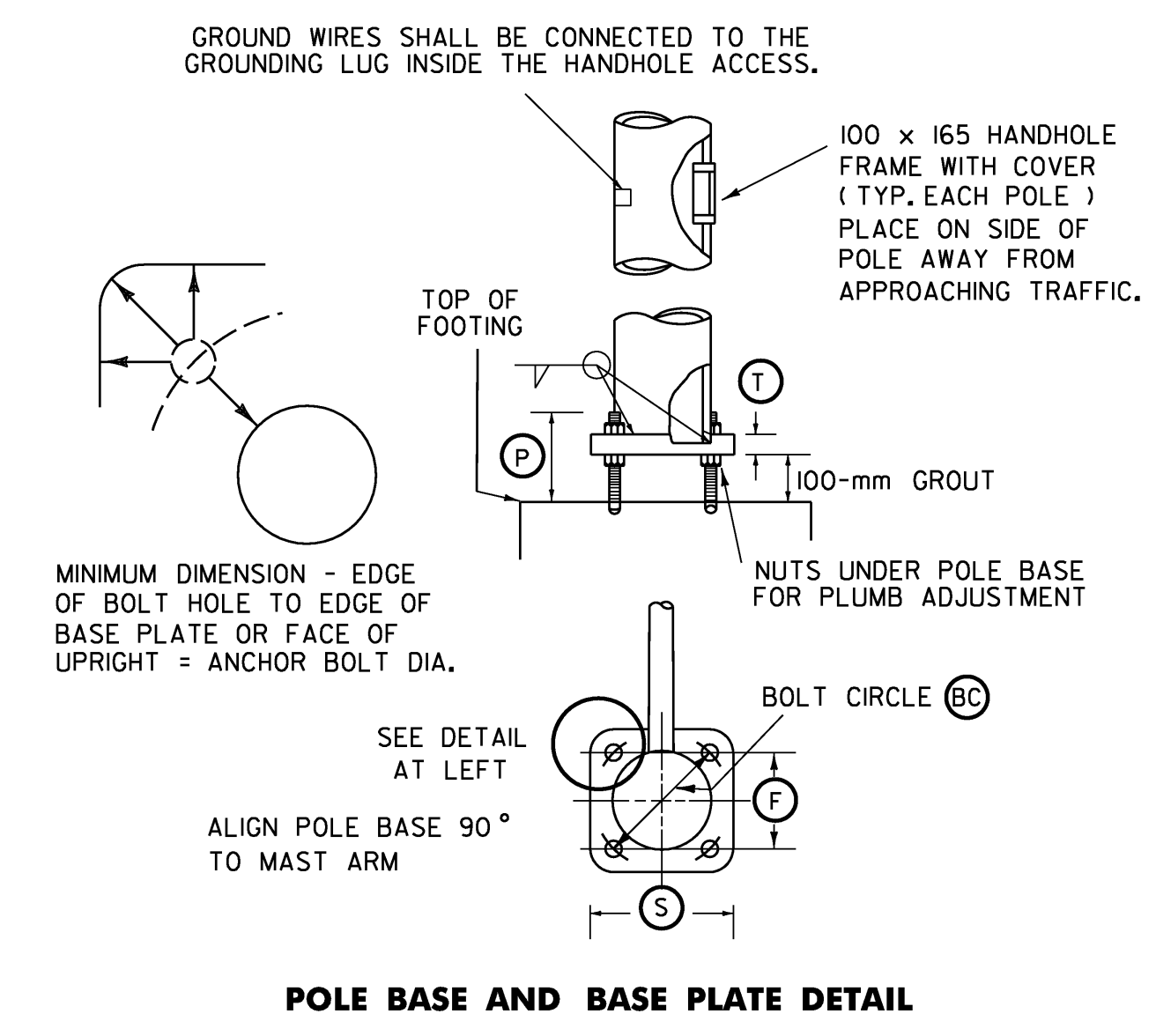
TYPE A



CAMBER AND BACKRAKE DATA

SEE SHEET(S) FOR CROSS SECTIONS

STRUCTURE DIMENSIONS																												
POLE TYPE	POLE DATA						ARM DATA						LIGHTING DATA						FOOTING DATA		BASE PLATE / BOLT DATA					ANCHOR BOLT SIZE		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	BC	F	S	T	P			



POLE BASE AND BASE PLATE DETAIL



NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

DATE	REVISIONS	BY

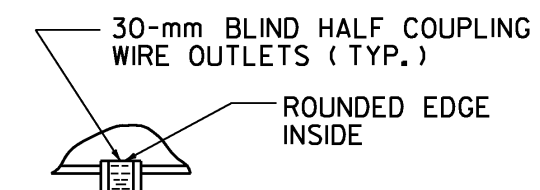
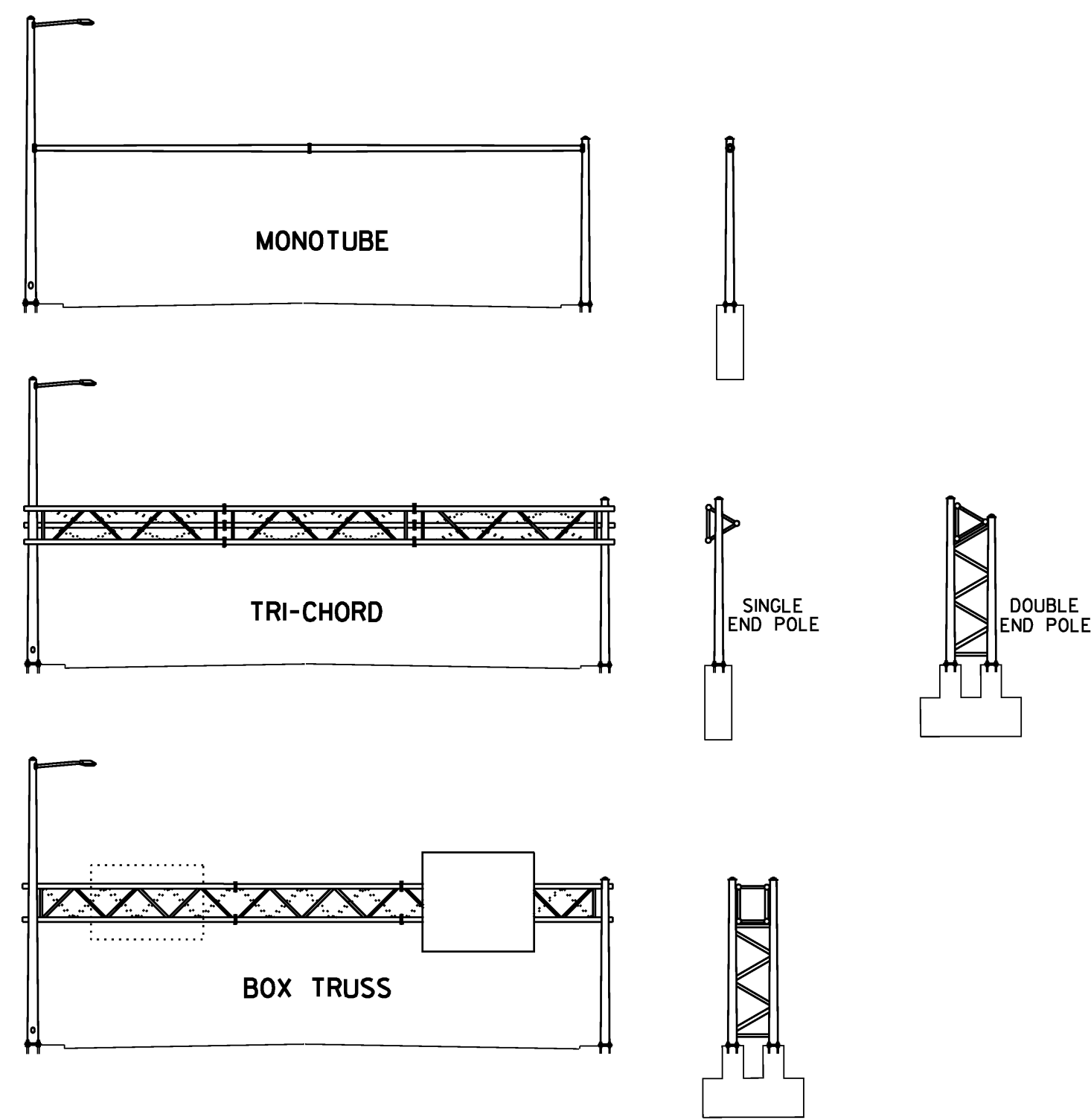
OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET #2

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 DESIGN SUPERVISOR _____ DATE _____
 PROJ. **M.M. 127.980 NB**
 TRAFFIC SHEET NO. _____ OF _____
 SHEET 85 OF 88 SHEETS

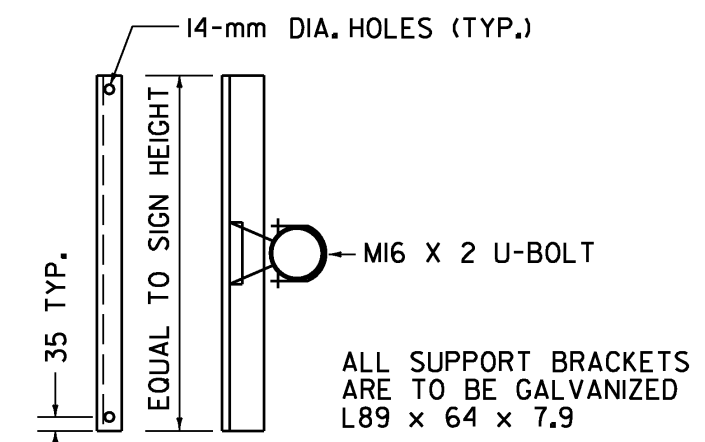
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PLOTTED: 12/15/2006



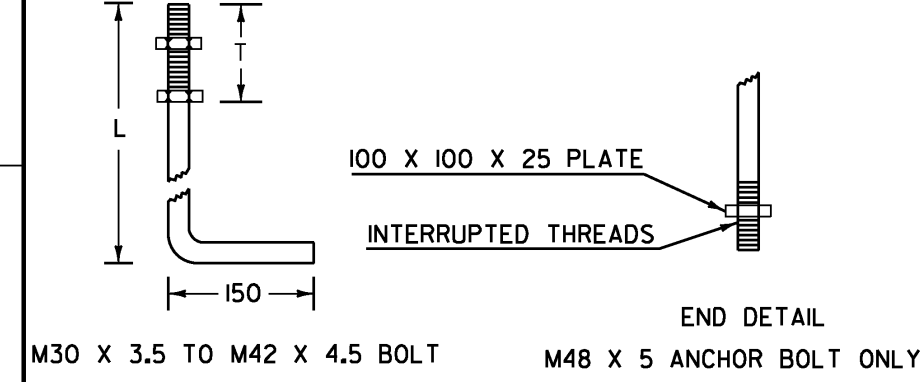
DETAIL A



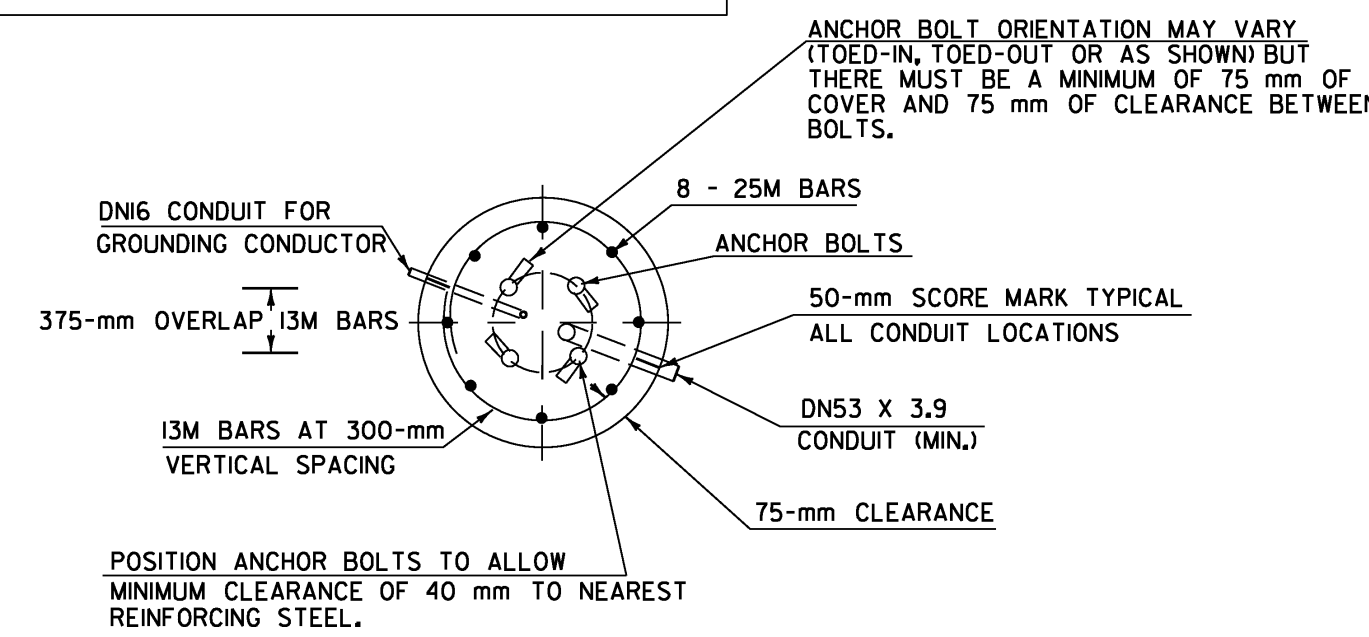
SIGN ON SINGLE MAST ARM

SIGN BRACKET DETAILS

ANCHOR BOLT DETAIL			
SIZE	L (mm)	T (mm)	
M30 X 3.5 X 1200	1050	200	
M36 X 4 X 1500	1350	230	
M42 X 4.5 X 2250	2100	230	
M48 X 5 X 2400	2400	230	



ANCHOR BOLT DETAIL



SECTION

OVERHEAD TRAFFIC SIGN BRIDGE FOOTING DETAIL

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)

13.30 mm² SOFT DRAWN COPPER GROUNDING CONDUCTOR CONNECT TO GROUNDING LUG IN POLE

100-mm GROUT PLACED AFTER POLE IS PLUMBED

CONDUITS TO EXTEND 50 mm ABOVE BASE GROUT 50-mm STEEL CLEARANCE

600 mm UNDER SIDEWALK OR CURB (MIN.) 900 mm UNDER ROADWAY (MIN.)

DN53 X 3.9 ELEC. CONDUIT(S) (MIN.) AS REQ'D. ANCHOR BOLTS SEE DETAIL AND CHART AT LEFT

8 - 25M BARS (25 mm SHORTER THAN FOOTING HEIGHT) 13M BARS AT 300-mm VERTICAL SPACING, 75-mm CLEARANCE

16 X 2400 MIN. COPPER CLAD GROUNDING ELECTRODE. SEE NOTE #1 ON THE CANTILEVER/OVERHEAD SIGN/SIGNAL SUPPORT NOTE SHEET.

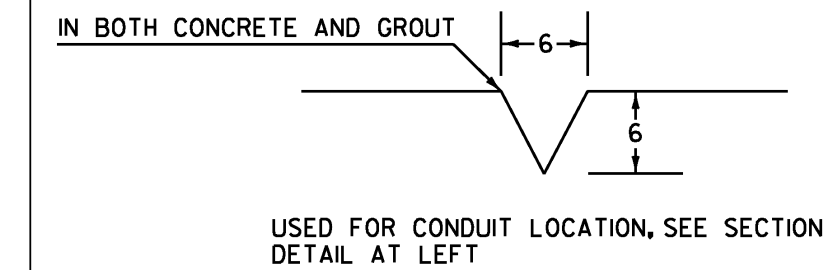
ANCHOR BOLT ORIENTATION MAY VARY (TOED-IN, TOED-OUT OR AS SHOWN) BUT THERE MUST BE A MINIMUM OF 75 mm OF COVER AND 75 mm OF CLEARANCE BETWEEN BOLTS.

DN16 CONDUIT FOR GROUNDING CONDUCTOR 375-mm OVERLAP 13M BARS 13M BARS AT 300-mm VERTICAL SPACING

8 - 25M BARS ANCHOR BOLTS 50-mm SCORE MARK TYPICAL ALL CONDUIT LOCATIONS DN53 X 3.9 CONDUIT (MIN.) 75-mm CLEARANCE

POSITION ANCHOR BOLTS TO ALLOW MINIMUM CLEARANCE OF 40 mm TO NEAREST REINFORCING STEEL.

ELEVATION

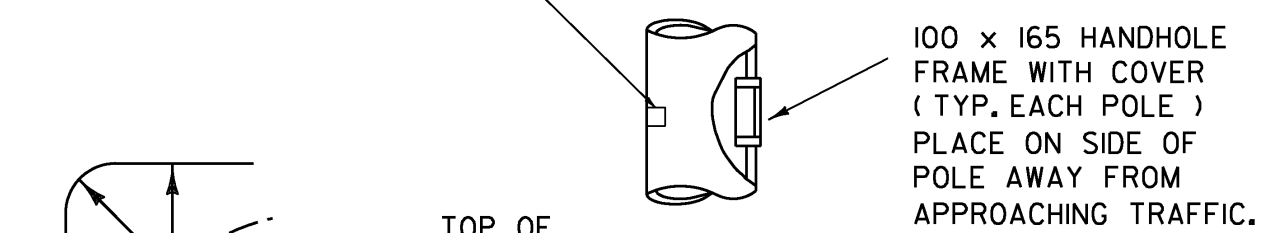


50-mm SCORE MARK DETAIL

NOTES:

1. SEE CANTILEVER / OVERHEAD SIGN / SIGNAL SUPPORTS NOTE SHEET FOR ADDITIONAL INFORMATION.
2. MANUFACTURER TO DETERMINE TYPE OF STRUCTURE REQUIRED.
3. MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 3 m IN HEIGHT.
4. STREET LIGHTING IS OPTIONAL. SEE PLAN SHEETS OR SECTION.
5. MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 5.2 m.

GROUND WIRES SHALL BE CONNECTED TO THE GROUNDING LUG INSIDE THE HANDHOLE ACCESS.



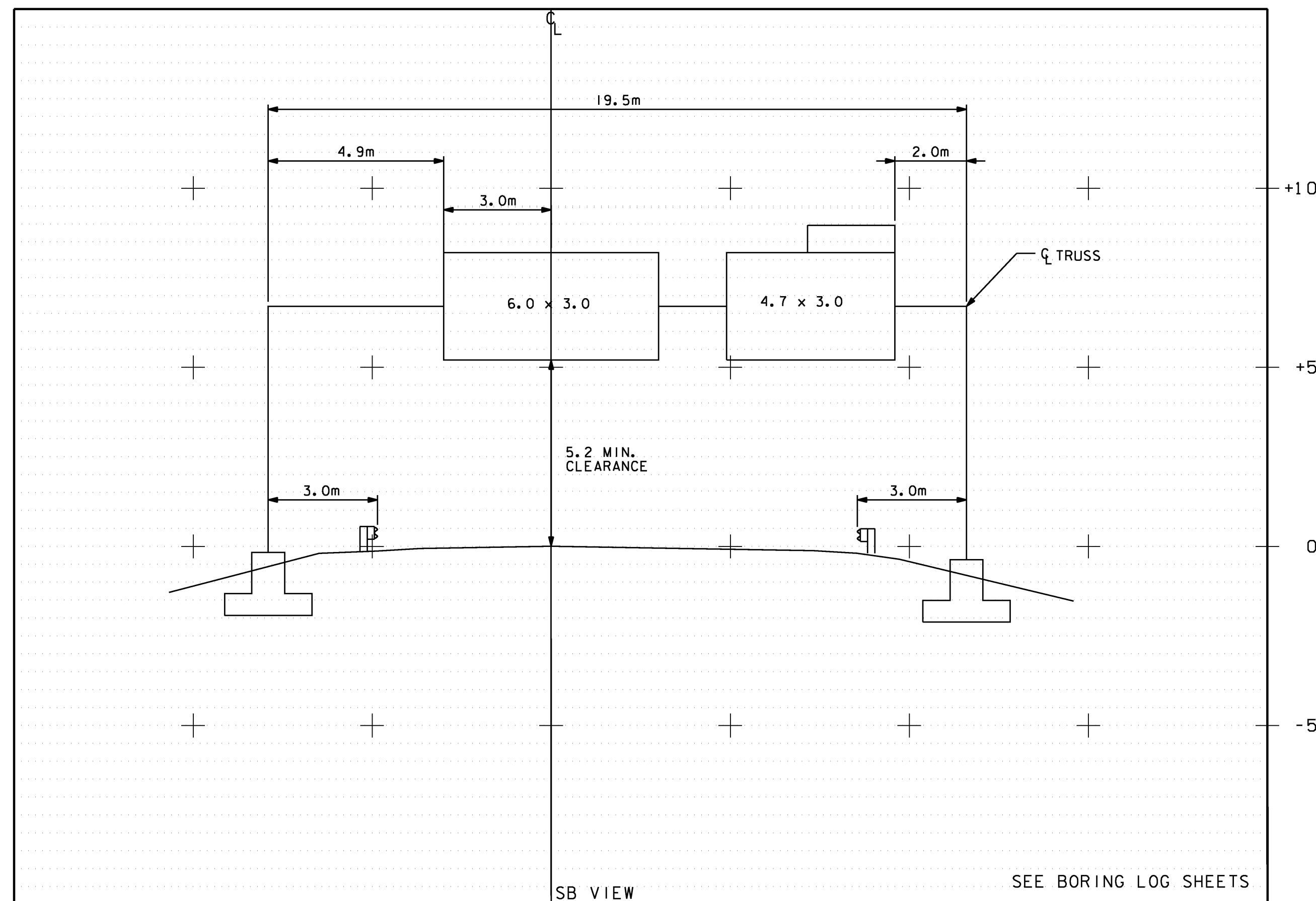
MINIMUM DIMENSION - EDGE OF BOLT HOLE TO EDGE OF BASE PLATE OR FACE OF UPRIGHT = ANCHOR BOLT DIA.

SEE DETAIL AT LEFT

BOLT CIRCLE (BC)

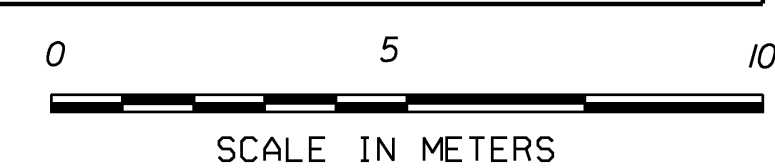
ALIGN POLE BASE 90° TO HORIZONTAL MEMBER(S)

POLE BASE AND BASE PLATE DETAIL



(SEE SHEET 31 FOR LOCATION PLAN)

OVERHEAD SIGN BRIDGE CROSS SECTION



NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

DATE	REVISIONS	BY

OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET #3

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 DESIGN SUPERVISOR _____ DATE _____
 PROJ. **M.M. 128.700 SB**
 TRAFFIC SHEET NO. _____ OF _____
 SHEET 86 OF 88 SHEETS



NOT TO SCALE

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-1 SHEET 1 OF 1 DATE STARTED: 6/18/02 DATE COMPLETED: 6/18/02							
PROJECT NAME: RYEGATE - St. JOHNSBURY SITE NAME: OVERHEAD SIGNS STATION: MM 127.628 NORTHBOUND GROUND EL.: NA		PROJECT NUMBER: IMIR 091-2 (8) SITE NO.: 1-91 OFFSET: RIGHT SIDE G.W. DEPTH: Hole caved in @ 6.0'							
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS		BORING RIG: TRACK RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL							
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-1-b, GrSa, brn, Moist, Rec. = 1.25'	7	8.1	25.6	59.6	14.8		
		Grass & Roots were within sample.							
		NXDC, 2.25'-3.25', Boulder	25	14.3	37.3	38.1	24.6		
5		A-1-b, SiGrSa, gry, Moist, Rec. = 1.0'	12	9.5	20.7	49.8	29.5		
		A-2-4, GrSiSa, brn, Moist Rec. = 1.6'							
		Broken rock was within sample.							
		NXDC, 6.0'-6.5', Cleaned out casing, No Rec.							
		NXDC, 7.5'-10.0', Cleaned out casing, Boulders							
10		10.0'-12.0', No Sample.	17						
		Top of bedrock @ 13.0'							
		Run#1: NXGDC, 13.0'-15.6', Rec. = 2.33' See Geologist's Report.	1	90	19	70			
15		Run#2: NXGDC, 15.6'-18.6', Rec. = 2.80' See Geologist's Report.	2	93	80	70			
20		Hole stopped @ 18.6'							
		Geologist's Report: Run#1: Gray metaquartzite, Hard to very hard, Unweathered, Poor RQD. Run#2: Same as Run#1, but Competent.							

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-2 SHEET 1 OF 1 DATE STARTED: 6/18/02 DATE COMPLETED: 6/18/02							
PROJECT NAME: RYEGATE - St. JOHNSBURY SITE NAME: OVERHEAD SIGNS STATION: MM 127.980 NORTHBOUND GROUND EL.: NA		PROJECT NUMBER: IMIR 091-2 (8) SITE NO.: 1-91 OFFSET: RIGHT SIDE G.W. DEPTH: Hole caved in @ 5.0'							
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS		BORING RIG: TRACK RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL							
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-1-b, Sa, brn, Moist, Rec. = 1.6'	6	7.3	15	72.3	12.7		
		Grass & Roots were within sample.							
		Visual Class: A-1-b, SiSaGr brn, Moist, Rec. = 0.15'	R						
		Top of bedrock @ 2.8'							
5		Run#1: NXGDC, 2.8'-5.8' Rec. = 1.7' See Geologist's Report.	1	57	33	50			
		Run#2: NXGDC, 5.8'-9.3' Rec. = 3.5', See Geologist's Report.	2	100	100	50			
10		Hole stopped @ 9.3'							
		Geologist's Report: Run#1: Gray meta quartzite and phyllite, Hard to moderately hard, Unweathered, Fair competency. Run#2: Gray meta quartz, Hard to very hard, Unweathered, Competent.							

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION		HOLE NO.: B-3 SHEET 1 OF 1 DATE STARTED: 6/19/02 DATE COMPLETED: 6/19/02							
PROJECT NAME: RYEGATE - St. JOHNSBURY SITE NAME: OVERHEAD SIGNS STATION: MM 127.980 NORTHBOUND GROUND EL.: NA		PROJECT NUMBER: IMIR 091-2 (8) SITE NO.: 1-91 OFFSET: LEFT SIDE G.W. DEPTH: 9.0 (06/19/02)							
BORING CREW CREW CHIEF: YOUNG DRILLER: YOUNG LOGGER: SOMERS		BORING RIG: TRACK RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL							
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-1-b, SiGrSa, brn, Moist, Rec. = 1.25'	8	10.8	31.8	45.5	22.7		
		Grass & Roots were within sample.							
		A-1-a, SaGr, brn-gry, Moist, Rec. = 1.2'	30	8.2	67.8	20.1	12.1		
		Broken rock was within sample.							
5		NXDC, 4.0'-5.0', Boulder							
		Top of bedrock @ 5.0'							
		Run#1: NXGDC, 5.0'-9.0', Rec. = 3.0', See Geologist's Report.	1	75	0	70			
10		Run#2: NXGDC, 9.0'-14.0', Rec. = 4.2', See Geologist's Report.	2	84	60	70			
15		Hole stopped @ 14.0'							
		Geologist's Report: Run#1: Gray meta quartzite, Hard, Unweathered, Poor RQD. Run#2 Same as Run#1, but Competent.							

BORING LOG
SHEET #1

SURVEYED BY: J. TOUCHETTE DATE: 07/02
 DRAWN BY: C. C. BENDA
 SQUAD LEADER: /M&R/87a023/ma023bor.dgn
 DESIGN FILE NO.: DATE PLOTTED: 12/13/2006
 IPARM FILE:
 PROJ. NAME: RYEGATE - St. JOHNSBURY
 PROJ. NO.: IM 091-2 (73)
 SHEET 87 OF 88 SHEETS

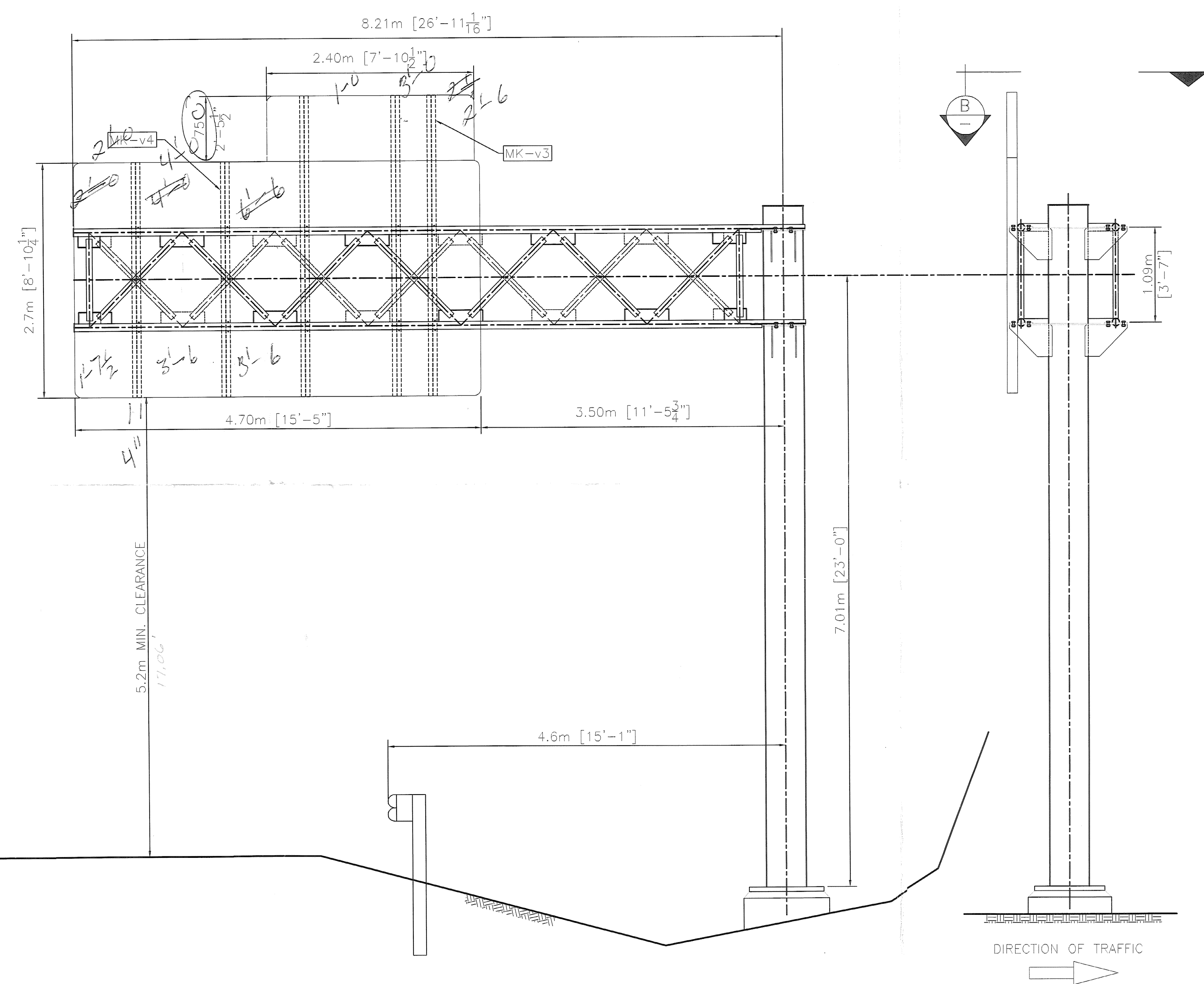
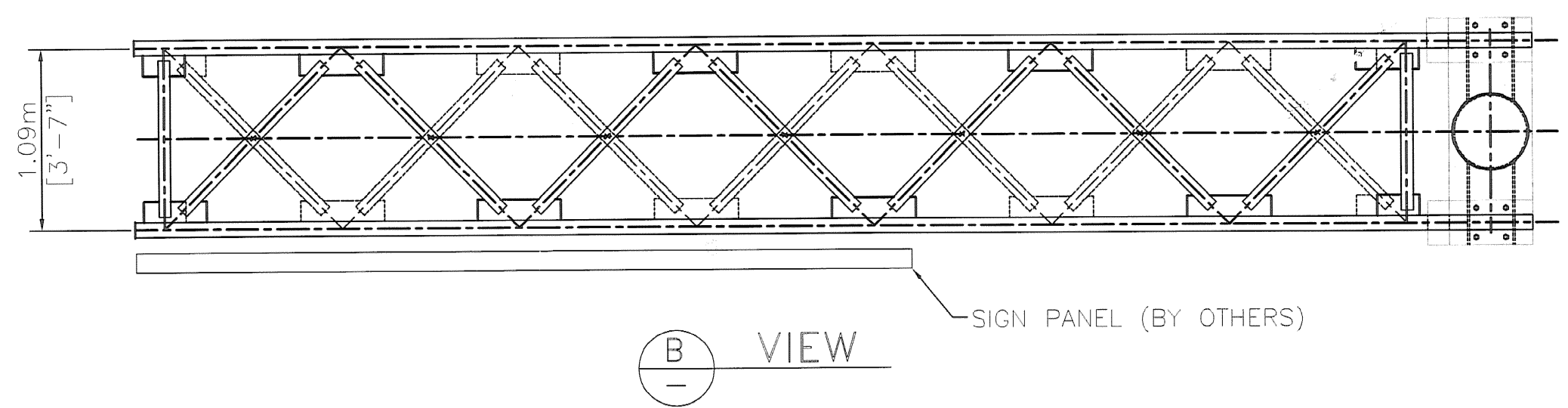
STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION				HOLE NO.: B-4 SHEET 1 OF 1 DATE STARTED: 6/20/02 DATE COMPLETED: 6/20/02					
PROJECT NAME: RYEGATE - St. JOHNSBURY				PROJECT NUMBER: IMR 09I-2 (8)					
SITE NAME: OVERHEAD SIGNS				SITE NO.: I-9I					
STATION: MM 128.690 SOUTHBOUND				OFFSET: LEFT SIDE					
GROUND EL.: NA				G.W. DEPTH: Dry Hole (06/20/02)					
BORING CREW CREW CHIEF: YOUNG				BORING RIG: TRACK RIG					
DRILLER: YOUNG				BORING TYPE: WASH BORE					
LOGGER: SOMERS				SAMPLE TYPE: SPLIT BARREL					
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4, SiGrSa, brn, Dry, Rec. = 1.6'	10	7.6	27.7	50.7	21.6		
		Grass & Roots were within sample.							
		A-2-4, Sa, brn, Dry, Rec. = 1.0'	10	10.9	12.6	69.1	18.3		
5		A-1-b, Sa, brn, Moist, Rec. = 1.2'	17	8.4	16.2	70.6	13.2		
		A-1-b, Sa, brn, Moist, Rec. = 1.0'	11	9.5	18	67.1	14.9		
		A-2-4, Sa, brn, Moist, Rec. = 1.1'	11	10.5	17.1	70	12.9		
10		A-2-4, Sa, brn, Moist, Rec. = 1.25'	23	12.1	16.1	64.7	19.2		
15		A-2-4, Sa, brn, Moist, Rec. = 0.9'	11	16.9	0.8	84.3	14.9		
20		A-2-4, Sa, brn, Moist, Rec. = 1.1'	13	21.4	0.3	88.7	11		
25		A-4, SaSi, brn, Moist, Rec. = 1.1'	19	22.2	0.2	35.9	63.9		
30		A-2-4, SiSa, brn, Moist, Rec. = 0.75'	R	23.4	0.2	66.2	33.6		
		Hole stopped @ 30.75'							

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH DIVISION SUBSURFACE INFORMATION				HOLE NO.: B-5 SHEET 1 OF 1 DATE STARTED: 6/20/02 DATE COMPLETED: 6/24/02					
PROJECT NAME: RYEGATE - St. JOHNSBURY				PROJECT NUMBER: IMR 09I-2 (8)					
SITE NAME: OVERHEAD SIGNS				SITE NO.: I-9I					
STATION: MM 128.690 SOUTHBOUND				OFFSET: RIGHT SIDE					
GROUND EL.: NA				G.W. DEPTH: Hole caved in @ 23.0'					
BORING CREW CREW CHIEF: YOUNG				BORING RIG: TRACK RIG					
DRILLER: YOUNG				BORING TYPE: WASH BORE					
LOGGER: SOMERS				SAMPLE TYPE: SPLIT BARREL					
DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4, GrSa, brn, Moist, Rec. = 1.25'	5	8.7	33.1	47.3	19.6		
		Grass & Roots were within sample.							
		A-1-b, SaGr, brn, Moist, Rec. = 0.8'	15	9.6	46.4	38	15.6		
5		NXDC, 3.33'-5.0', Boulders							
		NXDC, 5.0'-8.65', Boulders							
10		NXDC, 9.5'-10.0', Advanced & Cleaned out casing.	24	13.6	1.5	82.2	16.3		
		A-2-4, Sa, brn, Moist, Rec. = 1.0'							
15		A-3, Sa, brn, Moist, Rec. = 1.25'	11	19.5		90.7	9.3		
20		A-3, Sa, brn, Moist, Rec. = 1.20'	14	21.7		89.8	10.2		
25		A-2-4, Sa, brn-gry, Moist Rec. = 1.5'	74	13.4	16	65.5	19.5		
30		Not enough recovery for a sample, Appears to be SiGrSa.	R						
		Hole stopped @ 31.33'							

BORING LOG

SHEET #2

SURVEYED BY J. TOUCHETTE DATE 07/02
 DRAWN BY C. C. BENDA
 SQUAD LEADER
 DESIGN FILE NO. /M&R/87a023/ma023bor.dgn
 IPARM FILE DATE PLOTTED 12/13/2006
 PROJ. NAME RYEGATE - St. JOHNSBURY
 PROJ. NO. IM 09I-2 (73)
 SHEET 88 OF 88 SHEETS

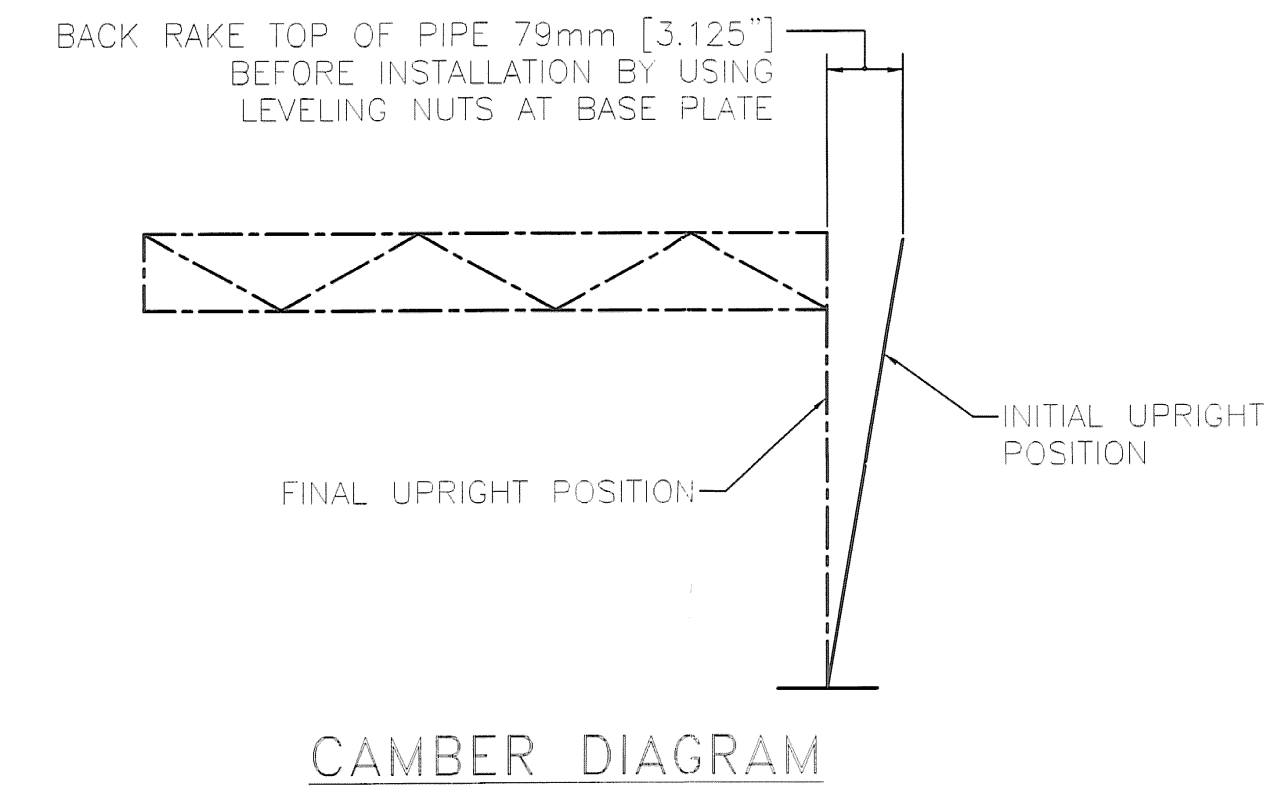


ELEVATION
NB I-91 STA.127.628

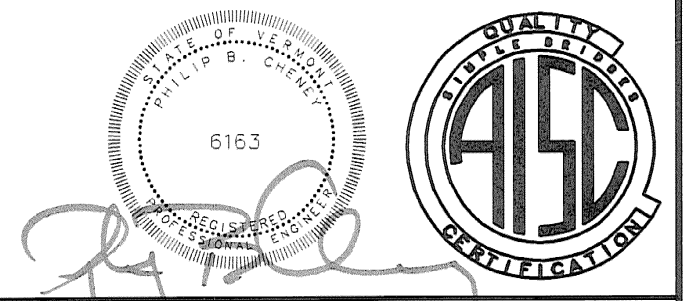
NOTE:
TOP OF FOOTING ELEVATION IS ASSUMED.
CONTRACTOR TO VERIFY ELEVATION BEFORE
FABRICATION.

SIDE ELEVATION

- NOTE:**
- STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.
 - ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.
 - GRIND SHARP CORNERS OF ALL PLATES TO A 1/8" MIN. RADIUS PRIOR TO GALVANIZING.
 - ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.
 - ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.
 - STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.
 - STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 48 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, A53 GR. B OR API 5LX42.
 - UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325).
 - GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.
 - ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
 - ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).
 - ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.
 - CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.
 - FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.
 - SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.
 - BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF (VDO) STANDARD SPECIFICATIONS SECTION 506.



6w
RT
A/W
RT 06/15/07



HIGHWAY SAFETY CORP.
GLASTONBURY, CT

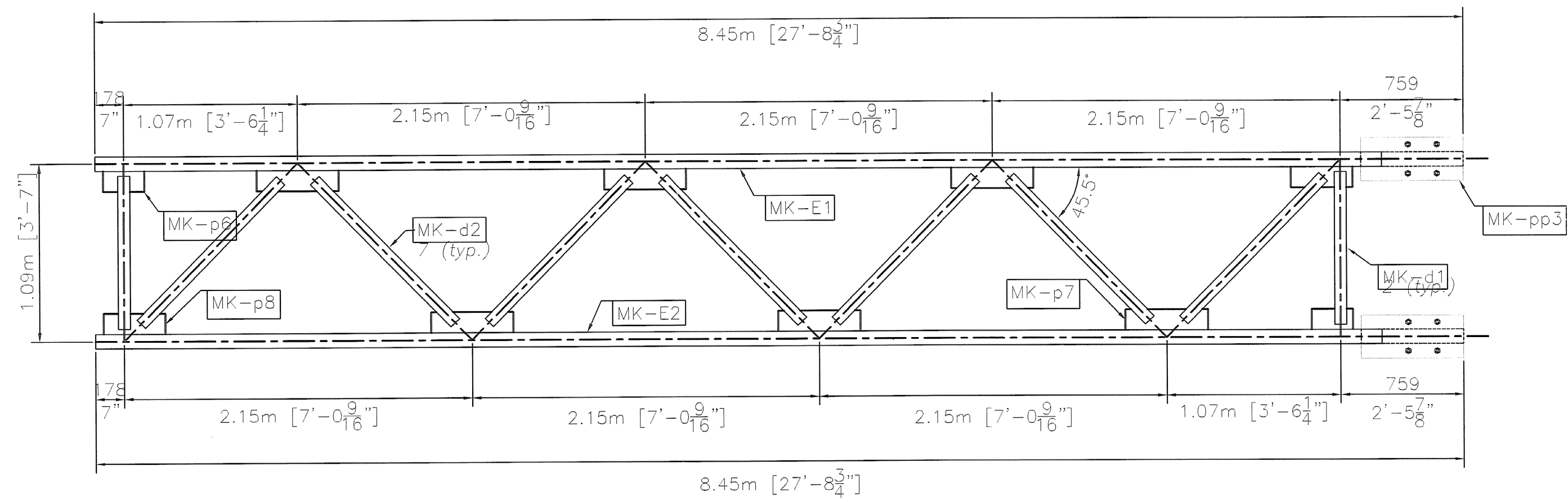
CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.127.628 NB
PROJECT No. AC IM 091-2(73)

DESIGNED BY: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
PART REFERENCE NO.: 1587c
SHEET NO.: 0
1 of 6

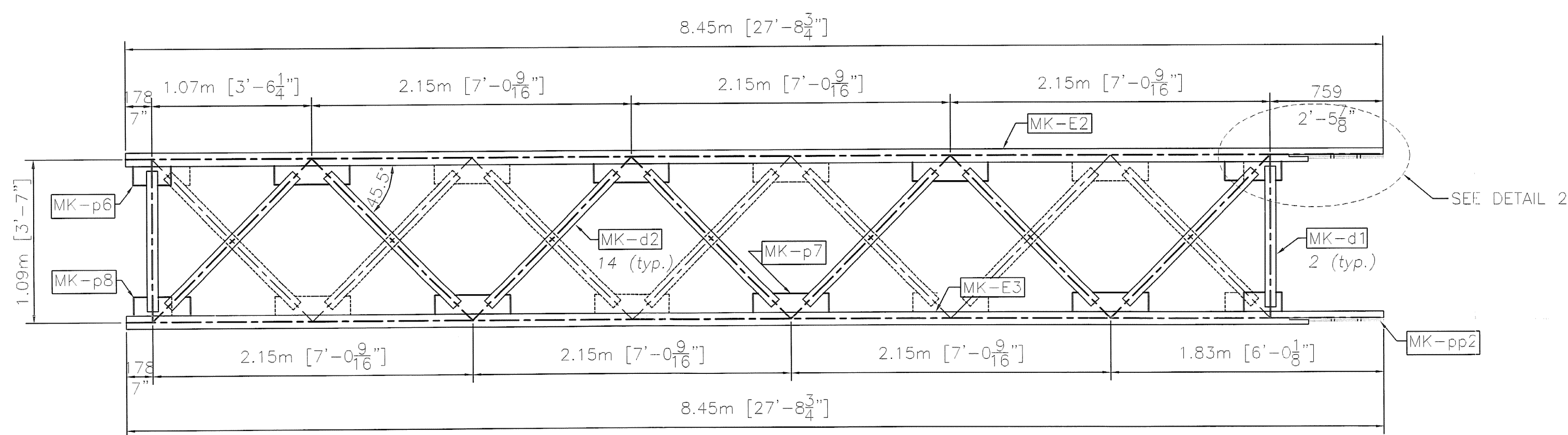
CONTRACTOR: F.R. LAFAYETTE

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

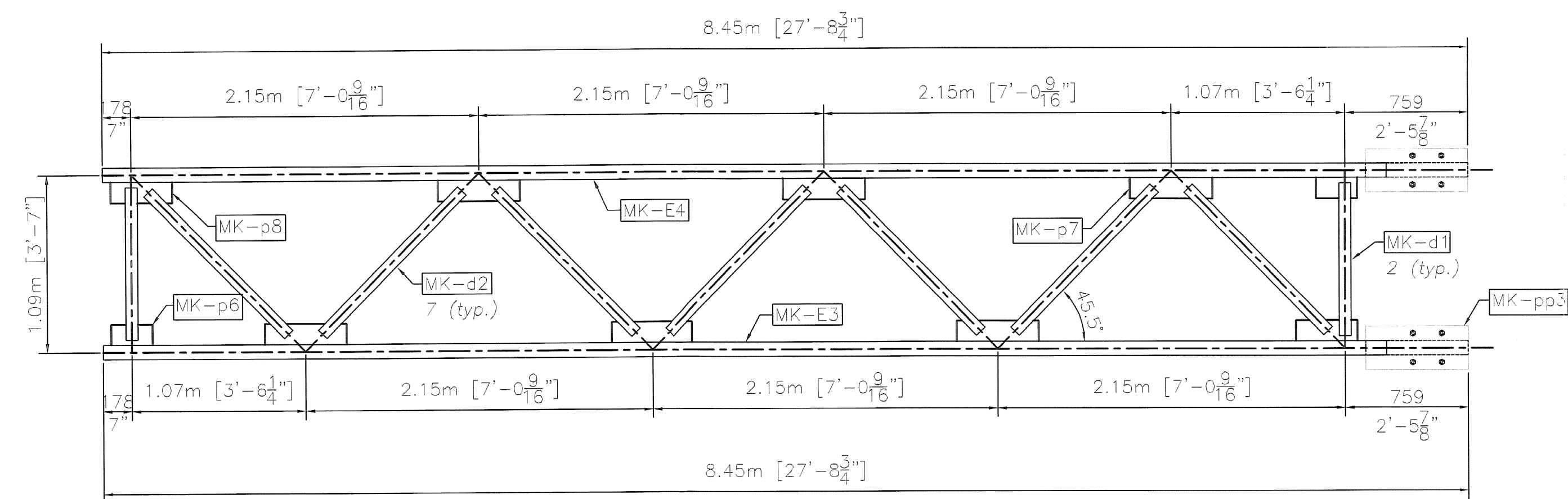
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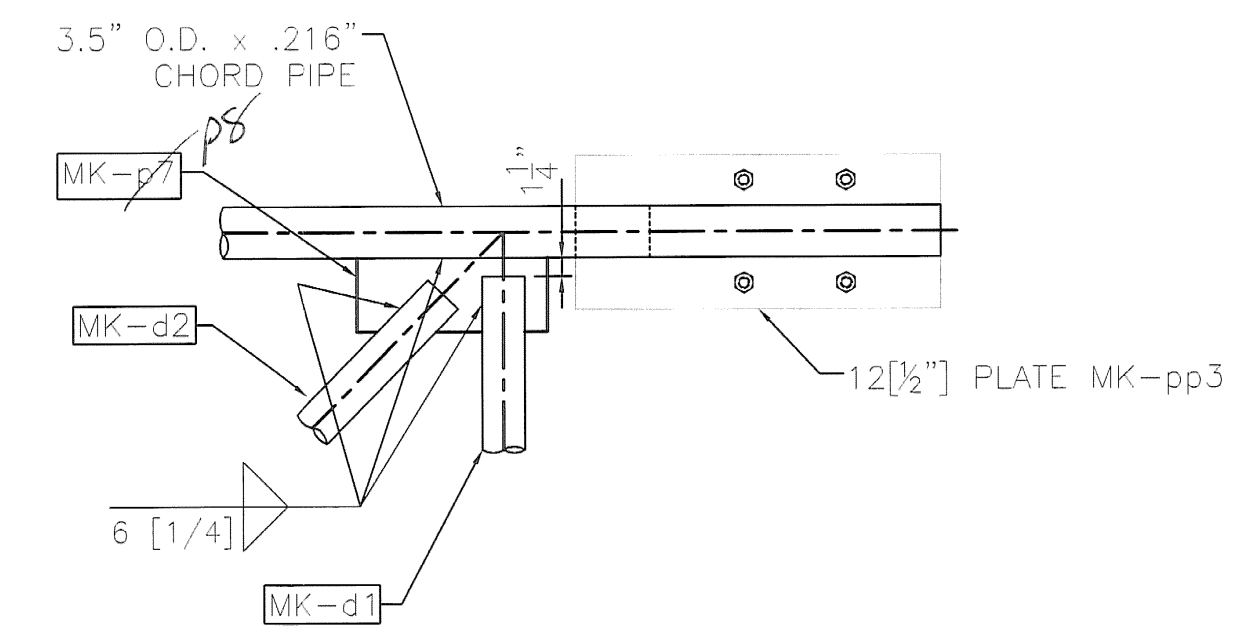
TOP VIEW



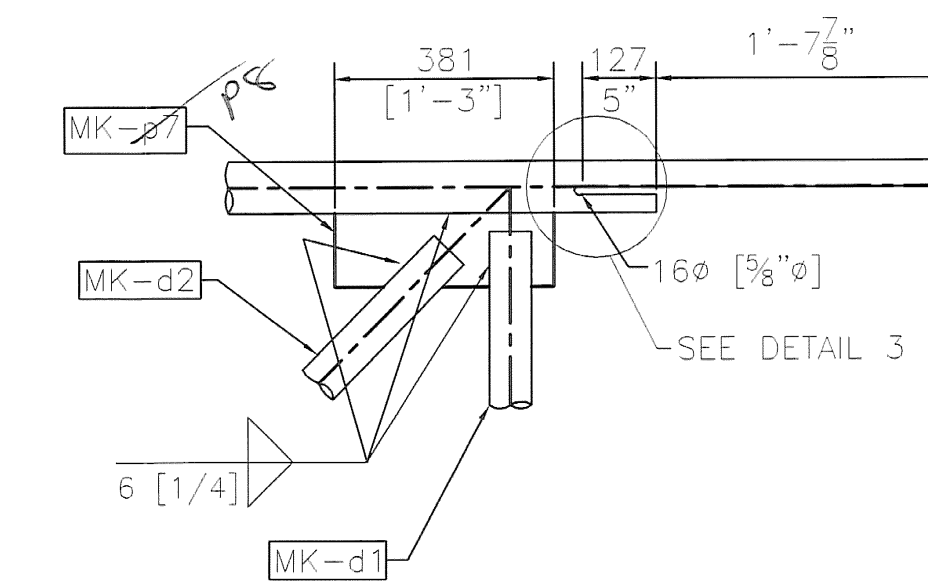
FRONT VIEW



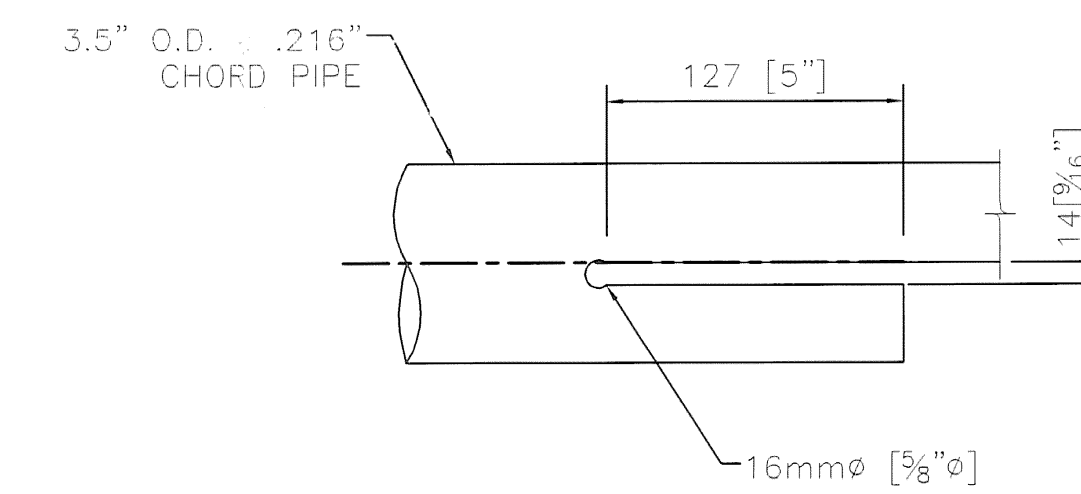
BOTTOM VIEW



DETAIL 1

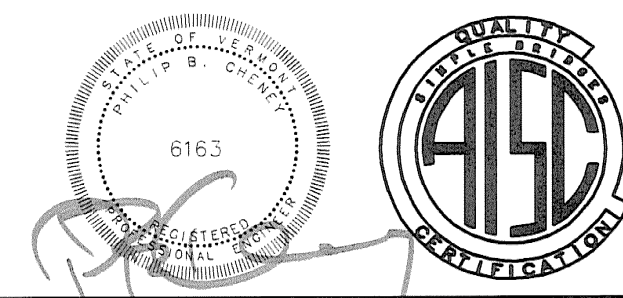


DETAIL 2



DETAIL 3

AC EL
 A/N
 EL 06/15/07



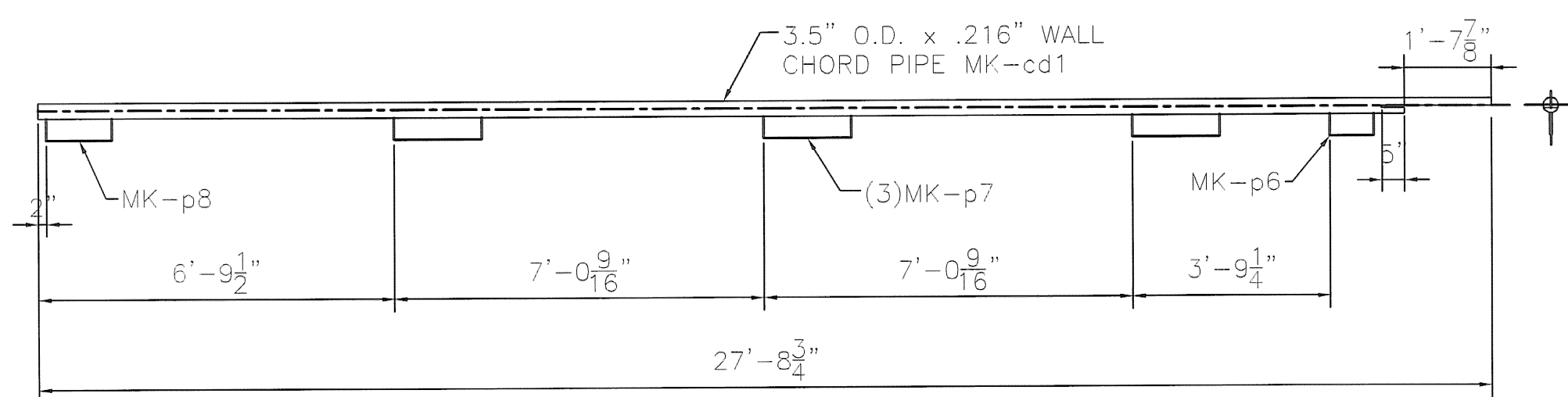
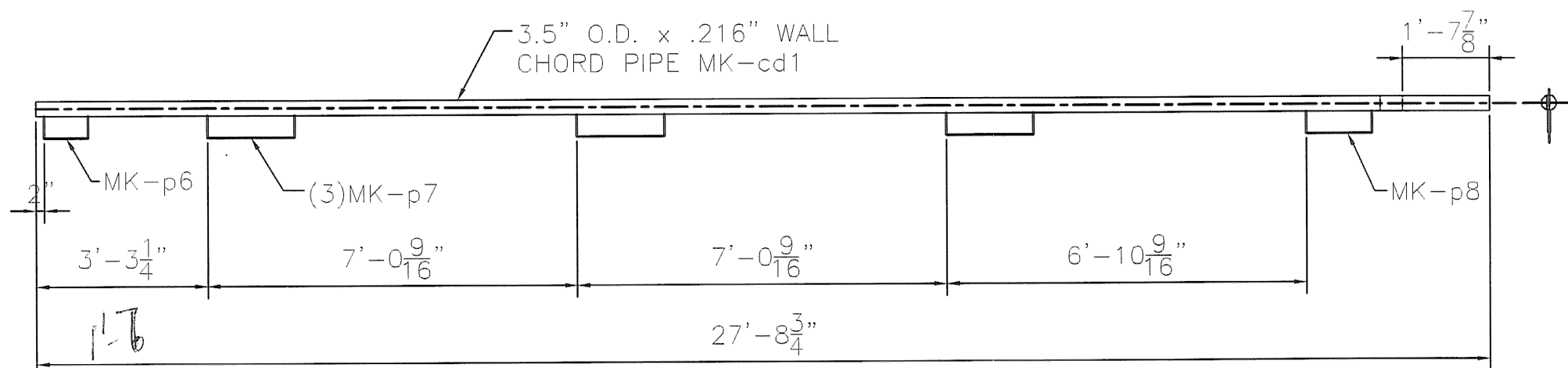
HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
 STATE OF VERMONT
 COUNTY OF CALEDONIA
 INTERSTATE RTE. 91 STA.127.628 NB
 PROJECT No. AC IM 091-2(73)

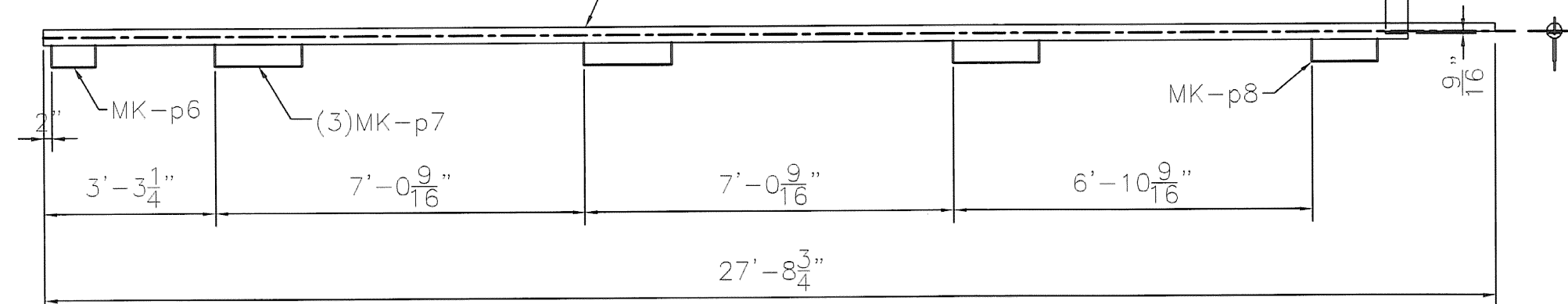
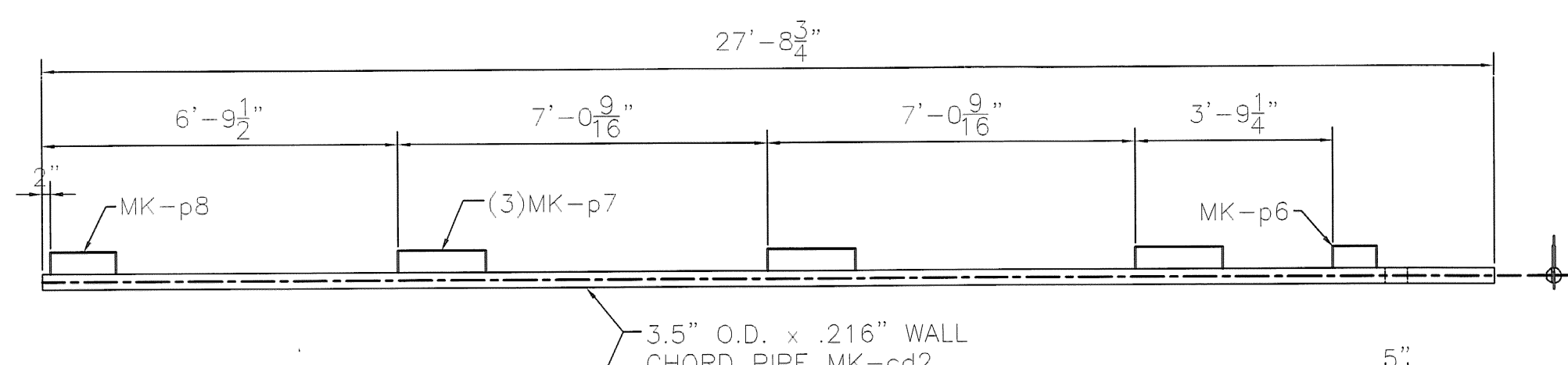
DESIGNER: MHM
 CHECKED: P. Radice
 DATE: 3/23/07
 SCALE: N.T.S.
 PROJECT No. 1587c
 SHEET No. 2 of 6

CONTRACTOR: F.R. LAFAYETTE

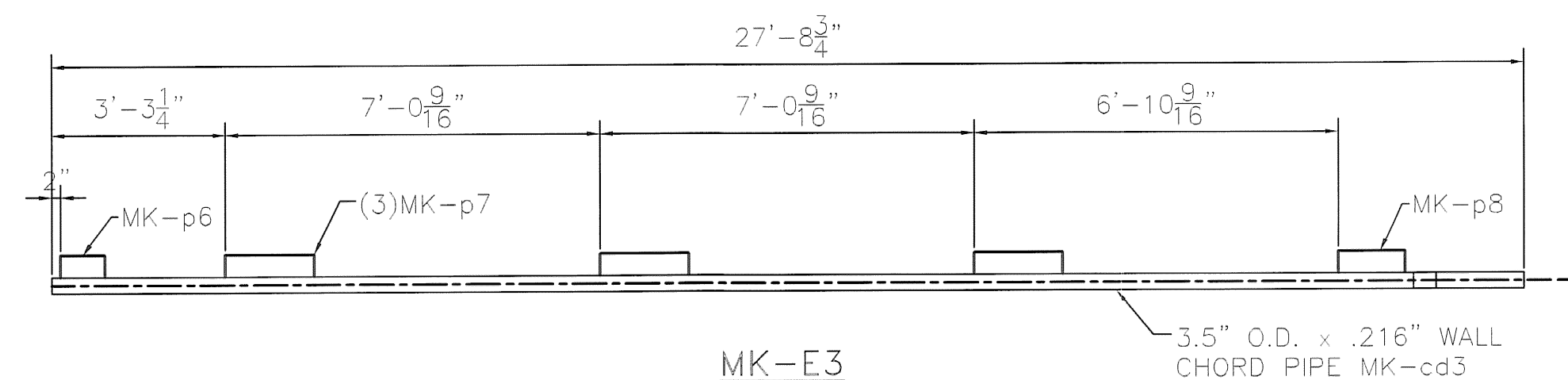
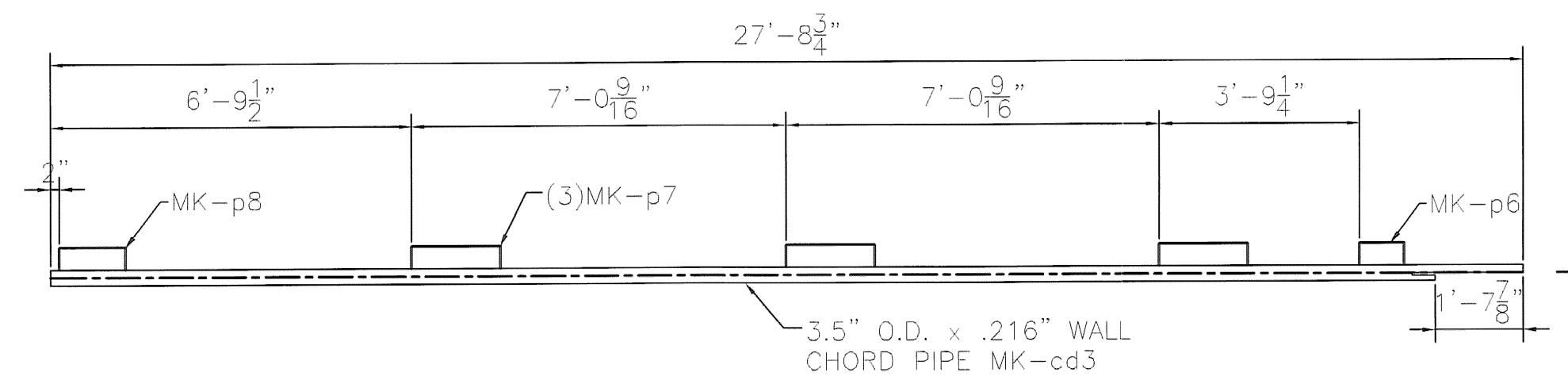
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



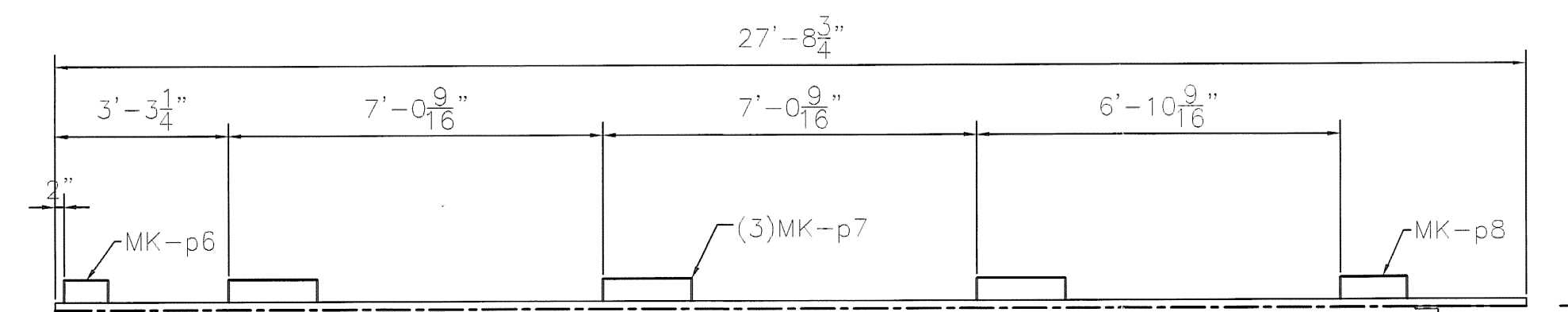
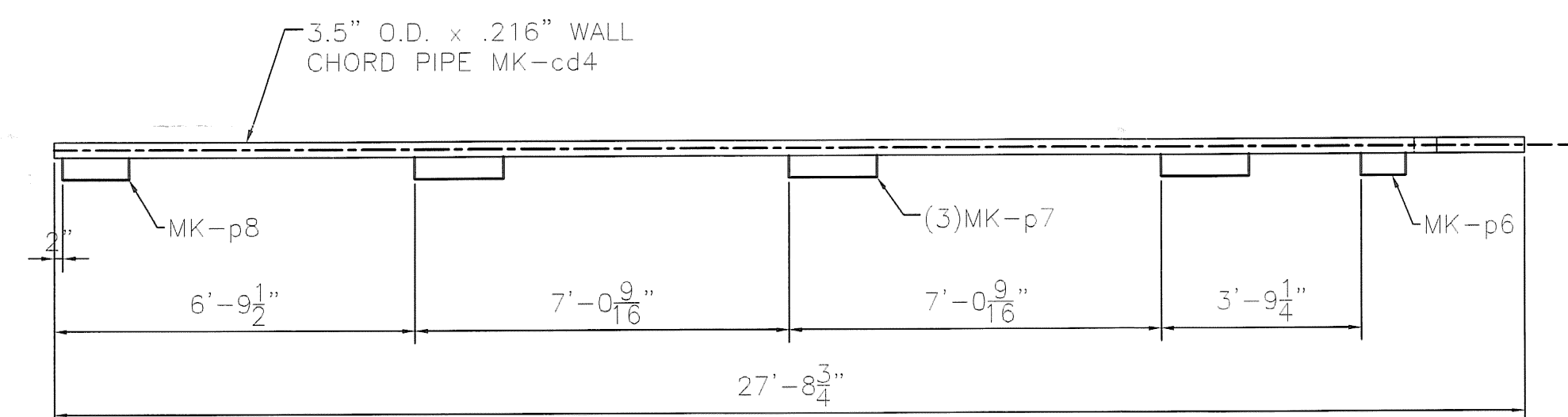
MK-E1



MK-E2

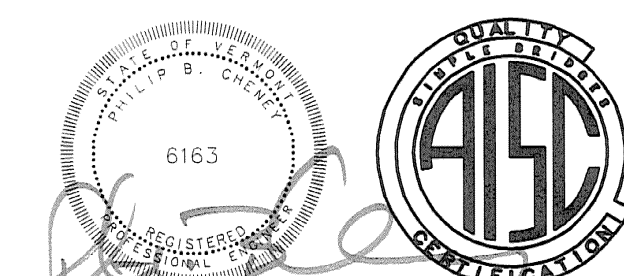


MK-E3



MK-E4

BY: GWC
DATE: 3/23/07
BY: ELS
DATE: 06/18/07



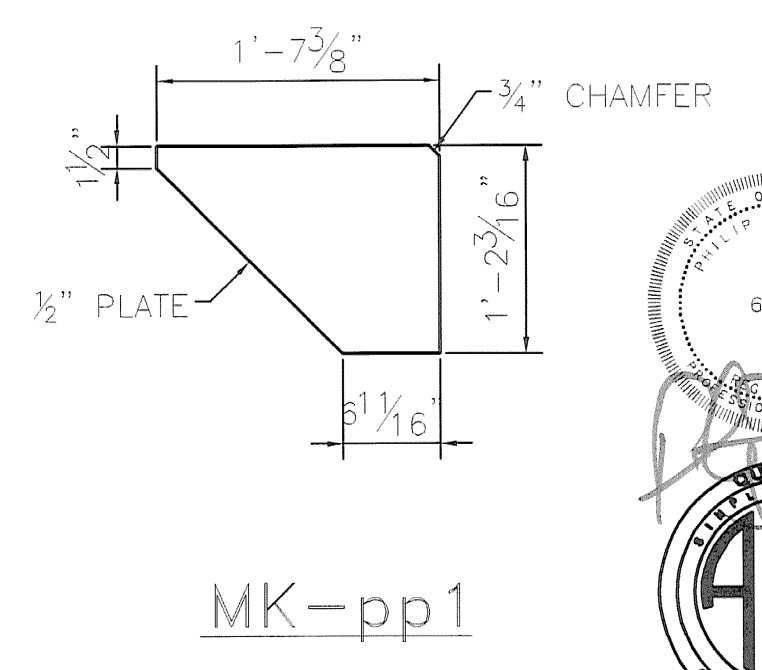
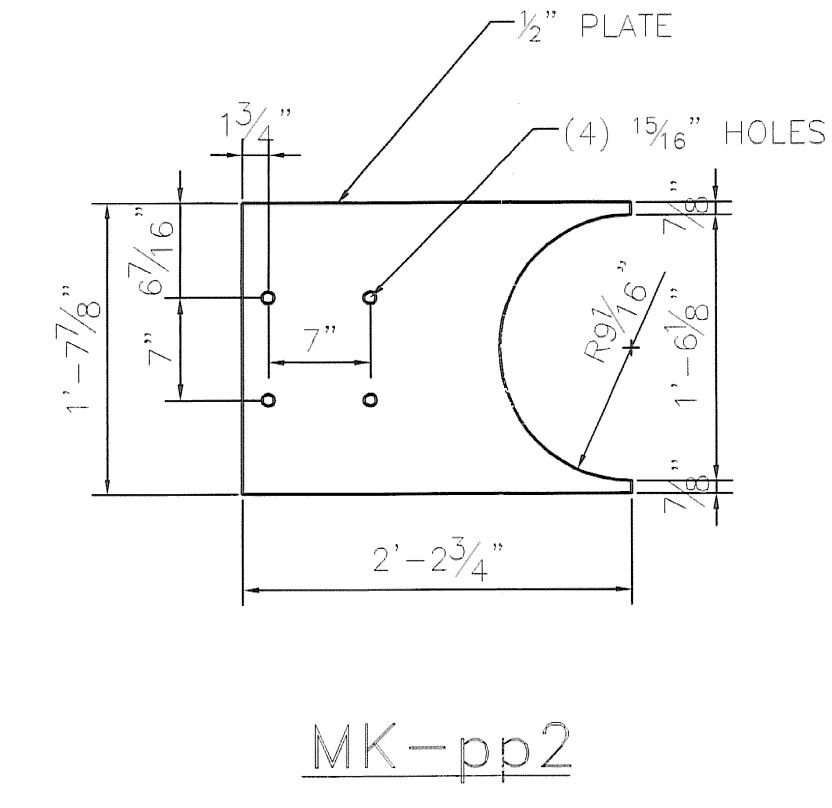
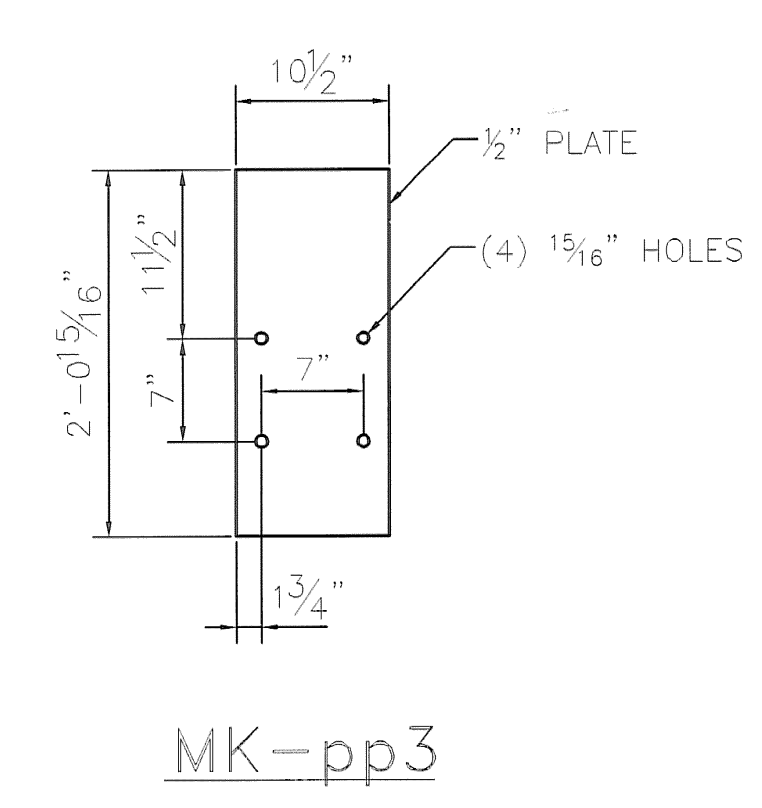
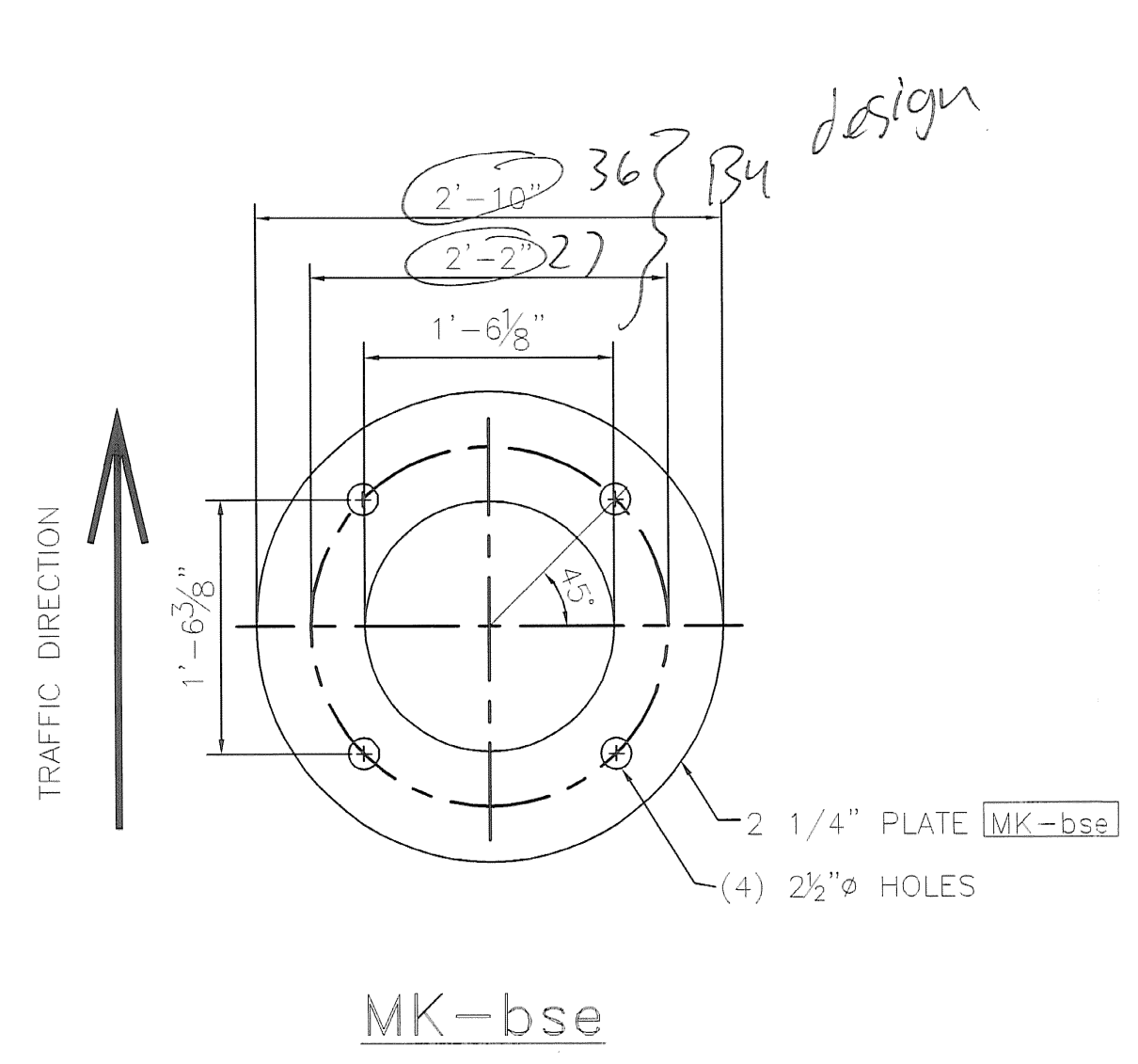
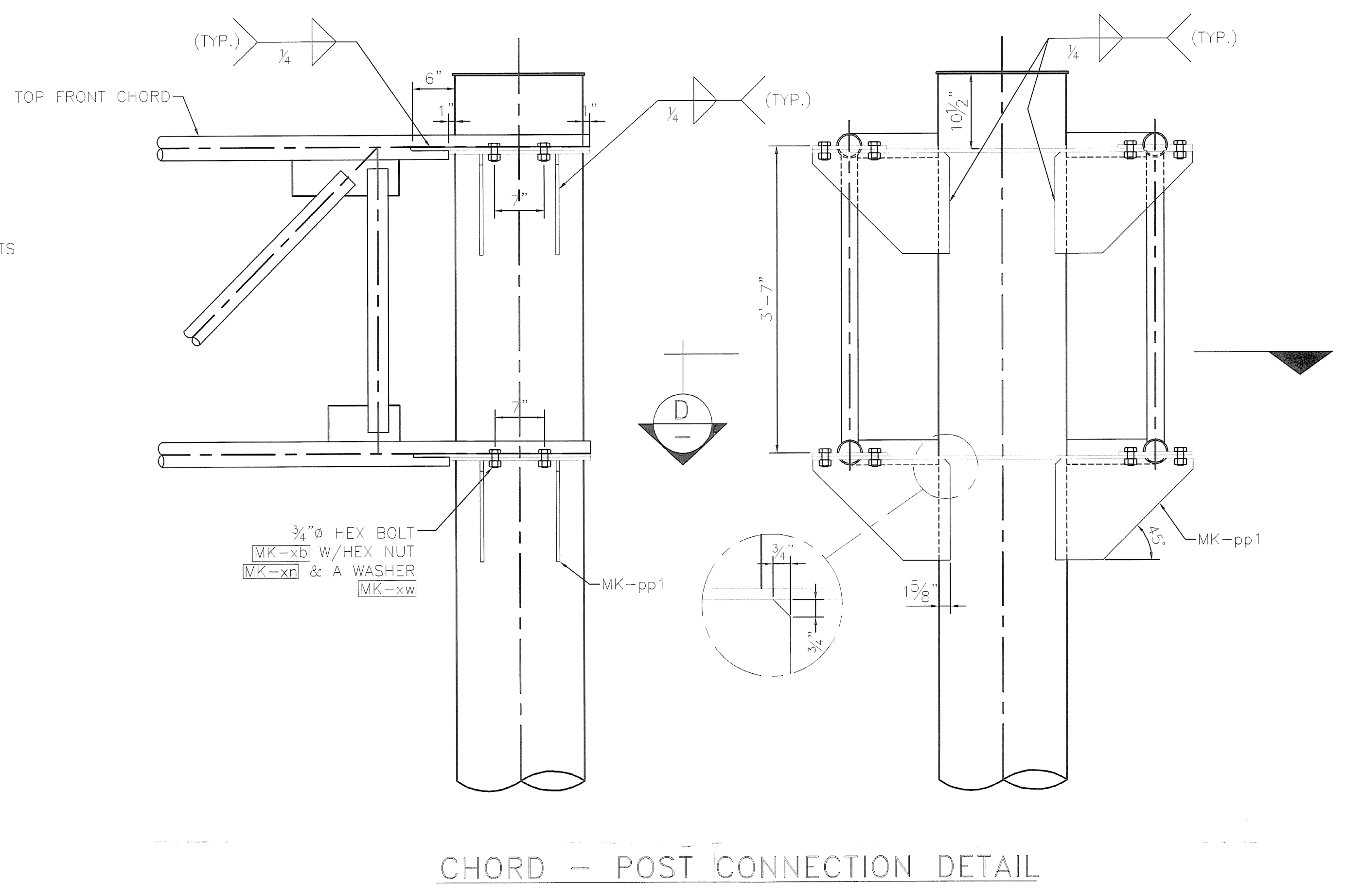
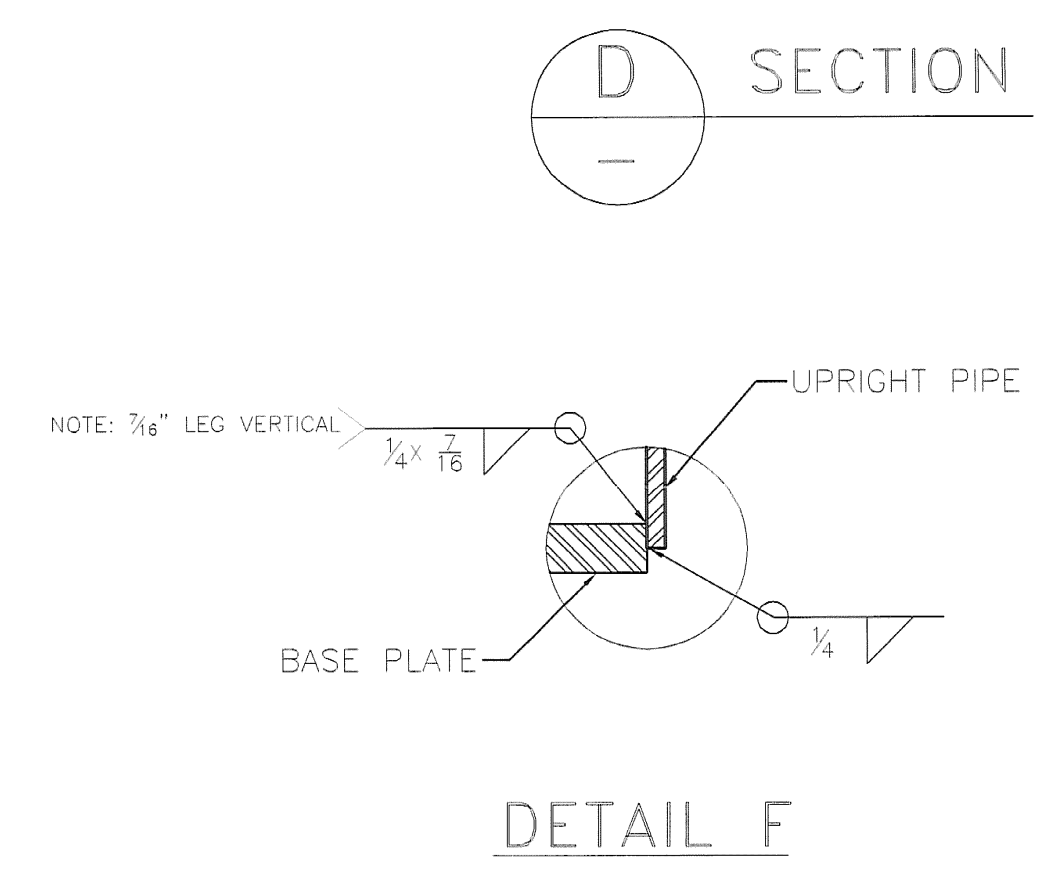
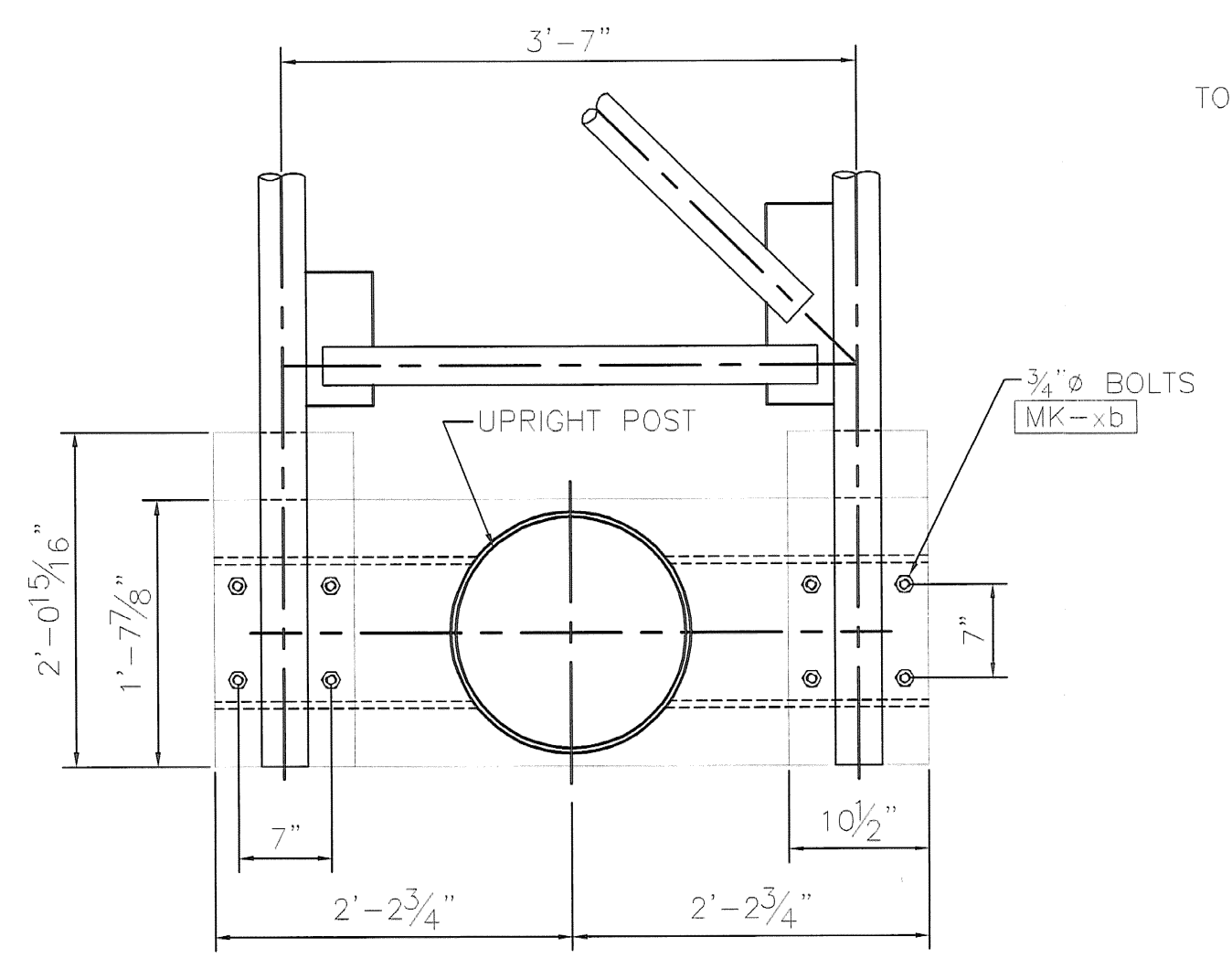
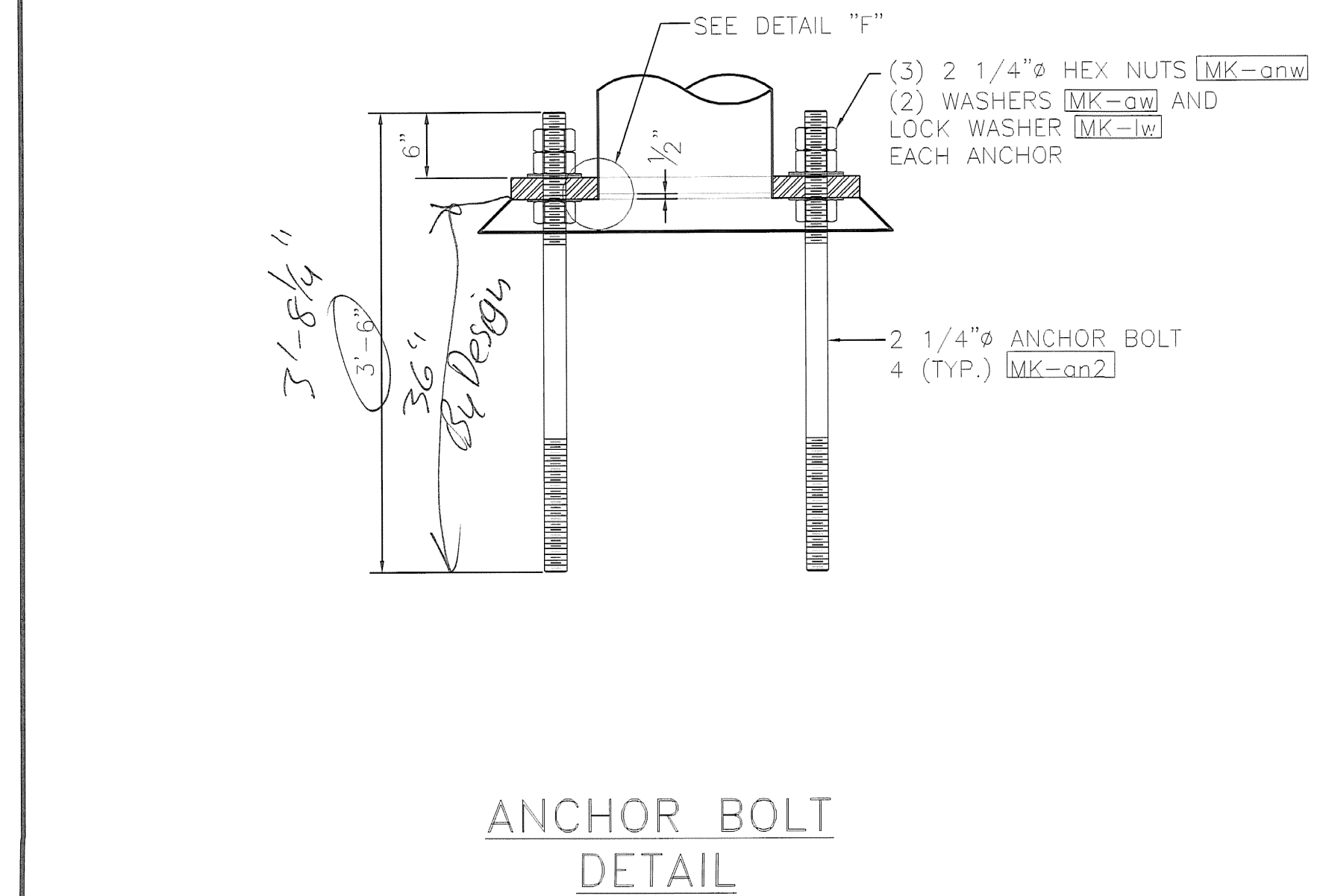
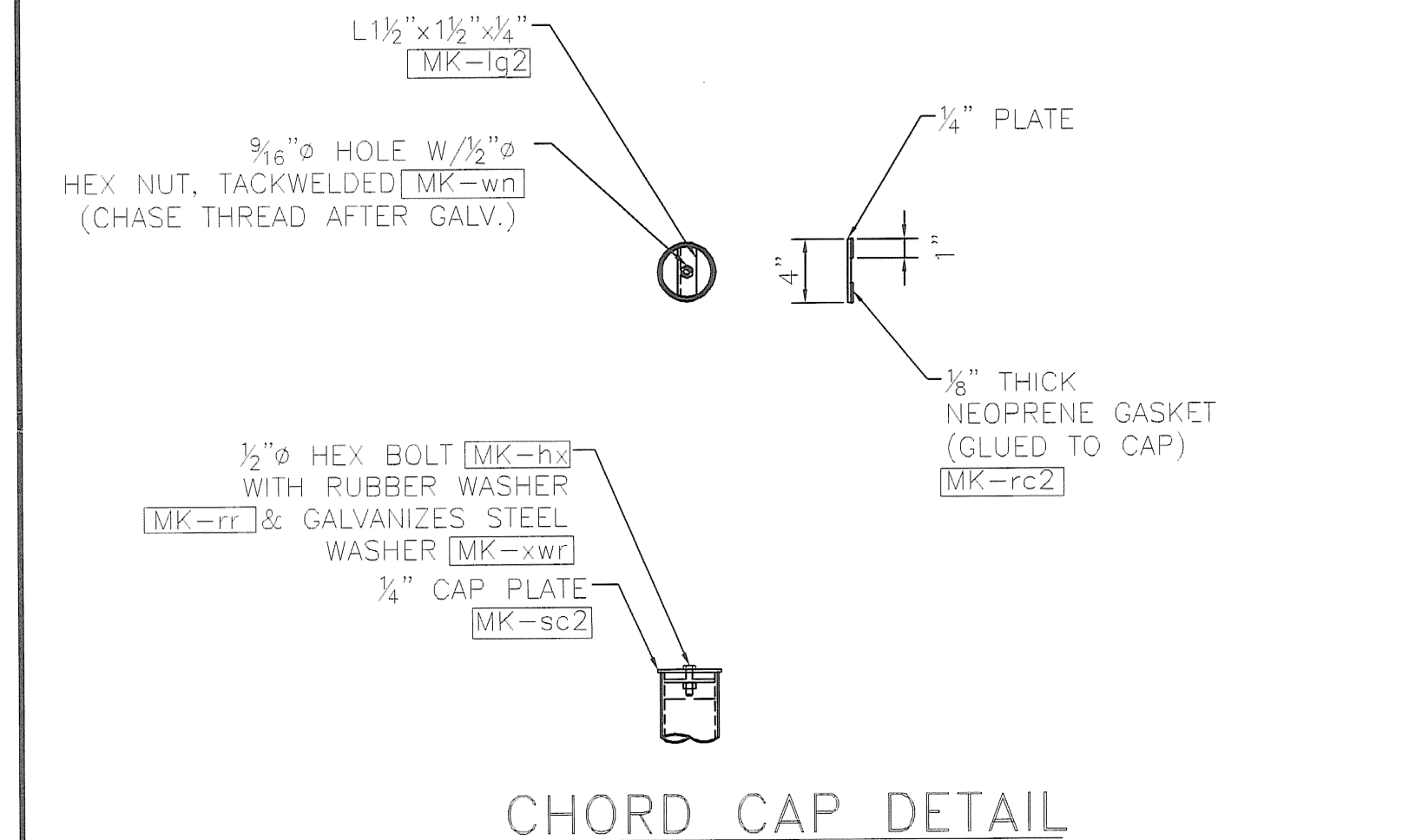
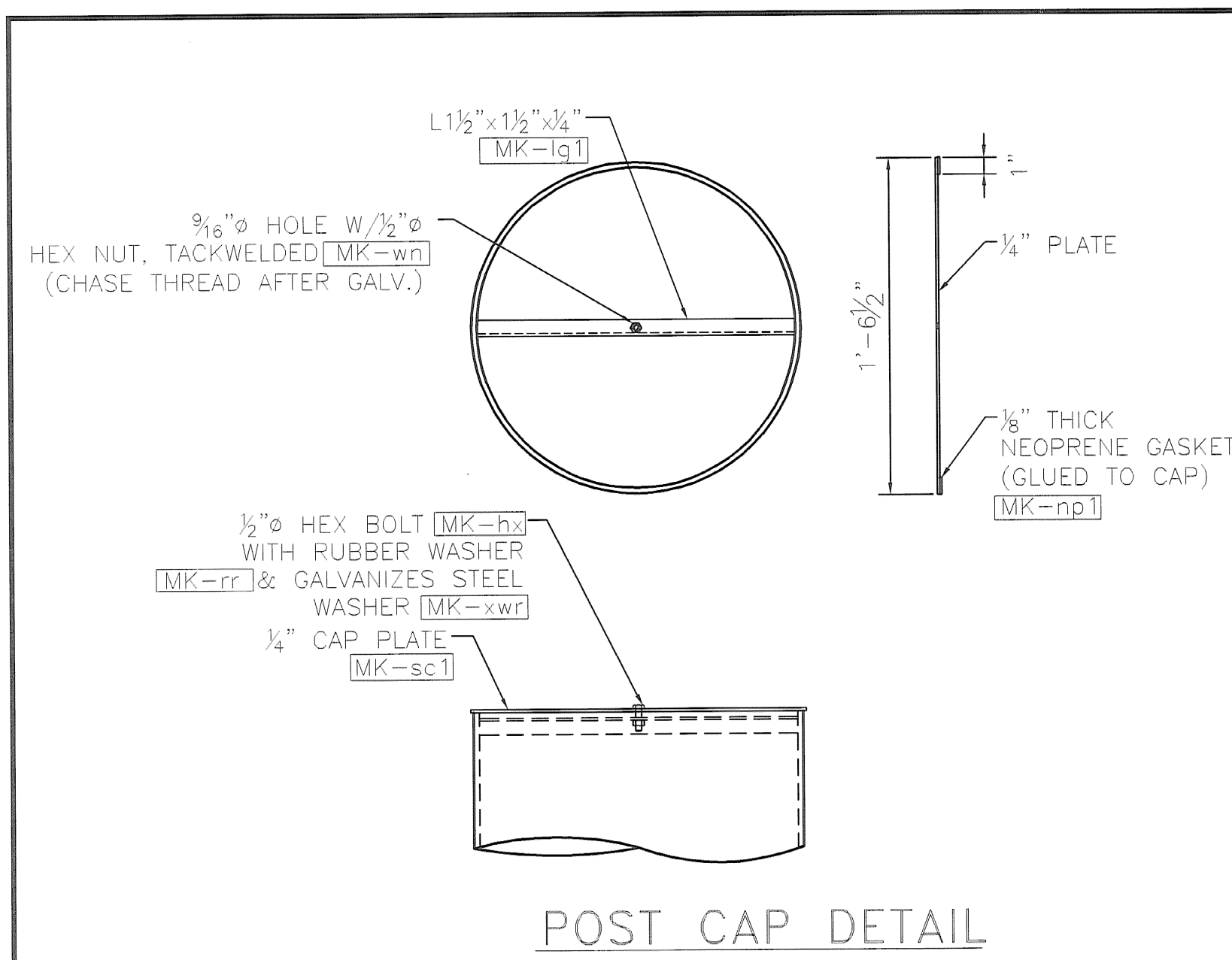
HIGHWAY SAFETY CORP.
GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.127.628 NB
PROJECT No. AC IM 091-2(73)

DESIGNED BY: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
SHEET NO.: 3 of 6

GENERAL CONTRACTOR: F.R. LAFAYETTE

REVISIONS		
No.	Remarks	Date
0	Initial submittal	



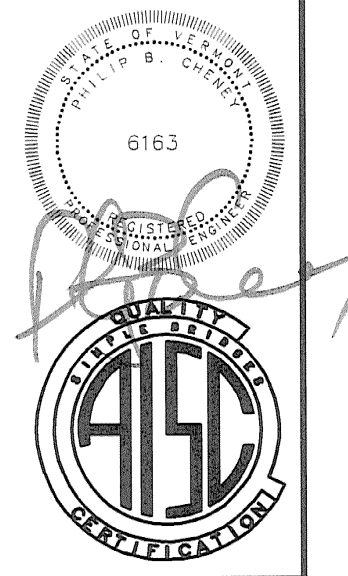
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No.	Remarks	Date
0	Initial submittal	

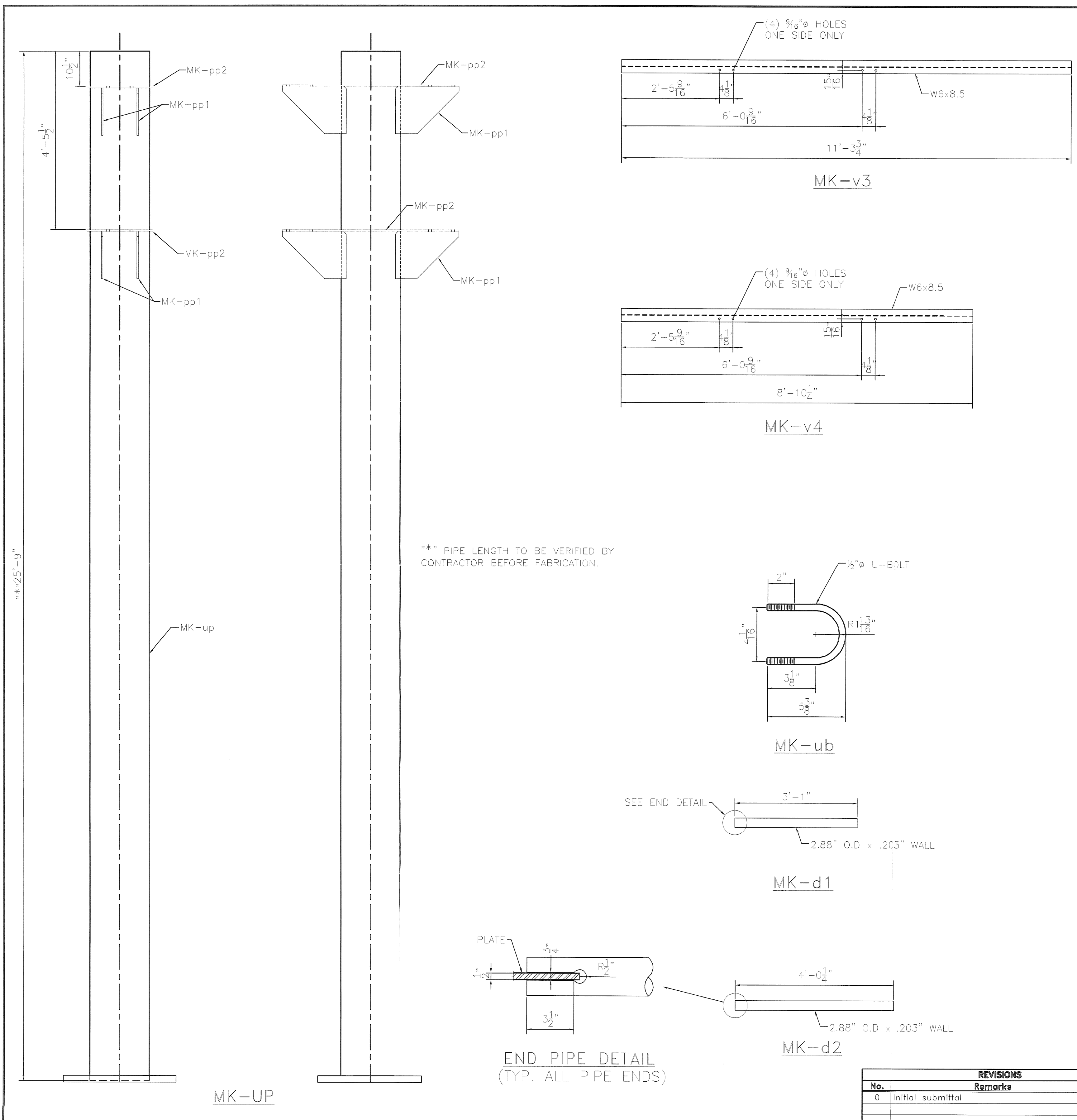
HIGHWAY SAFETY CORP.
GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA. 127.628 NB
PROJECT No. AC IM 091-2(73)

DESIGNED BY: MHM
CHECKED BY: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
PROJECT No. 1587c
DRAWN BY: D
DATE: 0
CHECKED BY: F.R. LAFAYETTE
DATE: 4 of 6

APPROVED
GWC
DATE: 06/18/07
A/W
RUC





erection mark	piece qty	item description	size/shape	length/qty per unit	material notes
TRUSS 1 ASSEMBLY					
CHORD PIPE ASSEMBLY					
E1					
cd1	1	pipe	3.5" O.D. x 0.216" wall	27'-8.75"	A500 gr B
pd	2	plate	PL 0.375" x 4"	18"	A709 gr 50
p7	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
p8	2	plate	PL 0.375" x 4"	1'-3"	A709 gr 50
pp3	1	plate	PL 0.50" x 10.5"	2'-0.937"	A709 gr 50
d1	2	pipe	2.88" O.D. x 0.203" wall	3'-1"	A53 gr B
d2	7	pipe	2.88" O.D. x 0.203" wall	4'-0.25"	API 5LX42
lg2	1	angle	L1.5" x 1.5" x .25"	3.25"	A36
nn	1	hex nut	50" dia		A563
E2					
CHORD PIPE ASSEMBLY					
E3					
CHORD PIPE ASSEMBLY					
E4					
CHORD PIPE ASSEMBLY					
VERTICAL PIPE ASSEMBLY					
PIPE ASSEMBLY					
up	1	pipe	18" O.D. x 0.5" wall	25'-9"	A500 gr B
pp1	4	plate	PL 0.5" x 1'-2.187"	1'-7.375"	A572 gr 50
pp2	4	plate	PL 0.5" x 1'-7.875"	2'-2.75"	A572 gr 50
pl1	1	angle	L1.5" x 1.5" x .25"	1'-8.25"	A36
nn	1	hex nut	50" dia		A563
bse	1	base plate	2'2" x 2'-10" O.D.		A572 gr 50
LOOSE ITEMS					
v3	3	sign hanger	W8x8.5	11'-3.75"	A36
v4	2	sign hanger	W8x8.5	8'-10.25"	A36
ub	10	u-bolt	0.50" dia.	3.375"	F1554 Gr. 36
kl	20	lock nut	0.50" dia.		A563 DH
swr	16	washer	0.50" dia.		F436
nh	16	hex nut	0.75" dia.	2.25"	A325
xn	16	hex nut	0.75" dia.		A563 DH
xw	16	washer	0.75" dia.		F436
sc1	1	cap plate	0.25" x 1'-6.5" O.D.		A36
sc2	4	cap plate	0.25" x 4" O.D.		A36
gp1	1	gasket	125" x 1'-6.5" O.D.		80 duro Neoprene
gp2	4	gasket	125" x 4" O.D.		50 duro Neoprene
hvi	5	hex bolt	0.50" dia.	1.5"	A307
xwr	5	washer	50" dia.		F844
rw	5	rubber washer	50" dia.		50 duro Neoprene
an2	4	anchor bolt	2.25" dia.	3'-8"	S/S A276 T304
anw	12	hex nut	2.25" dia.		S/S A194B T304
lw	4	lock washer	2.25" dia.		S/S TY 304
aw	8	flat washer	2.25" dia.		S/S TY 304

3'-8 1/4"

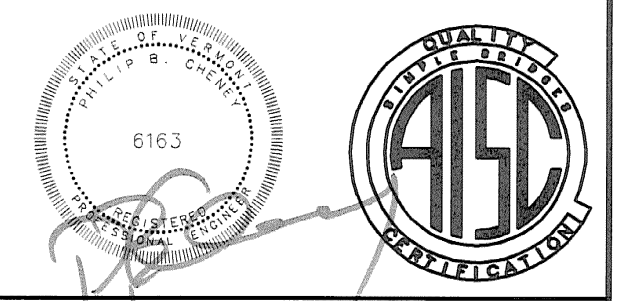
BVC

RLT

RLT

A/N

06/16/07

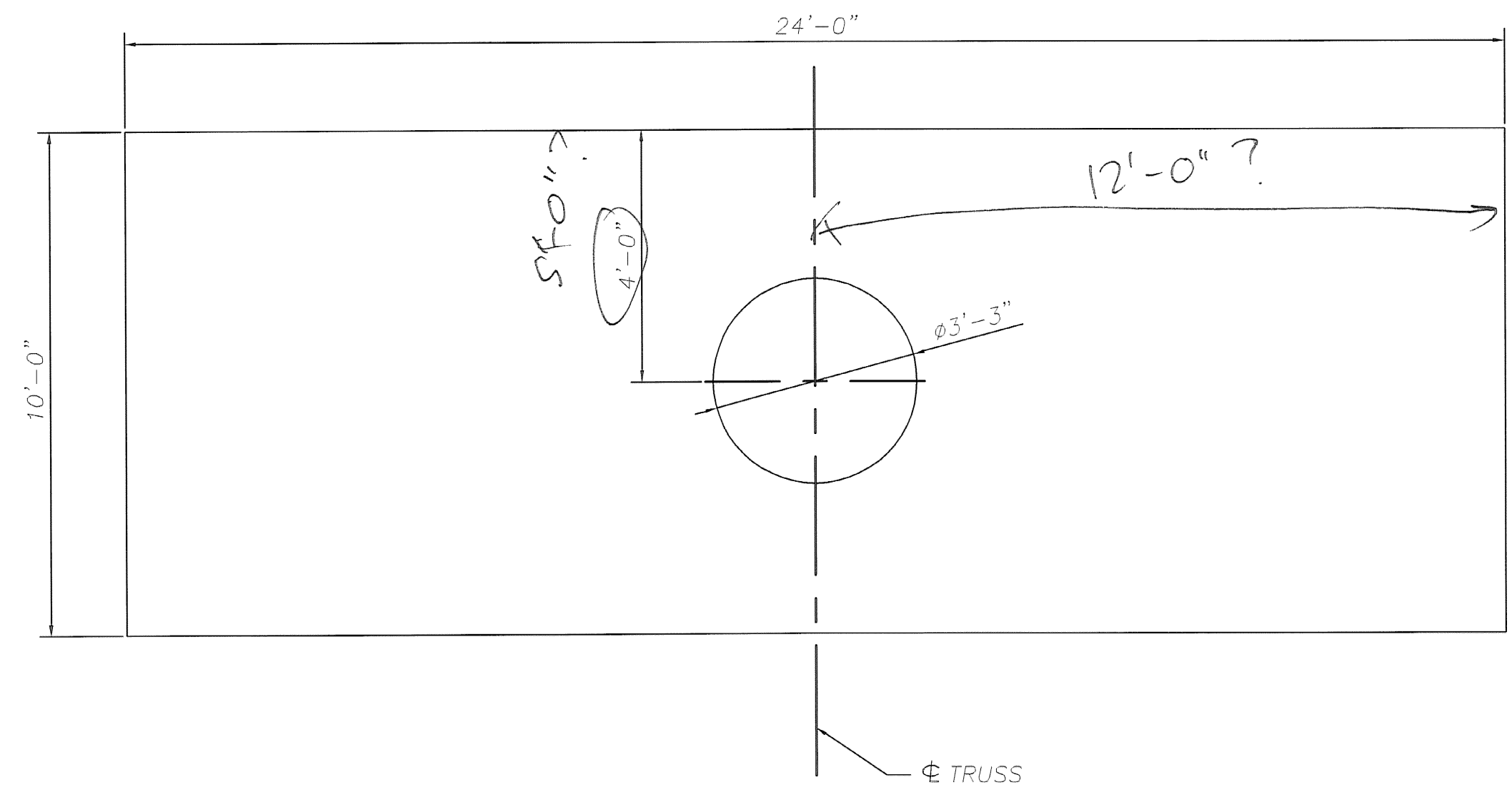


HIGHWAY SAFETY CORP.
GLASTONBURY, CT

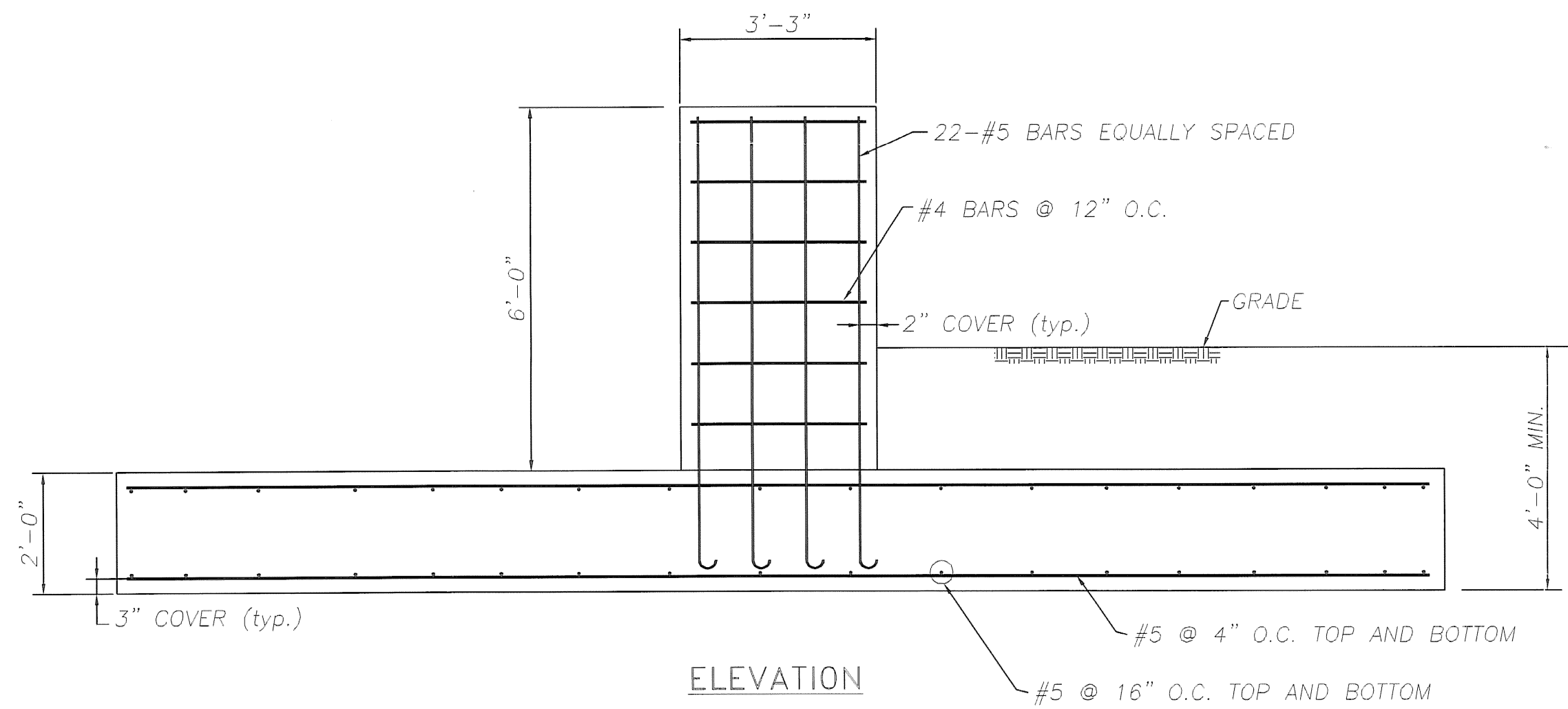
CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.127.628 NB
PROJECT No. AC IM 091-2(73)

DESIGNED BY: MHM
CHECKED BY: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
REVISED NO.: 1587c
REVISED DATE: 0
DRAWN BY: [Signature]
DATE: [Signature]
SUB CONTRACTOR: F.R. LAFAYETTE
PAGE: 5 of 6

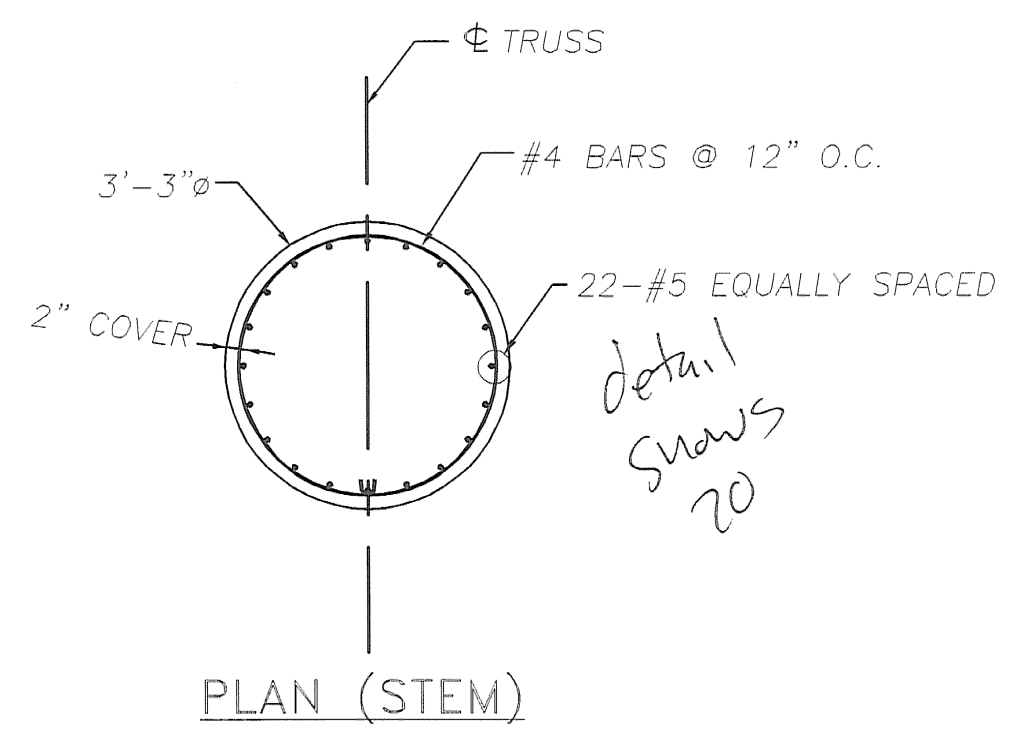
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



PLAN



ELEVATION

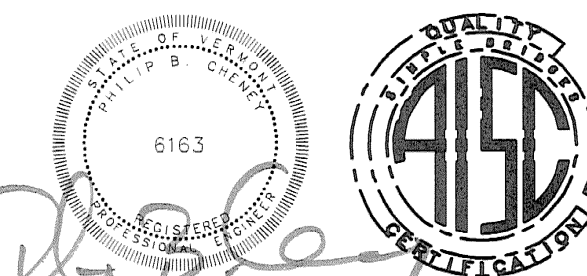


PLAN (STEM)

REBAR LIST

REBAR	PCS. REQD.	LENGTH
#4	7	10'-2"
#5	38	9'-6"
#5	60	23'-6"
#5 (HOOK ONE END)	22	8'-6"

GWC ECT
 ECT
 06/18/07



REVISIONS		
No.	Remarks	Date
0	Initial submittal	

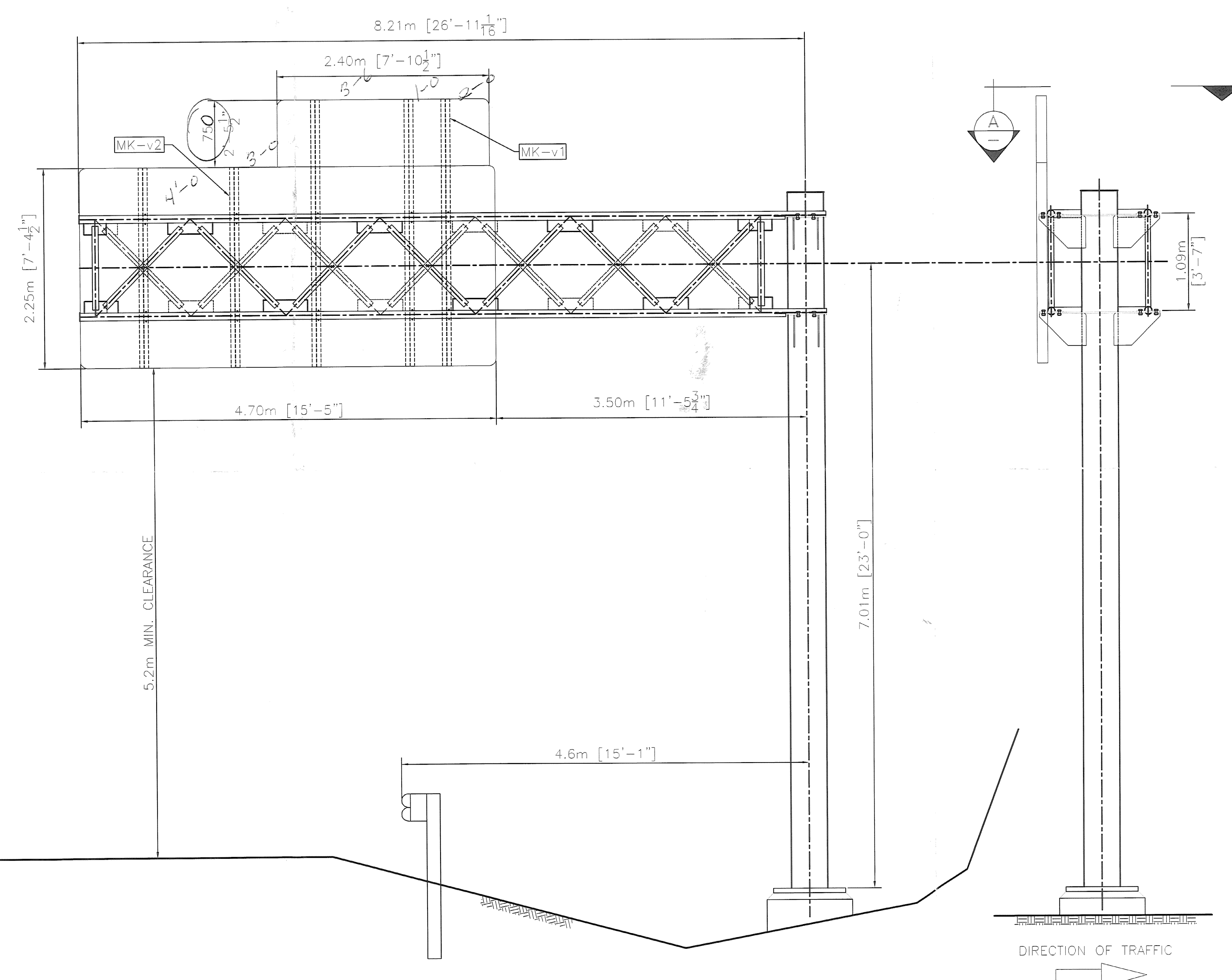
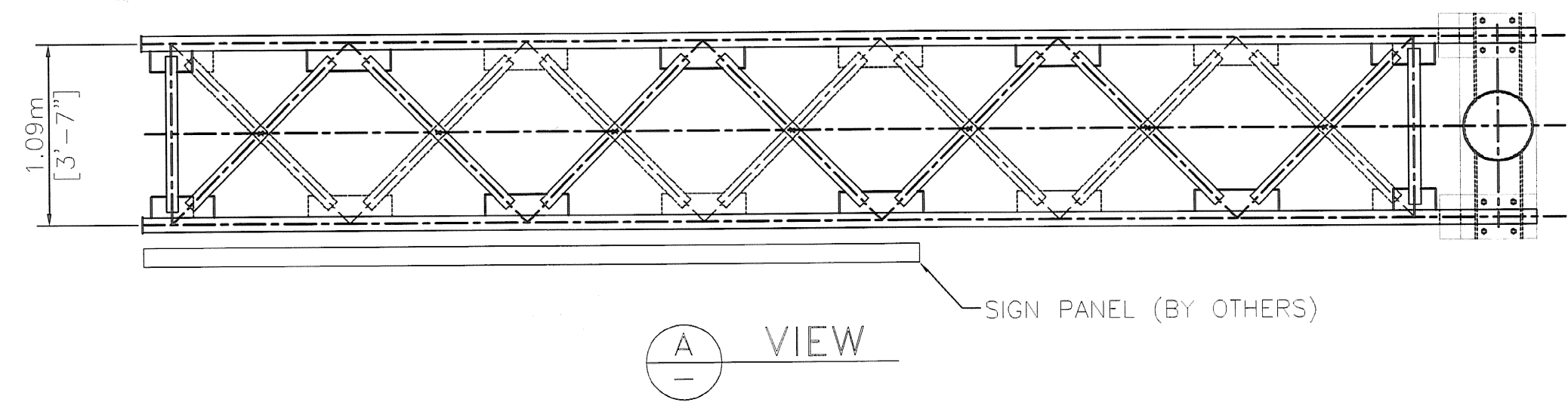
HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
 STATE OF VERMONT
 COUNTY OF CALEDONIA
 INTERSTATE RTE. 91 STA.127.628 NB
 PROJECT No. AC IM 091-2(73)

DESIGNED BY: MHM
 CHECKED BY: P. Radice
 DATE: 3/23/07
 SCALE: N.T.S.

PROJ REFERENCE NO. 1587c
 SHEET NO. 6 of 6

DESIGNED BY: F.R. LAFAYETTE



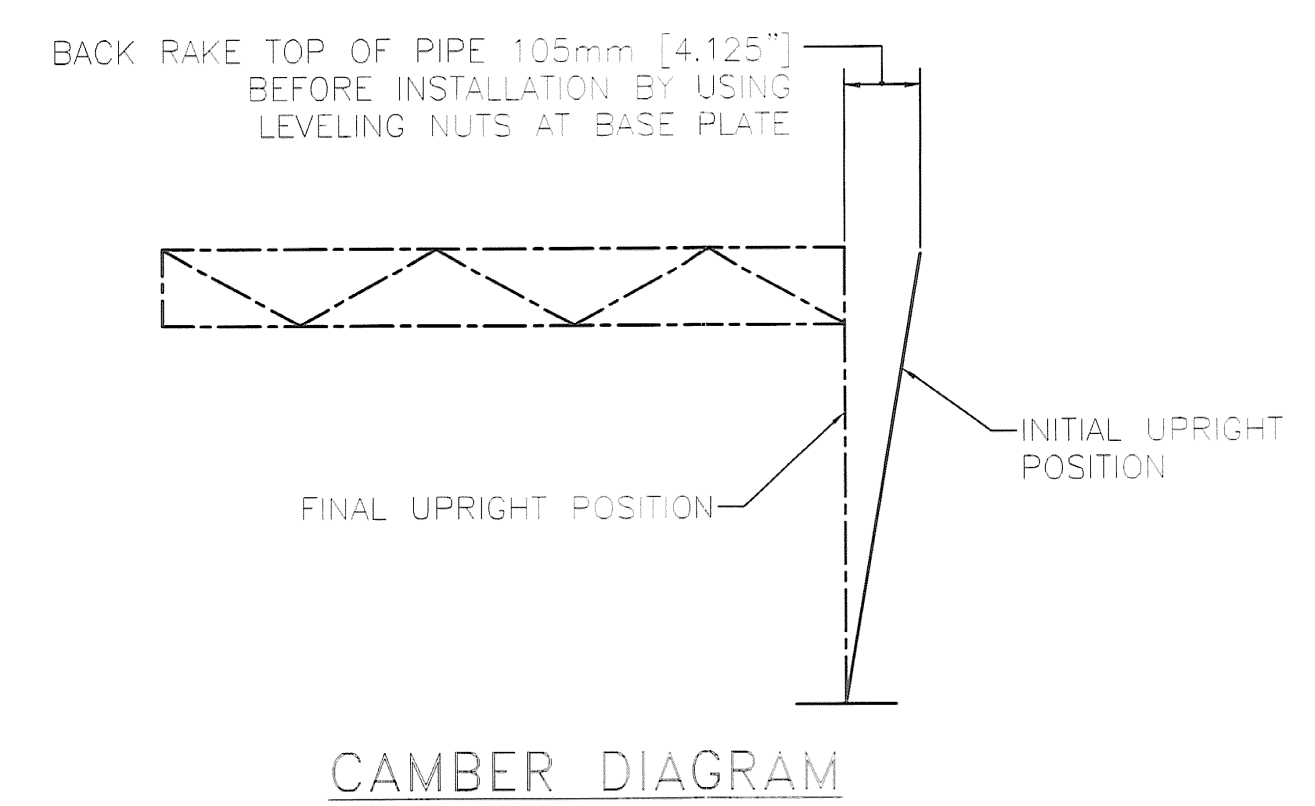
ELEVATION
NB I-91 STA.127.980

NOTE:
TOP OF FOOTING ELEVATION IS ASSUMED.
CONTRACTOR TO VERIFY ELEVATION BEFORE
FABRICATION.

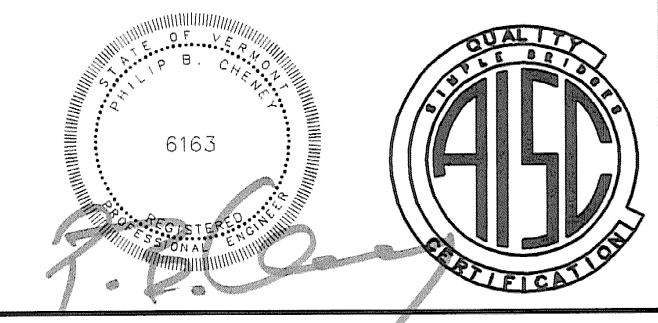
SIDE ELEVATION

- NOTE:
- STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.
 - ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.
 - GRIND SHARP CORNERS OF ALL PLATES TO A 1/16" MIN. RADIUS PRIOR TO GALVANIZING.
 - ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.
 - ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.
 - STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.
 - STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 48 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, A53 GR. B OR API 5LX42.
 - UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325).
 - GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.
 - ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
 - ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).
 - ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.
 - CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.
 - FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.
 - SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.
 - BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF VDOT STANDARD SPECIFICATIONS SECTION 506.

42ksi
A53 GR B
Fu = 36ksi
DESIGN = 42



RECEIVED
GWC
MAY 28 2007
BY RVT
DATE 06/14/07

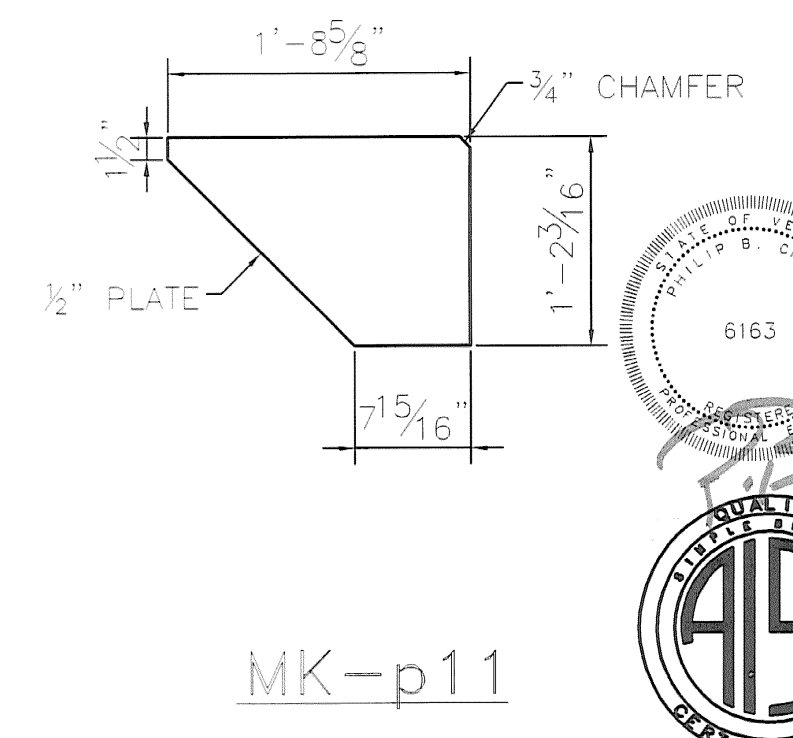
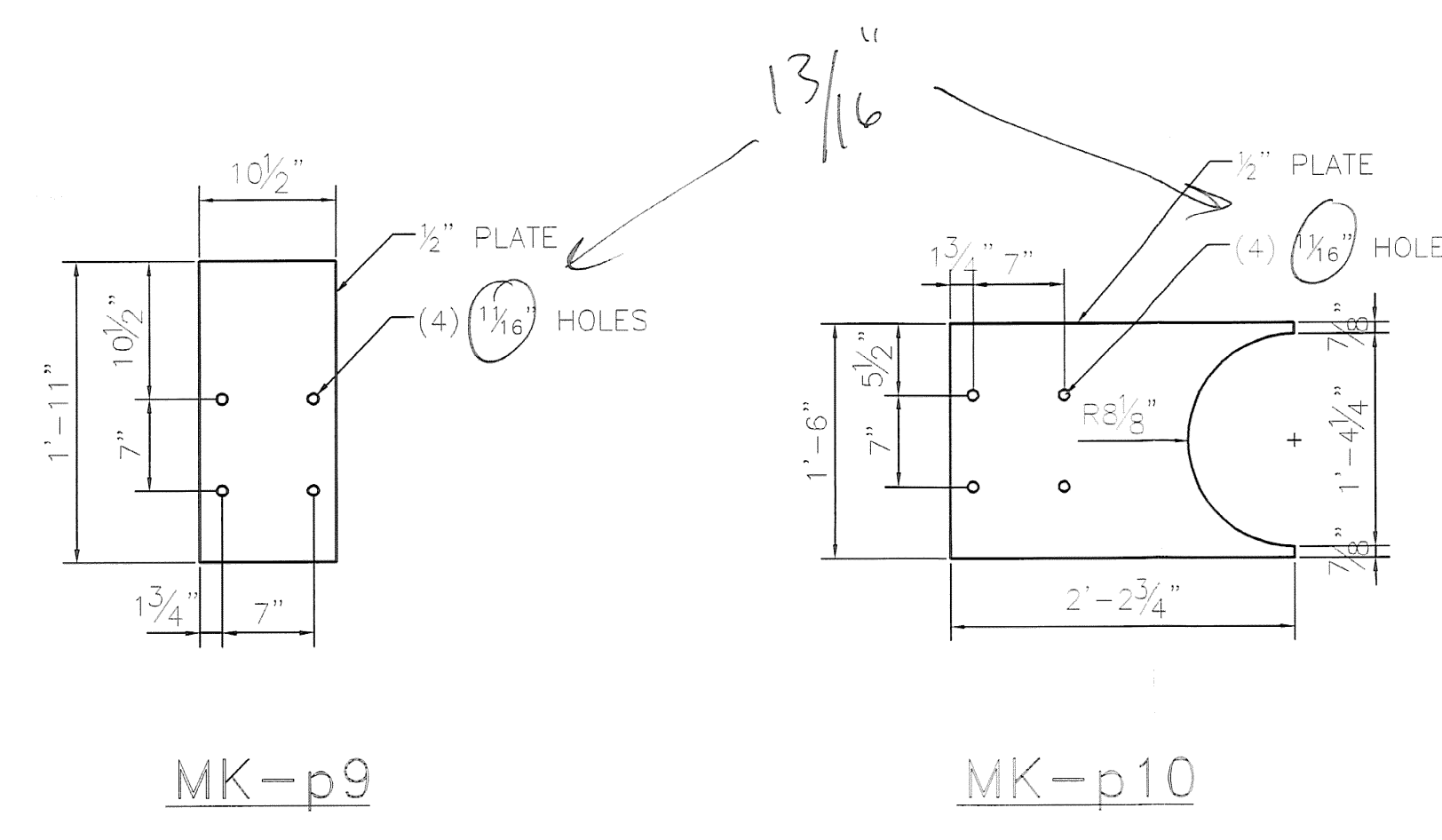
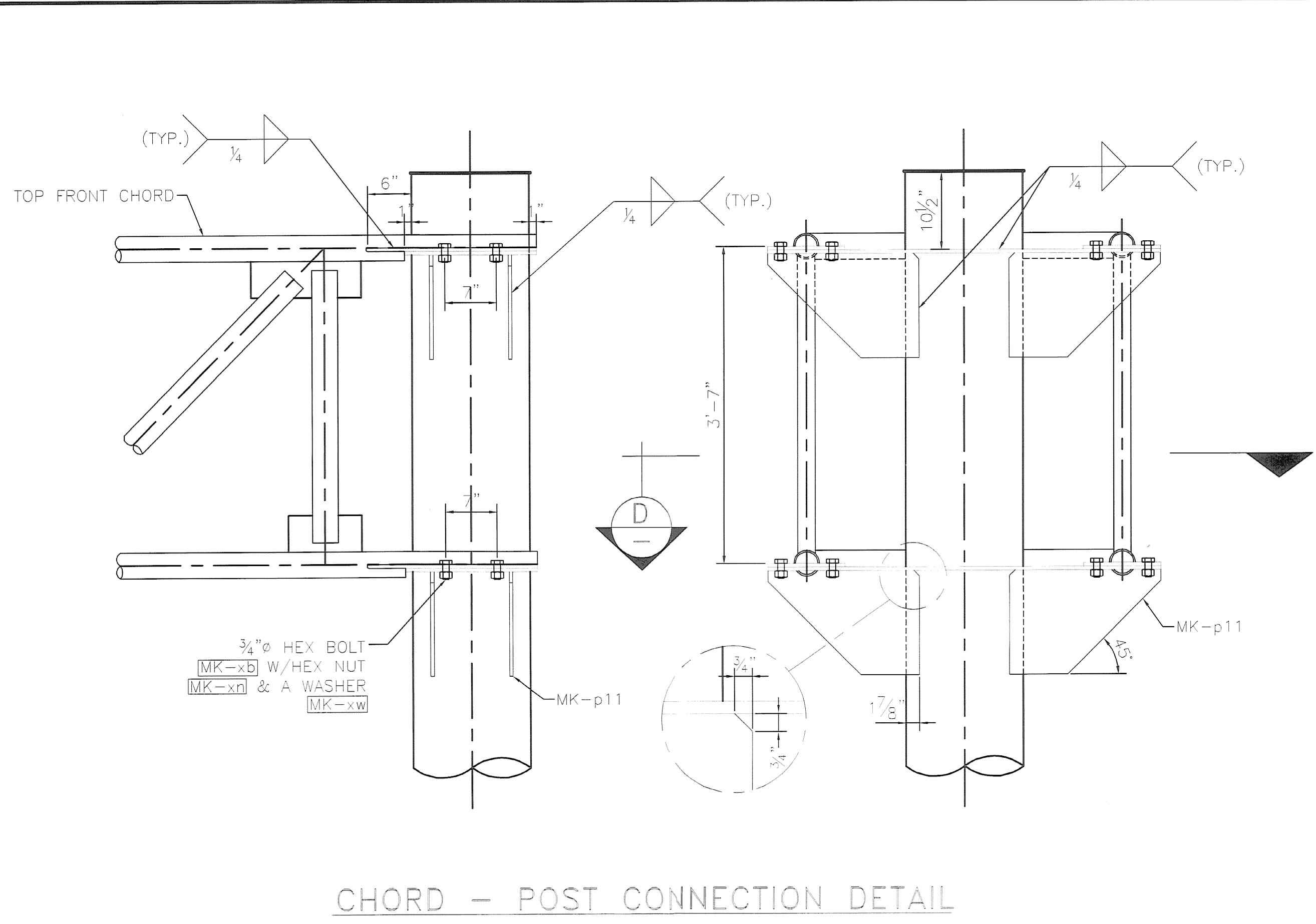
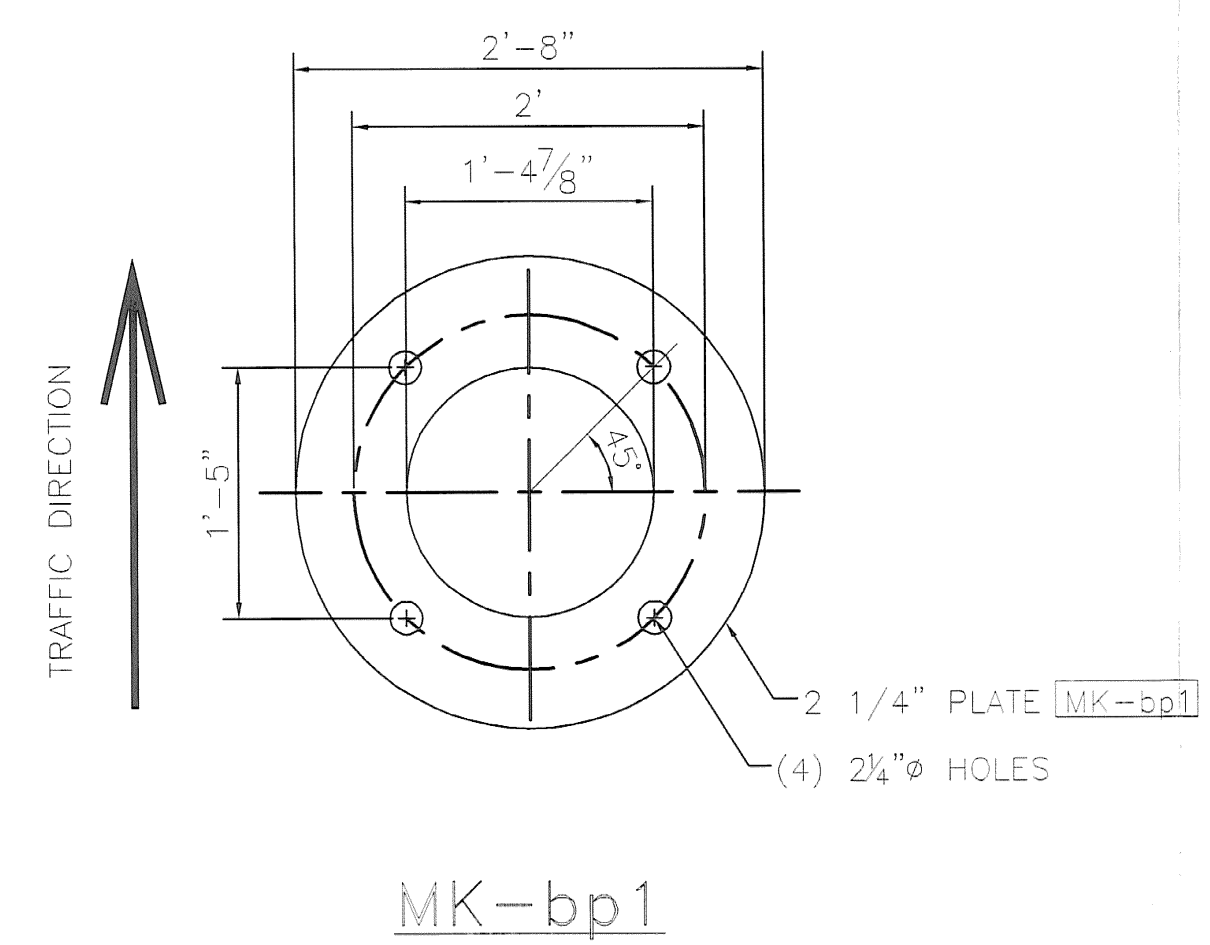
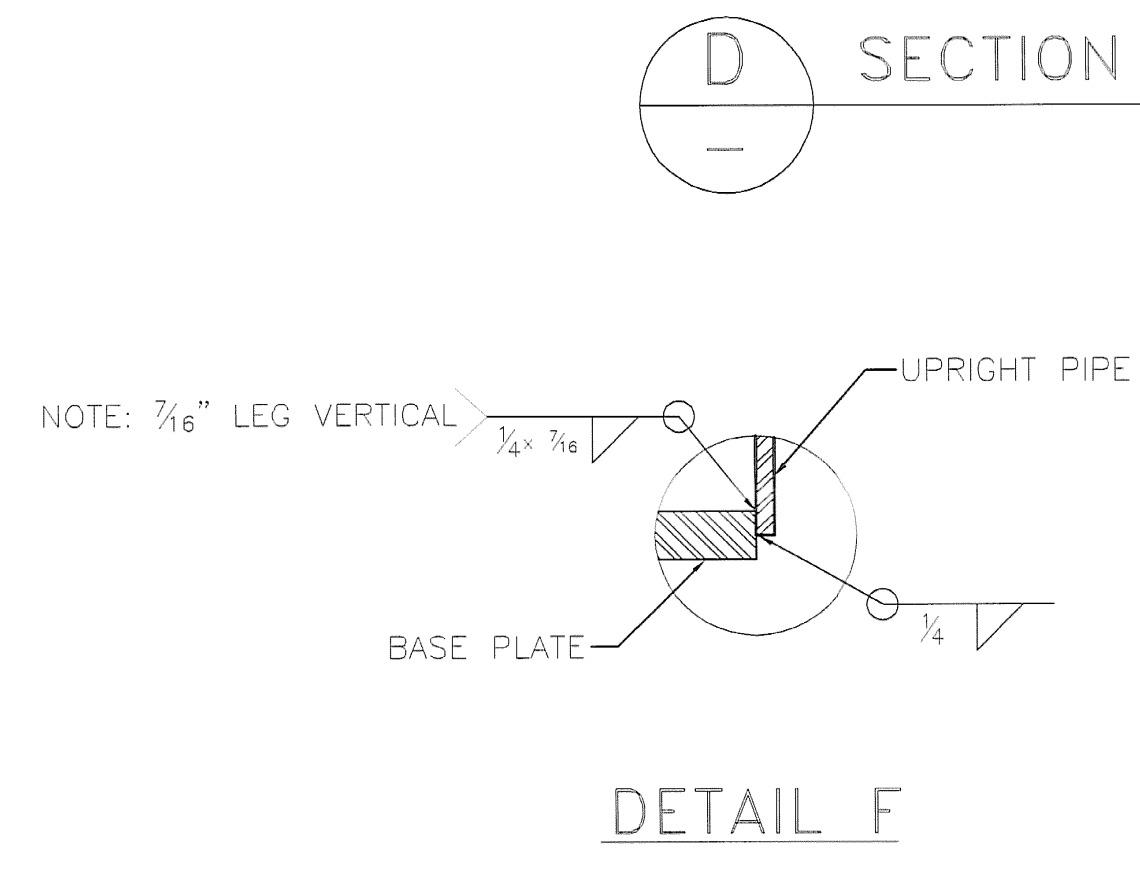
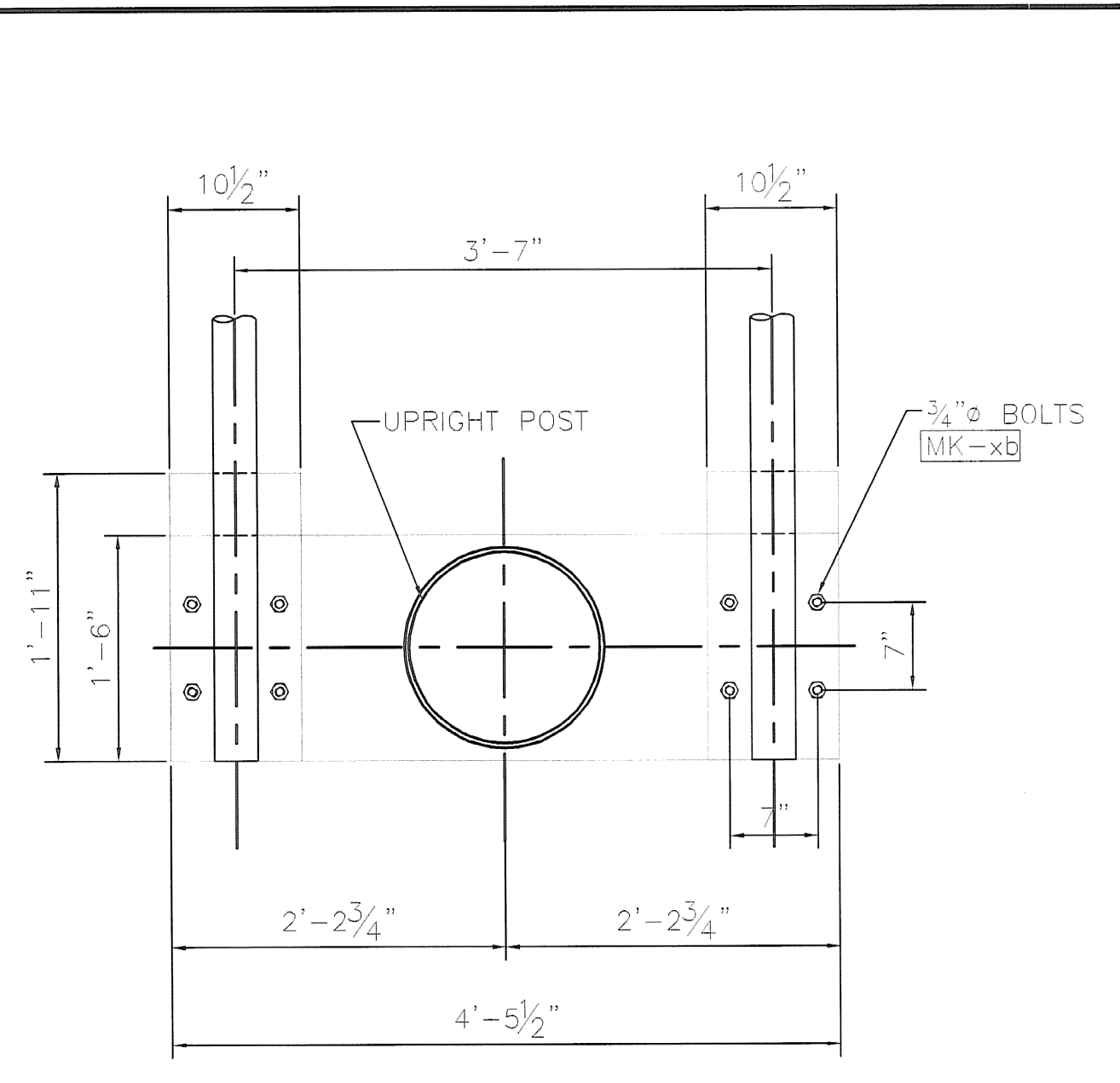
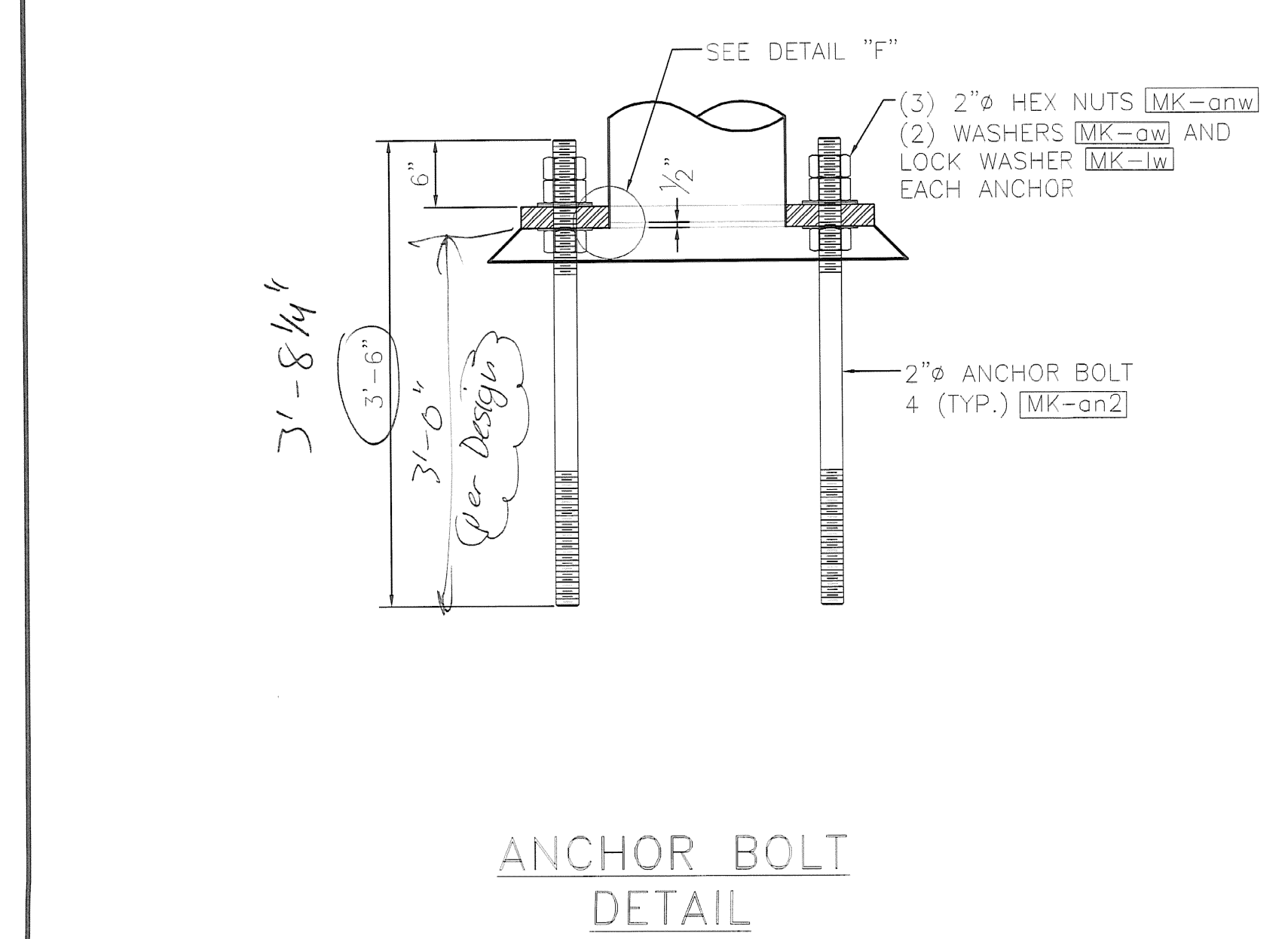
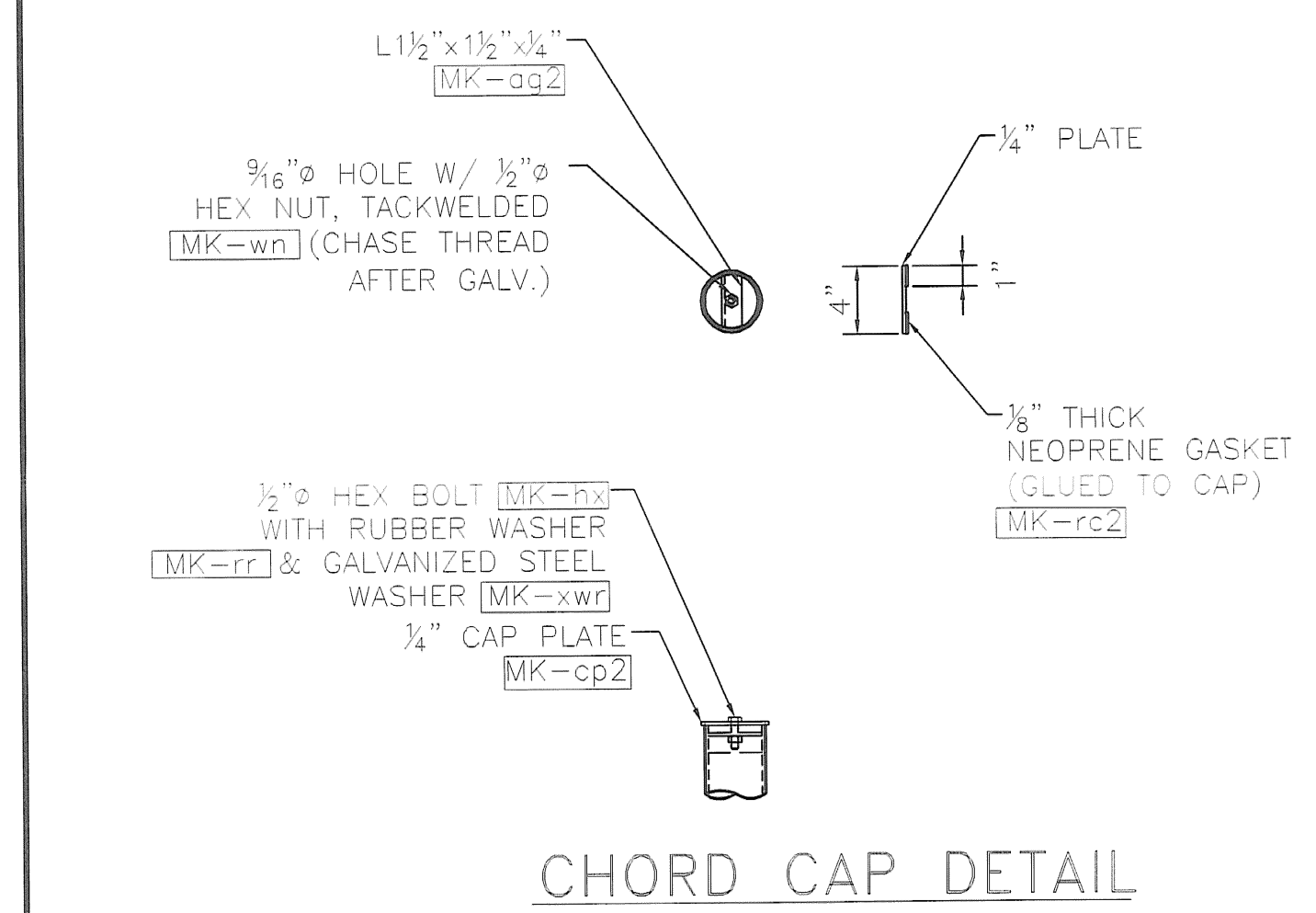
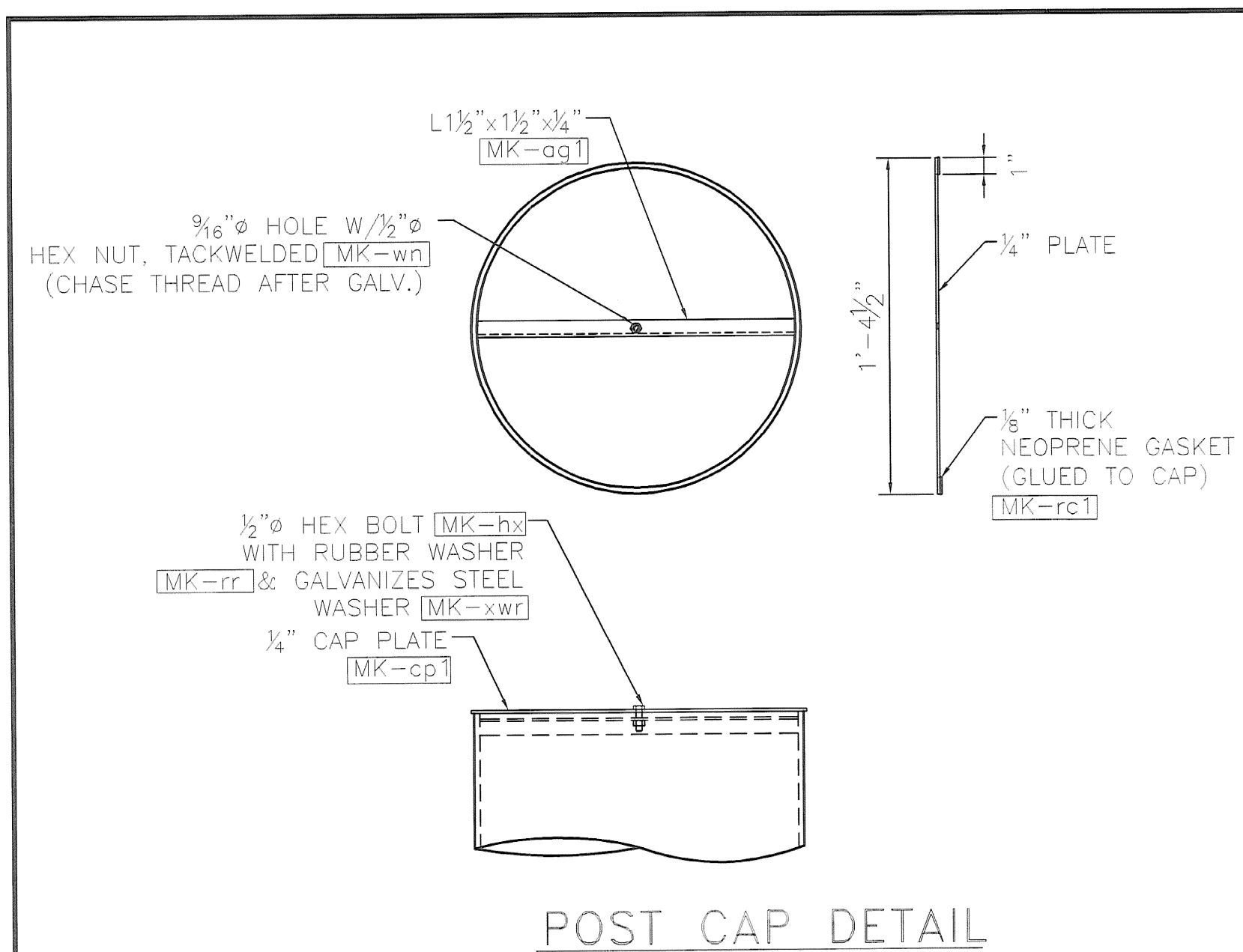


HIGHWAY SAFETY CORP.
GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE	DATE	3/23/07
STATE OF VERMONT	SCALE	N.T.S.
COUNTY OF CALEDONIA	PROJECT No.	AC IM 091-2(73)
INTERSTATE RTE. 91 STA.127.980 NB	PROJECT No.	1587b
PROJECT No. AC IM 091-2(73)	DATE	0
DESIGNED BY	DATE	0
CHECKED BY	DATE	0
CONTRACTOR	DATE	0
F.R. LAFAYETTE	DATE	0

ALL DIMENSIONS SHOWN ARE IN MILLIMETER (mm), UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN [] FOR REFERENCE ONLY.

REVISIONS		
No.	Remarks	Date
0	Initial submittal	



REVISIONS		
No.	Remarks	Date
0	Initial submittal	

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA. 127.980 NB
PROJECT No. AC IM 091-2(73)

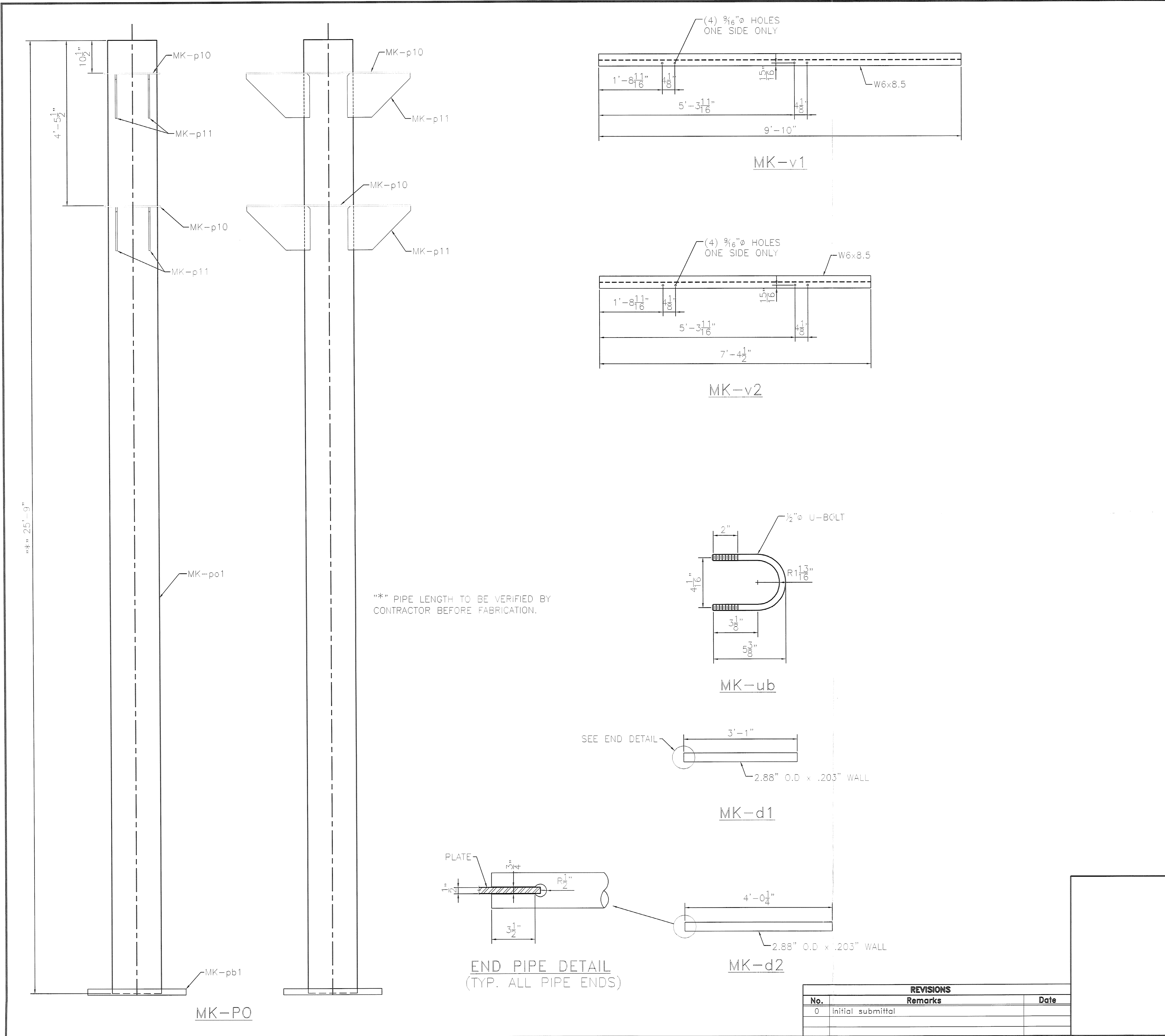
DESIGNED BY: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
DRAWING NO.: 1587b
REVISED BY: 0
CHECKED BY: 0
DATE: 4 of 6

GENERAL CONTRACTOR: F.R. LAFAYETTE

PREPARED BY: GUC
CHECKED BY: RUT
DATE: 06/15/07
AS NOTED
RUT

6163

ASCE
REGISTERED PROFESSIONAL ENGINEER
STATE OF VERMONT
NO. 6163

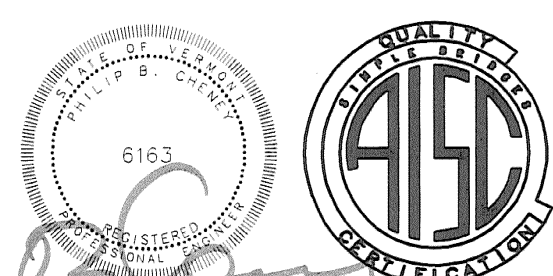


*" PIPE LENGTH TO BE VERIFIED BY CONTRACTOR BEFORE FABRICATION.

erection mark	piece qty	item description	size/shape	length/qty per unit	material notes
TRUSS 1 ASSEMBLY					
A1 CHORD PIPE ASSEMBLY					
pe1	1	pipe	3.5" O.D. x 0.216" wall	27'-7.813"	A500 gr B, A53-gr-B OR API 5LX42
p6	2	plate	PL 0.375" x 4"	10"	A709 gr 50
p7	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
p8	2	plate	PL 0.375" x 4"	1'-3"	A709 gr 50
p9	1	plate	PL 0.50" x 10.5"	1'-11"	A709 gr 50
d1	2	pipe	2.88" O.D. x 0.203" wall	3'-1"	A500 gr B, A53-gr-B OR API 5LX42
d2	7	pipe	2.88" O.D. x 0.203" wall	4'-0.25"	A500 gr B, A53-gr-B OR API 5LX42
aq2	1	angle	L1.5"x1.5"x.25"	3.25"	A36
wn	1	hex nut	.50" dia		A563
A2 CHORD PIPE ASSEMBLY					
pe2	1	pipe	3.5" O.D. x 0.216" wall	27'-7.813"	A500 gr B, A53-gr-B OR API 5LX42
p6	2	plate	PL 0.375" x 4"	10"	A709 gr 50
p7	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
p8	2	plate	PL 0.375" x 4"	1'-3"	A709 gr 50
p9	1	plate	PL 0.50" x 10.5"	1'-11"	A709 gr 50
d1	2	pipe	2.88" O.D. x 0.203" wall	3'-1"	A500 gr B, A53-gr-B OR API 5LX42
d2	7	pipe	2.88" O.D. x 0.203" wall	4'-0.25"	A500 gr B, A53-gr-B OR API 5LX42
aq2	1	angle	L1.5"x1.5"x.25"	3.25"	A36
wn	1	hex nut	.50" dia		A563
A3 CHORD PIPE ASSEMBLY					
pe3	1	pipe	3.5" O.D. x 0.216" wall	27'-7.813"	A500 gr B, A53-gr-B OR API 5LX42
p6	2	plate	PL 0.375" x 4"	10"	A709 gr 50
p7	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
p8	2	plate	PL 0.375" x 4"	1'-3"	A709 gr 50
p9	1	plate	PL 0.50" x 10.5"	1'-11"	A709 gr 50
d1	2	pipe	2.88" O.D. x 0.203" wall	3'-1"	A500 gr B, A53-gr-B OR API 5LX42
d2	7	pipe	2.88" O.D. x 0.203" wall	4'-0.25"	A500 gr B, A53-gr-B OR API 5LX42
aq2	1	angle	L1.5"x1.5"x.25"	3.25"	A36
wn	1	hex nut	.50" dia		A563
A4 CHORD PIPE ASSEMBLY					
pe4	1	pipe	3.5" O.D. x 0.216" wall	27'-7.813"	A500 gr B, A53-gr-B OR API 5LX42
p6	2	plate	PL 0.375" x 4"	10"	A709 gr 50
p7	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
p8	2	plate	PL 0.375" x 4"	1'-3"	A709 gr 50
p9	1	plate	PL 0.50" x 10.5"	1'-11"	A709 gr 50
d1	2	pipe	2.88" O.D. x 0.203" wall	3'-1"	A500 gr B, A53-gr-B OR API 5LX42
d2	7	pipe	2.88" O.D. x 0.203" wall	4'-0.25"	A500 gr B, A53-gr-B OR API 5LX42
aq2	1	angle	L1.5"x1.5"x.25"	3.25"	A36
wn	1	hex nut	.50" dia		A563
VERTICAL PIPE ASSEMBLY					
PG PIPE ASSEMBLY					
po1	1	pipe	16" O.D. x 0.5" wall	25'-9"	A500 gr B, A53-gr-B OR API 5LX42
p10	4	plate	PL 0.5" x 1'-6"	2'-2.75"	A572 gr 50
p11	4	plate	PL 0.5" x 1'-2.187"	1'-8.625"	A572 gr 50
aq1	1	angle	L 1.5"x1.5"x.25"	1'-3.625"	A36
wn	1	hex nut	.50" dia		A563
bp	1	base plate	2.25" x 2'-8" O.D.		A572 gr 50
LOOSE ITEMS					
v1	3	sign hanger	W6x8.5	8'-10"	A36
v2	2	sign hanger	W6x8.5	7'-4.25"	A36
ub	10	u-bolt	0.50" dia.	5.375"	F1554 Gr. 36
k1	20	lock nut	0.50" dia.		A563 DH
swr	16	washer	0.50" dia.		F436
xb	16	hex bolt	0.75" dia.	2.25"	A325
xn	16	hex nut	0.75" dia.		A563 DH
xw	16	washer	0.75" dia.		F436
cp1	1	cap plate	0.25" x 1'-4.5" O.D.		A36
cp2	4	cap plate	0.25" x 4" O.D.		A36
rc1	1	gasket	1.25"x1'-4.5" O.D.		50 duro. Neoprene
rc2	4	gasket	1.25"x4" O.D.		50 duro. Neoprene
hx	5	hex bolt	0.50" dia.		A307
swr	5	washer	.50" dia.		F844
rr	5	rubber washer	.50" dia.		50 duro. Neoprene
an2	4	anchor bolt	2" dia.	3'-8"	S/S A276 T304
anw	12	hex nut	2" dia.		S/S A194B T304
lw	4	lock washer	2" dia.		S/S TY304
aw	8	nut washer	2" dia.		S/S TY304

GWC
RUT
MAY
RUT
AS NOTED
06/15/07

31-8 1/4"



HIGHWAY SAFETY CORP.
GLASTONBURY, CT

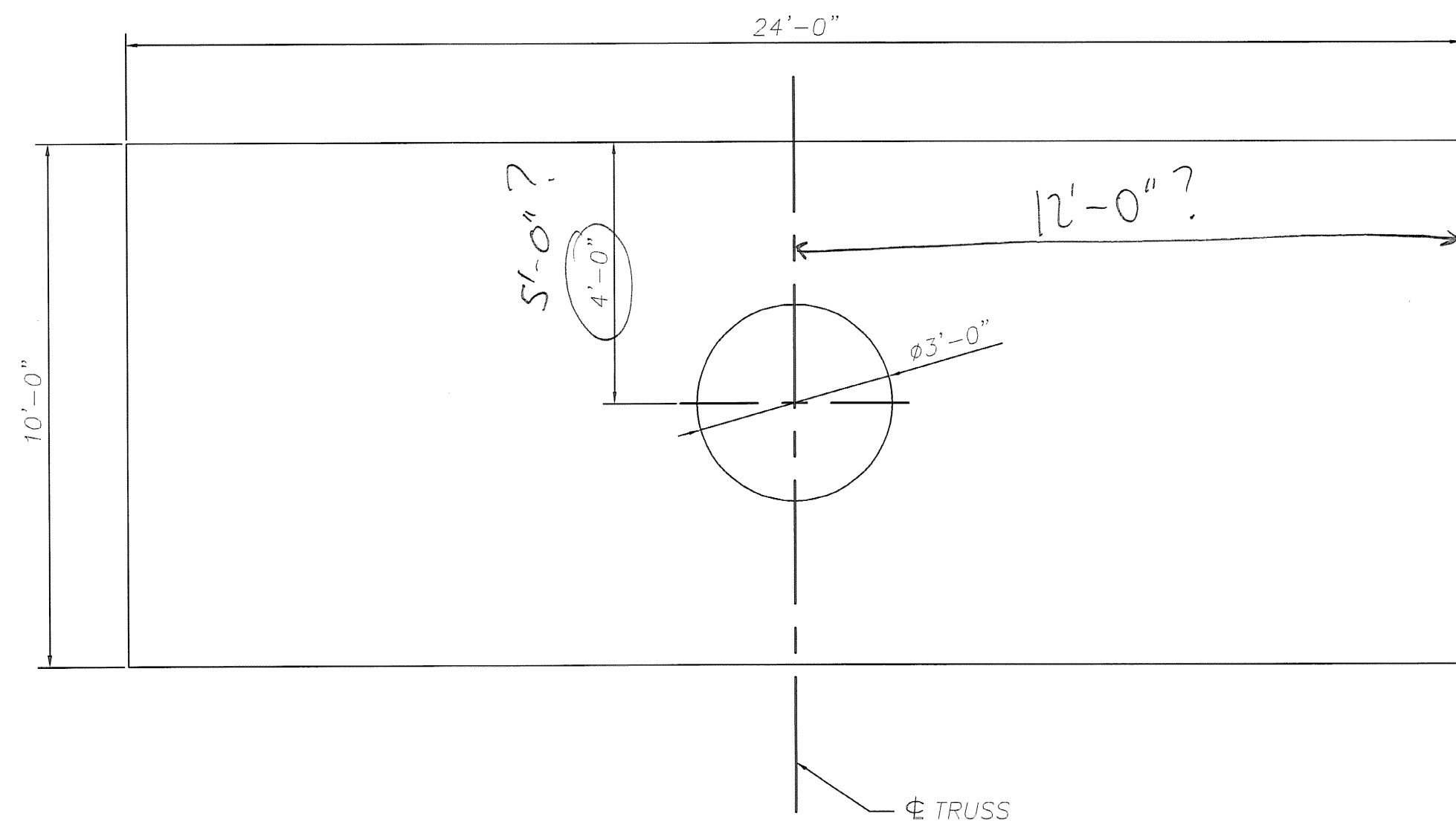
CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.127.980 NB
PROJECT No. AC IM 091-2(73)

DATE: 3/23/07
SCALE: N.T.S.
REVISION NO: 1587b
ISS D: 0
CHECKED BY: 0

GENERAL CONTRACTOR: F.R. LAFAYETTE
SUB CONTRACTOR: F.R. LAFAYETTE

5 of 6

No.	REVISIONS	Date
0	Initial submittal	

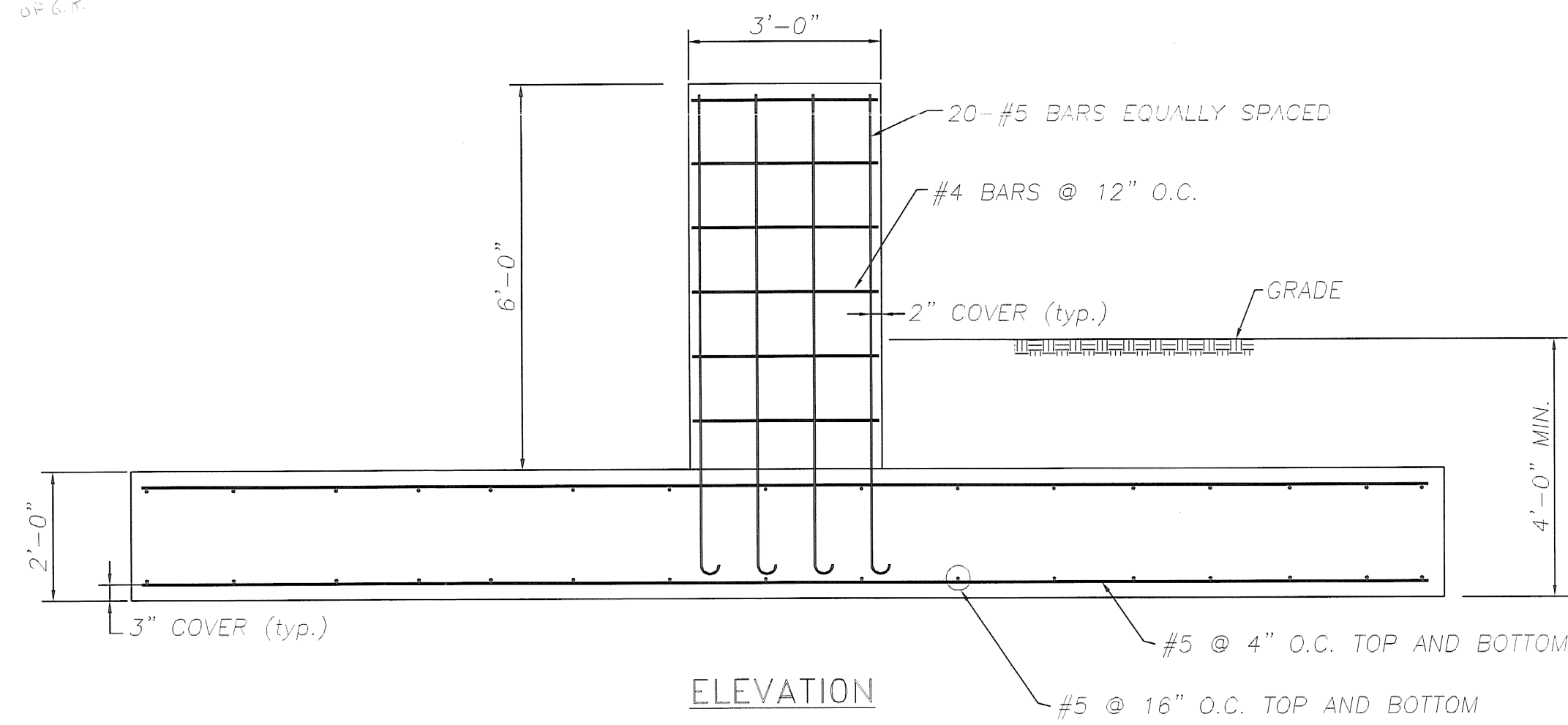


PLAN

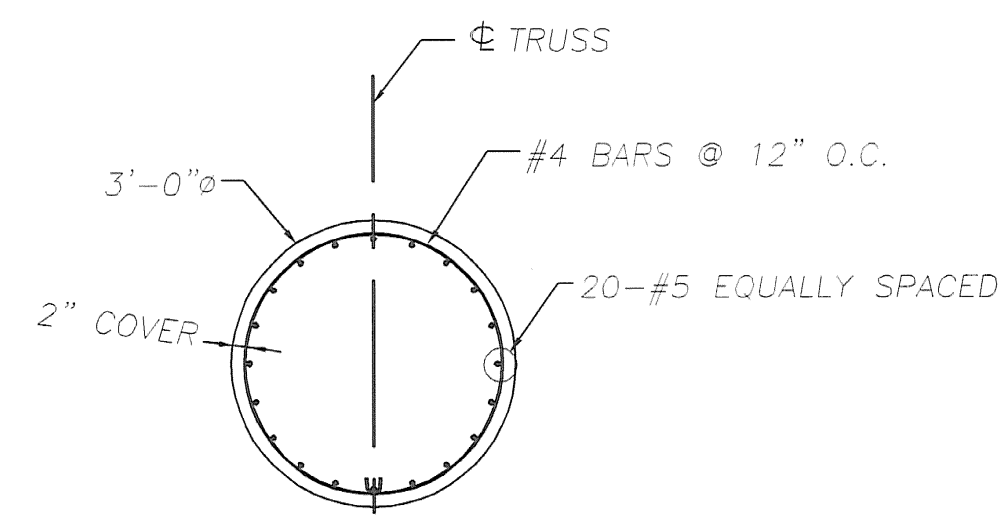
REBAR LIST

REBAR	PCS. REQD.	LENGTH
#4	7	9'-4"
#5	38	9'-6"
#5	60	23'-6"
#5 (HOOK ONE END)	20	8'-6"

15'-1" FROM FACE OF G.P.

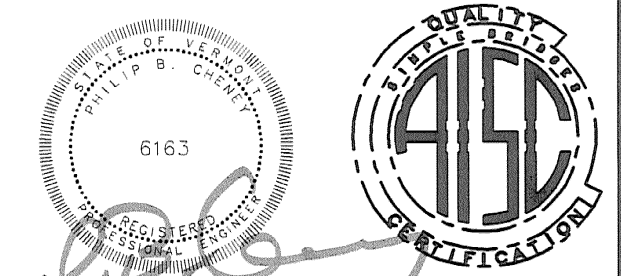


ELEVATION



PLAN (STEM)

GWC RLT
 As NOTED
 RLT 06/15/07

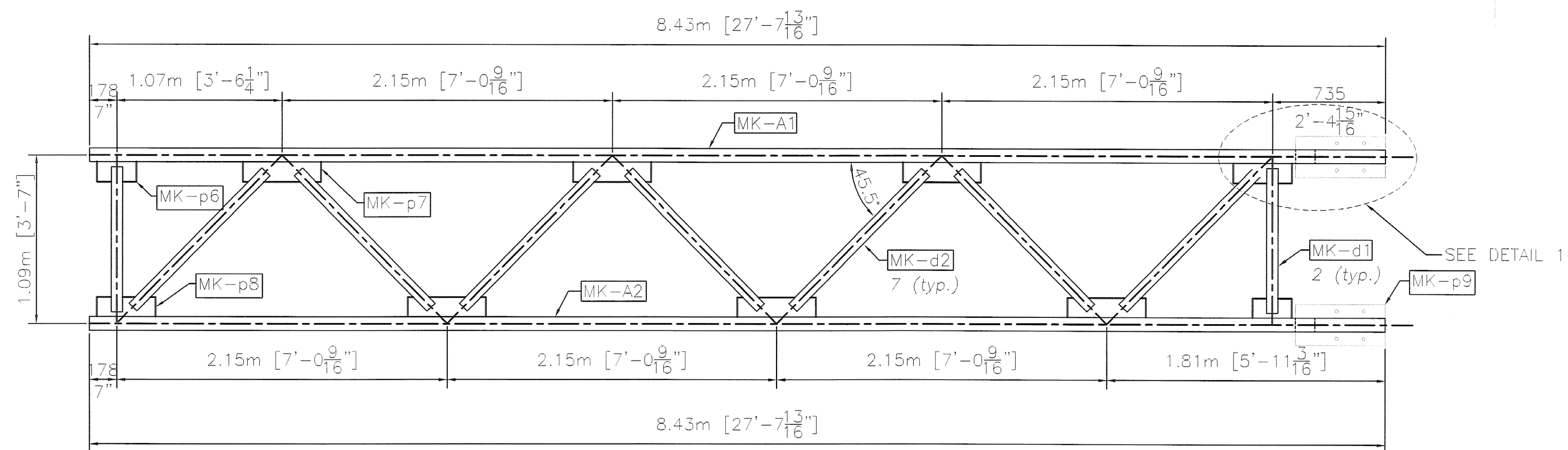


HIGHWAY SAFETY CORP.
GLASTONBURY, CT

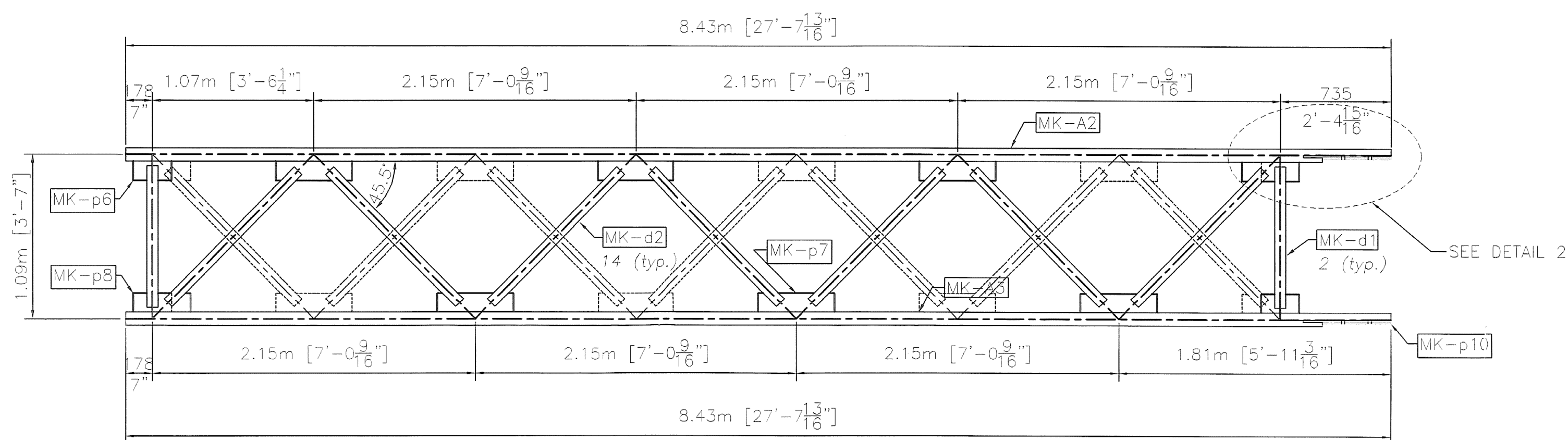
CANTILEVER SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA. 127.980 NB
PROJECT No. AC IM 091-2(73)

DRAWN: MHM
 CHECKED: P. Radice
 DATE: 3/23/07
 SCALE: N.T.S.
 FIELD REFERENCE NO.: 1587b
 GENERAL CONTRACTOR: F.R. LAFEYETTE
 SHEET NO.: 6 of 6

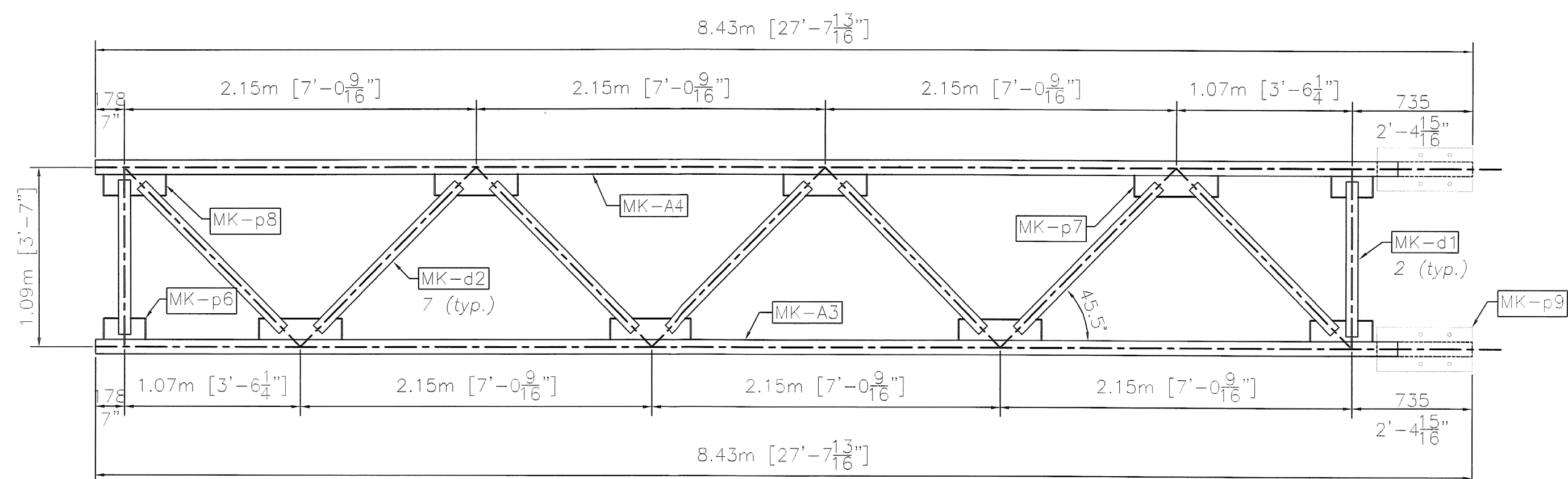
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



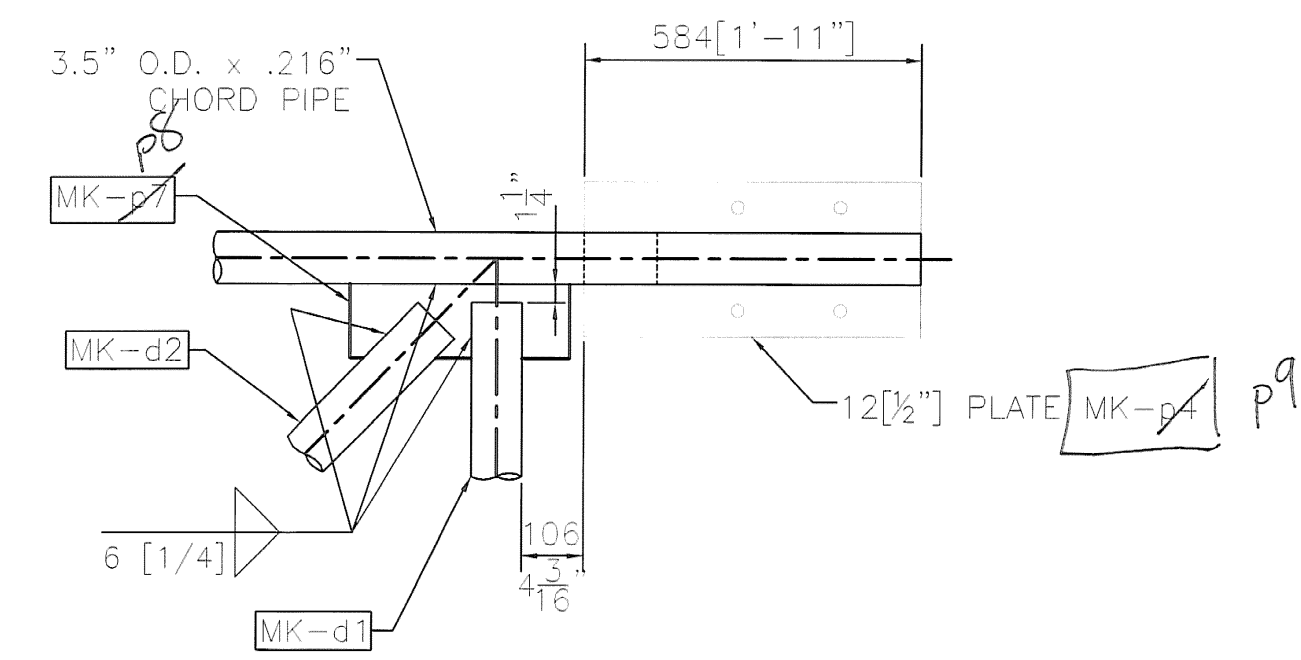
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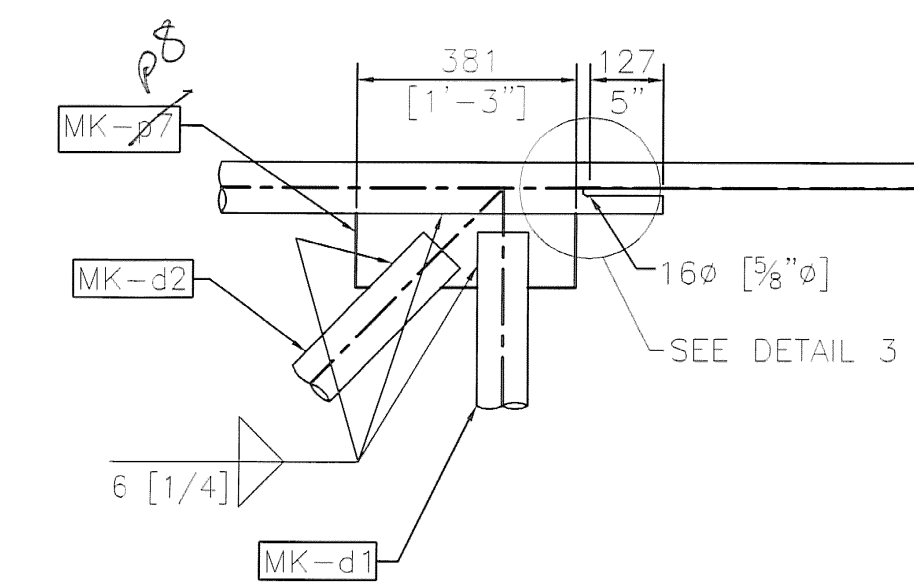
FRONT VIEW



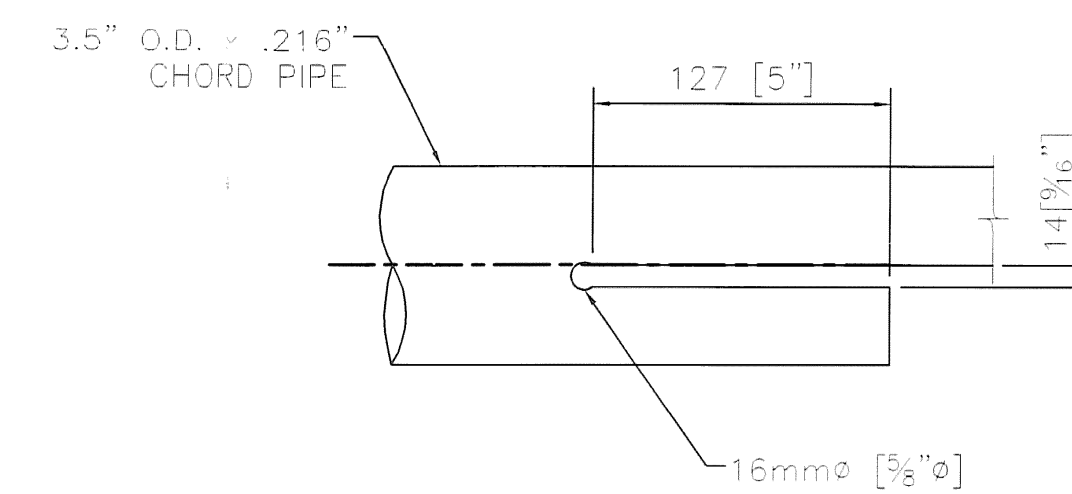
BOTTOM VIEW



DETAIL 1

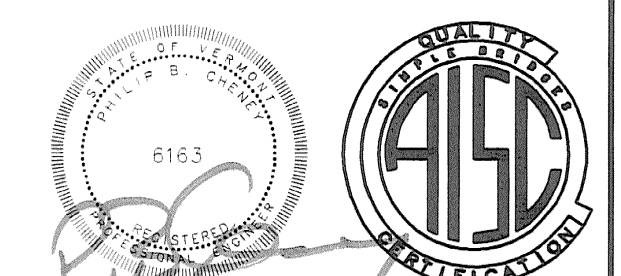


DETAIL 2



DETAIL 3

PACKED
 GWC 25
 AS NOTED
 06/15/07



HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

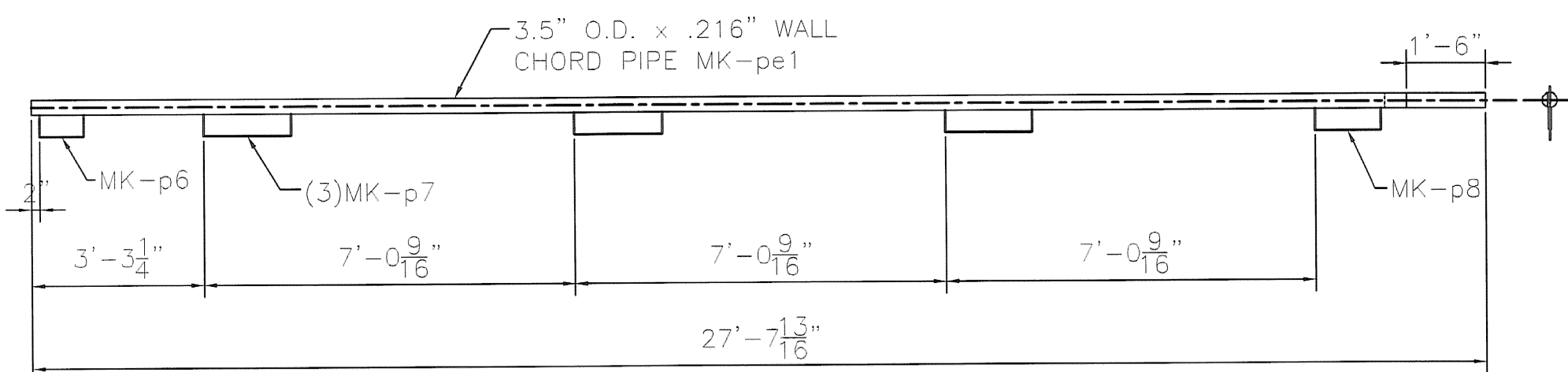
CANTILEVER SIGN STRUCTURE
 STATE OF VERMONT
 COUNTY OF CALEDONIA
 INTERSTATE RTE. 91 STA.127.980 NB
 PROJECT No. AC IM 091-2(73)

1587b

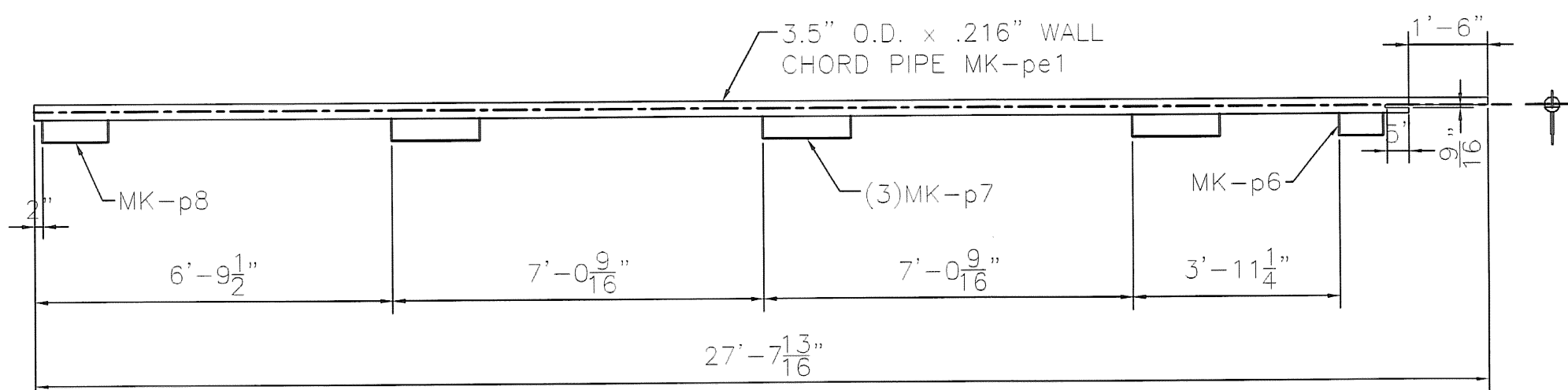
F.R. LAFAYETTE

2 of 6

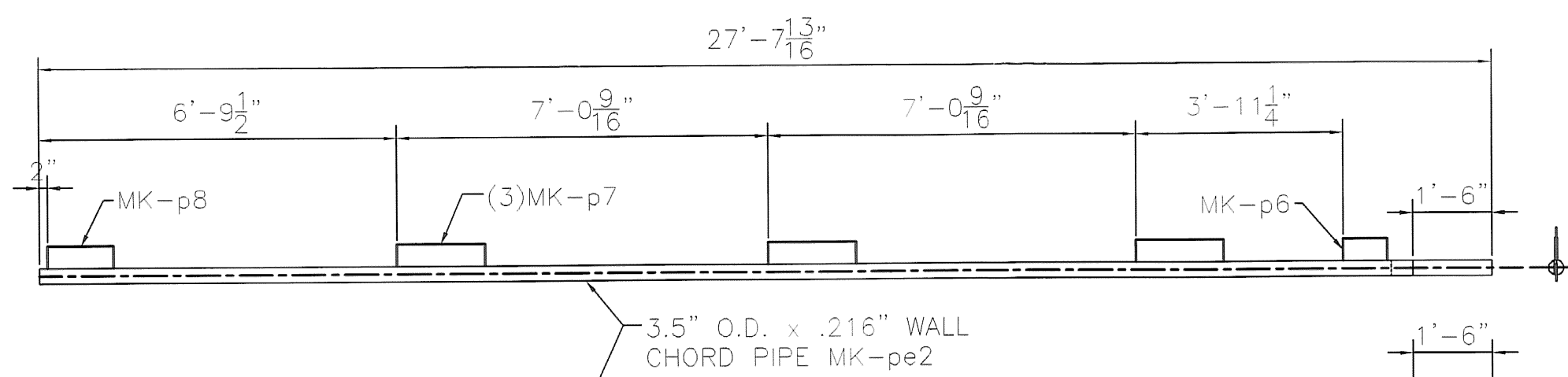
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



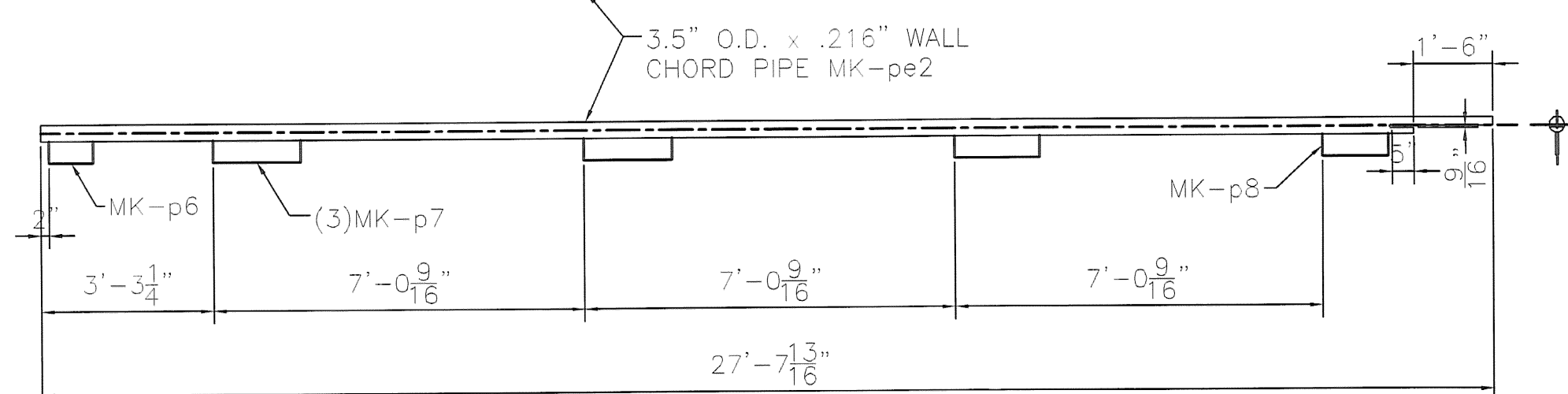
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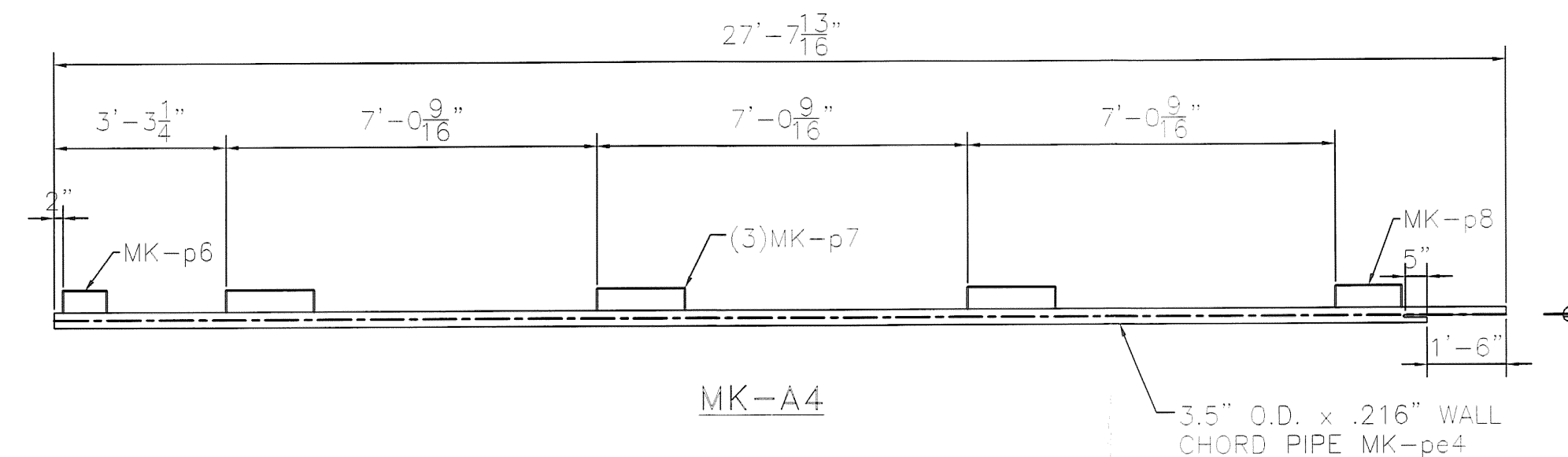
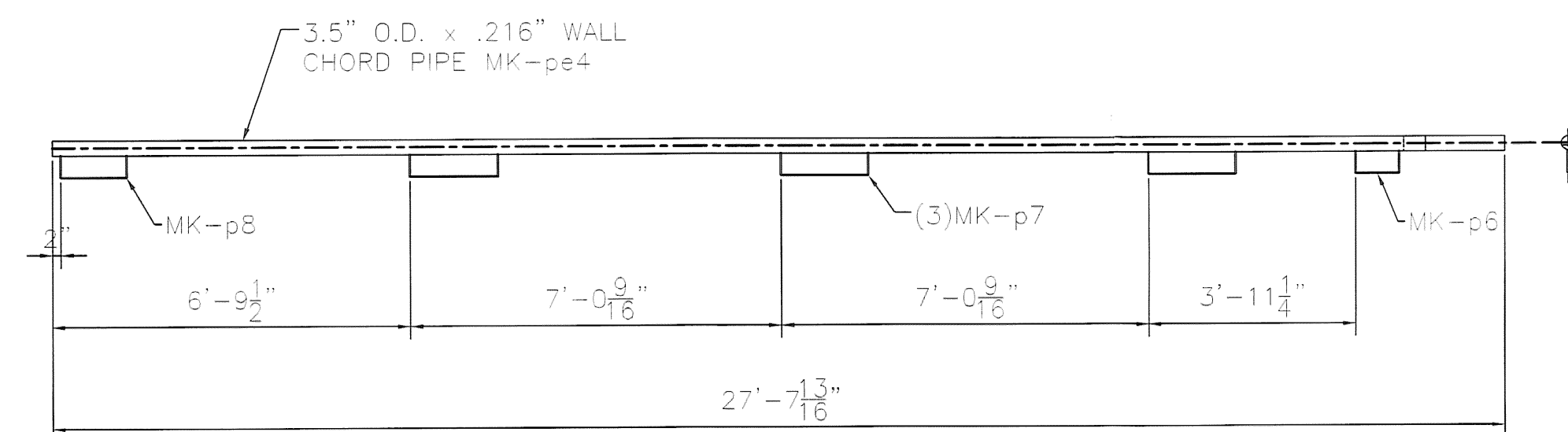
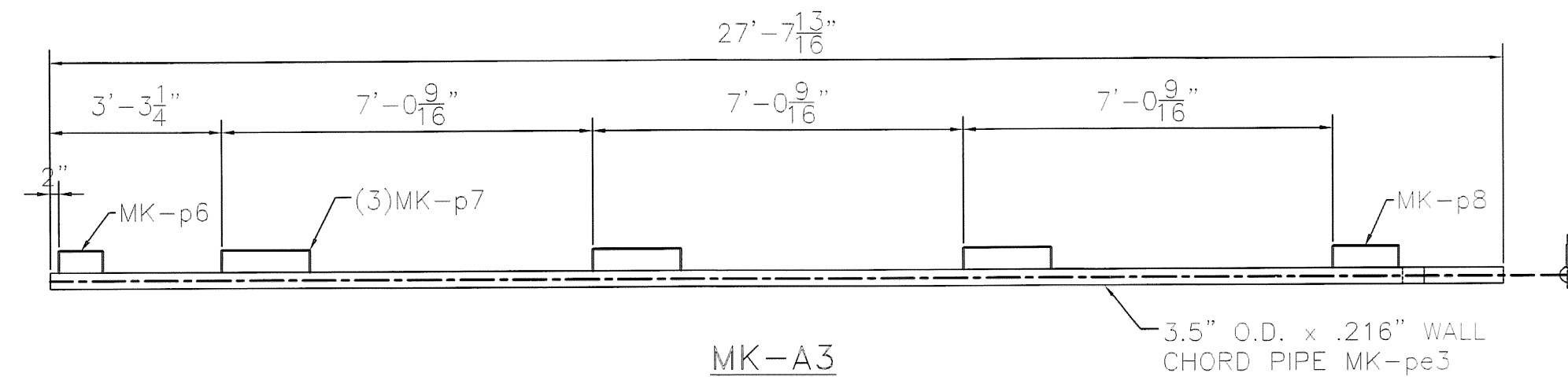
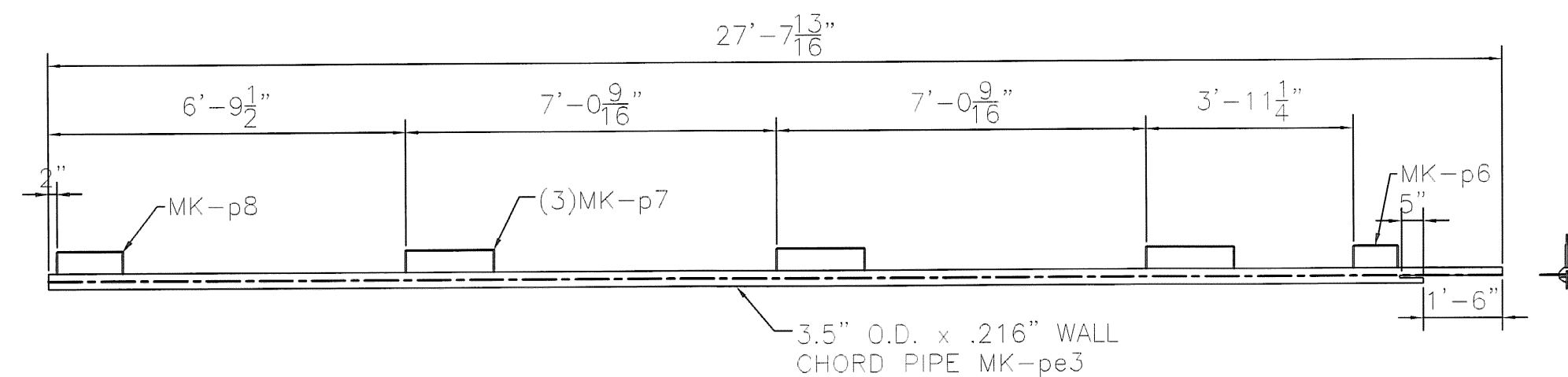
MK-A2



MK-A3



MK-A4



PROPOSED
 GAC
 MAY 15 2007
 BY: [Signature]
 FOR: [Signature]
 DATE: 06/15/07



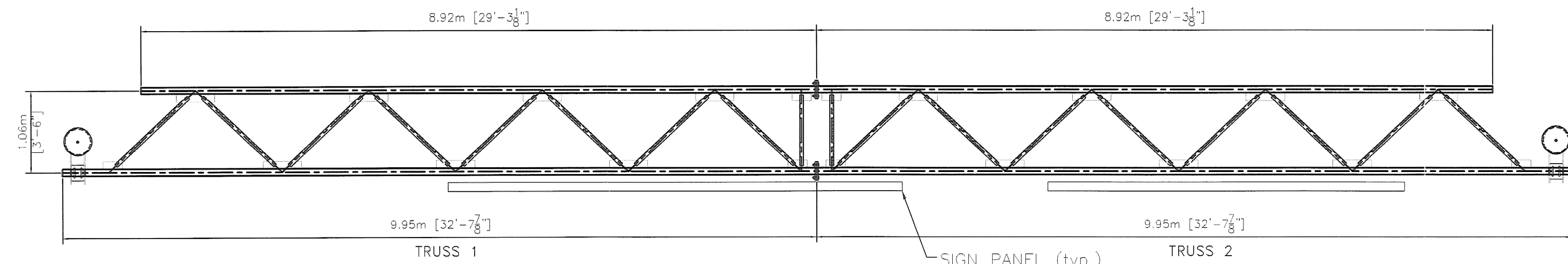
REVISIONS		
No.	Remarks	Date
0	Initial submittal	

HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

CANTILEVER SIGN STRUCTURE
 STATE OF VERMONT
 COUNTY OF CALEDONIA
 INTERSTATE RTE. 91 STA. 127.980 NB
 PROJECT No. AC IM 091-2(73)

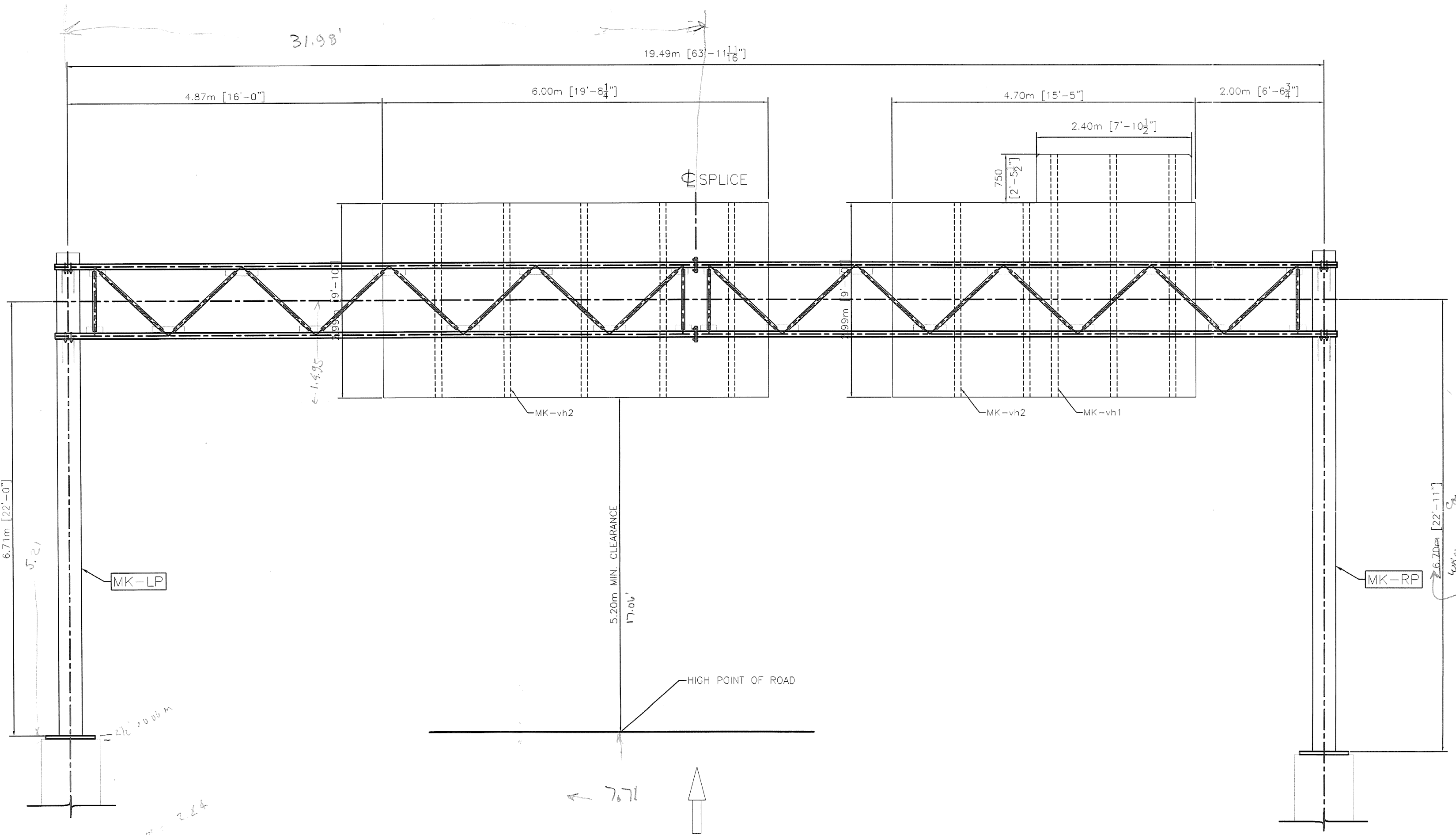
DESIGNED BY: MHM
 CHECKED BY: P. Radice
 DATE: 3/23/07
 SCALE: N.T.S.
 DRAWING NO.: 1587b
 SHEET NO.: 3 of 6

GENERAL CONTRACTOR: F.R. LAFAYETTE



(A) SECTION

SIGN PANEL (typ.) BY OTHERS

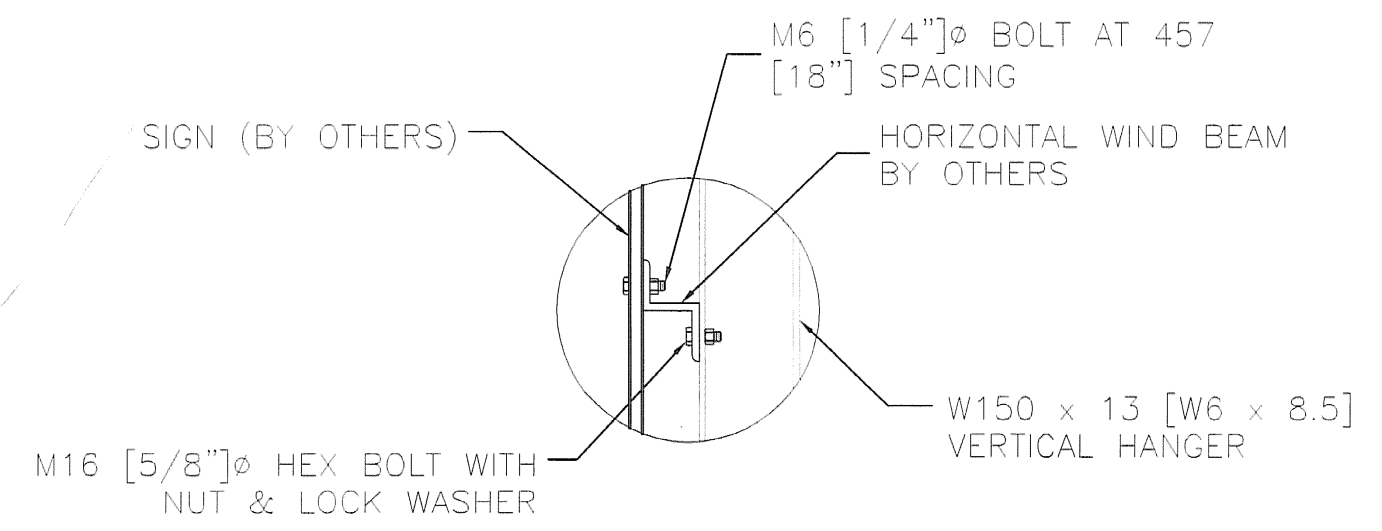


ELEVATION

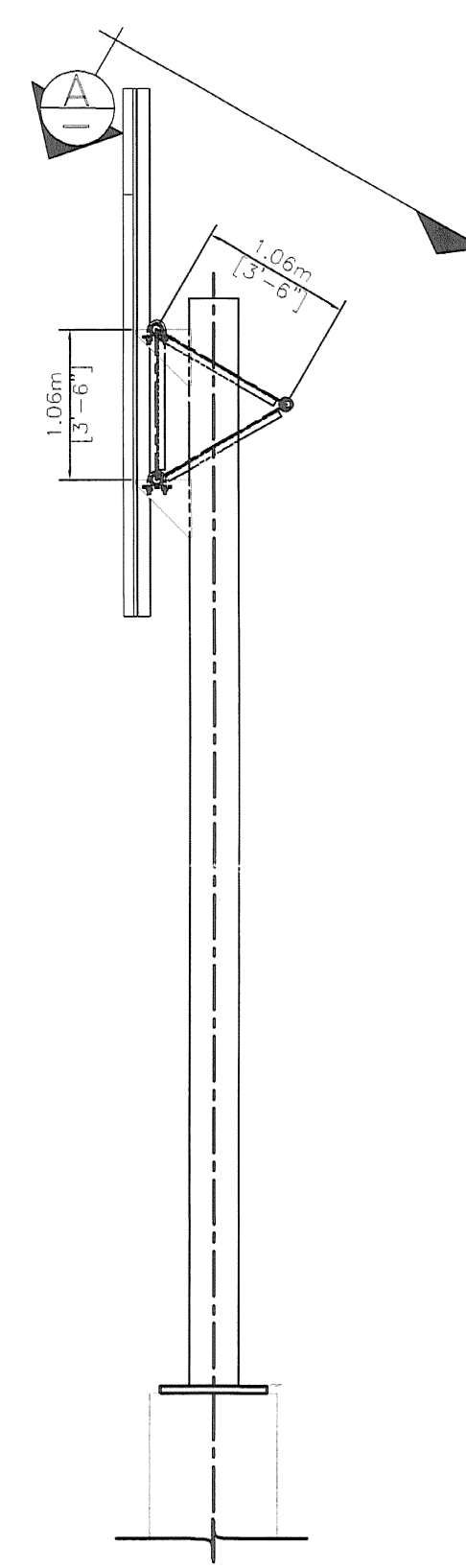
SB I-91 STA.128.70

LOOKING AT FACE OF SIGN
(OUT OF PLANE CHORDS NOT SHOWN FOR CLARITY)

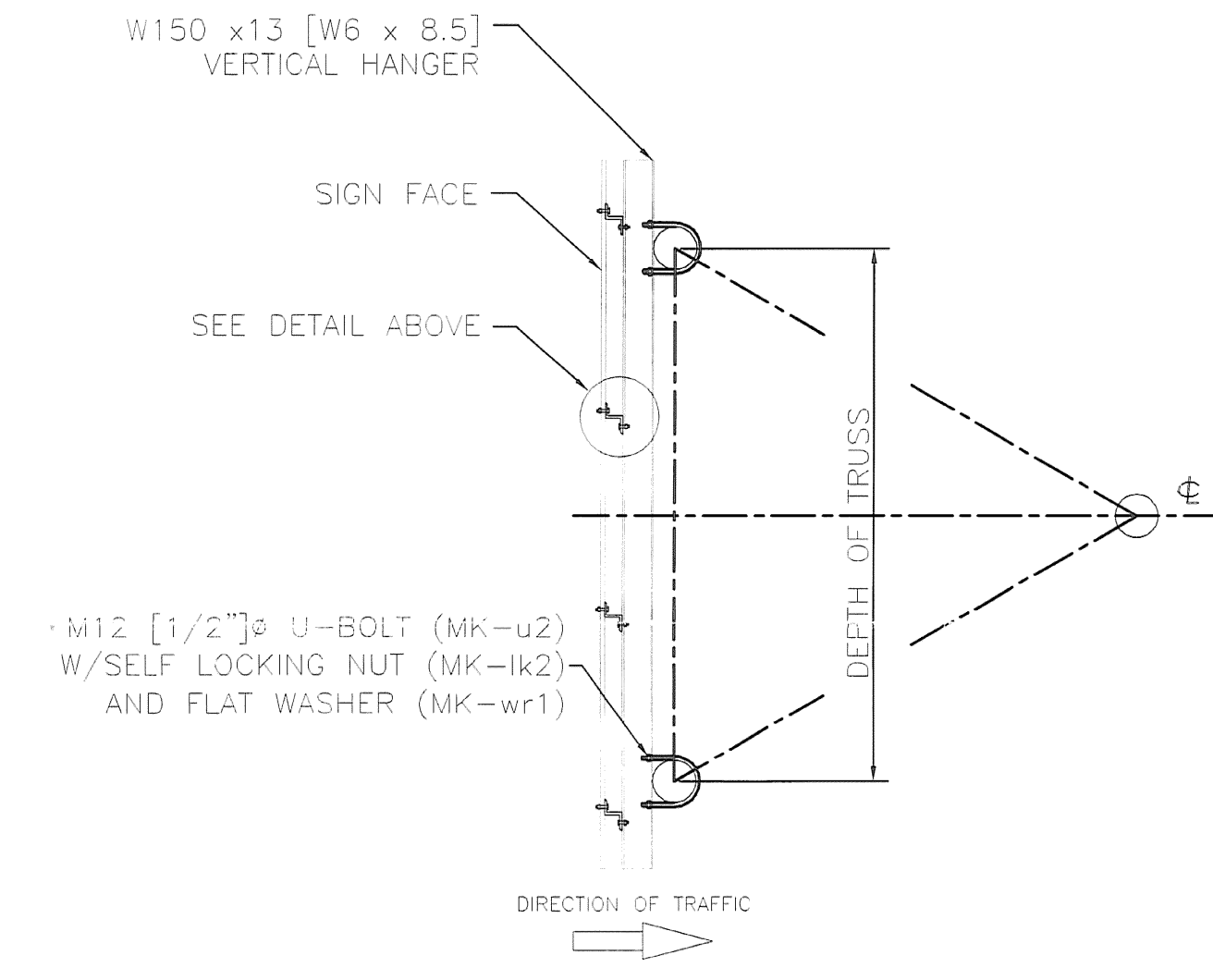
FOOTING ELEVATION IS ASSUMED.
CONTRACTOR TO VERIFY ELEVATIONS
BEFORE FABRICATION.



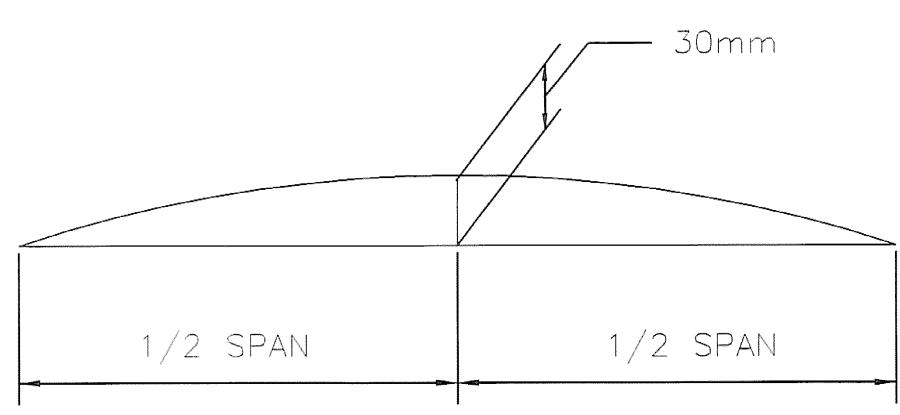
SIGN ATTACHMENT DETAIL



SIDE VIEW



SIGN MOUNTING DETAIL
VERTICAL HANGER BEAMS & U-BOLTS INCLUDED



CAMBER DIAGRAM

NOTE:

CAMBER WILL BE ACHIEVED BY SHORTENING LOWER CHORD PIPES BY AN AMOUNT SUCH THAT POSITIVE UPWARD DEFLECTION IS PRODUCED WHEN TRUSSES ARE BROUGHT TOGETHER AT SPLICES.

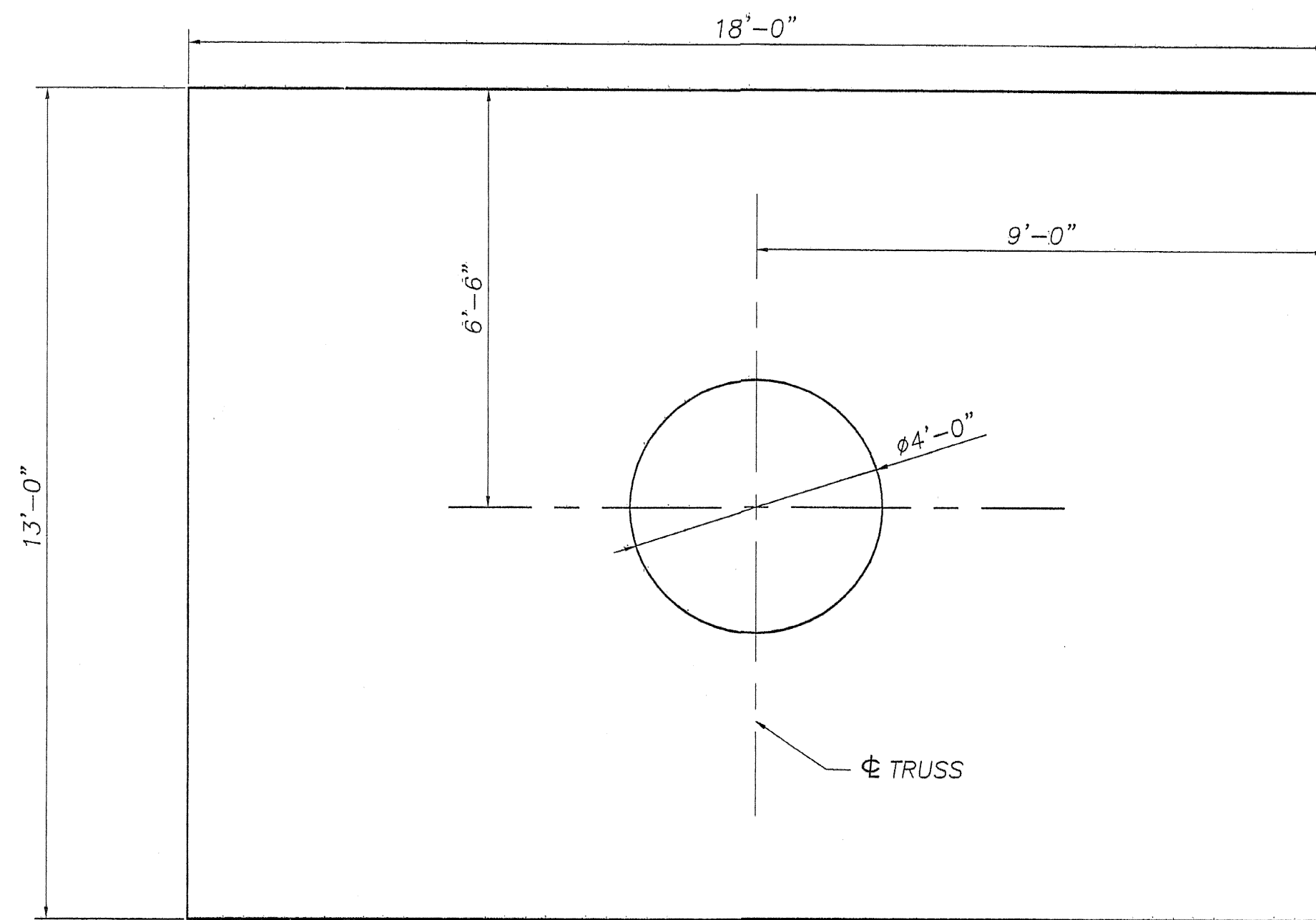
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED. ENGLISH CONVERSION SHOWN IN [] FOR REFERENCE ONLY.



HIGHWAY SAFETY CORP.
GLASTONBURY, CT

PROJECT	TRI-CHORD SIGN STRUCTURE	DATE	3/23/07
STATE	STATE OF VERMONT	SCALE	N.T.S.
COUNTY	COUNTY OF CALEDONIA	PROJECT No.	AC IM 091-2(73)
PROJECT No.	AC IM 091-2(73)	REVISION No.	1587a
GENERAL CONTRACTOR	F.R. LAFAYETTE	SHEET No.	1 of 8

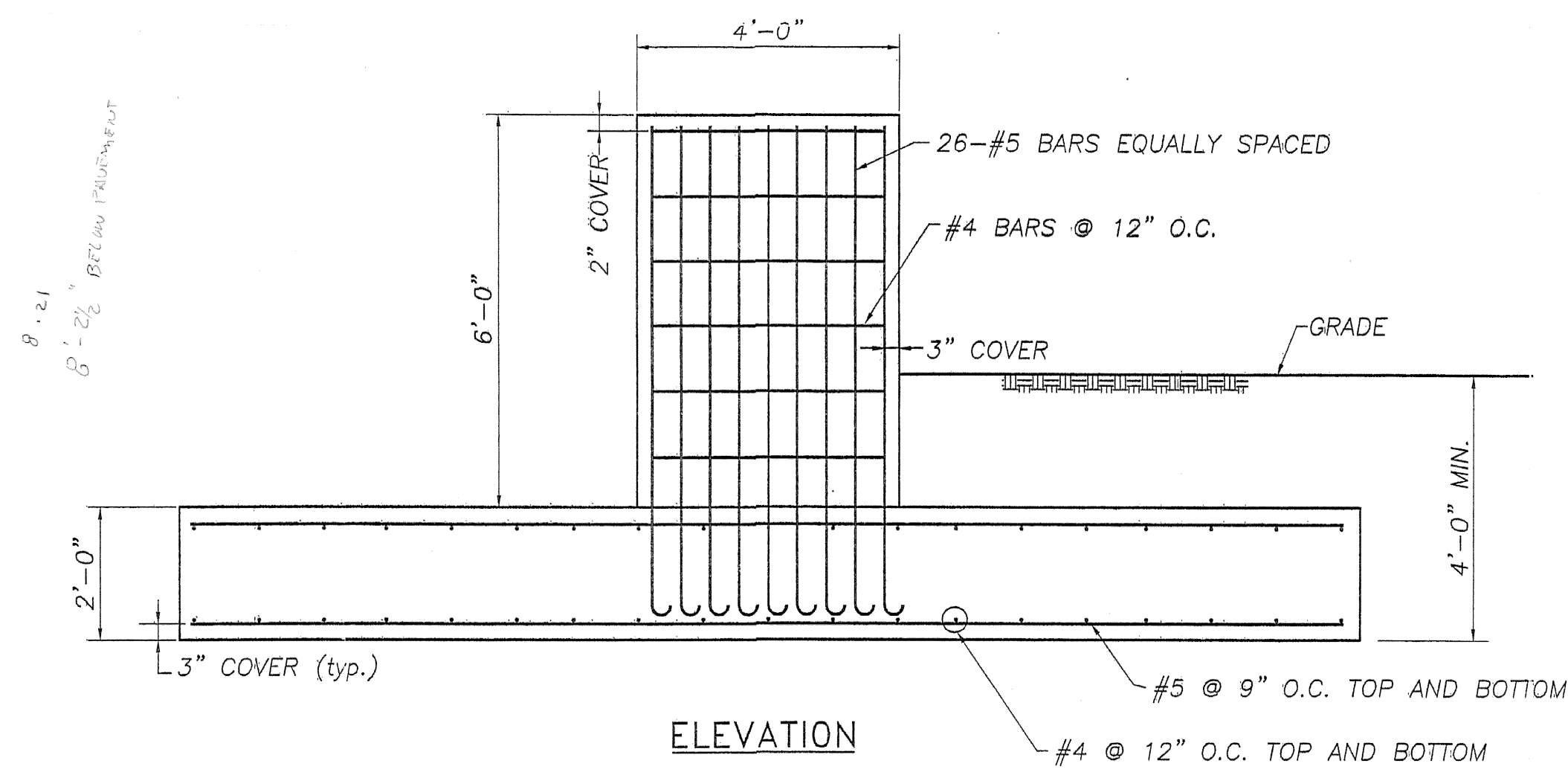
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



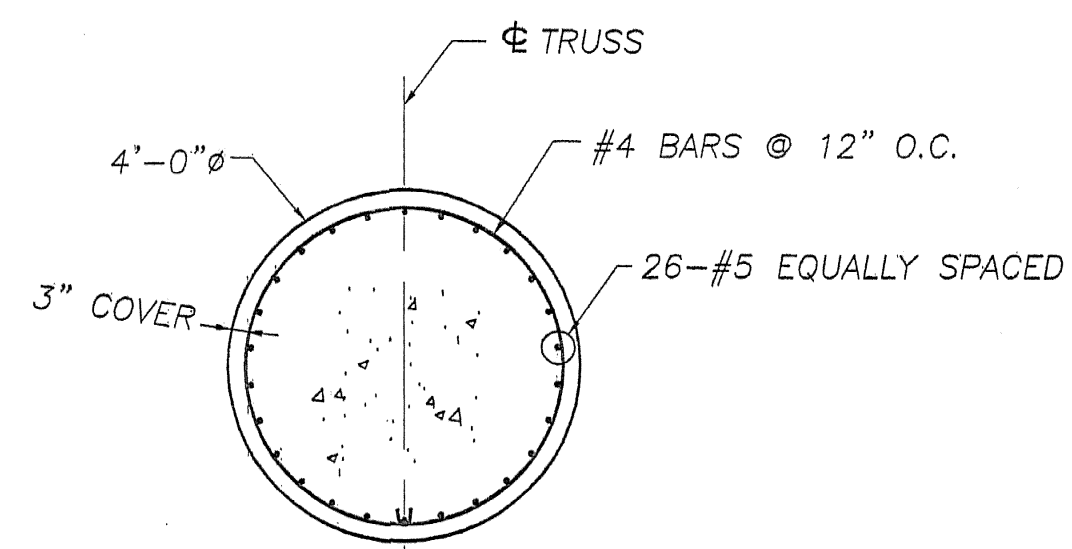
PLAN

REBAR LIST

REBAR	PCS. REQD.	LENGTH
#4	14	9'-4"
#4	76	12'-6"
#5	72	17'-6"
#5 (HOOK ONE END)	52	8'-6"



ELEVATION

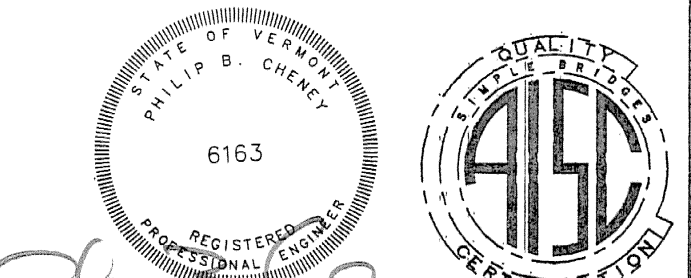


PLAN (STEM)

18'
13'
17.33 91
8.24
8'-22' (BEFORE PRODUCTION)
18' X 13'
STEM 4'
26 #5 BARS

NEWEST

cal
x
07/13/07



HIGHWAY SAFETY CORP.
GLASTONBURY, CT

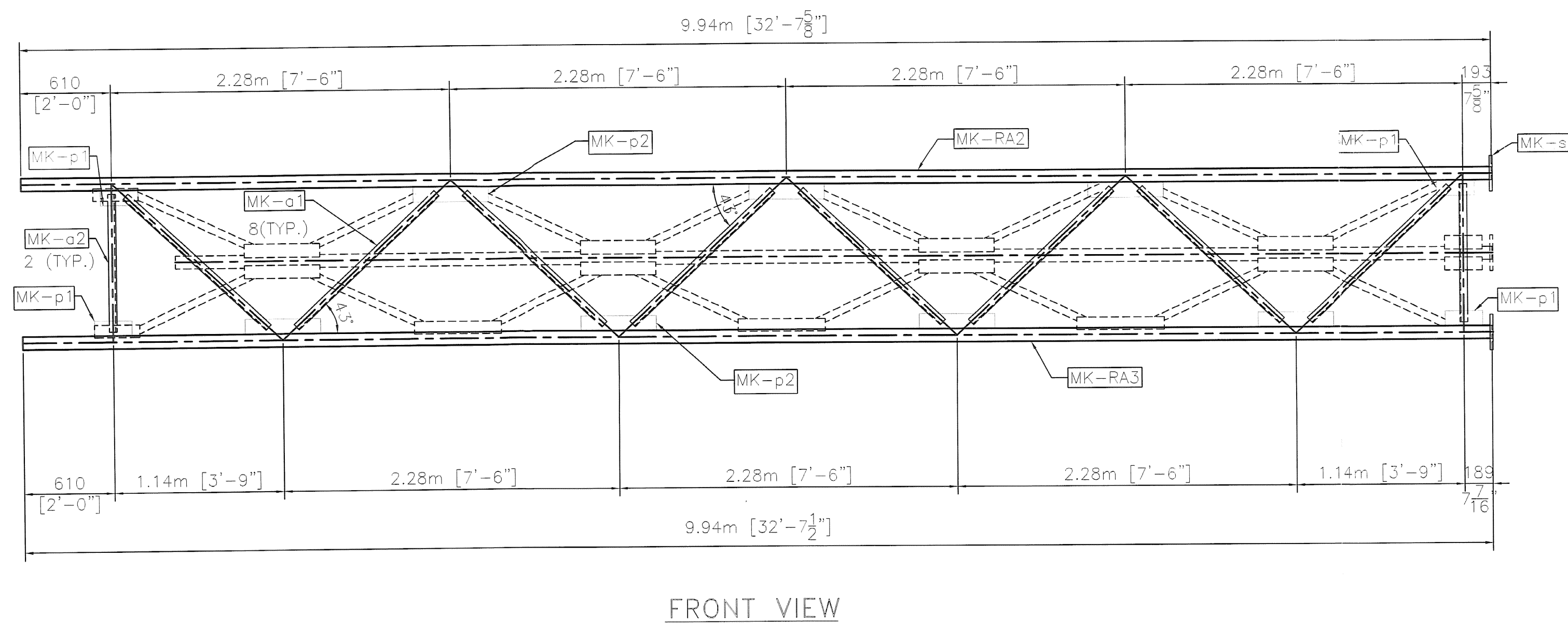
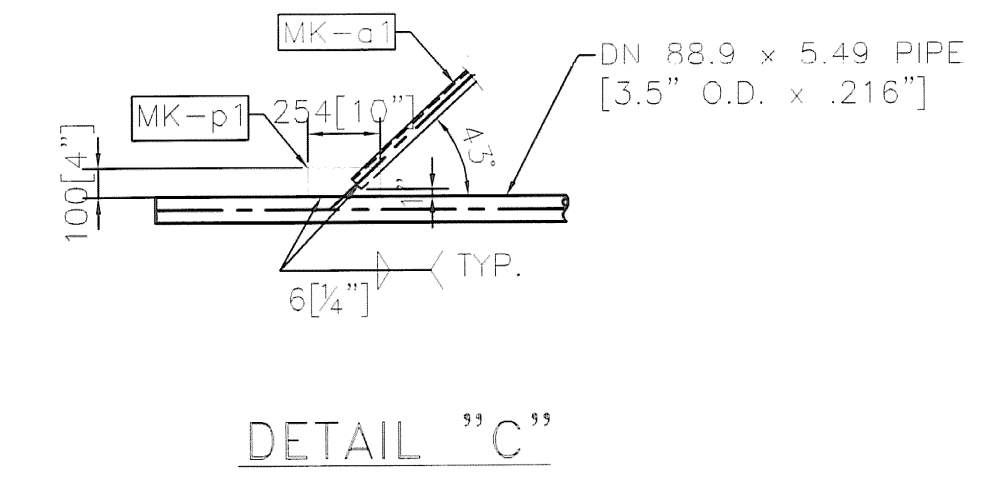
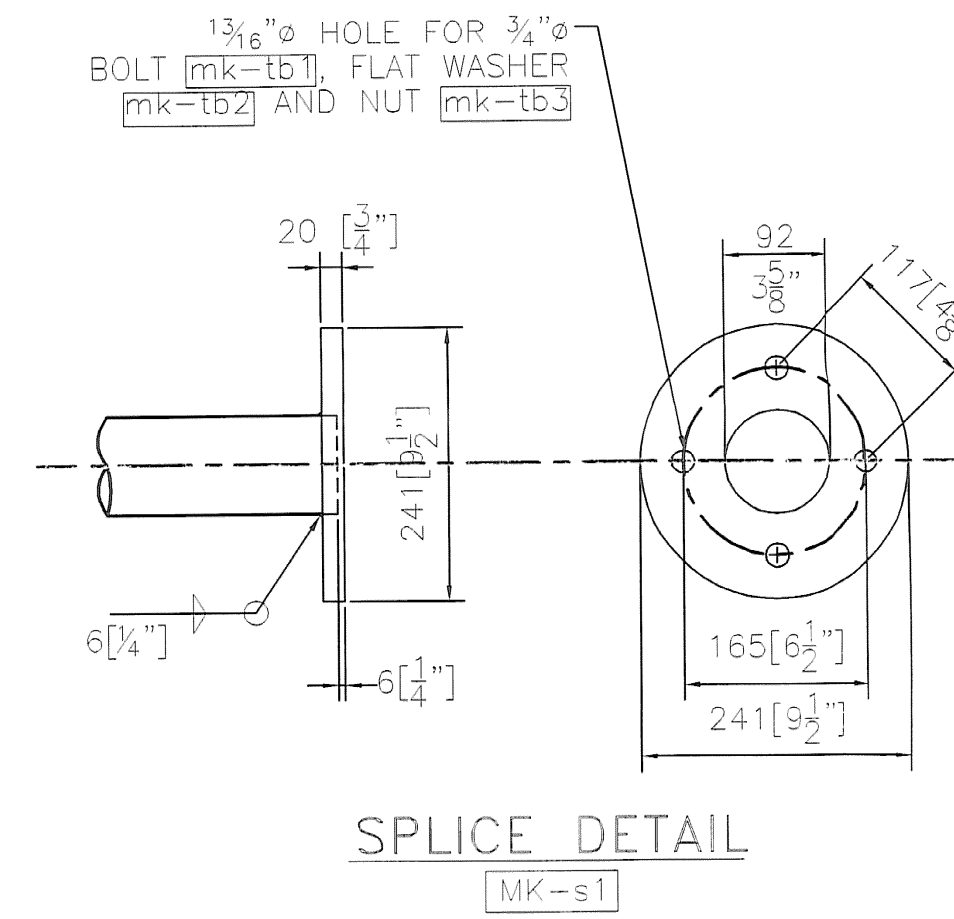
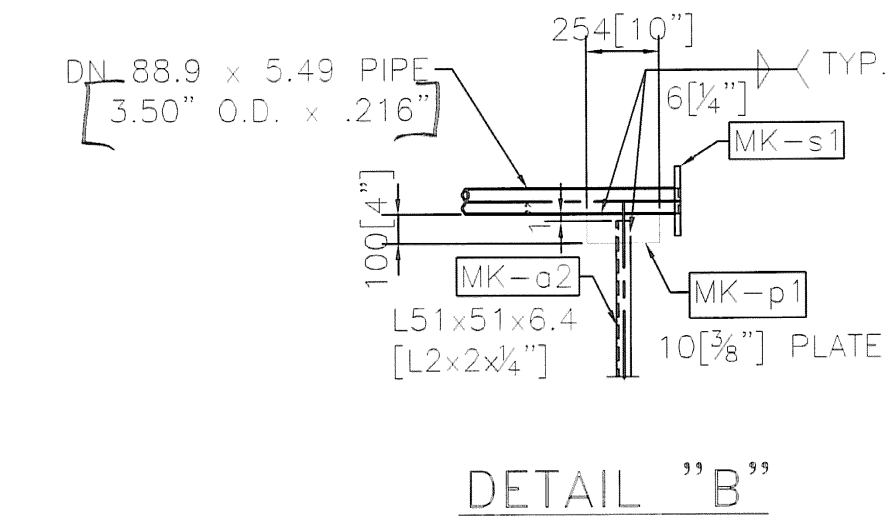
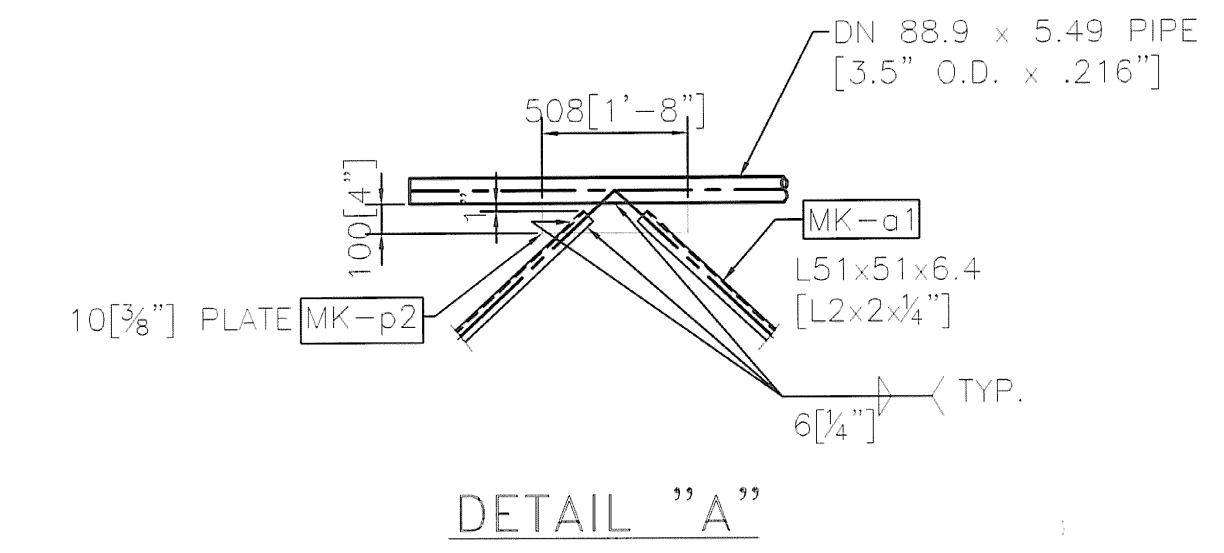
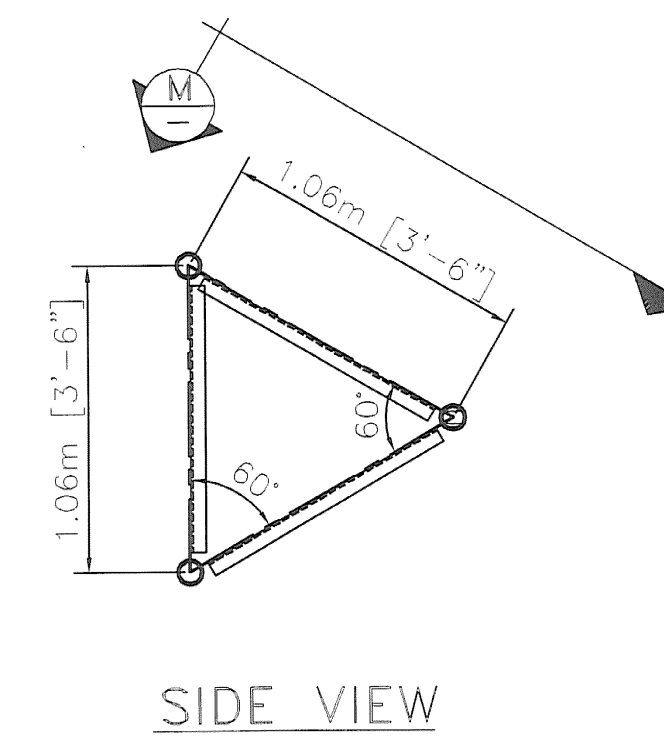
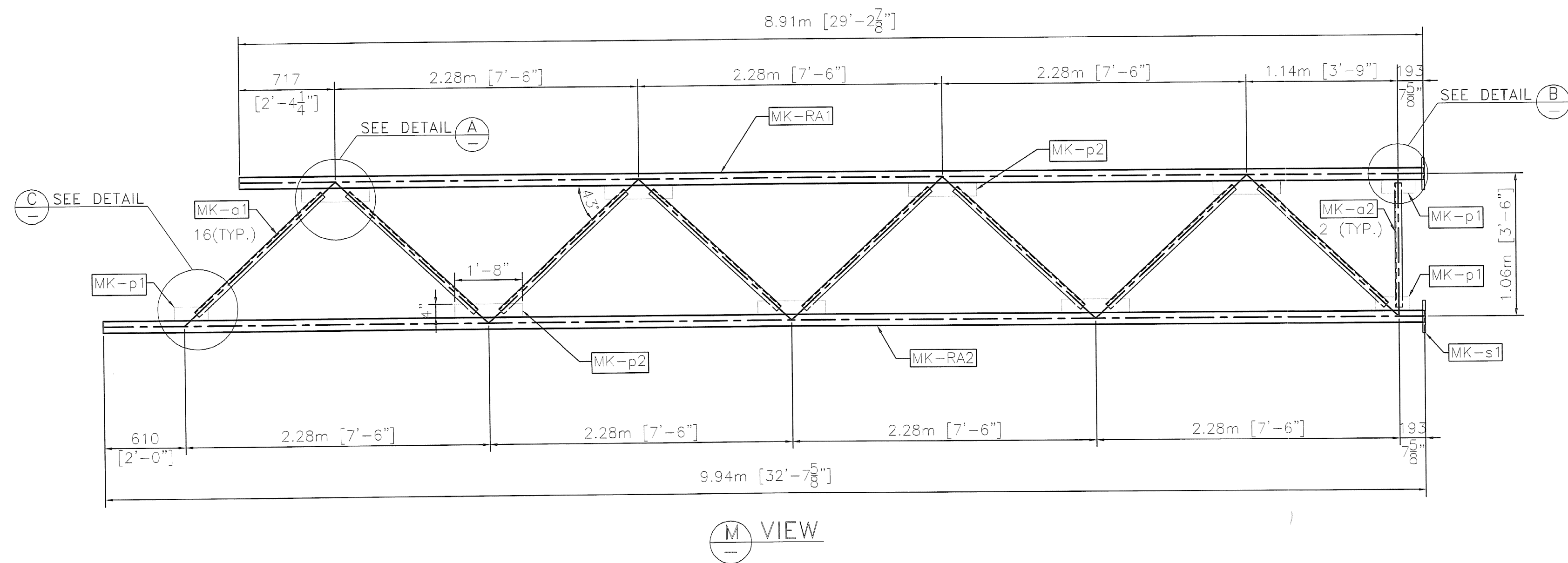
TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA. 128.70 SB
PROJECT No. AC IM 091-2(73)

DRWN: MHM
CHKD: P. Radice
DATE: 3/23/07
SCALE: N.T.S.
HSC REFERENCE NO.: 1587a
SHEET NO.: 8 of 8

GENERAL CONTRACTOR: F.R. LAFAYETTE

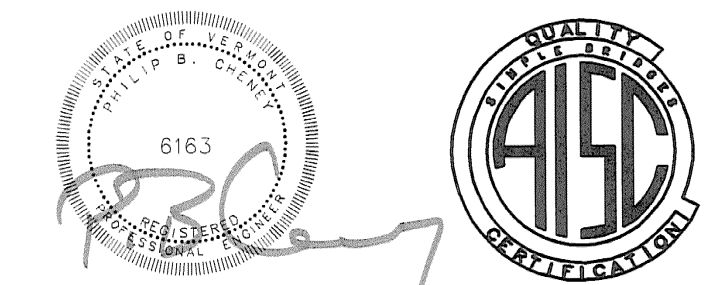
REVISIONS

No.	Remarks	Date
0	Initial submittal	
1	Second submittal	6/22/07



TRUSS 1

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED. ENGLISH CONVERSION SHOWN IN [] FOR REFERENCE ONLY.



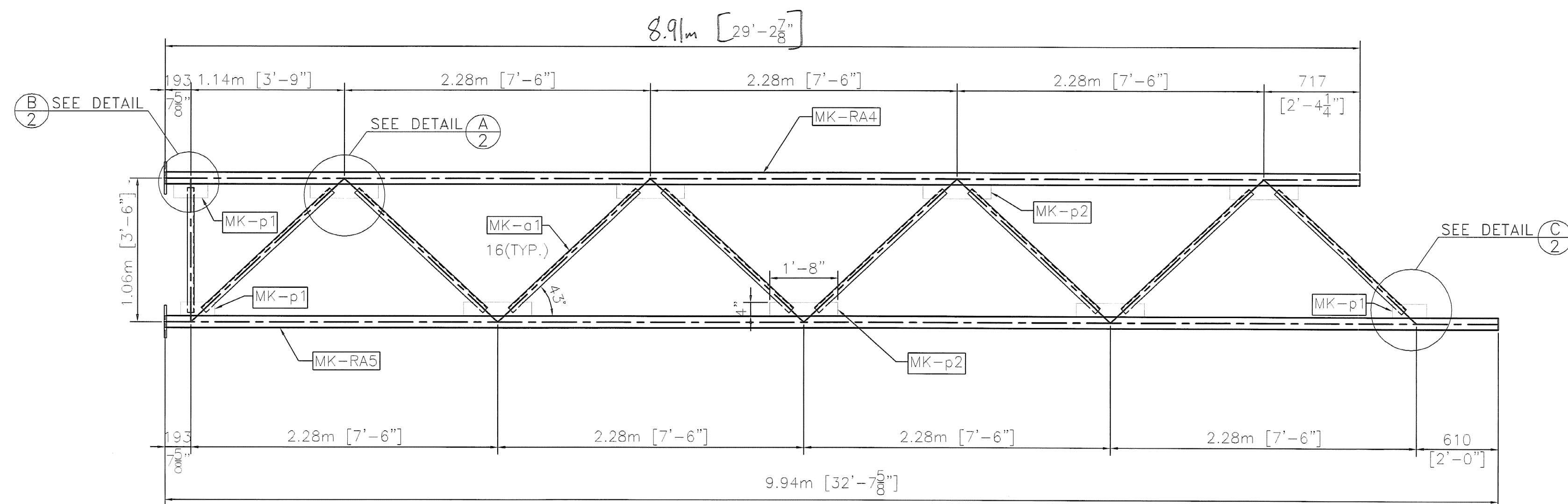
REVISIONS		
No.	Remarks	Date
0	Initial submittal	

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

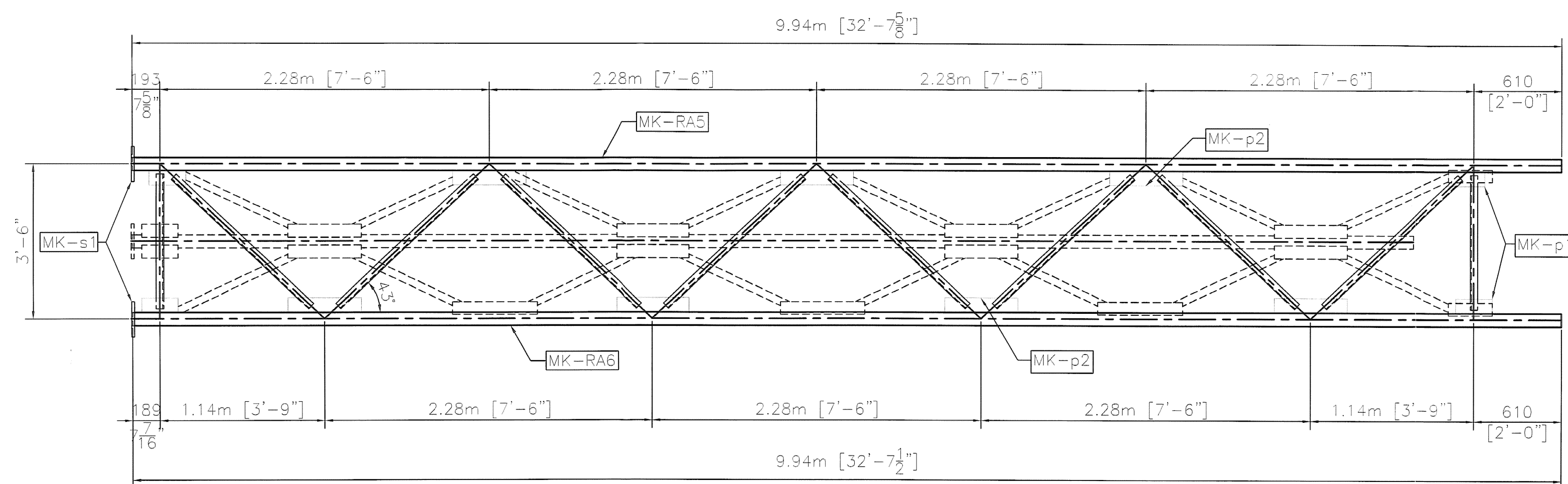
TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.128.70 SB
PROJECT No. AC IM 091-2(73)

DATE: 3/23/07
SCALE: NTS
JOB REFERENCE NO.: 1587a
SHEET NO.: 2 of 8

DESIGNED BY: F.R. LAFAYETTE

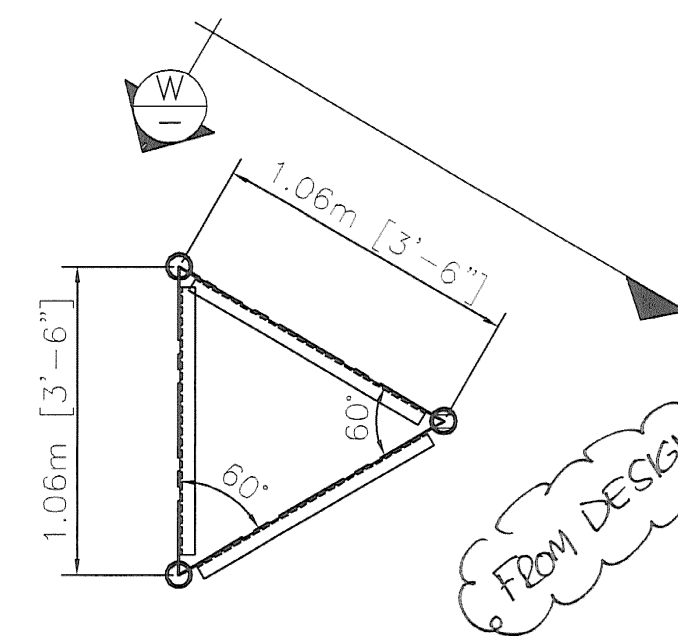


W VIEW



FRONT VIEW

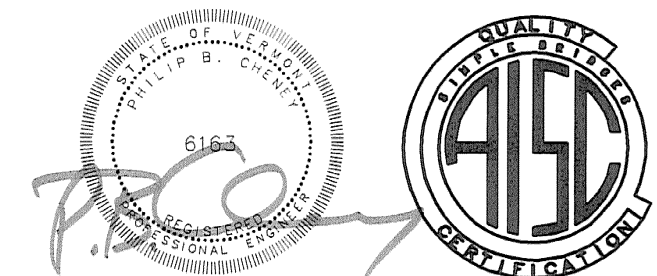
TRUSS 2



SIDE VIEW

- NOTE:**
- STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.
 - ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.
 - GRIND SHARP CORNERS OF ALL PLATES TO A $\frac{1}{16}$ " MIN. RADIUS PRIOR TO GALVANIZING.
 - ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.
 - ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.
 - STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.
 - STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 48 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, A53 GR. B OR API 5LX42.
 - UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325). *ASTM GR B HAS Fy 36KSI*
 - GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.
 - ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
 - ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).
 - ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.
 - CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.
 - FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.
 - SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.
 - BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF STANDARD SPECIFICATIONS SECTION 506. *VDOT VAOT*

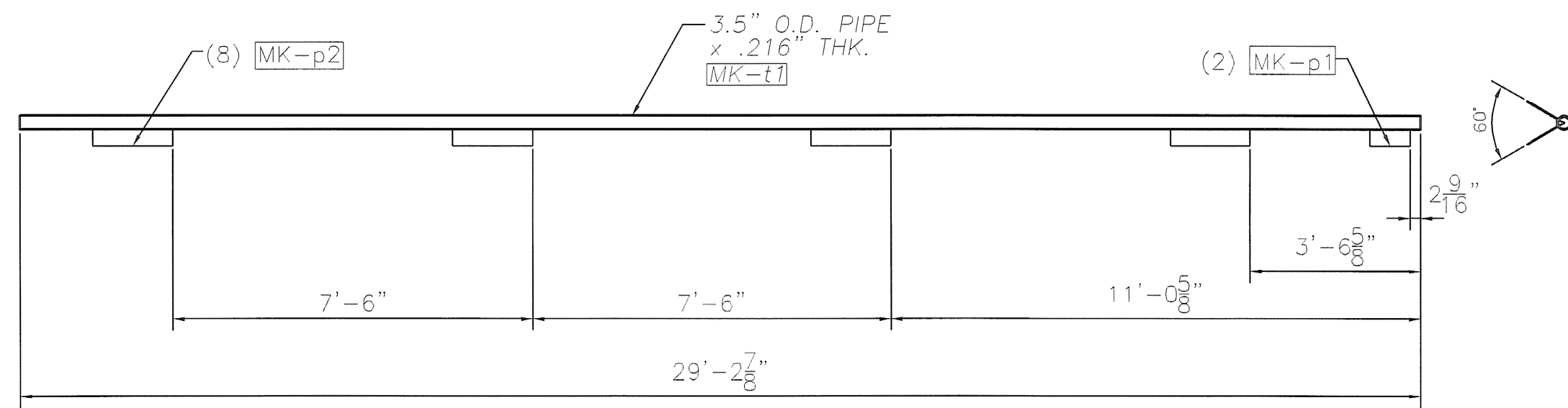
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED. ENGLISH CONVERSION SHOWN IN [] FOR REFERENCE ONLY.



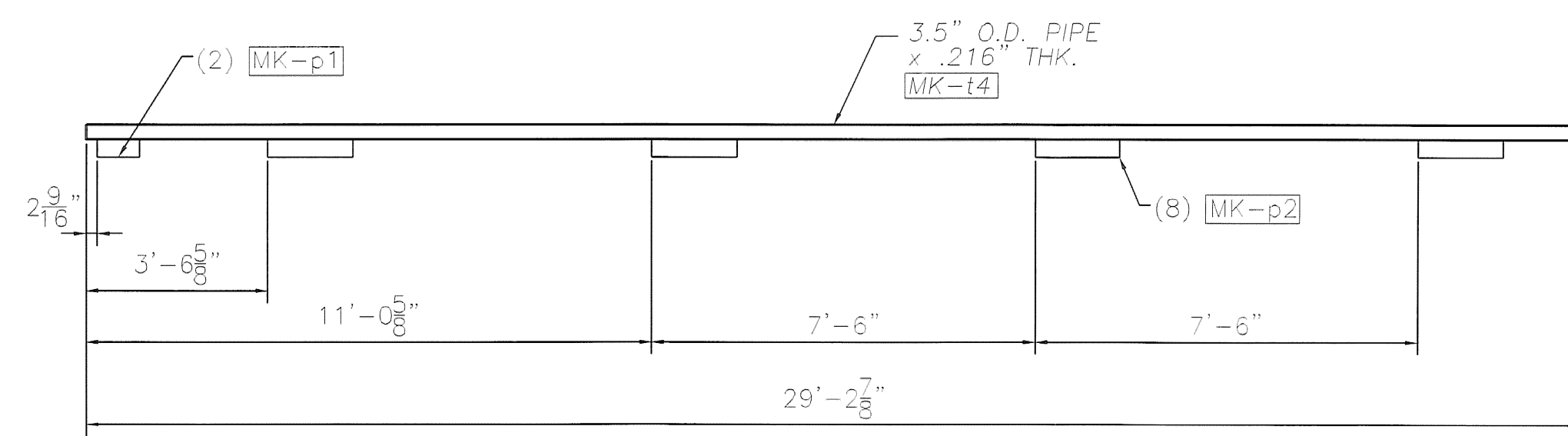
*GLC RLT
AS NOTED
06/14/07*

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

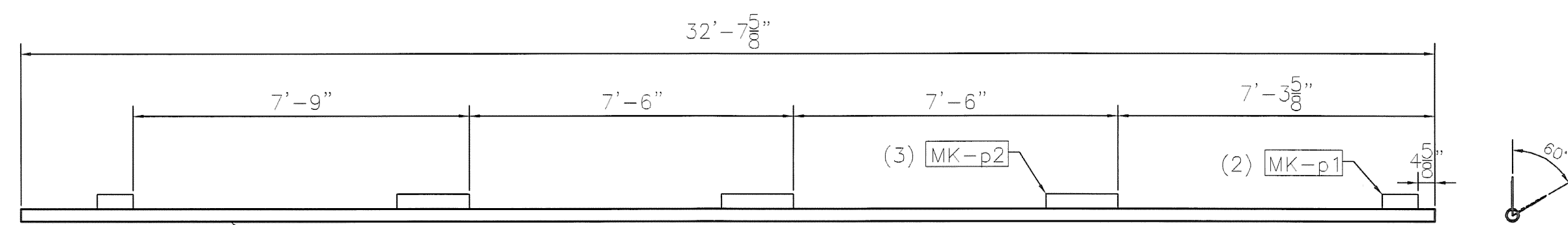
HIGHWAY SAFETY CORP. GLASTONBURY, CT	
TRI-CHORD SIGN STRUCTURE STATE OF VERMONT COUNTY OF CALEDONIA INTERSTATE RTE. 91 STA.128.70 SB PROJECT No. AC IM 091-2(73)	DRAWN: MHM CHECKED: P. Radice DATE: 3/23/07 SCALE: NTS PROJ. REVISION NO.: 1587a GENERAL CONTRACTOR: F.R. LAFAYETTE SHEET NO.: 3 of 8



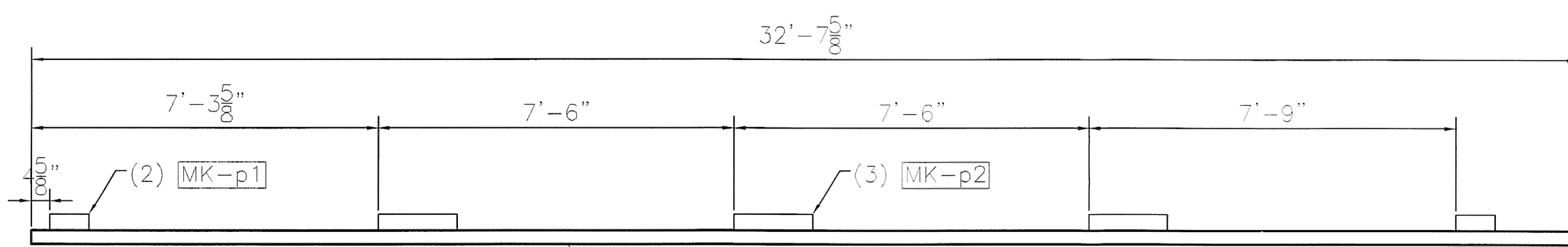
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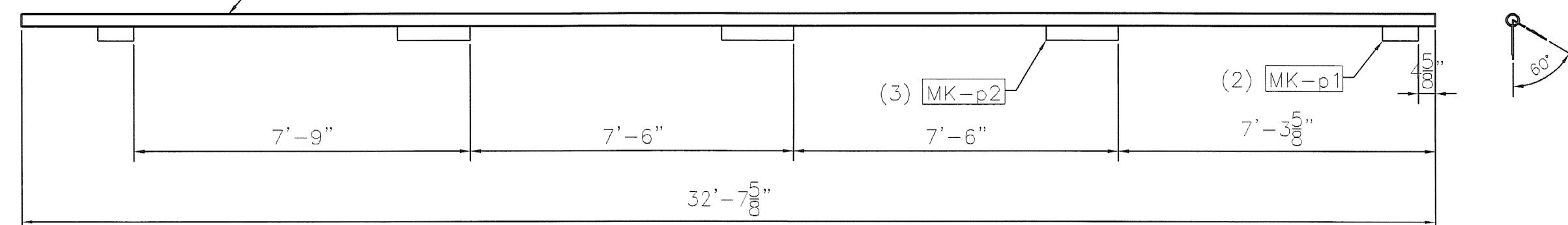
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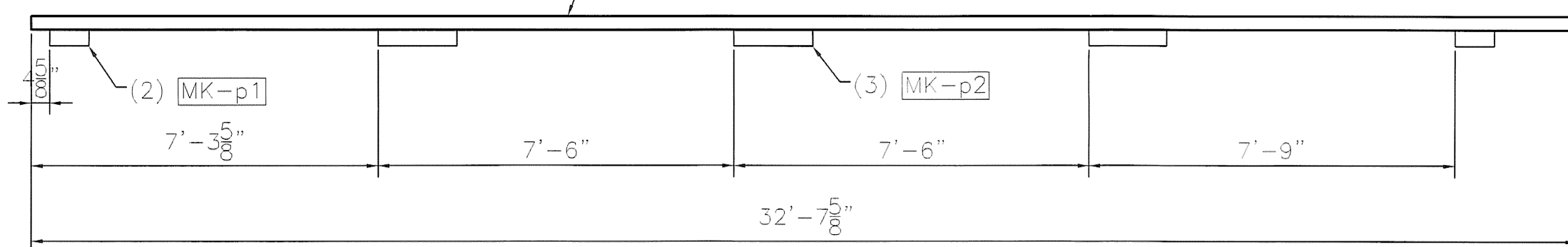
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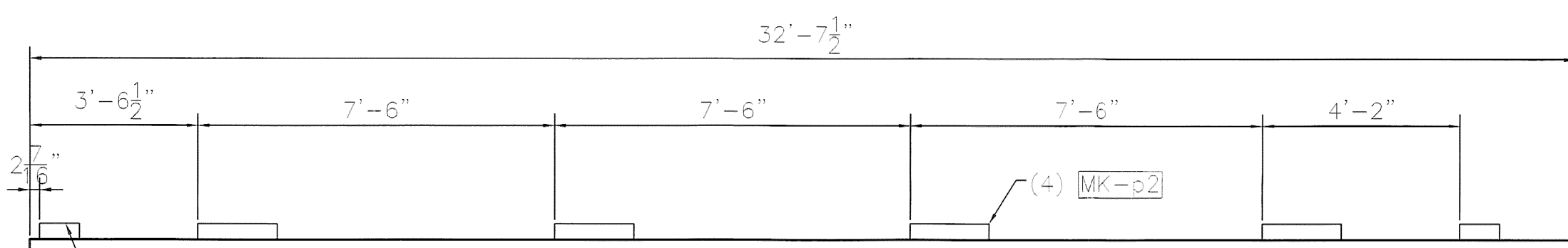
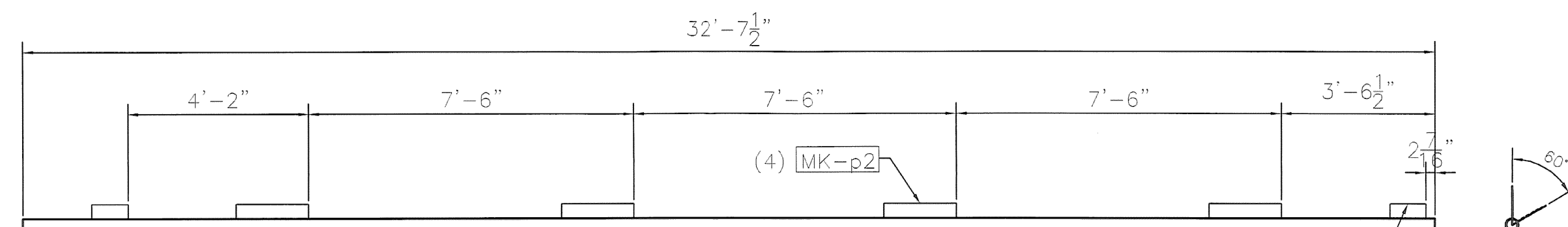
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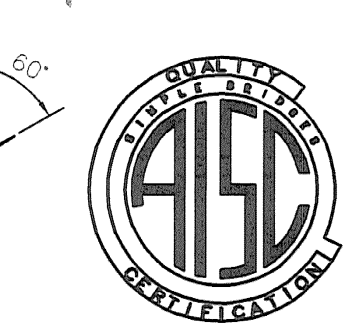
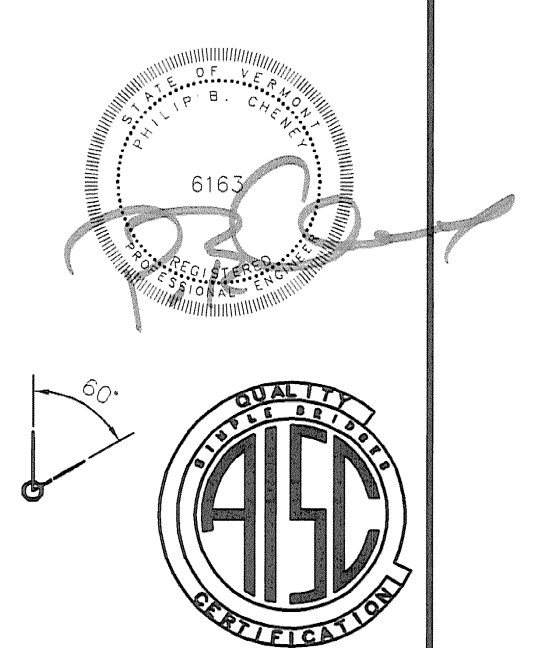
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MK-RA6



GJC
R-T
X
06/14/07



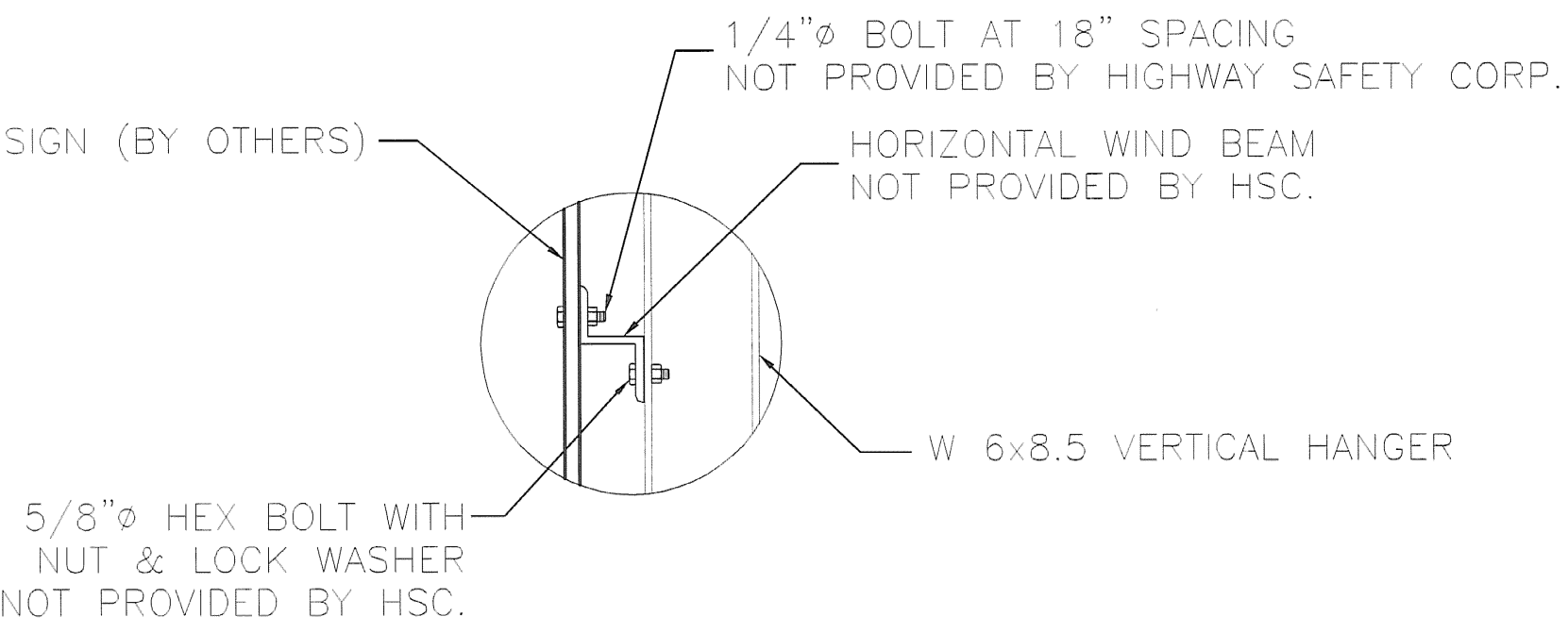
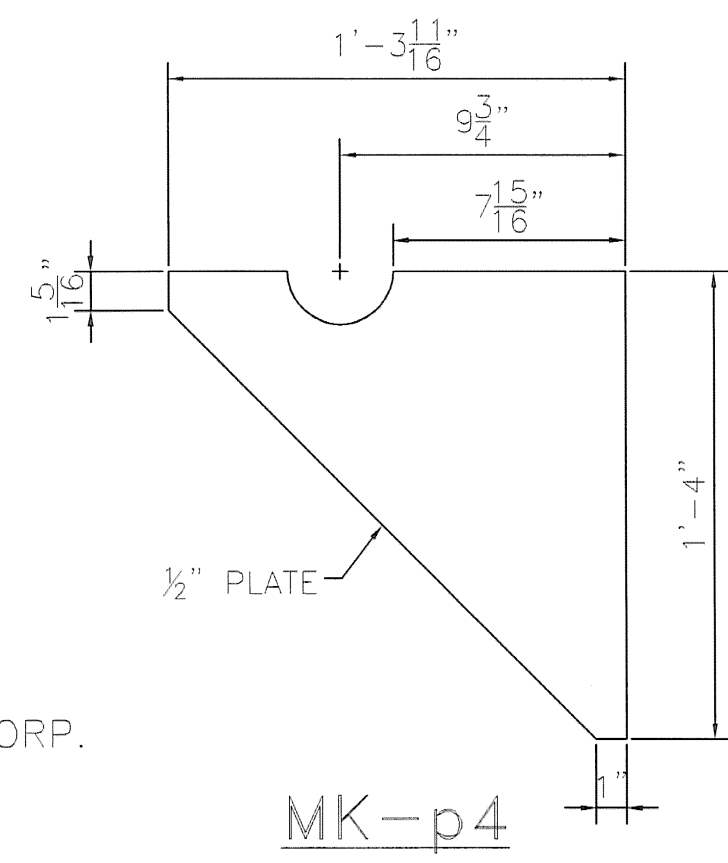
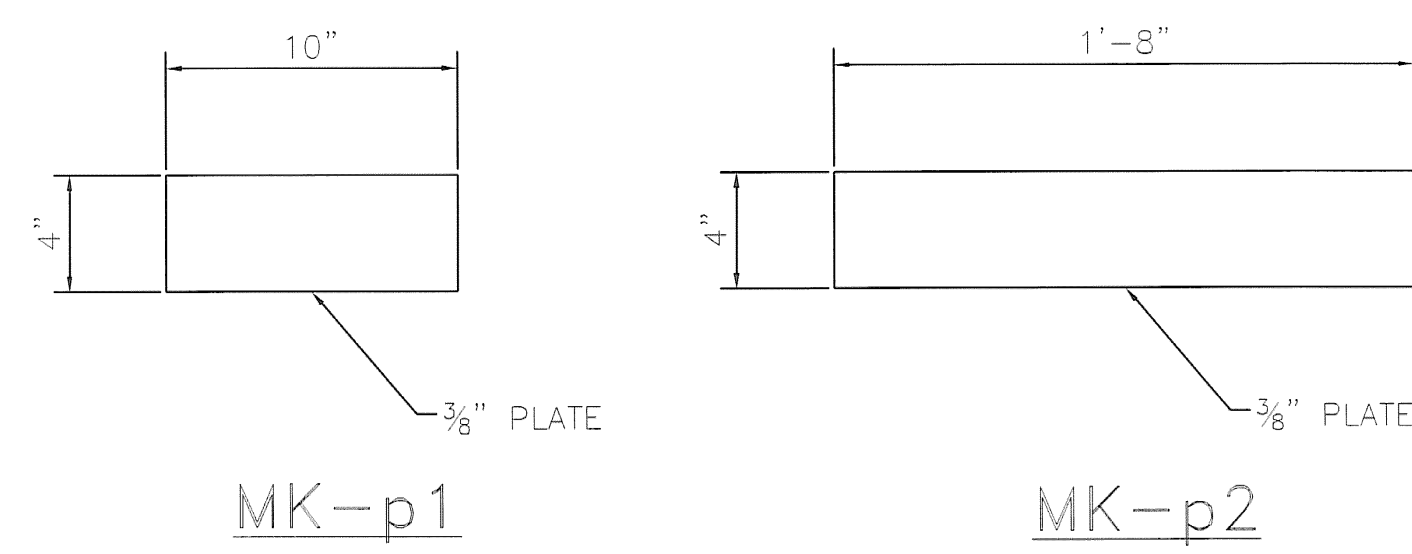
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No.	Remarks	Date
0	Initial submittal	

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

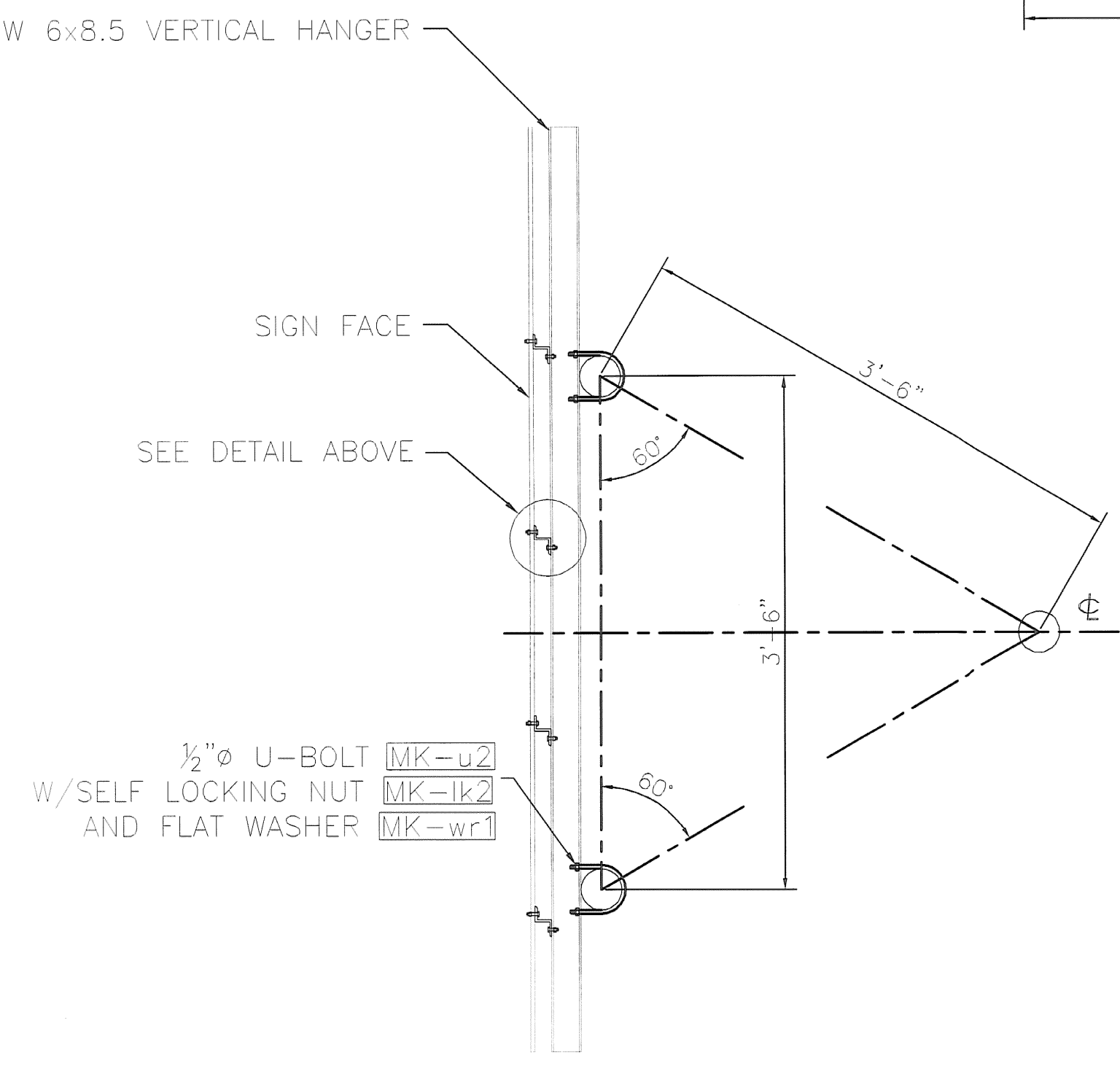
TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.128.70 SB
PROJECT No. AC IM 091-2(73)

DESIGNED BY: MHM
DATE: 3/23/07
SCALE: NTS
SHEET NO.: 5 of 8

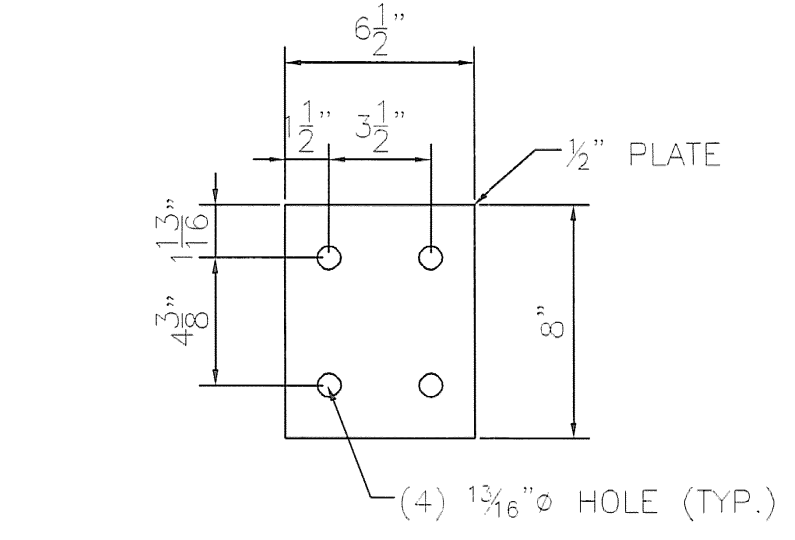
GENERAL CONTRACTOR: F.R. LAFAYETTE



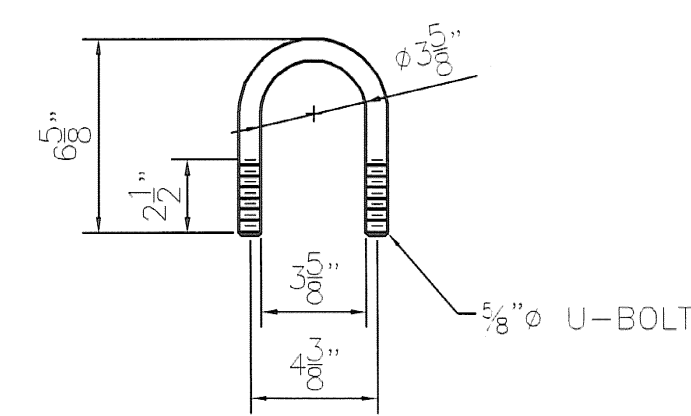
SIGN ATTACHMENT DETAIL



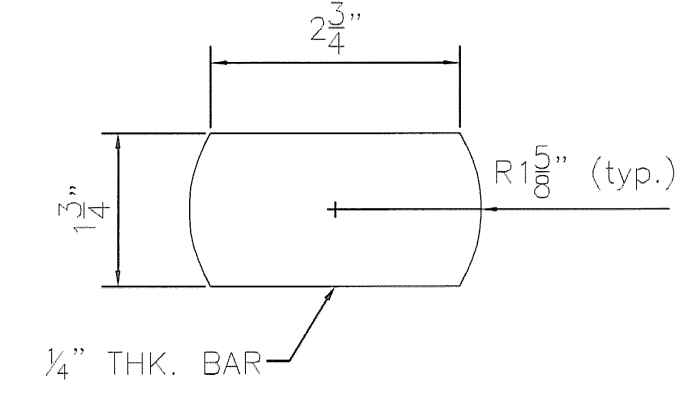
SIGN MOUNTING DETAIL
VERTICAL HANGER BEAMS & U-BOLTS INCLUDED



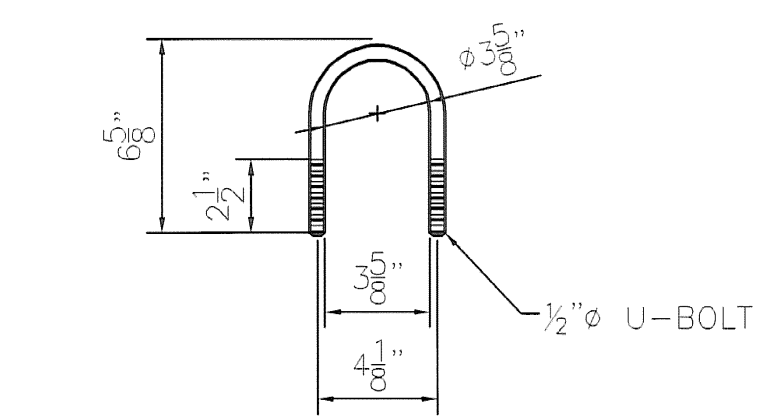
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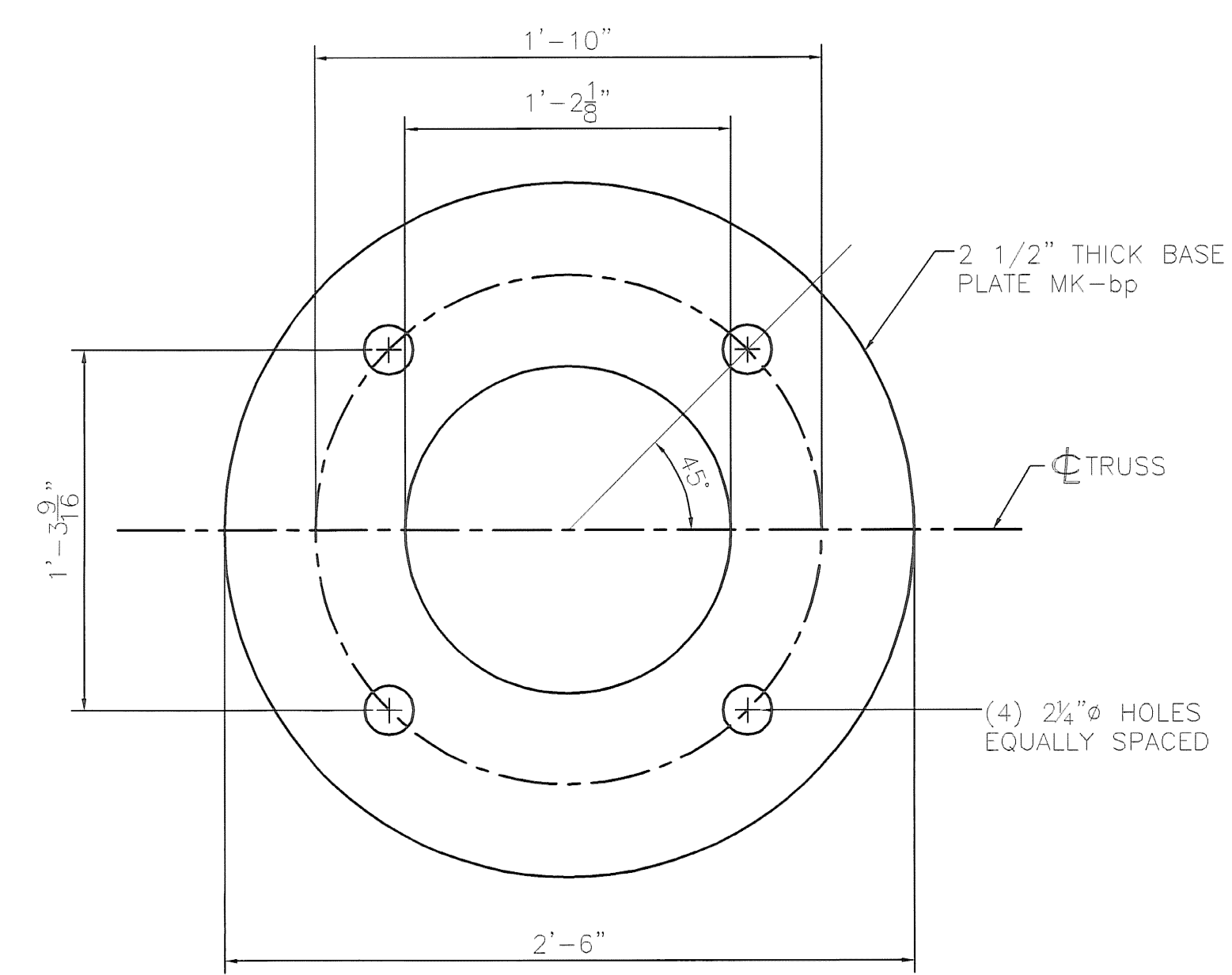
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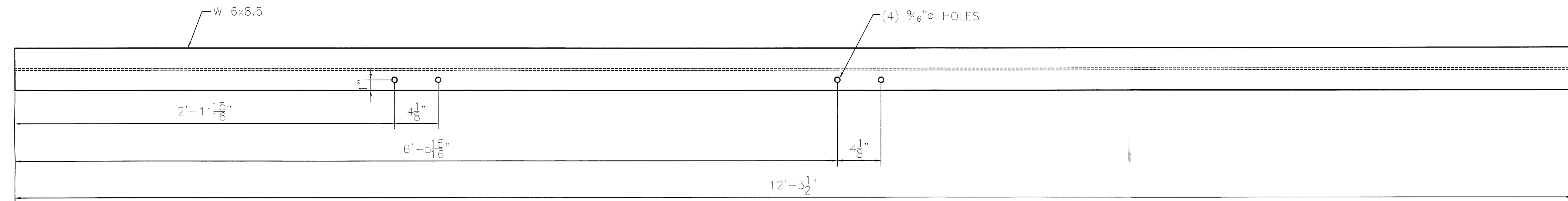
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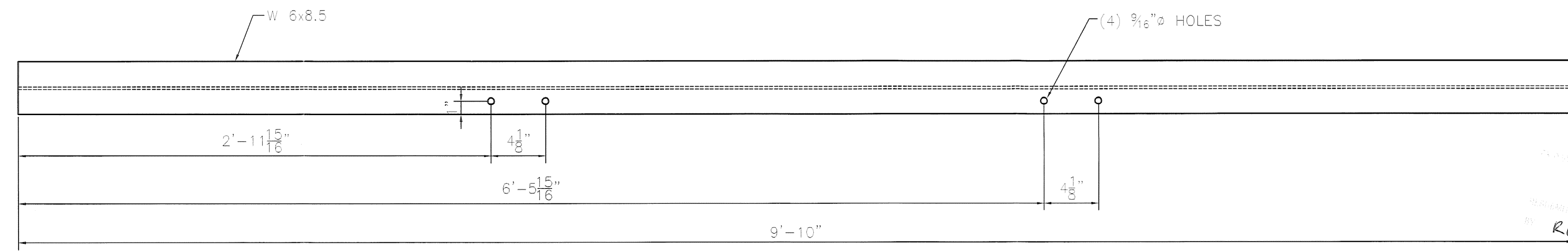
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MK-bp

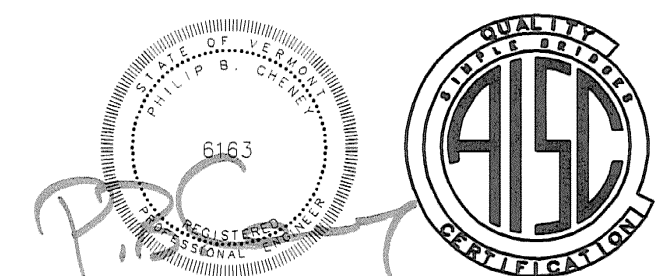


MK-vh1



MK-vh2

6WX
RT
RT
X
06/14/07



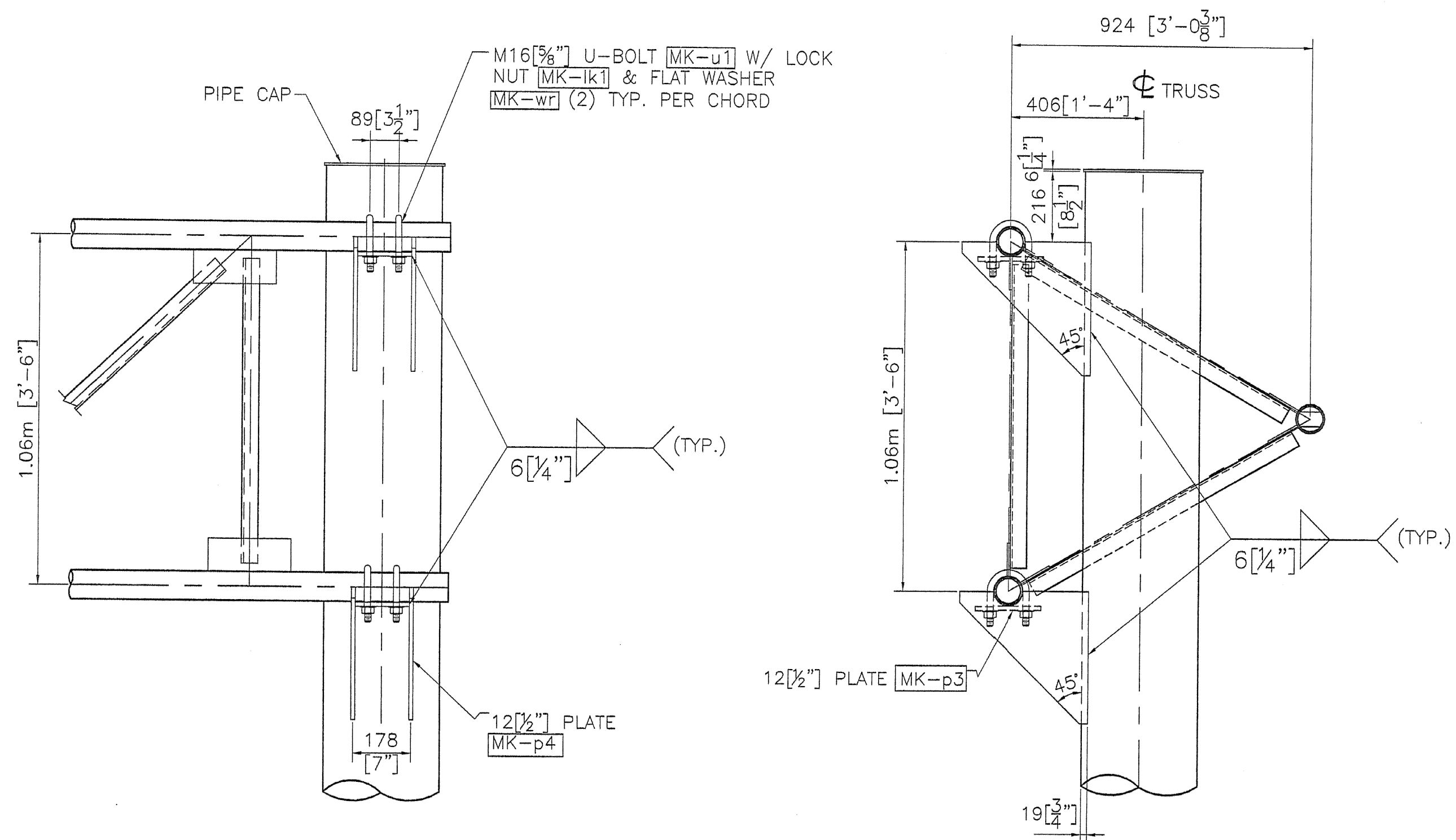
HIGHWAY SAFETY CORP.
GLASTONBURY, CT

TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.128.70 SB
PROJECT No. AC IM 091-2(73)

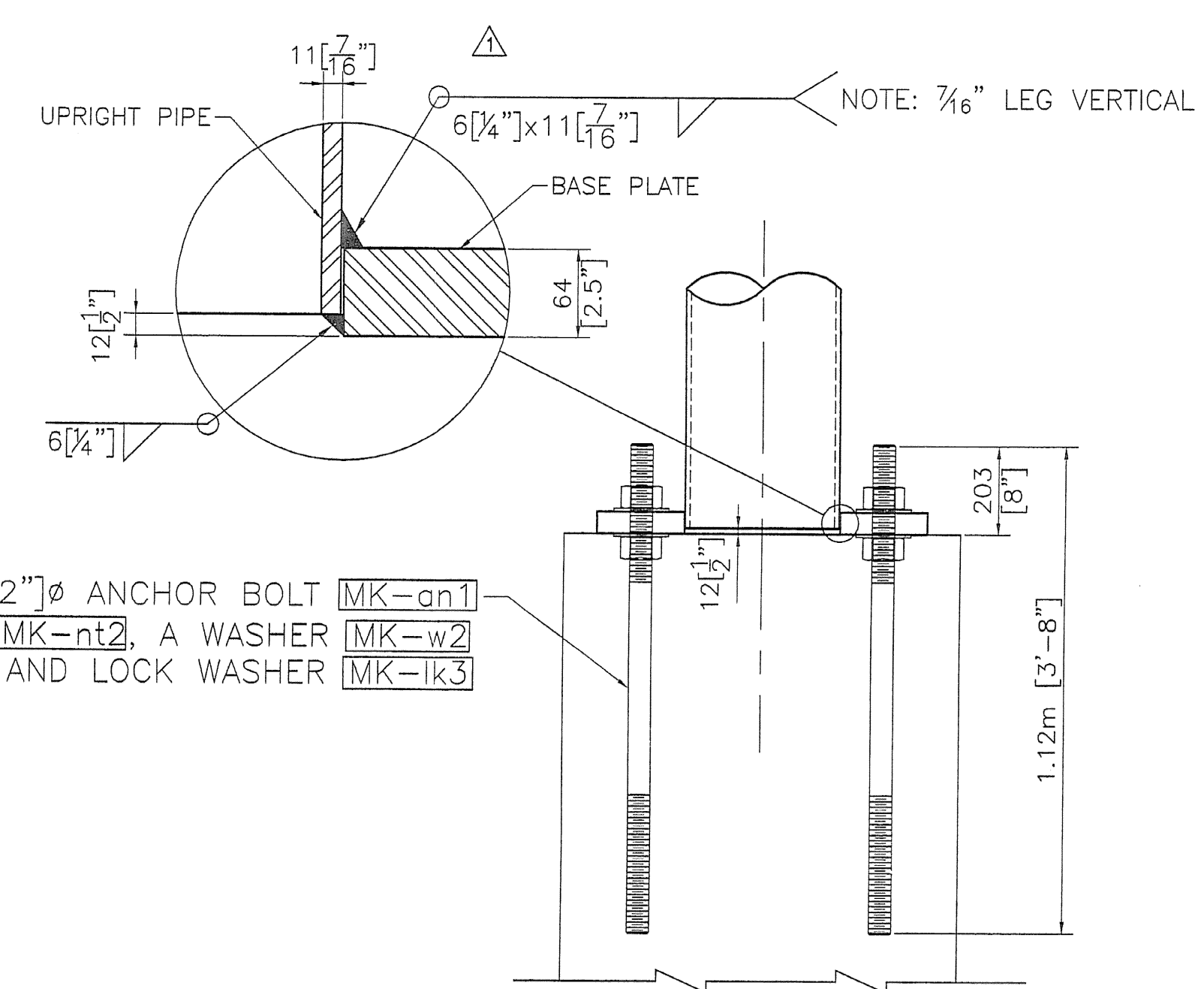
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SCALE: NTS
REV. REFERENCE NO.: 1587a
GENERAL CONTRACTOR: F.R. LAFAYETTE
SUB CONTRACTOR: F.R. LAFAYETTE

DESIGN: MHM
CHECKED: P. Radice
DATE: 3/23/07
SCALE: NTS
REV. REFERENCE NO.: 1587a
GENERAL CONTRACTOR: F.R. LAFAYETTE
SUB CONTRACTOR: F.R. LAFAYETTE

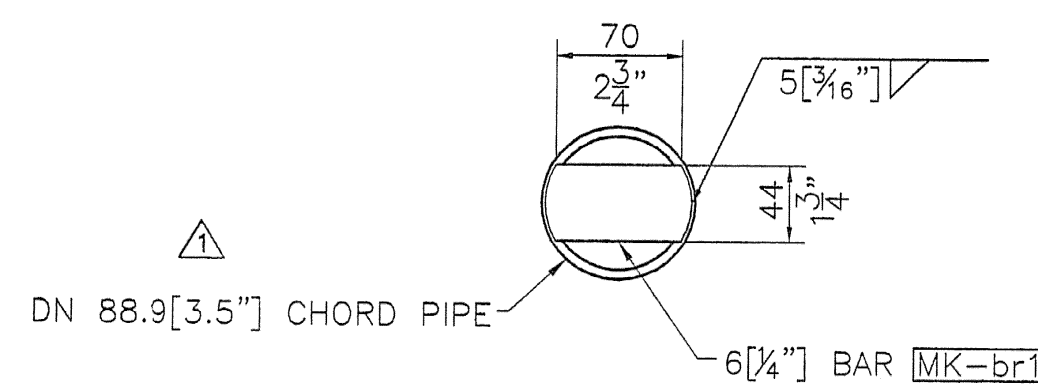
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



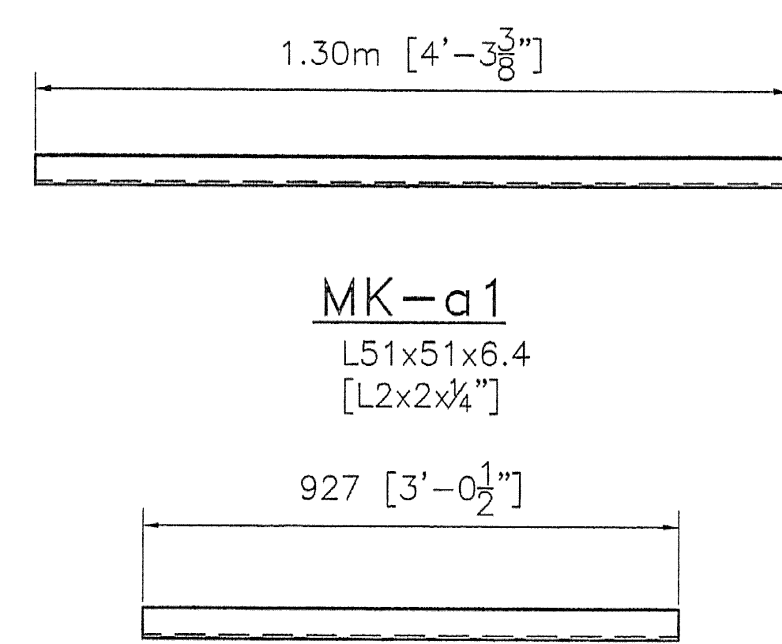
TRUSS CONNECTION DETAIL



ANCHORAGE ASSEMBLY

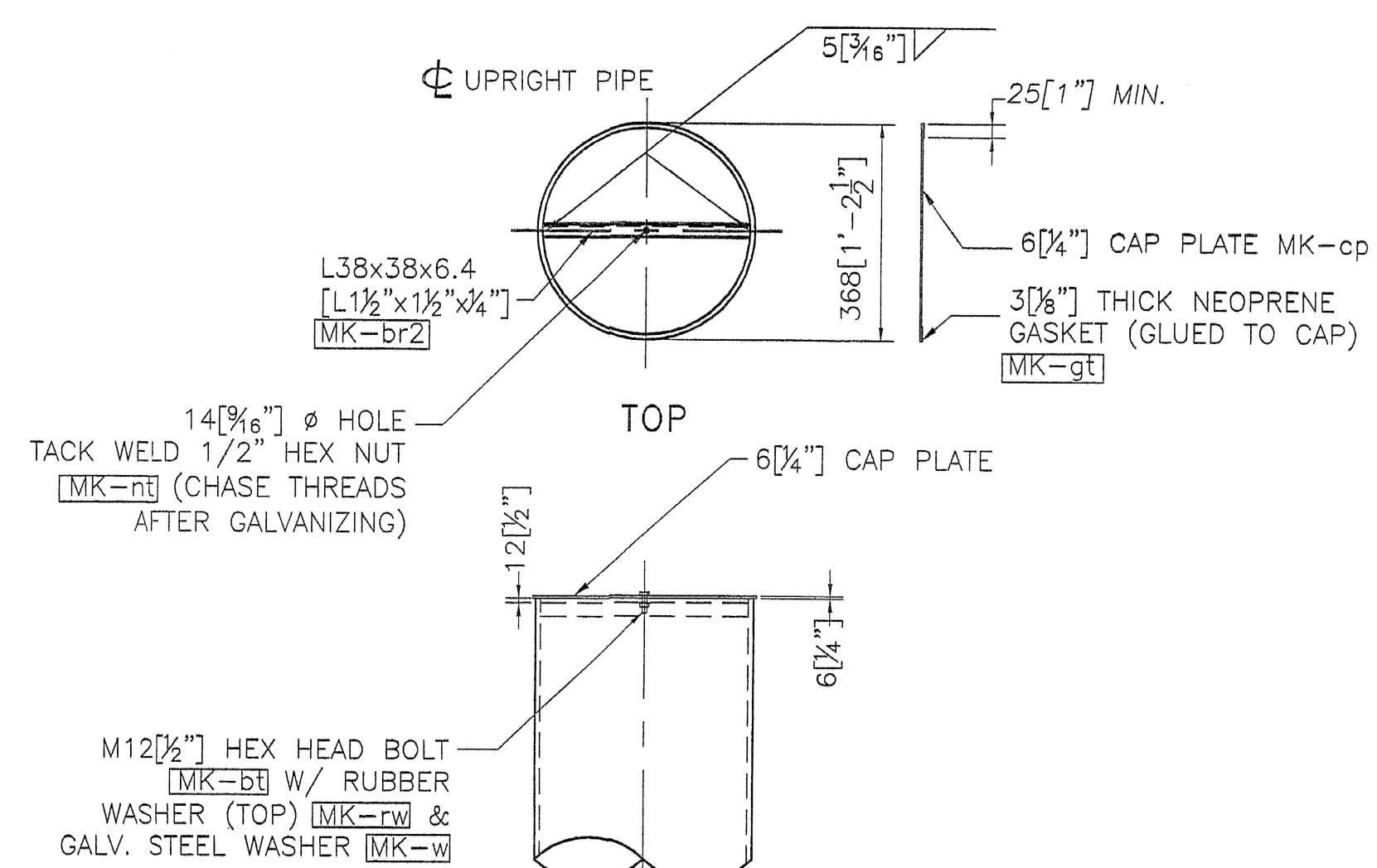


PLUG DETAIL
(EACH END OF TRUSS CHORD)



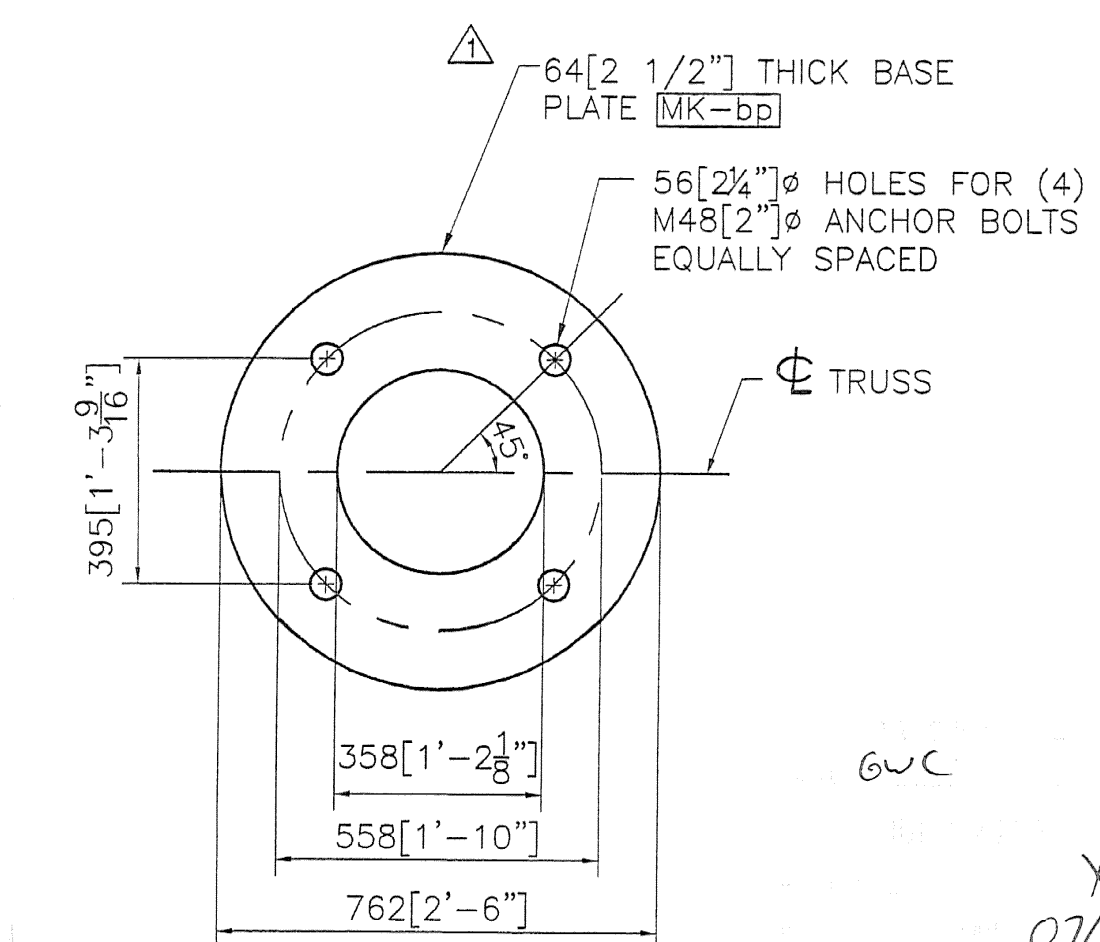
MK-a1
L51x51x6.4
[L2x2x1/4]"

MK-a2
L51x51x6.4
[L2x2x1/4]"



UPRIGHT CAP DETAIL

ASSEMBLE CAP TO POST PRIOR TO SHIPPING.



BASE PLATE DETAIL

NOTE:
BASE PLATE SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER (VD.), HEIGHT (VHT.), YIELD STRENGTH (VYS.), GAUGE (VGE.), AND SAME FOR HORIZONTAL MEMBER (HD.), (HYS.), AND (HGE.).

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED. ENGLISH CONVERSION SHOWN IN [] FOR REFERENCE ONLY.

REVISIONS		
No.	Remarks	Date
0	Initial submittal	
1	Second submittal	6/22/07

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.128.70 SB
PROJECT No. AC IM 091-2(73)

GENERAL CONTRACTOR
SUB CONTRACTOR F.R. LAFAYETTE

DRAWN: MHM
CHECKED: P. Radice
DATE: 3/23/07
SCALE: NTS
HSC REFERENCE NO.: 1587a
SIZE: D
REVISION: A
SHEET NO.: 4 of 8

Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification ASTM A36, A572 gr 50, A709 Gr 36, ASTM A709 Gr 50, A500 gr B

Welding process Gas Metal Arc Welding (GMAW)

Manual, semi-automatic, or automatic Semi-Automatic

Position of welding Horizontal (2F)

Filler metal specification AWS A5.18

Filler metal classification ER70S-3

Electrode and manufacturer Lincoln Electric Lincoln Weld L-50

Flux and manufacturer N/A

Shielding gas 85% Argon / 15% CO2 Flow rate 19-27 L / min

Single or multiple pass Single

Single or multiple arc Single

Welding current DC

Polarity Reverse

Welding progression Stringers

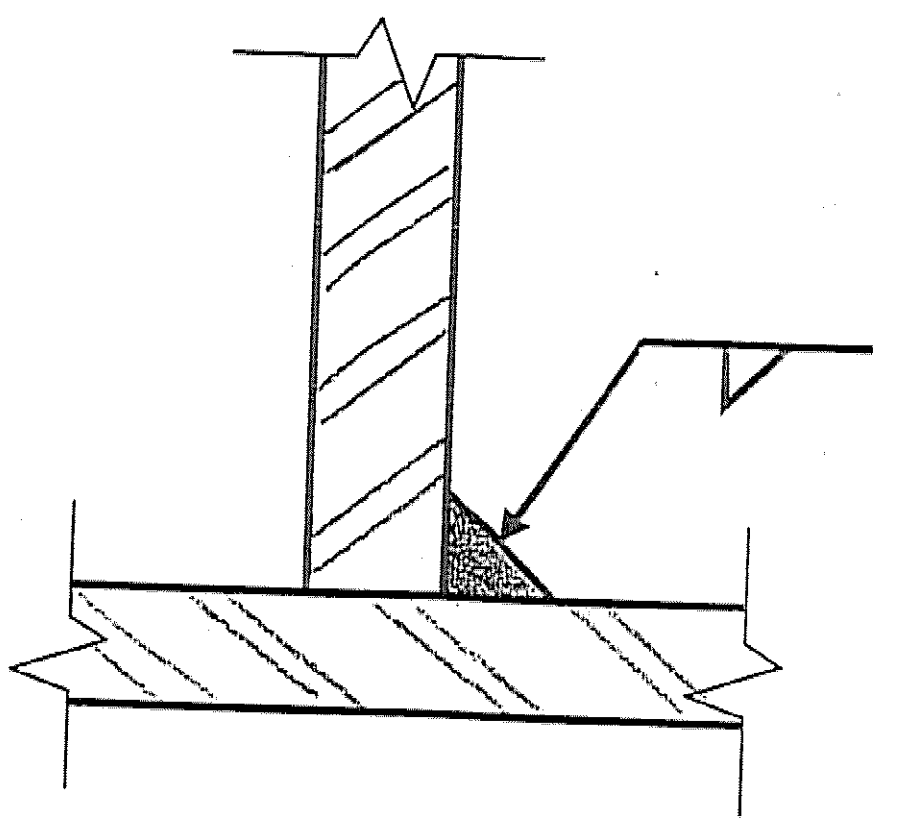
Root treatment None

Preheat and interpass temperature Base Metal up to 3/4" (50°F) ; over 3/4-1 1/2" (70°F)

Postheat treatment None

Electrode extension 3/4" ± 1/4"

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
3/16"	1	0.045"	300 A ± 30	29 V ± 2	28 ipm ± 2	<p>TYPICAL ALL FILLET WELDS</p> 
1/4"	1	0.045"	300 A ± 30	29 V ± 2	14 ipm ± 2	

VTR AWS

WFS

6/19/07

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.1

WPS no. W-1587-1

Revision no. 0

Supporting PQR no. Pre-qualified

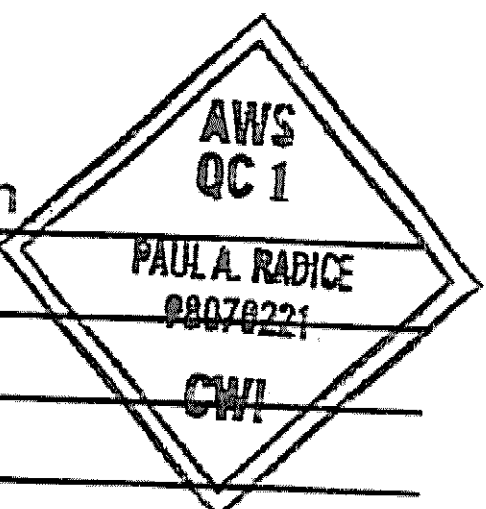
Project Name Ryegate, Vermont

Fabricator Highway Safety Corporation

Authorized by Paul Radice

Date 5/15/07

Project Number ACIM 091-2(73)





State of Vermont
PDD/Structures Design Section
National Life Building – Drawer 33
Montpelier, VT 05633-5001
www.aot.state.vt.us

[phone] 802-828-2621
[fax] 802-828-3566
[ttd] 800-253-0191

Agency of Transportation

June 19, 2007

Highway Safety Corp
ATTN: Paul Radice
239 Commerce Street
P. O. Box 358
Glastonbury, CT 06033-0358

Project Name: Ryegate – St. Johnsbury Project #: AC IM 091-2 (73)

Structure Identification: TRI-CHORD SIGN STRUCTURE – I91 STA 128+70 SB

The following Tri Chord Sign Structure details [Item #677.13, Name (OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT)] for the above project (Vendor's Job #1587a) transmitted with your letter dated 29-May-07 have been reviewed and are being returned herewith.

Sheets: 1, 5 and 6 are approved

Sheets: 2, 3 are 7 are approved “as noted”

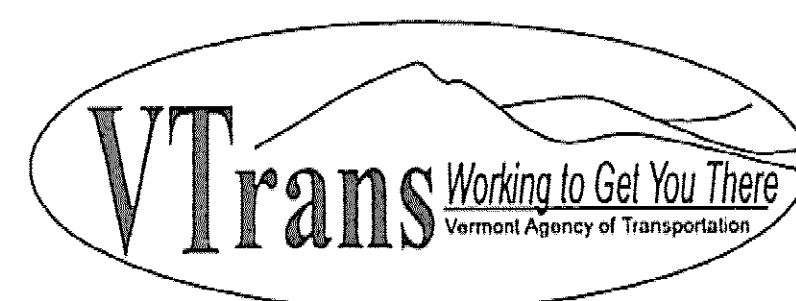
Sheets: 4 and 8 are to be reconsidered (note comments in red) and resubmitted for final approval.

Structure Identification: CANTILEVER SIGN STRUCTURE – I91 STA 127.9820 NB

The following Cantilever Sign Structure details [Item #677.12, Name (OVERHEAD TRAFFIC SIGN SUPPORT, CANTILEVER)] for the above project (Vendor's Job #1587b) transmitted with your letter dated 29-May-07 have been reviewed and are being returned herewith.

Sheets: 3 are approved

Sheets: 1-2, 4-6 are approved “as noted”



Project Name: Ryegate – St. Johnsbury Project #: AC IM 091-2 (73)

Structure Identification: CANTILEVER SIGN STRUCTURE – I91 STA 127.628 NB

The following Cantilever Sign Structure details [Item #677.12, Name (OVERHEAD TRAFFIC SIGN SUPPORT, CANTILEVER)] for the above project (Vendor's Job #1587c) transmitted with your letter dated 29-May-07 have been reviewed and are being returned herewith.

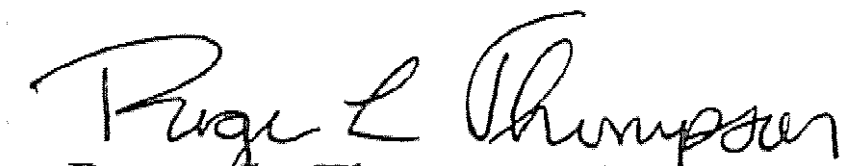
Sheets: 3 are approved

Sheets: 1-2, 4-6 are approved "as noted"

The Note Below refers to all structures

There shall be no fabrication done until all drawings and welding procedures are approved. You must provide notice to our fabrication inspector, Jeff Clark, as to the date fabrication represented by these drawings will begin. That notice must be received and acknowledged at least seven days prior to that date, as per Specification 506.03. Jeff may be contacted by phone at (802)828-0044 or email at jeff.clark@state.vt.us. Any material fabricated prior to the notification date is subject to rejection without further cause.

Sincerely,


Roger L. Thompson PE
Roadway Project Manager

Attachments

cc: Resident Engineer Jim Forest w/prints
 Shop Inspector Jeff Clark w/prints
 Contractor (Highway Safety)w/prints
 Sub Contractor (F.R. Lafayette)w/prints
 Construction Division – letter only
 Materials & Research Section (C&IA Unit) – letter only
 Files (Structures & Central)



State of Vermont
PDD/Structures Design Section
National Life Building – Drawer 33
Montpelier, VT 05633-5001
www.aot.state.vt.us

[phone] 802-828-2621
[fax] 802-828-3566
[ttd] 800-253-0191

Agency of Transportation

July 13, 2007

Highway Safety Corp
ATTN: Paul Radice
239 Commerce Street
P. O. Box 358
Glastonbury, CT 06033-0358

Project Name: Ryegate – St. Johnsbury Project #: AC IM 091-2 (73)

Structure Identification: TRI-CHORD SIGN STRUCTURE – I91 STA 128+70 SB


The following Tri Chord Sign Structure details [Item #677.13, Name (OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT)] for the above project (Vendor's Job #1587a) transmitted with your letter dated 05–July–07 have been reviewed and are being returned herewith.

Sheets: 4 and 8 resubmitted on 7/5/07 are approved

The Note Below refers to all structures

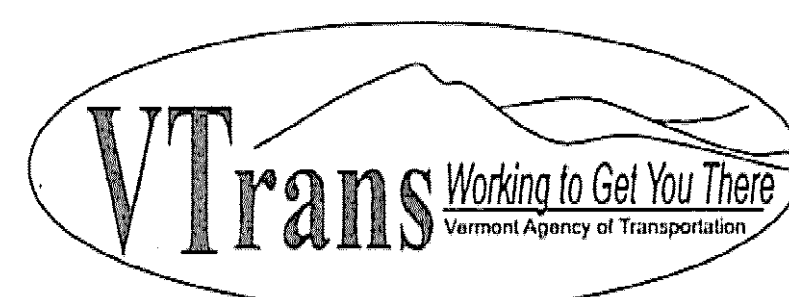
There shall be no fabrication done until all drawings and welding procedures are approved. You must provide notice to our fabrication inspector, Jeff Clark, as to the date fabrication represented by these drawings will begin. That notice must be received and acknowledged at least seven days prior to that date, as per Specification 506.03. Jeff may be contacted by phone at (802)828-0044 or email at jeff.clark@state.vt.us. Any material fabricated prior to the notification date is subject to rejection without further cause.

Sincerely,


Roger L. Thompson PE
Roadway Project Manager

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 Construction Division – letter only
 Materials & Research Section (C&IA Unit) – letter only
 Files (Structures & Central)



Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification ASTM A36, A572 gr 50, A709 Gr 36, ASTM A709 Gr 50, A500 gr B
 Welding process Gas Metal Arc Welding (GMAW)
 Manual, semi-automatic, or automatic Semi-Automatic
 Position of welding Horizontal (2F)
 Filler metal specification AWS A5.18
 Filler metal classification ER70S-3
 Electrode and manufacturer Lincoln Electric Lincoln Weld L-50
 Flux and manufacturer NA
 Shielding gas 85% Argon / 15% CO2 Flow rate 19-27 L / min
 Single or multiple pass Single & Multiple
 Single or multiple arc Single
 Welding current DC
 Polarity Reverse
 Welding progression Stringers
 Root treatment None
 Preheat and interpass temperature Base Metal up to 3/4" (50°F) ; over 3/4-1 1/2" (70°F)
 Postheat treatment None
 Electrode extension 3/4" ± 1/4"

WELDING PROCEDURE

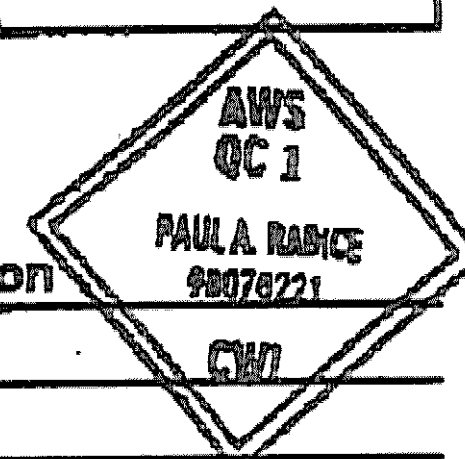
Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
7/16" x 1/4"	1 & 2	0.045"	300 A ± 30	29 V ± 2	14 ipm ± 2	<p>UN-EQUAL LEG FILLET WELD @ BASE PLATE CONNECTION</p>

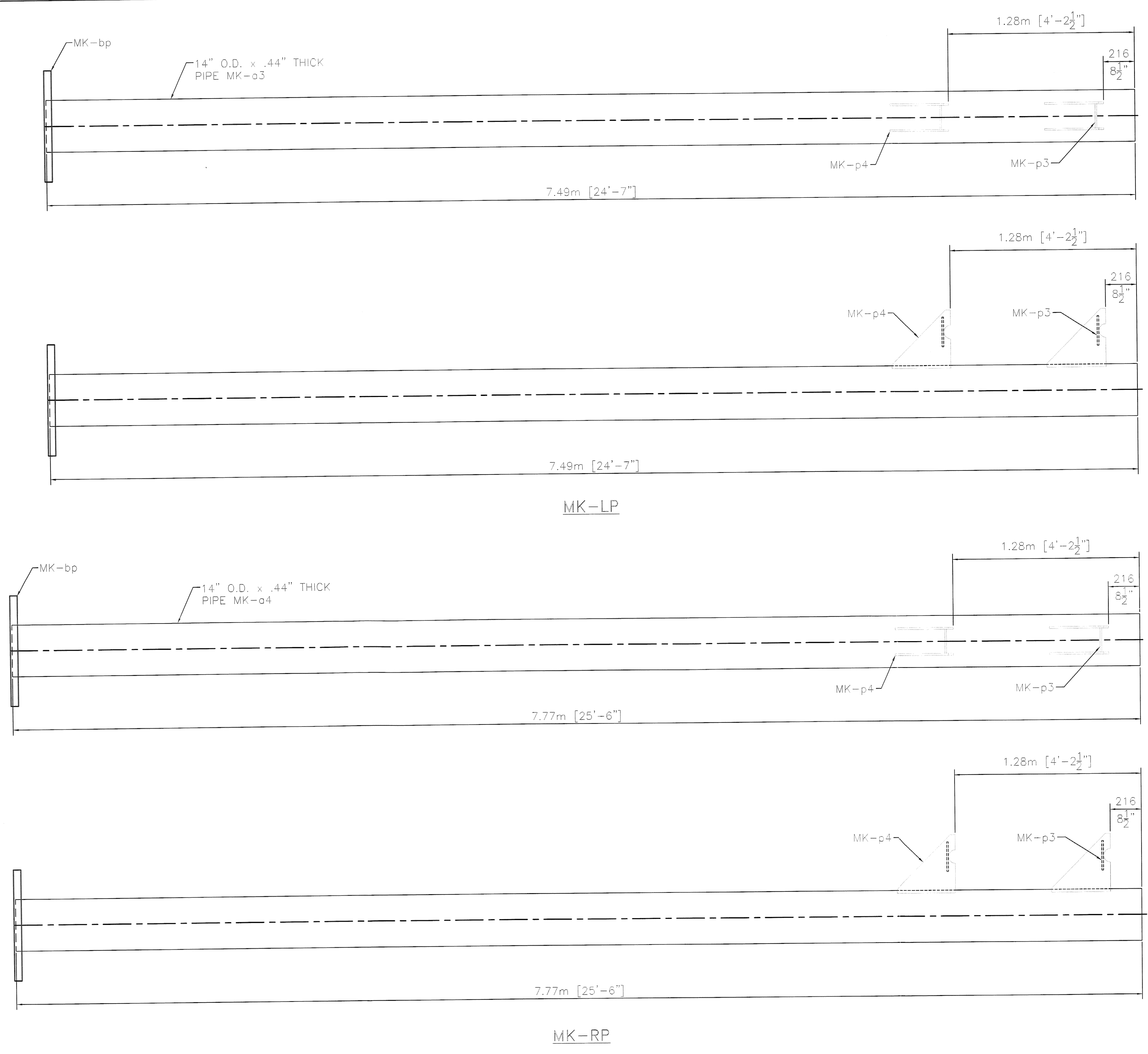
Handwritten notes: VTRAWS RECEIVED JUN 19 2007 6/19/07

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.1

WPS no. W-1587-2
 Revision no. 1 6/19/2007
 Supporting PQR no. Pre-qualified
 Project Name Ryegate, Vermont

Fabricator Highway Safety Corporation
 Authorized by Paul Radice
 Date 5/15/07
 Project Number ACIM 091-2(73)





erection mark	piece qty.	item description	size/shape	length/qty per unit	material notes
TRUSS 1 ASSEMBLY					
CHORD PIPE ASSEMBLY					
RAT					A500 gr B
i1	1	pipe	3.5" O.D. x 0.216" wall	29'-2.875"	API 5LX42
p1	2	plate	PL 0.375" x 4"	10"	A709 gr 50
p2	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
a1	16	angle	L2"x2"x.25"	4'-3.375"	A36
a2	2	angle	L2"x2"x.25"	3'-0.50"	A36
br1	1	plate	0.25" x 1.75"	3.25"	A36
s1	1	splice plate	0.75" x 8.50" O.D.		A709 gr 50
TRUSS 2 ASSEMBLY					
CHORD PIPE ASSEMBLY					
RAS					A500 gr B
i1	1	pipe	3.5" O.D. x 0.216" wall	32'-7.825"	API 5LX42
p1	4	plate	PL 0.375" x 4"	10"	A709 gr 50
p2	6	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
a1	8	angle	L2"x2"x.25"	4'-3.375"	A36
a2	2	angle	L2"x2"x.25"	3'-0.50"	A36
br1	1	plate	0.25" x 1.75"	3.25"	A36
s1	1	splice plate	0.75" x 8.50" O.D.		A709 gr 50
TRUSS 3 ASSEMBLY					
CHORD PIPE ASSEMBLY					
RAS					A500 gr B
i1	1	pipe	3.5" O.D. x 0.216" wall	32'-7.50"	API 5LX42
p1	4	plate	PL 0.375" x 4"	10"	A709 gr 50
p2	7	plate	PL 0.375" x 4"	1'-8"	A709 gr 50
br1	1	plate	0.25" x 1.75"	3.25"	A36
s1	1	splice plate	0.75" x 8.50" O.D.		A709 gr 50
VERTICAL PIPE ASSEMBLY					
LEFT PIPE ASSEMBLY					
LP					A500 gr B
i3	1	pipe	14" O.D. x 0.44" wall	24'-7"	API 5LX42
p3	2	plate	PL 0.5" x 6.5"	8"	A572 gr 50
p4	4	plate	PL 0.5" x 1'-3.688"	1'-4"	A572 gr 50
cp	1	plate	0.25" x 1'-2.5" O.D.		A36
br2	1	angle	L1.5"x1.5"x.25"	1'-1"	A36
gt	1	gasket	1.25" x 1'-2.5" O.D.		50 duro, Neoprene
nt	1	hex nut	50" dia		A563
bt	1	hex bolt	50" dia	1.5"	A307
w	1	washer	50" dia		F444
rw	1	rubber washer	50" dia		50 duro, Neoprene
bp	1	base plate	2.5" x 2'-6" O.D.		A572 gr 50
RIGHT PIPE ASSEMBLY					
RP					A500 gr B
i4	1	pipe	14" O.D. x 0.44" wall	25'-6"	API 5LX42
p3	2	plate	PL 0.5" x 6.5"	8"	A572 gr 50
p4	4	plate	PL 0.5" x 1'-3.688"	1'-4"	A572 gr 50
cp	1	plate	0.25" x 1'-2.5" O.D.		A36
br2	1	angle	L1.5"x1.5"x.25"	1'-1"	A36
gt	1	gasket	1.25" x 1'-2.5" O.D.		50 duro, Neoprene
nt	1	hex nut	50" dia		A563
bt	1	hex bolt	50" dia	1.5"	A307
w	1	washer	50" dia		F444
rw	1	rubber washer	50" dia		50 duro, Neoprene
bp	1	base plate	2.5" x 2'-6" O.D.		A572 gr 50
LOOSE ITEMS					
vh1	3	sign hanger	WBx6.3	12'-3.50"	A36
vh2	7	sign hanger	WBx6.3	9'-10"	A36
vt	8	lock nut	0.525" dia		F1554 gr. 36
lt	16	lock nut	0.525" dia		A563 DH
w1	16	washer	0.525" dia		F444
w2	20	washer	0.55" dia	6.625"	F1554 gr. 36
lt2	40	lock nut	0.55" dia		A563 DH
w3	40	washer	0.55" dia		F444
bt1	4	hex bolt	0.75" dia	3"	A325
bt2	4	washer	0.75" dia		F444
bt3	4	hex nut	0.75" dia		A563 DH
an1	2	ancher bolt	2" dia	3'-8"	S/S A276 T304
nz	16	hex nut	2" dia		S/S A194B T304
lw	16	lock washer	2" dia		S/S TV 304
w4	16	flat washer	2" dia		S/S TV 304

AS3 GR B;
F_y = 36
DESIGN = 42

GWC
RLT
AS NOTED
06/14/07

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

TRI-CHORD SIGN STRUCTURE
STATE OF VERMONT
COUNTY OF CALEDONIA
INTERSTATE RTE. 91 STA.128.70 SB
PROJECT No. AC IM 091-2(73)

DESIGNER: MHM
CHECKED: P. Radice
DATE: 3/23/07
SCALE:
HSC REFERENCE NO.: 1587a
SIZE: D REVISION: 0
SHEET NO.: 7 of 8

GENERAL CONTRACTOR:
SUB CONTRACTOR: F.R. LAFAYETTE

