NEL MAR 2016

PROJECT ID: 4986-11-71

WITH: N/A

COUNTY: FOND DU LAC

ORDER OF SHEETS

TOTAL SHEETS = 54

18

N

DESIGN DESIGNATION N ROLLING MEADOWS DR

A.A.D.T.	(2018)	= 11,800 V.P.D.
A.A.D.T.	(2038)	= 14,600 V.P.D.
D.H.V.		= 1,810 V.P.D.
D.D.		= 59/41
T.		= 3.4%
DESIGN SPEED		= 40 M.P.H.
ESALS		= 970,900 (HMA)

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE			
SLOPE INTERCEPT		CULVERT (Profile View)	
REFERENCE LINE		UTILITIES	
EXISTING CULVERT		ELECTRIC	E
PROPOSED CULVERT (Box or Pipe)		FIBER OPTIC	FO
		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C FOND DU LAC, N ROLLING MEADOWS DR

N ROLLING MEADOWS DR/S WALMART DR

LOCAL STREET

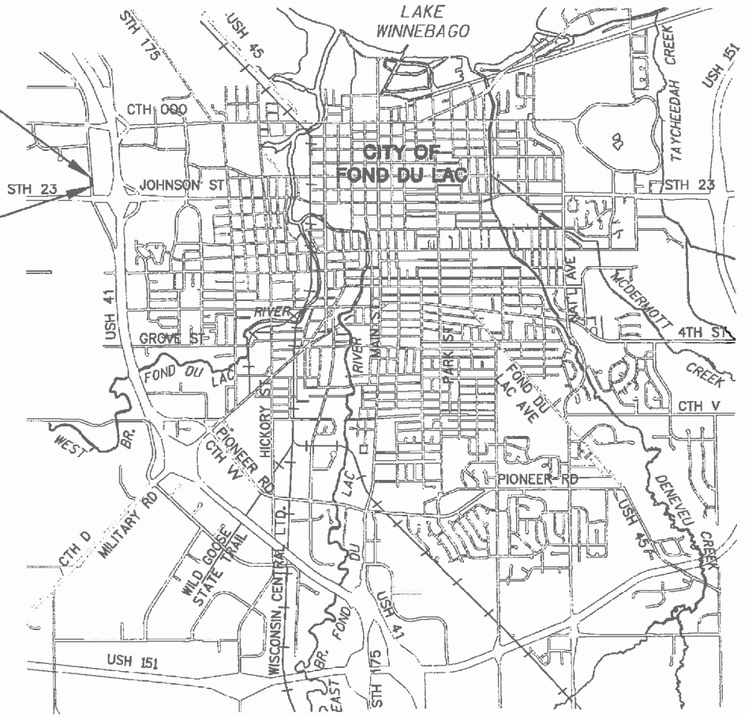
FOND DU LAC

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4986-11-71	WISC 2016060	1

STATE PROJECT NUMBER
4986-11-71

END PROJECT
STA. 14+09.15

BEGIN PROJECT
STA.11+30.60
Y = 388726.863
X = 806695.512



LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.053 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, FOND DU LAC COUNTY, NAD83 (1997), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR
CITY OF FOND DU LAC

10/7/15 (Date)
PAUL DEVRIES
CITY ENGINEER

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
83 South Pioneer Road, Suite 300 • Fond du Lac, WI 54935
(920) 924-5720 • fax (920) 924-5725

WISCONSIN
JEFFREY A. CHVOSTA
E-30047
SLINGER, WI
PROFESSIONAL ENGINEER

10/6/15 (Date)
JEFFREY A. CHVOSTA, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GREMMER & ASSOCIATES, INC.
Designer	GREMMER & ASSOCIATES, INC.
Management Consultant	JT ENGINEERING, INC.
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 10/16/15
(Management Consultant Signature)

E

GENERAL NOTES

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.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

A VERTICAL SAW CUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS, SIDEWALKS, CURB & GUTTER, AND PAVEMENTS AT THE REMOVAL LIMITS.

SAWCUT LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD.

REMOVAL OF ASPHALTIC PAVEMENT SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE DENSE, HMA PAVEMENT OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE MATERIAL SHOWN ON THE PLAN IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

TOPSOIL, FERTILIZER, SEED AND MULCH OR EROSION MAT AS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE PLACED ON ALL DISTURBED AREAS, EXCLUSIVE OF THE AREA OCCUPIED BY THE NEW PAVEMENTS, SIDEWALKS, ENTRANCES, AND RELATED STRUCTURES.

SECTIONS AS SHOWN ON THE CROSS-SECTIONS INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED.

CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATIONS WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.

ADDITIONAL DOWEL BARS AND CONTRACTION JOINTS DOWEL ASSEMBLIES REQUIRED TO MATCH MANHOLES, INLETS, AND SIDE ROADS SHALL BE INCIDENTAL TO THE CONCRETE PAVEMENT ITEM.

EROSION CONTROL ITEMS SHOWN ARE APPROXIMATE, THE EXACT LOCATION SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ABBREVIATIONS

AEW	APRON ENDWALL
AGG	AGGREGATE
AH	AHEAD
ASP	ASPHALT
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
CC	CENTER OF CURVATURE
CE	COMMERCIAL ENTRANCE
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CONC	CONCRETE
CP	CULVERT PIPE
CPCM	CULVERT PIPE CORRUGATED METAL
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CS	CURVE SPIRAL, THE POINT OF CHANGE IN ALIGNMENT FROM CURVE TO SPIRAL
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
E	EXTERNAL DISTANCE FROM MIDPOINT OF CIRCULAR CURVE FROM ANGLE INTERSECTION
EB	EASTBOUND
ELEV	ELEVATION
FE	FIELD ENTRANCE
HMA	HOT MIX ASPHALT
HP	HIGH POINT
HT	HEIGHT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LP	LOW POINT
Ls	LENGTH OF SPIRAL
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
NOM	NOMINAL
NORM	NORMAL
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SB	SOUTHBOUND
SC	SPIRAL CURVE, THE POINT OF CHANGE IN ALIGNMENT FROM SPIRAL TO CURVE
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SEG	SEGMENT
SF	SQUARE FOOT
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
ST	SPIRAL TANGENT, THE POINT OF CHANGE IN ALIGNMENT FROM SPIRAL TO TANGENT
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
TS	TANGENT SPIRAL, THE POINT OF CHANGE IN ALIGNMENT FROM TANGENT TO SPIRAL
TYP	TYPICAL
V	VELOCITY OR DESIGN SPEED
VC	VERTICAL CURVE
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPRC	POINT OF VERTICAL REVERSE CURVE
VPT	POINT OF VERTICAL TANGENT
WB	WESTBOUND
WCL	WISCONSIN CENTRAL LTD.

ORDER OF SECTION 2 SHEETS

UTILITIES

ELECTRIC & GAS

* ALLIANT ENERGY CORPORATION
(MAIN OFFICE)
4902 NORTH BILTMORE LANE
MADISON, WI 53718-2148
PHONE: (608) 458-4871
MOBILE: (608) 395-7395
ATTN: JASON HOGAN
EMAIL: JasonHogan@alliantenergy.com

COMMUNICATIONS

* AT&T
70 EAST DIVISION STREET
FOND DU LAC, WI 54935
PHONE: (920) 929-8459
MOBILE: (920) 202-0652
ATTN: LISA SUPRENAND
EMAIL: ad5647@att.com

COMMUNICATIONS

* CHARTER COMMUNICATIONS
1623 BROADWAY AVENUE
SHEBOYGAN, WI 53081
PHONE: (608) 826-1619
MOBILE: (920) 263-0074
ATTN: BRUCE HENRY
EMAIL: bruce.henry@chartercom.com

* DENOTES MEMBER OF DIGGERS HOTLINE

ELECTRICAL

* CITY OF FOND DU LAC
530 DOTY STREET
FOND DU LAC, WI 54935
PHONE: (920) 322-3542
ATTN: STEPHEN KEES
EMAIL: skees@fdl.wi.gov

WATER

* CITY OF FOND DU LAC
109 NORTH MACY STREET
P.O. BOX 150
FOND DU LAC, WI 54936-0150
PHONE: (920) 322-3682
MOBILE: (920) 960-5458
ATTN: KATHY SCHARF
EMAIL: kscharf@fdl.wi.gov

SEWER

* CITY OF FOND DU LAC
160 SOUTH MACY STREET
P.O. BOX 150
FOND DU LAC, WI 54936-0150
PHONE: (920) 322-3473
MOBILE: (920) 517-7890
ATTN: PAUL DEVRIES
EMAIL: pdevries@fdl.wi.gov

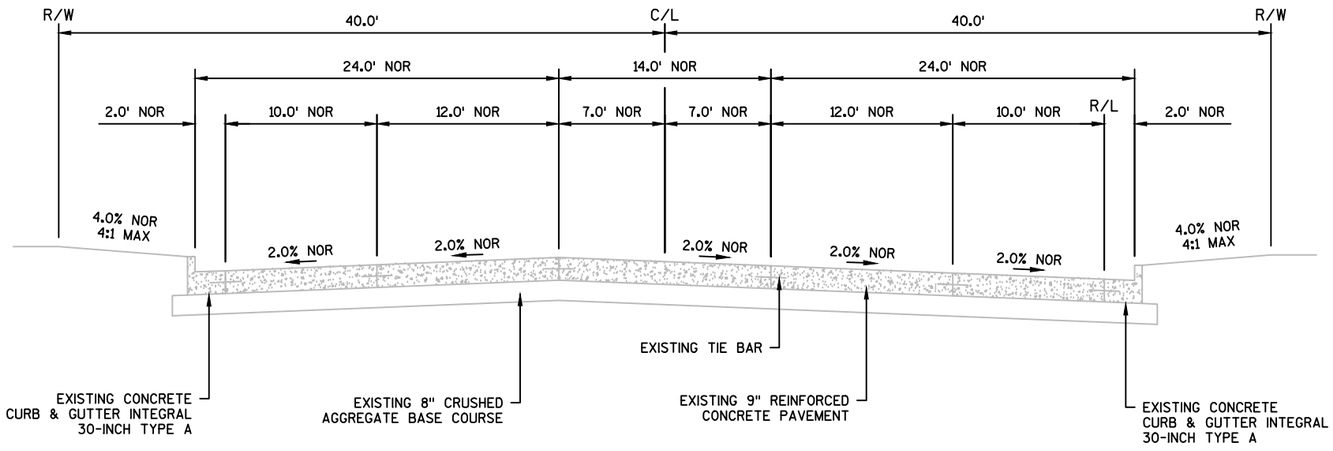
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

DNR AREA LIAISON

WISCONSIN DEPT. OF NATURAL RESOURCES
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
PHONE: (920) 662-5130
ATTN: MR. JAY SCHIEFELBEIN
EMAIL: jeremiah.schefelbein@wisconsin.gov

CITY OF FOND DU LAC CONTACT

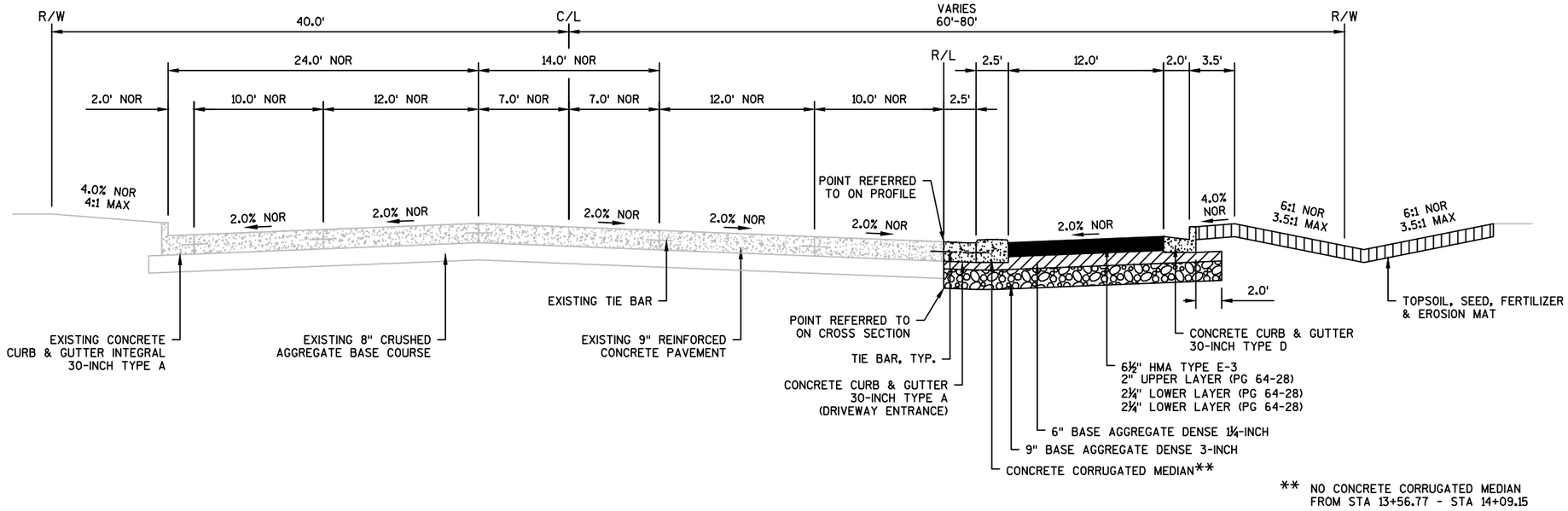
MR. PAUL DEVRIES
CITY ENGINEER
160 SOUTH MACY STREET
FOND DU LAC, WI 54936
PHONE: (920) 322-3473
EMAIL: pdevries@fdl.wi.gov



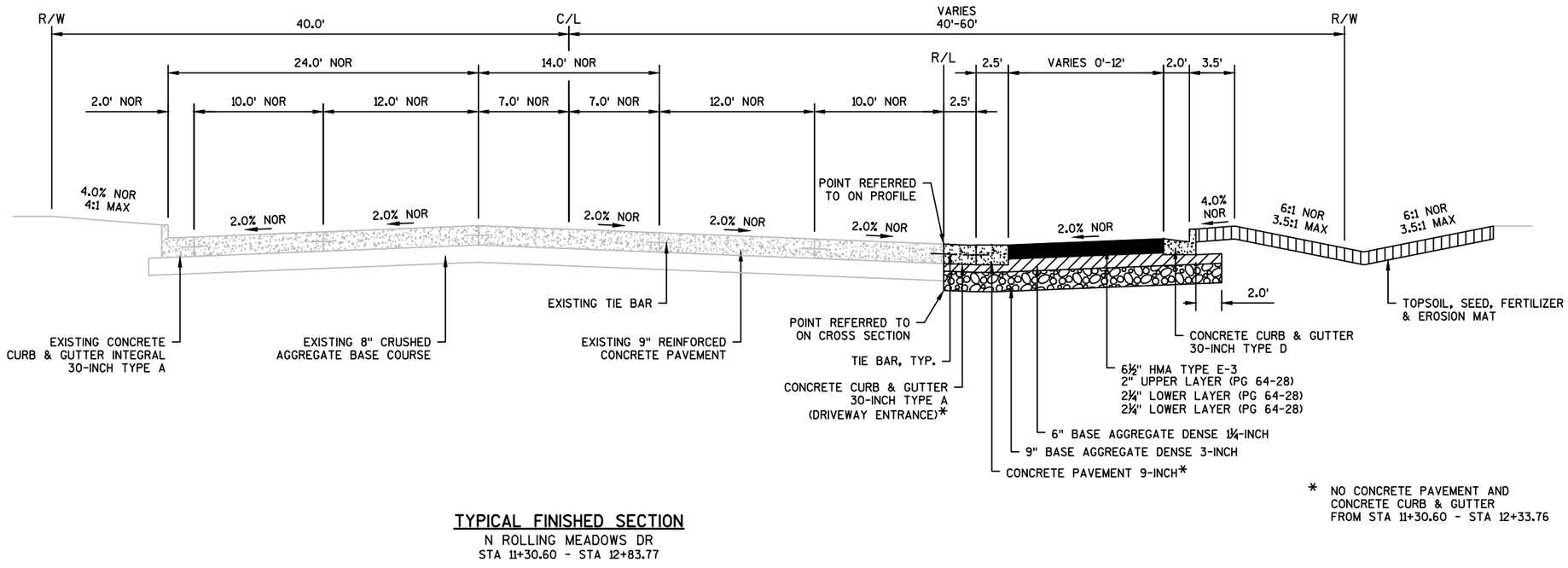
TYPICAL EXISTING SECTION

N ROLLING MEADOWS DR
STA 11+30.60 - STA 14+09.15

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 3	E



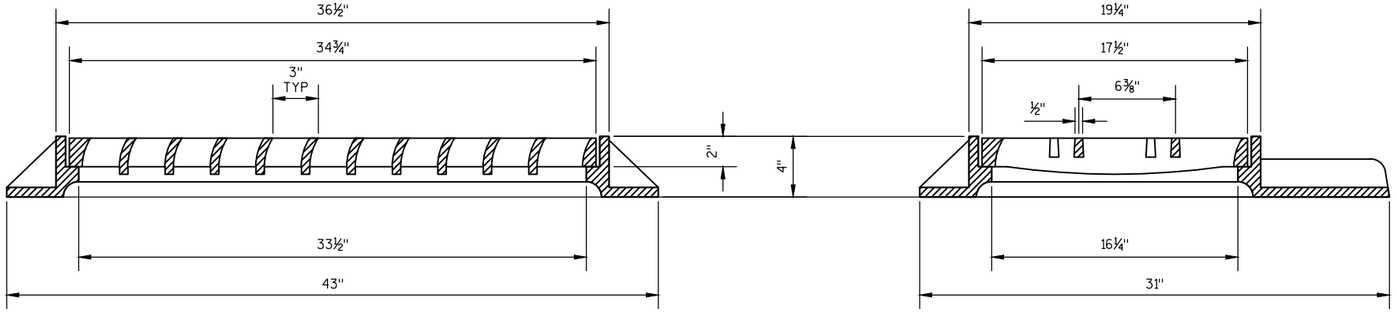
TYPICAL FINISHED SECTION
N ROLLING MEADOWS DR
STA 12+83.77 - STA 14+09.15



TYPICAL FINISHED SECTION
N ROLLING MEADOWS DR
STA 11+30.60 - STA 12+83.77

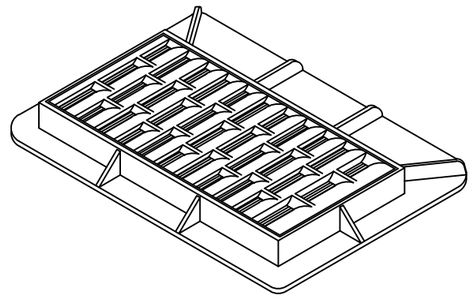
PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-020301-TS.DWG
LAYOUT NAME - 49861100-020301-TS - SHEET - 02
PLOT DATE : 9/17/2015 2:07 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



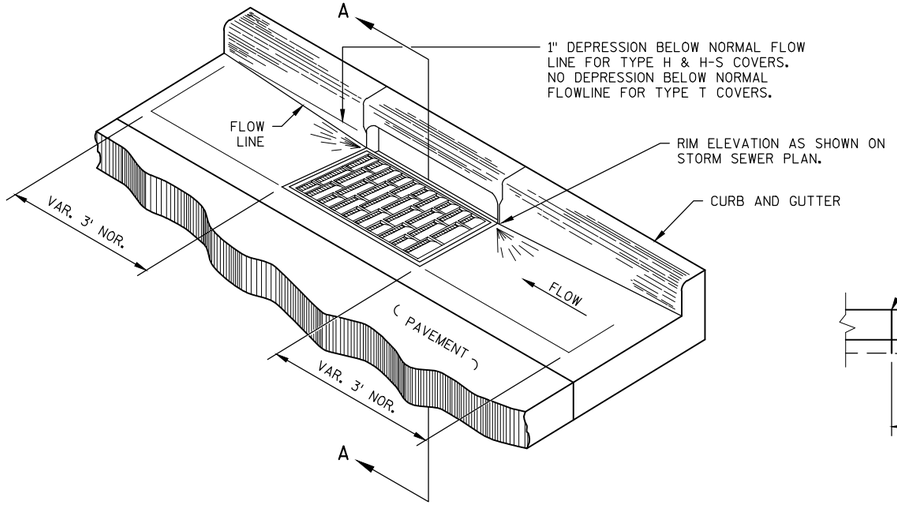
FRONT VIEW

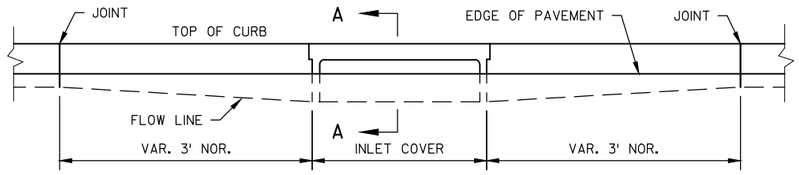
SIDE VIEW



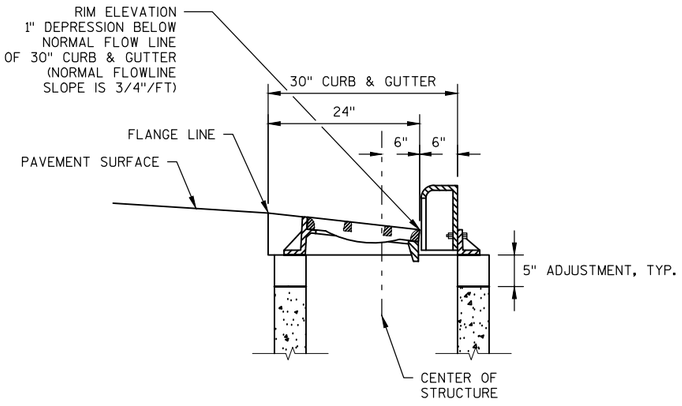
ISOMETRIC VIEW

INLET COVER TYPE HC





ELEVATION



(INLETS 2'X3'-H & 2'X3'-HS)
SECTION A-A

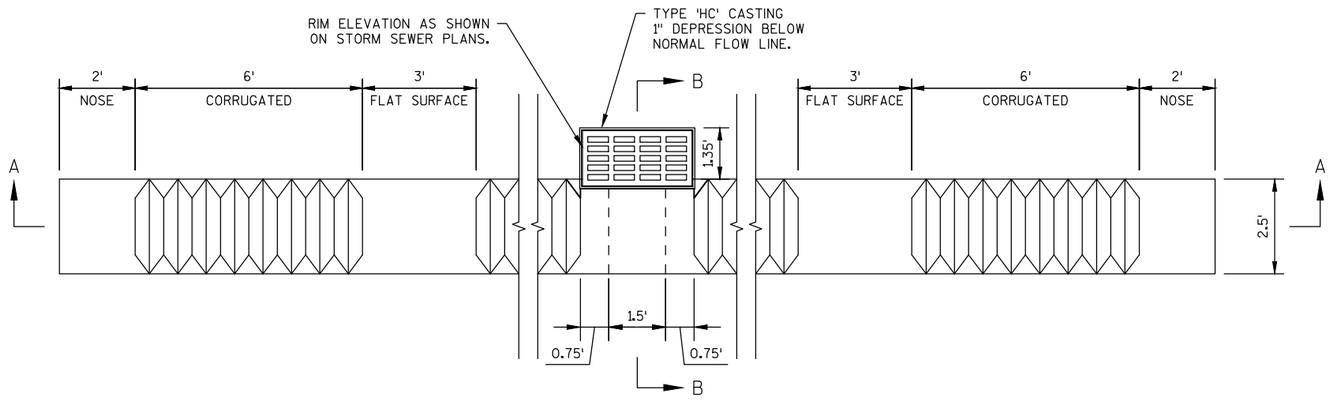
CURB AND GUTTER DETAIL AT INLETS

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS:	SHEET 5	E

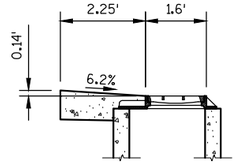
FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-021001-CD.DWG PLOT DATE : 9/17/2015 12:41 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1" = 1'
49861100_PLANS - 49861100-021001-CD - SHEET-01

WISDOT/CADDS SHEET 42

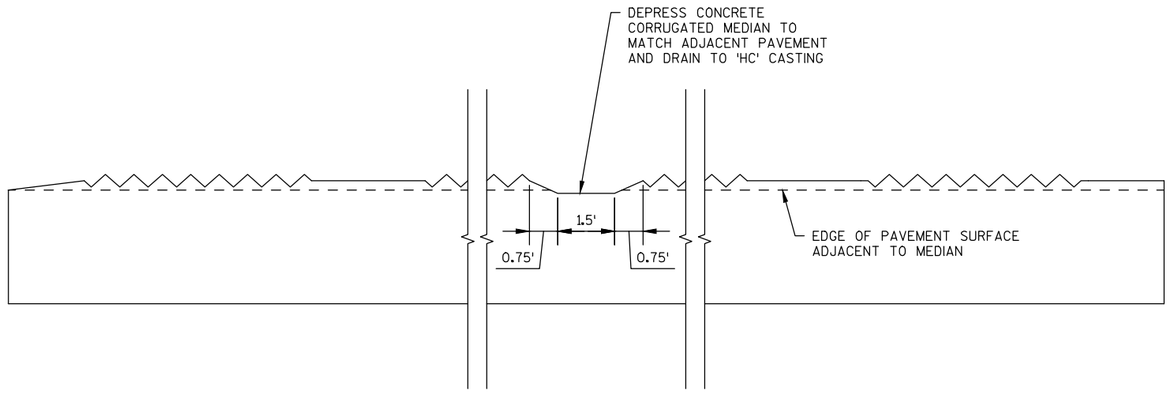
NOTES: SEE WISDOT STANDARD DETAIL DRAWING
FOR CONCRETE CORRUGATED MEDIAN
FOR ALL OTHER PERTINENT INFORMATION



PLAN VIEW

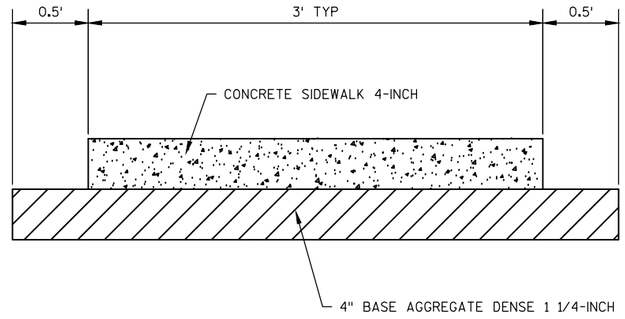


SECTION B-B



SECTION A-A

CONCRETE CORRUGATED MEDIAN DETAIL



TYPICAL SIDEWALK SECTION

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS:	SHEET 6	E

2

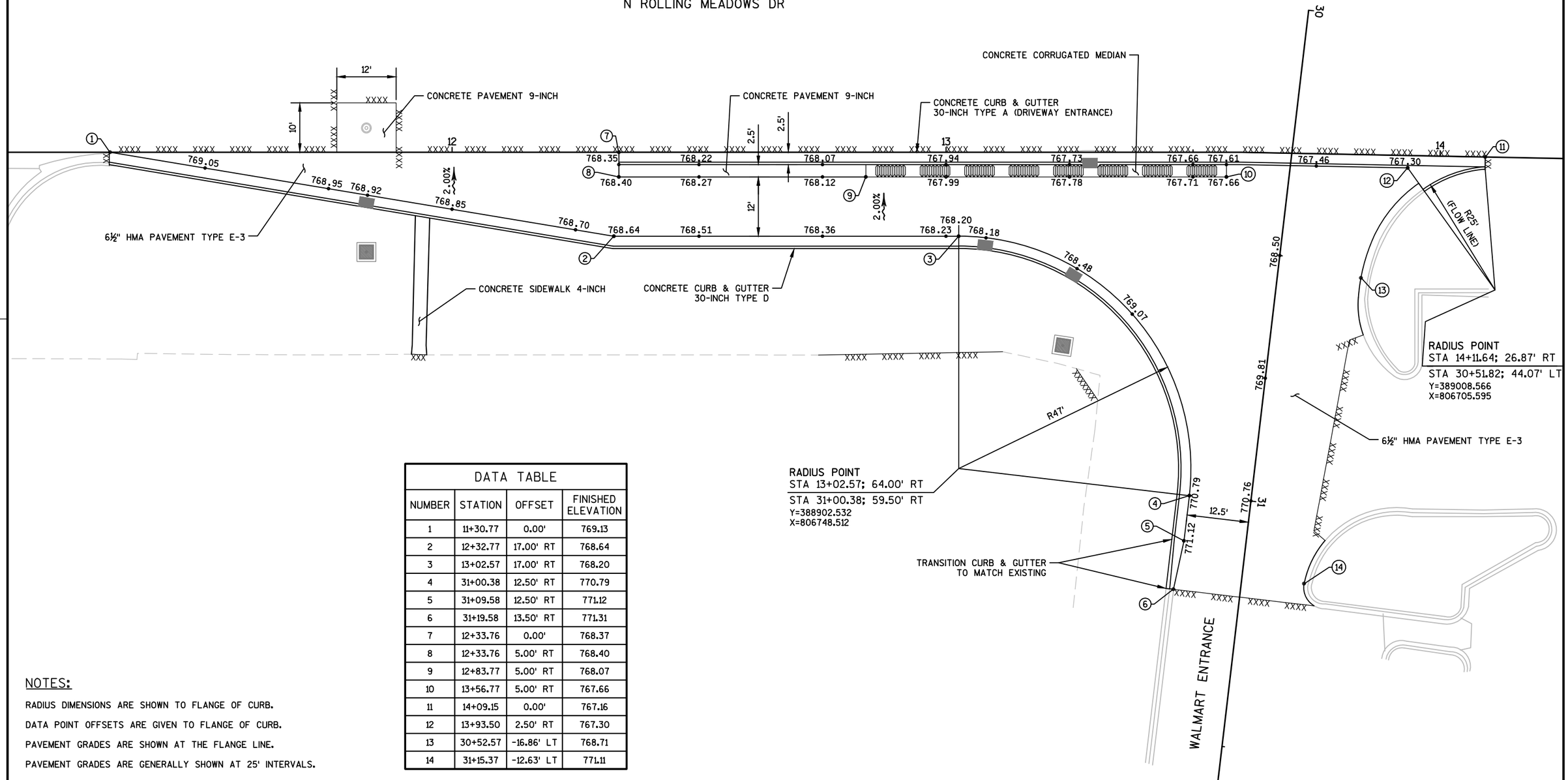
LEGEND

PROPOSED INLET

PROPOSED MEDIAN INLET

N

N ROLLING MEADOWS DR



DATA TABLE			
NUMBER	STATION	OFFSET	FINISHED ELEVATION
1	11+30.77	0.00'	769.13
2	12+32.77	17.00' RT	768.64
3	13+02.57	17.00' RT	768.20
4	31+00.38	12.50' RT	770.79
5	31+09.58	12.50' RT	771.12
6	31+19.58	13.50' RT	771.31
7	12+33.76	0.00'	768.37
8	12+33.76	5.00' RT	768.40
9	12+83.77	5.00' RT	768.07
10	13+56.77	5.00' RT	767.66
11	14+09.15	0.00'	767.16
12	13+93.50	2.50' RT	767.30
13	30+52.57	-16.86' LT	768.71
14	31+15.37	-12.63' LT	771.11

NOTES:

RADIUS DIMENSIONS ARE SHOWN TO FLANGE OF CURB.

DATA POINT OFFSETS ARE GIVEN TO FLANGE OF CURB.

PAVEMENT GRADES ARE SHOWN AT THE FLANGE LINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	PAVING DETAILS:	SHEET 7	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-021201-PD.DWG
49861100_PLANS - 49861100-021201-PD - SHEET-01
PLOT DATE : 9/17/2015 12:41 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

N ROLLING MEADOWS DR

TYPE B (PROPOSED)
TYPE C (EXISTING)

TYPE C

TYPE A

TYPE D

TYPE C

TYPE A

WALMART ENTRANCE

12

13

14

30

31

SIGN

SIGN

EROSION CONTROL LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- INLET PROTECTION (TYPE)
- SURFACE WATER FLOW

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS AND THE ADJACENT DOWNSTREAM INLETS SHALL RECEIVE INLET PROTECTION.

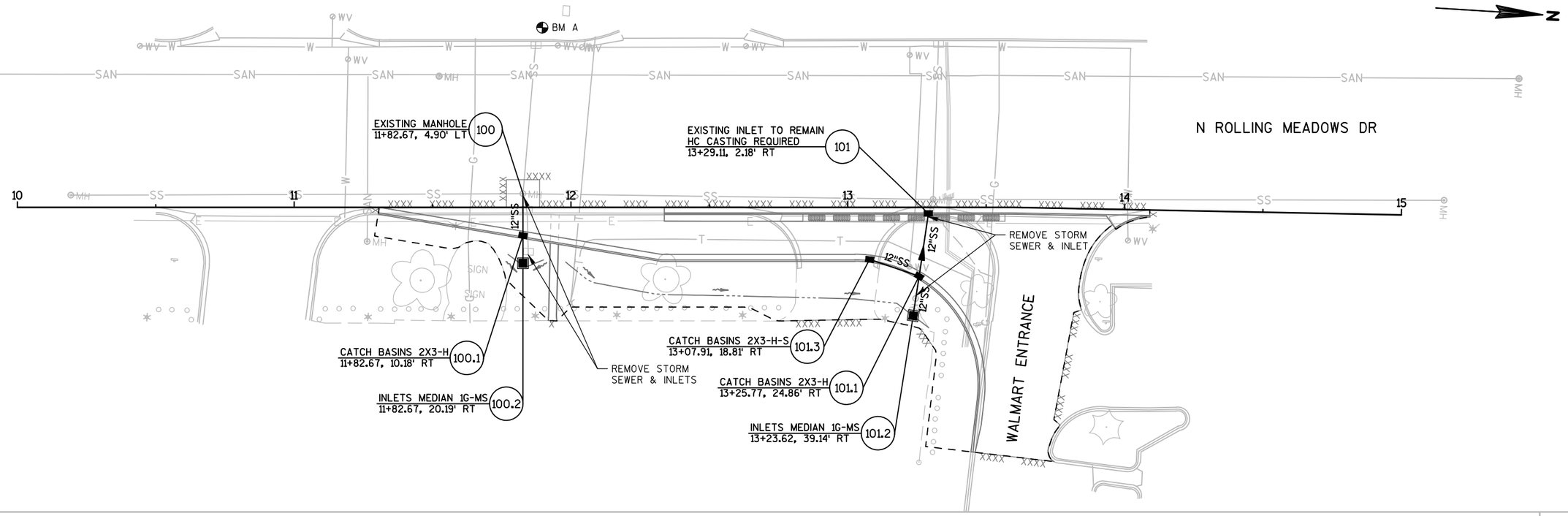
FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS.

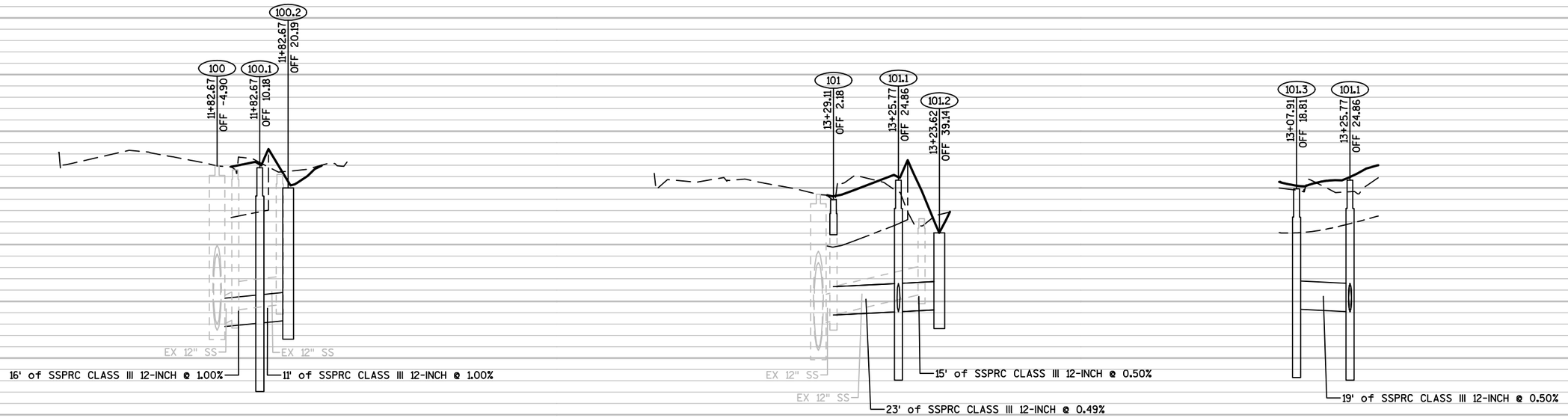
PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	EROSION CONTROL PLAN:	SHEET 8	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-022001-EC.DWG
LAYOUT NAME - 49861100-022001-EC - SHEET-01

PLOT DATE : 9/17/2015 12:42 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42





100
E INV IN: 763.08

100.1
RIM: 768.72
SUMP: 761.23
DEPTH: 7.49
E INV IN: 763.23
W INV OUT: 763.23

100.2
RIM: 768.00
SUMP: 763.33
DEPTH: 4.67
W INV OUT: 763.33

101
RIM: 767.60
E INV IN: 763.52

101.1
RIM: 768.28
SUMP: 761.63
DEPTH: 6.65
E INV IN: 763.63
S INV IN: 763.63
W INV OUT: 763.63

101.2
RIM: 766.42
SUMP: 763.70
DEPTH: 2.71
W INV OUT: 763.70

101.3
RIM: 767.97
SUMP: 761.73
DEPTH: 6.25
N INV OUT: 763.73

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	STORM SEWER	SHEET 9 E

PAVEMENT MARKING LEGEND

MW8	PAVEMENT MARKING 8-INCH (WHITE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
EPOXY	EPOXY

N ROLLING MEADOWS DR

MW8 EPOXY

SLW18 EPOXY

+04
0.0'

+34
5.0' RT

+57
0.0'

+57
5.0' RT

+42
0.0'

+40
20.3' LT

12

13

14

30

31

WALMART ENTRANCE

SIGN

SIGN

101
BEGIN RIGHT TURN LANE
R3-20-R
24"X36"

CENTER LANE ONLY
NO PARKING ON SIGN
MOVE
BY OTHERS

102
ROUTE 60
MOVE

SIGNING LEGEND

- XXX — SIGN - REMOVE EXISTING
- XXX — SIGN - MOVE EXISTING
- XXX — SIGN - PLACE NEW
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST(S)

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	SIGNING AND PAVEMENT MARKING PLAN:	SHEET 10 E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-023201-PS.DWG
LAYOUT NAME - 49861100-023201-PS - SHEET-01

PLOT DATE : 9/17/2015 12:42 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL GENERAL NOTES

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. SEE SDD'S FOR ADDITIONAL INFORMATION AND THE PLACEMENT AND SPACING OF DRUMS AND SIGNS. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON METHODS OF SEQUENCE OF OPERATION.

ADJUST SIGN SPACING TO AVOID CONFLICT WITH AND TO PROVIDE MINIMUM SPACING OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.

UNLESS NOTED, ALL WARNING SIGNS ARE 48"X48". ALL OTHER SIGNS ARE SIZE 2S.

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

REMOVE OR COVER ANY TEMPORARY OR EXISTING SIGNS THAT CONFLICT WITH "IN USE" TRAFFIC CONTROL.

ALL TRAFFIC CONTROL SIGNING WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, & THE WISCONSIN SUPPLEMENT DATED MAY 25, 2011.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

IF LANE CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SIGN SUPPORTS.

INSTALL THE LANE CLOSURE SERIES AS A COMPLETE UNIT THAT INCLUDES ALL ADVANCED WARNING SIGNING, DRUMS, AND ARROW BOARDS.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

REMOVE ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE TRAFFIC CONTROL OR NOT APPROPRIATE TO THE TRAVEL PATH.

LAYOUT INFORMATION PROVIDED IS NOT INTENDED TO REPLACE WHAT IS PROVIDED IN APPLICABLE STANDARD DETAIL DRAWINGS.

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	TRAFFIC CONTROL:	SHEET 11	E

DATE 22DEC15 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4986-11-71 QUANTITY
0010	201.0220	Grubbing	ID	25.000	25.000
0020	204.0100	Removing Pavement	SY	120.000	120.000
0030	204.0150	Removing Curb & Gutter	LF	120.000	120.000
0040	204.0155	Removing Concrete Sidewalk	SY	15.000	15.000
0050	204.0195	Removing Concrete Bases	EACH	1.000	1.000
0060	204.0220	Removing Inlets	EACH	3.000	3.000
0070	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	55.000	55.000
0080	204.9060.S	Removing (item description) 01. Steel Posts and Concrete Bases	EACH	7.000	7.000
0090	205.0100	Excavation Common	CY	607.000	607.000
0100	213.0100	Finishing Roadway (project) 01. 4986-11-71	EACH	1.000	1.000
0110	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	300.000	300.000
0120	305.0130	Base Aggregate Dense 3-Inch	TON	490.000	490.000
0130	415.0090	Concrete Pavement 9-Inch	SY	27.000	27.000
0140	416.0610	Drilled Tie Bars	EACH	104.000	104.000
0150	416.0620	Drilled Dowel Bars	EACH	12.000	12.000
0160	455.0120	Asphaltic Material PG64-28	TON	13.000	13.000
0170	455.0605	Tack Coat	GAL	90.000	90.000
0180	460.1103	HMA Pavement Type E-3	TON	235.000	235.000
0190	460.2000	Incentive Density HMA Pavement	DOL	160.000	160.000
0200	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	190.000	190.000
0210	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	270.000	270.000
0220	602.0405	Concrete Sidewalk 4-Inch	SF	80.000	80.000
0230	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	84.000	84.000
0240	611.0624	Inlet Covers Type H	EACH	2.000	2.000
0250	611.0639	Inlet Covers Type H-S	EACH	1.000	1.000
0260	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0270	611.1230	Catch Basins 2x3-FT	EACH	3.000	3.000
0280	611.3901	Inlets Median 1 Grate	EACH	2.000	2.000
0290	619.1000	Mobilization	EACH	1.000	1.000
0300	620.0100	Concrete Corrugated Median	SF	185.000	185.000
0310	625.0100	Topsoil	SY	510.000	510.000
0320	628.1504	Silt Fence	LF	75.000	75.000
0330	628.1520	Silt Fence Maintenance	LF	75.000	75.000
0340	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0350	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0360	628.2006	Erosion Mat Urban Class I Type A	SY	510.000	510.000
0370	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0380	628.7010	Inlet Protection Type B	EACH	1.000	1.000
0390	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0400	628.7020	Inlet Protection Type D	EACH	1.000	1.000
0410	629.0210	Fertilizer Type B	CWT	0.300	0.300
0420	630.0140	Seeding Mixture No. 40	LB	9.000	9.000
0430	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	1.000	1.000
0440	637.2210	Signs Type II Reflective H	SF	6.000	6.000
0450	638.2102	Moving Signs Type II	EACH	1.000	1.000
0460	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0470	642.5001	Field Office Type B	EACH	1.000	1.000
0480	643.0100	Traffic Control (project) 01. 4986-11-71	EACH	1.000	1.000
0490	643.0300	Traffic Control Drums	DAY	957.000	957.000
0500	643.0420	Traffic Control Barricades Type III	DAY	363.000	363.000
0510	643.0705	Traffic Control Warning Lights Type A	DAY	528.000	528.000

3

DATE 22DEC15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4986-11-71 QUANTITY
0520	643.0715	Traffic Control Warning Lights Type C	DAY	132.000	132.000
0530	643.0900	Traffic Control Signs	DAY	264.000	264.000
0540	646.0126	Pavement Marking Epoxy 8-Inch	LF	310.000	310.000
0550	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	21.000	21.000
0560	650.4000	Construction Staking Storm Sewer	EACH	5.000	5.000
0570	650.4500	Construction Staking Subgrade	LF	369.000	369.000
0580	650.5000	Construction Staking Base	LF	369.000	369.000
0590	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	270.000	270.000
0600	650.9910	Construction Staking Supplemental Control (project) 01. 4986-11-71	LS	1.000	1.000
0610	650.9920	Construction Staking Slope Stakes	LF	369.000	369.000
0620	690.0150	Sawing Asphalt	LF	120.000	120.000
0630	690.0250	Sawing Concrete	LF	315.000	315.000
0640	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0650	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	150.000	150.000
0660	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000
0670	SPV.0060	Special 01. Inlet Covers Type HC	EACH	1.000	1.000

3

GRUBBING

STATION	LOCATION	201.0220 ID
CATEGORY CODE 0010		
12+34	26' RT	15
13+47	30' RT	10
	TOTAL	25

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY
CATEGORY CODE 0010		
11+31 - 14+09	RT	120
	TOTAL	120

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 CURB & GUTTER LF	COMMENTS
CATEGORY CODE 0010			
12+75 - 12+82	RT	18	HOLIDAY GM DRIVEWAY
13+11 - 13+18	RT	17	HOLIDAY GM DRIVEWAY
31+20 - 30+39	LT	85	WALMART ENTRANCE
	TOTAL	120	

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY	COMMENTS
CATEGORY CODE 0010			
11+92 - 11+96	RT	15	SIDEWALK TO HOLIDAY GM
	TOTAL	15	

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH	COMMENTS
CATEGORY CODE 0010			
11+58	RT	1	REMOVE LIGHT POLE BASE
	TOTAL	1	

REMOVING STEEL POSTS AND CONCRETE BASES

STATION - STATION	LOCATION	204.9060.S.01 EACH
CATEGORY CODE 0010		
13+18 - 13+36	RT	7
	TOTAL	7

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
CATEGORY CODE 0010		
11+84	2' RT	1
11+85	17' RT	1
13+25	33' RT	1
	TOTAL	3

REMOVING STORM SEWER ITEMS

STATION - STATION	LOCATION	EXISTING PIPE MATERIAL	204.0245.01 12-INCH LF
CATEGORY CODE 0010			
11+83 - 11+84	LT & RT	RCP	8
11+84 - 11+85	RT	RCP	16
13+25 - 13+29	RT	RCP	31
	TOTAL		55

Division	From/To Station	Location	Common Excavation (1) Cut (2)	Salvaged/ Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5) Factor 1.25	Mass Ordinate +/- (6)	Waste	Comment:
1	11+25/14+00	N Rolling Meadows Dr	607	135	472	17	21	451	451	
Division 1 Subtotal			607	135	472	17	21	451	451	
Grand Total			607	135	472	17	21	451	451	

1) Common Excavation is the sum of the Cut column. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut
3) Salvaged/Unusable Pavement Material = Length * Typical Width * Typical Depth
4) Available Material = Cut - Salvaged/Unusable Pavement Material
5) Expanded Fill Factor = 1.25. Expanded Fill = Unexpanded Fill * Fill Factor
6) 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.

3

BASE AGGREGATE DENSE ITEMS

STATION - STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON
CATEGORY CODE 0010			
11+31 - 14+09	RT	300	490
	TOTALS	**300**	**490**

BASE AGGREGATE DENSE 1 1/4-INCH WEIGHT CALCULATIONS BASED ON 2.0 TONS/CY.
BASE AGGREGATE DENSE 3-INCH WEIGHT CALCULATIONS BASED ON 2.2 TONS/CY.

CONCRETE PAVEMENT 9-INCH

STATION - STATION	LOCATION	415.0090 SY
CATEGORY CODE 0010		
11+77 - 11+89	LT	13
12+34 - 12+84	RT	14
	TOTAL	**27**

DRILLED TIE BAR AND DRILLED DOWEL BAR ITEMS

STATION - STATION	LOCATION	416.0610 TIE BARS EACH	416.0620 DOWEL BARS EACH
CATEGORY CODE 0010			
11+31 - 14+09	LT & RT	104	12
	TOTALS	**104**	**12**

3

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0120 ASPHALTIC MATERIAL PG64-28 TON	455.0605 TACK COAT GAL	460.1103 HMA PAVEMENT TYPE E-3 TON
CATEGORY CODE 0010				
11+31 - 14+09	RT	13	90	235
	TOTALS	**13**	**90**	**235**

HMA PAVEMENT WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.
TACK COAT CALCULATIONS BASED ON 0.070 GAL/SY.
ASPHALTIC MATERIAL WEIGHT CALCULATIONS BASED ON 5.5% OF THE HMA PAVEMENT WEIGHT.

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB, GUTTER AND CURB & GUTTER LF
CATEGORY CODE 0010				
11+31 - 13+45	RT	--	270	270
12+34 - 14+09	RT	190	--	--
	TOTALS	**190**	**270**	**270**

CONCRETE SIDEWALK 4-INCH

STATION - STATION	LOCATION	602.0405 SF
CATEGORY CODE 0010		
11+92 - 11+95	RT	80
	TOTAL	**80**

STORM SEWER ITEMS

STURCURE NUMBER	STATION	LOCATION	608.0312 SSPRC CLASS III 12-INCH LF	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.01 INLET COVERS TYPE HC EACH
CATEGORY CODE 0010										
100.1	11+82.67	10.18' RT	16	1	--	--	1	--	1	--
100.2	11+82.67	20.19' RT	11	--	--	1	--	1	1	--
101	13+29.11	2.18' RT	--	--	--	--	--	--	--	1
101.1	13+25.77	24.86' RT	23	1	--	--	1	--	1	--
101.2	13+23.62	39.14' RT	15	--	--	1	--	1	1	--
101.3	13+07.91	18.81' RT	19	--	1	--	1	--	1	--
		TOTALS	**84**	**2**	**1**	**2**	**3**	**2**	**5**	**1**

CONCRETE CORRUGATED MEDIAN

STATION - STATION	LOCATION	620.0100 SF
CATEGORY CODE 0010		
12+84 - 13+57	RT	185
	TOTAL	**185**

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEED MIX NO. 40 LB
CATEGORY CODE 0010					
11+31 - 14+09	RT	462	462	0.3	8
UNDISTRIBUTED		48	48	--	1
	TOTALS	**510**	**510**	**0.3**	**9**

SILT FENCE ITEMS

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
CATEGORY CODE 0010			
30+76 - 31+26	RT	66	66
UNDISTRIBUTED		9	9
	TOTALS	**75**	**75**

INLET PROTECTION ITEMS

LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
CATEGORY CODE 0010				
EXISTING STRUCTURES	--	--	2	--
PROPOSED STRUCTURES	2	1	2	1
UNDISTRIBUTED	--	--	--	--
TOTALS	**2**	**1**	**4**	**1**

PERMANENT SIGNING ITEMS

SIGN NUMBER	STATION	LOCATION	OFFSET	SIGN CODE	SIZE	634.0614 POSTS WOOD 4X6X14 EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	COMMENTS
CATEGORY CODE 0010										
101	11+31	ROLLING MEADOWS DR	5' RT	R3-20R	24X36	1	6.00	--	--	--
102	31+00	WALMART ENTRANCE	31' RT	--	---	--	--	1	1	MOVE FROM STA 30+74 RT
				TOTALS		**1**	**6.00**	**1**	**1**	

TRAFFIC CONTROL ITEMS

LOCATION	NUMBER OF DAYS IN SERVICE	643.0300 DRUMS NO. REQ'D	643.0300 DRUMS TOTAL DAY	643.0420 BARRICADES TYPE III NO. REQ'D	643.0420 BARRICADES TYPE III TOTAL DAY	643.0705 WARNING LIGHTS TYPE A NO. REQ'D	643.0705 WARNING LIGHTS TYPE A TOTAL DAY	643.0715 WARNING LIGHTS TYPE C NO. REQ'D	643.0715 WARNING LIGHTS TYPE C TOTAL DAY	643.0900 SIGNS NO. REQ'D	643.0900 SIGNS TOTAL DAY
CATEGORY CODE 0010											
ROLLING MEADOWS DRIVE - NB RIGHT LANE	33	29	957	5	165	8	264	4	132	6	198
WALMART ENTRANCE - EAST OF CONSTRUCTION	33	--	--	3	99	4	132	--	--	1	33
WALMART ENTRANCE - NORTH OF CONSTRUCTION	33	--	--	3	99	4	132	--	--	1	33
TOTALS		29	**957**	11	**363**	16	**528**	4	**132**	8	**264**

PAVEMENT MARKING ITEMS

STATION - STATION	LOCATION	646.0126 EPOXY 8-INCH WHITE LF	647.0566 STOP LINE EPOXY 18-INCH WHITE LF
CATEGORY CODE 0010			
12+04 - 13+54	RT	310	--
30+40 - 30+42	LT	--	21
	TOTALS	**310**	**21**

3

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
CATEGORY CODE 0010					
11+31 - 14+09	RT	279	279	1	279
30-29 - 31+20	LT & RT	90	90	--	90
	TOTALS	**369**	**369**	**1**	**369**

STAKING ITEMS FOR CURB & GUTTER AND STORM SEWER SHOWN ELSEWHERE

SAWING PAVEMENT ITEMS

STATION - STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
CATEGORY CODE 0010			
11+31 - 14+09	LT & RT	--	308
11+92 - 11+95	RT	--	3
12+74 - 13+11	RT	38	--
13+26 - 13+31	RT	8	--
13+96 - 13+97	RT	--	2
30+53 - 31+15	LT	46	--
31+20	LT & RT	28	2
	TOTALS	**120**	**315**

3

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE (P.L.)
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) (W (TYPE))
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS (CAUTION)
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES (CAUTION)

R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN (IP)
VALVE (GAS, WATER, ETC.) (TYPE)
SIGN (SIGN)
OFF-PREMISE SIGN (I-25) (SIGN)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

BRIDGE
PARCEL NUMBER (1)
UTILITY NUMBER (40)

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, FOND DU LAC COUNTY, NAD 83 (1997) 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 BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

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

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" x 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES (EXISTING)	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TOTAL ACRES (REMAINING)	T.L.E. ACRES TEMP.
1	SILVER LAKE LAND & CATTLE, LLC	FEE, TLE	6.285	0.08	0	0.08	6.205	0.10
2	WAL-MART REAL ESTATE BUSINESS TRUST	TLE	12.008	0	0	0	12.008	0.12
40	ALLIANT ENERGY	RELEASE OF RIGHTS						
41	AT&T WISCONSIN	RELEASE OF RIGHTS						

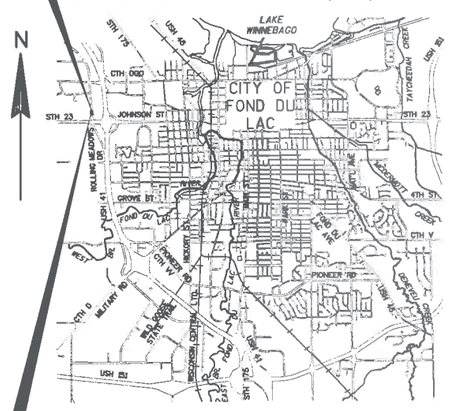
BASIS FOR EXISTING R/W

ROUTE	BASIS
N ROLLING MEADOWS DR	CSM #3900

NOTE - PROPERTY LINE STATIONS ARE COMPUTED FROM INFORMATION OF RECORD AND ARE APPROXIMATE ONLY.

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

END RELOCATION ORDER
104+00.00
Y 388993.92
X 806650.15
1991.04' SOUTH AND 1762.94' EAST OF THE NORTH QUARTER CORNER OF SECTION 8, T15N, R17E



BEGIN RELOCATION ORDER
101+25.00
Y 388719.44
X 806666.94
2265.53' SOUTH AND 1779.73' EAST OF THE NORTH QUARTER CORNER OF SECTION 8, T15N, R17E

LAYOUT
SCALE 0 1 MILE 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.052 MILES

S85°46'03"E 1693.48'

CITY OF FOND DU LAC
FOND DU LAC COUNTY, WISCONSIN

T 15 N R 17 E sec 5 8

(1192) RICKMEYER DR
4" ALUMINUM MONUMENT
Y 390984.96
X 804887.21

80'

IP

CTH VVV

N ROLLING MEADOWS DR

10' PUBLIC UTILITIES EASEMENT PER CSM #3900

SECTION LINE S85°46'03"E 2676.11'

(2) FDL-15-17-08-14-750-00
WAL-MART REAL ESTATE BUSINESS TRUST
DOC. #1013949

(1193) SURVEY NAIL
Y 390787.45
X 807556.02

LOT 1 CSM #3900 V21/P139 DOC. #481567

SE-NE
SEC. 8, T15N, R17E

END RELOCATION ORDER
104+00.00
Y 388993.92
X 806650.15
1991.04' SOUTH AND 1762.94' EAST OF THE NORTH QUARTER CORNER OF SECTION 8, T15N, R17E

EP: 105+00.00 (102)

104+00.00 (501) 40.00'
103+38.88 (401) 40.00'
103+85.00 (502) 130.00'
103+34.44 (402) 80.00'
103+29.32 (503) 126.03'
P.I. +43.3 15'
103+15.00 (504) 125.00'
103+20.00 (505) 75.00'
103+00.00 (403) 60.00'
102+25.00 (404) 60.00'
101+25.00 (506) 75.00'
101+25.00 (405) 40.00'

TLE FOR DRIVEWAY & SLOPES
ALLIANT ENERGY V800/P634 (40)
AT&T WISCONSIN V800/P634 (41)
SLOPE INTERECEPT, TYP.

LOT 1 CSM #1912 V10/P151 DOC. #332994

(1) FDL-15-17-08-14-751-00
SILVER LAKE LAND & CATTLE, LLC
DOC. #893623

10' UNDERGROUND ELECTRIC EASEMENT V800/P634

LOT 6 CSM #2190 V11/P179 DOC. #344391
LOT 5 CSM #1911 V10/P150 DOC. #332993
LOT 4 CSM #1006 V7/P66 DOC. #294316

PARCEL 1 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
1192	301	S85°46'03"E	1693.48'
301	401	S03°30'02"E	1928.21'
401	402	S87°09'34"E	40.25'
402	403	S26°38'43"W	39.82'
403	404	S03°30'02"E	75.00'
404	405	S07°48'33"W	101.98'
405	401	N03°30'02"W	213.88'

PARCEL 1 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
402	503	S87°09'34"E	46.32'
503	504	S00°37'31"W	14.36'
504	505	N87°47'24"W	50.25'
505	506	S03°30'02"E	195.00'
506	405	S86°29'58"W	35.00'
405	404	N07°48'33"E	101.98'
404	403	N03°30'02"W	75.00'
403	402	N26°38'43"E	39.82'

PARCEL 2 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
1192	301	S85°46'03"E	1693.48'
301	501	S03°30'02"E	1867.09'
501	502	S84°02'18"E	91.24'
502	503	S00°34'28"W	55.82'
503	401	N87°09'34"W	86.56'
401	501	N03°30'02"W	61.12'

BEGIN RELOCATION ORDER
101+25.00
Y 388719.44
X 806666.94
2265.53' SOUTH AND 1779.73' EAST OF THE NORTH QUARTER CORNER OF SECTION 8, T15N, R17E

BP: 100+00.00 (101)

COORDINATE TABLE

POINT	Y	X
101	388594.6713	806674.5697
102	389093.7383	806644.0395
301	390859.9747	806576.0658
401	388935.3646	806693.8027
402	388933.3702	806733.9995
403	388897.7751	806716.1397
404	388822.9150	806720.7192
405	388721.8804	806706.8625
501	388996.3673	806690.0709
502	388986.8907	806780.8189
503	388931.0750	806780.2592
504	388916.7160	806780.1025
505	388918.6537	806729.8905
506	388724.0175	806741.7972

N

SCALE, FEET
0' 50' 100'

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4986-11-00		
FEDERAL PROJECT NUMBER	4.1	1

PLAT OF RIGHT OF WAY REQUIRED FOR
C FOND DU LAC, N ROLLING MEADOWS DR
N ROLLING MEADOWS DR/S WALMART DR
CTH VVV — FOND DU LAC COUNTY

APPROVED FOR CITY OF FOND DU LAC
4/22/15 DATE
JORDAN SKIFF
DIRECTOR OF PUBLIC WORKS

ORIGINAL PLANS PREPARED BY
GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
93 South Pioneer Road, Suite 300 • Fond du Lac, WI 54935
(920) 924-5720 • fax (920) 924-5725
4/22/15 DATE
JAY W. PANETTI, PLS

WISCONSIN JAY W. PANETTI S-2747 WAUPUN, WI LAND SURVEYOR

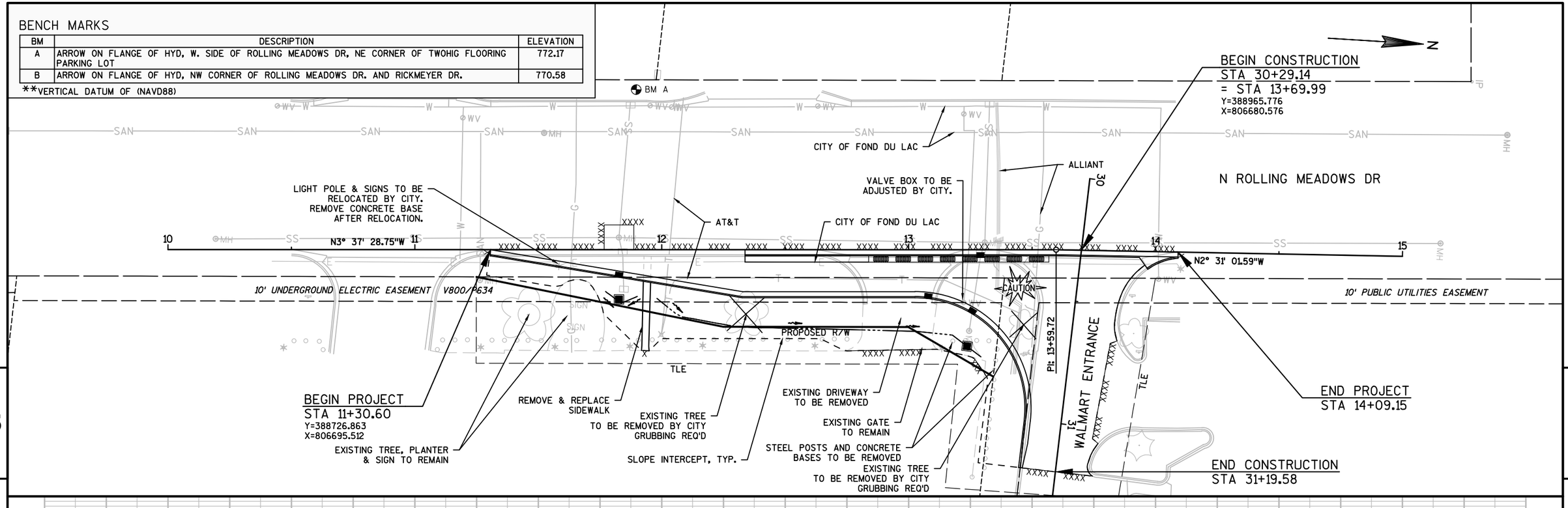
RECEIVED
REVISION DATE
APR 30 2015
LISA FREIBERG
FOND DU LAC COUNTY CLERK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
APPROVED FOR THE DEPARTMENT
DATE (Signature)

BENCH MARKS

BM	DESCRIPTION	ELEVATION
A	ARROW ON FLANGE OF HYD, W. SIDE OF ROLLING MEADOWS DR, NE CORNER OF TWOHIG FLOORING PARKING LOT	772.17
B	ARROW ON FLANGE OF HYD, NW CORNER OF ROLLING MEADOWS DR. AND RICKMEYER DR.	770.58

**VERTICAL DATUM OF (NAVD88)



PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	PLAN AND PROFILE:	SHEET 19	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-050101-PP.DWG
LAYOUT NAME - 49861100-050101-PP - SHEET-01
PLOT DATE : 9/18/2015 8:58 AM PLOT BY : JEFF CHVOSTA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LOT 6
CSM #2190
V11/P179
DOC. #344391

N ROLLING MEADOWS DR

N2° 31' 01.59"W

CITY OF FOND DU LAC

TLE

WALMART ENTRANCE

CITY OF FOND DU LAC

30 31 32

S86° 55' 03.61"E

PI: 13+59.72

15' PUBLIC UTILITIES EASEMENT

P.L.

CAUTION

AT&T

ALLIANT

EXISTING TREE TO BE REMOVED

EXISTING GATE TO REMAIN

EXISTING DRIVEWAY TO BE REMOVED

PROPOSED R/W

TLE

SLOPE INTERCEPT, TYP.

BEGIN CONSTRUCTION
STA 30+29.14
= STA 13+69.98
Y=388965.776
X=806680.576

END CONSTRUCTION
STA 31+19.58

5 5

EXISTING R/L PROFILE

VPI STA 30+84.58
VPI EL 770.56

2.00%

VPI STA 30+31.15
VPI EL 767.49

-5.98%

PROPOSED R/L PROFILE

VPI STA 31+19.58
VPI EL 771.26

-1.91%

2.07%

VPI STA 30+29.14
VPI EL 767.53

VPI STA 30+34.16
VPI EL 767.55

VPC STA 30+49.58
VPC EL 768.47

VPT STA 31+19.58
VPT EL 771.26

VCL = 70.00'
K = 17.61

EXISTING PROFILE ELEVATIONS AT R/L

PROPOSED PROFILE ELEVATIONS AT R/L

768.05 768.66 768.50 770.79 770.76

774 772 770 768 766 764 762 760

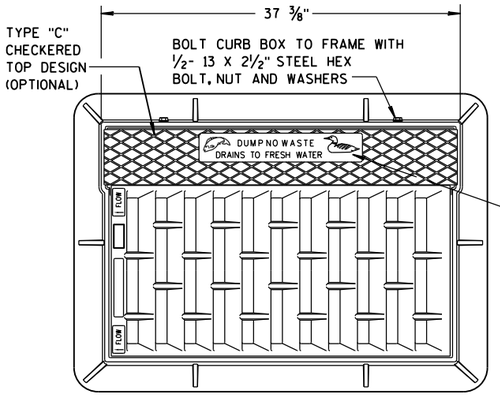
28 29 30 31 32 33 34

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	PLAN AND PROFILE: ROLLING MEADOWS DRIVE	SHEET 20	E

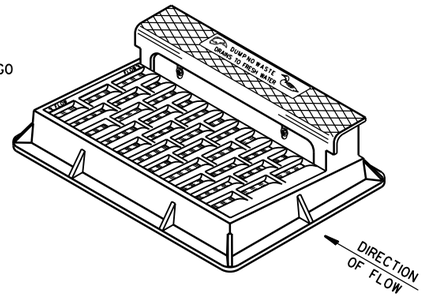
FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-050102-PP.DWG
LAYOUT NAME - 49861100-050102-PP - SHEET-01
PLOT DATE : 9/17/2015 12:43 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

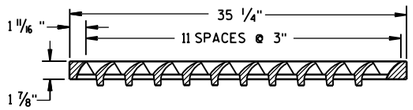
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
11B01-05	CONCRETE CORRUGATED MEDIAN
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-12A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-12B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-12C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-03	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

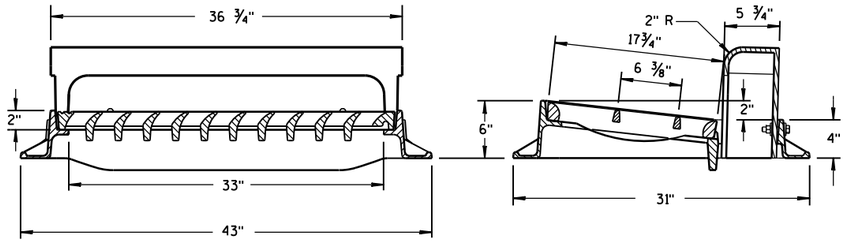


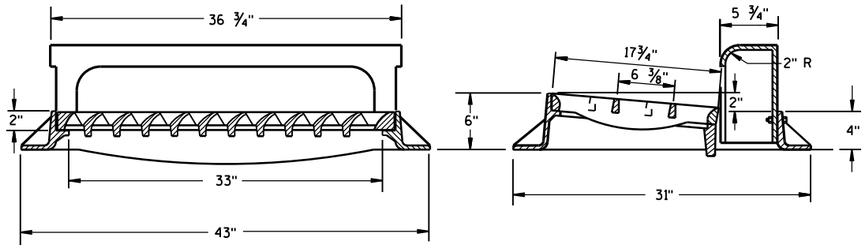
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

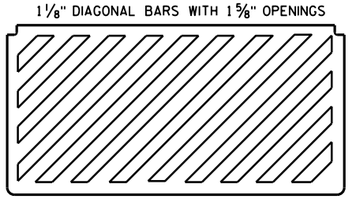






TYPE "H"

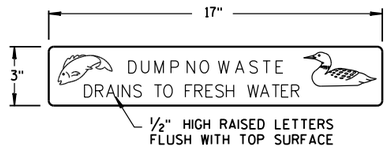
NOTE: EITHER CASTING IS ACCEPTABLE



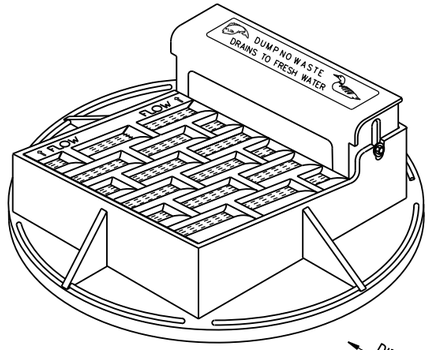
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

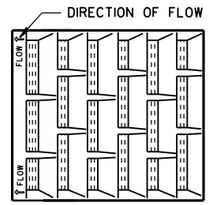
NOTE:
GRATE IS REVERSIBLE.

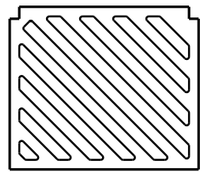
GENERAL NOTES

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.

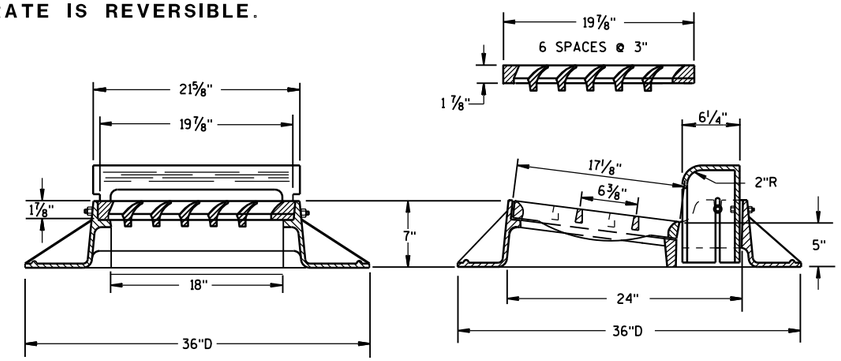




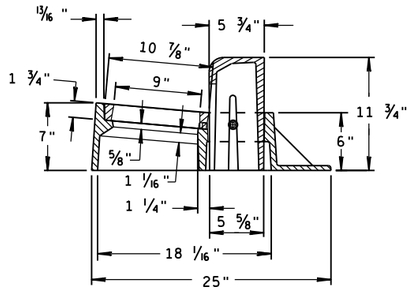
SPECIAL GRATE FOR TYPE "A" COVER

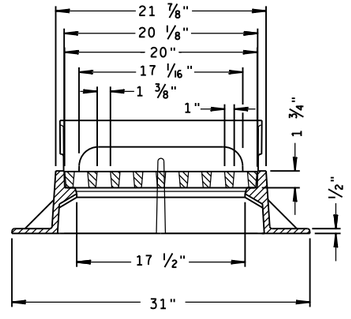
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

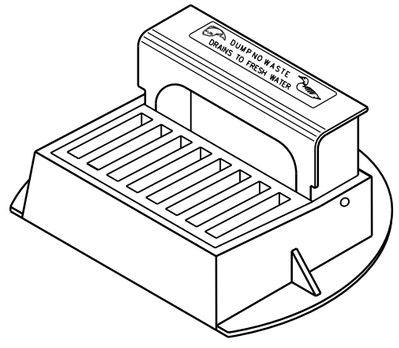


TYPE "A"





TYPE "Z"



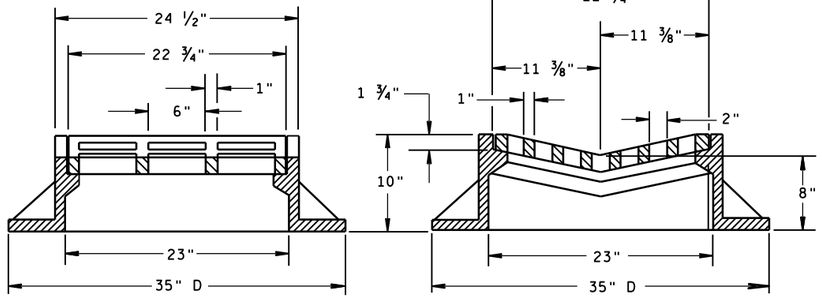
INLET COVERS
TYPE A, H, A-S, H-S & Z

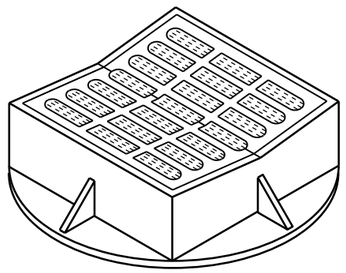
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

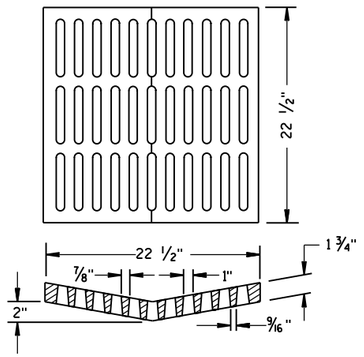
6

S.D.D. 8 A 5-19a



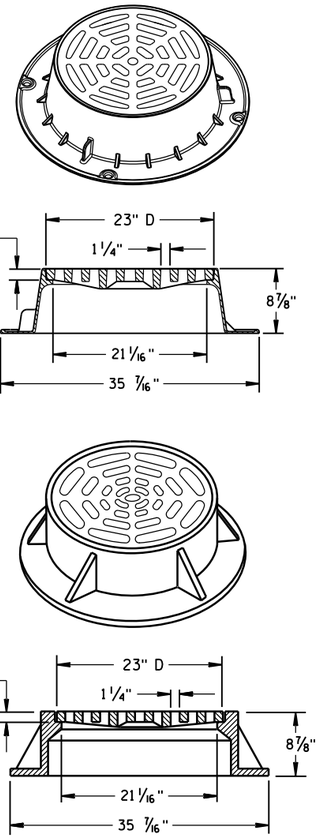


TYPE "B"



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"

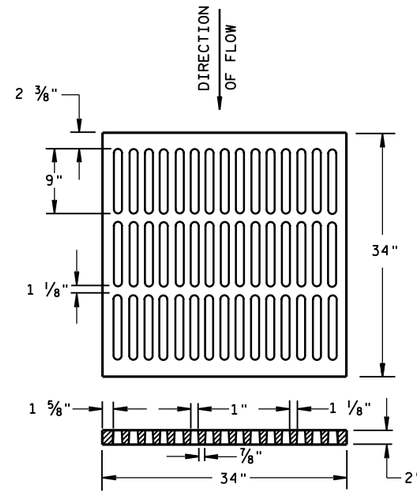
NOTE: EITHER CASTING IS ACCEPTABLE

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.

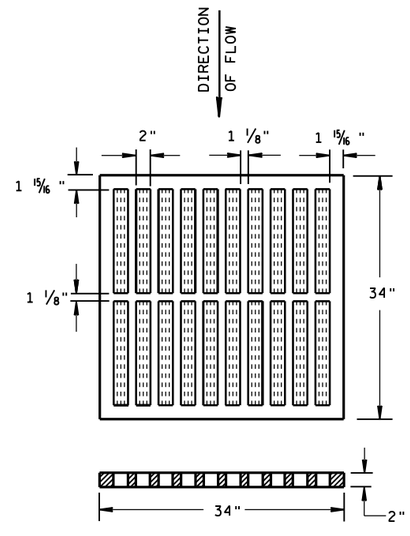
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



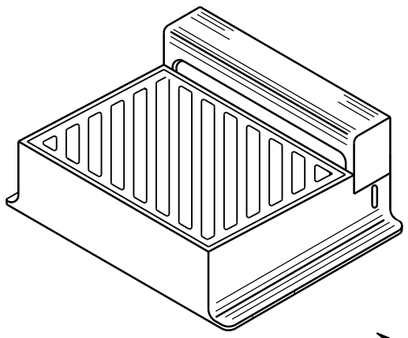
ALTERNATIVE TYPE "MS"

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

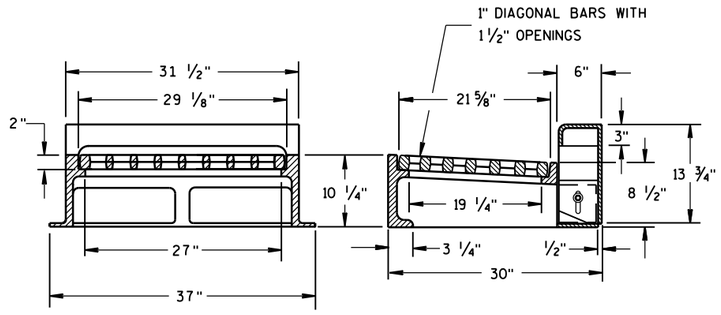


TYPE "MS"

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



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

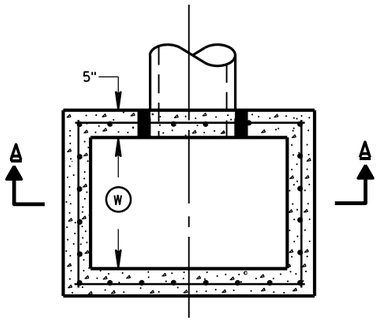
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

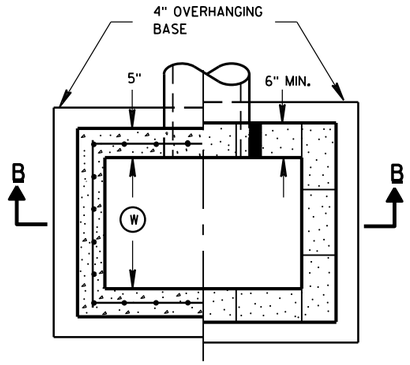
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

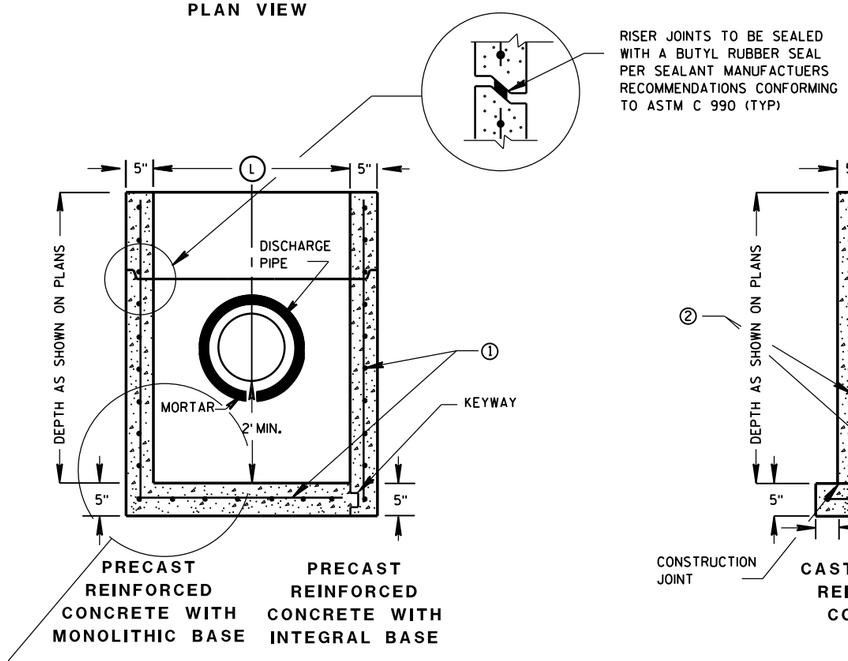
S.D.D. 8 A 5-19b



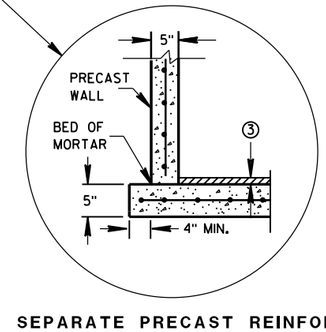
PLAN VIEW



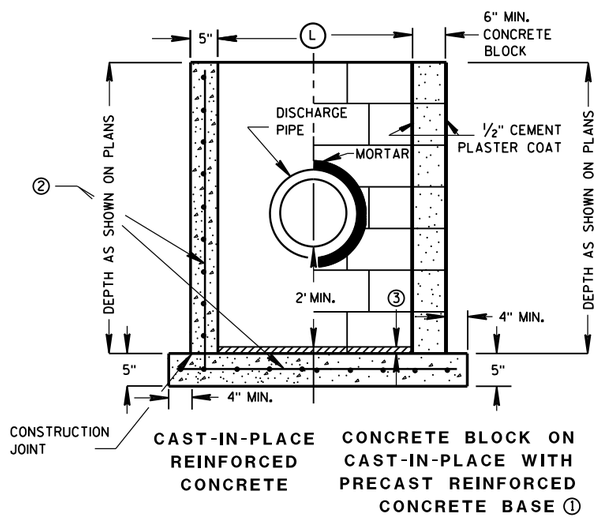
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

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 PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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.

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

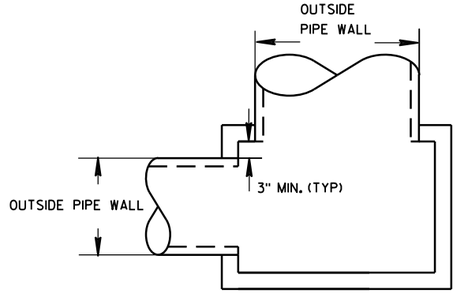
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

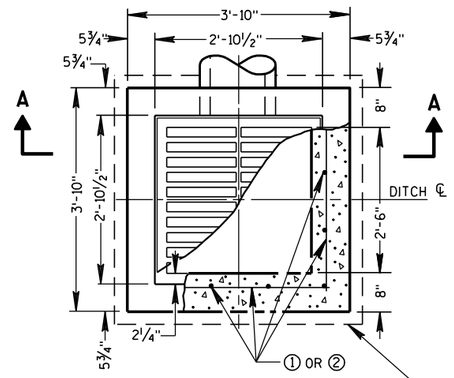
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

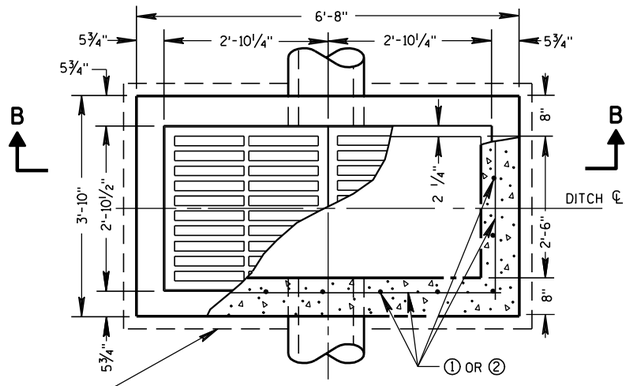
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 A 9-1

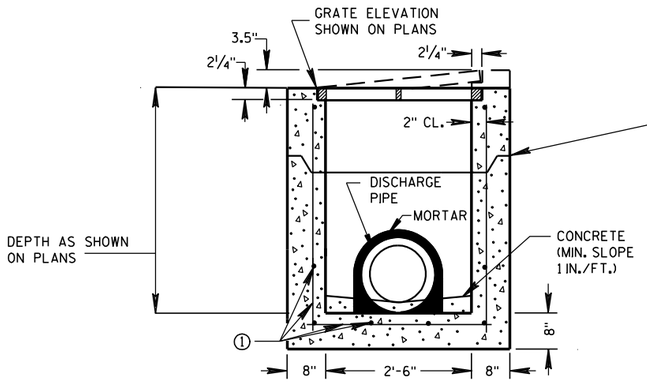


PLAN VIEW

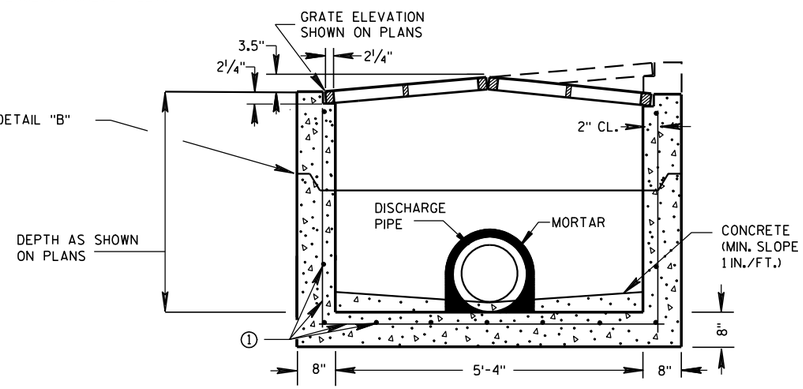


PLAN VIEW

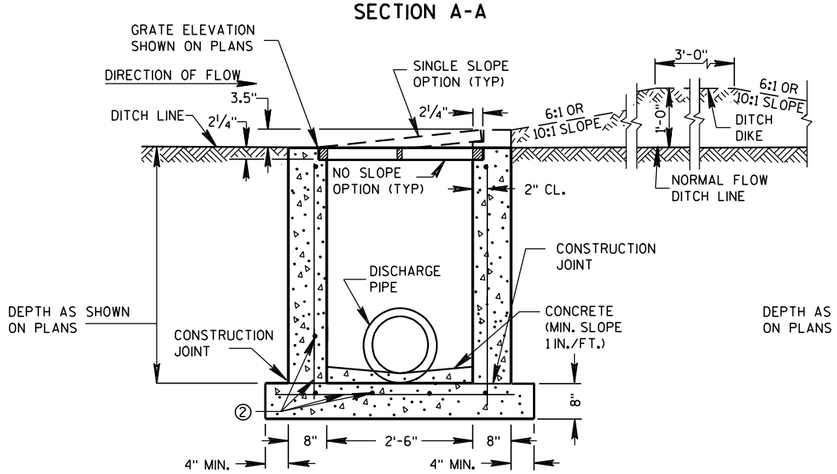
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



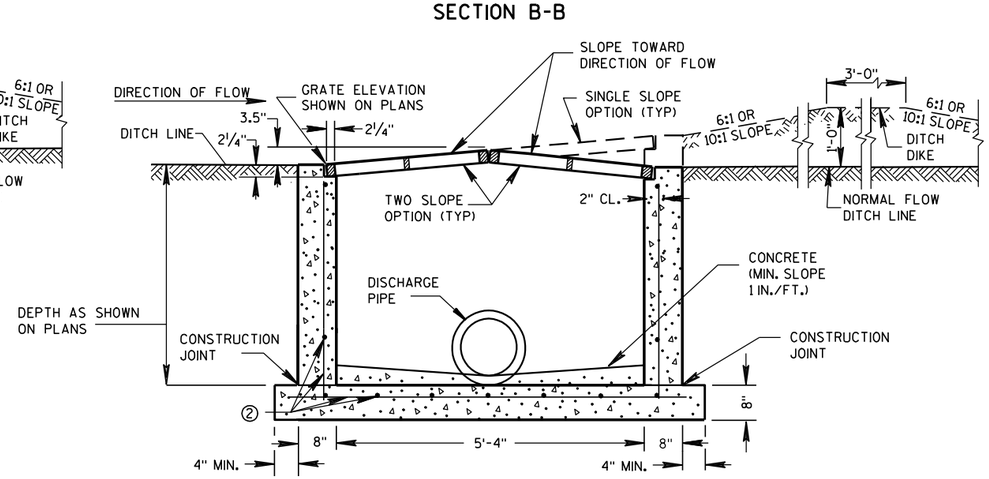
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

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 INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

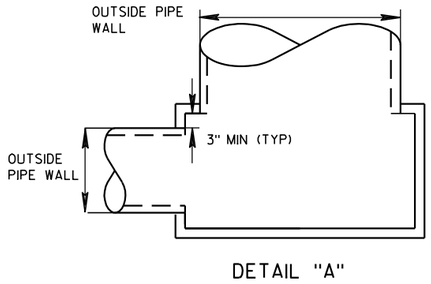
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

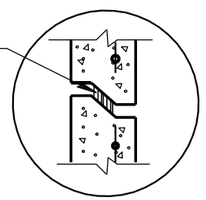
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

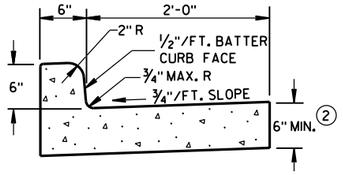
FHWA

6

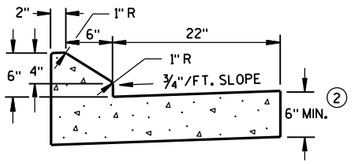
S.D.D. 8 C 8-1

6

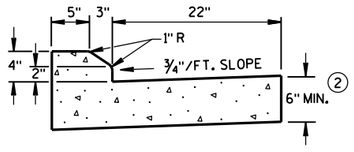
S.D.D. 8 C 8-1



TYPES A & D ①

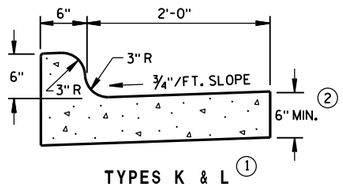


6" SLOPED CURB TYPES G & J ①

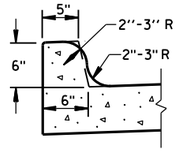


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

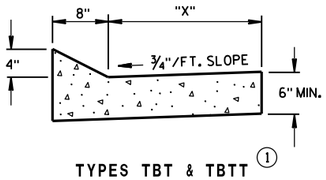


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

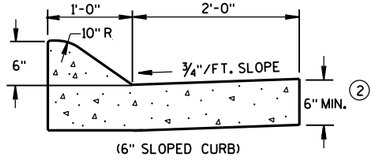
CONCRETE CURB & GUTTER 30"



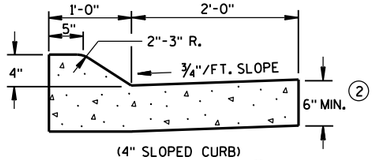
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

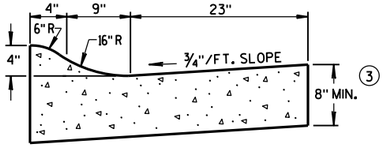


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

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.

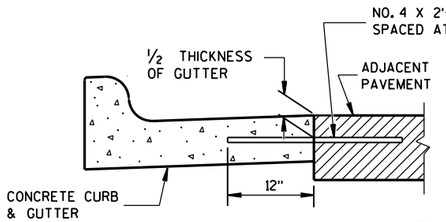
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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.

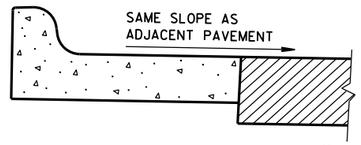
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

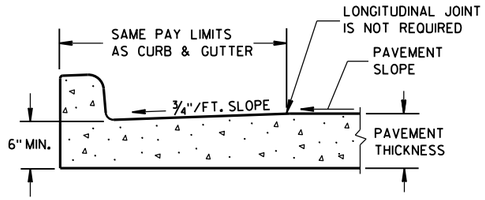
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



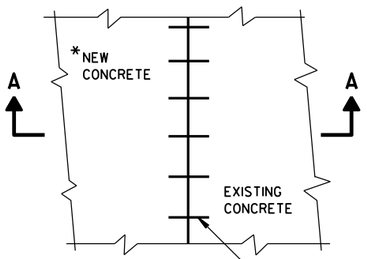
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

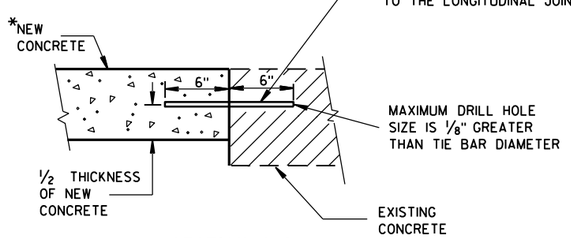


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



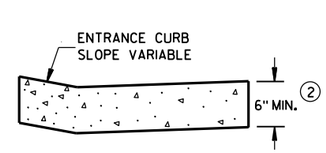
PLAN VIEW

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

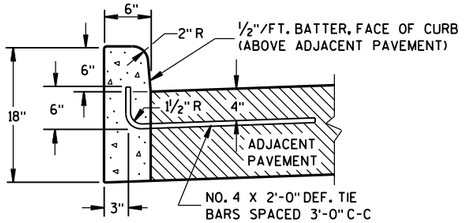


SECTION A-A

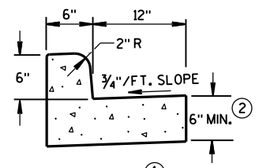
TIE BARS DRILLED
INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

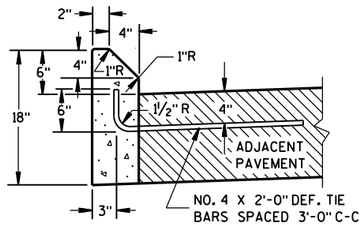


① TYPES A & D

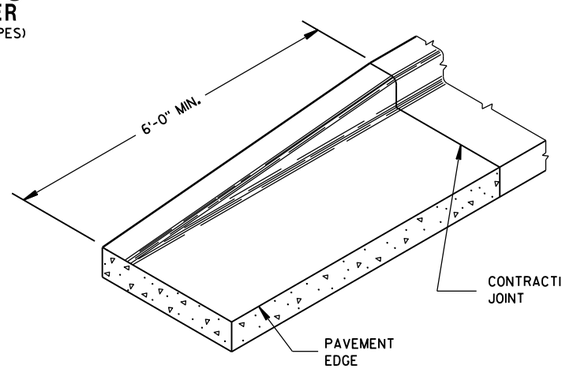


① TYPES A & D

CONCRETE CURB & GUTTER 18"



① TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

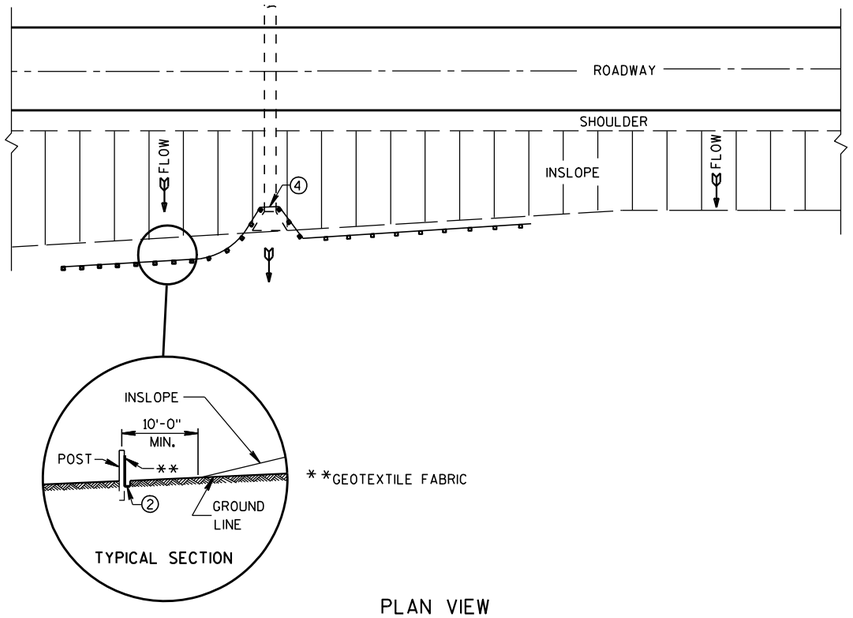
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

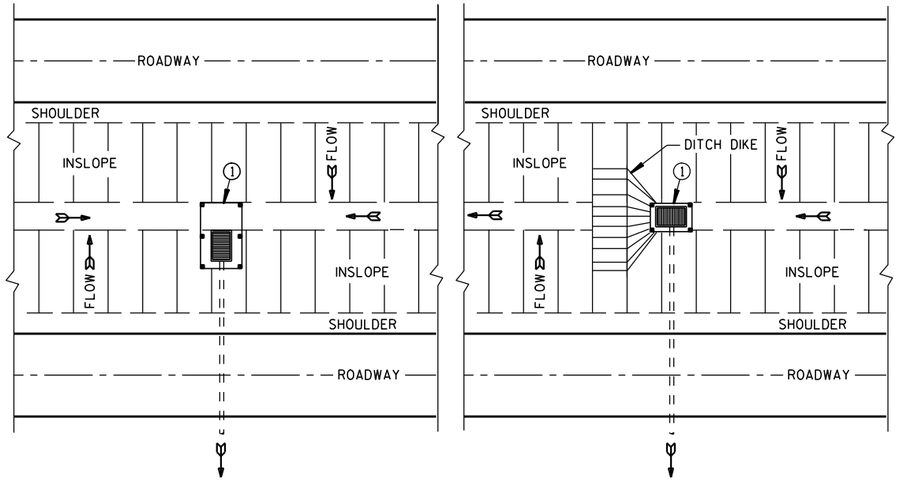
6

S.D.D. 8 D 1-18



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

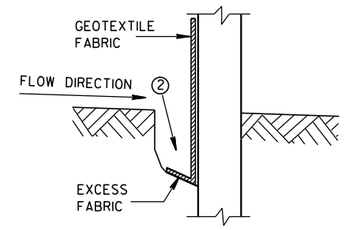
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

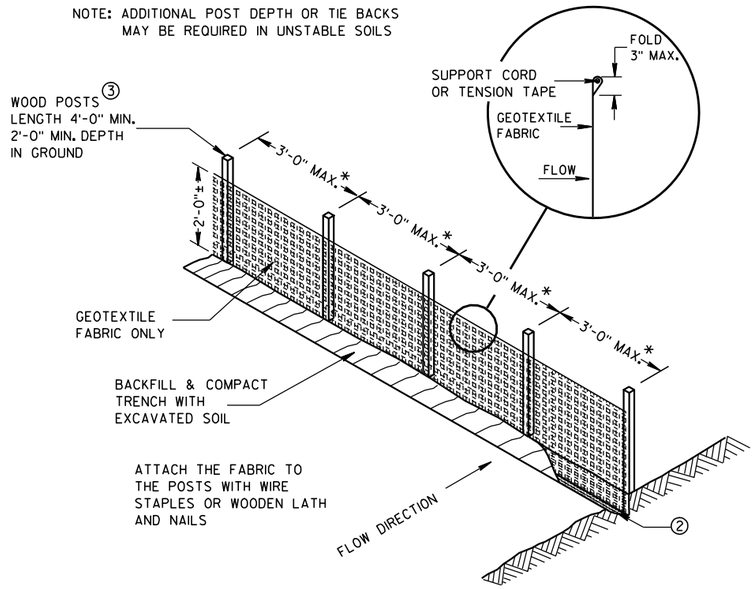
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

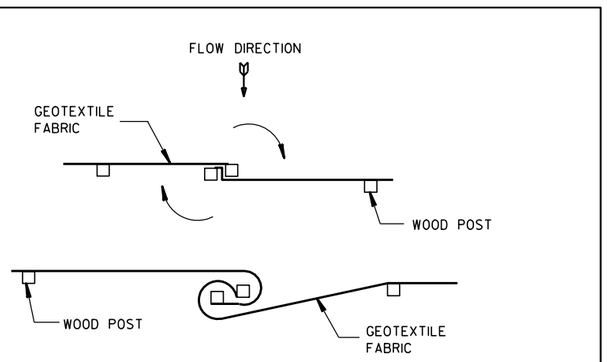
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



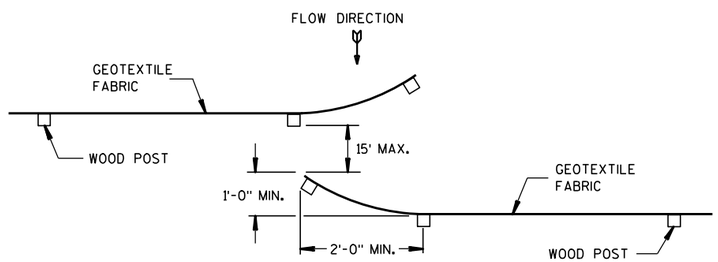
TRENCH DETAIL



SILT FENCE

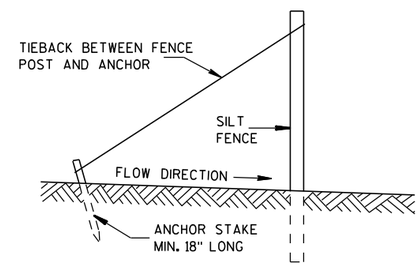


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

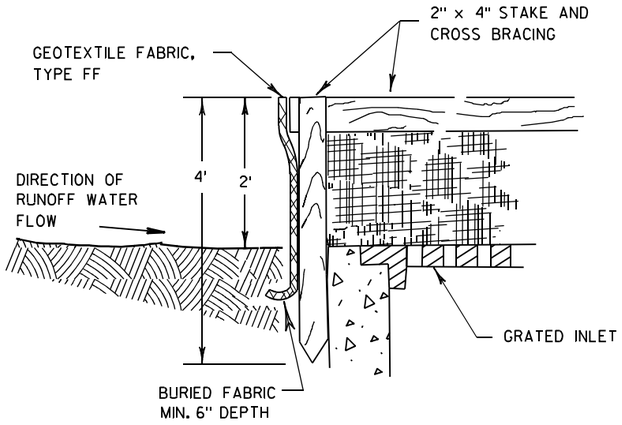
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

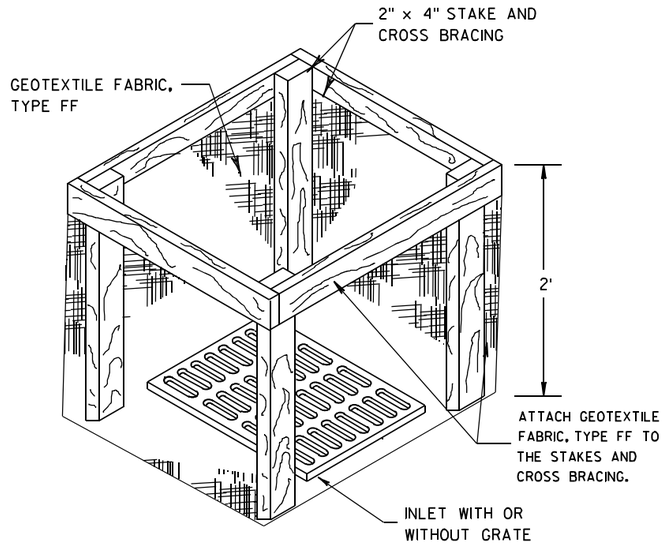
6

S.D.D. 8 E 9-6

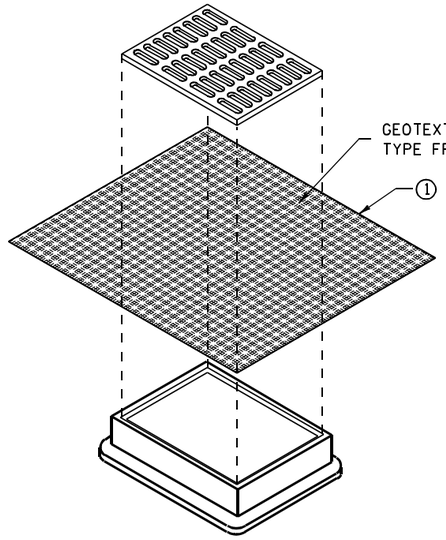
6

S.D.D. 8 E 9-6



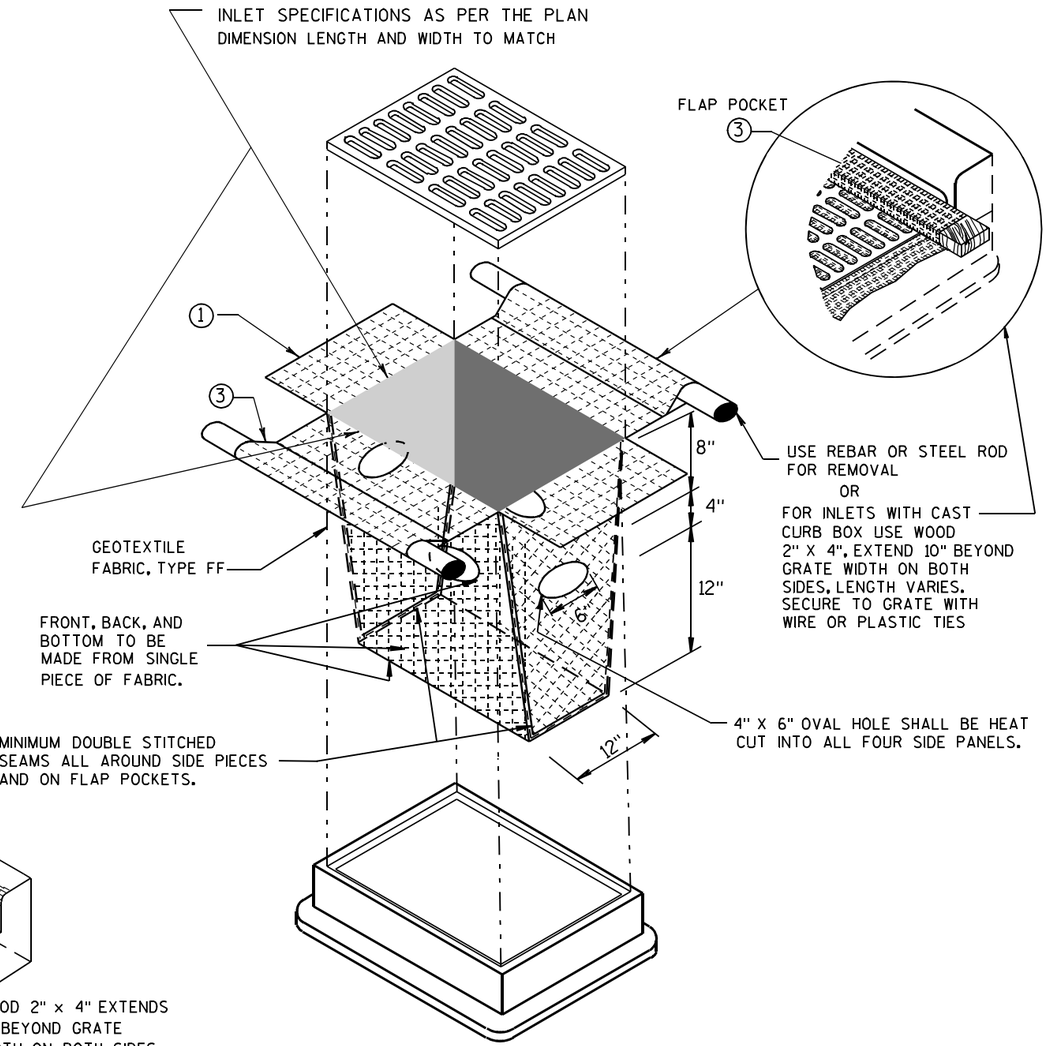


INLET PROTECTION, TYPE A



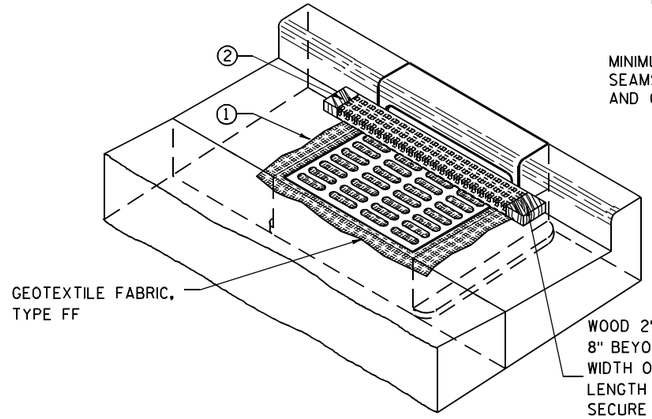
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

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 A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

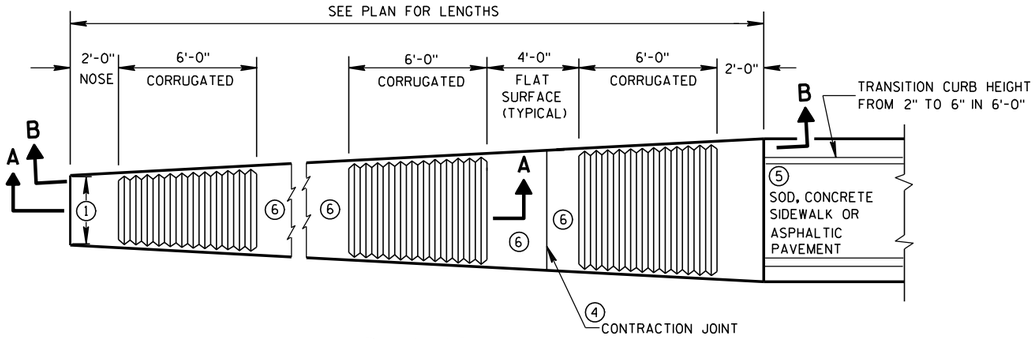
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

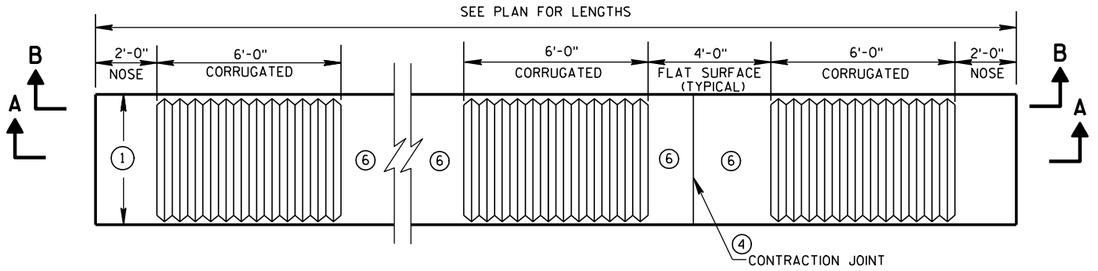
6

S.D.D. 8 E 10-2



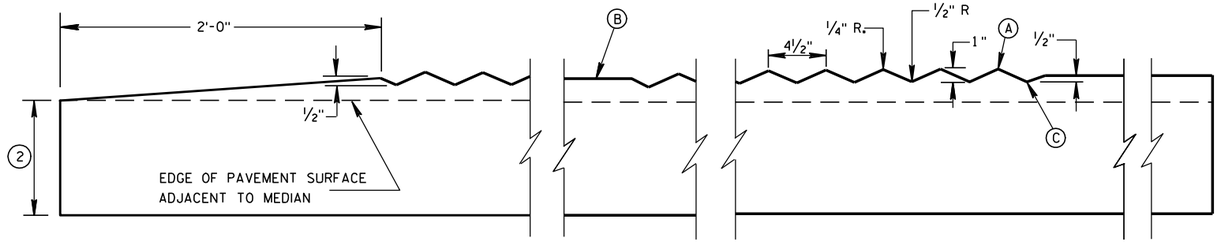
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

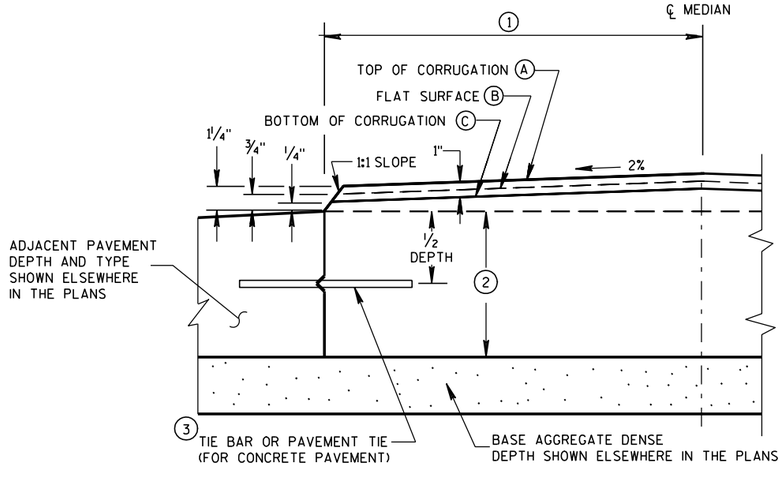
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

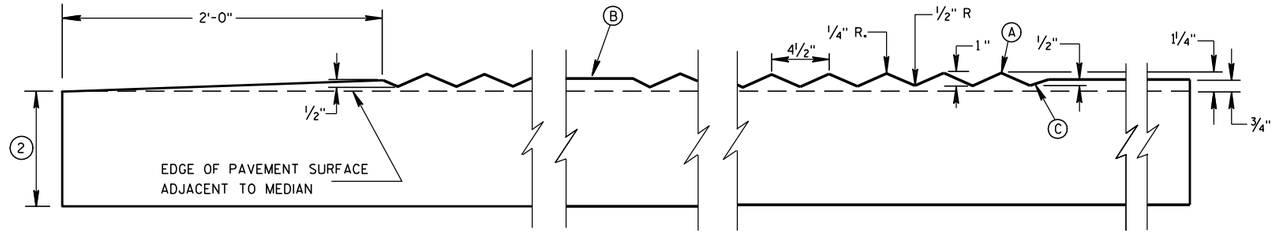
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

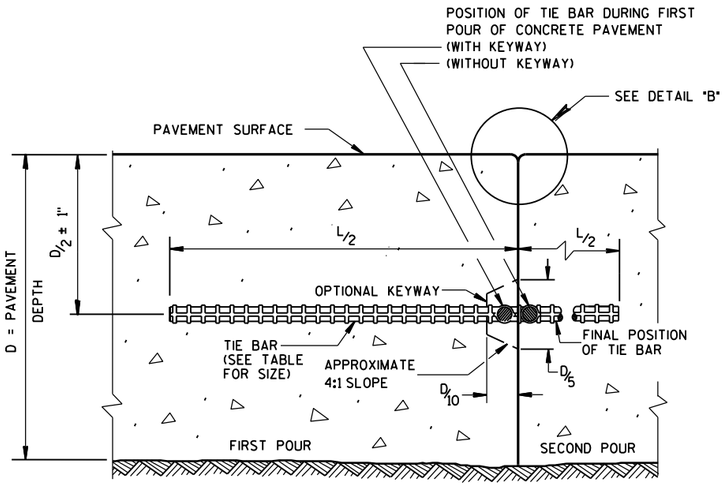
FHWA

6

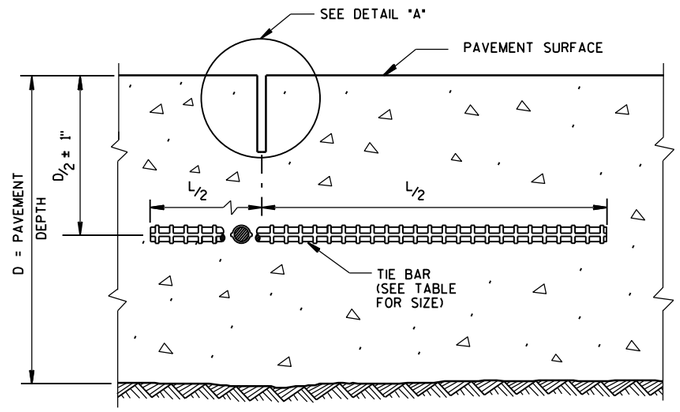
S.D.D. 11 B 1-5

6

S.D.D. 11 B 1-5



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.

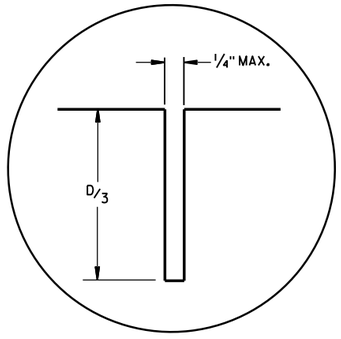
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

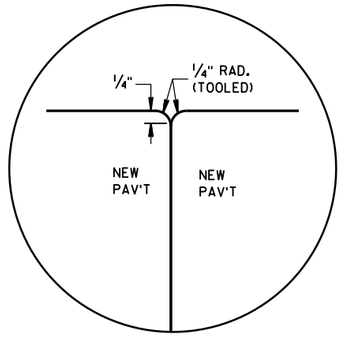
PLAN VIEW

SECTION A-A

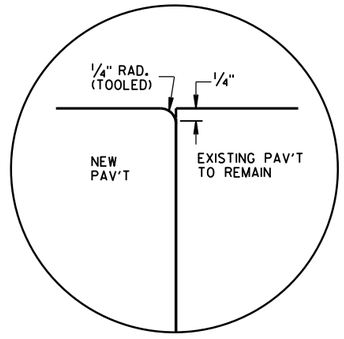
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



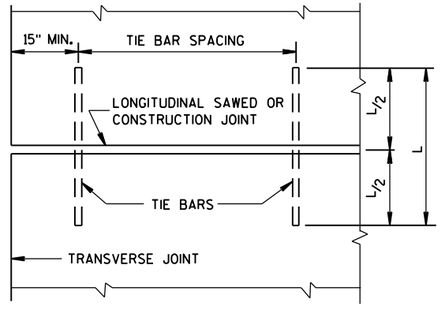
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

S.D.D. 13 C 1-18

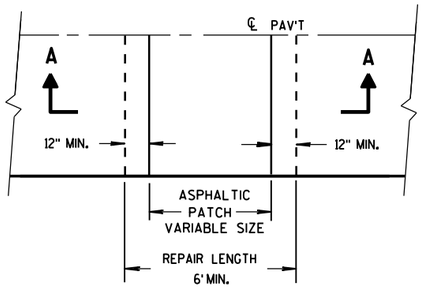
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES. ADDITIONAL SAW CUTS ARE NOT PAID FOR BY THE DEPARTMENT.

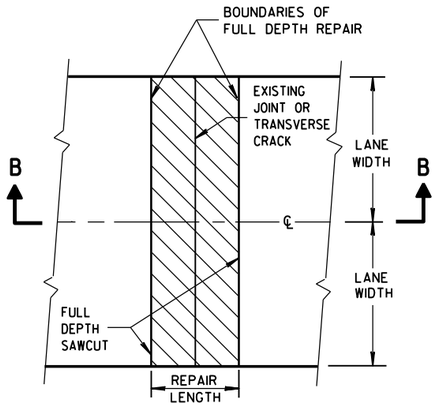
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

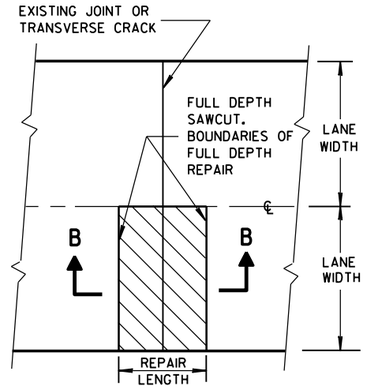
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

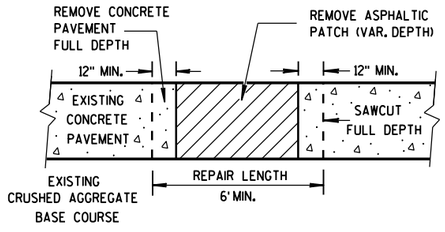


PLAN VIEW
(DOUBLE LANE REPAIR)



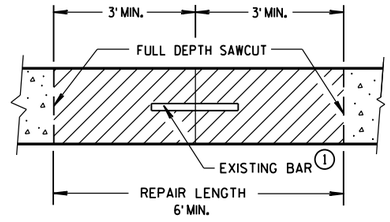
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

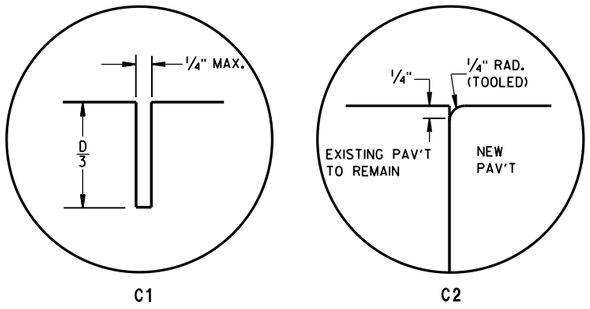
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 13 C 9-12a



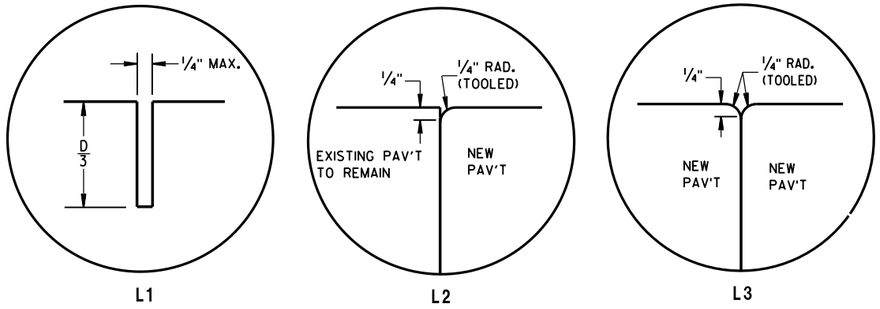
TRANSVERSE JOINTS

TIE BAR TABLE

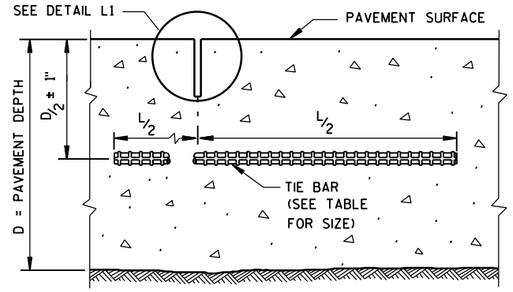
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

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

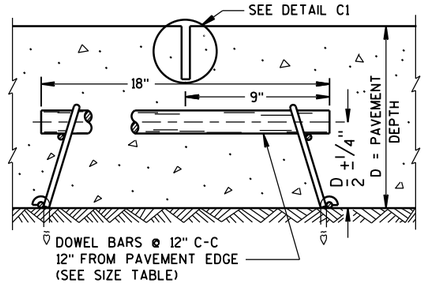
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

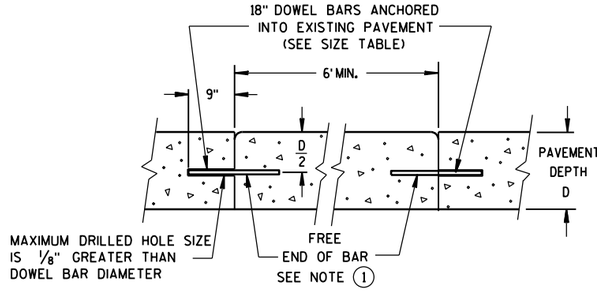
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

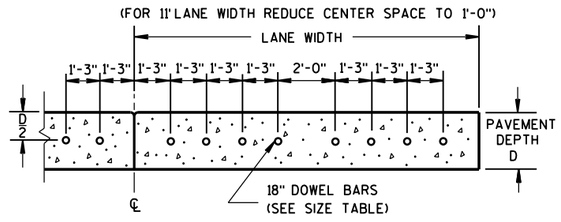


SECTION F-F

CONTRACTION JOINT



SECTION D-D

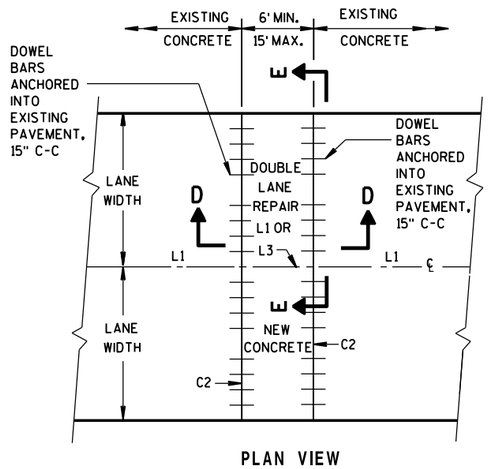


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

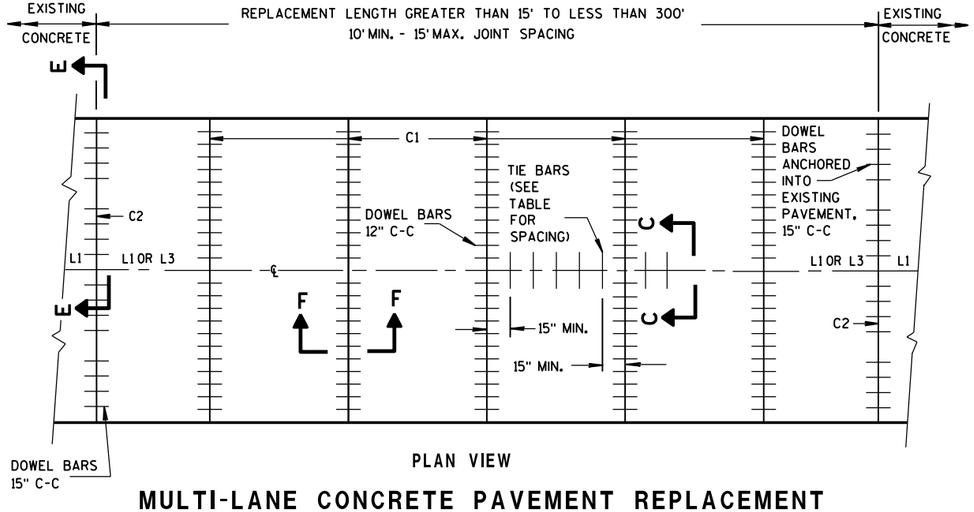
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6",6 ½"	NONE	12'
7",7 ½"	1"	14'
8",8 ½"	1 ¼"	15'
9",9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

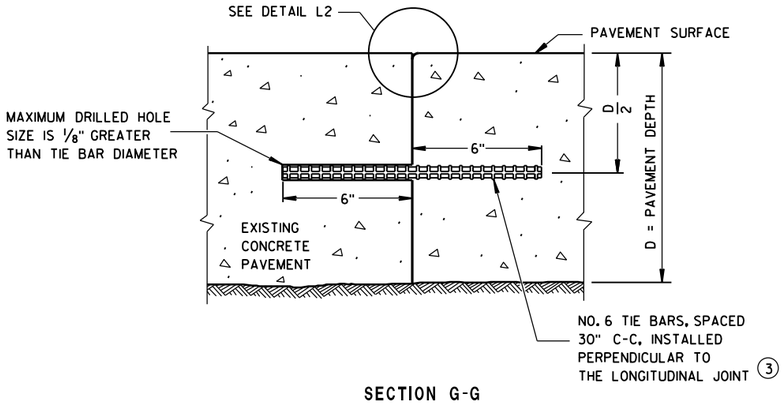
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 13 C 9-12b
S.D.D. 13 C 9-12b



SECTION G-G

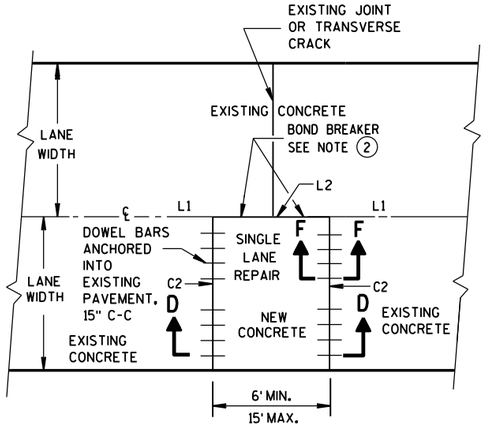
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

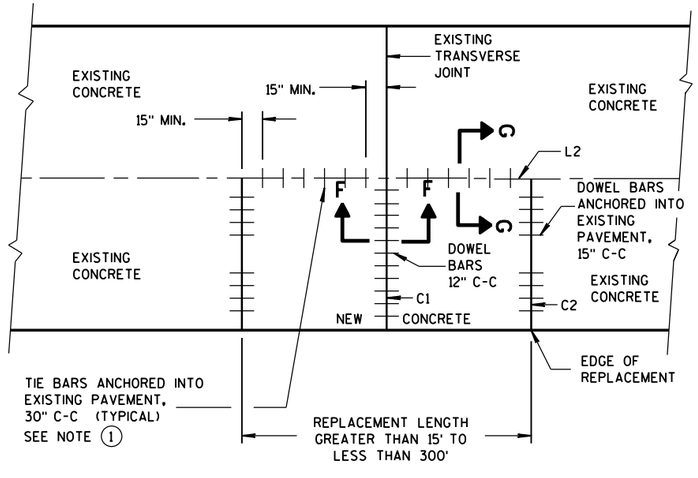
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

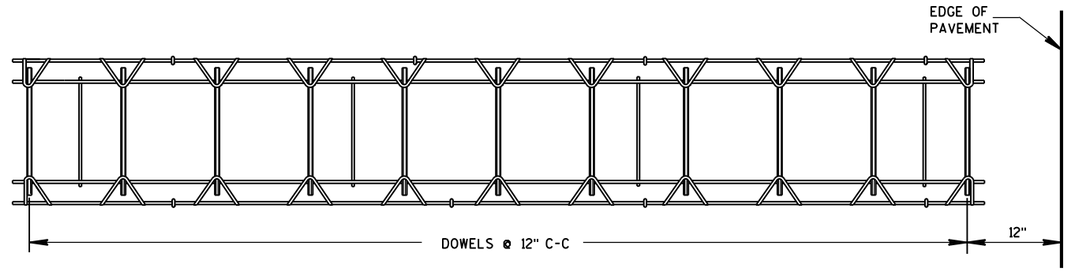
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

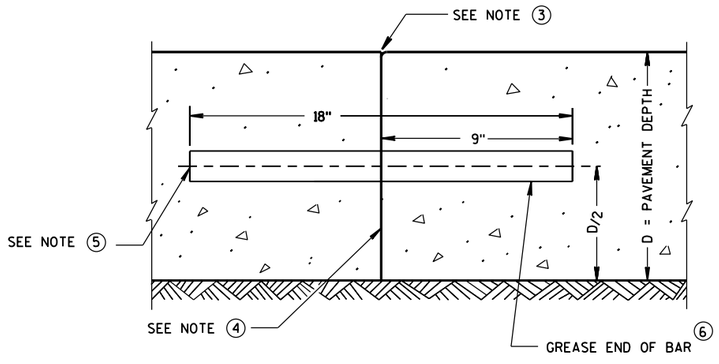
S.D.D. 13 C 9-12c



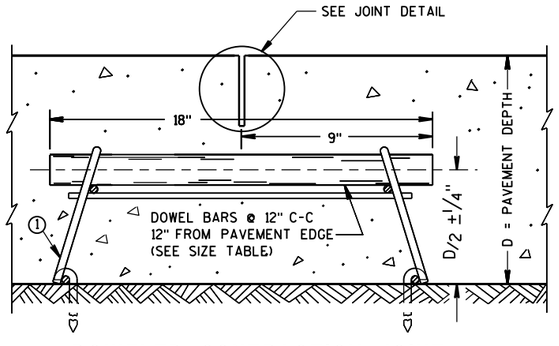
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



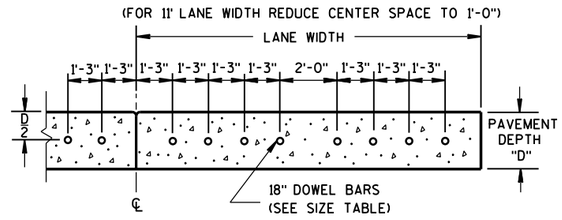
TRANSVERSE CONSTRUCTION JOINT



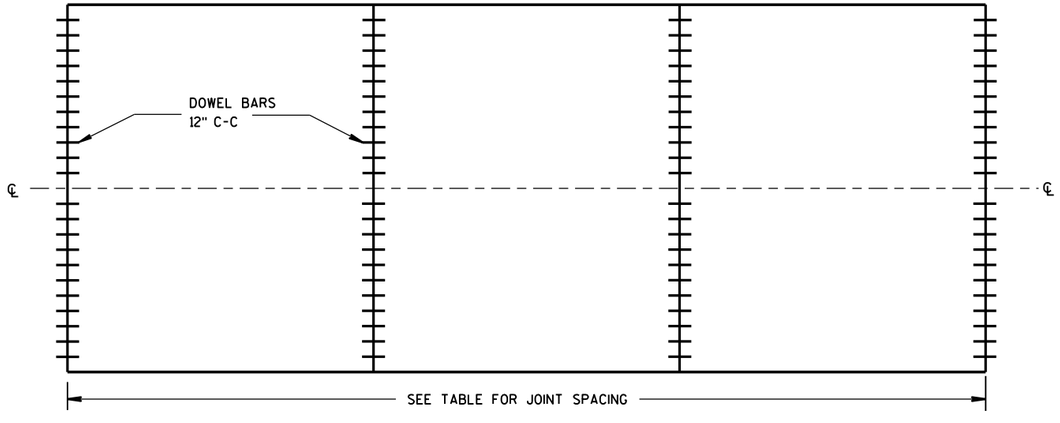
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

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.

① **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.**

② 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.

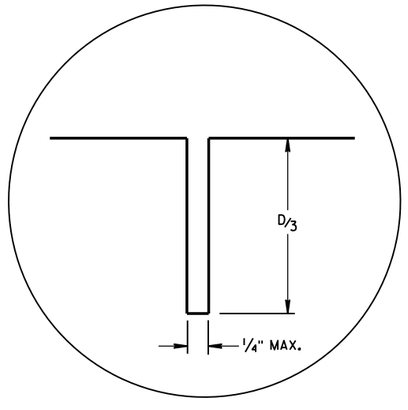
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ 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.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

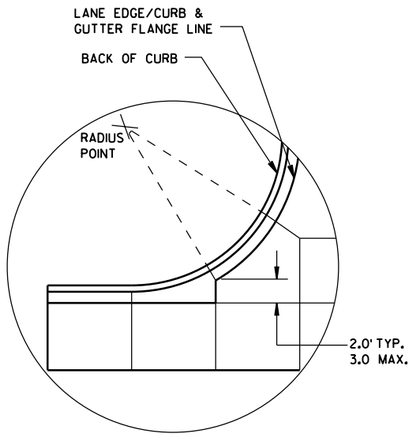
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

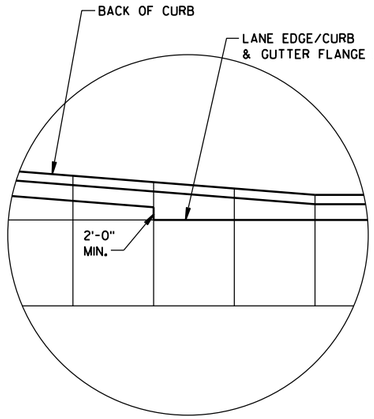
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

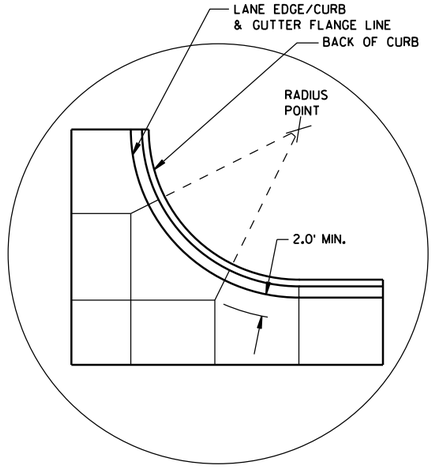
S.D.D. 13 C 13-8



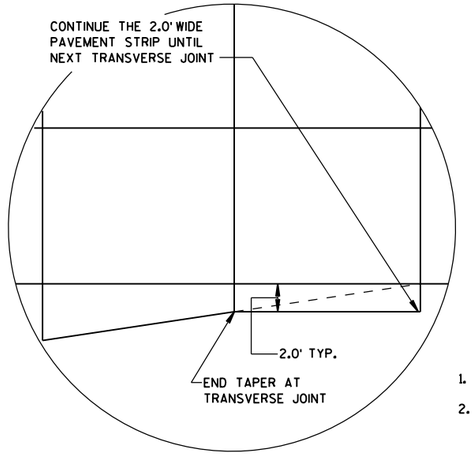
DETAIL "A"



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.

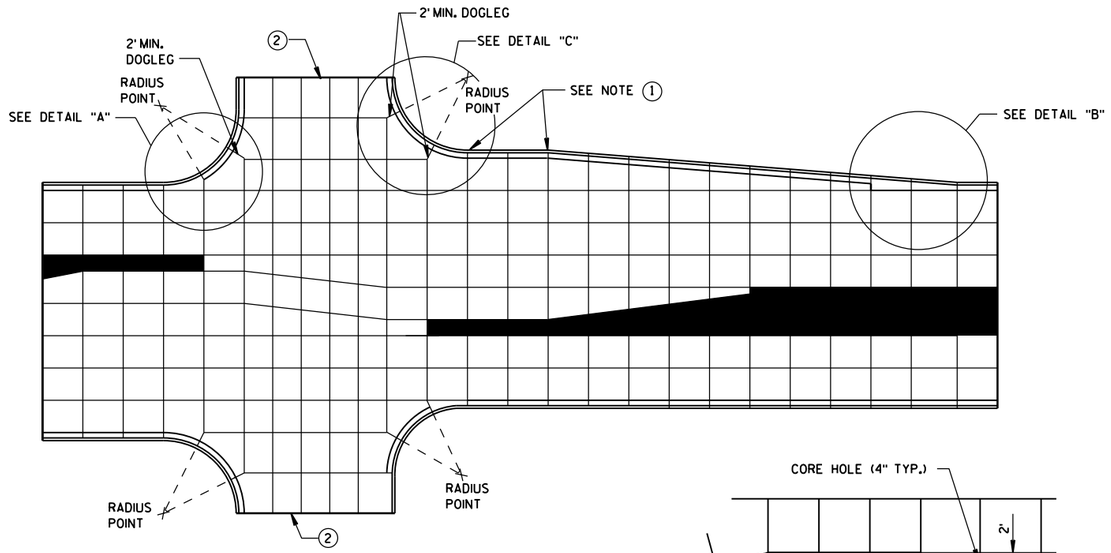
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

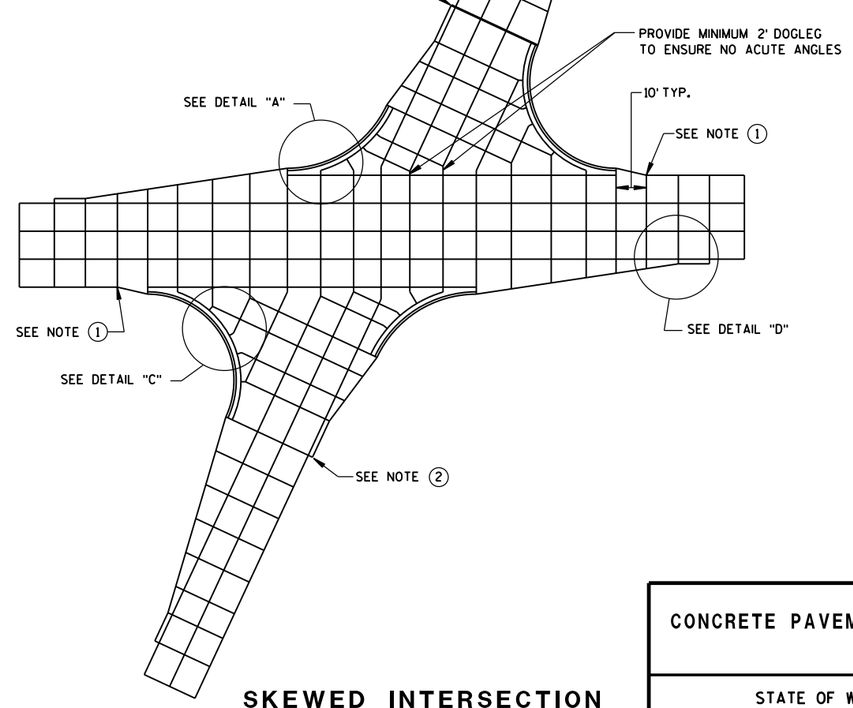
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



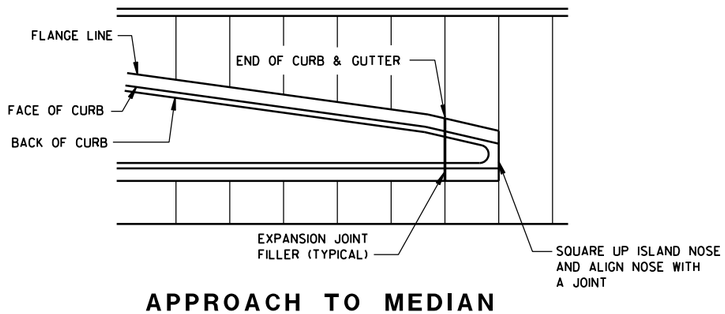
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

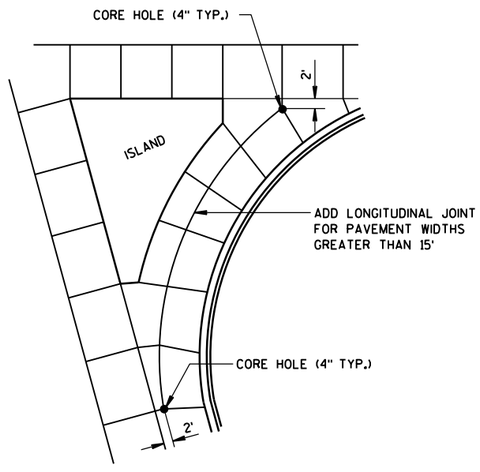
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

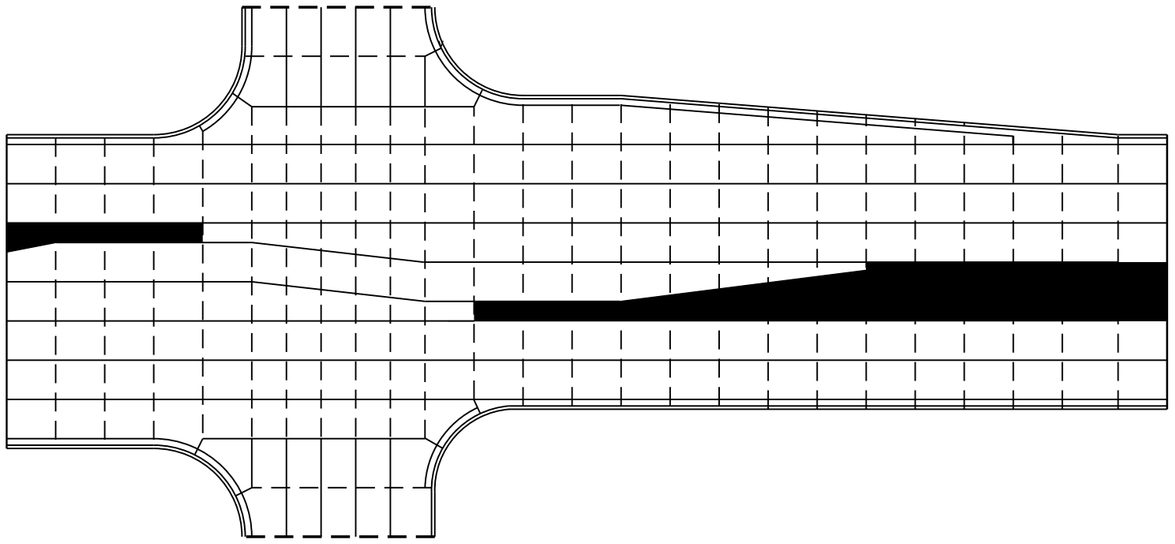
6
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

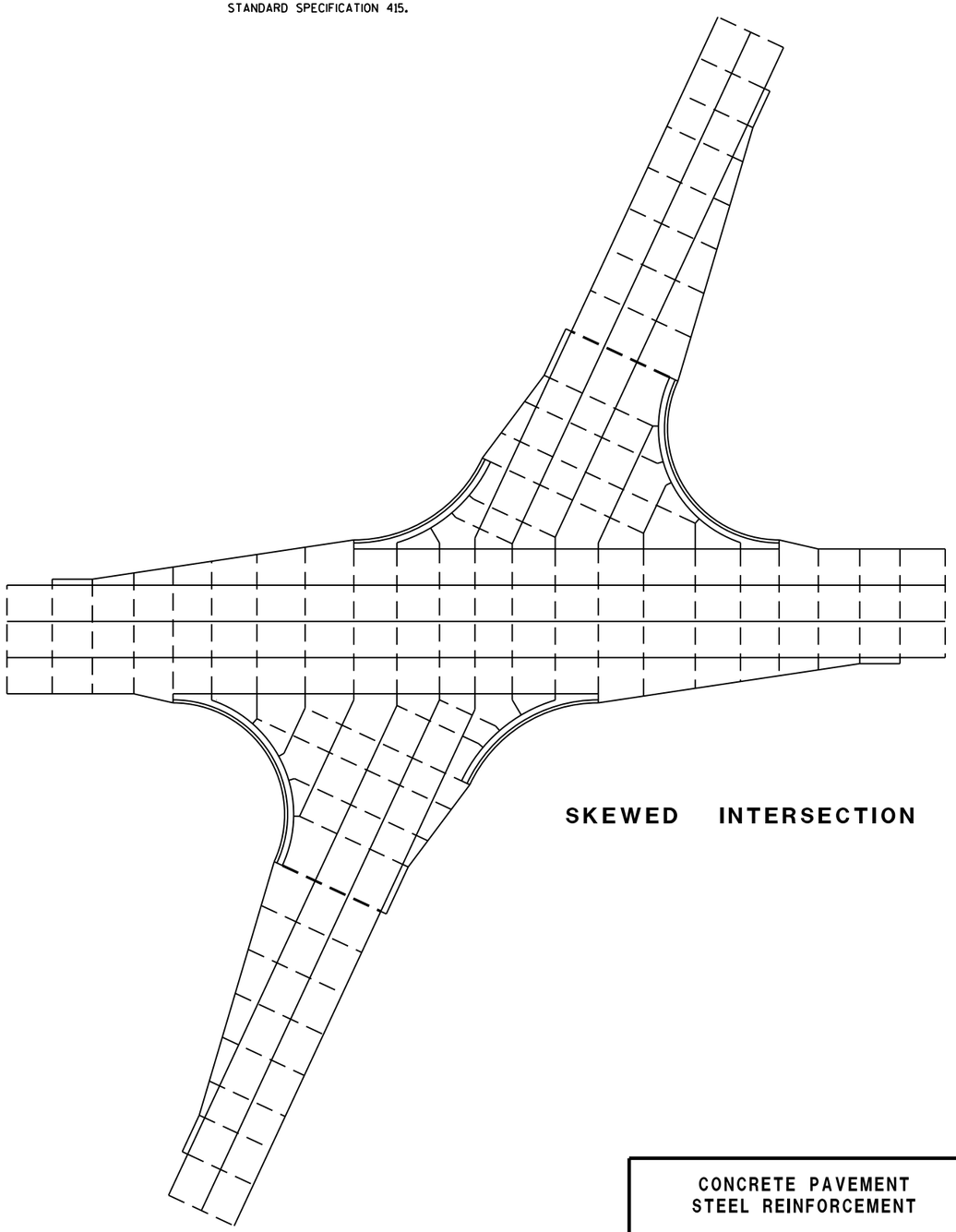
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

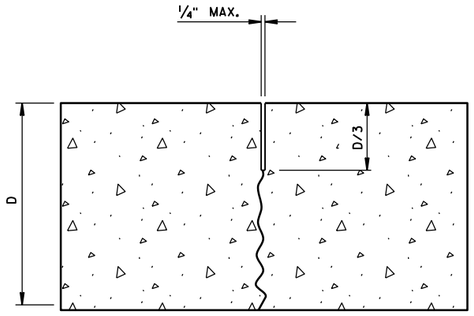
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

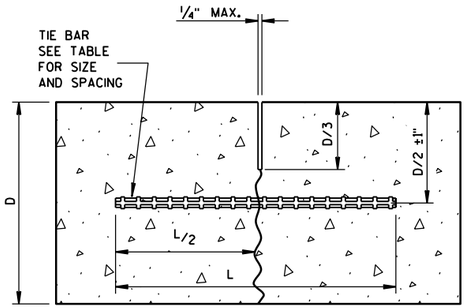
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

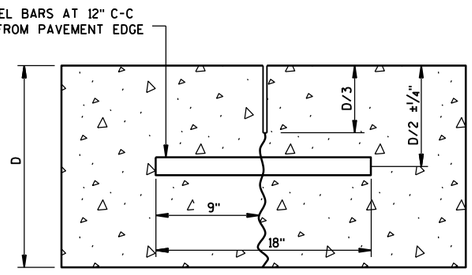
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

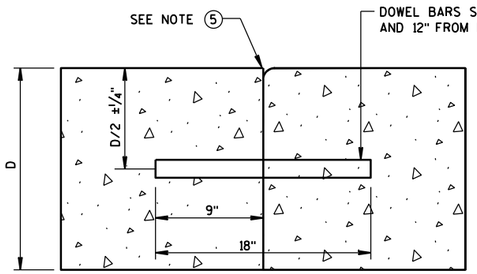
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



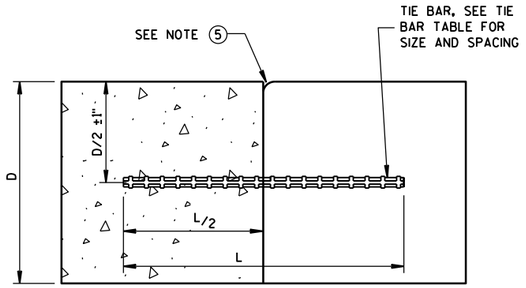
DOWELED-TRANSVERSE

CONTRACTION JOINTS

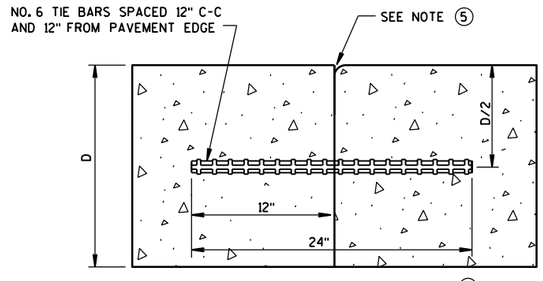
SEE NOTE (2)



DOWELED TRANSVERSE (3)

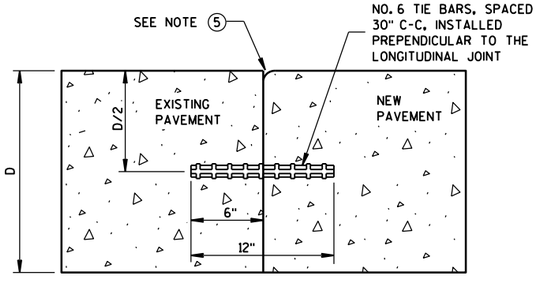


TIED LONGITUDINAL



TIED TRANSVERSE (3)

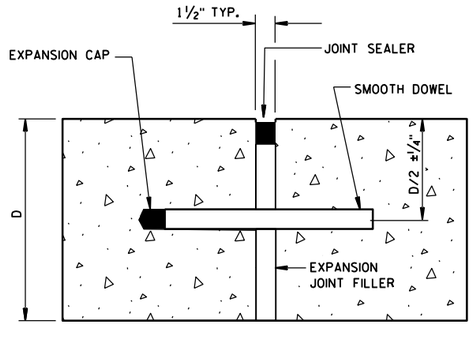
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

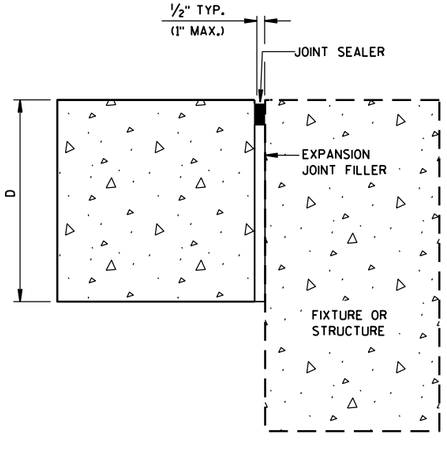
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

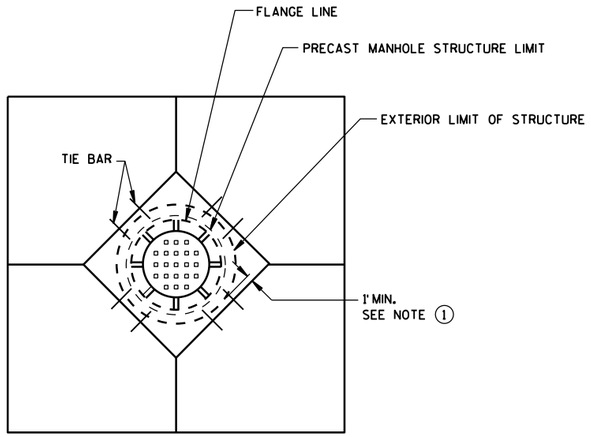
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

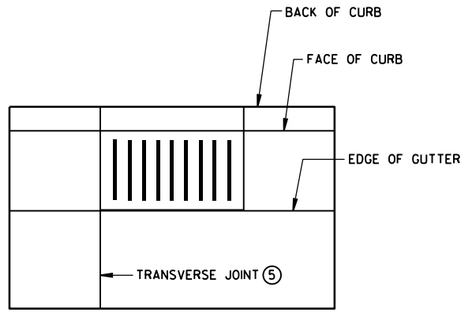
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

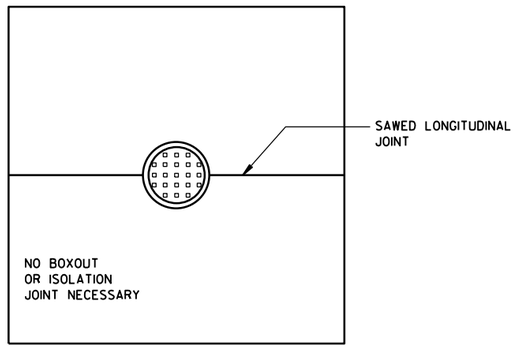
S.D.D. 13 C 18-3c



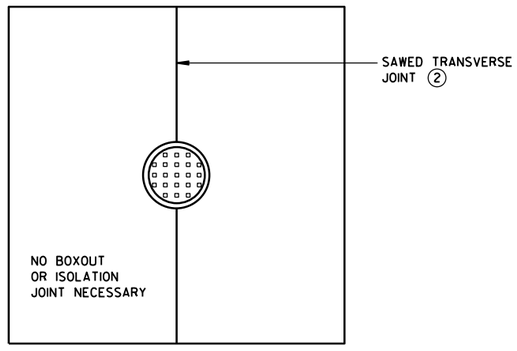
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



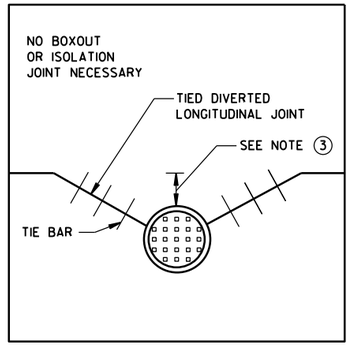
INLET WITH TRANSVERSE JOINT



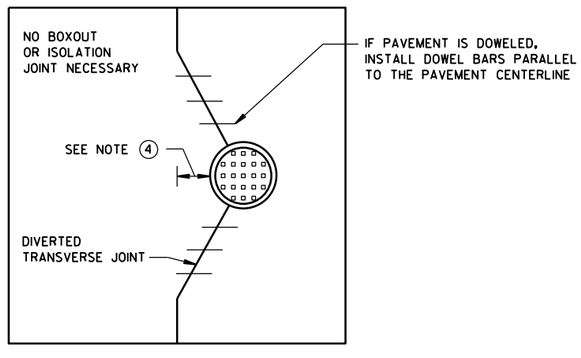
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION 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 LONGITUDIAL 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.

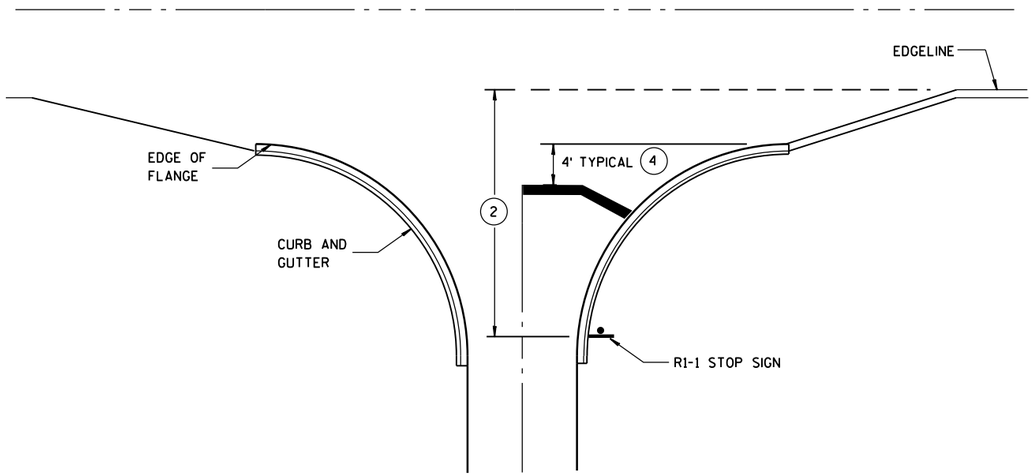
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

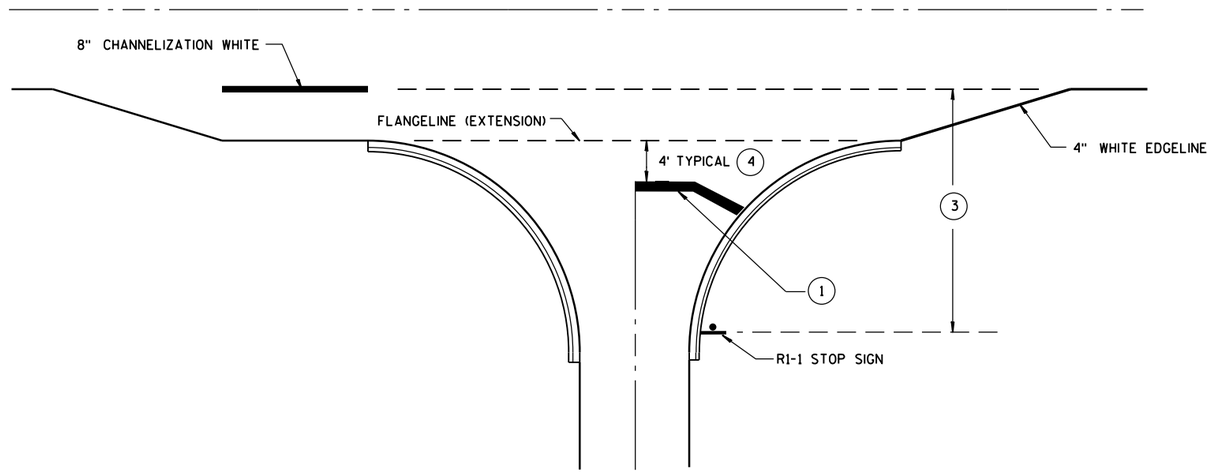
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

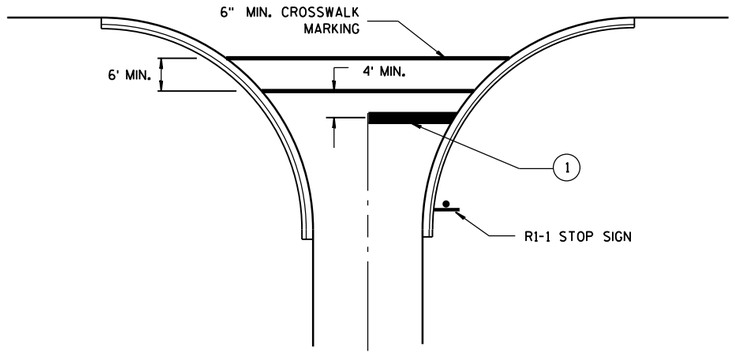
S.D.D. 13 C 18-3d



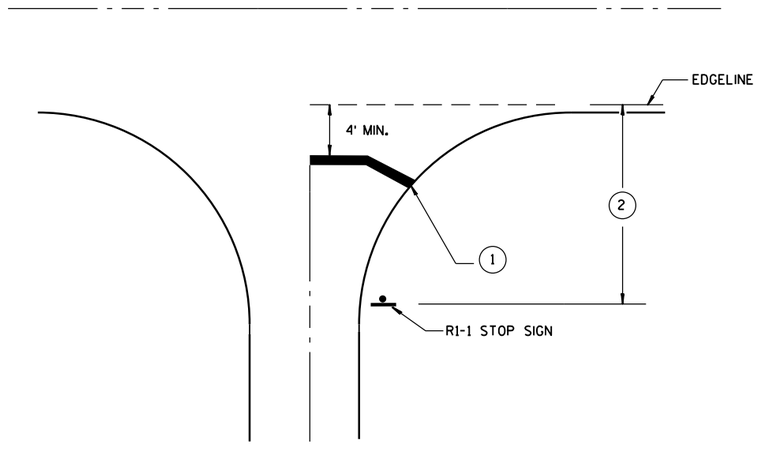
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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 EDGELINE 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

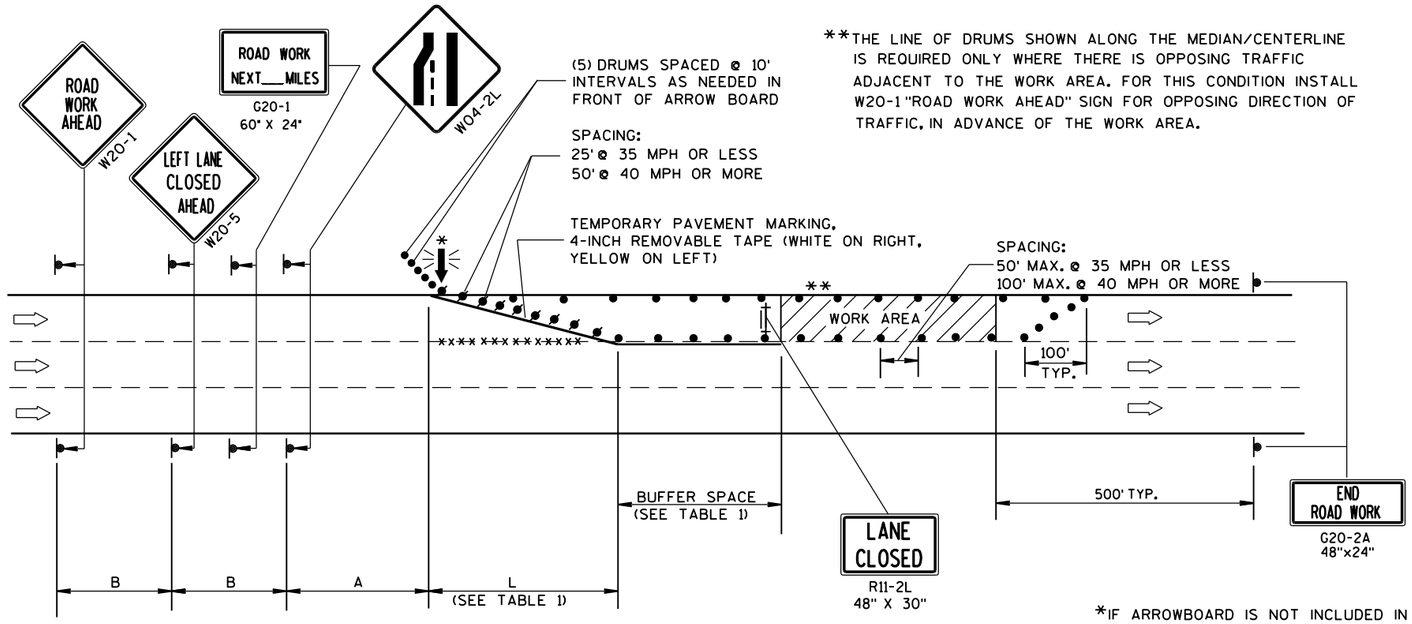
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

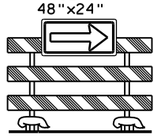


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

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

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.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

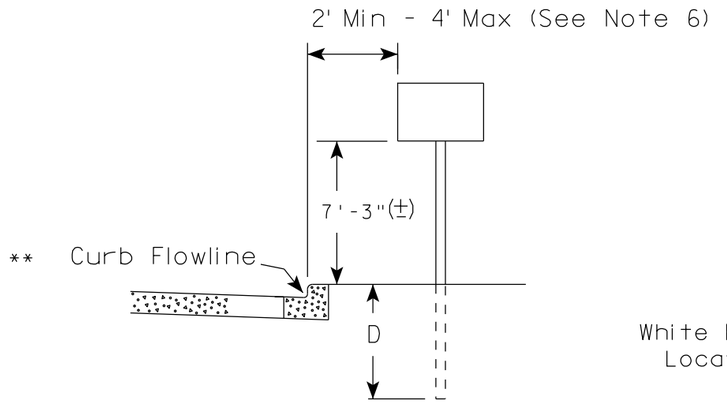
6

S.D.D. 15 D 20-3

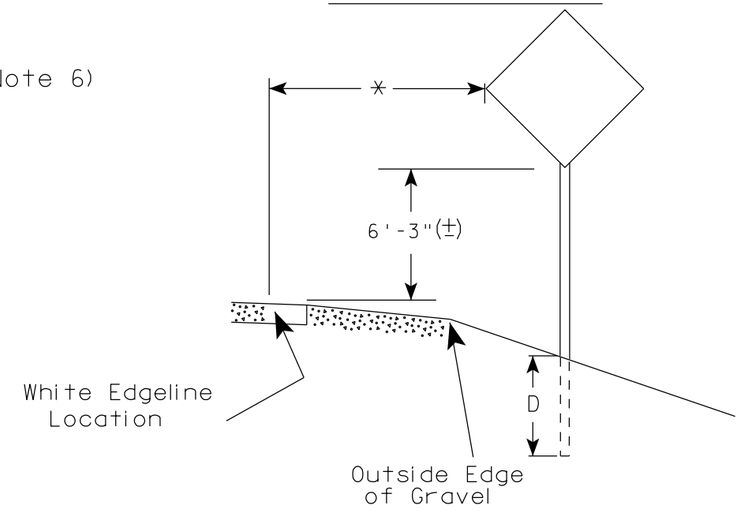
6

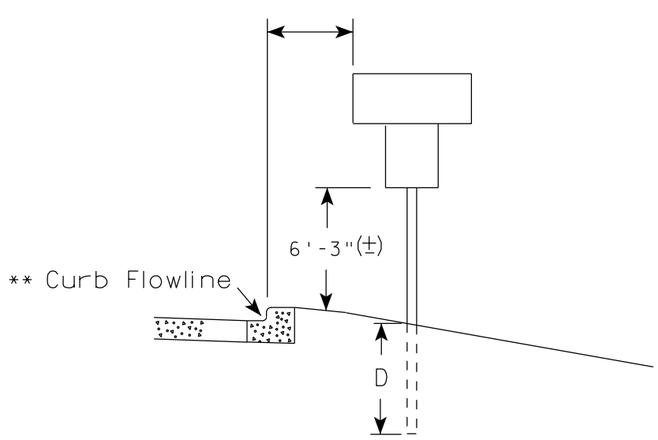
S.D.D. 15 D 20-3

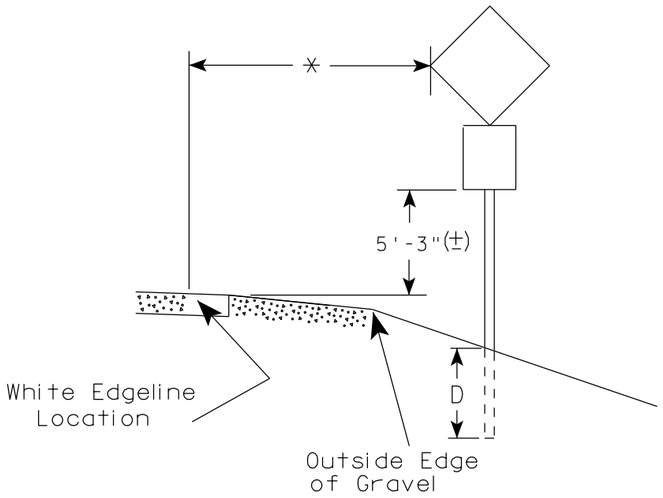
URBAN AREA



RURAL AREA (See Note 2)







** 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.

POST EMBEDMENT DEPTH

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

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 directd 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" (±).

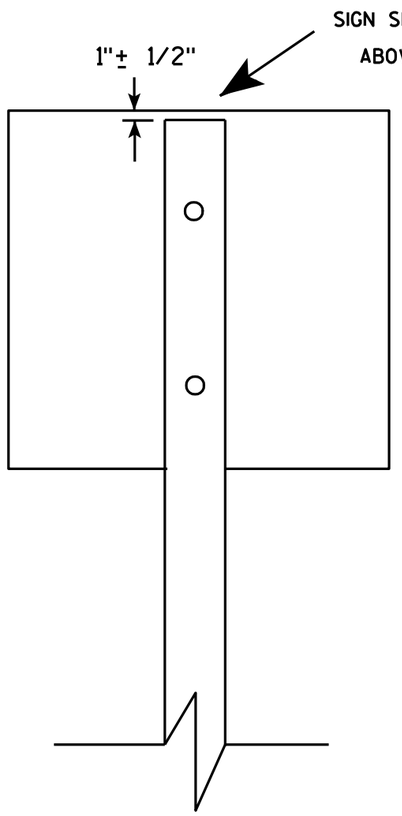
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

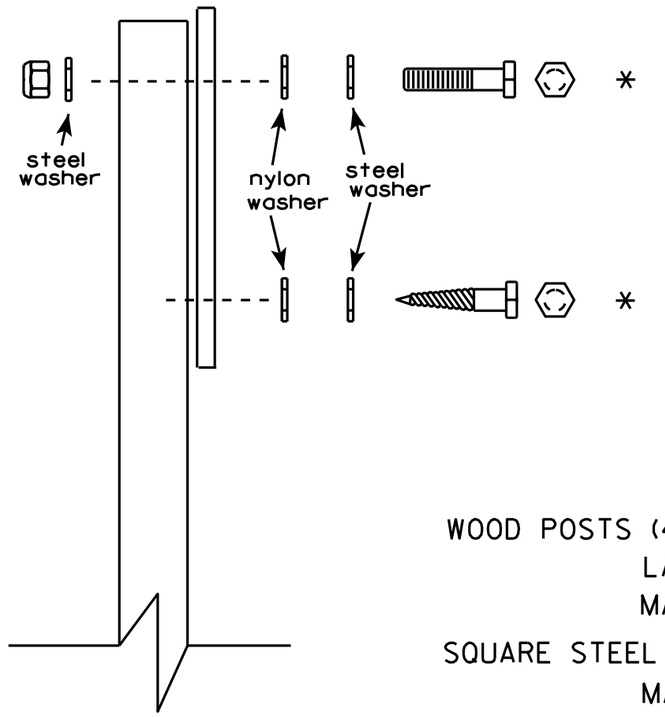
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





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

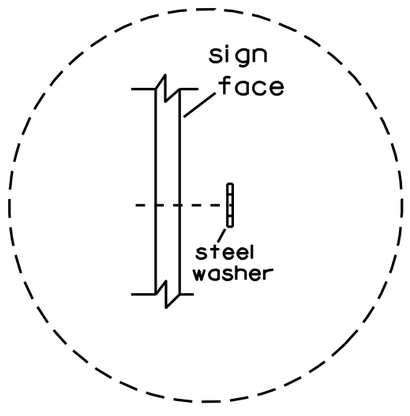
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 Matthew R Rauch
for State Traffic Engineer

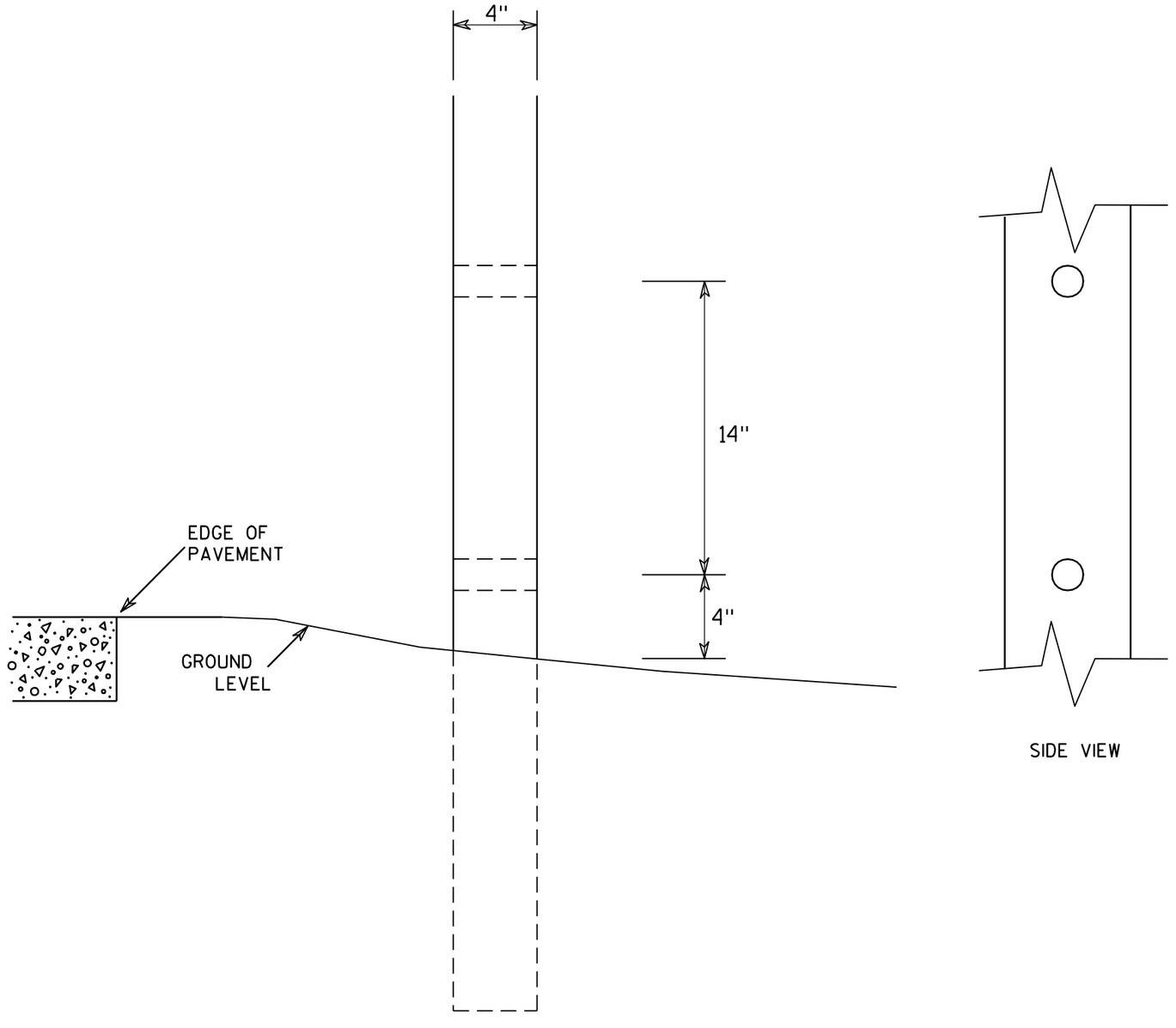
DATE 3/23/10 PLATE NO. A4-8.7

7

7

PROJECT NO:

SHEET NO: 42 E



SIDE VIEW

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

7

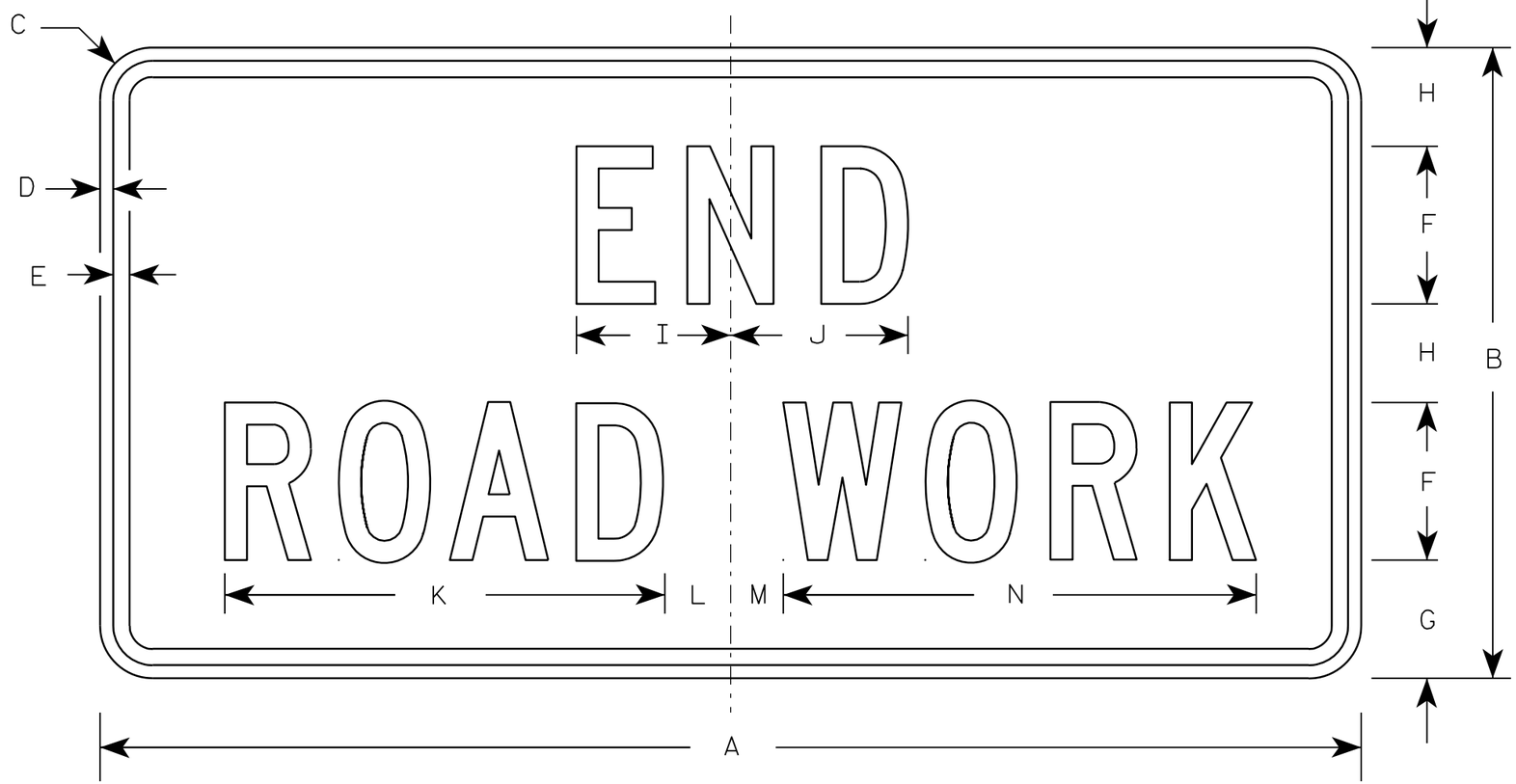
4 X 6 WOOD POST MODIFICATIONS

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: 43	E



G20-2A

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 - 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.

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 m2
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

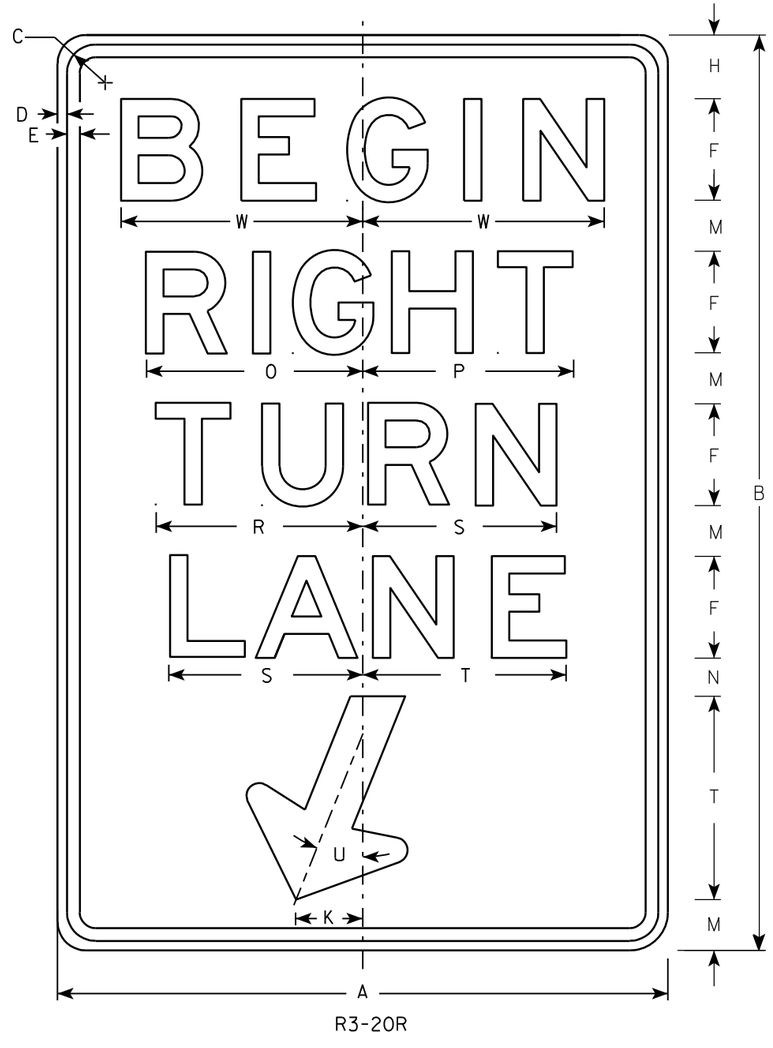
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

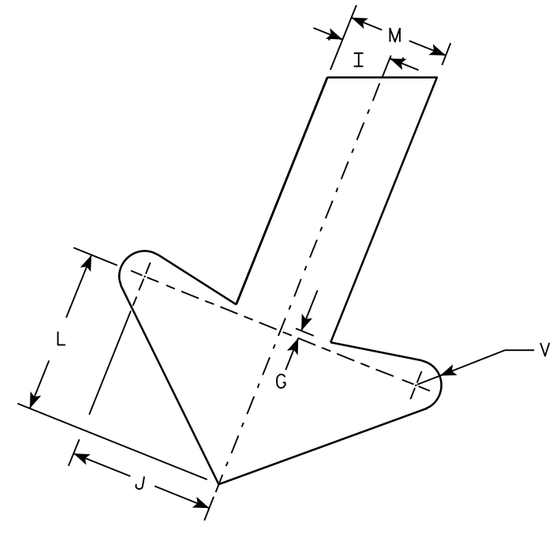
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 44	E



R3-20R

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.



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																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

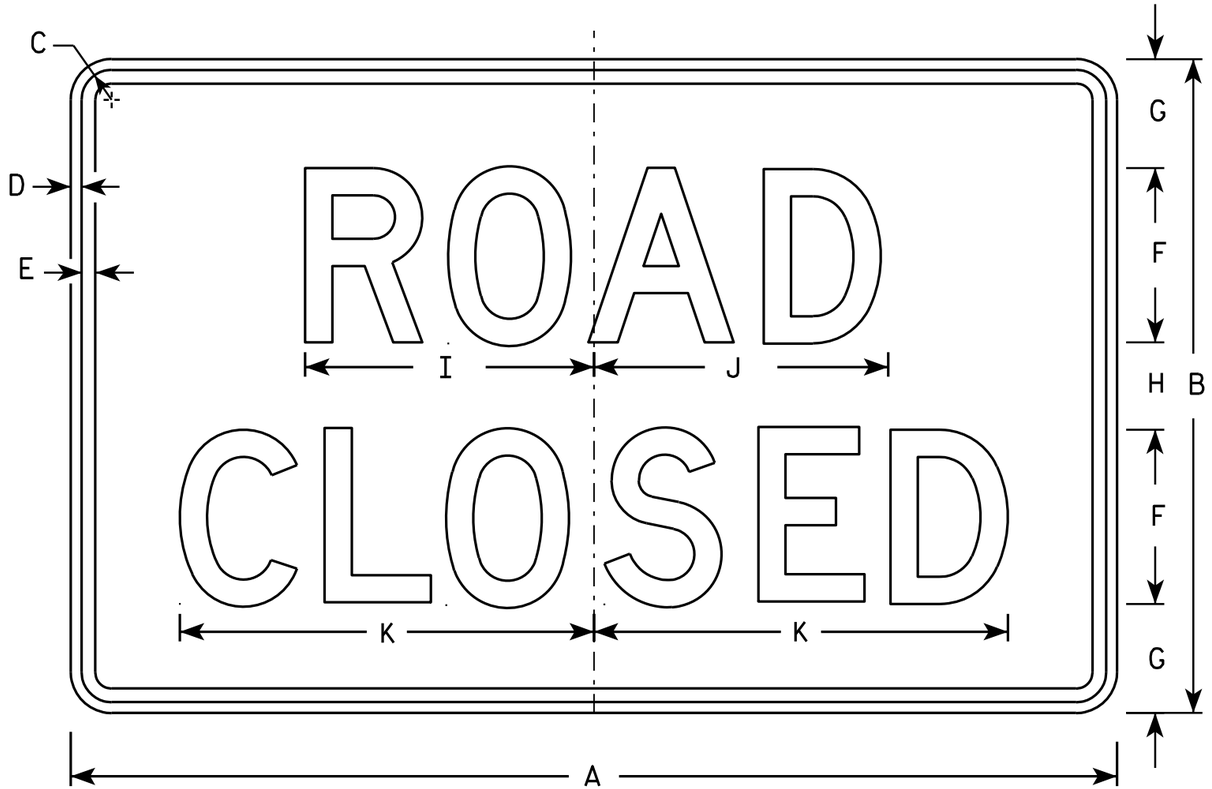
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

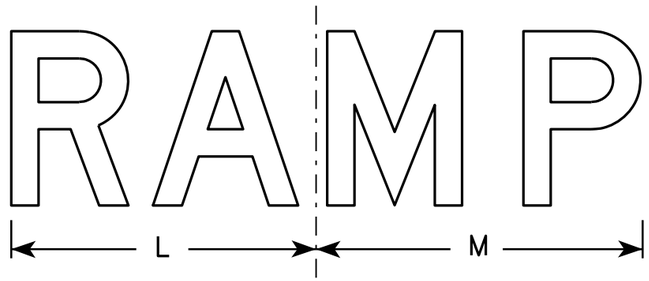
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 45 | E



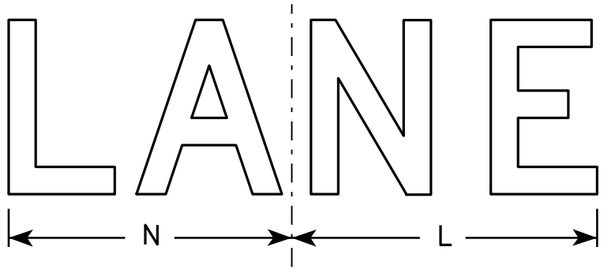
R11-2

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.



R11-2R



R11-2L

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

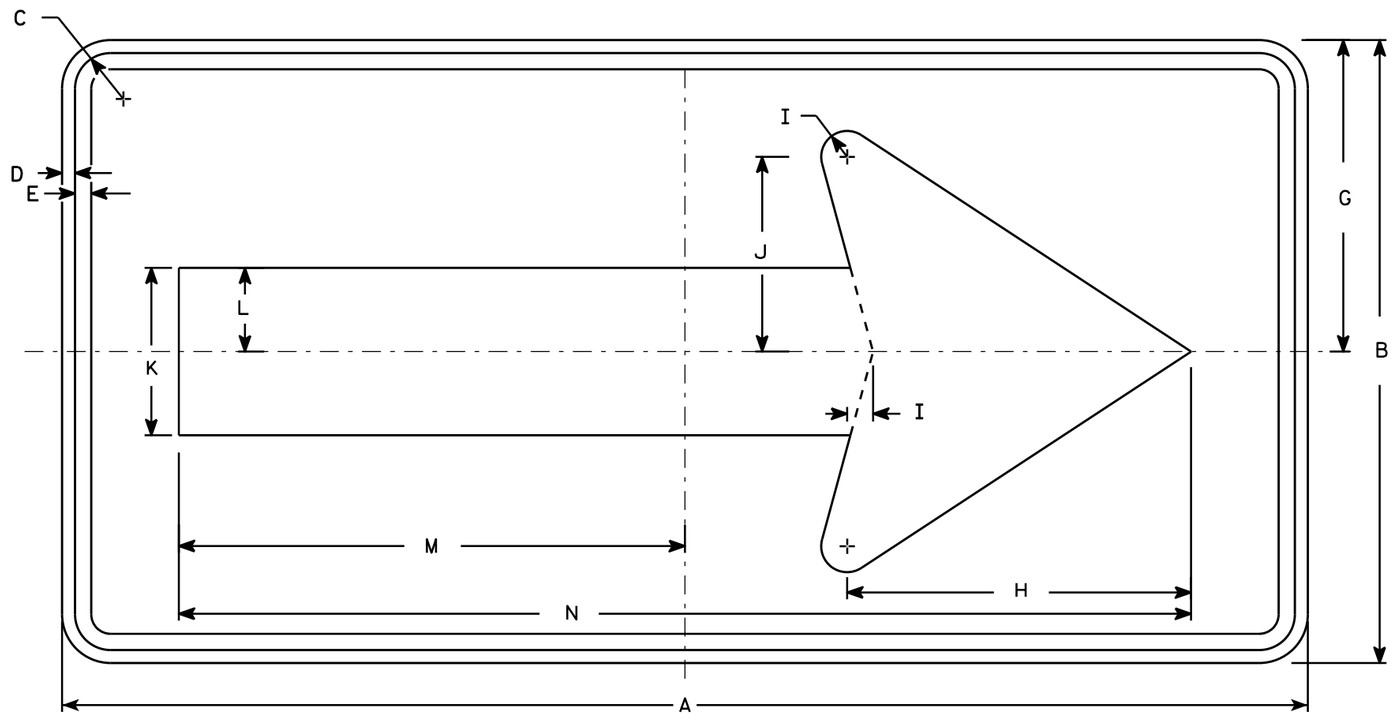
STANDARD SIGN
R11-2

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: 46 | E



W01-6

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.

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	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

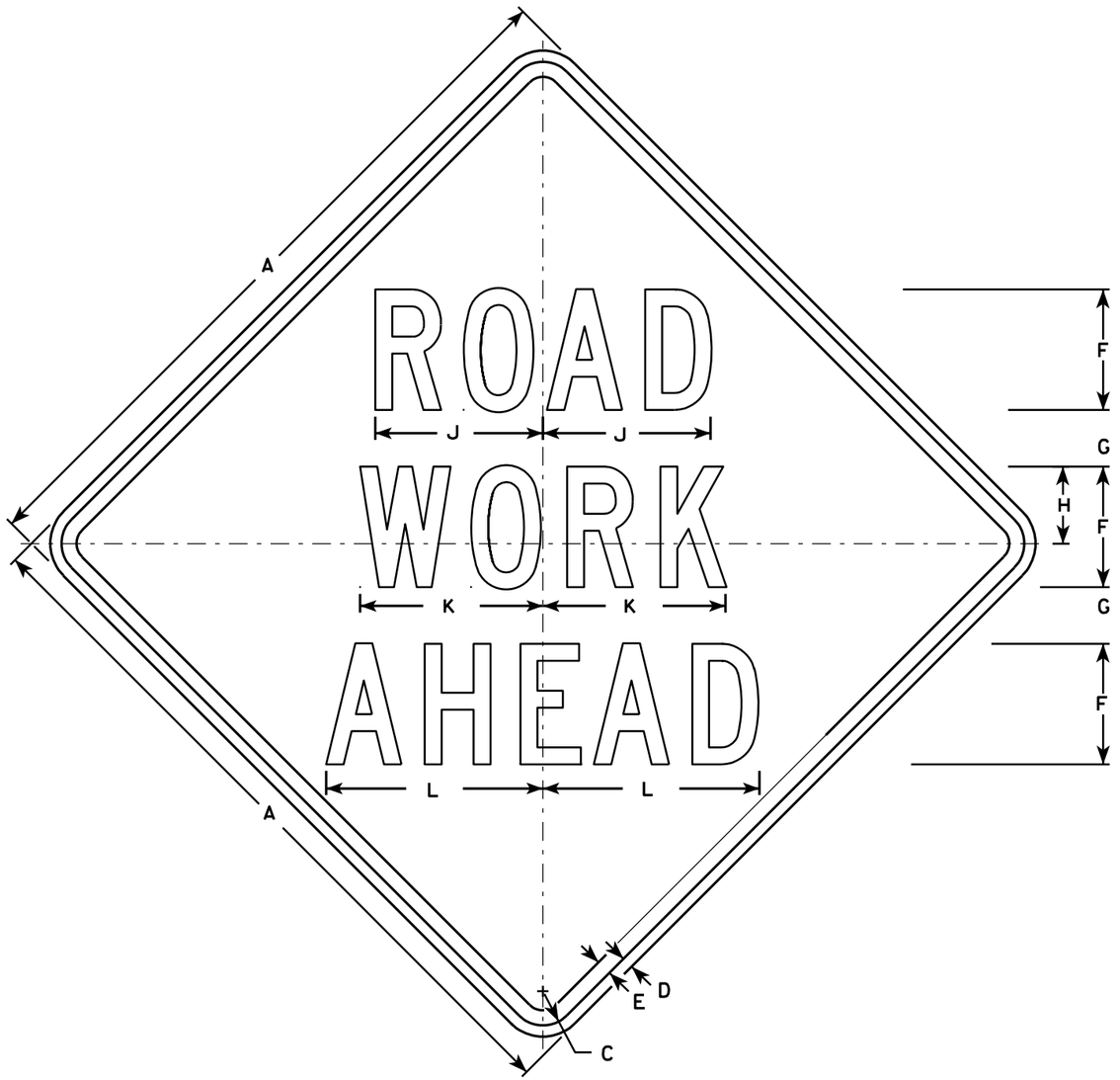
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

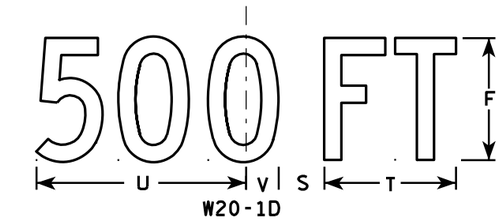
DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

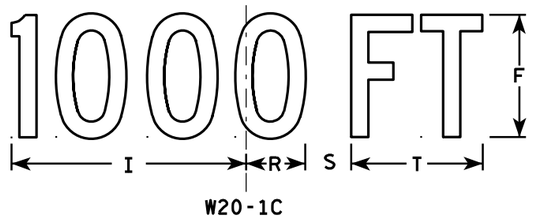
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



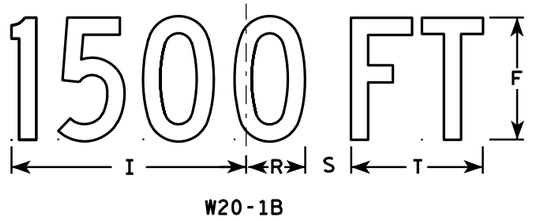
W20-1A



W20-1D

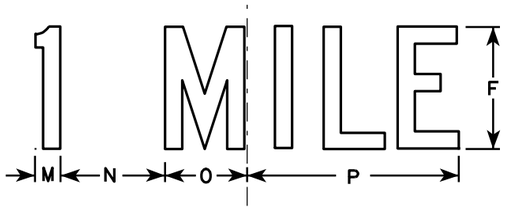


W20-1C



W20-1B

W20-1G



W20-1F

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 - 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	1 7/8	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		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		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		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		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		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 Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-1.9

PROJECT NO:

SHEET NO: 48 E

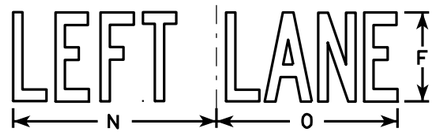
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

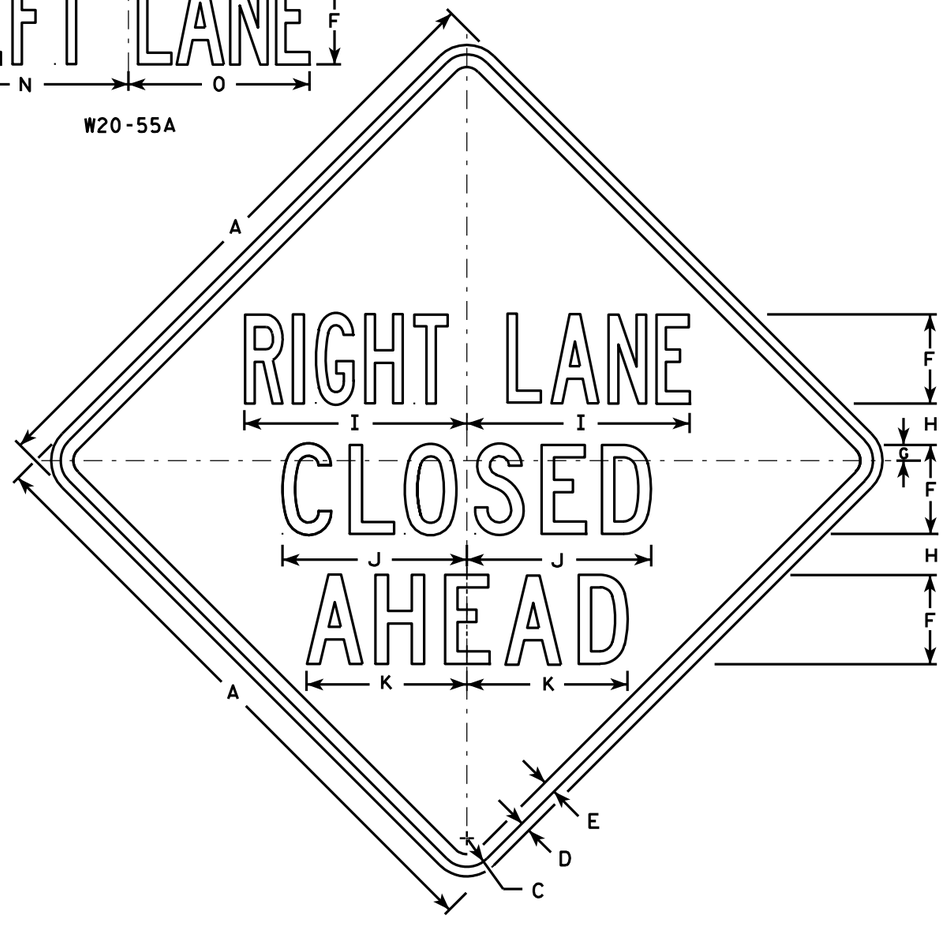
7

7

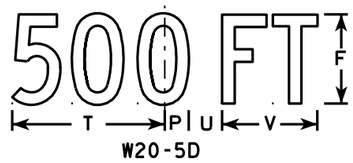
W20-56A



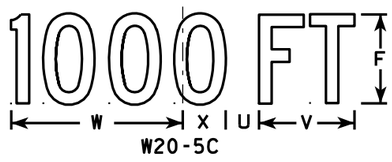
W20-55A



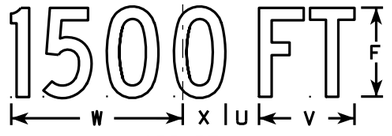
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

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	1/8	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 1/8	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

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 49 | E

7

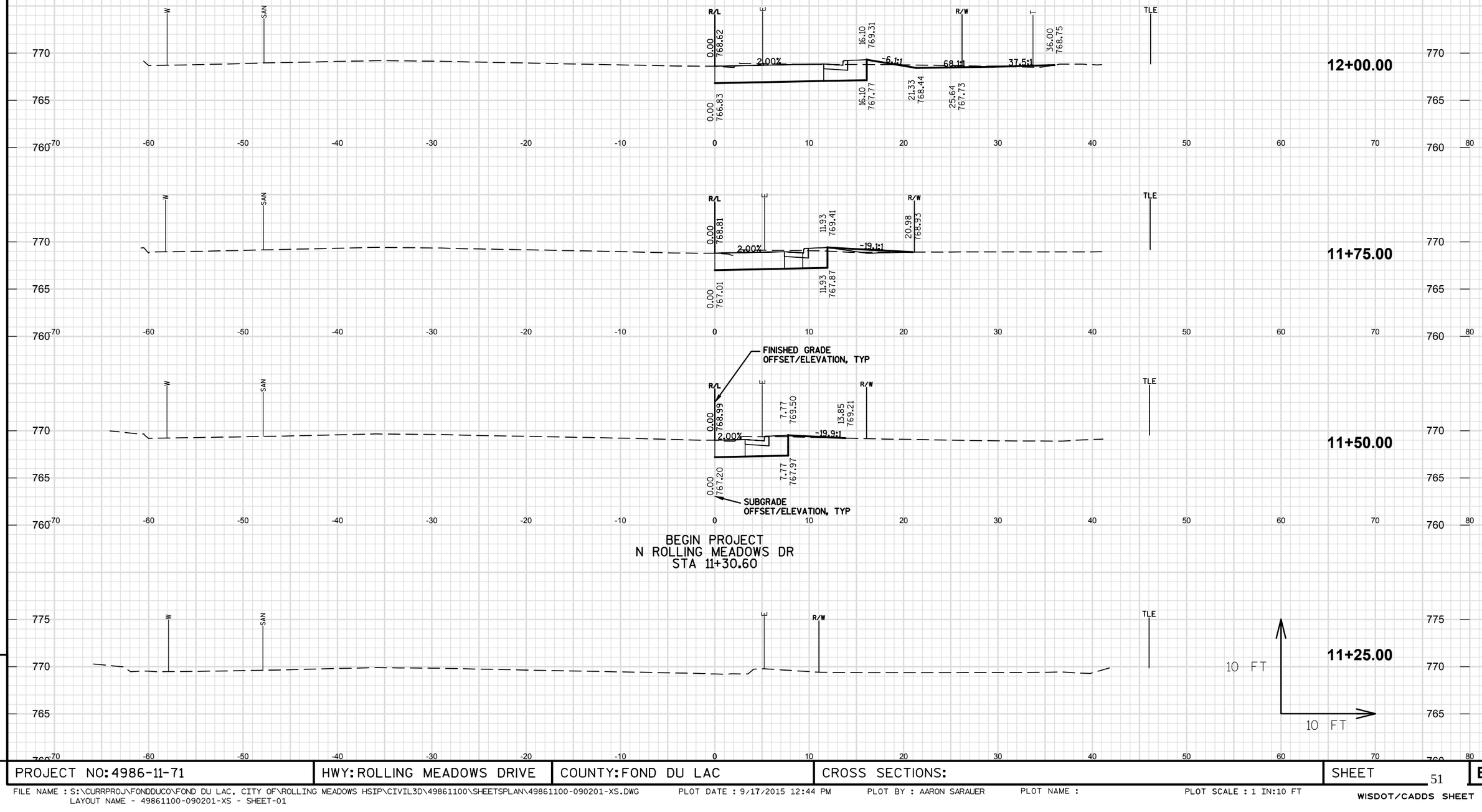
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.25	Note 3
11+25	1125	0	0	0	0	0	0	0	0
11+50	1150	25	15	0	7	0	7	0	7
11+75	1175	25	23	1	18	1	25	1	24
12+00	1200	25	31	1	25	1	49	2	47
12+25	1225	25	46	1	36	1	85	4	82
12+50	1250	25	49	1	44	1	129	4	125
12+75	1275	25	50	1	46	1	175	5	170
13+00	1300	25	44	2	44	1	218	6	212
13+25	1325	25	49	12	43	6	262	14	247
13+50	1350	25	198	0	114	6	376	21	355
13+75	1375	25	151	0	161	0	537	21	516
14+00	1400	25	0	0	70	0	607	21	586
				Column Totals	**607**	**17**			

Notes	
1 - Cut	Salvaged/Unusable Pavement Material is Included in Cut
2 - Fill	Does Not Include Pavement Excavation Volume
3 - Mass Ordinate	[(Cut) - ((Fill) * Fill Factor)]

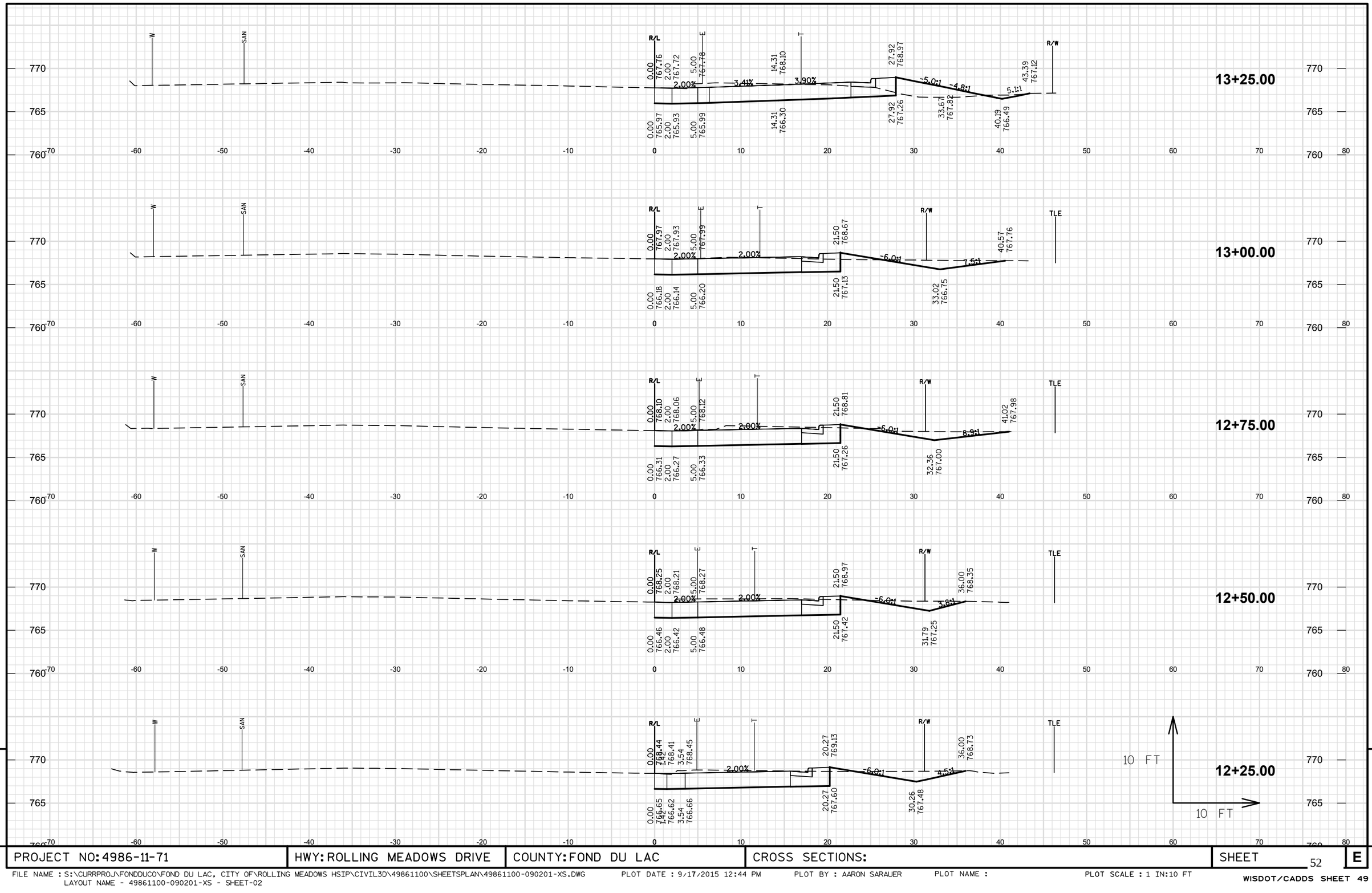
9

9



PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	CROSS SECTIONS:	SHEET 51	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-090201-XS.DWG
LAYOUT NAME - 49861100-090201-XS - SHEET-01
PLOT DATE : 9/17/2015 12:44 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



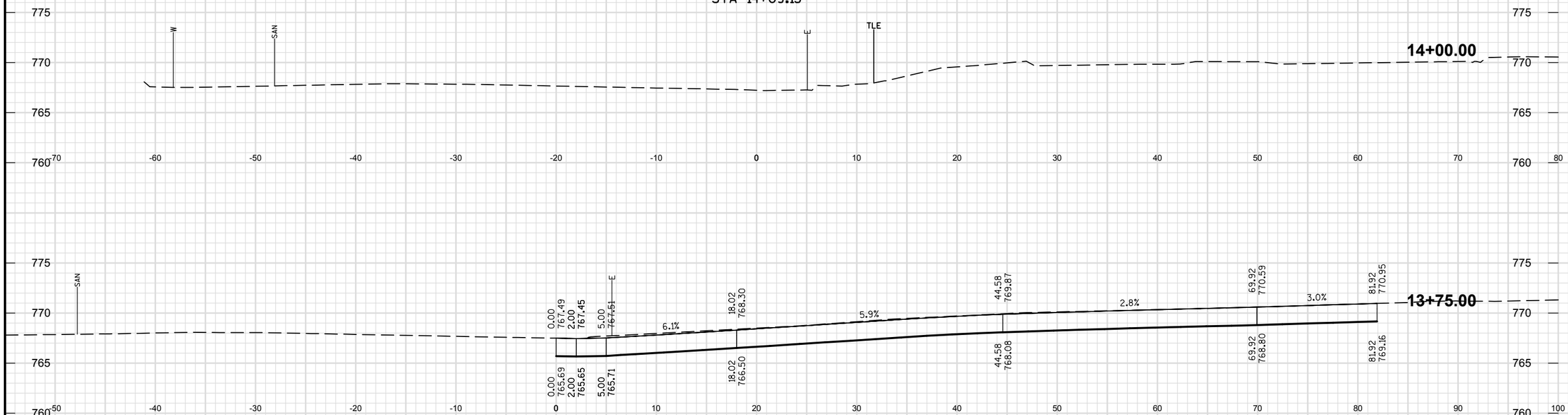
9

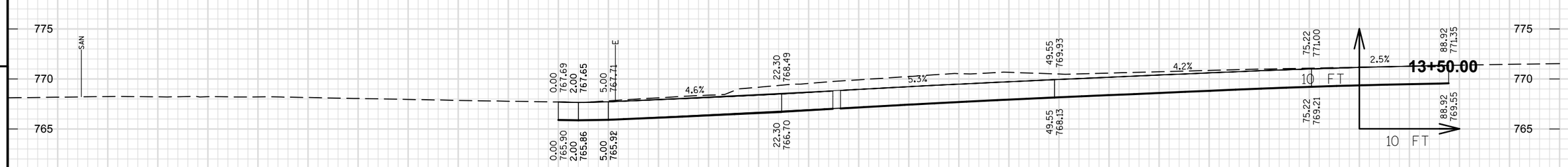
9

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	CROSS SECTIONS:	SHEET 52	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-090201-XS.DWG
LAYOUT NAME - 49861100-090201-XS - SHEET-02
PLOT DATE : 9/17/2015 12:44 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

END PROJECT
N ROLLING MEADOWS DR
STA 14+09.15





9

9

PROJECT NO: 4986-11-71	HWY: ROLLING MEADOWS DRIVE	COUNTY: FOND DU LAC	CROSS SECTIONS:	SHEET 53	E

FILE NAME : S:\CURRPROJ\FONDDUCO\FOND DU LAC, CITY OF\ROLLING MEADOWS HSIP\CIVIL3D\49861100\SHEETSPLAN\49861100-090201-XS.DWG
LAYOUT NAME - 49861100-090201-XS - SHEET-03
PLOT DATE : 9/17/2015 12:44 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov