

GRE

AUG 2015

PROJECT ID: 4100-31-71

COUNTY: CALUMET

ORDER OF SHEETS	
Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 138

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

E. CHESTNUT STREET, CITY OF CHILTON

S. MADISON STREET - ELM STREET

USH 151

CALUMET COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4100-31-71	WISC 2015469	1

STATE PROJECT NUMBER
4100-31-71



DESIGN DESIGNATION

A.A.D.T. 2016	=	9,000
A.A.D.T. 2036	=	11,200
D.H.V.	=	7.6
D.D.	=	50/50
T.	=	8.7%
DESIGN SPEED	=	35 MPH
ESALS	=	3,496,700

CONVENTIONAL SYMBOLS

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

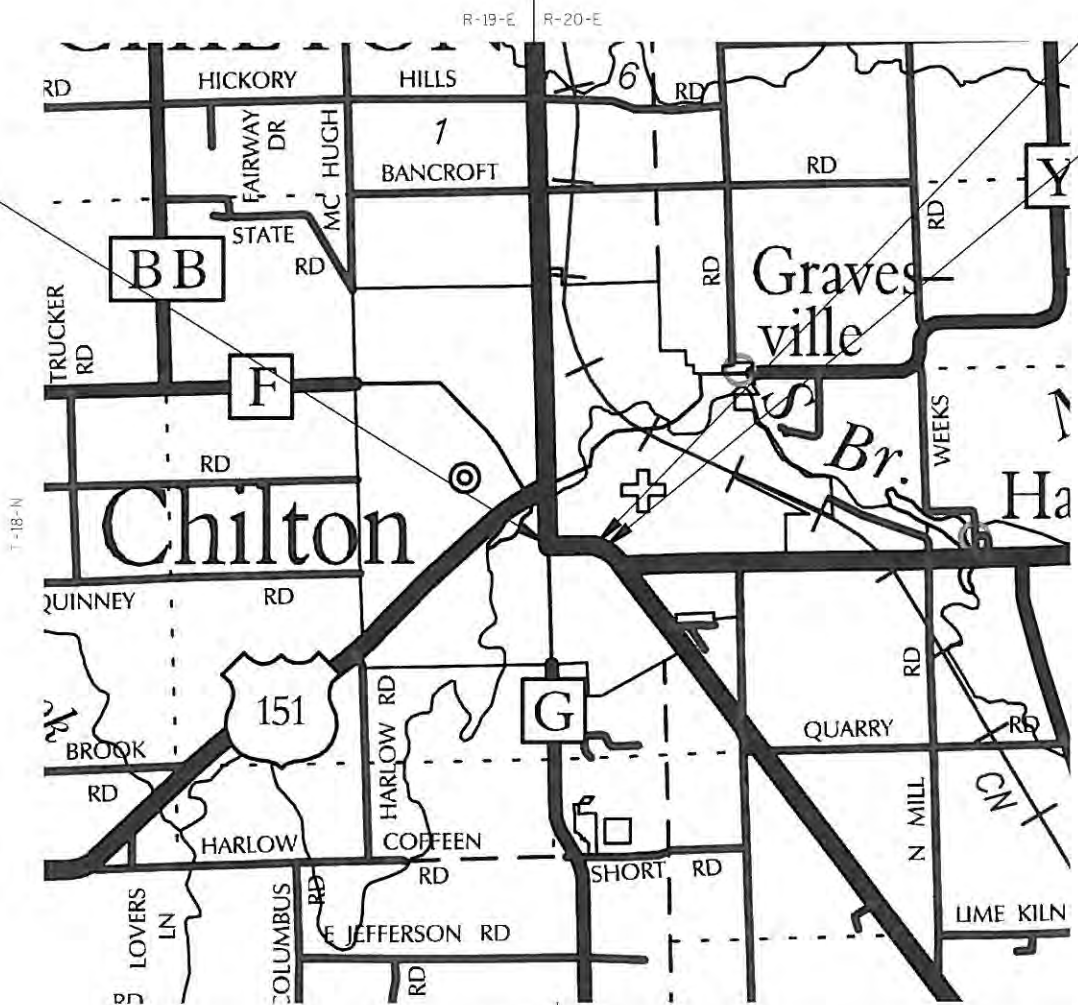
PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE	
(To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

	ROCK
	LABEL
	95.36
	E
	FO
	G
	SAN
	SS
	T
	W

BEGIN PROJECT
STA. 211+13.91
Y = 475749.18
X = 891802.80

END PROJECT
STA. 218+69.96

END CONSTRUCTION
STA. 221+20.92



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.143

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, CALUMET COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY

benesch
engineers · scientists · planners
Alfred Benesch & Company
1300 West Canal Street, Suite 150
Milwaukee, Wisconsin 53233
414-308-1310 Job No. 20140.00



Amanda Zacharias

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	WISDOT
Designer	ALFRED BENESCH & CO
Project Manager	TIM VERHAGEN
Regional Examiner	
Regional Supervisor	CHUCK KAROW
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 4/27/2015 *Tim Verhagen*
(Signature)

E

GENERAL NOTES

1. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
2. UNLESS NOTED ON THE PLAN, ALL STATIONS AND OFFSETS ARE REFERENCED FROM \mathbb{R} USH 151.
3. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE FINISHED WITH SOD.
4. EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
5. EXISTING DRIVEWAYS BEHIND THE BACK OF WALK SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AT THE LOCATIONS DETERMINED BY THE ENGINEER.
6. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK MAY BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.
7. A SAWED JOINT IS REQUIRED WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

8. ALL ELEVATIONS AND OFFSETS SHOWN IN THE PLAN SHALL BE VERIFIED IN THE FIELD.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
10. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
11. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DEEMS THE MEASURE NO LONGER NECESSARY.
12. CROSS SECTIONS ARE REFERENCED TO THE \mathbb{R} USH 151.
13. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES (WITH THE EXCEPTION OF SANITARY SEWER AND WATERMAIN) AS SHOWN ON THE PLAN AND CROSS SECTIONS ARE APPROXIMATE AND ARE BASED ON UTILITY LOCATES OBTAINED FROM THE UTILITIES WHEN THE SURVEY DATA WAS COLLETED PRIOR TO THE FINAL DESIGN OF THE PROJECT. IT IS ANTICIPATED THAT UTILITY FACILITIES WILL BE RELOCATED AS PART OF THIS PROJECT AS DESCRIBED IN THE SPECIAL PROVISIONS. LOCATIONS OF THE PROPOSED RELOCATED UTILITY FACILITIES ARE NOT SHOWN ON THE PLAN SHEETS OR CROSS SECTIONS.

UTILITY CONTACTS

<u>CHARTER COMMUNICATIONS</u> <u>(COMMUNICATION LINE)</u>	<u>WISCONSIN PUBLIC SERVICE CORPORATION</u> <u>(GAS/PETROLEUM)</u>
3315 LINCOLN AVE TWO RIVERS, WI 54241 MR. NICK FRASE (920) 793-2216 nicholas.frase@chartercom.com	933 S WILDWOOD AVE SHEBOYGAN, WI 53081 MR. MIKE LOWTHER (920) 451-3743 (920) 946-3198 (MOBILE) mllowther@wisconsinpublicservice.com
<u>CHILTON LAKE DISTRICT - WATER</u>	<u>WISCONSIN PUBLIC SERVICE CORPORATION</u> <u>(ELECTRICITY)</u>
42 SCHOOL STREET CHILTON, WI 53014 MR. TODD SCHWARZ (920) 849-2451 EXT. 320 chiltondpw@chiltonwi.com	P.O. BOX 236 TWO RIVERS, WI 54241 MR. JEFF PELISCHEK (920) 657-1816 (920) 323-4836 (MOBILE) jpellischek@wisconsinpublicservice.com
<u>FRONTIER NORTH, INC.</u> <u>(COMMUNICATION LINE)</u>	<u>CHILTON LAKE DISTRICT - SANITARY</u> <u>SEWER</u>
100 COMMUNICATIONS DRIVE SUN PRAIRIE, WI 53590 MR. RYAN OSNESS (608) 837-1881 ryan.d.osness@ftr.com	42 SCHOOL STREET CHILTON, WI 53014 MR. TODD SCHWARZ (920) 849-2451 EXT. 320 chiltondpw@chiltonwi.com

OTHER AGENCIES

<u>DNR</u>	<u>CITY OF CHILTON</u>
DNR NORTHEAST REGION 2984 SHAWANO AVE GREEN BAY, WI 54313 MR. MATTHEW SCHAEVE (920) 662-5472 matthew.schaeve@wisconsin.gov	42 SCHOOL ST CHILTON, WI 53014 MR. TODD SCHWARZ (920) 849-2451 EXT. 320 chiltondpw@chiltonwi.com

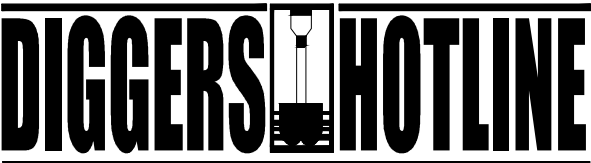
<u>DESIGN</u>	<u>WISDOT</u>
ALFRED BENESCH & COMPANY 1300 W CANAL ST, SUITE 150 MILWAUKEE, WI 53233 MS. AMANDA ZACHARIAS (414) 308-1320 azacharlase@benesch.com	WISCONSIN DOT, NORTHEAST REGION 944 VANDERPERRE WAY GREEN BAY, WI 54324 MR. TIM VERHAGEN (920) 492-4116 timothy.verhagen@dot.wi.gov


LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT	RD	ROAD
AC	ACRE	IN DIA	INCH DIAMETER	RDWY	ROADWAY
AGG	AGGREGATE	INL	INLET	SALV	SALVAGED
AADT	ANNUAL AVERAGE DAILY TRAFFIC	ID	INSIDE DIAMETER	SSS	SANITARY AND STORM SEWER
ASPH	ASPHALT	INV	INVERT	SAN S	SANITARY SEWER
AVG	AVERAGE	IP	IRON PIPE	SEC	SECTION
ADT	AVERAGE DAILY TRAFFIC	JT	JOINT	SHLDR	SHOULDER
BF	BACK FACE	JCT	JUNCTION	SW	SIDEWALK
BL	BASE LINE	LT	LEFT	S	SOUTH
BM	BENCH MARK	L	LENGTH OF CURVE	SB	SOUTHBOUND
CB	CATCH BASIN	LHF	LEFT-HAND FORWARD	SP	SPECIAL
C/L	CENTERLINE	LF	LINEAR FOOT	SPECS	SPECIFICATIONS
CC	CENTER TO CENTER	L	LITER	SQ	SQUARE
CE	COMMERCIAL ENTRANCE	LS	LUMP SUM	SF	SQUARE FEET
CONC	CONCRETE	MH	MANHOLE	SY	SQUARE YARD
CO	COUNTY	MB	MESSAGE BOARD	STD	STANDARD
CTH	COUNTY TRUNK HIGHWAY	MLB	MAILBOX	SDD	STANDARD DETAIL DRAWINGS
CY	CUBIC YARD	ML	MATCH LINE	STH	STATE TRUNK HIGHWAYS
CULV	CULVERT	NC	NORMAL CROWN	STA	STATION
C&G	CURB AND GUTTER	N	NORTH	SS	STORM SEWER
DHV	DESIGN HOUR VOLUME	Y	NORTH GRID COORDINATE	STR	STRUCTURE OR STRUCTURAL
DIA	DIAMETER	NB	NORTHBOUND	SL	SURVEY LINE
DD	DIRECTIONAL DISTRIBUTION	NO	NUMBER	TEL	TELEPHONE
E	EAST	OD	OUTSIDE DIAMETER	TEMP	TEMPORARY
X	EAST GRID COORDINATE	PAVT	PAVEMENT	TLE	TEMPORARY LIMITED EASEMENT
EB	EASTBOUND	PERM	PERMANENT	T	TON
ELEC	ELECTRIC	PLE	PERMANENT LIMITED EASEMENT	TC	TOP OF CURB
ELEV	ELEVATION	PT	POINT	T	TRUCKS (PERCENT OF)
ESALS	EQUIVALENT SINGLE AXLE LOADS	PVC	POLYVINYL CHLORIDE	TYP	TYPICAL
EXC	EXCAVATION	PCC	PORTLAND CEMENT CONCRETE	UG	UNDERGROUND
EBS	EXCAVATION BELOW SUBGRADE	PE	PRIVATE ENTRANCE	USH	UNITED STATES HIGHWAY
EXIST	EXISTING	PROJ	PROJECT	VAR	VARIABLE
FF	FACE TO FACE	PL	PROPERTY LINE	VERT	VERTICAL
FE	FIELD ENTRANCE	R	RADIUS	W	WATER
FG	FINISHED GRADE	R/L	REFERENCE LINE	WM	WATER MAIN
FL	FLOW LINE	RCCP	REINFORCED CONCRETE CULVERT PIPE	WV	WATER VALVE
FT	FOOT	REQD	REQUIRED	W	WEST
FTMS	FREEWAY TRAFFIC MANAGEMENT SYSTEM	RT	RIGHT	WB	WESTBOUND
HES	HIGH EARLY STRENGTH	RHF	RIGHT HAND FORWARD	YD	YARD
CWT	HUNDREDWEIGHT	R/W	RIGHT-OF-WAY		

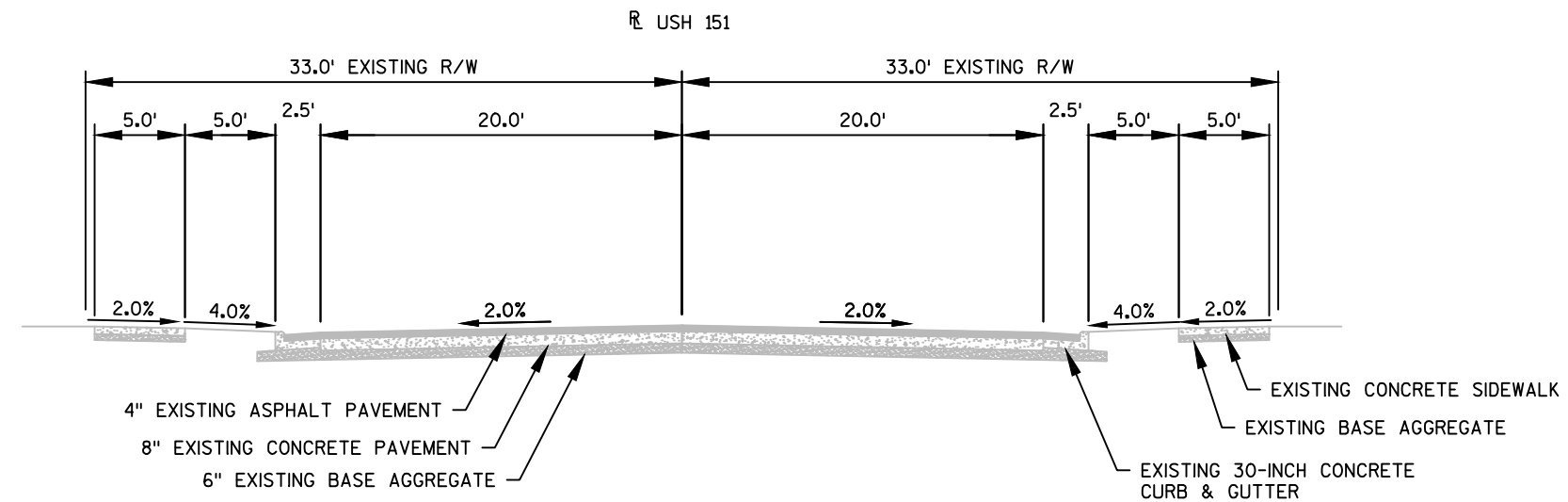
ORDER OF SECTION 2 SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- PAVEMENT GRADES
- EROSION CONTROL
- STORM SEWER
- PERMANENT SIGNING
- PAVEMENT MARKING
- TRAFFIC CONTROL
- DETOUR PLAN
- ALIGNMENT PLAN

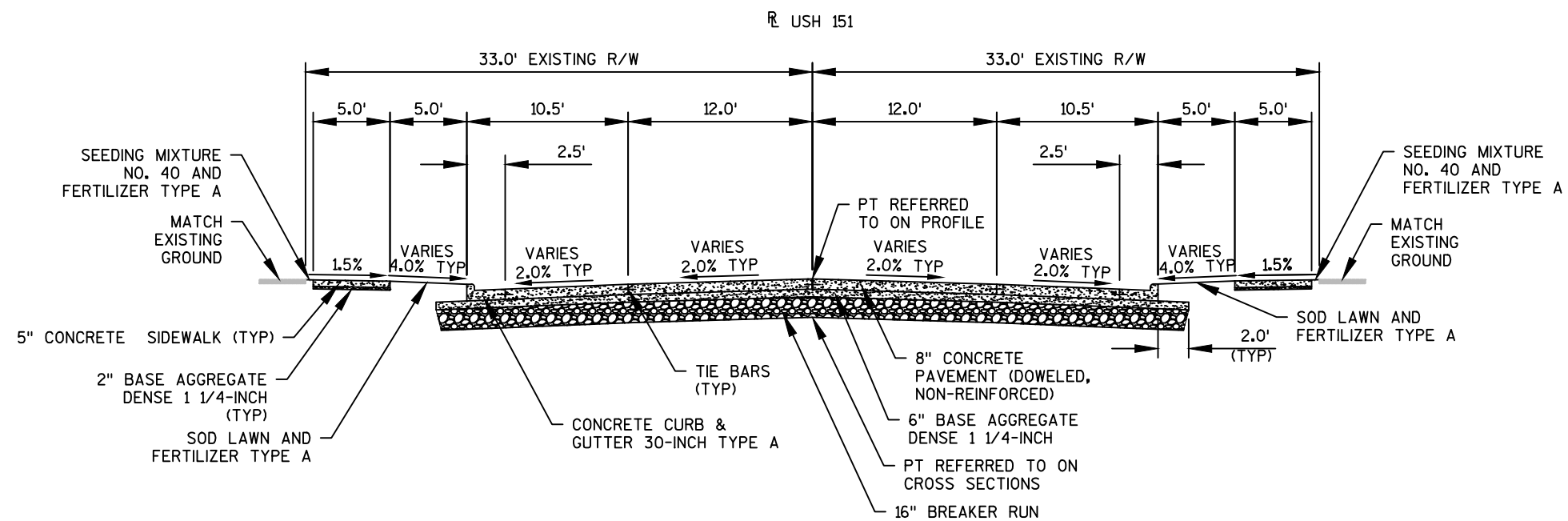


Dial  or (800)242-8511
www.DiggersHotline.com

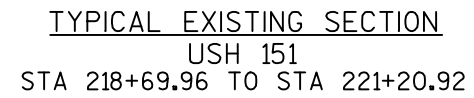


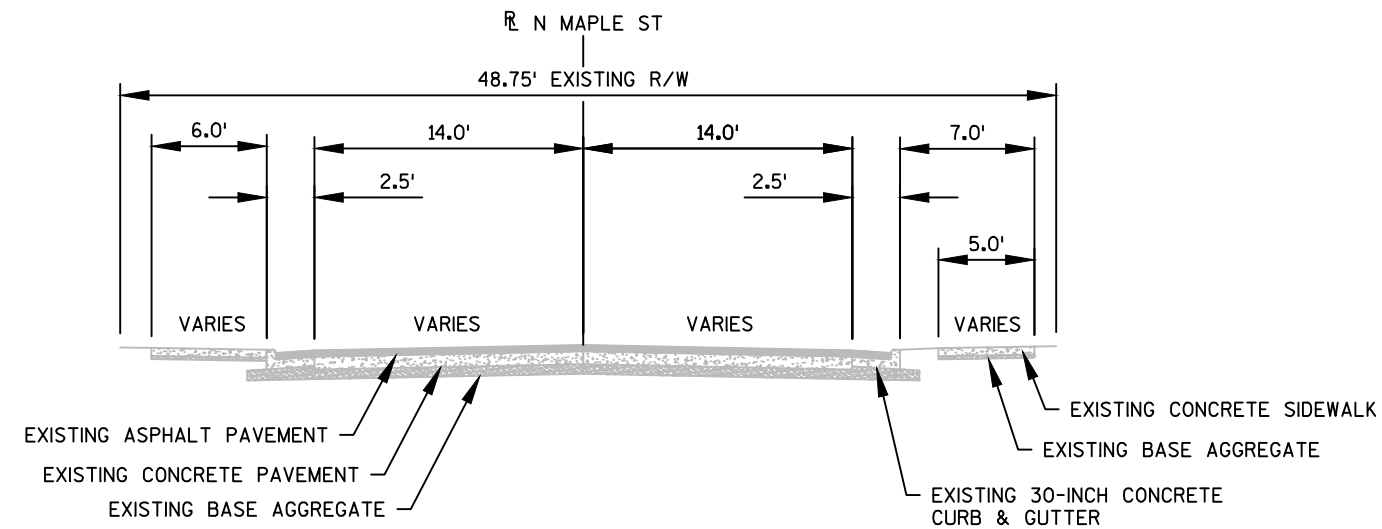


TYPICAL EXISTING SECTION
USH 151
STA 211+13.91 TO STA 218+69.96

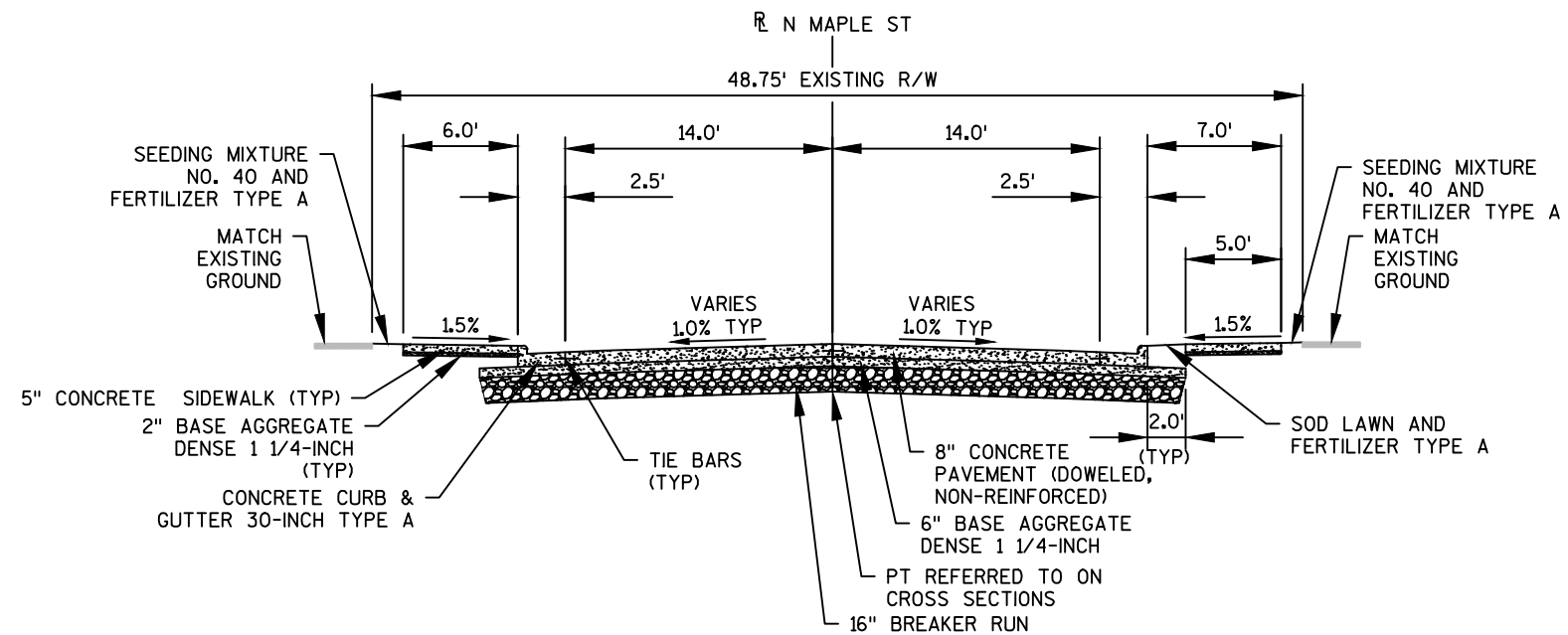


TYPICAL FINISHED SECTION
USH 151
STA 211+13.91 TO STA 218+69.96

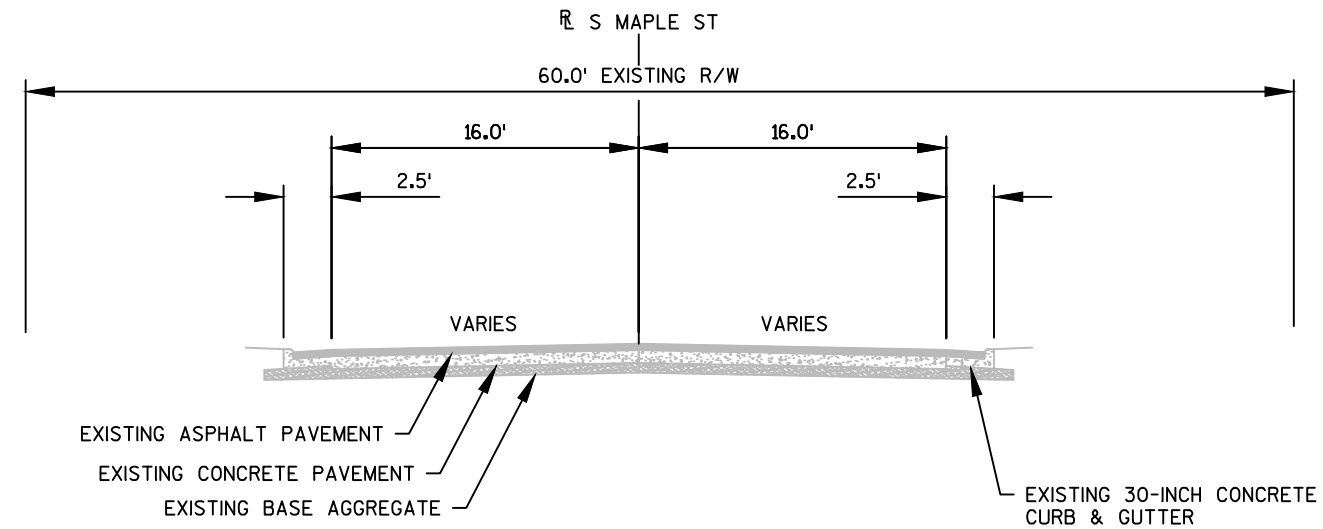




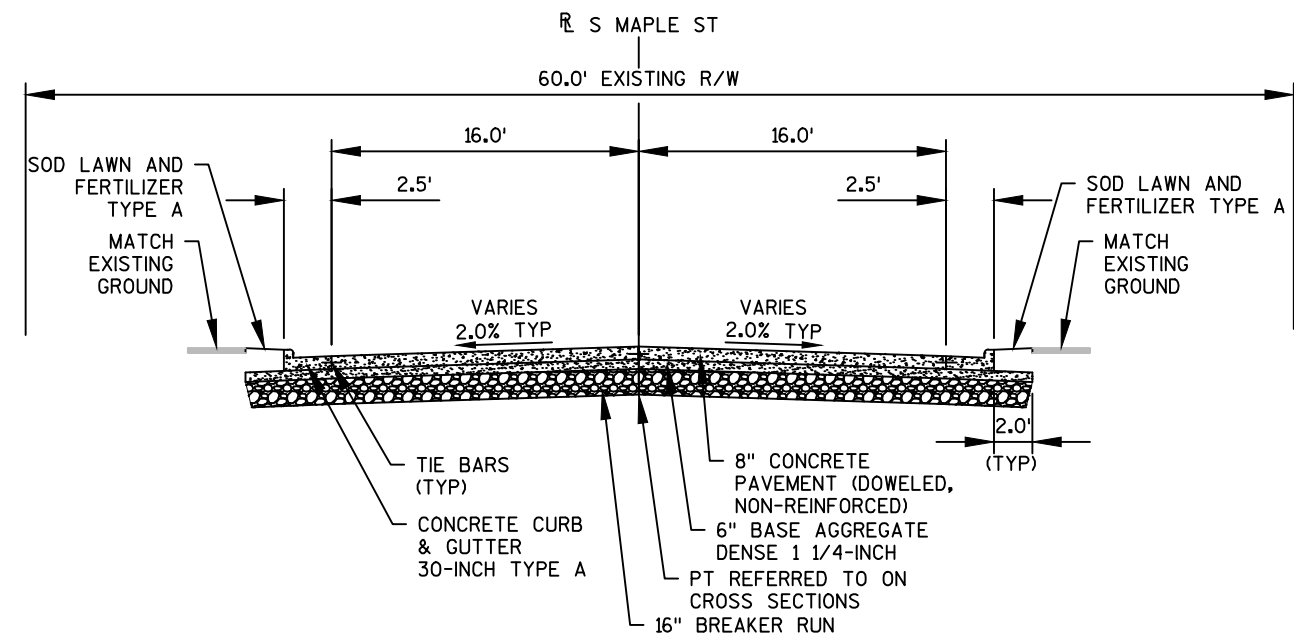
TYPICAL EXISTING SECTION
N MAPLE ST
STA 10+24.01 TO STA 10+49.28



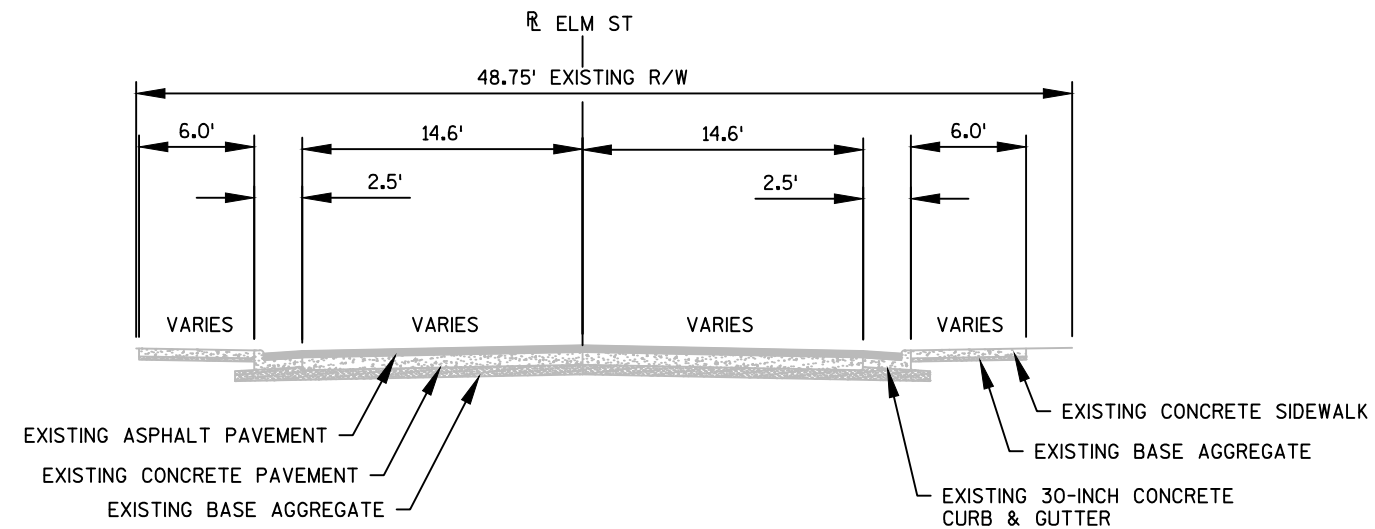
TYPICAL FINISHED SECTION
N MAPLE ST
STA 10+24.01 TO STA 10+49.28



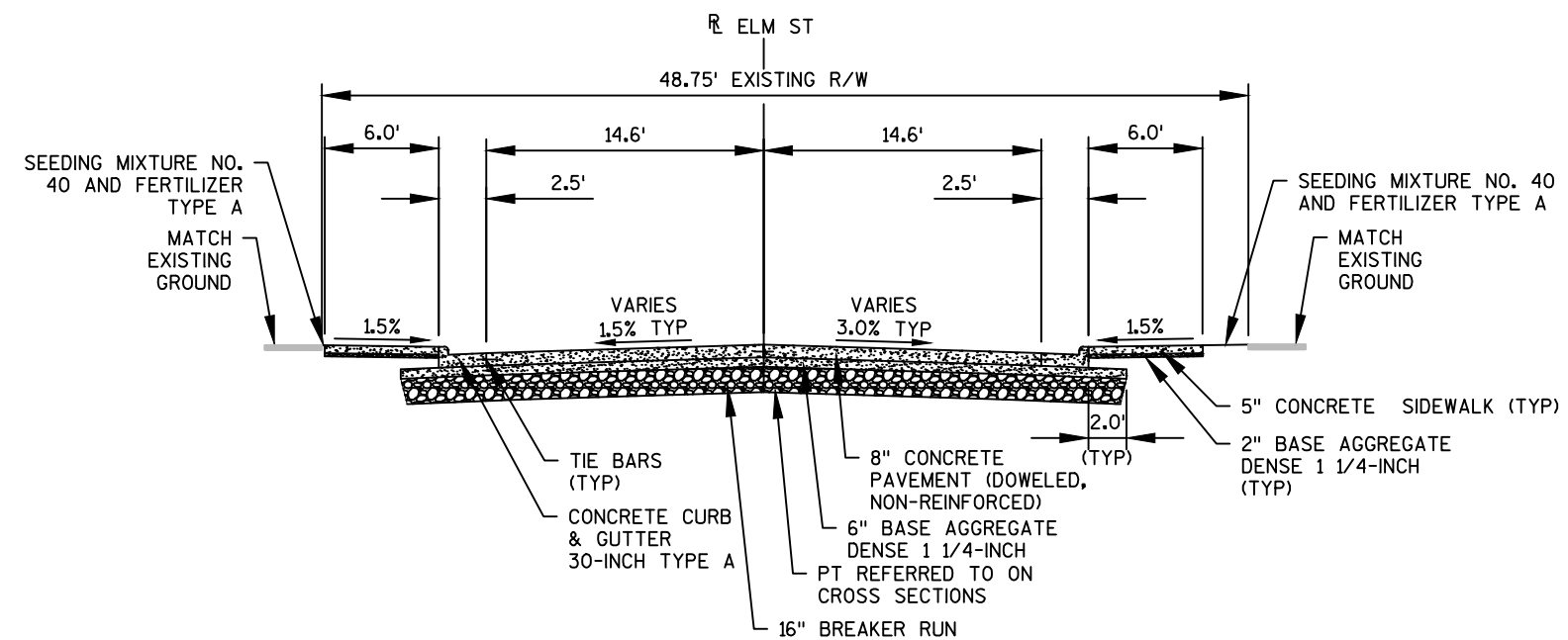
TYPICAL EXISTING SECTION
S MAPLE ST
STA 15+20.00 TO STA 15+47.97



TYPICAL FINISHED SECTION
S MAPLE ST
STA 15+20.00 TO STA 15+47.97



TYPICAL EXISTING SECTION
ELM ST
STA 20+25.36 TO STA 20+53.54



TYPICAL FINISHED SECTION
ELM ST
STA 20+25.36 TO STA 20+53.54

The diagram illustrates a cross-section of a sidewalk and its connection to a driveway. Key components and labels include:

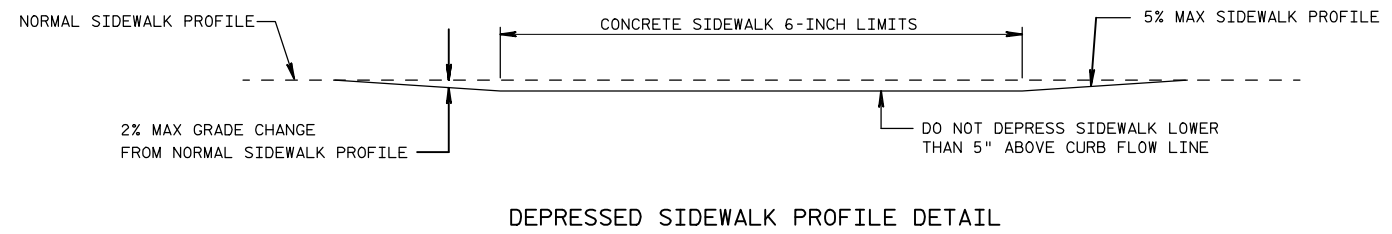
- CONCRETE DRIVEWAY**: 6-INCH wide.
- CONCRETE SIDEWALK**: 6-INCH wide.
- APRON SLOPE #**: Labeled G1, sloping at 1.50%.
- PAVEMENT**: The surface on the left.
- 1 1/2" HIGHER THAN FLOWLINE**: Elevation requirement for the driveway edge.
- 3/4" VERTICAL RISE**: Transition from pavement to apron.
- POINT OF REFERENCE ON PROFILE**: Indicated by a vertical line at the driveway edge.
- DRIVEWAY SLOPE**: 7% DESIRABLE MAX, 10% MAX.
- SIDEWALK SLOPE**: 1.50%.
- 6"**: Thickness of the concrete layers.
- 1/2" EXPANSION FELT REQ'D**: Located at the joint between the driveway and sidewalk.
- 1/2" EXPANSION FELT REQ'D IF ABUTTING CONCRETE DRIVEWAY**: Located at the joint between the sidewalk and the apron.
- ① ② ③**: Layers of base aggregate and asphalt, with a total thickness of 4 inches.
- ①—6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY**
- ②—6" BASE AGG. DENSE 1 1/4-INCH**
- ③—4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE**
- * ***: 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY
- TYPICAL SIDEWALK SECTION**: The main title of the diagram.

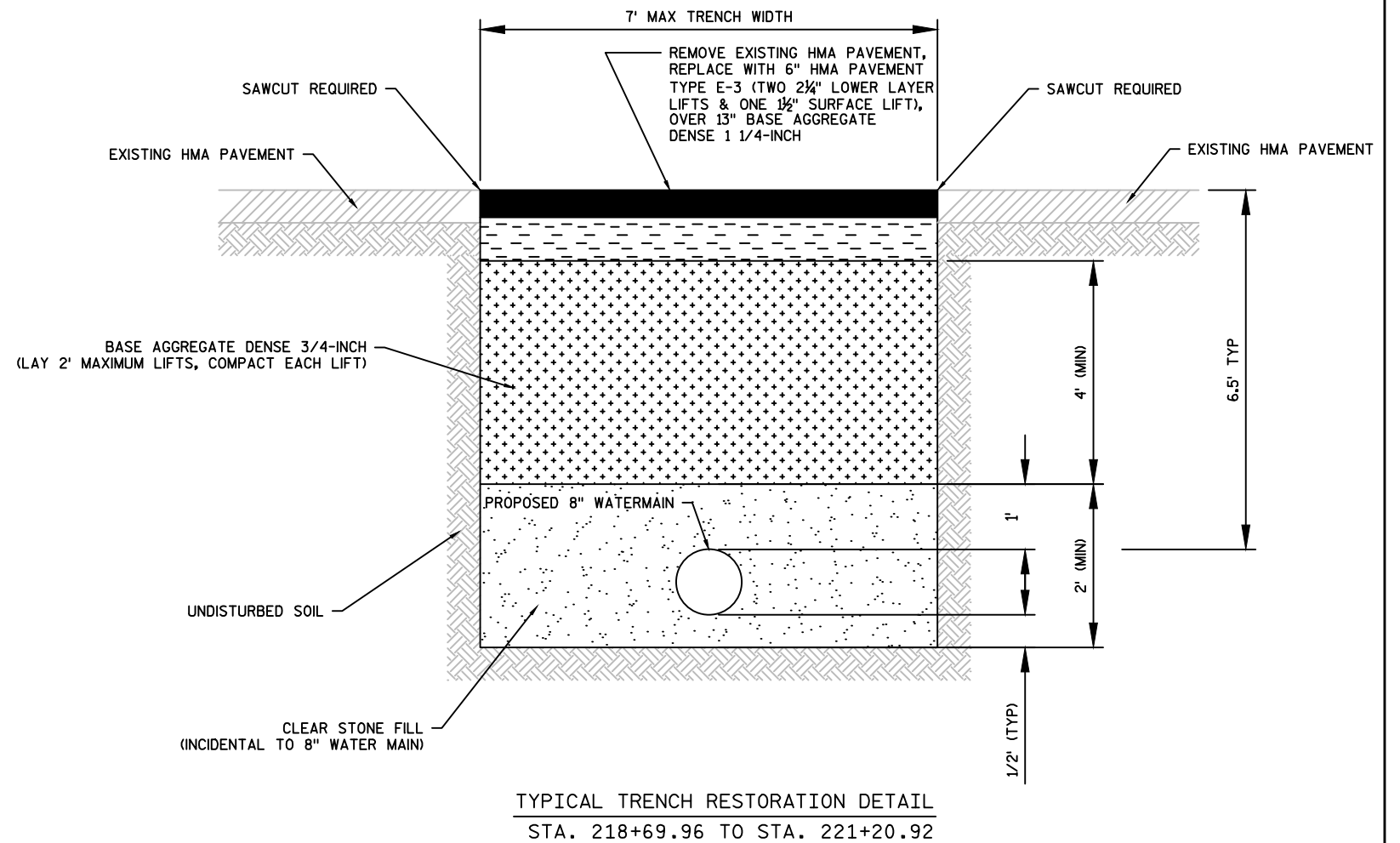
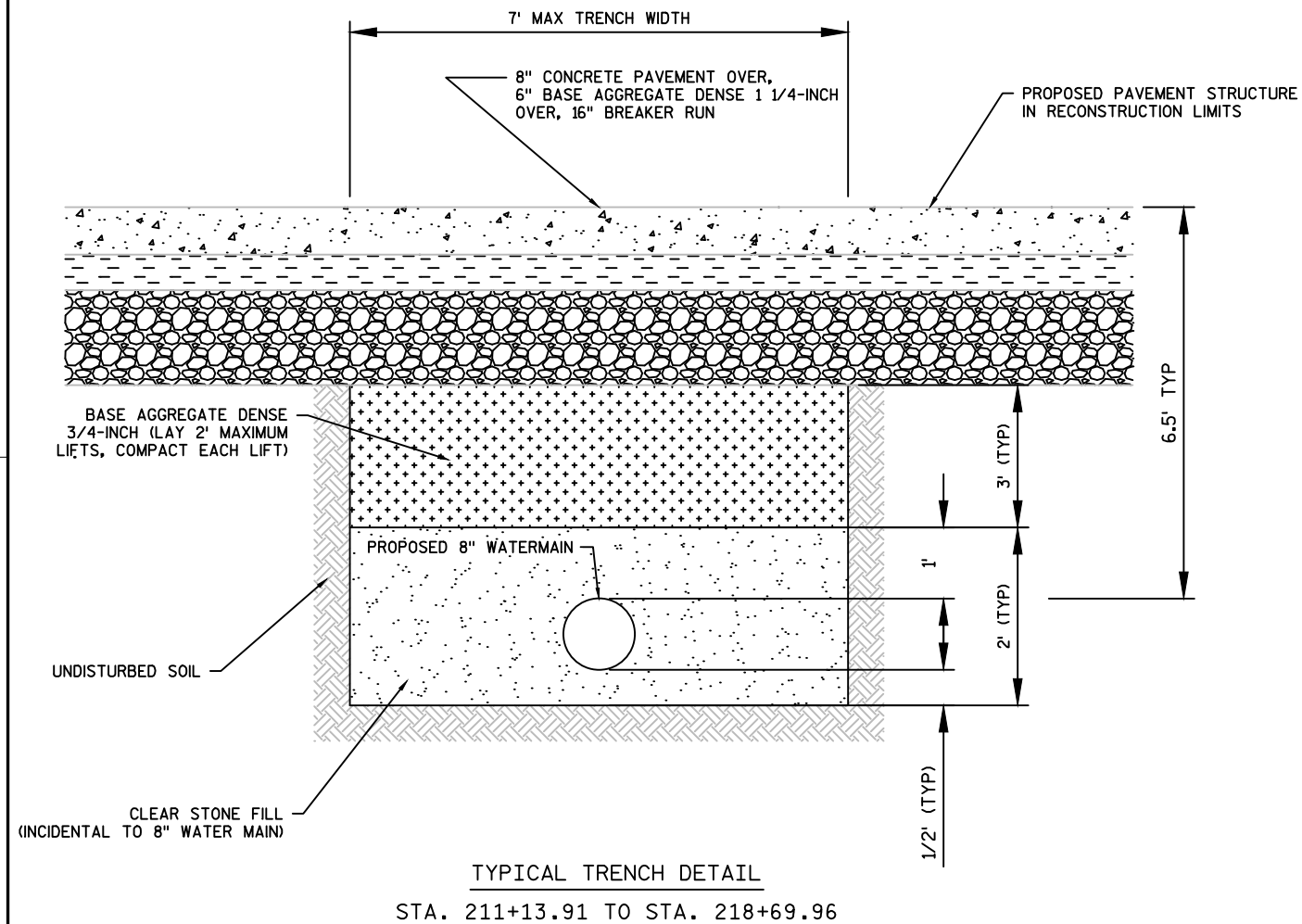
* * = 6" BASE AGG. DENSE 1 1/4-INCH
REQ'D UNDER CONCRETE DRWY

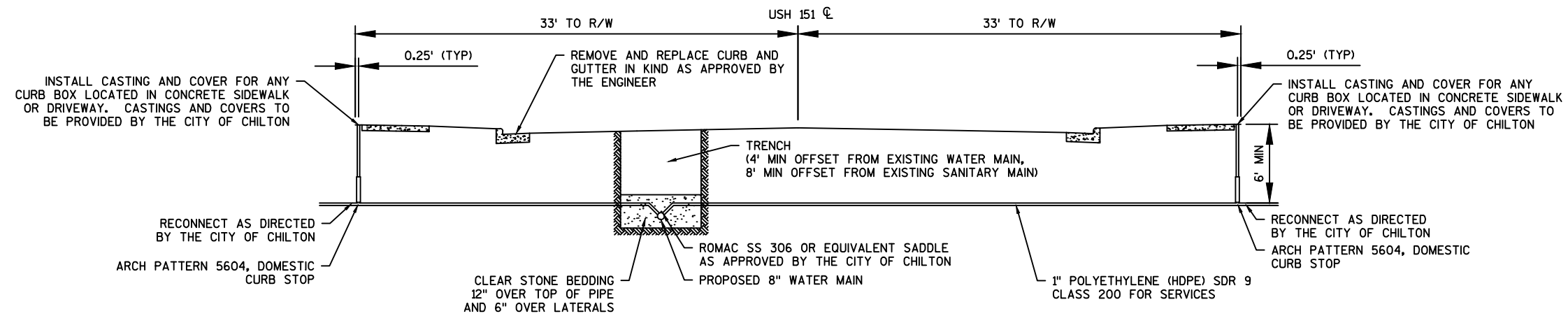
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 14%



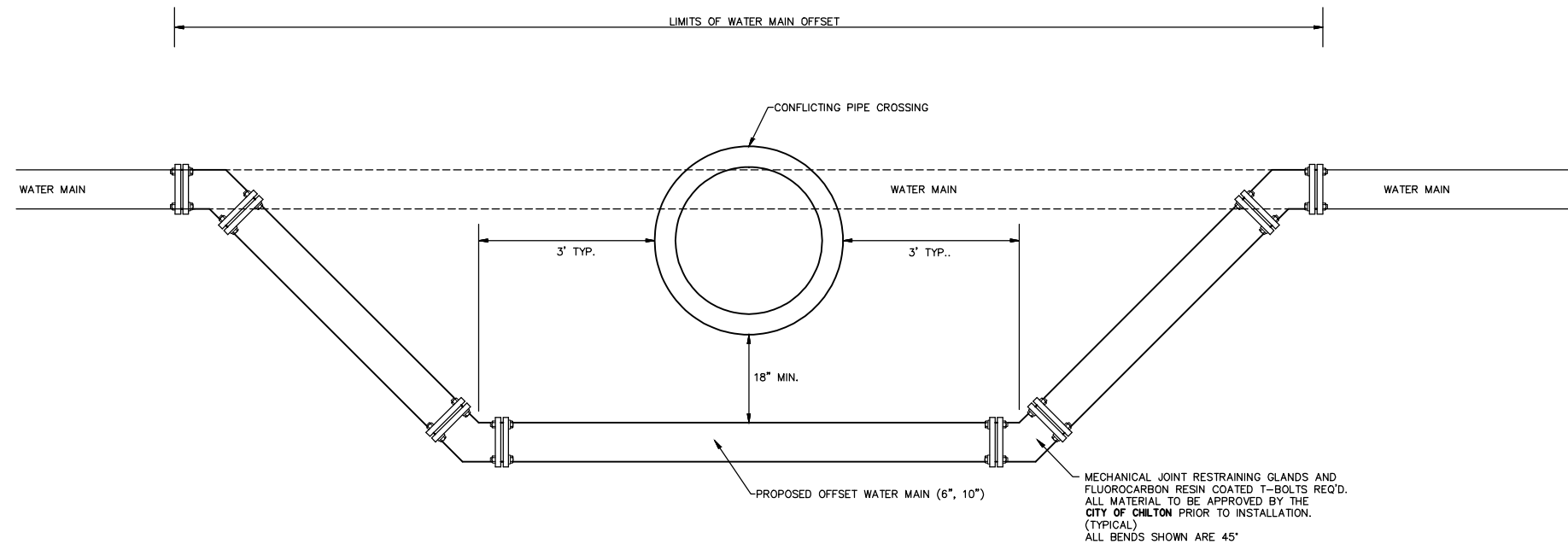
-
- CONCRETE DRIVEWAY 6-INCH
- 11"
- SECTION C-C



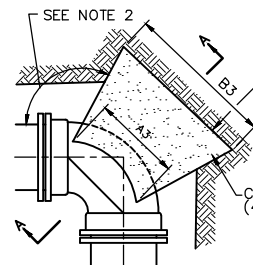




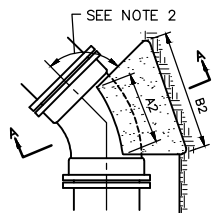
TYPICAL WATER SERVICE CONNECTION DETAIL



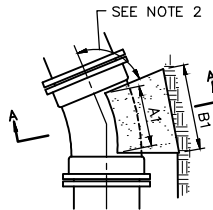
DETAIL FOR WATER MAIN OFFSET



PLAN - 90° BEND

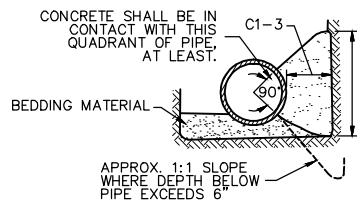


PLAN - 45° BEND

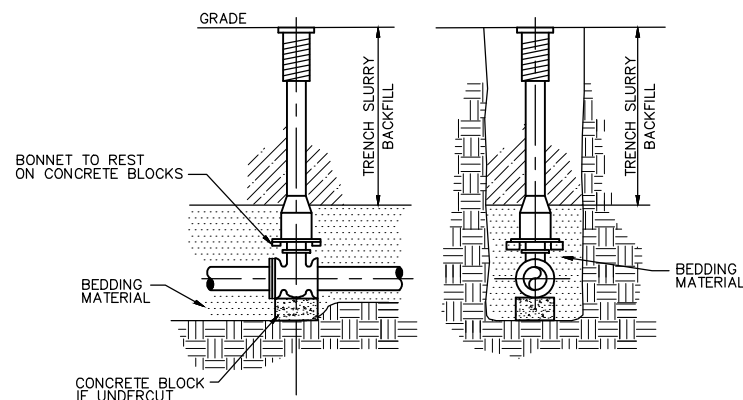
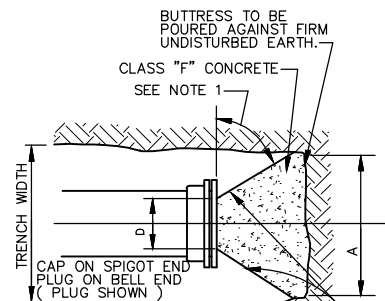


PLAN - 22-1/2° BEND

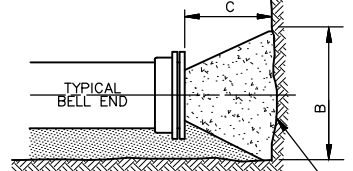
BUTTRESS DIMENSIONS						
PIPE SIZE	22-1/2° BENDS		45° BENDS		90° BENDS	
	B1	D1	B2	D2	B3	D3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-0"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	3'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"



SECTION A-A

BLOCKING FOR BENDS**STANDARD VALVE & VALVE BOX SETTING**

PLAN



ELEVATION

BLOCKING FOR PLUGS

BUTTRESS DIMENSIONS				
DIA.	A	B	C	D
6"	1'-6"	1'-2"	SEE NOTE 2	SEE NOTE 3
8"	2'-0"	1'-4"		
12"	2'-5"	1'-10"	SEE NOTE 2	SEE NOTE 3
16"	3'-4"	2'-4"		
20"	4'-3"	2'-10"	SEE NOTE 2	SEE NOTE 3
24"	5'-2"	3'-4"		
30"	6'-9"	4'-0"	SEE NOTE 2	SEE NOTE 3

NOTES:

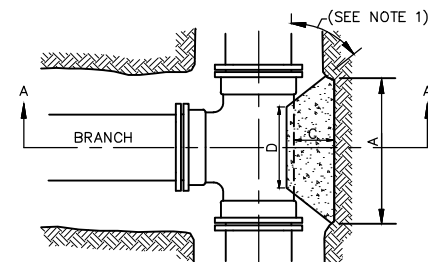
1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.

2. DIMENSION C SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.

3. DIMENSION D SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J. BOLTS.

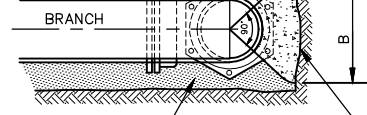
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM UNDISTURBED EARTH.

5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.



PLAN

CLASS "F" CONCRETE



SECTION A-A

BLOCKING FOR TEES

BUTTRESS DIMENSIONS				
B.D.	A	B	C	D
6"	1'-3"	1'-0"	SEE NOTE 1	SEE NOTE 2
8"	1'-6"	1'-4"		
12"	2'-3"	2'-0"	SEE NOTE 1	SEE NOTE 2
16"	3'-2"	2'-6"		
20"	4'-0"	3'-0"	SEE NOTE 1	SEE NOTE 2
24"	5'-3"	3'-4"		
30"	6'-6"	4'-3"	SEE NOTE 1	SEE NOTE 2

B.D. = BRANCH DIAMETER

NOTES:

1. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.

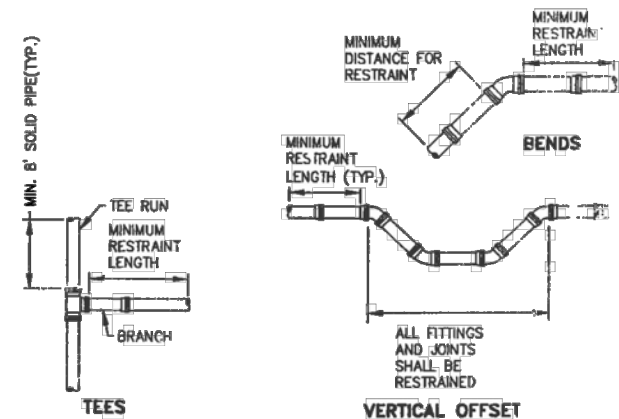
2. DIMENSION "D" EQUALS APPROX. I.D. OF PIPE LESS 2". AN EFFORT SHOULD BE MADE TO PREVENT THE CONCRETE FROM COVERING THE M.J. BOLTS.

3. WHERE BUTTRESSES ARE NOT POSSIBLE BECAUSE OF POOR SOIL CONDITIONS OR LACK OF ROOM, STRAPPING SHALL BE PERMITTED.

4. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.

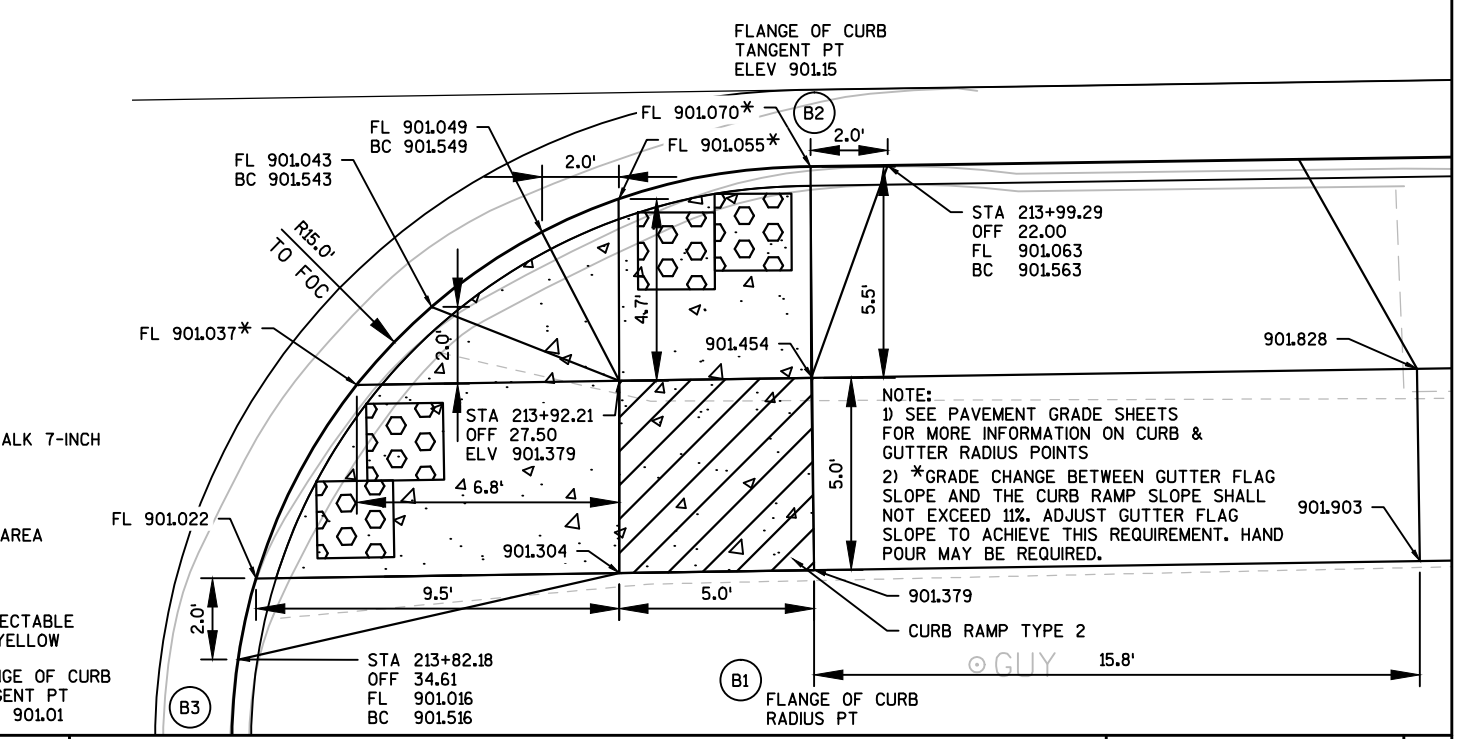
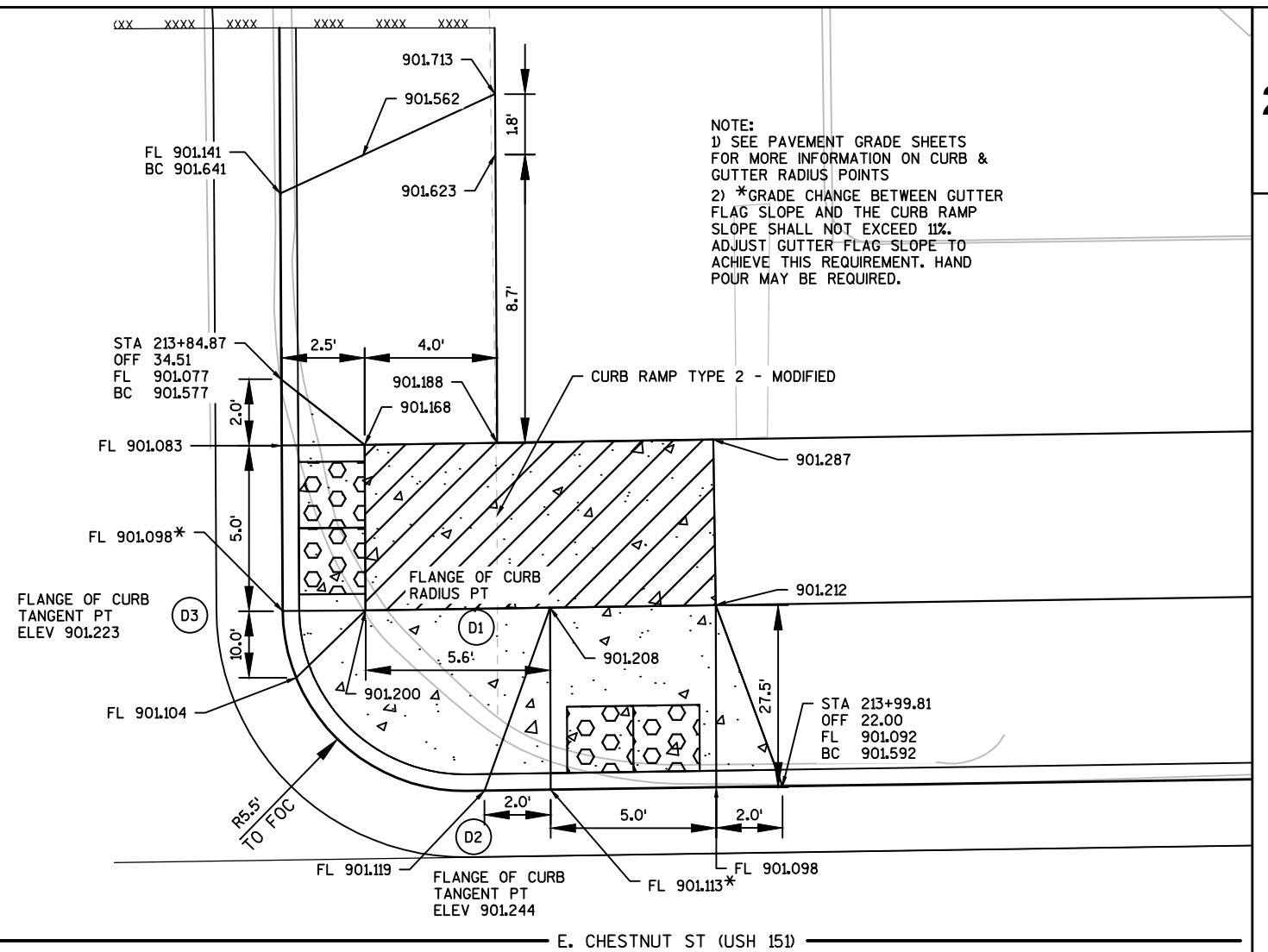
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

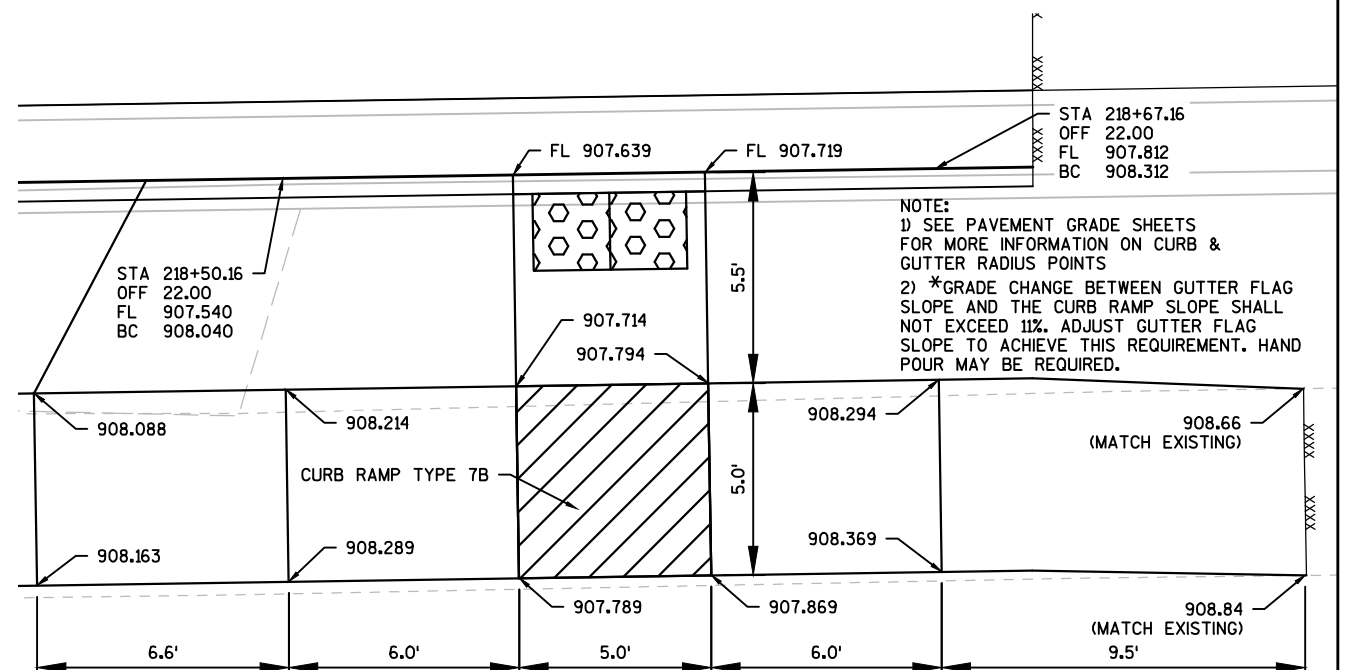
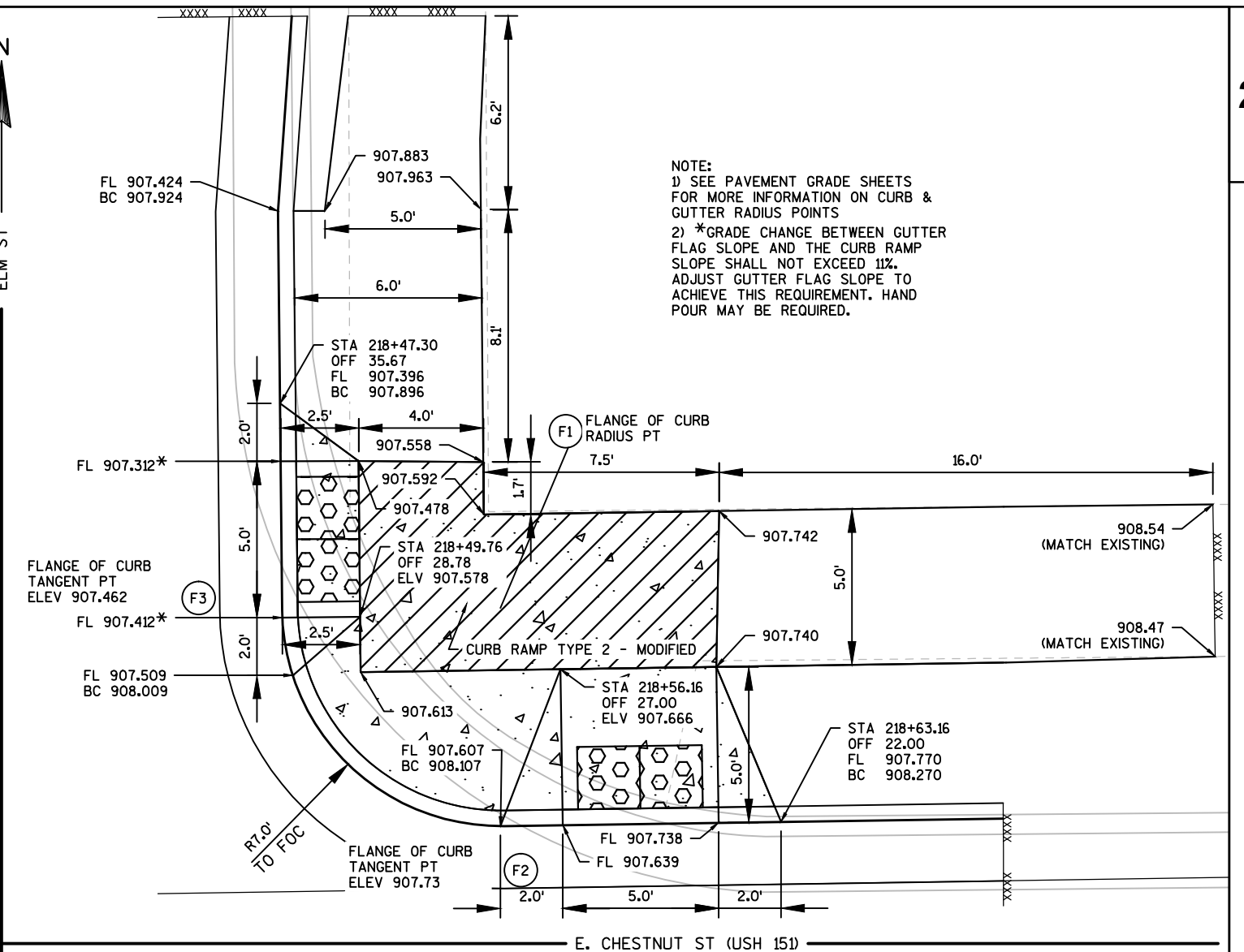
Minimum Restraint Length (ft) on both sides of the Fitting				
Fitting Type/Nominal Size	6"	8"	12"	16"
11 1/4" Bend	2	2	3	3
22 1/2" Bend	3	3	5	6
45° Bend	5	6	9	11
90° Bend	11	15	21	27
Dead End	30	40	56	73
Top Side of a Vertical Offset	13	17	24	31
Tee Run x Branch 6"BY	14			
Tee Run x Branch 8"BY	10	24		
Tee Run x Branch 12"BY	1	15	40	
Tee Run x Branch 16"BY	1	7	33	56

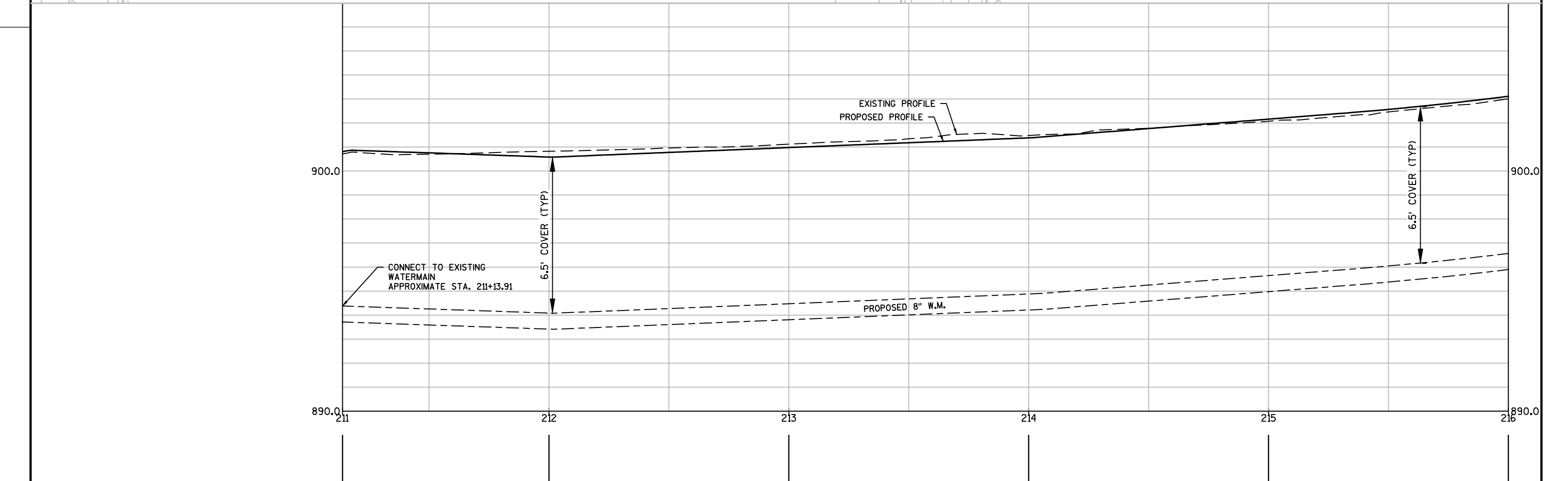
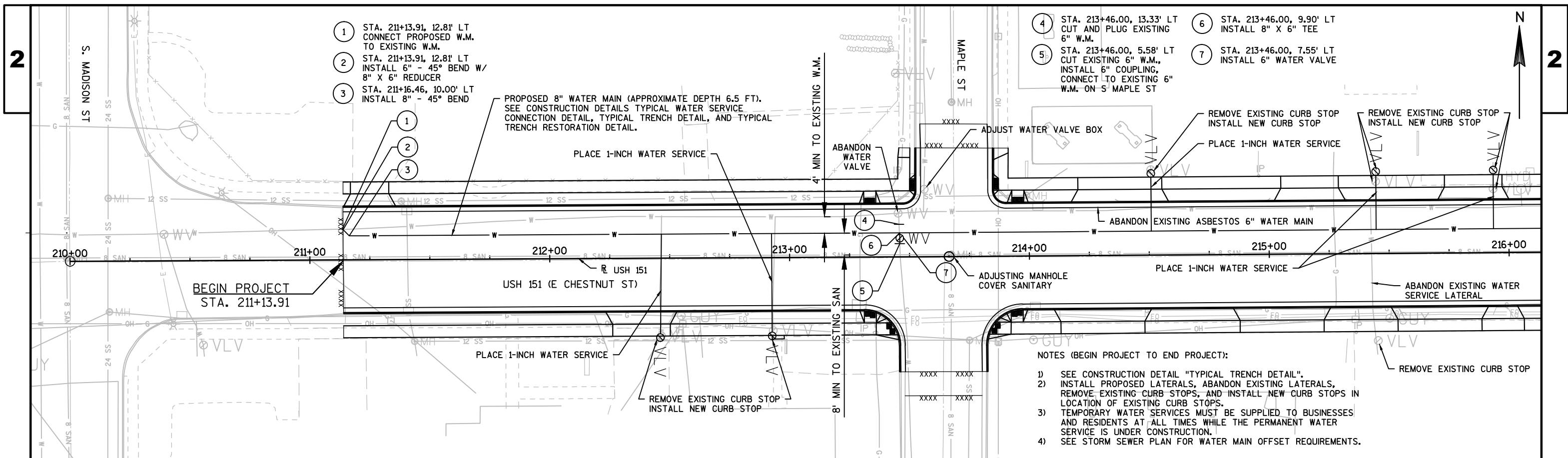


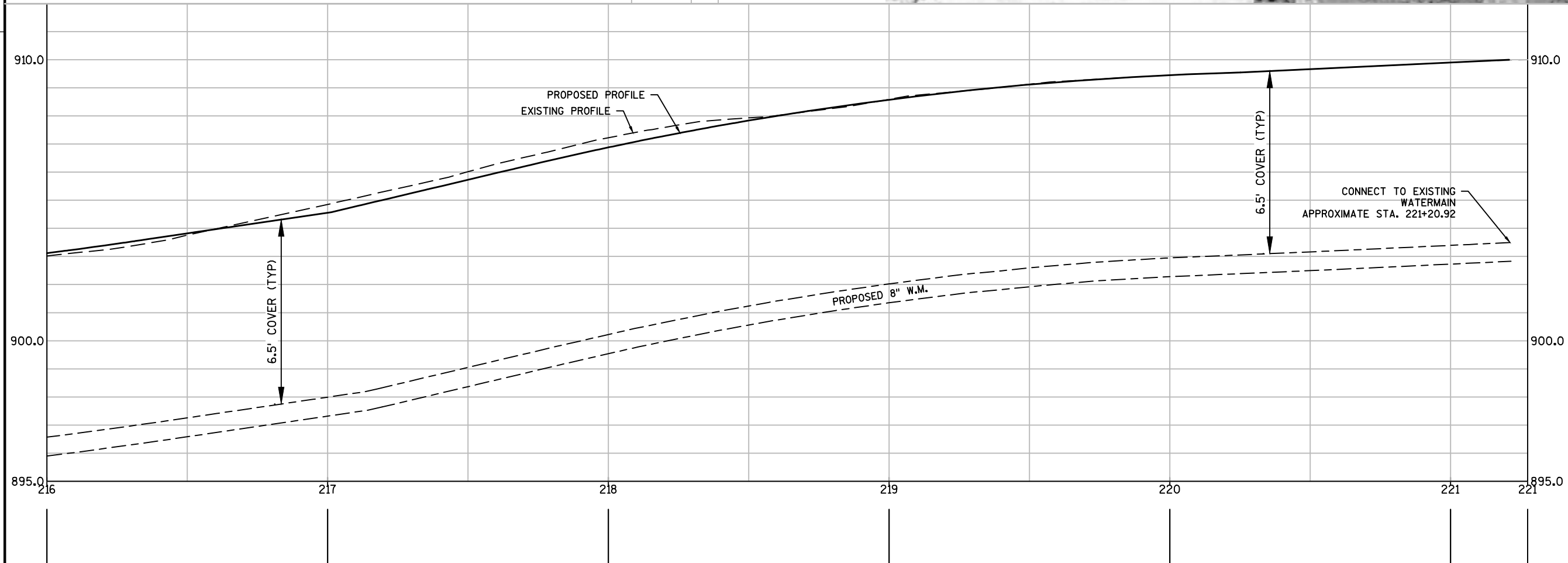
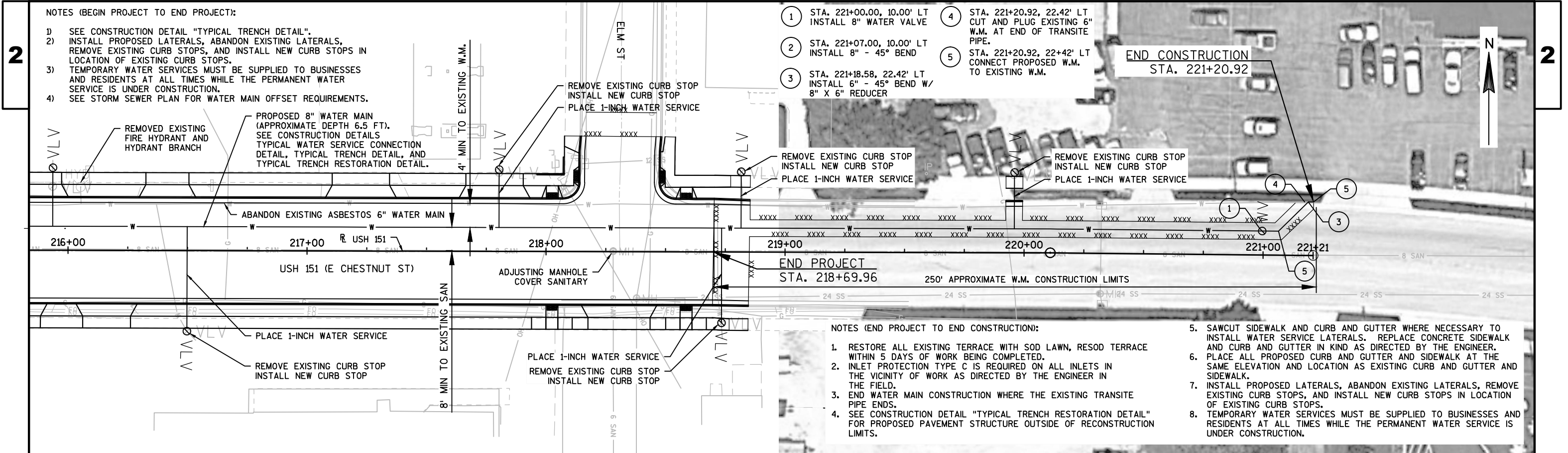
— USE EBBA 1100 HD SPLIT HARNESS ON EXISTING PUSH-ON PIPE BELLS;
— USE EBBA 1100 MEGALUGS ON NEW MECHANICAL JOINTS.

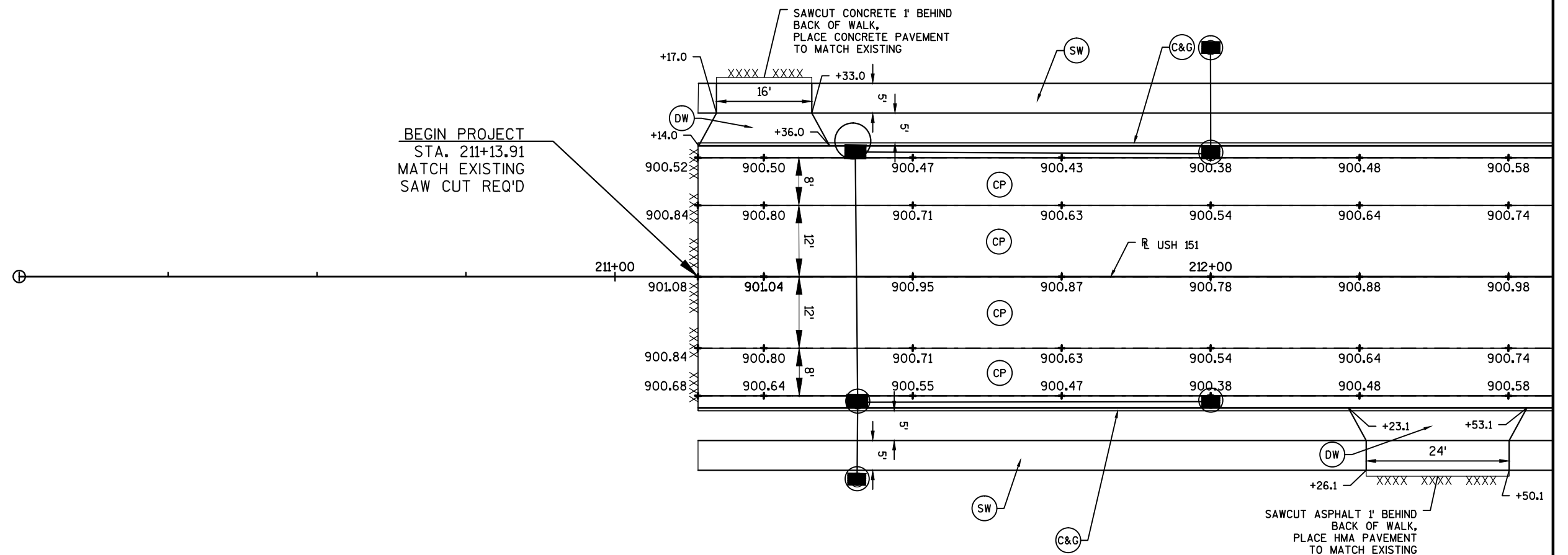
WATER MAIN RESTRAINT DETAIL



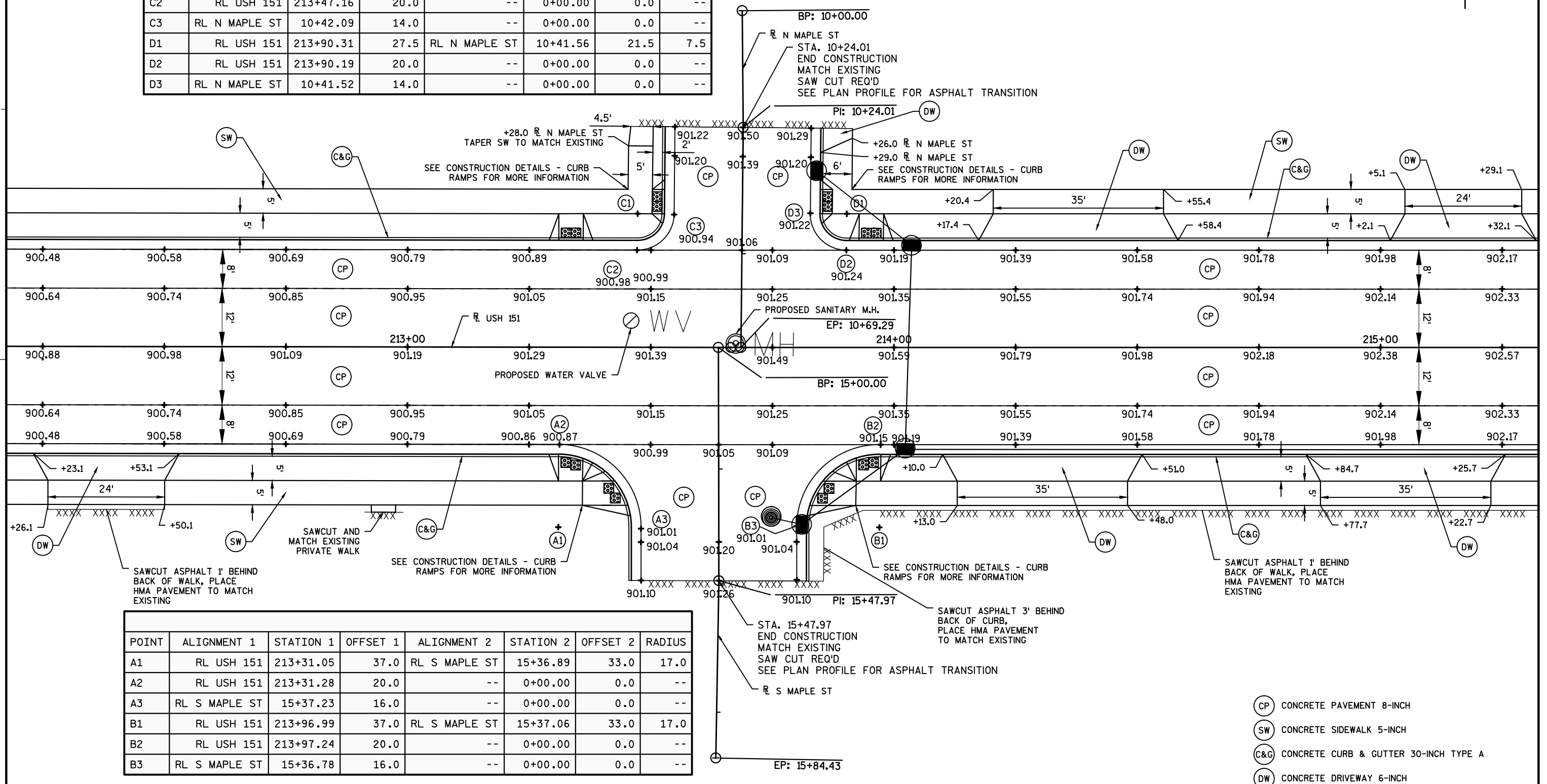


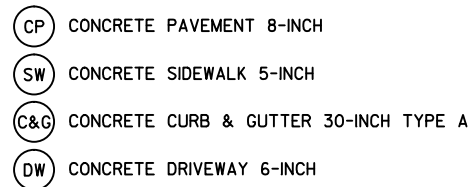


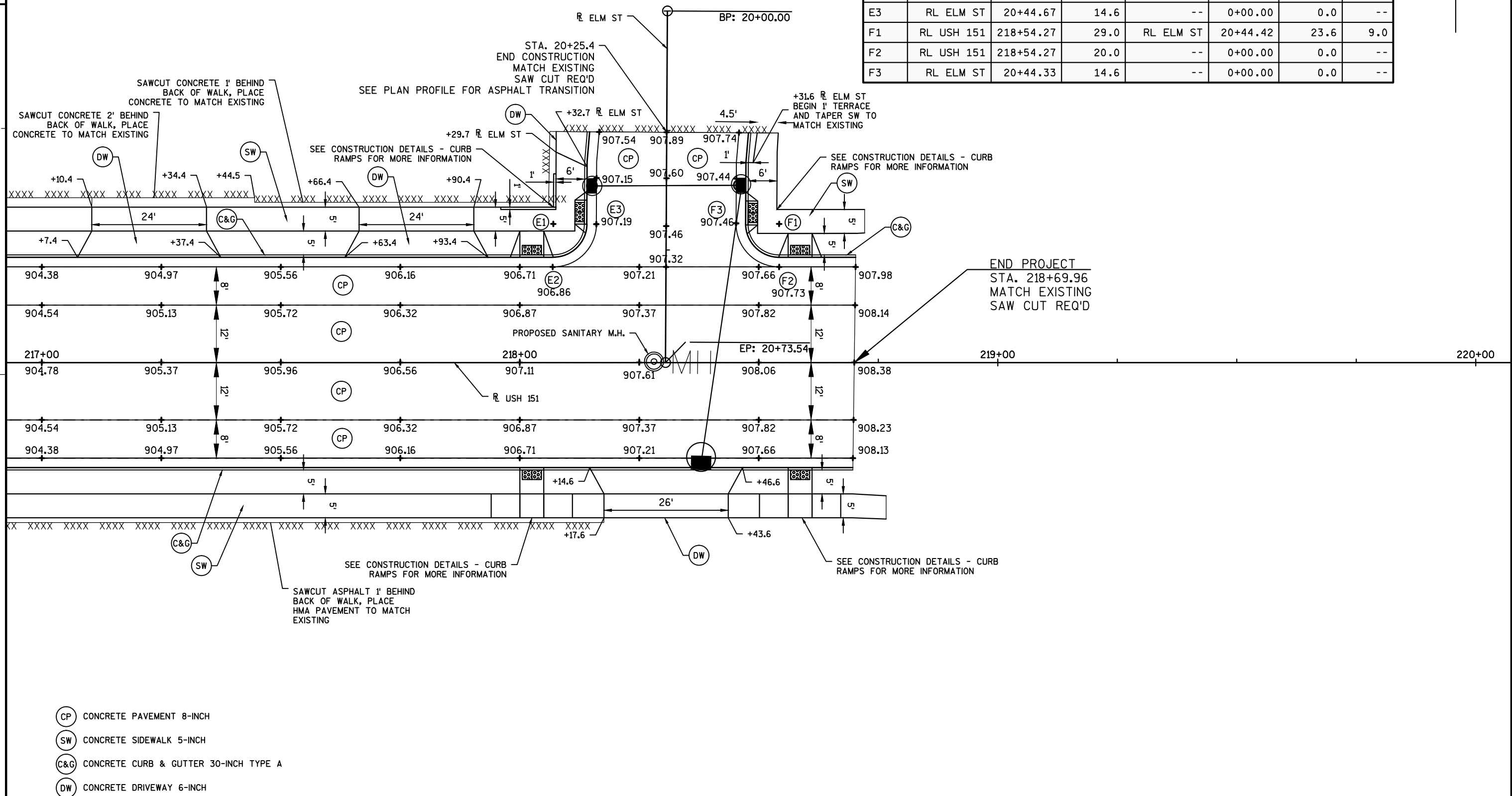


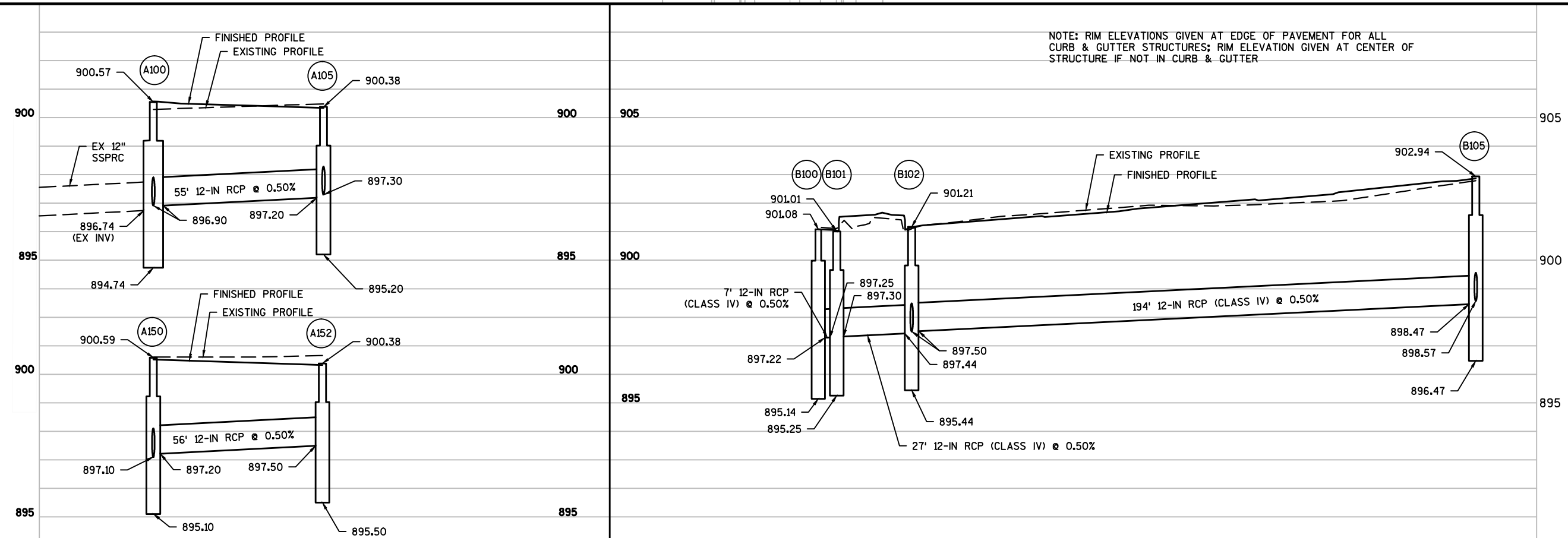
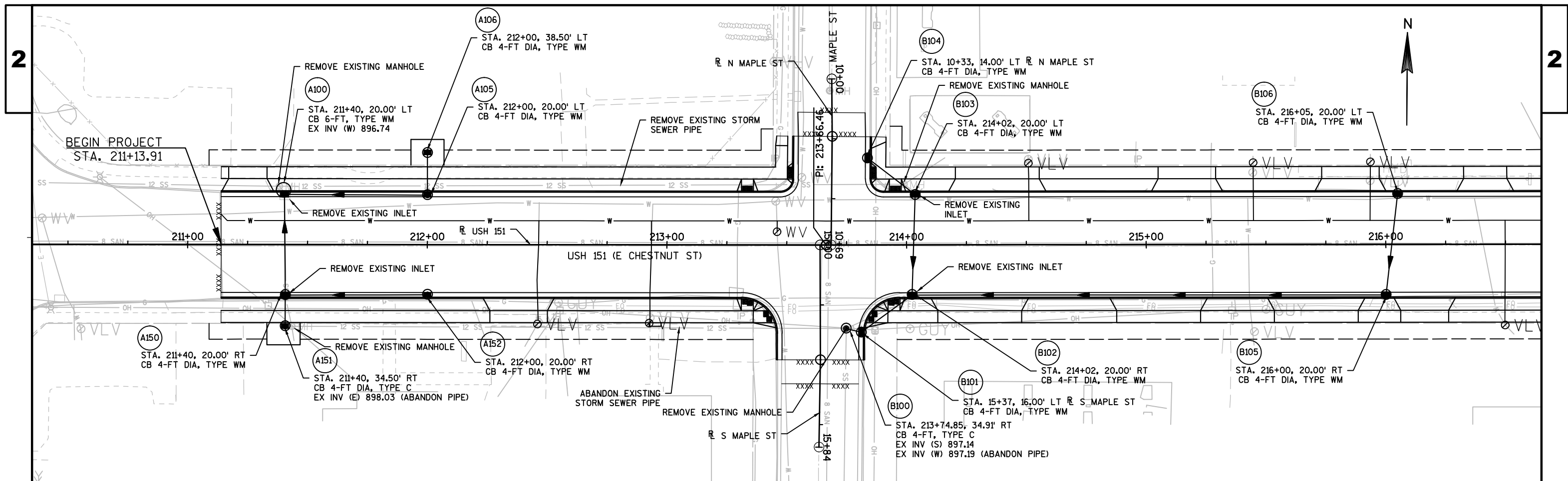


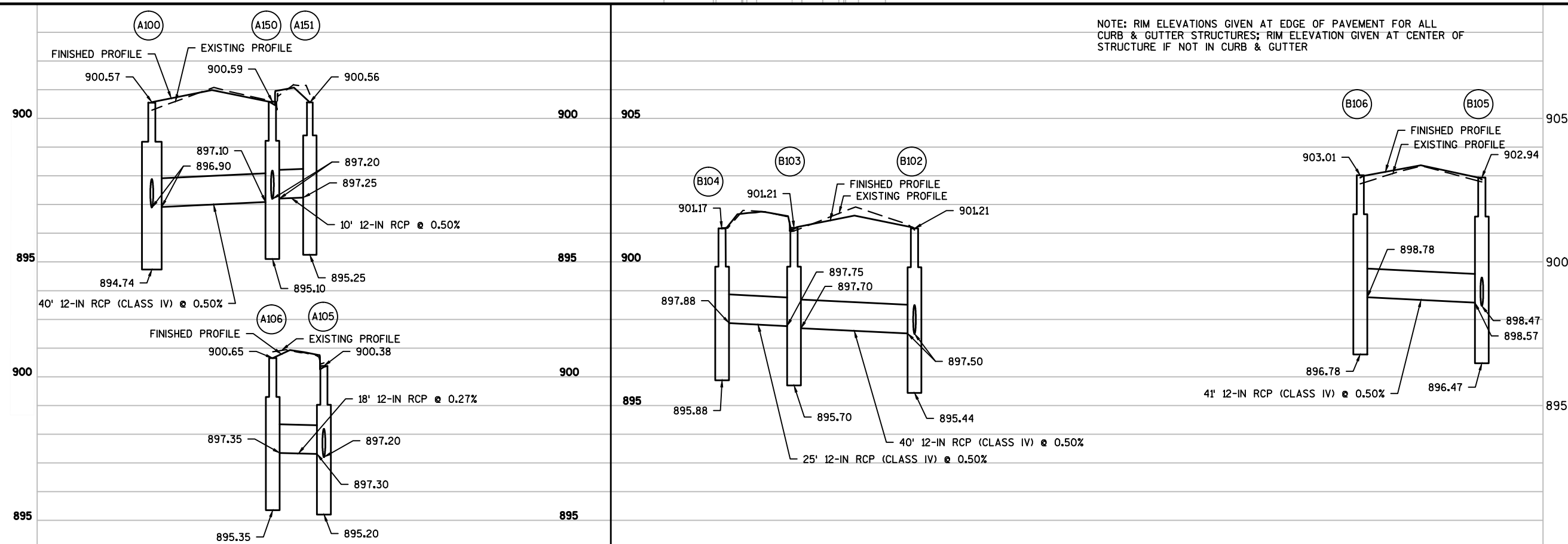
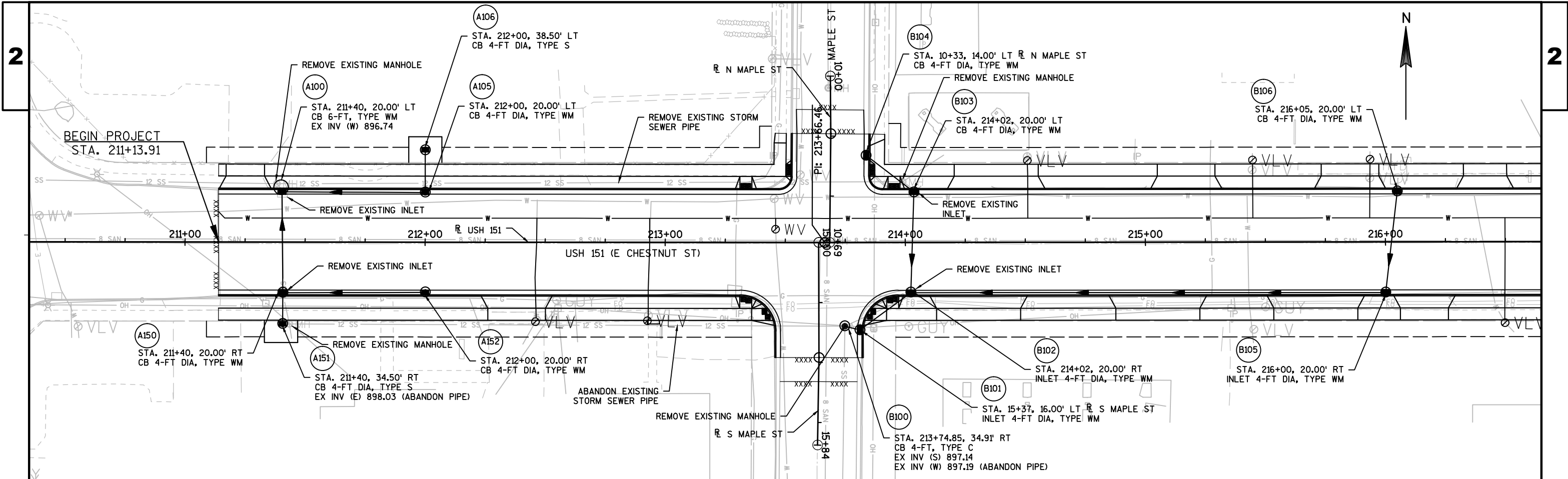
POINT	ALIGNMENT 1	STATION 1	OFFSET 1	ALIGNMENT 2	STATION 2	OFFSET 2	RADIUS
C1	RL USH 151	213+47.26	27.5	RL N MAPLE ST	10+41.97	21.5	7.5
C2	RL USH 151	213+47.16	20.0	--	0+00.00	0.0	--
C3	RL N MAPLE ST	10+42.09	14.0	--	0+00.00	0.0	--
D1	RL USH 151	213+90.31	27.5	RL N MAPLE ST	10+41.56	21.5	7.5
D2	RL USH 151	213+90.19	20.0	--	0+00.00	0.0	--
D3	RL N MAPLE ST	10+41.52	14.0	--	0+00.00	0.0	--











NOTE: RIM ELEVATIONS GIVEN AT EDGE OF PAVEMENT FOR ALL CURB & GUTTER STRUCTURES; RIM ELEVATION GIVEN AT CENTER OF STRUCTURE IF NOT IN CURB & GUTTER

PROJECT NO: 4100-31-71

HWY: USH 151

COUNTY: CALUMET

STORM SEWER: USH 151

SHEET

E

NOTE: THIS SECTION OF PROPOSED STORM SEWER IS SHOWN ON THE PREVIOUS SHEET

216+00 217+00 218+00 219+00 220+00 221+00 221+20.92

USH 151 (E CHESTNUT ST)

REMOVE EXISTING INLET

STA. 20+36.53, 14.63' RT R ELM ST
CB 4-FT DIA, TYPE WM

REMOVE EXISTING INLET

STA. 20+36.53, 14.63' LT R ELM ST
CB 4-FT DIA, TYPE WM

WATER MAIN OFFSET REQUIRED
SEE DETAIL FOR WATER MAIN OFFSET

END PROJECT
STA. 218+69.96

REMOVE EXISTING INLET;
REMOVE 18' EXISTING
12-INCH SSPRC

WATER MAIN CONSTRUCTION; SEE PLAN DETAILS

END CONSTRUCTION
STA. 221+20.92

Manholes: C111, C110, C100

Valves: VLV

Street Crossings: ELM ST, USH 151

Other: 24 SS, 6 SAN, 8 SAN, 12 SAN, 18 SAN, 24 SAN, 30 SAN, 36 SAN, 42 SAN, 48 SAN, 54 SAN, 60 SAN, 66 SAN, 72 SAN, 78 SAN, 84 SAN, 90 SAN, 96 SAN, 102 SAN, 108 SAN, 114 SAN, 120 SAN, 126 SAN, 132 SAN, 138 SAN, 144 SAN, 150 SAN, 156 SAN, 162 SAN, 168 SAN, 174 SAN, 180 SAN, 186 SAN, 192 SAN, 198 SAN, 204 SAN, 210 SAN, 216 SAN, 222 SAN, 228 SAN, 234 SAN, 240 SAN, 246 SAN, 252 SAN, 258 SAN, 264 SAN, 270 SAN, 276 SAN, 282 SAN, 288 SAN, 294 SAN, 300 SAN

NOTE: THIS SECTION OF PROPOSED STORM SEWER IS SHOWN ON THE PREVIOUS SHEET

216+00 217+00 218+00 219+00 220+00 221+00 221+20.92

USH 151 (E CHESTNUT ST)

REMOVE EXISTING INLET

STA. 20+36.53, 14.63' RT R ELM ST
CB 4-FT DIA, TYPE WM

REMOVE EXISTING INLET

STA. 20+36.53, 14.63' LT R ELM ST
CB 4-FT DIA, TYPE WM

WATER MAIN OFFSET REQUIRED
SEE DETAIL FOR WATER MAIN OFFSET

END PROJECT
STA. 218+69.96

REMOVE EXISTING INLET;
REMOVE 18' EXISTING
12-INCH SSPRC

WATER MAIN CONSTRUCTION; SEE PLAN DETAILS

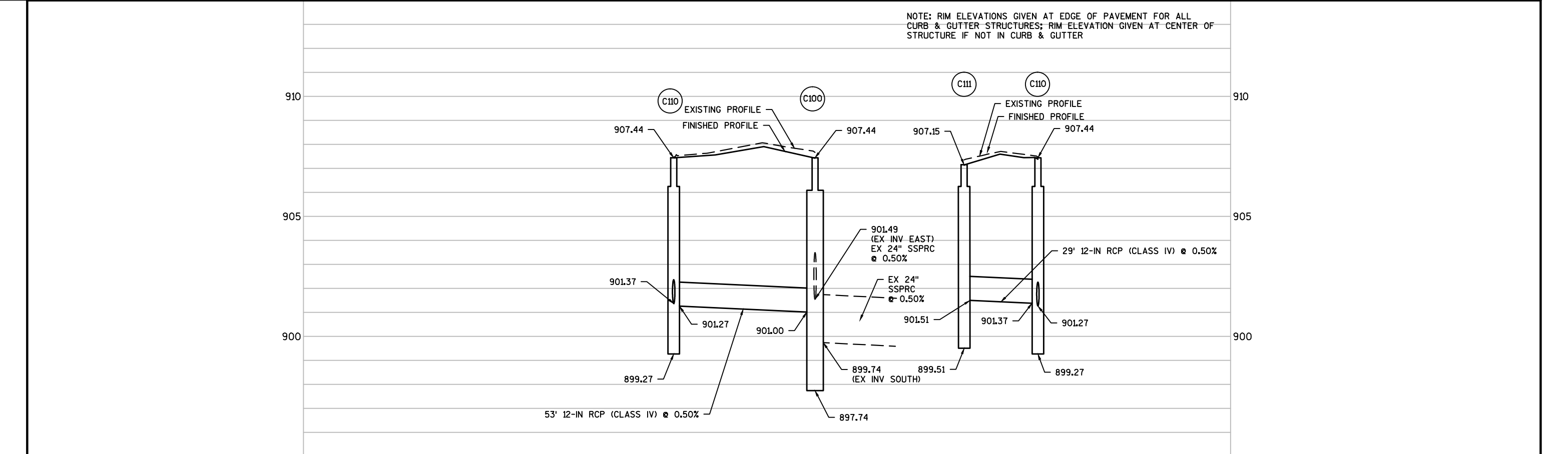
END CONSTRUCTION
STA. 221+20.92

Manholes: C111, C110, C100

Valves: VLV

Street Crossings: ELM ST, USH 151

Other: 24 SS, 6 SAN, 8 SAN, 12 SAN, 18 SAN, 24 SAN, 30 SAN, 36 SAN, 42 SAN, 48 SAN, 54 SAN, 60 SAN, 66 SAN, 72 SAN, 78 SAN, 84 SAN, 90 SAN, 96 SAN, 102 SAN, 108 SAN, 114 SAN, 120 SAN, 126 SAN, 132 SAN, 138 SAN, 144 SAN, 150 SAN, 156 SAN, 162 SAN, 168 SAN, 174 SAN, 180 SAN, 186 SAN, 192 SAN, 198 SAN, 204 SAN, 210 SAN, 216 SAN, 222 SAN, 228 SAN, 234 SAN, 240 SAN, 246 SAN, 252 SAN, 258 SAN, 264 SAN, 270 SAN, 276 SAN, 282 SAN, 288 SAN, 294 SAN, 300 SAN



PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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PROJECT NO: 4100-31-71	HWY: USH 151	COUNTY: CALUMET	STORM SEWER: USH 151	SHEET	E
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LAYOUT NAME - 050103_SS

PLOT DATE : 4/22/2015 10:02 AM

PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44

FILE NAME : Y:\MILWAUKEE\20100S\20140.00\41003100\SHEETS\PLAN\022501_SS.DWG
LAYOUT NAME - 050103_SS

PLOT DATE : 4/22/2015 10:02 AM

PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44

FILE NAME : Y:\MILWAUKEE\20100S\20140.00\41003100\SHEETS\PLAN\022501_SS.DWG
LAYOUT NAME - 050103_SS

PLOT DATE : 4/22/2015 10:02 AM

PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44

FILE NAME : Y:\MILWAUKEE\20100S\20140.00\41003100\SHEETS\PLAN\022501_SS.DWG
LAYOUT NAME - 050103_SS

PLOT DATE : 4/22/2015 10:02 AM

PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44

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PLOT DATE : 4/22/2015 10:02 AM

PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44

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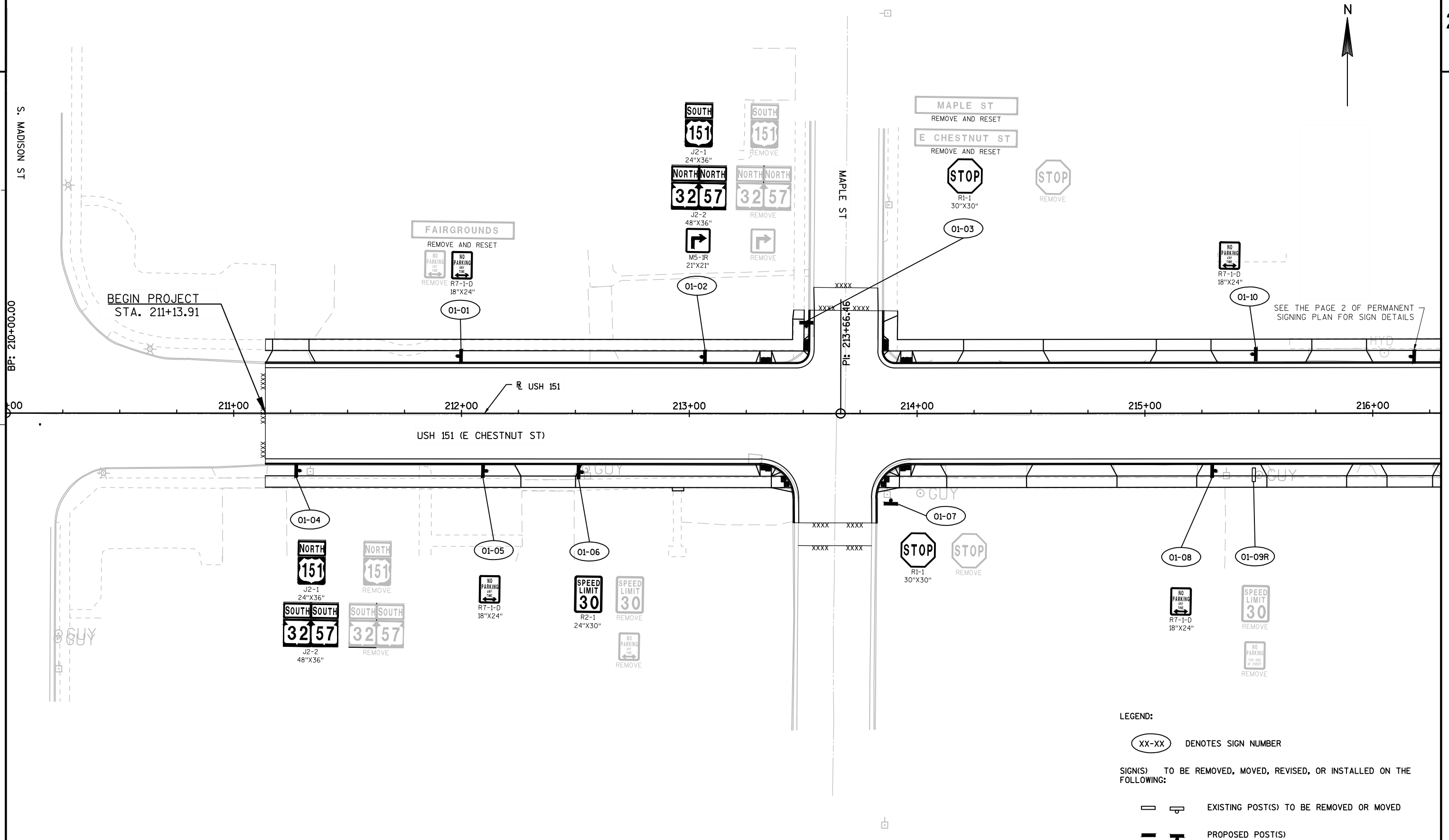
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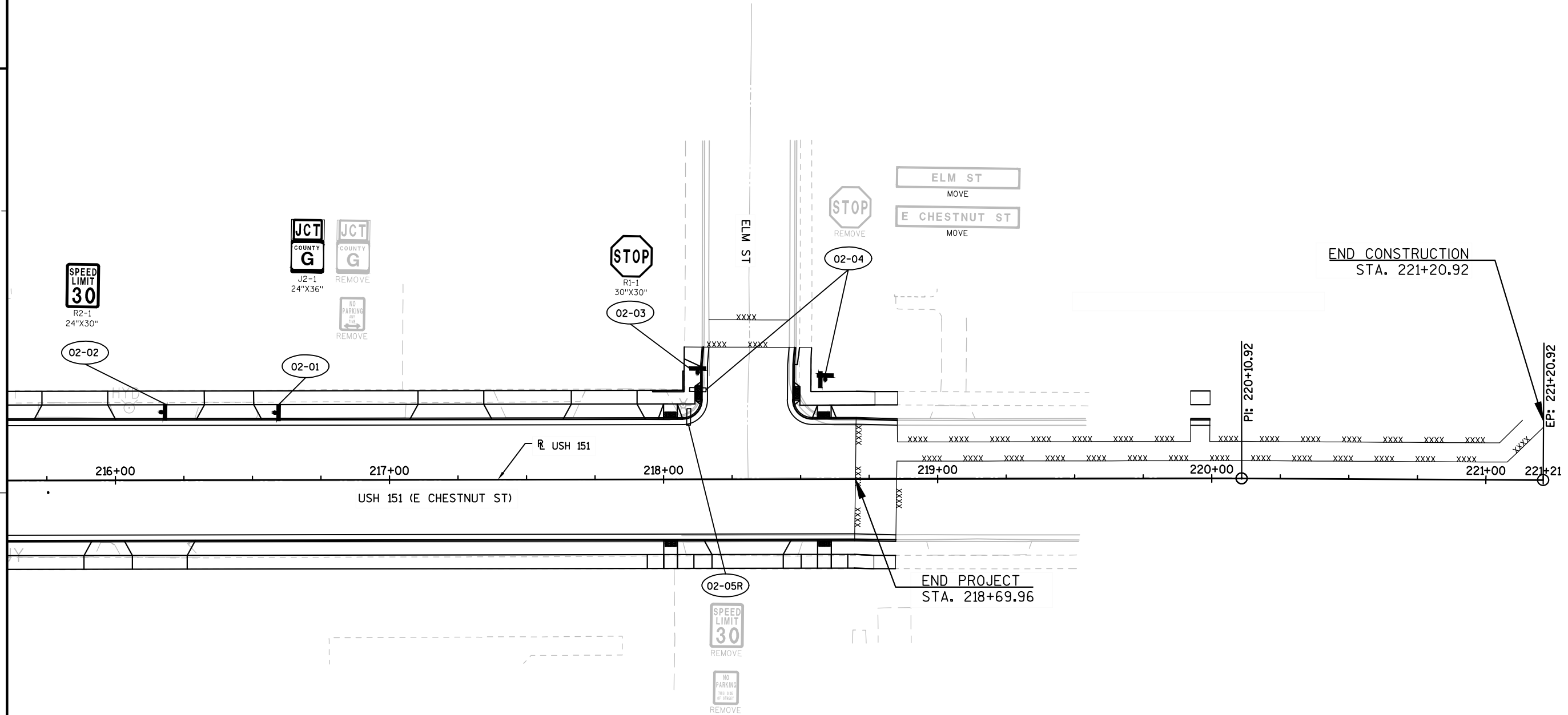
PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 44





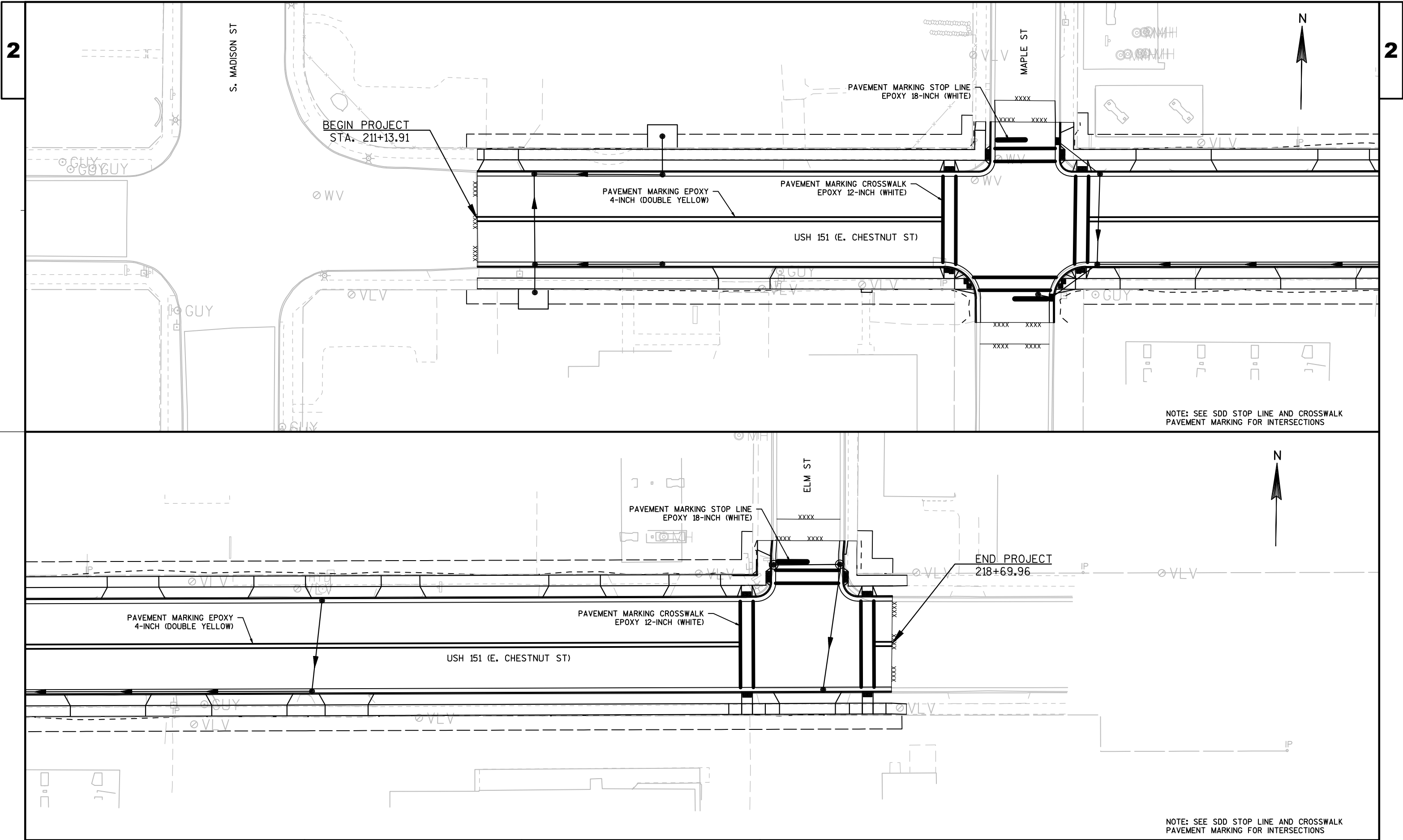
LEGEND:

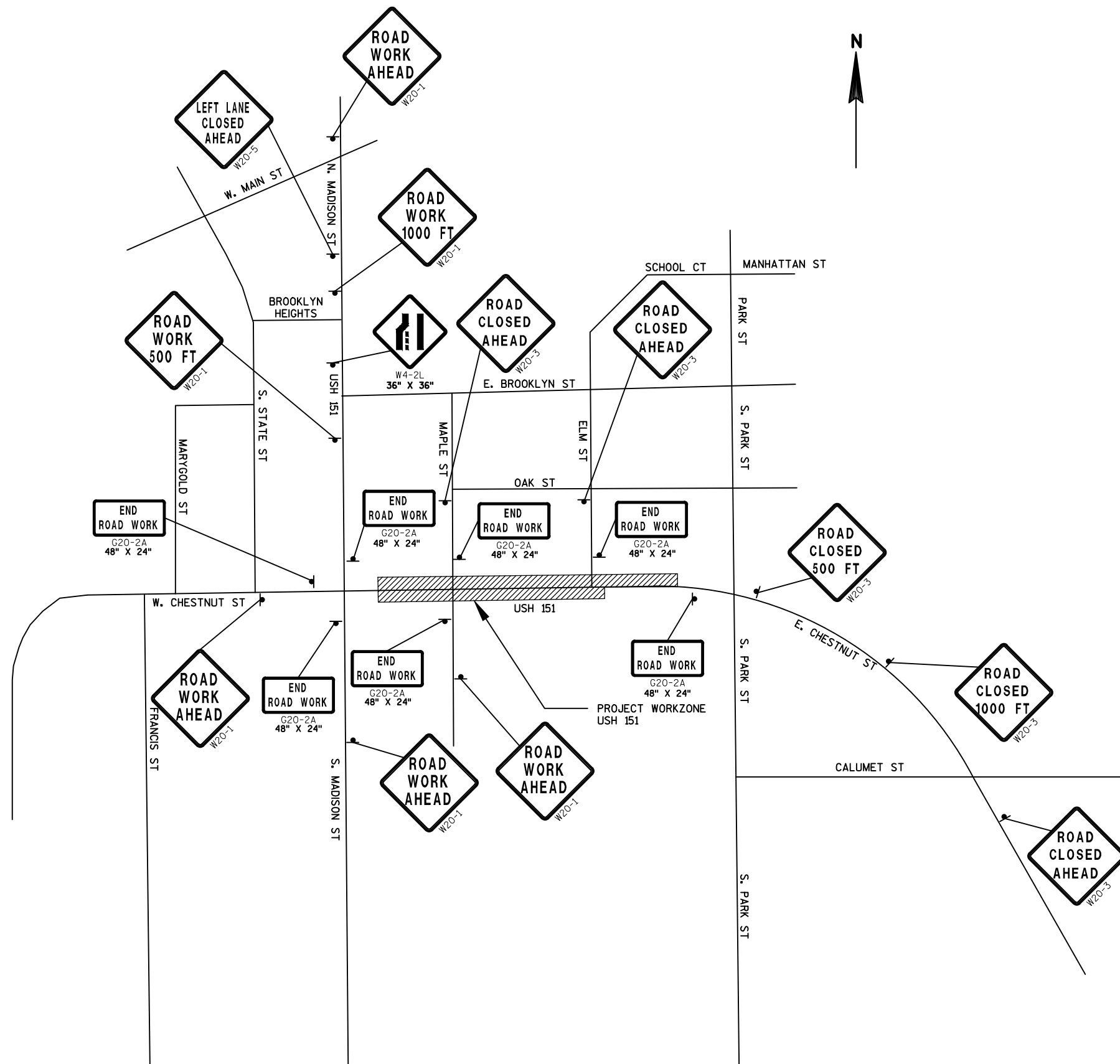
XX-XX DENOTES SIGN NUMBER

SIGN(S) TO BE REMOVED, MOVED, REVISED, OR INSTALLED ON THE FOLLOWING:

EXISTING POST(S) TO BE REMOVED OR MOVED

PROPOSED POST(S)



**STAGE TRAFFIC CONTROL NOTES:**

CLOSE ROAD ON E. CHESTNUT STREET (USH 151/STH 32/57) TO TRAFFIC FROM S. MADISON STREET TO ELM STREET (EASTBOUND). CLOSE ROAD ON E. CHESTNUT STREET TO THRU TRAFFIC FROM ELM STREET TO S. MADISON STREET (WESTBOUND), HOWEVER MAINTAIN ONE WAY TRAFFIC IN THIS DIRECTION FOR LOCAL ACCESS. MAINTAIN DRIVEWAY ACCESS WITHIN THE WORK ZONE AREA. AT A MINIMUM MAINTAIN ROADWAY AND DRIVEWAY SURFACES WITH BASE AGGREGATE. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES. CONSTRUCT PIPE CROSSINGS IN HALVES TO MAINTAIN ONE WAY WESTBOUND TRAFFIC AT ALL TIMES.

CLOSE THE LEFT TURN ONLY LANE ON S. MADISON STREET TO E. CHESTNUT STREET FOR THE DURATION OF THE PROJECT.

SETUP DETOUR PRIOR TO BEGINNING CONSTRUCTION AND MAINTAIN THROUGH THE COMPLETION OF THE PROJECT. CONFIRM ALL DETOUR SIGNING IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION. SUBMIT THE PROPOSED DETOUR AND SIGNING PLAN TO THE CITY OF CHILTON AND CALUMET COUNTY HIGHWAY DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.

PROVIDE FLAGGERS AND SIGNING IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION WHEN TEMPORARY LANE SHIFTS ARE REQUIRED FOR PIPE OR UTILITY CROSSINGS. WHEN MORE THAN ONE PIPE OR UTILITY CROSSING IS OCCURRING AT THE SAME TIME, PROVIDE SEPARATE SIGNING AND FLAGGERS FOR EACH OPERATION UNLESS THEY ARE IN CLOSE PROXIMITY TO BE CONSOLIDATED INTO A SINGLE SIGNING AND FLAGGING OPERATION.

PHASE THE CONSTRUCTION ON MAPLE STREET TO THE SOUTH TO MAINTAIN LOCAL ACCESS AT ALL TIMES.

PORTABLE SUPPORTS ALLOWED FOR SIGN PLACEMENT ON PAVEMENT AND AGGREGATE SURFACES ONLY.

CONFIRM DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THE TRAFFIC CONTROL DRAWINGS WITH THE PERTINENT REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION. ADJUST SIGNS, BARRICADES, AND DRUM LOCATIONS AS DIRECTED BY THE ENGINEERING IN THE FIELD. CONFORM ALL SIGN SIZES TO THE REQUIREMENTS FOR A CONVENTIONAL ROAD AS DESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE MINIMUM SIZE FOR A DIAMOND SHAPED TEMPORARY TRAFFIC CONTROL SIGN IS 48" X 48".

REMOVE ALL PAVEMENT MARKING THAT IS NOT APPROPRIATE TO THE TRAVEL PATH.

PLACE ADDITIONAL DRUMS AT SIDE ROADS AND PRIVATE ENTRANCES AS DIRECTED BY THE ENGINEER IN THE FIELD.

EXISTING UTILITIES ARE NOT SHOWN ON TRAFFIC CONTROL SHEETS.

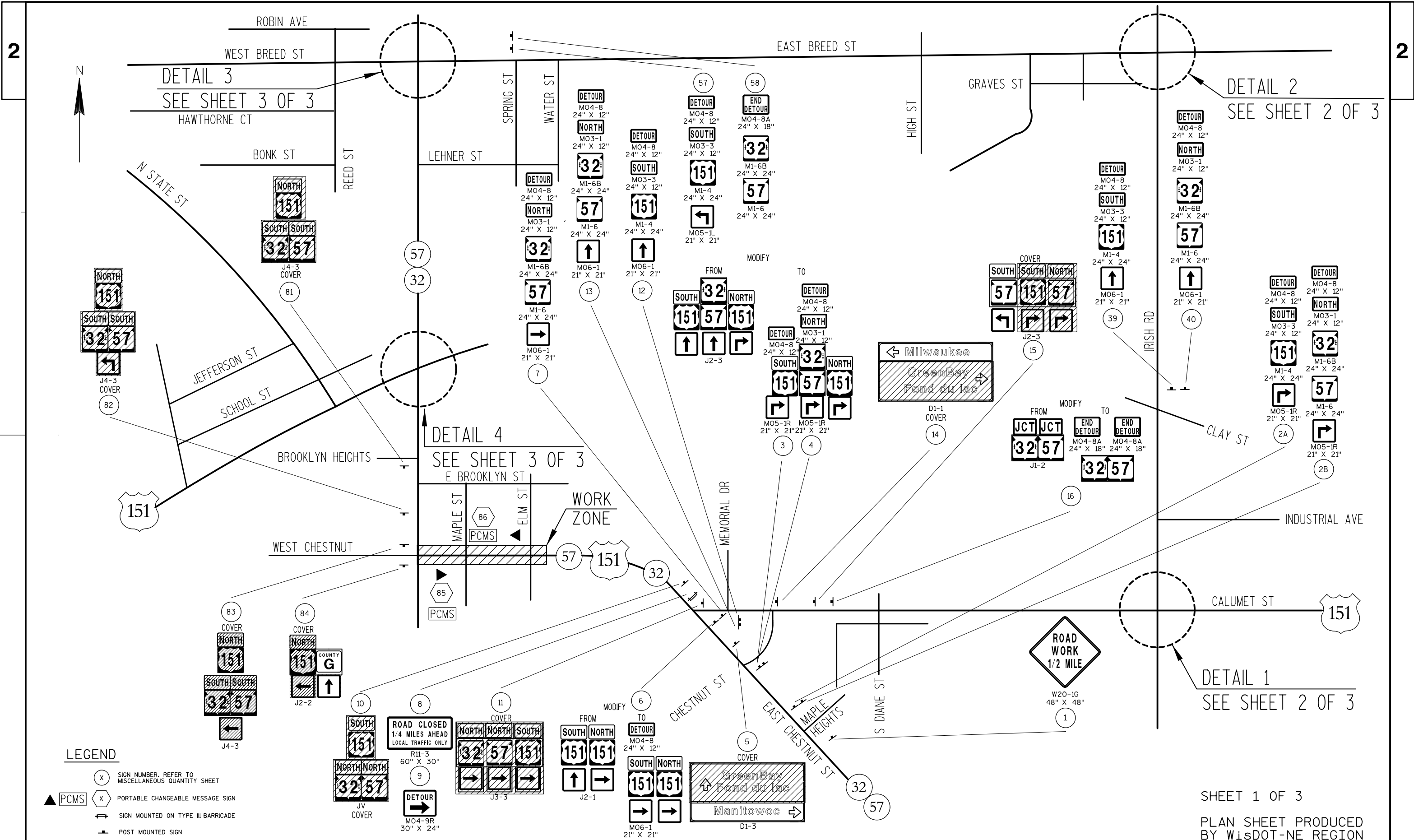
SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES AND SDD DETOUR SIGNING FOR MAINLINE CLOSURES FOR ADVANCED SIGNING AND MARKING.

SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES FOR SIGNING AND MARKING OF MAPLE STREET AND ELM STREET CLOSURES.

SEE SDD TRAFFIC CONTROL, SIDEWALK CLOSURE FOR SIGNING AND MARKING FOR A CLOSED SIDEWALK DURING CONSTRUCTION. ONE SIDEWALK ON EITHER SIDE OF THE STREET MUST REMAIN OPEN AT ALL TIMES.







LEGEND

- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
- (PCMS) PORTABLE CHANGEABLE MESSAGE SIGN
- (MOUNTED ON TYPE III BARRICADE)
- (POST MOUNTED SIGN)

PROJECT NO: 4100-31-71

HWY: USH 151

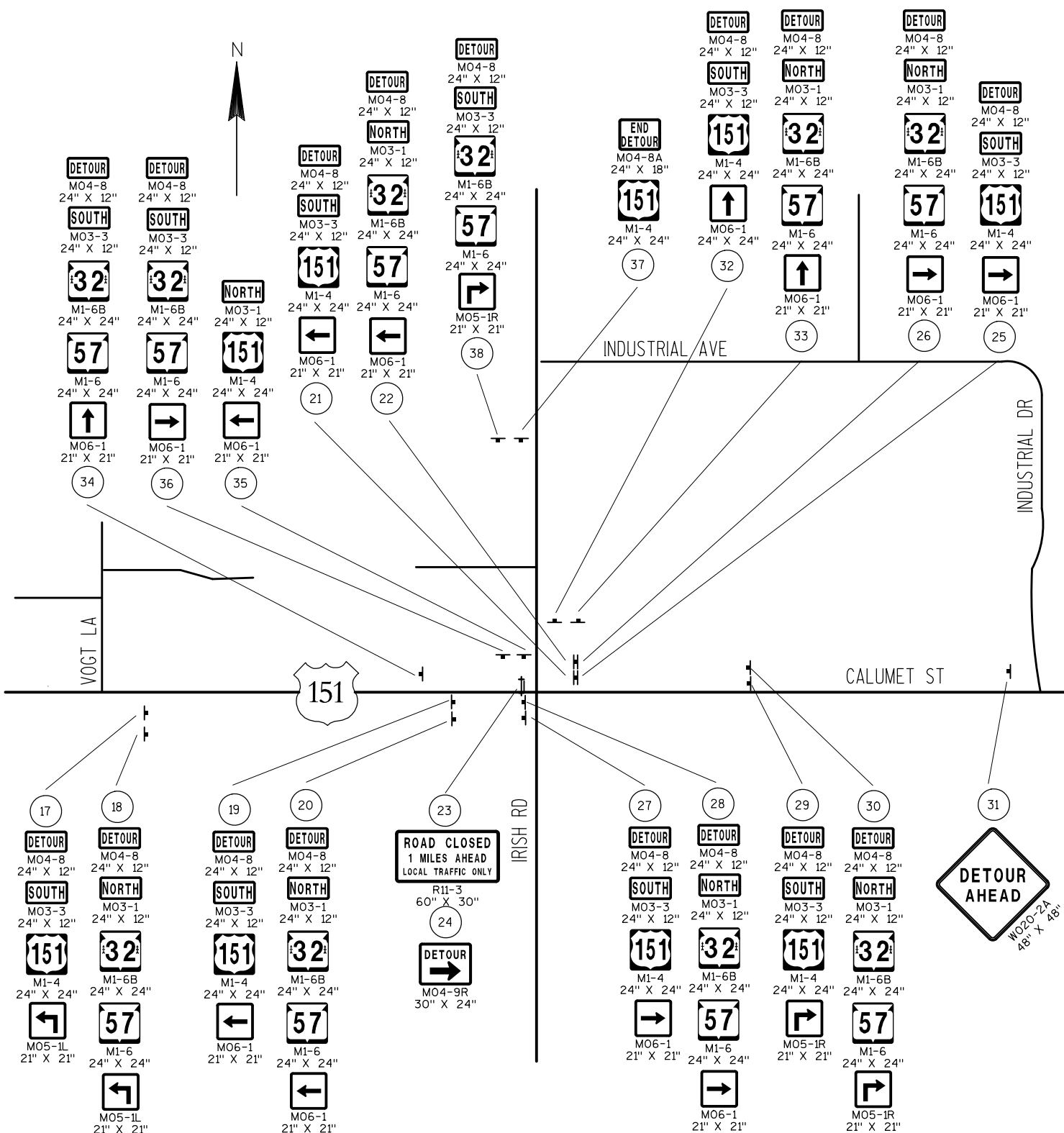
COUNTY: CALUMET

DETOUR SIGNING DETAIL

SHEET

E

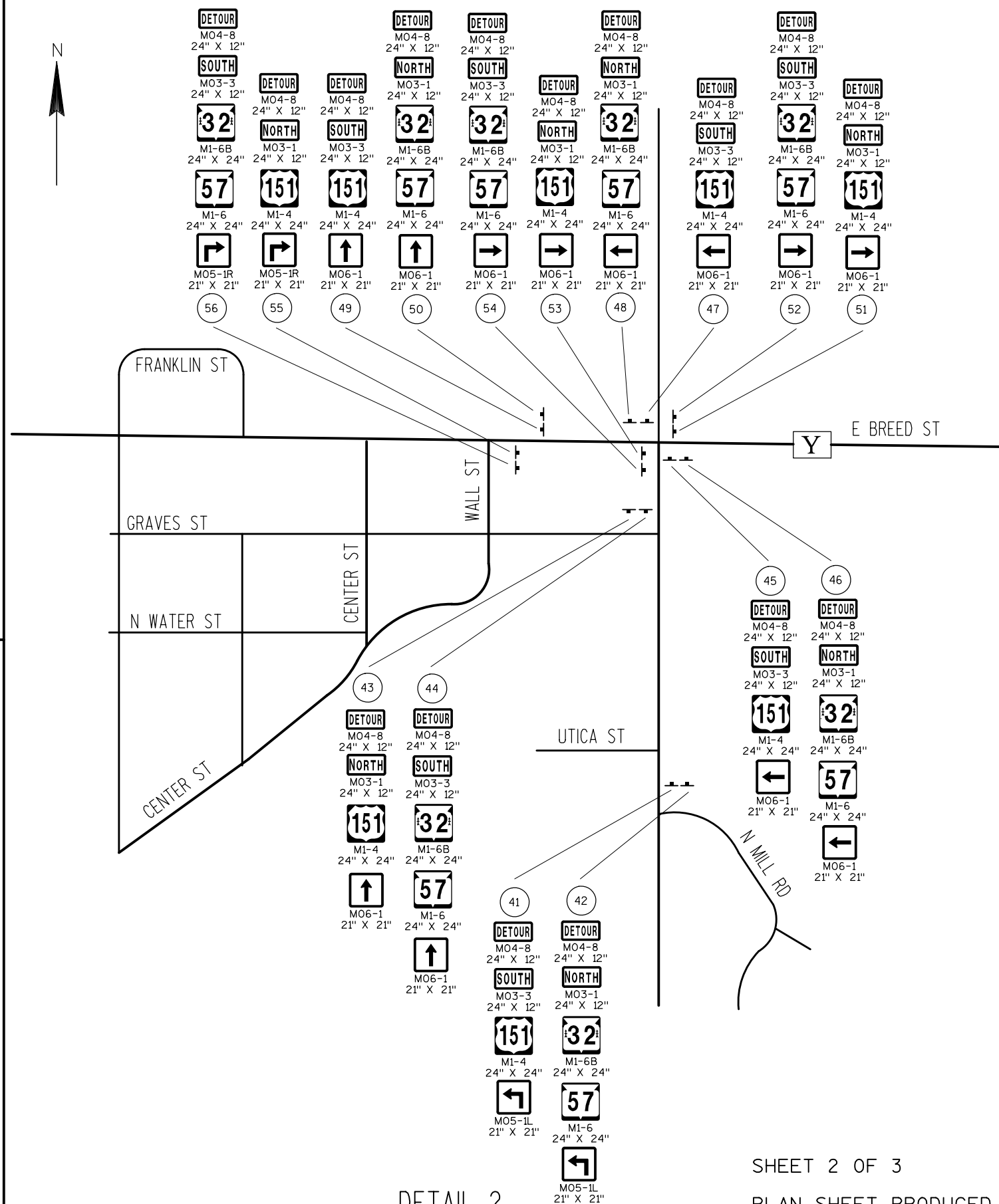
SHEET 1 OF 3
PLAN SHEET PRODUCED
BY WISDOT-NE REGION



LEGEND

- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

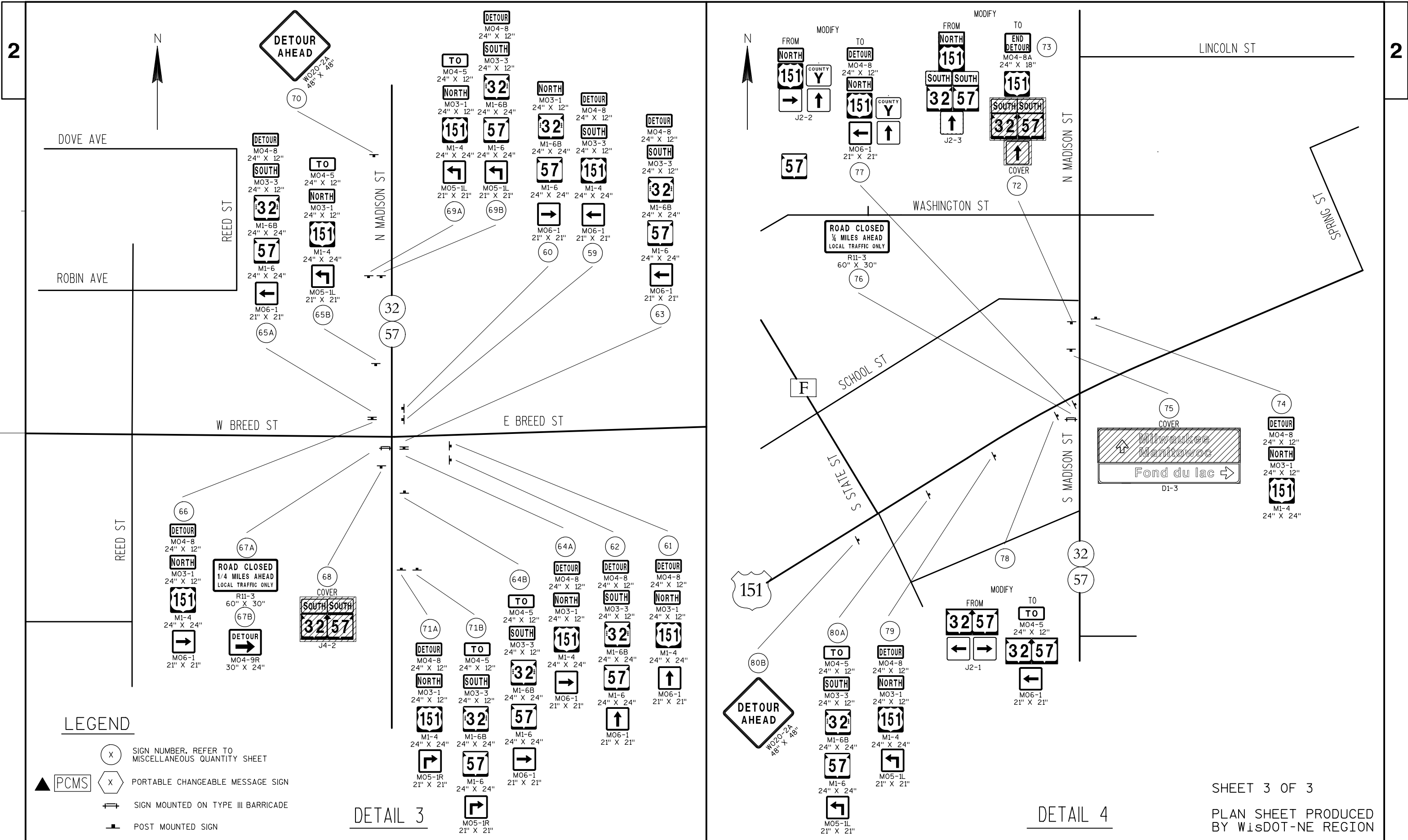
DETAIL 1



DETAIL 2

SHEET 2 OF 3

PLAN SHEET PRODUCED
BY WISDOT-NE REGION



PROJECT NO: 4100-31-71

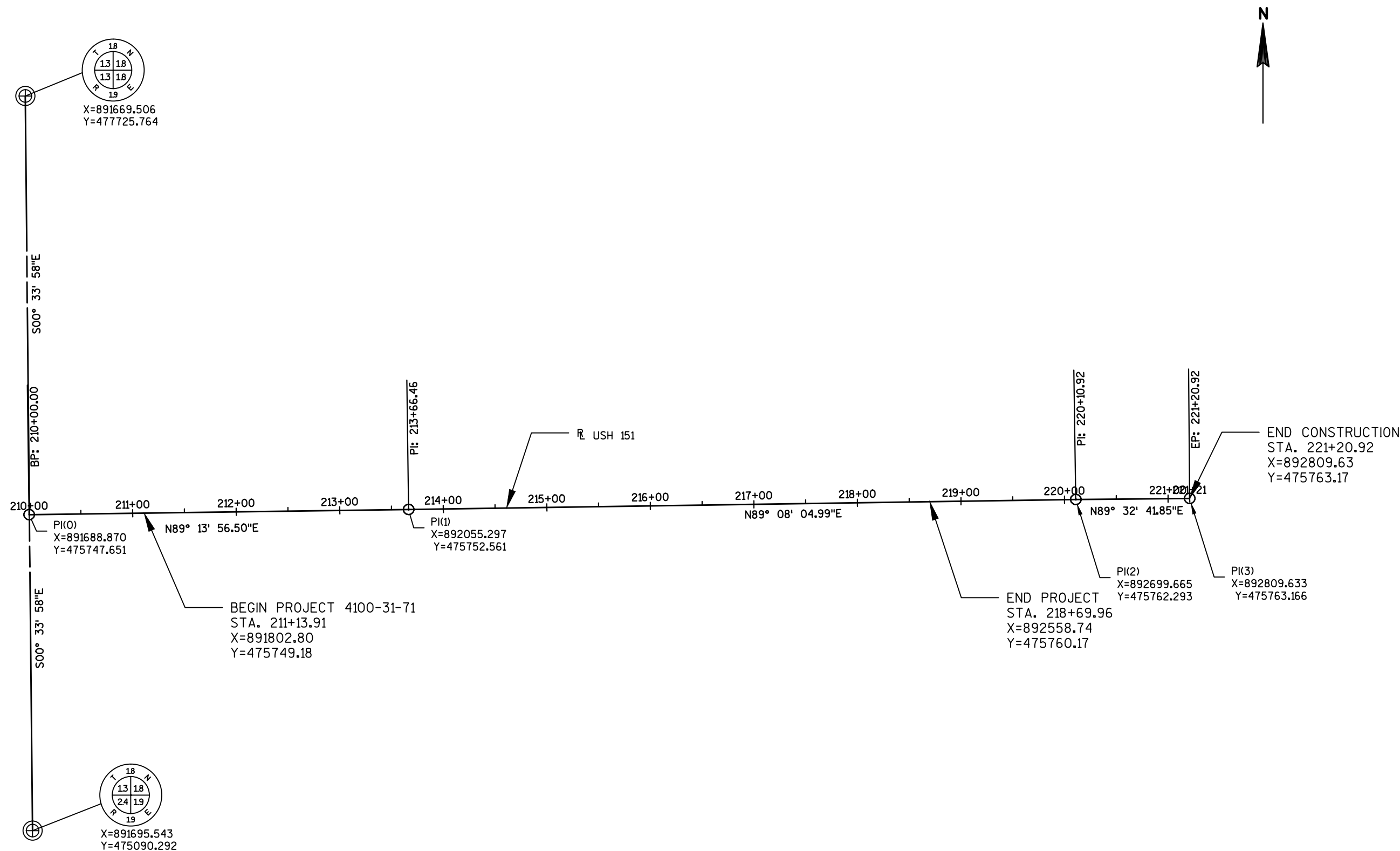
HWY: USH 151

COUNTY: CALUMET

DETOUR SIGNING DETAIL

SHEET

E



BP: 10+00.00
PI(6)
X = 475821.871
Y = 892056.616

S1° 15' 36.13"E

PI: 10+24.01

PI(5)
X = 475797.870
Y = 892057.144

R N MAPLE ST

S0° 16' 06.97"E

PI(1)
X=892055.297
Y=475752.561

PI: 213+66.46

EP: 10+69.29

214+00

R USH 151

PI(4)
X = 475752.592
Y = 892057.357



PI(1)
X=892055.297
Y=475752.561

R USH 151

BP: 15+00.00

PI(7)
X = 475752.527
Y = 892052.754

S0° 57' 50.57"E

PI(8)
X = 475704.559
Y = 892053.561

PI: 15+47.97

R S MAPLE ST

S0° 10' 13.02"W

EP: 15+84.43

PI(9)
X = 475668.104
Y = 892053.452



R ELM ST

S0° 34' 11.03"E

218+00

R USH 151

PI(10)
X = 475759.569
Y = 892519.274

EP: 20+73.54



DATE 09JUN15		E S T I M A T E O F Q U A N T I T I E S			
LINE					4100-31-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0210.S	Abatement of Asbestos Containing Material (structure) 01. Water Main	LS	1.000	1.000
0020	204.0100	Removing Pavement	SY	3,800.000	3,800.000
0030	204.0110	Removing Asphaltic Surface	SY	130.000	130.000
0040	204.0150	Removing Curb & Gutter	LF	1,665.000	1,665.000
0050	204.0155	Removing Concrete Sidewalk	SY	870.000	870.000
0060	204.0210	Removing Manholes	EACH	5.000	5.000
0070	204.0220	Removing Inlets	EACH	8.000	8.000
0080	204.0245	Removing Storm Sewer (size) 01. 8-Inch	LF	35.000	35.000
0090	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	770.000	770.000
0100	204.0291.S	Abandoning Sewer	CY	10.000	10.000
0110	205.0100	Excavation Common	CY	4,077.980	4,077.980
0120	213.0100	Finishing Roadway (project) 01. 4100-31-71	EACH	1.000	1.000
0130	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,520.000	1,520.000
0140	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,080.000	2,080.000
0150	311.0110	Breaker Run	TON	4,270.000	4,270.000
0160	415.0080	Concrete Pavement 8-Inch	SY	3,730.000	3,730.000
0170	415.0210	Concrete Pavement Gaps	EACH	3.000	3.000
0180	416.0160	Concrete Driveway 6-Inch	SY	210.000	210.000
0190	416.0610	Drilled Tie Bars	EACH	50.000	50.000
0200	416.0620	Drilled Dowel Bars	EACH	25.000	25.000
0210	455.0120	Asphaltic Material PG64-28	TON	12.000	12.000
0220	455.0605	Tack Coat	GAL	40.000	40.000
0230	460.1103	HMA Pavement Type E-3	TON	155.000	155.000
0240	460.2000	Incentive Density HMA Pavement	DOL	110.000	110.000
0250	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0260	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,650.000	1,650.000
0270	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	55.000	55.000
0280	601.0600	Concrete Curb Pedestrian	LF	20.000	20.000
0290	602.0410	Concrete Sidewalk 5-Inch	SF	6,175.000	6,175.000
0300	602.0415	Concrete Sidewalk 6-Inch	SF	1,700.000	1,700.000
0310	602.0420	Concrete Sidewalk 7-Inch	SF	830.000	830.000
0320	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	112.000	112.000
0330	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	145.000	145.000
0340	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	467.000	467.000
0350	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0360	611.0651	Inlet Covers Type S	EACH	2.000	2.000
0370	611.0660	Inlet Covers Type WM	EACH	13.000	13.000
0380	611.1004	Catch Basins 4-FT Diameter	EACH	14.000	14.000
0390	611.1006	Catch Basins 6-FT Diameter	EACH	2.000	2.000
0400	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4100-31-71	EACH	1.000	1.000
0410	619.1000	Mobilization	EACH	1.000	1.000
0420	624.0100	Water	MGAL	16.000	16.000
0430	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0440	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0450	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0460	628.7015	Inlet Protection Type C	EACH	23.000	23.000
0470	629.0205	Fertilizer Type A	CWT	57.000	57.000
0480	630.0140	Seeding Mixture No. 40	LB	4.000	4.000
0490	631.0300	Sod Water	MGAL	15.000	15.000

DATE 09JUN15		E S T I M A T E O F Q U A N T I T I E S				
LINE						4100-31-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL		QUANTITY
0500	631. 1000	Sod Lawn	SY	583. 000		583. 000
0510	634. 0614	Posts Wood 4x6-Inch X 14-FT	EACH	9. 000		9. 000
0520	634. 0616	Posts Wood 4x6-Inch X 16-FT	EACH	2. 000		2. 000
0530	634. 0618	Posts Wood 4x6-Inch X 18-FT	EACH	1. 000		1. 000
0540	634. 0620	Posts Wood 4x6-Inch X 20-FT	EACH	1. 000		1. 000
0550	637. 2210	Signs Type II Reflective H	SF	85. 610		85. 610
0560	638. 2102	Moving Signs Type II	EACH	5. 000		5. 000
0570	638. 2602	Removing Signs Type II	EACH	10. 000		10. 000
0580	638. 3000	Removing Small Sign Supports	EACH	8. 000		8. 000
0590	642. 5001	Field Office Type B	EACH	1. 000		1. 000
0600	643. 0100	Traffic Control (project) 01. 4100-31-71	EACH	1. 000		1. 000
0610	643. 0300	Traffic Control Drums	DAY	3, 974. 000		3, 974. 000
0620	643. 0410	Traffic Control Barricades Type II	DAY	3, 070. 000		3, 070. 000
0630	643. 0420	Traffic Control Barricades Type III	DAY	3, 058. 000		3, 058. 000
0640	643. 0705	Traffic Control Warning Lights Type A	DAY	8, 236. 000		8, 236. 000
0650	643. 0715	Traffic Control Warning Lights Type C	DAY	1, 218. 000		1, 218. 000
0660	643. 0900	Traffic Control Signs	DAY	4, 610. 000		4, 610. 000
0670	643. 0920	Traffic Control Covering Signs Type II	EACH	12. 000		12. 000
0680	643. 1050	Traffic Control Signs PCMS	DAY	14. 000		14. 000
0690	643. 2000	Traffic Control Detour (project) 01. 4100-31-71	EACH	1. 000		1. 000
0700	643. 3000	Traffic Control Detour Signs	DAY	35, 746. 000		35, 746. 000
0710	646. 0106	Pavement Marking Epoxy 4-Inch	LF	1, 270. 000		1, 270. 000
0720	647. 0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	50. 000		50. 000
0730	647. 0776	Pavement Marking Crosswalk Epoxy 12-Inch	LF	520. 000		520. 000
0740	650. 4000	Construction Staking Storm Sewer	EACH	14. 000		14. 000
0750	650. 4500	Construction Staking Subgrade	LF	831. 000		831. 000
0760	650. 5500	Construction Staking Curb Gutter and Curb & Gutter	LF	65. 000		65. 000
0770	650. 7000	Construction Staking Concrete Pavement	LF	831. 000		831. 000
0780	650. 9910	Construction Staking Supplemental Control (project) 01. 4100-31-71	LS	1. 000		1. 000
0790	690. 0150	Sawing Asphalt	LF	1, 485. 000		1, 485. 000
0800	690. 0250	Sawing Concrete	LF	305. 000		305. 000
0810	715. 0415	Incentive Strength Concrete Pavement	DOL	500. 000		500. 000
0820	ASP. 1T0A	On-the-Job Training Apprentice at \$5. 00/HR	HRS	300. 000		300. 000
0830	ASP. 1T0G	On-the-Job Training Graduate at \$5. 00/HR	HRS	600. 000		600. 000
0840	SPV. 0060	Special 01. Adjusting Water Valve Boxes	EACH	1. 000		1. 000
0850	SPV. 0060	Special 02. Abandon Water Valve	EACH	1. 000		1. 000
0860	SPV. 0060	Special 03. Remove Fire Hydrant	EACH	1. 000		1. 000
0870	SPV. 0060	Special 04. Cut and Plug Existing Water Main 6-Inch	EACH	2. 000		2. 000
0880	SPV. 0060	Special 05. Tee 8" X 6"	EACH	1. 000		1. 000
0890	SPV. 0060	Special 06. Bend 45-Degree 8"	EACH	10. 000		10. 000
0900	SPV. 0060	Special 07. Bend 45-Degree 6" With 8" X 6" Reducer	EACH	2. 000		2. 000
0910	SPV. 0060	Special 08. Remove Water Service Curb Stop	EACH	11. 000		11. 000
0920	SPV. 0060	Special 09. Water Service Curb Stop	EACH	10. 000		10. 000
0930	SPV. 0060	Special 10. Connect to Existing Water Main	EACH	3. 000		3. 000
0940	SPV. 0060	Special 11. Water Valve and Box 6-Inch	EACH	1. 000		1. 000
0950	SPV. 0060	Special 12. Water Valve and Box 8-Inch	EACH	1. 000		1. 000

DATE 09JUN15		E S T I M A T E O F Q U A N T I T I E S				
LINE						4100-31-71
NUMBER	ITEM	ITEM DESCRIPTION		UNIT	TOTAL	QUANTITY
0960	SPV. 0060	Special	13. Adjusting Sanitary Manhole Cover	EACH	2.000	2.000
0970	SPV. 0090	Special	01. Water Main 6-Inch PVC	LF	10.000	10.000
0980	SPV. 0090	Special	02. Water Main 8-Inch	LF	1,030.000	1,030.000
0990	SPV. 0090	Special	03. Water Service 1-Inch	LF	325.000	325.000
1000	SPV. 0090	Special	04. Removing Asbestos Water Main	LF	25.000	25.000
1010	SPV. 0105	Special	01. Concrete Pavement Joint Layout	LS	1.000	1.000
1020	SPV. 0105	Special	02. Construction Staking Water Main	LS	1.000	1.000
1030	SPV. 0105	Special	03. Temporary Water	LS	1.000	1.000

REMOVALS										
		ITEM 204.0100 REMOVING PAVEMENT	ITEM 204.0110 REMOVING ASPHALTIC SURFACE	ITEM 204.0150 REMOVING CURB & GUTTER	ITEM 204.0155 REMOVING CONCRETE SIDEWALK	ITEM 204.0210 REMOVING MANHOLES	ITEM 204.0220 REMOVING INLETS	ITEM 204.0245.01 REMOVING STORM SEWER 8-INCH	ITEM 204.0245.02 REMOVING STORM SEWER 12-INCH	ITEM 204.0291.S ABANDONING SEWER
LOCATION	CATEGORY	(SY)	(SY)	(LF)	(SY)	(EACH)	(EACH)	(LF)	(LF)	(CY)
211+13 to 218+69	0010	3650	118	1571	815	5	7	31	734	7
218+69 to 218+69	0010	-	-	45	12	-	-	-	-	-
UNDISTRIBUTED	0010	150	12	49	43	-	1	4	36	3
TOTALS		3800	130	1665	870	5	8	35	770	10

PAVEMENT																	
		ITEM 305.0110 BASE AGGREGATE DENSE 3/4-INCH	ITEM 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	ITEM 311.0110 BREAKER RUN	ITEM 415.0080 CONCRETE PAVEMENT 8-INCH	ITEM 415.0210 CONCRETE PAVEMENT GAPS	ITEM 416.0160 CONCRETE DRIVEWAY 6-INCH	ITEM 416.0610 DRILLED TIE BARS	ITEM 416.0620 DRILLED DOWEL BARS	ITEM 601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A	ITEM 601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	ITEM 601.0600 CONCRETE CURB PEDESTRIAN	ITEM 602.0410 CONCRETE SIDEWALK 5-INCH	ITEM 602.0415 CONCRETE SIDEWALK 6-INCH	ITEM 602.0420 CONCRETE SIDEWALK 7-INCH	ITEM 602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	ITEM SPV.0105.01 CONCRETE PAVEMENT JOINT LAYOUT
LOCATION	CATEGORY	(TON)	(TON)	(TON)	(SY)	(EA)	(SY)	(EACH)	(EACH)	(LF)	(LF)	(LF)	(SF)	(SF)	(SF)	(SF)	(LS)
211+13 to 218+69	0010	885	1372	3659	3361	3	-	38	8	1415	-	-	5375	1700	-	16	1
MAPLE ST NORTH	0010	-	31	108	82	-	-	-	4	52	-	-	260	-	340	32	-
MAPLE ST SOUTH	0010	-	33	128	114	-	-	-	4	52	-	-	-	-	205	32	-
ELM ST	0010	-	30	95	96	-	-	-	4	52	-	19	150	-	273	32	-
DRIVEWAYS	0010	-	55	-	-	-	190	-	-	-	-	-	-	-	-	-	-
PARKING LOTS	0010	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-
SIDEWALKS	0010	-	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-
218+69 to 221+21	0010	550	180	-	-	-	-	-	-	-	55	-	200	-	-	-	-
UNDISTRIBUTED	0010	85	314	280	57	-	20	12	5	79	-	1	190	-	12	-	-
TOTALS		1520	2080	4270	3730	3	210	50	25	1650	55	20	6175	1700	830	112	1

ASPHALT				
		ITEM 455.0120 ASPHALTIC MATERIAL PG64-28	ITEM 455.0605 TACK COAT	ITEM 460.1103 HMA PAVEMENT TYPE E-3
LOCATION	CATEGORY	(TON)	(GAL)	(TON)
218+69 to 221+21	0010	6	26	92
S Maple Street	0010	1	2	9
N Maple Street	0010	1	2	9
Elm Street	0010	1	2	9
DRIVEWAYS & PARKING LOTS	0010	2	3	26
UNDISTRIBUTED	0010	1	5	10
TOTALS		12	40	155

EARTHWORK SUMMARY

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100)		Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6)	Mass Ordinate +/- (7)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation (3)				Factor 1.33				
Division 1 (Category 0010)											(item #208.0100)	
S. Maple Street	15+20.01/15+47.91	S. Maple St	87	0	38	48	0	0	48	48	0	
N. Maple Street	15+20.01/10+49.25	N. Maple St	82	0	34	48	0	0	48	48	0	
Elm Street	10+24.03/20+53.54	Elm St	80	0	40	40	0	0	40	40	0	
USH 151 (E. Chestnut Street)	211+13.91/218+69.69	USH 151	3,729	0	1,353	2,376	14	19	2,358	2,358	0	
Division 1 Subtotal			3,978	0	1,465	2,513	14	19	2,494	2,494	0	
Division 2 (Category 0010)												
Undistributed			0	100	0	100	0	0	100	100	0	
Division 2 Subtotal			0	100	0	100	0	0	100	100	0	
Grand Total			3,977.98	100.00	1,465.30	2,612.68	14.21	18.90	2,593.78	2,593.78	0.00	
Total Common Exc			4,077.98									

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be considered Waste
4) Unusable Pavement Material is paid for under Items Removing Pavement, Removing Concrete Sidewalk, and Removing Curb & Gutter
5) Available Material = Cut - Unusuable Pavement Material
6) Expanded Fill. Factor = 1.33
Depending on selections: **Expanded Fill = Unexpanded Fill * Fill Factor**
7) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
Note: EBS Excavation Areas - This is to be filled with Breaker Run material and is paid for under Item Breaker Run

STORM SEWER PIPES							
PIPE NO. & UPSTREAM DOWNSTREAM STRUCTURE STRUCTURE		LENGTH	SLOPE	CATEGORY	ITEM 520.8000	ITEM 608.0312	ITEM 608.0412
					CONCRETE	STORM SEWER	STORM SEWER
					COLLARS FOR	PIPE REINFORCED	PIPE REINFORCED
					PIPE (EACH)	CONCRETE CLASS III 12-INCH (LF)	CONCRETE CLASS IV 12-INCH (LF)
A105	A100	55	0.50%	0010	-	55	-
A152	A150	56	0.50%	0010	-	56	-
B105	B101	194	0.50%	0010	-	-	194
B101	B100	7	0.50%	0010	-	-	7
B102	B101	27	0.50%	0010	-	-	27
A151	A150	10	0.50%	0010	-	10	-
A150	A100	40	0.50%	0010	-	-	40
A105	A106	18	0.27%	0010	-	18	-
B103	B102	40	0.50%	0010	-	-	40
B104	B103	25	0.50%	0010	-	-	25
B106	B105	41	0.50%	0010	-	-	41
C110	C100	53	0.50%	0010	-	-	53
C111	C110	29	0.50%	0010	-	-	29
UNDISTRIBUTED				0010	2	6	11
TOTALS					2	145	467

STORM SEWER STRUCTURES															611.0612	611.0651	ITEM 611.0660	ITEM 611.1004	ITEM 611.1006	SPV.0060.13
STR	CATEGORY	ALIGNMENT RL	STATION	OFFSET	RIM OR GRATE ELEV	INVERT ELEVATION								INLET COVERS TYPE C	INLET COVERS TYPE S	INLET COVERS TYPE WM	CATCH BASINS 4-FT DIAMETER	CATCH BASINS 6-FT DIAMETER	ADJUSTING SANITARY MANHOLE COVER (EACH)	
						NORTH	NORTHEAST	SOUTHEAST	EAST	SOUTH	NORTHWEST	SOUTHWEST	WEST	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	
A100	0010	E CHESTNUT ST	211+40	20.00	LT	900.57	-	-	-	896.90	896.90	-	-	896.74	-	-	1	-	1	-
A105	0010	E CHESTNUT ST	212+00	20.00	LT	900.38	897.30	-	-	-	-	-	-	897.20	-	-	1	1	-	-
A106	0010	E CHESTNUT ST	212+00	38.50	LT	900.65	-	-	-	-	897.35	-	-	-	-	1	-	1	-	-
A150	0010	E CHESTNUT ST	211+40	20.00	RT	900.59	897.10	-	-	897.20	897.20	-	-	-	-	-	1	1	-	-
A151	0010	E CHESTNUT ST	211+40	34.50	RT	900.56	897.25	-	-	-	-	-	-	-	-	1	-	1	-	-
A152	0010	E CHESTNUT ST	212+00	20.00	RT	900.38	-	-	-	-	-	-	-	897.50	-	-	1	1	-	-
B100	0010	E CHESTNUT ST	213+74.85	34.91	RT	901.08	-	-	-	897.22	897.14	-	-	897.19 (ABANDON)	1	-	-	1	-	-
B101	0000	S. MAPLE ST	15+37	16.00	LT	901.01	-	897.30	-	-	-	-	-	897.25	-	-	1	1	-	-
B102	0010	E CHESTNUT ST	214+02	20.00	RT	901.21	897.50	-	-	897.50	-	-	897.44	-	-	-	1	1	-	-
B103	0010	E CHESTNUT ST	214+02	20.00	LT	901.21	-	-	-	-	897.70	897.75	-	-	-	-	1	1	-	-
B104	0010	N. MAPLE ST	10+33	14.00	LT	901.17	-	-	897.88	-	-	-	-	-	-	-	1	1	-	-
B105	0010	E CHESTNUT ST	216+00	20.00	RT	902.94	898.57	-	-	-	-	-	-	898.47	-	-	1	1	-	-
B106	0010	E CHESTNUT ST	216+05	20.00	LT	903.01	-	-	-	-	898.78	-	-	-	-	-	1	1	-	-
C100	0010	E CHESTNUT ST	218+37.96	20.00	RT	907.44	901.00	-	-	901.49	899.74	-	-	-	-	-	1	-	1	-
C110	0010	ELM ST	20+36.53	14.63	LT	907.44	-	-	-	-	901.27	-	-	901.37	-	-	1	1	-	-
C111	0010	ELM ST	20+36.53	14.63	RT	907.15	-	-	-	901.51	-	-	-	-	-	-	1	1	-	-
SANITARY MANHOLES	0020	E CHESTNUT ST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
TOTALS															1	2	13	14	2	2

NOTE: RIM AND GRATE ELEVATIONS ARE TO FLANGE LINE OF CURB AND GUTTER FOR INLETS IN CURB AND GUTTER, ALL OTHER ELEVATION ARE TO CENTER OF STRUCTION

PERMANENT SIGNING, TYPE II															
SIGN NO.	CATEGORY	SIGN CODE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE		ITEM 634.0614	ITEM 634.0616	ITEM 634.0618	ITEM 634.0620	ITEM 637.2210	ITEM 638.2102	ITEM 638.2602	ITEM 638.3000	REMARKS
					W [IN.]	H [IN.]	POSTS WOOD 4X6- INCH X 14-FT [EA]	POSTS WOOD 4X6- INCH X 16-FT [EA]	POSTS WOOD 4X6- INCH X 18-FT [EA]	POSTS WOOD 4X6- INCH X 20-FT [EA]	SIGNS TYPE II REFLECTIVE H [SF]	MOVING SIGNS TYPE II [EA]	REMOVING SIGNS TYPE II [EA]	REMOVING SMALL SIGN SUPPORTS [EA]	
01-01(R)	0010	SPECIAL		FAIRGROUNDS	48	12	-	1	-	-	-	1	-	1	REMOVE AND RESET
	0010	R7-1-D		-	18	24	-	-	-	-	3.00	-	1	-	REMOVE AND REPLACE
01-02(R)	0010	J2-1		SOUTH	24	36	-	-	-	1	6.00	-	1	1	-
				[151]											
	0010	J2-2		NORTH NORTH	48	36	-	-	-	-	12.00	-	-	-	-
				[32] [57]											
	0010	M5-1R		[A]	21	21	-	-	-	-	3.06	-	-	-	-
01-03(R)	0010	R1-1		-	30	30	1	-	-	-	5.18	-	1	1	REMOVE AND REPLACE
	0010	SPECIAL		MAPLE ST	-	-	-	-	-	-	-	1	-	-	REMOVE AND RESET
	0010	SPECIAL		E CHESTNUT ST	-	-	-	-	-	-	-	1	-	-	REMOVE AND RESET
01-04(R)	0010	J2-1		NORTH	24	36	-	-	1	-	6.00	-	1	1	-
				[151]											
	0010	J2-2		SOUTH SOUTH	48	36	-	-	-	-	12.00	-	-	-	-
				[32] [57]											
01-05	0010	R7-1-D		-	18	24	1	-	-	-	3.00	-	-	-	-
01-06(R)	0010	R2-1		SPEED LIMIT 30	24	30	1	-	-	-	5.00	-	1	1	-
	0010	R7-1-D		-	18	24	-	-	-	-	3.00	-	-	-	-
01-07(R)	0010	R1-1		-	30	30	1	-	-	-	5.18	-	1	1	-
01-08	0010	R7-1-D		-	18	24	1	-	-	-	3.00	-	-	-	-
01-09R	0010	REMOVE		SPEED LIMIT 30	-	-	-	-	-	-	-	-	1	-	R2-1
	0010	REMOVE		-	-	-	-	-	-	-	-	-	-	-	R7-6-12
01-10	0010	R7-1-D		-	18	24	1	-	-	-	3.00	-	-	-	-
02-01(R)	0010	J2-1		JCT	24	36	-	1	-	-	6.00	-	1	1	-
				[G]											
02-02	0010	R2-1		SPEED LIMIT 30	24	30	1	-	-	-	5.00	-	-	-	-
02-03	0010	R1-1		-	30	30	1	-	-	-	5.18	-	-	-	-
02-04	0010	R1-1		-	-	-	-	-	-	-	-	-	1	1	REMOVE
	0010	SPECIAL		ELM ST	-	-	1	-	-	-	-	1	-	-	MOVE
	0010	SPECIAL		E CHESTNUT ST	-	-	-	-	-	-	-	1	-	-	MOVE
02-05R	0010	REMOVE		SPEED LIMIT 30	-	-	-	-	-	-	-	-	1	-	R2-1
	0010	REMOVE		-	-	-	-	-	-	-	-	-	-	-	R7-6-12
(R) DENOTES REMOVAL OF EXISTING SIGN IN SAME LOCATION							TOTALS	9	2	1	1	85.61	5	10	8

EROSION CONTROL

		ITEM 628.7005		ITEM 628.7015	
		INLET PROTECTION TYPE A		INLET PROTECTION TYPE C	
LOCATION	CATEGORY	(EA)	(EA)		
Begin Project	RT	0010	-	1	
STA 211+40	RT	0010	1	1	
STA 211+40	LT	0010	-	1	
STA 212+00	LT	0010	1	1	
STA 212+00	RT	0010	-	1	
STA 213+53	LT (MAPLE ST)	0010	-	1	
STA 214+02	RT	0010	-	1	
STA 214+03	LT	0010	-	1	
STA 216+00	RT	0010	-	1	
STA 216+05	LT	0010	-	1	
STA 218+15	LT (ELM ST)	0010	-	1	
STA 218+38	RT	0010	-	1	
STA 218+47	LT (ELM ST)	0010	-	1	
End Project	LT	0010	-	1	
End Project	RT	0010	-	1	
WATER MAIN EXTENSION		0010	-	1	
UNDISTRIBUTED		0010	1	7	
TOTALS			3	23	

EROSION CONTROL MOBILIZATION & RESTORATION

		ITEM 618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (4100-31-71)	ITEM 624.0100 WATER	ITEM 628.1905 MOBILIZATIONS EROSION CONTROL	ITEM 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	629.0205 FERTILIZER TYPE A	630.0140 SEEDING MIXTURE NO. 40	ITEM 631.0300 SOD WATER	ITEM 631.1000 SOD LAWN
LOCATION	CATEGORY	(EACH)	(MGAL)	(EA)	(EA)	(CWT)	(LB)	(MGAL)	(SY)
211+13 to 218+69	0010	1	15	2	2	56	3	13	540
218+69 to 221+21	0010	-	-	-	-	1	1	1	9
UNDISTRIBUTED	0010	-	1	-	-	-	-	1	34
TOTALS		1	16	2	2	57	4	15	583

TRAFFIC CONTROL

			ITEM 643.0300 TRAFFIC CONTROL DRUMS		ITEM 643.0410 TRAFFIC CONTROL BARRICADES TYPE II		ITEM 643.0420 TRAFFIC CONTROL BARRICADES TYPE III *		ITEM 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A *		ITEM 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		ITEM 643.0900 TRAFFIC CONTROL SIGNS	
DURATION														
CATEGORY	CALANDAR DAYS	#	(DAYS)	#	(DAYS)	#	(DAYS)	#	(DAYS)	#	(DAYS)	#	(DAYS)	
TOTAL PROJECT	0010	122	32	3904	24	2928	20	2440	57	6954	9	1098	37	4514
UNDISTRIBUTED	0010			70		142		130		306		120		96
TOTALS				3,974		3,070		2,570		7,260		1,218		4,610

*ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVI CE PERI OD 122	643. 3000 DETOUR SIGNS	643. 0420 BARRI CADES TYPE I I I *	643. 0705 WARNI NG LI GHTS TYPE A *	643. 1050 SI GNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERI NG SI GNS TYPE I I	
SIGN NO.	LOCATION										
1	100' S OF MAPLE HEIGHTS ST ON HWY 32/57	W 20-1-G	48"x48"	1	122	122					
2A	IN FRONT OF J1-1 (JCT 151)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-R	21"x21"	1	122	122					
2B	RT OF SIGN # 2A	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-R	21"x21"	1	122	122					
3	MODIFY J 2-3 (S-151-AH; 32/57/AH; N-151-AH RT)	MO 4-8	24"x12"	1	122	122					
		MO 3-3	EXI STI NG								
		M 1-4	EXI STI NG								151
		MO 5-1-R	21"x21"	1	122	122					
4	MODIFY J 2-3 (S-151-AH; 32/57/AH; N-151-AH RT)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	EXI STI NG								32
	" " "	M 1-6	EXI STI NG								57
	" " "	MO 5-1-R	21"x21"	1	122	122					
5	D 1-3 (AH-GREEN BAY/FOND DU LAC; MANI TOWOC-RT)									1	AH-GREEN BAY/ FOND DU LAC; ONE CYCLE
6	MODIFY J 2-1 (151-AH & RT)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	EXI STI NG								
	" " "	M 1-4	EXI STI NG								151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
7	RT OF SIGN # 6	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
8	NE QUAD OF STH 32/57 (SOUTH LEG) & USH 151 (EAST LEG)	R 11-3	60"x30"	1	122	122	122	244			1/4 MI LE
9	BELOW SIGN # 8	MO 4-9-R	30"x24"	1	122	122					
10	JV (SOUTH 151, NORTH-32/57)									1	SOUTH 151; NORTH-32/57; ONE CYCLE
11	J 3-3 (N-32-RT; N-57-RT; S-151-RT)									1	N-32-RT; N-57-RT; S-57-RT; ONE CYCLE
12	200' E OF STH 32/57 INTERSECTION ON USH 151 (EB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
13	RT OF SIGN # 12	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVICE PERIOD 122	643. 3000 DETOUR SIGNS	643. 0420 BARRICADES TYPE III *	643. 0705 WARNING LIGHTS TYPE A *	643. 1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERING SIGNS TYPE II	REMARKS
SIGN NO.	LOCATION										
14	D 1-1 (LT-MILWAUKEE; GREEN BAY/FOND DU LAC-RT)									1	GREEN BAY / FOND DU LAC-RT; ONE CYCLE
15	J 2-3 (S-57-AH LT; S-151-AH RT; N-57-AH RT)									1	S-151-AH RT; N-57-AH RT; ONE CYCLE
16	J 1-2 (JCT 32; JCT 57)	MO 4-8-A	24"x18"	2	122	244					
	" " "	M 50-2	EXISTING								32/57
17	100' E OF VOGT ST INTERSECTION ON USH 151 (EB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-L	21"x21"	1	122	122					
18	RT OF SIGN # 17	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-L	21"x21"	1	122	122					
19	@ BEGINNING OF LT TURN LANE ON HWY 151 EB	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
20	RT OF SIGN # 19	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
21	NE QUAD OF HWY 151 & IRISH RD INTERSECTION (FACING EB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
22	RT OF SIGN # 21	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
23	NW QUAD OF USH 151 & IRISH RD INTERSECTION	R 11-3	60"x30"	1	122	122	122	244			1 MILE
24	BELOW SIGN # 23	MO 4-9-R	30"x24"	1	122	122					
25	WITH SIGN # 21 (FACING WB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
26	WITH SIGN # 22 (FACING WB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVICE PERIOD 122	643. 3000 DETOUR SIGNS	643. 0420 BARRICADES TYPE III *	643. 0705 WARNING LIGHTS TYPE A *	643. 1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERING SIGNS TYPE II	REMARKS
SIGN NO.	LOCATION										
27	SW QUAD OF USH 151 & IRI SH RD INTERSECTION (FACING WB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
28	RT OF SIGN # 27	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
29	500' E OF SIGN # 25 ON USH 151 WB	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-R	21"x21"	1	122	122					
30	RT OF SIGN # 29	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-R	21"x21"	1	122	122					
31	400' E OF SIGN # 29 ON USH 151 WB	WO 20-2-A	48"x48"	1	122	122					
32	200' N OF HWY 151 INTERSECTION ON IRI SH RD	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
33	RT OF SIGN # 32	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
34	200' W OF IRI SH RD INTERSECTION ON HWY 151 (WB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
35	RT OF STOP SIGN (SB IRI SH RD @ HWY 151)	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
36	RT OF SIGN # 35	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
37	500' N OF SIGN # 35 ON SB IRI SH RD	MO 4-8-A	24"x18"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
38	RT OF SIGN # 37	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-R	21"x21"	1	122	122					

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVI CE PERI OD 122	643. 3000 DETOUR SIGNS	643. 0420 BARRI CADES TYPE I I I *	643. 0705 WARNI NG LI GHTS TYPE A *	643. 1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERI NG SI GNS TYPE I I	REMARKS
SIGN NO.	LOCATION										
39	200' N OF CLAY ST INTERSECTION ON IRISH RD	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
40	RT OF SIGN # 39	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
41	250' S OF MILL ST (NORTH LEG) ON IRISH RD	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-L	21"x21"	1	122	122					
42	RT OF SIGN # 41	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-L	21"x21"	1	122	122					
43	500' S OF BREED ST ON IRISH RD	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
44	RT OF SIGN # 43	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
45	RT OF STOP SIGN (IRISH RD & BREED ST INTERSECTION)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
46	RT OF SIGN # 45	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
47	NW QUAD OF IRISH RD & BREED ST INTERSECTION (FACING NB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
48	RT OF SIGN # 47	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVICE PERIOD	643. 3000 DETOUR SIGNS	643. 0420 BARRICADES TYPE III *	643. 0705 WARNING LIGHTS TYPE A *	643. 1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERING SIGNS TYPE II	REMARKS
SIGN NO.	LOCATION										
49	250' W OF IRISH RD INTERSECTION ON BREED ST	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
50	RT OF SIGN # 49	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
51	NE QUAD OF BREED ST & IRISH RD INTERSECTION	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
52	RT OF SIGN # 51	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
53	SW QUAD OF BREED ST & IRISH RD INTERSECTION	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
54	RT OF SIGN # 53	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
55	500' W OF SIGN # 53 ON BREED ST (EB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-R	21"x21"	1	122	122					
56	RT OF SIGN # 55	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-R	21"x21"	1	122	122					
57	100' W OF SPRING ST ON BREED ST (WB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-L	21"x21"	1	122	122					
58	RT OF SIGN # 57	MO 4-8-A	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVICE PERIOD	643. 3000 DETOUR SIGNS	643. 0420 BARRICADES TYPE III *	643. 0705 WARNING LIGHTS TYPE A *	643. 1050 SIGN PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERING SIGN TYPE II	REMARKS
SIGN NO.	LOCATION										
59	RT OF STOP SIGN (BREED ST & HWY 32/57 INTERSECTION)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
60	RT OF SIGN # 57	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
61	200' E OF STH 32/57 INTERSECTION ON BREED ST (EB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
62	RT OF SIGN # 61	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					AHEAD
63	SE QUAD OF HWY 32/57 & E BREED ST INTERSECTION	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
64A	BACKSIDE OF SIGN # 63 (FACING NB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
64B	150' S OF SIGN # 64A ON HWY 32/57 (NB)	MO 4-5	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT
65A	NW QUAD OF HWY 32/57 & W BREED ST INTERSECTION	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
65B	150' N OF SIGN # 65A ON HWY 32/57 (SB)	MO 4-5	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	M 5-1-L	21"x21"	1	122	122					
66	BACKSIDE OF SIGN # 65 (FACING NB TRAFFIC)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 6-1	21"x21"	1	122	122					RIGHT

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVI CE PERI OD	643. 3000 DETOUR SIG NS	643. 0420 BARRI CADES TYPE I I I *	643. 0705 WARNI NG LI GHTS TYPE A *	643. 1050 SI GNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERI NG SI GNS TYPE I I	
SIGN NO.	LOCATION										
		CODE	W X H	SERVI CE	122 DAYS	DAYS	DAYS	DAYS		EACH	REMARKS
67A	SW QUAD OF STH 32/57 & BREED ST INTERSECTION	R 11-3	60"x30"	1	122	122	122	244			1/4 MI LE
67B	BELOW SIGN # 67A	MO 4-9-R	30"x24"	1	122	122					
68	J4-2 (S-32; S-57)									1	S-32, S-57; ONE CYCLE
69A	500' N OF SIGN # 65 ON HWY 32/57 (SB)	MO 4-5	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					
	" " "	M 5-1-L	21"x21"	1	122	122					
69B	RT OF SIGN # 69A ON HWY 32/57 (SB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-L	21"x21"	1	122	122					
70	500' N OF SIGN # 69 ON HWY 32/57 (SB)	WO 20-2-A	48"x48"	1	122	122					
71A	500' S OF SIGN # 64 ON HWY 32/57 (NB)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-R	21"x21"	1	122	122					
71B	150' S OF SIGN # 71A ON HWY 32/57 (NB)	MO 4-5	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-R	21"x21"	1	122	122					
72	J2-3 (N-151; S-32; S-57; AH)									1	S-32, S-57; ONE CYCLE
73	MODI FY J2-3 (N-151; S-32; S-57)	MO 4-8-A	24"x18"	1	122	122					
	" " "	M 1-4	EXI STI NG								
74	ABOVE J4-2 (N-32, N-57)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
75	D 1-3 (AH- MILWAUKEE/MANI TOWOC; FOND DU LAC-RT)									1	AH-MI LWAUKEE / MANI TOWOC; ONE CYCLE
76	SW QUAD OF STH 32/57 & HWY 151 INTERSECTION	R 11-3	60"x30"	1	122	122	122	244			1/4 MI LE
77	MODI FY J2-2 (CTY Y-AH; 151-RT)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	EXI STI NG								
	" " "	M 1-4	EXI STI NG								151
	" " "	MO 6-1	21"x21"	1	122	122					LEFT
78	MODI FY J2-1 (32/57-LT & RT)	MO 4-5	24"x12"	1	122	122					
	" " "	M 1-6B	EXI STI NG								32
	" " "	M 1-6	EXI STI NG								57
	" " "	MO 6-1	21"x21"	1	122	122					LEFT

CONTINUED FROM PREVIOUS SHEET

* ADDI TIONAL I TEMS LI STED ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY CONTINUED

CATEGORY 0010		SIGN	SIZE	NUMBER IN	APPROX. SERVICE PERIOD 122	643. 3000 DETOUR SIGNS	643. 0420 BARRICADES TYPE III *	643. 0705 WARNING LIGHTS TYPE A *	643. 1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643. 0920 COVERING SIGNS TYPE II	
SIGN NO.	LOCATION										
79	ABOVE J1-1 (JCT Y)	MO 4-8	24"x12"	1	122	122					
	" " "	MO 3-1	24"x12"	1	122	122					
	" " "	M 1-4	24"x24"	1	122	122					151
	" " "	MO 5-1-L	21"x21"	1	122	122					
80A	150' S OF SIGN # 79 ON HWY 151 (EB)	MO 4-5	24"x12"	1	122	122					
	" " "	MO 3-3	24"x12"	1	122	122					
	" " "	M 1-6B	24"x24"	1	122	122					32
	" " "	M 1-6	24"x24"	1	122	122					57
	" " "	MO 5-1-L	21"x21"	1	122	122					
80B	150' W OF SIGN # 79 ON HWY 151 (EB)	WO 20-2-A	48"x48"	1	122	122					
81	J 4-3 (N-151; S-32; S-57)									1	N-151; S-32; S-57; ONE CYCLE
82	J 4-3 (N-151; S-32; S-57; AH LT)									1	N-151; S-32; S-57, AH LT; ONE CYCLE
83	J 4-3 (N-151; S-32; S-57; LT)									1	N-151; S-32; S-57, LT; ONE CYCLE
84	J2-2 (N-151-LT; G-AH)									1	N-151-LT; ONE CYCLE
85	FIELD DETERMINER (FACING SB TRAFFIC)			1					7		
86	FIELD DETERMINER (FACING NB TRAFFIC)			1					7		
	TOTAL			293		35,746	488	976	14	12	

CONTINUED FROM PREVIOUS SHEET

* ADDITIONAL ITEMS LISTED ELSEWHERE

PAVEMENT MARKING						
			ITEM 646.0106	ITEM 647.0566	ITEM 647.0776	
			PAVEMENT MARKING	PAVEMENT MARKING	PAVEMENT MARKING	
			EPOXY 4-INCH	STOP LINE	CROSSWALK	
				EPOXY 18-INCH	EPOXY 12-INCH	
LOCATION		CATEGORY	YELLOW (LF)	WHITE (LF)	WHITE (LF)	
211+14	TO	218+70	0010	1,253	-	
INTERSECTION OF MAPLE ST AND E CHESTNUT			0010	-	30	
INTERSECTION OF ELM ST AND E CHESTNUT			0010	-	15	
UNDISTRIBUTED			0010	17	5	
TOTALS				1,270	50	
					520	

CONSTRUCTION STAKING ITEMS									
		ITEM 650.4000	ITEM 650.4500	ITEM 650.5500	ITEM 650.7000	ITEM 650.9910	ITEM SPV.0105.02		
		CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION		
		STAKING	STAKING	STAKING	STAKING	STAKING	STAKING		
		STORM	SUBGRADE	CURB GUTTER	CONCRETE	SUPPLEMENTAL	WATER		
		SEWER		AND	PAVEMENT	CONTROL	MAIN		
				CURB & GUTTER		(4100-31-71)			
LOCATION		CATEGORY	(EACH)	(LF)	(LF)	(LF)	(LS)	(LS)	
211+13	to	218+69	0010	14	756	-	756	1	-
218+69	to	221+21	0010	-	-	45	-	-	-
218+69	to	221+21	0020	-	-	-	-	-	1
UNDISTRIBUTED		0010	-	75	20	75	-	-	-
TOTALS			14	831	65	831	1	1	

SAWING					
			ITEM 690.0150	ITEM 690.0250	
			SAWING	SAWING	
			ASPHALT	CONCRETE	
LOCATION		CATEGORY	(LF)	(LF)	
211+13	to	218+69	0010	923	272
218+69	to	221+21	0010	540	10
UNDISTRIBUTED		0010	22	23	
TOTALS			1,485	305	

WATER MAIN ITEMS													
		ITEM SPV.0060.01	ITEM SPV.0060.02	ITEM SPV.0060.03	ITEM SPV.0060.04	ITEM SPV.0060.05	ITEM SPV.0060.06	ITEM SPV.0060.07	ITEM SPV.0060.08	ITEM SPV.0060.09	ITEM SPV.0060.10	ITEM SPV.0060.11	ITEM SPV.0060.12
		ADJUSTING WATER VALVE BOXES	ABANDON WATER VALVE	REMOVE FIRE HYDRANT	CUT AND PLUG EXISTING WATER MAIN 6-INCH	TEE 8" X 6"	BEND 45-DEGREE 8"	BEND 45-DEGREE 6" WITH 8" X 6" REDUCER	REMOVE WATER SERVICE CURB STOP	WATER SERVICE CURB STOP	CONNECT TO EXISTING WATER MAIN	WATER VALVE AND BOX 6-INCH	WATER VALVE AND BOX 8-INCH
LOCATION	CATEGORY	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)
211+13 to 218+69	0020	1	1	1	1	1	1	1	8	7	2	1	-
218+69 to 221+21	0020	-	-	-	1	-	1	1	3	3	1	-	1
UNDISTRIBUTED	0020	-	-	-	-	-	8	-	-	-	-	-	-
TOTALS		1	1	1	2	1	10	2	11	10	3	1	1

WATER MAIN ITEMS CONTINUED							
		ITEM SPV.0090.01	ITEM SPV.0090.02	ITEM SPV.0090.03	ITEM SPV.0090.04	ITEM SPV.0105.03	ITEM 203.0210.S.01
		WATER MAIN 6-INCH PVC	WATER MAIN 8-INCH	WATER SERVICE 1-INCH	REMOVING ASBESTOS WATER MAIN *	TEMPORARY WATER	ABATEMENT OF ASBESTOS CONTAINING MATERIAL WATER MAIN*
LOCATION	CATEGORY	(LF)	(LF)	(LF)	(LF)	(LS)	(LS)
211+13 to 218+69	0020	7	760	249	25	1	1
218+69 to 221+21	0020	3	256	68	-	-	-
UNDISTRIBUTED	0020	-	14	8	-	-	-
TOTALS		10	1,030	325	25	1	1

* APPROXIMATE QUANTITY OF 25 LF OF ABATEMENT OF ASBESTOS WATER MAIN AND REMOVING ASBESTOS WATER MAIN ASSUMED FOR ITEMS

CONVENTIONAL SIGNS AND ABBREVIATIONS

COUNTY LINE	=====	NON-COMPENSABLE	COMPENSABLE
TOWNSHIP AND RANGE LINES	-----	SERVICE PEDESTAL	
SECTION LINE	-----	POWER POLE	
QUARTER LINE	-----	TELEPHONE POLE	
SIXTEENTH LINE	-----	SIGN	
NEW REFERENCE LINE		ACCESS RESTRICTED (BY ACQUISITION)	=====
NEW R/W LINE	=====	NO ACCESS (BY STATUTORY AUTHORITY)
EXISTING R/W LINE	=====	ACCESS RESTRICTED (BY PREVIOUS PROJECT)	◆◆◆◆◆
PROPERTY LINE	-----	PERMANENT LIMITED EASEMENT	
CORPORATE LIMITS	////NAME////	TEMPORARY LIMITED EASEMENT	
LOT, TIE AND OTHER MINOR LINES	-----	FEE	
SLOPE INTERCEPTS		NON-MONUMENTED SURVEY POINT	○
UNDERGROUND FACILITY (GAS, TELEPHONE, ELECTRIC, ETC.)		SECTION CORNER	
FENCE	---x---x---x---	BUSHES	
HAZARDOUS UTILITY SITE		TREES (DECIDUOUS)	
CULVERT (BOX, PIPE OR CATTLE PASS)		TREES (CONIFEROUS)	
RAIL LINE	=====	WOODS	
FOUNDATION OR RUIN			
BUILDING			
CEMETERY			
TELEPHONE PEDESTAL			
IRON PIN			
IRON PIN SET (TYPE 2)			
VALVE	●VLV (TYPE)		
SILLO, MANHOLE, VENT SEPTIC VENT, WELL, ETC.	●MH (TYPE)		

NOTES:

BEARINGS ON THIS PLAT ARE ORIENTED TO GRID NORTH OF THE WISCONSIN COUNTY COORDINATE SYSTEM, CALUMET COUNTY, NAD83 (1991), WITHIN WHICH THE WEST LINE OF THE SW 1/4 OF SECTION 18, T18N, R20E IS ASSUMED TO BEAR N00°33'58"W.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, CALUMET COUNTY, NAD 83(1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES HEREON ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM AND/OR OTHER SURVEYS OF PUBLIC RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL/MONUMENTED LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING OWNERSHIP LINES, EXCLUDING RIGHT OF WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NE REGION OFFICE. IN GREEN BAY, WI.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION PLAN OF PROPOSED IMPROVEMENTS E. CHESTNUT STREET, CITY OF CHILTON

S. MADISON STREET - ELM STREET

U.S.H. 151
CALUMET

STATE PROJECT NUMBER
4100-31-21

END RELOCATION ORDER

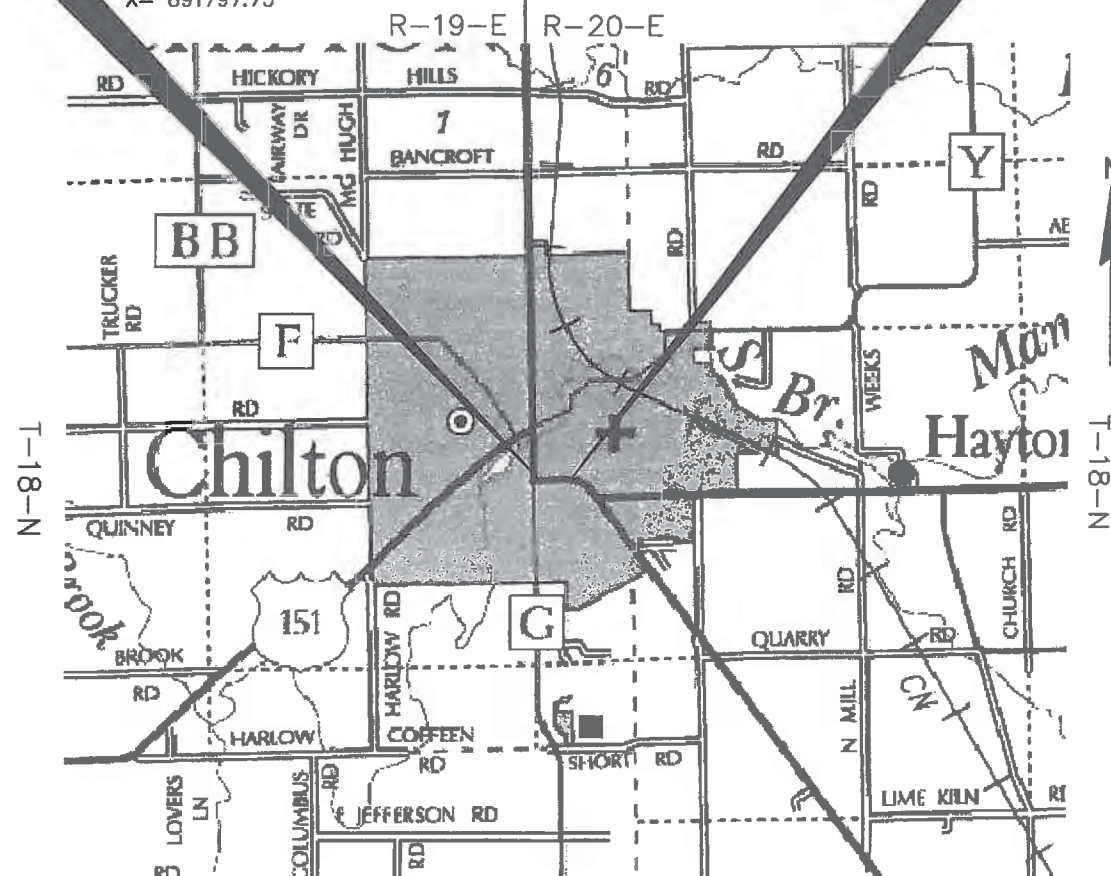
PROJECT ID: 4100-31-21 STA. 218+74.52

Y= 475760.24
X= 892563.30

BEGIN RELOCATION ORDER

PROJECT ID: 4100-31-21 STA. 211+08.89

Y= 475749.11
X= 891797.75



LAYOUT
SCALE 0 1 MI.

R-19-E R-20-E

TOTAL NET LENGTH OF CENTERLINE = 0.143 MI. (URBAN)

AC.	ACRE	LT.	LEFT
AH.	AHEAD	ML.	MILE
ALUM. MON.	ALUMINUM MONUMENT	PG.	PAGE
ANT.	ANTENNA	P.C.	POINT OF CURVATURE
A.P.	ACCESS POINT	P.E.	PRIVATE ENTRANCE
B.	BARN	PERM.	PERMANENT
BK.	BACK	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C.	CHURCH	P.L.E.	PERMANENT LIMITED EASEMENT
C.E.	COMMERCIAL ENTRANCE	R.	RADIUS
C/L	CENTERLINE	R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
CONC. MON.	CONCRETE MONUMENT	REM.	REMAINING
CONST.	CONSTRUCTION	REST.	RESTAURANT
C.P.	CULVERT PIPE	RT.	RIGHT
C.S.M.	CERTIFIED SURVEY MAP	R/W	RIGHT OF WAY
D.	DEGREE OF CURVE	S.	SHED
ETAL.	AND OTHERS	S.D.	STORM DRAINAGE
F.E.	FIELD ENTRANCE	S.F.	SQUARE FEET
FRL.	FRACTIONAL	STA.	STATION
FT.	FEET	T	TANK
G.	GARAGE	TAV.	TAVERN
H.	HOUSE	TEMP.	TEMPORARY
L.	LENGTH OF CURVE	T.L.E.	TEMPORARY LIMITED EASEMENT
L.C.	LONG CHORD OF CURVE	VOL.	VOLUME
L.C.B.	LONG CHORD BEARING	W	WALL

APPROVED FOR THE CITY OF CHILTON

9-29-14 *Todd Schuy*
DATE SIGNATURE

ORIGINAL PLAT PREPARED BY:
ONE SOURCE CONSULTING



SEPTEMBER 25, 2014
DATE

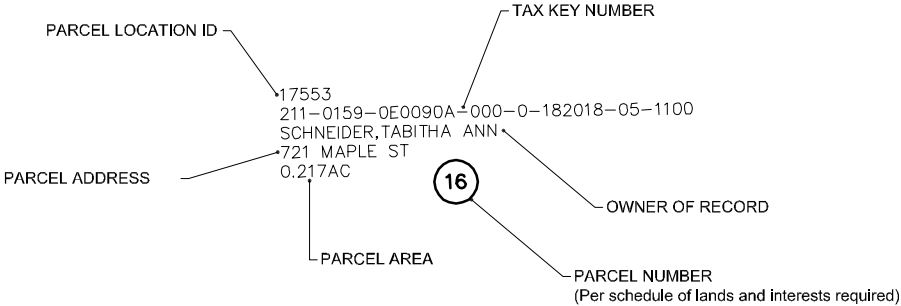
James R. Beatty
REGISTERED LAND SURVEYOR

E

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL (ACRES)	T.L.E. REQ'D. (SQ. FT.)	P.L.E. REQ'D. (SQ. FT.)
①	GREGOR PROPERTIES LLC	T.L.E.	1.64	60.47	----
②	CONVENIENCE STORE INVESTMENTS	T.L.E.	2.47	1514.51	----
④	CHESTNUT STREET PROPERTIES INC	T.L.E.	1.499	1320.95	----
⑤	CITY OF CHILTON (MAPLE ST. R.O.W)	---	0.88	---	----
⑥	GREGOR PROPERTIES LLC	T.L.E.	0.22	214.50	----
⑦	MUELLER, ERIK J	T.L.E. & P.L.E.	0.281	164.29	124.65
⑧	HILBERT, WILLIAM E & JULIE A	T.L.E.	0.525	539.50	----
⑨	PRODUCTIONCREDIT ASSN OF EAST	T.L.E.	0.31	682.50	----
⑩	SCHLAEFER REVOC LIVING TRUST	T.L.E.	0.327	202.88	----
⑪	WEBER OIL COMPANY	T.L.E.	0.313	736.46	----
⑫	LA-TEC CREDIT UNION	T.L.E.	0.668	884.39	----
⑭	PREMIER FINANCIAL CREDIT UNION	T.L.E.	0.840	1179.78	----
⑰	WHALEY, JAMES A	T.L.E. & P.L.E.	0.778	1485.32	152.70
⑩⑩	WISCONSIN PUBLIC SERVICE	RELEASE OF RIGHTS	----	----	----

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS.



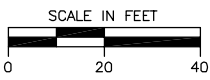
PARCEL LABEL LEGEND

COURSE TABLE - T.L.E.			
FROM	TO	BEARING	DIST.
100	108	N 89°13'58" E	24.20'
108	115	S 00°46'02" E	6.50'
115	101	S 89°13'58" W	24.20'
101	100	N 00°46'02" W	6.50'
106	107	N 89°13'58" E	1.13'
107	103	S 00°33'58" E	6.50'
103	114	S 89°13'58" W	1.11'
114	106	N 00°46'02" W	6.50'
107	109	N 89°13'58" E	105.00'
109	112	S 00°33'58" E	6.50'
112	103	S 89°13'58" W	105.00'
109	110	N 89°13'58" E	83.00'
110	111	S 00°33'58" E	6.50'
111	112	S 89°13'58" W	83.00'
113	122	N 89°08'03" E	233.00'
122	121	S 00°33'58" E	6.50'
121	116	S 89°08'03" W	233.00'
116	113	N 00°33'58" W	6.50'
122	123	N 89°08'03" E	203.22'
123	124	S 00°41'28" E	6.50'
124	121	S 89°08'03" W	203.23'
123	125	N 89°08'03" E	33.00'
125	126	S 00°33'58" E	6.50'
126	124	S 89°08'03" W	33.00'
125	128	N 89°08'03" E	9.29'
128	127	S 00°51'57" E	6.50'
127	126	S 89°08'03" W	9.31'
134	133	N 00°33'58" W	20.00'
133	132	N 89°08'03" E	7.00'
132	131	S 00°33'58" E	13.00'
131	130	N 89°08'03" E	8.96'
130	129	S 00°51'57" E	7.00'
129	134	S 89°08'03" W	16.00'
139	140	N 00°33'58" W	6.50'
140	137	N 89°08'03" E	98.30'
137	136	N 00°33'58" W	13.00'
136	135	N 89°08'03" E	5.00'
135	138	S 00°33'58" E	19.50'
138	139	S 89°08'03" W	103.30'
139	143	S 89°08'03" W	136.09'
143	144	N 00°33'58" W	6.50'
144	140	N 89°08'03" E	136.09'
144	143	S 00°33'58" E	6.50'
143	147	S 89°08'03" W	173.81'
147	148	N 00°33'58" W	16.50'
148	149	N 89°08'03" E	5.00'
149	150	S 00°33'58" E	10.00'
150	144	N 89°08'03" E	168.81'
155	160	N 00°46'02" W	6.50'
160	154	N 89°13'58" E	132.31'
154	153	N 00°33'58" W	9.00'
153	151	N 89°13'58" E	5.00'
151	152	S 00°33'58" E	15.50'
152	155	S 89°13'58" W	137.29'
162	163	N 00°46'02" W	6.50'
163	158	N 89°13'58" E	85.37'
158	157	S 00°46'02" E	6.50'
157	162	S 89°13'58" W	84.18'

COURSE TABLE - P.L.E.			
FROM	TO	BEARING	DIST.
157	159	N 00°46'02" W	11.00'
159	161	N 89°13'58" E	13.88'
161	155	S 00°46'02" E	11.00'
155	157	S 89°13'58" W	13.88'
108	106	N 89°13'58" E	13.85'
106	105	S 00°46'02" E	9.00'
105	102	S 89°13'58" W	13.85'
102	108	N 00°46'02" W	9.00'

REVISION DATE	_____
_____	_____
_____	_____

DATE	SEPTEMBER 12, 2014
_____	_____



HWY: U.S.H. 151
COUNTY: CALUMET

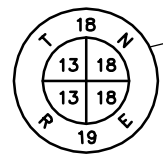
STATE R/W PROJECT NUMBER 4100-31-21
CONSTRUCTION PROJECT NUMBER 4100-31-71

PLAT SHEET	4.02
PS&E SHEET	_____

PLE (PERMANENT LIMITED EASEMENT) AS SHOWN FOR STORM DRAINAGE PURPOSES
TLE (TEMPORARY LIMITED EASEMENT) AS SHOWN FOR SLOPE GRADING PURPOSES

CITY

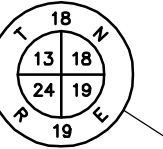
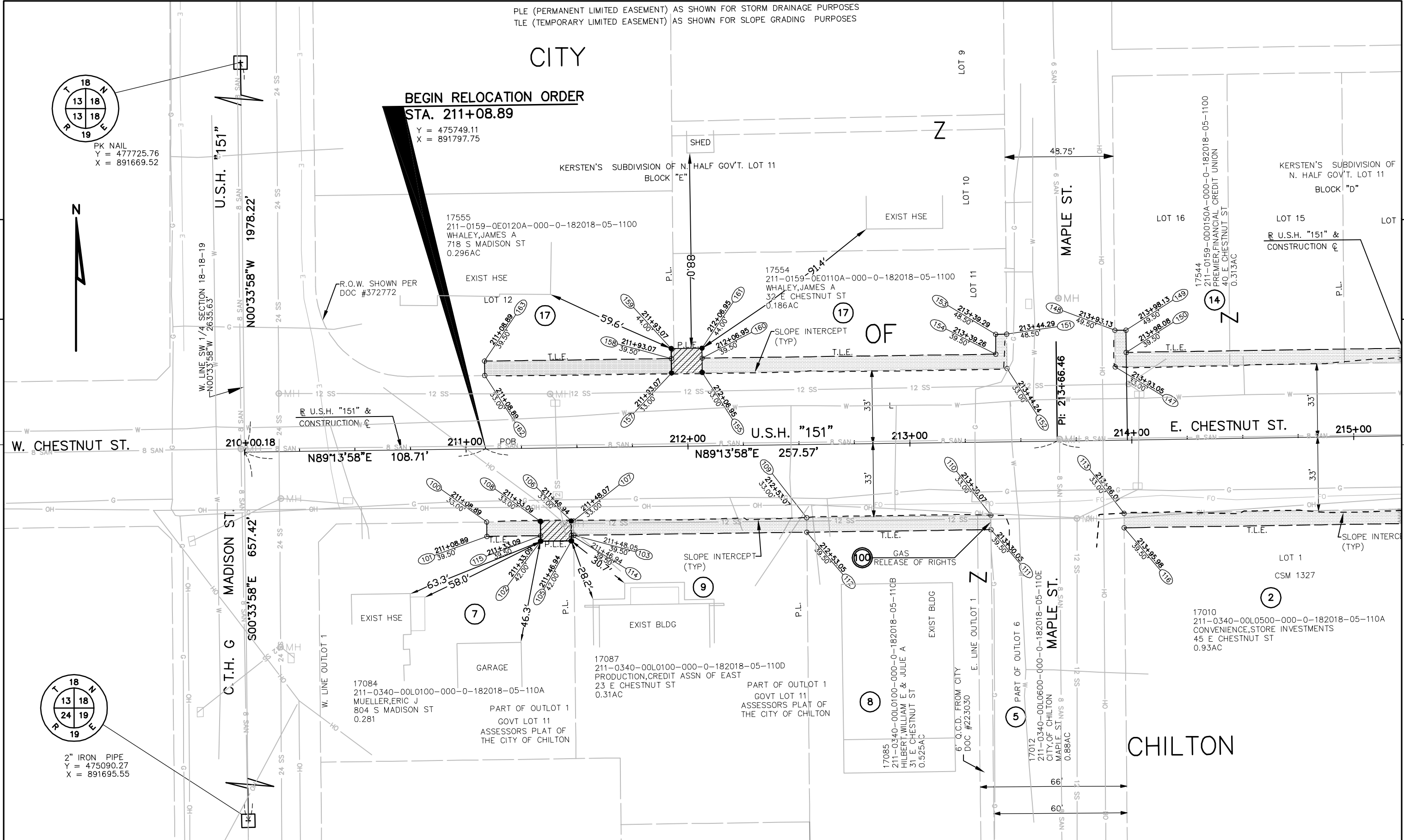
BEGIN RELOCATION ORDER
STA. 211+08.89
Y = 475749.11
X = 891797.75



PK NAIL
Y = 477725.76
X = 891669.52

4

4



2" IRON PIPE
Y = 475090.27
X = 891695.55

REVISION DATE _____	DATE SEPTEMBER 12, 2014	SCALE IN FEET 0 20 40	HWY: U.S.H. 151	STATE R/W PROJECT NUMBER 4100-31-21	PLAT SHEET 4.03
_____	_____	_____	COUNTY: CALUMET	CONSTRUCTION PROJECT NUMBER 4100-31-71	PS&E SHEET _____

PLE (PERMANENT LIMITED EASEMENT) AS SHOWN FOR STORM DRAINAGE PURPOSES
TLE (TEMPORARY LIMITED EASEMENT) AS SHOWN FOR SLOPE GRADING PURPOSES

CITY

N

BLOCK SHORT - LOTS PRORATED

KERSTEN'S SUBDIVISION OF
N. HALF GOV'T. LOT 11
BLOCK "D"

LOT 15

LOT 14

LOT 13

LOT 12

LOT 11

KERSTEN'S SUBDIVISION OF
N. HALF GOV'T. LOT 11
BLOCK "D"

LOT 10

LOT 9

LOT 16

LOT 15

LOT 14

KERSTEN'S SUBDIVISION OF
N. HALF GOV'T. LOT 11
BLOCK "C"

17533

211-0159-000150A-000-0-182018-05-1100
SCHLAEFER, REVOC LIVING TRUST
102 E CHESTNUT ST
0.327AC

17532

OF

N

N

NUT ST.

215+00

216+00

U.S.H. "151"

217+00

218+00

219+00

E. CHESTNUT ST. 220+00

U.S.H. "151"

LOT 1

CSM 1327

LOT 1

CSM 1607

LOT 2

CSM 1607

17011
211-0340-0000600-000-0-182018-05-1100
CHESTNUT, STREET PROPERTIES INC
61 E CHESTNUT ST
1.499AC

1

17007
211-0340-0000600-000-0-182018-05-110A
GREGOR, PROPERTIES LLC
101 E CHESTNUT ST
1.64AC

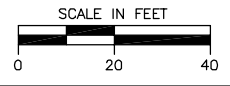
END RELOCATION ORDER
STA. 218+74.52

Y = 475760.24
X = 892563.30

CHILTON

REVISION DATE	DATE
	SEPTEMBER 12, 2014

DATE	SEPTEMBER 12, 2014



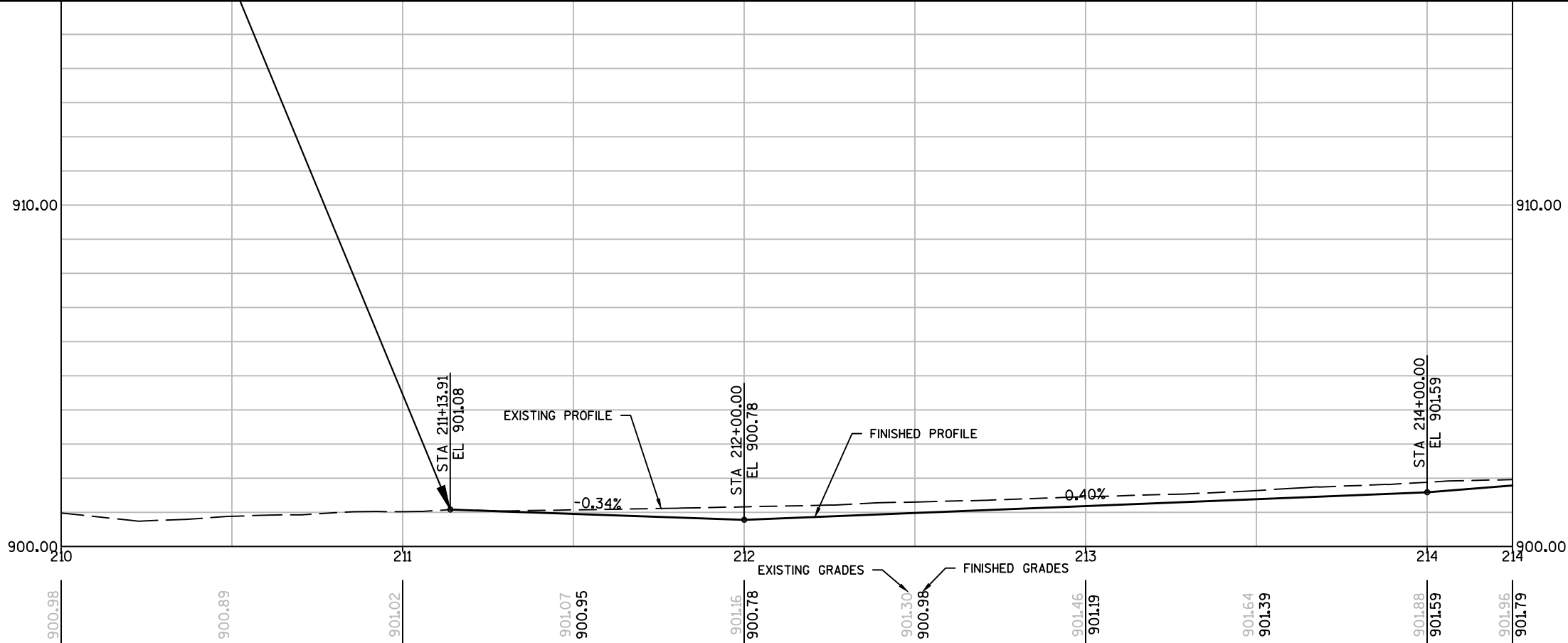
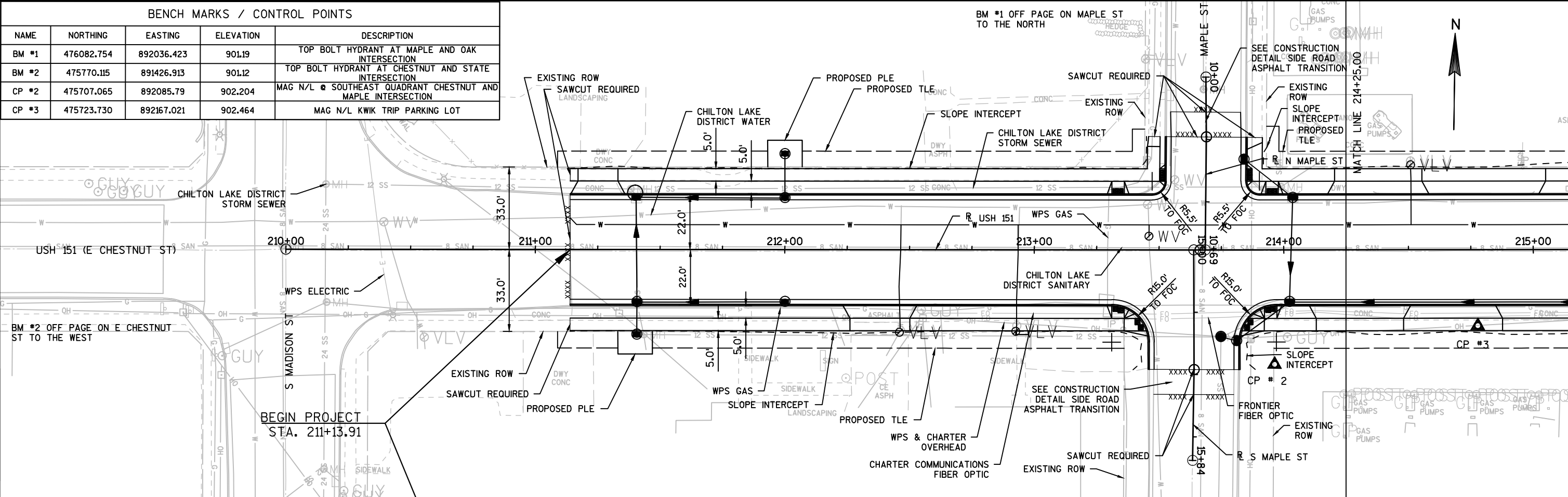
HWY: U.S.H. 151
COUNTY: CALUMET

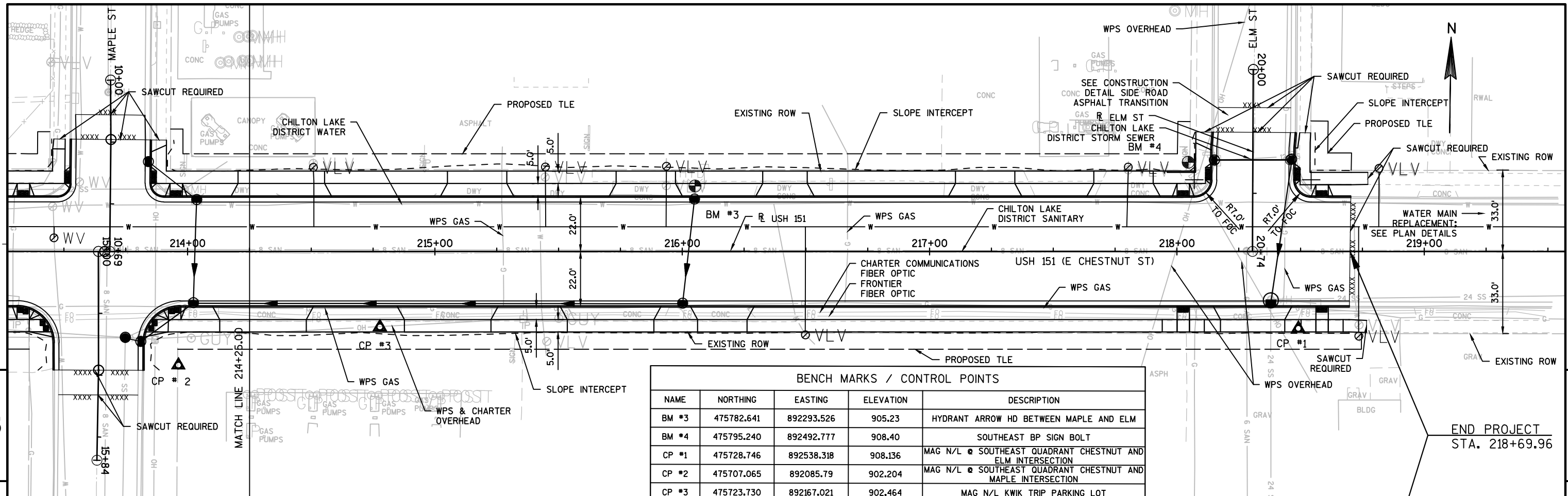
STATE R/W PROJECT NUMBER 4100-31-21
CONSTRUCTION PROJECT NUMBER 4100-31-71

PLAT SHEET 4.04
PS&E SHEET

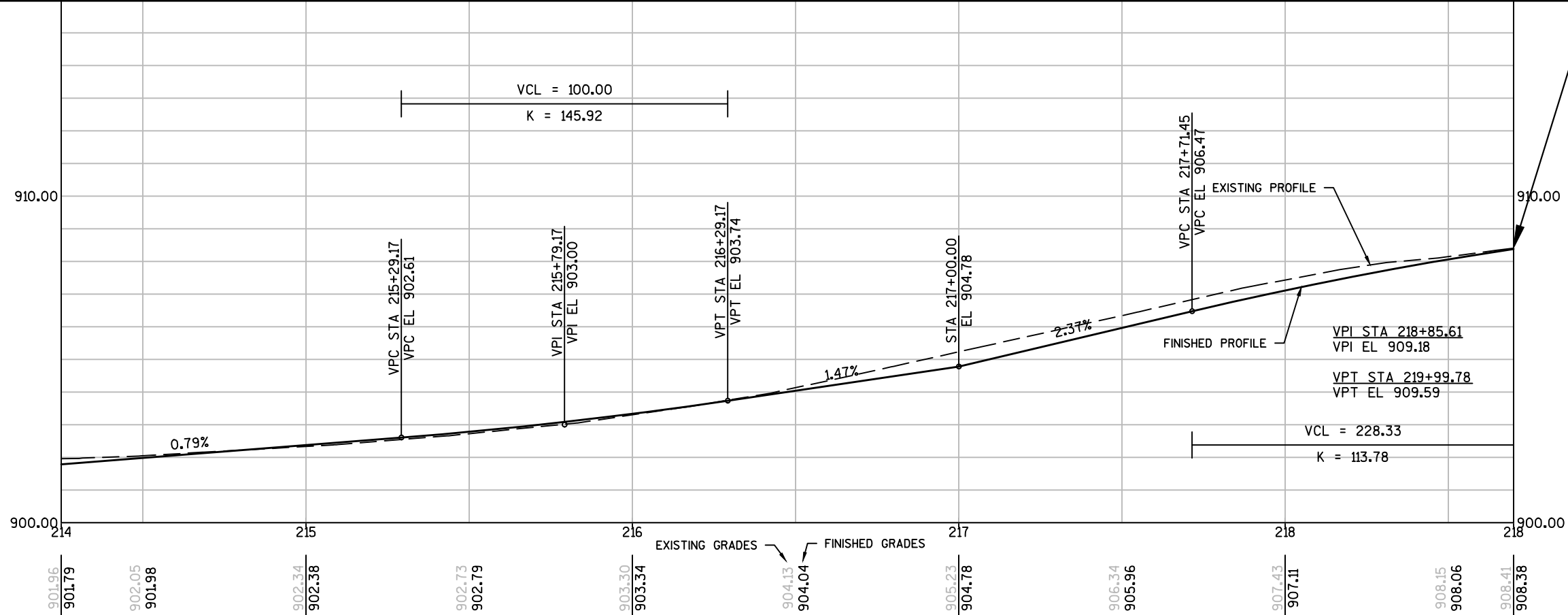
E

BENCH MARKS / CONTROL POINTS				
NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM #1	476082.754	892036.423	901.19	TOP BOLT HYDRANT AT MAPLE AND OAK INTERSECTION
BM #2	475770.115	891426.913	901.12	TOP BOLT HYDRANT AT CHESTNUT AND STATE INTERSECTION
CP #2	475707.065	892085.79	902.204	MAG N/L @ SOUTHEAST QUADRANT CHESTNUT AND MAPLE INTERSECTION
CP #3	475723.730	892167.021	902.464	MAG N/L Kwik TRIP PARKING LOT



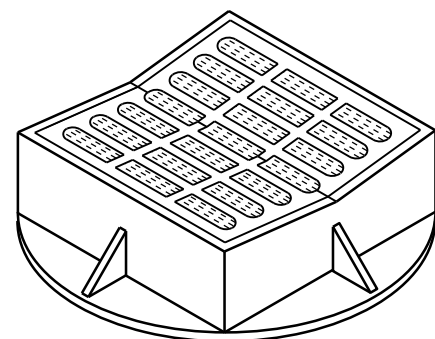
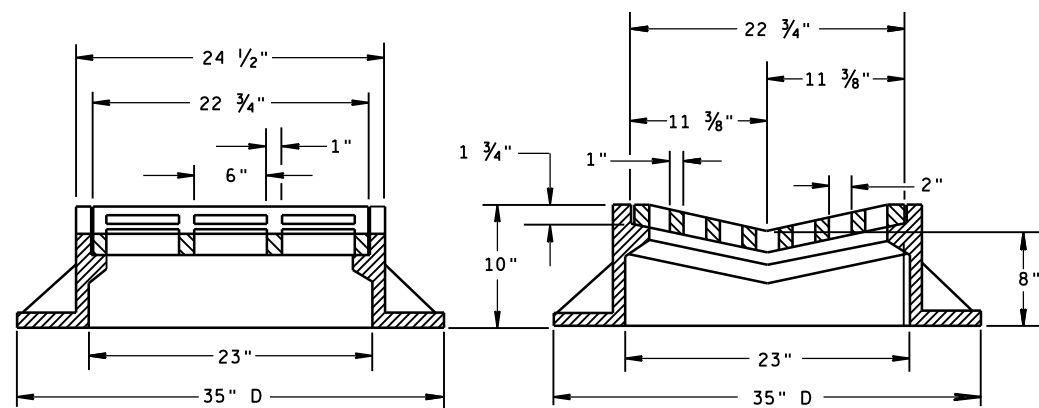


BENCH MARKS / CONTROL POINTS				
NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM #3	475782.641	892293.526	905.23	HYDRANT ARROW HD BETWEEN MAPLE AND ELM
BM #4	475795.240	892492.777	908.40	SOUTHEAST BP SIGN BOLT
CP #1	475728.746	892538.318	908.136	MAG N/L @ SOUTHEAST QUADRANT CHESTNUT AND ELM INTERSECTION
CP #2	475707.065	892085.79	902.204	MAG N/L @ SOUTHEAST QUADRANT CHESTNUT AND MAPLE INTERSECTION
CP #3	475723.730	892167.021	902.464	MAG N/L KWIK TRIP PARKING LOT

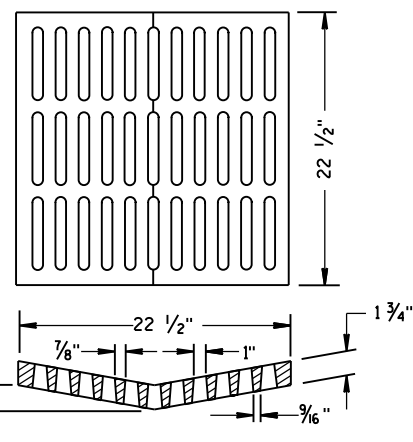


Standard Detail Drawing List

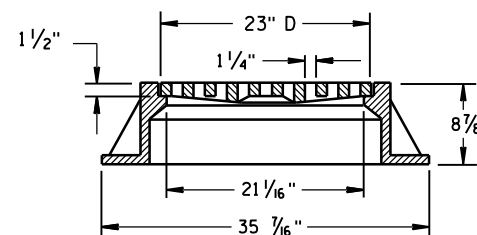
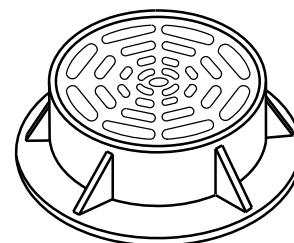
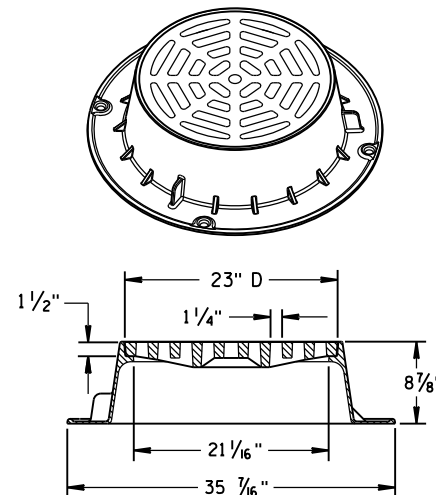
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-03	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-02A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-02B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-02C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TYPE "B"

ALTERNATIVE GRATE FOR
TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
 NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

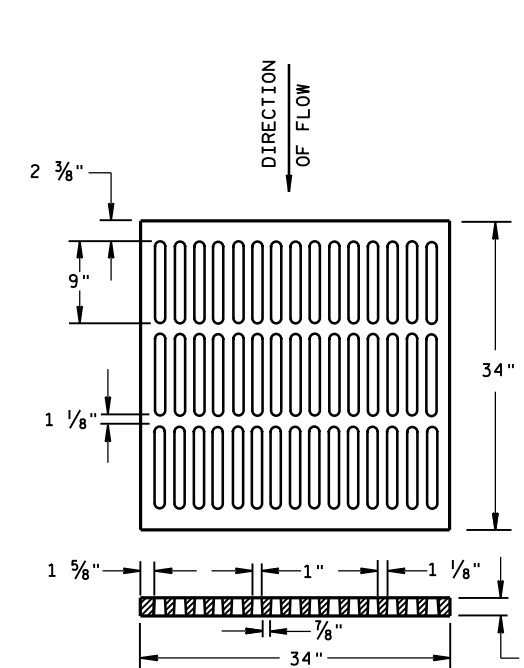
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

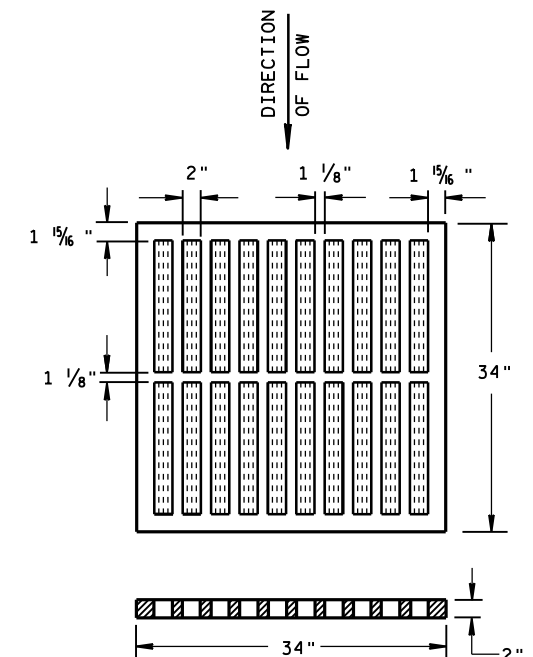
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



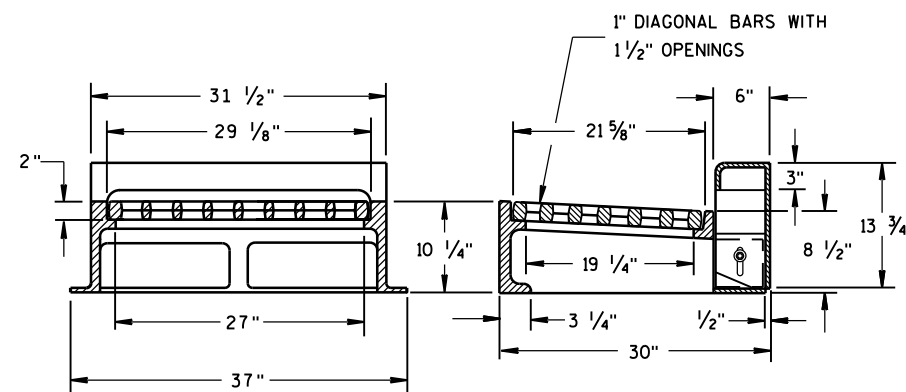
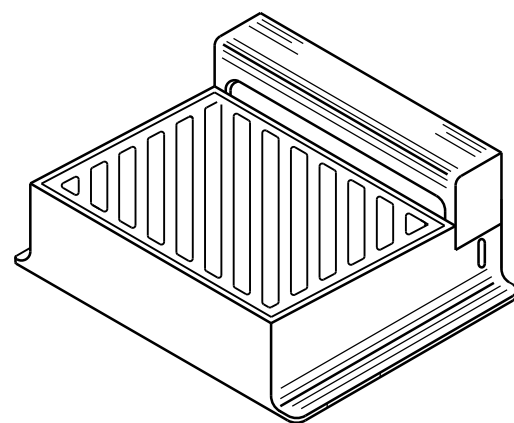
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
 NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
 NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIAGONAL SLOTS, SHALL BE ORIENTED
 TO THE DIRECTION OF FLOW AS ILLUSTRATED.
 GRATES ARE MANUFACTURED TO BE REVERSIBLE.

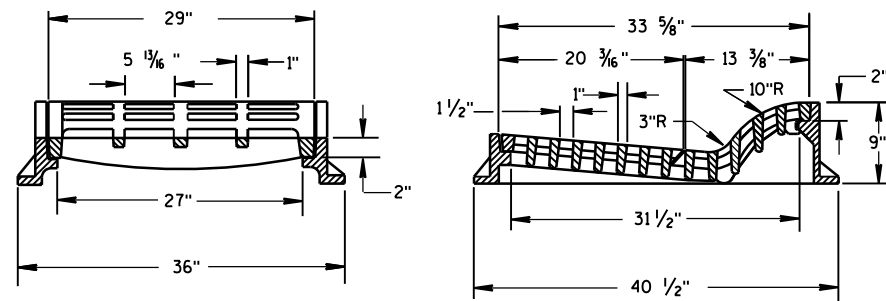
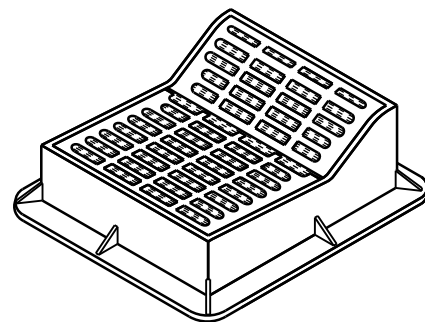
DIRECTION
OF FLOW

INLET COVERS
 TYPE B, B-A, C,
 MS, MS-A, & WM

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

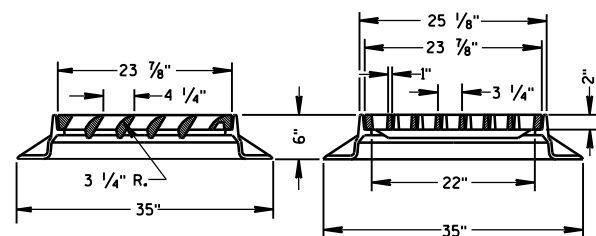
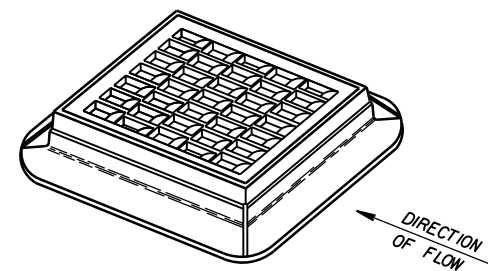
APPROVED
 11/27/2013
 DATE
 FHWA

/S/ Jerry H. Zogg
 ROADWAY STANDARDS DEVELOPMENT
 ENGINEER

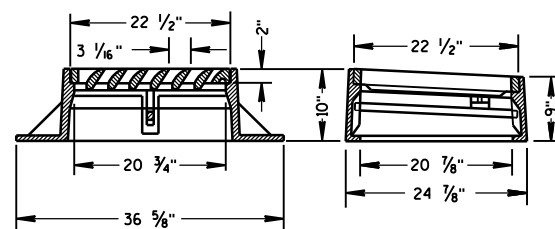
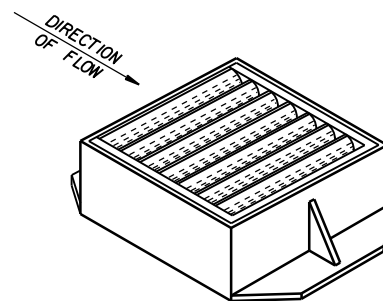


TYPE "F"

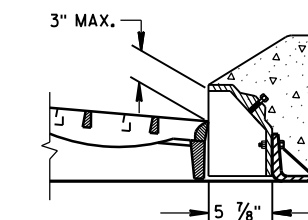
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



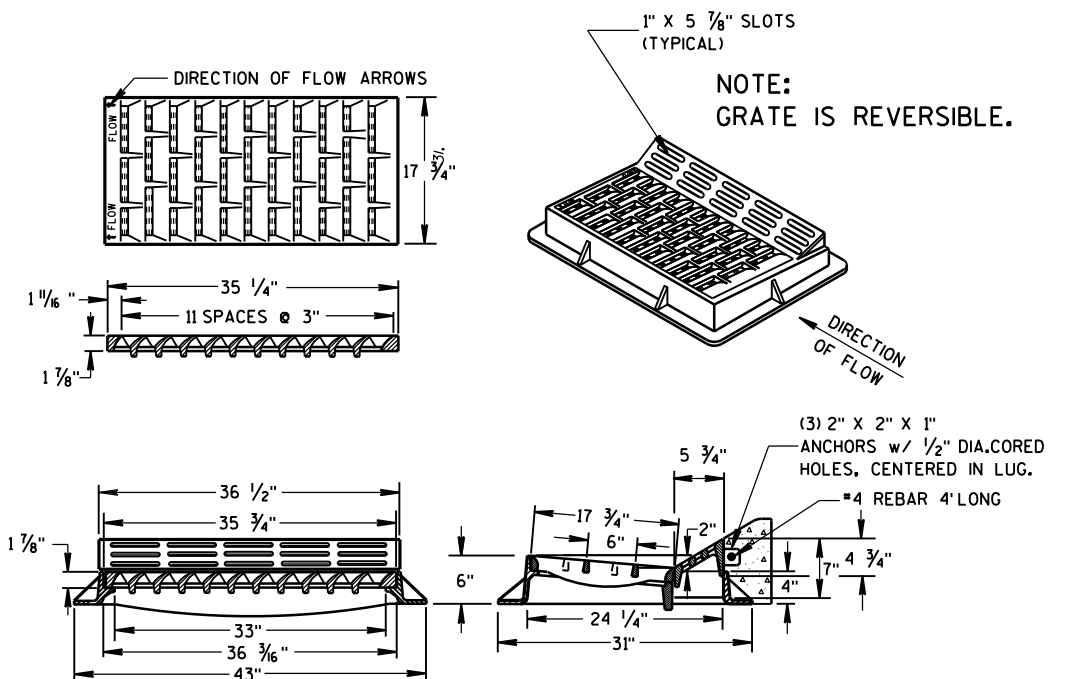
TYPE "S"



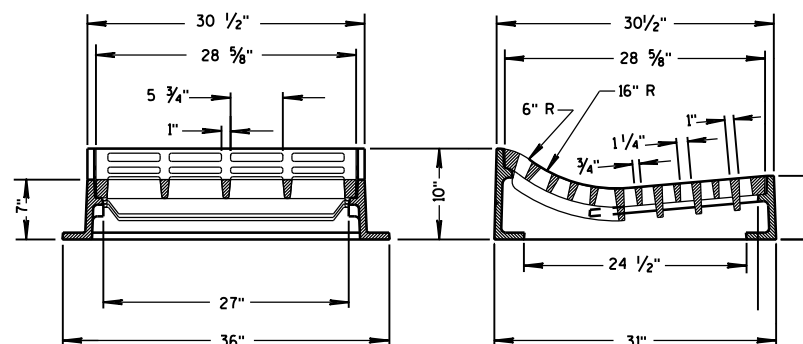
TYPE "V"

ALTERNATIVE CURB BOX
FOR TYPE "HM" COVERUSE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLENOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

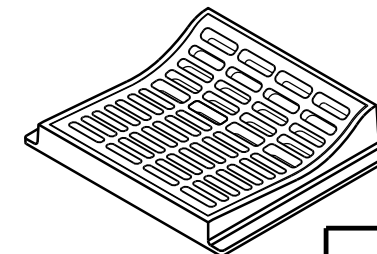
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING
SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND
THE APPLICABLE SPECIAL PROVISIONS.DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED
TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION
FOR EQUIVALENT CAPACITY AND STRENGTH.

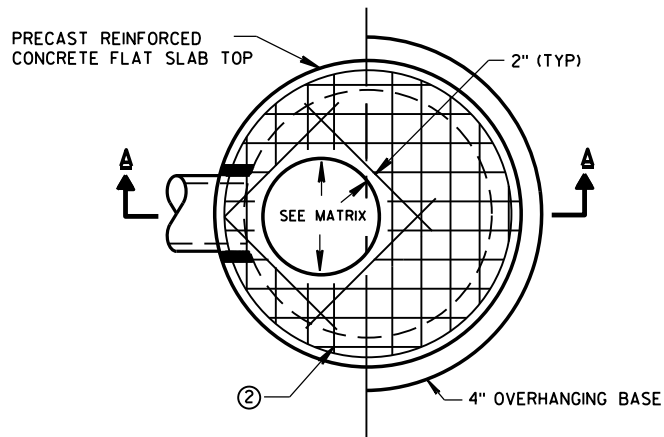
TYPE "HM"

USE WITH TYPES A & D CONCRETE
CURB & GUTTER, 36 INCH.NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

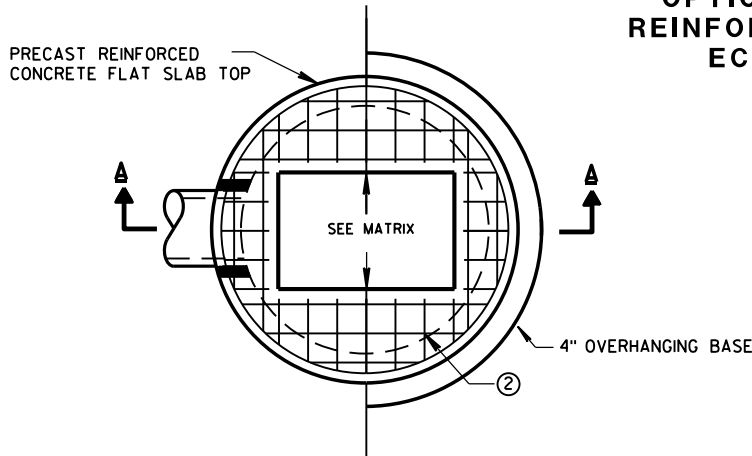
TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

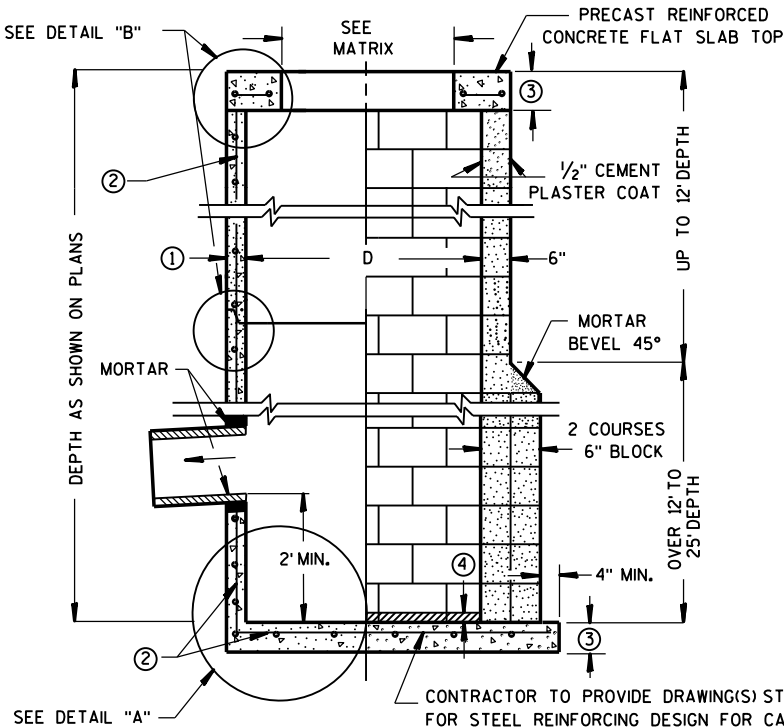
INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-SSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



PLAN VIEW CIRCULAR OPENING



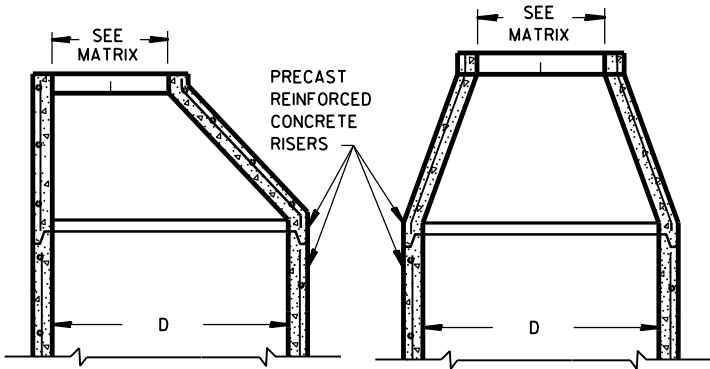
PLAN VIEW RECTANGULAR OPENING



SECTION A-A

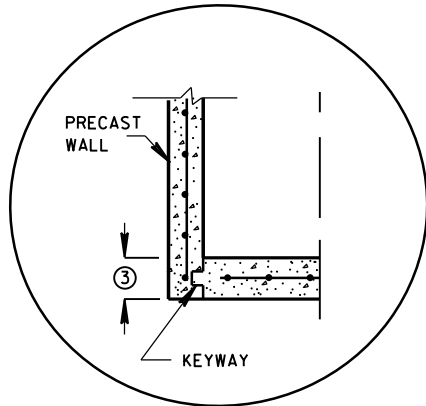
PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-
IN-PLACE OR PRECAST
REINFORCED CONCRETE BASE ②

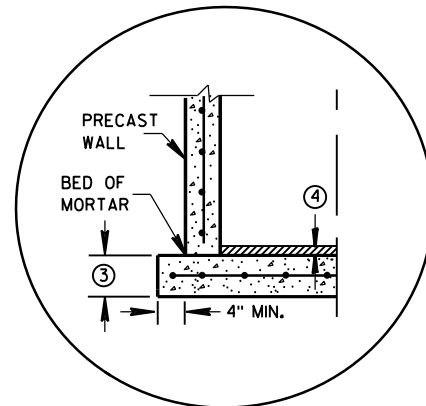


OPTIONAL PRECAST
REINFORCED CONCRETE
ECCENTRIC TOP

OPTIONAL PRECAST
REINFORCED CONCRETE
CONCENTRIC TOP



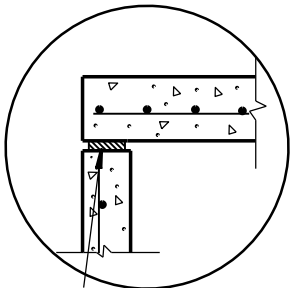
PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



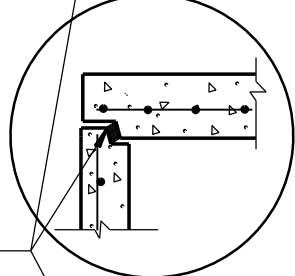
SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "A"

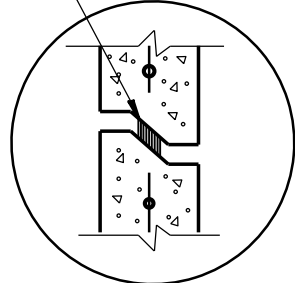
JOINTS TO BE SEALED WITH
A BUTYL RUBBER SEAL PER
SEALANT MANUFACTURERS
RECOMMENDATIONS
CONFORMING TO ASTM C 990
(TYP)



TOP WITH PLAIN END JOINT

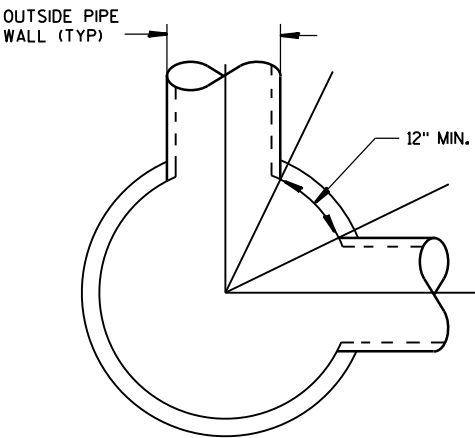


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".
- ④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2" SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE OPENING SIZE (FT)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT- 6-FT	2X2	X	X							X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

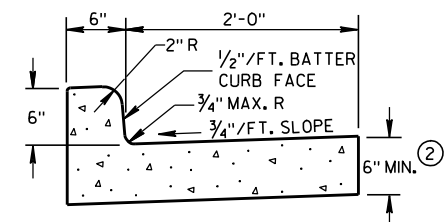
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT,
4-FT, 5-FT AND
6-FT DIAMETER

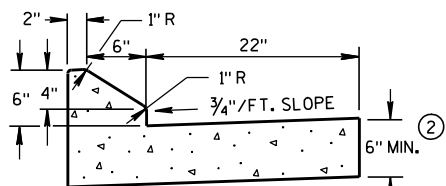
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

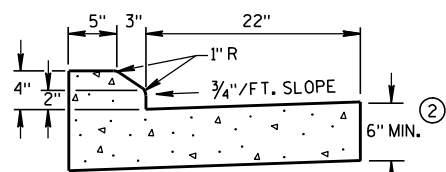
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER



TYPES A & D ①



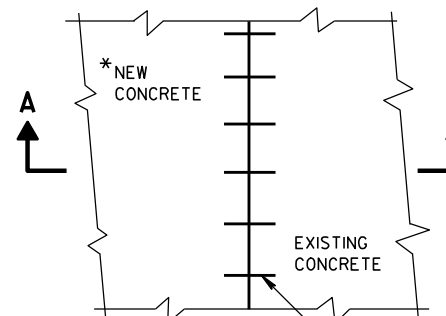
6" SLOPED CURB TYPES G & J ①



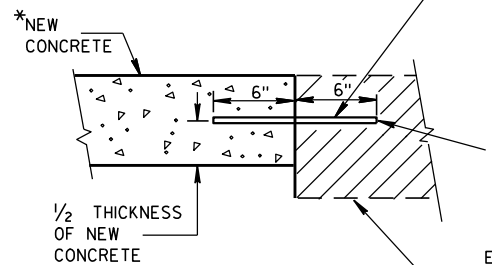
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



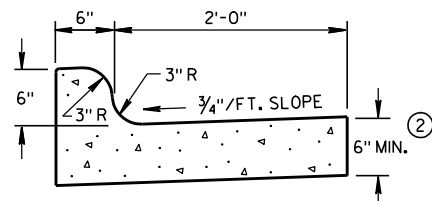
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

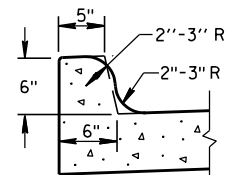
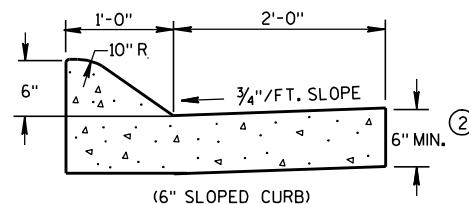
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

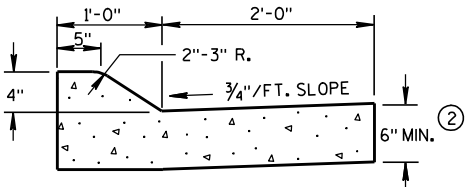
EXISTING
CONCRETE



TYPES K & L ①

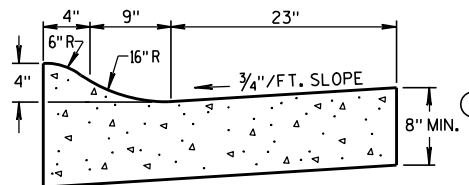
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)

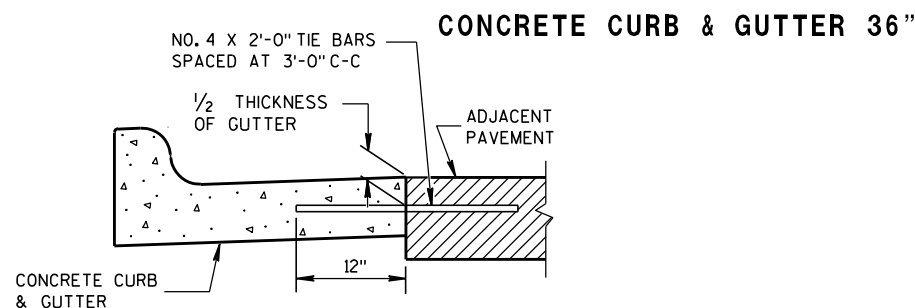


(4" SLOPED CURB)

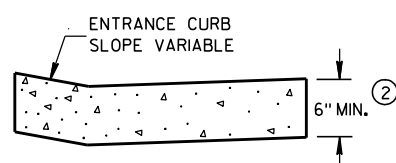
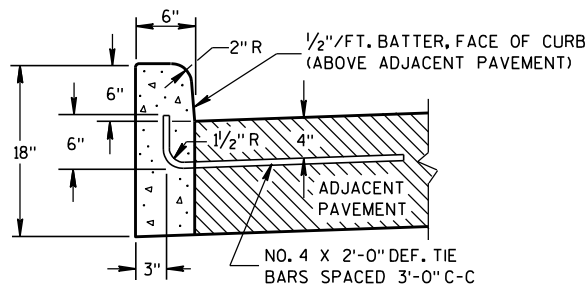
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

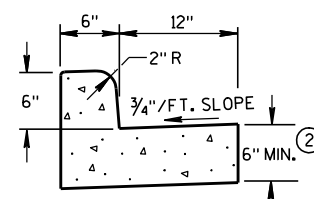
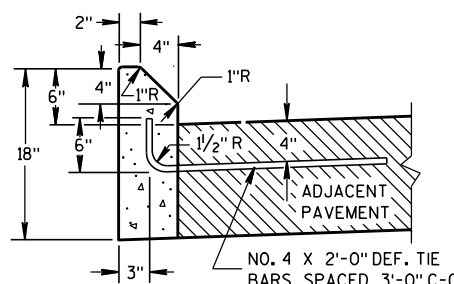


TYPICAL TIE BAR LOCATION ①

DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

TYPES A & D ①

CONCRETE CURB

TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

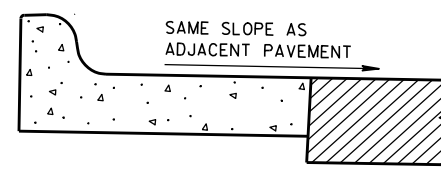
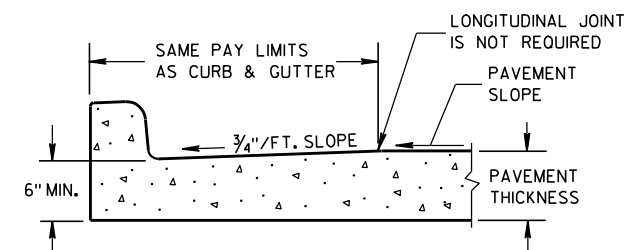
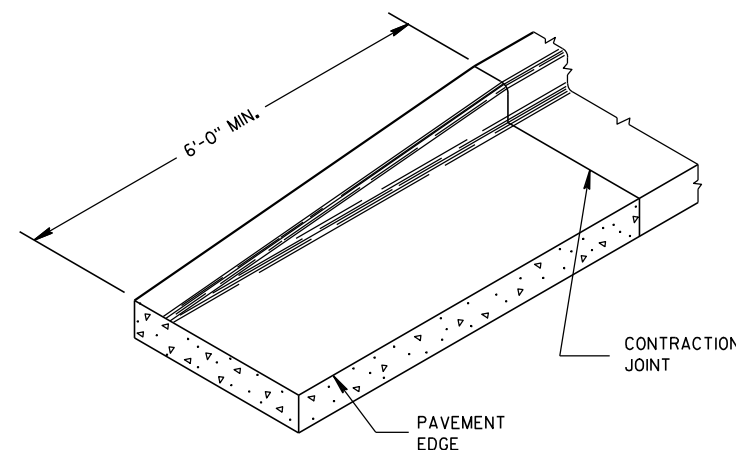
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

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DEPARTMENT OF TRANSPORTATION

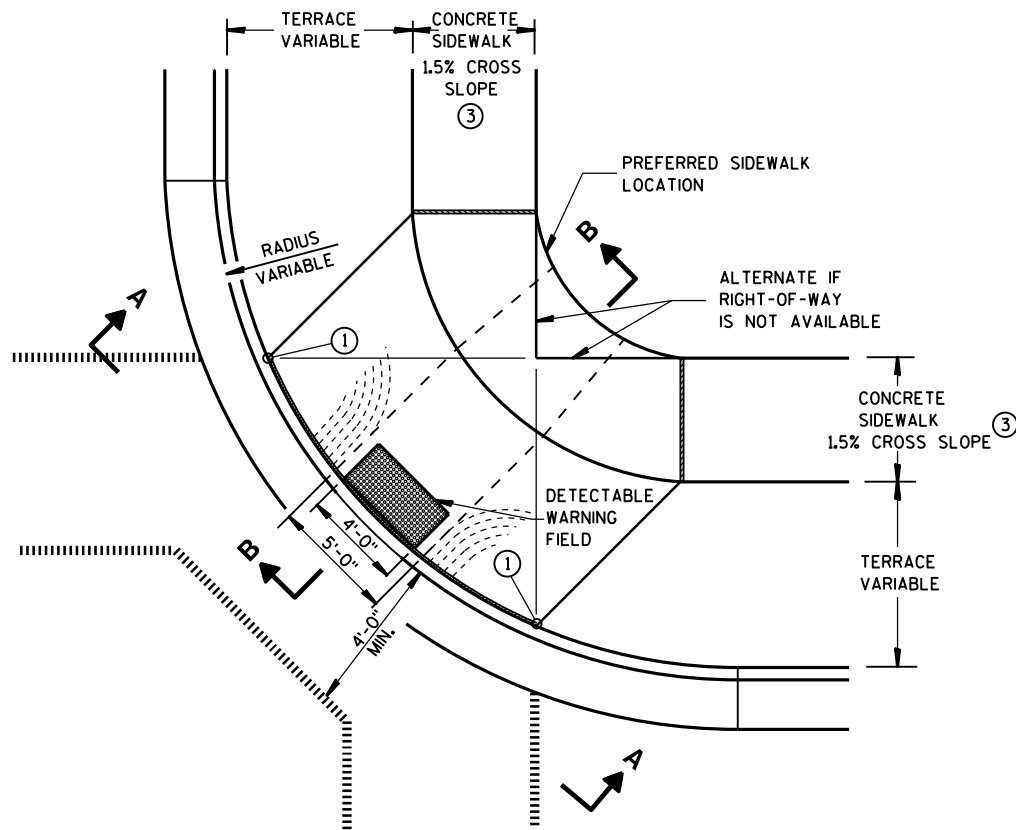
APPROVED

9/4/08

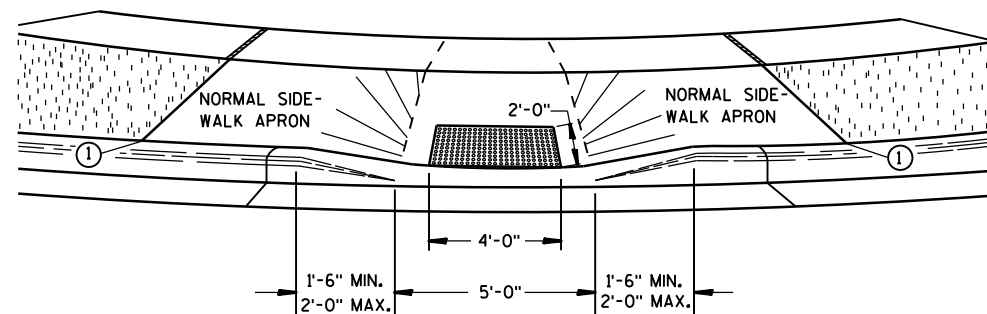
DATE

FHWA

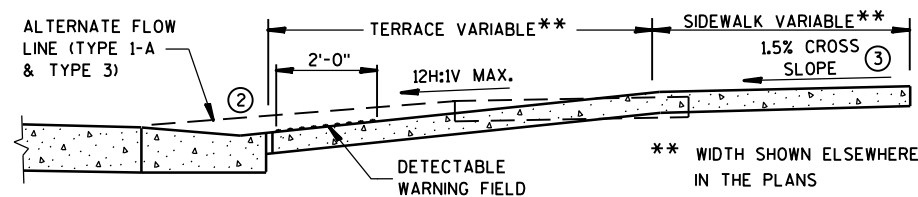
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



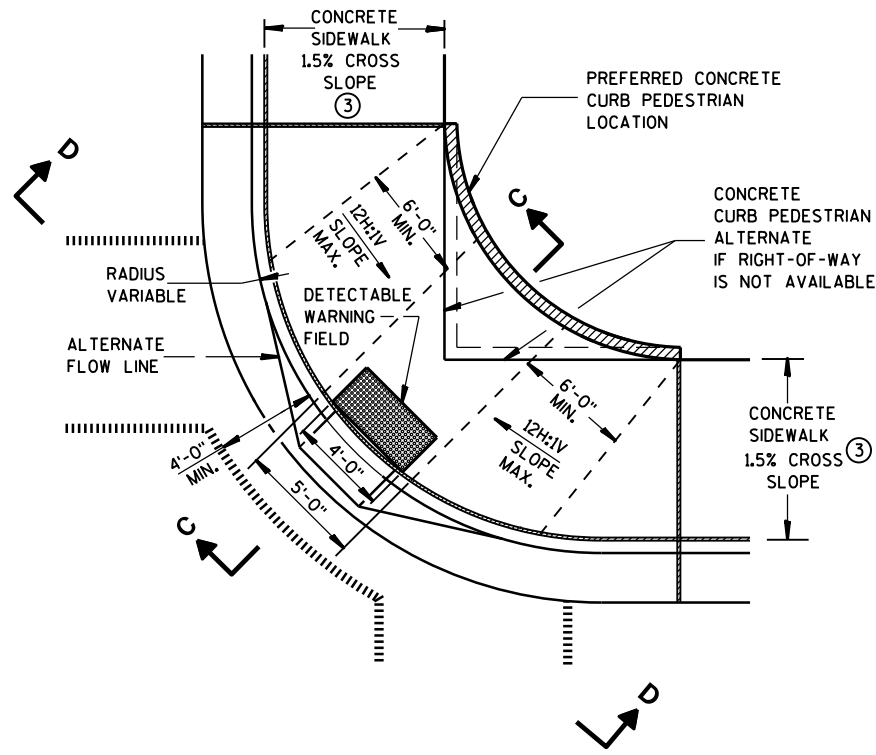
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



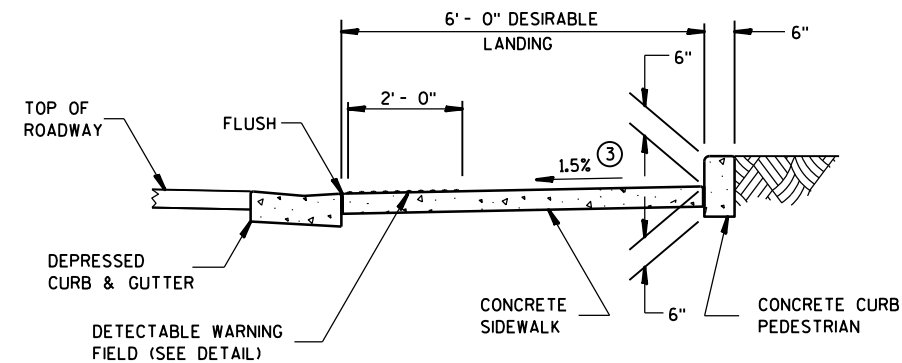
VIEW A-A



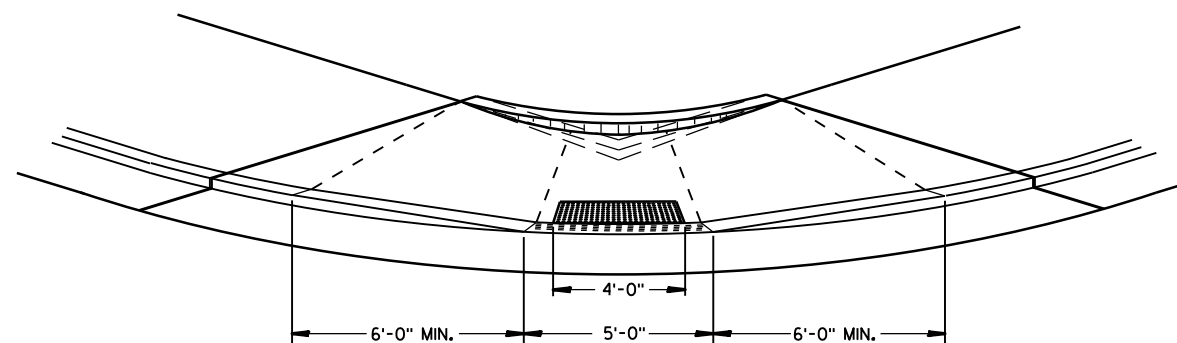
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

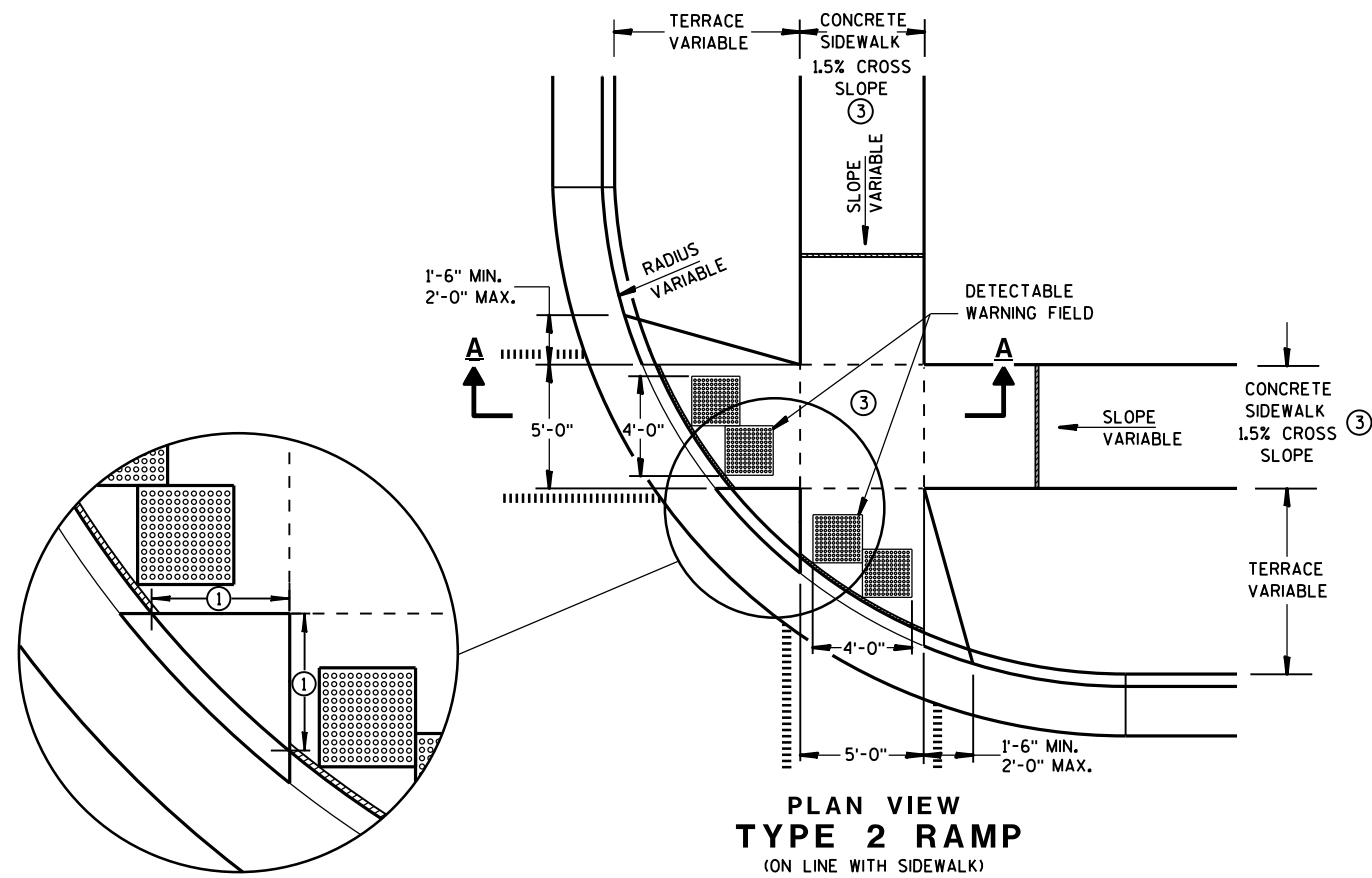
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

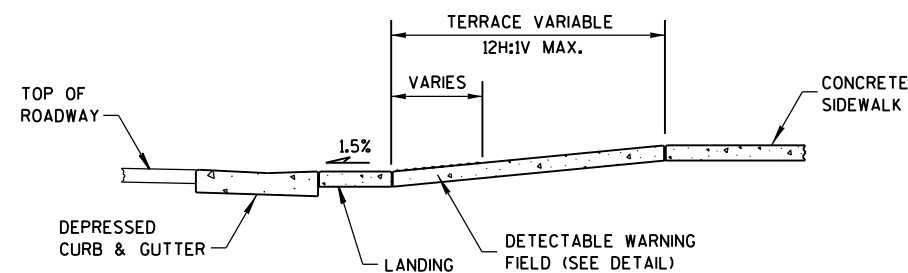
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS
TYPES 1 AND 1-A**

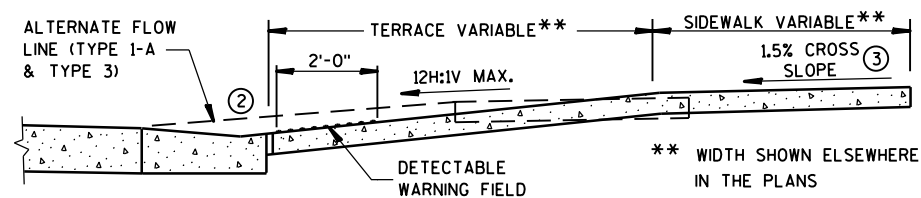
STATE OF WISCONSIN
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**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

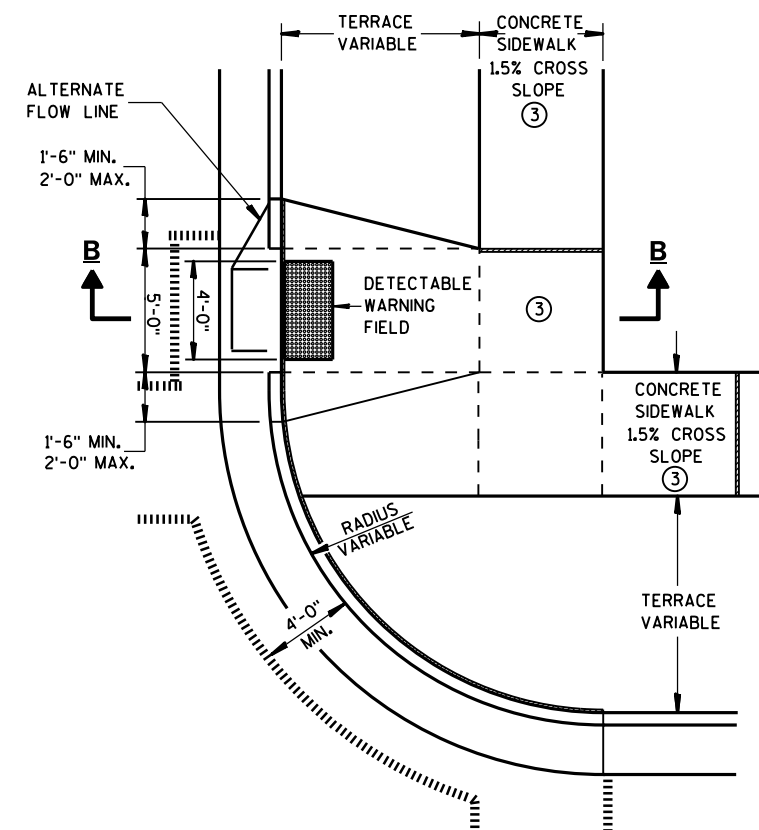
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

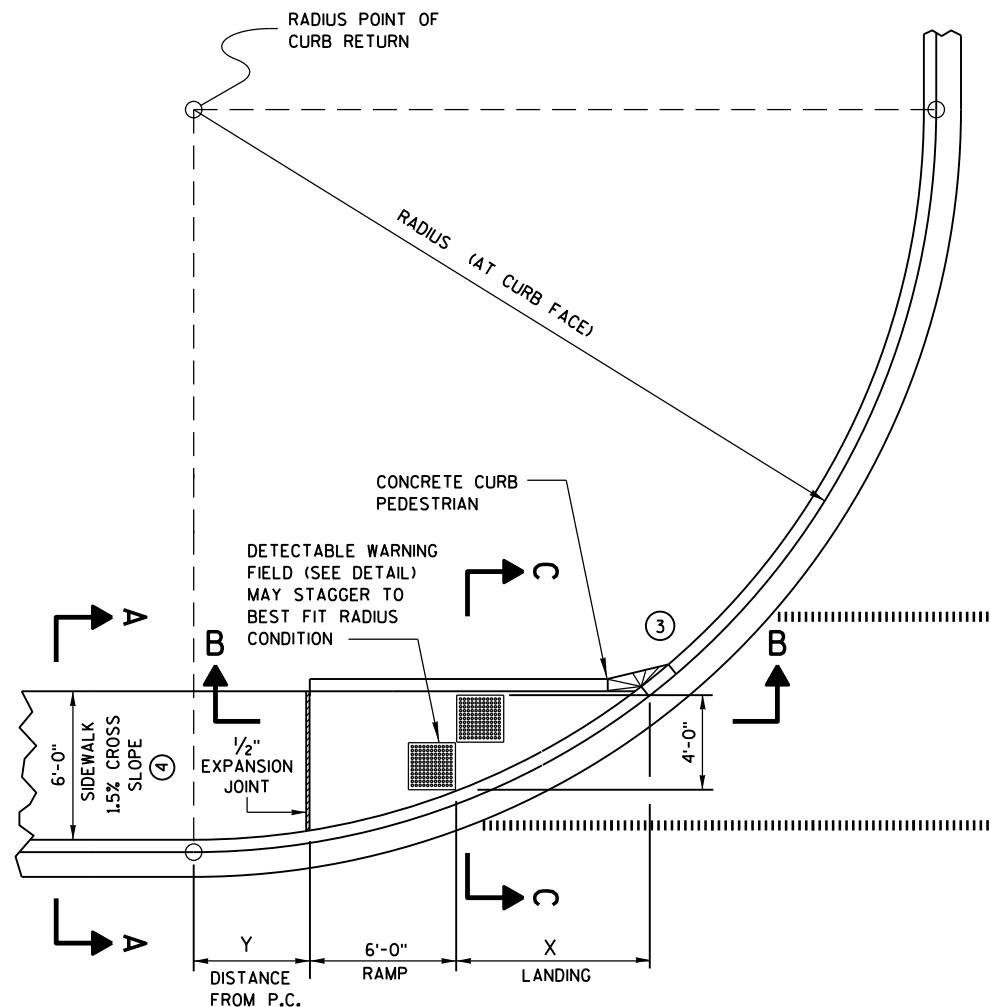
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



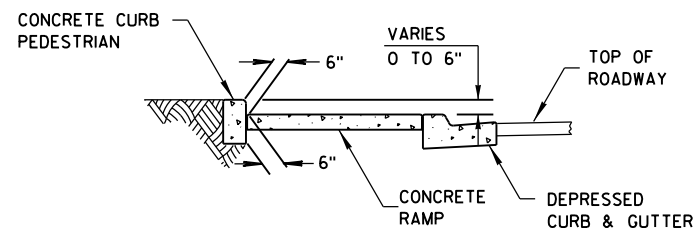
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

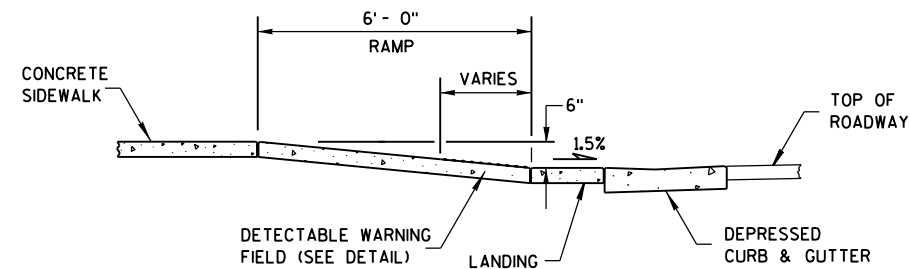
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



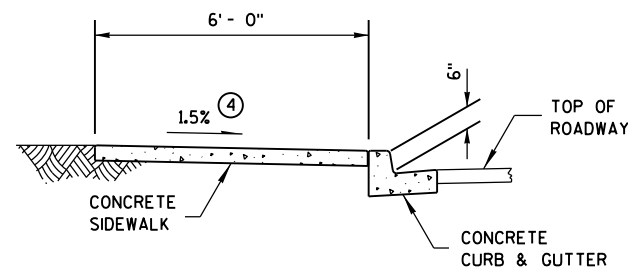
SECTION C-C FOR TYPE 4A



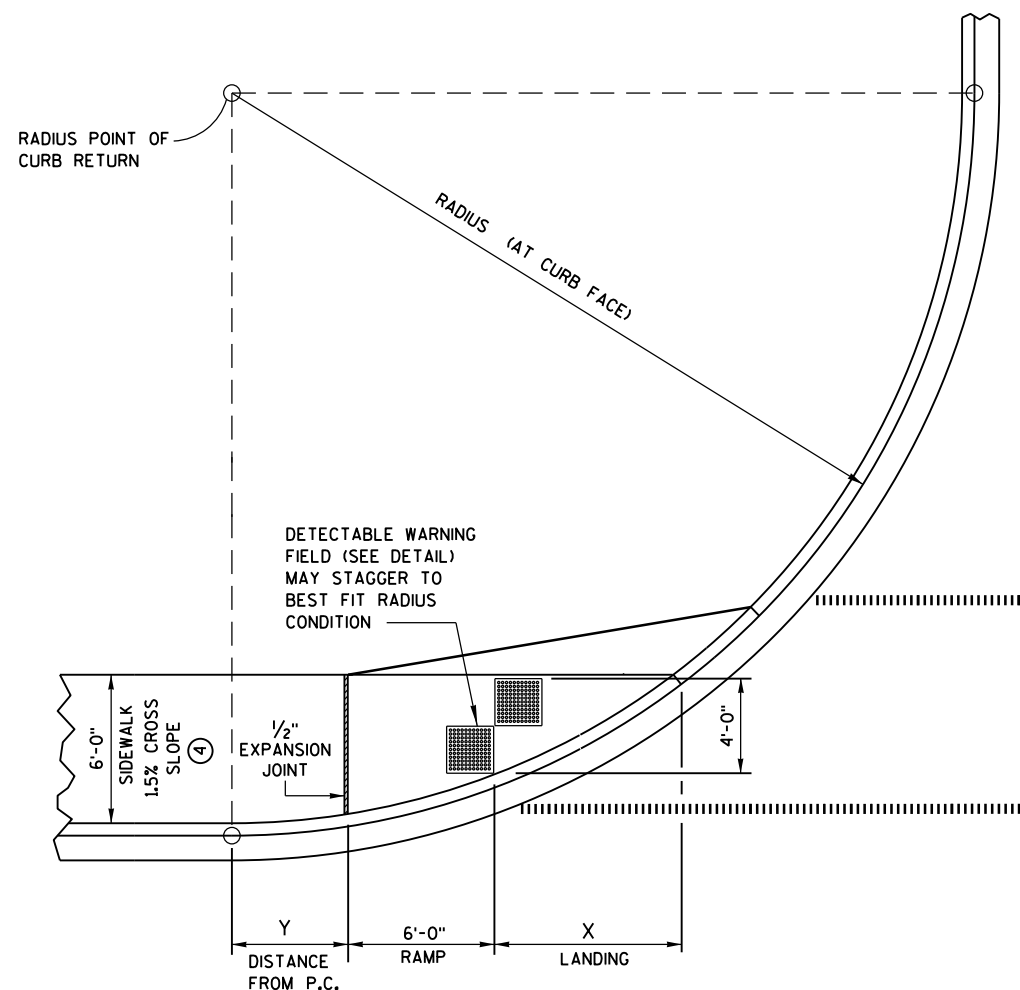
SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 3/4"	2'-7 1/4"
30 FEET	7'-11 3/4"	4'-8 1/4"
40 FEET	9'-5 1/4"	6'-5"
50 FEET	10'-8 3/4"	7'-11 1/4"
60 FEET	11'-10 1/4"	9'-3 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW

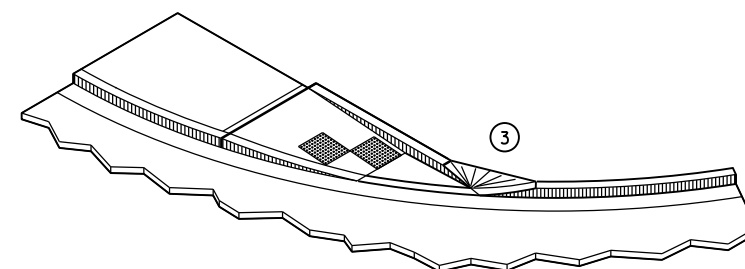
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

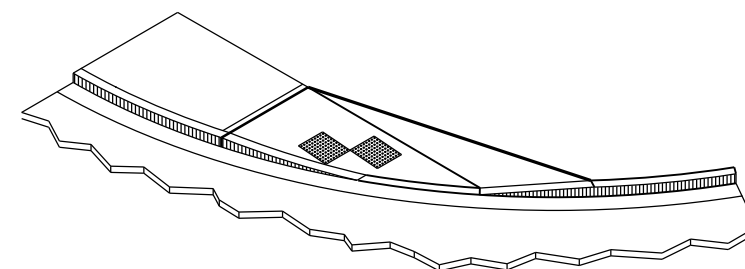
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



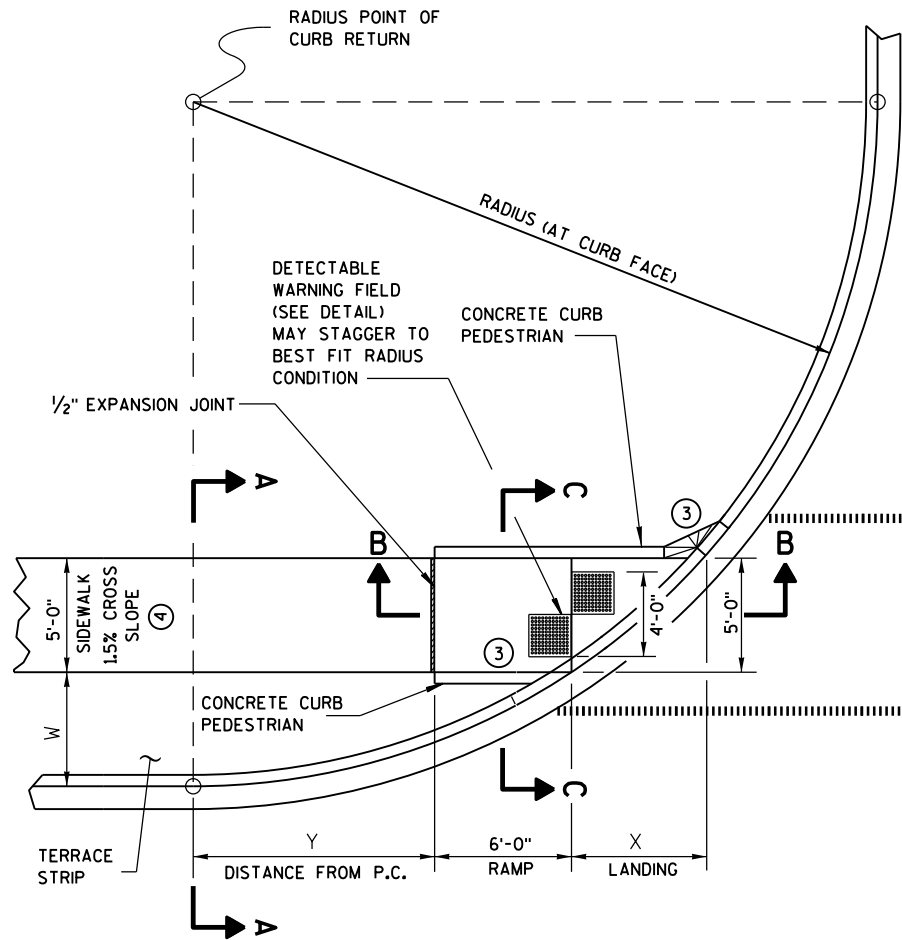
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

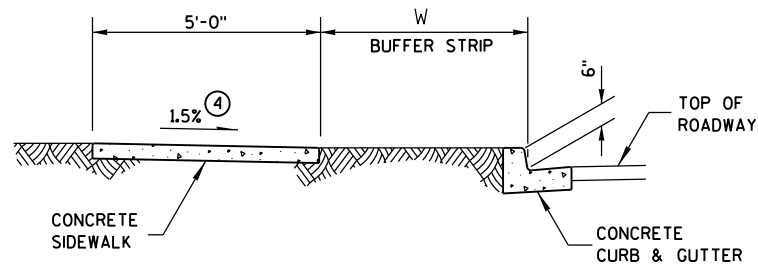
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

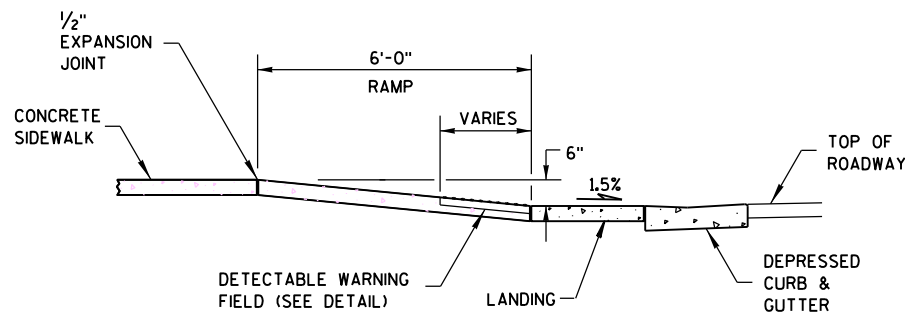
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B

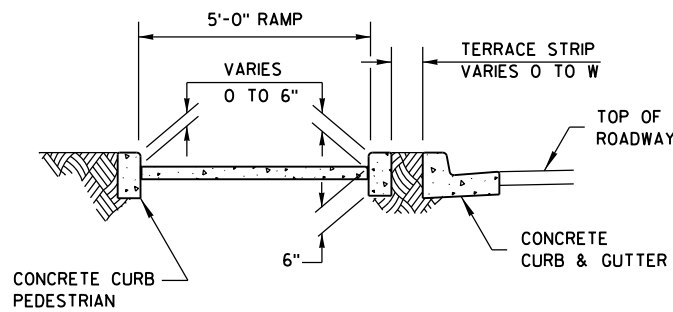


SECTION B-B FOR TYPE 4B

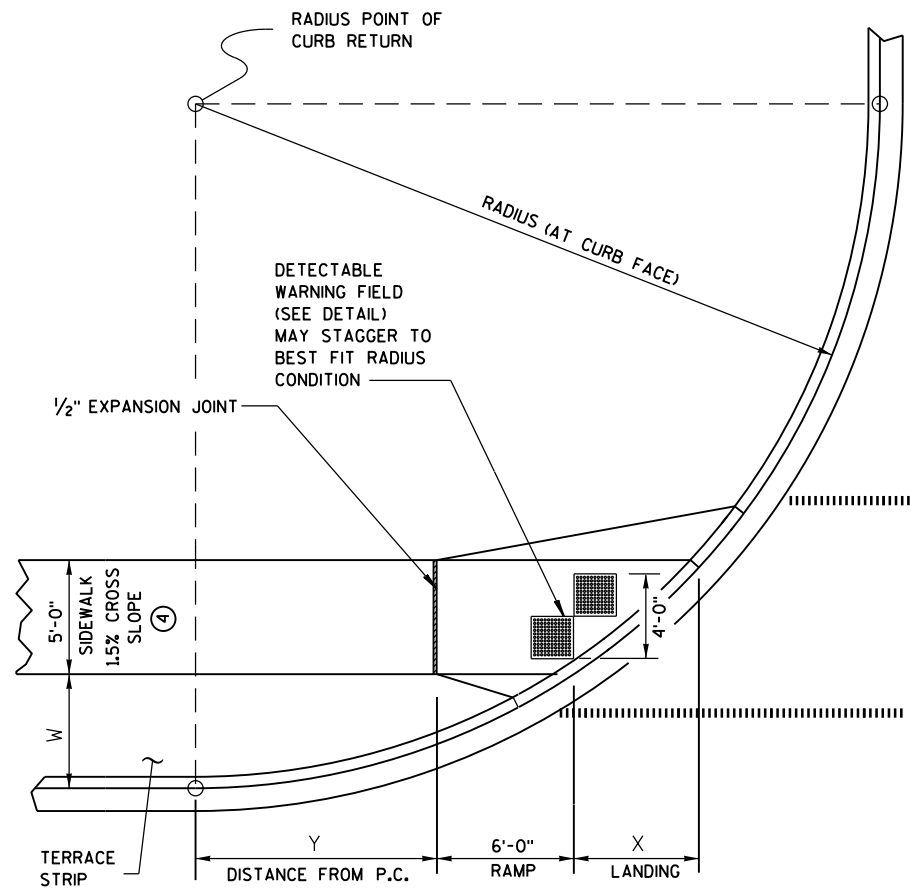
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW

GENERAL NOTES

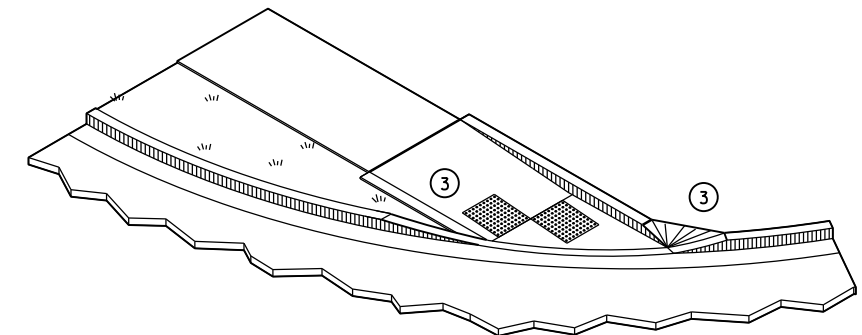
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

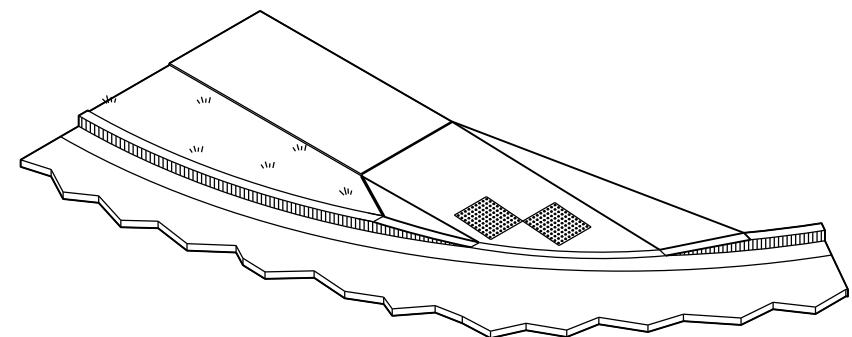
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



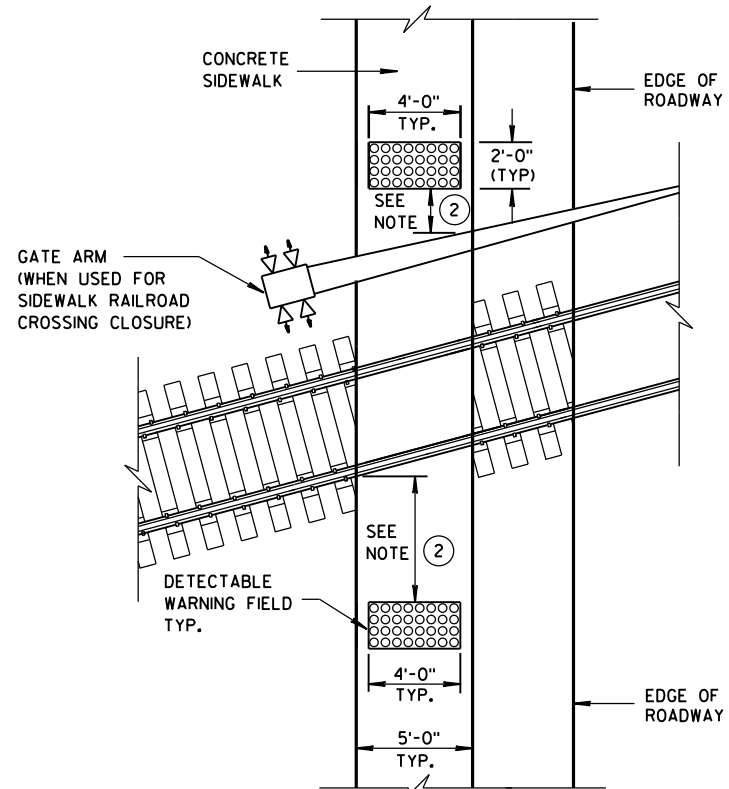
ISOMETRIC VIEW FOR TYPE 4B



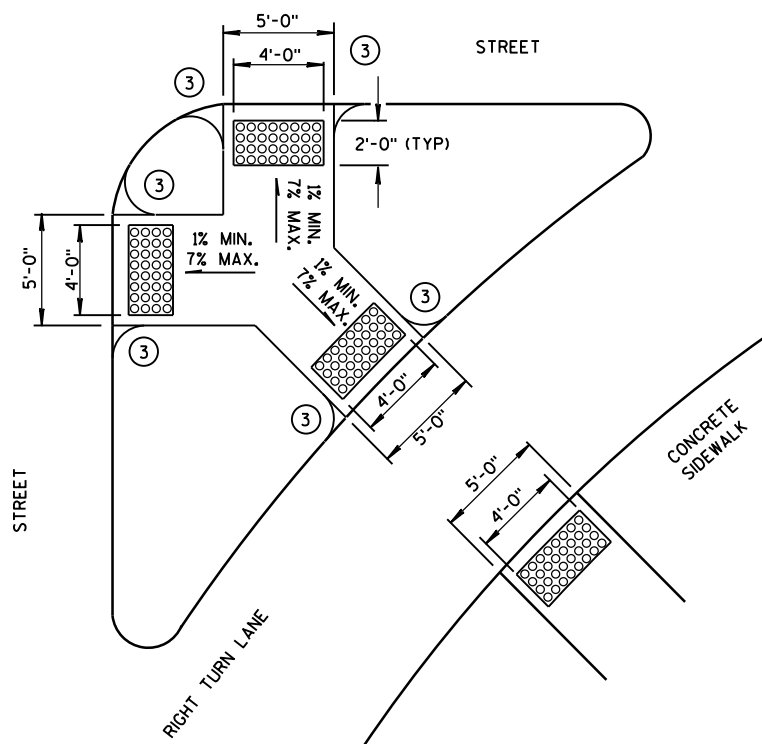
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

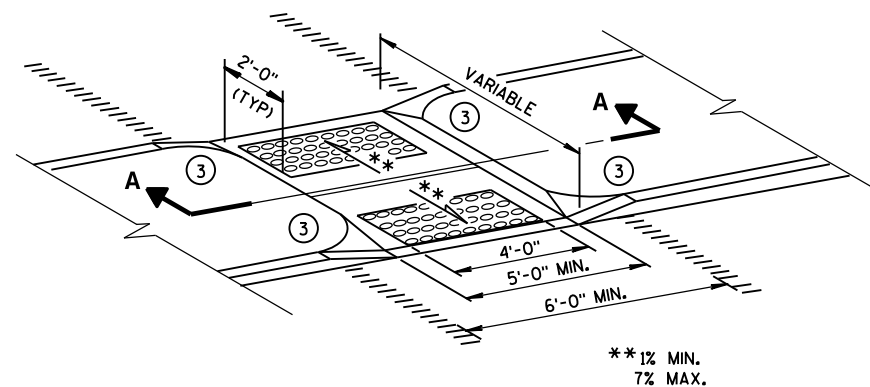
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



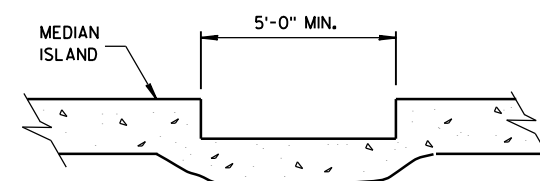
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



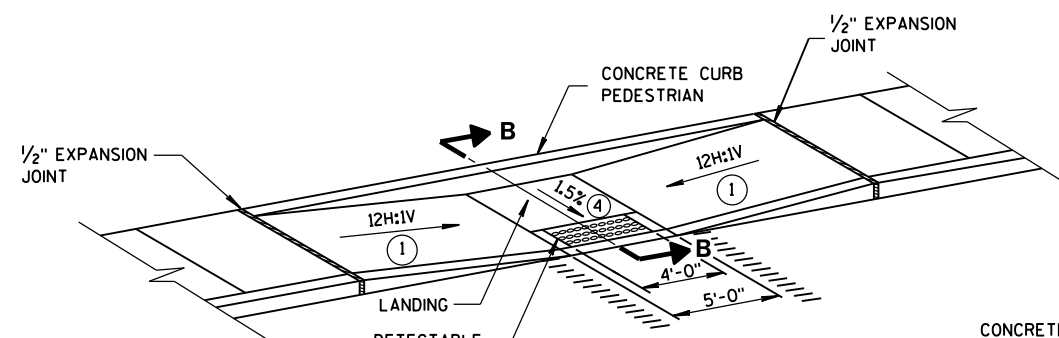
TYPE 6
DETECTABLE WARNING AT ISLANDS



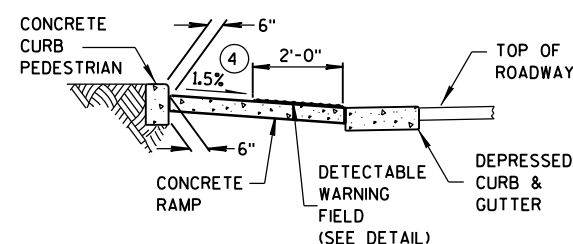
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



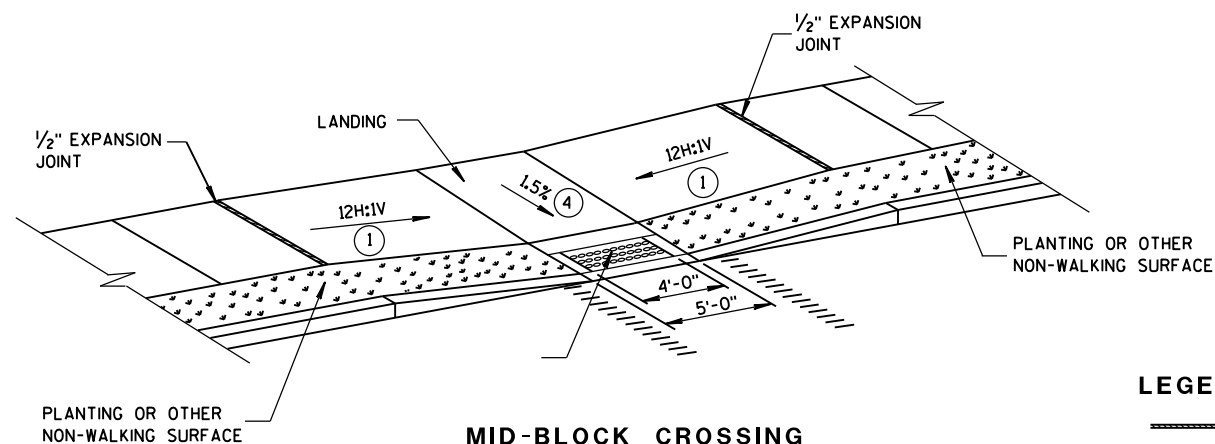
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

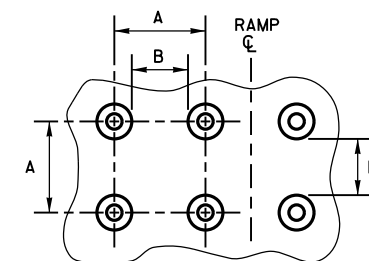
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

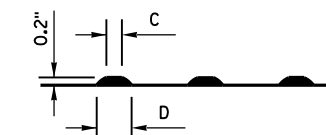
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET \pm 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- 4 \pm 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



PLAN VIEW



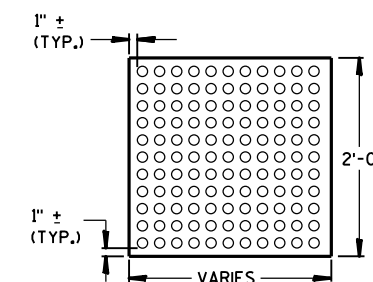
ELEVATION VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

LEGEND

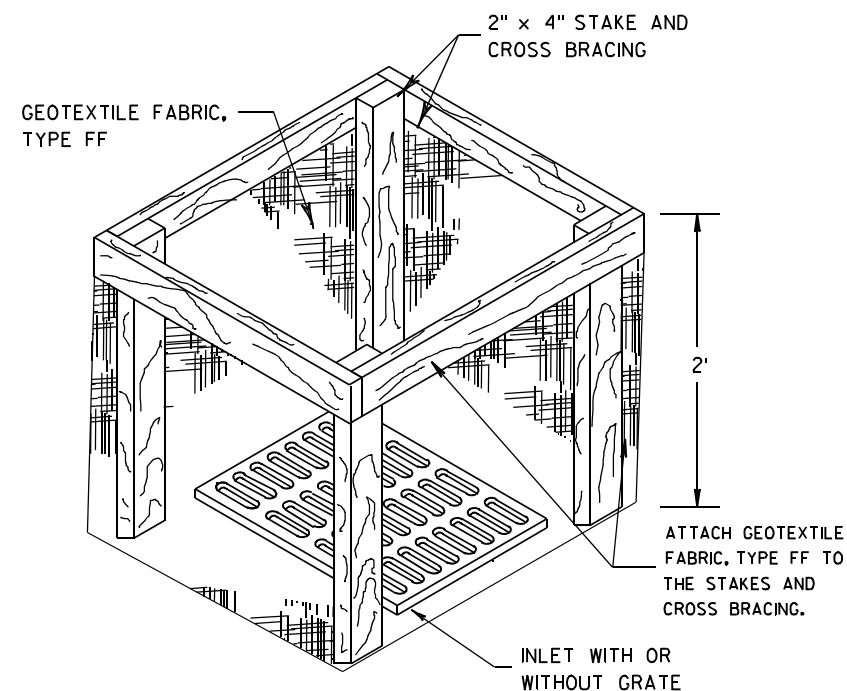
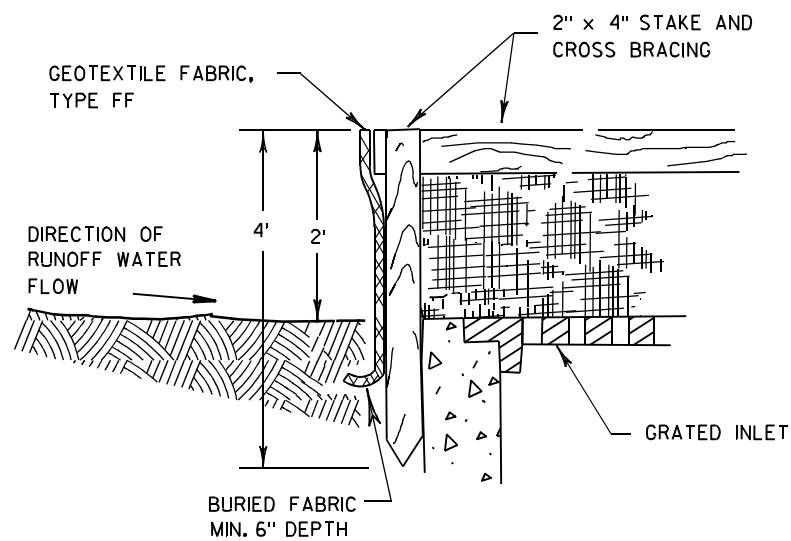
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-6-2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



INLET PROTECTION, TYPE A

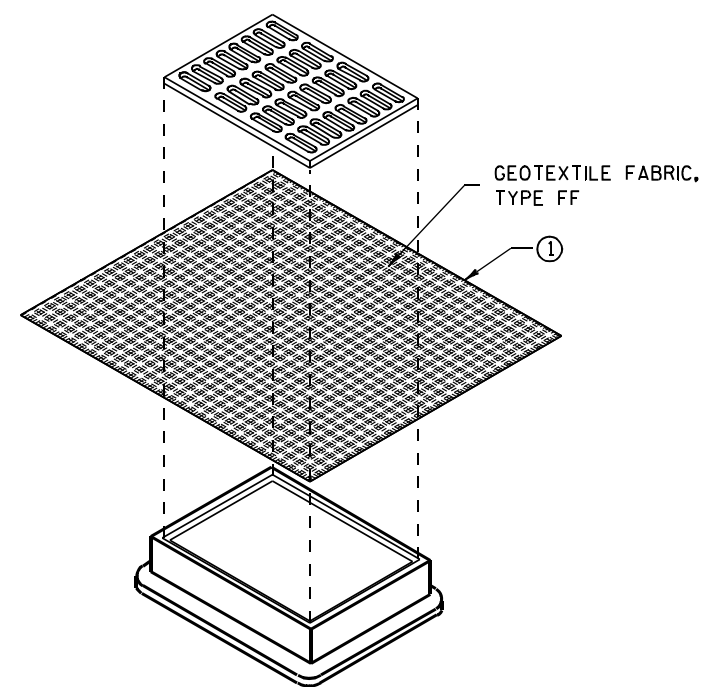
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

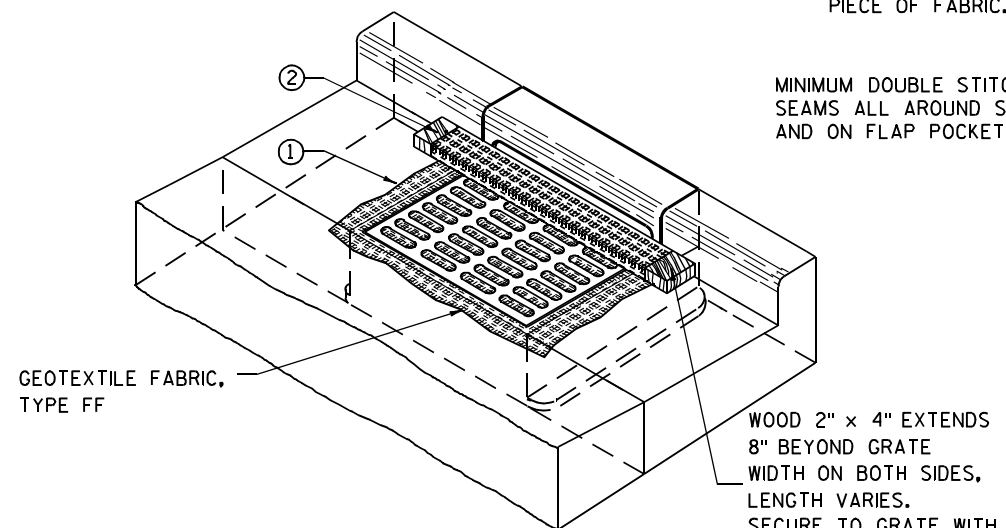
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

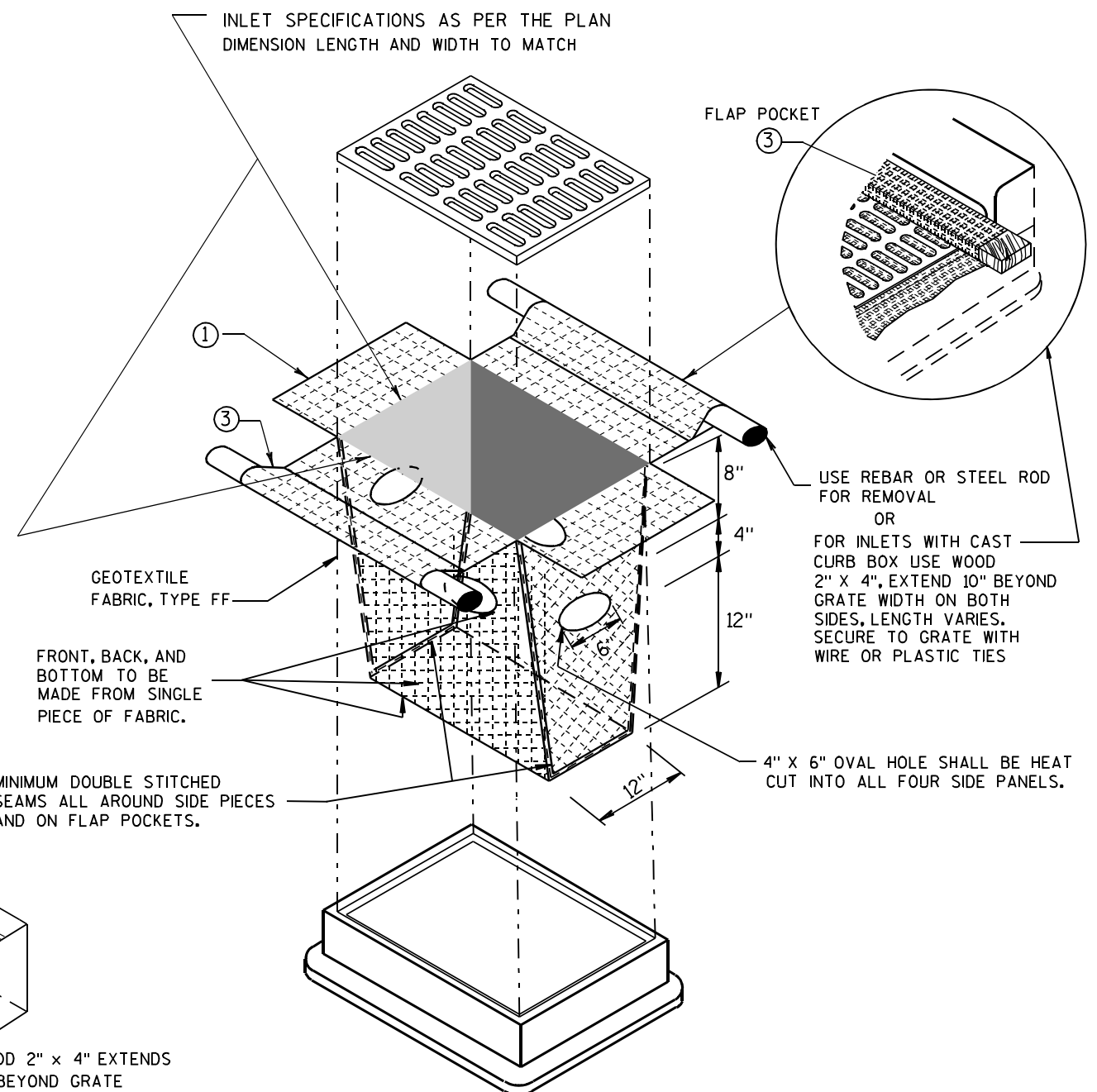
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



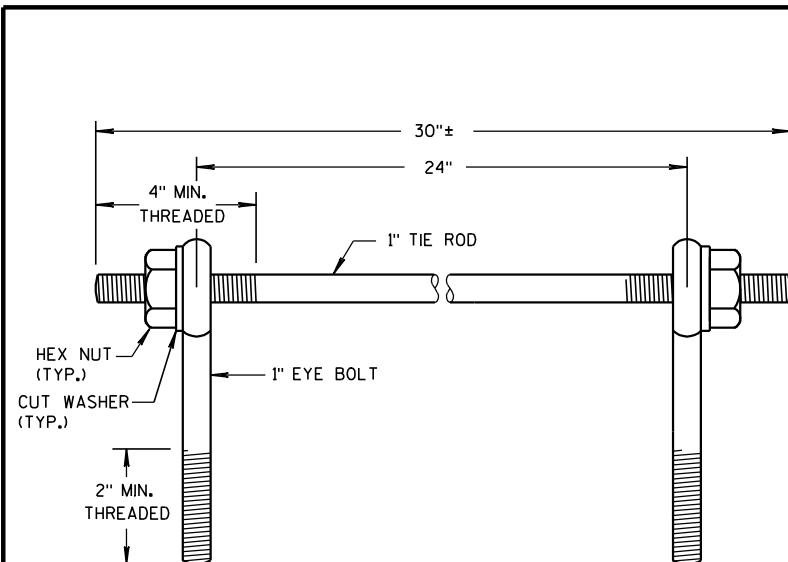
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

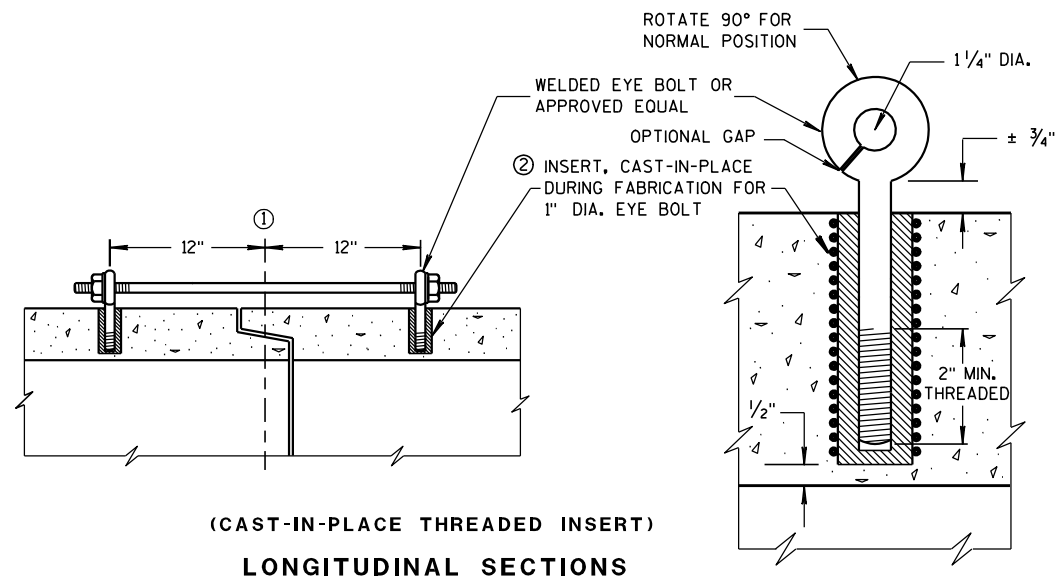
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

(CAST-IN-PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

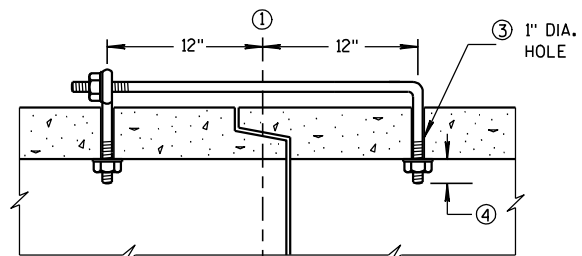
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

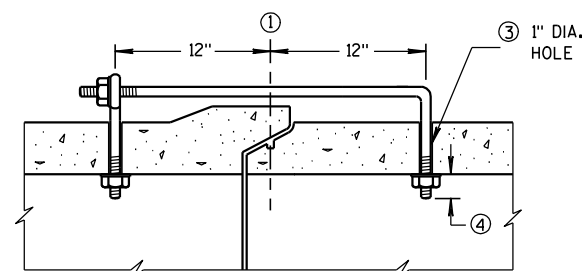
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- ① ϕ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- ② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- ③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ϕ OF TONGUE AND GROOVE.
- ④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- ⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN $\frac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.

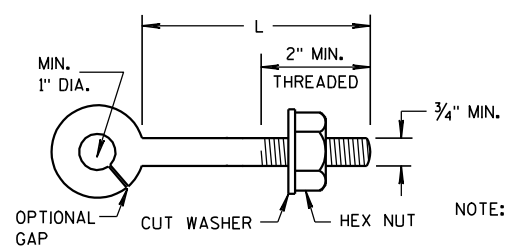


(TONGUE & GROOVE PIPE)

(MODIFIED BELL PIPE)
LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

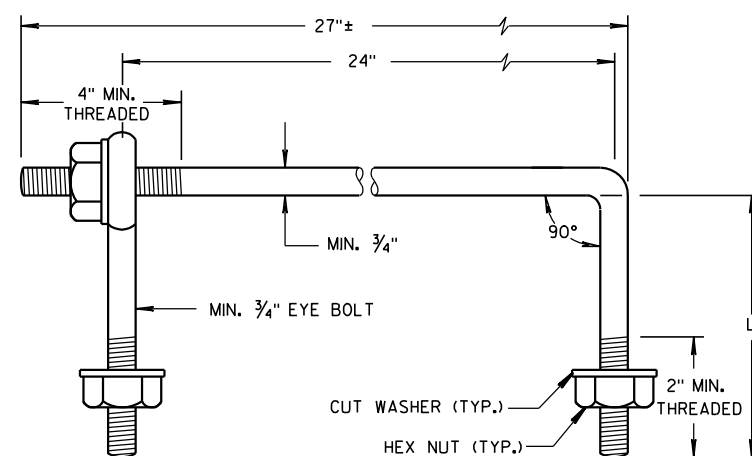


EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

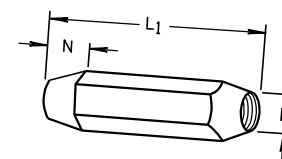


EYE BOLT AND TIE ROD

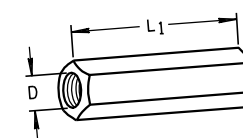
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



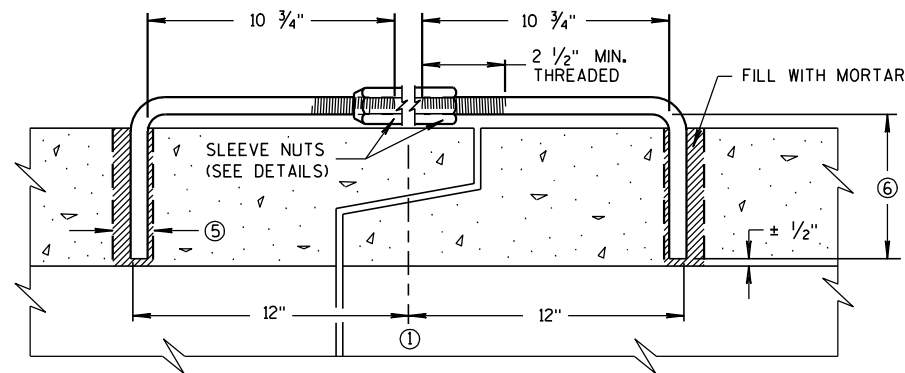
TAPERED



PLAIN

RIGHT AND LEFT THREADS

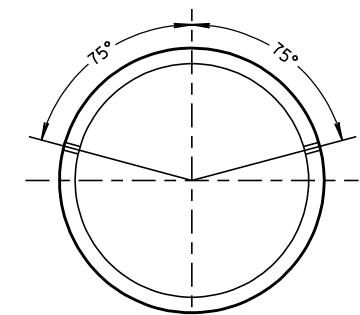
SLEEVE NUTS



LONGITUDINAL SECTION

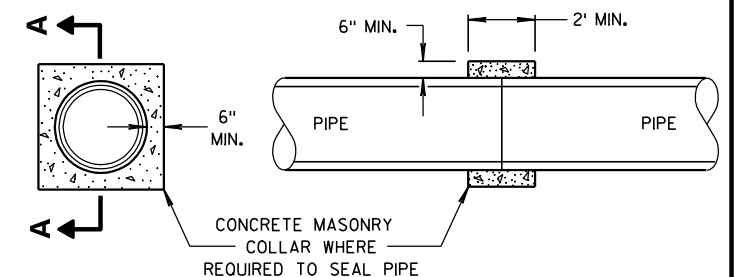
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE
PIPE AND CONCRETE
COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

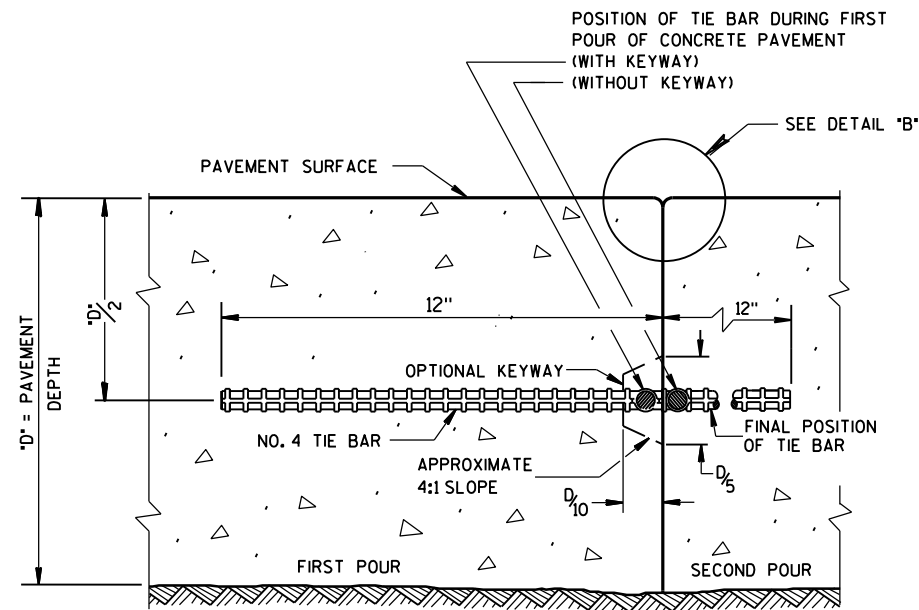
APPROVED

6/5/2012

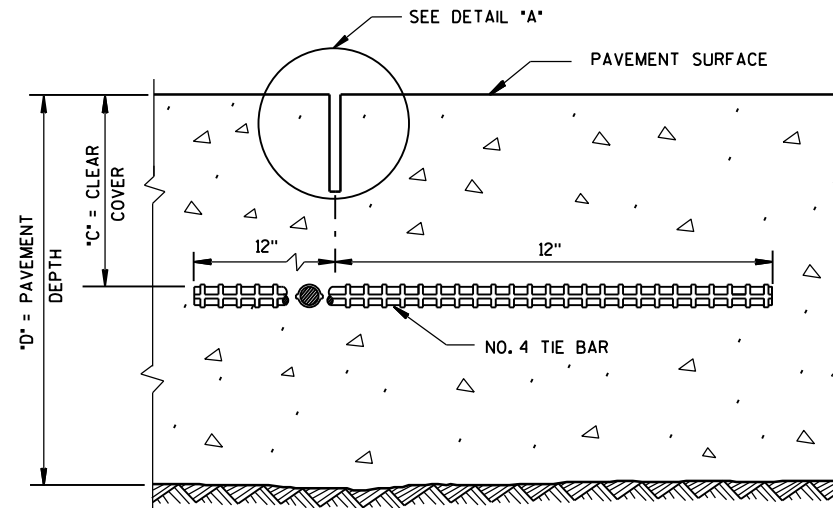
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



CONSTRUCTION JOINT



SAWED JOINT

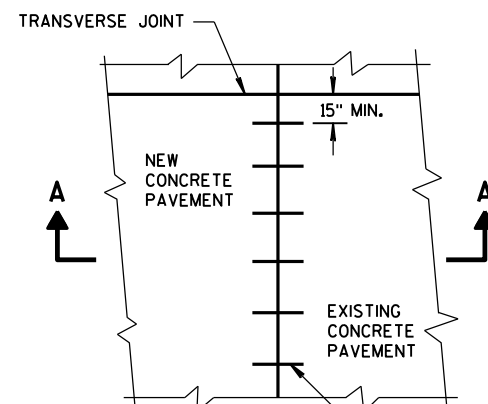
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

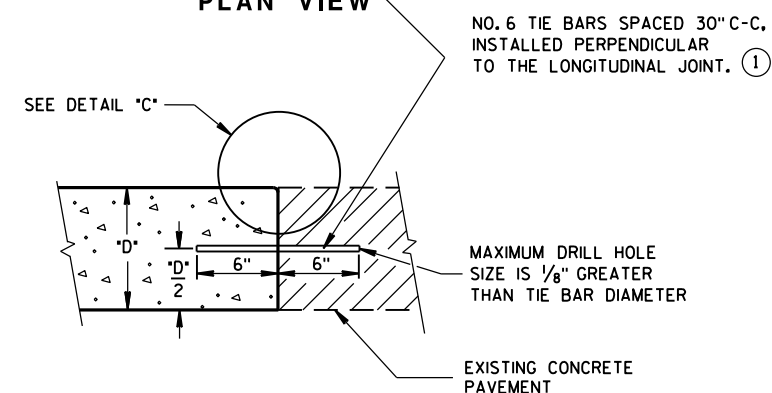
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

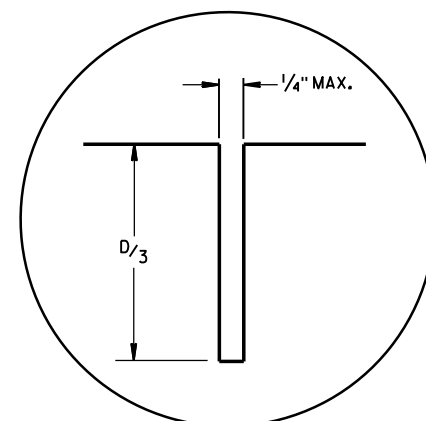
① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



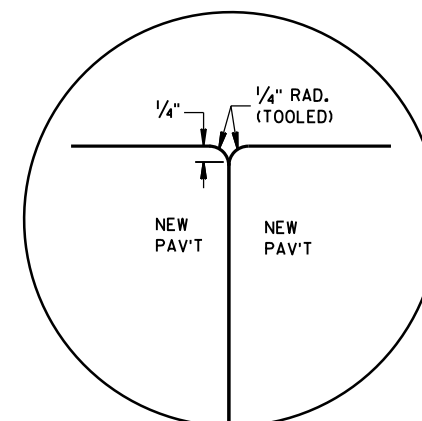
PLAN VIEW



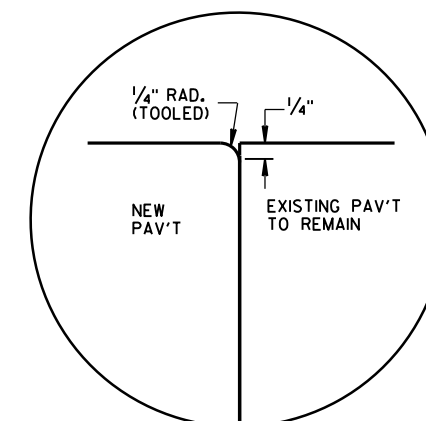
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



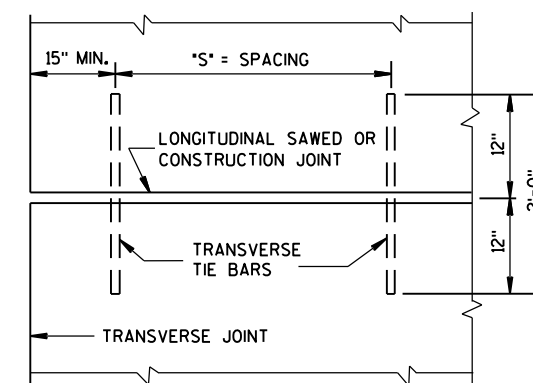
DETAIL "B"



DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH 24' OR 26'	≥ 30'
6, 6 1/2"	3 ± 1/2"	48"	42"
7, 7 1/2"	3 1/4 ± 1"	45"	36"
8, 8 1/2"	3 3/4 ± 1"	39"	30"
9, 9 1/2"	4 1/4 ± 1"	33"	27"
10, 10 1/2"	4 3/4 ± 1"	30"	24"
11, 11 1/2"	5 1/4 ± 1"	27"	21"
12"	5 3/4 ± 1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

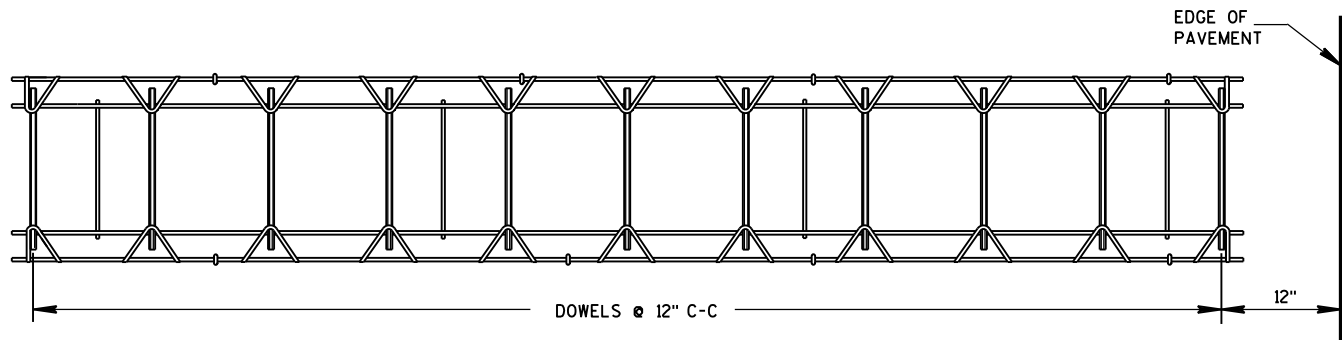
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/2014
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER

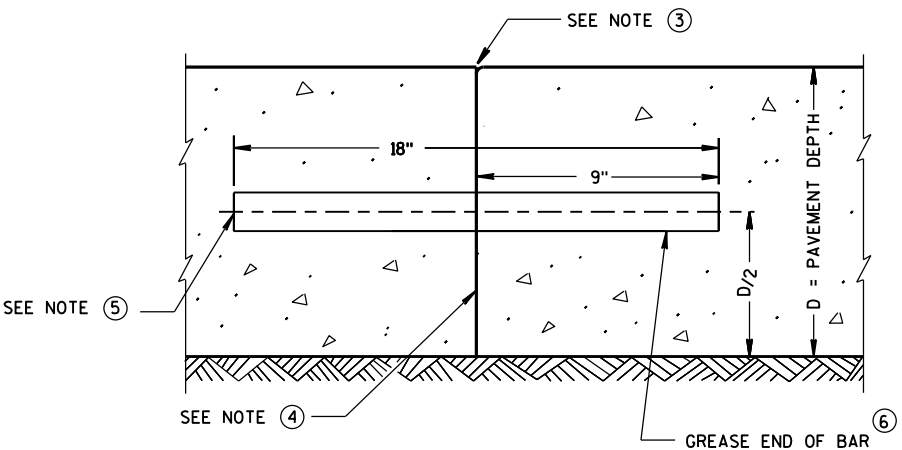
FHWA



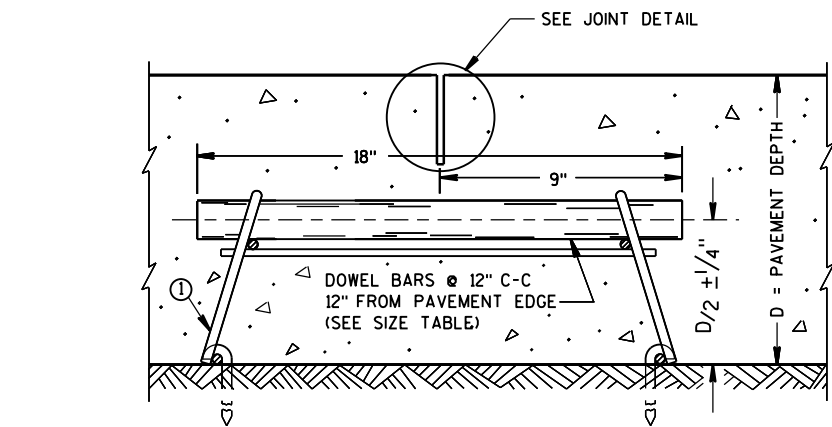
PLAN VIEW



SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY



TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

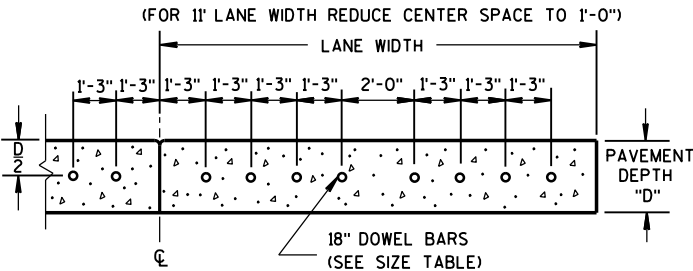
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

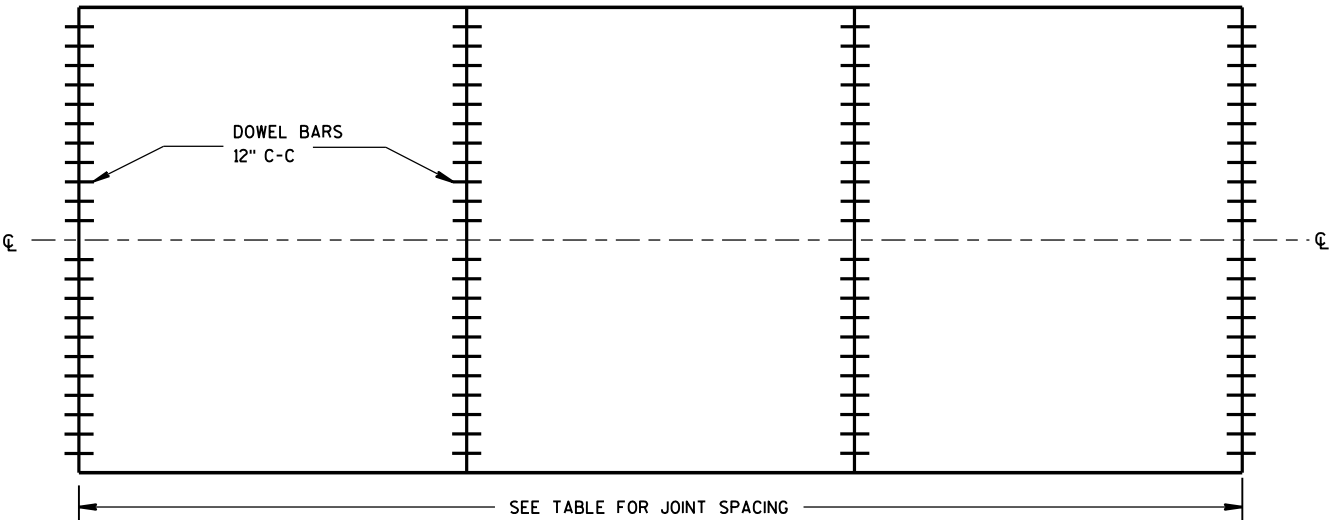
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

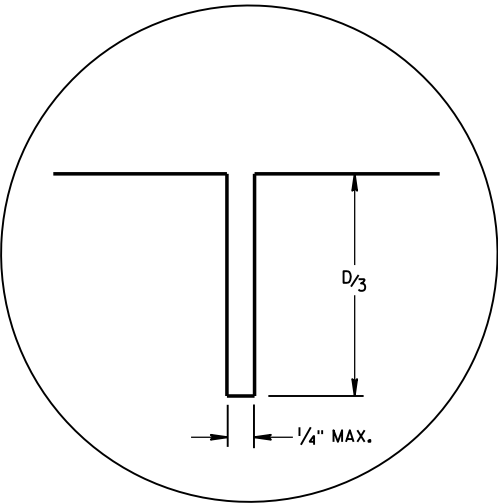
- OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
- APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DRILLED DOWEL BAR CONSTRUCTION JOINT



CONTRACTION JOINT LOCATIONS

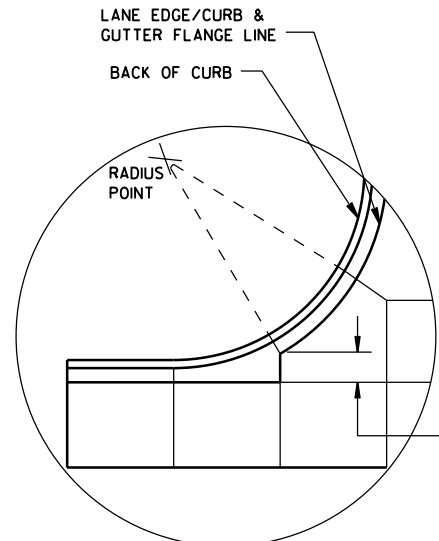


JOINT DETAIL

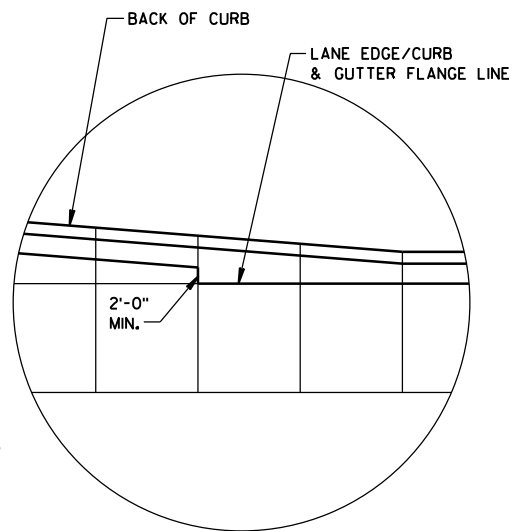
URBAN DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

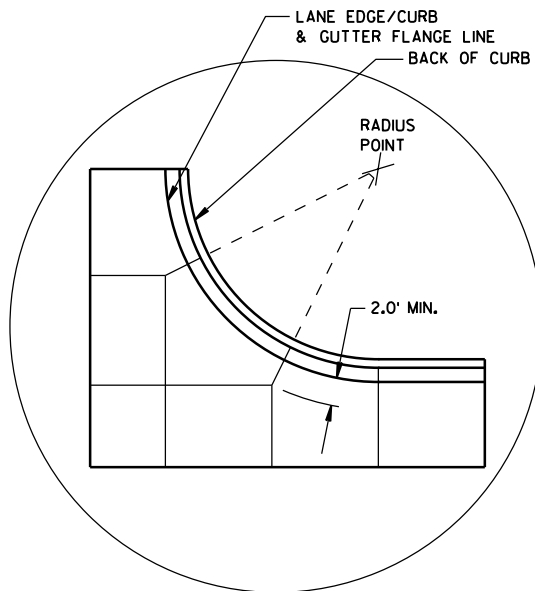
APPROVED
5/3/2013 /S/ Deb Bischoff
DATE PAVEMENT POLICY & DESIGN ENGINEER
FHWA



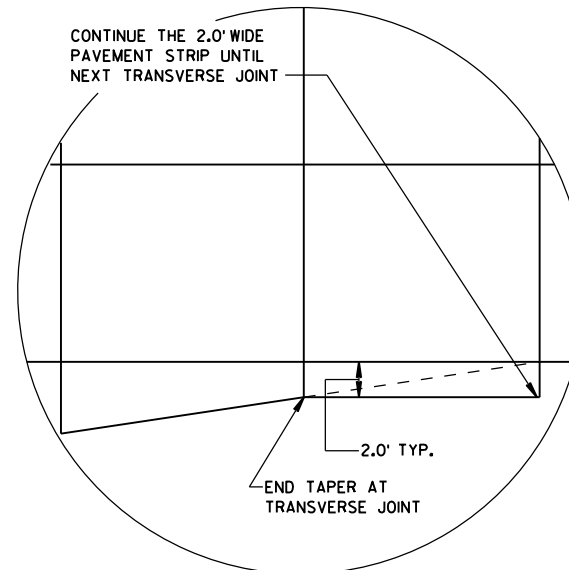
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

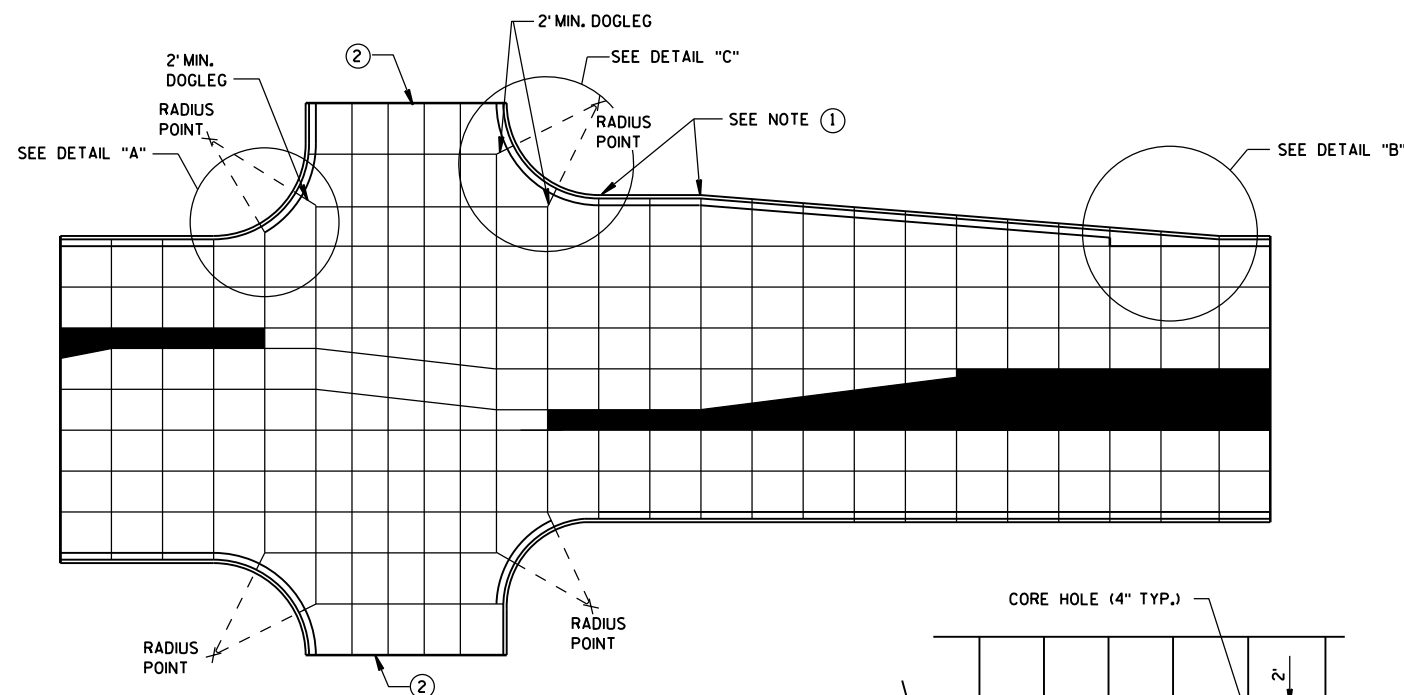
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

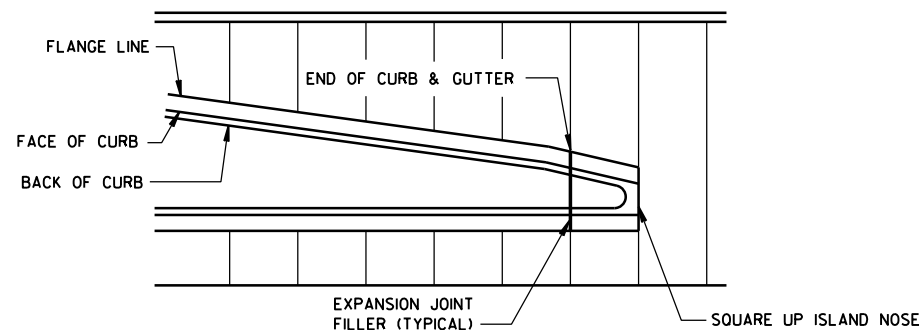
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

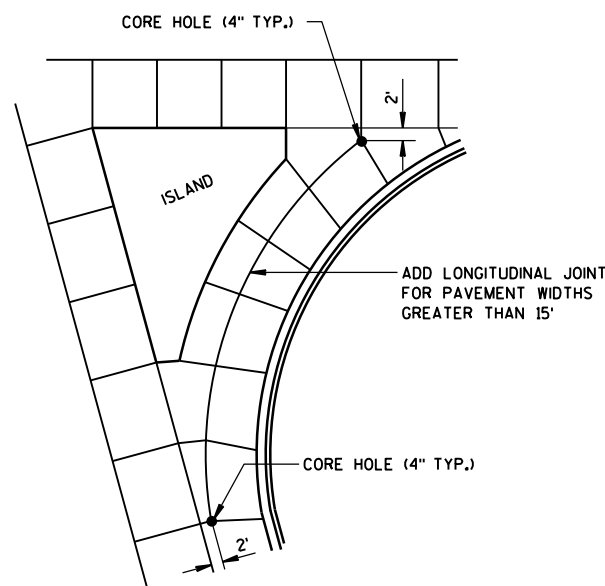
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



STANDARD INTERSECTION



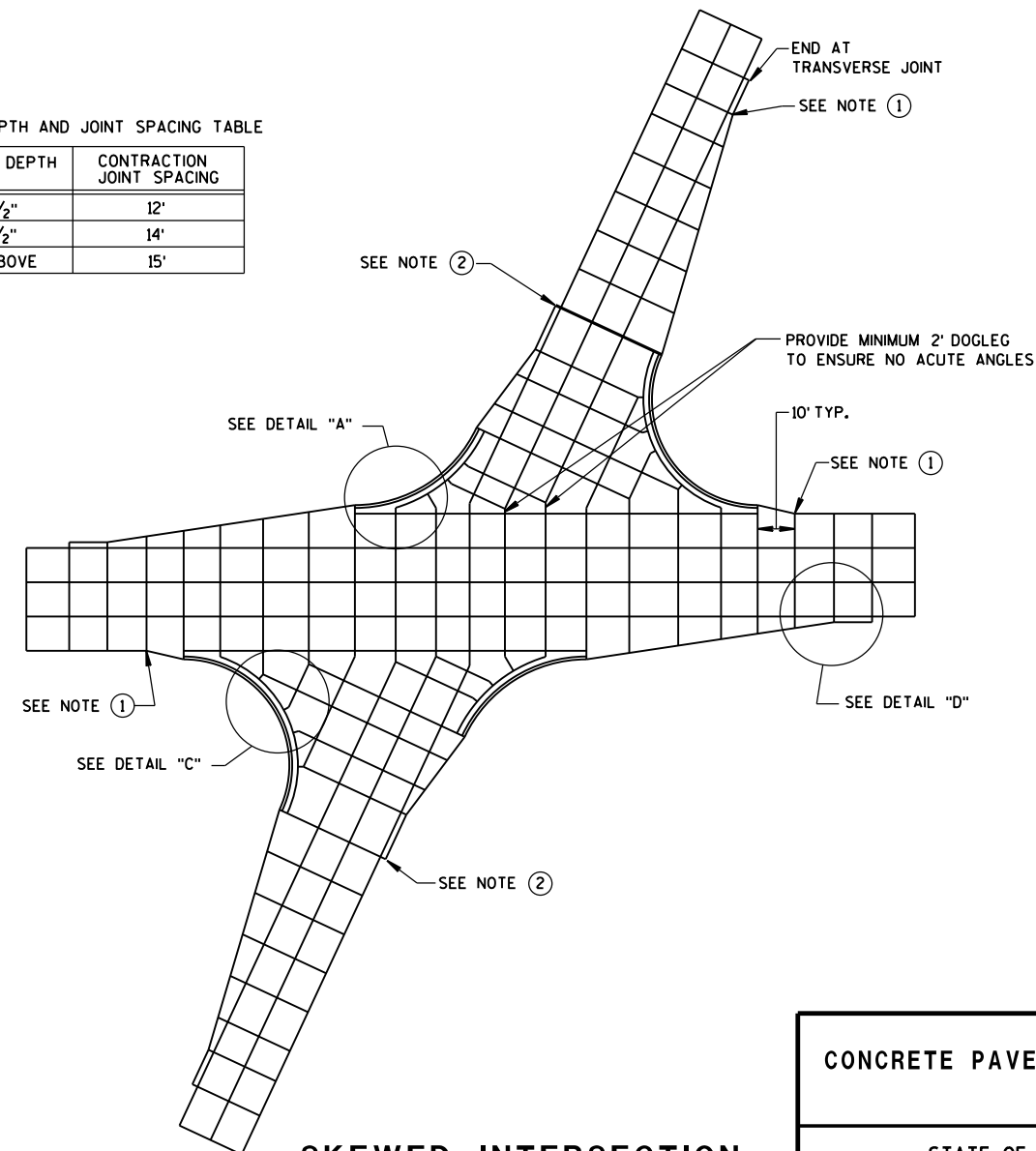
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

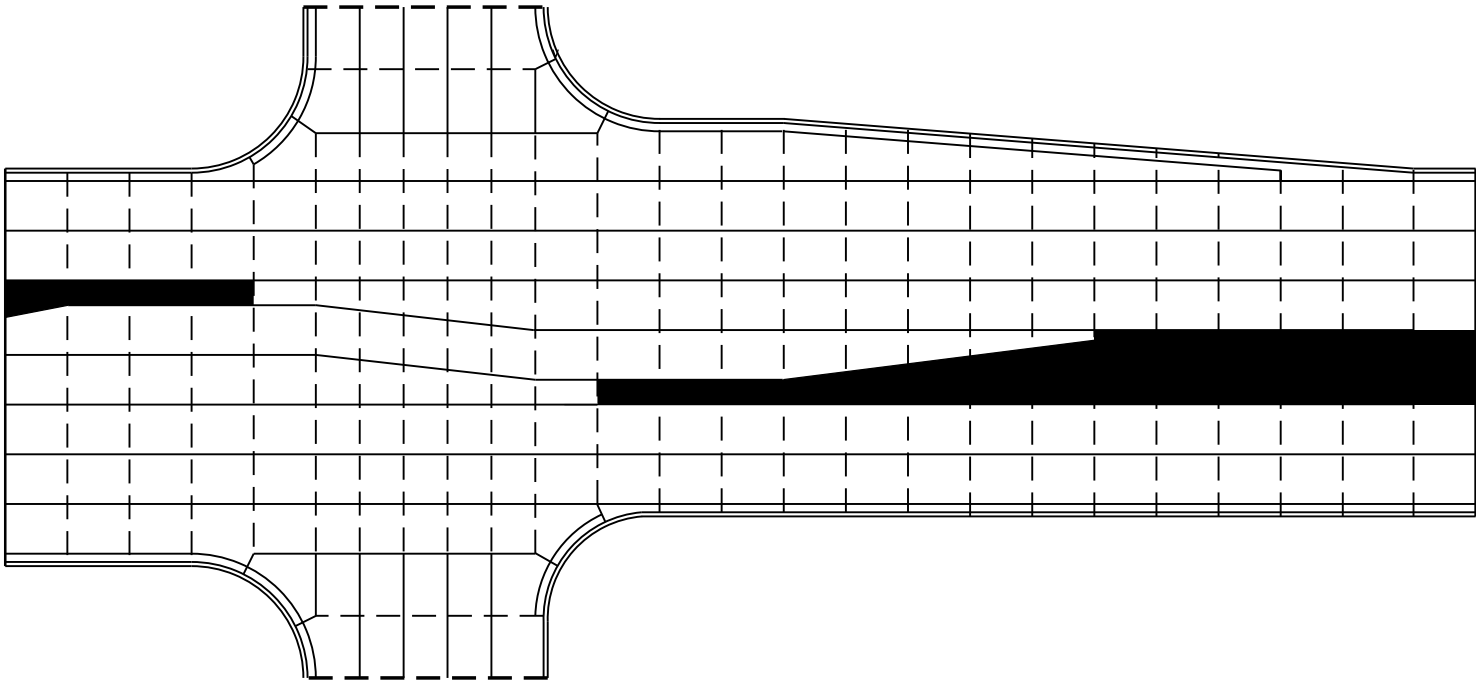
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

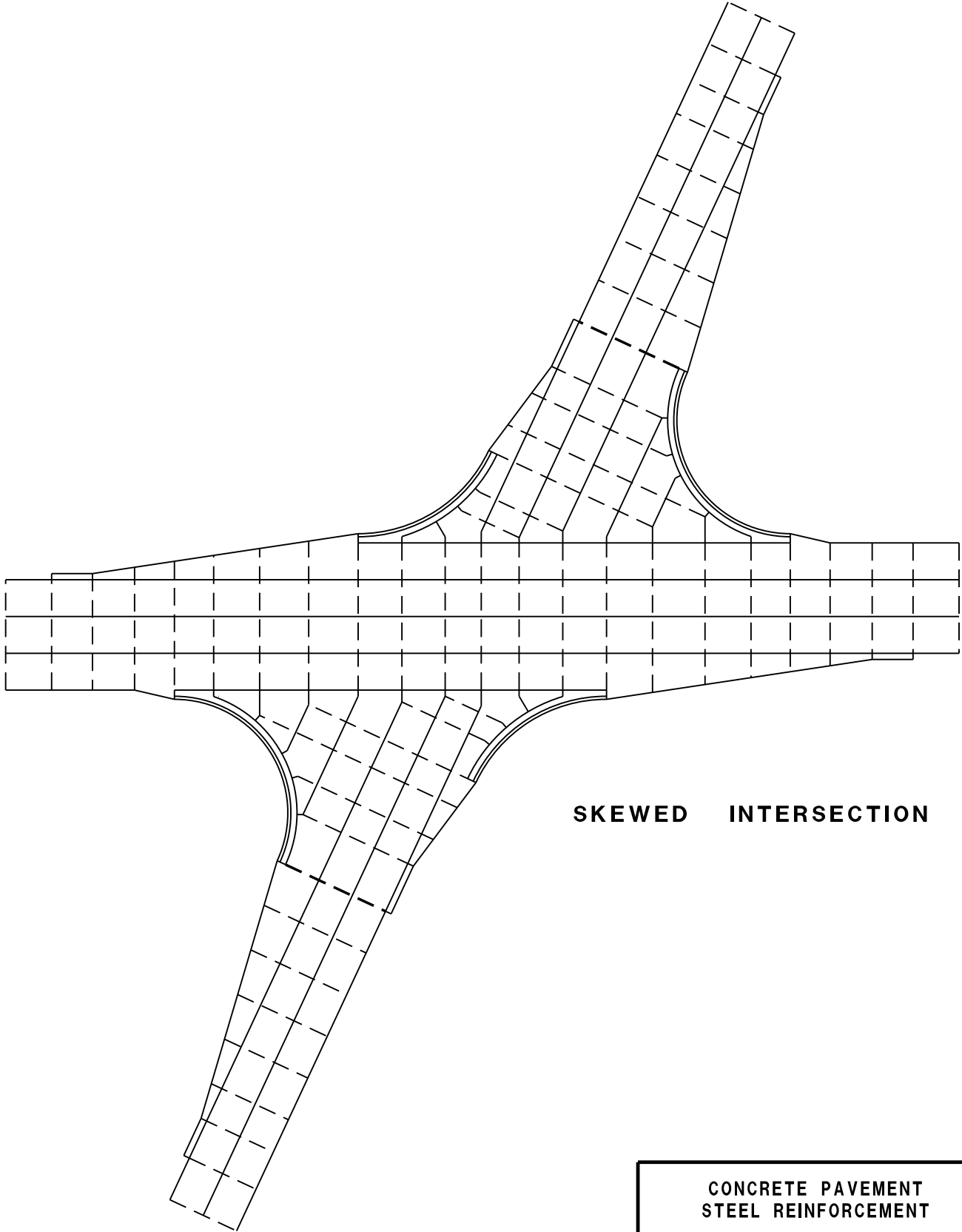
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



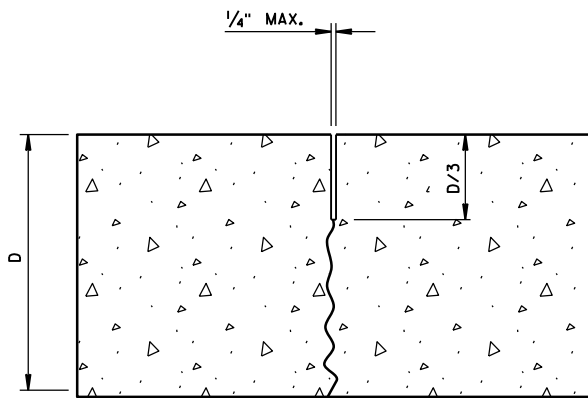
STANDARD INTERSECTION



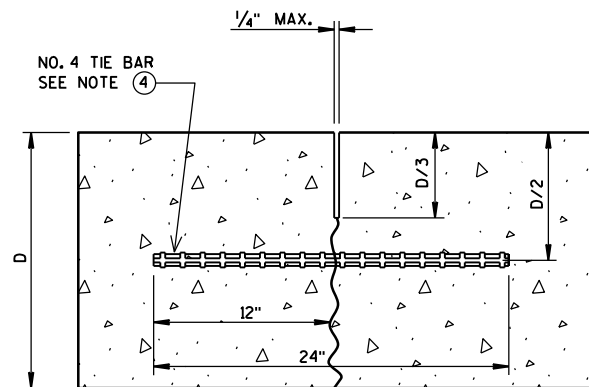
SKewed INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

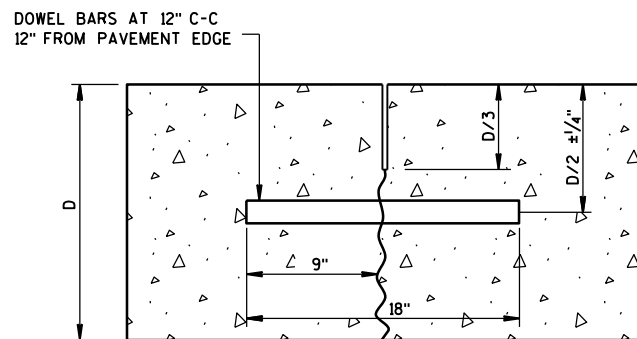
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UNDOWELED-TRANSVERSE



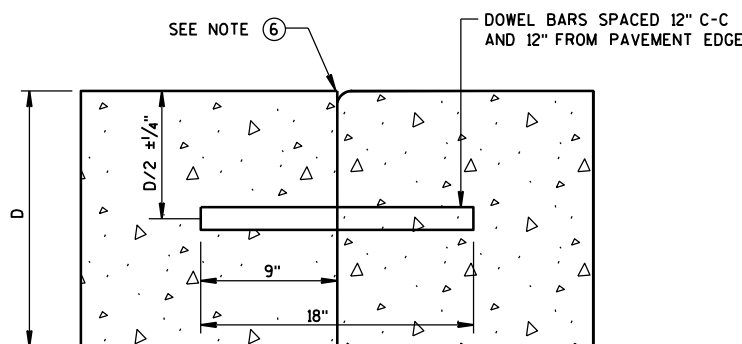
TIED LONGITUDINAL



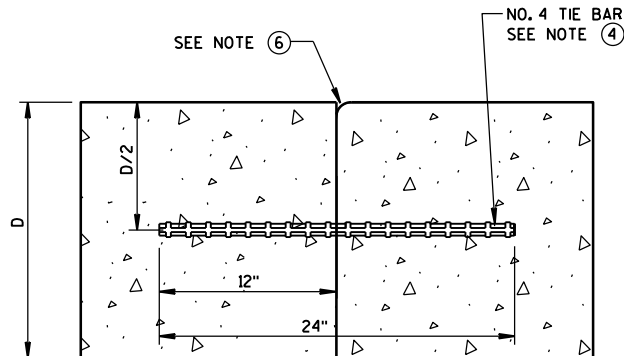
DOWELED-TRANSVERSE

CONTRACTION JOINTS

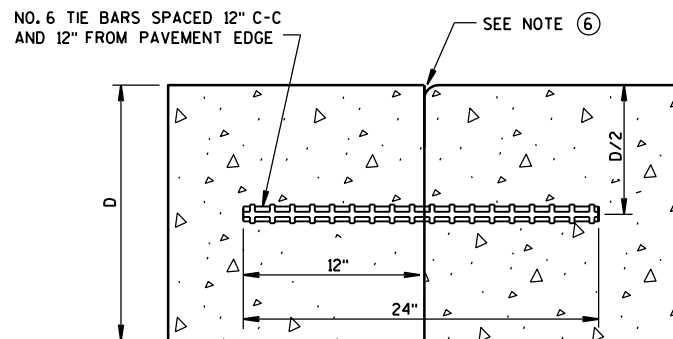
SEE NOTE ②



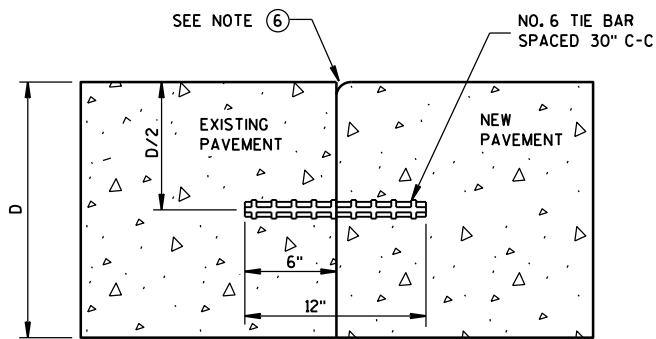
DOWELED TRANSVERSE



TIED LONGITUDINAL



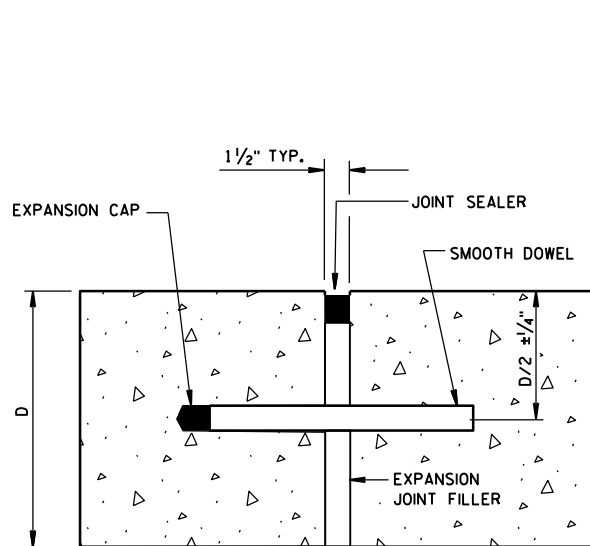
TIED TRANSVERSE
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

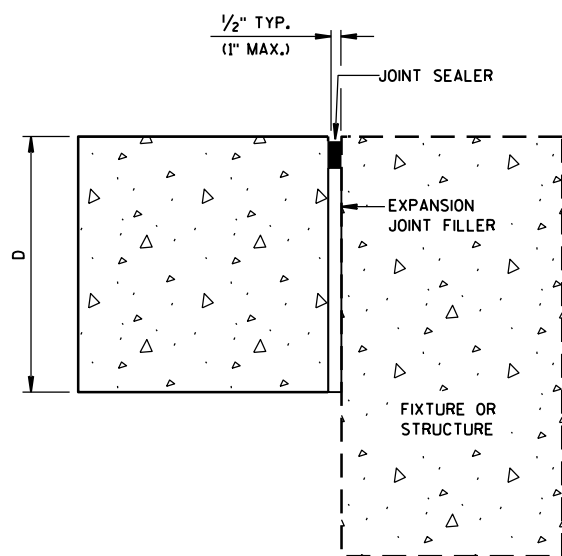
CONSTRUCTION JOINTS

SEE NOTE ⑤



DOWELED-TRANSVERSE

SEE NOTE ①



UNTIED-LONGITUDINAL

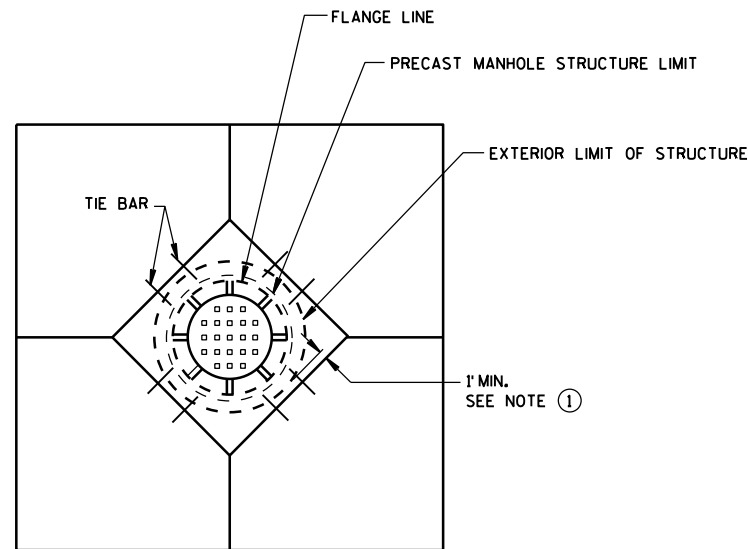
EXPANSION JOINTS

GENERAL NOTES

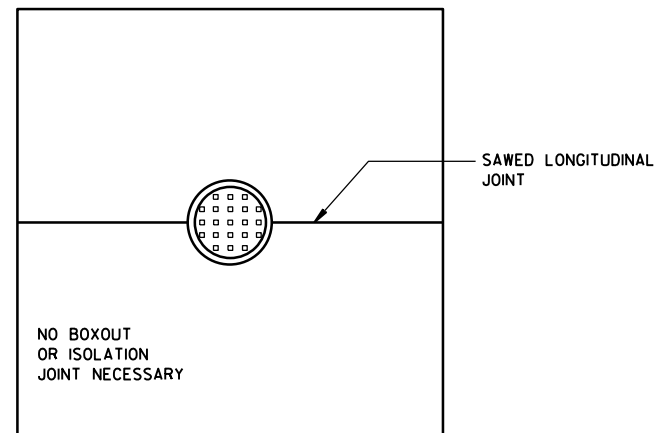
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.

CONCRETE PAVEMENT
JOINT TYPES

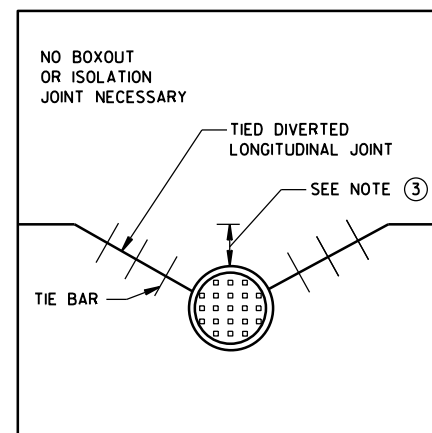
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



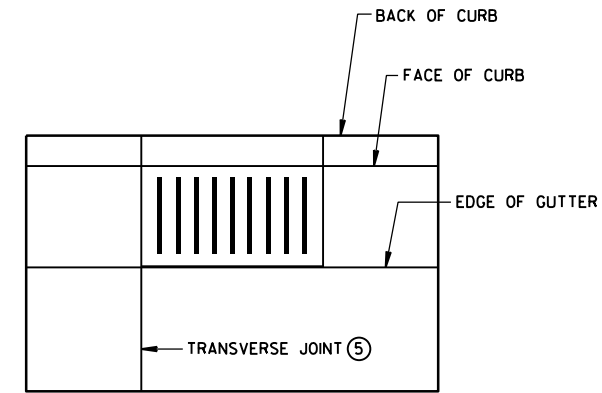
**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**



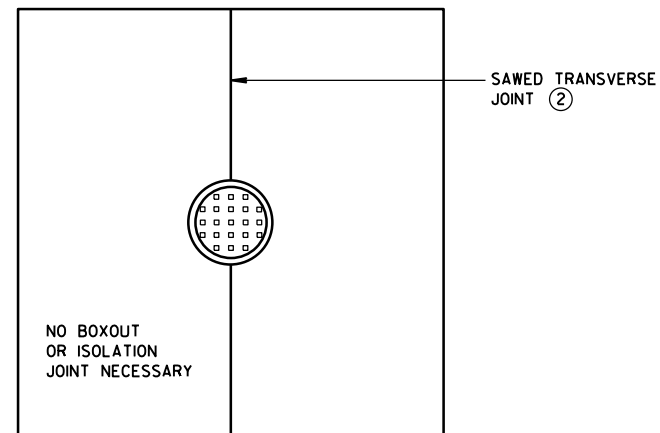
**MANHOLE WITH
LONGITUDINAL JOINT**



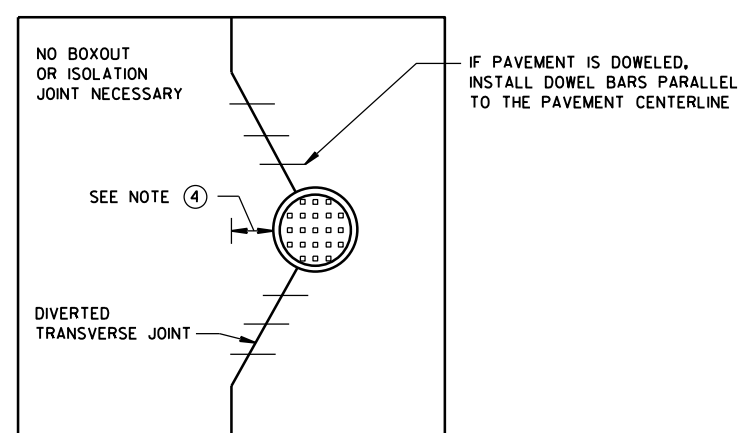
**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH
TRANSVERSE JOINT**



**MANHOLE WITH
TRANSVERSE JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**

GENERAL NOTES

- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ④ IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

**CONCRETE PAVEMENT
JOINTING AT UTILITY FIXTURES**

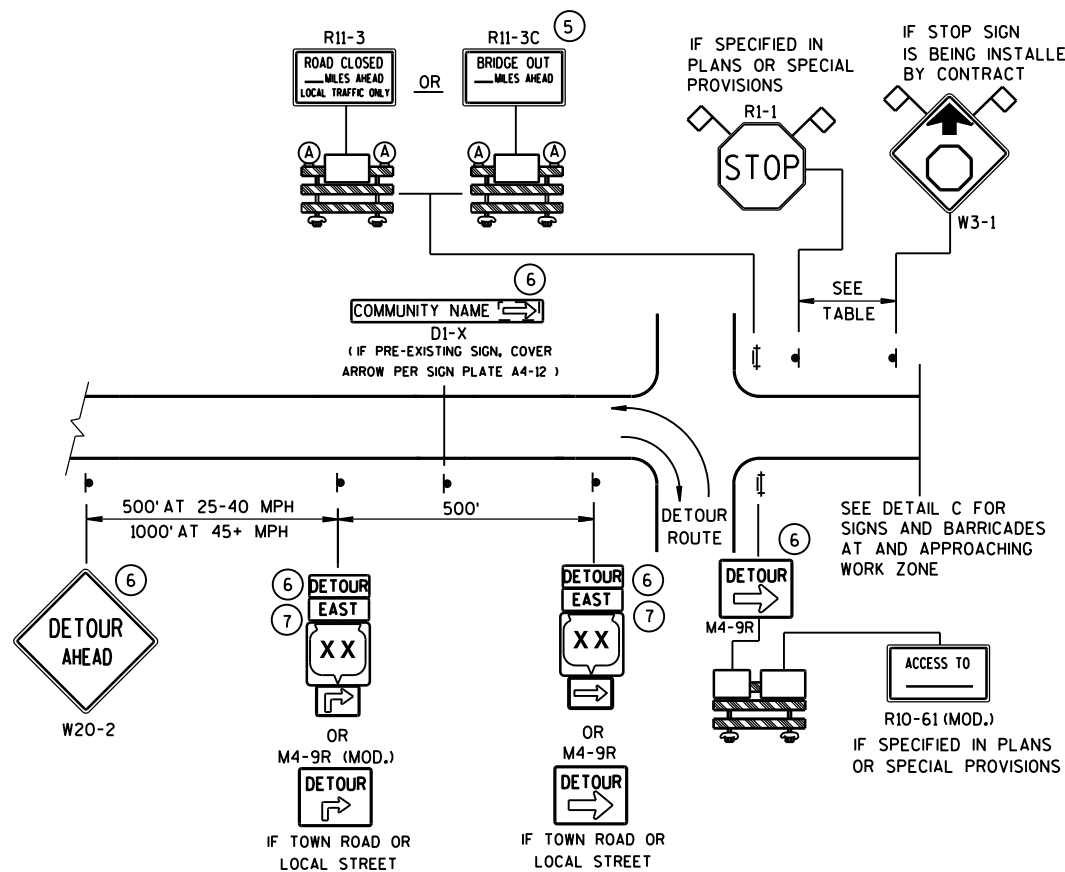
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

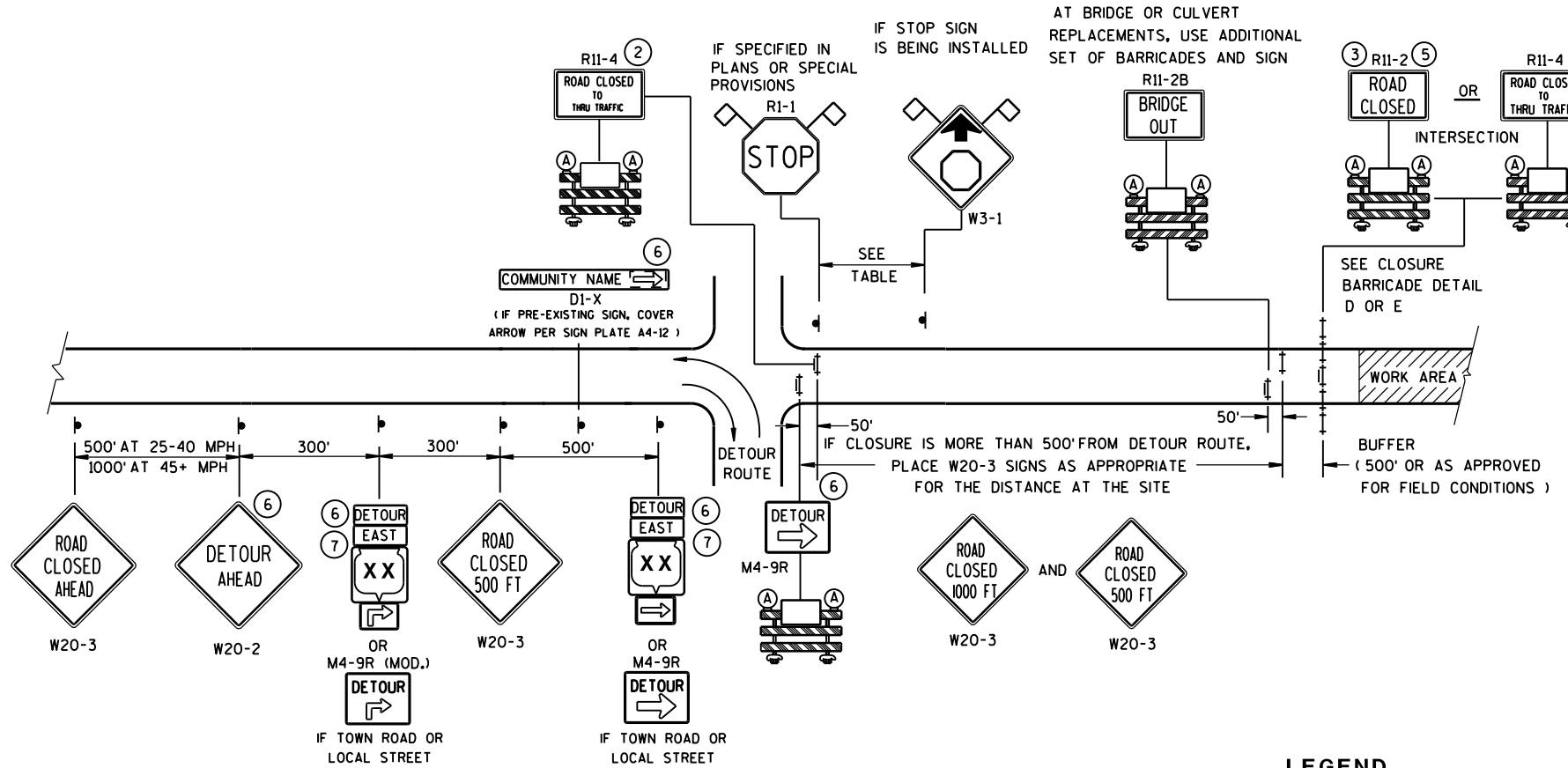
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DATE

FHWA

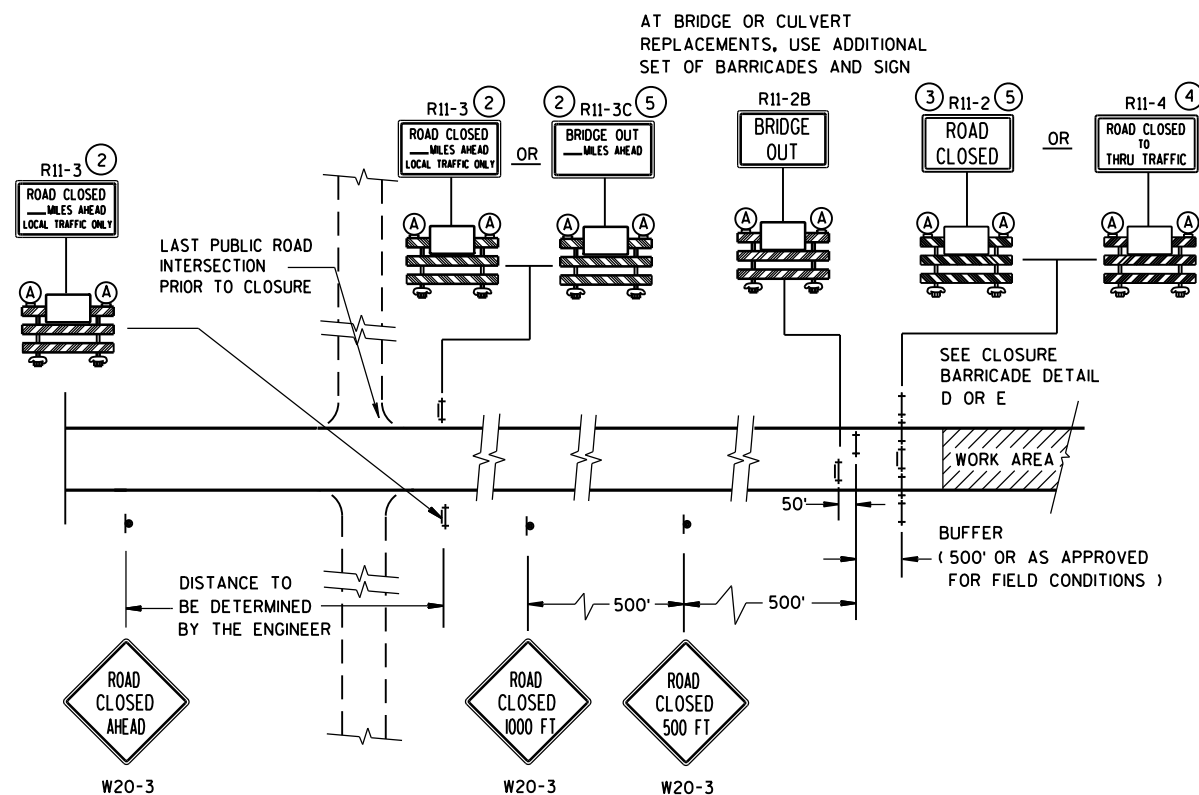
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

- SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

DETOUR EAST
M4-8
M3-X
XX OR XX OR XX
M1-4 M1-5A M1-6

OR
M05-1 M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

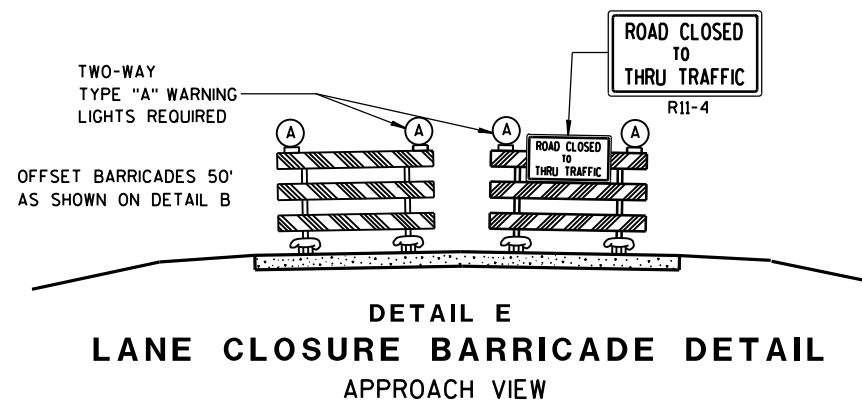
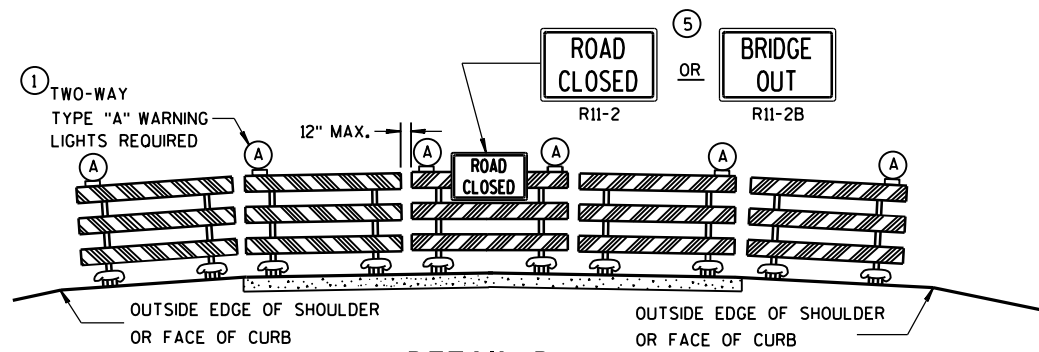
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

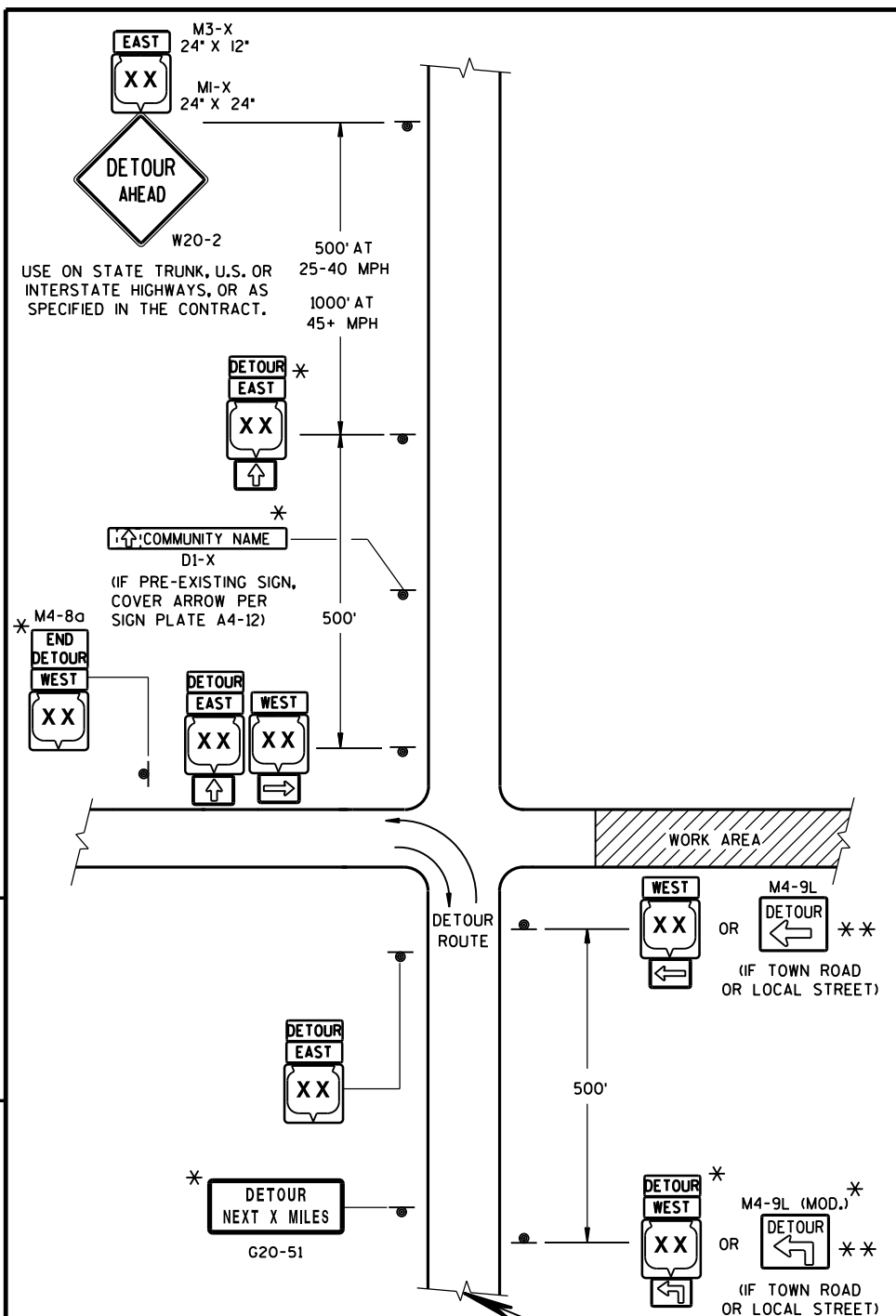
R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT

DETAIL F
DETOUR SIGNING

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

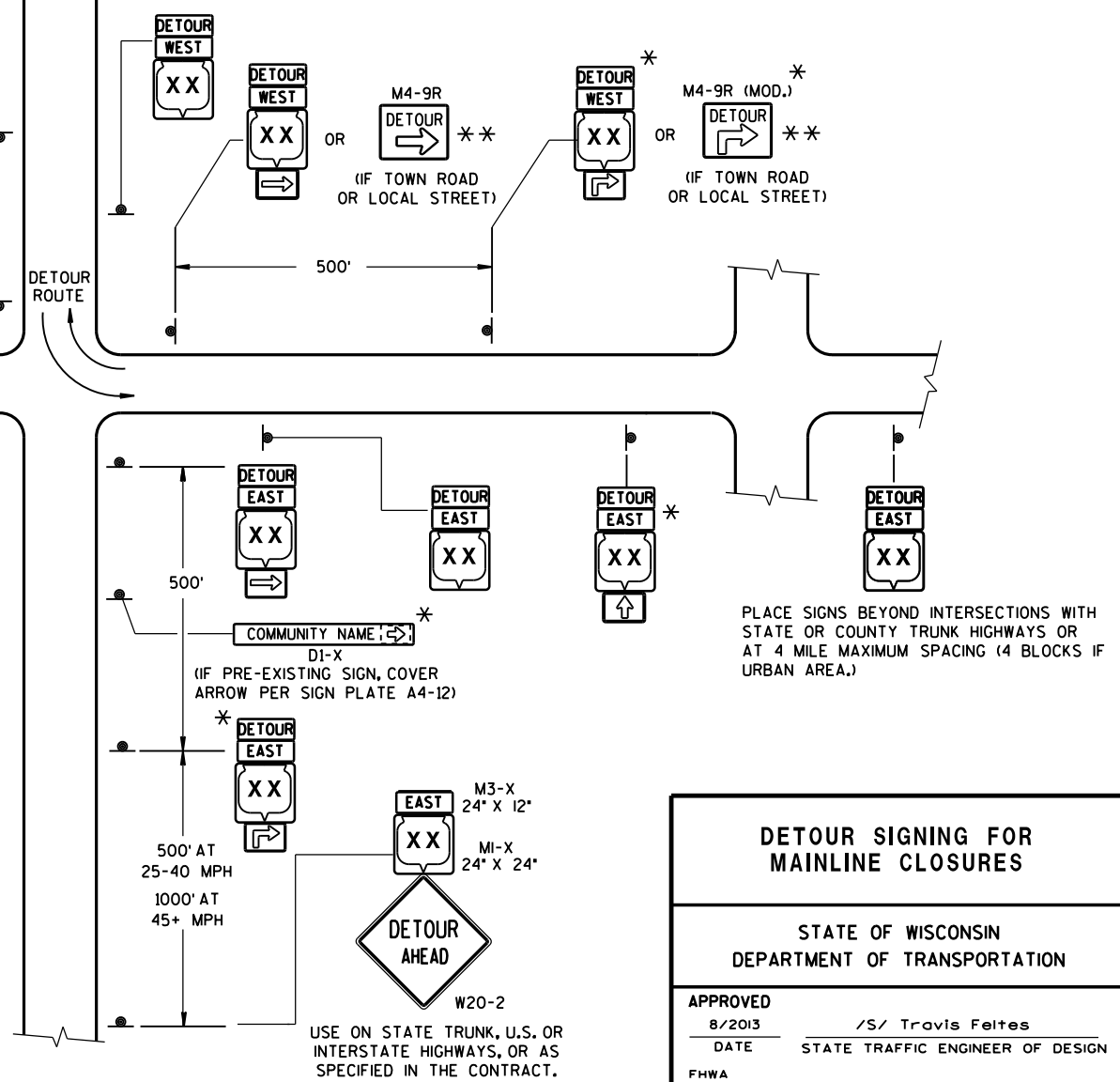
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

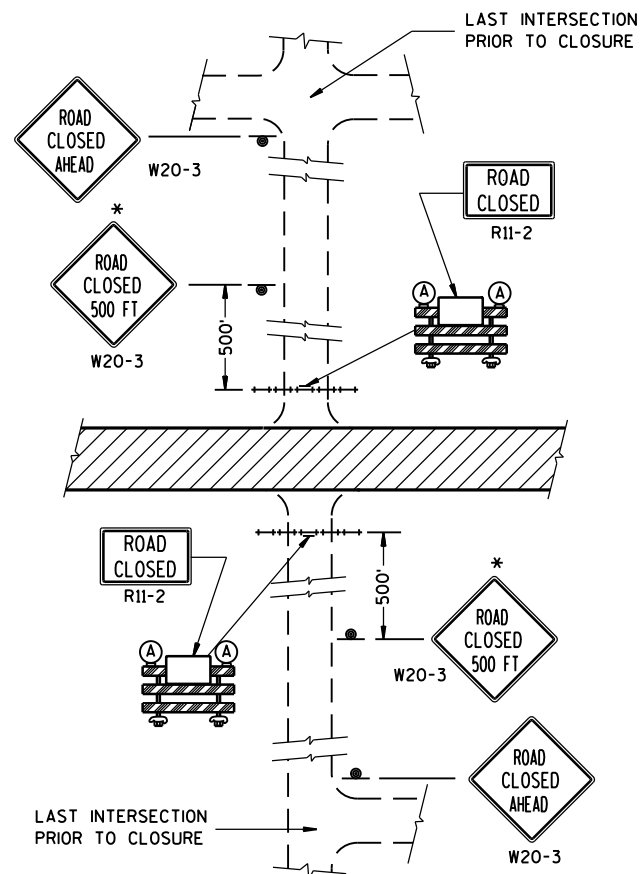
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



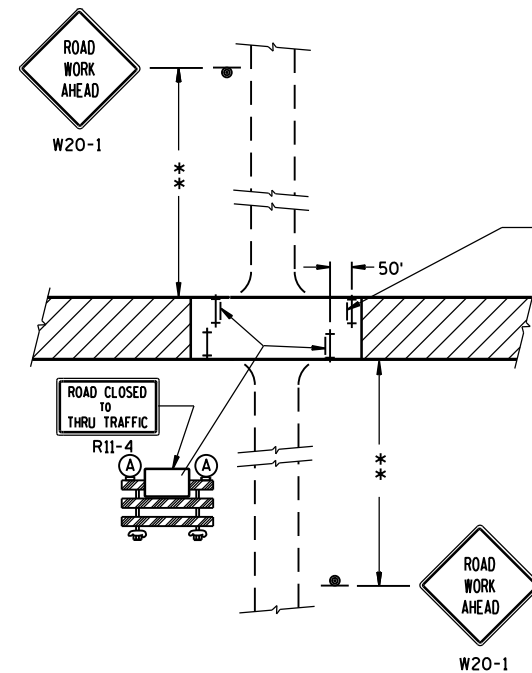
- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - WORK AREA
 - M4-8
 - M3-X
 - MI-4
 - MI-5A
 - MI-6
 - M05-1
 - M06-1
 - M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

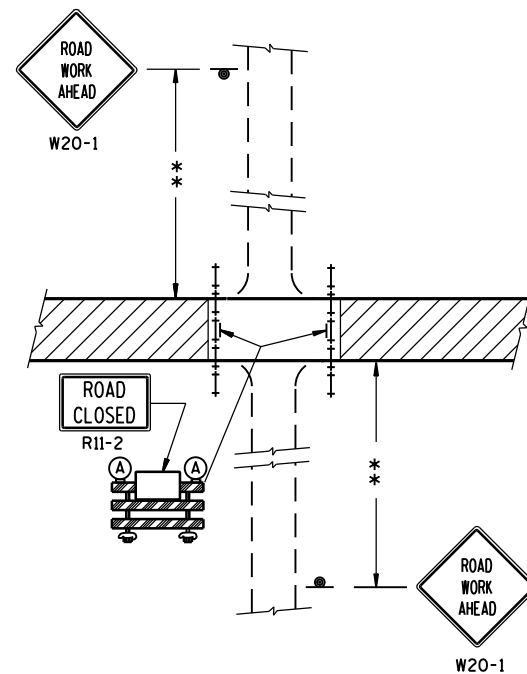
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



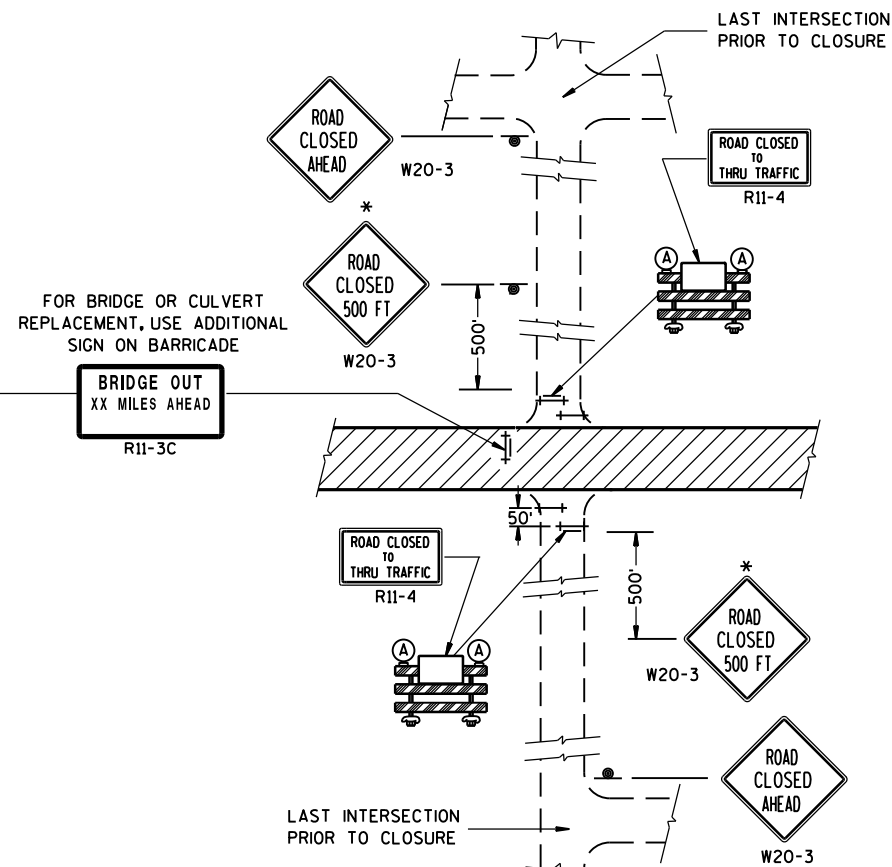
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

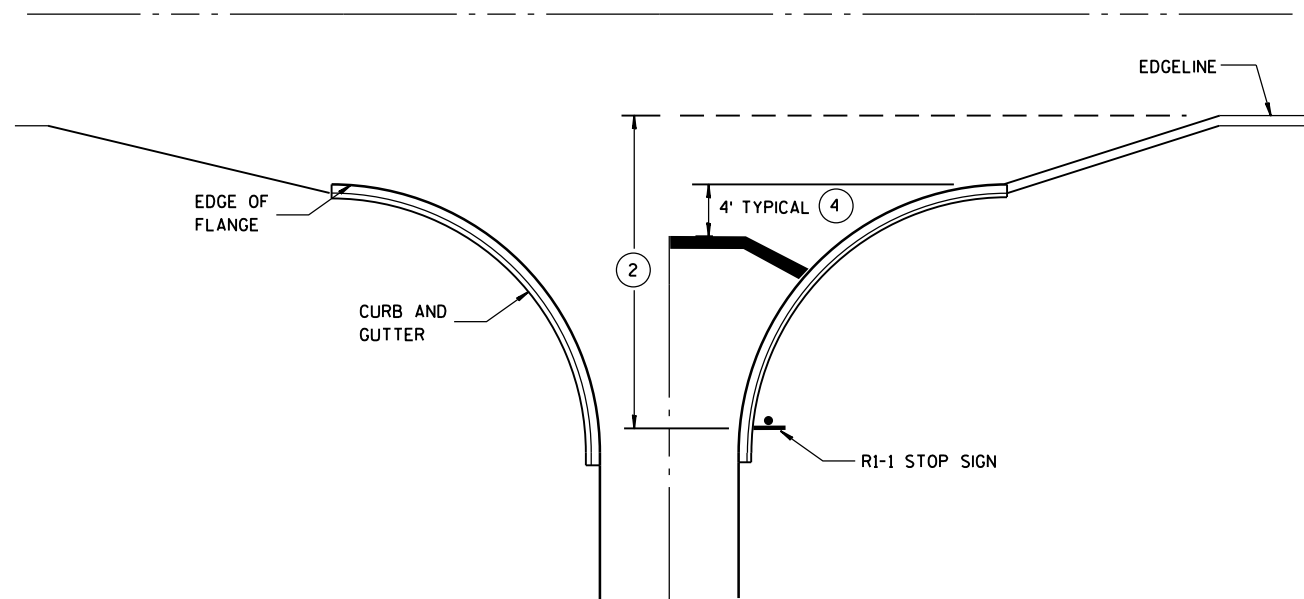
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

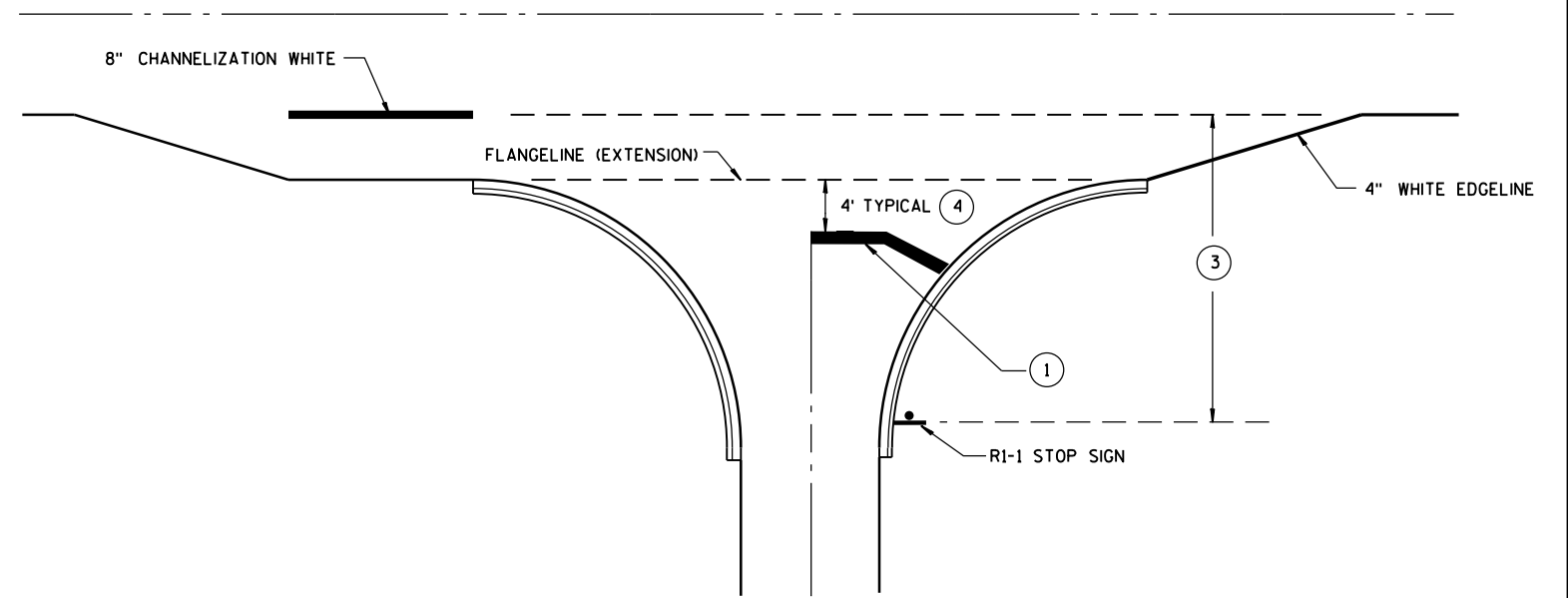
8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

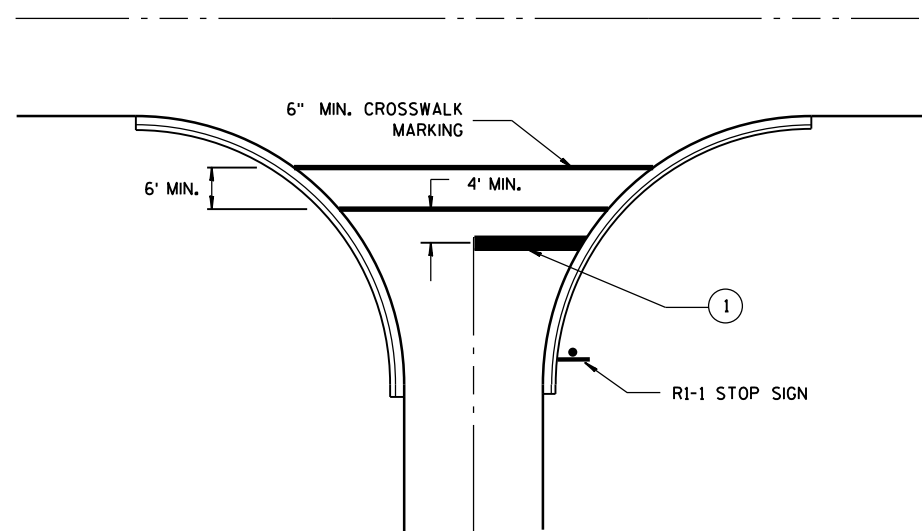
FHWA



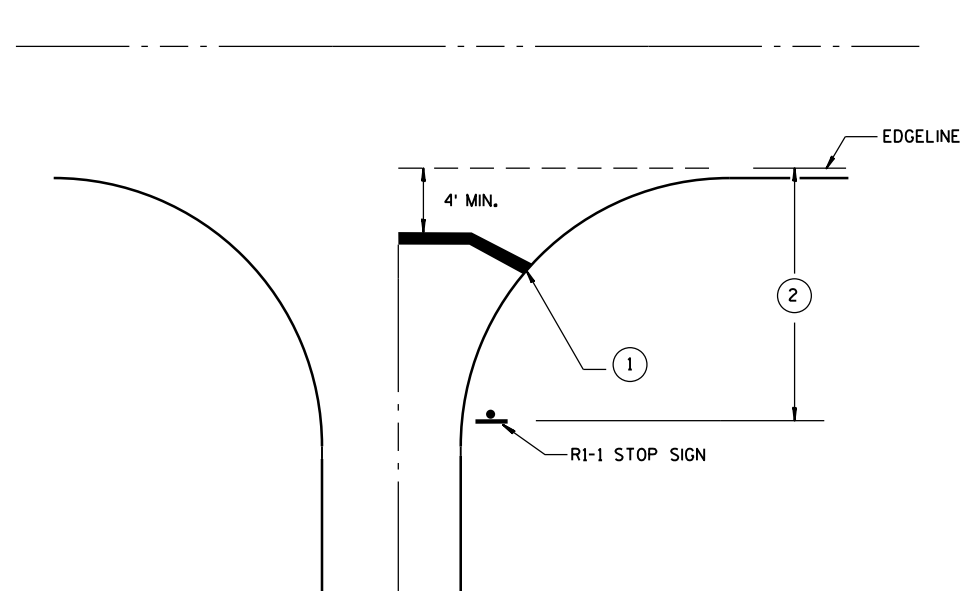
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

**STOP LINE AND CROSSWALK
PAVEMENT MARKING**

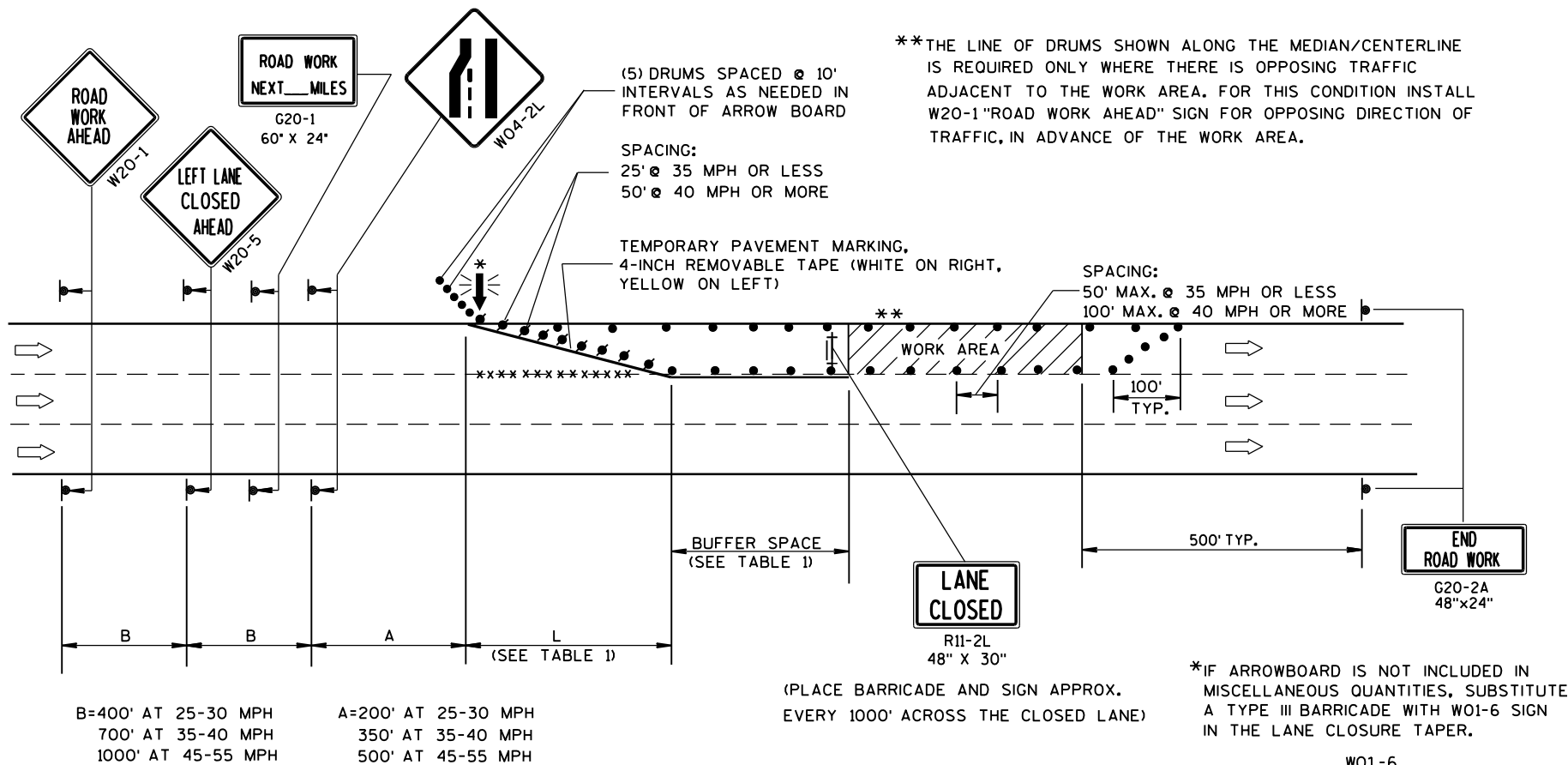
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

FHWA

/S/ Travis Feltz
STATE TRAFFIC ENGINEER



GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

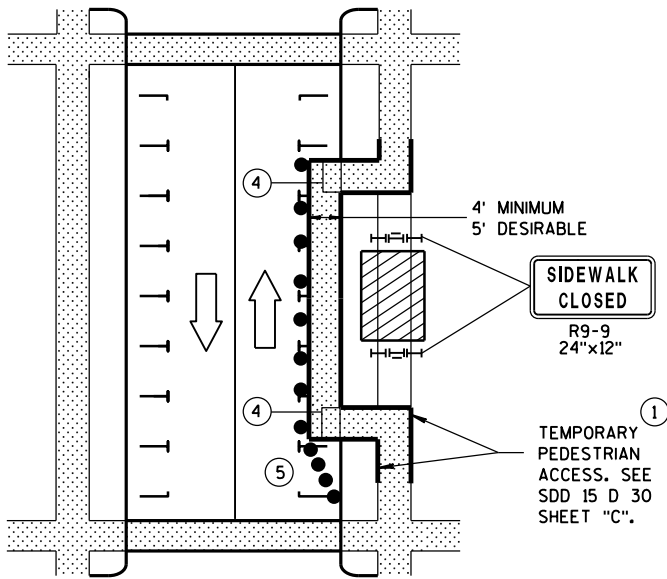
W = WIDTH OF LANE CLOSURE

LEGEND

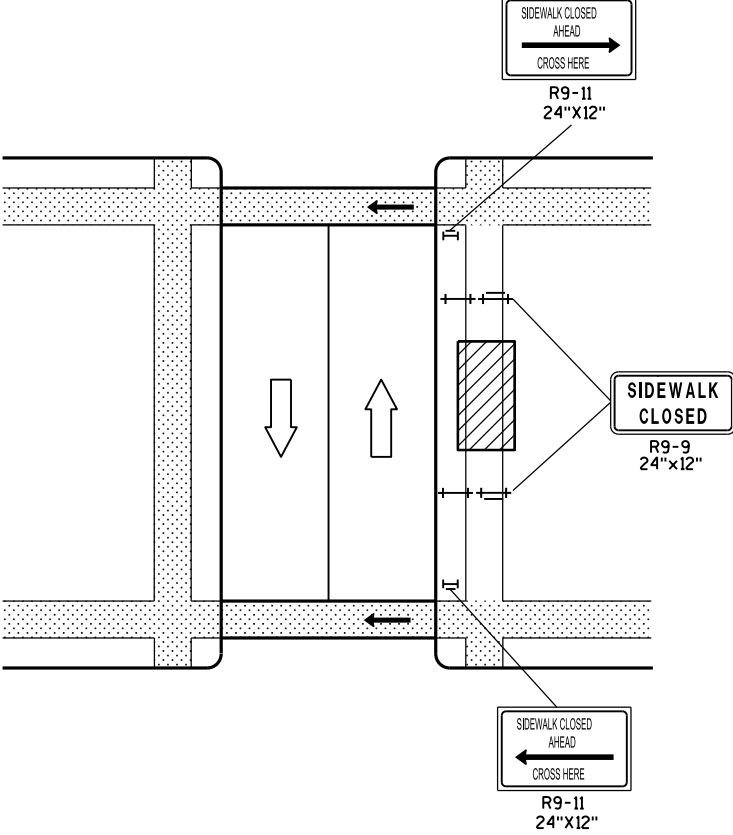
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Feb. 2015	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

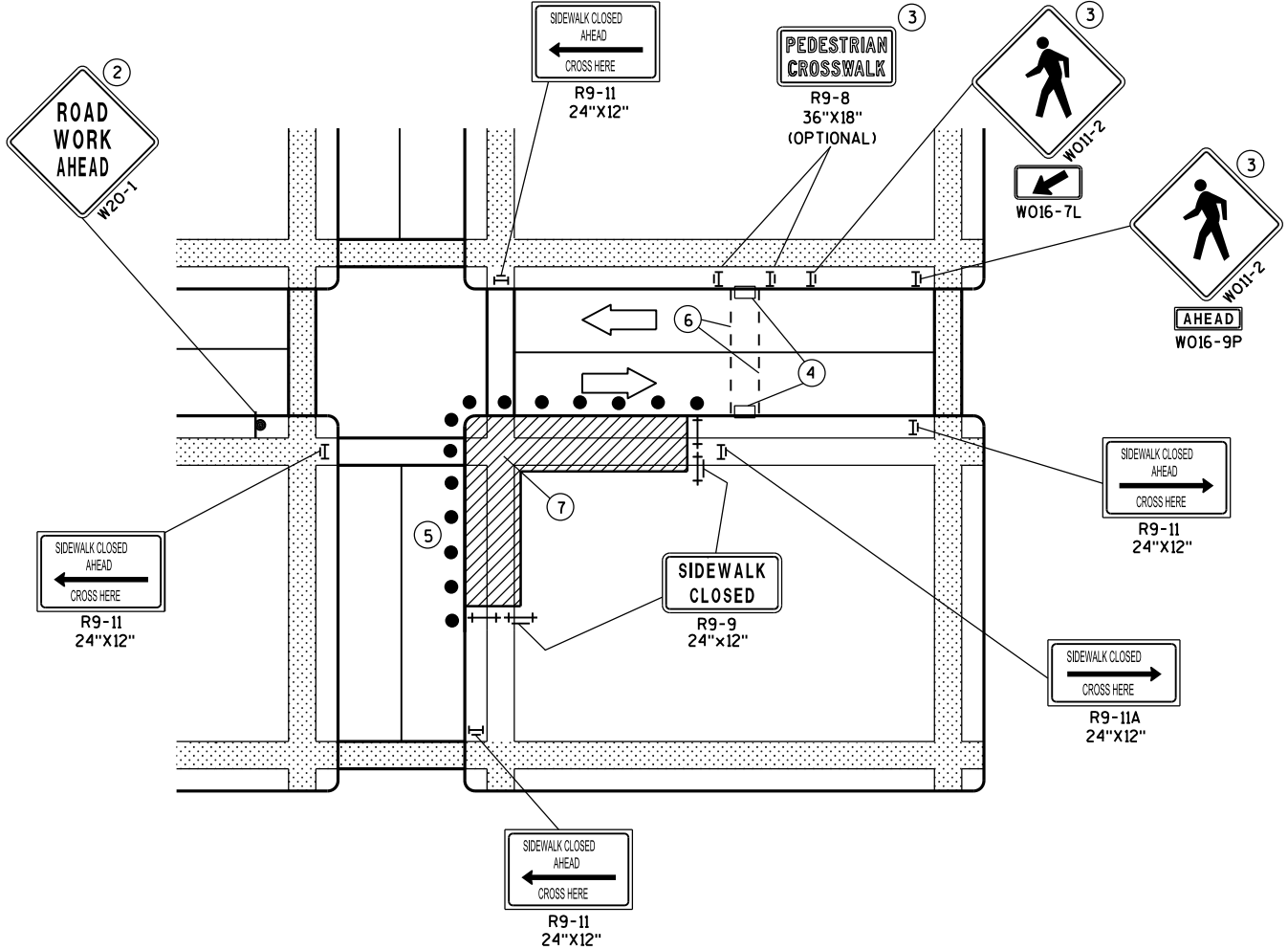
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

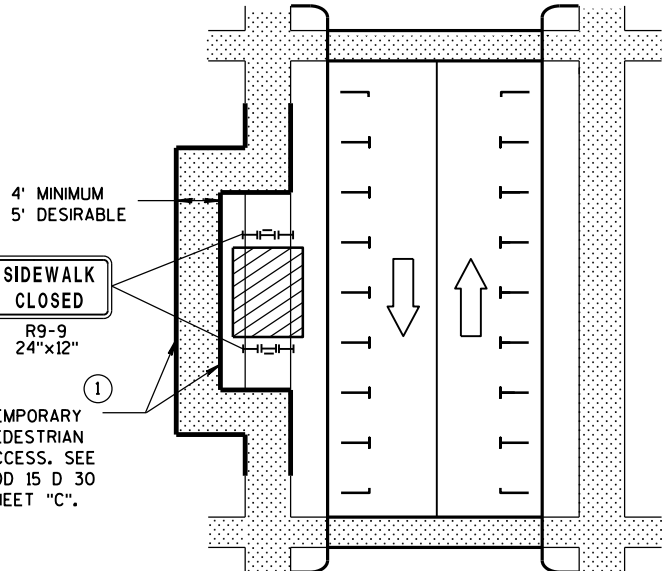


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"W0" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

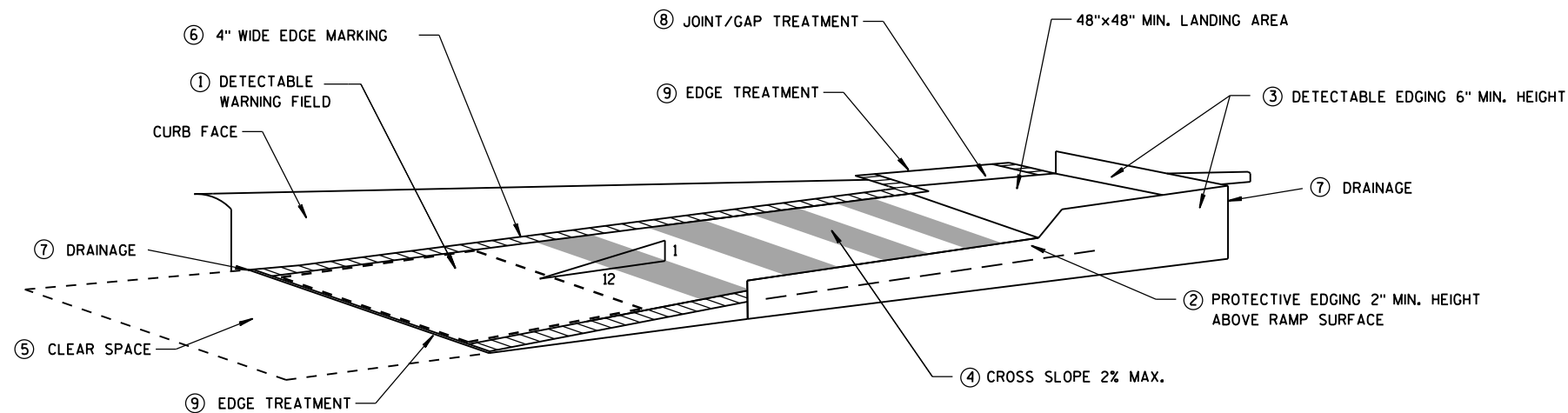
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

	SIGN ON PERMANENT SUPPORT		DIRECTION OF TRAFFIC
	UNDER PEDESTRIAN TRAFFIC		TRAFFIC CONTROL DRUM
	WORK AREA		
	PEDESTRIAN CHANNELIZATION DEVICE		
	TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		
	TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

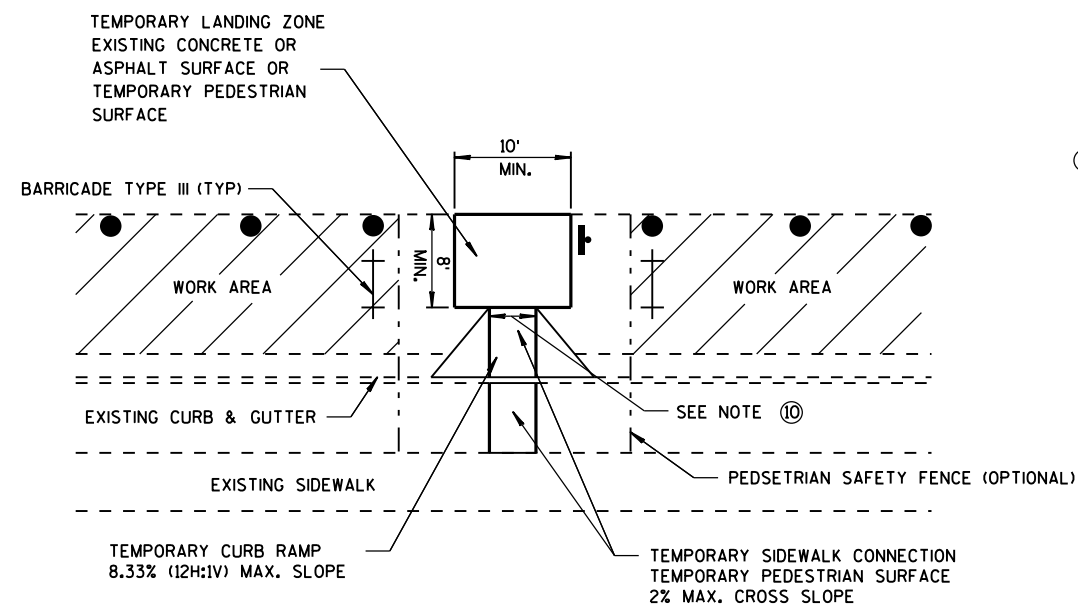
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



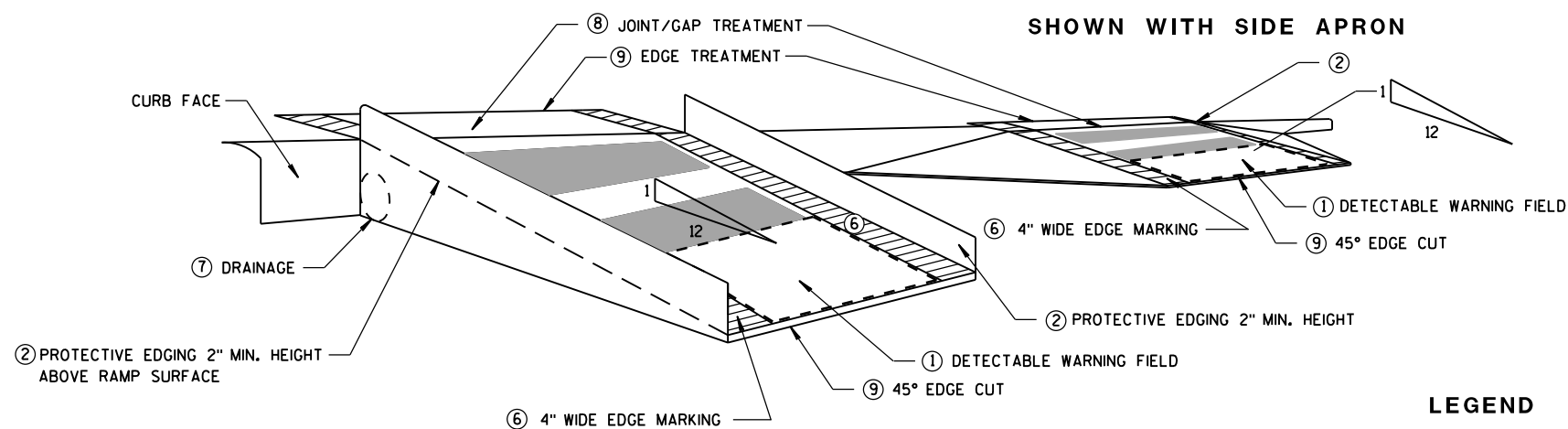
TEMPORARY CURB RAMP
PARALLEL TO CURB

GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY
TO MAINTAIN PEDESTRIAN ACCESS.
- 1 CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
 - 2 PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
 - 3 DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
 - 4 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
 - 5 CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
 - 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
 - 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
 - 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
 - 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
 - 10 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP
PERPENDICULAR TO CURB

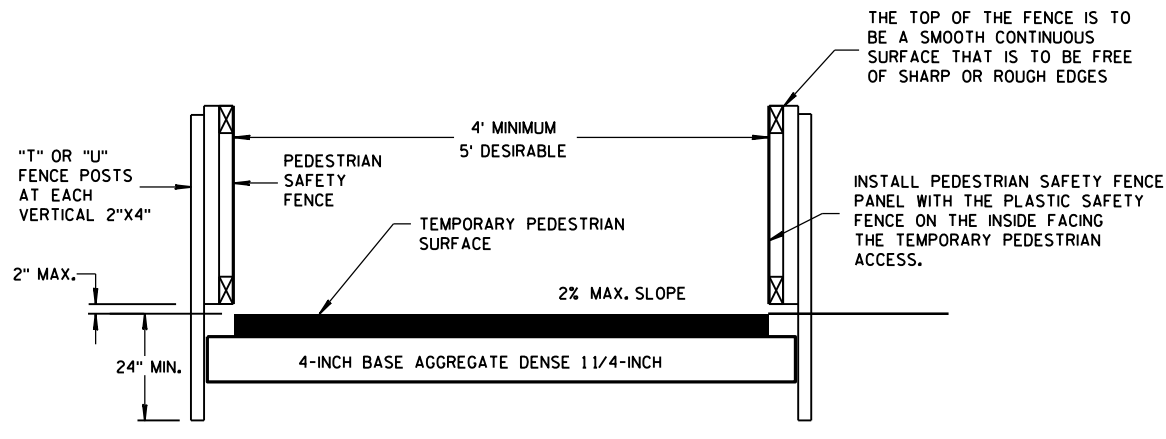
SHOWN WITH SIDE APRON

- LEGEND
- WORK AREA
 - TYPE III BARRICADE
 - TRAFFIC CONTROL DRUM

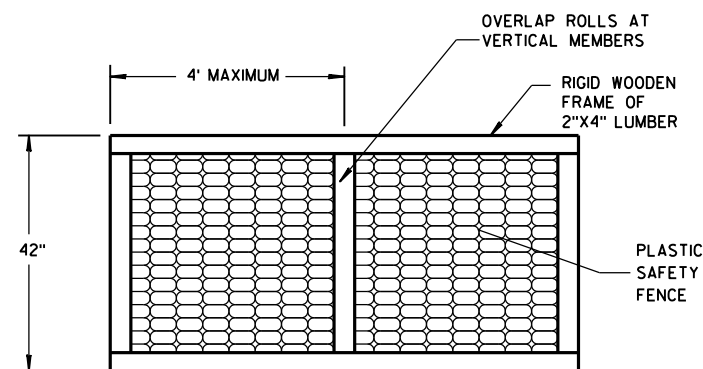
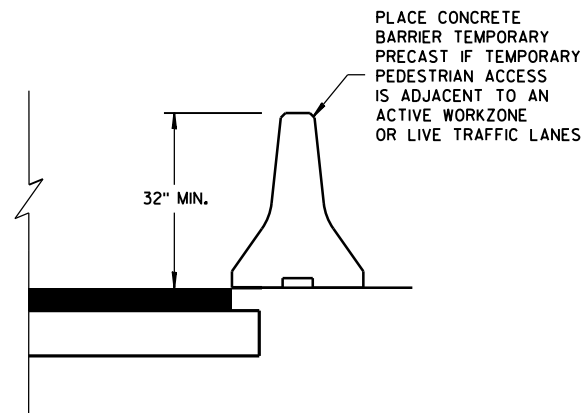
TRAFFIC CONTROL,
TEMPORARY ADA COMPLIANT
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

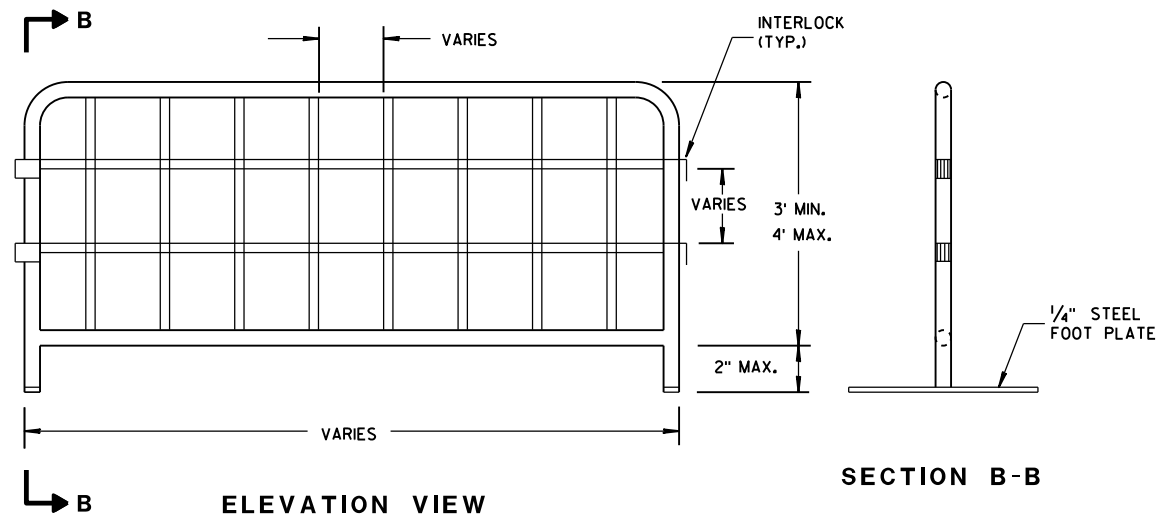
APPROVED
March 2015 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



TEMPORARY PEDESTRIAN ACCESS

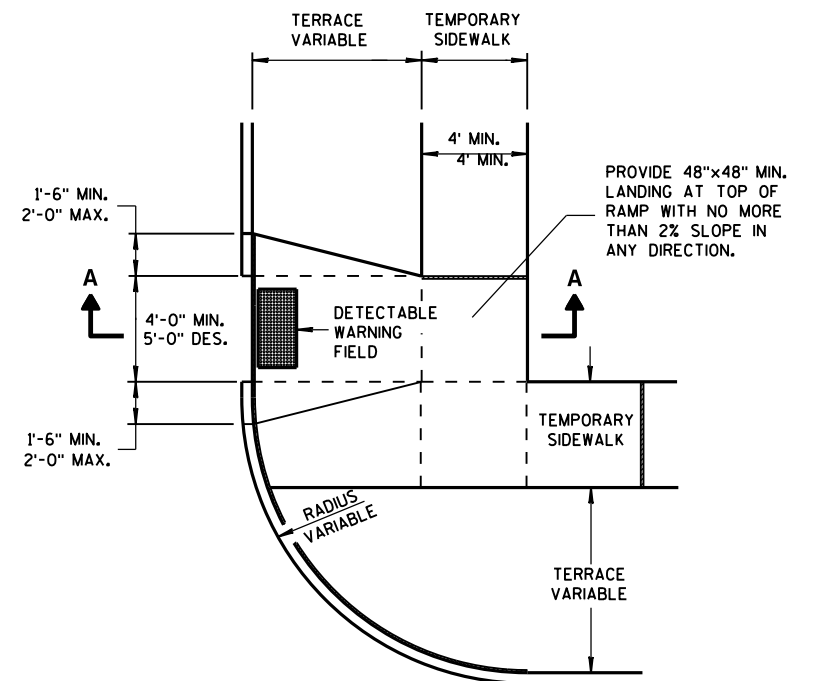
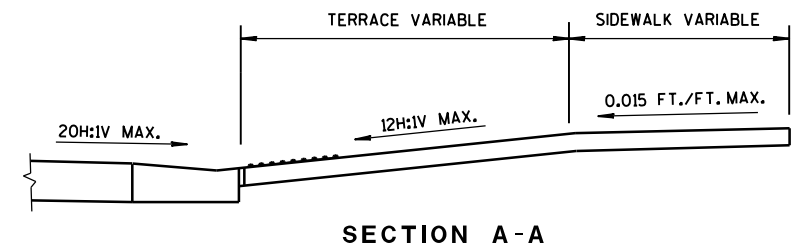


PEDESTRIAN SAFETY FENCE

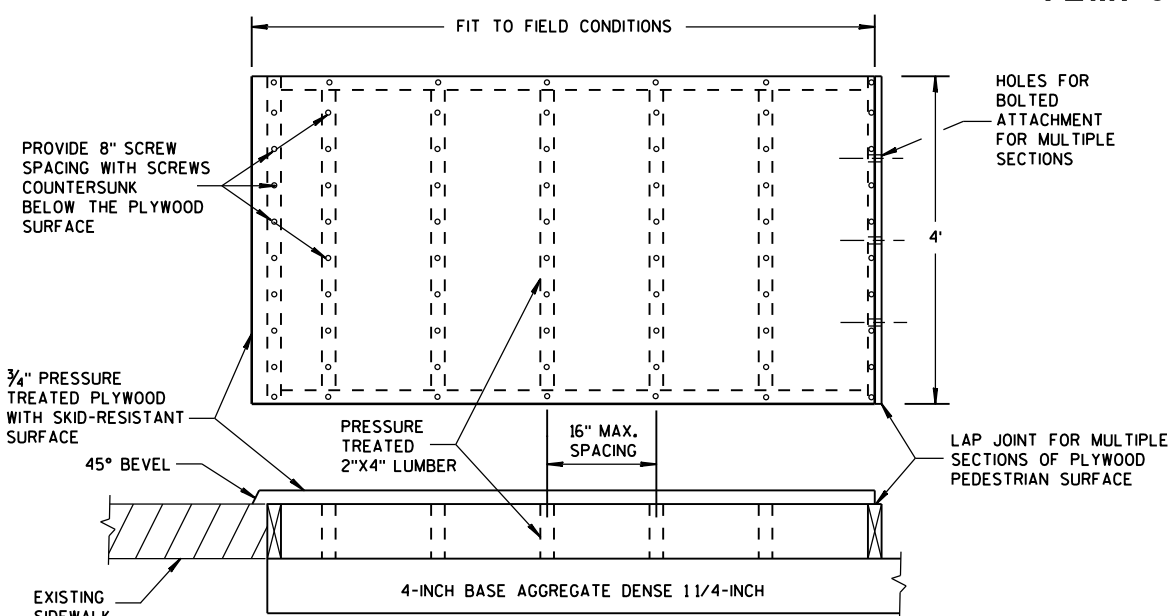


TEMPORARY PEDESTRIAN STEEL BARRICADE

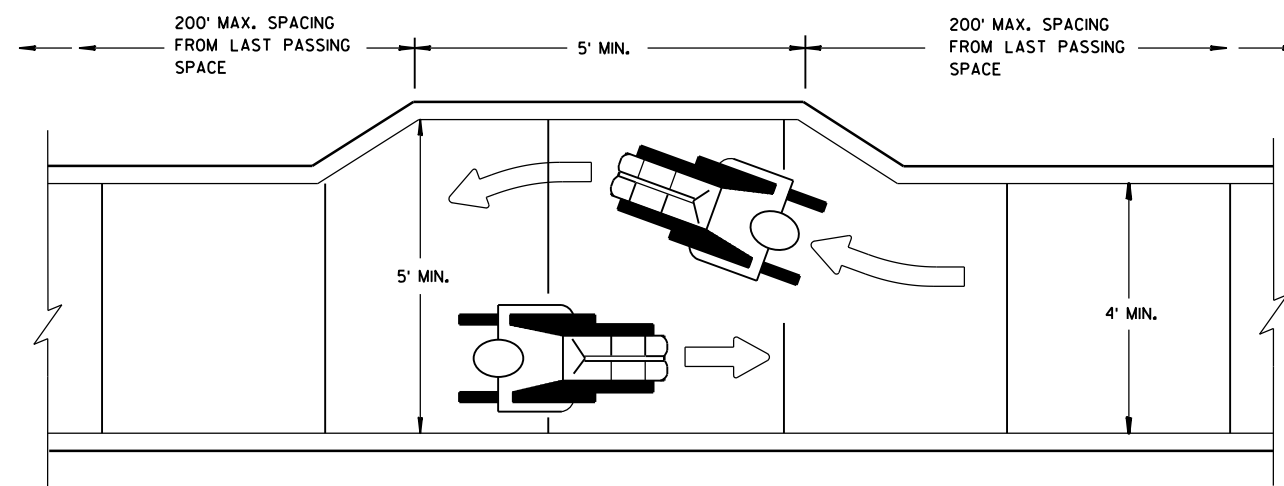
GENERAL NOTES
① INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)



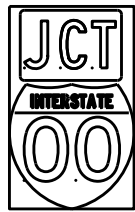
TEMPORARY PEDESTRIAN SURFACE PLYWOOD



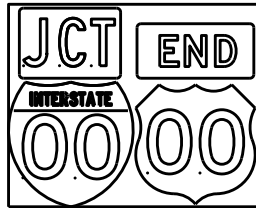
NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

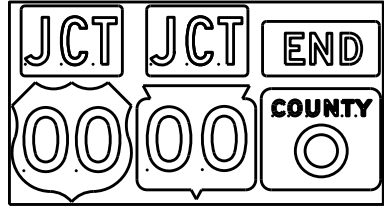
TYPICAL ASSEMBLIES



J1-1



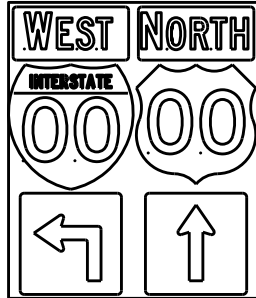
J1-2



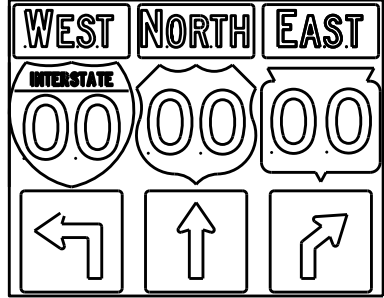
J1-3



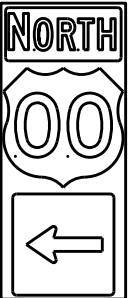
J2-1



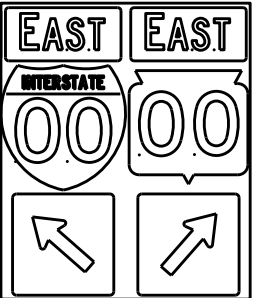
J2-2



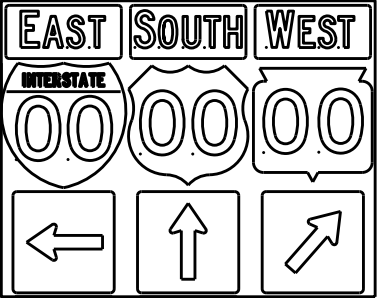
J2-3



J3-1



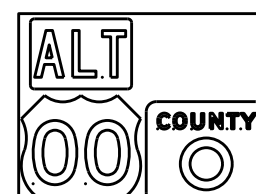
J3-2



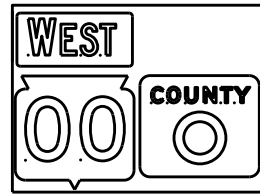
J3-3



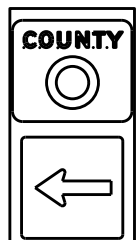
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

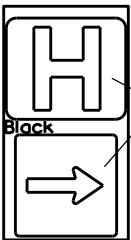


J22-1



JV

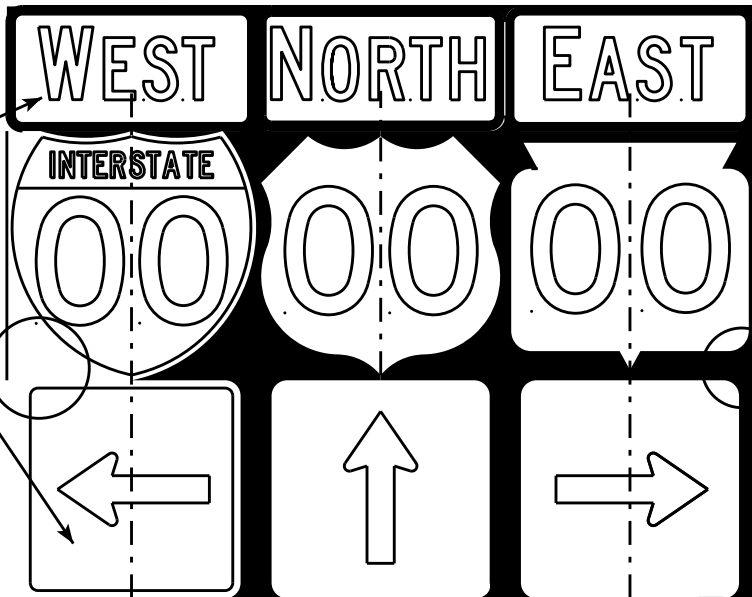
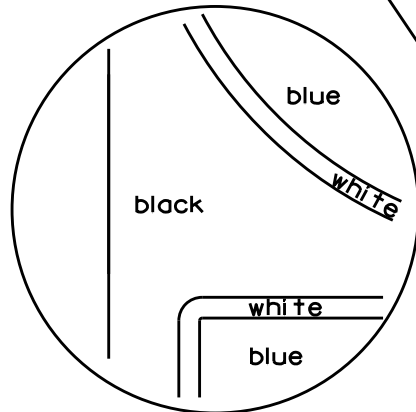
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN

PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

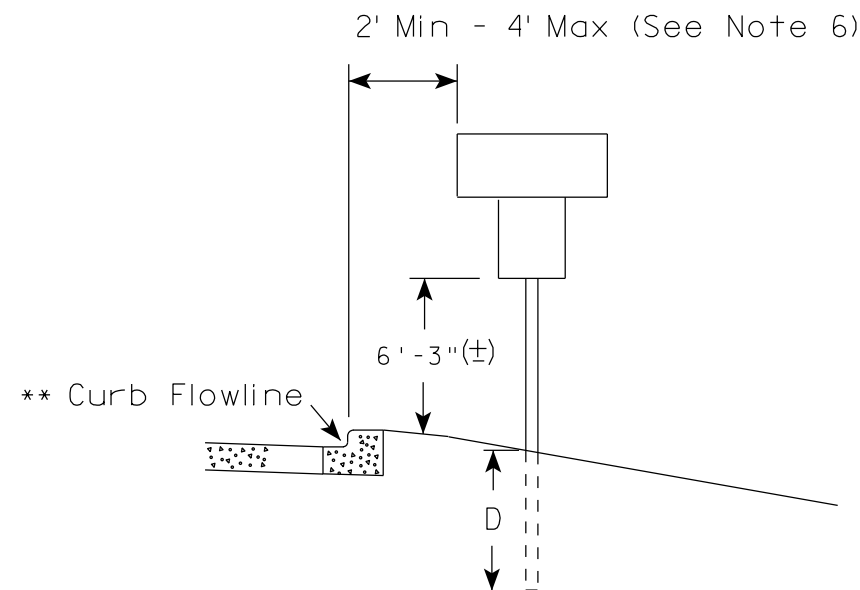
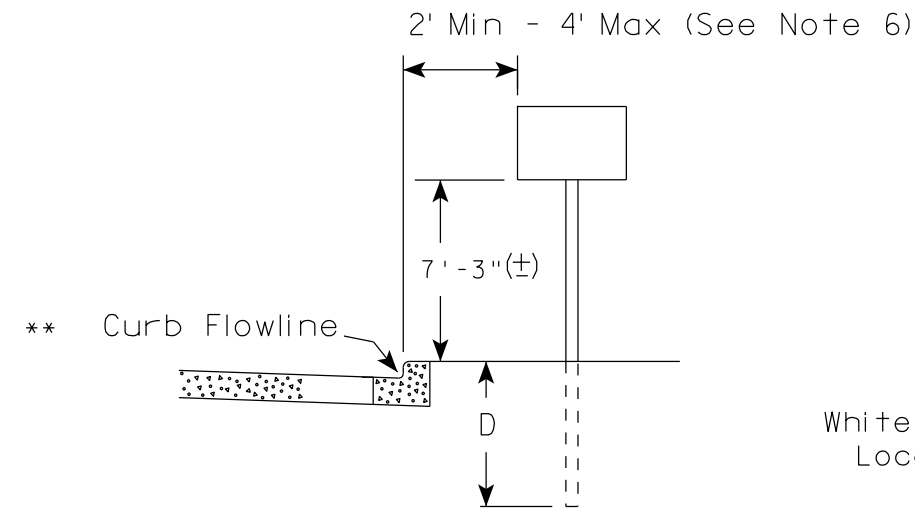
PLOT NAME :

SHEET NO:

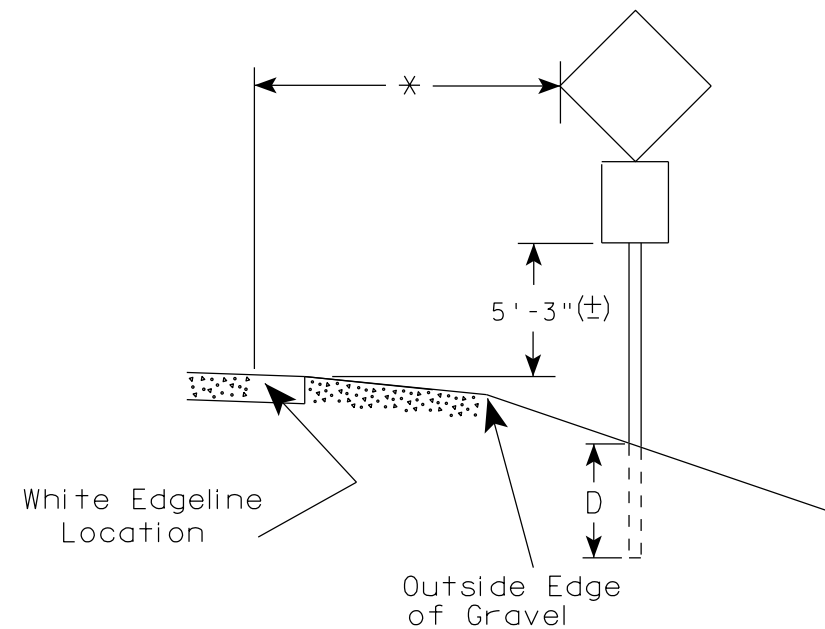
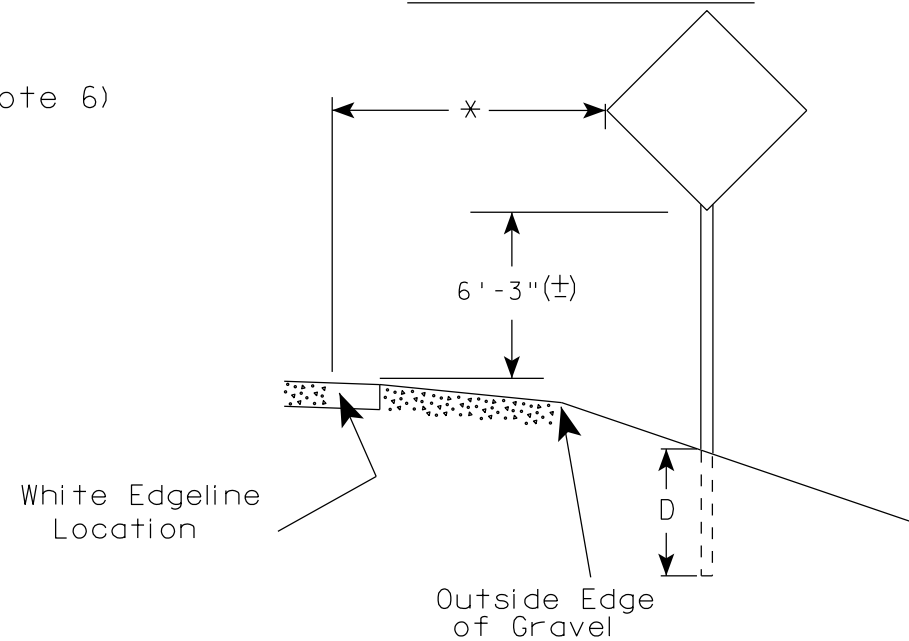
E

WISDOT/CADDs SHEET 42

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

×× The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/12/14

PLATE NO. A4-3.19

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

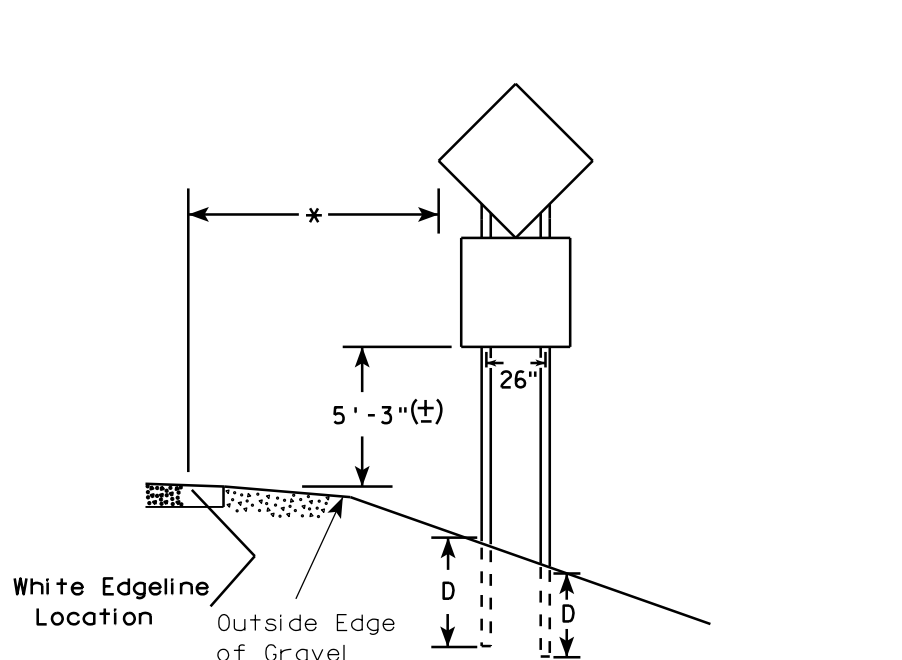
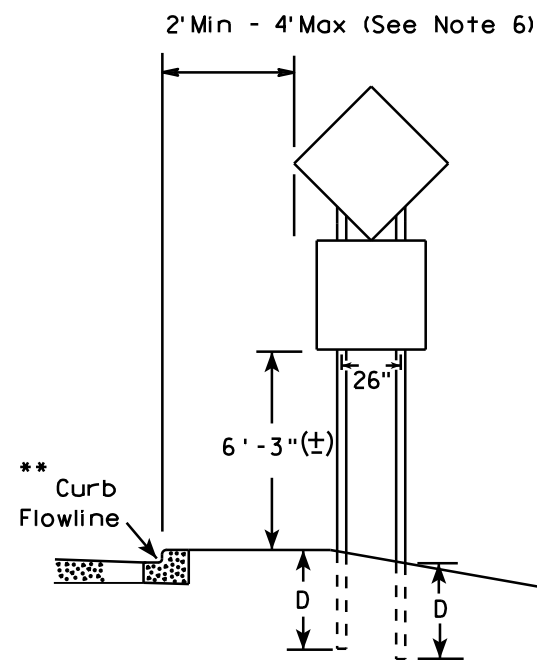
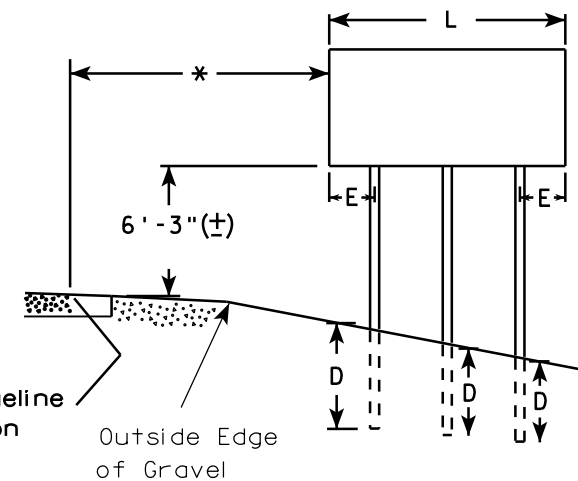
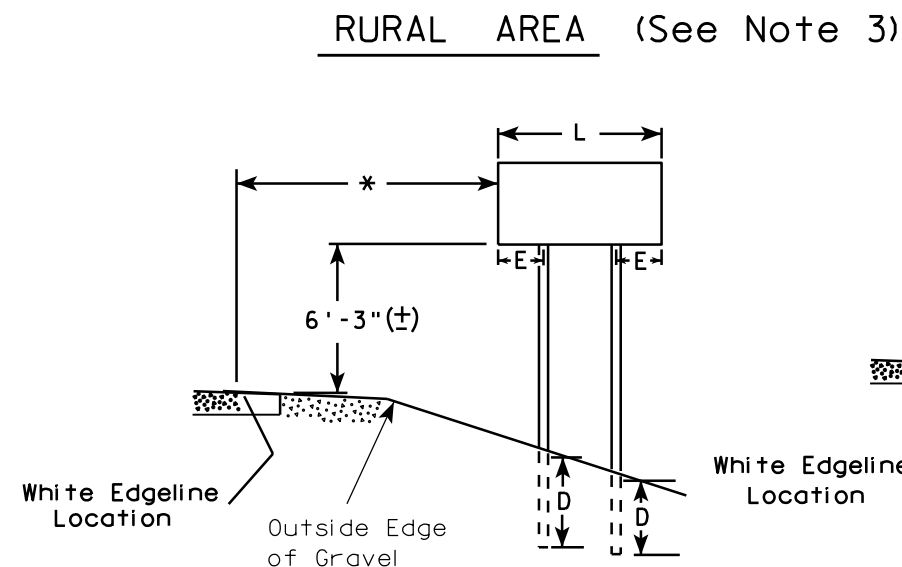
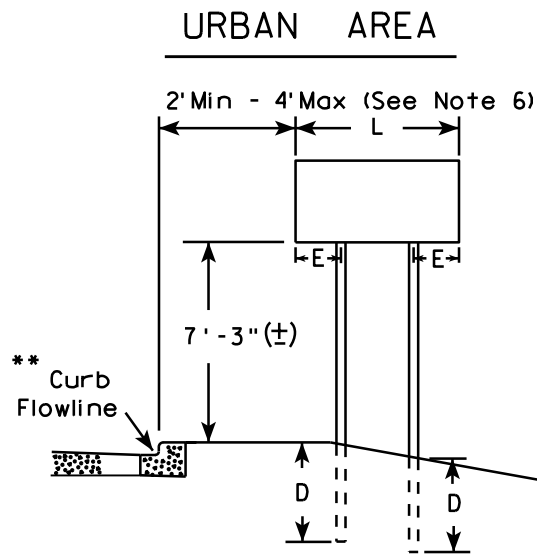
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 - See tables below for required number of posts.
 - For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 - The (±) tolerance for mounting height is 3 inches.
 - Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 - Offset distance shall be consistent with existing signs or consistent throughout length of project.
 - Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 - The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

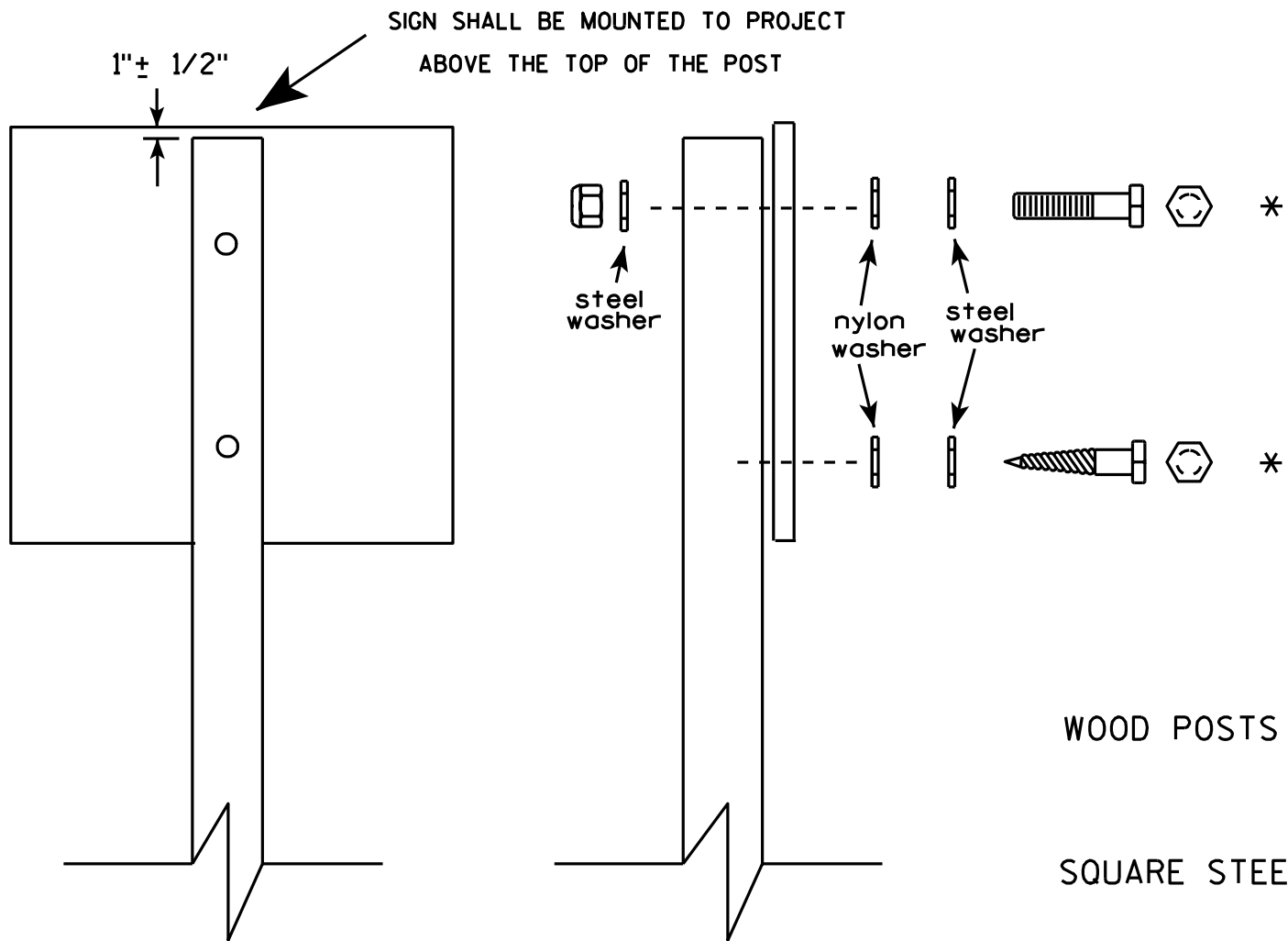
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4.13

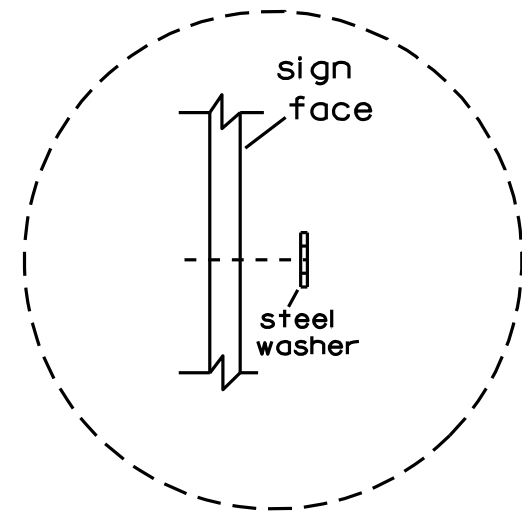


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

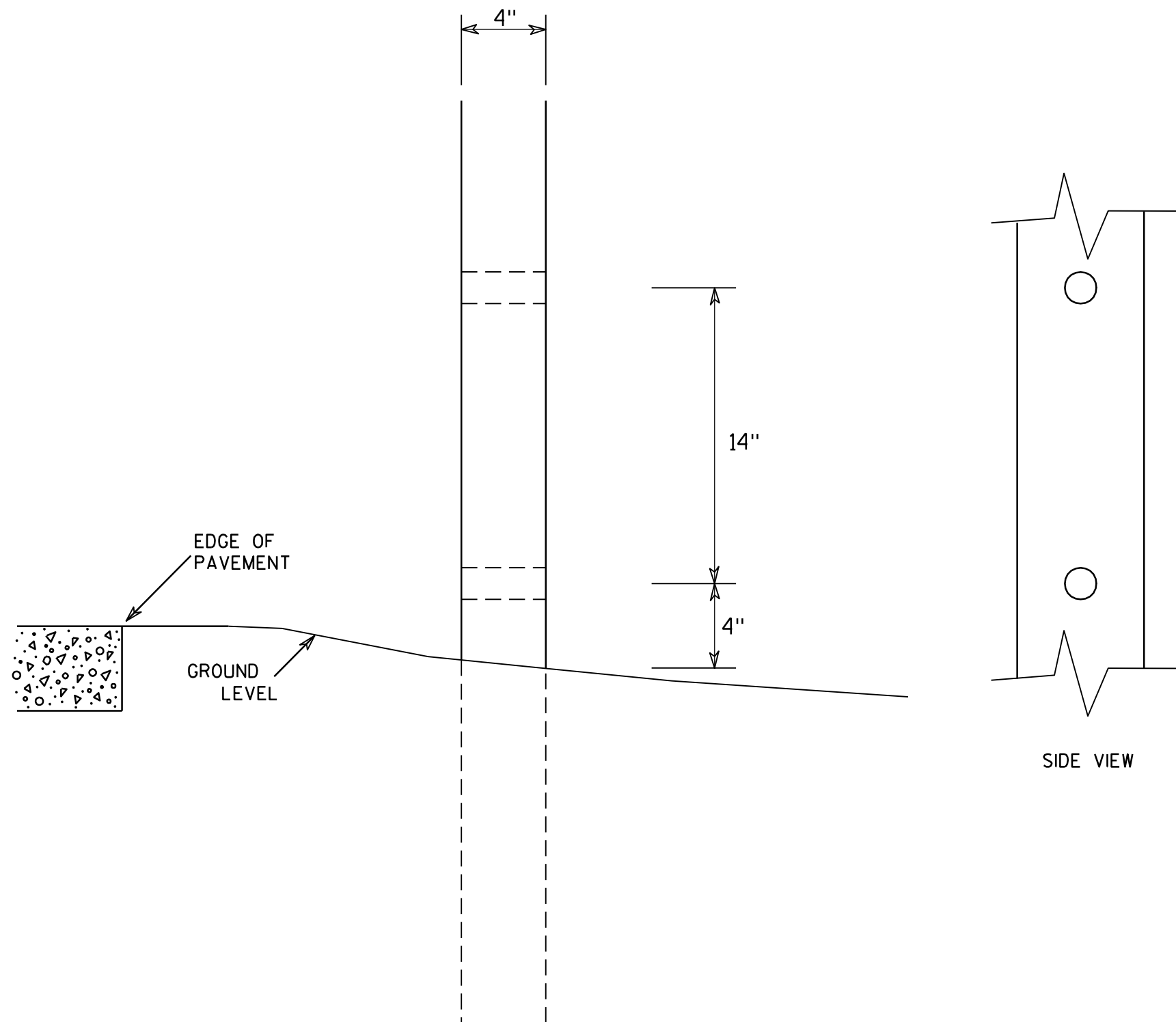
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

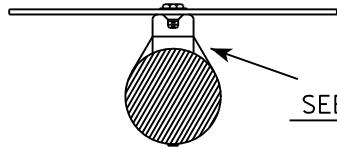
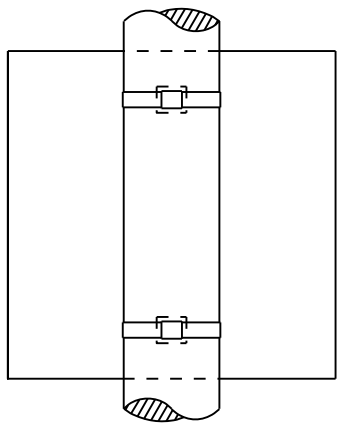
COUNTY:

SHEET NO:

E

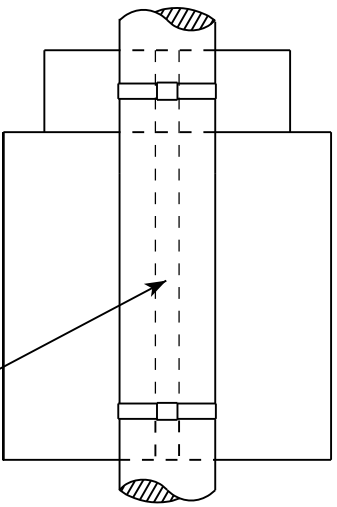
BANDING

SINGLE SIGN

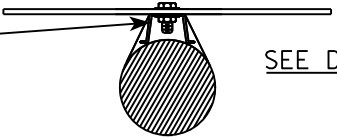


SEE DETAIL A

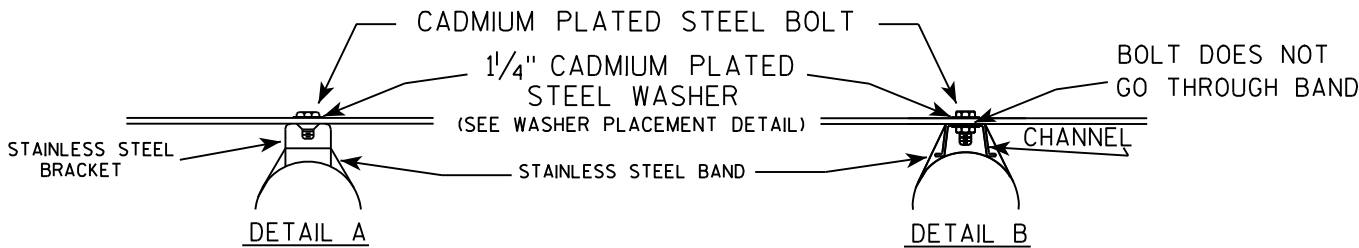
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



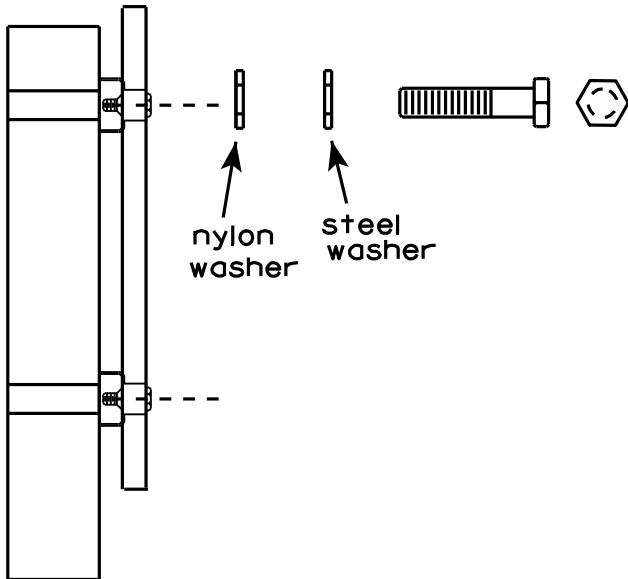
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



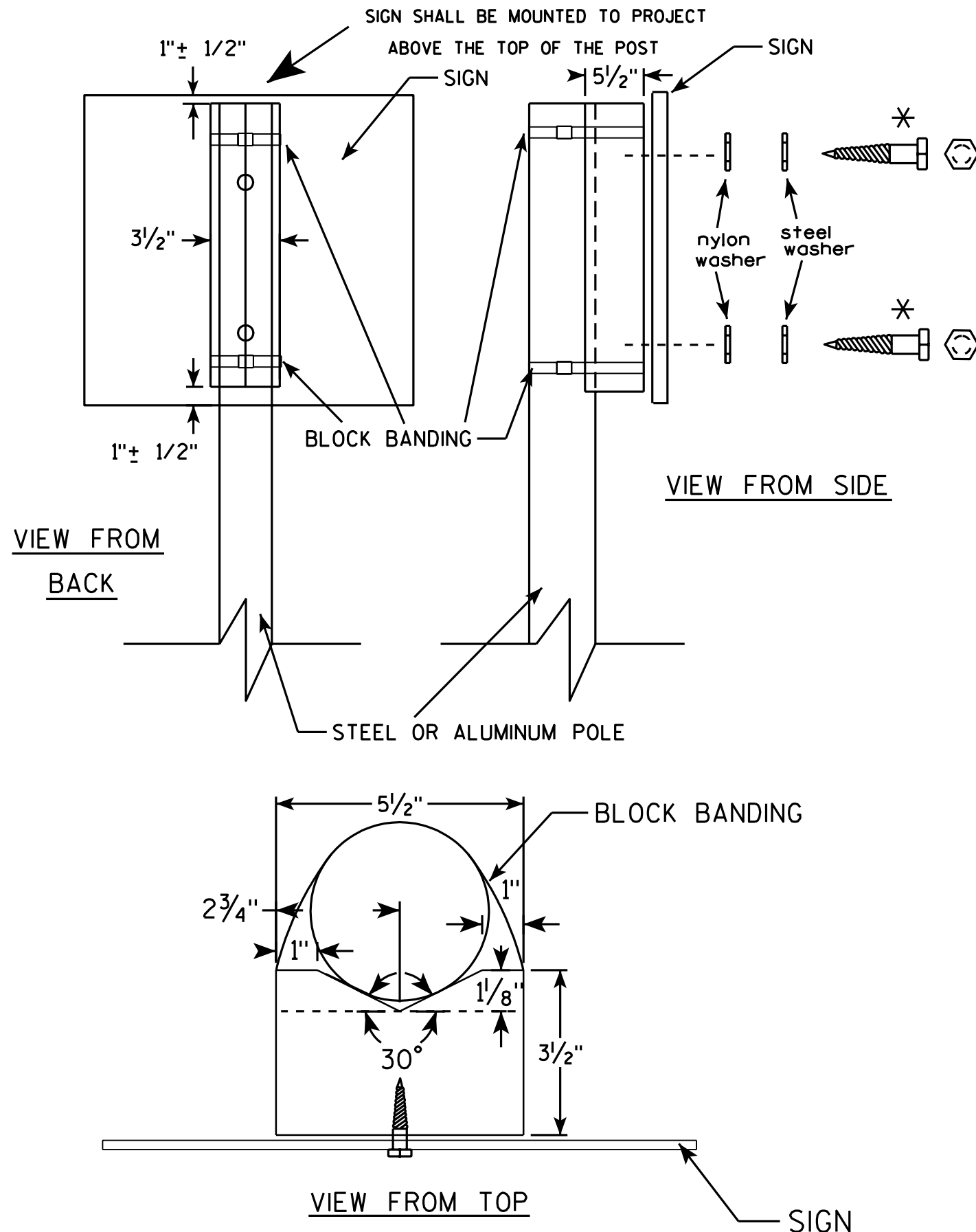
WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

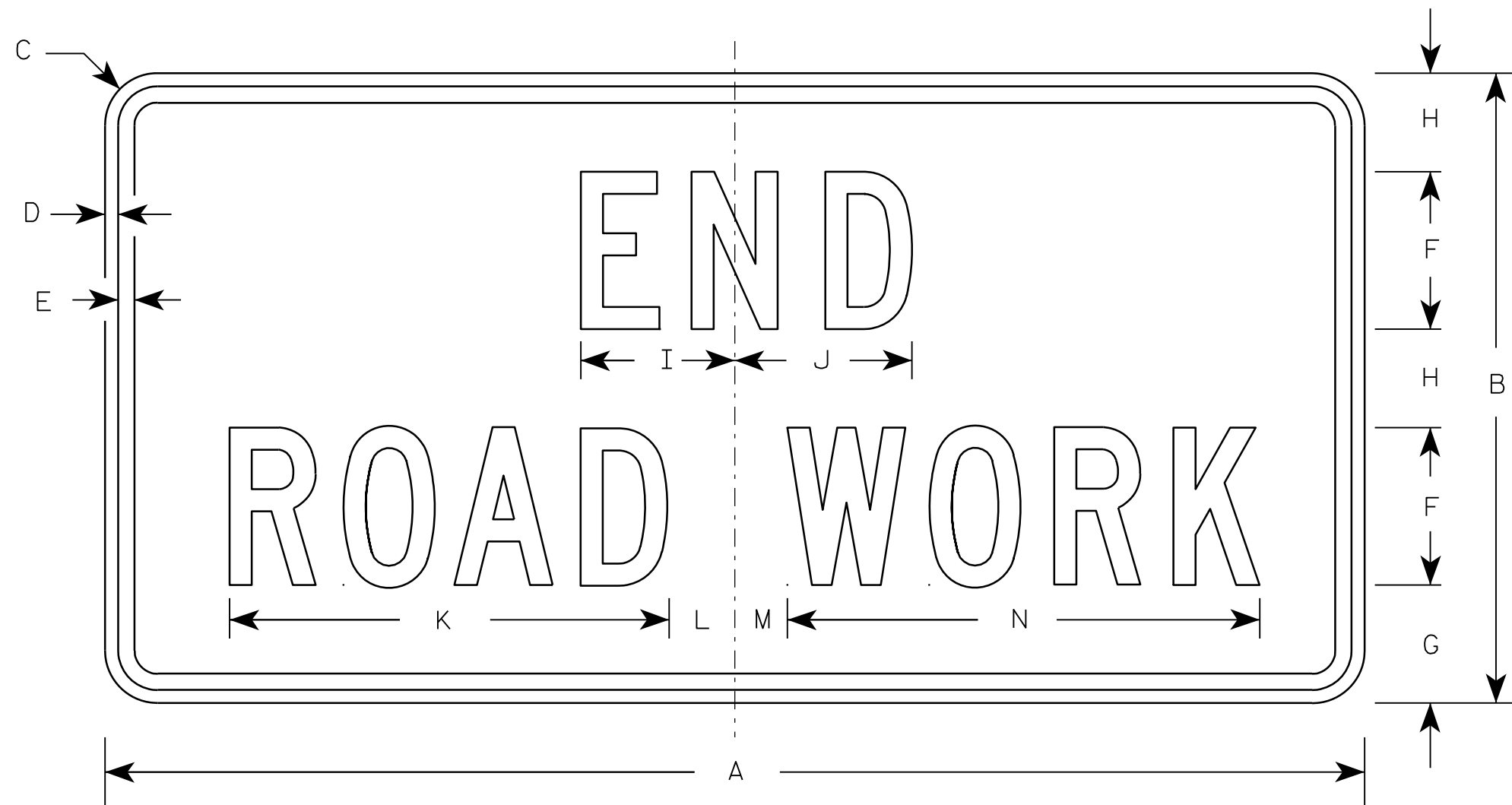
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO:

E

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

PROJECT NO:

HWY:

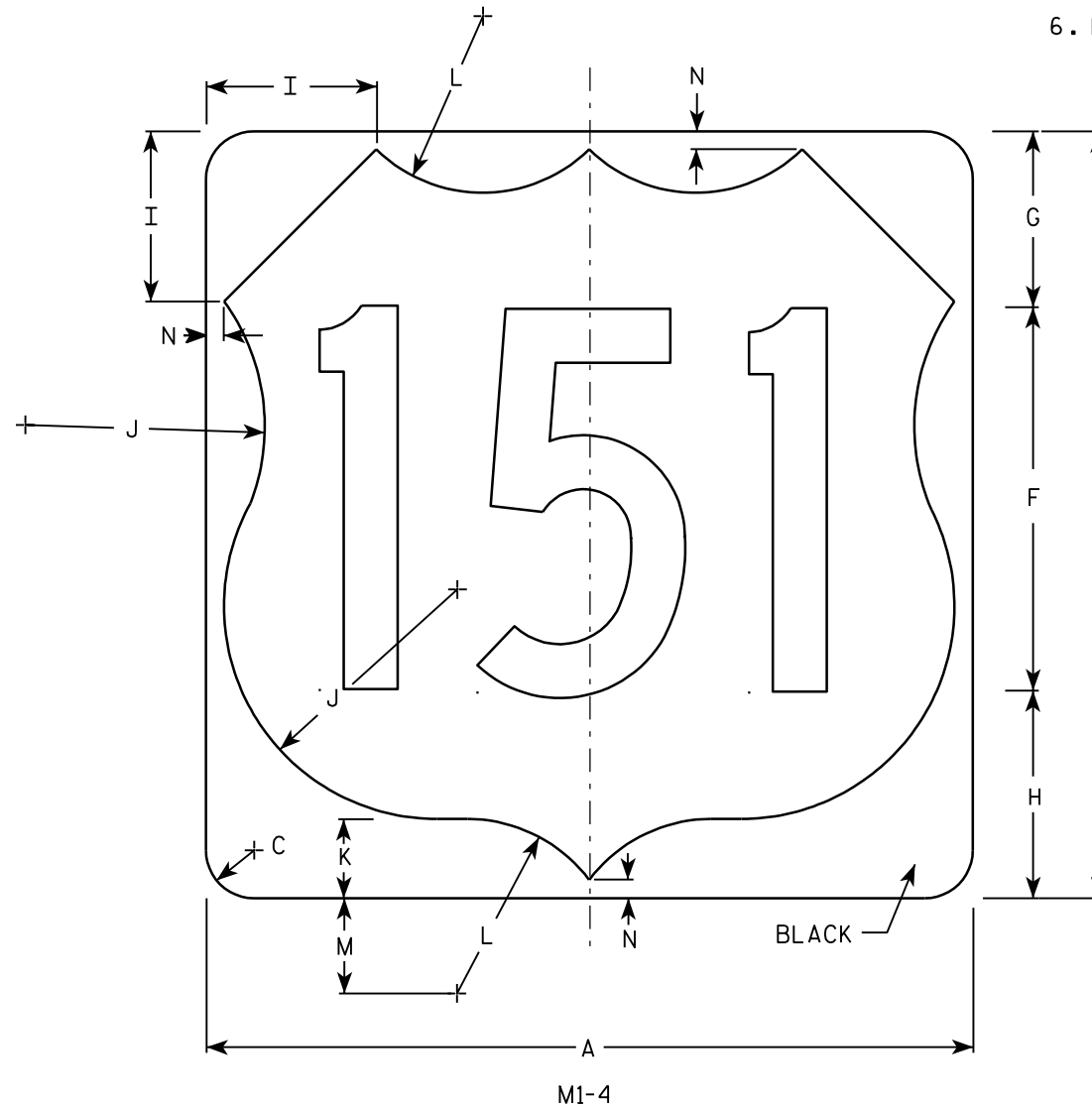
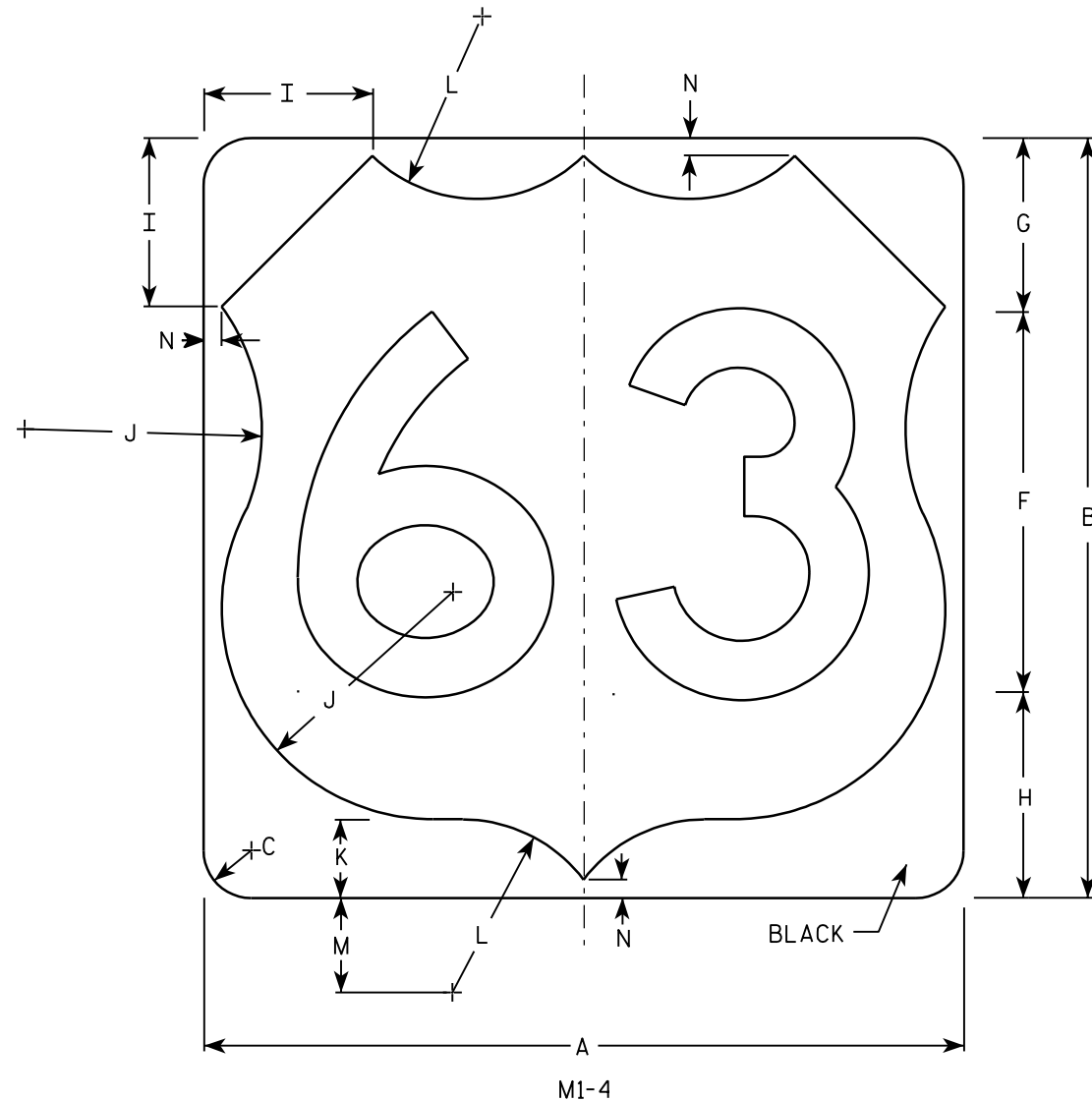
COUNTY:

SHEET NO:

E

NOTES

- Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 6
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
- Substitute appropriate numerals and adjust
spacing as per Plate A10-1.
- Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.	Area m ²
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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FILE NAME : C:\Users\Projects\tr_stdplate\M14.DGN

PLOT DATE : 13-OCT-2005 14:52

PLOT BY : DITJPH

PLOT NAME :

PLOT SCALE : 5.960833:1.000000

WISDOT/CADDS SHEET 42

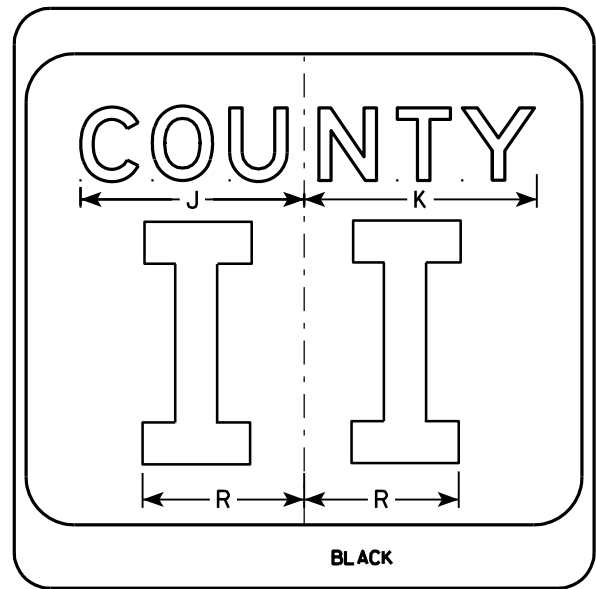
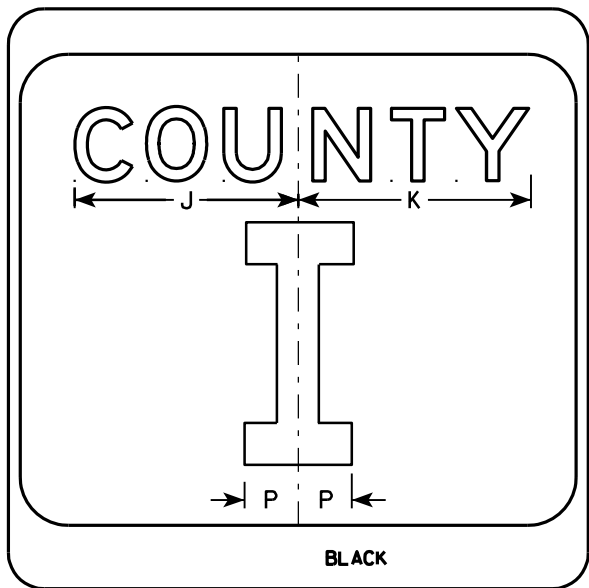
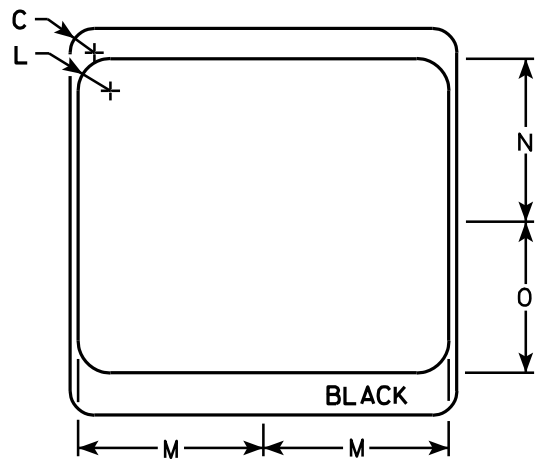
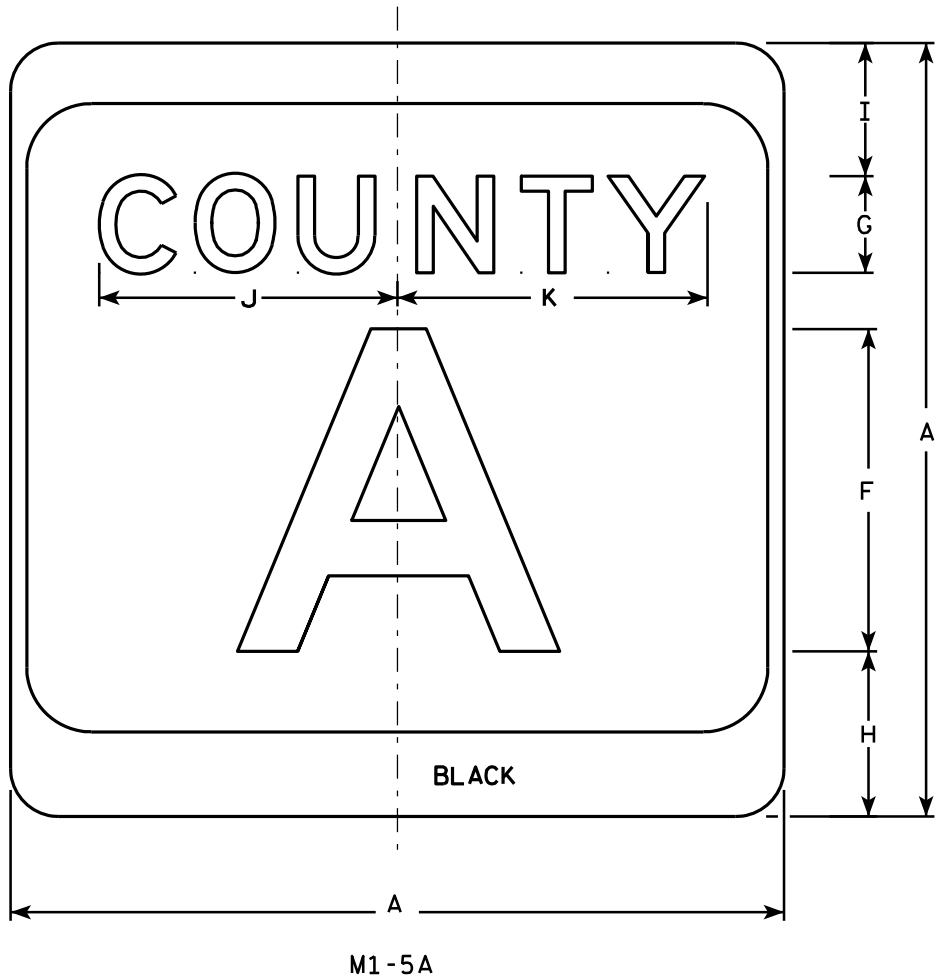
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

CTH MARKER

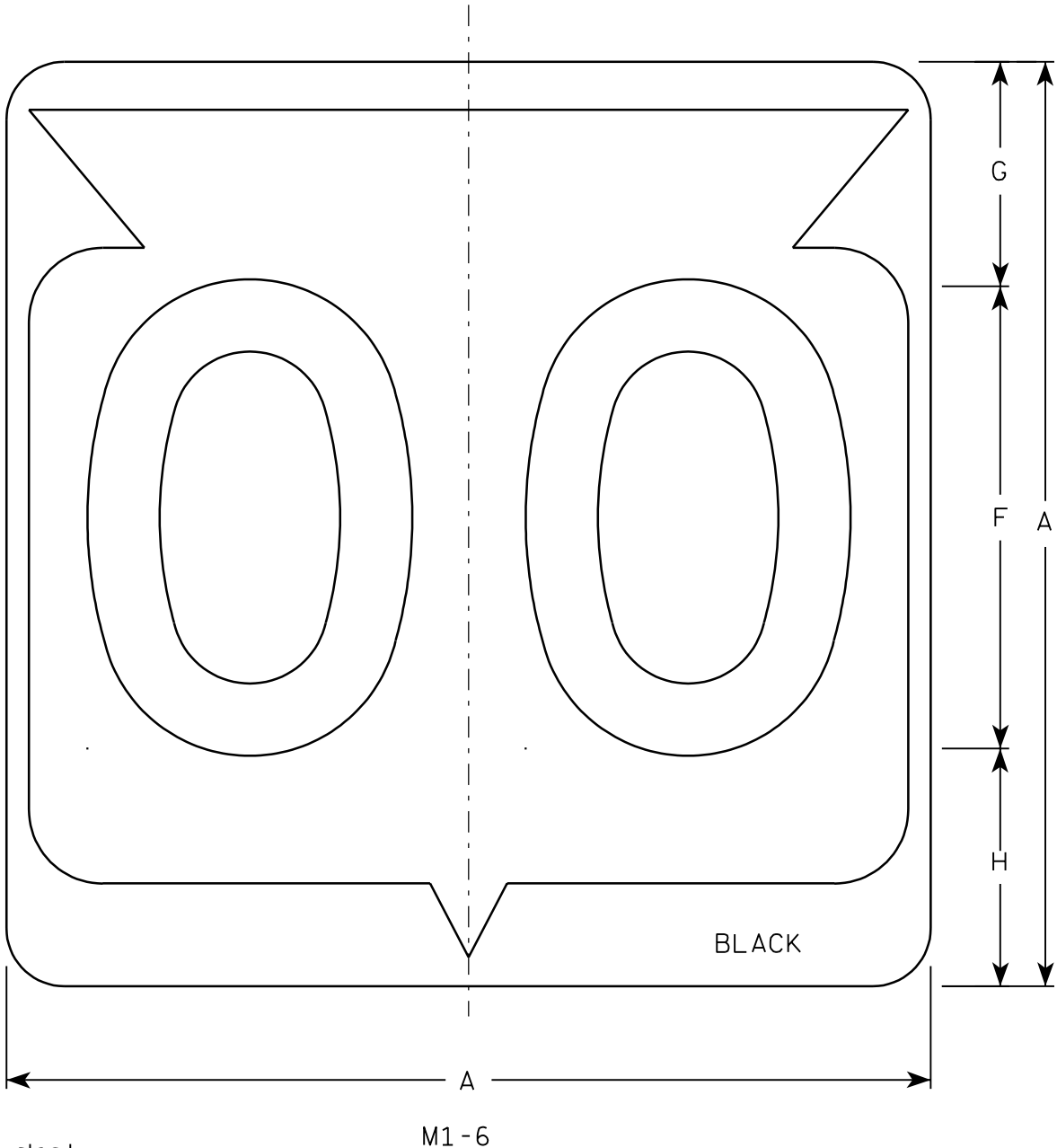
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

FILE NAME : C:\Users\Projects\tr_stdp\late\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

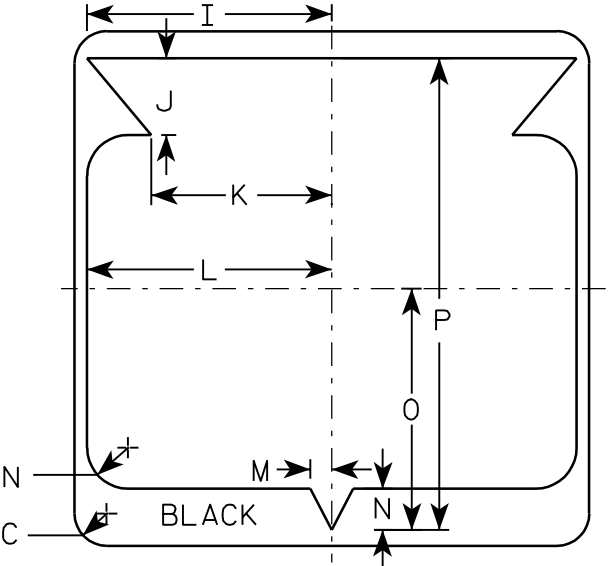
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

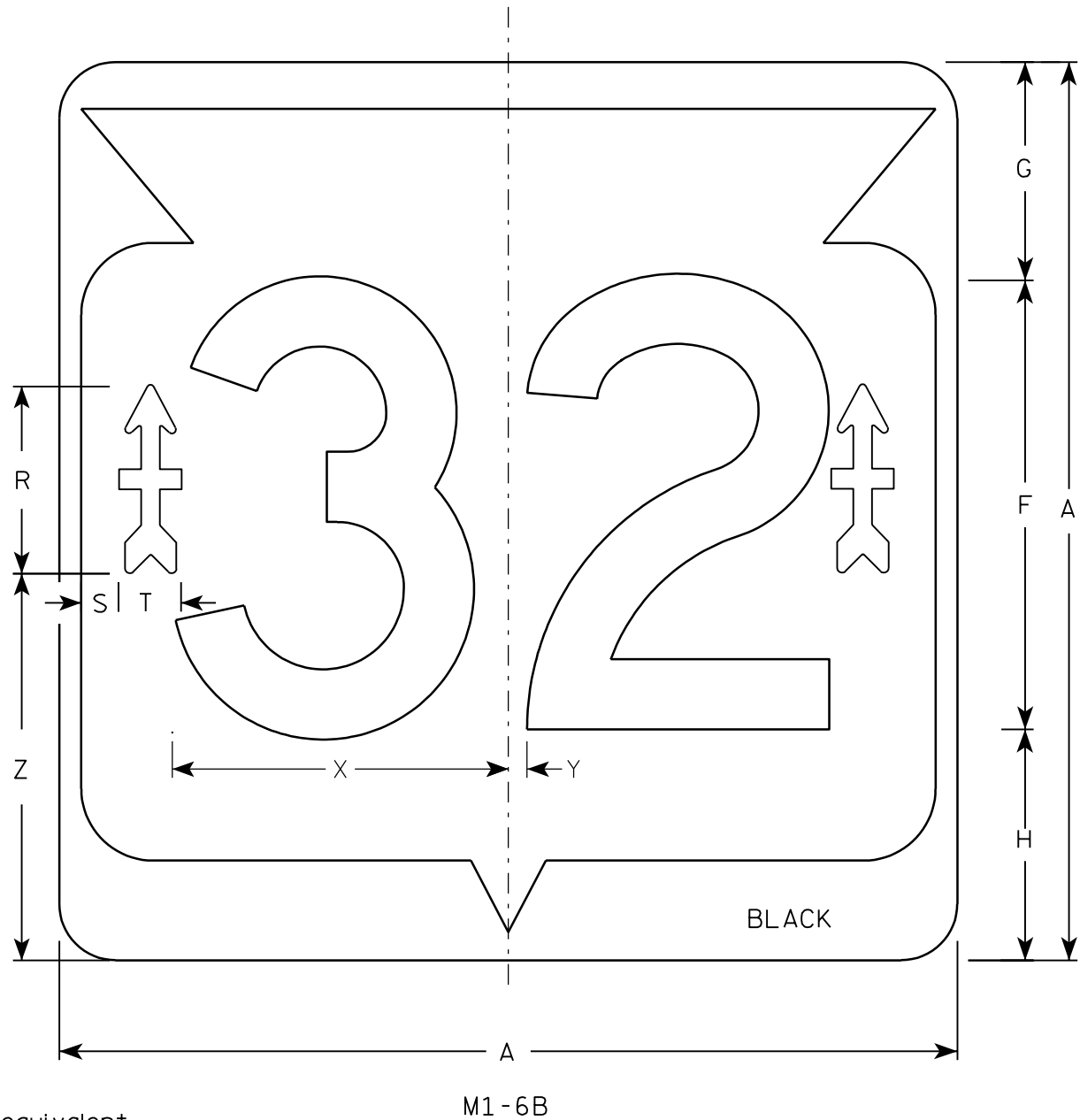
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9

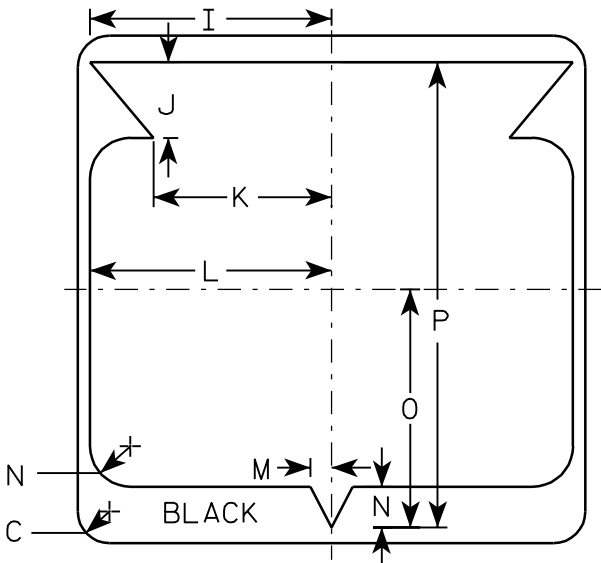


SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

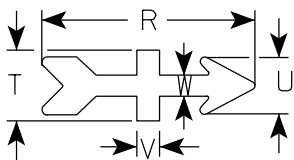
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8		5 1/8	3/4	1 7/8	1 1/2	5/8	5/8	9	1/2	10 1/2	4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81

NOTES

- 1. Sign is Type II - Type H - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White & Black
 - Message - Black
 - Arrow - Type H Reflective Red
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



32nd DIVISION ARROW
ACTUAL SIZE

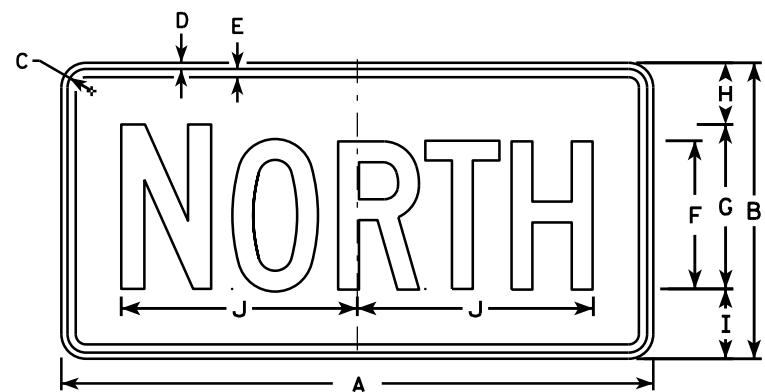


STATE ROUTE MARKER "32"
M1-6B FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

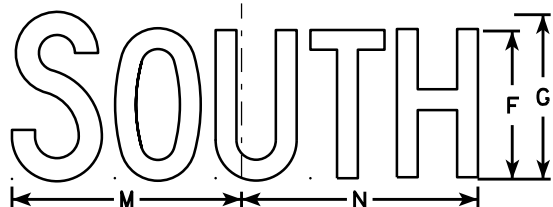
DATE 12/5/05 PLATE NO. M1-6B.2



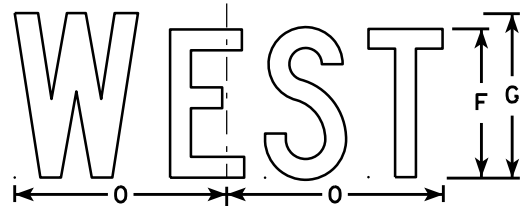
M3-1
MK3-1
MM3-1
MN3-1



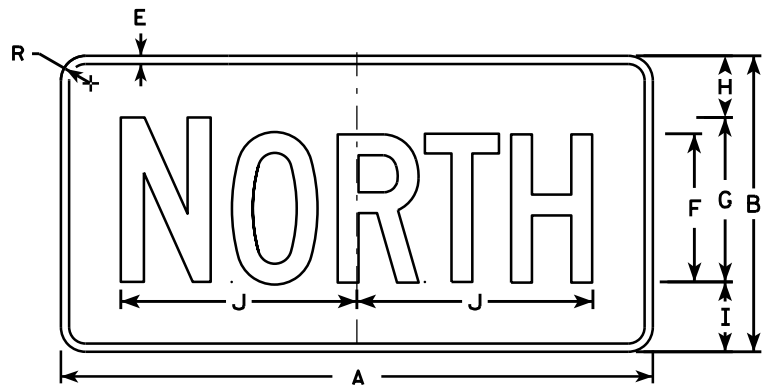
M3-2
MK3-2
MM3-2
MN3-2



M3-3
MK3-3
MM3-3
MN3-3



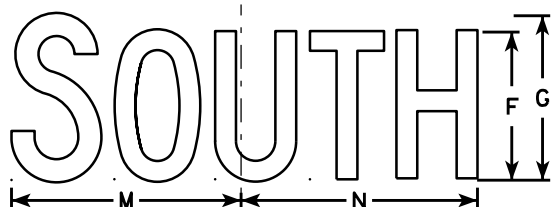
M3-4
MK3-4
MM3-4
MN3-4



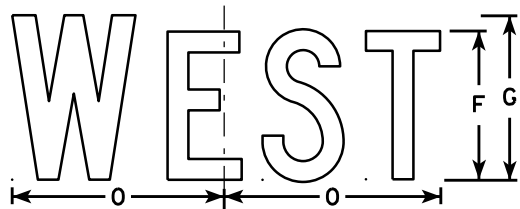
MB3-1



MB3-2



MB3-3



MB3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

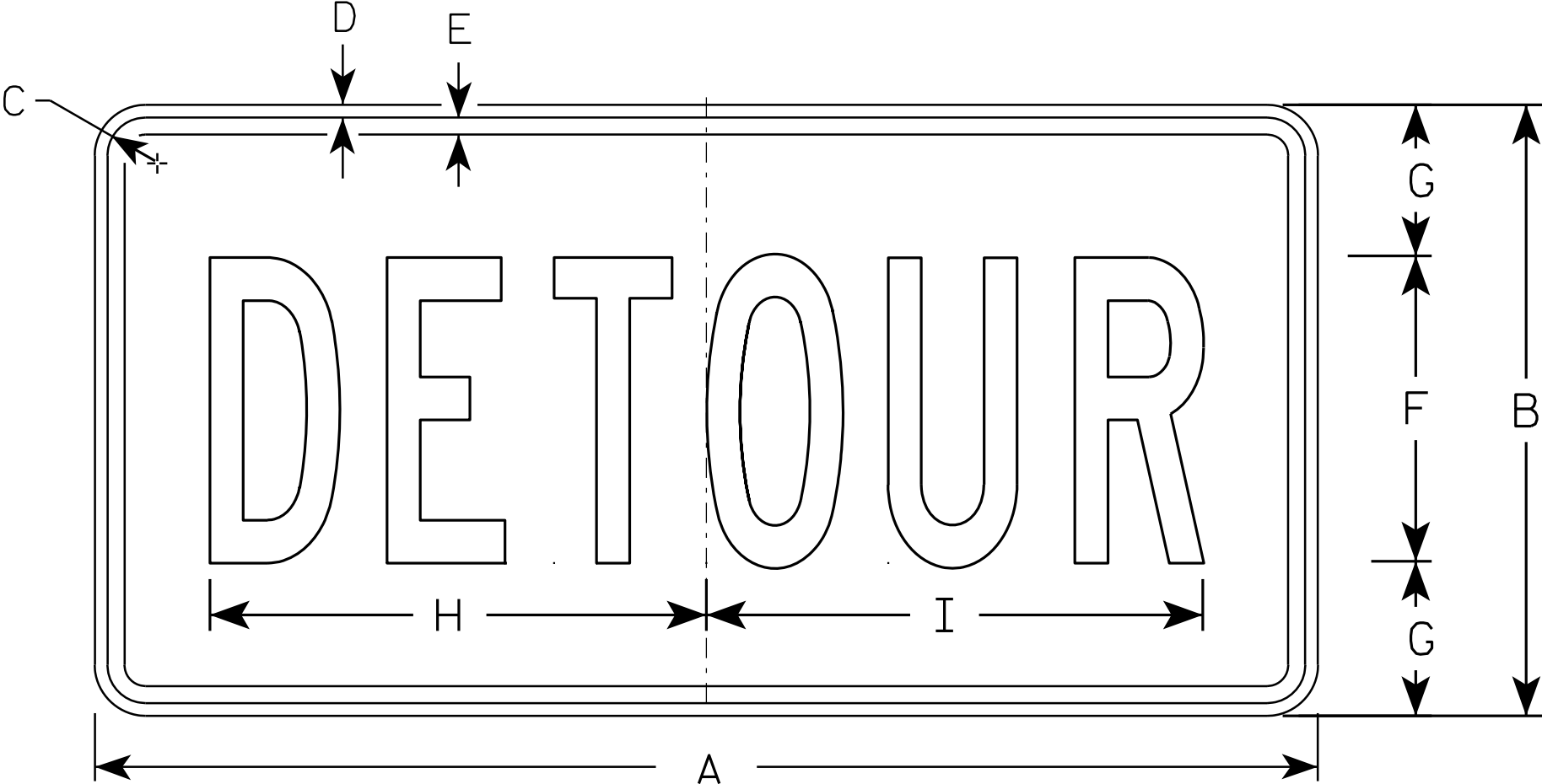
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE NO. M3-1.13

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4 - 8

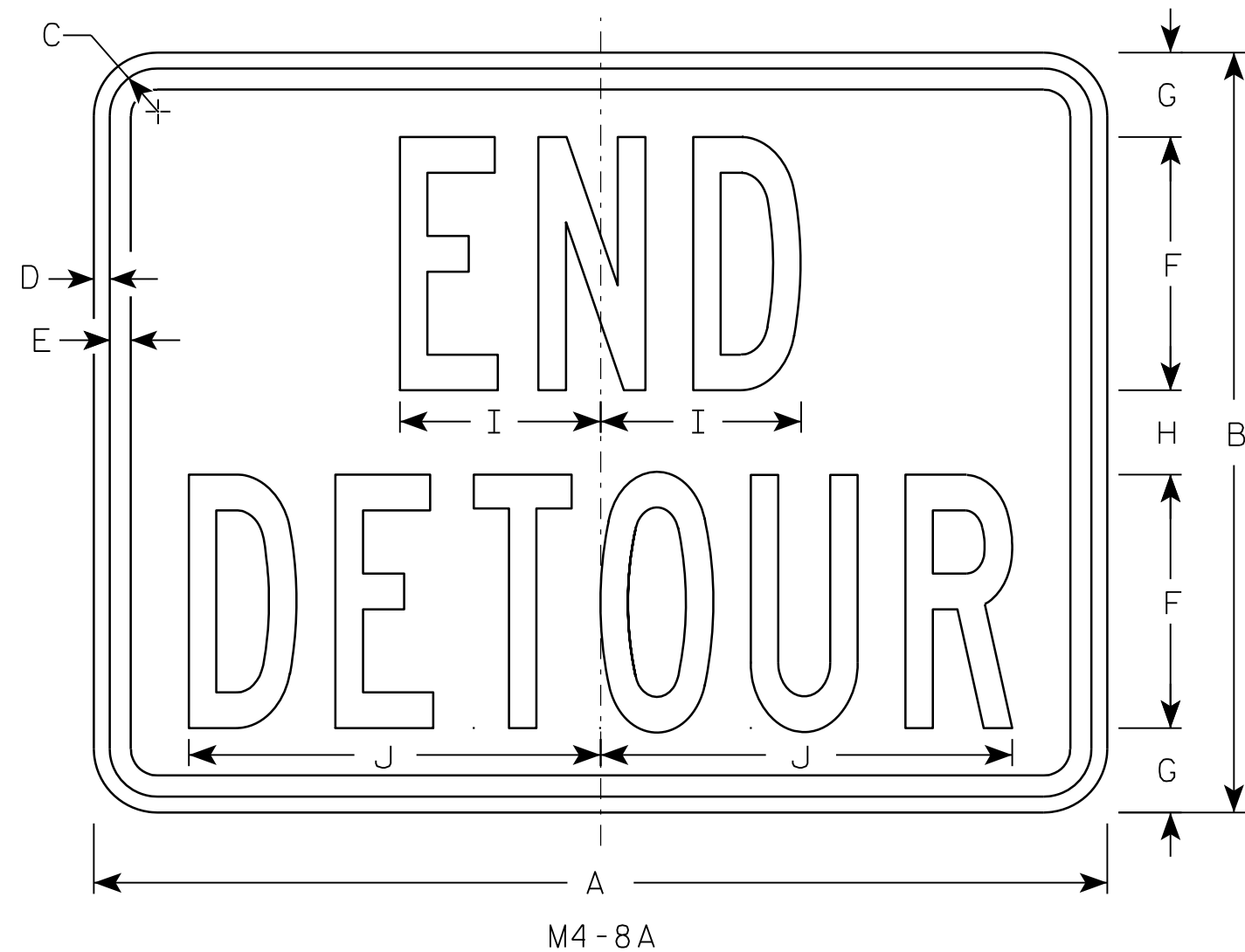
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areg sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

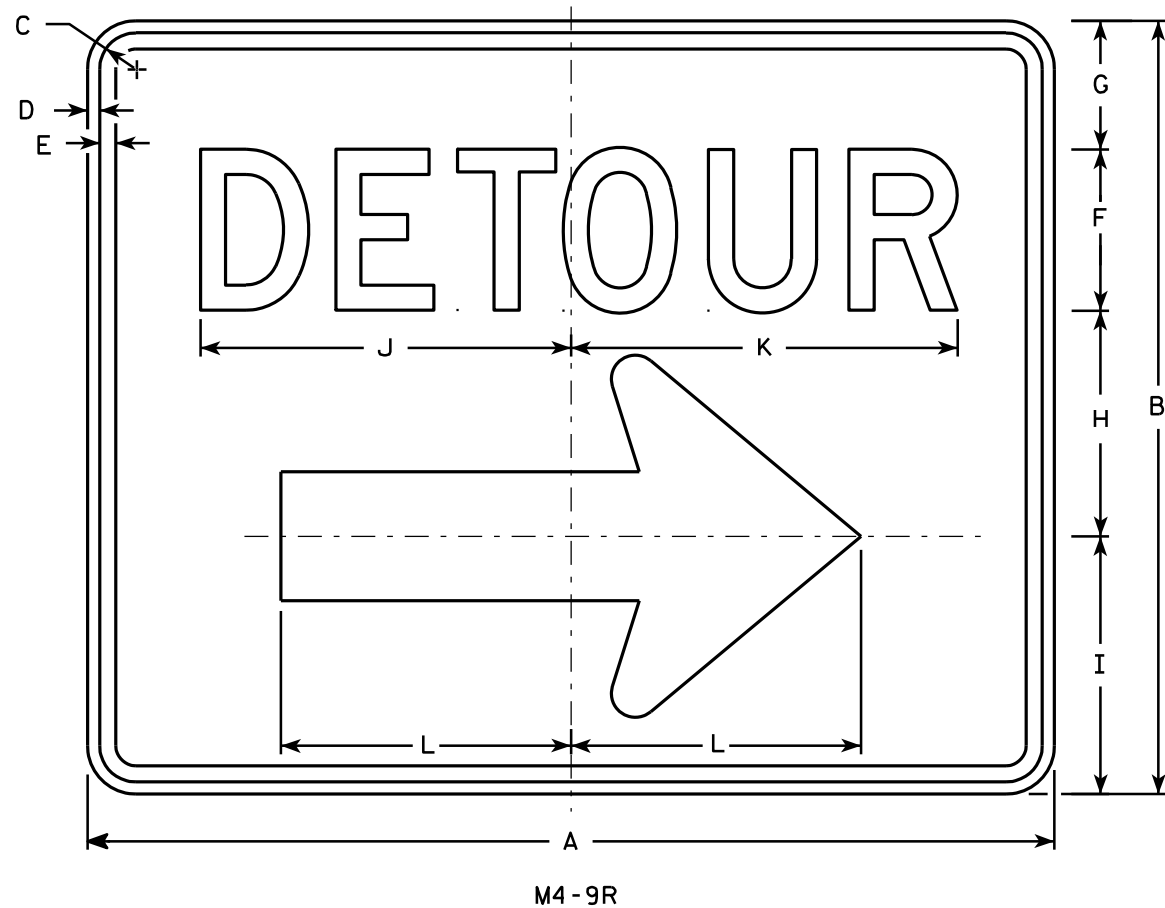
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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STANDARD SIGN
M4-8A

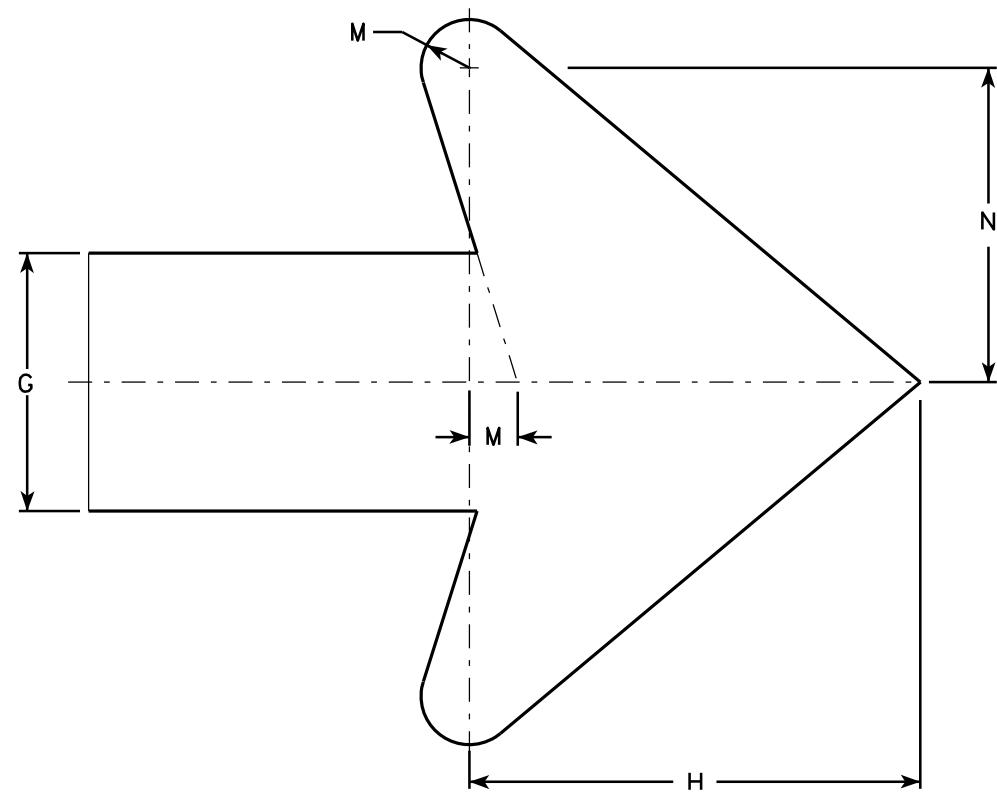
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2



- NOTES**
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Orange
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

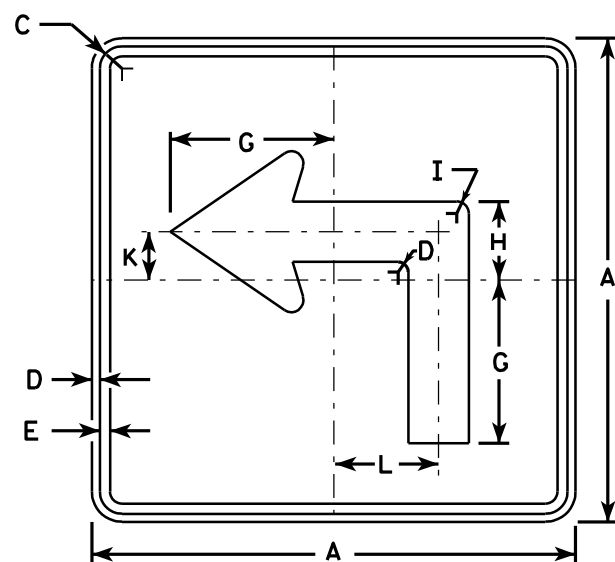
PROJECT NO:

HWY:

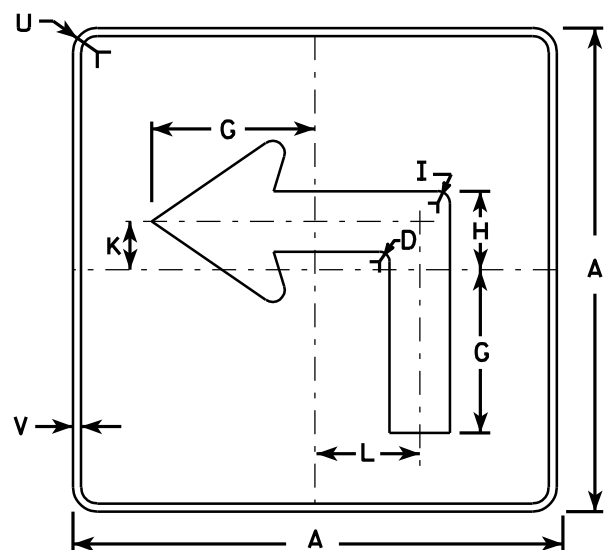
COUNTY:

SHEET NO:

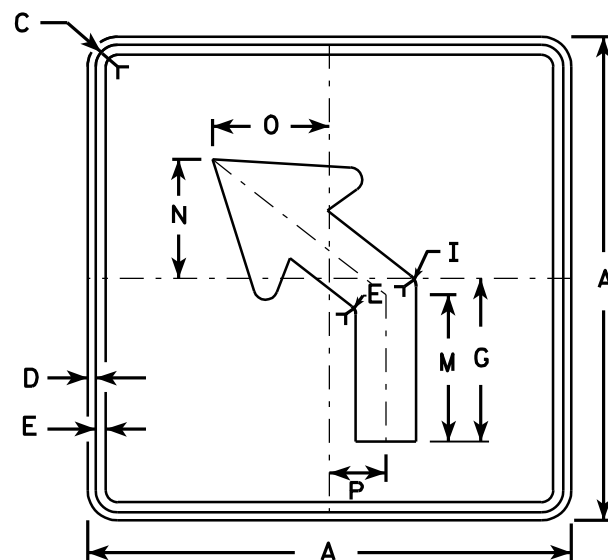
E



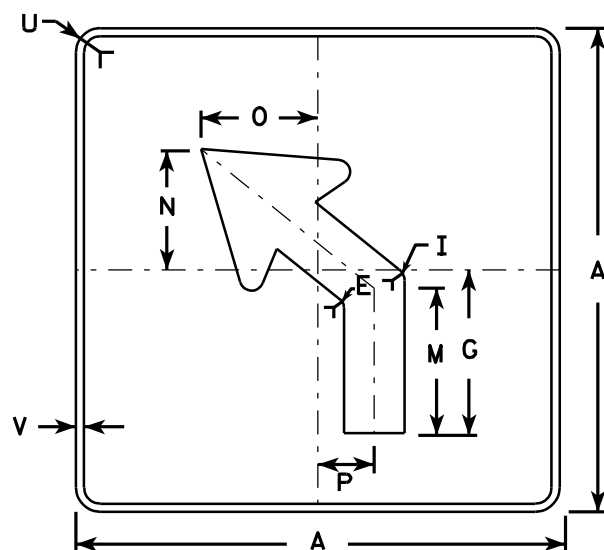
M5-1L
MK5-1L
MM5-1L
M05-1L
MP5-1L
MR5-1L



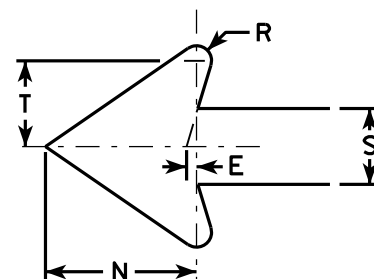
MB5-1L
MG5-1L
MN5-1L



M5-2L
MK5-2L
MM5-2L
M05-2L
MP5-2L
MR5-2L



MB5-2L
MG5-2L
MN5-2L



NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M5-1 and M5-2 Background - White - Type H Reflective
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
M05-1 and M05-2 Background - Orange - Type F Reflective
Message - Black
MP5-1 and MP5-2 Background - White - Type H Reflective
Message - Blue
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

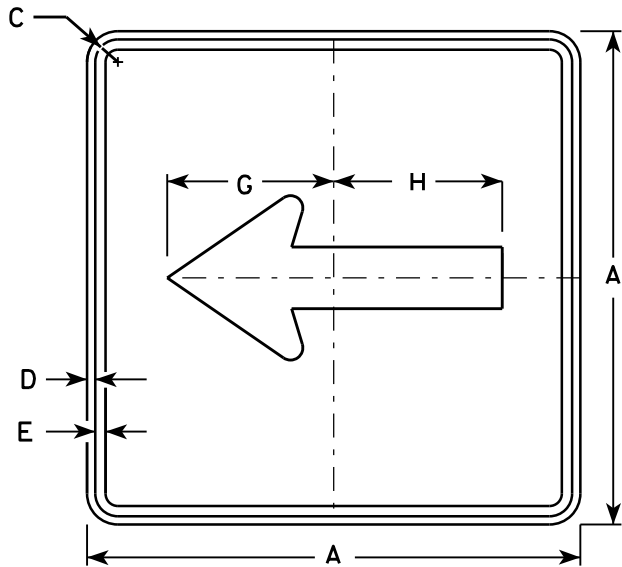
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

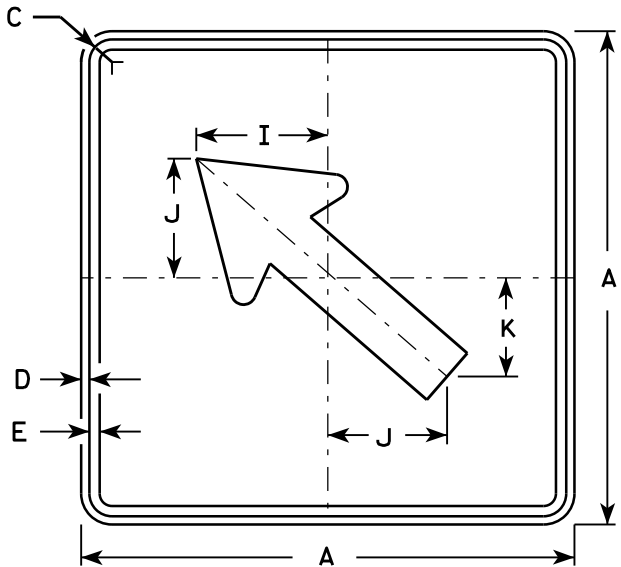
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

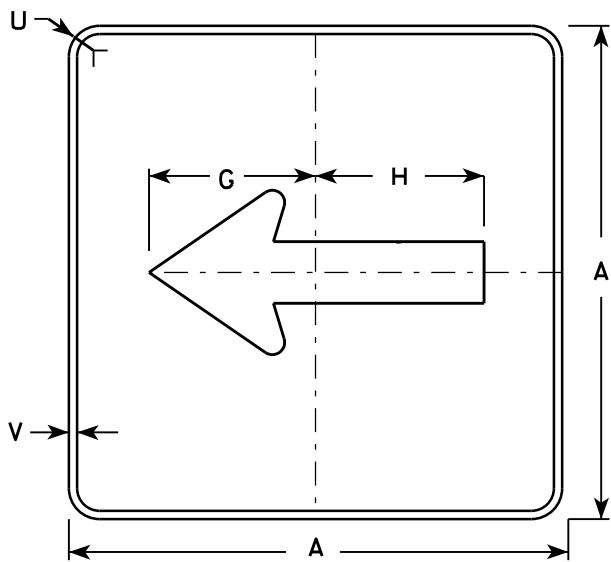
DATE 7/29/13 PLATE NO. M5-1.12



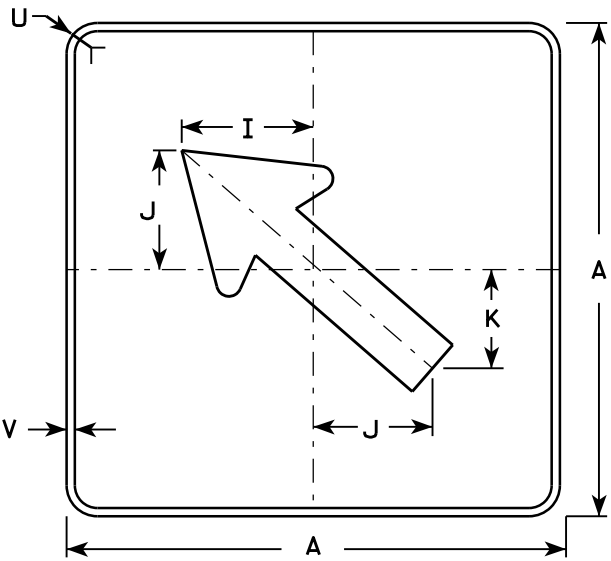
M6 - 1
MK6 - 1
MM6 - 1
MN6 - 1
M06 - 1
MP6 - 1
MR6 - 1



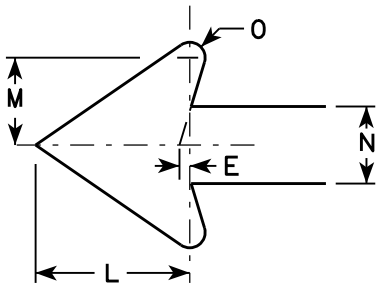
M6 - 2
MK6 - 2
MM6 - 2
MN6 - 2
M06 - 2
MP6 - 2
MR6 - 2



MB6 - 1



MB6 - 2



NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
Background - See note 4
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MG6-1 and MG6-2 Background - Green
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

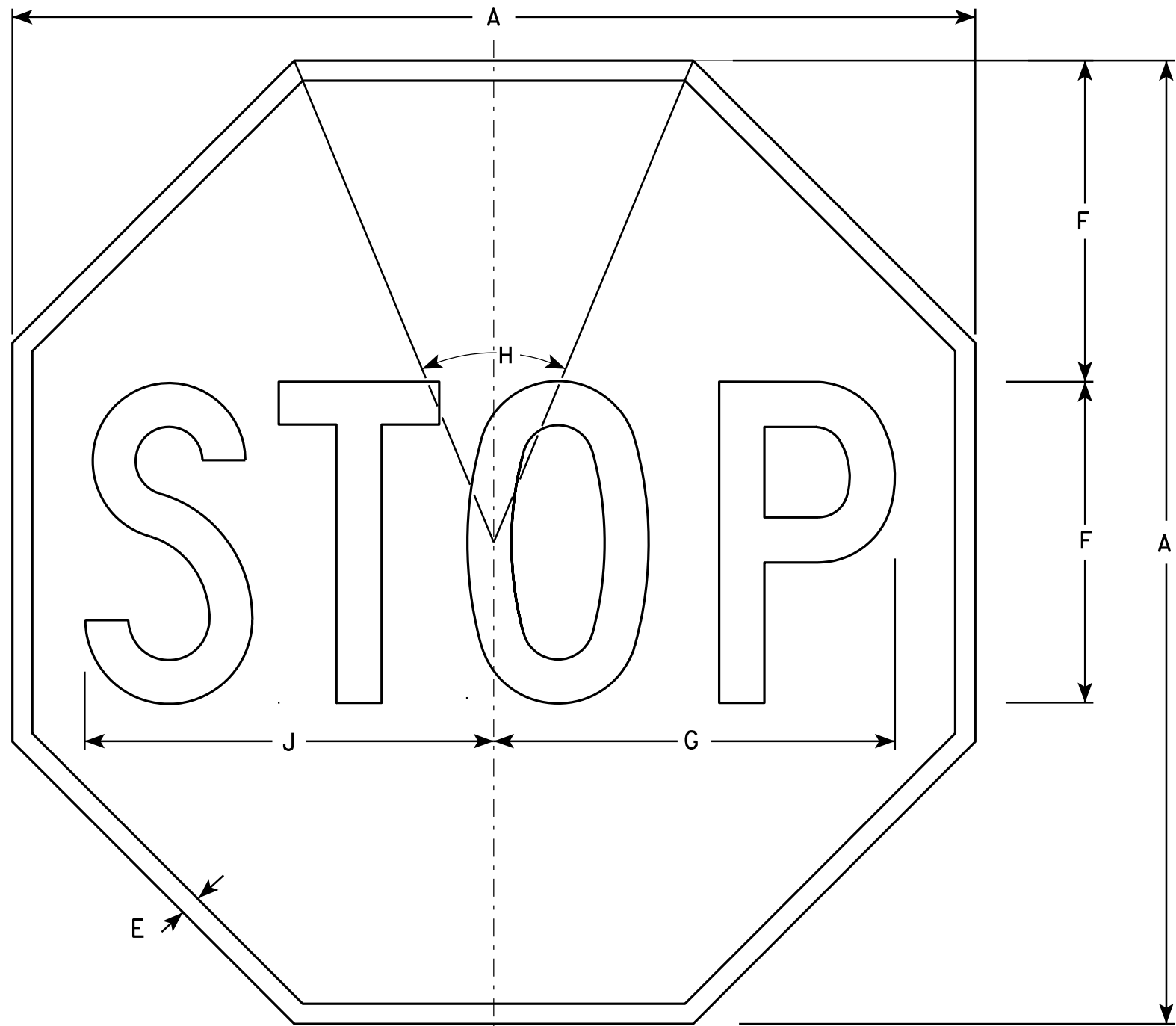
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE NO. M6-1.14



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

R1-1

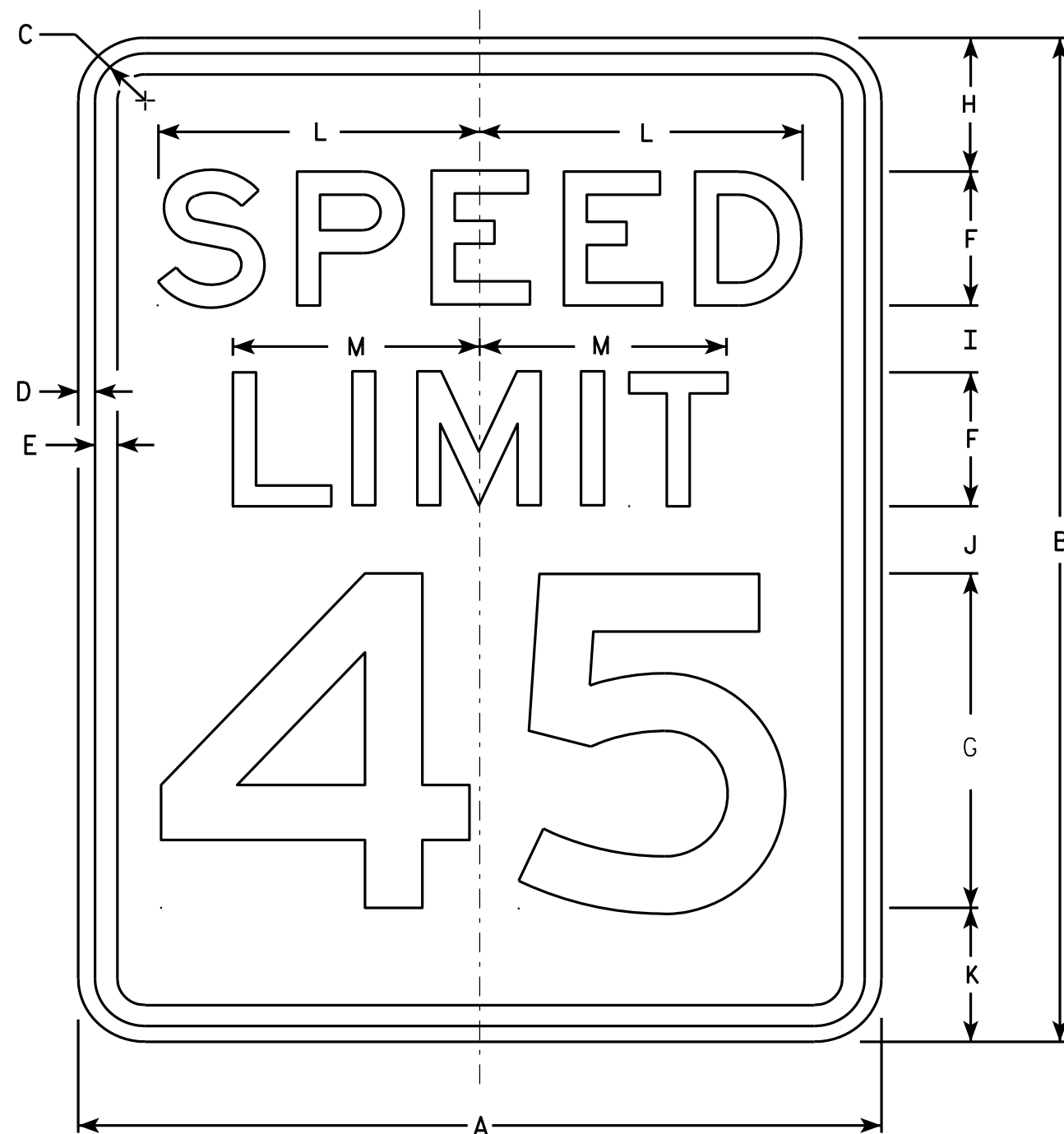
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

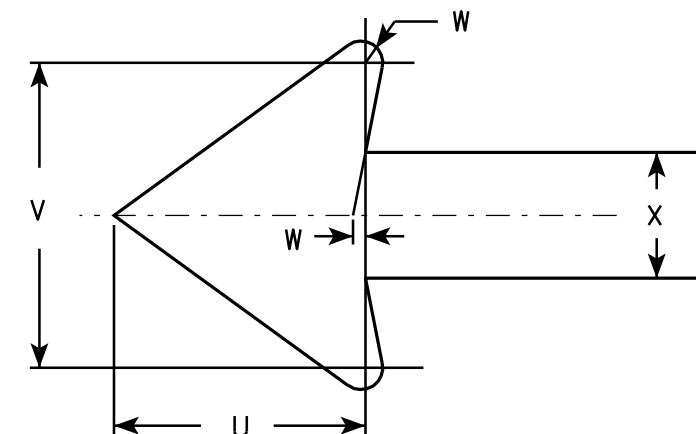
PROJECT NO: HWY: COUNTY: SHEET NO: E



R7-1

NOTES

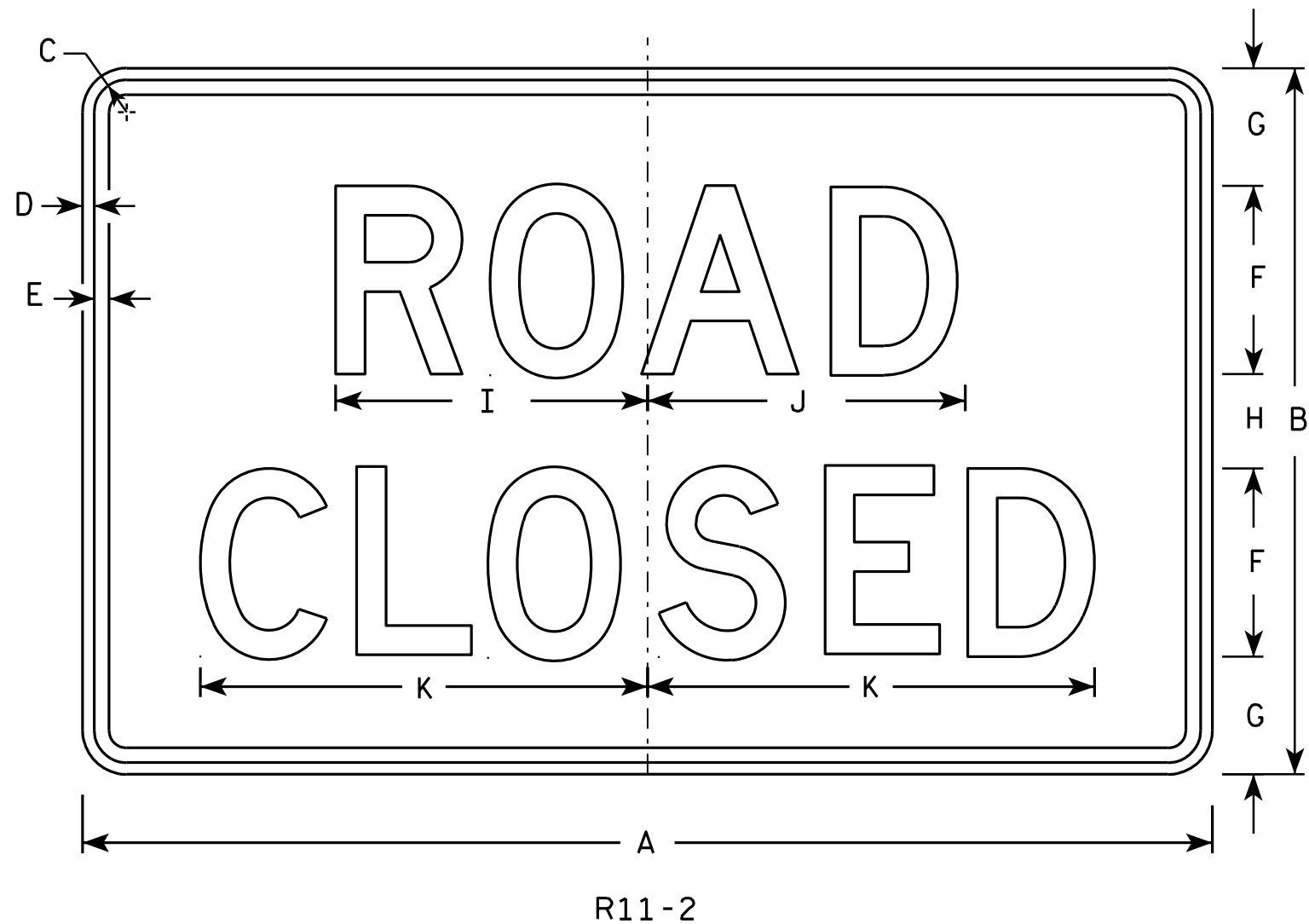
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

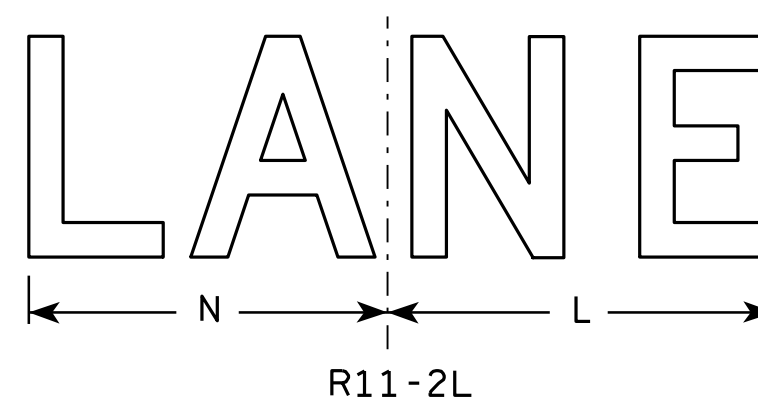
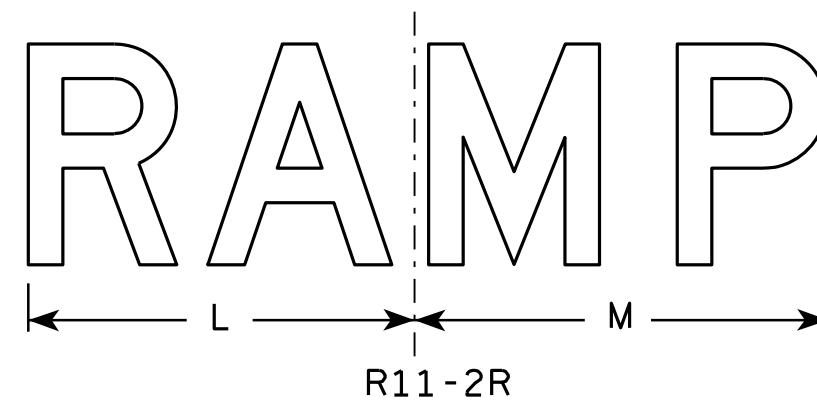
STANDARD SIGN R7-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/31/2011	PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

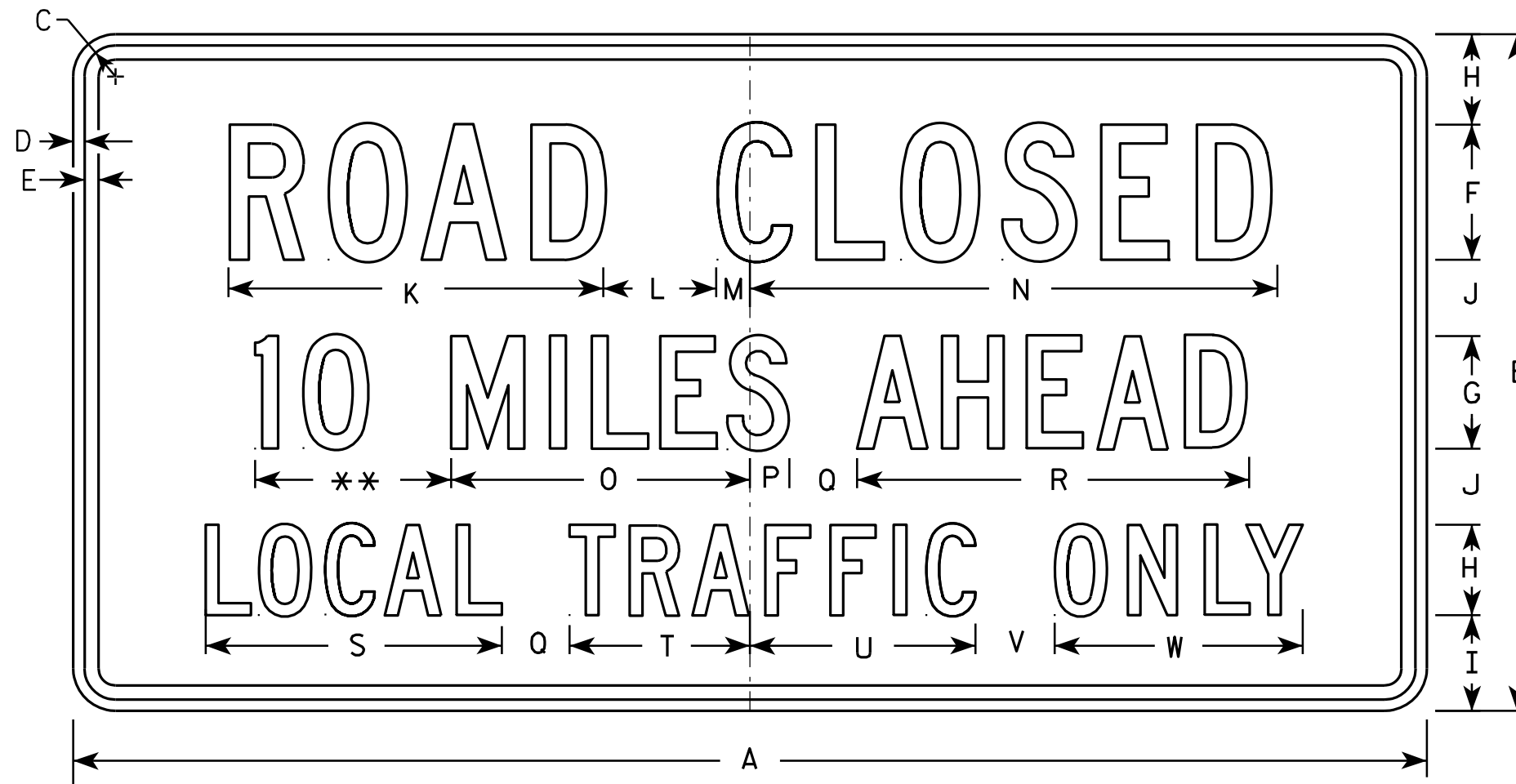
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R11-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 5

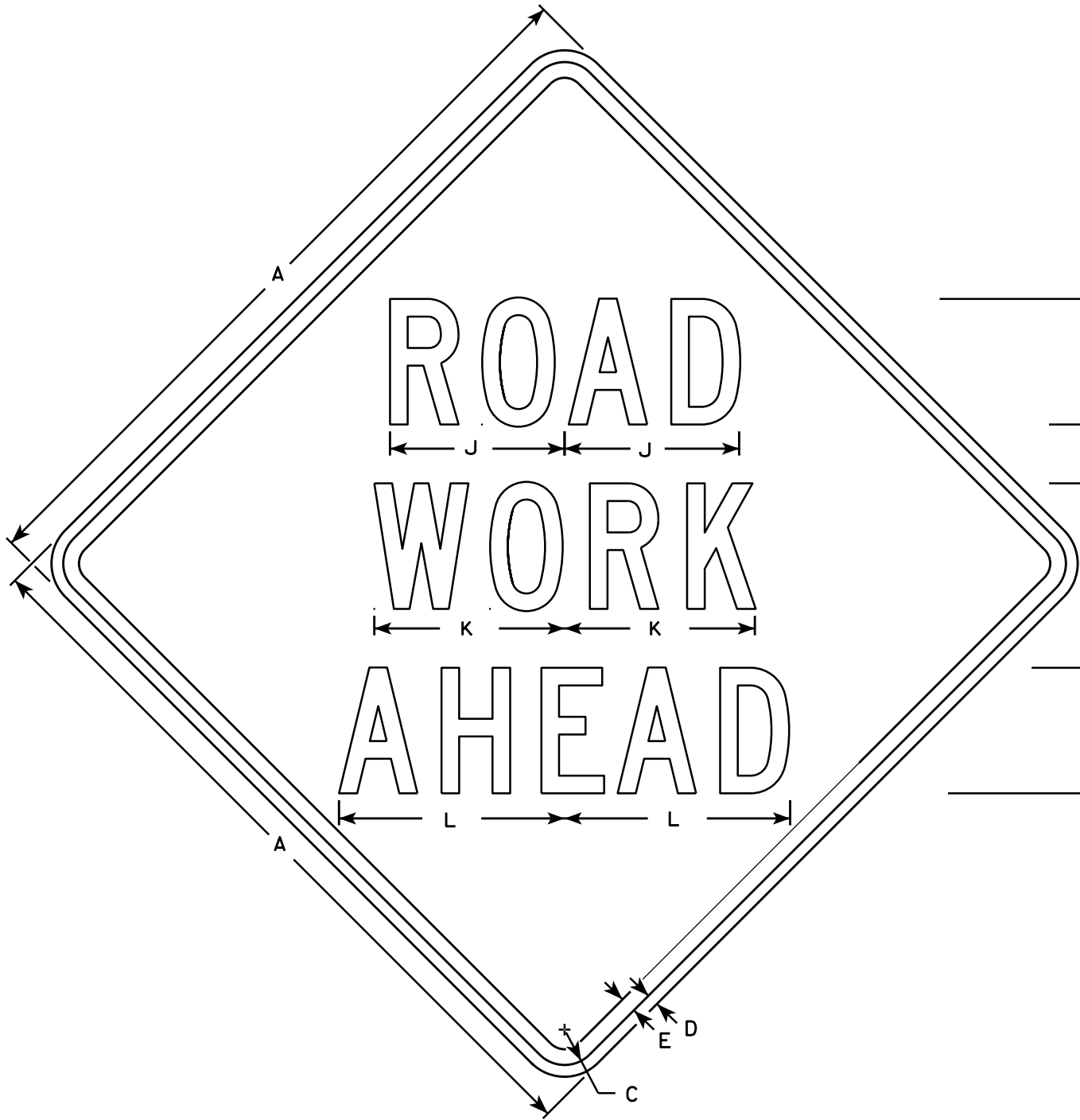
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

STANDARD SIGN R11-3

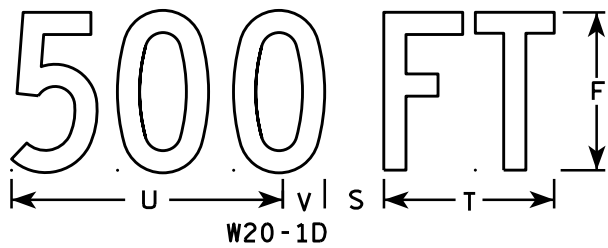
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-3.6

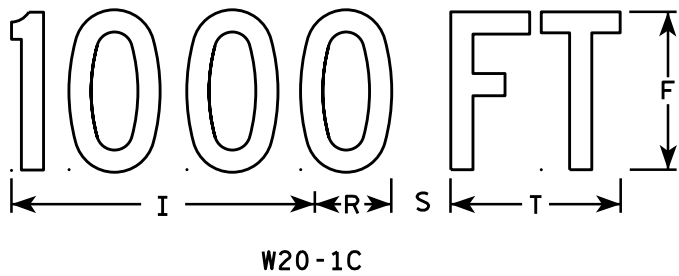
PROJECT NO: HWY: COUNTY: SHEET NO: E



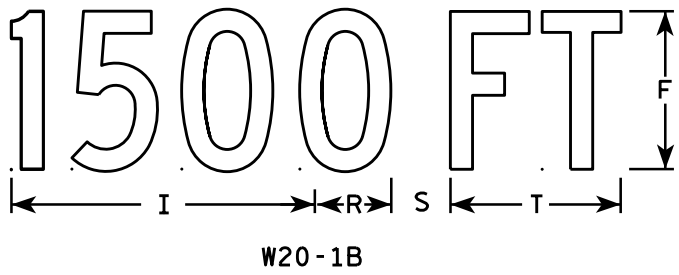
W20-1A



W20-1D



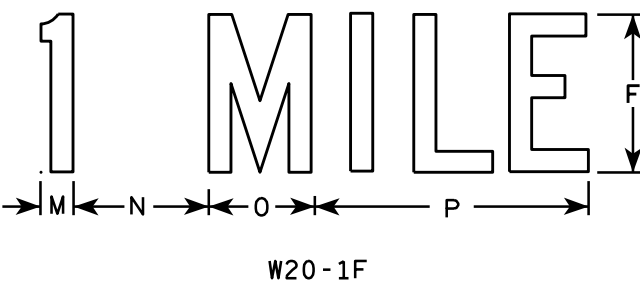
W20-1C



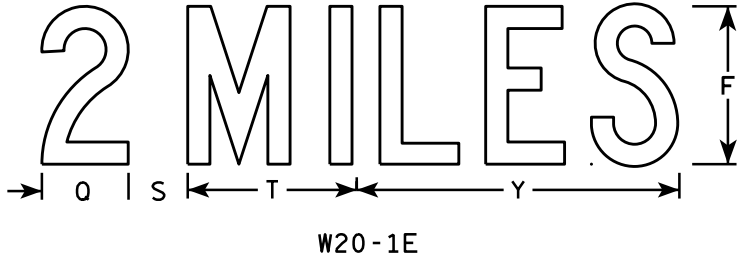
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

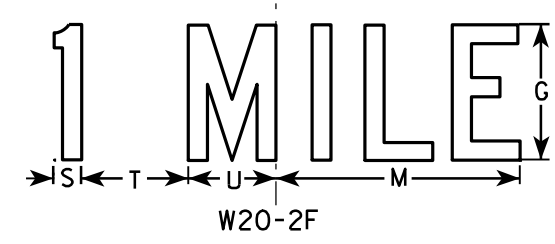
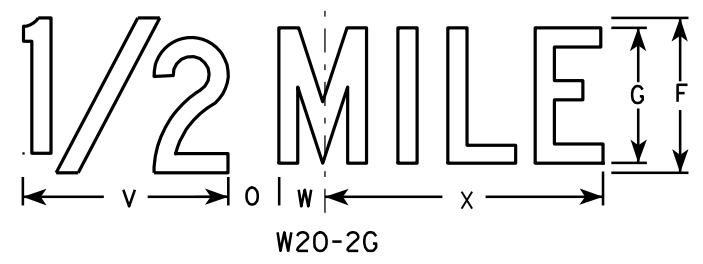
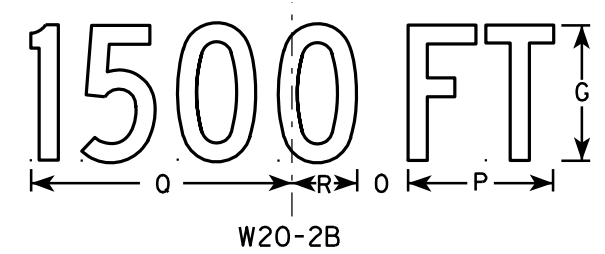
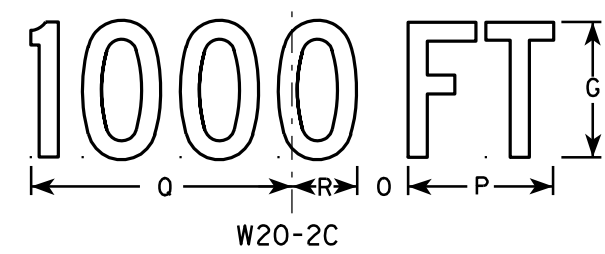
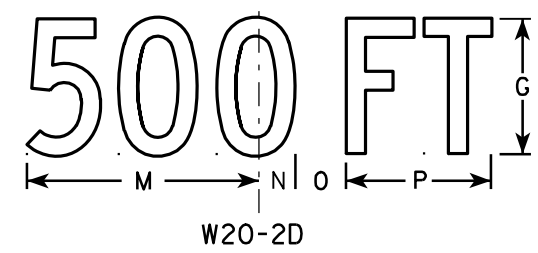
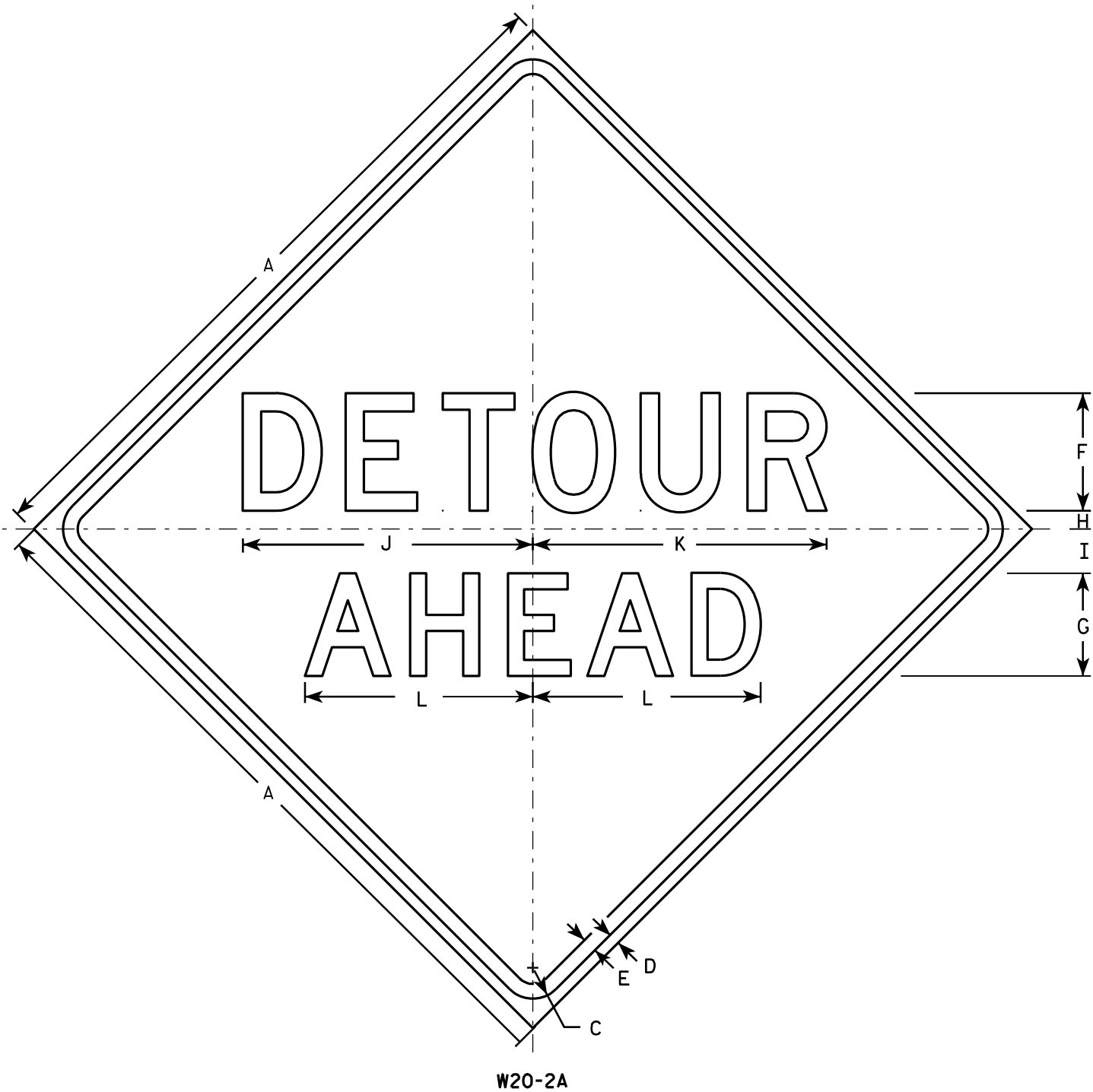
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

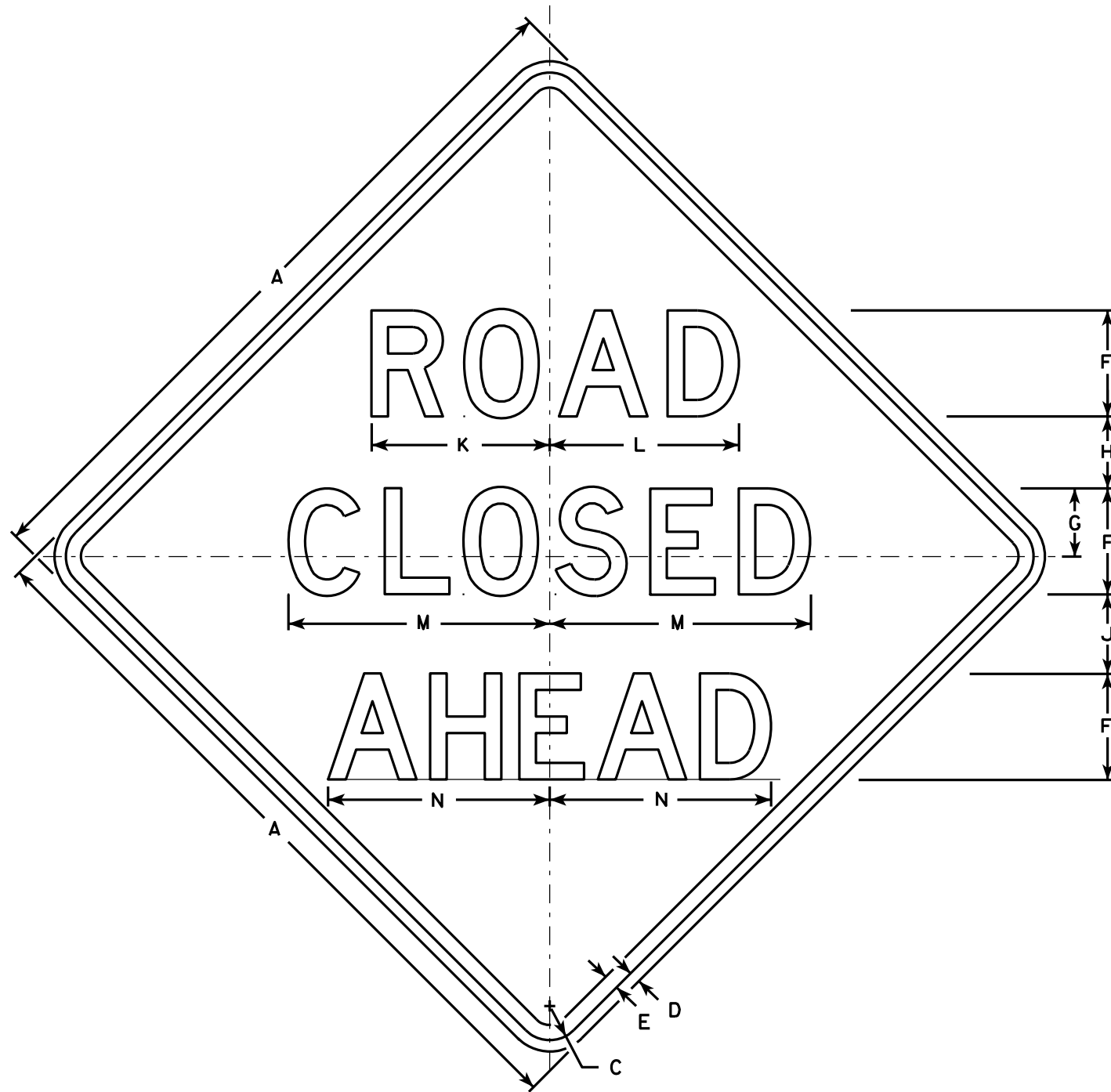
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W20-3A

500 FT

W20-3D

1000 FT

W20-3C

1500 FT

W20-3B

1/2 MILE

W20-3G

1 MILE

W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

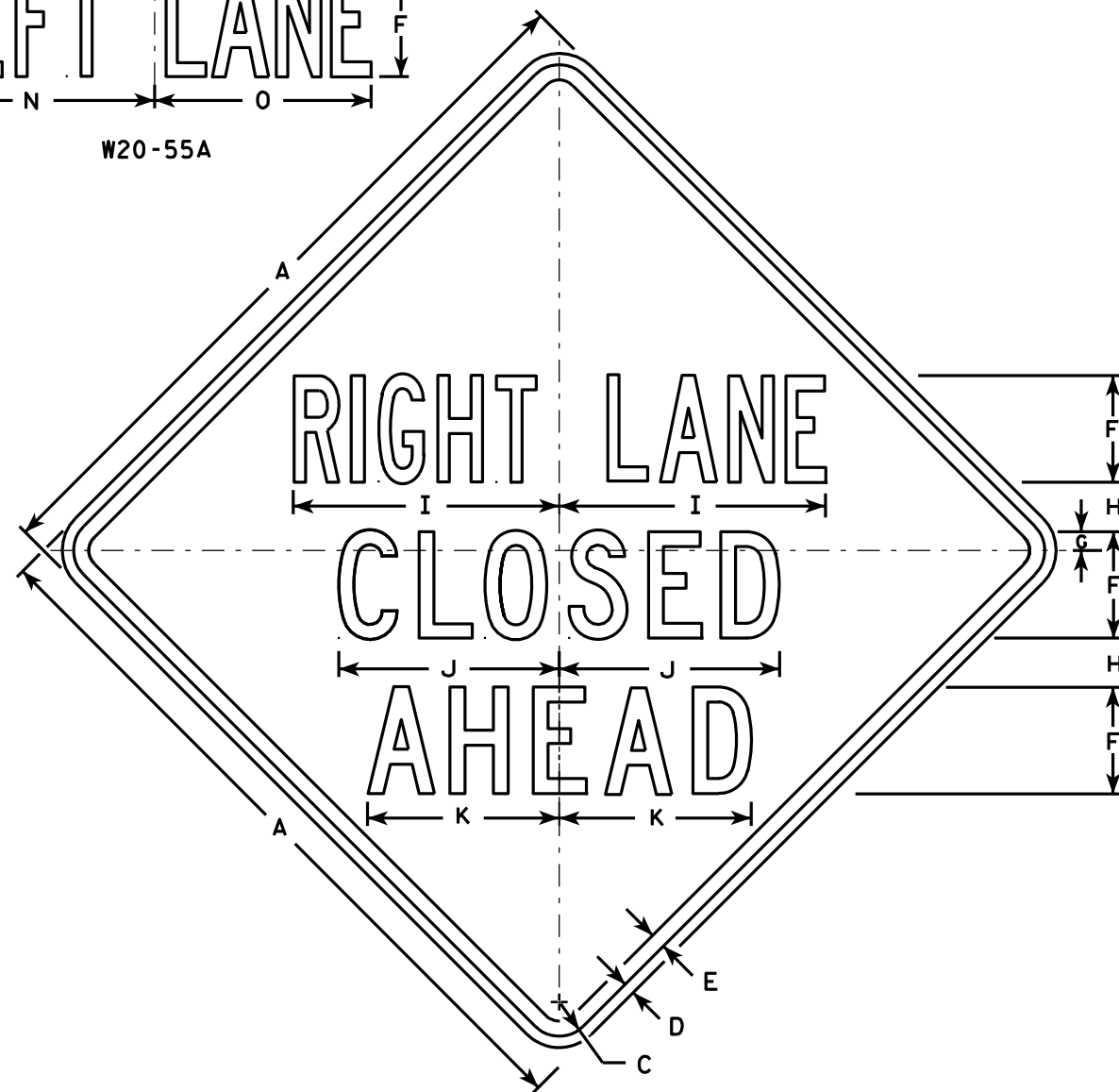
E

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. "----- LANE" is Series B.
All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

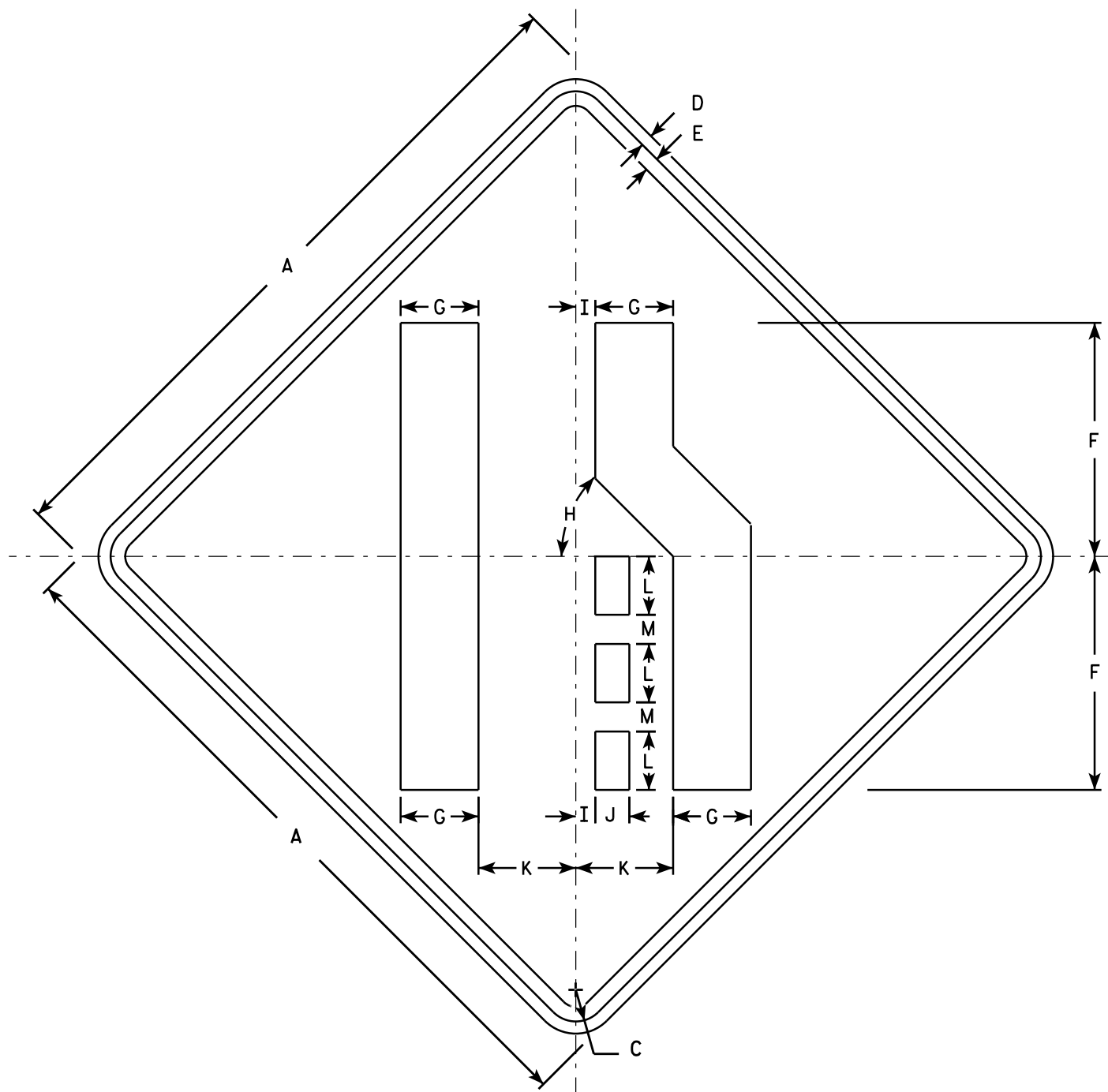
HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN	
W20-5A, B, C, D, F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-5.11



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN

W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch

For State Traffic Engineer

DATE 11/20/13

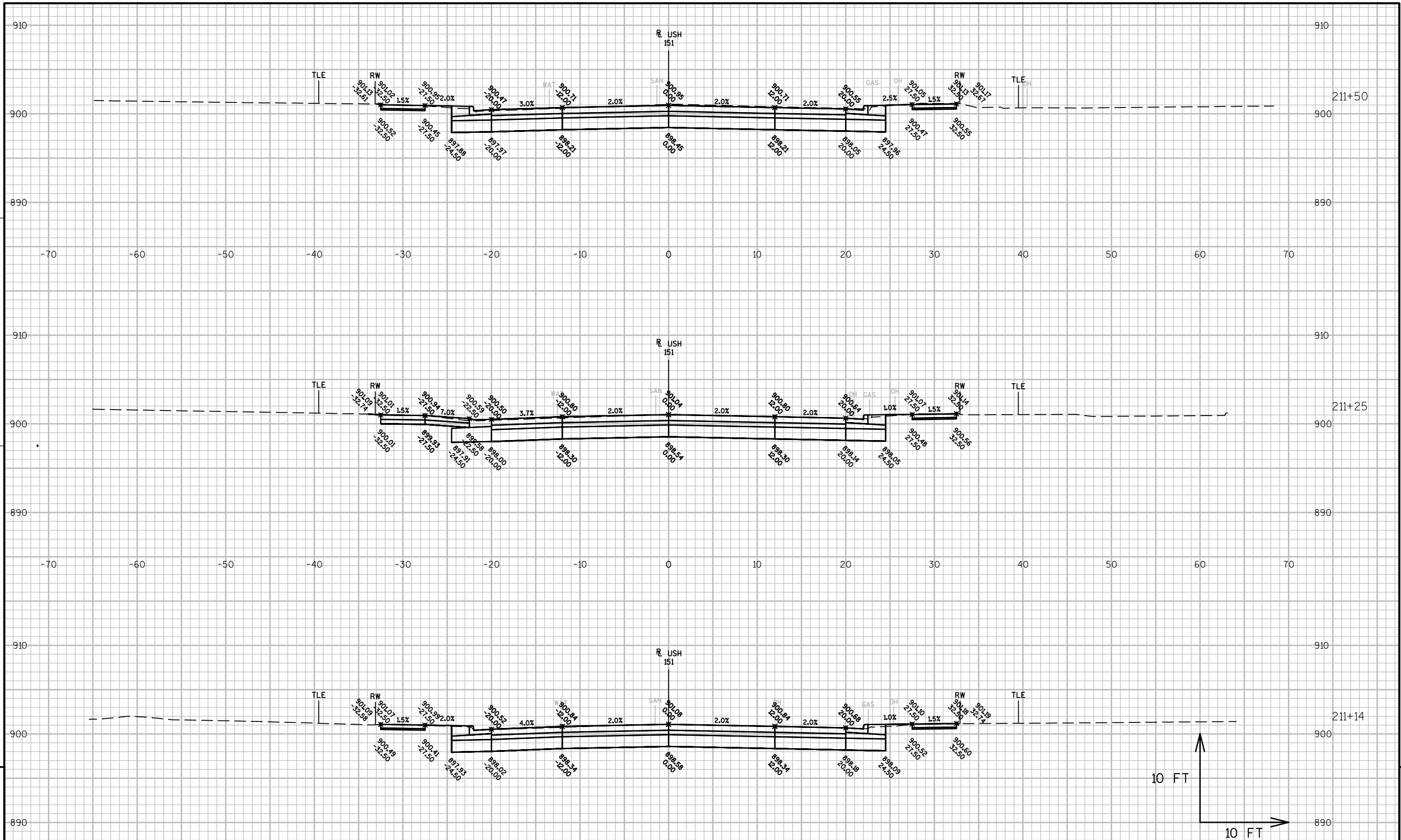
PLATE NO. W04-2.1

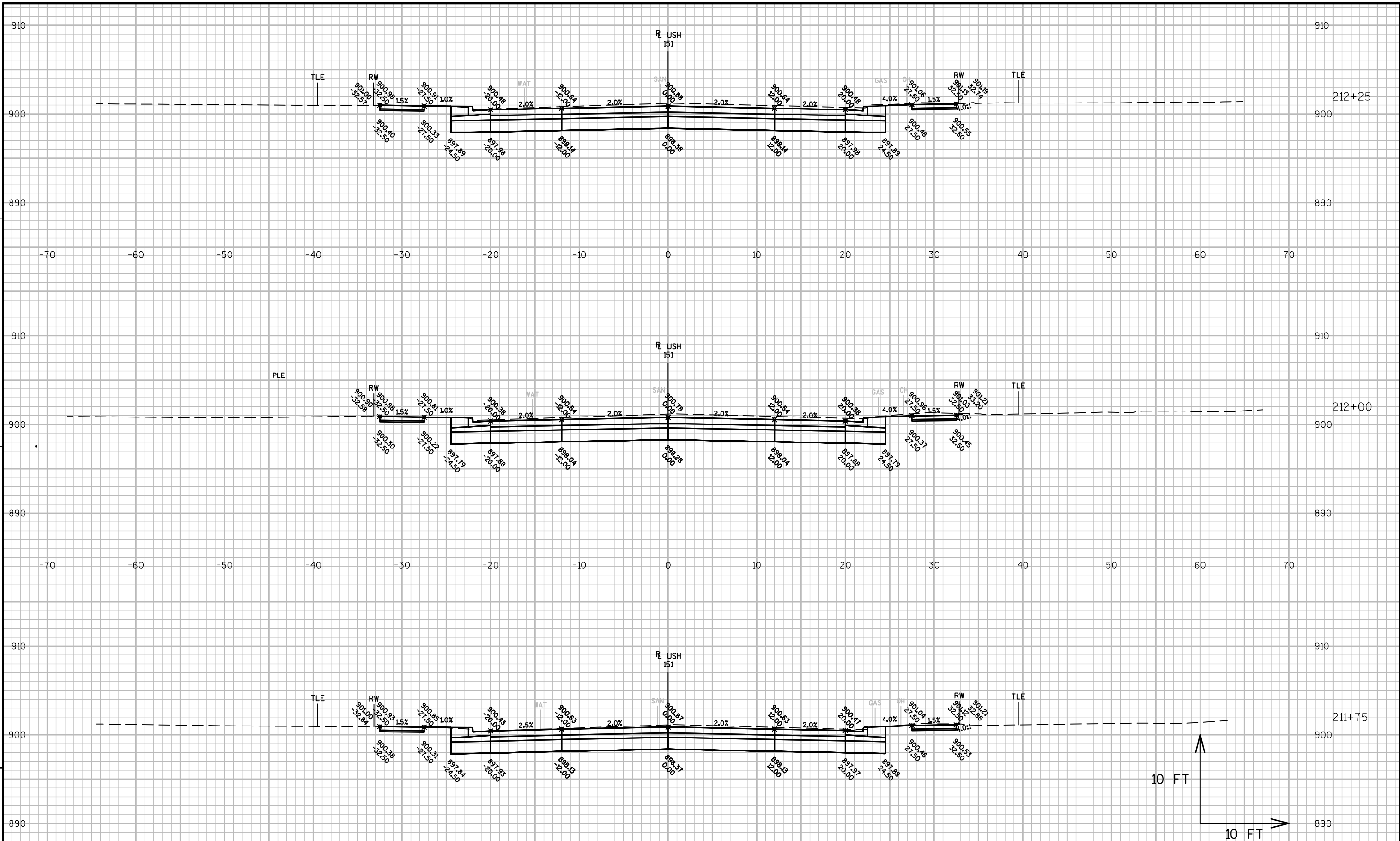
USH 151 (E. CHESTNUT STREET) EARTHWORK													
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.33	
211+13.94	21113.94	0.00	127.91	48.33	0.70	0.00	0	0	0	0	0	0	0.00
211+25	21125.00	11.06	128.02	48.33	0.24	0.00	52	20	0	0	52	0	32.37
211+50	21150.00	25.00	130.35	48.33	0.69	0.00	120	45	0	0	172	1	106.66
211+75	21175.00	25.00	137.43	48.33	0.20	0.00	124	45	0	0	296	1	185.34
212+00	21200.00	25.00	145.76	48.33	0.00	0.00	131	45	0	0	427	1	271.57
212+25	21225.00	25.00	143.19	48.33	0.01	0.00	134	45	0	0	561	2	360.58
212+50	21250.00	25.00	135.79	48.33	0.11	0.00	129	45	0	0	690	2	444.91
212+75	21275.00	25.00	135.05	48.33	0.15	0.00	125	45	0	0	815	2	525.39
213+00	21300.00	25.00	138.66	48.33	0.23	0.00	127	45	0	0	942	2	607.12
213+20.54	21320.54	20.54	135.68	48.33	0.18	0.00	104	37	0	0	1,047	2	674.49
213+25	21325.00	4.46	135.29	48.33	0.33	0.00	22	8	0	0	1,069	2	688.84
213+30	21330.00	5.00	138.23	48.33	0.34	0.00	25	9	0	0	1,094	2	705.13
213+35	21335.00	5.00	130.15	48.33	0.30	0.00	25	9	0	0	1,119	2	720.95
213+40	21340.00	5.00	139.72	48.33	0.82	0.00	25	9	0	0	1,144	3	736.85
213+45	21345.00	5.00	145.34	48.33	0.32	0.00	26	9	0	0	1,170	3	754.16
213+50	21350.00	5.00	141.88	48.33	0.00	0.00	27	9	0	0	1,197	3	771.76
213+55	21355.00	5.00	130.90	48.33	0.00	0.00	25	9	0	0	1,222	3	788.07
213+60	21360.00	5.00	120.21	48.33	0.00	0.00	23	9	0	0	1,246	3	802.37
213+65	21365.00	5.00	113.89	48.33	0.00	0.00	22	9	0	0	1,267	3	815.09
213+66.46	21366.46	1.46	114.49	48.33	0.00	0.00	6	3	0	0	1,273	3	818.65
213+70	21370.00	3.54	117.63	48.33	0.00	0.00	15	6	0	0	1,289	3	827.53
213+75	21375.00	5.00	127.28	48.33	0.00	0.00	23	9	0	0	1,311	3	841.26
213+80	21380.00	5.00	138.00	48.33	0.00	0.00	25	9	0	0	1,336	3	856.87
213+85	21385.00	5.00	147.95	48.33	0.00	0.00	26	9	0	0	1,362	3	874.40
213+90	21390.00	5.00	135.75	48.33	0.47	0.00	26	9	0	0	1,389	3	891.66
213+95	21395.00	5.00	132.58	48.33	0.15	0.00	25	9	0	0	1,413	3	907.48
214+00	21400.00	5.00	130.70	48.33	0.57	0.00	24	9	0	0	1,438	3	922.81
214+05	21405.00	5.00	133.12	48.33	0.54	0.00	24	9	0	0	1,462	3	938.15
214+10	21410.00	5.00	130.01	48.33	0.67	0.00	24	9	0	0	1,487	3	953.42
214+15	21415.00	5.00	131.53	48.33	0.64	0.00	24	9	0	0	1,511	3	968.52
214+15.83	21415.83	0.83	131.41	48.33	0.54	0.00	4	1	0	0	1,515	3	971.04
214+25	21425.00	9.17	133.17	48.33	0.01	0.00	45	16	0	0	1,560	4	999.45
214+50	21450.00	25.00	132.24	48.33	0.04	0.00	123	45	0	0	1,683	4	1077.54
214+75	21475.00	25.00	128.68	48.33	1.28	0.00	121	45	1	0	1,803	4	1152.77
215+00	21500.00	25.00	124.02	48.33	1.22	0.00	117	45	1	0	1,920	6	1223.47
215+25	21525.00	25.00	121.62	48.33	0.73	0.00	114	45	1	0	2,034	7	1291.24
215+50	21550.00	25.00	115.51	48.33	2.88	0.00	110	45	2	0	2,144	9	1354.05
215+75	21575.00	25.00	120.39	48.33	0.25	0.00	109	45	1	0	2,253	11	1416.58
216+00	21600.00	25.00	122.15	48.33	1.58	0.00	112	45	1	0	2,365	12	1482.99
216+25	21625.00	25.00	117.76	48.33	1.24	0.00	111	45	1	0	2,477	14	1547.57
216+50	21650.00	25.00	128.18	48.33	0.55	0.00	114	45	1	0	2,590	15	1615.57
216+75	21675.00	25.00	136.38	48.33	0.77	0.00	122	45	1	0	2,713	16	1692.49
217+00	21700.00	25.00	146.00	48.33	0.00	0.00	131	45	0	0	2,844	17	1778.00
217+25	21725.00	25.00	144.67	48.33	0.00	0.00	135	45	0	0	2,978	17	1867.81
217+50	21750.00	25.00	140.74	48.33	0.16	0.00	132	45	0	0	3,110	17	1955.10
217+75	21775.00	25.00	143.36	48.33	0.33	0.00	132	45	0	0	3,242	17	2041.58
217+89.09	21789.09	14.09	144.01	48.33	0.46	0.00	75	25	0	0	3,317	17	2091.08
217+90	21790.00	0.91	144.13	48.33	0.46	0.00	5	2	0	0	3,322	17	2094.28
217+95	21795.00	5.00	140.41	48.33	0.71	0.00	26	9	0	0	3,348	17	2111.53
218+00	21800.00	5.00	144.08	48.33	0.42	0.00	26	9	0	0	3,374	17	2128.78
218+05	21805.00	5.00	140.62	48.33	0.34	0.00	26	9	0	0	3,401	18	2146.10
218+10	21810.00	5.00	139.28	48.33	0.53	0.00	26	9	0	0	3,427	18	2162.96
218+15	21815.00	5.00	150.62	48.33	0.11	0.00	27	9	0	0	3,454	18	2180.77
218+20	21820.00	5.00	145.75	48.33	0.00	0.00	27	9	0	0	3,481	18	2199.25
218+25	21825.00	5.00	137.45	48.33	0.00	0.00	26	9	0	0	3,507	18	2216.52
218+30	21830.00	5.00	129.48	48.33	0.00	0.00	25	9	0	0	3,532	18	2232.29
218+35	21835.00	5.00	132.07	48.33	0.00	0.00	24	9	0	0	3,556	18	2247.55
218+40	21840.00	5.00	137.99	48.33	0.00	0.00	25	9	0	0	3,581	18	2263.61
218+45	21845.00	5.00	142.08	48.33	0.01	0.00	26	9	0	0	3,607	18	2280.59
218+50	21850.00	5.00	134.46	48.33	0.81	0.00	26	9	0	0	3,633	18	2297.14
218+55	21855.00	5.00	129.56	48.33	1.44	0.00	24	9	0	0	3,657	18	2312.36
218+60	21860.00	5.00	134.53	48.33	0.67	0.00	24	9	0	0	3,682	18	2327.60
218+65	21865.00	5.00	132.50	48.33	0.52	0.00	25	9	0	0	3,706	19	2343.23
218+69.69	21869.69	4.69	129.67	48.33	0.51	0.00	23	8	0	0	3,729	19	2357.50
Column Totals							3,729	1,353	14	0			

S MAPLE STREET EARTHWORK													
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Unusable Pavement Material	Fill	EBS	Cut	Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.33	
15+20.01	1520.01	0.00	0.14	37.00	0.00	0.00	0	0	0	0	0	0	0.00
15+25.00	1525.00	4.99	45.75	37.00	0.00	0.00	4	7	0	0	4	0	-2.60
15+30.00	1530.00	5.00	96.77	37.00	0.00	0.00	13	7	0	0	17	0	3.75
15+35.00	1535.00	5.00	103.45	37.00	0.01	0.00	19	7	0	0	36	0	15.44
15+40.00	1540.00	5.00	109.48	37.00	0.09	0.00	20	7	0	0	56	0	28.29
15+42.30	1542.30	2.30	106.18	37.00	0.11	0.00	9	3	0	0	65	0	34.30
15+45.00	1545.00	2.70	104.04	37.00	0.11	0.00	11	4	0	0	75	0	41.10
15+47.91	1547.91	2.91	103.90	37.00	0.10	0.00	11	4	0	0	87	0	48.32
Column Totals							87	38	0	0			

N MAPLE STREET EARTHWORK													
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Unusable Pavement Material	Fill	EBS	Cut	Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.33	
10+24.03	1024.03	0.00	101.20	36.67	0.00	0.00	0	0	0	0	0	0	0.00
10+25.00	1025.00	0.97	101.80	36.67	0.00	0.00	4	1	0	0	4	0	2.32
10+30.00	1030.00	5.00	98.22	36.67	0.01	0.00	19	7	0	0	22	0	14.05
10+34.99	1034.99	4.99	103.24	36.67	0.01	0.00	19	7	0	0	41	0	25.89
10+35.00	1035.00	0.01	103.25	36.67	0.01	0.00	0	0	0	0	41	0	25.91
10+40.00	1040.00	5.00	105.80	36.67	0.03	0.00	19	7	0	0	60	0	38.47
10+45.00	1045.00	5.00	72.84	36.67	0.00	0.00	17	7	0	0	77	0	48.22
10+49.25	1049.25	4.25	0.26	36.67	0.00	0.00	6	6	0	0	82	0	48.20
Column Totals							82	34	0	0			

ELM STREET EARTHWORK													
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.33	
20+25.36	2025.36	0.00	91.89	38.25	1.05	0.00	0	0	0	0	0	0	0.00
20+29.34	2029.34	3.99	103.42	38.25	0.00	0.00	14	6	0	0	14	0	8.67
20+30.00	2030.00	0.66	101.60	38.25	0.00	0.00	2	1	0	0	17	0	10.23
20+35.00	2035.00	5.00	104.86	38.25	0.01	0.00	19	7	0	0	36	0	22.26
20+40.00	2040.00	5.00	91.36	38.25	0.19	0.00	18	7	0	0	54	0	33.32
20+45.00	2045.00	5.00	68.80	38.25	0.00	0.00	15	7	0	0	69	0	41.04
20+50.00	2050.00	5.00	28.09	38.25	0.00	0.00	9	7	0	0	78	0	42.93
20+53.54	2053.54	3.54	0.01	38.25	0.00	0.00	2	5	0	0	80	0	39.76
Column Totals							80	40	0	0			





PROJECT NO: 4100-31-71

HWY: USH 151

COUNTY: CALUMET

CROSS SECTIONS: USH 151

SHEET

E

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LAYOUT NAME - 090202_XS

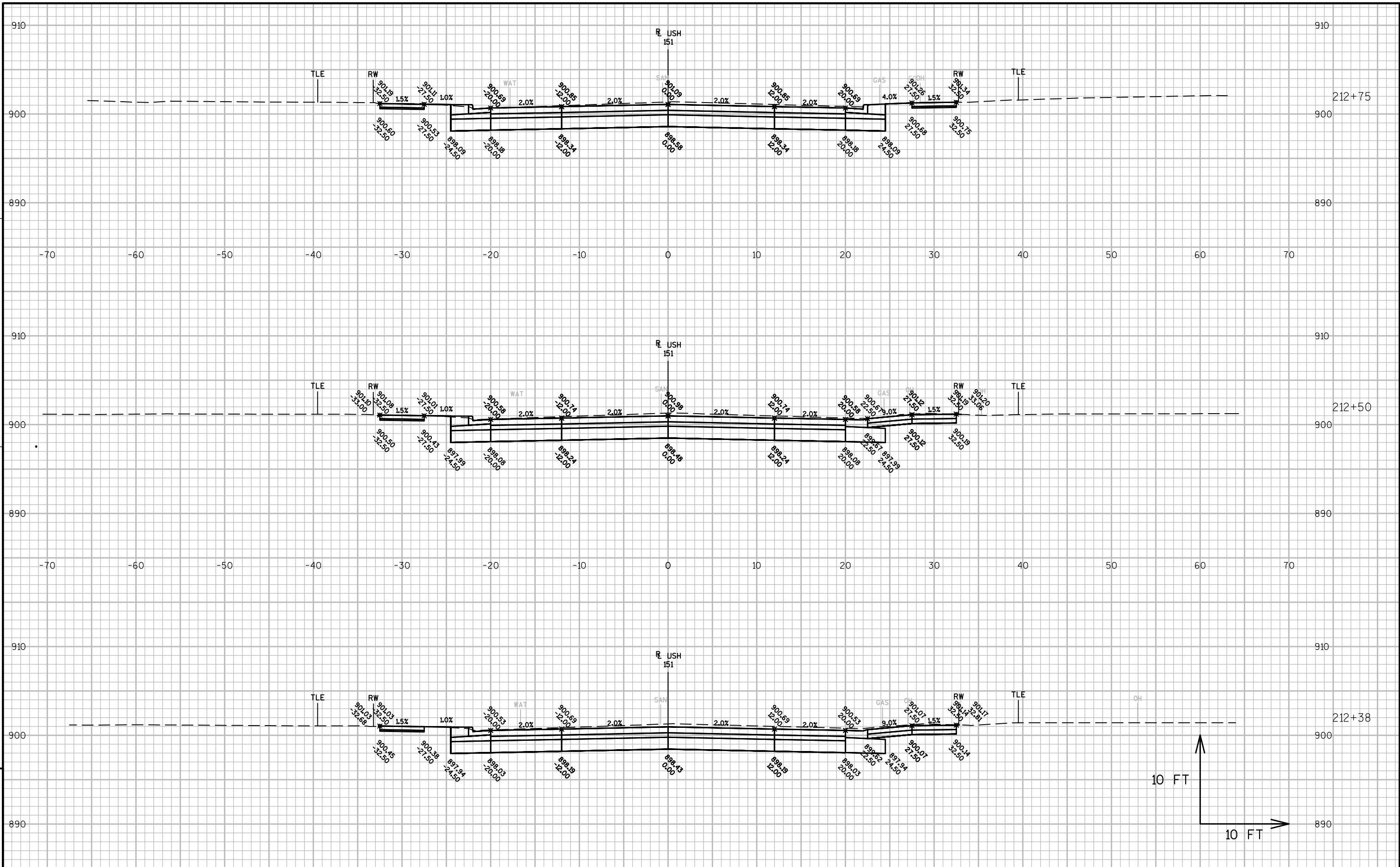
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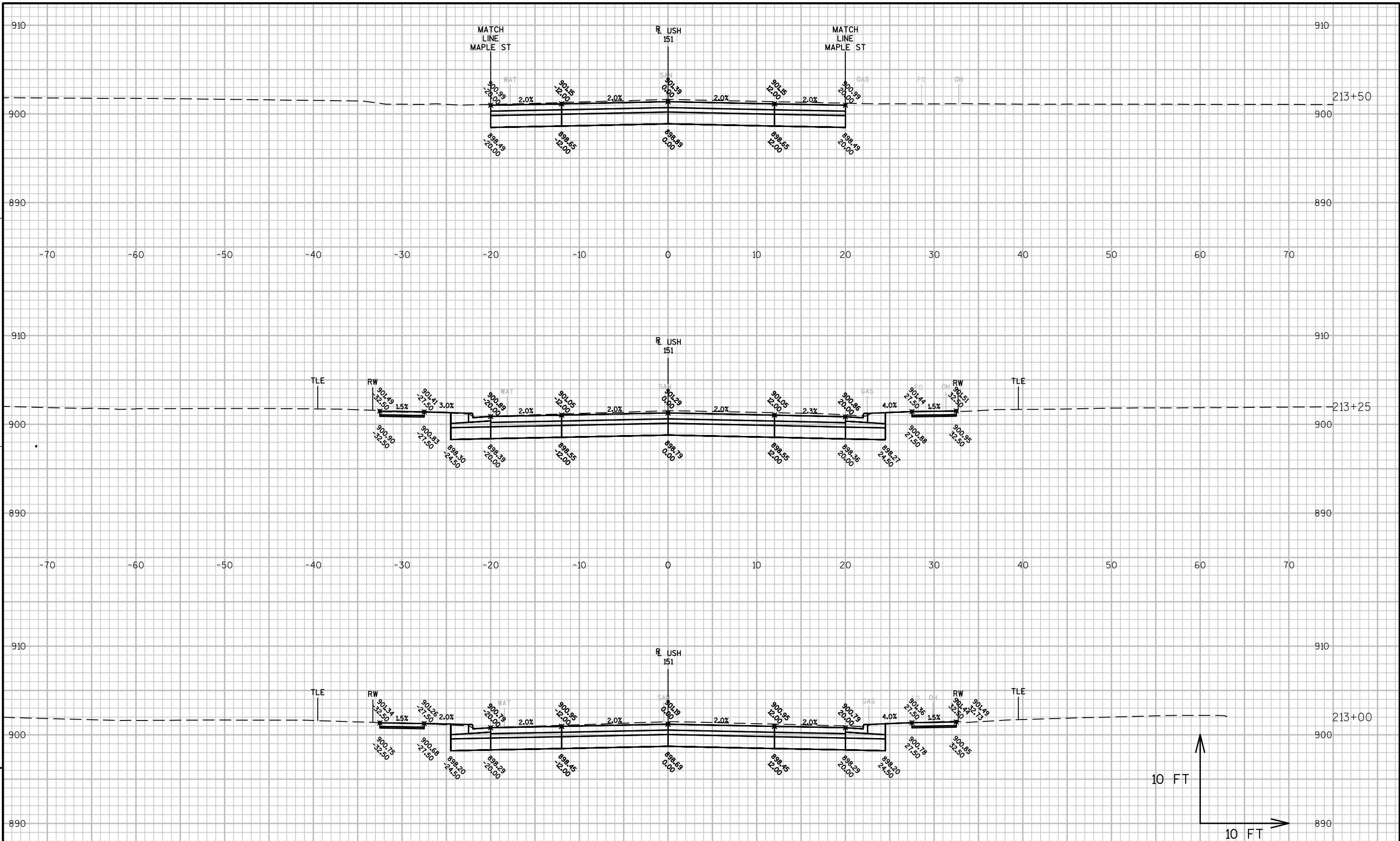
PLOT BY : WATT, TIMOTHY

PLOT NAME :

PLOT SCALE : 1:10_XREF

WISDOT/CADDs SHEET 49





PROJECT NO: 4100-31-74

HWY: USH 151

COUNTY: CALUMET

CROSS SECTIONS: USH 151

SHEET

E

FILE NAME : Y:\MILWAUKEE\201005\20140.00\41003100\SHEETS\PLAN\090201_XS.DWG
LAYOUT NAME - 090204_XS

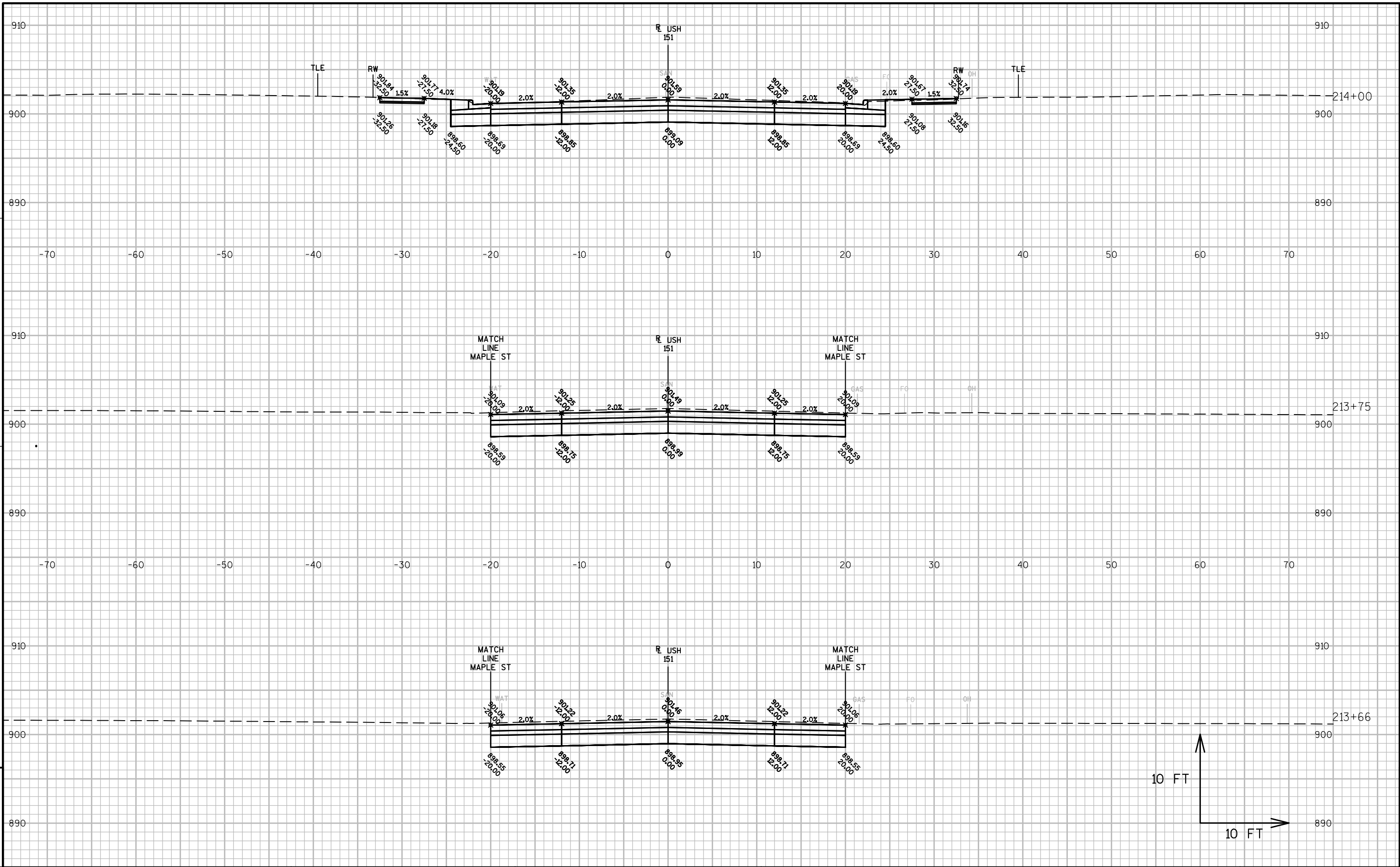
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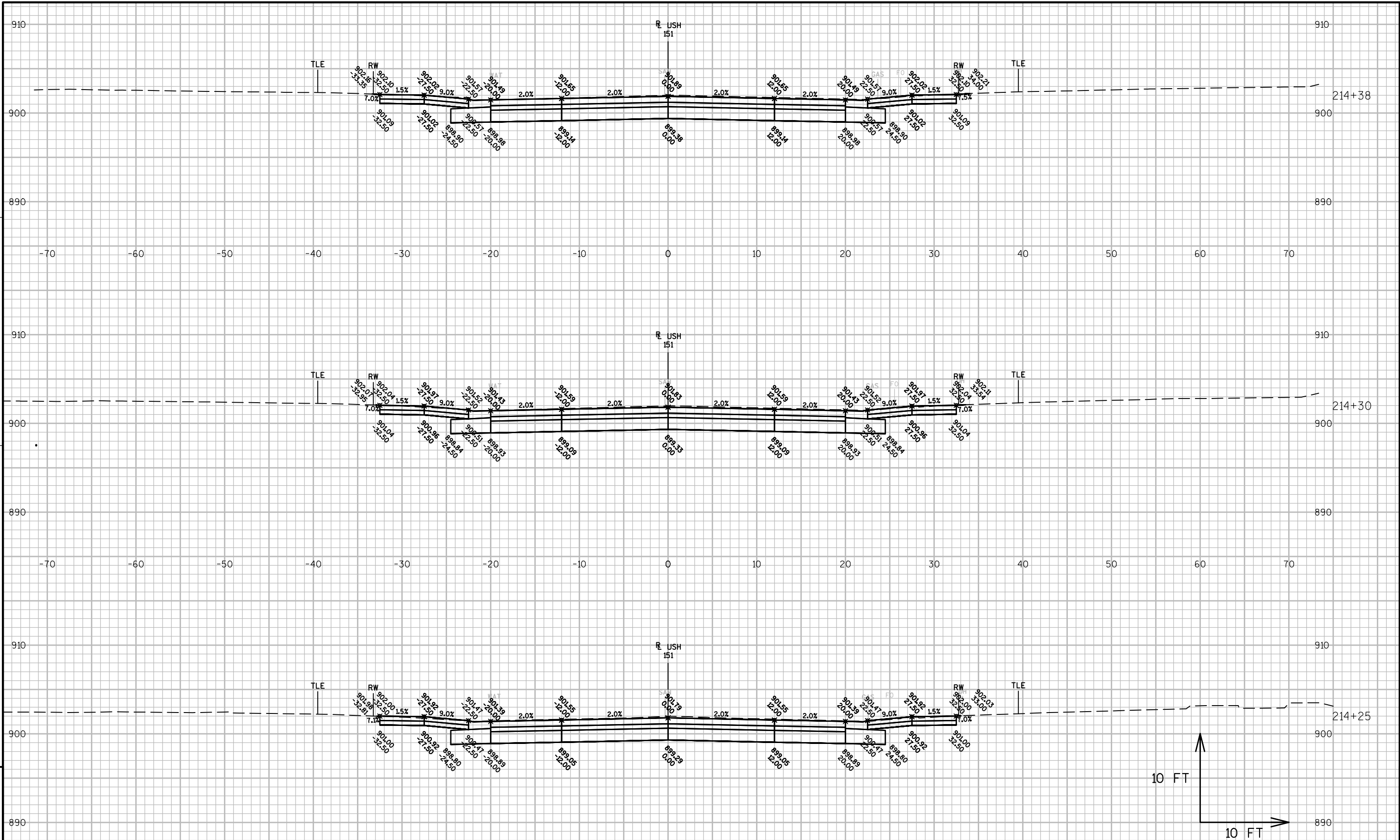
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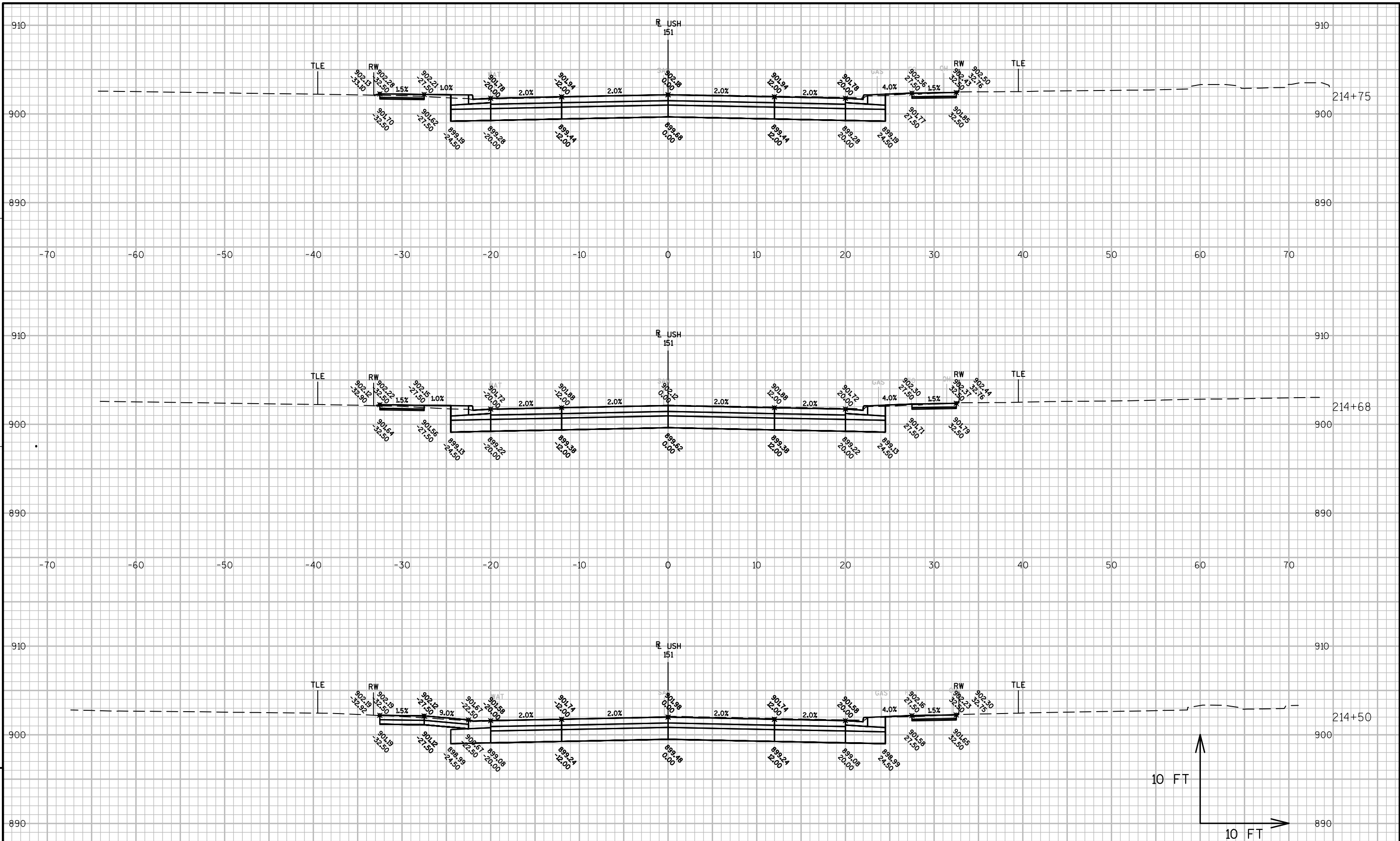
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WISDOT/CADDs SHEET 49







PROJECT NO: 4100-31-71

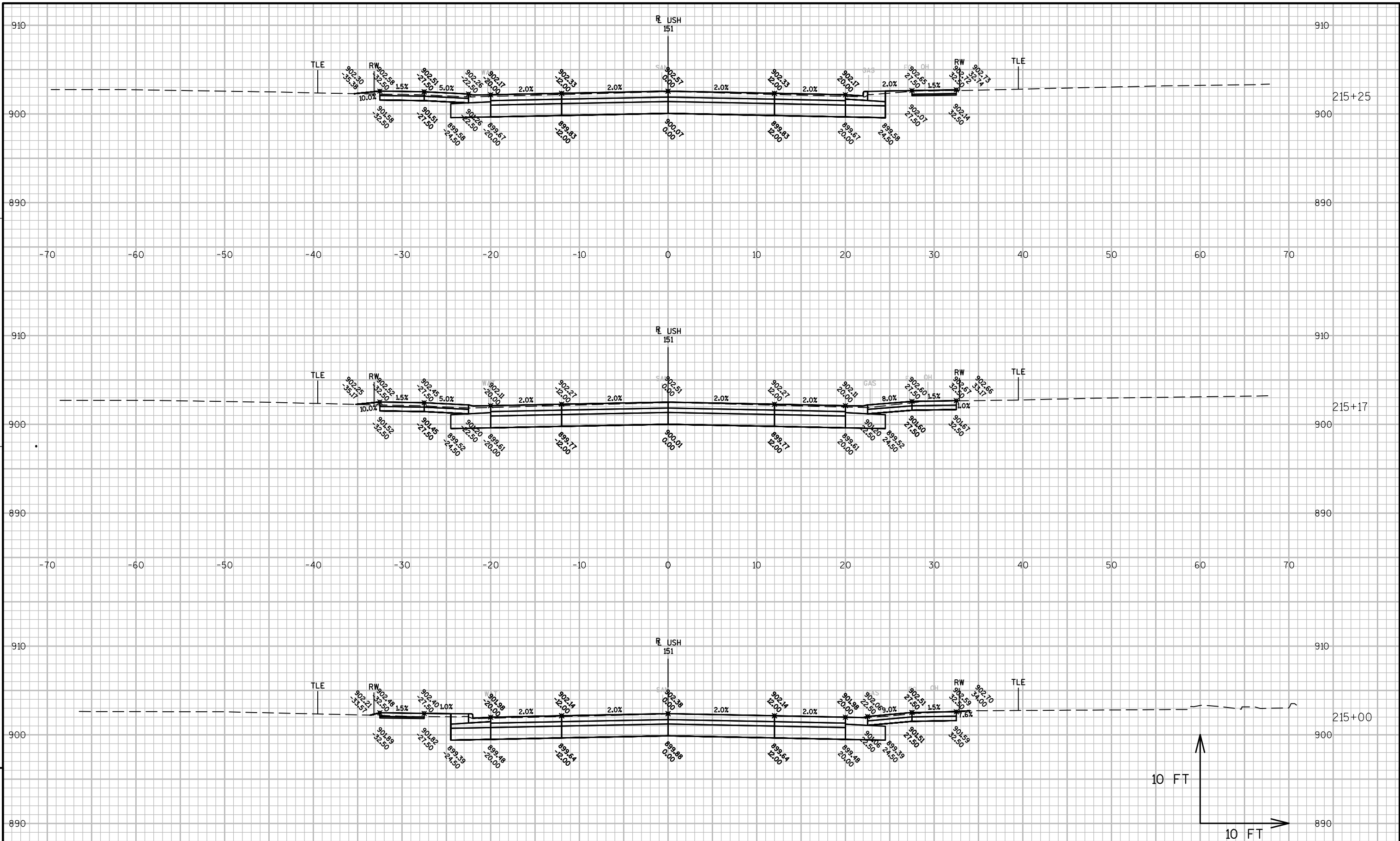
HWY: USH 151

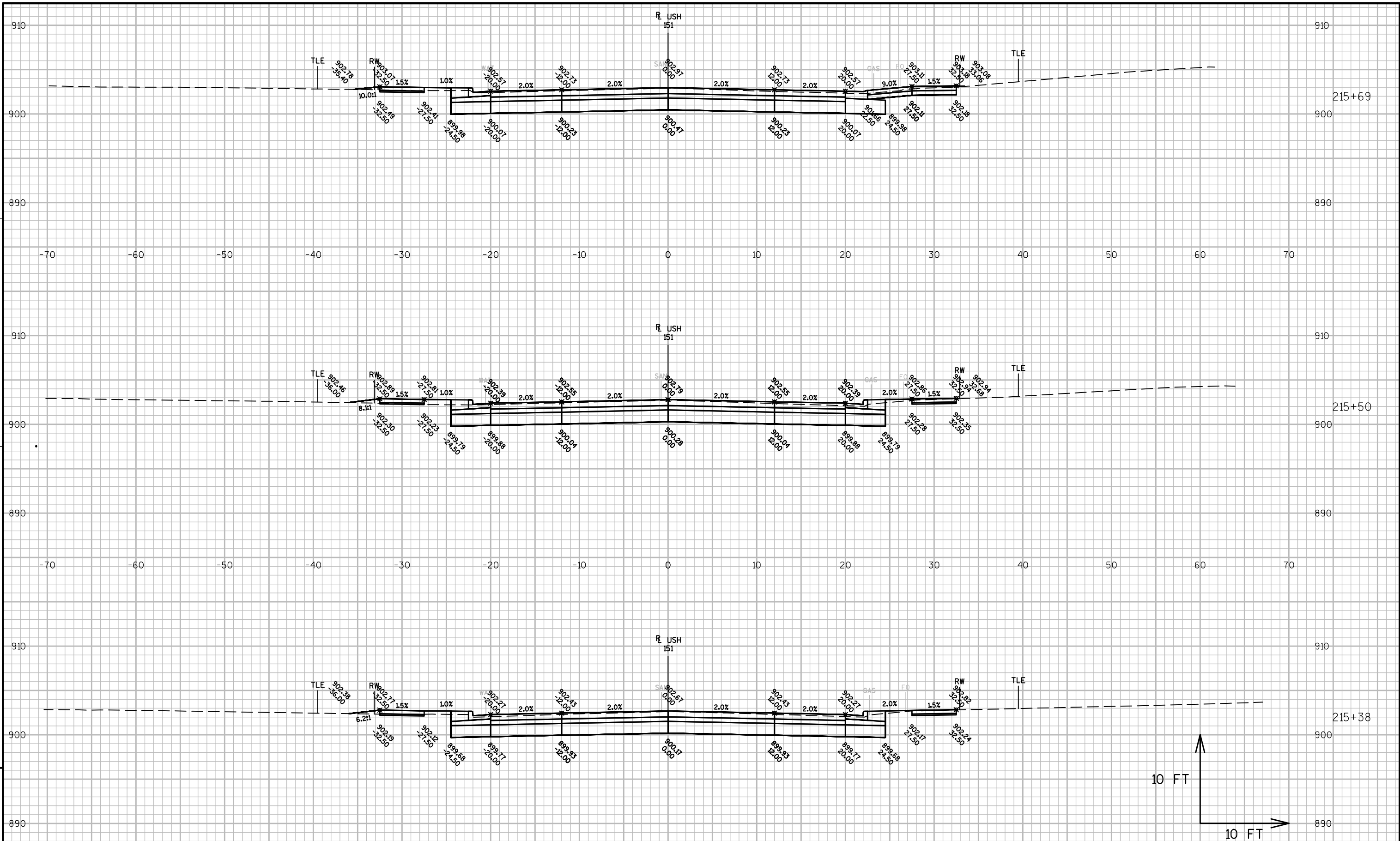
COUNTY: CALUMET

CROSS SECTIONS: USH 151

SHEET

E





PROJECT NO: 4100-31-71

HWY: USH 151

COUNTY: CALUMET

CROSS SECTIONS: USH 151

SHEET

9

FILE NAME : Y:\MILWAUKEE\201005\20140.00\41003100\SHEETS\PLAN\090201_XS.DWG
LAYOUT NAME - 090209_XS

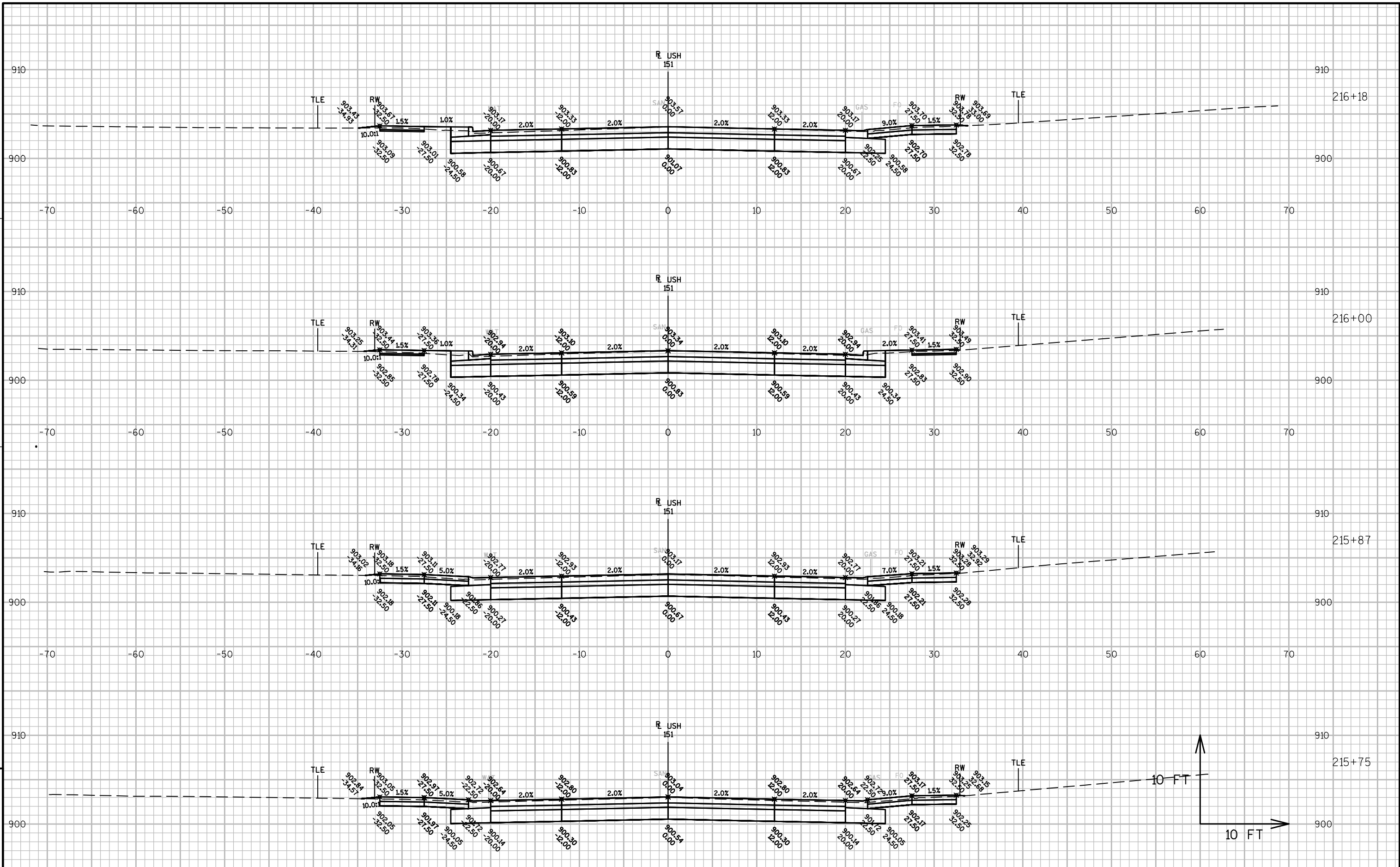
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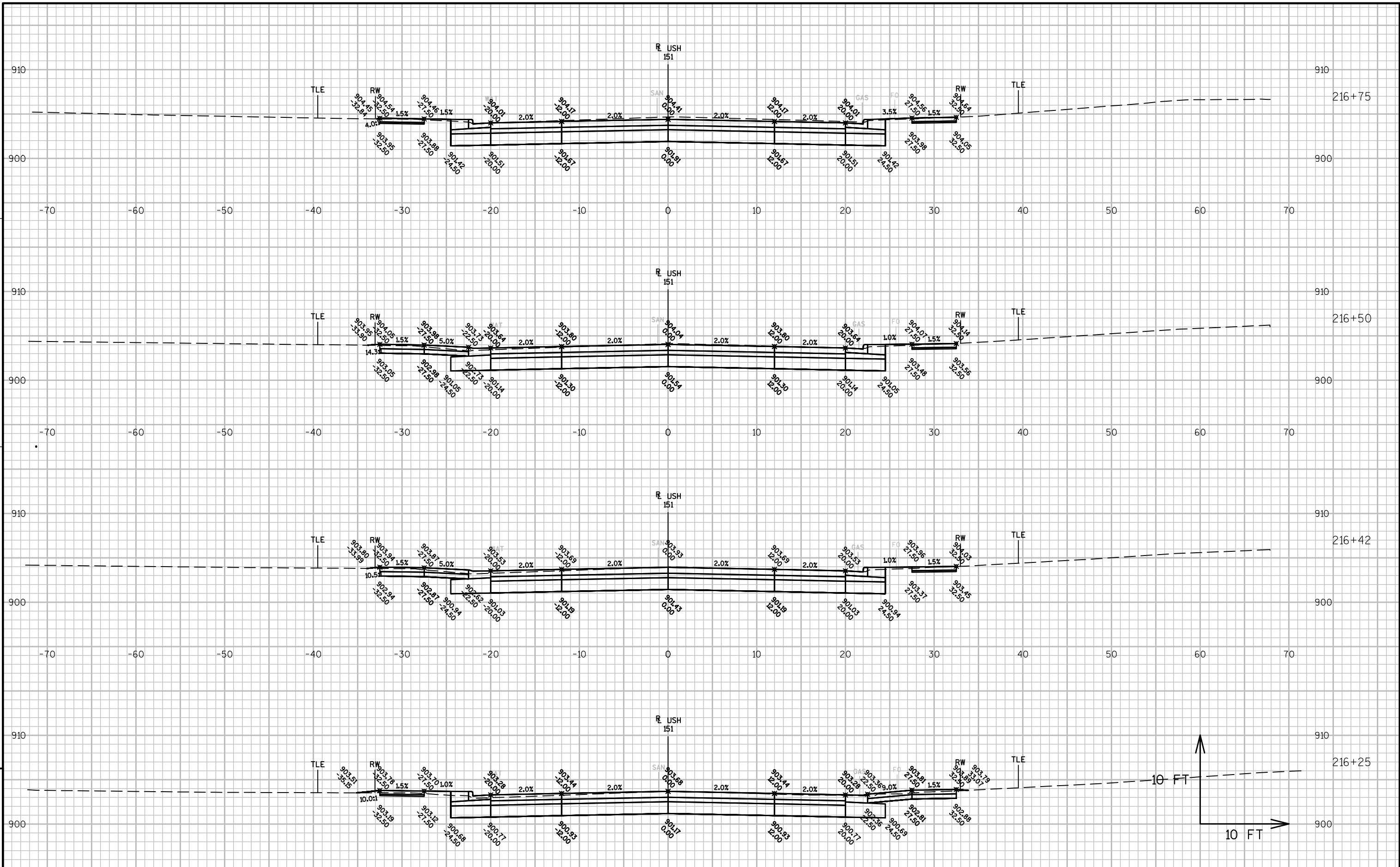
PLOT BY : WATT, TIMOTHY

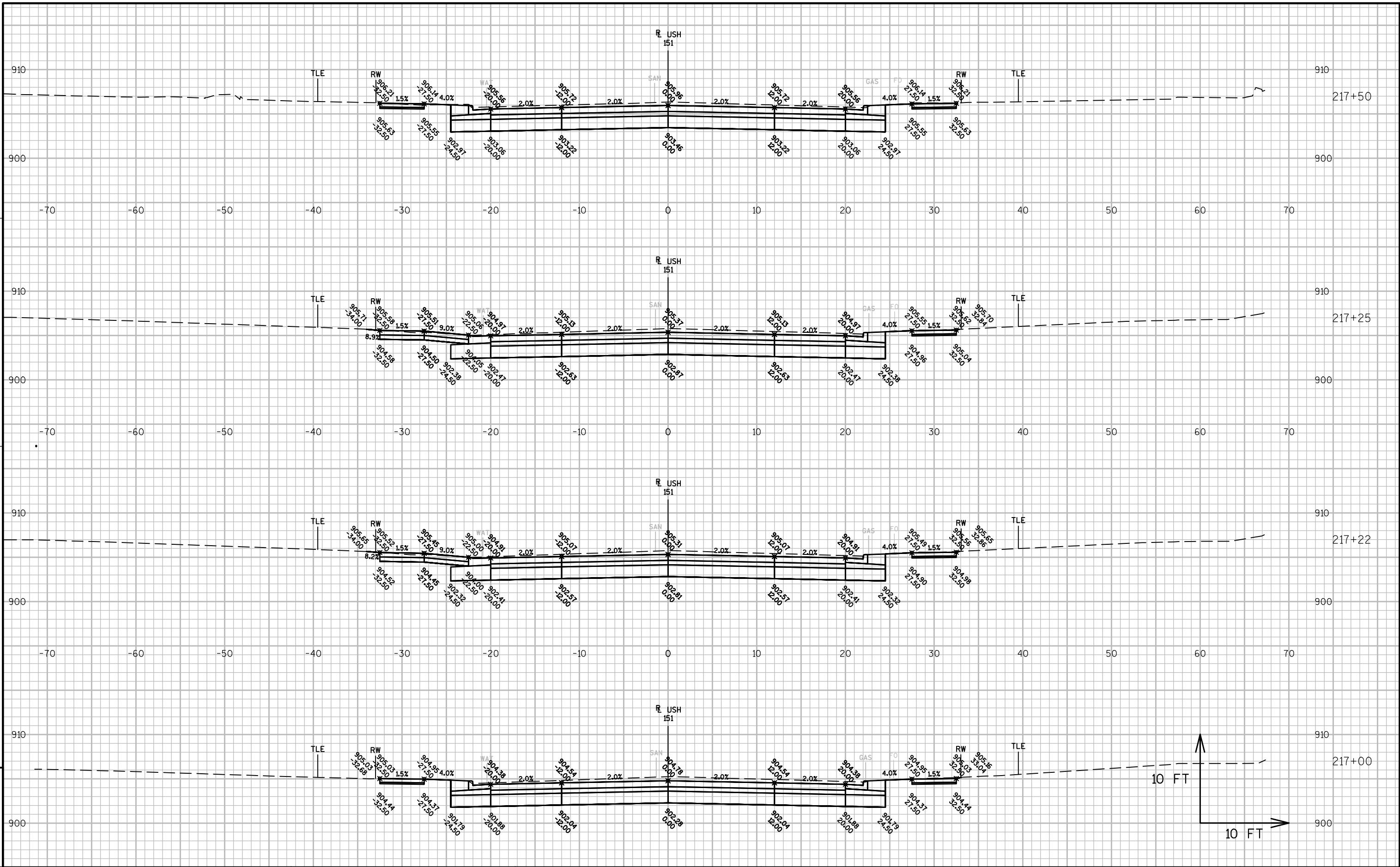
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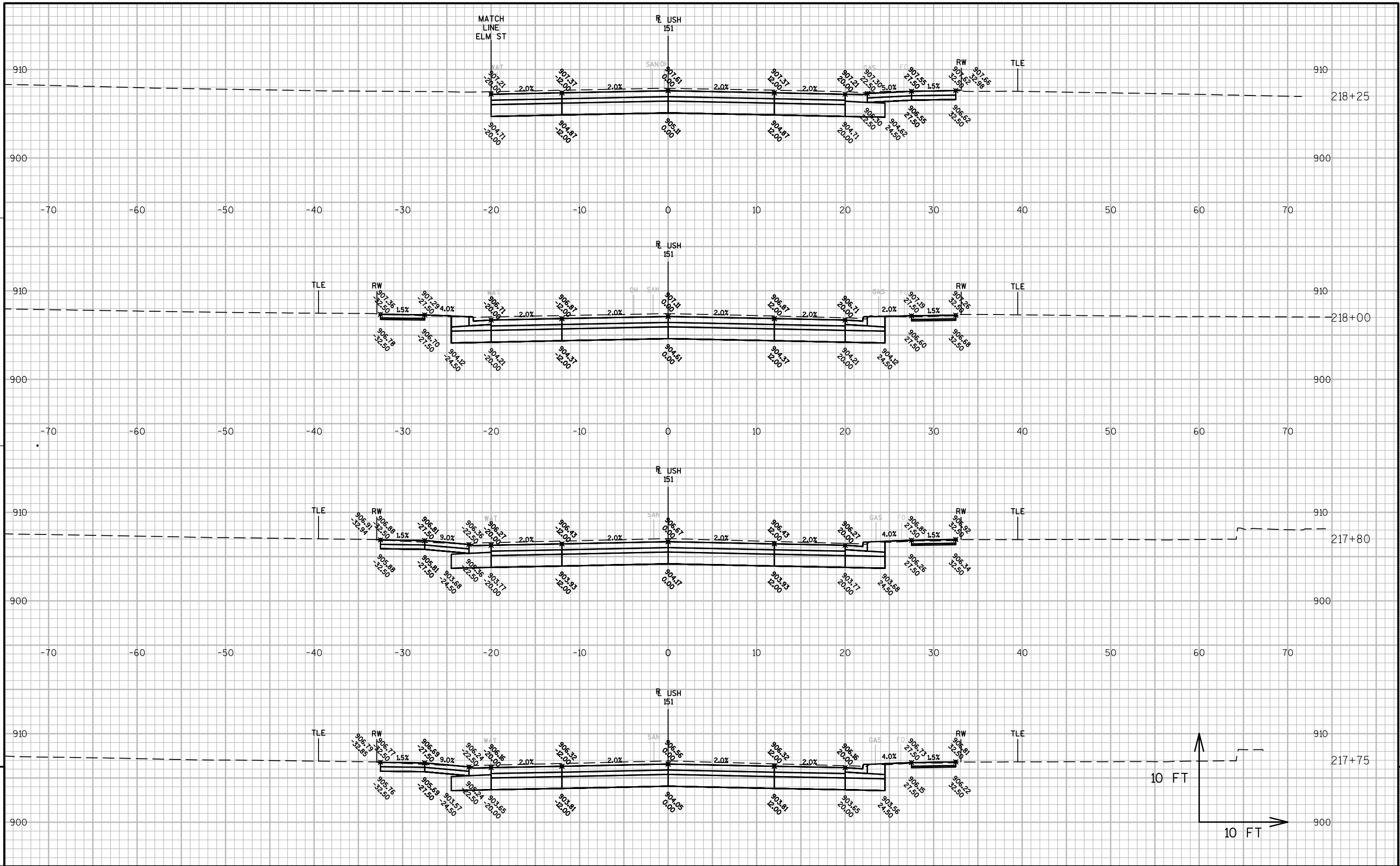
PLOT SCALE : 1:10_XREF

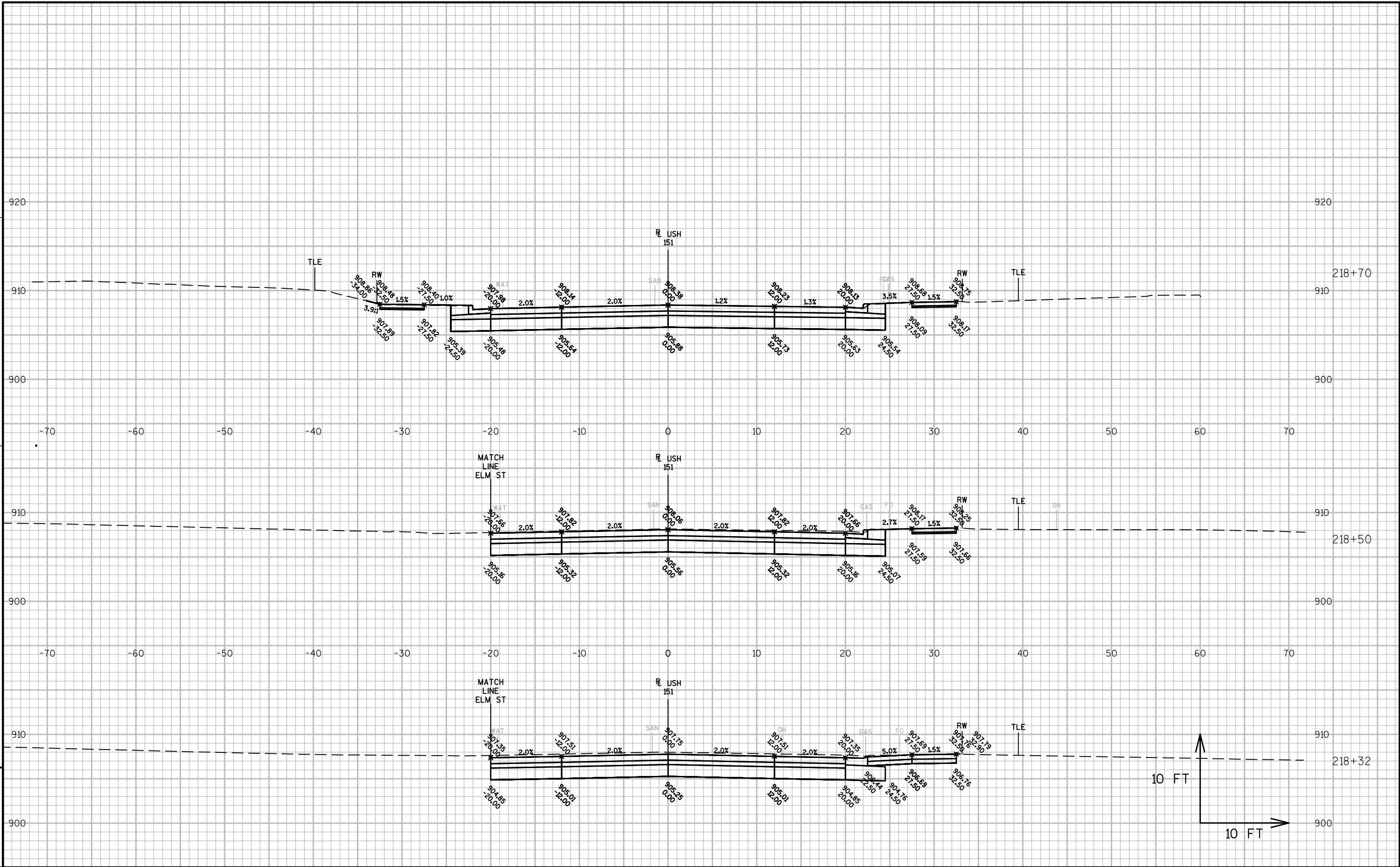
WISDOT/CADDs SHEET 49











NOTE: S MAPLE STREET ALIGNMENT HAS STATIONING THAT RUNS NORTH TO SOUTH. SEE ALIGNMENT PLAN FOR DETAILS.

15+48

15+45

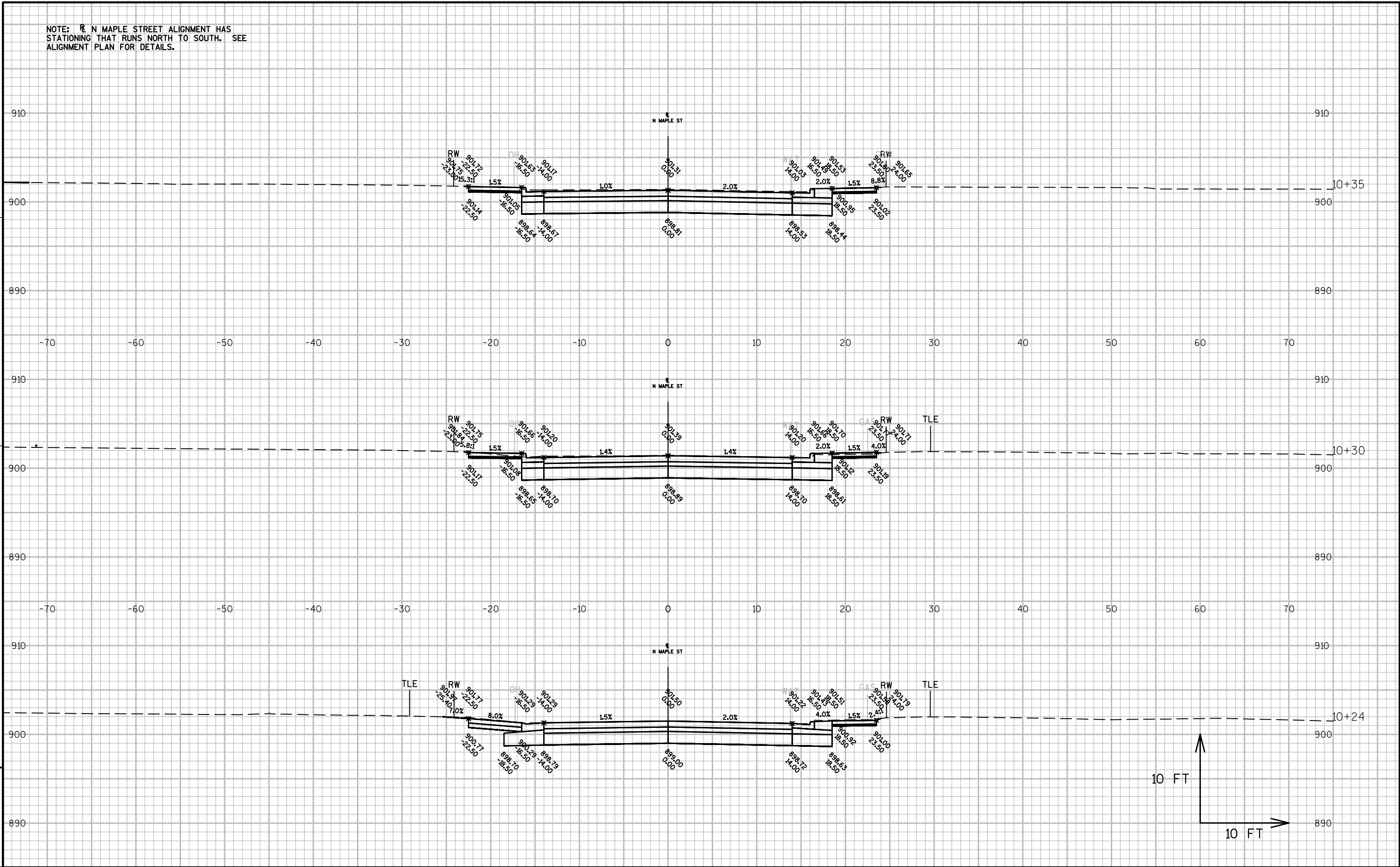
15+40

10 FT

10 FT

E

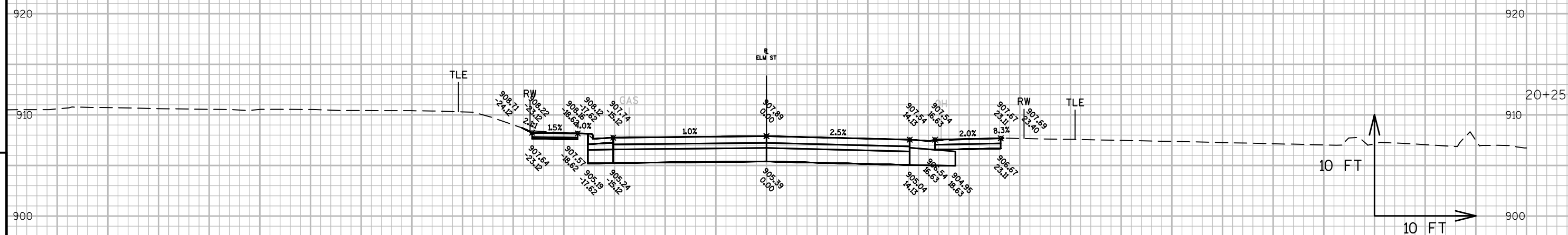
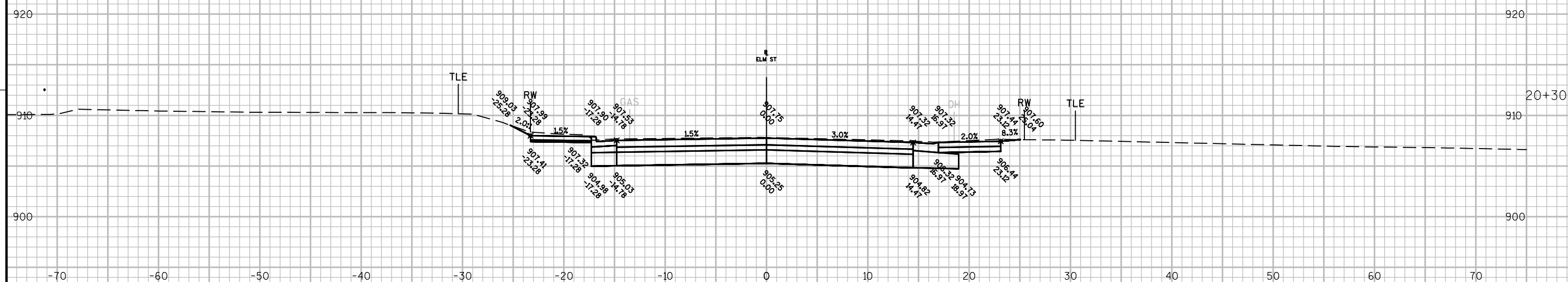
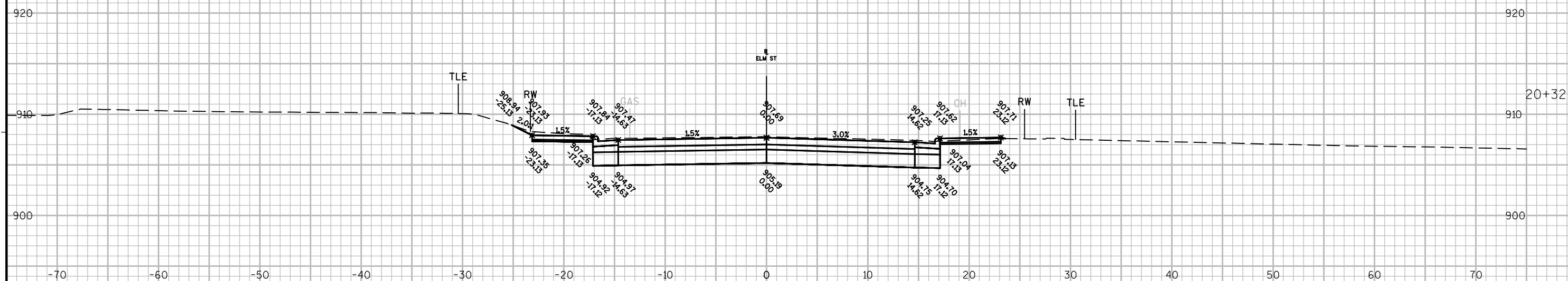
NOTE: R N MAPLE STREET ALIGNMENT HAS STATIONING THAT RUNS NORTH TO SOUTH. SEE ALIGNMENT PLAN FOR DETAILS.



9

9

NOTE: R ELM STREET ALIGNMENT HAS STATIONING
THAT RUNS NORTH TO SOUTH. SEE ALIGNMENT
PLAN FOR DETAILS.



PROJECT NO: 4100-31-71

HWY: USH 151

COUNTY: CALUMET

CROSS SECTIONS: ELM ST

SHEET

9



E

WISDOT/CADDS SHEET 49



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