WKE

FEB 13

PROJECT ID: 1030-11-74

WITH: 1030-11-70 1030-11-77 1030-11-78 1030-25-77 1030-25-78

COUNTY: RACINE

ORDER OF SHEETS

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

TOTAL SHEETS = 328

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

N-S FREEWAY - CTH K INTERCHANGE

WEST FRONTAGE ROAD AND LOCAL ROADS

IH 94

RACINE COUNTY

STATE PROJECT NUMBER

1030-11-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1030-11-74	WISC 2013044	1

Section No. 2- Sheet 32 replaced with revised sheet 32.

AS-BUILT PLAN

SUPERVISOR: Jason Roselle
PROJECT MANAGER: Mark Klipstein
PROJECT LEADER: Kerry Jones
CONTRACTOR: James Peterson Sons, Inc.
WORK STARTED 4/1/2013
WORK COMPLETED 11/22/2013

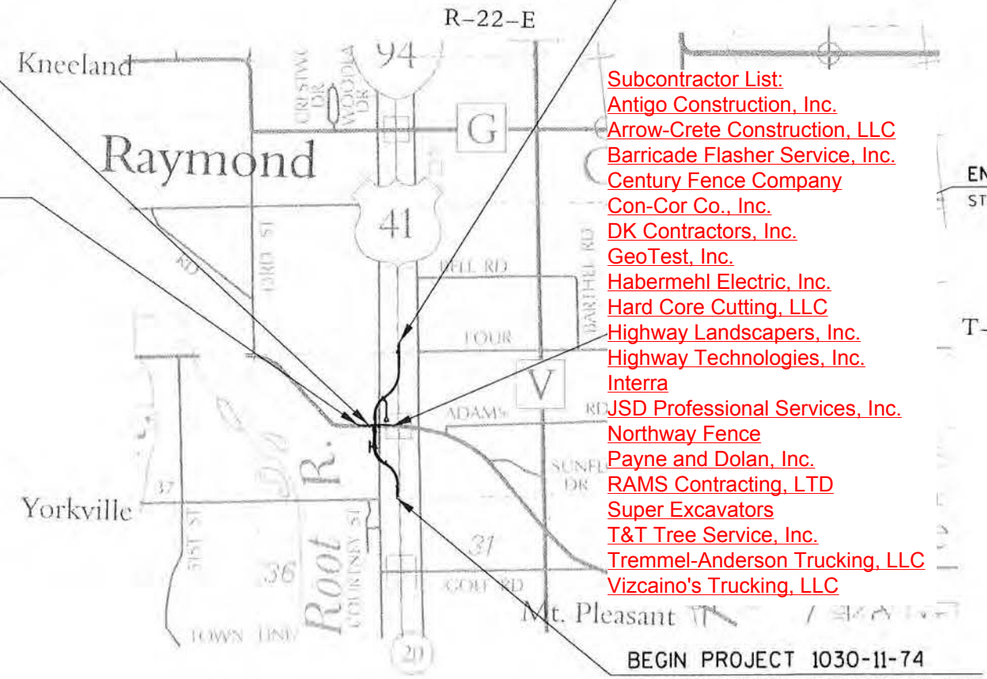
04



N

EQUATION

STA 2059+23.60 BK =
R/L WEST FRONTAGE ROAD
STA 4053+12.38 AH
R/L WEST FRONTAGE ROAD



END PROJECT 1030-11-74
STA 4085+50.00 R/L WEST FRONTAGE ROAD

END CONSTRUCTION
STA 39+08.7 R/L CTH K

T-4-N

BEGIN CONSTRUCTION
STA 27+36.1 R/L CTH K

T-4-N

BEGIN PROJECT 1030-11-74
STA 2030+25.00 R/L WEST FRONTAGE ROAD
Y = 202294.10
X = 593897.47

LAYOUT
SCALE 0 ½ MI.

TOTAL NET LENGTH OF CENTERLINE = 1.162 MI.

DESIGN DESIGNATION	CTH K	WEST FRONTAGE ROAD SOUTH OF CTH K	WEST FRONTAGE ROAD NORTH OF CTH K
A.A.D.T. 2010	= 9100	= 2,570	= 1,490
A.A.D.T. 2035	= 11,935	= 4,715	= 3,330
D.H.V. 2035	= 1750	= 433	= 433
D.D.	= 48/52	= 48/52	= 48/52
T.	= 16.9%	= 16.9%	= 16.9%
DESIGN SPEED	= 40-60 MPH	= 40-60 MPH	= 40-60 MPH
ESALS	= 12,775,000	= 3,489,400	= 3,489,400

CONVENTIONAL SYMBOLS

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

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

Subcontractor List:
Antigo Construction, Inc.
Arrow-Crete Construction, LLC
Barricade Flasher Service, Inc.
Century Fence Company
Con-Cor Co., Inc.
DK Contractors, Inc.
GeoTest, Inc.
Habermehl Electric, Inc.
Hard Core Cutting, LLC
Highway Landscapers, Inc.
Highway Technologies, Inc.
Interra
JSD Professional Services, Inc.
Northway Fence
Payne and Dolan, Inc.
RAMS Contracting, LTD
Super Excavators
T&T Tree Service, Inc.
Tremmel-Anderson Trucking, LLC
Vizcaino's Trucking, LLC

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY, NAD 1983 (97)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (91) (NAVD 88 (91))

ORIGINAL PLANS PREPARED BY
BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

WISCONSIN
DAVID J. TAPIA
34755-006
MENOMONEE FALLS, WI
PROFESSIONAL ENGINEER

8/25/12 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	BLOOM COMPANIES, LLC
Project Manager	JOSHUA LEVEQUE
Regional Examiner	
Regional Supervisor	WAFA ELOAO

APPROVED FOR THE DEPARTMENT
DATE: 8/25/12 (Signature)

E

UTILITY CONTACTS

AT&T LONG DISTANCE
866 ROCK CREEK ROAD
PLANO, IL 60545
CAL DONAHUE
(847) 420-9115
cdonahue@ems.att.com

AT&T WISCONSIN
4420 COUNTY LINE ROAD
RACINE, WISCONSIN 53403
KEITH ROSENBERG
(262) 636-0787

CALEDONIA DISTRICT #1 MANAGER
333 4-1/2 MILE ROAD
RACINE, WI 53402
BOB LUI
(262) 681-3900

LEVEL 3 COMMUNICATIONS, LLC
ONE TECHNOLOGY CENTER
MAIL DROP TC-95
100 CINCINNATI AVE.
MARSHA KIDD
(918) 547-0029
level3.networklocations@level3.com

WE ENERGIES-ELECTRIC
333 W.EVERETT STREET - A279
MILWAUKEE, WI 53203
DAN SANDE
(414) 221-4578
dan.sande@we-energies.com

WE ENERGIES - (GAS OPERATIONS)
333 W.EVERETT STREET - A279
MILWAUKEE, WI 53203
DAN SANDE
(414) 221-4578
dan.sande@we-energies.com
CARL DRECHSLER (FIELD)
(262) 552-3428

WISDOT ATR PULL BOXES
935 S. 60TH STREET
WEST ALLIS, WI 53214
CLIFF SEROWSKI
(414) 266-1157
clifford.serowski@dot.wi.gov

WISDOT SIGNALS
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187-0798
ANDREW DIRKS
(262) 548-8642
andrew.dirks@dot.wi.gov

WISDOT TRAFFIC LIGHTING
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187-0798

STATE AGENCIES

WISDOT SOUTHEAST REGION
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187-0798
MR. JOSHUA LEVEQUE, PROJECT MANAGER
OFFICE (262) 548-5926 CELL (414) 750-2029
joshua.leveque@dot.wi.gov

WISDOT SOUTHEAST REGION
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187
KARLA LEITHOFF, WETLAND ECOLOGIST
karla.leithoff@dot.wi.gov

WISCONSIN DEPARTMENT OF NATURAL RECOURCES
DISTRICT DNR AREA LIASON
141 NW BARSTOW STREET, ROOM 180
WAUKESHA WI, 53188
CRAIG WEBSTER,
WATER RESOURCE MANAGEMENT SPECIALIST
(262) 574-2141
craig.webster@wisconsin.gov

OTHER AGENCIES

VILLAGE OF CALEDONIA
6922 NICHOLSON ROAD
CALEDONIA, WI 53108
MIKE HAYEK
(262) 835-6423
mhayek@caledoniawi.com

RACINE COUNTY DEPARTEMENT OF PUBLIC WORKS
14200 WASHINGTON AVENUE
STURTEVANT, WI 53177
JEFF KATZ
(262) 886-8440
jeff.katz@goracine.org

CALEDONIA STORM SEWER UTILITY COMMISSION
6922 NICHOLSON ROAD
CALEDONIA, WI 53108
TONY BUNKELMAN
(262) 835-6416
abunkelman@caledoniawi.com

TOWN OF RAYMOND TOWN CLERK
2255 S. 76TH STREET
FRANKSVILLE, WI 53126
MS. LINDA TERRY
(262) 835-4426
townofraymond@core.com

BLOOM COMPANIES
10501 W. RESEARCH DRIVE, SUITE 100
MILWAUKEE, WI 53226
DAVID TAPIA
(414) 292-4538
dtapia@bloomcos.com

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
EXISTING SIGNING
PERMANENT SIGNING
PERMANENT MARKING
STAGED CONSTRUCTION/TRAFFIC CONTROL
FENCING
ALIGNMENT PLAN

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

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. SEE UTILITY OCCUPATION PLANS FOR ADDITIONAL INFORMATION.

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

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCIDENTAL ITEMS INCLUDED IN THE COST OF THE CONCRETE PIPE.

HMA PAVEMENT AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS SHALL BE SAWCUT AT THE MATCHLINE AS SHOWN ON THE PLAN & PROFILES OR AS DIRECTED BY THE ENGINEER.

A SAWED JOINT IS REQUIRED WHERE NEW ASPHALTIC CONCRETE SURFACE MEETS EXISTING ASPHALTIC CONCRETE SURFACE.

EXISTING DRIVEWAYS AND FIELD ENTRANCES SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

TYPICAL SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED.

THE QUANTITY OF SALVAGED TOPSOIL IS COMPUTED FROM MEASUREMENTS TAKEN:
A) ALONG THE HIGHWAY'S OUTSIDE SLOPE AREAS, BETWEEN ITS SUBGRADE SHOULDER OR BACK OF CURB AND A POINT POSTIONED 5-FEET PAST THE SLOPE INTERCEPT INDICATED BY THE CROSS SECTIONS (TO ALLOW FOR SLOPE ROUNDING); PLUS
B) WITHIN THE HIGHWAY MEDIAN AREAS BETWEEN THE INSIDE SHOULDER SUBGRADE OR BACK OF CURB.

BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS LIGHT RIPRAP OR MEDIUM RIPRAP.

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE.

CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 4 INCHES OR 0 TO 6 INCHES IN 6 FEET.

CONCRETE MEDIAN SLOPED NOSE SHALL BE CONSTRUCTED FOR ALL MEDIAN OPENINGS AT INTERSECTIONS WITH CURB & GUTTER.

SUBSURFACE EXPLORATION REPORTS WERE PREPARED BY MIDWEST ENGINEERING SERVICES, INC. DATED JANUARY 26,2007. THESE REPORTS ARE AVAILABLE BY CONTACTING WISDOT (BILL MOHR 414-220-5444)

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOUDER POINTS, SHALL BE TOPSOILED FERTILIZED AND SEEDED WITHIN 7 DAYS AFTER PLACEMENT OF SALVAGED TOPSOIL AS DIRECTED BY THE ENGINEER.

WISDOT WILL FURNISH THE CONTRACTOR A MONUMENT WHICH SHALL BE SET IN THE STRUCTURES AS DESIGNATED BY THE ENGINEER IN THE FIELD.

REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.

FERTILIZER SHALL NOT BE USED NEAR NAVIGATABLE WATERWAYS OR WETLANDS.

COORDINATE WITH RACINE COUNTY PLANNING AND DEVELOPMENT DIRECTOR, JULIE ANDERSON, AT (262) 886-8470 TO PERPETUATE SECTION CORNERS 10 DAYS PRIOR TO BEGINNING OF CONSTRUCTION OPERATIONS.

BASE AGGREGATE DENSE QUANTITIES WERE COMPUTED USING 2.1 TONS/CY FOR 3/4-INCH AND 1 1/4-INCH.

PLACE SEEDING MIXTURE NO 60 & FERTILIZER B ON EMBANKMENT SLOPES ADJACENT TO WETLAND AREAS.

ALL TYPES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

TOTAL LAYER THICKNESS	LAYERS	NOMINAL MAXIMUM SIZE GRADATION
4"	1 3/4" UPPER LAYER	12.5 mm
	2 1/4" LOWER LAYER	19.0 mm
5"	1 3/4" UPPER LAYER	12.5 mm
	3 1/4" LOWER LAYER	19.0 mm
5.5"	1 3/4" UPPER LAYER	12.5 mm
	3 3/4" LOWER LAYER	19.0 mm

THE FOLLOWING PLANS WERE PREPARED FOR THIS PROJECT BY: BLOOM COMPANIES, LLC.

RAS NATIONAL PREPARED: EROSION CONTROL, STORM SEWER, STORM WATER PONDS, PERMANENT SIGNING, PAVEMENT MARKING AND CONSTRUCTION STAGING / DETOUR.

STANDARD ABBREVATIONS

AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALTIC
BK	BACK
BM	BENCH MAK
CL OR C/L	CENTER OR CONSTUCTION LINE
Δ	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CP	CULVERT PIPE
CY	CUBIC YARD
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPT	CULVERT PIPE TEMPORARY
D	DEGREE OF CURVE
DIA	DIAMETER
DISCH	DISCHARGE
EL OR ELEV	ELEVATION
EW	ENDWALL
EBS	EXCAVATION BELOW SUBGRADE
FF	FACE TO FACE
FE	FIELD ENTRANCE
FS	FULL SUPERELEVATION
FT	FOOT
HES	HIGH EARLY STRENGTH
HMA	HOT MIX ASPHALT
INV	INVERT
LT	LEFT
LHF	LEFT HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
MIN	MINIMUM
ML OR M/L	MATCHLINE
NC	NORMAL CROWN
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PCC	POINT OF COMPOUND CURVE
PC	POINT OF CURVE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PE	PRIVATE ENTRANCE
PL	PROPERTY LINE
R	RADIUS OF CURVE
RL OR R/L	REFERENCE LINE
REINF	REINFORCED
REQD	REQUIRED
RC	REVERSE CROWN
RT	RIGHT
RHF	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
SALV	SALVAGED
SF	SQUARE FOOT
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWING
STA	STATION
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE (HORIZONTAL ELLIPTICAL)
SE	SUPER ELEVATION
T	TANGENT
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VPCC	VERTICAL POINT OF COMPOUND CURVE
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPRC	VERTICAL OPINT OF REVERSE CURVE
VPT	VERTICAL POINT OF TANGENCY

2

2

TOWN OF RAYMOND

END PROJECT
I.D. 1030-11-74
STA 4085+50.00
R/L WEST FRONTAGE ROAD

EQUATION
STA 2059+23.60 BK =
R/L WEST FRONTAGE ROAD
STA 4053+12.38 AH
R/L WEST FRONTAGE ROAD

CTH K

WEST FRONTAGE ROAD

4 MILE RD.

FUHRMAN DRIVE

NW POND
BY OTHERS
UNDER
1030-11-72

BEGIN CONSTRUCTION
STA 27+36.1 R/L CTH K

CONSTRUCTION UNDER
PROJECT ID 1030-11-70

NE POND

END CONSTRUCTION
STA 39+08.7 R/L CTH K

SW POND

MICHEL COURT

3 MILE RD.

BEGIN PROJECT
I.D. 1030-11-74
STA 2030+25.00
R/L WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

ADAMS RD.

VILLAGE OF CALEDONIA

CONSTRUCTION UNDER
PROJECT ID 1030-11-70

NICHOLAS RD.

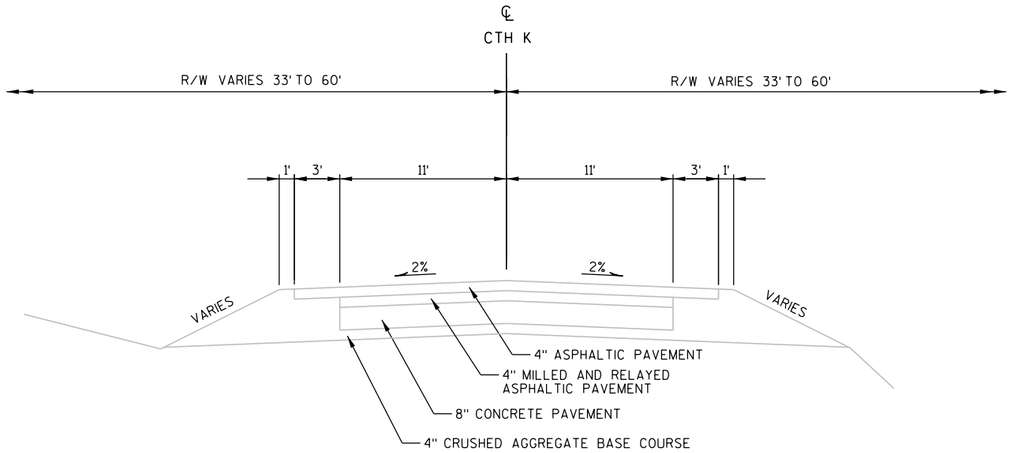
IH 94 SB

IH 94 NB

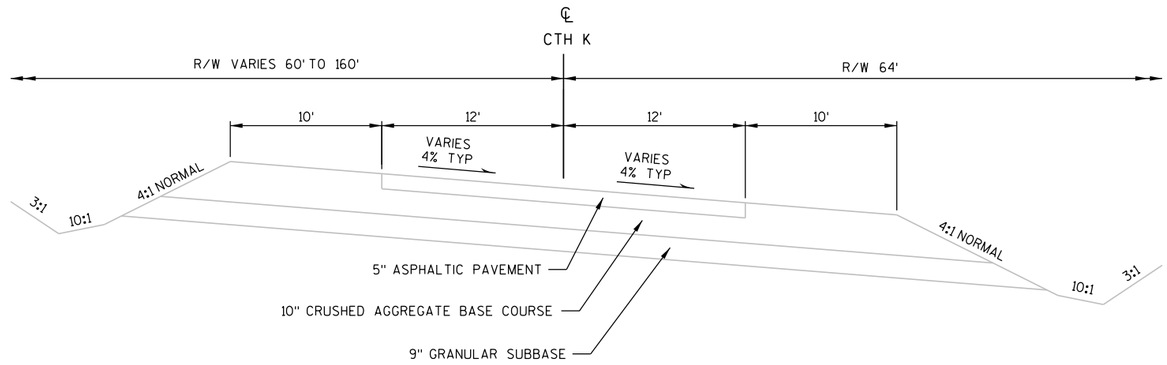
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PROJECT OVERVIEW	SCALE, FEET 0 300 600	SHEET 4	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\020101_po.dgn PLOT DATE : 25-JUN-2012 10:52 PLOT BY : rmakoutz PLOT NAME : 020101_po PLOT SCALE : 600:1

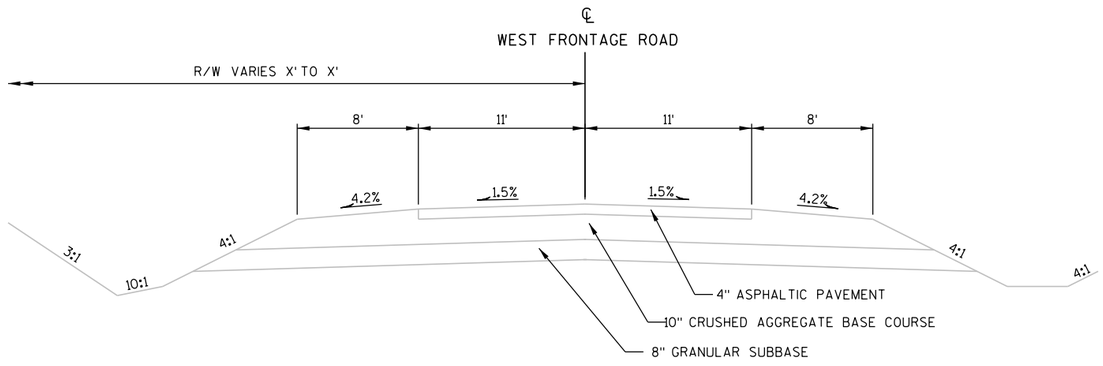
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
CTH K
STA 27+36 TO STA 34+75

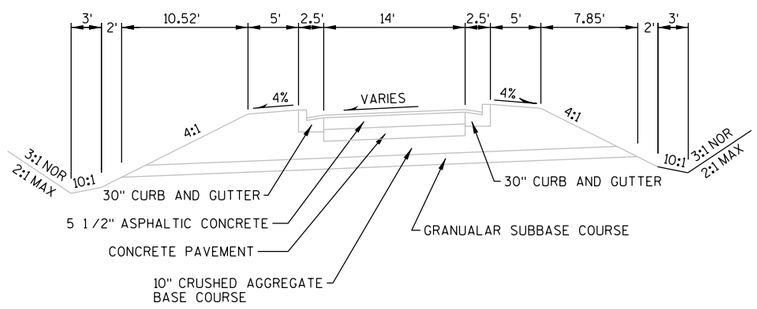


TYPICAL EXISTING SECTION
CTH K
STA 34+75 TO STA 39+09



TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 2030+25 TO STA 1049+11 (RAMP SW)
STA 1068+81 (RAMP NW) TO STA 4085+50
STA 1049+80 TO STA 1055+50 (RAMP SW)
STA 1055+00 TO STA 1061+62 (RAMP NW)

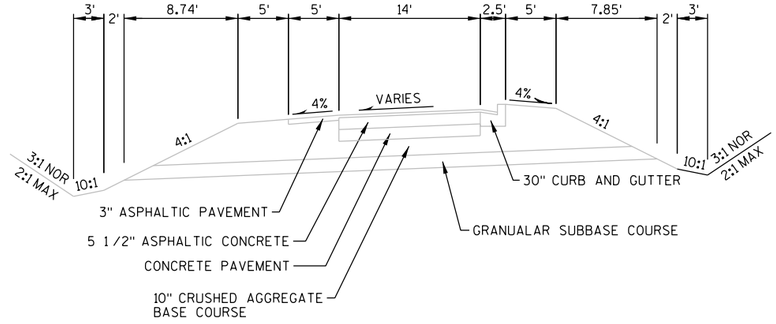
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL EXISTING SECTIONS	SCALE: NTS	SHEET 5	E



TYPICAL EXISTING SECTION
RAMPS

SCISSOR RAMP AREAS
CURB AND GUTTER BOTH SIDES

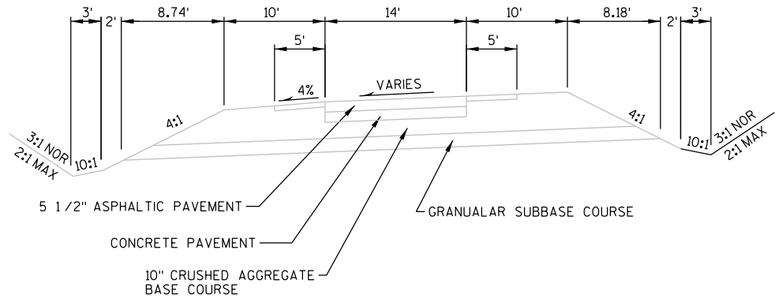
STA 1049+20 TO STA 1049+65 (IH 94)
STA 1066+23 TO STA 1067+94 (IH 94)
STA 1067+13 TO STA 1068+09 (IH 94)



TYPICAL EXISTING SECTION
RAMPS

BETWEEN MAINLINE AND SCISSOR RAMP AREAS
CURB AND GUTTER ONE SIDE

STA 1048+41 TO STA 1049+20 (IH 94)
STA 1049+65 TO STA 1049+80 (IH 94)
STA 1066+47 TO STA 1067+13 (IH 94)
STA 1068+09 TO STA 1069+51 (IH 94)

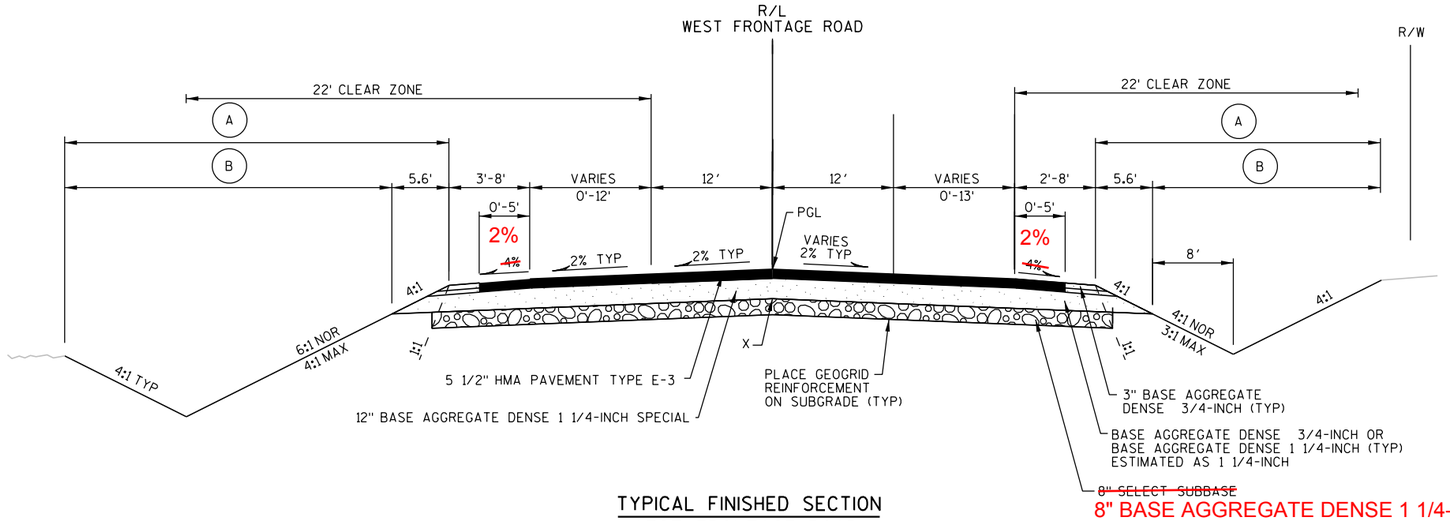


TYPICAL EXISTING SECTION
RAMPS

SCISSOR RAMP AREAS
WITHOUT CURB AND GUTTER

STA 1061+62 TO STA 1066+23 (IH 94)
STA 1069+51 TO STA 1070+42 (IH 94)

2



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD

STA 2030+25 TO STA 2034+26

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

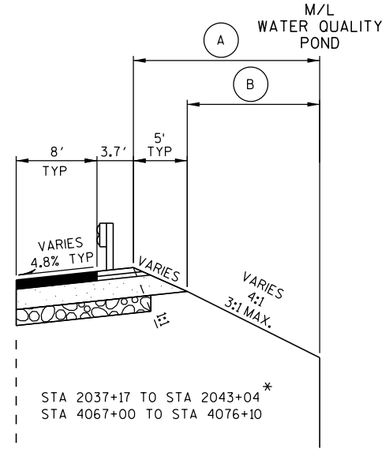
NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

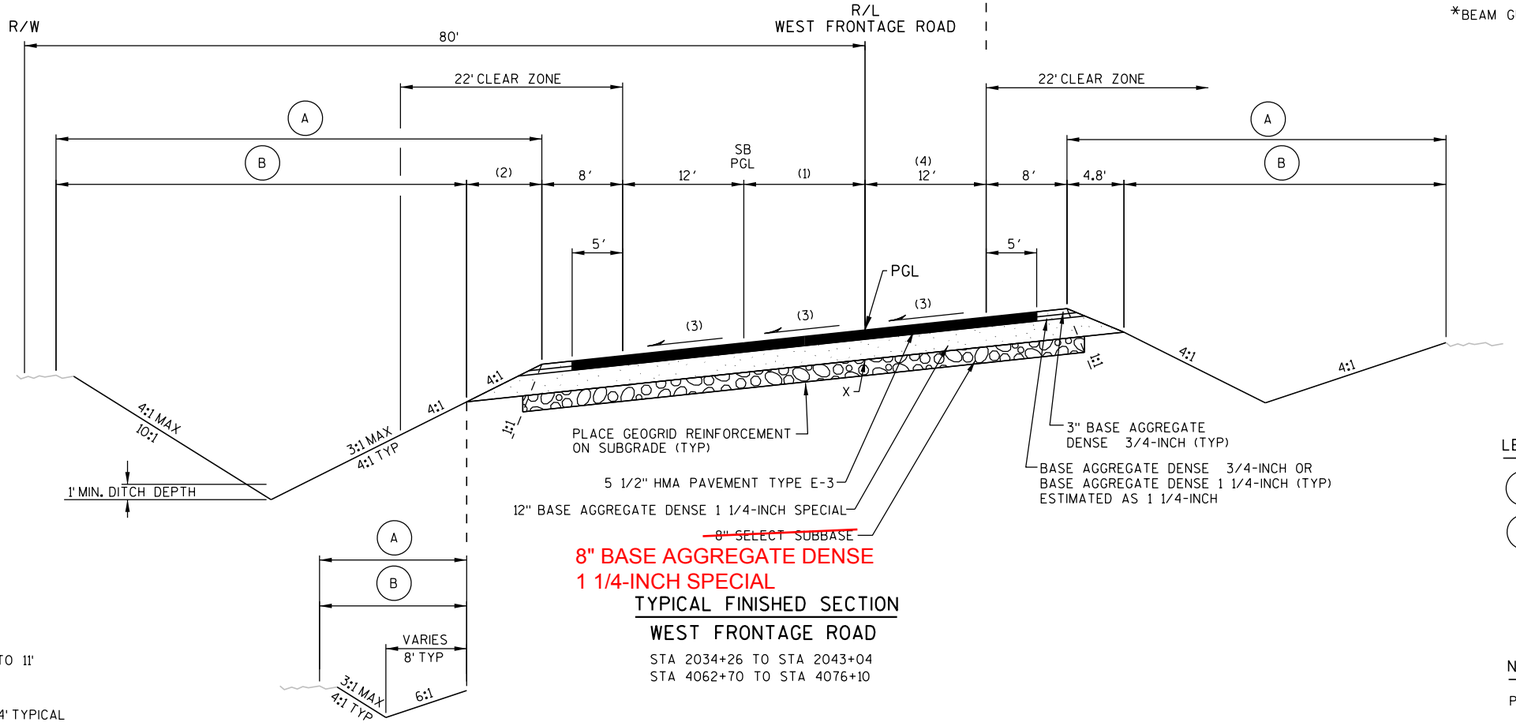
X = POINT REFERRED TO ON CROSS SECTION

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 7	E

2



*BEAM GUARD EXTENDS TO STA 2043+21



TYPICAL FINISHED SECTION

WEST FRONTAGE ROAD

STA 2034+26 TO STA 2043+04
STA 4062+70 TO STA 4076+10

DITCH SECTION

STA 2034+26 TO STA 2039+25
STA 4064+50 TO STA 4069+50

FOOTNOTES

(1) STA 2043+04 TO STA 2043+26 VARIES 0' TO 11'
STA 4062+70 TO STA 4075+00 0' TYPICAL

(2) STA 2043+04 TO STA 2043+26 VARIES 7.4' TYPICAL
STA 4062+70 TO STA 4075+00 VARIES 7.6' TYPICAL

(3) STA 2034+93 TO STA 2042+60 5.30%
STA 4066+25 TO STA 4074+70 4.80%

(4) STA 2034+26 TO STA 2034+62 VARIES 12' to 13'

LEGEND

A — SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

B — 4" SALVAGED TOPSOIL & MULCHING

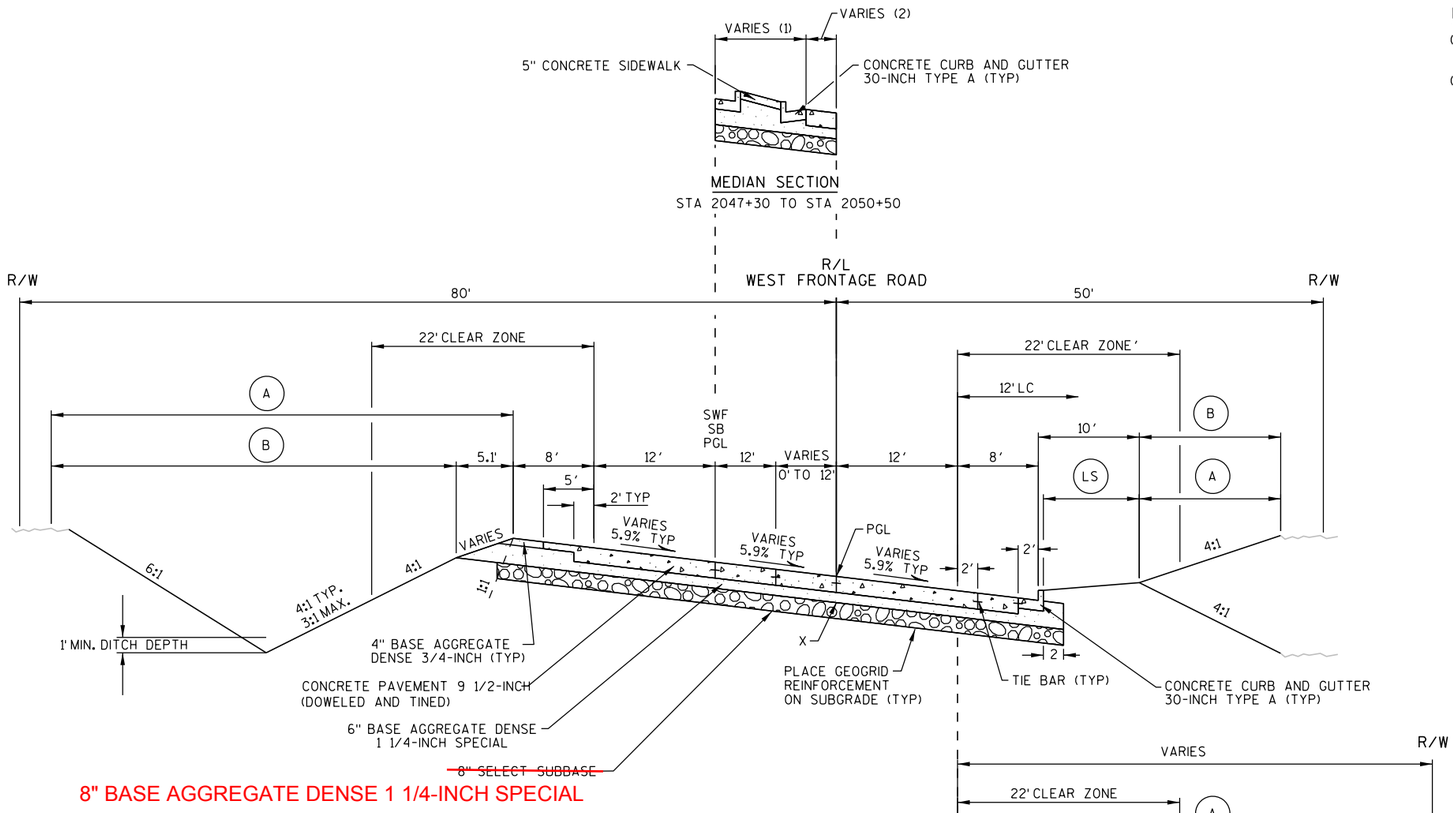
NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

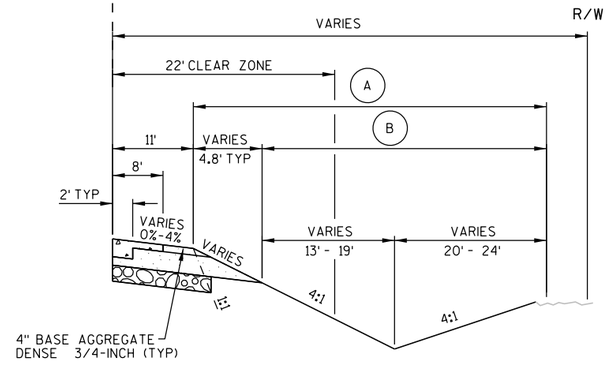
X = POINT REFERRED TO ON CROSS SECTION

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 8	E

2



8" BASE AGGREGATE DENSE 1 1/4-INCH SPECIAL



RURAL SECTION

STA 2043+04 TO STA 2045+10

*FLAT BOTTOM DITCH
STA 2043+04 TO STA 2043+70

TYPICAL FINISHED SECTION

WEST FRONTAGE ROAD

STA 2043+04 TO STA 2050+83

FOOTNOTES

(1) STA 2047+30 TO STA 2047+83 VARIES 13.8' TO 21.2'
STA 2047+83 TO STA 2050+50 VARIES 21.2' TO 24.0"

(2) STA 2047+30 TO STA 2047+83 VARIES 0' TO 6'

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

(LS) SOD LAWN, FERTILIZER TYPE B, AND 4" SALVAGED TOPSOIL

NOTES

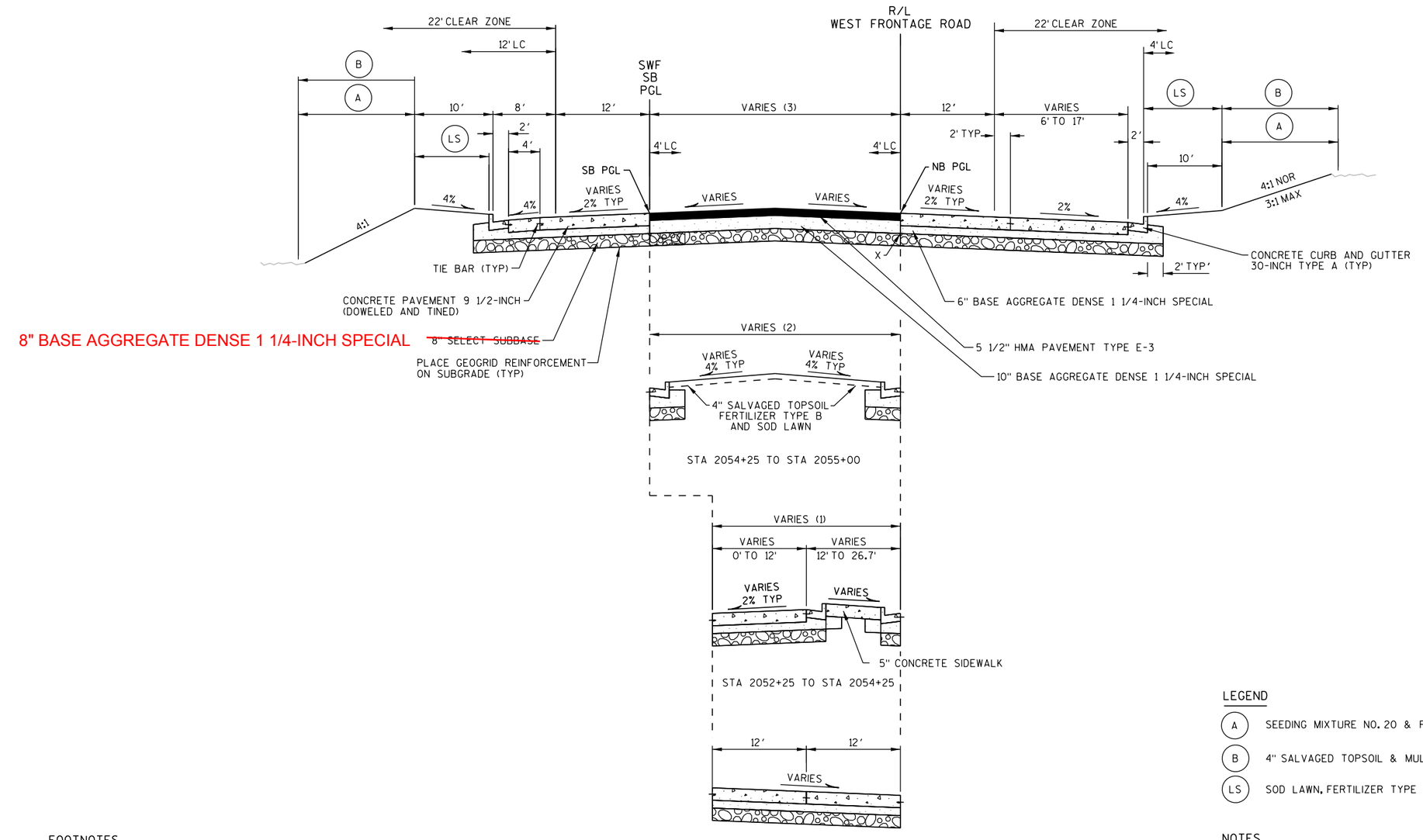
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

X = POINT REFERRED TO ON CROSS SECTION

LC = LATERAL CLEARANCE

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 9	E

2



FOOTNOTES

(1) STA 2052+25 TO STA 2054+20 24'
STA 2054+20 TO STA 2054+92 24' TO 26.7'

(2) STA 2054+92 TO STA 2055+00 26.7' TO 27'

(3) STA 2055+00 TO STA 2056+33 27' TO 32'

TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 2050+83 TO STA 2057+25

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

(LS) SOD LAWN, FERTILIZER TYPE B, AND 4" SALVAGED TOPSOIL

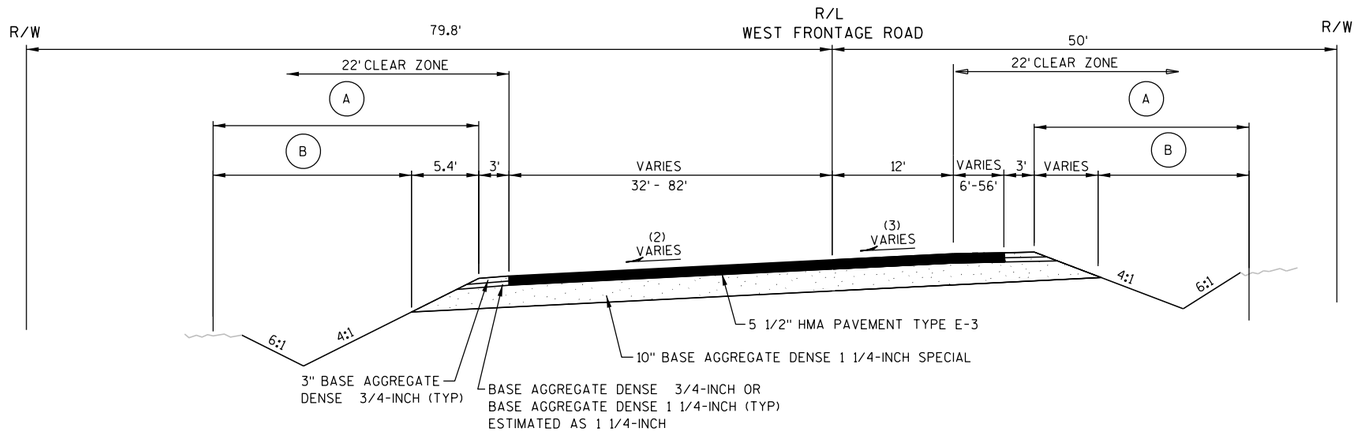
NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

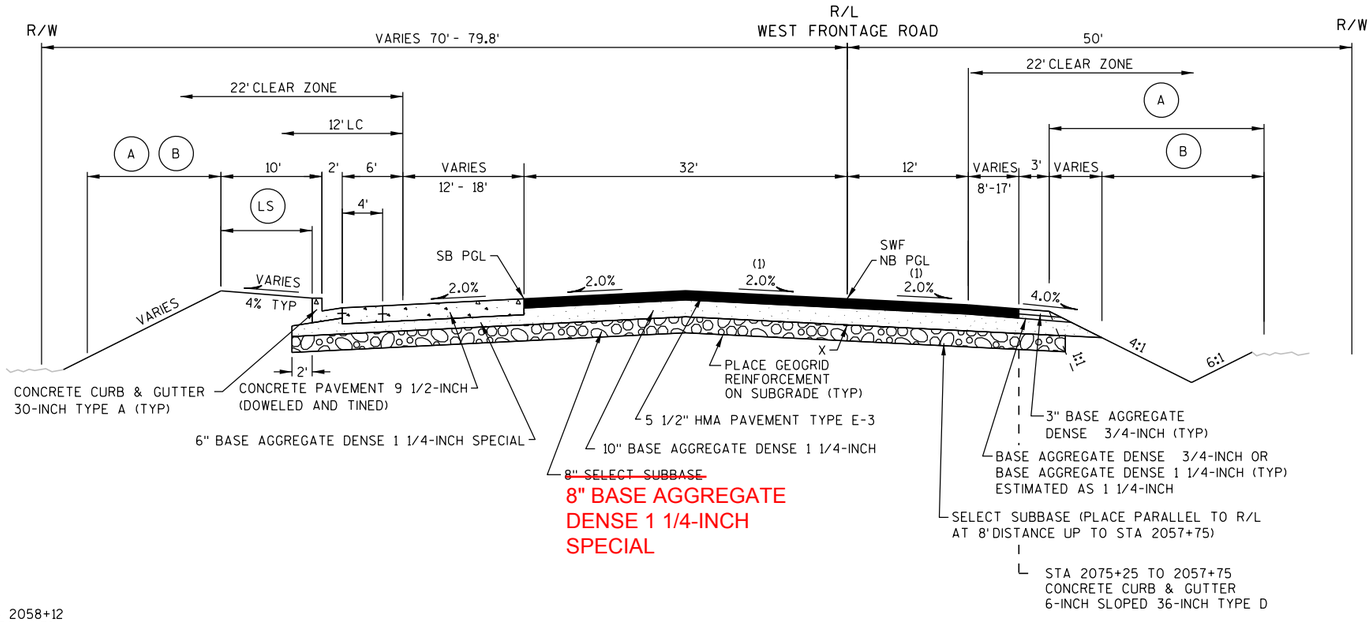
X = POINT REFERRED TO ON CROSS SECTION

LC = LATERAL CLEARANCE

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 10	E



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 2058+12 TO STA 2058+86



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 2057+25 TO STA 2058+12

FOOTNOTES

(1) STA 2058+05 TO STA 2058+12
SLOPE VARIES -2.0% TO -1.7%

(2) -2.0% TO -1.4%

(3) -1.7% TO +1.4%

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

(LS) SOD LAWN, FERTILIZER TYPE B, AND 4" SALVAGED TOPSOIL

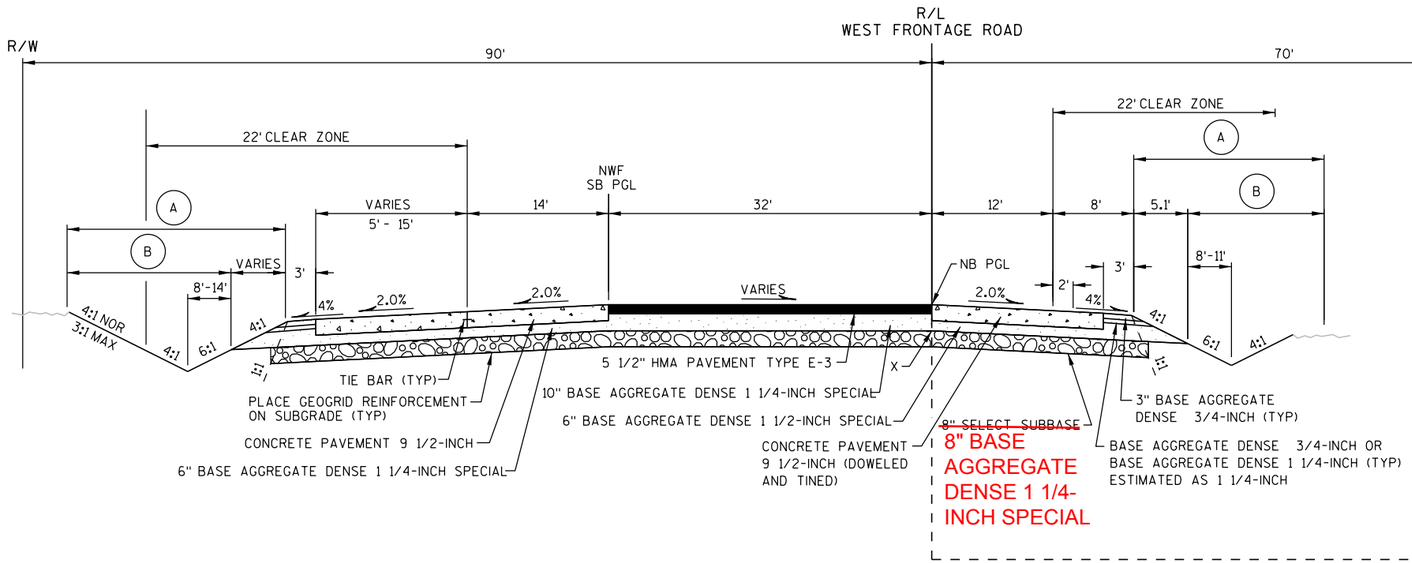
NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

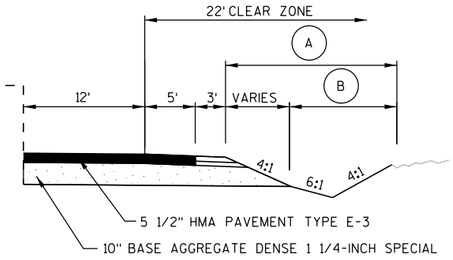
X = POINT REFERRED TO ON CROSS SECTION

LC = LATERAL CLEARANCE

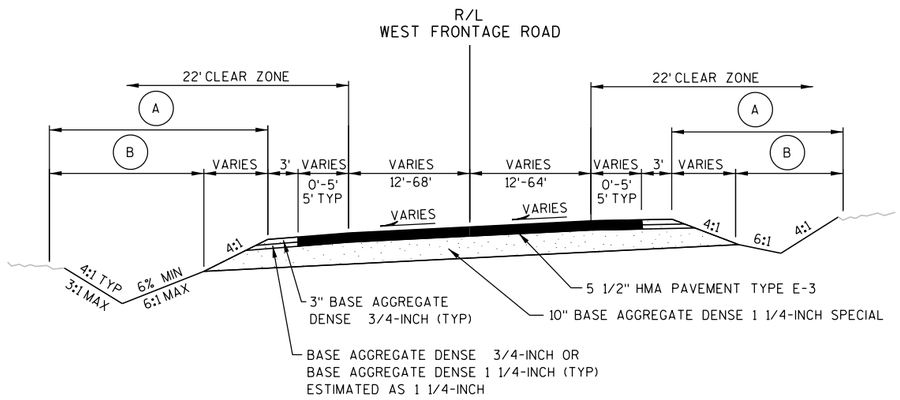
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 11	E



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 4054+94 TO STA 4056+92



STA 4054+94 TO STA 4055+20



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 4053+22 TO STA 4054+94

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

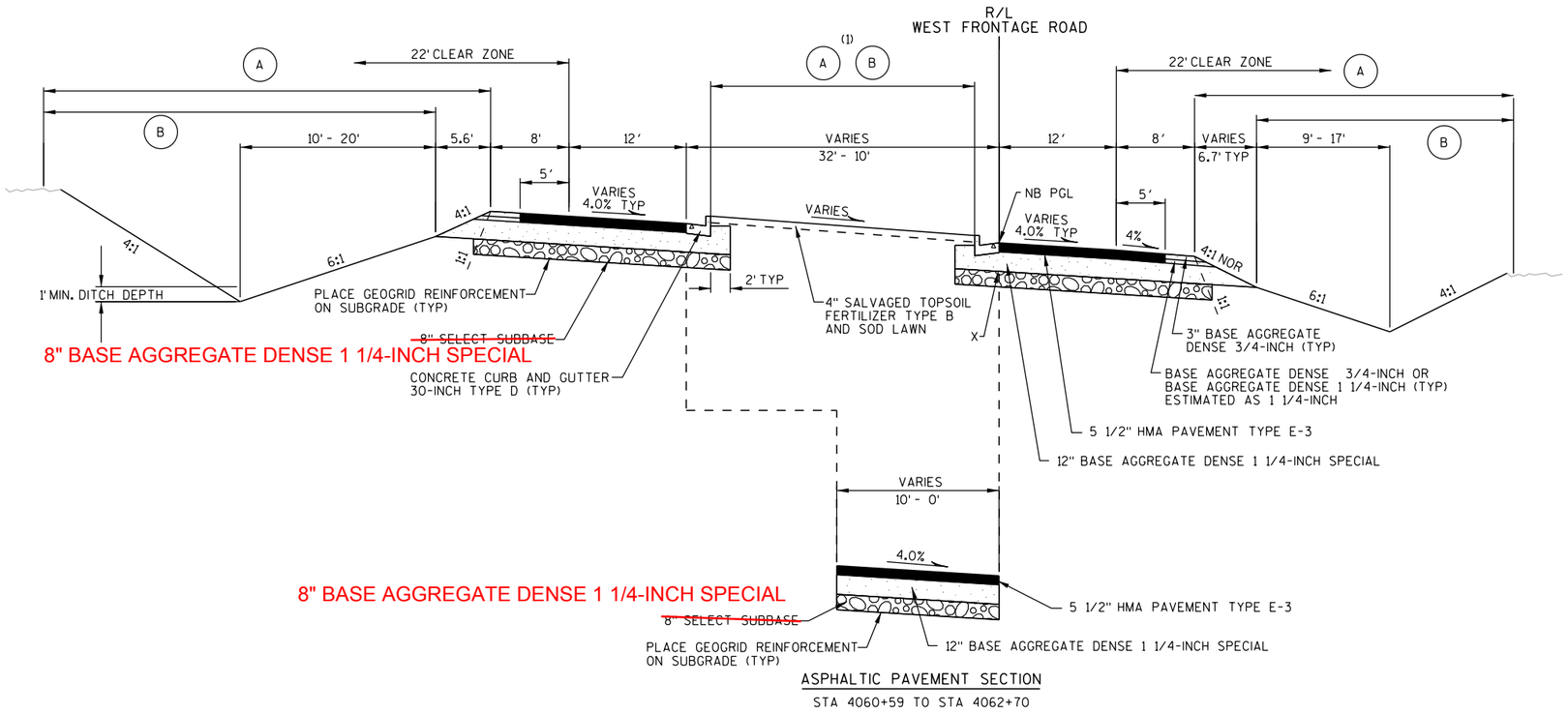
(LS) SOD LAWN, FERTILIZER TYPE B, AND 4" SALVAGED TOPSOIL

NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

X = POINT REFERRED TO ON CROSS SECTION

LC = LATERAL CLEARANCE



ASPHALTIC PAVEMENT SECTION

STA 4060+59 TO STA 4062+70

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

X = POINT REFERRED TO ON CROSS SECTION

LC = LATERAL CLEARANCE

FOOTNOTES

(1) CONCRETE SIDEWALK
STA 4059+70 TO STA 4060+52

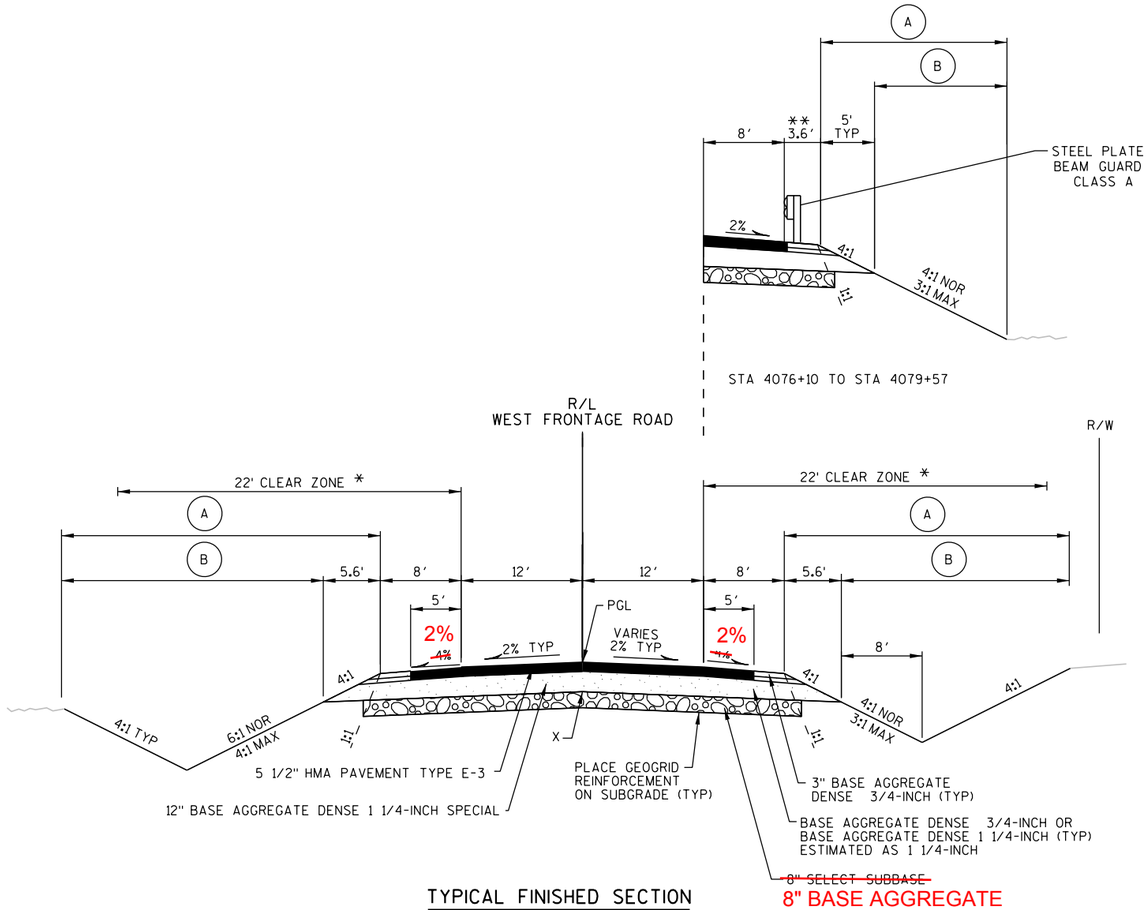
TYPICAL FINISHED SECTION

WEST FRONTAGE ROAD

STA 4056+92 TO STA 4062+70

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 13	E

2



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 4076+10 TO STA 4085+50

* 34' CLEAR ZONE
- STA 4078+00 TO STA 4085+50

** EXCEPT AT EAT

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

X = POINT REFERRED TO ON CROSS SECTION

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 14	E

2

LEGEND

(A) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(B) 4" SALVAGED TOPSOIL & MULCHING

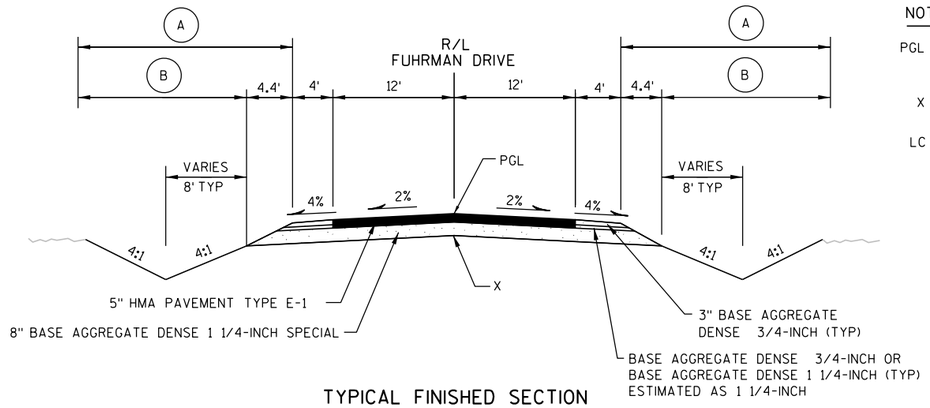
(LS) SOD LAWN, FERTILIZER TYPE B, AND 4" SALVAGED TOPSOIL

NOTES

PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

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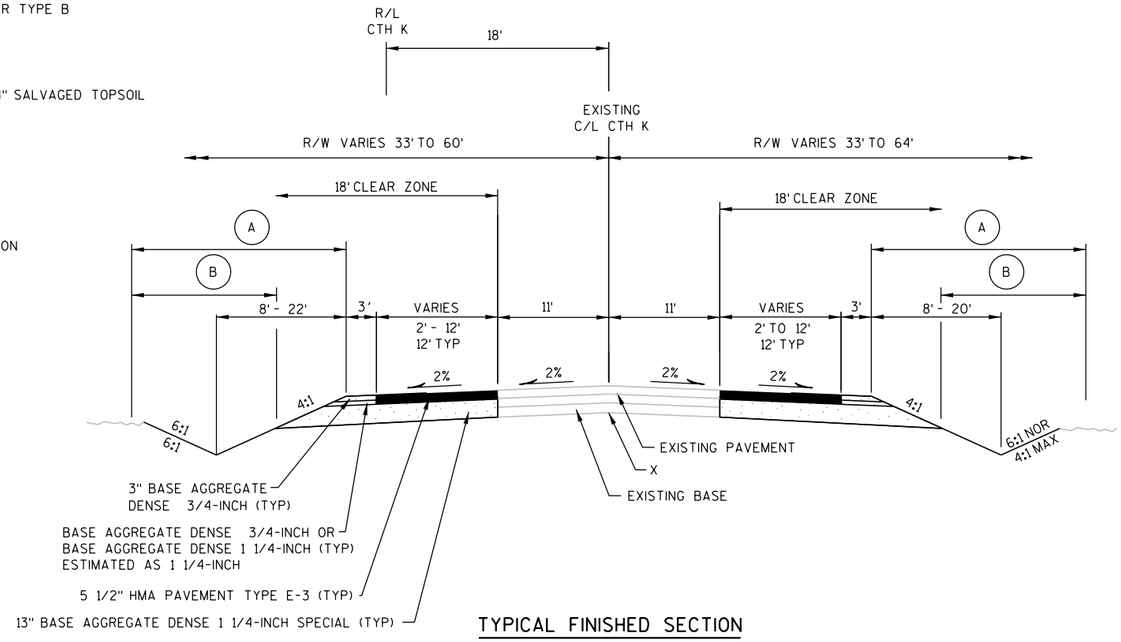
LC = LATERAL CLEARANCE



TYPICAL FINISHED SECTION

FUHRMAN DRIVE

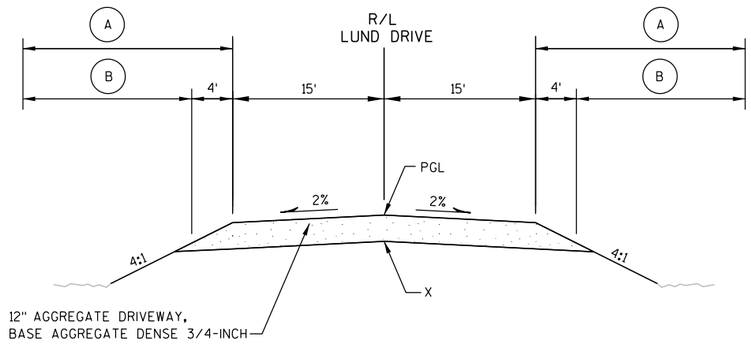
STA 10+00 TO STA 17+00



TYPICAL FINISHED SECTION

CTH K

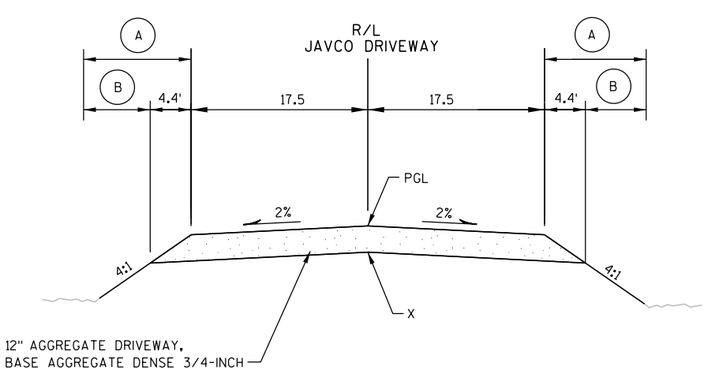
STA 27+36 TO STA 39+09



TYPICAL FINISHED SECTION

LUND DRIVE

STA 8+35 TO STA 8+93



TYPICAL FINISHED SECTION

JAVCO DRIVEWAY

STA 16+16.30 TO STA 20+41.78

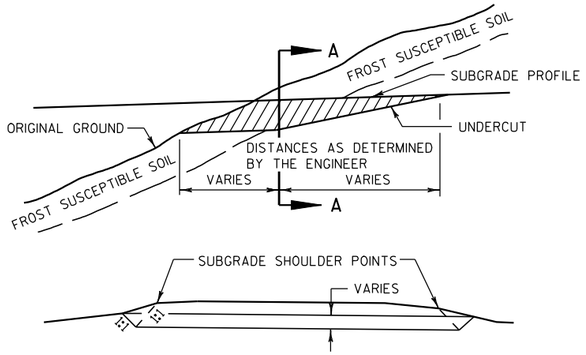
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	TYPICAL SECTIONS	SCALE: NTS	SHEET 15	E

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT: HMA												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 36.80 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 23.45 ACRES

090805



SECTION A-A
CROSS SECTION SHOWING UNDERCUT

NOTES

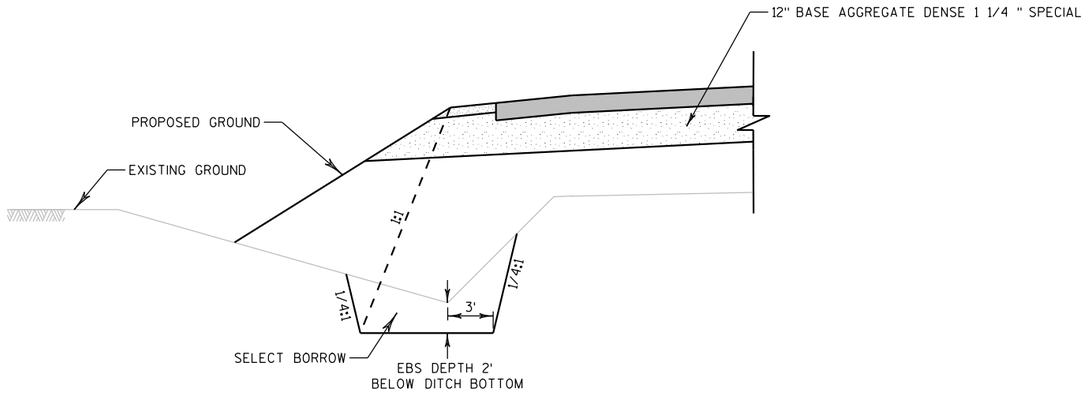
1. EXACT LOCATIONS AND EXTENT OF EBS SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. EBS AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER.
3. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
4. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL EBS IS COMPLETED.

EXCAVATION BELOW SUBGRADE AT CUTS

100901

2

EXISTING DITCHES
** STA 2030+25 TO 2032+50
STA 4053+50 TO 4055+00
STA 4069+50 TO 4070+50

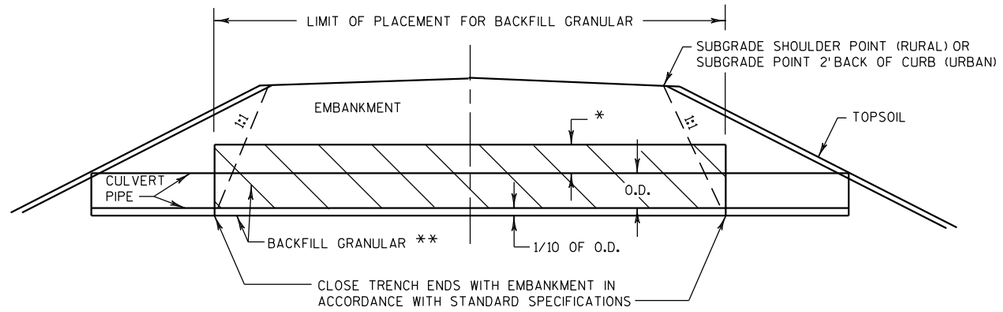


PAVEMENT SUBGRADE IMPROVEMENT DETAILS FOR FRONTAGE ROADS AND CROSSROADS

** ACTUAL LOCATIONS DEPENDENT ON FIELD CONDITIONS DURING GRADING OPERATIONS. GEOGRID REINFORCEMENT AND FILL MATERIAL SHALL NOT BE PLACED UNTIL AUTHORIZED BY THE ENGINEER OR SOILS ENGINEER.

100813

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS	SCALE: NTS	SHEET 17	E



O.D. = OUTSIDE DIAMETER

* CULVERT PIPE IN NEW EMBANKMENT = 1' MIN
* CULVERT PIPE IN EXISTING EMBANKMENT = TO EXISTING GROUND ELEVATION

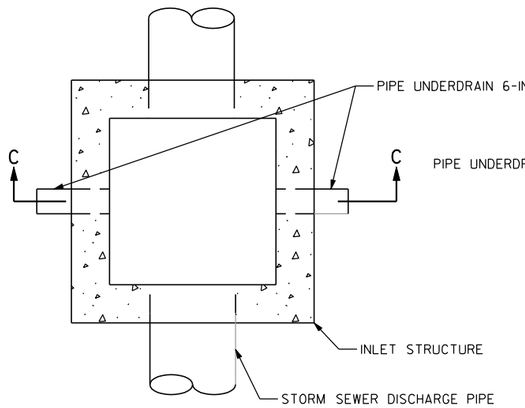
** INCIDENTAL TO CULVERT PIPE

CULVERT BACKFILL DETAIL

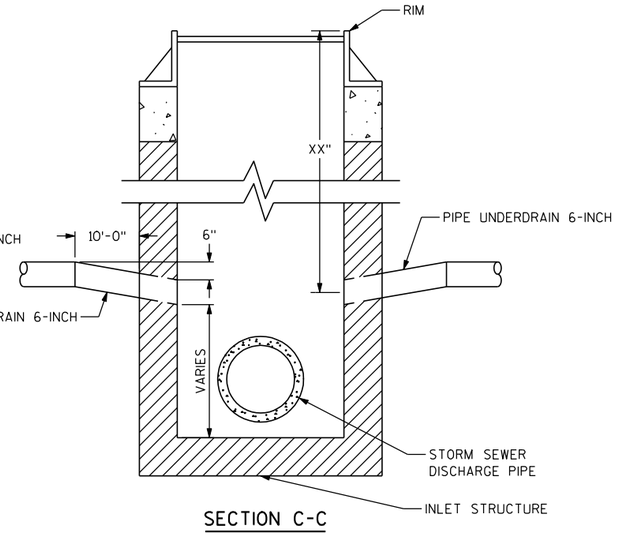
100813

NOTES

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.
2. PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF XX" BELOW THE RIM ELEVATION.



PLAN VIEW



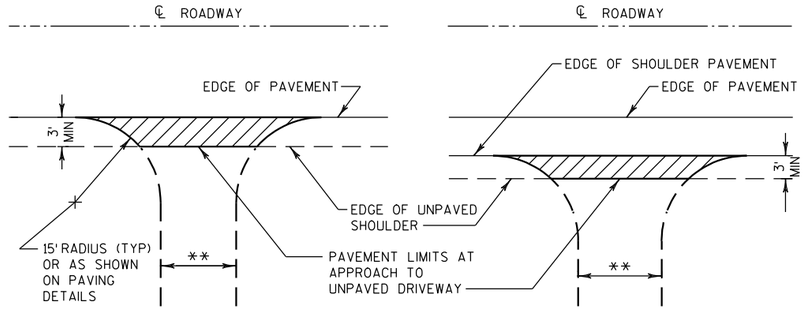
SECTION C-C

UNDERDRAIN OUTFALL AT INLET

(IN EBS AREAS)

100813 100514

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS	SCALE: NTS	SHEET 18	E

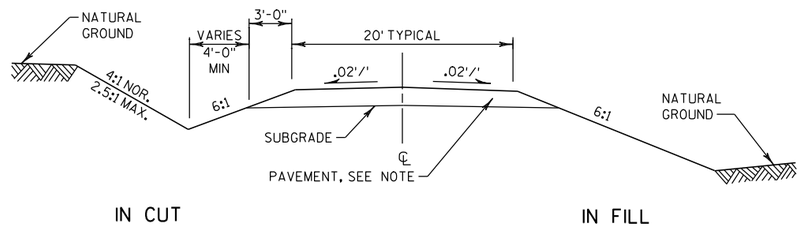


** SEE PAVING DETAILS FOR WIDTH REQUIRED.

PLAN VIEW

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

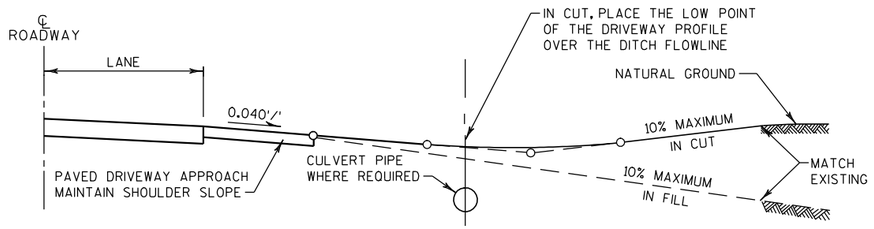
RURAL DRIVEWAY INTERSECTION



IN CUT

IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



TYPICAL DRIVEWAY PROFILES

NOTES

1. WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT. SAWCUT IS REQUIRED.
2. DRIVEWAY SURFACE TO BE SAME AS EXISTING WITH MINIMUM SECTION OF:

   ASPHALTIC SURFACE (3-INCH) DRIVEWAYS AND FIELD ENTRANCES OVER BASE AGGREGATE DENSE 3/4 -INCH (4-INCH)

   OR

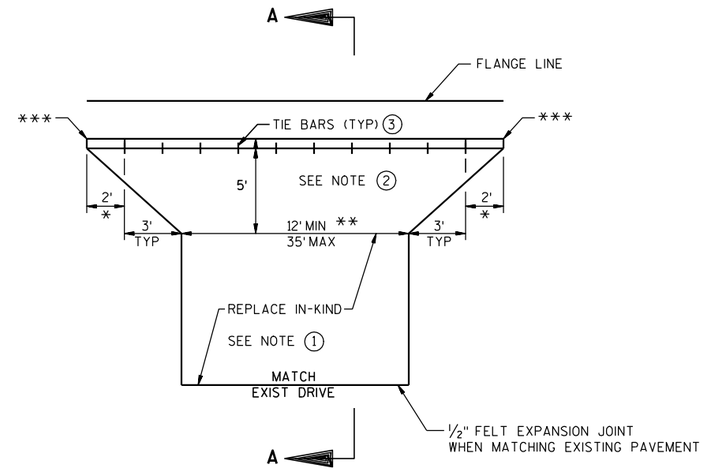
   CONCRETE DRIVEWAY 6-INCH OVER BASE AGGREGATE DENSE 3/4 -INCH (4-INCH)

   OR

   BASE AGGREGATE DENSE 3/4 -INCH (6-INCH)

RURAL DRIVEWAY

110210



PLAN VIEW

NOTES:

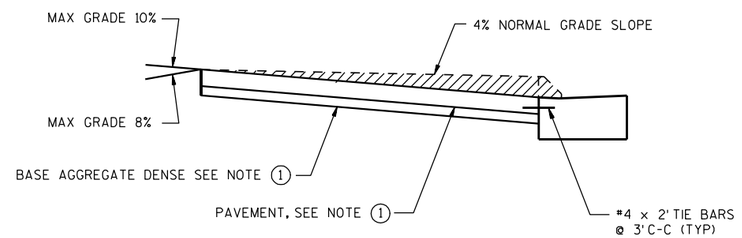
(1) DRIVEWAY SURFACE BEYOND APRON SHALL BE REPLACE IN-KIND WITH MINIMUM SECTION OF:

ASPHALTIC SURFACE (3-INCH) DRIVEWAYS AND FIELD ENTRANCES OVER BASE AGGREGATE DENSE 3/4-INCH (4-INCH)
OR
CONCRETE DRIVEWAY 6-INCH OVER BASE AGGREGATE DENSE 3/4-INCH (4-INCH)
OR
BASE AGGREGATE DENSE 3/4-INCH (6-INCH)

(2) ALL URBAN DRIVEWAYS TO BACK OF APRON SHALL BE PAID FOR AS CONCRETE DRIVEWAY 6-INCH

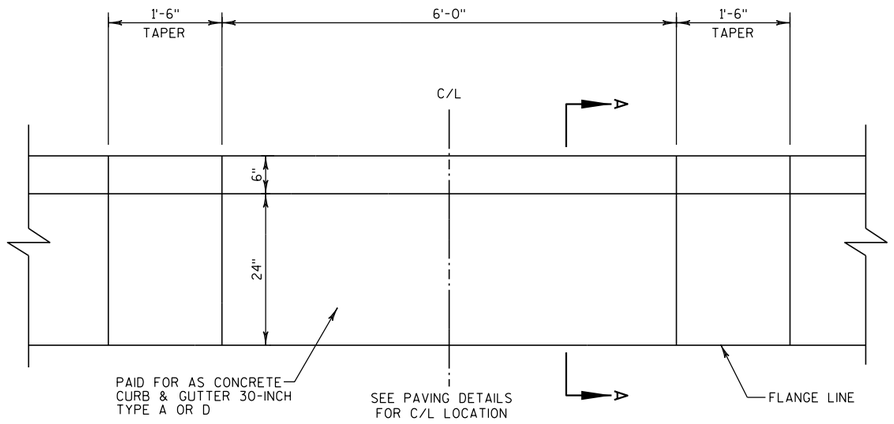
(3) TIE BARS ARE INCIDENTAL TO THE BID ITEM "CONCRETE DRIVEWAY 6-INCH"

* TAPER CURB HEAD
** SEE PAVING DETAILS FOR WIDTH REOD
*** STATION SHOWN ON PAVING DETAILS

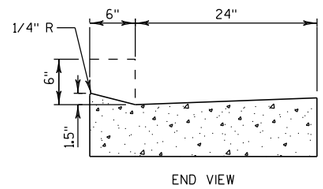


SECTION A-A

URBAN DRIVEWAY

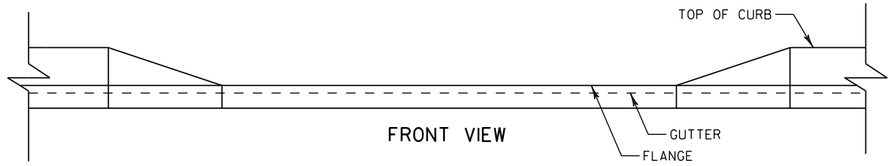


PLAN VIEW



END VIEW

SECTION A-A

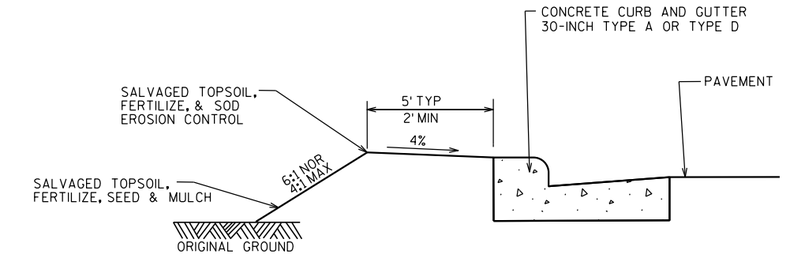


FRONT VIEW

MAINTENANCE OPENING

LOCATIONS SHOWN ON PAVING DETAILS

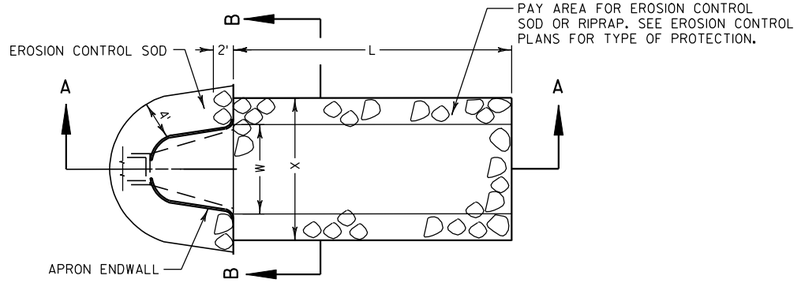
100813



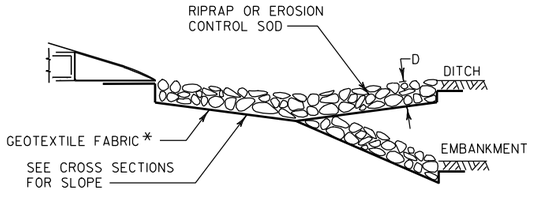
TYPICAL PARTIAL SECTION
AT INTERSECTION RADII

081230

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS	SCALE: NTS	SHEET 20	E



PLAN VIEW



SECTION A-A

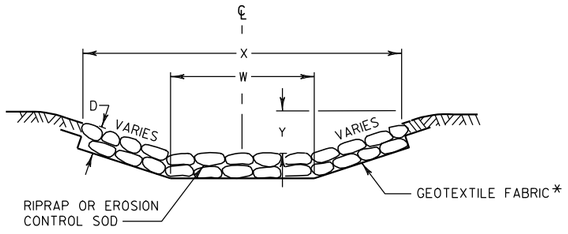
L = 3 x W (NOR) OR 10' MIN
OR AS INDICATED IN THE PLANS
OR AS DIRECTED BY THE ENGINEER

D = 12" FOR RIPRAP LIGHT
18" FOR RIPRAP MEDIUM
24" FOR RIPRAP HEAVY

X = W+2' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

* TYPE R (FOR RIPRAP LIGHT ONLY)
TYPE HR (FOR RIPRAP HEAVY AND MEDIUM ONLY)

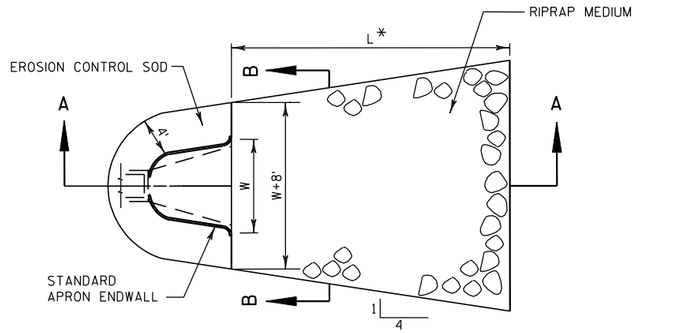


SECTION B-B

SOD, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

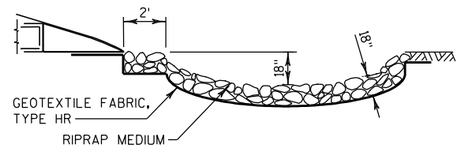
SEE EROSION CONTROL PLAN FOR LOCATIONS

090429

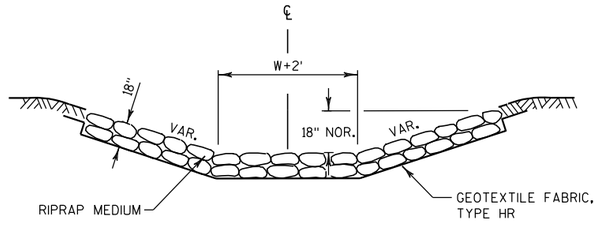


* L = 3 TIMES W OR 10' MIN
OR AS DIRECTED BY THE
ENGINEER

PLAN VIEW



SECTION A-A

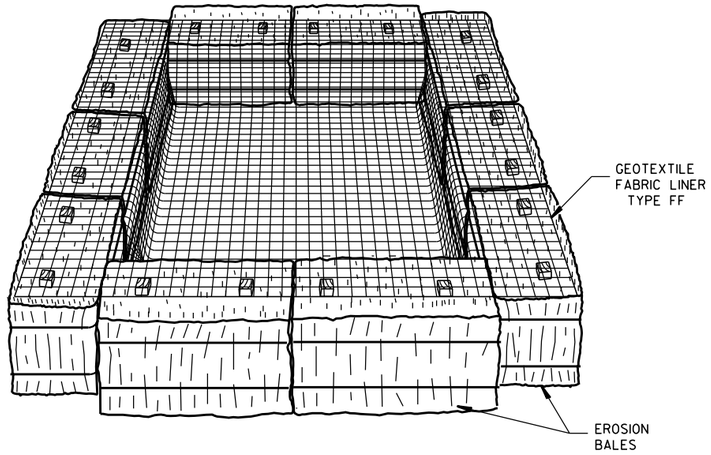


SECTION B-B

SOD, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT POND OUTFALL ENDWALLS

090429

2



TEMPORARY SETTLING BASIN

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

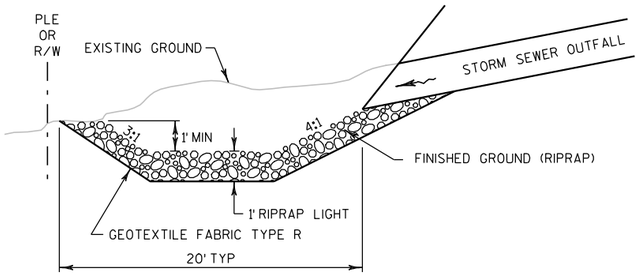
SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

$\frac{800 \text{ C.F.}}{1.5 \text{ FT.}}$ = 533 S.F.

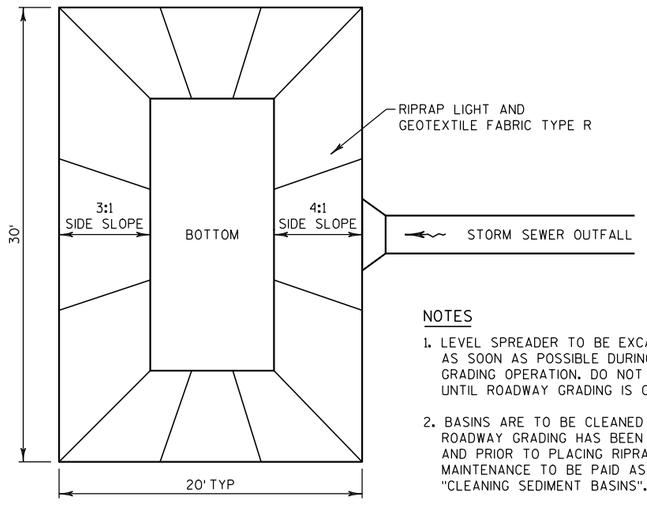
USE A 20 FT. X 27 FT. BASIN

NOTES:

1. CONTRACTOR TO PUMP WATER FROM EXCAVATION TO BASIN PRIOR TO DISCHARGING TO THE WATERWAY.
2. BASIN TO BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS TO BE DISPOSED BY THE CONTRACTOR OFF OF THE PROJECT SITE.
3. TEMPORARY SETTLING BASIN TO BE PAID FOR AS EROSION BALES AND GEOTEXTILE FABRIC TYPE FF.



SECTION VIEW



NOTES

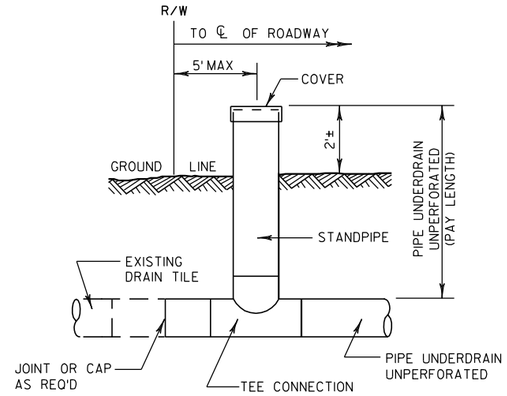
1. LEVEL SPREADER TO BE EXCAVATED AS SOON AS POSSIBLE DURING ROADWAY GRADING OPERATION. DO NOT PLACE RIPRAP UNTIL ROADWAY GRADING IS COMPLETE.
2. BASINS ARE TO BE CLEANED AFTER ROADWAY GRADING HAS BEEN COMPLETED AND PRIOR TO PLACING RIPRAP. BASIN MAINTENANCE TO BE PAID AS "CLEANING SEDIMENT BASINS".
3. CONSTRUCTION OF LEVEL SPREADER TO BE PAID AS EXCAVATION COMMON, RIPRAP LIGHT, AND GEOTEXTILE FABRIC TYPE R.

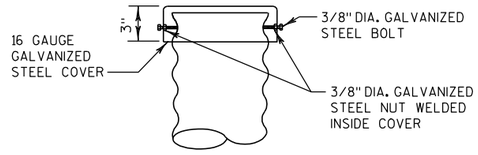
PLAN VIEW

PERMANENT STORM SEWER OUTFALL LEVEL SPREADER DETAIL

Note to designer:
Add locations here

100820





NOTE

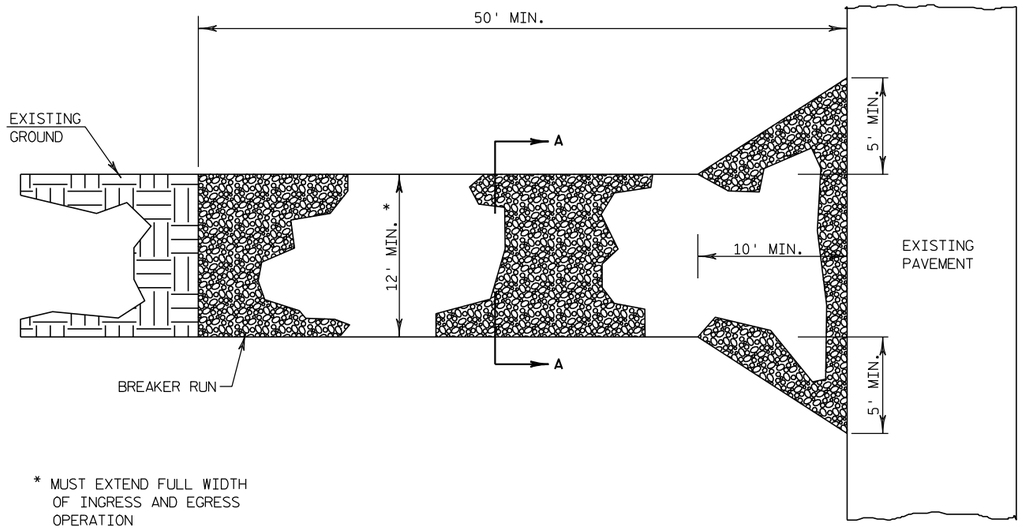
THE COST OF FURNISHING AND INSTALLING THE CONNECTION TO THE UNDERDRAIN AND THE COVER SHALL BE CONSIDERED INCIDENTAL TO THE ITEM PIPE UNDERDRAIN, UNPERFORATED.

INSPECTION STANDPIPE AIR VENT

FOR DRAIN TILE

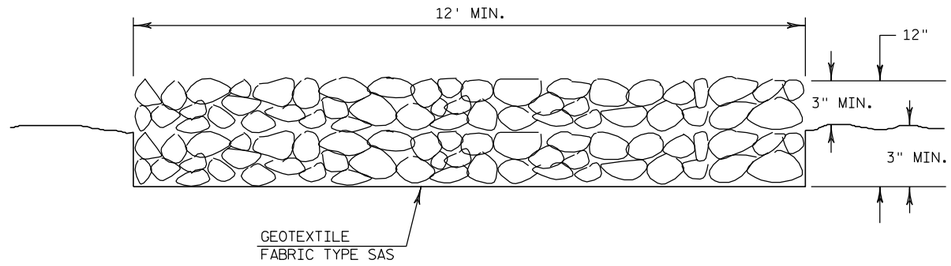
100813

2



* MUST EXTEND FULL WIDTH
OF INGRESS AND EGRESS
OPERATION

PLAN VIEW



SECTION A-A

TRACKING MAT

FOR CONSTRUCTION EGRESS POINTS

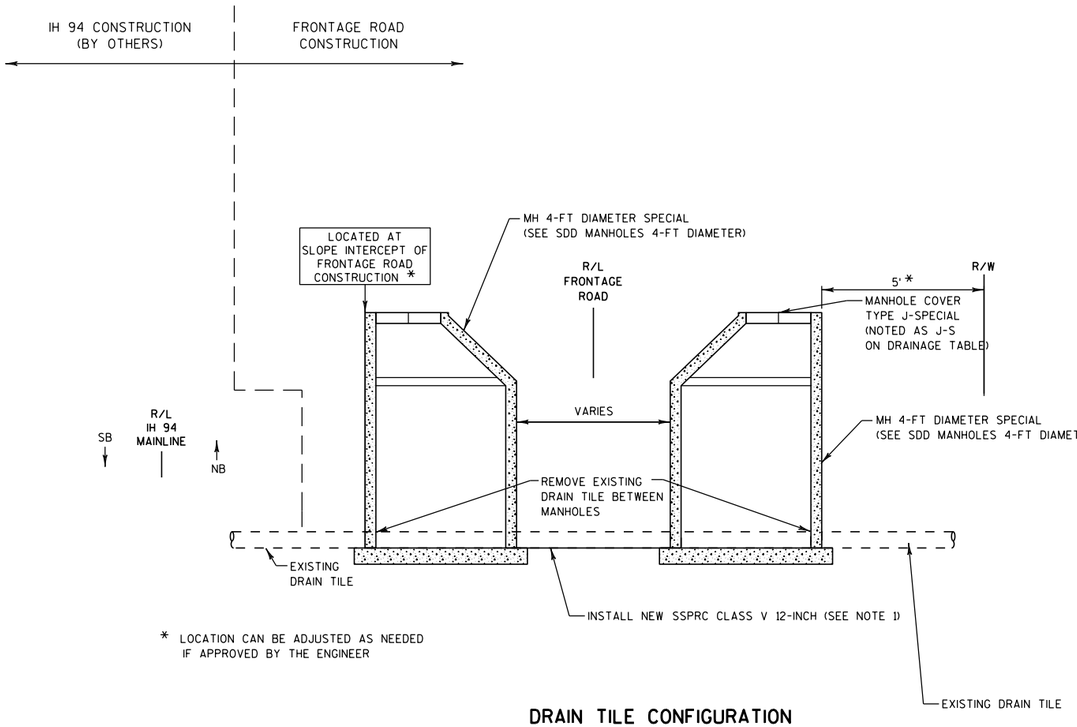
NOTE:

1) TRACKING MATS TO BE INSPECTED DAILY. DEFICIENT AREAS TO BE REPAIRED OR REPLACED IMMEDIATELY.

2) PAID FOR AS BREAKER RUN AND GEOTEXTILE FABRIC TYPE SAS.

090512

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS	SCALE: NTS	SHEET 24	E



* LOCATION CAN BE ADJUSTED AS NEEDED
IF APPROVED BY THE ENGINEER

DRAIN TILE CONFIGURATION

(FOR EAST FRONTAGE ROAD CROSSINGS)

STAGING

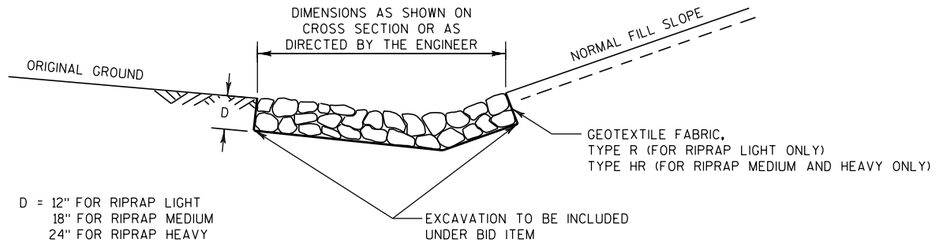
1) FRONTAGE ROAD CONSTRUCTION:
CONSTRUCT MANHOLE 4-FT DIAMETER SPECIAL:
CONNECT EXISTING TILE TO MANHOLE, REPLACE
EXISTING TILE WITH SSPRC CLASS 12-INCH
BETWEEN MANHOLES.

NOTES

1) IF EXISTING DRAIN TILE IS LARGER THAN 12", MATCH THE
EXISTING SIZE IN THE FIELD.

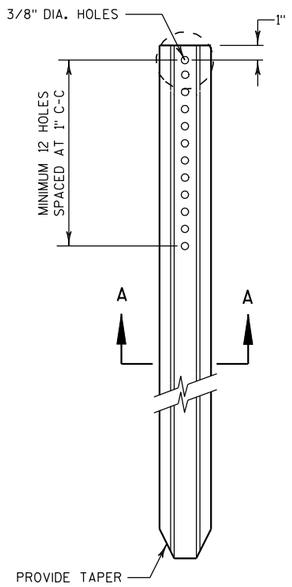
2) GRADING AT MANHOLES WITHIN THE CLEAR ZONE OF THE
FRONTAGE ROADS AND MAINLINE IS TO BE FLUSH WITH
TOP OF THE MANHOLE.

081229

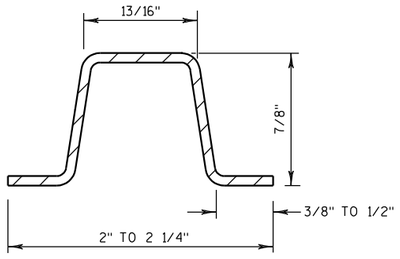


DETAIL FOR RIPRAP (MEDIUM) IN DITCHES

100901

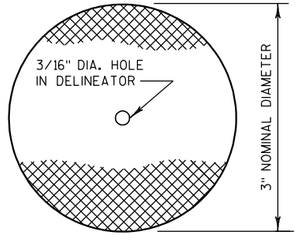


DELINEATOR POST

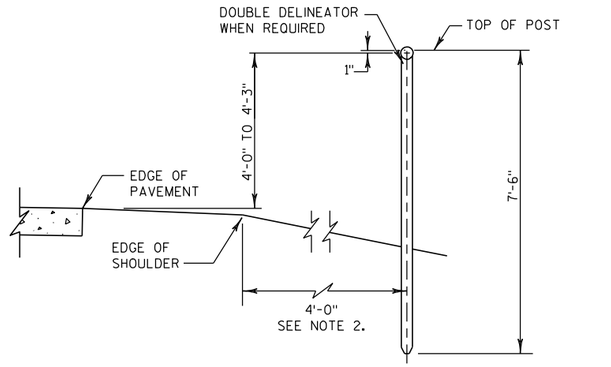


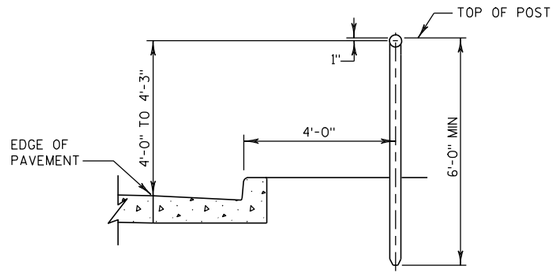
SECTION A-A

WEIGHT 1.12 LBS PER FT, ± 0.1 LB.

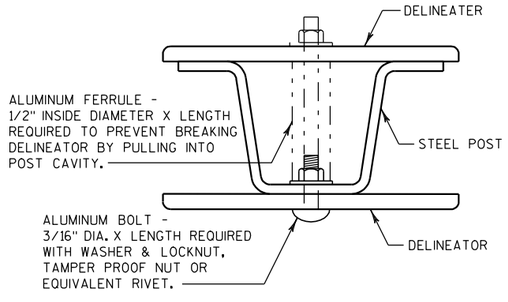


DELINEATOR





TYPICAL INSTALLATIONS OF DELINEATOR POSTS

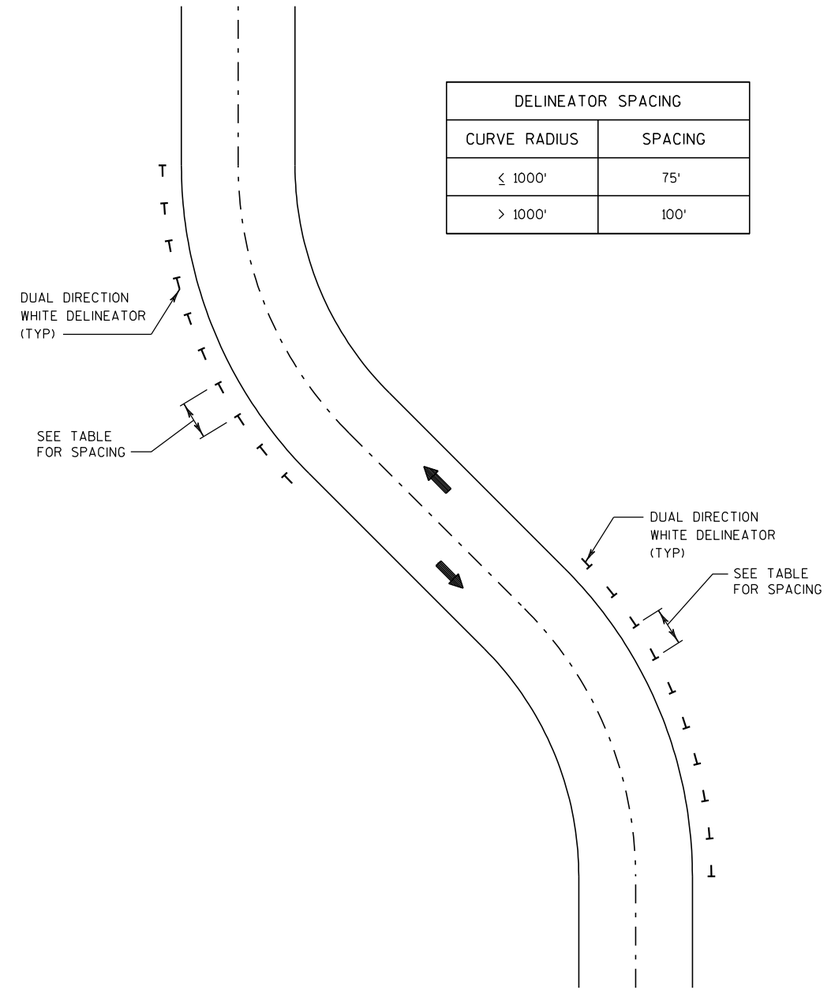


MOUNTING DETAIL FOR DELINEATOR

NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
2. DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
3. INSTALL POST PERPENDICULAR TO ROADWAY, AT THE POINT OF INSTALLATION, SO THAT THE DELINEATORS ARE VISIBLE FROM BOTH DIRECTION.

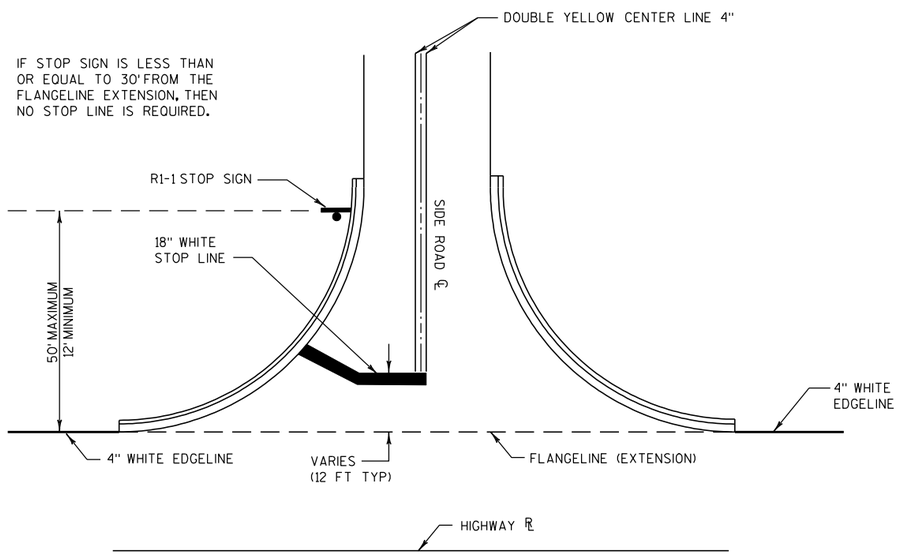
DELINEATOR SPACING	
CURVE RADIUS	SPACING
≤ 1000'	75'
> 1000'	100'



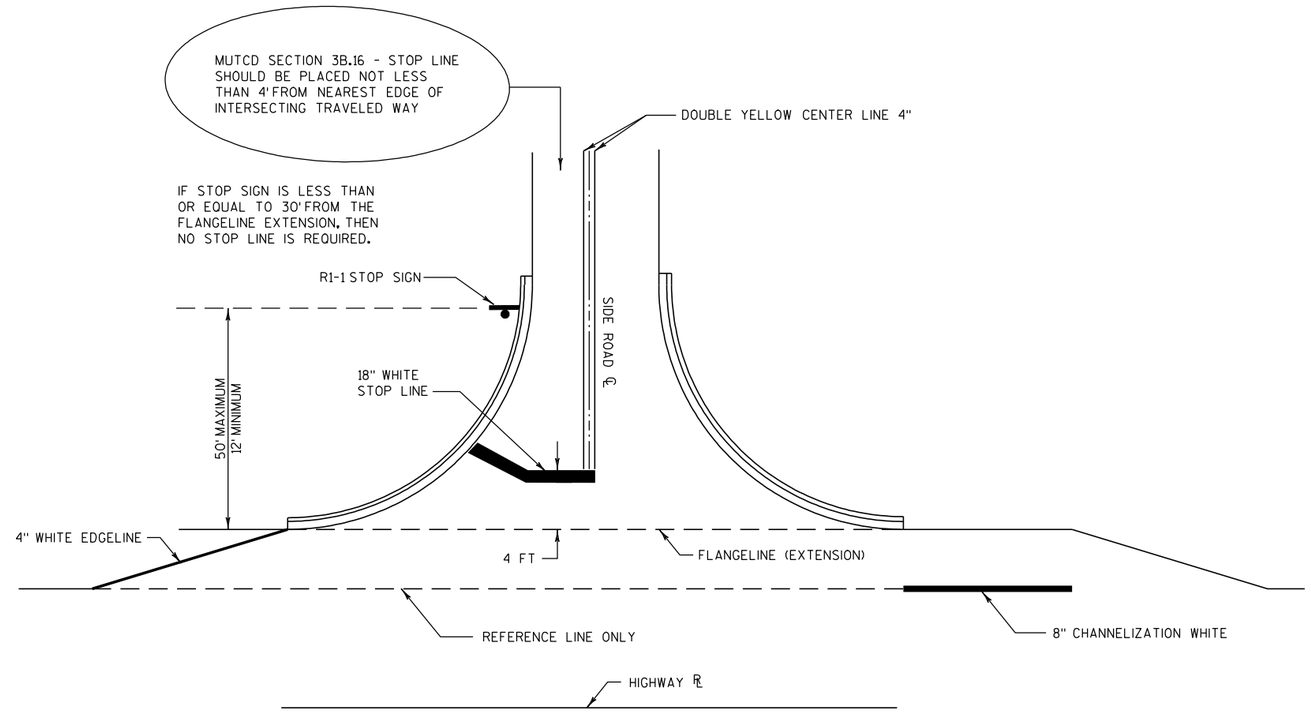
DELINEATOR SPACING

DELINEATOR LAYOUT ON FRONTAGE ROAD REVERSE CURVES

100728



TYPICAL PAVEMENT MARKING FOR SIDEROADS



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE

NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

2. STOP LINES REQUIRED WHERE:

   A. CROSSWALK MARKINGS EXIST OR ARE BEING PROVIDED

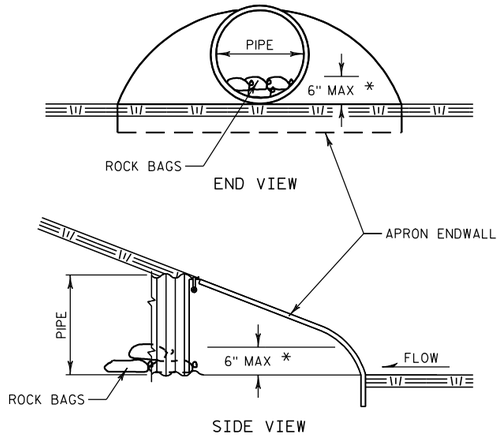
   B. LARGE RADII

   C. OFFSET LEFT TURNS WHERE STOP BAR FOR LEFT TURN IS SET BACK FROM THRU MOVEMENT

PAVEMENT MARKING AT SIDEROADS

100818

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS	SCALE: NTS	SHEET 27	E

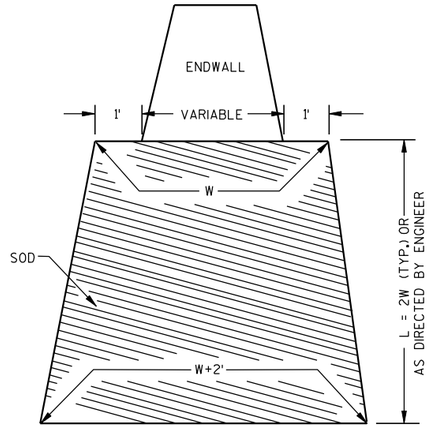


* OR AS DIRECTED BY THE ENGINEER

CULVERT PIPE CHECK

SEE EROSION CONTROL PLAN FOR LOCATIONS

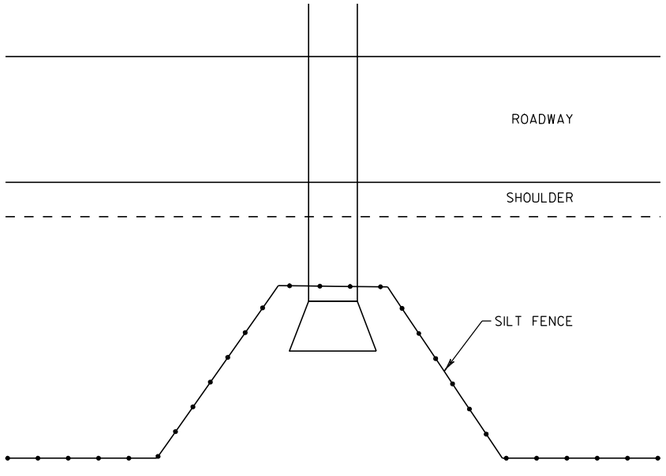
100813



SOD TREATMENT AT CULVERTS

SEE EROSION CONTROL PLAN FOR LOCATIONS

2

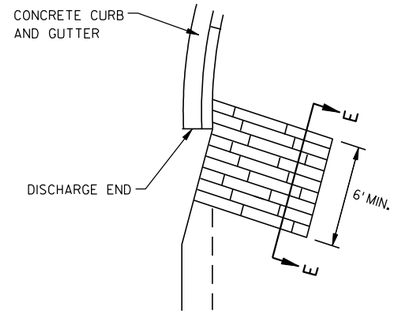


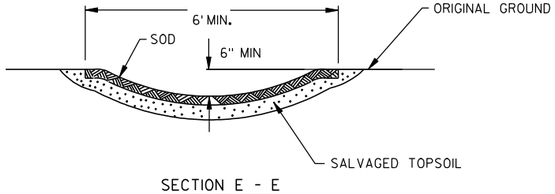
NOTE

SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

TYPICAL SILT FENCE DETAIL AT PIPE INLET

100902

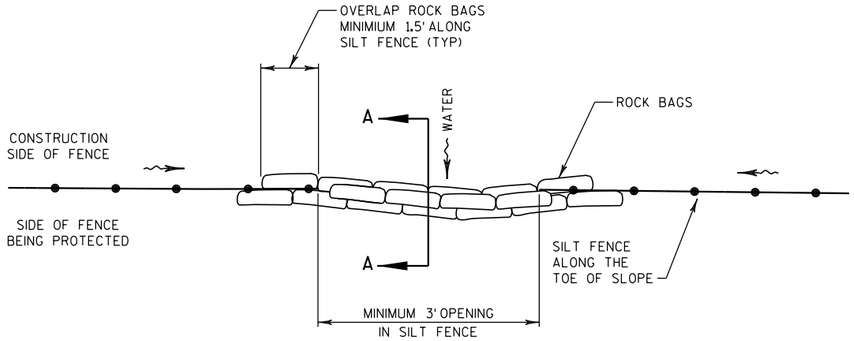




SECTION E - E

SOD FLUME DETAIL AT CURB ENDS

SEE EROSION CONTROL PLAN FOR LOCATIONS



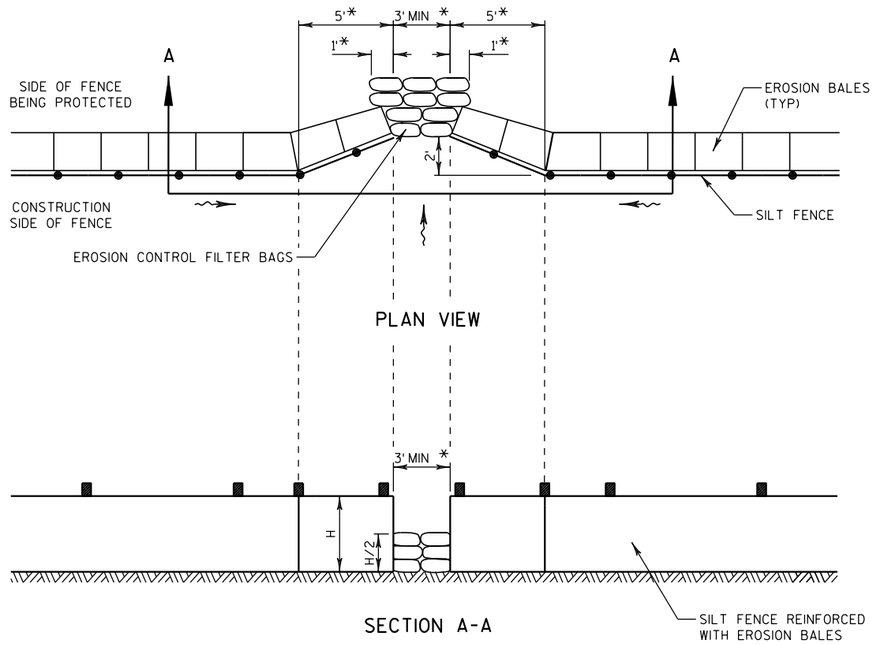
PLAN VIEW



SECTION A-A

SILT FENCE DRAINAGE OUTLET, ROCK BAGS

100903



PLAN VIEW

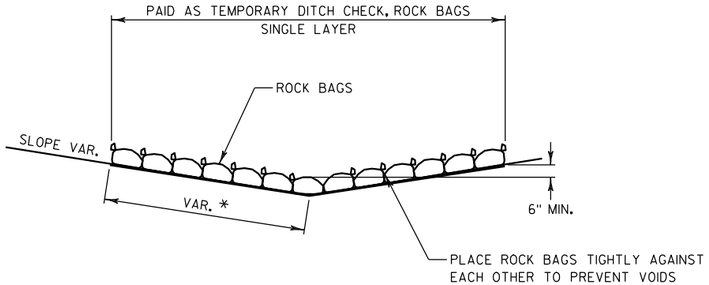
SECTION A-A

* DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS
AS DIRECTED BY THE ENGINEER.

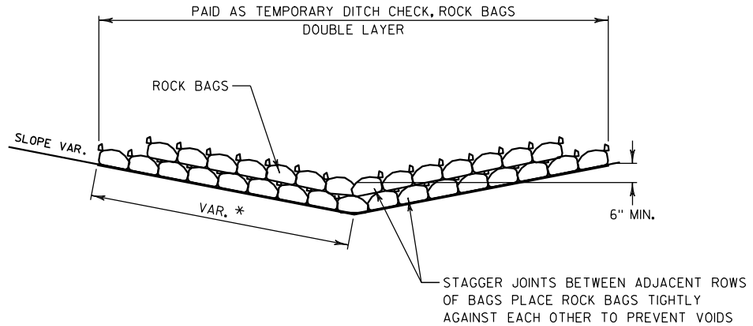
SILT FENCE DRAINAGE OUTLET, EROSION CONTROL FILTER BAGS

(FOR USE IN ENVIRONMENTALLY SENSITIVE AREAS)

100903



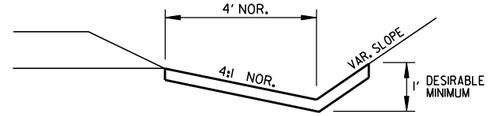
SIDE VIEW (SINGLE LAYER)



* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL.

SIDE VIEW (DOUBLE LAYER)

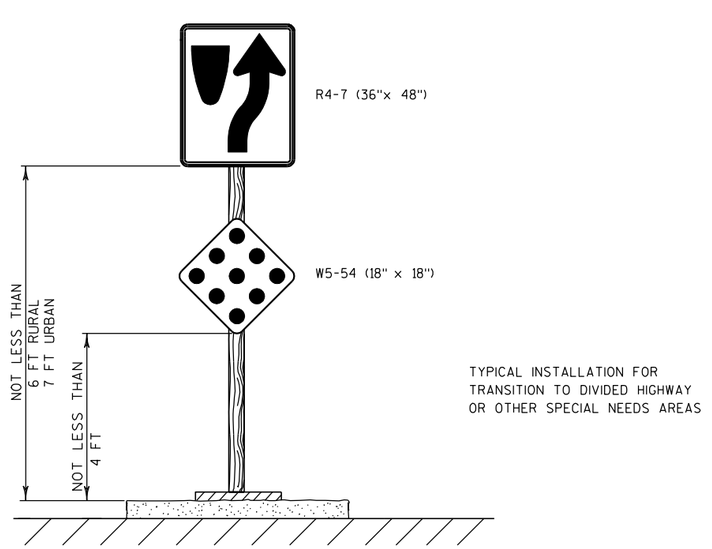
TEMPORARY DITCH CHECK, ROCK BAGS, SINGLE LAYER AND DOUBLE LAYER



SOD OR EROSION MAT DETAIL FOR DITCHES

SEE EROSION CONTROL PLAN FOR LOCATIONS

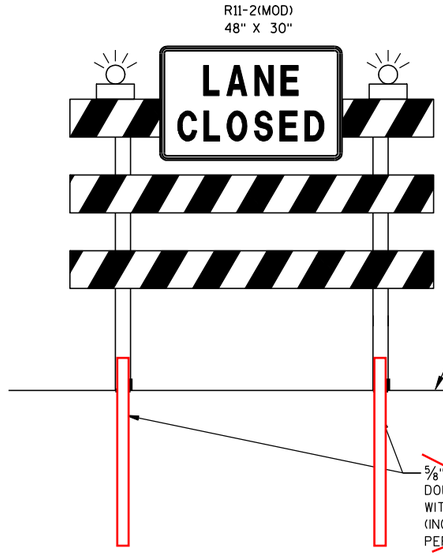
081231



SIGNING DETAIL

SEE PERMANENT SIGNING PLANS FOR LOCATIONS

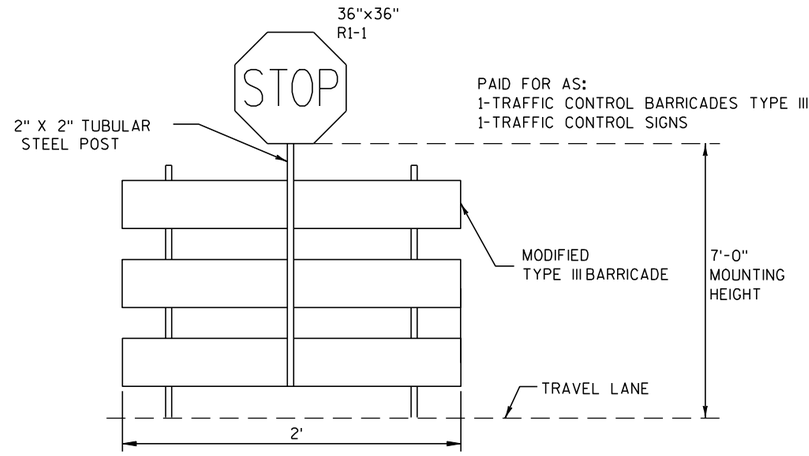
090610



DELINEATOR POST DRIVEN TO +/-4' DEPTH AND BOLTED TO LEGS OF BARRICADE

TRAFFIC CONTROL BARRICADE PERMANENT TYPE III ANCHORING DETAIL

090401

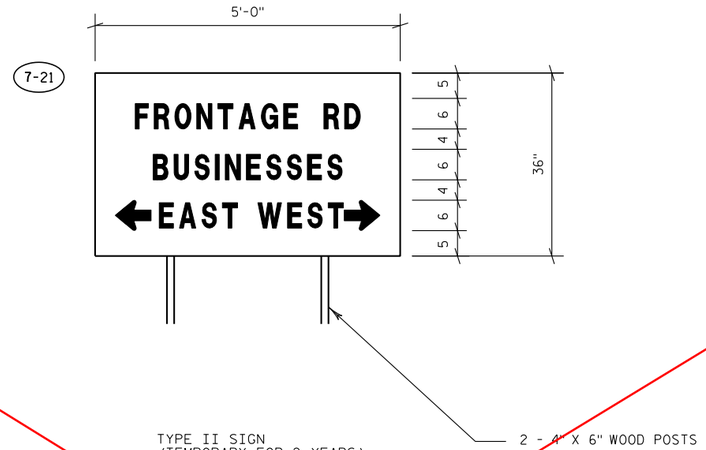


TEMPORARY STOP SIGN

GENERAL NOTES FOR TRAFFIC CONTROL

1. TRAFFIC CONTROL DRUMS IN TAPERS, SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
5. BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTIOIN OF TRAFFIC FLOW.

100813



TYPE II SIGN
(TEMPORARY FOR 2 YEARS)
ORANGE BACKGROUND
BLACK COPY

X-XX = SIGN NUMBER

NOTES;

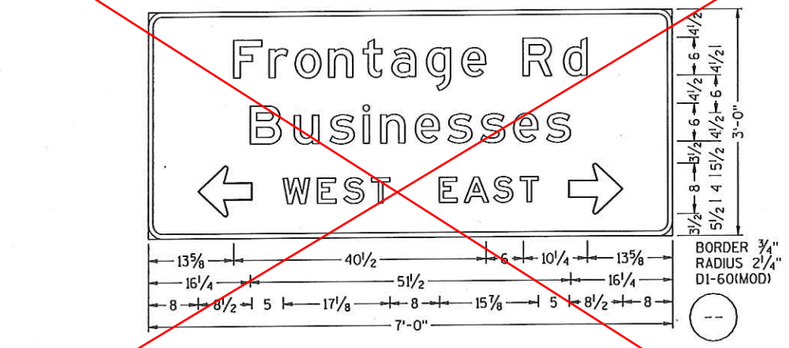
1. ALL SIGNS TO HAVE HIGH INTENSITY SHEETING - REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
2. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.
3. ALL SIGNS TO BE MOUNTED ON A NEW WOODEN POST SUPPORTS (4"x6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN.
4. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE."
5. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE HIGH INTENSITY SHEETING.
6. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:

   6" CAPS SHALL BE SERIES "B"

7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.
8. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637.2.1.2.
9. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

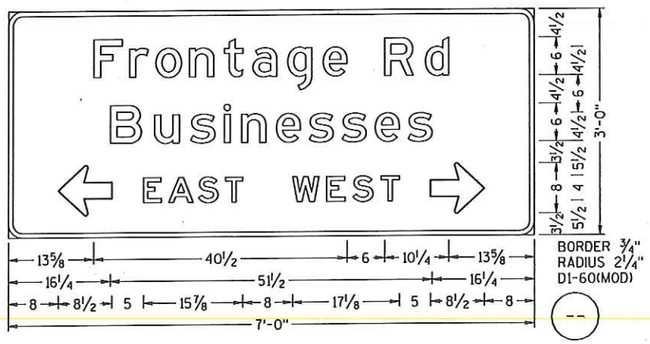
100414

REPLACED WITH
REVISED SHEET 32



GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE TYPE SH REFLECTIVE SHEETING.
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. TYPE II SIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.
6. TYPE I SIGNS - ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAP WORDS ARE "SERIES E"
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES ALL-7 AND ALL-10
11. DO NOT SCALE.



7-21

SHEET 1 OF 1

PROJECT NO: (1030-11-74	HWY: IH-94	COUNTY: RACINE	CONSTRUCTION DETAIL- FIXED MESSAGE SIGN	SCALE: 0 ½" 1"	REVISED SHEET 32	E

FILE NAME : J:\projects\d2_00820200\Tom H\I-94Kenosha_FrontageRdSigns.dgn PLOT DATE : 19-DEC-2011 08:48 PLOT BY : MSCCXV PLOT NAME : PLOT SCALE : 48.125:1 WISDOT/CADDS SHEET 47

ORIGINAL PLANS PREPARED BY

R.A. Smith National

Beyond Surveying and Engineering

16745 W. Bluemound Road, Brookfield WI 53005
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www.rasmithnational.com

WISCONSIN
RACHEL A. De SOMBRE
E-36868
PEWAUKEE
WI
PROFESSIONAL ENGINEER

8/31/2011 (Date)

Rachel De Sombre (Signature)

THIS STAMP APPLIES TO STORM WATER DETENTION POND PLANS
1 TO 4 OF 4

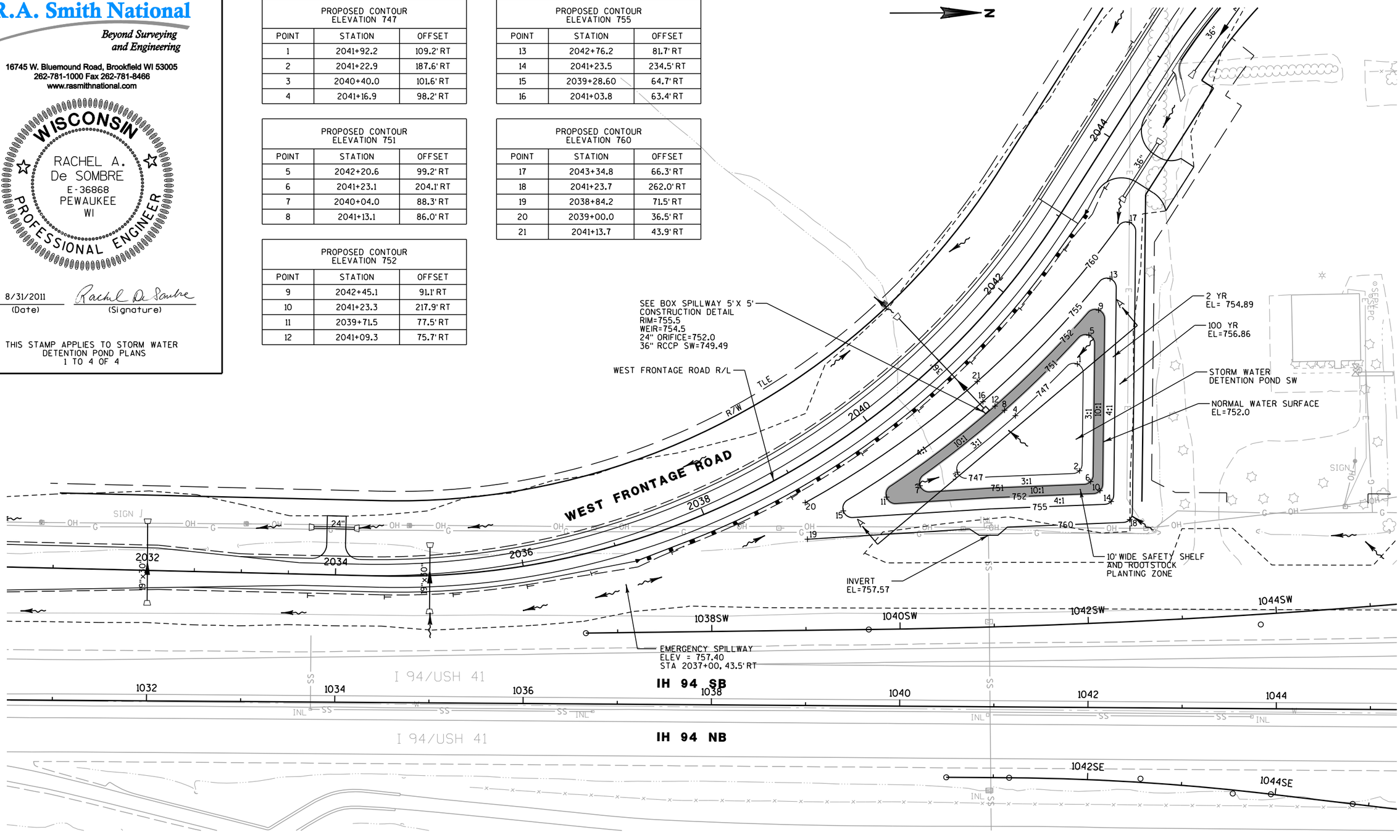
PROPOSED CONTOUR ELEVATION 747		
POINT	STATION	OFFSET
1	2041+92.2	109.2' RT
2	2041+22.9	187.6' RT
3	2040+40.0	101.6' RT
4	2041+16.9	98.2' RT

PROPOSED CONTOUR ELEVATION 751		
POINT	STATION	OFFSET
5	2042+20.6	99.2' RT
6	2041+23.1	204.1' RT
7	2040+04.0	88.3' RT
8	2041+13.1	86.0' RT

PROPOSED CONTOUR ELEVATION 752		
POINT	STATION	OFFSET
9	2042+45.1	91.1' RT
10	2041+23.3	217.9' RT
11	2039+71.5	77.5' RT
12	2041+09.3	75.7' RT

PROPOSED CONTOUR ELEVATION 755		
POINT	STATION	OFFSET
13	2042+76.2	81.7' RT
14	2041+23.5	234.5' RT
15	2039+28.60	64.7' RT
16	2041+03.8	63.4' RT

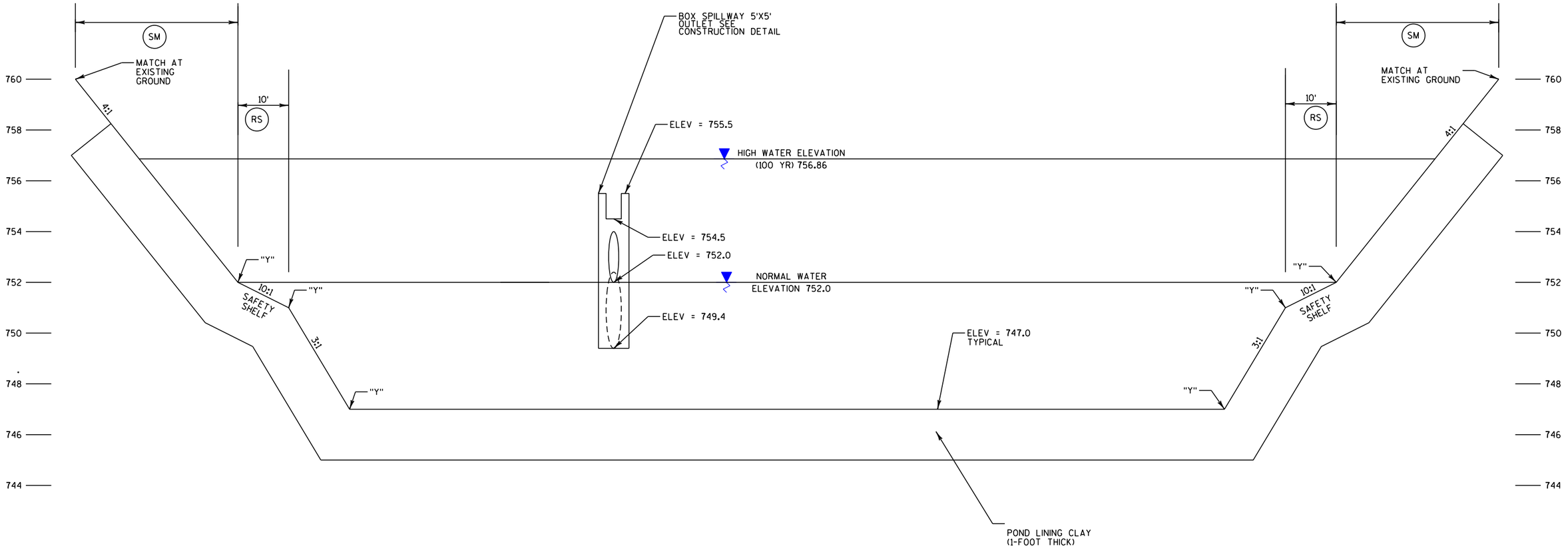
PROPOSED CONTOUR ELEVATION 760		
POINT	STATION	OFFSET
17	2043+34.8	66.3' RT
18	2041+23.7	262.0' RT
19	2038+84.2	71.5' RT
20	2039+00.0	36.5' RT
21	2041+13.7	43.9' RT



STORM WATER DETENTION POND SW

SHEET 1 OF 4

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS - STORM WATER DETENTION POND SW	SHEET 33	E



LEGEND

(RS) ROOTSTOCK PLANTING ZONE

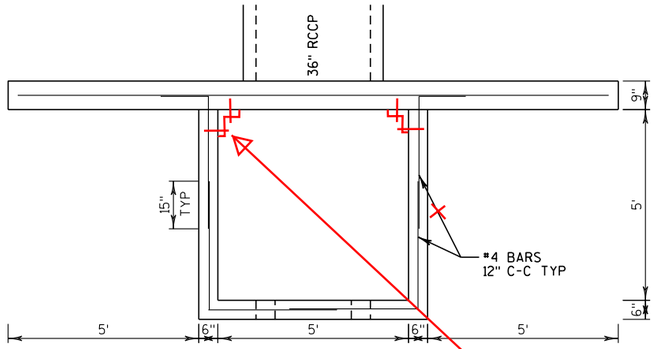
(SM) SEEDING MIXTURE NO. 60, FERTILIZER, AND MULCHING SPECIAL

"Y" POINTS REFERENCED ON POND STAKING TABLES

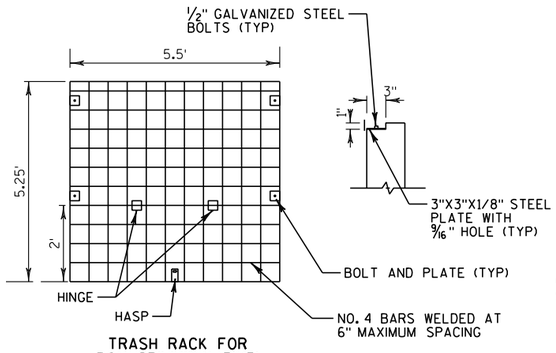
SECTION A-A
PROPOSED TYPICAL SECTION
STORM WATER DETENTION POND SW
(LOOKING WEST)
STA 2039+39.5 TO STA 2042+54.8 RT

SHEET 2 OF 4

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS - STORM WATER DETENTION POND SW	SHEET 34	E

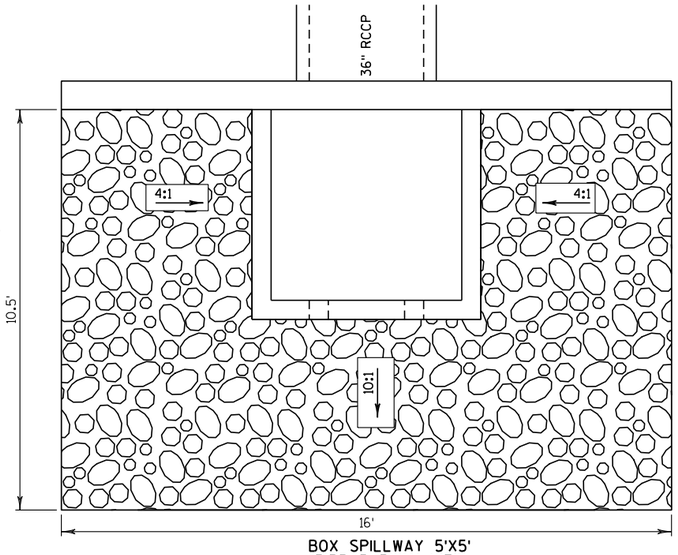


BOX SPILLWAY 5'X5'
PLAN VIEW

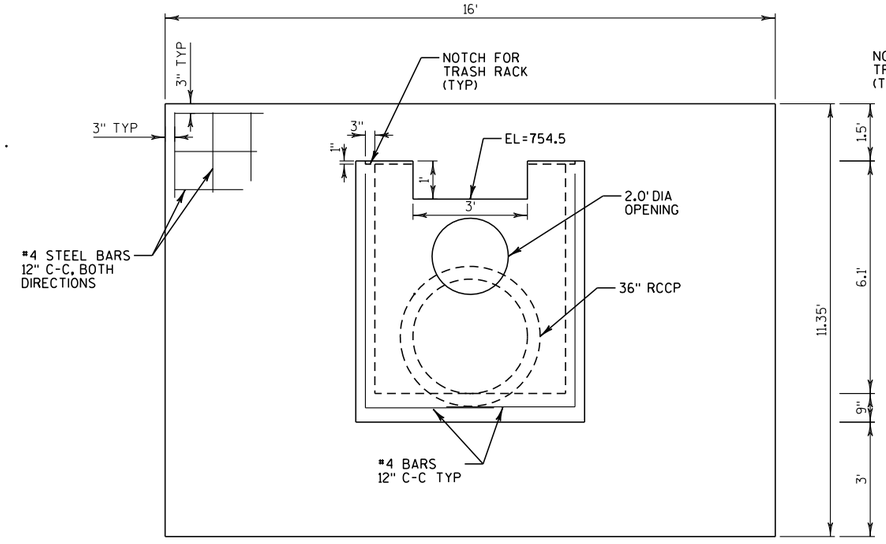


TRASH RACK FOR
BOX SPILLWAY 5'X5'

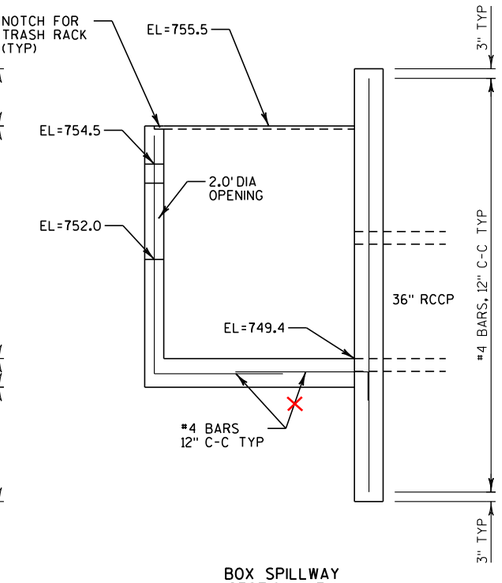
BOX AND WALL WERE MADE IN TWO SEPARATE PRECAST SECTIONS, ATTACHED WITH STEEL ANGLE AND EXPANSION ANCHORS.



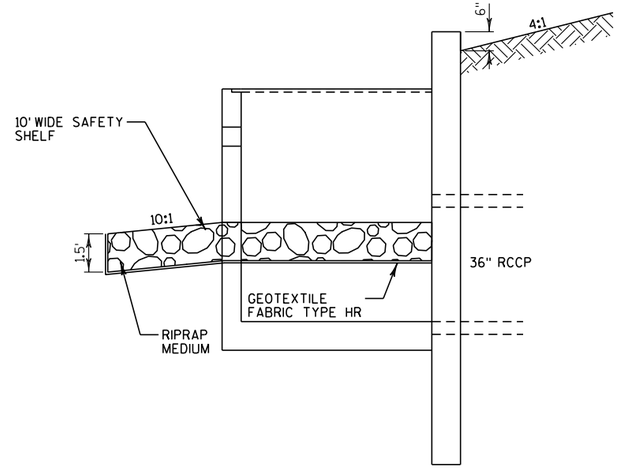
BOX SPILLWAY 5'X5'
RIPRAP PLAN VIEW



BOX SPILLWAY 5'X5'
FRONT VIEW



BOX SPILLWAY
SECTION VIEW

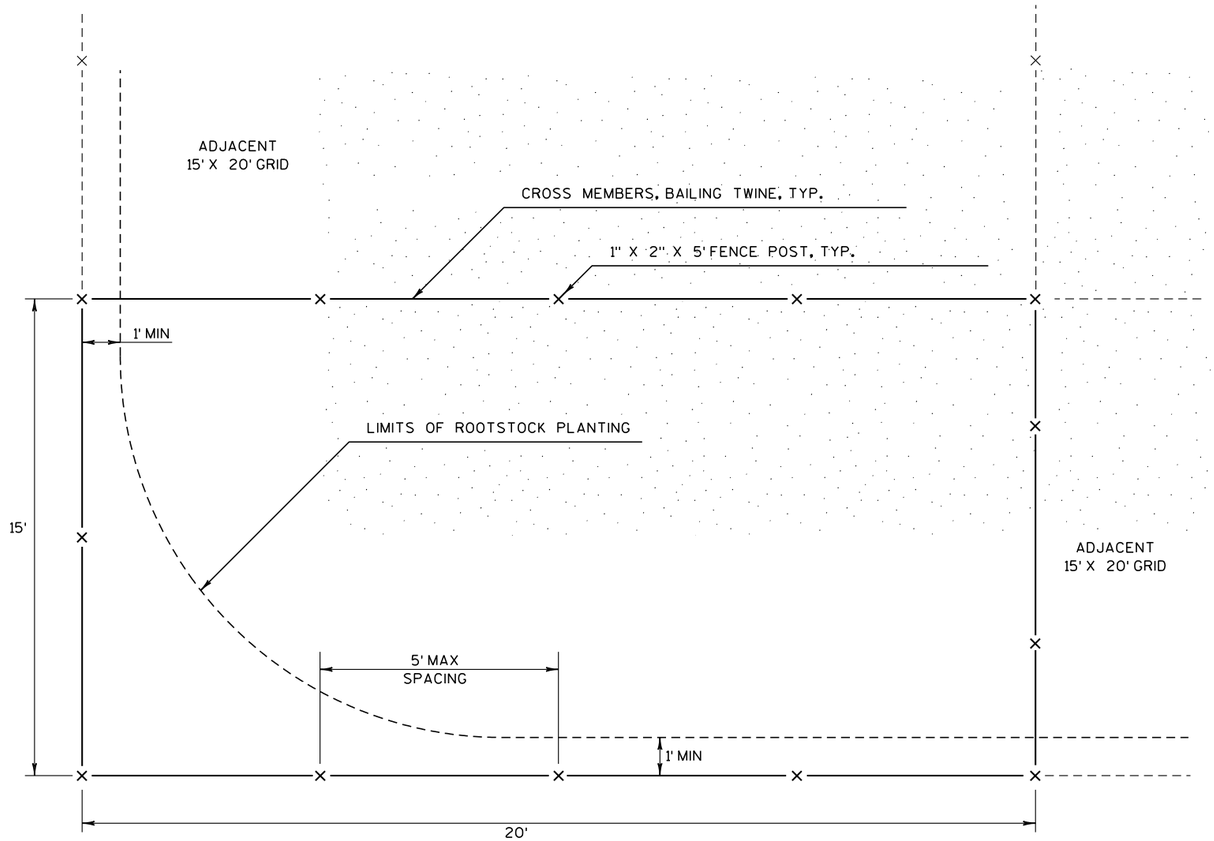


BOX SPILLWAY 5'X5'
RIPRAP SECTION VIEW

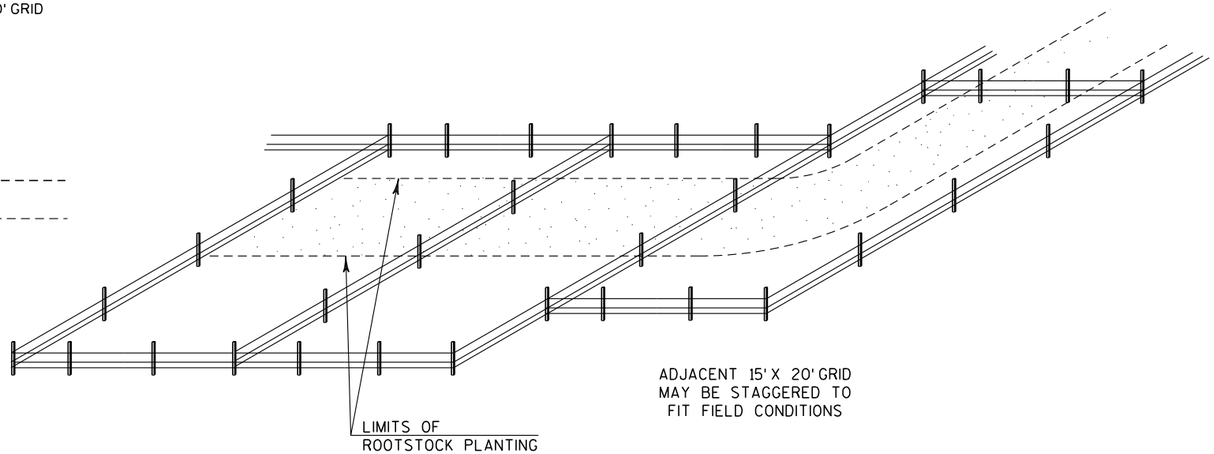
BOX SPILLWAY 5'X5' DETAILS

STA 2041+00, 62.7' RT

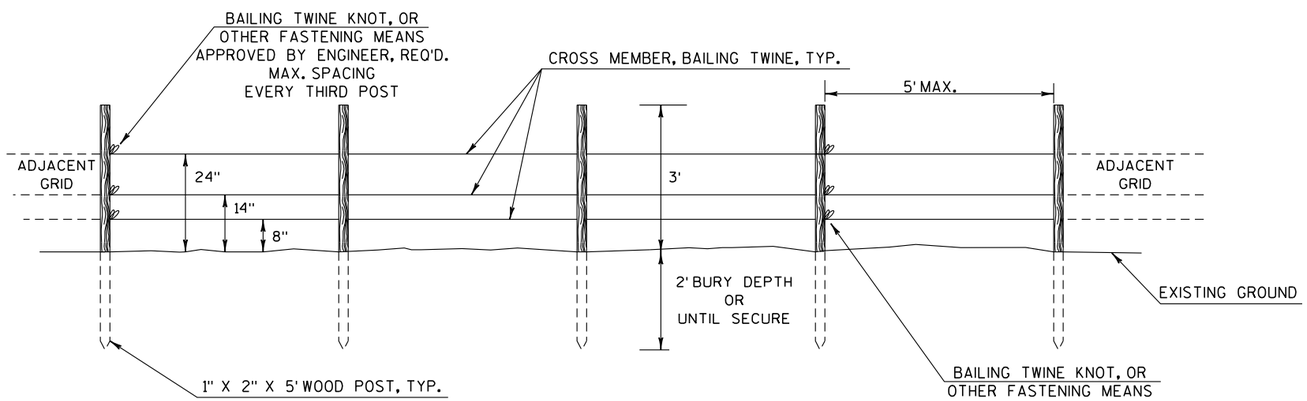
2



PLAN VIEW



ISOMETRIC VIEW



PROFILE VIEW

ROOTSTOCK PROTECTION

SHEET 4 OF 4

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CONSTRUCTION DETAILS - STORM WATER DETENTION POND SW	SHEET 36	E

2

2

LEGEND

APO3 HMA PAVEMENT TYPE E-3, 5 1/2-INCH

AGO1 BASE AGGREGATE DENSE 3/4-INCH

DRO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH

SW01 SAWING ASPHALT

N

EBS UNDERCUT-
2033+00 TO 2034+75
44.5' WIDTH x 1.5' DEPTH
REPLACED WITH
GRANULAR MATERIAL

SIGN

R/L WEST FRONTAGE ROAD

BEGIN 12.5:1 TAPER
STA 2032+11.29, 28.00' LT

END 12.5:1 TAPER
STA 2034+11.29, 12.00' LT

+89.93
62.59' LT

+09.93
62.59' LT

+48.79
17.00' LT

+74.93
32.00' LT

+74.93
17.00' LT

+24.93
32.00' LT

+25.72
17.00' LT

+25.72
0.00' LT

15:1 R

SWF SB PGL

MATCHLINE

2030 2031 2032 2033 2034 2035 2036

748.26 748.83 749.38 749.92 750.45 750.97 751.47 751.97 752.47 742.98 753.48 754.97 754.44 754.91 755.28 755.36 755.80 755.94 756.14 756.18 756.38 756.37 756.60 756.56 756.82 756.86 757.13 757.16 757.43 757.45 757.72 757.73 758.00 758.64 758.84

748.24 748.82 749.39 749.95 750.50 751.04 751.56 752.08 752.58 753.07 753.55 754.02 754.47 755.22 755.78 755.79 756.30 756.34 756.45 756.80 756.89 756.82 757.27 757.43 757.19 757.74 757.97 757.54 758.18 758.44 757.88 758.52 758.78 758.21 758.85 759.11 758.35 758.53 759.17 759.43 759.48 759.74

28'

29'

3"

2"

12"

5"

3"

BEGIN PROJECT
I.D. 1030-11-74
STA 2030+25.00
MATCH PROJECT
I.D. 1030-11-78

BEGIN 25:1 TAPER
STA 2030+37.79 29.00' RT

+37.79
17.00' RT

END 25:1 TAPER
STA 2034+46.99, 17.00' RT

+99.34
20.00' RT

2036+00

WEST FRONTAGE ROAD

IH 94 SB

1030 1031 1032 1033 1034 1035 1036

R/L IH 94

INL

IH 94 NB

SHEET 1 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET E

FILE NAME : F:\BM1-1644D CTH K\103011174_W\Roads\cds\021201_pd.dgn PLOT DATE : 20-AUG-2012 09:46 PLOT BY : smccarty PLOT NAME : PLOT SCALE : 41.087613:1 WISDOT/CADDS

LEGEND

(APO3) HMA PAVEMENT TYPE E-3, 5 1/2-INCH

(AG01) BASE AGGREGATE DENSE 3/4-INCH

(BG02) MSG GUARDRAIL 3

(BG04) MSG GUARDRAIL TERMINAL EAT

GUARDRAIL MOWSTRIP INSTALLED PER SDD

WEST FRONTAGE ROAD

R/L WEST FRONTAGE ROAD

R/L RAMP SW

R/L IH 94

IH 94 SB

SWF NB PGL

SWF SB PGL

MATCHLINE

WATER QUALITY POND SW

1037SW

1038SW

1039SW

2036+00

2042+00

+26.48 17.00' RT

+16.69 22.00' RT

+16.62 28.50' RT

+41.04 25.33' RT

+65.51 20.00' RT

+65.51 23.67' RT

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 38	E

SHEET 2 OF 12

2

6" PERFORATED DRAIN TILE UNDER ROADWAY, OUTFALL IN WEST DITCH

GUARDRAIL MOWSTRIP INSTALLED PER SDD

WEST FRONTAGE ROAD

SWF SB PGL

SWF NB PGL

R/L WEST FRONTAGE ROAD

MATCHLINE

WATER QUALITY POND SW

LEGEND

APO1	HMA PAVEMENT TYPE E-3, 4-INCH
APO3	HMA PAVEMENT TYPE E-3, 5 1/2-INCH
AGO1	BASE AGGREGATE DENSE 3/4-INCH
CGO6	CONCRETE CURB AND GUTTER 30-INCH TYPE A
CMO1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CPO9	CONCRETE PAVEMENT 9 1/2-INCH, DOWELED AND TINED
DRO4	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
BGO2	MSG GUARDRAIL 3
BGO4	MSG GUARDRAIL TERMINAL EAT
LSO1	SOD LAWN
PVI1	CONCRETE SURFACE DRAINS

SHEET 3 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 39	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\021203_pd.dgn PLOT DATE : 18-JUN-2012 11:28 PLOT BY : rmakoutz PLOT NAME : PLOT SCALE : 40:1

LEGEND

- (APO1) HMA PAVEMENT TYPE E-3, 4-INCH
- (APO3) HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (CGO2) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A
- (CGO6) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (CMO1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CMO5) CONCRETE SIDEWALK, 5-INCH
- (CPO9) CONCRETE PAVEMENT 9 1/2-INCH, DOWELED AND TINED
- (DRO1) CONCRETE DRIVEWAY 6-INCH
- (DRO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (LSO1) SOD LAWN
- (PV11) CONCRETE SURFACE DRAINS
- (PV05) ASPHALTIC FLUME
- (CMO4) MAINTENANCE OPENING, SEE CONSTRUCTION DETAILS

JAVCO DRIVEWAY

LUND DRIVE

R/L LUND DRIVE

STA 8+17.49 R/L LUND DRIVE =
STA 18+17.49 R/L JAVCO DRIVEWAY

R/L JAVCO DRIVEWAY

STA 2051+35.89 R/L W. FRONTAGE ROAD
STA 10+00.00 R/L LUND DRIVE

WEST FRONTAGE ROAD

R/L WEST FRONTAGE ROAD

SWF SB PGL

SWF NB PGL

MATCHLINE

2048+00

2053+50

CONCRETE DRIVEWAY EXTENDED FOR TRUCK TURNING RADII.

RADIUS TABLE

POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
1	2050+30.27	51.00' RT	-	-	75'
2	2050+31.94	75.00' LT	9+29.98	113.12' RT	75'
3	2052+43.26	75.00' LT	9+25.93	108.00' LT	75'
4	2052+44.46	63.00' RT	-	-	75'
5	2050+84.16	88.00' LT	9+12.23	55.00' RT	40'
6	2052+09.98	108.00' LT	8+92.65	75.00' LT	60'

SHEET 4 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 40 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\021204_pd.dgn PLOT DATE : 18-JUN-2012 11:23 PLOT BY : rmakoutz PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

EBS UNDERCUT-
28+50 TO 30+31
17' WIDTH x 1.7' DEPTH
REPLACED WITH
GRANULAR MATERIAL

RADIUS TABLE

POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
7	2058+36.12	77.38' LT	32+50.41	86.95' RT	50'
8	2058+36.72	68.00' RT	33+95.79	87.34' RT	50'

ASPHALT CURB

WEST FRONTAGE ROAD

SWF SB PGL

SWF NB PGL

R/L WEST FRONTAGE ROAD

BEGIN 15:1 TAPER
STA 2055+23.78, 18.00' RT

END 15:1 TAPER
STA 2056+89.56, 29.00' RT

EBS UNDERCUT-
2056+50 TO 2057+12
88' WIDTH x 1' DEPTH
REPLACED WITH
GRANULAR MATERIAL

EBS UNDERCUT-
OLD HOUSE
FOUNDATION AT 2058+00
25'x28', 3' DEPTH
REPLACED WITH
GRANULAR MATERIAL

EBS UNDERCUT-
2057+65 TO CTH K
88' WIDTH x 1.0' DEPTH
REPLACED WITH
GRANULAR MATERIAL

MATCHLINE 31+50

R/L CTH K

CTH K

MATCHLINE

LEGEND

- APO3 HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- APO9 HMA PAVEMENT TYPE E-1, 5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- CGO6 CONCRETE CURB AND GUTTER 30-INCH TYPE A
- CGO7 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CMO1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO5 CONCRETE SIDEWALK, 5-INCH
- CPO9 CONCRETE PAVEMENT 9 1/2-INCH, DOWELED AND TINED
- DRO1 CONCRETE DRIVEWAY 6-INCH
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
- DRO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- SWO1 SAWING ASPHALT
- LSO1 SOD LAWN
- PVO8 ASPHALTIC CURB
- PVO5 ASPHALTIC FLUME

2

RADIUS TABLE

POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
9	4053+71.26	68.00' LT	32+60.78	59.34' LT	50'
10	4053+61.64	64.00' RT	33+92.71	48.83' LT	40'

LEGEND

- (APO1) HMA PAVEMENT TYPE E-3, 4-INCH
- (APO3) HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (CGO6) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (CGO7) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CMO4) MAINTENANCE OPENING, SEE CONSTRUCTION DETAIL
- (CPO9) CONCRETE PAVEMENT 9 1/2-INCH, DOWELED AND TINED
- (LSO1) SOD LAWN

ASPHALT CURB

CTH K

R/L CTH K

WEST FRONTAGE ROAD

NWF SB PGL

NWF NB PGL

R/L WEST FRONTAGE ROAD

MATCHLINE

MATCHLINE 35+00

2059+00

4058+00

STA 4053+12.38 R/L W. FRONTAGE ROAD =
STA 33+28.38 R/L CTH K

+60.54 2.27' RT

+60.58 9.34' LT

50' R

+69.61 18.03' LT

+89.91 17.36' LT

R=648.51'

+93.87 22.27' LT

+93.87 61.00' LT

+62.97 61.00' LT

+01.75 49.90' LT

+12.48 48.92' LT

R=471.85'

+59.77 41.55' LT

+56.72 24.30' RT

+15.59 17.00' RT

+55.89 12.00' RT

+20.43 12.00' RT

+20.43 14.00' RT

+91.75 12.00' RT

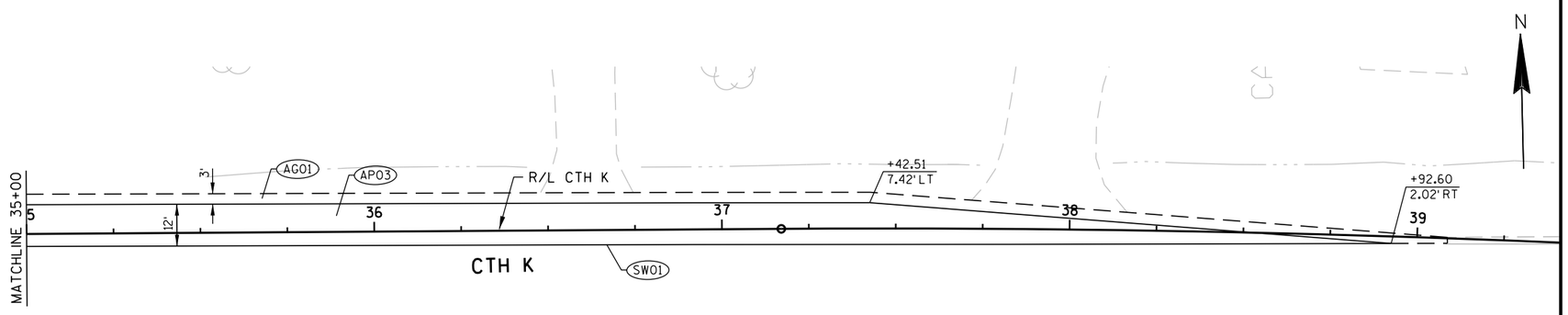
+91.75 14.00' RT

40' R

+92.55 8.83' LT

+42.51 7.42' LT

+92.60 2.02' RT

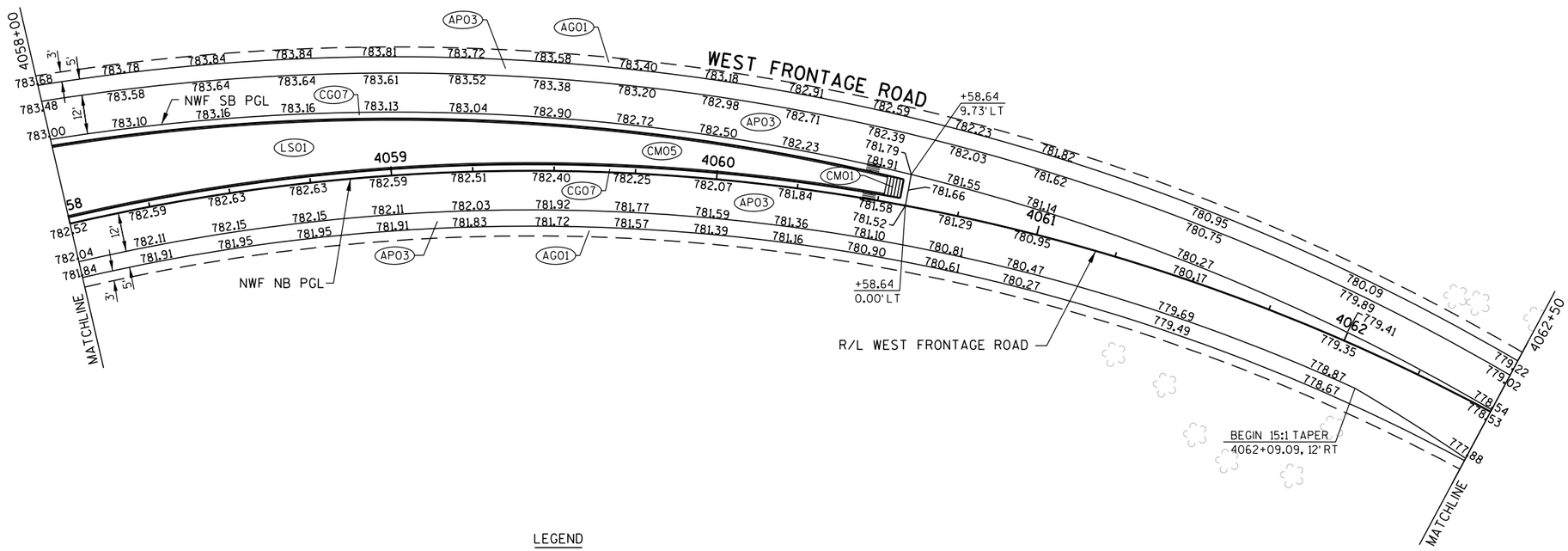


SHEET 6 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 42	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\021206_pd.dgn PLOT DATE : 05-JUL-2012 08:10 PLOT BY : rmakoutz PLOT NAME : PLOT SCALE : 40.000014:1

2



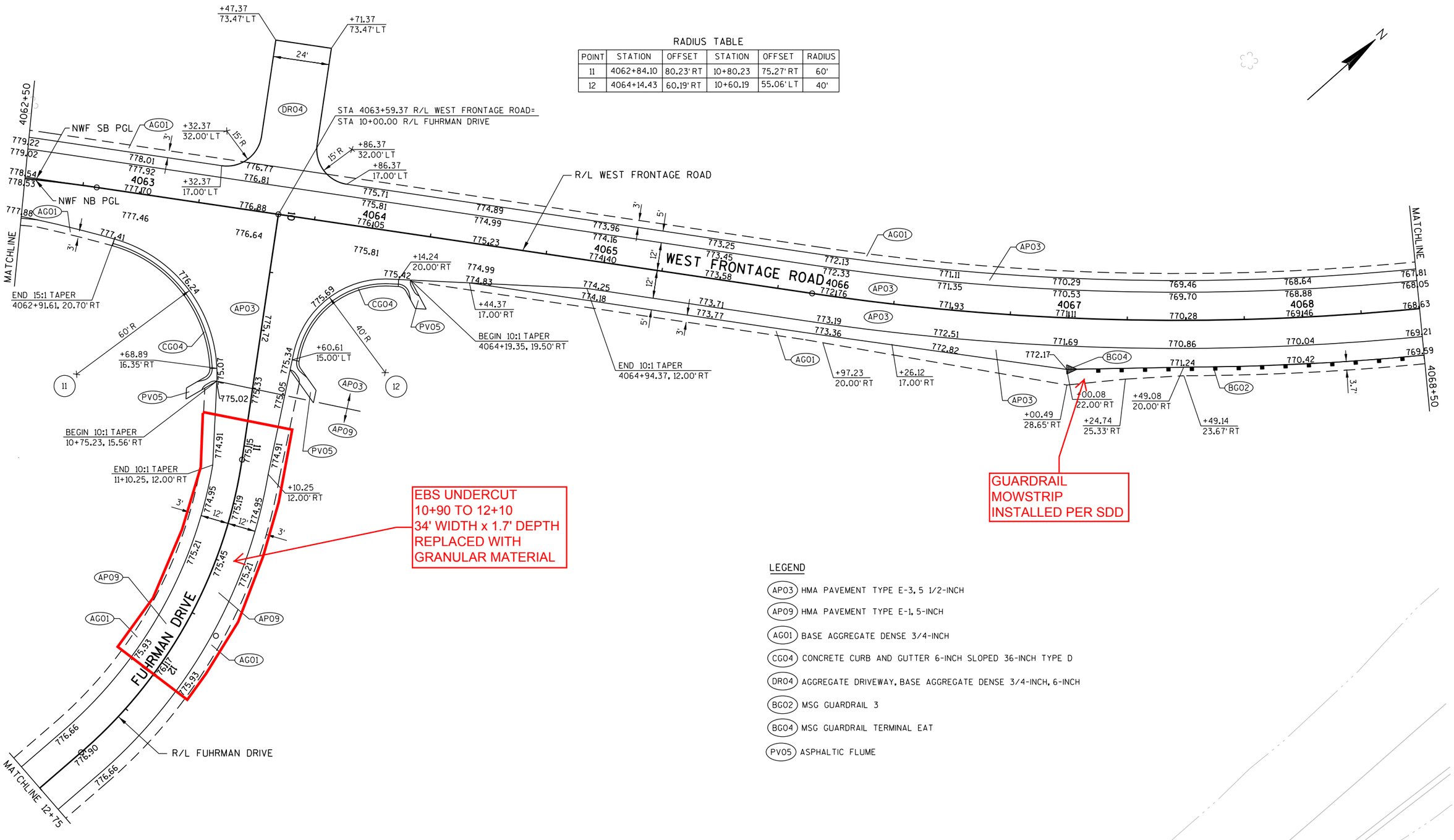
LEGEND

- (AP03) HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CG07) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM05) CONCRETE SIDEWALK 5-INCH
- (LS01) SOD LAWN

2

RADIUS TABLE

POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
11	4062+84.10	80.23' RT	10+80.23	75.27' RT	60'
12	4064+14.43	60.19' RT	10+60.19	55.06' LT	40'



LEGEND

- (AP03) HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- (AP09) HMA PAVEMENT TYPE E-1, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CG04) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (BG02) MSG GUARDRAIL 3
- (BG04) MSG GUARDRAIL TERMINAL EAT
- (PV05) ASPHALTIC FLUME

2

LEGEND

(AP03) HMA PAVEMENT TYPE E-3, 5 1/2-INCH

(AG01) BASE AGGREGATE DENSE 3/4-INCH

(BG02) MSG GUARDRAIL 3

(BG04) MSG GUARDRAIL TERMINAL EAT

N

4068+50

MATCHLINE

R/L WEST FRONTAGE ROAD

WEST FRONTAGE ROAD

4069

4070

4071

4072

4073

4074

4074+50

MATCHLINE

767.81 768.05 768.63 769.21 769.59

766.99 767.23 766.41 766.17 765.58 765.34 764.52 763.69 762.87 762.47 762.11 761.78 761.49 761.23 761.00 760.81 760.65 760.52 760.43 760.37 760.34

766.99 766.41 766.16 765.34 764.76 763.93 763.11 762.71 762.35 762.02 761.73 761.47 761.24 761.05 760.89 760.76 760.67 760.61 760.58

768.39 767.57 766.74 765.92 765.09 764.27 763.87 763.51 763.18 762.89 762.63 762.40 762.21 762.05 761.92 761.83 761.77 761.74

768.77 767.95 767.12 766.30 765.47 764.65 764.25 763.89 763.56 763.27 763.01 762.78 762.59 762.43 762.30 762.21 762.15 762.12

767.81 767.23 766.99 766.74 766.41 766.16 765.92 765.58 765.34 765.09 764.76 764.52 764.27 763.93 763.87 763.69 763.51 763.29 763.18 762.89 762.87 762.71 762.63 762.47 762.40 762.31 762.21 762.11 762.05 762.02 761.92 761.83 761.78 761.73 761.63 761.49 761.47 761.34 761.25 761.19 761.16

4069 4070 4071 4072 4073 4074

767.81 768.05 768.63 769.21 769.59

766.99 767.23 766.41 766.17 765.58 765.34 764.52 763.69 762.87 762.47 762.11 761.78 761.49 761.23 761.00 760.81 760.65 760.52 760.43 760.37 760.34

766.99 766.41 766.16 765.34 764.76 763.93 763.11 762.71 762.35 762.02 761.73 761.47 761.24 761.05 760.89 760.76 760.67 760.61 760.58

768.39 767.57 766.74 765.92 765.09 764.27 763.87 763.51 763.18 762.89 762.63 762.40 762.21 762.05 761.92 761.83 761.77 761.74

768.77 767.95 767.12 766.30 765.47 764.65 764.25 763.89 763.56 763.27 763.01 762.78 762.59 762.43 762.30 762.21 762.15 762.12

4069 4070 4071 4072 4073 4074

767.81 768.05 768.63 769.21 769.59

766.99 767.23 766.41 766.17 765.58 765.34 764.52 763.69 762.87 762.47 762.11 761.78 761.49 761.23 761.00 760.81 760.65 760.52 760.43 760.37 760.34

766.99 766.41 766.16 765.34 764.76 763.93 763.11 762.71 762.35 762.02 761.73 761.47 761.24 761.05 760.89 760.76 760.67 760.61 760.58

768.39 767.57 766.74 765.92 765.09 764.27 763.87 763.51 763.18 762.89 762.63 762.40 762.21 762.05 761.92 761.83 761.77 761.74

768.77 767.95 767.12 766.30 765.47 764.65 764.25 763.89 763.56 763.27 763.01 762.78 762.59 762.43 762.30 762.21 762.15 762.12

4069 4070 4071 4072 4073 4074

3' 5' 12' 12' 8' 3.7'

AG01 AP03 AP03 AP03 BG02 AG01 AP03

ATT-FO

SS

IH 94 SB

IH 94 NB

R/L IH 94

1073 1074

SHEET 9 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 45	E

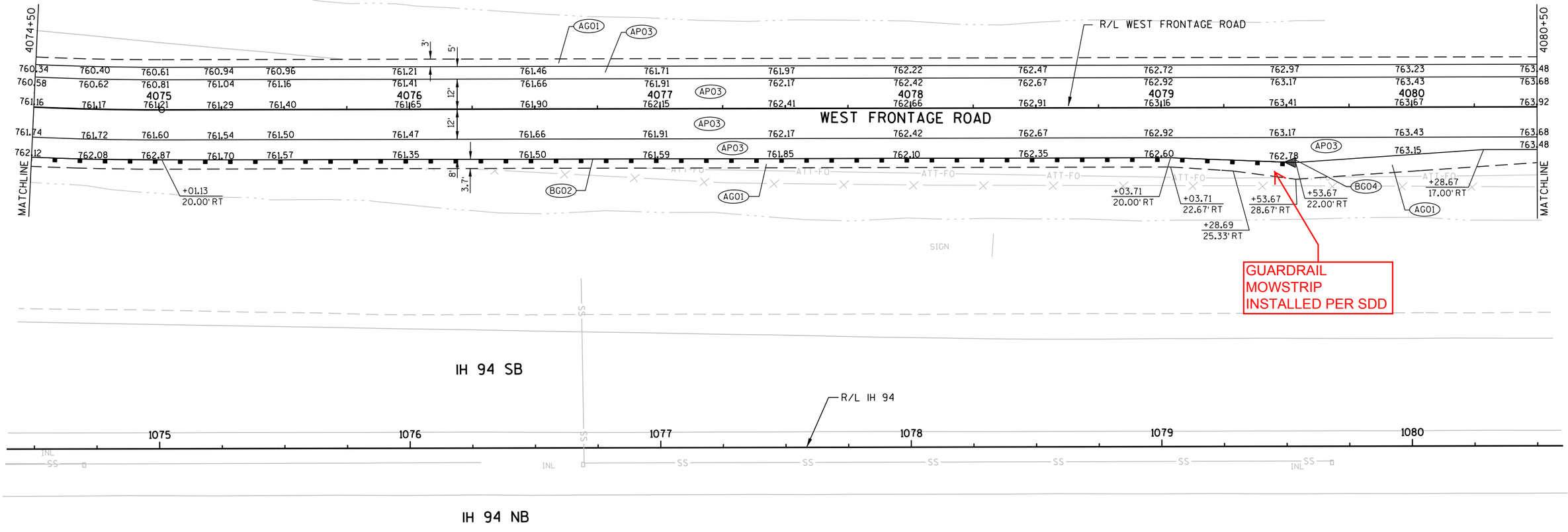
FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\021209_pd.dgn PLOT DATE : 18-JUN-2012 11:23 PLOT BY : rmakoutz PLOT NAME : PLOT SCALE : 40:1

2

N

LEGEND

- (AP03) HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (BG02) MSG GUARDRAIL 3
- (BG04) MSG GUARDRAIL TERMINAL EAT



SHEET 10 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - WEST FRONTAGE ROAD	SCALE, FEET 0 20 40	SHEET 46 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\021210_pd.dgn PLOT DATE : 18-JUN-2012 11:23 PLOT BY : rmakoutz PLOT NAME : PLOT SCALE : 40:1

2

N

LEGEND

- AP03 HMA PAVEMENT TYPE E-3, 5 1/2-INCH
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- DR04 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE ¾-INCH, 6-INCH
- SW01 SAWING ASPHALT

+96.99 117.62' LT — +6.99 117.62' LT — 10' — DR04

+76.60 77.00' LT — DR03 — DR04 — +93.60 77.00' LT — 17'

+24.24 72.40' LT — DR04 — DR03 — +39.28 72.40' LT — 15'

4080+50

+82.00 32.00' LT — 15:R — +22.00 32.00' LT — +62.11 32.00' LT — +09.11 32.00' LT — +12.37 32.00' LT — +57.51 32.00' LT

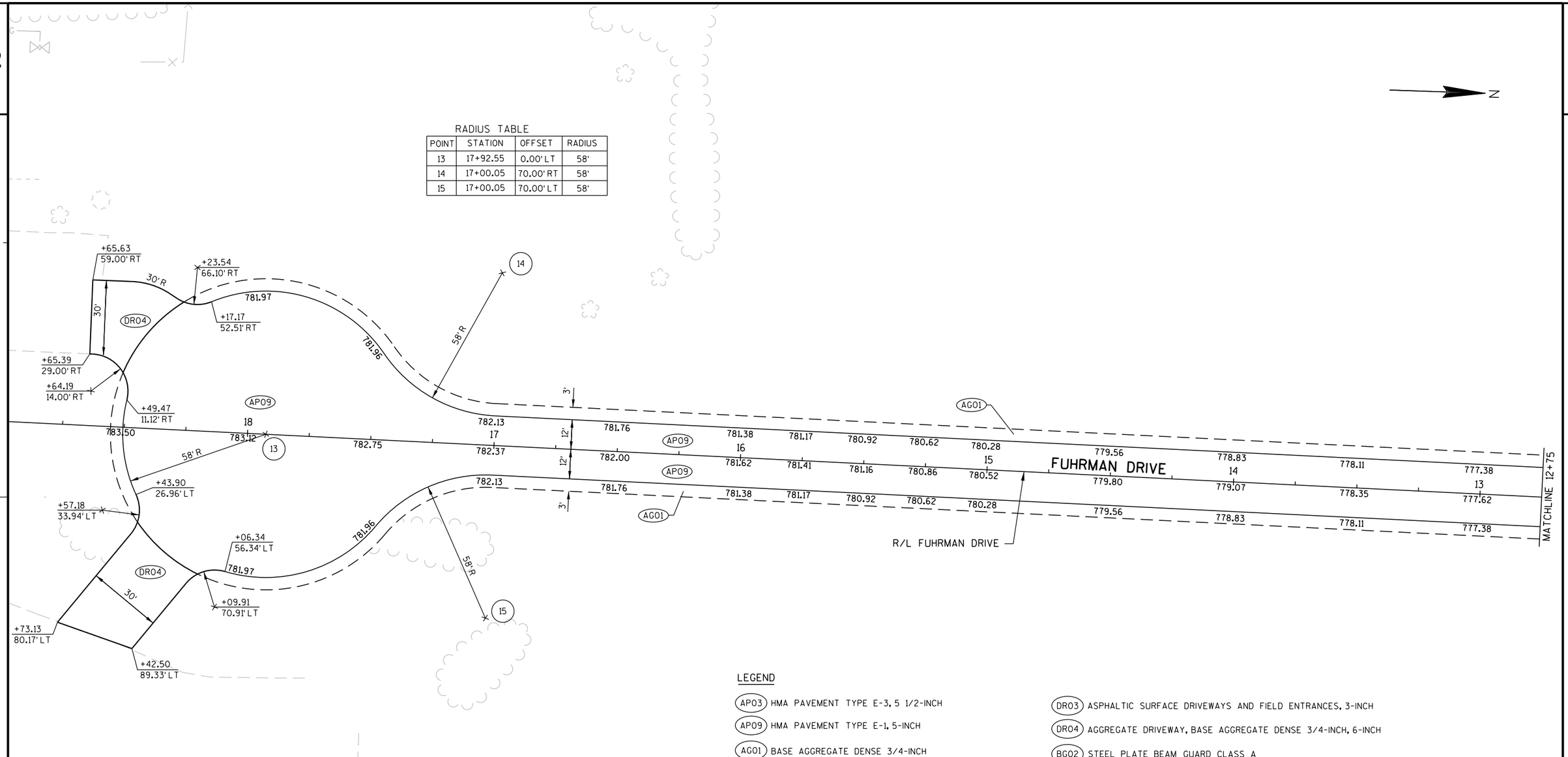
+82.00 17.00' LT — +22.00 17.00' LT — +62.11 17.00' LT — +09.11 17.00' LT — +12.37 17.00' LT — +57.51 17.00' LT

| | | |

2

RADIUS TABLE

POINT	STATION	OFFSET	RADIUS
13	17+92.55	0.00' LT	58'
14	17+00.05	70.00' RT	58'
15	17+00.05	70.00' LT	58'



LEGEND

APO3	HMA PAVEMENT TYPE E-3, 5 1/2-INCH
APO9	HMA PAVEMENT TYPE E-1, 5-INCH
AGO1	BASE AGGREGATE DENSE 3/4-INCH
CGO6	CONCRETE CURB AND GUTTER 30-INCH TYPE A
CGO7	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CMO1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CMO5	CONCRETE SIDEWALK, 5-INCH
CPO9	CONCRETE PAVEMENT 9 1/2-INCH, DOWELED AND TINED
DRO1	CONCRETE DRIVEWAY 6-INCH
DRO3	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
DRO4	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
BGO2	STEEL PLATE BEAM GUARD CLASS A
BGO4	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
SWO1	SAWING ASPHALT
LSO1	SOD LAWN
PVO8	ASPHALTIC CURB
PV11	CONCRETE SURFACE DRAINS
PVO5	ASPHALTIC FLUME

SHEET 12 OF 12

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN DETAIL - FUHRMAN DRIVE	SCALE, FEET 0 20 40	SHEET 48	E

2

2

LEGEND

- EROSION BALES
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PLS — PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY

NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

EROSION MATS SHALL NOT BE INSTALLED IN STANDING WATER

N

MATCH ID 1030-11-78

WEST FRONTAGE ROAD

STA 2046+00

SEE SHEET 2 OF 6 MATCHLINE

RIPRAP MEDIUM

SILT FENCE DRAINAGE OUTLET, ROCK BAGS SEE CONSTRUCTION DETAIL

SLOPE INTERCEPT, TYP

R/W

TLE

IH 94 SB

IH 94 NB

19"X30"

24"

36"

30"

1030SW

1032SW

1034SW

1036SW

1038SW

1040SW

1042SW

1044SW

2030

2032

2034

2036

2038

2040

2042

2044

2046

1034

1036

1038

1040

1042

760

755

752

751

747

EOD

SEPV

SIGN

RIPRAP MEDIUM

EARTHEN BERM TO REDUCE EROSION FROM PARKING LOT TO POND

SHEET 1 OF 6

ORIGINAL PLANS PREPARED BY

R.A. Smith National

Beyond Surveying and Engineering

16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN
BRIAN PLUEMER
E-35072
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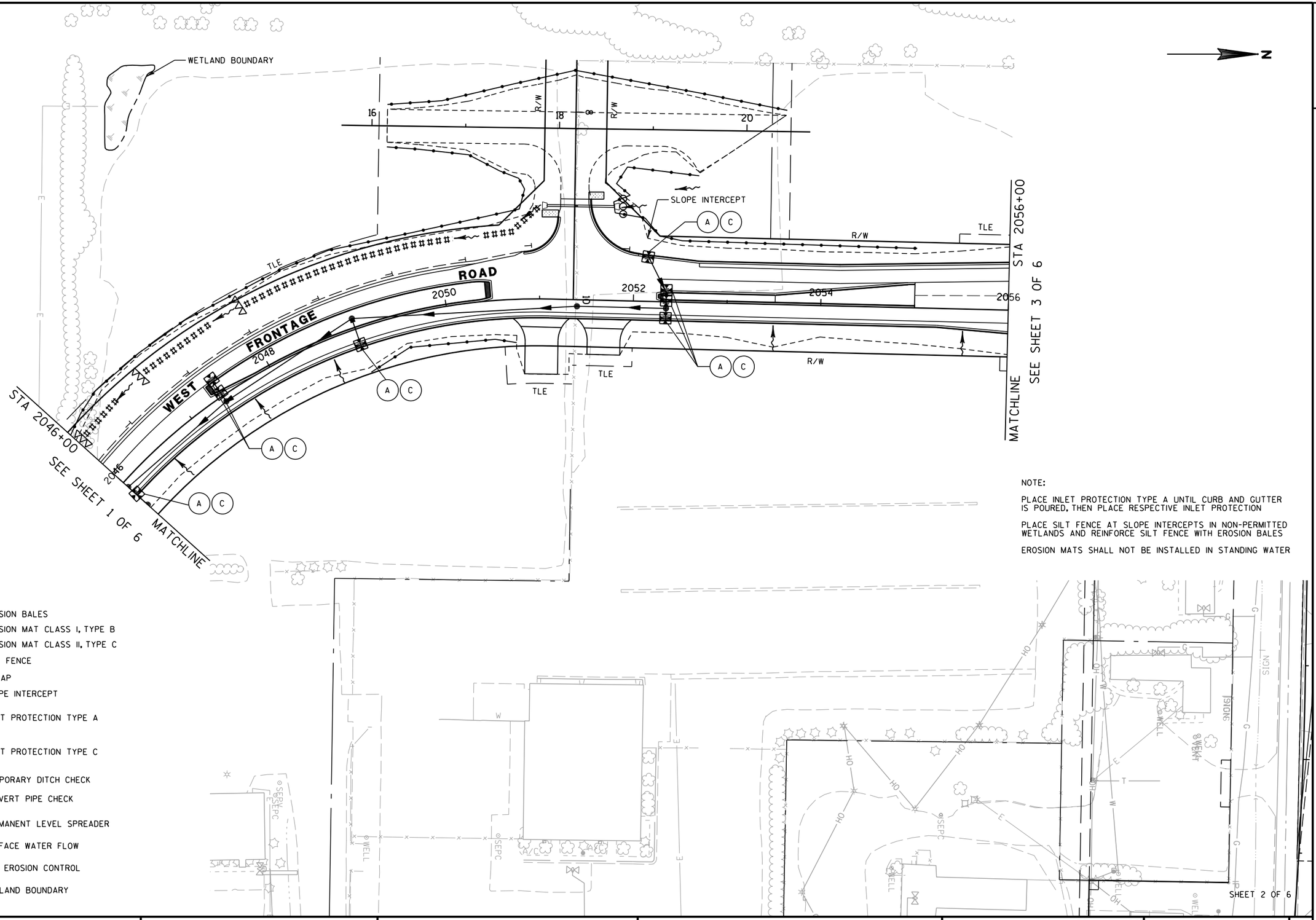
9/15/2010 (Date)

(Signature)

THIS STAMP APPLIES TO EROSION CONTROL PLANS 1 TO 6 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET 49	E

FILE NAME : T:\1052705\Cadd\sheets\EROSION CONTROL\WFR_74\022001_ec.DGN PLOT DATE : 12/6/2012 PLOT BY : Trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

EROSION MATS SHALL NOT BE INSTALLED IN STANDING WATER

LEGEND

- EROSION BALES
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PLS — PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY

SHEET 2 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET 50	E

NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

EROSION MATS SHALL NOT BE INSTALLED IN STANDING WATER

LEGEND

- EROSION BALES
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- EROSION BALES
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY
- PERMITTED WETLAND IMPACTS

N

SEE SHEET 4 OF 6

MATCHLINE STA 4058+00

WEST FRONTAGE ROAD

R/W

4058

4056

4054

2058

2056

SLOPE INTERCEPT

STA 4054+61.5, 47.7'RT

STA 4054+48.1, 52.4'RT

STA 4054+21.6 40.4'RT

WETLAND BOUNDARY

PERMITTED WETLAND IMPACTS

STA 4054+01.3, 43.0'RT

STA 4053+79.7, 51.2'RT

STA 4054+22.2, 69.9'LT

WETLAND BOUNDARY

STA 4053+66.4, 47.8'LT

CTH K

1058NW

1056NW

1054SW

TLE

RIPRAP LIGHT

SLOPE INTERCEPT

RUINS

SILO

MATCHLINE STA 2056+00

SEE SHEET 2 OF 6

SHEET 3 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET 51	E

2

N

NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

EROSION MATS SHALL NOT BE INSTALLED IN STANDING WATER

LEGEND

- EROSION BALES
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PLS — PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY
- PERMITTED WETLAND IMPACTS

SEE SHEET 3 OF 6 MATCHLINE STA 4058+00

4058 4060 4062 4064 4066 4068 4070

R/W TLE SLOPE INTERCEPT WETLAND BOUNDARY

FUHRMAN DRIVE

WEST FRONTAGE ROAD

RAMP NW

1056NW 1058NW 1060NW 1062NW 1064NW 1066NW

SEE SHEET 5 OF 6 MATCHLINE STA 4070+00

SHEET 4 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET 52	E

NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

EROSION MATS SHALL NOT BE INSTALLED IN STANDING WATER

LEGEND

- EROSION BALE, BARRIER
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- EROSION BALES
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PLS PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY
- PERMITTED WETLAND IMPACTS

N

SEE SHEET 4 OF 6 STA 4070+00 MATCHLINE

WETLAND BOUNDARY

STA 4070+44.5, 79.3'LT

STA 4071+18, 57.4'LT

STA 4071+47.7, 49.6'LT

STA 4072+46.6, 65.6'LT

STA 4073+81.4, 74.6'LT

SILT FENCE DRAINAGE OUTLET, EROSION CONTROL FILTER BAGS SEE CONSTRUCTION DETAIL (REMAIN UNTIL PLS IS BUILT)

STA 4073+95.5, 72.4'LT

STA 4074+46.9, 63.6'LT

STA 4075+49.9, 60.2'LT

RIPRAP LIGHT

SLOPE INTERCEPT

PLS

RIPRAP LIGHT

WETLAND BOUNDARY

SILT FENCE DRAINAGE OUTLET, EROSION CONTROL FILTER BAGS SEE CONSTRUCTION DETAIL

RIPRAP MEDIUM

RIPRAP LIGHT

WEST FRONTAGE ROAD

IH 94 SB

IH 94 NB

1070NW 1072NW 1072 1072NE 1074NW 1074 1074NE 1076NW 1076 1076NE 1078 1080 1082 1084

4070 4072 4074 4076 4078 4080 4082 4084

R/W TLE INL SS MH OH SIGN

SEE SHEET 6 OF 6 STA 4085+00 MATCHLINE

SHEET 5 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET	E

FILE NAME : T:\1052705\Cadd\sheets\EROSION CONTROL\WFR_74\022005_ec.DGN PLOT DATE : 12/6/2012 PLOT BY : Trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE:

PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS POURED, THEN PLACE RESPECTIVE INLET PROTECTION

PLACE SILT FENCE AT SLOPE INTERCEPTS IN NON-PERMITTED WETLANDS AND REINFORCE SILT FENCE WITH EROSION BALES

LEGEND

- EROSION BALE, BARRIER
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- RIPRAP
- SLOPE INTERCEPT
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- EROSION BALES
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- PLS — PERMANENT LEVEL SPREADER
- SURFACE WATER FLOW
- SOD EROSION CONTROL
- WETLAND BOUNDARY

SLOPE INTERCEPT

R/W

SEE SHEET 5 OF 6
STA 4085+00

MATCHLINE

4086
4088
4090
1086
1088
1090
1092
1094
1096
1098
1100

WEST FRONTAGE ROAD

IH 94 SB

IH 94 NB

SHEET 6 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	EROSION CONTROL - WEST FRONTAGE RD	SCALE, FEET 0 50 100	SHEET 54	E

FILE NAME : t:\1052705\cadd\sheets\erosion control\wfr_74\022006_ec.dgn PLOT DATE : 12/6/2012 PLOT BY : Trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

ORIGINAL PLANS PREPARED BY
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16745 W. Bluemound Road, Brookfield WI 53005
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WISCONSIN
RACHEL A. De SOMBRE
E-36868
PEWAUKEE
WI
PROFESSIONAL ENGINEER

8/31/2011 (Date)
Rachel De Sombre (Signature)

THIS STAMP APPLIES TO STORM SEWER PLANS 1 TO 5 OF 5

122E STA 2031+99.5, 49.2' LT
1-19" X 30" APRON ENDWALL

122D STA 2032+00.8, 36.0' RT
1-19" X 30" APRON ENDWALL
PIPE CONNECTS TO FUTURE IH 94 STORM SEWER
APRON ENDWALL TO BE SALVAGED UNDER ID 1030-11-72

123E STA 2035+01.7, 29.8' LT
19" X 30" APRON ENDWALL

123D STA 2034+98.6, 35.6' RT
19" X 30" APRON ENDWALL
PIPE CONNECTS TO FUTURE IH 94 STORM SEWER
APRON ENDWALL TO BE SALVAGED UNDER ID 1030-11-72

215B STA 2041+00, 61.9' LT
1-36" APRON END WALL

220 STA 2041+00, 82.3' LT
INLET MEDIAN 1 GRATE
CONNECT TO EXISTING DRAIN TILE
FIELD VERIFY PIPE LOCATION, SIZE AND ELEVATION PRIOR TO ORDERING MATERIALS

208A STA 2046+00, 19.5' RT
5' DIA-H MANHOLE

208 STA 2046+00, 7' RT
6' DIA-J-S MANHOLE

210 STA 2045+08, 38.3' RT
36" APRON ENDWALL

209 STA 2046+00, 35' RT
6' DIA-J-S MANHOLE

215A STA 2041+00, 68.8' RT
5'X5' BOX SPILLWAY

SLOPE INTERCEPT
WEST FRONTAGE ROAD R/L
IH 94 R/L
IH 94 SB
IH 94 NB
WEST FRONTAGE ROAD
STORM WATER DETENTION POND SW
SEE CONSTRUCTION DETAIL
SHEET 1 OF 5

FINISHED PROFILE
EXISTING DRAIN TILE TO REMAIN
19"X30" X 85.2' SSPRCHE CL IV @ 0.69%
19"X30" X 65.5' SSPRCHE CL IV @ 0.50%
30" X 139.0' SSPRC CL IV @ 0.80%
36" X 139.0' SSPRC CL III @ 0.96%
30" X 12.5' SSPRC CL IV @ 0.80%
36" X 15.5' SSPRC CL IV @ 0.35%
36" X 86.0' SSPRC CL III @ 0.35%

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	STORM SEWER - WEST FRONTAGE ROAD	SHEET 55	E

STA 2051+40, 7' RT
6'DIA-J-S MANHOLE
STRUCTURE AND DOWNSTREAM
STORM SEWER DESIGNED
TO ACCOMODATE FURTURE
LUND DRIVE STORM SEWER
205

STA 2049+00, 12' LT
6'DIA-J-S MANHOLE
206

STA 2049+00, 19.5' RT
2'X3'-H INLET
206A

STA 2047+41, 18.6' LT
2'X3'-H INLET
207A

STA 2047+41, 5.8' LT
2'X3'-H INLET
207B

STA 2047+41, 7' RT
5'DIA-J-S MANHOLE
207

STA 2052+14.5, 49.0' LT
4'DIA-H INLET
201A

STA 2052+35.0, 9.9' LT
2'X3'-H INLET
201B

STA 2052+35.0, 2.0' LT
2'X3'-H INLET
201C

STA 2052+35.0, 7' RT
4'DIA-J-S MANHOLE
201

STA 2052+35.0, 19.5' RT
2'X3'-H INLET
201D

STA 30+35.3, 47.1' RT
24"X38" APRON ENDWALL
603A

STA 30+34.4, 30.4' RT
6'DIA-J-S MANHOLE
CONNECT TO EXISTING
24"X36" CMP ARCH TO
THE NORTH
FIELD VERIFY SIZE, INVERT
ELEVATION AND LOCATION
PRIOR TO ORDERING MATERIALS
603

STA 34+00, 43.8' RT
18" APRON ENDWALL
WITH PIPE GRATE
601A

STA 34+00, 31.4' RT
4'DIA-J-S MANHOLE
601

STA 32+50.0, 44.4' RT
18" APRON ENDWALL
WITH PIPE GRATE
602A

STA 32+50, 31.0' RT
4'DIA-J-S MANHOLE
602

WEST FRONTAGE ROAD

WEST FRONTAGE ROAD R/L

SLOPE INTERCEPT

SLOPE INTERCEPT

12" CLIV RCP

MEDIAN GRATE 1
INLET- INV.773.78

CTH K

WETLAND BOUNDARY

WETLAND BOUNDARY

SHEET 2 OF 5

FINISHED PROFILE

30" X 160.3' SSPRC CL III @ 0.80%

30" X 139.0' SSPRC CL IV @ 0.80%

30" X 240.5' SSPRC CL III @ 0.40%

15" X 95.0' SSPRC CL III @ 2.00%

18" X 215.6' SSPRC CL IV @ 1.24%

24"X38" X 16.7' SSPRCHE CL IV @ 0.95%

18" X 150.0' SSPRC CL IV @ 1.0%

18" X 15.1' SSPRC CL IV @ 0.50%

12" X 12.8' SSPRC CL IV @ 1.00%

12" X 44.2' SSPRC CL IV @ 1.00%

12" X 7.9' SSPRC CL IV @ 1.00%

12" X 9.0' SSPRC CL IV @ 1.00%

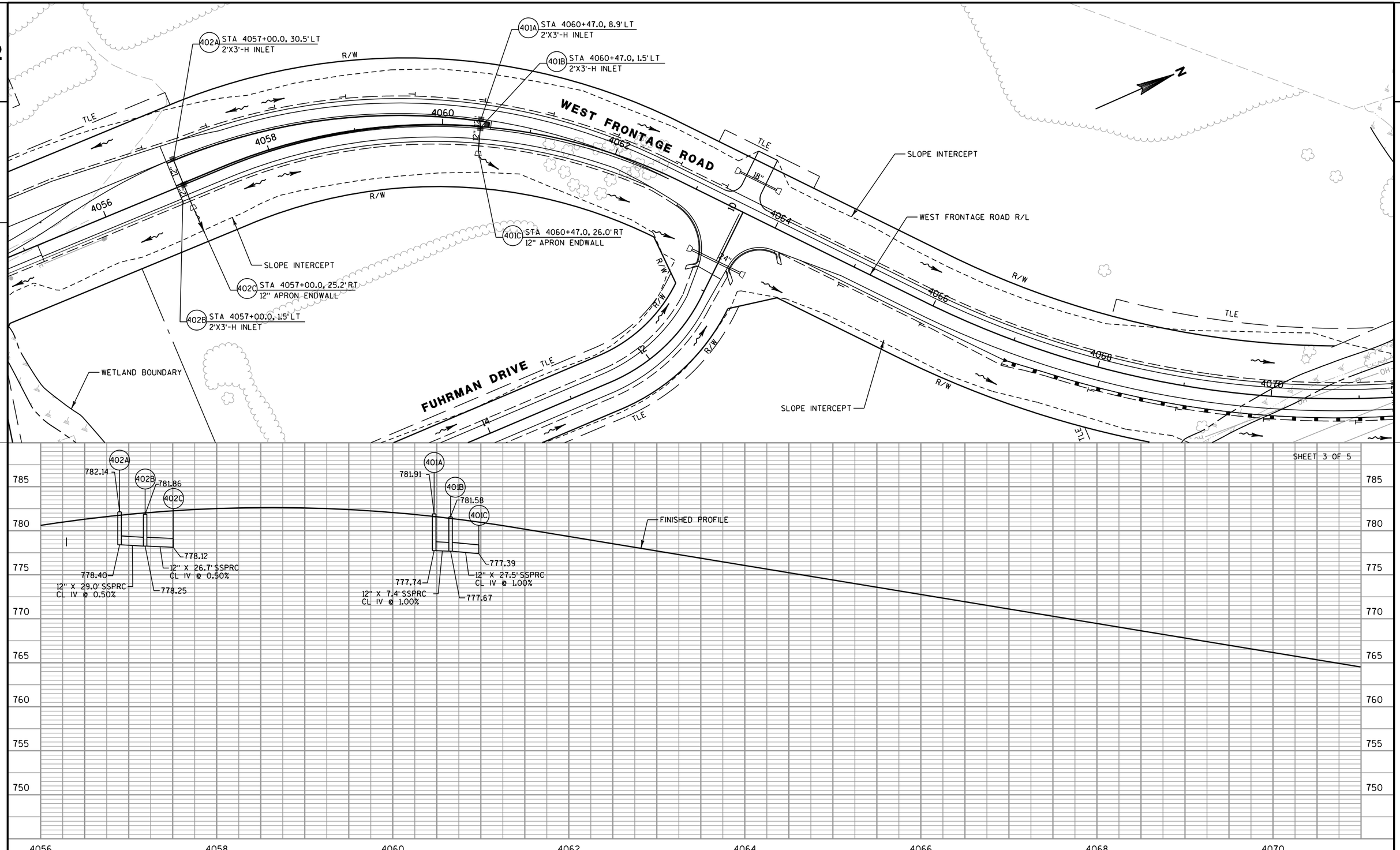
12" X 12.5' SSPRC CL IV @ 1.00%

18" X 13.4' SSPRC CL IV @ 0.75%

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	STORM SEWER - WEST FRONTAGE ROAD	SHEET E

FILE NAME : t:\1052705\cadd\sheets\STORM\WFR_74\022502_ss.dgn PLOT DATE : 7/27/2012 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41a

2



SHEET 3 OF 5

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	STORM SEWER - WEST FRONTAGE ROAD	SHEET 57 E

2

2

R/W

TLE

TLE

TLE

4068

4070

4072

4074

4076

SLOPE INTERCEPT

WETLAND BOUNDARY

R/W

R/W

STA 4073+91.0, 45.5'LT
1-36" APRON ENDWALL
137F

WEST FRONTAGE ROAD

30"x45"

36"

24"

WEST FRONTAGE ROAD R/L

S 27th ST.

FRONTAGE RD

1062NW

1064NW

RAMP NW

1066NW

1068NW

1070NW

1072NW

1074NW

STA 4076+25.0, 34.3'LT
1-24" APRON ENDWALL
138K

STA 4073+99.9, 55.8'RT
137E
INLET MEDIAN 2 GRATE
CONNECT TO EXISTING
STORM SEWER
FIELD VERIFY EXISTING PIPE
LOCATION, SIZE AND ELEVATION
PRIOR TO ORDERING MATERIALS
PIPE CONNECTS TO FUTURE IH 94
STORM SEWER

IH 94 SB

I 94/USH 41

1062

1064

1066

1068

1070

1072

1074

1076

IH 94 NB

I 94/USH 41

IH 94 R/L

STA 4076+25.0, 38.4'RT
138J
24" APRON ENDWALL
PIPE CONNECTS TO
FUTURE IH 94 STORM SEWER
APRON ENDWALL TO BE
SALVAGED UNDER ID 1030-11-72

1074NE

1072NE

1070NE

1068NE

RAMP NE

1076NE

SHEET 4 OF 5

775

770

765

760

755

FINISHED PROFILE

137E

757.75

137F

749.87

36" X 101.5' SSPRC
CL III @ 0.40%

EXISTING 24"
SSPRC TO REMAIN

750.27

138K

754.73

24" X 72.8'
SSPRCHE
CL IV @ 0.50%

138J

755.09

4062

4064

4066

4068

4070

4072

4074

4076

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	STORM SEWER - WEST FRONTAGE ROAD	SHEET	E

FILE NAME : t:\1052705\cadd\sheets\STORM\WFR_74\022504_ss.dgn PLOT DATE : 7/27/2012 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 41a

2

SLOPE INTERCEPT

WETLAND BOUNDARY

R/W

STA 4080+00.0, 37.6' LT
1-24" APRON ENDWALL
140F

STA 4081+50.0, 33.6' LT
1-48" APRON ENDWALL
404F

TLE

WELL

TLE

R/W

R/W

OH

OH

OH

OH

OH

OH

OH

OH

OH

OH

OH

OH

SIGN

WEST FRONTAGE ROAD

36"

24"

24"

48"

24"

48"

48"

42"

4078

4080

4082

4084

4086

4088

4090

S. 27th ST.

STA 4083+15.9, 6.0' RT
8' DIA-J-S MANHOLE
404D

STA 4085+50.0, 6.0' RT
7' DIA-J-S MANHOLE
CONNECT TO STORM
SEWER CONSTRUCTED
UNDER ID 1030-25-78
404B

Z

WEST FRONTAGE ROAD R/L

SIGN

STA 4080+00.0, 37.1' RT
24" APRON ENDWALL
PIPE CONNECTS TO
FUTURE IH 94 STORM SEWER
APRON ENDWALL TO BE
SALVAGED UNDER ID 1030-11-72
140E

STA 4082+00.0, 6.0' LT
7' DIA-J-S MANHOLE
404E

STA 4083+15.9, 31.0' RT
SEAL INLET END OF PIPE
FUTURE CONNECTION
UNDER ID 1030-11-72
404C

SS

SS

1078

1080

1082

1084

IH 94 R/L

1086

IH 94 SB

I 94/USH 41

1088

1090

1092

SS

SS

INL

INL

SS

SS

INL

INL

SS

SS

INL

IH 94 NB

I 94/USH 41

SIGN

INL

SIGN

5078

5080

5082

SHEET 5 OF 5

FINISHED PROFILE

775

770

765

760

755

765

760

755

404E

764.55

404D

765.27

404B

767.01

404D

765.27

404C

140F

140E

404F

48" X 63.8'
SSPRC
CL III @ 0.83%

48" X 115.9' SSPRC
CL III @ 0.85%

48" X 234.1' SSPRC
CL III @ 0.41%

757.98

757.02

757.10

756.62

755.87

755.50

756.03

24" X 74.7' SSPRC
CL IV @ 1.0%

42" X 25.0' SSPRC
CL III @ 0.35%

4078

4080

4082

4084

4086

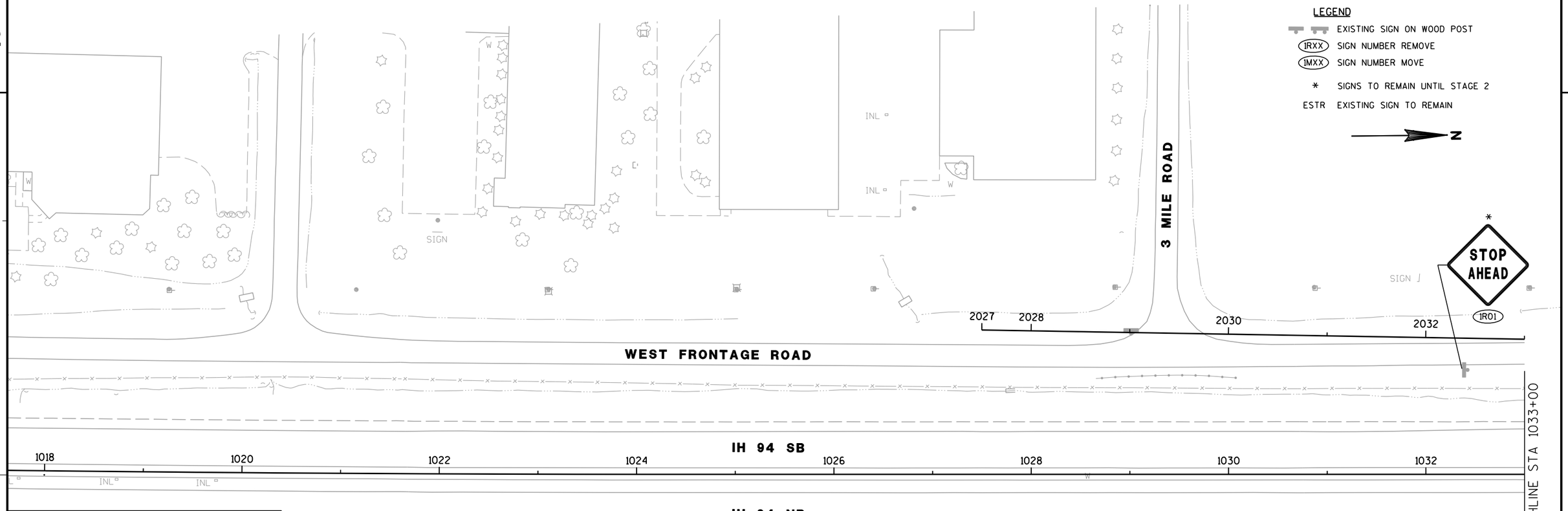
4088

4090

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	STORM SEWER - WEST FRONTAGE ROAD	SHEET 59	E

FILE NAME : t:\1052705\cadd\sheets\STORM\WFR_74\022505_ss.dgn PLOT DATE : 8/29/2012 PLOT BY : Rad PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2



ORIGINAL PLANS PREPARED BY

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WISCONSIN
BRIAN PLUEMER
E-35072
BROOKFIELD WI
PROFESSIONAL ENGINEER

9/15/2010 (Date)

Brian Pluemer (Signature)

THIS STAMP APPLIES TO EXISTING SIGNING PLANS 1 TO 6 OF 6

SHEET 1 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 60	E

2

LEGEND

- EXISTING SIGN ON WOOD POST
- (2RXX) SIGN NUMBER REMOVE
- (2MXX) SIGN NUMBER MOVE
- * SIGNS TO REMAIN UNTIL STAGE 2

N

*STOP AHEAD (2R01)

*STOP (2R02, 2R03)

*ALT 94 / ALT 41 (2R04)

27th ST

SIGN TO BE REMOVED BY RACINE COUNTY

S 27th ST.

WEST FRONTAGE ROAD

2034 2036 2038 2040 2042

1038SW 1040SW 1042SW 1044SW 1046SW 1048

MATCHLINE STA 1033+00

I 94/USH 41

IH 94 SB

1034 1036 1038 1040 1042 1044 1046

IH 94 NB

1038 1040 1042SE 1044SE 1046SE

MATCHLINE STA 1048+00

EAST FRONTAGE ROAD / RAMP SE

NE FRONTAGE RD.

3034 3036 3038 3040 3042

SHED SHED HSE

WELL VENT SEPTIC SEPTIC SEPTIC SIGN WALLS POST WALLS POST SIGN

14 12

SHEET 2 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 61	E

2

LEGEND

EXISTING SIGN ON WOOD POST

3RXX SIGN NUMBER REMOVE

3MXX SIGN NUMBER MOVE

* SIGNS TO REMAIN UNTIL STAGE 2

ESTR EXISTING SIGN TO REMAIN

N

MATCHLINE STA 38+50

CTH K

Milwaukee

Chicago

3R17

EAST 94 SOUTH 41

ESTR

Chicago

ESTR

STOP

ONCOMING TRAFFIC DOES NOT STOP

3R01

3R02

3R03

3R04

3R07

RAMP CLOSED FOLLOW ALT ROUTE

3R08

EAST 94 SOUTH 41

3R10

3R12

STOP

ALL WAY

ESTR

1050SW

1052SW

1054SW

1056NW

1058NW

1060NW

SW

WEST FRONTAGE ROAD / RAMP SW

WEST FRONTAGE ROAD RAMP NW

COUNTY K

3R16

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

3R05

3R06

STOP AHEAD

3R09

JCT COUNTY K

3R11

STOP

ALL WAY

3R13

COUNTY K

3R14

STOP

ALL WAY

ESTR

IH 94 SB

IH 94 SB

WEST 94 NORTH 41

3R15

IH 94 NB

IH 94 NB

MATCHLINE STA 1048+00

MATCHLINE STA 1061+00

1048

1050

1052

1054

1056

1058

1060

EAST FRONTAGE ROAD / RAMP SE

EAST FRONTAGE ROAD / RAMP NE

1050SE

1052SE

1054SE

N0°54'25.26"E

1056NE

1058NE

1060NE

1050

1052

1054

14

16

18

SHEET 3 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 62	E

LEGEND

EXISTING SIGN ON WOOD POST

(4RXX) SIGN NUMBER REMOVE

(4MXX) SIGN NUMBER MOVE

* SIGNS TO REMAIN UNTIL STAGE 2

N

STOP AHEAD (4R01)

DO NOT ENTER (4R05)

STOP AHEAD (4R06)

FOOD

TO BE MOVED BY DERSE 800-345-5772

YIELD (4R11)

(4R12)

NO TURNS (4R13)

(4R14)

EXIT 329

ESTR

JCT COUNTY K (4R20)

WEST FRONTAGE ROAD

Racine (4R02)

(4R03)

NO PASSING ZONE (4R04)

STOP (4R08)

(4R07)

(4R10)

NO TURNS (4R09)

DO NOT ENTER (4R15) (4R16) (4R17)

WRONG WAY (4R18) (4R19)

IH 94 SB

IH 94 NB

EAST FRONTAGE ROAD

MATCHLINE STA 1061+00

MATCHLINE STA 1076+00

1062NW 1064NW 1066NW 1068NW 1070NW 1072NW 1074NW

1062 1064 1066 1068 1070 1072 1074

1062NE 1064NE 1066NE 1068NE 1070NE 1072NE 1074NE

4068 4070 4072 4074 5072 5074

INL MH

SHEET 4 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 63	E

2

2

LEGEND

EXISTING SIGN ON WOOD POST

5RXX SIGN NUMBER REMOVE

5MXX SIGN NUMBER MOVE

* SIGNS TO REMAIN UNTIL STAGE 2

N

*
YIELD AHEAD
5R02

*
NO PASSING ZONE
5R01

WELL

SEPV

176 4078 4080 4082 4084 4086 4088 4090

WEST FRONTAGE ROAD

S. 27th ST.

SIGN

SIGN

MATCHLINE STA 1076+00

176 1078 1080 1082 1084 1086 1088 1090

IH 94 SB

I 94/USH 41

INL INL INL INL INL INL

IH 94 NB

I 94/USH 41

SIGN

INL

SIGN

5078 5080 5082

EAST FRONTAGE ROAD

E. FRONTAGE RD.

SIGN

LE RD.

SHEET 5 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 64	E

FILE NAME : t:\1052705\cadd\sheets\SIGNING\EXIST\WFR_74\023205_es.DGN PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

LEGEND

EXISTING SIGN ON WOOD POST

6RXX SIGN NUMBER REMOVE

6MXX SIGN NUMBER MOVE

ESTR EXISTING SIGN TO REMAIN

N

WEST FRONTAGE ROAD

CTH K

MATCLINE STA 38+50

35 M.P.H. ESTR

JCT 94 41 ESTR

SPEED LIMIT 35 6R01

EAST SOUTH 94 41 6R02

STOP AHEAD 6R03

Milwaukee Chicago 6R04

RUINS

SILO

WELL

SEPTIC

POST

VENT

SHEET 6 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	EXISTING SIGNING	SCALE, FEET 0 50 100	SHEET 65	E

FILE NAME : t:\1052705\cadd\sheets\signing\exist\wfr_74\023206_es.DGN PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

LEGEND

EXISTING SIGN

PROPOSED SIGN

PERMANENT BARRICADE TYPE III WITH SIGN

(X-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

ESTR EXISTING SIGN TO REMAIN

3 MILE ROAD

WEST FRONTAGE ROAD

W6-1
36" X 36"
(I-05)

W6-3
36" X 36"
(I-06)

SIGN TO BE PLACED IN LINE WITH TANGENT

W1-6
48" X 24"
(I-07)

MATCHLINE STA 2038+00

2027 2028 2030 2032 2034 2036 2038

1038SW

IH 94 SB

1026 1028 1030 1032 1034 1036 1038

IH 94 NB

W1-4L
36" X 36"
(I-03)

1038
N0°36'41.81"E

3030 3032 3034 3036 3038

INL

W

VENT

HSE

WELL

G

TO

SHED

SHED

SHEET 1 OF 7

ORIGINAL PLANS PREPARED BY

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BRIAN PLUEMER
E-35072
BROOKFIELD WI
PROFESSIONAL ENGINEER

9/15/2010 (Date)

Brian Pluemer (Signature)

THIS STAMP APPLIES TO PERMANENT SIGNING PLANS 1 TO 7 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 66	E

2

LEGEND

EXISTING SIGN

PROPOSED SIGN

PERMANENT BARRICADE TYPE III WITH SIGN

X-XX DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

DO NOT ENTER
R5-1
30" X 30"
2-01

R4-7
36" X 48"
2-02

W5-54D
18" X 18"
2-03
SEE CONSTRUCTION DETAIL

WEST FRONTAGE ROAD

MATCHLINE STA 2038+00

MATCHLINE STA 2049+00

2038
2040
2042
2044
2046
2048

W1-6
24"x48"

IH 94 SB

IH 94 NB

1038SW
1040SW
1042SW
1038
1040
1038
N0°36'41.81"E
1040

SHEET 2 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 67	E

LEGEND

EXISTING SIGN
PROPOSED SIGN
PERMANENT BARRICADE TYPE III WITH SIGN
(X-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE
TWO 16" ORANGE FLAGS

N

NOTE: DELINEATORS AND FLEXIBLE TUBULAR MARKERS SHOWN ON PAVEMENT MARKING PLAN

MATCHLINE STA 30+00

C.T.H. K

WEST FRONTAGE ROAD

WRONG WAY R5-1A 36" X 24" (3-03)
W6-2 36" X 36" (3-04)
DO NOT ENTER R5-1 30" X 30" (3-07)
W1-4L 36" X 36" (3-06)
SPEED LIMIT 35 R2-1 24" X 30" (3-11)
W1-6 48" X 24" (3-15)
J13-1 WEST FRONTAGE ROAD M1-95A 24" X 30" M6-4 21" X 21" (3-19)
SPEED LIMIT 35 R2-1 24" X 30" (3-20)
W1-6 48" X 24" (3-24)
LANE CLOSED R11-2(MOD) 48" X 30" (3-23)
R4-7 24"x30"
WRONG WAY R5-1A 36" X 24" (3-25)
DO NOT ENTER R5-1A 24"x24"

MATCHLINE STA 2049+00

JCT M2-1 21" X 15" COUNTY K M1-5A 24" X 24" (3-01)
DO NOT ENTER R5-1 30" X 30" (3-10)
R4-7 24" X 30" (3-02)
R4-7 24" X 30" (3-05)
W3-1 36" X 36" (3-08)
J3-3 M3-2 24" X 12" WEST EAST TO COUNTY K COUNTY K INTERSTATE 94 M3-4 24" X 12" M1-5A 24" X 24" M1-1 24" X 24" M6-1 21" X 21" M6-1 21" X 21" MB5-5 24" X 12" MB6-1 21" X 21" (3-12)
WRONG WAY R5-1A 36" X 24" (3-13)
LANE CLOSED R11-2(MOD) 48" X 30" (3-16)
STOP R1-1 36" X 36" (3-17)
TRAFFIC ON K DOES NOT STOP R1-52 36" X 15" (3-18)
W3-1 36" X 36" (3-29)
J32-2 MB4-1 24" X 12" ALTERNATE ALTERNATE EAST WEST INTERSTATE 94 INTERSTATE 94 MB3-2 24" X 12" MB3-4 24" X 12" M1-1 24" X 24" MB6-1 21" X 21" (3-30)
RAMP CLOSED USE ALT ROUTE R11-54F 48" X 30" (3-36)
J2-2 MB3-2 24" X 12" EAST SOUTH INTERSTATE 94 INTERSTATE 41 M3-3 24" X 12" M1-1 24" X 24" M1-4 24" X 24" MB5-1R 21" X 21" M5-1R 21" X 21" (3-31)
MATCHLINE STA 38+00

STOP R1-1 36" X 36" (3-21)
TRAFFIC ON K DOES NOT STOP R1-52 36" X 15" (3-22)
J13-1 WEST FRONTAGE ROAD M1-95A 24" X 30" M6-4 21" X 21" (3-28)
West Frontage Rd SOUTH NORTH D1-60 96" X 24" (3-32)
4' MOUNTING HEIGHT
W5-56 18" X 18" (3-33) (3-34) (3-35)
FUHRMAN DRIVE
J3-3 M3-2 24" X 12" TO EAST WEST INTERSTATE 94 COUNTY K COUNTY K M3-4 24" X 12" MB4-5 24" X 12" M1-1 24" X 24" M1-5A 24" X 24" MB6-1 21" X 21" M6-1 21" X 21" (3-26)
SPEED LIMIT 35 R2-1 24" X 30" (3-27)
MATCHLINE STA 4058+00
MATCHLINE STA 16+00

SHEET 3 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 68 E

2

LEGEND

EXISTING SIGN

PROPOSED SIGN

PERMANENT BARRICADE TYPE III WITH SIGN

(X-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

N

SEE CONSTRUCTION DETAIL

4-04 R4-7 36" X 48"

4-05 W5-54D 18" X 18"

W1-6 48"x24"

J1-1 JCT M 2-1 21" X 15"

COUNTY K M1-5A 24" X 24" 4-08

W6-1 36" X 36" 4-09

WEST FRONTAGE ROAD

4062 4064 4066 4068

MATCHLINE STA 4070+00

MATCHLINE STA 1072+00

W3-1 36" X 36" 4-03

4060

MATCHLINE STA 4058+00

W6-2 36" X 36" 4-01

WRONG WAY R5-1A 36" X 24" 4-02

3-25

W6-3 36" X 36" 4-06

DO NOT ENTER R5-1 30" X 30" 4-07

DEAD END W14-1 30" X 30" 4-10

STOP R1-1 30" X 30" 4-11

W1-6 48" X 24" 4-14

FUHRMAN DRIVE

MATCHLINE STA 16+00

J1-1 JCT M 2-1 21" X 15"

COUNTY K M1-5A 24" X 24" 4-13

W3-1 36" X 36" 4-12

RAMP NW

1070NW 1068NW 1066NW 1064NW

1070 1068 1066 1064

IH 94 SB

IH 94 NB

I 94/USH 41

FRONTAGE RD

RAMP NE

1064NE 1066NE 1068NE 1070NE

MATCHLINE STA 1063+00

SHEET 4 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 69	E

2

N

LEGEND

EXISTING SIGN

PROPOSED SIGN

PERMANENT BARRICADE TYPE III WITH SIGN

X-XX DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

MATCHLINE STA 4070+00

WEST FRONTAGE ROAD

4072 4074 4076 4078 4080 4082 4084

W1-6
48" X 24"
5-01

SIGN TO BE PLACED IN LINE WITH TANGENT

SPEED LIMIT 35
R2-1
36" X 48"
5-03

W1-4R
36" X 36"
5-04

SPEED LIMIT 35
W3-5
36" X 36"
5-05

SPEED LIMIT 45
R2-1
24" X 30"
5-02

NO PASSING ZONE
W14-3
48" X 36"
5-06

LOCATE SIGN PER NO PASSING ZONE PAVEMENT MARKING ESTABLISHED

MATCHLINE STA 1072+00

2NW 1074NW

IH 94 SB

72 1074 1076 1078 1080 1082 1084

IH 94 NB

70NE 1072NE 1074NE 1076NE

RAMP NE

EAST FRONTAGE ROAD

5072 5074 5076 5078 5080 5082

SHEET 5 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 70	E

2

2

LEGEND

EXISTING SIGN

PROPOSED SIGN

PERMANENT BARRICADE TYPE III WITH SIGN

(X-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE

TWO 16" ORANGE FLAGS

N

SNI

MATCHLINE STA 30+00

CTH K

NEW TRAFFIC PATTERN

W23-2
36" X 36"
6-05
6-06

FLASHING SOLAR BEACON ASSEMBLY

W2-1
36" X 36"
6-01
6-02

R3-8
36" X 30"
6-03

JCT
ALTERNATE
94
41
ESTR

West Frontage Rd
NORTH SOUTH

D1-60
96" X 24"
6-04

SHEET 6 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 71	E

2

N

LEGEND

- EXISTING SIGN
- PROPOSED SIGN
- PERMANENT BARRICADE TYPE III WITH SIGN
- (X-XX) DENOTES SIGN AND SIGN SUPPORT NUMBER CORRESPONDING TO MISCELLANEOUS QUANTITY TABLE
- ESTR EXISTING SIGN TO REMAIN

MATCHLINE STA 38+00

CTH K

Milwaukee
Chicago
D1-2
72" X 30"
7-18

ESTR
EAST SOUTH
ALTERNATE 94 41
Chicago

ESTR
STOP
ALL WAY

R3-1
24" X 24"
7-02

PEDESTRIANS
BICYCLES
ANIMALS NOT MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
R5-57
36" X 36"
7-06

FREEWAY ENTRANCE RAMP ONLY
48" X 36"
7-19

W1-6
48" X 24"
7-05

R3-8
36" X 30"
7-01

ONLY

J32-2
MB4-1A 24" X 12"
ALT ALT
EAST WEST
ALTERNATE ALTERNATE
94 94
MB3-2 24" X 12"
MB3-4 24" X 12"
M1-1 24" X 24"
M1-1 24" X 24"
MB5-1L 21" X 21"
MB5-1R 21" X 21"
7-20

M3-4 24" X 12"
ALTERNATE
EAST WEST EAST
COUNTY K COUNTY K ALTERNATE 94
M3-2 24" X 12"
MB4-1 24" X 12"
MB3-2 24" X 12"
M1-5A 24" X 24"
M1-1 24" X 24"
M6-1 21" X 21"
MB6-1 21" X 21"
M6-1 21" X 21"
J3-3
7-15
7-21

DO NOT ENTER
R5-1
36" X 36"
7-03

ONE WAY
R6-2L
24" X 30"
7-04

FRONTAGE RD
BUSINESSES
EAST WEST
FIXED MESSAGE SIGN
60" X 36"

Racine
Waterford
D1-2
72" X 30"
7-14

1050SW 1052SW 1054SW 1056NW 1058NW 1060NW 1062NW

RAMP SW

RAMP NW

J3-2
MB3-2 24" X 12"
EAST SOUTH
ALTERNATE 94 41
M3-3 24" X 12"
M1-1 24" X 24"
M1-4 24" X 24"
MB6-2 21" X 21"
M6-2 21" X 21"
7-16
7-17

ESTR
EAST SOUTH
ALTERNATE 94 41

BARRICADE RACK REQ'D
PROVIDE 4 PERMANENT BARRICADES

ONE WAY
R6-2R
24" X 30"
7-07

ROAD CLOSED
R11-2
48" X 30"
7-08

DO NOT ENTER
R5-1
36" X 36"
7-10
7-22

W1-6
48" X 24"
7-11

WRONG WAY
R5-1A
42" X 30"
7-12
7-13

IH 94 SB

IH 94 NB

1050 1052 1054 1056 1058 1060 1062 1064

ESTR
STOP
ALL WAY

R3-1
24" X 24"
7-09

1050SE 1052SE 1054SE 1056NE 1058NE 1060NE 1062NE 1064NE

N0°54'25.26"E

SEPTIC

MATCHLINE STA 1063+00

SHEET 7 OF 7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET	E

FILE NAME : t:\1052705\Cadd\sheets\SIGNING\PROPOSED\WFR_74\023207_ps.dgn PLOT DATE : 12/7/2012 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

FREEWAY LIGHTING AND LOCAL STREET LIGHTING SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTIONS 652 TO 657 AND 659 EXCEPT:

1. DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

2. LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, UNDER THE APPROVAL OF THE ENGINEER. ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED TO ILLUSTRATE AS BUILT CONDITIONS.

3. THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

4. ALL OPEN AND UNTERMINATED CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

5. BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

6. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

7. PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

8. CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX, JUNCTION BOX OR BASE-TO-BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

9. PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

10. CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS (.PDF FORMAT) FOR ALL THE WORK BEING DONE.

11. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

12. PROVIDE MINIMUM CABLE SLACK AS MENTIONED BELOW:

PULL BOXES:	10-FT
POLE BASES:	5-FT ONE WAY IN OR OUT
EMBEDDED JUNCTION BOXES:	3-FT
DISTRIBUTION CENTER/LOAD CENTER:	10-FT

STREET LIGHTING PLANS PREPARED BY:

HNTB CORPORATION
111 N CANAL STREET, SUITE 1250
CHICAGO, IL 60606

WISCONSIN
MATTHEW C. DURNING
E-39943
OSWEGO, IL
PROFESSIONAL ENGINEER

SIGNATURE: Matthew C Durning

DATE: 8/29/2012 SHEETS: 1 TO 6

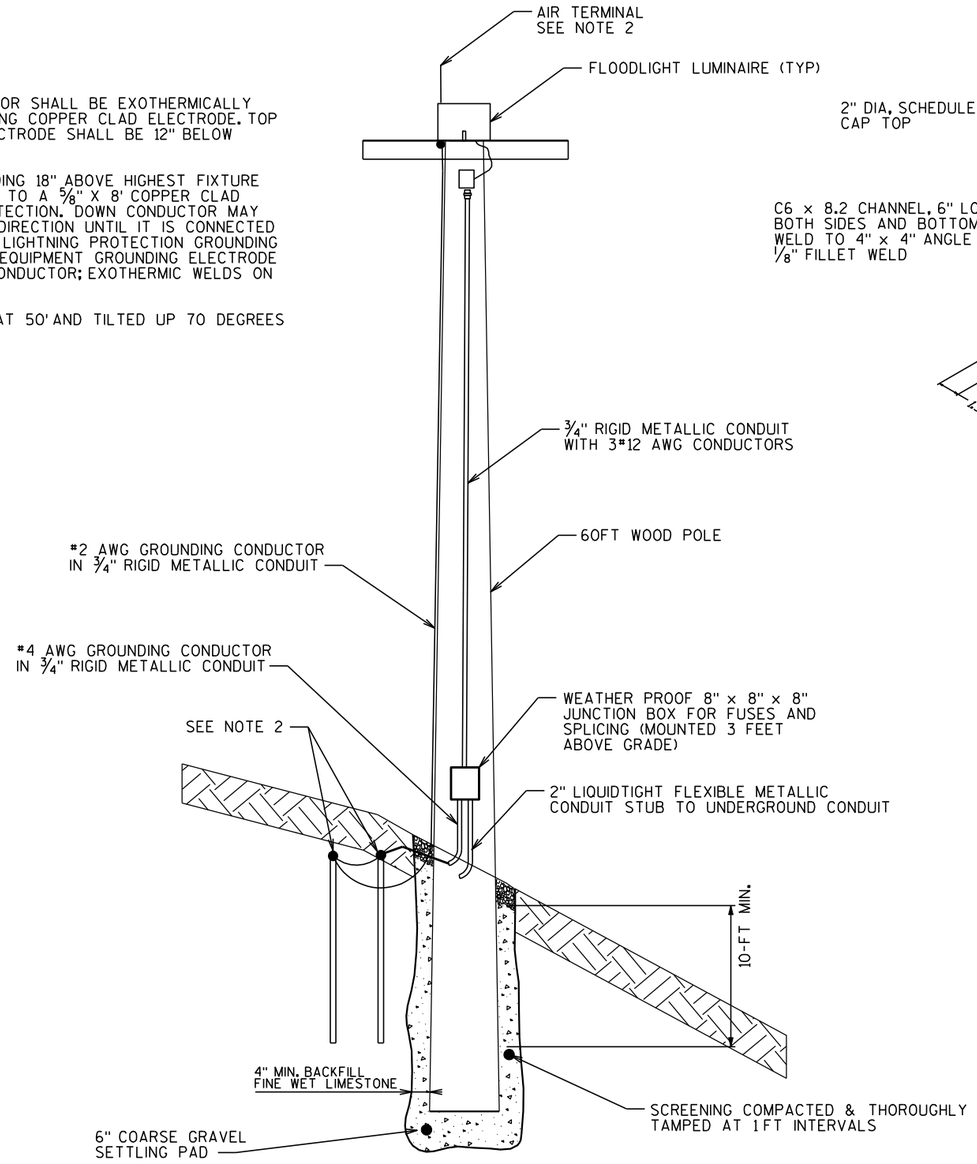
SHEET 1 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	LIGHTING PLAN - DETAIL	SHEET 73	E

2

NOTES:

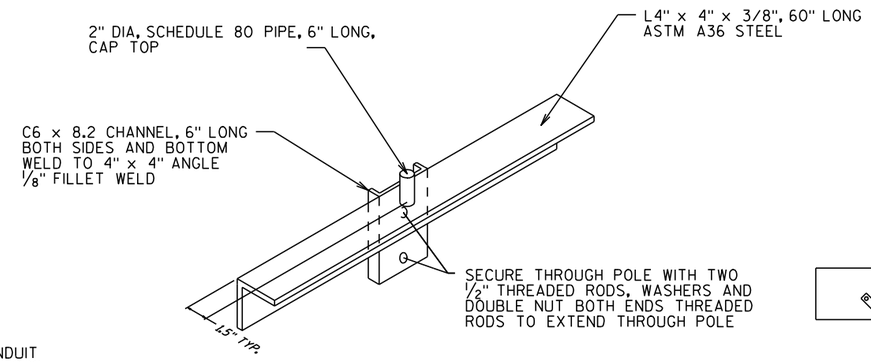
1. EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY BONDED TO 5/8" BY 8-FOOT LONG COPPER CLAD ELECTRODE. TOP OF EQUIPMENT GROUNDING ELECTRODE SHALL BE 12" BELOW FINISHED MEDIAN GRADE.
2. PROVIDE AIR TERMINAL PROTRUDING 18" ABOVE HIGHEST FIXTURE WITH #2 AWG DOWN CONDUCTOR TO A 5/8" X 8' COPPER CLAD ELECTRODE FOR LIGHTNING PROTECTION. DOWN CONDUCTOR MAY TRAVEL ONLY IN A DOWNWARD DIRECTION UNTIL IT IS CONNECTED TO THE GROUNDING ELECTRODE. LIGHTNING PROTECTION GROUNDING ELECTRODE TO BE BONDED TO EQUIPMENT GROUNDING ELECTRODE WITH BARE, SOLID #2 COPPER CONDUCTOR; EXOTHERMIC WELDS ON BOTH ENDS.
3. FLOODLIGHTS TO BE MOUNTED AT 50' AND TILTED UP 70 DEGREES FROM GROUND.



TEMPORARY 60' WOOD POLE LIGHTING UNIT

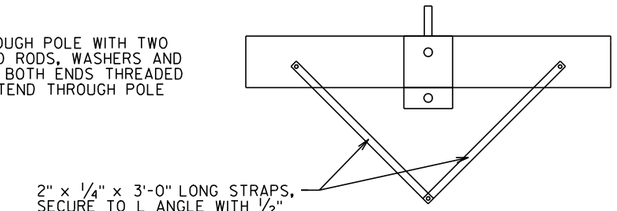
WITH SINGLE 400W FLOOD LIGHT

NOT TO SCALE
SEE ELECTRICAL DRAWINGS
FOR ADDITIONAL INFORMATION



ISOMETRIC VIEW

STRAPS NOT SHOWN FOR CLARITY



FRONT VIEW

FLOODLIGHT BRACKET ARM

2

LEGEND

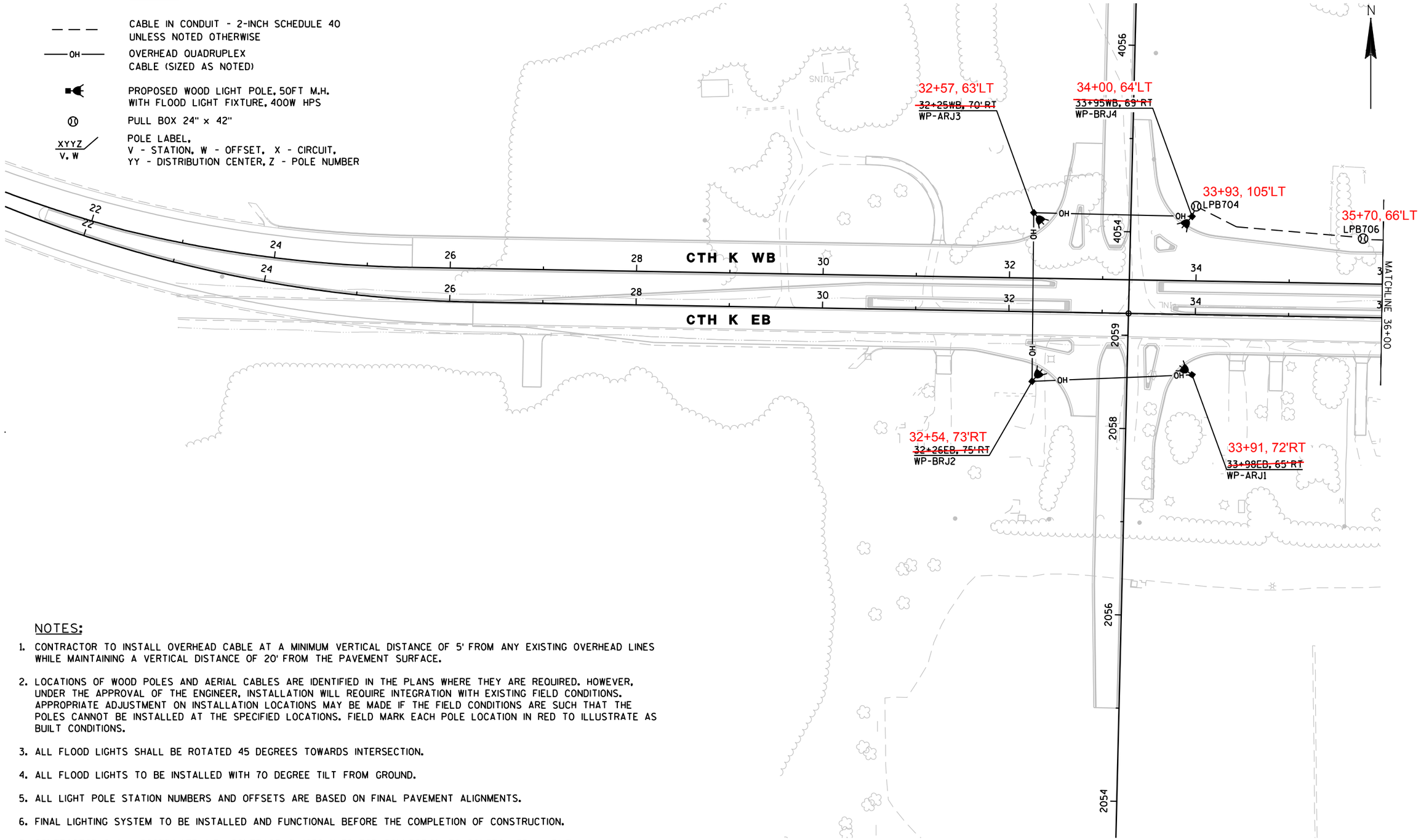
CABLE IN CONDUIT - 2-INCH SCHEDULE 40 UNLESS NOTED OTHERWISE

OH — OVERHEAD QUADRUPLEX CABLE (SIZED AS NOTED)

PROPOSED WOOD LIGHT POLE, 50FT M.H. WITH FLOOD LIGHT FIXTURE, 400W HPS

PULL BOX 24" x 42"

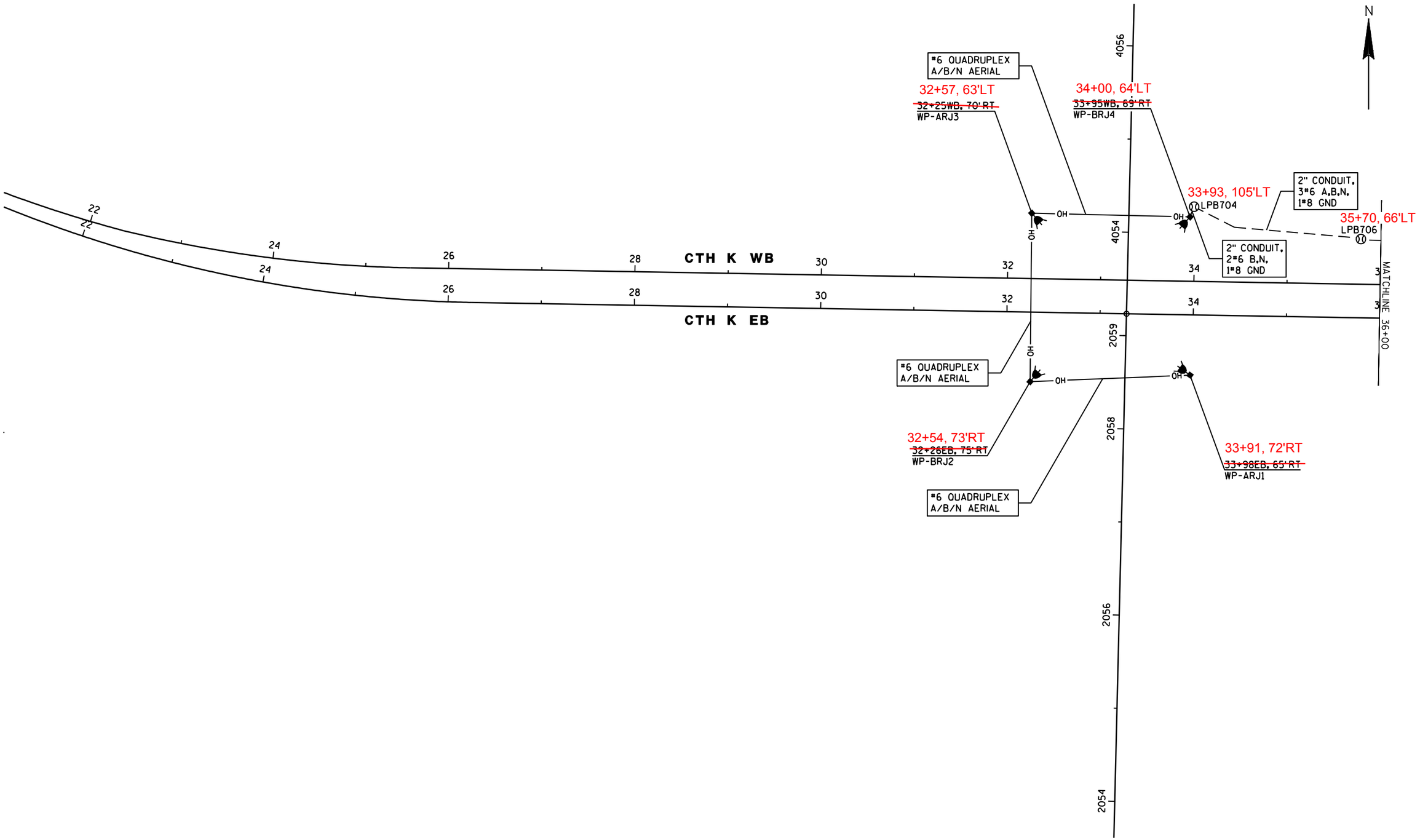
XYYZ / V.W — POLE LABEL, V - STATION, W - OFFSET, X - CIRCUIT, YY - DISTRIBUTION CENTER, Z - POLE NUMBER



NOTES:

1. CONTRACTOR TO INSTALL OVERHEAD CABLE AT A MINIMUM VERTICAL DISTANCE OF 5' FROM ANY EXISTING OVERHEAD LINES WHILE MAINTAINING A VERTICAL DISTANCE OF 20' FROM THE PAVEMENT SURFACE.
2. LOCATIONS OF WOOD POLES AND AERIAL CABLES ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, UNDER THE APPROVAL OF THE ENGINEER, INSTALLATION WILL REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. APPROPRIATE ADJUSTMENT ON INSTALLATION LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE POLES CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH POLE LOCATION IN RED TO ILLUSTRATE AS BUILT CONDITIONS.
3. ALL FLOOD LIGHTS SHALL BE ROTATED 45 DEGREES TOWARDS INTERSECTION.
4. ALL FLOOD LIGHTS TO BE INSTALLED WITH 70 DEGREE TILT FROM GROUND.
5. ALL LIGHT POLE STATION NUMBERS AND OFFSETS ARE BASED ON FINAL PAVEMENT ALIGNMENTS.
6. FINAL LIGHTING SYSTEM TO BE INSTALLED AND FUNCTIONAL BEFORE THE COMPLETION OF CONSTRUCTION.
7. CONTRACTOR SHALL COORDINATE WITH CONTRACT ID 1030-11-70 FOR CONNECTION TO CONTROLLER HL-51-RJ AND MAKE SYSTEM FULLY OPERATIONAL.

2



SHEET 4 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	LIGHTING PLAN - SCHEMATIC	SHEET 76	E

FILE NAME : \\CHIW00\projects\58011\CADD\cds\1030-11-74\023802_lp.dgn PLOT DATE : 31-AUG-2011 20:52 PLOT BY : kanyikwa PLOT NAME : PLOT SCALE : 100:1

2

N

IH 94 SB

IH 94 NB

1058NW

1058

1058NE

1056NW

1056

1056NE

1054SW

1054

1054SE

1052SW

1052

1052SE

MATCHLINE 36+00

37+74, 77'LT
LPB707

40+16. 101'LT
LPB708

41+08, 81'LT
~~41+11WB, 43'LT~~
WP-ARJ5

ELIMINATED
LPB709

LPB710

40+96, 86'LT

OH

2" CONDUIT SPECIAL -
LPB710 TO 41+33, 48'RT.
INSTALLED - NOT USED
DUE TO SITE CONDITIONS.

LPB711

41+09, 66'RT
~~41+34EB, 61'RT~~
WP-BRJ6

ELIMINATED

ELIMINATED
LPB712

44+63, 110'LT
~~44+60WB, 73'LT~~
WP-BRJ7

45+51, 140'LT
LPB715

LPB716

LPB713

44+75, 113'LT

1056NE+46, 90'RT
HL-51-RJ
DOOR NORTH

HL-51-RJ
A,C,E,G RED
B,D,F,H BLACK
240/480 VAC 3W
ISOLATED NEUTRAL

CTH K WB

CTH K EB

45+06, 58'RT
~~45+02EB, 58'RT~~
WP-ARJ8

LPB714

45+16, 56'RT

SHEET 5 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	LIGHTING PLAN - FINAL	SHEET 77	E

FILE NAME : \\CHIW00\projects\58011\CADD\cds\1030-11-74\023803_lp.dgn PLOT DATE : 31-AUG-2011 20:52 PLOT BY : kanyikwa PLOT NAME : PLOT SCALE : 100:1

2

2

N

IH 94 SB

IH 94 NB

1058NW

1058

1058NE

1056NW

1056

1056NE

1054SW

1054

1054SE

1052SW

1052

1052SE

MATCHLINE 36+00

CTH K WB

CTH K EB

2" CONDUIT, 3*6 A,B,N, 1*8 GND

2" CONDUIT, 3*6 A,B,N, 1*8 GND

37+74, 77'LT
LPB707

40+16, 101'LT
LPB708

41+08, 81'LT
~~41+11WB, 43'LT~~
WP-ARJ5

ELIMINATED
LPB709

LPB710

40+96, 86'LT

2" CONDUIT, 3*6 A,B,N, 1*8 GND

2" CONDUIT SPECIAL - LPB710 TO 41+33, 48'RT. INSTALLED- NOT USED DUE TO SITE CONDITIONS.

#6 QUADRUPLEX A/B/N AERIAL

2" CONDUIT, 2*6 B,N, 1*8 GND

ELIMINATED

LPB711

41+09, 66'RT
~~41+34EB, 61'RT~~
WP-BRJ6

2" CONDUIT, 2*6 B,N, 1*8 GND

2" CONDUIT, SPECIAL, 3*6 A,B,N, 1*8 GND

ELIMINATED
LPB712

2" CONDUIT, 3*6 A,B,N, 1*8 GND

44+63, 110'LT
~~44+60WB, 73'LT~~
WP-BRJ7

45+51, 140'LT
LPB715

LPB713

44+75, 113'LT

2" CONDUIT, 3*6 A,B,N, 1*8 GND

EXISTING (2) 3" CONDUIT, 3*6 A,B,N, 1*8 GND

1056NE+46, 90' RT
HL-51-RJ
DOOR NORTH

HL-51-RJ
A,C,E,G RED
B,D,F,H BLACK
240/480 VAC 3W
ISOLATED NEUTRAL

(2) 3" CONDUIT, 3*8 C,D,N, 1*8 GND

LPB716

2" CONDUIT, 3*8 C,D,N, 1*8 GND

LPB717

2" CONDUIT, 3*8 C,D,N, 1*8 GND

LPB718

2" CONDUIT, 2*6 B,N, 1*8 GND

2" CONDUIT, 2*6 A,N, 1*8 GND

45+06, 58'RT
~~45+02EB, 58'RT~~
WP-ARJ8

LPB714

45+16, 56'RT

2" CONDUIT, 2*6 A,N, 1*8 GND

SHEET 6 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	LIGHTING PLAN - SCHEMATIC	SHEET 78	E

FILE NAME : \\CHIW00\projects\58011\CADD\cds\1030-11-74\023804_lp.dgn PLOT DATE : 31-AUG-2011 20:52 PLOT BY : kanyikwa PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

LEGEND

X X X X X X = REMOVE PAVEMENT MARKING

NOTE:
SEE PAVEMENT MARKING SHEET 3 OF 5
AND SHEET 5 OF 5 FOR REMOVING PAVEMENT
MARKING ON RAMP SW AND RAMP NW

WEST FRONTAGE ROAD

CTH K

REMOVING PAVEMENT MARKINGS
EDGE LINE (WHITE)
(STA 27+49 TO STA 41+10)

REMOVING PAVEMENT MARKINGS
EDGE LINE (WHITE)
(STA 27+49 TO STA 41+05)

REMOVE PAVEMENT MARKINGS
CENTER LINE (DOUBLE YELLOW)
(STA 27+49 TO STA 41+05)

ORIGINAL PLANS PREPARED BY

R.A. Smith National
Beyond Surveying and Engineering

16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN
BRIAN
PLUEMER
E-35072
BROOKFIELD
WI
PROFESSIONAL ENGINEER

9/15/2010 (Date)

(Signature)

THIS STAMP APPLIES TO REMOVING PAVEMENT MARKING
1 TO 1 OF 1

SHEET 1 OF 1

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	REMOVING PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET 79	E

2

ORIGINAL PLANS PREPARED BY

R.A. Smith National

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16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN
BRIAN PLUEMER
E-35072
BROOKFIELD WI
PROFESSIONAL ENGINEER

11/29/2011 (Date)

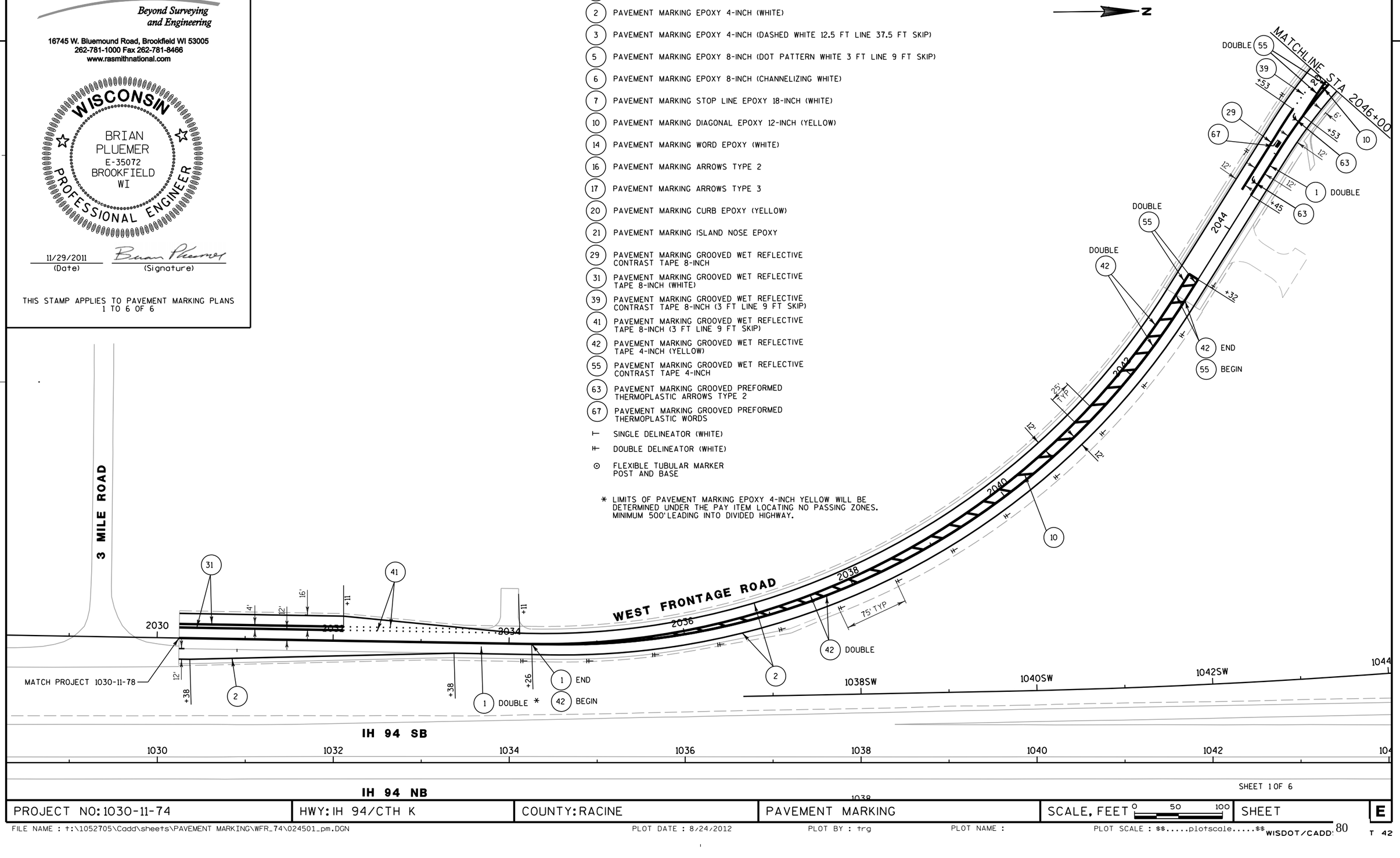
Brian Pluemer (Signature)

THIS STAMP APPLIES TO PAVEMENT MARKING PLANS 1 TO 6 OF 6

LEGEND

1 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2 PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3 PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5 PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6 PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14 PAVEMENT MARKING WORD EPOXY (WHITE)
16 PAVEMENT MARKING ARROWS TYPE 2
17 PAVEMENT MARKING ARROWS TYPE 3
20 PAVEMENT MARKING CURB EPOXY (YELLOW)
21 PAVEMENT MARKING ISLAND NOSE EPOXY
29 PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH
31 PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
39 PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (3 FT LINE 9 FT SKIP)
41 PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (3 FT LINE 9 FT SKIP)
42 PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
55 PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH
63 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
67 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
⊢ SINGLE DELINEATOR (WHITE)
⊢⊢ DOUBLE DELINEATOR (WHITE)
⊙ FLEXIBLE TUBULAR MARKER POST AND BASE

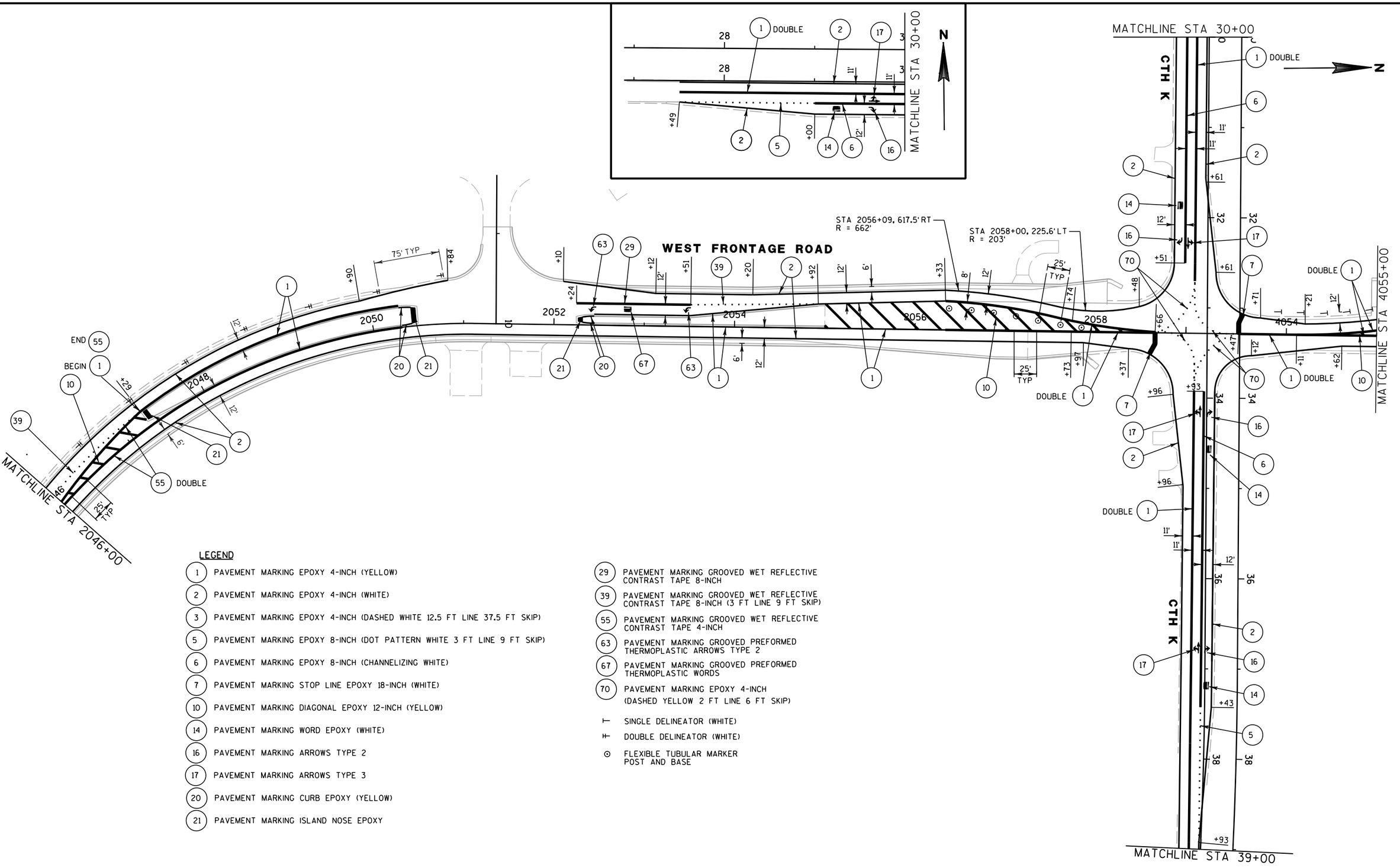
* LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM LOCATING NO PASSING ZONES. MINIMUM 500' LEADING INTO DIVIDED HIGHWAY.



SHEET 1 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET E

FILE NAME : t:\1052705\Cadd\sheets\PAVEMENT MARKING\WFR_74\024501_pm.DGN PLOT DATE : 8/24/2012 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADD



LEGEND

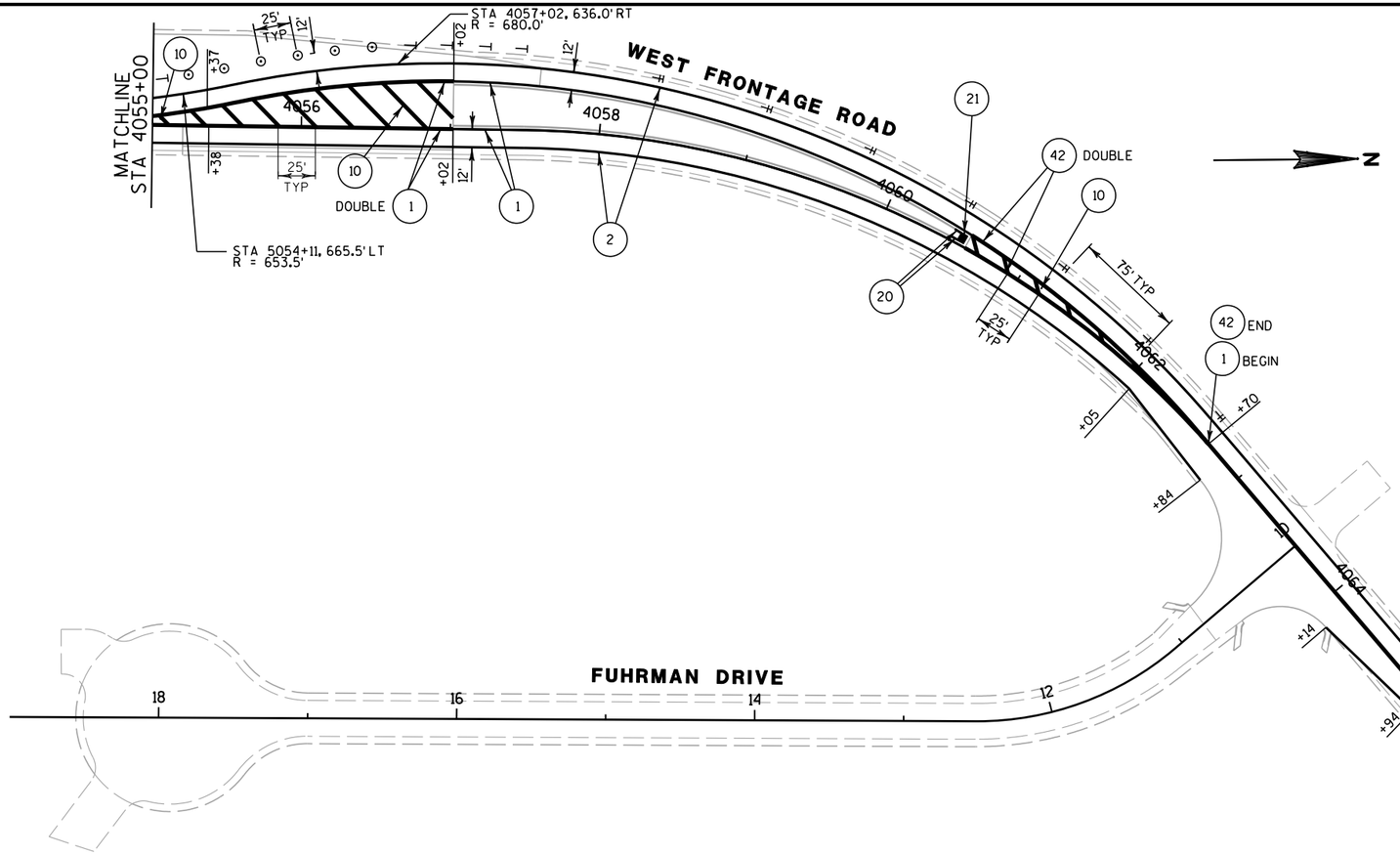
1	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5	PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6	PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14	PAVEMENT MARKING WORD EPOXY (WHITE)
16	PAVEMENT MARKING ARROWS TYPE 2
17	PAVEMENT MARKING ARROWS TYPE 3
20	PAVEMENT MARKING CURB EPOXY (YELLOW)
21	PAVEMENT MARKING ISLAND NOSE EPOXY
29	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH
39	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (3 FT LINE 9 FT SKIP)
55	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH
63	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
67	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
70	PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW 2 FT LINE 6 FT SKIP)

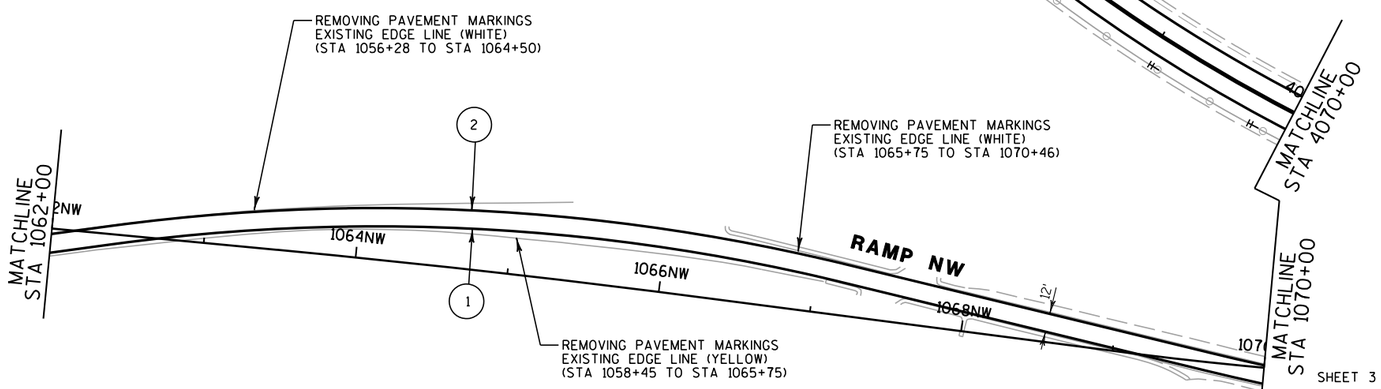
- SINGLE DELINEATOR (WHITE)
- DOUBLE DELINEATOR (WHITE)
- FLEXIBLE TUBULAR MARKER POST AND BASE

SHEET 2 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET 81 E

2





LEGEND

1	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5	PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6	PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14	PAVEMENT MARKING WORD EPOXY (WHITE)
16	PAVEMENT MARKING ARROWS TYPE 2
17	PAVEMENT MARKING ARROWS TYPE 3
20	PAVEMENT MARKING CURB EPOXY (YELLOW)
21	PAVEMENT MARKING ISLAND NOSE EPOXY
42	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
⊢	SINGLE DELINEATOR (WHITE)
⊩	DOUBLE DELINEATOR (WHITE)
⊙	FLEXIBLE TUBULAR MARKER POST AND BASE

* LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM LOCATING NO PASSING ZONES. MINIMUM 500'LEADING INTO DIVIDED HIGHWAY.

SHEET 3 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET 82	E

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14. PAVEMENT MARKING WORD EPOXY (WHITE)
16. PAVEMENT MARKING ARROWS TYPE 2
17. PAVEMENT MARKING ARROWS TYPE 3
20. PAVEMENT MARKING CURB EPOXY (YELLOW)
21. PAVEMENT MARKING ISLAND NOSE EPOXY

⊢ SINGLE DELINEATOR (WHITE)

⊢⊢ DOUBLE DELINEATOR (WHITE)

⊙ FLEXIBLE TUBULAR MARKER POST AND BASE

* LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM LOCATING NO PASSING ZONES.

N

MATCHLINE STA 4070+00

MATCHLINE STA 1070+00

1 DOUBLE *

2

75' TYP

12'

+46

+44

1070NW 1072NW 1074NW

RAMP NW

1070 1072 1074 1076 1078 1080 1082 1084

4072 4074 4076 4078 4080 4082 4084

WEST FRONTAGE ROAD

STA 4085+00

IH 94 SB

IH 94 NB

MATCHLINE

1070NE 1072NE 1074NE 1076NE

RAMP NE

EAST FRONTAGE ROAD

5072 5074 5076 5078 5080 5082

SHEET 4 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET 83	E

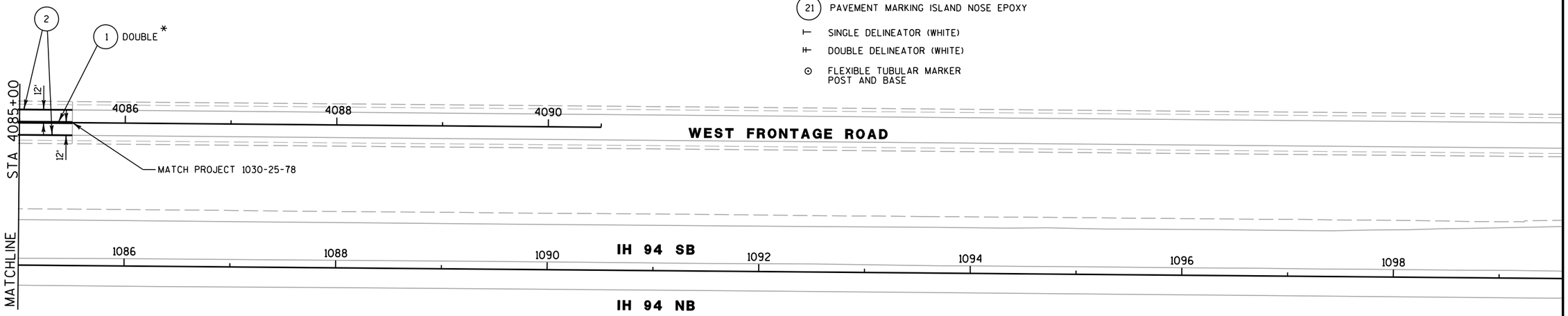
2

LEGEND

1	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2	PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5	PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6	PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14	PAVEMENT MARKING WORD EPOXY (WHITE)
16	PAVEMENT MARKING ARROWS TYPE 2
17	PAVEMENT MARKING ARROWS TYPE 3
20	PAVEMENT MARKING CURB EPOXY (YELLOW)
21	PAVEMENT MARKING ISLAND NOSE EPOXY
⊢	SINGLE DELINEATOR (WHITE)
⊩	DOUBLE DELINEATOR (WHITE)
⊙	FLEXIBLE TUBULAR MARKER POST AND BASE

* LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM LOCATING NO PASSING ZONES.

N



SHEET 5 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SHEET 84	E

2

2

LEGEND

1 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2 PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3 PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE 12.5 FT LINE 37.5 FT SKIP)
5 PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE 3 FT LINE 9 FT SKIP)
6 PAVEMENT MARKING EPOXY 8-INCH (CHANNELIZING WHITE)
7 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
10 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
14 PAVEMENT MARKING WORD EPOXY (WHITE)
16 PAVEMENT MARKING ARROWS TYPE 2
17 PAVEMENT MARKING ARROWS TYPE 3
20 PAVEMENT MARKING CURB EPOXY (YELLOW)
21 PAVEMENT MARKING ISLAND NOSE EPOXY

⊢ SINGLE DELINEATOR (WHITE)

⊙ FLEXIBLE TUBULAR MARKER POST AND BASE

ALL EXISTING RAMP PAVEMENT MARKINGS REMOVED AND REINSTALLED TO CENTER 12' RAMP LANE ON AVAILABLE PAVEMENT WIDTH.

N

MATCHLINE STA 39+00

CTH K

RAMP SW

RAMP NW

1048SW 1050SW 1052SW 1054SW 1056NW 1058NW 1060NW

STA 1051+05. 211.2' RT
R = 338.0'

REMOVING PAVEMENT MARKINGS
EXISTING CENTERLINE (DOUBLE YELLOW)
(STA 1045+65 TO STA 1054+98)

REMOVING PAVEMENT MARKINGS
EXISTING CENTERLINE (DOUBLE YELLOW)
(STA 1056+22 TO STA 1058+45)

REMOVING PAVEMENT MARKINGS
EXISTING EDGE LINE (WHITE)
(STA 1056+28 TO STA 1064+50)

REMOVING PAVEMENT MARKINGS
EXISTING EDGE LINE (YELLOW)
(STA 1058+45 TO STA 1065+75)

MATCHLINE STA 1062+00

IH 94 SB

1048 1050 1052 1054 1056 1058 1060

IH 94 NB

ALL EXISTING RAMP PAVEMENT MARKINGS REMOVED AND REINSTALLED TO CENTER 12' RAMP LANE ON AVAILABLE PAVEMENT WIDTH.

1048SE 1050SE 1052SE 1054SE 1056NE 1058NE 1060NE

N0°54'25.26"E

SHEET 6 OF 6

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET 85	E

ORIGINAL PLANS PREPARED BY

R.A. Smith National

Beyond Surveying and Engineering

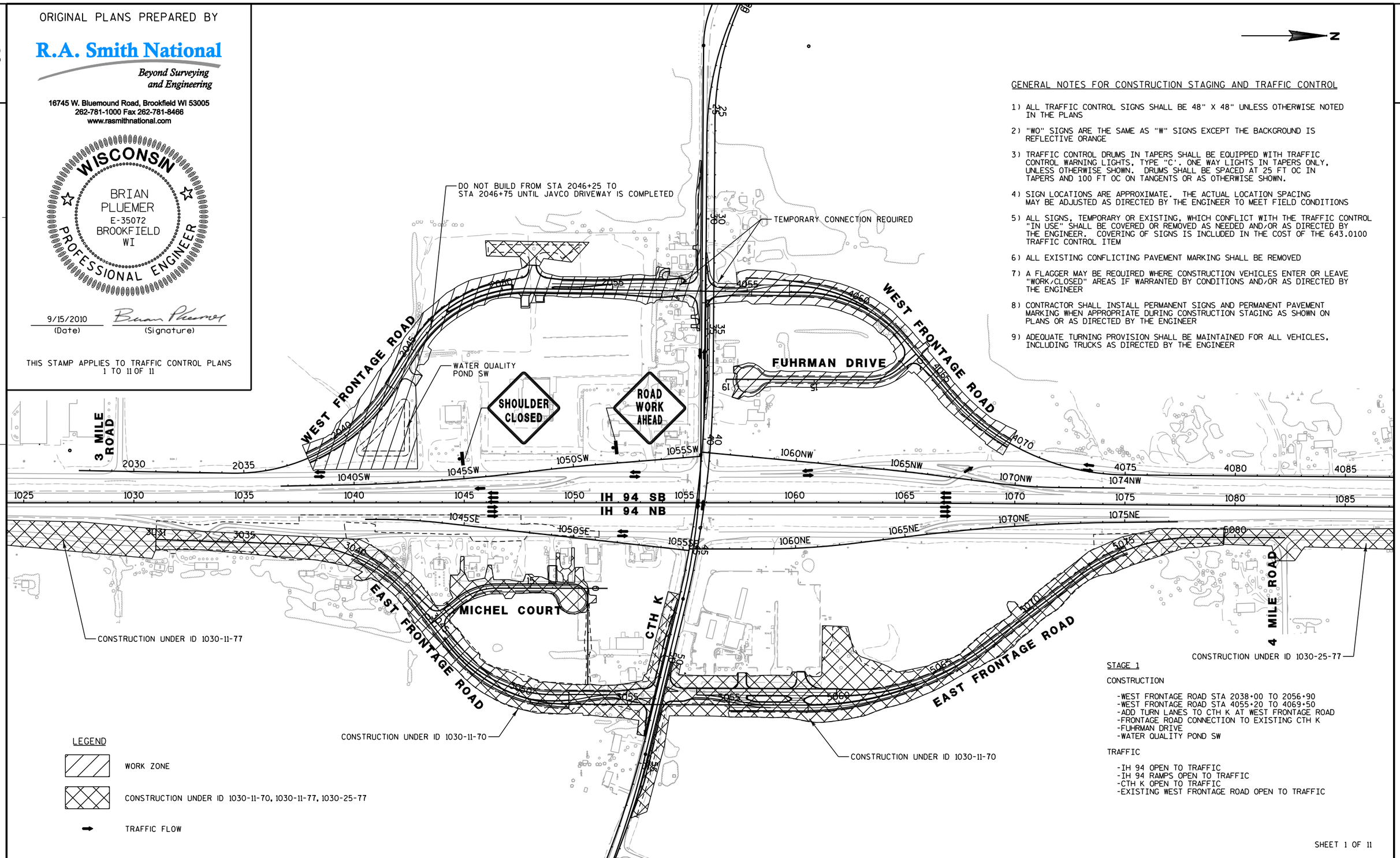
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
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WISCONSIN
BRIAN PLUEMER
E-35072
BROOKFIELD WI
PROFESSIONAL ENGINEER

9/15/2010 (Date)

Brian Pluemer (Signature)

THIS STAMP APPLIES TO TRAFFIC CONTROL PLANS 1 TO 11 OF 11



GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

1) ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS
2) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE
3) TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH TRAFFIC CONTROL WARNING LIGHTS, TYPE "C". ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN. DRUMS SHALL BE SPACED AT 25 FT OC IN TAPERS AND 100 FT OC ON TANGENTS OR AS OTHERWISE SHOWN.
4) SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS
5) ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER. COVERING OF SIGNS IS INCLUDED IN THE COST OF THE 643.0100 TRAFFIC CONTROL ITEM
6) ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED
7) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER
8) CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER
9) ADEQUATE TURNING PROVISION SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER

STAGE 1

CONSTRUCTION

-WEST FRONTAGE ROAD STA 2038+00 TO 2056+90
-WEST FRONTAGE ROAD STA 4055+20 TO 4069+50
-ADD TURN LANES TO CTH K AT WEST FRONTAGE ROAD
-FRONTAGE ROAD CONNECTION TO EXISTING CTH K
-FUHRMAN DRIVE
-WATER QUALITY POND SW

TRAFFIC

-IH 94 OPEN TO TRAFFIC
-IH 94 RAMPS OPEN TO TRAFFIC
-CTH K OPEN TO TRAFFIC
-EXISTING WEST FRONTAGE ROAD OPEN TO TRAFFIC

SHEET 1 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFF CONTROL OVERVIEW:STAGE 1A/AB	SCALE, FEET 0 200 400	SHEET 86	E

LEGEND

WORK ZONE

CONSTRUCTION UNDER ID 1030-11-70, 1030-11-77, 1030-25-77

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

3 MILE ROAD

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

ROAD CLOSED
R11-2
48" X 30"

WEST FRONTAGE ROAD

2027 2028 2030 2032 2034 2036 2038 2040 2042

147 151 152 155 160

100'

1038SW 1040SW 1042SW

RAMP SW

IH 94 SB

1028 1030 1032 1034 1036 1038 1040 1042

IH 94 NB

1038 1040 1042SE

N0°36'41.81"E

N5°09'04.18"E

EAST FRONTAGE ROAD

3030 3032 3034 3036 3038 3040 3042

CONSTRUCTION UNDER ID 1030-11-77

CONSTRUCTION UNDER ID 1030-11-70

SHEET 2 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 1A & 1B	SCALE, FEET 0 50 100	SHEET 87 E

2

N

WEST FRONTAGE ROAD

4066

4068

ROAD CLOSED
R11-2
48" X 30"

4070

4072

4074

4076

4078

4080

100'

ROAD WORK AHEAD
W20-1A

ROAD WORK AHEAD
W20-1A
PLACE AT
STA 4113+00

END ROAD WORK
G20-2A
48" X 24"
PLACE AT
STA 4087+00

1066NW

1068NW

1070NW

1072NW

1074NW

SIGN

IH 94 SB

1066

1068

1070

1072

1074

1076

1078

1080

IH 94 NB

1066NE

1068NE

1070NE

1072NE

1074NE

1076NE

5078

5080

5076

5074

5072

CONSTRUCTION UNDER ID 1030-11-70

CONSTRUCTION UNDER ID 1030-25-77

EAST FRONTAGE ROAD

LEGEND

WORK ZONE

CONSTRUCTION UNDER ID 1030-11-70, 1030-11-77, 1030-25-77

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

SHEET 3 OF 11

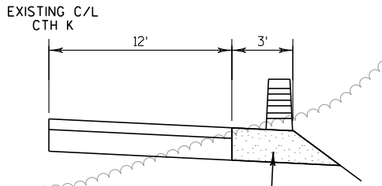
PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 1A & 1B	SCALE, FEET 0 50 100	SHEET 88	E

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NOTES:

FLAGGING OPERATIONS REQUIRED FOR CONSTRUCTION ACTIVITIES ADJACENT TO CTH K

SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" AS NEEDED FOR WORK ALONG CTH K



PLACEMENT OF TRAFFIC CONTROL DEVICES ALONG CTH K

WEST FRONTAGE ROAD

FUHRMAN DRIVE

CTH K

RUINS

SILO

WELL

SEPV

SEPTIC

POST

VENT

SIGN

NOIS

HW

PHONE

TILLER CAPS

CANOPY

4058

4056

4054

2058

2056

1060NW

1058NW

1054SW

1052SW

END ROAD WORK
G20-2A
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

R3-1
24" X 24"

ROAD WORK AHEAD
W20-1A

SHOULDER WORK
W21-5

MB

USE PORTABLE CHANGEABLE MESSAGE SIGN 14 DAYS PRIOR TO CTH K SHOULDER CLOSURES MESSAGE TO READ "CTH K SHOULDER CLOSED" AND "DATE"

250'

250'

50'

150'

300'

24"

18"

LEGEND

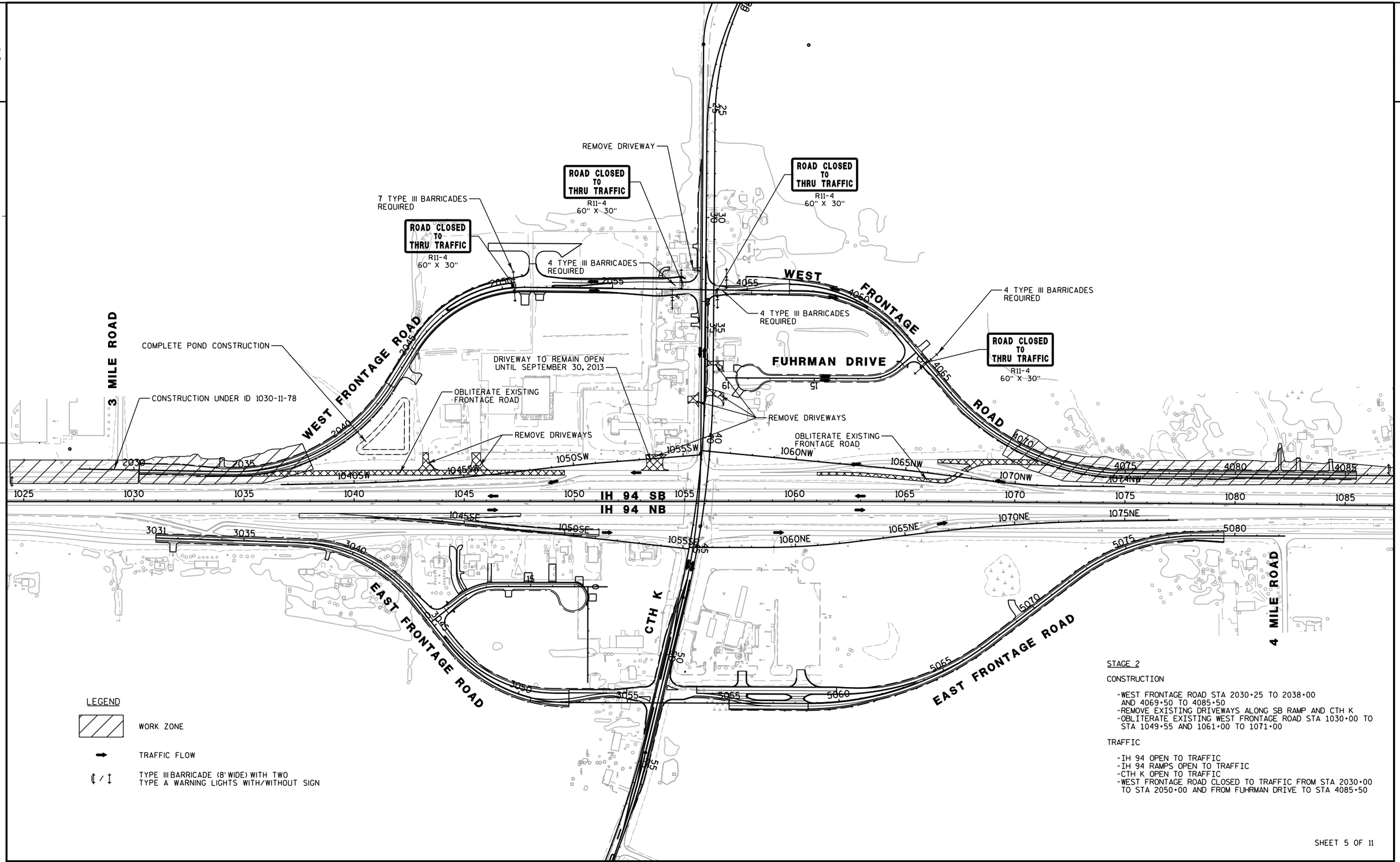
- WORK ZONE
- CONSTRUCTION UNDER ID 1030-11-70
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT
- POST MOUNTED TRAFFIC CONTROL SIGN
- TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN
- TRAFFIC FLOW
- MB — PORTABLE CHANGEABLE MESSAGE SIGN

SHEET 4 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 1A & 1B	SCALE, FEET 0 50 100	SHEET 89	E

FILE NAME : t:\1052705\cadd\sheets\staging\wfr_74\025004_tc.dgn PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2



STAGE 2

CONSTRUCTION

- -WEST FRONTAGE ROAD STA 2030+25 TO 2038+00 AND 4069+50 TO 4085+50
- -REMOVE EXISTING DRIVEWAYS ALONG SB RAMP AND CTH K
- -OBLITERATE EXISTING WEST FRONTAGE ROAD STA 1030+00 TO STA 1049+55 AND 1061+00 TO 1071+00

TRAFFIC

- -IH 94 OPEN TO TRAFFIC
- -IH 94 RAMPS OPEN TO TRAFFIC
- -CTH K OPEN TO TRAFFIC
- -WEST FRONTAGE ROAD CLOSED TO TRAFFIC FROM STA 2030+00 TO STA 2050+00 AND FROM FUHRMAN DRIVE TO STA 4085+50

SHEET 5 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL OVERVIEW: STAGE 2	SCALE, FEET 0 200 400	SHEET 90	E

2

NICHOLAS ROAD

SEE SHEET 5 OF 10 FOR ADDITIONAL ADVANCED SIGNING

3 MILE ROAD

LEGEND

WORK ZONE

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

CONSTRUCTION UNDER ID 1030-11-78

WEST FRONTAGE ROAD

STA 1035+00

2027 2028 2030 2032 2034

24"

18"x30"

9"x20"

SAFETY FENCE

100'

IH 94 SB

1020 1022 1024 1026 1028 1030 1032 1034

IH 94 NB

INL

SIGN

MATCHLINE

WEST FRONTAGE ROAD

2040 2038 2036

19"x30"

STA 1035+00

SHOULDER WORK W21-5

747 751 752 755 760

OBLITERATE EXISTING FRONTAGE ROAD

REMOVE DRIVEWAY

STA 1045+00

SEE SHEET 7 OF 11

1038SW 1040SW 1042SW 1044SW

SAFETY FENCE

100'

RAMP SW

IH 94 SB

1036 1038 1040 1042 1044

IH 94 NB

1038 N0°36'41.81"E 1040 1042E N5°09'04.18"E 1044E

MATCHLINE

SHEET 6 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 91	E

LEGEND

WORK ZONE

CONSTRUCTION UNDER ID 1030-11-70

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

REMOVE DRIVEWAYS

REMOVE DRIVEWAYS

REMOVE DRIVEWAYS
DRIVEWAYS TO REMAIN OPEN UNTIL SEPTEMBER 30, 2013

REMOVE DRIVEWAY

OBLITERATE EXISTING FRONTAGE ROAD

ESTR EAST SOUTH ALTERNATE 94 41 Chicago

Milwaukee
Chicago

ESTR STOP ALL WAY

ESTR EAST SOUTH ALTERNATE 94 41

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

FREEWAY ENTRANCE RAMP ONLY

ROAD CLOSED
R11-2
48" X 30"

SHOULDER WORK

SEE PAVEMENT MARKING PLAN

ROAD CLOSED

SEE PAVEMENT MARKING PLAN

ONE WAY
R6-2L

WRONG WAY

ROAD WORK AHEAD

ESTR STOP ALL WAY

RAMP SW

RAMP NW

*PERMANENT BARRICADES

DO NOT ENTER
R5-1

SEE PAVEMENT MARKING PLAN FOR PROPOSED MARKING AND PAVEMENT MARKING REMOVALS.

* SEE PERMANENT SIGNING PLAN FOR PROPOSED SIGNS AND PERMANENT BARRICADES

EAST SOUTH ALTERNATE 94 41
J3-1

ONE WAY

IH 94 SB

IH 94 NB

ESTR STOP ALL WAY

RAMP SE

RAMP NE

N0°54'25.26"E

END ROAD WORK
G20-2A
48" X 24"
PLACE AT STA 47+00

ROAD WORK AHEAD
W20-1
PLACE AT STA 47+00

CTH K

STA 1045+00

STA 1060+00

SEE SHEET 6 OF 11

SEE SHEET 8 OF 11

MATCHLINE

MATCHLINE

SHEET 7 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 92 E

FILE NAME : t:\1052705\cadd\sheets\staging\wfr_74\025103_tc.dgn PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

WORK ZONE

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

STA 1060+00

STA 1075+00

OBLITERATE EXISTING FRONTAGE ROAD

WEST FRONTAGE ROAD

RAMP NW

IH 94 SB

IH 94 NB

RAMP NE

EAST FRONTAGE ROAD

SAFETY FENCE

100'

1060NW 1062NW 1064NW 1066NW 1068NW 1070NW 1072NW 1074NW

1060 1062 1064 1066 1068 1070 1072 1074

1060NE 1062NE 1064NE 1066NE 1068NE 1070NE 1072NE 1074NE

4065 4066 4068 4070 4072 4074

INL MH

SEE SHEET 7 OF 11

SEE SHEET 9 OF 11

MATCHLINE

MATCHLINE

SHEET 8 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 93	E

FILE NAME : t:\1052705\cadd\sheets\staging\wfr_74\025104_tc.dgn PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

LEGEND

WORK ZONE

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

SEE SHEET 5 OF 11 FOR ADDITIONAL ADVANCED SIGNING

STA 1075+00

STA 1090+00

SEE SHEET 8 OF 11

SEE SHEET 10 OF 11

CONSTRUCTION UNDER ID 1030-25-78

WEST FRONTAGE ROAD

SAFETY FENCE

100'

IH 94 SB

IH 94 NB

1076NE

EAST FRONTAGE ROAD

MATCHLINE

MATCHLINE

SHEET 9 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 94	E

FILE NAME : t:\1052705\cadd\sheets\staging\wfr_74\025105_tc.dgn PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

LEGEND

WORK ZONE

TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT

POST MOUNTED TRAFFIC CONTROL SIGN

TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN

TRAFFIC FLOW

N

STA 1090+00

4090

WEST FRONTAGE ROAD

500'

1000'

1090 1092 1094 1096 1098 1100 1102 1104

IH 94 SB

IH 94 NB

EAST FRONTAGE ROAD

SHOULDER WORK W21-5

RAMP WORK AHEAD W20-1 (MOD)

SIGN

INL

W

FOOTBRIDGE

RUINS

SEE SHEET 9 OF 11

MATCHLINE

SHEET 10 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 95 E

FILE NAME : t:\1052705\cadd\sheets\staging\wfr_74\025106_tc.dgn PLOT DATE : 11/29/2011 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

N

WEST FRONTAGE ROAD

FUHRMAN DRIVE

CTH K

RUINS

SILO

WELL

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

W2-1
SEE PERMANENT SIGNING PLAN FOR LOCATION

REMOVE DRIVEWAYS

REMOVE DRIVEWAY

REMOVE DRIVEWAYS

REMOVE DRIVEWAYS
DRIVEWAY TO REMAIN OPEN
UNTIL SEPTEMBER 30, 2013

Milwaukee
Chicago

SEPTIC

SEPV

POST

SIGN

CANOPY

4058
4056
4054
2058
2056
1060NW
1058NW
1056NW
1054SW
1052SW

* SEE PERMANENT SIGNING PLAN

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C WARNING LIGHT
- POST MOUNTED TRAFFIC CONTROL SIGN
- TYPE III BARRICADE (8' WIDE) WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN
- TRAFFIC FLOW

SHEET 11 OF 11

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	TRAFFIC CONTROL STAGE 2	SCALE, FEET 0 50 100	SHEET 96	E

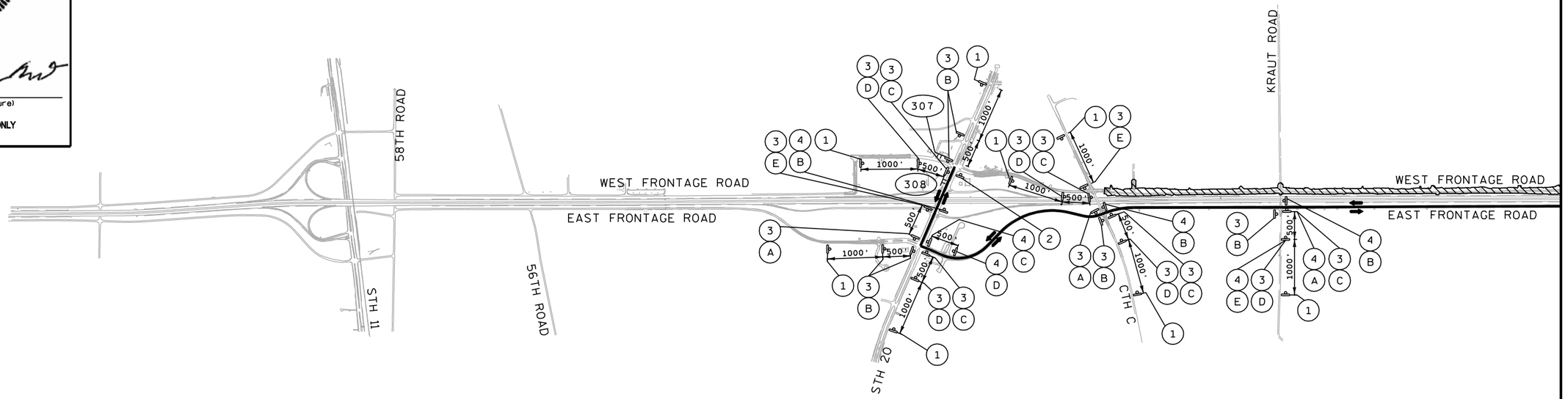
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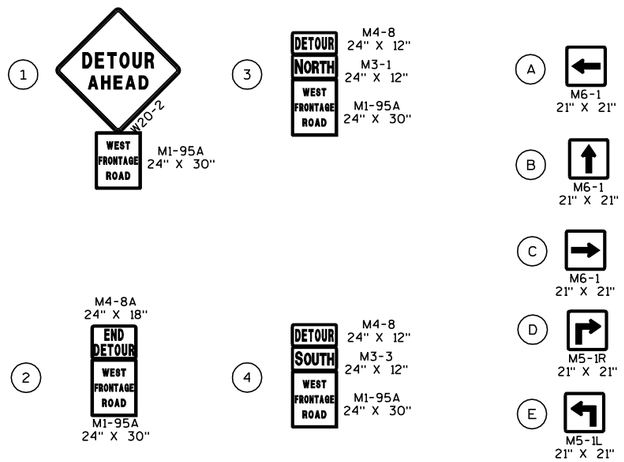
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Milwaukee, WI 53202
414-225-9817

WISCONSIN
JOSHUA H. MOUNT
E-35706
MILWAUKEE, WI
PROFESSIONAL ENGINEER

08/16/2012
(Date) (Signature)

THIS STAMP APPLIES TO THIS SHEET ONLY





NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINSTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROVIDED IN THE PLAN.
4. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER.
5. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN WEST AND EAST FRONTAGE ROAD IS OPEN TO TRAFFIC AND SIGN DETOUR IS NOT IN USE.

LEGEND

- PROPOSED SIGN MOUNTED ON POSTS
- (X) SIGN NUMBER
- X FIXED MESSAGE SIGN NUMBER
- DETOUR ROUTE
- WORK AREA

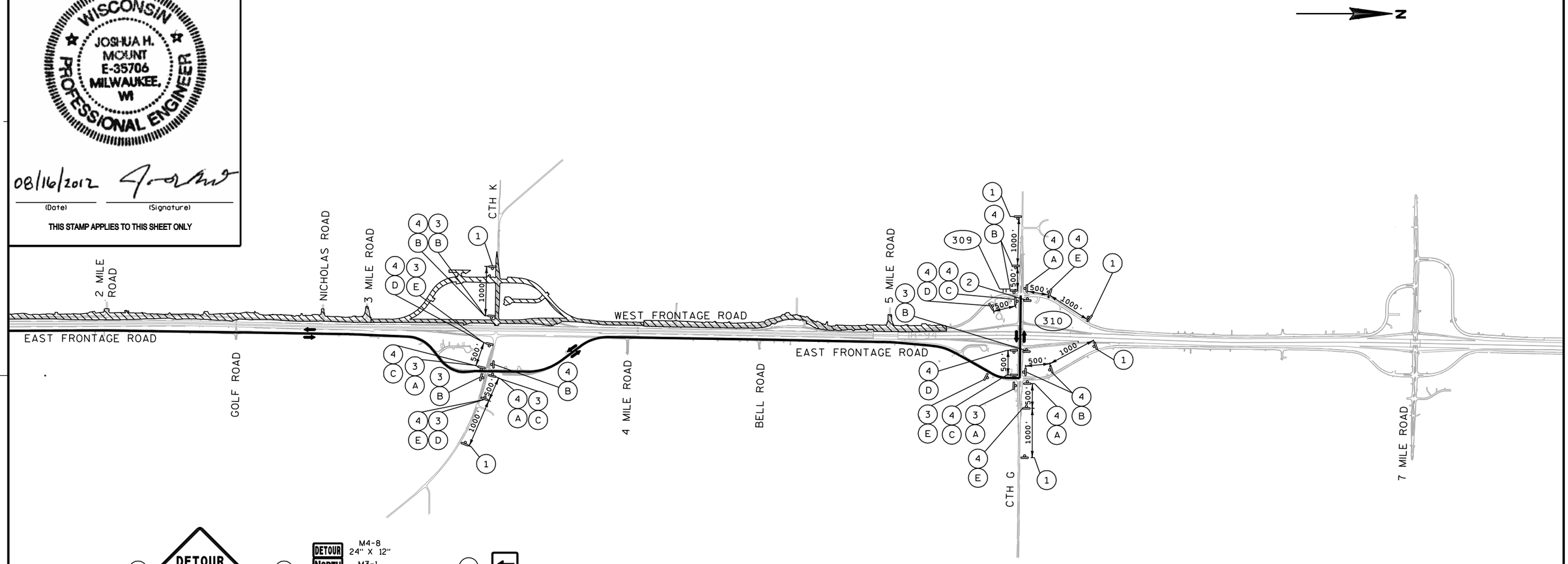
PROJECT NO: 1030-11-74	HWY: IH 94	COUNTY: RACINE	DETOUR PLAN - WEST FRONTAGE ROAD - STAGE 2	SHEET 97	E

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WISCONSIN
JOSHUA H. MOUNT
E-35706
MILWAUKEE, WI
PROFESSIONAL ENGINEER

08/16/2012
(Date) (Signature)

THIS STAMP APPLIES TO THIS SHEET ONLY



1 DETOUR AHEAD W20-2
WEST FRONTAGE ROAD M1-95A 24" X 30"

3 DETOUR NORTH WEST FRONTAGE ROAD
M4-8 24" X 12"
M3-1 24" X 12"
M1-95A 24" X 30"

2 M4-8A 24" X 18"
END DETOUR WEST FRONTAGE ROAD
M1-95A 24" X 30"

4 DETOUR SOUTH WEST FRONTAGE ROAD
M4-8 24" X 12"
M3-3 24" X 12"
M1-95A 24" X 30"

A M6-1 21" X 21"
B M6-1 21" X 21"
C M6-1 21" X 21"
D M5-1R 21" X 21"
E M5-1L 21" X 21"

NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINSTRATION MANUAL OF STANDARD HIGHWAY SIGNS. UNLESS OTHERWISE PROVIDED IN THE PLAN.
4. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER.
5. DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN WEST AND EAST FRONTAGE ROAD IS OPEN TO TRAFFIC AND SIGN DETOUR IS NOT IN USE.

LEGEND
- PROPOSED SIGN MOUNTED ON POSTS
- (X) SIGN NUMBER
- X FIXED MESSAGE SIGN NUMBER
- DETOUR ROUTE
- WORK AREA

PROJECT NO: 1030-11-74	HWY: IH 94	COUNTY: RACINE	DETOUR PLAN - WEST FRONTAGE ROAD - STAGE 2	SHEET 98	E





GENERAL NOTES

-ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING - REFERENCE: WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.

-AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.

-ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"X6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN.

-SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "FIXED MESSAGE SIGNS".

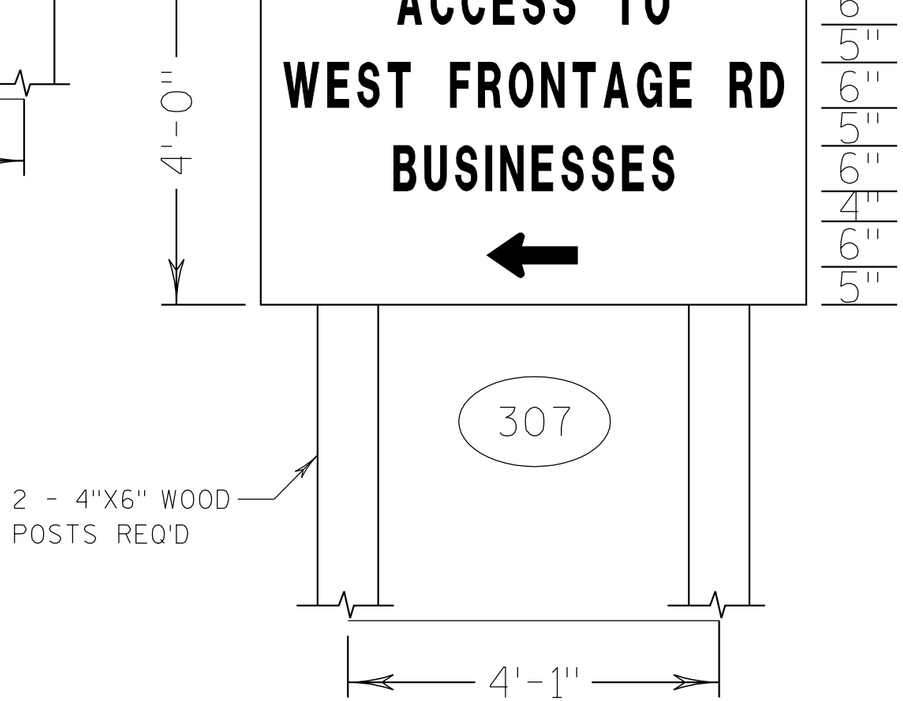
-SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE BACKGROUND PER SPEC. 637 & 643.

-ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 6" CAPS SHALL BE SERIES "C".

-CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING. CONTRACTOR TO VERIFY DIMENSIONS.

-SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637 & 643.

(XXX) SIGN NUMBER NOTED ON TRAFFIC CONTROL PLAN



ORIGINAL PLANS PREPARED BY
DAAR
ENGINEERING, INC.
www.daarcorp.com
Milwaukee, WI 53202
414-225-9817

WISCONSIN
JOSHUA H.
MOUNT
E-35706
MILWAUKEE,
WI
PROFESSIONAL ENGINEER

08/16/2012
(Date) (Signature)

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PROJECT NO: 1030-11-74	HWY: IH 94	COUNTY: RACINE	DETOUR PLAN: FIXED MESSAGE SIGNS - STAGE 2	SHEET 99	E

2

3 MILE ROAD

MATCH PROJECT
I.D. 1030-11-78
STA 2030+25, 55'RT

WEST FRONTAGE ROAD

TLE
R/W
2040
46'
+03
46'RT
+17
95'RT
+40
256'RT
R/W
TLE
TLE
WOVEN WIRE FENCE
4-FOOT
R/W
TLE
TIE INTO EXISTING FENCE
STA 1053SW+87, 162'LT
SW+76
38'LT
SW+05
28'LT
1055SW
1050SW
1045SW
1040SW
2030
2035
55'
+47
55'RT
+69
46'RT
SLOPE INTERCEPT
RAMP SW
1030
1035
1040
IH 94 SB
1045
1050
1055
IH 94 NB
FENCE SAFETY REQUIRED
STA 2030+25 TO STA 2038+00
STA 1030+25 TO STA 1048+93
REMOVE EXISTING FENCE
1045SE
1050SE
RAMP SE
1055SE
MATCHLINE 1059+00
3030
3035
3040
EAST FRONTAGE ROAD
MICHEL COURT
15
CTH K
19
40
45
R/W
TLE
NW+55
77'LT
NW+02
38'LT
N

4065
R/W
WEST FRONTAGE ROAD
4070
FUHRMAN DRIVE
WOVEN WIRE FENCE
4-FOOT
R/W
TLE
+78
70'RT
+98
28'RT
R/W
R/W
20'
+48
28'RT
4075
4080
4085
1060NW
RAMP NE
1065NW
1070NW
1075NW
55'
+00
58'RT
SLOPE INTERCEPT
1060
IH 94 SB
1065
1070
1075
1080
WOVEN WIRE
FENCE 4-FOOT
1085
MATCHLINE 1059+00
IH 94 NB
STA 4069+44 TO STA 4085+50
REMOVE EXISTING FENCE
FENCE SAFETY REQUIRED DURING CONSTRUCTION
1075NE
MATCH PROJECT
I.D. 1030-25-78
STA 4085+50, 58'RT
RAMP NE
1065NE
1060NE
5080
5075
EAST FRONTAGE ROAD
N

FENCE LOCATION SHIFTED EAST TO +/- 58'RT AROUND CURVE TO ACCOMMODATE MAINTENANCE/SNOW STORAGE

SHEET 1 OF 1

PROJECT NO: 1030-11-74	HWY: IH 94 / CTH K	COUNTY: RACINE	FENCING PLAN	SCALE, FEET 0 100 200	SHEET 100 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\027101_fn.dgn
PLOT DATE : 28-APR-2011 07:55
PLOT BY : rmakoutz
PLOT NAME :
PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

2

2

CAST IRON MONU.
WITH BRASS CAP
STA 1029+44.92
2564.70' LT
N=202,239.33
E=591,473.71

T 4 N
R 21 E
25
36

N

N 89°13'30" W
2660.61'

BEGIN PROJECT I.D. 1030-11-74
END PROJECT I.D. 1030-11-78
STA 2030+25.00
Y 202294.10
X 593897.47

SWF SB PGL
MATCHLINE
STA 2039+50
CURVE 84
CURVE 80

POB STA 2027+50.00
Y 202019.20
X 593889.94

N 01°34'09" E

2030

WEST FRONTAGE ROAD

2035

R/L WEST FRONTAGE ROAD

BEGIN PROJECT
I.D. 1030-11-72
STA 1024+00
Y 201667.83
X 594032.60

BEGIN SWF SB PGL
STA 2034+25.72
Y 202694.67
X 593908.45

PC 80

1010 N 01°32'42" E 1015 1020 IH 94 1025 N 00°35'40" E 1030 1035 1040+00

R/L IH 94

POB RAMP SE
STA 1037+50.00
Y 203017.18
X 594101.54

N 00°36'42" E

R/L RAMP SE

N 05°09'04" E

MATCHLINE 1040+00

TOWNSHIP LINE N 00°52'57" E 2640.62'

N 00°43'07" E

2635.24'

CAST IRON MONU.
WITH BRASS CAP
STA 1029+36.54
95.89' RT
N=202,203.35
E=594,134.08

T 4 N
T 4 N
R 21 E
R 22 E
25
30
36
31

SECTION LINE

N 88°58'03" W
2450.32'

CAST IRON MONU.
WITH BRASS CAP
STA 1029+17.80
2546.15' RT
N=202,159.19
E=596,584.00

T 4 N
R 22 E
30
31

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	ALIGNMENT PLAN	SCALE, FEET 0 100 200	SHEET 101	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\027201_ad.dgn PLOT DATE : 26-JUN-2012 10:18 PLOT BY : rmakoutz PLOT NAME : 027201_ad PLOT SCALE : 200:1

2

2

N

POB LUND DRIVE
STA 7+44.35
Y 204091.26
X 592830.92

STA 8+17.49 R/L LUND DRIVE =
STA 18+17.49 R/L JAVCO DRIVEWAY

R/L JAVCO DRIVEWAY

POB JAVCO DRIVEWAY
STA 15+67.49
Y 203840.16
X 592900.44

POE JAVCO DRIVEWAY
STA 20+67.49
Y 204340.10
X 592907.67

N 00°49'41" E

JAVCO DRIVEWAY

LUND DRIVE

R/L LUND DRIVE
N 89°06'58" W

PI 85

PT 85

PI 81

CURVE 85

2050

SWF SB PGL

R/L WEST FRONTAGE ROAD

WEST FRONTAGE ROAD

CURVE 81

PT 81

POE LUND DRIVE
STA 10+00.00
Y 204087.32
X 593086.54

PC 85

2045

PC 81

N 57°15'57" W

PT 84

PT 80

CURVE 84

CURVE 80

2040

MATCHLINE
STA 2039+50

STA 2051+35.89 R/L WEST FRONTAGE ROAD =
STA 10+00.00 R/L LUND DRIVE

PI STA 2054+20.09, 24.00' LT

2055

N 01°22'51" E

PC TEMP WFR 1

PI TEMP WFR 1

CURVE TEMP WFR 1

R/L TEMPORARY WFR

POB TEMP WFR
STA 2055+63.38
Y 204517.83
X 593067.44

PRC TEMP WFR 1/2

CURVE TEMP WFR 2

PI TEMP WFR 2

PT TEMP WFR 2

EQUATION

STA 3056+18.38 BK=
STA 5051+56.45 AH=
R/L TEMPORARY WFR

R/L CTH K

30

35

N 69°00'27" W

2650.55'

40

STA 2059+23.38, 32.00' LT SB PGL=
STA 32+96.36 CTH K
Y 204875.33
X 593073.52

PRC TEMP WFR 3/4

CURVE TEMP WFR 4

PI TEMP WFR 4

PCC TEMP WFR 4/5

PI TEMP WFR 5

CURVE TEMP WFR 5

PI NWF SB 86

PT TEMP WFR 5

PI 82

NWF SB PGL

N 01°22'51" E

4055

PC, NWF SB 86

PC 82

4058

4060

CURVE 82

CURVE 86

CURVE TEMP WFR 3

PI TEMP WFR 3

PC TEMP WFR 3

POE TEMP WFR
STA 4058+74.51
Y 205432.80
X 593108.59

END NWF SB PGL
STA 4062+69.57, 0' LT
Y 205768.74
X 593331.46

PT WFR 82/NWF SB 86

STA 2059+23.60 BK
STA 4053+12.38 AHD
WEST FRONTAGE ROAD=
STA 33+28.38 CTH K
Y 204874.78
X 593105.52

EQUATION

POB FUHRMAN DRIVE
STA 10+00.00=
Y 205826.40
X 593400.30

N 50°07'04" E

R/L WEST FRONTAGE ROAD

PT 92

S 39°52'56" E

CURVE 92

4065

S 00°51'02" W

FUHRMAN DRIVE

PC 92

PI 92

PC 83

CURVE 83

R/L FUHRMAN DRIVE

POE FUHRMAN DRIVE
STA 19+00.00
Y 204962.36
X 593506.26

STA 4063+59.37 R/L WEST FRONTAGE ROAD =
STA 10+00.00 R/L FUHRMAN DRIVE

MATCHLINE
STA 4068+50

MON. EAST 25-04-21
CONCRETE MONUMENT
WITH ALUMINUM CAP
STA 1055+71.78
101.61' RT
N=204,838.38
E=594,167.13

T 4 N
R 22 E
R 23 E
25
30

CTH K WB PGL

STA 1055+54.65 IH 94=
STA 42+90.46 CTH K
Y 204822.31
X 594065.35

IH 94

1040

1045

1050

1055

1060

1065

N 00°35'40" E

R/L IH 94

STA 1055+72.48 IH 94

STA 1055+90.97 IH 94=
STA 42+90.18 CTH K WB PGL
Y 204858.63
X 594065.72

MATCHLINE STA 1040+00

MATCHLINE STA 1069+50

00°43'07" E

TOWNSHIP LINE

N 00°42'23" E

2656.24'

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	ALIGNMENT PLAN	SCALE, FEET 0 100 200	SHEET 102	E

2

2

CAST IRON MONU.
WITH BRASS CAP
1082+13.86
2548.25' LT
N=207,529.73
E=591,560.10

T 4 N
R 21 E
25 24

N

N 89°14'02" W

2645.42'

SECTION LINE

MATCHLINE
STA 4068+50

4070

R/L WEST FRONTAGE ROAD

CURVE, 83

PI 83

PT 83

4075

4080

WEST FRONTAGE ROAD

N 01°05'31" E

4085

4090

END PROJECT I.D. 1030-11-74

BEGIN PROJECT I.D. 1030-25-78

POE STA 4085+50.00
Y 207819.81
X 593979.07

END PROJECT
I.D. 1030-11-72
STA 1093+00.00
Y 208567.10
X 594128.59

MATCHLINE STA 1069+50

1070

1075

R/L IH 94

1080

IH 94

1085

N 01°05'31" E

1090

1095

N 00°42'23" E 2656.24'

TOWNSHIP LINE

N 00°53'45" E 2650.20'

T 4 N
R 21 E
R 22 E
25 30 24 19

CAST IRON MONU.
WITH BRASS CAP
STA 1082+28.90
97.12' RT
N=207,494.35
E=594,205.28

CAST IRON MONU.
WITH BRASS CAP
STA 1108+79.09
88.05' RT
N=210,144.23
E=594,246.71

N 89°16'45" W

2414.15'

T 4 N
R 22 E
30 19

CAST IRON MONU.
WITH BRASS CAP
STA 1082+32.76
2368.15' RT
N=207,463.98
E=596,619.24

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	ALIGNMENT PLAN	SCALE, FEET 0 100 200	SHEET 103	E

2

WEST FRONTAGE ROAD R/L (SOUTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PC (Y,X)	
80	2039+17.83	203186.59	593921.92	58°50'05"	6°51'42"	835.00	470.83	857.43	123.60	2034+46.99	202715.94	593909.03	2043+04.42	203441.19	593525.86
81	2048+07.29	203729.15	593077.91	58°38'47"	9°38'45"	594.00	333.65	608.00	87.29	2045+03.29	203548.73	593358.57	2051+11.30	204062.71	593085.95

WEST FRONTAGE ROAD R/L (NORTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PC (Y,X)	
82	4060+32.39	205594.58	593122.87	48°44'14"	9°10'02"	625.00	283.10	531.64	61.13	4057+49.29	205311.56	593116.05	4062+80.93	205776.11	593340.11
83	4070+75.49	206285.58	593949.82	49°01'33"	5°22'48"	1065.00	485.64	911.28	105.50	4065+89.85	205974.19	593577.16	4075+01.13	206771.13	593959.08

WEST FRONTAGE ROAD PGL (SOUTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
84	2038+64.99, 116.79' RT	203172.57	593921.54	58°50'05"	6°45'28"	847.86	478.09	870.64	125.50	2034+25.72, 0.00'	202694.67	593908.45	2043+04.42, 12.00' LT	203431.10	593519.38
85	2048+17.66, 108.55' LT	203730.30	593053.93	58°38'47"	9°47'39"	585.00	328.60	598.79	85.97	2045+28.61, 12.55' LT	203552.61	593330.34	2051+06.99, 24.02' LT	204058.80	593061.85

WEST FRONTAGE ROAD PGL (NORTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
86	4059+86.56, 82.56' LT	205574.39	593090.37	49°44'40"	8°34'39"	667.98	309.67	579.94	68.29	4057+04.10, 32.00' LT	205264.81	593082.91	4062+69.57, 0.00'	205768.74	593331.46

EAST FRONTAGE ROAD R/L (SOUTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PC (Y,X)	
70	3040+74.67	203339.75	594248.79	49°49'04"	8°02'50"	712.00	330.63	619.07	73.02	3037+44.03	203009.43	594234.47	3043+63.10	203541.94	594510.40
71	3049+42.29	203896.12	594968.67	51°28'42"	8°19'40"	688.00	331.69	618.14	75.78	3046+10.60	203693.28	594706.23	3052+28.74	204227.77	594973.44

EAST FRONTAGE ROAD R/L (NORTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PC (Y,X)	
72	5063+18.50	205779.30	594995.73	37°36'22"	4°14'39"	1350.00	459.66	886.07	76.11	5058+58.84	205319.69	594989.12	5067+44.91	206147.45	594720.49
73	5075+45.44	206788.59	594241.14	37°36'22"	6°21'58"	900.00	306.44	590.72	50.74	5072+39.00	206543.16	594424.63	5078+29.72	207095.00	594245.54

EAST FRONTAGE ROAD PGL (SOUTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
74	3039+51.39, 31.30' LT	203222.66	594243.71	29°46'17"	9°03'01"	633.08	168.28	328.95	21.98	3037+89.12, 1.43' LT	203054.53	594236.42	3041+13.99, 12.00' LT	203364.97	594333.52
75	3042+38.55, 23.22' LT	203473.18	594401.81	20°02'47"	7°54'50"	724.00	127.96	253.31	11.22	3041+13.99, 12.00' LT	203364.97	594333.52	3043+63.10, 12.00' LT	203551.43	594503.06
76	3048+85.10, 45.62' RT	203877.06	594924.40	51°28'42"	9°29'57"	603.16	290.79	541.92	66.44	3046+04.81, 12.00' LT	203699.24	594694.31	3051+64.20, 41.16' LT	204167.82	594928.57

EAST FRONTAGE ROAD PGL (NORTH OF CTH K)

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
77	5063+67.51, 54.53' RT	205837.05	594952.55	37°36'22"	5°02'01"	1138.23	387.55	747.08	64.17	5059+91.99, 37.62' LT	205449.54	594946.98	5067+44.91, 0.00'	206147.45	594720.49

2

TEMPORARY WFR R/L

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
WFR 1	2056+91.39	204645.72	593070.26	10°37'22"	8°48'53"	650.00	60.43	120.51	2.80	2056+30.97	204585.41	593066.54	2057+51.48	204704.32	593085.03
WFR 2	2058+25.56	204776.15	593103.14	12°46'15"	8°39'41"	661.50	74.03	147.45	4.13	2057+51.53	204704.37	593085.04	2058+98.98	204850.16	593104.93
WFR 3	4054+84.71	205047.06	593109.67	12°34'38"	8°36'34"	665.50	73.34	146.09	4.03	4054+11.37	204973.74	593107.91	4055+57.46	205119.00	593095.43
WFR 4	4056+31.08	205191.21	593081.14	12°34'38"	8°34'39"	667.98	73.61	146.63	4.04	4055+57.46	205119.00	593095.43	4057+04.10	205264.81	593082.91
WFR 5	4057+89.77	205350.45	593084.98	14°37'02"	8°34'39"	667.97	85.67	170.41	5.47	4057+04.10	205264.81	593082.91	4058+74.51	205432.81	593108.59

FUHRMAN DRIVE R/L

CURVE NO.	PI (STA)	PI (Y,X)		DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
92	11+82.02	593517.01	205686.73	40°43'58"	27°56'57"	205.00	76.10	145.74	13.67	11+05.92	205745.12	593468.22	12+51.66	205610.63	593515.88

WEST FRONTAGE ROAD - SOUTH OF CTH K NB PGL

SUPERELEVATION DESCRIPTION	STATION	SLOPE LT	SLOPE RT
END NORMAL CROWN	2033+00	-2.00%	-2.00%
REVERSE CROWN	2034+10	-2.00%	2.00%
BEGIN FULL SUPER	2034+93	-5.30%	5.30%
END FULL SUPER	2042+60	-5.30%	5.30%
BEGIN FULL SUPER	2045+55	5.90%	-5.90%
END FULL SUPER	2050+60	5.90%	-5.90%
REVERSE CROWN	2051+61	2.00%	-2.00%
BEGIN NORMAL CROWN	2052+65	-2.00%	-2.00%
END NORMAL CROWN	2058+05	-2.00%	-2.00%
REMOVE CROWN	2058+46	-2.00%	0.00%
BEGIN FULL SUPER	2058+75	-1.43%	1.43%
MATCH CTH K	2058+98	-1.43%	1.43%

WEST FRONTAGE ROAD - NORTH OF CTH K NB PGL

SUPERELEVATION DESCRIPTION	STATION	SLOPE LT	SLOPE RT
MATCH CTH K	4053+74	-1.43%	1.43%
PAVEMENT WARPING	4054+00	-1.43%	1.43%
PAVEMENT WARPING	4054+12	-2.00%	--
BEGIN NORMAL CROWN	4054+70	-2.00%	-2.00%
END NORMAL CROWN	4056+50	-2.00%	-2.00%
REVERSE CROWN	4057+34	--	-2.00%
BEGIN FULL SUPER	4057+75	--	-4.00%
END FULL SUPER	4062+55	--	-4.00%
REVERSE CROWN	4062+96	--	-2.00%
BEGIN NORMAL CROWN	4063+80	-2.00%	-2.00%
END NORMAL CROWN	4064+85	-2.00%	-2.00%
REVERSE CROWN	4065+69	-2.00%	2.00%
BEGIN FULL SUPER	4066+25	-4.80%	4.80%
END FULL SUPER	4074+70	-4.80%	4.80%
REVERSE CROWN	4075+26	-2.00%	2.00%
BEGIN NORMAL CROWN	4076+10	-2.00%	-2.00%

WEST FRONTAGE ROAD - NORTH OF CTH K SB PGL

SUPERELEVATION DESCRIPTION	STATION	SLOPE LT	SLOPE RT
REVERSE CROWN	4056+90	2.00%	--
BEGIN FULL SUPER	4057+30	4.00%	--
END FULL SUPER	4062+55	4.00%	--
REVERSE CROWN	4062+95	2.00%	--

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
0010	108.4400	CPM PROGRESS SCHEDULE	EACH	0.200	0.200
0020	201.0105	CLEARING **P**	STA	23.000	23.000
0040	201.0205	GRUBBING **P**	STA	23.000	23.000
0060	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	21.000	21.000
0240	204.0150	REMOVING CURB & GUTTER **P**	LF	800.000	800.000
0260	204.0170	REMOVING FENCE **P**	LF	3,530.000	3,530.000
0270	204.0195	REMOVING CONCRETE BASES	EACH	1.000	1.000
0320	204.0280	SEALING PIPES	EACH	1.000	1.000
0340	205.0100	EXCAVATION COMMON	CY	71,257.000	71,257.000
0400	213.0100	FINISHING ROADWAY (PROJECT) 018. 1030-11-74	EACH	1.000	1.000
0430	214.0100	OBLITERATING OLD ROAD **P**	STA	23.000	23.000
0440	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,530.000	2,530.000
0460	415.0095	CONCRETE PAVEMENT 9 1/2-INCH **P**	SY	9,750.000	9,750.000
0470	415.0210	CONCRETE PAVEMENT GAPS	EACH	1.000	1.000
0490	416.0160	CONCRETE DRIVEWAY 6-INCH **P**	SY	65.000	65.000
0500	416.1010	CONCRETE SURFACE DRAINS **P**	CY	5.400	5.400
0510	440.4410.S	INCENTIVE IRI RIDE	DOL	1,136.000	1,136.000
0520	455.0105	ASPHALTIC MATERIAL PG58-28	TON	475.000	475.000
0540	455.0605	TACK COAT	GAL	640.000	640.000
0550	460.1101	HMA PAVEMENT TYPE E-1	TON	850.000	850.000
0560	460.1103	HMA PAVEMENT TYPE E-3	TON	7,220.000	7,220.000
0580	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	5,180.000	5,180.000
0590	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	35.000	35.000
0600	465.0310	ASPHALTIC CURB	LF	82.000	82.000
0610	465.0315	ASPHALTIC FLUMES **P**	SY	50.000	50.000
0670	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	165.000	165.000
0680	521.0124	CULVERT PIPE CORRUGATED STEEL 24-INCH	LF	69.000	69.000
0710	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	8.000	8.000
0720	521.1024	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	EACH	4.000	4.000
0790	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	231.000	231.000
0810	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	89.000	89.000
0830	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	2.000	2.000
0850	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	2.000	2.000
0860	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	12.000	12.000
0880	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	7.000	7.000
0900	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	1.000	1.000
0950	523.0434	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 34X53-INCH	LF	74.000	74.000
0960	523.0519	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	EACH	4.000	4.000
0990	523.0534	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34X53-INCH	EACH	2.000	2.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
1010	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A **P**	LF	2,930.000	2,930.000
1020	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D **P**	LF	710.000	710.000
1040	601.0555	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A **P**	LF	140.000	140.000
1050	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D **P**	LF	160.000	160.000
1060	602.0410	CONCRETE SIDEWALK 5-INCH **P**	SF	830.000	830.000
1070	602.2400	CONCRETE SAFETY ISLANDS	SF	3,050.000	3,050.000
1080	606.0100	RIPRAP LIGHT	CY	75.000	75.000
1090	606.0200	RIPRAP MEDIUM	CY	748.000	748.000
1100	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	95.000	95.000
1110	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	401.000	401.000
1120	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	327.000	327.000
1130	608.0342	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	25.000	25.000
1140	608.0348	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	414.000	414.000
1150	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	190.000	190.000
1160	608.0415	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH	LF	32.000	32.000
1170	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	395.000	395.000
1180	608.0424	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH	LF	148.000	148.000
1190	608.0430	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	152.000	152.000
1200	608.0436	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH	LF	16.000	16.000
1240	608.0512	STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH	LF	400.000	400.000
1290	610.0419	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH	LF	151.000	151.000
1300	610.0424	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH	LF	17.000	17.000
1340	611.0535	MANHOLE COVERS TYPE J-SPECIAL	EACH	22.000	22.000
1370	611.0624	INLET COVERS TYPE H	EACH	12.000	12.000
1390	611.0642	INLET COVERS TYPE MS	EACH	3.000	3.000
1420	611.2004	MANHOLES 4-FT DIAMETER	EACH	3.000	3.000
1430	611.2005	MANHOLES 5-FT DIAMETER	EACH	2.000	2.000
1440	611.2006	MANHOLES 6-FT DIAMETER	EACH	5.000	5.000
1450	611.2007	MANHOLES 7-FT DIAMETER	EACH	2.000	2.000
1460	611.2008	MANHOLES 8-FT DIAMETER	EACH	1.000	1.000
1470	611.3004	INLETS 4-FT DIAMETER	EACH	1.000	1.000
1500	611.3230	INLETS 2X3-FT	EACH	10.000	10.000
1510	611.3901	INLETS MEDIAN 1 GRATE	EACH	1.000	1.000
1520	611.3902	INLETS MEDIAN 2 GRATE	EACH	1.000	1.000
1550	611.9800.S	PIPE GRATES	EACH	2.000	2.000
1570	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	500.000	500.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
1580	612.0208	PIPE UNDERDRAIN UNPERFORATED 8-INCH	LF	200.000	200.000
1590	612.0210	PIPE UNDERDRAIN UNPERFORATED 10-INCH	LF	200.000	200.000
1600	612.0212	PIPE UNDERDRAIN UNPERFORATED 12-INCH	LF	200.000	200.000
1610	612.0700	DRAIN TILE EXPLORATION	LF	2,000.000	2,000.000
1670	614.2300	MGS GUARDRAIL 3 **P**	LF	1,678.000	1,678.000
1690	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	4.000	4.000
1700	616.0100	FENCE WOVEN WIRE (HEIGHT) 001. 4-FT MANDATORY SUB	LF	5,290.000	5,290.000
1710	616.0329	GATES CHAIN LINK (WIDTH) 001. 12-FT MANDATORY SUB	EACH	1.000	1.000
1720	616.0700.S	FENCE SAFETY MANDATORY SUB	LF	2,340.000	2,340.000
1740	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 013. 1030-11-74	EACH	1.000	1.000
1790	619.1000	MOBILIZATION	EACH	0.200	0.200
1800	620.0300	CONCRETE MEDIAN SLOPED NOSE **P**	SF	374.000	374.000
1810	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	7.000	7.000
1820	623.0200	DUST CONTROL SURFACE TREATMENT	SY	9,830.000	9,830.000
1830	624.0100	WATER	MGAL	15.000	15.000
1840	625.0500	SALVAGED TOPSOIL **P**	SY	103,010.000	103,010.000
1850	627.0200	MULCHING **P** MANDATORY SUB	SY	97,120.000	97,120.000
1860	628.1104	EROSION BALES MANDATORY SUB	EACH	330.000	330.000
1870	628.1504	SILT FENCE MANDATORY SUB	LF	5,605.000	5,605.000
1880	628.1520	SILT FENCE MAINTENANCE MANDATORY SUB	LF	5,605.000	5,605.000
1890	628.1905	MOBILIZATIONS EROSION CONTROL MANDATORY SUB	EACH	4.000	4.000
1900	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL MANDATORY SUB	EACH	4.000	4.000
1910	628.1920	CLEANING SEDIMENT BASINS MANDATORY SUB	CY	2.000	2.000
1920	628.2004	EROSION MAT CLASS I TYPE B MANDATORY SUB	SY	17,165.000	17,165.000
1930	628.2027	EROSION MAT CLASS II TYPE C MANDATORY SUB	SY	3,690.000	3,690.000
1950	628.7005	INLET PROTECTION TYPE A MANDATORY SUB	EACH	18.000	18.000
1960	628.7015	INLET PROTECTION TYPE C MANDATORY SUB	EACH	15.000	15.000
1980	628.7504	TEMPORARY DITCH CHECKS MANDATORY SUB	LF	1,565.000	1,565.000
1990	628.7555	CULVERT PIPE CHECKS MANDATORY SUB	EACH	28.000	28.000
2000	628.7560	TRACKING PADS	EACH	7.000	7.000
2010	628.7570	ROCK BAGS MANDATORY SUB	EACH	25.000	25.000
2020	629.0210	FERTILIZER TYPE B MANDATORY SUB	CWT	59.000	59.000
2030	630.0120	SEEDING MIXTURE NO. 20 MANDATORY SUB	LB	2,385.000	2,385.000
2050	630.0160	SEEDING MIXTURE NO. 60 MANDATORY SUB	LB	200.000	200.000
2060	630.0200	SEEDING TEMPORARY MANDATORY SUB	LB	1,200.000	1,200.000
2070	631.0300	SOD WATER MANDATORY SUB	MGAL	44.000	44.000
2080	631.1000	SOD LAWN MANDATORY SUB	SY	1,860.000	1,860.000
2090	631.1100	SOD EROSION CONTROL MANDATORY SUB	SY	380.000	380.000
2100	633.0100	DELINEATOR POSTS STEEL MANDATORY SUB	EACH	53.000	53.000
2110	633.0500	DELINEATOR REFLECTORS MANDATORY SUB	EACH	96.000	96.000
2130	633.5200	MARKERS CULVERT END MANDATORY SUB	EACH	20.000	20.000
2140	634.0612	POSTS WOOD 4X6-INCH X 12-FT MANDATORY SUB	EACH	3.000	3.000
2150	634.0614	POSTS WOOD 4X6-INCH X 14-FT MANDATORY SUB	EACH	7.000	7.000
2160	634.0616	POSTS WOOD 4X6-INCH X 16-FT MANDATORY SUB	EACH	58.000	58.000
2170	634.0618	POSTS WOOD 4X6-INCH X 18-FT MANDATORY SUB	EACH	12.000	12.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
2200	637.0202	SIGNS REFLECTIVE TYPE II MANDATORY SUB	SF	804.980	804.980
2210	637.0402	SIGNS REFLECTIVE FOLDING TYPE II MANDATORY SUB	SF	10.000	10.000
2230	638.2602	REMOVING SIGNS TYPE II MANDATORY SUB	EACH	48.000	48.000
2240	638.3000	REMOVING SMALL SIGN SUPPORTS MANDATORY SUB	EACH	46.000	46.000
2260	642.6001	FIELD LABORATORY	EACH	0.200	0.200
2300	643.0100	TRAFFIC CONTROL (PROJECT) 018. 1030-11-74 MANDATORY SUB	EACH	1.000	1.000
2330	643.0300	TRAFFIC CONTROL DRUMS MANDATORY SUB	DAY	4,153.000	4,153.000
2340	643.0420	TRAFFIC CONTROL BARRICADES TYPE III MANDATORY SUB	DAY	2,181.000	2,181.000
2350	643.0453	TRAFFIC CONTROL BARRICADES PERMANENT TYPE III MANDATORY SUB	EACH	9.000	9.000
2360	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A MANDATORY SUB	DAY	4,362.000	4,362.000
2370	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C MANDATORY SUB	DAY	195.000	195.000
2390	643.0900	TRAFFIC CONTROL SIGNS MANDATORY SUB	DAY	1,973.000	1,973.000
2410	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE MANDATORY SUB	SF	117.000	117.000
2420	643.1050	TRAFFIC CONTROL SIGNS PCMS MANDATORY SUB	DAY	38.000	38.000
2440	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 002. 1030-11-74 MANDATORY SUB	EACH	1.000	1.000
2450	643.3000	TRAFFIC CONTROL DETOUR SIGNS MANDATORY SUB	DAY	34,472.000	34,472.000
2470	645.0120	GEOTEXTILE FABRIC TYPE HR **P**	SY	1,465.000	1,465.000
2480	645.0130	GEOTEXTILE FABRIC TYPE R **P**	SY	195.000	195.000
2490	646.0106	PAVEMENT MARKING EPOXY 4-INCH MANDATORY SUB	LF	31,150.000	31,150.000
2500	646.0126	PAVEMENT MARKING EPOXY 8-INCH MANDATORY SUB	LF	840.000	840.000
2510	646.0600	REMOVING PAVEMENT MARKINGS MANDATORY SUB	LF	11,750.000	11,750.000
2530	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH MANDATORY SUB	LF	825.000	825.000
2540	646.0843.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH MANDATORY SUB	LF	315.000	315.000
2550	646.0881.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH MANDATORY SUB	LF	4,405.000	4,405.000
2560	646.0883.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH MANDATORY SUB	LF	475.000	475.000
2580	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2 MANDATORY SUB	EACH	4.000	4.000
2590	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3 MANDATORY SUB	EACH	4.000	4.000
2600	647.0356	PAVEMENT MARKING WORDS EPOXY MANDATORY SUB	EACH	4.000	4.000
2610	647.0456	PAVEMENT MARKING CURB EPOXY MANDATORY SUB	LF	60.000	60.000
2620	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH MANDATORY SUB	LF	65.000	65.000
2630	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY MANDATORY SUB	EACH	4.000	4.000
2640	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH MANDATORY SUB	LF	1,150.000	1,150.000
2660	648.0100	LOCATING NO-PASSING ZONES **P** MANDATORY SUB	MI	0.340	0.340

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
2680	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	1,515.000	1,515.000
2700	652.0605	CONDUIT SPECIAL 2-INCH	LF	220.000	220.000
2710	653.0140	PULL BOXES STEEL 24X42-INCH MANDATORY SUB	EACH	11.000	11.000
2730	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG MANDATORY SUB	LF	1,320.000	1,320.000
2740	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG MANDATORY SUB	LF	1,915.000	1,915.000
2750	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG MANDATORY SUB	LF	5,330.000	5,330.000
2780	690.0150	SAWING ASPHALT	LF	222.000	222.000
2790	690.0250	SAWING CONCRETE	LF	1,528.000	1,528.000
2800	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	160.000	160.000
2810	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	600.000	600.000
2820	SPV.0035	SPECIAL 001. POND LINING CLAY	CY	2,280.000	2,280.000
2840	SPV.0060	SPECIAL 001. BOX SPILLWAY 5' X 5'	EACH	1.000	1.000
2850	SPV.0060	SPECIAL 002. ROOTSTOCK VEGETATION MANDATORY SUB	EACH	860.000	860.000
2870	SPV.0060	SPECIAL 005. SALVAGE EXISTING RAMP GATE SYSTEM	EACH	1.000	1.000
2890	SPV.0060	SPECIAL 009. EROSION CONTROL FILTER BAGS MANDATORY SUB	EACH	25.000	25.000
2900	SPV.0060	SPECIAL 012. EXPOSING EXISTING UTILITY MANDATORY SUB	EACH	4.000	4.000
2930	SPV.0060	SPECIAL 017. PERMANENT BARRICADES TYPE III MANDATORY SUB	EACH	4.000	4.000
2940	SPV.0060	SPECIAL 018. BARRICADE RACK MANDATORY SUB	EACH	1.000	1.000
2970	SPV.0060	SPECIAL 030. SILT FENCE DRAINAGE OUTLET EROSION CONTROL FILTER BAGS MANDATORY SUB	EACH	6.000	6.000
2980	SPV.0060	SPECIAL 031. SILT FENCE DRAINAGE OUTLET ROCK BAGS MANDATORY SUB	EACH	6.000	6.000
3010	SPV.0060	SPECIAL 072. FLEXIBLE TUBULAR MARKER BASES LEFT IN PLACE MANDATORY SUB	EACH	13.000	13.000
3020	SPV.0060	SPECIAL 073. FLEXIBLE TUBULAR MARKER POSTS LEFT IN PLACE MANDATORY SUB	EACH	13.000	13.000
3030	SPV.0060	SPECIAL 077. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS MANDATORY SUB	EACH	2.000	2.000
3050	SPV.0060	SPECIAL 081. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 MANDATRY SUB	EACH	4.000	4.000
3100	SPV.0060	SPECIAL 108. TEMPORARY WOOD POLE LIGHTING UNITS MANDATORY SUB	EACH	8.000	8.000
3180	SPV.0090	SPECIAL 111. OVERHEAD CABLE QUADRUPLEX 6 AWG MANDATORY SUB	LF	525.000	525.000
3190	SPV.0105	SPECIAL 001. FIELD OFFICE FIXED	LS	0.200	0.200
3260	SPV.0105	SPECIAL 018. SURVEY PROJECT 1030-11-74	LS	1.000	1.000
3270	SPV.0105	SPECIAL 019. PAVEMENT CLEANUP PROJECT 1030-11-74	LS	1.000	1.000
3320	SPV.0105	SPECIAL 096. FLASHING SOLAR BEACON ASSEMBLY STA 24+00 RT	LS	1.000	1.000
3330	SPV.0105	SPECIAL 097. FLASHING SOLAR BEACON ASSEMBLY STA 24+00 LT	LS	1.000	1.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1030-11-74 QUANTITY
3350	SPV.0105	SPECIAL 112. FREEWAY LIGHTING INTEGRATOR ID 1070-11-74 MANDATORY SUB	LS	1.000	1.000
3380	SPV.0180	SPECIAL 001. GEOGRID REINFORCEMENT	SY	38,400.000	38,400.000
3390	SPV.0180	SPECIAL 002. GEOTEXTILE FABRIC TYPE FF	SY	480.000	480.000
3420	SPV.0180	SPECIAL 005. ROOTSTOCK PROTECTION MANDATORY SUB	SY	1,750.000	1,750.000
3430	SPV.0180	SPECIAL 006. MULCHING SPECIAL MANDATORY SUB	SY	4,000.000	4,000.000
3440	SPV.0195	SPECIAL 002. BASE AGGREGATE DENSE 1 1/4-INCH SPECIAL	TON	32,888.000	32,888.000
3450	SPV.0195	SPECIAL 006. SELECT SUBBASE	TON	14,960.000	14,960.000
3460	SPV.0200	SPECIAL 001. MANHOLES 4-FT DIAMETER SPECIAL	VF	200.000	200.000

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REMOVING CURB & GUTTER

CATEGORY	ROADWAY	LOCATION	204.0150 REMOVING CURB & GUTTER LF
1000	EXISTING NW RAMP	1066+46 - 1068+91	800
	TOTAL		800

REMOVING FENCE

CATEGORY	ROADWAY	STATION	OFFSET	STATION	OFFSET	204.0170 REMOVING FENCE LF
1000	WEST FRONTAGE ROAD SOUTH					
		1030+25	87' LT	1048+93	106' LT	1,870
	WEST FRONTAGE ROAD NORTH					
		1068+83	56' LT	4085+50	44' RT	1,660
	TOTAL					3,530

3

REMOVING SMALL PIPE CULVERTS

CATEGORY	ROADWAY	STATION	OFFSET	LENGTH	* 203.0100 REMOVING SMALL PIPE CULVERTS EACH
1000	WEST FRONTAGE ROAD SOUTH				
		2032+85	25' LT	32'	1
		2058+90	LT/RT	20'	1
	WEST FRONTAGE ROAD NORTH				
		4073+96	21' RT	84'	1
		4081+33	27' RT	62'	1
		4081+92	34' LT	20'	1
		4082+70	33' LT	30'	1
		4084+25	33' LT	21'	1
		4087+07	34' LT	31'	1
	CTH K				
		31+31	35' RT	22'	1
		32+25	34' RT	19'	1
		34+35	34' RT	23	1
		34+75	34' RT	26	1
	IH 94				
		1067+66	158' LT	66'	1
		1068+62	232' LT	43'	1
	TOTAL				14

* FOR REMOVING OLD DRIVEWAYS, ADDITIONAL QUANTITIES SHOWN ELSEWHERE SEE "OBLITERATING OLD ROAD AND REMOVING DRIVEWAYS" TABLE

CLEARING AND GRUBBING ITEMS

CATEGORY	STATION		STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA
1000	WEST FRONTAGE ROAD SOUTH					
	2043+00	-	2047+00	LT/RT	4	4
	2056+00	-	2059+00	LT/RT	3	3
	EAST FRONTAGE ROAD NORTH					
	4043+00	-	4046+00	LT	3	3
	4061+00	-	4063+00	LT/RT	2	2
	4069+00	-	4072+00	LT/RT	3	3
	4077+00	-	4079+00	LT	2	2
	4082+00	-	4084+00	LT	2	2
	4084+00	-	4086+00	LT	2	2
	FUHRMAN DRIVE					
	17+00	-	19+00	LT	2	2
	TOTALS				23	23

REMOVING DRIVEWAYS ITEMS

CATEGORY	ROADWAY	STATION	OFFSET	LENGTH	* 203.0100 REMOVING SMALL PIPE CULVERTS EACH	* 205.0100 EXCAVATION COMMON CY
1000	CTH K					
		36+60 WB	20' LT	34'	1	--
		37+95 WB	18' LT	37'	1	--
		38+30 EB	50' RT	36'	1	--
		40+40 EB	40' RT	44'	1	--
	IH 94					
		1043+28	188' LT	108'	1	496
		1045+20	188' LT	76'	1	508
		1053+65	177' LT	86'	1	643
	TOTALS				7	1,647

* FOR REMOVING OLD DRIVEWAYS, ADDITIONAL QUANTITIES SHOWN ELSEWHERE SEE "EARTHWORK" TABLE

FINISHING ROADWAY PROJECT ID 1030-11-74

CATEGORY	PROJECT	213.0100.018 EACH
1000	1030-11-74	1
	TOTAL	1

OBLITERATING OLD ROAD

CATEGORY	ROADWAY	214.0100 OBLITERATING OLD ROAD STA
1000	WEST FRONTAGE ROAD	
	1037+00 - 1050+00	13
	1061+00 - 1071+00	10
	TOTAL	23

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	SPV.0195.002 BASE AGGREGATE DENSE 1 1/4-INCH SPECIAL TON	SPV.0195.006 SELECT SUBBASE TON
1000	CTH K					
		33+50 -	39+00	145	1,815	--
	WEST FRONTAGE ROAD SOUTH					
		2030+25 -	2058+12	1,300	11,848	8,710
	WEST FRONTAGE ROAD NORTH					
		4057+00 -	4085+50	705	17,060	6,250
	FURHMAN DRIVE					
		10+20 -	18+50	380	2,165	--
	TOTALS			2,530	32,888	14,960

REMOVE RAMP GATE ITEMS

CATEGORY	ROADWAY	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	SPV.0060.005 SALVAGING EXISTING RAMP GATE SYSTEM EA
1000	EXISTING WEST FRONTAGE ROAD SOUTH AND I94 ON RAMP	STA 1049+64, LT	1	1
	TOTAL		1	1

3

EARTHWORK

	CATEGORY - 0100		A			B	H	I	J	K
			Item #205.0100		*	*	*	*	*	*
Division	From/To Station	Location	Excavation Common (1)		Reduced EBS in Fill (4)	Expanded EBS Backfill (3)	Unexpanded Fill	Expanded Fill	Mass Ordinate +/- (4)	Waste (5)
			Cut	EBS Excavation (2)	Factor 0.80	Factor 1.30	(CY)	(CY) Factor 1.25	(CY)	(CY)
1	2037+00 - 2058+50	West Frontage Road	25,978	0		0	7,486	9,358	16,620	16,620
1	4053+50 - 4071+00	West Frontage Road	15,127	2,077		2,700	3,684	2,528	9,899	9,899
1	33+50-39+00	CTH K	1,395	0	0	0	254	317	1,078	1,078
1	11+00-18+00	Fuhrman	804	0	0	0	432	540	264	264
1	16+50-20+00	Javco Driveway	63	0	0	0	2,282	2,852	-2,789	-2,789
2	2030+50-2037+00	West Frontage Road	18,118	804		1,046	16	-784	17,856	17,856
2	4071+00 - 4085+50	West Frontage Road	5,243	0		0	11,256	14,070	-8,827	-8,827
	Grand Total (CY)		69,610		0	3,745	25,410	28,881	34,102	34,102

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
The existing pavement structure is not shown in the cross sections.
Additional quantities shown elsewhere
2) EBS Excavation to be backfilled with Borrow or Cut.
3) Expanded EBS Backfill - This is to be filled with Borrow or Cut material. EBS Backfill Factor = 1.3.
4) The Mass Ordinate + or - Qty calculated for the Project. A plus quantity indicates an excess of material and a minus indicates a shortage of material.
5) All EBS material to be wasted

* FOR INFORMATION ONLY

CONCRETE ITEMS

CATEGORY	ROADWAY	STATIONS	415.0095 CONCRETE PAVEMENT 9 1/2-INCH SY	416.1010 CONCRETE SURFACE DRAINS CY	416.0160 CONCRETE DRIVEWAY 6-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.2400 CONCRETE SAFETY ISLANDS SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
1000	WEST FRONTAGE ROAD SOUTH								
		2030+25 - 2058+12	8,650	3.0	65	1	830	3,050	305
	WEST FRONTAGE ROAD NORTH								
		4057+00 - 4085+50	1,100	2.4	--	--	--	--	69
	TOTALS		9,750	5.4	65	1	830	3,050	374

ASPHALTIC PAVEMENT ITEMS

CATEGORY	ROADWAY	STATION	STATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1101 HMA PAVEMENT TYPE E-1 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY
1000	CTH K									
		33+50 -	39+00	25	30	--	400	19	82	--
	WEST FRONTAGE ROAD SOUTH									
		2030+25 -	2058+12	150	200	--	2,540	16	--	30
	WEST FRONTAGE ROAD NORTH									
		4057+00 -	4085+50	250	340	--	4,280	--	--	20
	FURHMAN DRIVE									
		10+20 -	18+50	50	70	850	--	--	--	--
	TOTALS			475	640	850	7,220	35	82	50

CULVERTS

CATEGORY							1000	1000		1000	1000	1000	1000	1000	1000	1000	1000	6100		
															**	**		**		
							521.0118	521.0124	*	521.1018	521.1024	522.0124	522.0136	523.0434	522.1024	522.1036	523.0534	633.5200	*	
							CULVERT PIPE CORRUGATED STEEL			APRON ENDWALL FOR CULVERT PIPE STEEL		CULVERT PIPE REINFORCED CONCRETE CLASS III		CLASS HE-IV	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE			MARKERS CULVERT ENDS	** JOINT TIES	
INLET STATION	INLET OFFSET	INLET ELEVATION	DISCH STATION	DISCH OFFSET	DISCH ELEVATION	SLOPE	18-INCH LF	24-INCH LF	STEEL THICKNESS IN	18-INCH EACH	24-INCH EACH	24-INCH LF	36-INCH LF	34X53-INCH LF	24-INCH EACH	36-INCH EACH	HE 34x53-inch EACH	EACH	EACH	COMMENTS
4053+50.0	38.3' RT	775.86	4053+50.0	38.0' LT	775.00	1.18%	73	--	0.064	2	--	--	--	--	--	--	--	2	--	
4071+50.0	43.1' RT	756.50	4071+50.0	30.9' LT	756.13	0.50%	---	--	--	--	--	--	--	74	--	--	2	2	12	
SIDE ROADS AND PRIVATE ENTRANCES																				
34+54.8	45.1' RT	778.66	34+30.8	45.1' RT	778.18	2.00%	24	--	0.064	2	--	--	--	--	--	--	--	--	--	
34+97.7	40.3' RT	779.20	34+75.7	40.3' RT	779.09	0.50%	22	--	0.064	2	--	--	--	--	--	--	--	--	--	
2034+19.0	50.0' LT	750.38	2033+76.0	50.0' LT	749.52	2.00%	--	43	0.064	--	2	--	--	--	--	--	--	--	--	
2044+20.6	46.9' RT	763.34	2043+54.6	46.9' RT	761.86	2.24%	--	--	---	--	--	--	66	--	--	2	--	--	12	
9+00	42.6' LT	773.83	9+00	29.4' RT	773.42	0.57%	--	--	---	--	--	72	--	--	2	--	--	--	12	
4063+39.1	43' LT	772.52	4063+85.2	43' LT	771.60	2.00%	46	--	0.064	2	--	--	--	--	--	---	--	--	---	
4082+11.7	53.0' LT	756.78	4081+88.7	53.0' LT	756.31	2.04%	--	--	--	--	--	--	23	--	--	2	--	--	12	
4083+07.7	49.8' LT	758.04	4082+61.8	49.8' LT	757.67	0.80%	--	--	--	--	--	46	--	--	2	--	--	--	12	
4084+58.2	49.1' LT	759.24	4084+06.2	49.1' LT	758.82	0.81%	--	--	--	--	--	52	--	--	2	--	--	--	12	
487+36.1	34.1' LT	766.13	487+10.1	34.1' LT	765.48	2.50%	--	26	0.064	--	2	--	--	--	--	--	--	--	--	
10+60.5	33.4 ' RT	770.78	10+60.5	30.6' LT	769.91	1.43%	--	--	--	--	--	61	--	--	2	--	--	2	12	
TOTAL							165	69		8	4	231	89	74	8	4	2	6	84	

* FOR INFORMATION ONLY

**ADDITIONAL QUANTITIES SHOWN ELSEWHERE - SEE STORM SEWER TABLES

1. STATIONS AND OFFSETS ARE TO THE END OF PIPE. FIELD VERIFY CULVERT PIPE LOCATIONS AND ELEVATIONS PRIOR TO INSTALLATION.
2. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST TWO JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE PIPE.
3. PIPE LENGTHS DO NOT INCLUDE LAYING LENGTH OF ENDWALLS.

CATEGORY			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
STRUCTURE NUMBER	STATION	OFFSET	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3 FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0535 MANHOLE COVERS TYPE J-S EACH	611.0624 INLET COVERS TYPE H EACH	611.0642 INLET COVERS TYPE MS EACH	204.0280 SEALING PIPES EACH	RIM OR FLANGE ELEV	STR DEPTH FEET	COMMENTS
122D	2032+00.8	36.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
122E	2031+99.5	49.2' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
123D	2034+98.6	35.6' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
123E	2035+01.7	29.8' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
137E	4073+99.9	55.8' RT	---	---	---	---	---	---	---	---	1	---	---	2	---	757.75	7.5	SEE NOTES 4, 6
137F	4073+91.0	45.5' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
138J	4076+25.0	38.4' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
138K	4076+25.0	34.3' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
140E	4080+00.0	37.1' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
140F	4080+00.0	37.6' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
201A	2052+14.5	49' LT	---	---	---	---	---	1	---	---	---	---	1	---	---	780.00	3.0	---
201B	2052+35.0	9.9' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	780.36	3.8	---
201C	2052+35.0	2.0' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	780.22	3.7	---
201D	2052+35.0	19.5' RT	---	---	---	---	---	---	1	---	---	---	1	---	---	779.79	3.0	---
201	2052+35.0	7' RT	1	---	---	---	---	---	---	---	---	1	---	---	---	780.08	5.0	---
205	2051+40.0	7' RT	---	---	1	---	---	---	---	---	---	1	---	---	---	779.07	7.2	SEE NOTE 4
206A	2049+00.0	19.5' RT	---	---	---	---	---	---	1	---	---	---	1	---	---	775.82	3.2	---
206	2049+00.0	12' LT	---	---	1	---	---	---	---	---	---	1	---	---	---	778.06	7.1	---
207A	2047+41.0	18.6' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	776.48	3.5	---
207B	2047+41.0	5.8' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	775.57	2.7	---
207	2047+41.0	7' RT	---	1	---	---	---	---	---	---	---	1	---	---	---	774.88	5.2	---
208	2046+00.0	7' RT	---	---	1	---	---	---	---	---	---	1	---	---	---	773.00	4.4	---
208A	2046+00.0	19.5' RT	---	1	---	---	---	---	---	---	---	---	1	---	---	772.36	4.7	SEE NOTE 5
209	2046+00.0	35' RT	---	---	1	---	---	---	---	---	---	1	---	---	---	774.36	6.5	---
210	2045+08.0	38.3' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
215A	2041+00.0	68.8' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
215B	2041+00.0	61.9' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
220	2041+00.0	82.3' LT	---	---	---	---	---	---	---	1	---	---	---	1	---	747.65	5.4	SEE NOTE 4
401A	4060+47.0	8.9' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	781.91	3.3	---
401B	4060+47.0	1.5' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	781.58	3.1	---
401C	4060+47.0	26' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
402A	4057+00.0	30.5' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	782.14	2.9	---
402B	4057+00.0	1.5' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	781.86	2.8	---
402C	4057+00.0	25.2' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
601A	34+00.0	43.8' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
601	34+00.0	31.4' RT	1	---	---	---	---	---	---	---	---	1	---	---	---	780.54	3.5	---
602A	32+50.0	44.4' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
602	32+50.0	31.0' RT	1	---	---	---	---	---	---	---	---	1	---	---	---	778.48	3.0	---
603	30+34.4	30.4' RT	---	---	1	---	---	---	---	---	---	1	---	---	---	775.55	3.3	SEE NOTE 4
603A	30+35.3	47.1' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
404B	4085+50.0	6' RT	---	---	---	1	---	---	---	---	---	1	---	---	---	767.01	7.9	SEE NOTE 8
404C	4083+15.9	31.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	SEE NOTE 7
404D	4083+15.9	6' RT	---	---	---	---	1	---	---	---	---	1	---	---	---	765.27	7.2	---
404E	4082+00.0	6' RT	---	---	---	1	---	---	---	---	---	1	---	---	---	764.55	7.4	---
404F	4081+50.0	33.6' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTALS			3	2	5	2	1	1	10	1	1	12	12	3	1			

NOTES:
1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE STRUCTURE FOR MANHOLES.
2. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL (DOES NOT INCLUE RCAEW).
3. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE J COVERS; AND 6" FOR TYPE H-S, H, AND S COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR TYPE 8 AND 9 INLETS OR AS NOTED IN THE REMARKS COLUMN)
4. FIELD VERIFY EXISTING PIPE AND STRUCTURE LOCATIONS AND ELEVATIONS PRIOR TO ORDERING MATERIALS.
5. FLAT TOP SLAB WITH CENTERED 36 3/16 X 24 1/4-INCH RECTANGULAR OPENING REQUIRED
6. CONNECT TO EXISTING STORM SEWER
7. SEAL ONLY INLET END OF PIPE
8. CONNECT TO STORM SEWER CONSTRUCTED UNDER ID 1030-25-78

CONTINUED ON NEXT PAGE

STORM SEWER (CONT.)

CATEGORY					1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	6100		
					608.0315	608.0330	608.0336	608.0342	608.0348	608.0412	608.0415	608.0418	608.0424	608.0430	608.0436	610.0419	610.0424	522.1012	522.1018	** 522.1024	** 522.1036	522.1048	523.0519	SPV.0060.001	611.9800.S	** 633.5200	* **	
					STORM SEWER PIPE REINFORCED CONCRETE													APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE											
					CLASS III					CLASS IV						CLASS HE-IV	CLASS HE-IV							BOX		MARKERS		
FROM	TO	INLET	DISCH		15-INCH	30-INCH	36-INCH	42-INCH	48-INCH	12-INCH	15-INCH	18-INCH	24-INCH	30-INCH	36-INCH	19X30-INCH	24X38-INCH	12-INCH	18-INCH	24-INCH	36-INCH	48-INCH	HE 19X30-INCH	SPILLWAY 5'X5'	PIPE GRATES	CULVERT END	JOINT TIES	
STR	STR	ELEV	ELEV	SLOPE	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	COMMENTS
122D	122E	746.57	745.98	0.69%	---	---	---	---	---	---	---	---	---	---	---	85.2	---	---	---	---	---	---	1	---	---	1	6	SEE NOTE 4
122E	OUTLET	745.98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6	---
123D	123E	752.40	752.07	0.50%	---	---	---	---	---	---	---	---	---	---	---	65.5	---	---	---	---	---	---	1	---	---	1	6	SEE NOTE 4
123E	OUTLET	752.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6	---
137E	137F	750.27	749.87	0.40%	---	---	101.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
137F	OUTLET	749.87	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	6	---
138J	138K	755.09	754.73	0.50%	---	---	---	---	---	---	---	---	72.8	---	---	---	---	---	---	1	---	---	---	---	---	1	6	SEE NOTE 4
138K	OUTLET	754.73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1	6	---
140E	140F	756.62	755.87	1.00%	---	---	---	---	---	---	---	---	74.7	---	---	---	---	---	---	1	---	---	---	---	---	1	6	SEE NOTE 4
140F	OUTLET	755.87	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1	6	---
201A	201B	776.21	775.77	1.00%	---	---	---	---	---	44.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
201B	201C	775.77	775.69	1.00%	---	---	---	---	---	7.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
201C	201	775.69	775.60	1.00%	---	---	---	---	---	9.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
201D	201	776.01	775.88	1.00%	---	---	---	---	---	12.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
201	205	773.98	772.08	2.00%	95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
205	206	770.83	769.87	0.40%	---	240.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
206A	206	771.75	771.12	2.00%	---	---	---	---	---	---	31.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
206	207	769.87	768.58	0.80%	---	160.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
207A	207B	772.17	772.04	1.00%	---	---	---	---	---	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
207B	207	772.04	771.91	1.00%	---	---	---	---	---	12.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
207	208	768.58	767.47	0.80%	---	---	---	---	---	---	---	---	---	139	---	---	---	---	---	---	---	---	---	---	---	---	---	---
208	208A	767.47	767.37	0.80%	---	---	---	---	---	---	---	---	---	12.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
208A	209	766.87	766.82	0.35%	---	---	---	---	---	---	---	---	---	---	15.5	---	---	---	---	---	---	---	---	---	---	---	---	---
209	210	766.82	766.52	0.35%	---	---	86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
210	OUTLET	766.52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	6	---
215A	215B	749.50	748.17	0.96%	---	---	139	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	SW POND OUTFALL
215B	OUTLET	748.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	6	---
220	EXISTING	742.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
401A	401B	777.74	777.67	1.00%	---	---	---	---	---	7.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
401B	401C	777.67	777.39	1.00%	---	---	---	---	---	27.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
401C	OUTLET	777.39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	6	---
402A	402B	778.40	778.25	0.50%	---	---	---	---	---	29.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
402B	402C	778.25	778.12	0.50%	---	---	---	---	---	26.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
402C	OUTLET	778.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	6	---
601A	601	775.99	775.91	0.50%	---	---	---	---	---	---	---	15.1	---	---	---	---	---	---	1	---	---	---	---	---	1	1	6	---
601	602	775.91	774.36	1.04%	---	---	---	---	---	---	---	150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
602A	602	774.46	774.36	0.75%	---	---	---	---	---	---	---	13.4	---	---	---	---	---	---	1	---	---	---	---	---	1	1	6	---
602	603	774.36	771.68	1.24%	---	---	---	---	---	---	---	215.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
603	603A	771.18	771.02	0.95%	---	---	---	---	---	---	---	---	---	---	---	---	16.7	---	---	---	---	---	---	---	---	---	---	---
603A	OUTLET	771.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6	---
404B	404C	757.98	757.02	0.41%	---	---	---	---	234.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
404C	404D	757.10	757.02	0.35%	---	---	---	25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
404D	404E	757.02	756.03	0.85%	---	---	---	---	115.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
404E	404F	756.03	755.50	0.83%	---	---	---	---	63.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
404F	OUTLET	755.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---
TOTALS					95	401	327	25	414	190	32	395	148	152	16	151	17	2	2	4	3	1	4	1	2	14	96	

NOTES:
1. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURE OR ENDWALL CONNECTION AND DO NOT INCLUDE THE LAYING LENGTH OF ENDWALLS
2. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.
3. FIELD VERIFY PIPE AND STRUCTURE LOCATIONS AND ELEVATIONS PRIOR TO ORDERING MATERIALS.
4. CONNECT TO FUTURE STORM SEWER CONSTRUCTED UNDER ID 1030-11-71

* FOR INFORMATION ONLY

** ADDITIONAL QUANTITIES SHOWN ELSEWHERE SEE CULVERT TABLE

3

FENCING ITEMS

CATEGORY	ROADWAY	616.0100.001 FENCE WOVEN WIRE 4-FT LF	616.0329.001 GATES CHAIN LINK 12-FOOT EACH
6100	WEST FRONTAGE ROAD SOUTH	2,630	1
	WEST FRONTAGE ROAD NORTH	2,660	--
	TOTALS	5,290	1

FENCE SAFETY

CATEGORY	LOCATION	616.0700.S LF
6100	STAGE 2	
	CTH K	---
	WEST FRONTAGE ROAD SOUTH	650
	WEST FRONTAGE ROAD NORTH	1,470
	SOUTH BOUND ON RAMP	---
	SOUTH BOUND OFF RAMP	---
	STAGE 2 SUBTOTAL	2,120
	UNDISTRIBUTED	220
	TOTALS	2,340

ROCK BAGS

CATEGORY	LOCATION	628.7570 ROCK BAGS EACH
6100	UNDISTRIBUTED	25
	TOTAL	25

3

MOBILIZATION

CATEGORY	STAGE		619.1000 LS
1000	ALL	PROJECT ID 1030-11-74	0.2
	TOTAL		0.2

LANDMARK REFERENCE MONUMENTS

CATEGORY	STATION			621.0100 EACH
1000	WEST FRONTAGE ROAD			
	2038+76	123 RT	PI	1
	2045+03	C/L	PC	1
	2051+11	C/L	PT	1
	4057+49	C/L	PC	1
	4062+81	C/L	PT	1
	4065+90	C/L	PC	1
	4075+01	C/L	PT	1
	TOTAL			7

3

STORMWATER RETENTION POND ITEMS

CATEGORY		1000	1000	6100	6100	1000	1000	6100	6100	6100
		*	*	*	*	*				
		606.0200	625.0500	629.0210	630.0160	645.0120	SPV.0035.001	SPV.0060.002	SPV.0180.005	SPV.0180.006
		RIPRAP MEDIUM	SALVAGED TOPSOIL	FERTILIZER TYPE B	SEEDING MIXTURE NO. 60	GEOTEXTILE FABRIC TYPE HR	POND LINING CLAY	ROOTSTOCK VEGETATION	ROOTSTOCK PROTECTION	MULCHING SPECIAL
LOCATION	OFFSET	CY	SY	CWT	LB	SY	CY	EACH	SY	SY
2039+39.5-2042+54.8	RT	8	4,000	3	109	15	2,280	860	1,750	4,000
TOTALS		8	4,000	3	109	15	2,280	860	1,750	4,000

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE. SEE EROSION CONTROL AND RESTORATION TABLES

EROSION CONTROL FILTER BAGS

CATEGORY	6100
	SPV.0060.009
ROADWAY	EACH
UNDISTRIBUTED	25
TOTALS	25

3

EROSION CONTROL ITEMS

CATEGORY	** 1000	** 1000	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	** 1000	** 1000	6100	6100	1000
	606.0100	606.0200	628.1104	628.1504	628.1520	628.1905	628.1910	628.2004	628.2027	628.7005	628.7015	628.7504	628.7555	631.1100	645.0120	645.0130	SPV.0060.030	SPV.0060.031	SPV.0180.002
	RIPRAP LIGHT	RIPRAP MEDIUM	EROSION BALES	SILT FENCE	SILT FENCE MAINTENANCE	MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL	EROSION MAT CLASS I TYPE B	EROSION MAT CLASS II TYPE C	INLET PROTECTION TYPE A	INLET PROTECTION TYPE C	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECKS	SOD EROSION CONTROL	** GEOTEXTILE FABRIC TYPE HR	** GEOTEXTILE FABRIC TYPE R	SILT FENCE DRAINAGE OUTLET, EROSION CONTROL FILTER BAGS	SILT FENCE DRAINAGE OUTLET, ROCK BAGS	GEOTEXTILE FABRIC TYPE FF
ROADWAY	CY	CY	EACH	LF	LF	LF	LF	SY	SY	EACH	EACH	LF	EACH	SY	SY	SY	EACH	EACH	SY
WEST FRONTAGE ROAD SOUTH	---	550	---	2,550	2,550	1	1	5,550	600	9	8	325	4	125	1,100	---	---	1	---
WEST FRONTAGE ROAD NORTH	30	40	230	1,350	1,350	1	1	5,975	2,350	5	4	675	9	125	60	70	1	---	---
CTH K	10	---	---	---	---	1	1	600	---	---	---	70	5	50	---	25	---	---	---
FUHRMAN DRIVE	---	---	---	---	---	---	---	1,600	---	---	---	175	---	---	---	---	---	---	---
JAVCO DRIVE	---	---	---	725	725	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UNDISTRIBUTED	10	150	100	980	980	1	1	3,440	740	4	3	320	10	80	290	30	5	5	480
TOTALS	50	740	330	5,605	5,605	4	4	17,165	3,690	18	15	1,565	28	380	1,450	125	6	6	480

**ADDITIONAL QUANTITIES SHOWN ELSEWHERE - SEE PERMANENT LEVEL SPREADER TABLE AND STORM WATER REDETENTION POND ITEMS TABLE

WATER ITEMS

CATEGORY	1000	6100
	624.0100 WATER	631.0300 SOD WATER
ROADWAY	MGAL	MGAL
CTH K	1	--
WEST FRONTAGE ROAD SOUTH	4	20
WEST FRONTAGE ROAD NORTH	6	15
FURHMAN DRIVE	4	--
UNDISTRIBUTED	--	9
TOTALS	15	44

PERMANENT LEVEL SPREADER ITEMS

CATEGORY		1000	6100	1000
		606.0100 RIPRAP LIGHT	628.1920 CLEANING SEDIMENT BASINS	645.0130 GEOTEXTILE FABRIC TYPE R
ROADWAY	STATION	CY	CY	SY
WEST FRONTAGE ROAD NORTH	4073+90, LT	25	2	70
TOTALS		25	2	70

RESTORATION ITEMS

CATEGORY			* 1000	6100	6100	6100	* 6100	6100	6100
			625.0500 SALVAGED TOPSOIL	627.0200 MULCHING	629.0210 FERTILIZER TYPE B	630.0120 SEEDING MIXTURE NO. 20	630.0160 SEEDING MIXTURE NO. 60	630.0200 SEEDING TEMPORARY	631.1000 SOD LAWN
ROADWAY	STATION	STATION	SY	SY	CWT	LB	LB	LB	SY
CTH K	93+50	- 105+50	3,900	3,900	3	115	3	60	--
WEST FRONTAGE ROAD SOUTH	2030+25	- 2058+12	37,930	37,080	24	1,025	--	515	845
WEST FRONTAGE ROAD NORTH	4057+00	- 4085+50	33,270	32,630	15	640	70	320	645
FURHMAN DRIVE	10+20	- 18+50	4,110	4,110	3	125	--	65	--
UNDISTRIBUTED			19,800	19,400	11	480	18	240	370
TOTALS			99,010	97,120	56	2,385	91	1,200	1,860

* USE SEEDING MIXTURE NO. 60 FOR THE BOTTOM 1/3 OF THE EMBANKMENT SLOPES ADJACENT TO WETLAND AREAS. SEE TYPICAL SECTIONS
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE SEE "STORMWATER RETENTION POND ITEMS" TABLE

DUST CONTROL ITEM

CATEGORY	ROADWAY	623.0200 DUST CONTROL SURFACE TREATMENT SY
1000	WEST FRONTAGE ROAD SOUTH	4,980
	WEST FRONTAGE ROAD NORTH	3,750
	FUHRMAN DRIVE	1,100
	TOTAL	9,830

3

CONCRETE CURB & GUTTER ITEMS

CATEGORY	ROADWAY	STATION - STATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
1000	WEST FRONTAGE ROAD SOUTH					
		2030+25 - 2058+12	2,930	--	--	--
	WEST FRONTAGE ROAD NORTH					
		4057+00 - 4085+50	--	710	--	--
	FURHMAN DRIVE					
		10+20 - 18+50	--	--	--	160
	LUND DRIVE					
		8+75 - 9+75	--	--	140	--
	TOTALS		2,930	710	140	160

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	ROADWAY	618.0100.013 EACH
1000	PROJECT ID 1030-11-74	1
	TOTAL	1

EXPOSING EXISTING UTILITY

CATEGORY	LOCATION	SPV.0060.012 EXPOSING EXISTING UTILITIES EACH
1000	UNDISTRIBUTED	4
	TOTAL	4

3

BEAM GUARD ITEMS

CATEGORY 1000

ROADWAY	LOCATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
WEST FRONTAGE ROAD NORTH				
	4066+90 - 4079+57	RT	1163	2
WEST FRONTAGE ROAD SOUTH				
	2037+65 - 2043+05	RT	515	2
TOTALS			1,678	4

DRAIN TILE

CATEGORY	ROADWAY	608.0512 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 12-INCH LF	SPV.0200.001 MANHOLES 4 FT DIAMETER SPECIAL VF	* 611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF	612.0210 PIPE UNDERDRAIN UNPERFORATED 10-INCH LF	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF	612.0700 DRAIN TILE EXPLORATION LF
1000	WEST FRONTAGE ROAD SOUTH								
	UNDISTRIBUTED	400	200	10	500	200	200	200	2000
	TOTALS	400	200	10	500	200	200	200	2000

PERMANENT SIGNING SUMMARY

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE IN	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	SIGN MOUNTED ON SAME POST AS #	REMARKS
6100	1-1	--	--	--	--	--	--	--	--	--	--	NOT USED
	1-2	--	--	--	--	--	--	--	--	--	--	NOT USED
	1-3	W1-4L	(3)	36X36	9.00	--	--	--	1	--	--	LEFT REVERSE CURVE ARROW
	1-4	--	--	--	--	--	--	--	--	--	--	NOT USED
	1-5	W6-1	(2)	36X36	9.00	--	--	--	1	--	--	DIVIDED HIGHWAY AHEAD SYMBOL
	1-6	W6-3	(2)	36X36	9.00	--	--	--	1	--	--	TWO WAY TRAFFIC SYMBOL
	1-7	W1-6	(2)	48X24	8.00	--	--	1	--	--	--	NIGHT ARROW (SINGLE)
	2-1	R5-1	(2)	30X30	6.25	--	--	--	1	--	--	DO NOT ENTER
	2-2	R4-7	(3)	36X48	12.00	--	--	--	1	--	--	KEEP RIGHT SYMBOL
	2-3	W5-54D	(2)	18X18	2.25	--	--	--	--	--	2-2	9 UNIT HAZARD/CLEARANCE MKR YELLOW DELIN
	3-1	J1-1	(2)	24X39	6.50	--	--	--	1	--	--	JCT OR END ASSEMBLY
		M2-1	(2)	21X15	--	--	--	--	--	--	--	JCT
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
	3-2	R4-7	(2)	24X30	5.00	--	--	1	--	--	--	KEEP RIGHT SYMBOL
	3-3	R5-1A	(2)	36X24	6.00	--	--	1	--	--	--	WRONG WAY
	3-4	W6-2	(2)	36X36	9.00	--	--	--	1	--	--	DIVIDED HIGHWAY ENDS SYMBOL
	3-5	R4-7	(2)	24X30	5.00	--	--	1	--	--	--	KEEP RIGHT SYMBOL
	3-6	W1-4L	(3)	36X36	9.00	--	--	--	1	--	--	LEFT REVERSE CURVE ARROW
	3-7	R5-1	(2)	30X30	6.25	--	--	1	--	--	--	DO NOT ENTER
	3-8	W3-1	(2)	36X36	9.00	--	--	--	1	--	--	STOP AHEAD
	3-9	--	--	--	--	--	--	--	--	--	--	NOT USED
	3-10	R5-1	(2)	30X30	6.25	--	--	1	--	--	--	DO NOT ENTER
	3-11	R2-1	(2)	24X30	5.00	--	--	1	--	--	--	SPEED LIMIT 35 MPH
	3-12	J3-3	(2)	72X57	28.50	--	--	--	2	--	--	DIRECTIONAL ASSEMBLY
		M3-4	(2)	24X12	--	--	--	--	--	--	--	WEST
		M3-2	(2)	24X12	--	--	--	--	--	--	--	EAST
		MB4-5	(2)	24X12	--	--	--	--	--	--	--	TO, BLUE
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD
		MB6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD, BLUE
	3-13	R5-1A	(2)	36x24	6.00	--	--	--	--	--	3-12	WRONG WAY
	3-14	--	--	--	--	--	--	--	--	--	--	NOT USED
	3-15	W1-6	(2)	48X24	8.00	--	--	--	--	--	SEE NOTE 1	NIGHT ARROW (SINGLE)
	3-16	R11-2	(2)	48X30	10.00	--	--	--	--	--	SEE NOTE 1	ROAD/RAMP/LANE CLOSED
	3-17	R1-1	(3)	36X36	7.46	--	--	--	1	--	--	STOP SIGN
	3-18	R1-52	(2)	36X15	3.75	--	--	--	--	--	3-17	TRAFFIC ON K DOES NOT STOP
	3-19	J13-1	(2)	24X45	7.50	--	--	--	1	--	--	DIRECTIONAL W/O CARDINAL
		M1-95A	(2)	24X30	--	--	--	--	--	--	--	FRONTAGE RD MKR W/ CARDINAL
		M6-4	(2)	21X21	--	--	--	--	--	--	--	DIR ARW LEFT-RIGHT
	3-20	R2-1	(2)	24X30	5.00	--	--	--	1	--	--	SPEED LIMIT 35 MPH
	3-21	R1-1	(3)	36X36	7.46	--	--	--	1	--	--	STOP SIGN
	3-22	R1-52	(2)	36X15	3.75	--	--	--	--	--	3-21	TRAFFIC ON K DOES NOT STOP

CONTINUED ON NEXT PAGE

PERMANENT SIGNING SUMMARY

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE IN	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	SIGN MOUNTED ON SAME POST AS #	REMARKS
6100	3-23	R11-2	(2)	48X30	10.00	--	--	--	--	--	SEE NOTE 1	ROAD/RAMP/LANE CLOSED
	3-24	W1-6	(2)	48X24	8.00	--	--	--	--	--	SEE NOTE 1	NIGHT ARROW (SINGLE)
	3-25	R5-1A	(2)	36x24	6.00	--	--	--	--	--	3-26	WRONG WAY
	3-26	J3-3	(2)	72X57	28.50	--	--	--	--	2	--	DIRECTIONAL ASSEMBLY
		MB4-5	(2)	24X12	--	--	--	--	--	--	--	TO, BLUE
		M3-2	(2)	24X12	--	--	--	--	--	--	--	EAST
		M3-4	(2)	24X12	--	--	--	--	--	--	--	WEST
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		MB6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD, BLUE
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD
	3-27	R2-1	(2)	24X30	5.00	--	--	--	1	--	--	SPEED LIMIT 35 MPH
	3-28	J13-1	(2)	24X45	7.50	--	--	--	1	--	--	DIRECTIONAL W/O CARDINAL
		M1-95A	(2)	24X30	--	--	--	--	--	--	--	FRONTAGE RD MKR W/ CARDINAL
		M6-4	(2)	21X21	--	--	--	--	--	--	--	DIR ARW LEFT-RIGHT
	3-29	W3-1	(2)	36X36	9.00	--	--	--	1	--	--	STOP AHEAD
	3-30	J32-2	(2)	48X69	23.00	--	--	--	--	2	--	TRAILBLAZER (ADVANCE TURN) W/ CARD
		MB4-1	(2)	24X12	--	--	--	--	--	--	--	ALTERNATE, BLUE
		MB4-1	(2)	24X12	--	--	--	--	--	--	--	ALTERNATE, BLUE
		MB4-1	(2)	24X12	--	--	--	--	--	--	--	ALTERNATE, BLUE
		MB3-2	(2)	24X12	2.00	--	--	--	--	--	--	EAST, BLUE
		MB3-4	(2)	24X12	2.00	--	--	--	--	--	--	WEST, BLUE
		M1-1	(2)	24X24	3.13	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		M1-1	(2)	24X24	3.13	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB6-1	(2)	21X21	3.06	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD, BLUE
		MB6-1	(2)	21X21	3.06	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD, BLUE
	3-31	J2-2	(2)	48X57	19.00	--	--	--	1	--	--	ROUTE TURN ASSEMBLY
		MB3-2	(2)	24X12	--	--	--	--	--	--	--	EAST, BLUE
		M3-3	(2)	24X12	--	--	--	--	--	--	--	SOUTH
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		M1-4	(2)	24X24	--	--	--	--	--	--	--	USH MARKER 2 OR 3 DIGITS
		MB5-1R	(2)	21X21	--	--	--	--	--	--	--	ADV ARW RIGHT TURN, BLUE
		M5-1R	(2)	21X21	--	--	--	--	--	--	--	ADV ARW RIGHT TURN
	3-32	D1-60	(2)	96X24	16.00	--	--	--	--	2	--	STREET NAME W/ CARDINALS & ARROWS
	3-33	W5-56	(2)	18X18	2.25	--	1	--	--	--	--	END OF ROAD MKR W/ RED DELIN
	3-34	W5-56	(2)	18X18	2.25	--	1	--	--	--	--	END OF ROAD MKR W/ RED DELIN
	3-35	W5-56	(2)	18X18	2.25	--	1	--	--	--	--	END OF ROAD MKR W/ RED DELIN
	3-36	R11-54F	(3)	48x30	--	10.00	--	--	2	--	--	RAMP CLOED USE ALT ROUTE
	4-1	W6-2	(2)	36X36	9.00	--	--	--	1	--	--	DIVIDED HIGHWAY ENDS SYMBOL
	4-2	R5-1A	(2)	36x24	6.00	--	--	--	--	--	4-1	WRONG WAY
	4-3	W3-1	(2)	36X36	9.00	--	--	--	1	--	--	STOP AHEAD
	4-4	R4-7	(3)	36X48	12.00	--	--	--	1	--	--	KEEP RIGHT SYMBOL
	4-5	W5-54D	(2)	18X18	2.25	--	--	--	--	--	4-4	9 UNIT HAZARD/CLEARANCE MKR YELLOW DELIN
	4-6	W6-3	(3)	36X36	9.00	--	--	--	1	--	--	TWO WAY TRAFFIC SYMBOL

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PERMANENT SIGNING SUMMARY

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE IN	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	SIGN MOUNTED ON SAME POST AS #	REMARKS
6100	4-7	R5-1	(2)	30X30	6.25	--	--	--	--	--	4-6	DO NOT ENTER
	4-8	J1-1	(2)	24X39	6.50	--	--	--	1	--	--	JCT OR END ASSEMBLY
		M2-1	(2)	21X15	--	--	--	--	--	--	--	JCT
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
	4-9	W6-1	(2)	36X36	9.00	--	--	--	1	--	--	DIVIDED HIGHWAY AHEAD SYMBOL
	4-10	W14-1	(2)	30X30	6.25	--	--	--	1	--	--	DEAD END
	4-11	R1-1	(2)	30X30	5.18	--	--	--	1	--	--	STOP SIGN
	4-12	W3-1	(2)	36X36	9.00	--	--	--	1	--	--	STOP AHEAD
	4-13	J1-1	(2)	24X39	6.50	--	--	--	1	--	--	JCT OR END ASSEMBLY
		M2-1	(2)	21X15	--	--	--	--	--	--	--	JCT
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
	4-14	W1-6	(2)	48X24	--	--	--	--	1	--	--	NIGHT ARROW (SINGLE)
	5-1	W1-6	(2)	48X24	8.00	--	--	--	1	--	--	NIGHT ARROW (SINGLE)
	5-2	R2-1	(2)	24X30	5.00	--	--	--	1	--	--	SPEED LIMIT 45 MPH
	5-3	R2-1	(3)	36X48	12.00	--	--	--	1	--	--	SPEED LIMIT 35 MPH
	5-4	W1-4R	(3)	36X36	9.00	--	--	--	1	--	--	RIGHT REVERSE CURVE ARROW
	5-5	W3-5	(2)	36X36	9.00	--	--	--	1	--	--	SPEED LIMIT 35 MPH AHEAD
	5-6	W14-3	(2)	48X36	6.00	--	--	--	1	--	--	NO PASSING ZONE
	6-1	W2-1	(3)	36X36	9.00	--	--	--	--	--	SEE NOTE 2	CROSS ROAD SYMBOL
	6-2	W2-1	(3)	36X36	9.00	--	--	--	--	--	SEE NOTE 2	CROSS ROAD SYMBOL
	6-3	R3-8	(2)	36X30	6.75	--	--	--	1	--	--	RIGHT LANE MUST TURN RIGHT, LT LN THRU ONLY
	6-4	D1-60	(2)	96X24	16.00	--	--	--	--	2	--	STREET NAME W/ CARDINALS & ARROWS
	6-5	W23-2	(3)	36X36	9.00	--	--	--	1	--	--	NEW TRAFFIC PATTERN
	6-6	W23-2	(3)	36X36	9.00	--	--	--	1	--	--	NEW TRAFFIC PATTERN
	7-1	R3-8	(2)	36X30	6.75	--	--	--	1	--	--	RIGHT LANE MUST TURN RIGHT, LT LN THRU ONLY
	7-2	R3-1	(2)	24X24	4.00	--	--	--	1	--	--	NO RIGHT TURN SYMBOL
	7-3	R5-1	(3)	36X36	9.00	--	--	--	1	--	--	DO NOT ENTER
	7-4	R6-2L	(2)	24X30	5.00	--	--	--	1	--	--	ONE WAY ARROW LEFT
	7-5	W1-6	(2)	48X24	8.00	--	--	--	--	--	SEE NOTE 1	NIGHT ARROW (SINGLE)
	7-6	R5-57	(4)	36X36	9.00	--	--	--	1	--	--	PED, BIKES,NON MOTORIZED... PROHIB
	7-7	R6-2R	(2)	24X30	5.00	--	--	--	1	--	--	ONE WAY ARROW RIGHT
	7-8	R11-2	(2)	48X30	10.00	--	--	--	--	--	SEE NOTE 1	ROAD/RAMP/LANE CLOSED
	7-9	R3-1	(2)	24X24	4.00	--	--	--	1	--	--	NO RIGHT TURN SYMBOL
	7-10	R5-1	(2)	30X30	6.25	--	--	--	1	--	--	DO NOT ENTER
	7-11	W1-6	(2)	48X24	8.00	--	--	--	--	--	SEE NOTE 1	NIGHT ARROW (SINGLE)
	7-12	R5-1A	(3)	42X30	8.75	--	--	--	1	--	--	WRONG WAY
	7-13	R5-1A	(3)	42X30	8.75	--	--	--	1	--	--	WRONG WAY
	7-14	D1-2	(2)	72X30	15.00	--	--	--	2	--	--	TWO DESTINATIONS ARROWS
	7-15	J3-3	(2)	72x69	34.50	--	--	--	1	--	--	DIRECTIONAL ASSEMBLY
		M3-2	(2)	24X12	--	--	--	--	--	--	--	EAST
		M3-4	(2)	24X12	--	--	--	--	--	--	--	WEST
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		M1-5A	(2)	24X24	--	--	--	--	--	--	--	CTH MARKER 2 OR 3 LETTER
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD
		M6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD

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PERMANENT SIGNING SUMMARY

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE IN	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	SIGN MOUNTED ON SAME POST AS #	REMARKS
6100		MB4-1	(2)	24X12	--	--	--	--	--	--	--	ALTERNATE, BLUE
		MB3-2	(2)	24X12	--	--	--	--	--	--	--	EAST, BLUE
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB6-1	(2)	21X21	--	--	--	--	--	--	--	ARW RIGHT LEFT OR AHEAD, BLUE
	7-16	J3-2	(2)	48X57	19.00	--	--	--	1	--	--	DIRECTIONAL ASSEMBLY
		MB3-2	(2)	24X12	--	--	--	--	--	--	--	EAST, BLUE
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB6-2	(2)	21X21	--	--	--	--	--	--	--	ARW TILT RIGHT OR LEFT, BLUE
		M3-3	(2)	24X12	--	--	--	--	--	--	--	SOUTH
		M1-4	(2)	24X24	--	--	--	--	--	--	--	USH MARKER 2 OR 3 DIGITS
		M6-2	(2)	21X21	--	--	--	--	--	--	--	ARW TILT RIGHT OR LEFT
	7-17	J3-2	(2)	48X57	19.00	--	--	--	1	--	--	DIRECTIONAL ASSEMBLY
		MB3-2	(2)	24X12	--	--	--	--	--	--	--	EAST, BLUE
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB6-2	(2)	21X21	--	--	--	--	--	--	--	ARW TILT RIGHT OR LEFT, BLUE
		M3-3	(2)	24X12	--	--	--	--	--	--	--	SOUTH
		M1-4	(2)	24X24	--	--	--	--	--	--	--	USH MARKER 2 OR 3 DIGITS
		M6-2	(2)	21X21	--	--	--	--	--	--	--	ARW TILT RIGHT OR LEFT
	7-18	D1-2	(2)	72X30	15.00	--	--	--	--	2	--	TWO DESTINATIONS ARROWS
	7-19			48X36	12.00	--	--	--	1	--	--	FREEWAY ENTRANCE RAMP ONLY
	7-20	J32-2	(2)	48X69	23.00	--	--	--	--	2	--	TRAILBLAZER (ADVANCE TURN) W/ CARD
		MB4-1A	(2)	24X12	--	--	--	--	--	--	--	ALT, BLUE
		MB3-2	(2)	24X12	--	--	--	--	--	--	--	EAST, BLUE
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB5-1L	(2)	21x21	--	--	--	--	--	--	--	ADV ARW LEFT TURN, BLUE
		MB4-1A	(2)	24X12	--	--	--	--	--	--	--	ALT, BLUE
		MB3-4	(2)	24X12	--	--	--	--	--	--	--	WEST, BLUE
		M1-1	(2)	24X24	--	--	--	--	--	--	--	IH MARKER 2 DIGIT CUTOUT
		MB5-1R	(2)	21x21	--	--	--	--	--	--	--	ADV ARW RIGHT TURN, BLUE
	7-21	--	--	--	--	--	--	--	--	--	--	FIXED MESSAGE SIGN
	7-22	R5-1	(2)	30X30	6.25	--	--	--	1	--	--	DO NOT ENTER
TOTALS					804.98	10.00	3	7	58	12		

NOTE 1 = SIGN MOUNTED ON PERMANENT BARRICADE TYPE III

NOTE 2 = SIGN MOUNTED ON FLASHING SOLAR BEACON ASSEMBLY

SIGN REMOVAL SUMMARY

CATEGORY	SIGN #	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS #	REMARKS
6100	1R-1	1	1	--	STOP AHEAD
	2R-1	1	1	--	STOP AHEAD
	2R-2	1	1	--	STOP SIGN
	2R-3	1	1	--	STOP SIGN
	2R-4	1	1	--	ROUTE TURN ASSEMBLY
	3R-1	1	1	--	STOP SIGN
	3R-2	1	--	3R-1	ONCOMING TRAF DOES NOT STOP
	3R-3	1	1	--	STOP SIGN
	3R-4	1	--	3R-3	ONCOMING TRAF DOES NOT STOP
	3R-5	1	1	--	PED, BIKES,NON MOTORIZED... PROHIB
	3R-6	1	1	--	NO RIGHT TURN SYMBOL
	3R-7	1	1	--	ARW RIGHT LEFT OR AHEAD
	3R-8	1	1	--	RAMP CLOSED FOLLOW ALT ROUTE
	3R-9	1	1	--	STOP AHEAD
	3R-10	1	1	--	ROUTE TURN ASSEMBLY
	3R-11	1	1	--	JCT OR END ASSEMBLY
	3R-12	1	1	--	TWO WAY TRAFFIC SYMBOL
	3R-13	1	1	--	STOP SIGN
	3R-14	1	1	--	ROUTE TURN ASSEMBLY
	3R-15	1	1	--	ROUTE TURN ASSEMBLY
	3R-16	1	1	--	ROUTE TURN ASSEMBLY
	3R-17	1	2	--	TWO DESTINATIONS ARROWS
	4R-1	1	1	--	STOP AHEAD
	4R-2	1	1	--	ONE DESTINATION ARROW
	4R-3	1	1	--	KEEP RIGHT SYMBOL
	4R-4	1	--	4R-3	NO PASSING ZONE
	4R-5	1	1	--	DO NOT ENTER
	4R-6	1	1	--	STOP AHEAD
	4R-7	1	1	--	NIGHT ARROW (SINGLE)
	4R-8	1	1	--	STOP SIGN
	4R-9	1	1	--	NO RIGHT TURN SYMBOL
	4R-10	1	--	4R-9	NO TURNS
	4R-11	1	1	--	YIELD
	4R-12	1	1	--	KEEP RIGHT SYMBOL
	4R-13	1	1	--	NO TURNS
	4R-14	1	1	--	NIGHT ARROW (SINGLE)
	4R-15	1	1	--	DO NOT ENTER
	4R-16	1	1	--	DO NOT ENTER
	4R-17	1	1	--	DO NOT ENTER
	4R-18	1	1	--	WRONG WAY
	4R-19	1	1	--	WRONG WAY
	4R-20	1	1	--	JCT OR END ASSEMBLY
	5R-1	1	1	--	NO PASSING ZONE
	5R-2	1	1	--	YIELD AHEAD
	6R-1	1	1	--	SPEED LIMIT 35 MPH
	6R-2	1	1	--	ROUTE TURN ASSEMBLY
	6R-3	1	1	--	STOP AHEAD
	6R-4	1	2	--	TWO DESTINATIONS ARROWS
TOTALS		48	46		

DELINEATORS, BARRICADE, AND TUBULAR MARKER MISCELLANEOUS ITEMS

CATEGORY	ROADWAY	STATION		STATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATORS EACH	643.0453 TRAFFIC CONTROL BARRICADES PERMANENT TYPE III EACH	SPV.0060.073 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS LEFT-IN PLACE EACH	SPV.0060.072 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES LEFT-IN PLACE EACH	SPV.0060.018 BARRICADE RACK EACH	SPV.0060.017 PERMANENT BARRICADES TYPE III EACH
6100											
	WEST FRONTAGE ROAD SOUTH										
		2030+25	-	2059+24	23	46	2	7	7	--	--
	WEST FRONTAGE ROAD NORTH										
		3031+00	-	3056+18	30	50	2	6	6	--	--
	RAMP SW				--	--	1	--	--	1	4
	RAMP NW				--	--	4	--	--	--	--
	TOTALS				53	96	9	13	13	1	4

FLASHING SOLAR BEACON ASSEMBLY

CATEGORY	LOCATION	SPV.0105.096 LS	SPV.0105.097 LS
6100			
CTH K	STA 24+00 RT	1	---
CTH K	STA 24+00 LT	---	1
TOTAL		1	1

3

FIELD OFFICE LABORATORY

CATEGORY	STAGE		642.6001 EACH
1000	ALL	PROJECT ID 1030-11-74	0.2
	TOTAL		0.2

FIELD OFFICE FIXED

CATEGORY	STAGE		SPV.0105.001 EACH
1000	ALL	PROJECT ID 1030-11-74	0.2
	TOTAL		0.2

TRAFFIC CONTROL SIGN FIXED MESSAGE

CATEGORY	SIGN NO	SIGN SIZE W X H FT X FT	643.1000 SIGN AREA SF
6100			
	307	4' x 6'	24.00
	308	4.5' x 6'	27.00
	309	4.5' x 6'	27.00
	310	4' x 6'	24.00
RAMP NW	7-21	5.0 X 3.0	15
TOTALS			117

SIGN TO REMAIN UNTIL PROJECT ID 1030-11-71 IS CONSTRUCTED

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	STAGE DURATION DAYS	643.3000 TRAFFIC CONTROL DETOUR SIGNS EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS
6100	STAGE 2			
	WEST FRONTAGE RD	139	248	34,472
	TOTAL			34,472

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	PROJECT	643.2000.002 TRAFFIC CONTROL DETOUR ID 1030-11-74 EACH
6100	1 & 2	1030-11-74	1
	TOTALS		1

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	* STAGE DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH*	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH*	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH*	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH*	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH*	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE EACH*	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS
6100	STAGE 1	54												
	CTH K		33	1,782	8	432	16	864	---	---	10	540	---	---
	WEST FRONTAGE ROAD SOUTH		5	270	3	162	6	324	---	---	5	162	1	14
	WEST FRONTAGE ROAD NORTH		4	216	3	162	6	324	---	---	4	216	1	14
	STAGE 1 SUBTOTAL			2,268		756		1,512		---		918		28
	STAGE 2	35												
	I-94		---	---	0	0	0	0	---	---	4	140	---	---
	CTH K		---	---	4	140	8	280	---	---	6	210	---	---
	WEST FRONTAGE ROAD SOUTH		---	---	15	560	30	1,120	---	---	2	245	---	---
	WEST FRONTAGE ROAD NORTH		---	---	12	455	24	910	---	---	2	280	---	---
	SOUTH BOUND ON RAMP		17	595	2	70	4	140	5	175	5	70	---	---
	SOUTH BOUND OFF RAMP		26	910	0	0	0	0	---	---	3	70	---	---
	STAGE 2 SUBTOTAL			1,505		1,225		2,450		175		875		0
	UNDISTRIBUTED			380		200		400		20		180		10
	TOTALS			4,153		2,181		4,362		195		1,973		38

* FOR INFORMATION PURPOSES ONLY

TRAFFIC CONTROL ITEM

CATEGORY	STAGE	PROJECT	643.0100.018 TRAFFIC CONTROL ID 1030-11-74 EACH
6100	1 & 2	1030-11-74	1
	TOTALS		1

TRACKING PADS

CATEGORY	ROADWAY	628.7560 TRACKING PADS EACH
1000	WEST FRONTAGE ROAD	
	TRACKING PADS	7
	TOTALS	7

REMOVING PAVEMENT MARKING

CATEGORY	LOCATION	646.0600 LF
6100		
	CTH K	5,430
	RAMP SW	1,870
	RAMP NW	2,490
	SUBTOTAL	9,790
	UNDISTRIBUTED (20%)	1,960
	TOTAL	11,750

PAVEMENT MARKING

CATEGORY	ROADWAY	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH WHITE LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH LF	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH LF	646.0883.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH LF	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0176 PAVEMENT MARKING ARROWS EPOXY TYPE 3 EACH	647.0356 PAVEMENT MARKING WORDS EPOXY EACH	647.0456 PAVEMENT MARKING CURB EPOXY YELLOW LF	647.0566 PAVEMENT MARKING STOPLINE EPOXY 18-INCH LF	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY EACH	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	SPV.0060.081 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 EACH	SPV.0060.077 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS EACH
6100	CTH K	2,525	2,700	840	--	--	--	--	4	4	4	--	--	--	--	--	--
	WEST FRONTAGE ROAD SOUTH	3,280	5,450	--	825	3,385	315	475	--	--	--	50	25	3	800	4	2
	WEST FRONTAGE ROAD NORTH	6,600	6,370	--	--	1,020	--	--	--	--	--	10	23	1	350	--	--
	RAMP SW	625	625	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	RAMP NW	1,525	1,450	--	--	--	--	--	--	--	--	--	17	--	--	--	--
	TOTALS	31,150		840	825	4,405	315	475	4	4	4	60	65	4	1,150	4	2

LOCATING NO-PASSING ZONES

CATEGORY	ROADWAY	STATION		STATION	648.0100 MI
6100					
	WEST FRONTAGE ROAD NORTH				
		4067+70	-	4085+50	0.34
	TOTALS				0.34

SAW CUTTING ITEMS

CATEGORY	STAGE	ROADWAY	FROM STATION		TO STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1000		CTH K						
			27+36	-	35+07	RT	--	771
			31+53		39+10	RT	--	757
		WEST FRONTAGE ROAD NORTH						
			4070+89	-	4071+54	RT	66	--
		DRIVEWAYS					156	--
		TOTALS					222	1,528

PAVEMENT CLEANUP

CATEGORY	SPV.0105.019 PAVEMENT CLEANUP LS
1000	1
TOTAL	1

SURVEY PROJECT

CATEGORY	LOCATION	SPV.0105.018 SURVEY PROJECT 1030-11-74 LS
1000	PROJECT ID 1030-11-74	1
TOTAL		1

GEOGRID REINFORCEMENT

CATEGORY	LOCATION	SPV.0180.001 SY
1000	SW FRONTAGE ROAD	17,600
	NW FRONTAGE ROAD	15,800
	UNDISTRIBUTED	5,000
	TOTAL	38,400

FREEWAY LIGHTING – POLES

SYSTEM	POLE I. D. OR LOCATION	6110 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	6110 SPV.0060.108 TEMPORARY WOOD POLE LIGHTING UNITS
		LF	EACH
HL-51-RJ	WP-ARJ1	165	1
	WP-BRJ2	165	1
	WP-ARJ3	165	1
	WP-BRJ4	165	1
	WP-ARJ5	165	1
	WP-BRJ6	165	1
	WP-BRJ7	165	1
	WP-ARJ8	165	1
		1320	8

FREEWAY LIGHTING – WIRE AND CONDUIT

SYSTEM	FROM	CATEGORY TO	1100 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	1100 652.0605 CONDUIT SPECIAL 2-INCH	6110 655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	6110 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG	6110 SPV.0090.111 OVERHEAD CABLE QUADRUPLEX 6 AWG
			LF	LF	LF	LF	LF
HL-51-RJ	HL-51-RJ	LPB715	-	-	30	90	-
	LPB715	LPB713	85	-	95	285	-
	LPB713	LPB714	175	-	185	370	-
	LPB713	WP-BRJ7	5	-	15	30	-
	LPB714	WP-ARJ8	5	-	15	30	-
	LPB715	LPB712	190	-	200	600	-
	LPB712	LPB709	-	220	230	690	-
	LPB709	LPB710	75	-	85	255	-
	LPB710	LPB711	160	-	170	340	-
	LPB710	WP-ARJ5	5	-	15	30	-
	LPB711	WP-BRJ6	5	-	15	30	-
	LPB709	LPB708	160	-	170	510	-
	LPB708	LPB707	245	-	255	765	-
	LPB707	LPB706	205	-	215	645	-
	LPB706	LPB704	185	-	195	585	-
	LPB704	WP-BRJ4	15	-	25	75	-
	WP-BRJ4	WP-ARJ3	-	-	-	-	170
	WP-ARJ3	WP-BRJ2	-	-	-	-	180
	WP-BRJ2	WP-ARJ1	-	-	-	-	175
		TOTAL	1515	220	1915	5330	525

3

FREEWAY LIGHTING – PULL BOXES

SYSTEM	DESCRIPTION	STATION	CATEGORY OFFSET	6110 653.0140 PULL BOXES STEEL 24X42-INCH
				EACH
HL-51-RJ	LPB704	32+13WB	75' LT	1
	LPB706	35+79WB	49' LT	1
	LPB707	37+81WB	44' LT	1
	LPB708	40+19WB	65' LT	1
	LPB709	41+76WB	60' LT	1
	LPB710	41+03WB	50' LT	1
	LPB711	41+29EB	73' RT	1
	LPB712	43+75WB	62' LT	1
	LPB713	44+79WB	68' LT	1
	LPB714	45+11EB	66' RT	1
	LPB715	45+59WB	102' LT	1
			TOTAL	11

FREEWAY LIGHTING – MISCELLANEOUS

SYSTEM	DESCRIPTION	CATEGORY 6110 SPV.0105.112 FREEWAY LIGHTING INTEGRATOR I.D. 1030-11-74
		LS
HL-51-RJ	CONTRACT 1030-11-74	1
	TOTAL	1

3

TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.01

THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 25, TOWNSHIP 04 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

AMENDMENT NO.2:

AMENDS PARCEL NO. 12,13,14 AND EXISTING C/L IH-94 OF TRANSPORTATION PROJECT PLAT NO. 1030-11-20 - 4.01
AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 2245538

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LINE COURSE TABLE

LINE	PARCEL	BEARING	DISTANCE
L1	1	S 77°42'30" E	57.42'
L2	1	S 44°08'40" E	26.58'
L3	8	N 46°11'12" E	35.48'
L4	8	N 01°22'51" E	150.70'
L5	12	N 43°52'04" W	51.31'
L6	12	N 44°57'15" E	81.43'
L7	8	N 89°00'27" W	29.65'
L8	10	N 00°59'33" E	31.95'
L9	46	N 00°59'33" E	148.70'
L10	2	N 00°59'33" E	208.70'
L11	2	N 89°00'27" W	99.00'
L12	2	N 00°43'07" E	145.70'
L13	2	N 89°00'27" W	100.00'
L14	14	N 44°27'03" W	67.62'
L15	1	N 89°00'27" W	8.65'
L16	10	N 00°59'33" E	148.70'

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES
CTH "K"	I 101-1 (3)	1956	VARIES
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-71	1972	VARIES

The most current Right of Way information should be viewed in DOTView using the Real Estate project ID. The plat information contained in this as-built plan may not be the final record.

GENERAL NOTES;

FOR THE PURPOSE OF HORIZONTAL ADJUSTMENT, WISCONSIN DOT SOUTHEAST REGION SURVEY HAS FIELD VERIFIED GPS CONTROL STATIONS FOR THE FOLLOWING TOWNSHIPS: YORKVILLE EAST, RAYMOND NORTH AND RAYMOND SOUTH.

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

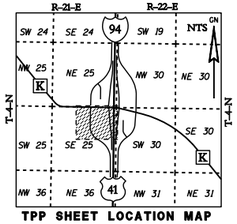
I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1 (3).

PLAT NOTES;

THE CONSULTANT IS NOT RESPONSIBLE FOR PARCEL 2, WHICH HAS BEEN ACQUIRED ON A PREVIOUS PLAT PREPARED BY DOT. THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010

BASED ON LEGAL DESCRIPTIONS FOR PARCELS 1, 2, 3, 8, 9, 10 AND 13 TO THE EAST, OCCUPATION LINES TO THE EAST, AND THE SIXTEENTH LINE TO THE WEST OF THIS PART OF PARCEL 7, THE WIDTH OF PARCEL 7 IS APPROXIMATELY 82 FEET WIDE INSTEAD OF THE RECORDED 100.00 FEET.

COMMUNITY WELL ON PARCEL 11 SERVING PARCELS 3,7,8,10 & 12 TO BE CAPPED AT EAST R/W LINE OF WEST RELOCATED FRONTAGE ROAD. PARCEL 7 TO BE SERVED BY NEW WELL.

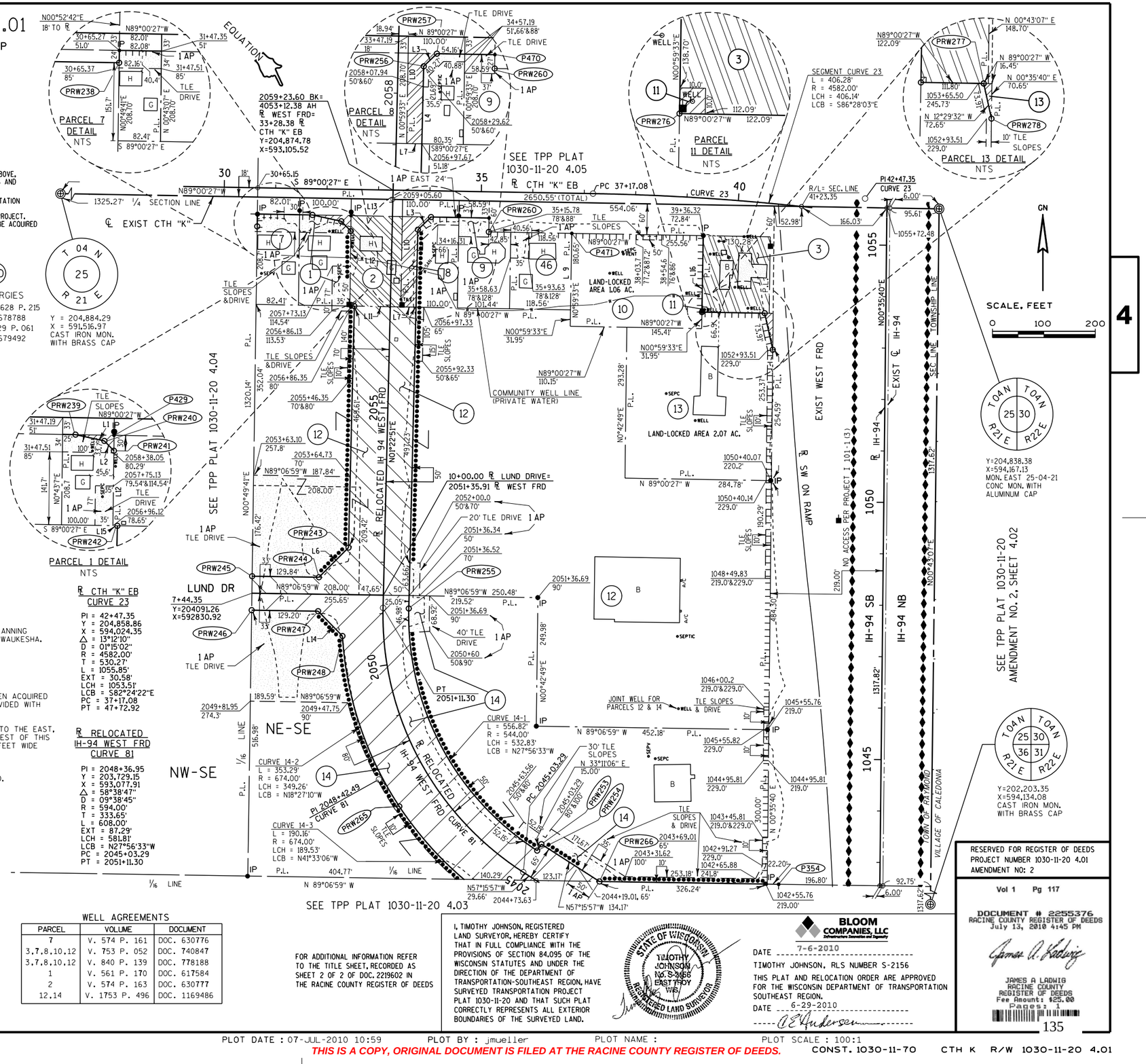


TPP SHEET LOCATION MAP

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES
1	RICHARD A. & DEBRA E. BAUMANN	FEE,AR,TLE	0.016	0.076	0.092	0.124
2	KENDALL A. & CATHERINE McCANN	FEE	0.401	0.076	0.477	0.000
3	DONATH A.ROETTGERS VENDOR & HWY K, LLC VENDEE	FEE	0.446	0.000	0.440	0.000
7	CHAD J. WILKS	FEE,AR,TLE	0.000	0.062	0.062	0.064
8	ROBERT LUND	FEE,AR,TLE	0.130	0.083	0.213	0.041
9	SHELIA M. JORGENSEN	FEE,AR,TLE	0.000	0.044	0.044	0.050
10	THOMAS A HRIBAR	AR,TLE	0.000	0.000	0.000	0.012
11	ROBERT E. & ROBERTA H. TUGENBERG	FEE	0.002	0.000	0.002	0.000
12	SCOTT MILES TRUST	FEE,AR,TLE	1.724	0.000	1.724	0.975
13	FRANKLIN H. & SHARON F WELCH	FEE,AR,TLE	0.013	0.000	0.013	0.081
14	JAVCO REALTY LLP	FEE,AR,TLE	2.155	0.000	2.155	1.151
46	THOMAS B. & JUDITH A. KING	AR,TLE	0.000	0.000	0.000	0.040
50	VACATED	---	---	---	---	---
100	WE ENERGIES	ROR	---	---	---	---



WELL AGREEMENTS

PARCEL	VOLUME	DOCUMENT
7	V. 574 P. 161	DOC. 630776
3,7,8,10,12	V. 753 P. 052	DOC. 740847
3,7,8,10,12	V. 840 P. 139	DOC. 778188
1	V. 561 P. 170	DOC. 617584
2	V. 574 P. 163	DOC. 630777
12,14	V. 1753 P. 496	DOC. 1169486

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN — TIMOTHY JOHNSON — NO. S-2156 — EAST TROY WIS. — REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC

DATE 7-6-2010

TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-29-2010

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.01
AMENDMENT NO: 2

Vol 1 Pg 117

DOCUMENT # 2255376
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:45 PM

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040401_rp.dgn PLOT DATE : 07-JUL-2010 10:59 PLOT BY : jmueller PLOT NAME : PLOT SCALE : 100:1
THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.
CONST. 1030-11-70 CTH K R/W 1030-11-20 4.01

TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.02

THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 4 NORTH, RANGE 22 EAST, IN THE VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

AMENDMENT NO.2:

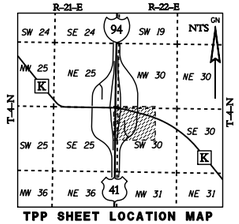
AMENDS EXISTING C/L IH-94 OF TRANSPORTATION PROJECT PLAT NO. 1030-11-20 - 4.02 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 2219602

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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TPP SHEET LOCATION MAP

GN

SCALE, FEET

0 100 200

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES
CTH "K"	I 101-1 (3)	1956	VARIES
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-71	1972	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

FOR THE PURPOSE OF HORIZONTAL ADJUSTMENT, WISCONSIN DOT SOUTHEAST REGION SURVEY HAS FIELD VERIFIED GPS CONTROL STATIONS FOR THE FOLLOWING TOWNSHIPS: YORKVILLE EAST, RAYMOND NORTH AND RAYMOND SOUTH.

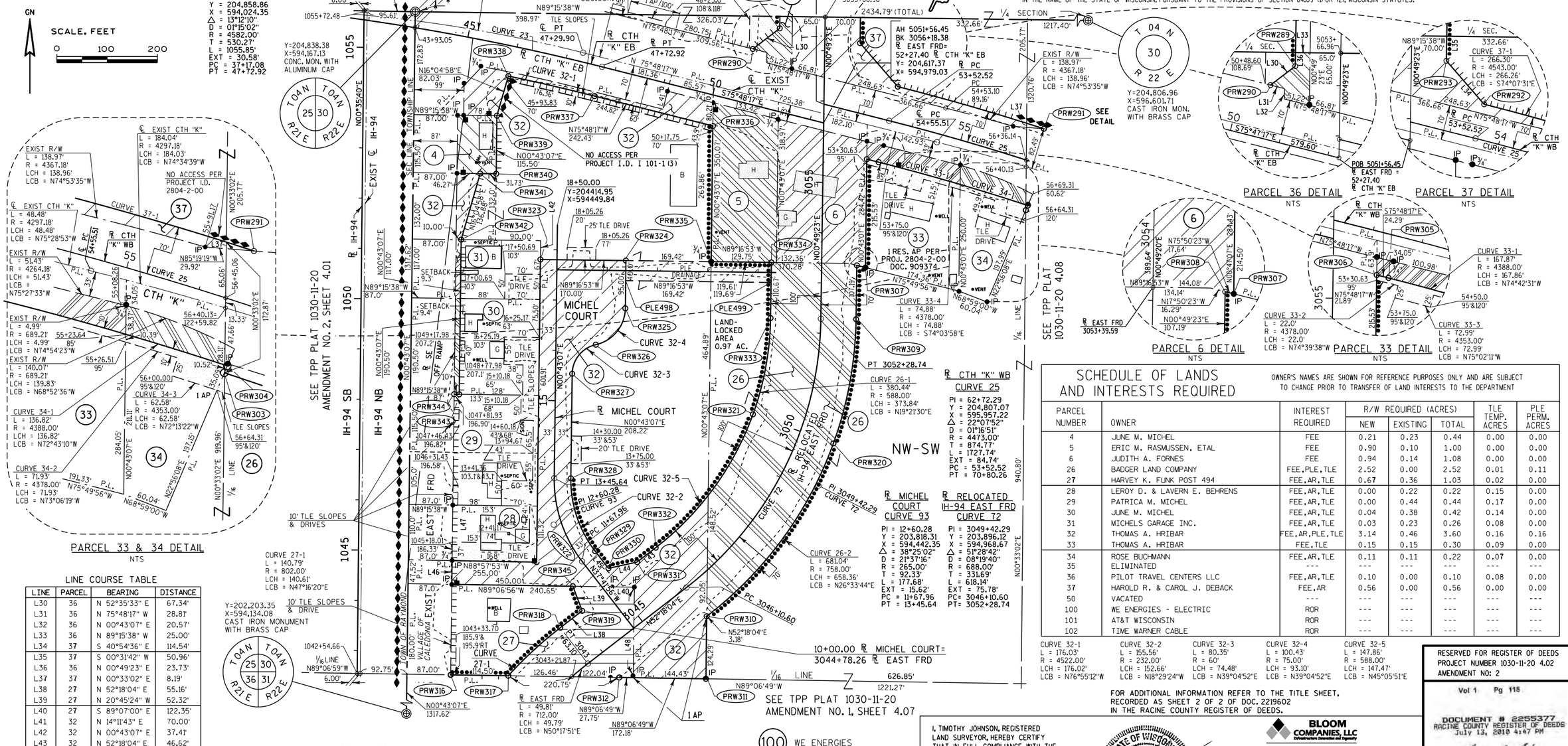
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1(3).

TLE IMPACTS FOR PARCELS 28,29 AND 30 SHALL NOT APPLY IN AREAS OCCUPIED BY EXISTING BUILDINGS.

PLAT NOTE:

THE CONSULTANT IS NOT RESPONSIBLE FOR PARCELS 4, 5 AND 6, WHICH WERE ACQUIRED ON A PREVIOUS PLAT PREPARED BY DOT. THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010



LINE COURSE TABLE

LINE	PARCEL	BEARING	DISTANCE
L30	36	N 52°35'33" E	67.34'
L31	36	N 75°48'17" W	28.81'
L32	36	N 00°43'07" E	20.57'
L33	36	N 89°15'38" W	25.00'
L34	37	S 40°54'36" E	114.54'
L35	37	S 00°31'42" W	50.96'
L36	36	N 00°49'23" E	23.73'
L37	37	N 00°33'02" E	8.19'
L38	27	N 52°18'04" E	55.16'
L39	27	N 20°45'24" W	52.32'
L40	27	S 89°07'00" E	122.35'
L41	32	N 14°11'43" E	70.00'
L42	32	N 00°43'07" E	37.41'
L43	32	N 52°18'04" E	46.62'
L44	32	N 77°40'24" E	58.34'
L45	32	S 37°41'56" E	42.96'
L46	32	N 00°43'01" E	47.29'
L47	27-29	N 00°43'07" E	558.25'
L48	27	N 00°43'07" E	180.03'

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
4	JUNE M. MICHEL	FEE	0.21	0.23	0.44	0.00	0.00
5	ERIC M. RASMUSSEN, ETAL	FEE	0.90	0.10	1.00	0.00	0.00
6	JUDITH A. FORNES	FEE	0.94	0.14	1.08	0.00	0.00
26	BADGER LAND COMPANY	FEE,PLE,TLE	2.52	0.00	2.52	0.01	0.11
27	HARVEY K. FUNK POST 494	FEE,AR,TLE	0.67	0.36	1.03	0.02	0.00
28	LEROY D. & LAVERN E. BEHRENS	FEE,AR,TLE	0.00	0.22	0.22	0.15	0.00
29	PATRICA M. MICHEL	FEE,AR,TLE	0.00	0.44	0.44	0.17	0.00
30	JUNE M. MICHEL	FEE,AR,TLE	0.04	0.38	0.42	0.14	0.00
31	MICHELS GARAGE INC.	FEE,AR,TLE	0.03	0.23	0.26	0.08	0.00
32	THOMAS A. HRIBAR	FEE,AR,PLE,TLE	3.14	0.46	3.60	0.16	0.16
33	THOMAS A. HRIBAR	FEE,TLE	0.15	0.15	0.30	0.09	0.00
34	ROSE BUCHMANN	FEE,AR,TLE	0.11	0.11	0.22	0.07	0.00
35	ELIMINATED	---	---	---	---	---	---
36	PILOT TRAVEL CENTERS LLC	FEE,AR,TLE	0.10	0.00	0.10	0.08	0.00
37	HAROLD R. & CAROL J. DEBACK	FEE,AR	0.56	0.00	0.56	0.00	0.00
50	VACATED	---	---	---	---	---	---
100	WE ENERGIES - ELECTRIC	ROR	---	---	---	---	---
101	AT&T WISCONSIN	ROR	---	---	---	---	---
102	TIME WARNER CABLE	ROR	---	---	---	---	---

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS.

100 WE ENERGIES

101 WE ENERGIES & AT&T
PAR 32 V. 2160 P. 143
DOC. NO. 1379517

DRAINAGE AGREEMENTS

PARCEL	VOLUME	DOCUMENT
26,37	V. 331 P. 115	DOC. NO. 423463
26,36,37	V. 1644 P. 660	DOC. NO. 1104147
26,36,37	V. 1646 P. 335	DOC. NO. 1105316
38	V. 1084 P. 638	DOC. NO. 881690

PAR 5,6,26,33,34,37	V. 331 P. 115 DOC. NO. 423463
PAR 32	V. 2160 P. 143 DOC. NO. 1379517
PAR 36	V. 2353 P. 974 DOC. NO. 1458536
PAR 37	V. 331 P. 118 DOC. NO. 423466
PAR 37	V. 331 P. 124 DOC. NO. 423472
PAR 38	V. 331 P. 122 DOC. NO. 423470

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN — TIMOTHY JOHNSON S-2156 — REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC

DATE 7-6-2010

TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 7-7-2010

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.02
AMENDMENT NO: 2

Vol 1 Pg 118

DOCUMENT # 2255377
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:47 PM

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040402_rp.dgn PLOT DATE : 06-JUL-2010 16:01 PLOT BY : jmueller PLOT NAME : PLOT SCALE : 100:1

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.

CONST. 1030-11-70 CTH K R/W 1030-11-20 4.02

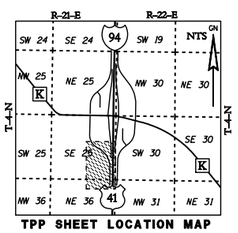
TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.03

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 25, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



TPP SHEET LOCATION MAP

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

FOR THE PURPOSE OF HORIZONTAL ADJUSTMENT, WISCONSIN DOT SOUTHEAST REGION SURVEY HAS FIELD VERIFIED GPS CONTROL STATIONS FOR THE FOLLOWING TOWNSHIPS: YORKVILLE EAST, RAYMOND NORTH AND RAYMOND SOUTH.

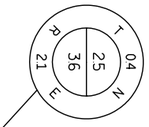
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1(3).

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1(3)	1956	VARIES
3 MILE ROAD	BY STATUTE 82.81	---	66'



Y=202,239.33
X=591,473.71
CAST IRON MONUMENT
WITH BRASS CAP

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
23	GILBERT & AUDREY HAGEMANN	FEE, AR, TLE	3.716	0.00	3.716	0.324	0.00
--	---	---	---	---	---	---	---

PLAT NOTE:

THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010

DOT DISTRICT NOTE:

THE SECTION CORNER LOCATION FOR THE NE CORNER OF SEC. 36-4-21 ON I-101-1(3) WAS NOT SHOWN ACCURATELY. THE FIELD DISTANCE FROM THE SECTION CORNER LOCATION TO THE CENTERLINE OF I-94 SHOULD HAVE BEEN LISTED AS 89.90 FEET RATHER THAN 95.44 FEET. THE SECTION CORNER LOCATION DID NOT MOVE. THE TIE DISTANCE WAS SHOWN INCORRECTLY.

℄ IH-94
CURVE 11

PI = 1019+70.32
Y = 201,238.16
X = 594,028.16
△ = 00°57'02"
D = 00°06'00"
R = 57289.78
T = 475.29
L = 950.56
EXT = 1.97
LCH = 950.55'
LCB = N01°04'11"E
PC = 1014+95.03
PT = 1024+45.59

℄ RELOCATED IH-94 WEST FRD
CURVE 80

PI = 2039+17.83
Y = 203,186.59
X = 593,921.92
△ = 58°50'05"
D = 6°51'42"
R = 835.00'
T = 470.83'
L = 857.43'
EXT = 123.60'
LCH = 820.25'
LCB = N27°50'54"W
PC = 2034+46.99
PT = 2043+04.42

BEGIN PROJECT 1030-11-20
STA. 1024+00 ℄ IH-94
Y = 201,667.83
X = 594,032.60

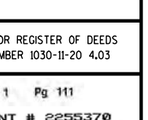
POB 2027+50.00
Y=202,019.21
X=593,889.94

SEE TPP PLAT 1030-11-20
AMENDMENT NO. 2, SHEET 4.01

SEE TPP PLAT 1030-11-20
AMENDMENT NO. 1, SHEET 4.07



Y=202,203.35
X=594,134.08
CAST IRON MONUMENT
WITH BRASS CAP



Y=204,838.38
X=594,167.13
CONC MON. WITH
ALUMINUM CAP

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN
TIMOTHY JOHNSON
No. S-2156
EAST TROY
WIS.
REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
DATE 6/23/10
TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
DATE 6-29-2010
C E Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.03

Vol 1 Pg 111
DOCUMENT # 2255370
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:24 PM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040403_rp.dgn PLOT DATE : 23-JUN-2010 14:21 PLOT BY : Kdew PLOT NAME : PLOT SCALE : 100:1

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.

CONST. 1030-11-70 CTH K R/W 1030-11-20 4.03

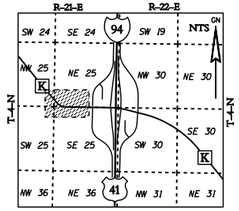
TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.04

THAT PART OF PARCEL 1, CSM 2749, THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, OF SECTION 25, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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TPP SHEET LOCATION MAP

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

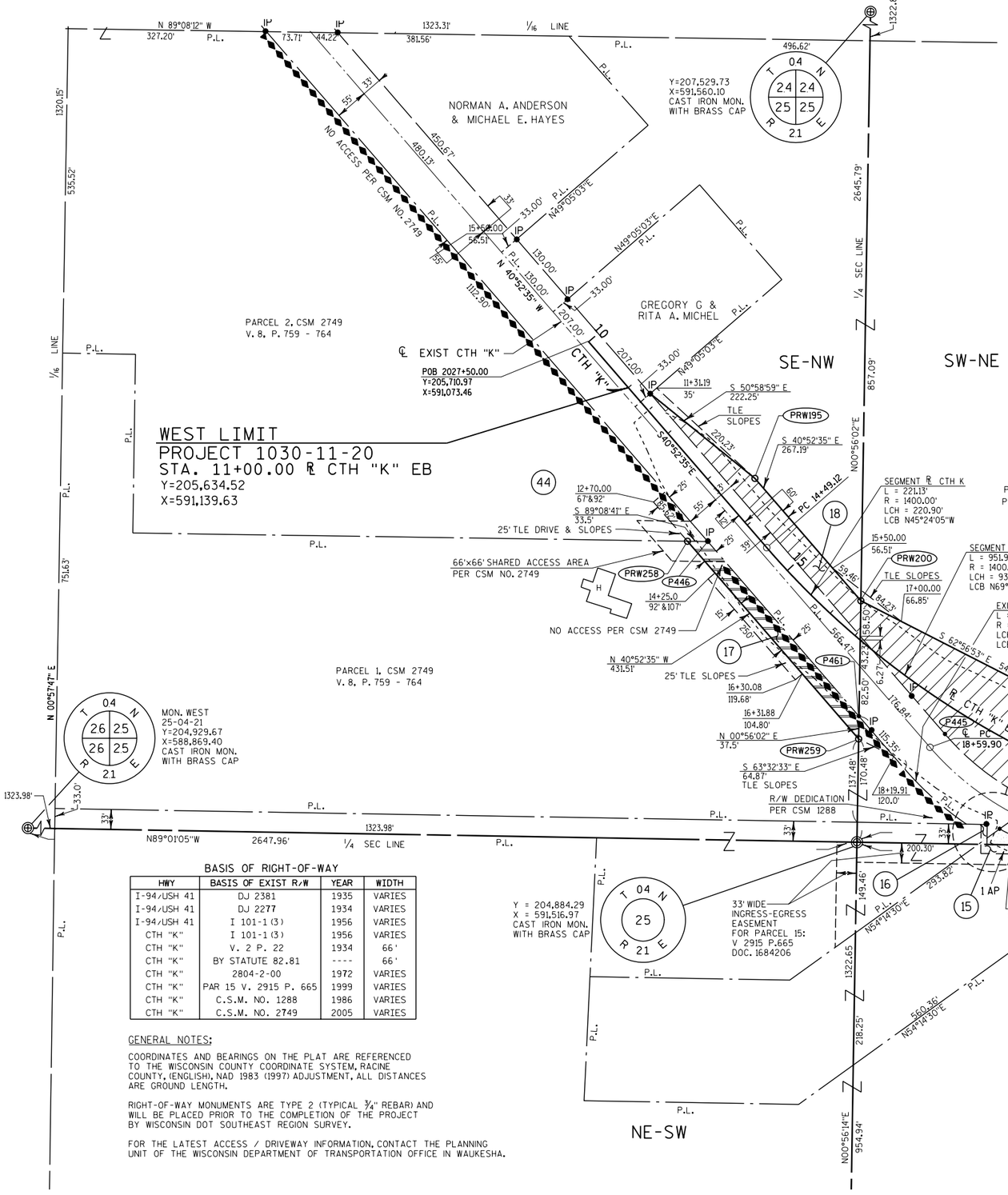
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES
15	KERRY S DIETER AND DONNA D. DIETER	TLE	0.000	0.000	0.000	0.064
16	SUSAN J. LENART	TLE	0.000	0.000	0.000	0.012
17	CARL G. FREITAG	FEE,TLE	0.233	0.000	0.233	0.101
18	OMEGA INVESTMENT INC.	FEE,AR,TLE	3.991	1.501	5.492	0.320
44	AMERICAN PROPERTIES, LLC	TLE	0.000	0.000	0.000	0.056
45	JEFFERY P. SWEET	FEE,AR,TLE	0.413	0.647	1.060	0.206
--	---	---	---	---	---	---
100	WE ENERGIES - ELECTRIC	ROR	---	---	---	---

DRAIN TILE EASEMENT

PARCEL	VOLUME	DOCUMENT
15	V. 536 P. 650	DOC. NO. 592979
16	V. 536 P. 650	DOC. NO. 592979

WELL AGREEMENT

PARCEL	VOLUME	DOCUMENT
15	V. 1434 P. 525	DOC. NO. 1023993
16	V. 1434 P. 525	DOC. NO. 1023993



BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1(3)	1956	VARIES
CTH "K"	I 101-1(3)	1956	VARIES
CTH "K"	V. 2 P. 22	1934	66'
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-00	1972	VARIES
CTH "K"	PAR 15 V. 2915 P. 665	1999	VARIES
CTH "K"	C.S.M. NO. 1288	1986	VARIES
CTH "K"	C.S.M. NO. 2749	2005	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

(100) WE ENERGIES - ELECTRIC
PAR. 18, NO RECORD OF EASEMENT
PAR. 15,16,45: V.333, P.381, DOC. 425251
PAR. 15,16,45: V.333, P.365, DOC. 425235
PAR. 16: V.1469, P.359, DOC. 1037608

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN
TIMOTHY JOHNSON
NO. S-2156
EAST TROY WI
REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

DATE 6/23/10
TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
DATE 6-29-2010
DE Anderson

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.04

Vol 1 Pg 112

DOCUMENT # 2255371
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:25 PM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040404_rp.dgn PLOT DATE : 23-JUN-2010 14:21 PLOT BY : kdew PLOT NAME : PLOT SCALE : 100:1

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CONST. 1030-11-70 CTH K R/W 1030-11-20 4.04

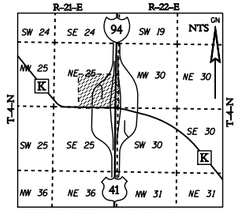
TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.05

THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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TPP SHEET LOCATION MAP

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES
CTH "K"	I 101-1 (3)	1956	VARIES
CTH "K"	V. 2 P. 22	1934	66'
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-71	1972	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

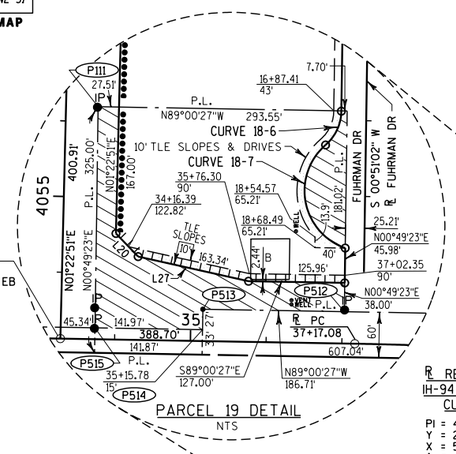
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FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

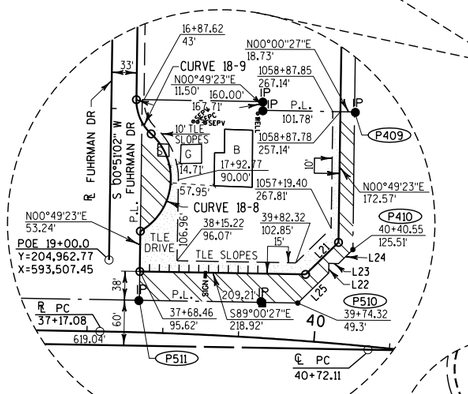
I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1 (3).

PLAT NOTE:

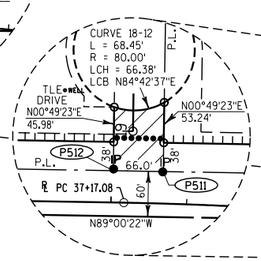
THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010



PARCEL 19 DETAIL
NTS



PARCEL 20 DETAIL
NTS



PARCEL 18 DETAIL
NTS

CURVE 18-2	CURVE 18-3	CURVE 18-4	CURVE 18-5
L = 595.75'	L = 214.25'	L = 472.10'	L = 122.28'
R = 700.37'	R = 1005.00'	R = 555.00'	R = 172.00'
LCH = 577.95'	LCH = 213.84'	LCH = 457.99'	LCH = 119.72'
LCB N25°44'57"E	LCB N44°00'38"E	LCB N25°44'57"E	LCB S19°30'57"E
CURVE 18-6	**CURVE 18-7**	**CURVE 18-8**	**CURVE 18-9**
L = 50.66'	L = 167.56'	L = 150.41'	L = 50.66'
R = 60.00'	R = 80.00'	R = 80.00'	R = 60.00'
LCH = 49.16'	LCH = 138.57'	LCH = 129.21'	LCH = 49.16'
LCB S25°02'13"W	LCB S10°46'41"E	LCB N06°20'21"E	LCB N23°20'08"W
CURVE 18-10	**CURVE 18-11**		
L = 169.20'	L = 302.65'		
R = 238.00'	R = 1135.00'		
LCH = 165.66'	LCH = 301.75'		
LCB N19°30'57"W	LCB N42°28'43"E		

℄ RELOCATED IH-94 WEST FRD CURVE 82	℄ RELOCATED IH-94 WEST FRD CURVE 83
PI = 4060+32.39	PI = 4070+75.49
Y = 205,594.58	Y = 206,285.58
X = 593,122.87	X = 593,949.82
△ = 48°44'14"	△ = 49°01'33"
D = 09°10'02"	D = 05°22'48"
R = 625.00'	R = 1065.00'
T = 283.10'	T = 485.64'
L = 531.64'	L = 911.28'
EXT = 61.13'	EXT = 105.50'
LCH = 515.76'	LCH = 883.73'
LCB = N25°44'57"E	LCB = N25°36'18"E
PC = 4057+49.29	PC = 4065+89.85
PT = 4062+80.93	PT = 4075+01.13

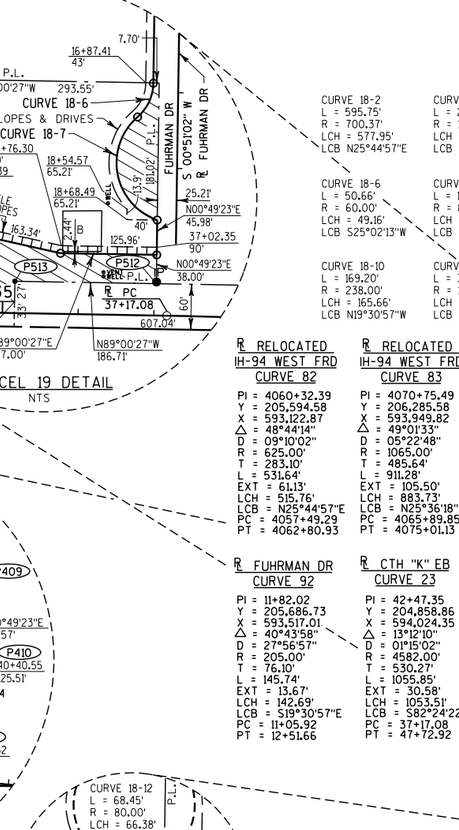
℄ FUHRMAN DR CURVE 92	℄ CTH "K" EB CURVE 23
PI = 11+82.02	PI = 42+47.35
Y = 205,686.73	Y = 204,858.86
X = 593,517.01	X = 594,024.35
△ = 40°43'58"	△ = 13°12'10"
D = 27°56'57"	D = 01°15'02"
R = 205.00'	R = 4582.00'
T = 76.10'	T = 530.27'
L = 145.74'	L = 1055.85'
EXT = 13.67'	EXT = 30.58'
LCH = 142.69'	LCH = 1053.51'
LCB = S19°30'57"E	LCB = S82°24'22"E
PC = 11+05.92	PC = 37+17.08
PT = 12+51.66	PT = 47+72.92

LINE COURSE TABLE			
LINE	PARCEL	BEARING	DISTANCE
L20	19	N 43°48'48" W	42.28'
L21	20	N 45°51'11" E	60.57'
L22	20	N 00°49'23" E	12.61'
L23	20	S 89°00'27" E	12.58'
L24	20	N 45°51'11" E	26.49'
L25	20	N 45°51'11" E	56.99'
L26	18	N 46°11'12" E	42.57'
L27	19	S 77°24'57" E	149.30'

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
18	OMEGA INVESTMENTS, INC.	FEE,AR,TLE	7.057	0.234	7.291	0.633	0.000
19	RONALD R. ZIMMERMAN	FEE,AR,TLE	0.742	0.108	0.850	0.116	0.000
20	CORRINE L. MARITA	FEE,AR,TLE	0.387	0.000	0.387	0.227	0.000
--	---	---	---	---	---	---	---
100	WE ENERGIES - ELECTRIC	ROR	---	---	---	---	---



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN
TIMOTHY JOHNSON
NO. S-2156
EAST TROY
WI
REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
Infrastructure Solutions and Ingenuity

DATE 6/23/10

TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 6-25-2010

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.05

Vol 1 Pg 113

DOCUMENT # 2255372
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:26 PM

JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040405_rp.dgn
PLOT DATE : 23-JUN-2010 14:22
PLOT BY : kdew
PLOT NAME :
PLOT SCALE : 100.0002:1
THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.
CONST. 1030-11-70
CTH K R/W 1030-11-20 4.05

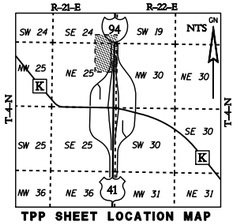
TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.06

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25, AND THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24, TOWNSHIP 4 NORTH, RANGE 21 EAST, IN THE TOWN OF RAYMOND, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



TPP SHEET LOCATION MAP

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES
CTH "K"	I 101-1 (3)	1956	VARIES
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-71	1972	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNINGUNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

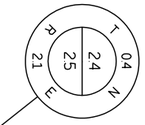
I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1 (3).

PLAT NOTE:

THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010

N

SCALE, FEET
0 100 200



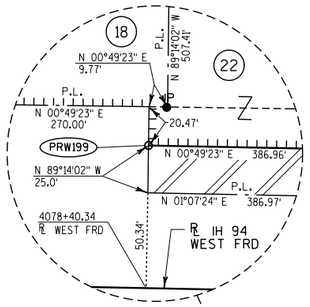
Y=207,529.73
X=591,560.10
CAST IRON MON.
WITH BRASS CAP

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
18	OMEGA INVESTMENTS INC.	FEE,AR,TLE	0.260	0.000	0.260	0.124	0.000
21	ELIMINATED	---	---	---	---	---	---
22	MARK W. NELSON	FEE,AR,TLE	0.231	0.000	0.231	0.068	0.000
43	ROGER A. & PAMELA J. HAYS	FEE,AR,TLE	0.044	0.000	0.044	0.045	0.000
--	---	---	---	---	---	---	---

PARCEL 18 & 22 DETAIL
NTS



℄ IH-94
CURVE 14
PI = 1064+92.20
Y = 205,759.81
X = 594,075.07
△ = 00°29'51"
D = 00°03'00"
R = 114,597.56'
T = 497.62'
L = 995.23'
EXT = 1.08'
LCH = 995.23'
LCB = N00°50'36"E
PC = 1059+94.58
PT = 1069+89.81

℄ RELOCATED
IH-94 WEST FRD
CURVE 83
PI = 4070+75.49
Y = 206,285.58
X = 593,949.83
△ = 49°01'33"
D = 05°22'48"
R = 1065.00'
T = 485.64'
L = 911.28'
EXT = 105.50'
LCH = 883.73'
LCB = N25°36'18"E
PC = 4065+89.85
PT = 4075+01.13

END PROJECT 1030-11-20
STA. 1093+00 ℄ IH-94
Y = 208,567.11
X = 594,128.59

SEE TPP PLAT 1030-11-20, SHEET 4.05

SEE TPP PLAT 1030-11-20
AMENDMENT NO. 1, SHEET 4.09

Y=204,838.38
X=594,167.13
CONC MON. WITH
ALUMINUM CAP

Y=207,494.35
X=594,205.28
CAST IRON MON.
WITH BRASS CAP

Y=210,144.23
X=594,246.71
CAST IRON MON.
WITH BRASS CAP

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN — TIMOTHY JOHNSON — NO. S-2156 — EAU CLAIRE WI — REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

DATE 7/5/10
TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
DATE 7-7-2010
A E Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.06

Vol 1 Pg 114

DOCUMENT # 2255373
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:27 PM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040406_rp.dgn PLOT DATE : 05-JUL-2010 19:44 PLOT BY : kdew PLOT NAME : PLOT SCALE : 100:1

CONST. 1030-11-70 CTH K R/W 1030-11-20 4.06

TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.07

THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 4 NORTH, RANGE 22 EAST, VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

AMENDMENT NO.1:

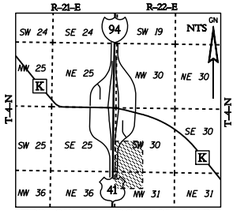
AMENDS PARCEL NO.24 AND 25 AND EXISTING C/L IH-94 OF TRANSPORTATION PROJECT PLAT NO. 1030-11-20 - 4.07 RECORDED AS DOCUMENT NO. 2245539

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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TPP SHEET LOCATION MAP

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH.

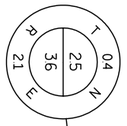
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1 (3).

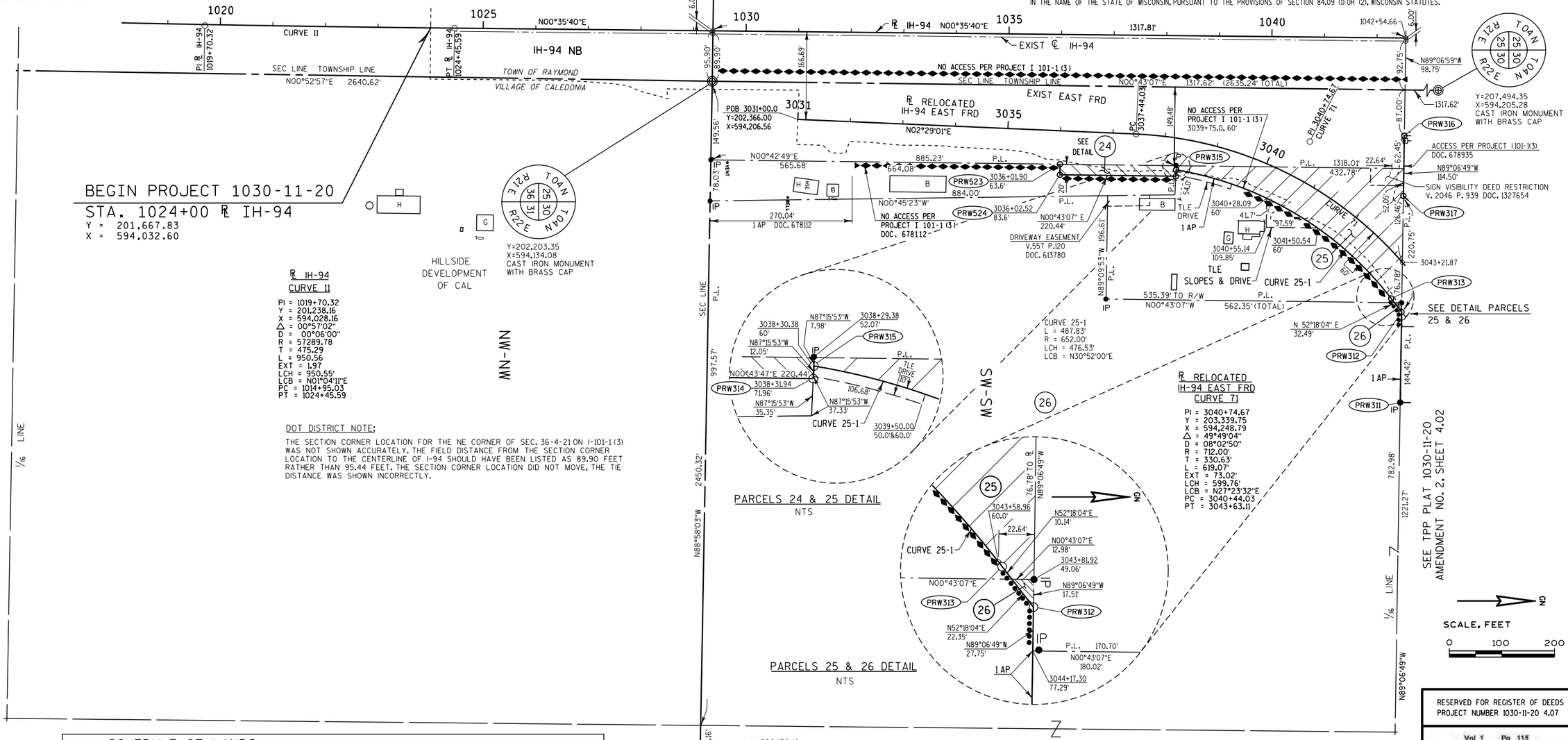
PLAT NOTE:

THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010



Y=202,239.33
X=591,473.71
CAST IRON MONUMENT WITH BRASS CAP

SEE TPP PLAT 1030-11-20, SHEET 4.03



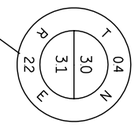
SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
24	KENNETH L. NICHOLSON	FEE	0.101	0.000	0.101	0.000	0.000
25	TODD M. FORNES	FEE,AR,TLE	0.997	0.000	0.997	0.091	0.000
26	BADGER LAND COMPANY	FEE,AR	0.003	0.000	0.000	0.000	0.000
--	---	---	---	---	---	---	---

DOT DISTRICT NOTE:

THE SECTION CORNER LOCATION FOR THE NE CORNER OF SEC. 36-4-21 ON I-101-1 (3) WAS NOT SHOWN ACCURATELY. THE FIELD DISTANCE FROM THE SECTION CORNER LOCATION TO THE CENTERLINE OF I-94 SHOULD HAVE BEEN LISTED AS 89.90 FEET RATHER THAN 95.44 FEET. THE SECTION CORNER LOCATION DID NOT MOVE, THE TIE DISTANCE WAS SHOWN INCORRECTLY.



Y=202,159.19
X=596,584.00
CAST IRON MONUMENT WITH BRASS CAP

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN — TIMOTHY JOHNSON — NO. S-2156 — EAST TROY WI — REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

DATE 7/5/10
TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 7-7-2010
C E Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.07

Vol 1 Pg 115
DOCUMENT # 2255374
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:29 PM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: $25.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040407_rp.dgn PLOT DATE : 05-JUL-2010 19:45 PLOT BY : kdew PLOT NAME : PLOT SCALE : 100:1

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.

CONST. 1030-11-70 CTH K R/W 1030-11-20 4.07

TRANSPORTATION PROJECT PLAT NO: 1030-11-20 - 4.09

THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 30, TOWNSHIP 4 NORTH, RANGE 22 EAST, VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN.

AMENDMENT NO.1:

AMENDS ACCESS RIGHTS OF PARCEL 37 AND AMENDS EXISTING C/L IH-94 OF TRANSPORTATION PROJECT PLAT NO. 1030-11-20 - 4.09

AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 2221139

RELOCATION ORDER I-94 @ CTH "K" RACINE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

BASIS OF RIGHT-OF-WAY

HWY	BASIS OF EXIST R/W	YEAR	WIDTH
I-94/USH 41	DJ 2381	1935	VARIES
I-94/USH 41	DJ 2277	1934	VARIES
I-94/USH 41	I 101-1 (3)	1956	VARIES
CTH "K"	I 101-1 (3)	1956	VARIES
CTH "K"	BY STATUTE 82.81	----	66'
CTH "K"	2804-2-71	1972	VARIES

GENERAL NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, (ENGLISH), NAD 1983 (1997) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYP 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY WISCONSIN DOT SOUTHEAST REGION SURVEY.

I-94 ACCESS WAS PREVIOUSLY CONTROLLED PER PROJECT I 101-1 (3).

PLAT NOTE:

THE CONSULTANT WAS PROVIDED WITH THE EXISTING C/L IH-94 VIA DOT SE DISTRICT 05/2010

Y=204,838.38
X=594,167.13
CONC. MON. WITH ALUMINUM CAP

Y = 204,884.29
X = 591,516.97
CAST IRON MON. WITH BRASS CAP

SEE TPP PLAT 1030-11-20, SHEET 4.05

SEE TPP PLAT 1030-11-20, SHEET 4.06

SEE TPP PLAT 1030-11-20 AMENDMENT NO. 2, SHEET 4.02

Y=207,529.73
X=591,560.10
CAST IRON MON. WITH BRASS CAP

Y=207,494.35
X=594,205.28
CAST IRON MONUMENT WITH BRASS CAP

Y=207463.98
X=596619.24
CAST IRON MONUMENT WITH BRASS CAP

Y=204,806.96
X=596,601.71
CAST IRON MONUMENT WITH BRASS CAP

TPP SHEET LOCATION MAP

SCALE, FEET
0 100 200

PARCELS 37 & 42 DETAIL
NTS

SCHEDULE OF LANDS AND INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE TEMP. ACRES	PLE PERM. ACRES
36	PILOT TRAVEL CENTERS LLC	FEE,AR,TLE	0.51	0.00	0.51	0.89	0.00
37	HAROLD R. & CAROL J. DEBACK	FEE,AR,TLE	6.24	0.00	6.24	0.30	0.00
42	BFD ENTERPRISES A PARTNERSHIP	FEE,AR,TLE	2.01	0.00	2.01	0.19	0.00
--	---	---	---	---	---	---	---

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOC. 2219602 IN THE RACINE COUNTY REGISTER OF DEEDS.

I, TIMOTHY JOHNSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION-SOUTHEAST REGION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1030-11-20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

STATE OF WISCONSIN — TIMOTHY JOHNSON — NO. S-2156 — EAST TROY WIS. — REGISTERED LAND SURVEYOR

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity

DATE 7/5/10

TIMOTHY JOHNSON, RLS NUMBER S-2156

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

DATE 7-7-2010

D E Andersen

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1030-11-20 4.09

Vol 1 Pg 116
DOCUMENT # 2255375
RACINE COUNTY REGISTER OF DEEDS
July 13, 2010 4:34 PM
James A. Ladwig
JAMES A LADWIG
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: 425.00
Pages: 1

FILE NAME : F:\BM1-1644D CTH K\Survey\ck_040409_rp.dgn PLOT DATE : 05-JUL-2010 19:45 PLOT BY : kdew PLOT NAME : PLOT SCALE : 100:1

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE RACINE COUNTY REGISTER OF DEEDS.

CONST. 1030-11-70 CTH K R/W 1030-11-20 4.09

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
20	2043+47.67, 93.35'RT	RRSP S FACE WOOD POST	768.20

STA 2032+00
1 - 19"X30" SSPRCHE
1 - 19"X30" AEW REQ'D
1 - MARKERS CULVERT END

REMOVING SMALL PIPE CULVERT

STA 2034+00 LT
CONSTRUCT BASE AGG FE
1 - 24" CPCS REQ'D
2 - 24" CPCS AEW REQ'D

CAUTION

REMOVING FENCE
SEE FENCING PLAN

BEGIN PROJECT
I.D. 1030-11-74
STA 2030+25.00
MATCH PROJECT I.D. 1030-11-78

SWF SB PGL

SLOPE INTERCEPT

STA 2041+00
1 - 36" CPRC REQ'D
2 - 36" CPRC AEW REQ'D

MATCHLINE 2045+00

BM #20

STA 2044+00 RT
CONSTRUCT BASE AGG CE
1 - 30" CPRC REQ'D
2 - 30" CPRC AEW REQ'D

STORM WATER DETENTION POND
SEE CONSTRUCTION DETAIL

R/L WEST FRONTAGE ROAD

IH 94 SB

IH 94 NB

EAST FRONTAGE

WEST FRONTAGE ROAD

VCL 950'
K = 534

VCL 250'
K = 143

VCL 300'
K = 240

VPC STA 2030+25.00
VPC EL 748.82

BEGIN PROJECT ID 1030-11-74
STA 2030+25.00,
R/L WEST FRONTAGE ROAD
MATCH PROJECT ID 1030-11-78

VPI STA 2035+00.00
VPI EL 759.66

EXISTING GROUND AT
R/L W. FRONTAGE RD.

VPRC STA 2039+75.00
VPRC EL 762.03

VPT STA 2042+25.00
VPT EL 765.46

2.25%

VPI STA 2041+00.00
VPI EL 762.65

VPC STA 2044+50.00
VPC EL 770.52

FINISHED PROFILE GRADE
LINE AT R/L W. FRONTAGE RD.

STA 2032+00
1 - 19"X30" SSPRCHE
2 - 19"X30" AEW REQ'D
2 - MARKERS CULVERT END

STA 2032+00
1 - 19"X30" SSPRCHE
2 - 19"X30" AEW REQ'D
2 - MARKERS CULVERT END

EXCAVATION BELOW SUBGRADE

EXISTING PROFILE ELEVATIONS

FINISHED NB PROFILE ELEVATIONS

STA 2041+00
1- 36" CPRC
2-36" CPRC AEW

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN AND PROFILE: WEST FRONTAGE ROAD	SCALE, FEET 0 50 100	SHEET 143 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\050101_pp.dgn
PLOT DATE : 22-JUN-2012 09:11
PLOT BY : rmakoutz
PLOT SCALE : 100:1

WISDOT/CADDS SHEET 44

BEGIN CONSTRUCTION
STA 2052+00.00 SWF SB PGL=
STA 2052+00.00 24' RT
R/L WEST FRONTAGE ROAD

R/L WEST FRONTAGE ROAD

WEST FRONTAGE ROAD

TLE

2045 2046 2048 2050 2052 2054 2056 2058

MATCHLINE 2045+00

SLOPE INTERCEPT

STA 2051+02.31 RT
CONSTRUCT BASE AGG CE

REMOVE FENCE

STA 2051+69.42 RT
CONSTRUCT BASE AGG CE

R/L WEST FRONTAGE ROAD

NB PGL

BM #19

SWF SB PGL

REPAIRED BROKEN
6" DRAIN TILE
RUNNING ALONG
CTK K AT +/-30+80RT

END CONSTRUCTION
STA 2058+12.25 SWF SB PGL=
STA 2058+12.25, 32' RT
R/L WEST FRONTAGE RD.

STA 2057+08 LT,
CONSTRUCT ASPHALTIC PE

REMOVE ACCESS

END CONSTRUCTION
STA 2058+98.46 W. FRONTAGE RD.

REMOVING FENCE

REMOVING SMALL PIPE CULVERT

CAUTION

CTH K

CTH K WB PGL

R/L CTH K

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
19	2050+20.94, 97.94' LT	TOP OF POST 2' ABOVE GROUND	780.33

STA 34+41.62 R/L CTH K
1 - 18" CPCM REQ'D
2 - 18" AEW REQ'D

STA 34+86.74 R/L CTH K
1 - 18" CPCM REQ'D
2 - 18" AEW REQ'D

WEST FRONTAGE ROAD

VCL 300'
K = 240

VPI STA 2046+00.00
VPI EL 773.89

VPI STA 2047+50.00
VPI EL 775.39

FINISHED PROFILE GRADE
LINE AT R/L W. FRONTAGE RD.

1.00%

EXISTING GROUND AT
R/L W. FRONTAGE RD.

STA 2047+41
12" SSPRC

STA 2048+42.34
30" SSPRC

STA 2049+00
15" SSPRC

STA 2049+49.55
30" SSPRC

VPC STA 2052+75.00
VPC EL 780.62

VPI STA 2055+00.00
VPI EL 782.86

NB VCL 450'
K = 199

NB VCL 160'
K = 89

2.00%

END CONSTRUCTION
STA 2058+98.46
W. FRONTAGE ROAD

VPRC STA 2057+25.00
VPRC EL 780.01

VPI STA 2058+05.00
VPI EL 779.00

VPT STA 2058+85.00
VPT EL 779.43

VPI STA 2058+98.46
VPI EL 779.67

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

FINISHED SWF SB PGL ELEVATIONS

795 790 785 780 775 770 765 760

| | | |

WEST FRONTAGE ROAD SB PGL

BEGIN CONSTRUCTION
STA 2051+50.00 SWF SB PGL

SB VPI STA 2051+49.85
SB VPI EL 779.95
SB VPC STA 2051+72.89
SB VPC EL 779.97
VCL 80'
K = 88
SB VPI STA 2052+12.89
SB VPI EL 780.00
SB VPT STA 2052+52.89
SB VPT EL 780.40
SB VPC STA 2052+74.83
SB VPC EL 780.61
0.08%
0.99%
SB VPI STA 2054+99.92
SB VPI EL 782.85
VCL 450'
K = 200
SB PGL FINISHED PROFILE GRADE LINE
VCL 150'
K = 66
SB VPT STA 2057+25.00
SB VPT EL 780.01
SB VPC STA 2057+50.00
SB VPC EL 779.69
-1.26%
END CONSTRUCTION
STA 2058+12.25 SWF SB PGL
SB VPI STA 2058+12.25
SB VPI EL 778.75
SB VPI STA 2058+25.00
SB VPI EL 778.75

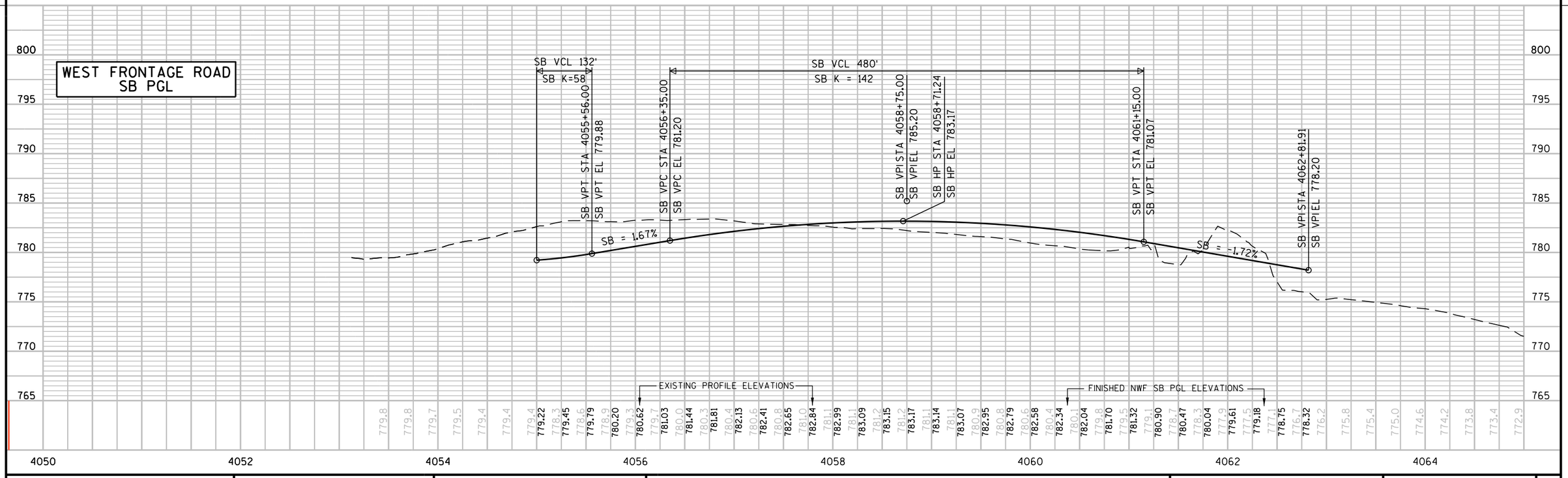
EXISTING GROUND AT R/L W. FRONTAGE RD.

EXISTING PROFILE ELEVATIONS

FINISHED SWF SB PGL ELEVATIONS

800 795 790 785 780 775 770 765

775.5 775.4 775.0 774.7 775.0 774.7 774.9 775.4 775.9 776.4 776.7 777.1 777.3 777.6 777.6 777.4 776.9 776.7 776.5 776.5 776.2 776.3 776.8 776.6 776.2 775.6 778.5 779.95 779.3 779.97 779.6 780.03 780.1 780.06 780.5 780.37 780.8 780.62 781.0 780.85 781.2 781.06 781.5 781.23 781.9 781.37 782.3 781.47 782.6 781.55 783.0 781.59 783.2 781.61 783.4 781.58 783.6 781.54 783.8 781.46 784.0 781.35 784.1 781.20 784.2 781.03 786.3 780.82 780.5 780.58 779.5 780.31 779.0 780.01 779.1 779.69 779.4 779.43 779.7 779.25 776.2 778.7 779.2 779.7



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PROFILES:	SCALE, FEET 0 50 100	SHEET 145	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\050103_pp.dgn PLOT DATE : 22-JUN-2012 09:11 PLOT BY : rmakoutz PLOT NAME : 050103_pp PLOT SCALE : 100:1

WISDOT/CADDS SHEET 40

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	4057+37.97, 134.55' RT	TOP OF POST 1' ABOVE GROUND	784.40

BEGIN CONSTRUCTION
STA 4054+93.87 NWF SB PGL =
STA 4054+93.87, 32' LT R/L W. FRONTAGE RD.=

STA 33+28.38 R/L CTH K=
STA 2059+23.60 BK=
STA 4053+12.38 AH
R/L WEST FRONTAGE RD.

STA 4053+51
1 - 18" CPCM REQ'D
2 - 18" AEW REQ'D

STA 4063+59.37 R/L W. FRONTAGE RD.=
STA 10+00.00 R/L FUHRMAN DR.

STA 4063+58 LT.
CONSTRUCT BASE AGG FE
1-18" CPCS REQ'D
2-18" CPCS AEW REQ'D

END CONSTRUCTION SB
STA 4062+81.91 NWF SB PGL=
STA 4062+69.57 R/L W. FRONTAGE RD.

BM #14

WEST FRONTAGE ROAD

FUHRMAN DRIVE

R/L CTH K

R/L WEST FRONTAGE ROAD

R/L FUHRMAN DRIVE

NWF SB PGL

NB PGL

SLOPE INTERCEPT

WETLAND BOUNDARY (TYP)

REMOVE ACCESS

CAUTION

MATCHLINE 4065+00

BEGIN CONSTRUCTION
STA 2059+20.68 R/L W. FRONTAGE RD.

STA 2059+23.60 BK=
STA 4053+12.38 AH
STA 4053+51
1-18" CPCM
2-18" AEW

VCL 50'
K = 30

VPI STA 4053+12.38
VPI EL 779.68

VPC STA 4053+50.00
VPC EL 779.77

VPI STA 4053+75.00
VPI EL 779.93

LP STA 4054+67.47
LP EL 779.35

-0.99%
-0.64%

STA 4053+21.46 AH
VPI STA 4053+21.46
VPI EL 779.59

HP STA 4053+69.55
HP EL 779.84

VPRC STA 4054+00.00
VPRC EL 779.68

EXCAVATION BELOW SUBGRADE

VPI STA 4054+90.00
VPI EL 778.78

VPRC STA 4055+80.00
VPRC EL 780.28

BEGIN CONSTRUCTION
STA 4054+93.87 NWF SB PGL

VCL 180'
K = 67

VPI STA 4058+60.00
VPI EL 784.95

EXISTING GROUND AT R/L W. FRONTAGE RD.

FINISHED PROFILE GRADE LINE AT R/L W. FRONTAGE RD.

FINISHED PROFILE GRADE LINE AT NWF SB PGL

STA 4057+00
12" SSPRC

STA 4060+47
12" SSPRC

HP STA 4058+61.62
HP EL 782.63

VPT STA 4061+40.00
VPT EL 780.34

VCL 560'
K = 169

-1.65%

END CONSTRUCTION SB
STA 4062+81.91 SB PGL=
STA 4062+69.57 R/L W. FRONTAGE RD.

WEST FRONTAGE ROAD

FINISHED PROFILE ELEVATIONS
779.68 779.61 779.77 779.83 779.68 779.48 779.37 779.35 779.42 779.59 779.85 780.20 780.61 780.98 781.31 781.60 781.86 782.08 782.26 782.41 782.52 782.59 782.63 782.63 782.59 782.51 782.40 782.25 782.07 781.84 781.58 781.29 780.95 780.58 780.17 779.76 779.35 778.94 778.53 778.11 777.70 777.29 776.88 776.46 776.05 775.64 775.23 774.82 774.40

EXISTING PROFILE ELEVATIONS
779.8 779.8 779.7 779.5 779.4 779.4 779.4 778.6 778.9 779.3 779.7 780.0 780.3 780.4 780.6 780.8 781.0 781.1 781.1 781.2 781.2 781.1 781.1 780.9 780.8 780.6 780.4 780.1 779.8 779.5 779.1 778.7 778.3 777.9 777.5 777.1 776.7 776.2 775.8 775.4 775.0 774.6 774.2 773.8 773.4 772.9

FINISHED NWF SB PGL ELEVATIONS

795 790 785 780 775 770 765 760

4050 4052 4054 4056 4058 4060 4062 4064

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN AND PROFILE: WEST FRONTAGE ROAD	SCALE, FEET 0 50 100	SHEET 146 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\050104_pp.dgn
PLOT DATE : 22-JUN-2012 09:11
PLOT BY : rmakoutz
PLOT SCALE : 100:1

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	4076+71.65, 47.37' RT	MAG NAIL W END 12" PCP	754.58

MATCHLINE 4065+00

MATCHLINE 4080+00

R/W

R/L WEST FRONTAGE ROAD

WEST FRONTAGE ROAD

TLE

WETLAND BOUNDARY (TYP)

STA 4071+50
1 - 36" CPRC REQ'D
2 - 36" CPRC AEW REQ'D

SLOPE INTERCEPT

REMOVING SMALL CULVERT PIPE

OBLITERATE EXISTING FRONTAGE ROAD. SEE TRAFFIC CONTROL STAGE 2 FOR LIMITS

REMOVE CURB AND GUTTER

REMOVE FENCE

BM #9

IH 94 SB

IH 94 NB

R/L IH 94

1072NW

1074NW

1076NE

5078

FINISHED PROFILE GRADE LINE AT R/L W. FRONTAGE RD.

-1.65%

VPC STA 4071+50.00
VPC EL 763.69

VCL 400'
K = 186

LP STA 4074+56.39
LP EL 761.16

VPT STA 4075+50.00
VPT EL 761.40

0.50%

EXCAVATION BELOW SUBGRADE

EXISTING GROUND AT R/L W. FRONTAGE RD.

STA 4071+50
1 - 36" CPRC REQ'D
2 - 36" CPRC AEW REQ'D

VPI STA 4073+50.00
VPI EL 760.39

STA 4073+95.28
36" SSPRC

STA 4076+25.00
24" SSPRC

STA 4080+00.00
12" SSPRC

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

4066	4068	4070	4072	4074	4076	4078	4080
774.40	773.99	773.58	773.17	772.76	772.34	771.93	771.52
771.11	770.69	770.28	769.87	769.46	769.05	768.63	768.22
767.81	767.40	766.99	766.57	766.16	765.75	765.34	764.93
764.51	764.10	763.69	763.29	762.93	762.60	762.31	762.05
761.82	761.63	761.47	761.34	761.25	761.19	761.16	761.17
761.21	761.29	761.40	761.52	761.65	761.78	761.90	762.03
762.15	762.28	762.41	762.53	762.66	762.78	762.91	763.04
763.16	763.29	763.41	763.54	763.67			

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN AND PROFILE: WEST FRONTAGE ROAD	SCALE, FEET 0 50 100	SHEET 147 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\050105_pp.dgn PLOT DATE : 22-JUN-2012 09:11 PLOT BY : rmakoutz PLOT SCALE : 100:1

WISDOT/CADDS SHEET 44

WETLAND BOUNDARY (TYP)

STA 4082+02 LT,
CONSTRUCT BASE AGG PE
1 - 36" CPRC REQ'D
2 - 36" CPRC AEW REQ'D

STA 4082+86 LT,
CONSTRUCT BASE AGG PE
1 - 19X30" CPRCHE REQ'D
2 - 30" CPRCHE AEW REQ'D

STA 4084+31 LT
CONSTRUCT BASE AGG PE
1 - 19X30" CPRCHE REQ'D
2 - 30" CPRCHE AEW REQ'D

END PROJECT ID 1030-11-74
STA 4085+50.00
MATCH PROJECT I.D. 1030-25-78

BM #8

TLE

R/W

REMOVE SMALL CULVERT PIPE

REMOVE SMALL CULVERT PIPE

REMOVE SMALL CULVERT PIPE

MATCHLINE 4080+00

4082

4084

WEST FRONTAGE ROAD

R/L WEST FRONTAGE ROAD

REMOVE FENCE

SLOPE INTERCEPT

IH 94 SB

R/L IH 94

IH 94 NB

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
8	4086+67.38, 74.91'LT	RRSP E FACE PP #66T6599	768.69

VCL 300'
K = 648

VPC STA 4082+50.00
VPC EL 764.92

END PROJECT ID 1030-11-74
STA 4085+50.00,
R/L WEST FRONTAGE ROAD
MATCH PROJECT ID 1030-25-78

FINISHED PROFILE GRADE LINE AT R/L W. FRONTAGE RD.

0.50%

EXISTING GROUND AT R/L W. FRONTAGE RD.

STA 4080+00.00
12" SSPRC

STA 4081+92.42
48" SSPRC

VPI STA 4084+00.00
VPI EL 765.68

VPT STA 4085+50.00
VPT EL 767.13

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

| | | |

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
11	17+08.39, 205.20' LT	RRSP NE FACE PP #E60-11862	781.36

WEST FRONTAGE ROAD

R/L WEST FRONTAGE ROAD

OMEGA INVESTMENTS INC

STA 10+59
1 - 24" CPRC REQ'D
2 - 24" CPRC AEW REQ'D

FUHRMAN DRIVE

R/L FUHRMAN DRIVE

SLOPE INTERCEPT

SLOPE INTERCEPT

BEGIN CONSTRUCTION
STA 10+00.00 FUHRMAN DRIVE=
STA 4063+59.37 W. FRONTAGE RD.

END CONSTRUCTION
STA 18+55.55 FUHRMAN DRIVE

OMEGA INVESTMENTS INC

OMEGA INVESTMENTS INC

MARITA

BM #11

SEPTIC VENT TO REMAIN

REMOVE SMALL PIPE CULVERT

STA 18+31 LT, CONSTRUCT PE

REMOVE ACCESS

STA 18+40 RT, CONSTRUCT PE

REMOVE SMALL PIPE CULVERT

ZIMMERMAN

HWY L LLC

HRIBAR

REMOVE ACCESS

R/L CTH K EB

REMOVE ACCESS

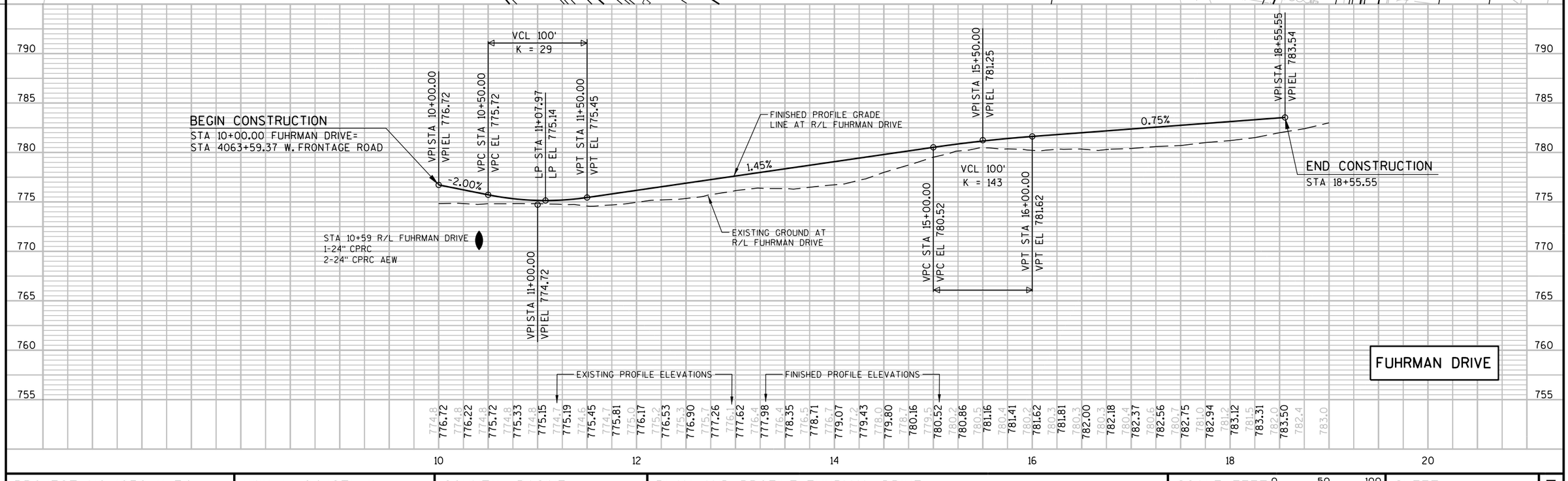
KING

CTH K

1056 VW

5

5

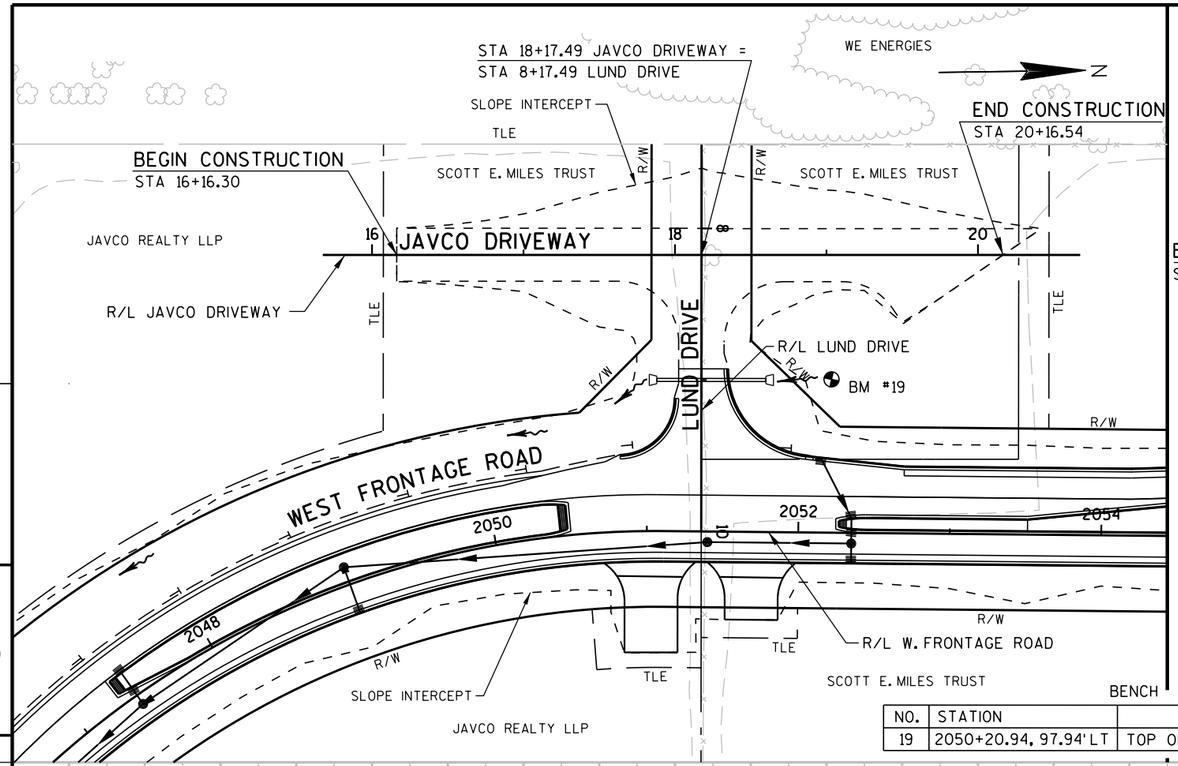


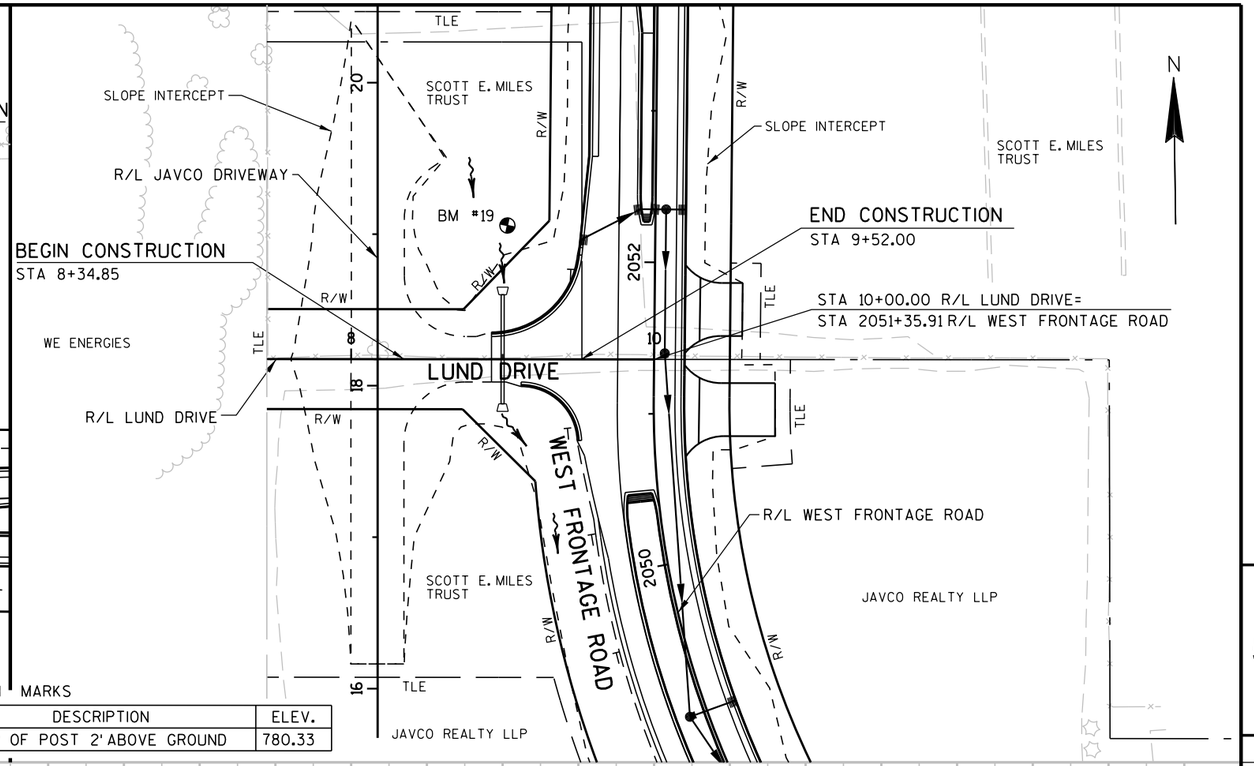
FUHRMAN DRIVE

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN AND PROFILE: FUHRMAN DRIVE	SCALE, FEET 0 50 100	SHEET 149	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\050107_pp.dgn PLOT DATE : 22-JUN-2012 09:11 PLOT BY : rmakoutz PLOT SCALE : 100:1

WISDOT/CADDS SHEET 44



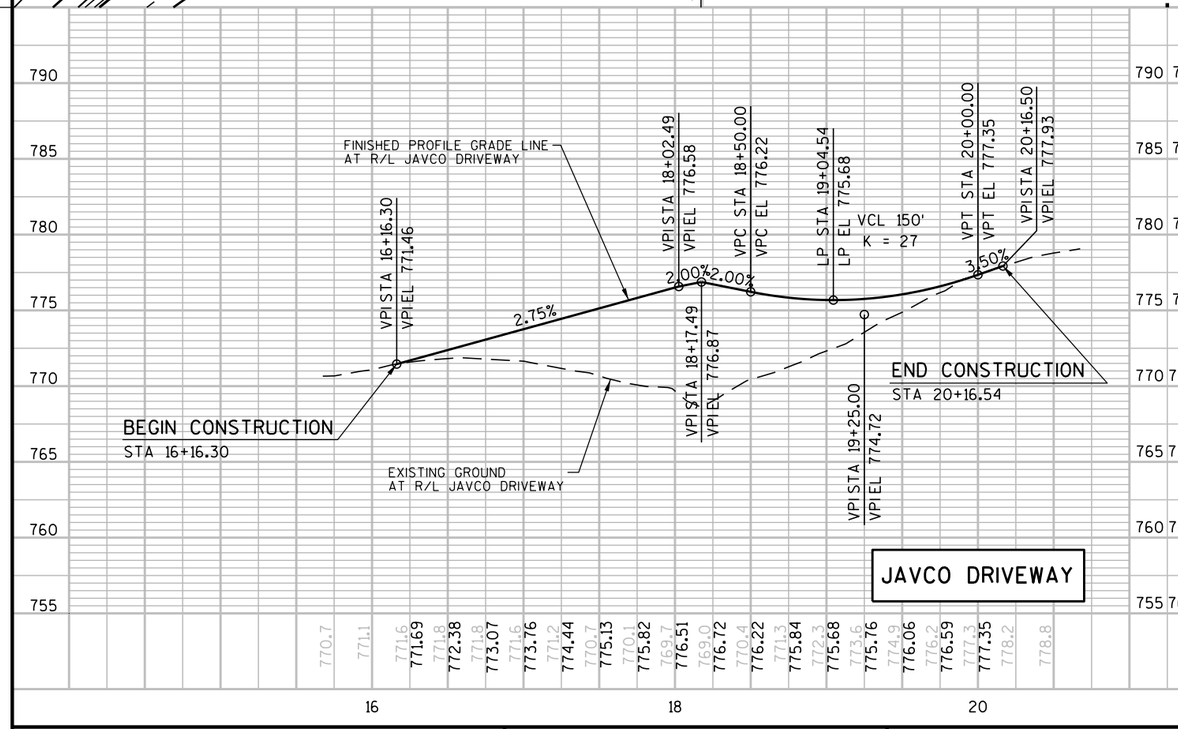


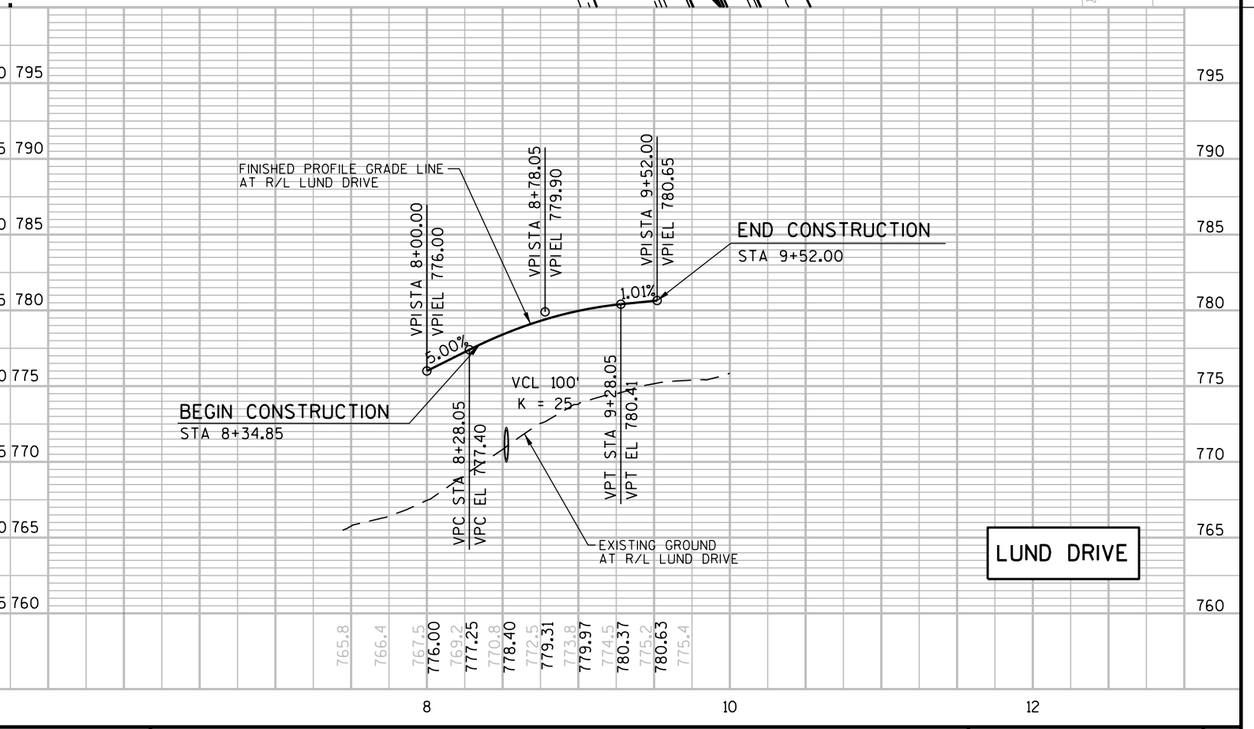
5

5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
19	2050+20.94, 97.94'LT	TOP OF POST 2' ABOVE GROUND	780.33



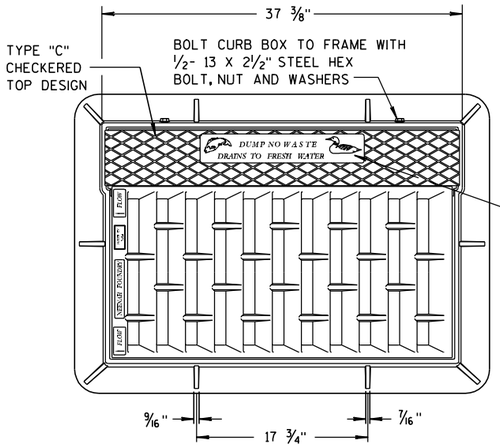


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PLAN AND PROFILE: JAVCO DRIVEWAY/LUND DRIVE	SHEET 150	E

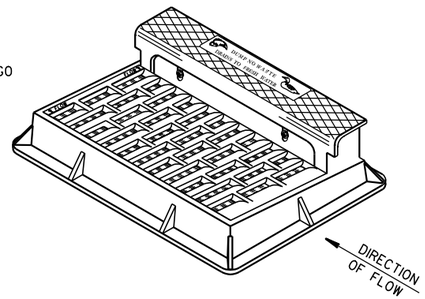
Standard Detail Drawing List

08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-06	JOINT TIES FOR CONCRETE PIPE
08F07-03	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SIDE DRAINS SLOPED SECTION
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B02-07	CONDUIT
09B04-09	PULL BOX
10A01-02	ELECTRICAL HANDHOLE WIRING
10A05-02	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
11B02-02	CONCRETE MEDIAN NOSE
13C01-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-10A	RURAL DOWELED CONCRETE PAVEMENT
13C11-10B	RURAL DOWELED CONCRETE PAVEMENT
13C16-01	CONCRETE JOINT DETAIL FOR TEE INTERSECTION BYPASS LANE AND RIGHT TURN LANE
13C18-01A	CONCRETE PAVEMENT JOINTING
13C18-01B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-01C	CONCRETE PAVEMENT JOINT TIES
13C18-01D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A02-07	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15A03-01	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C26-02	END-OF-ROADWAY SIGNING
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D16-01	TRAFFIC CONTROL, EXIT RAMP CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

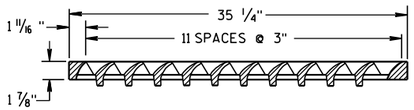
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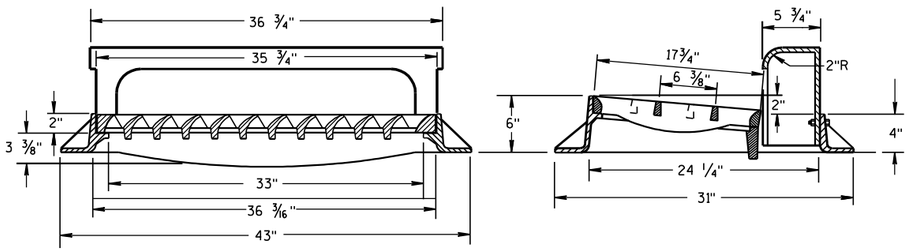


NOTE:
GRATE IS REVERSIBLE.



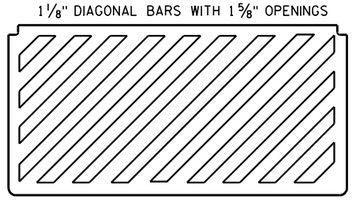
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

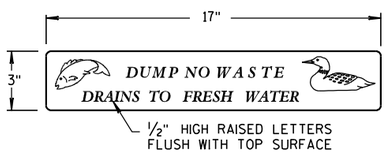
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

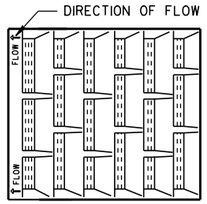
GENERAL NOTES

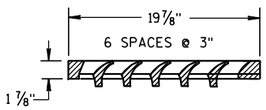
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

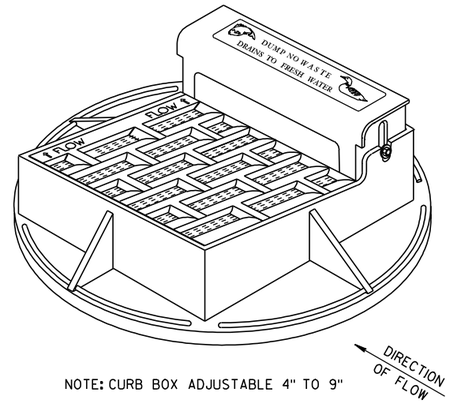
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

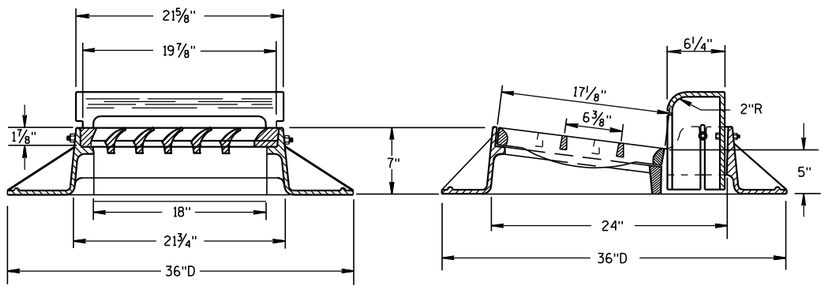
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





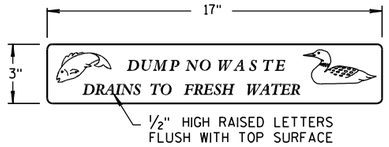


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



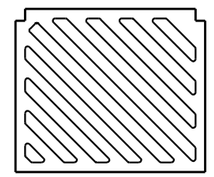
TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

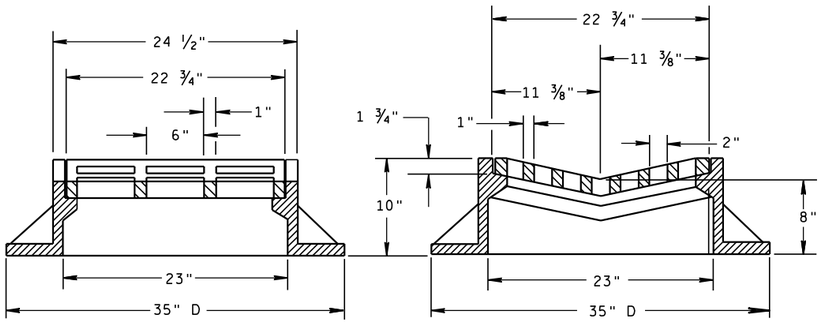
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

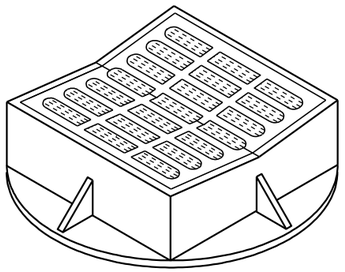
INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 8 A 5-18a

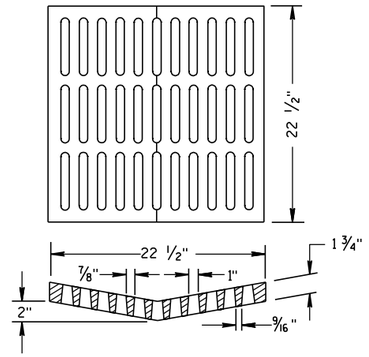




TYPE "B"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME..... 294 LBS.
GRATE..... 111 LBS.

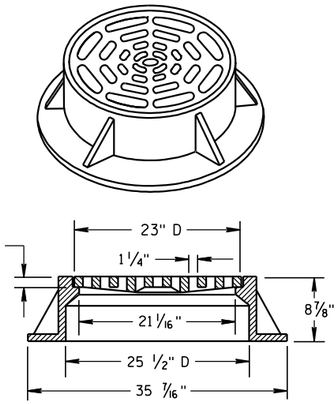


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 134 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 259 LBS.)

FRAME..... 152 LBS.
GRATE..... 107 LBS.

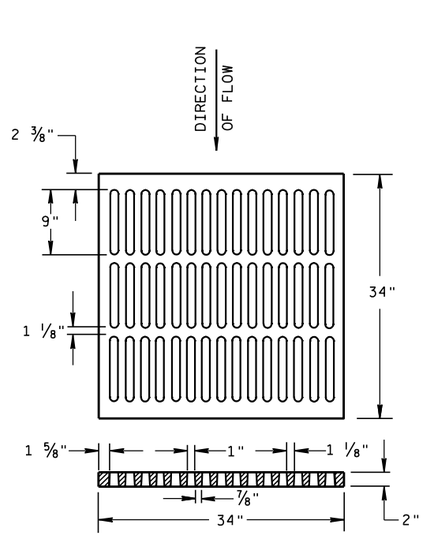
GENERAL NOTES

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.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

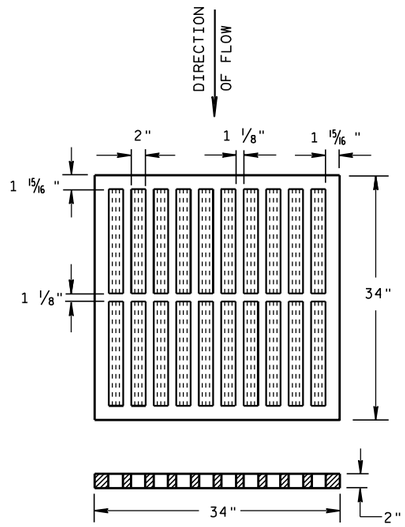


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

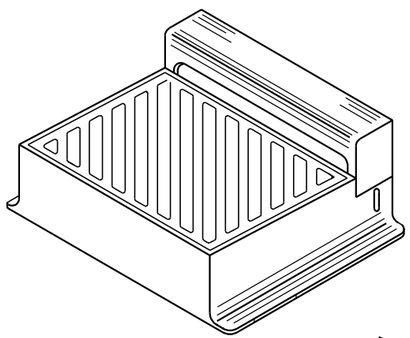


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

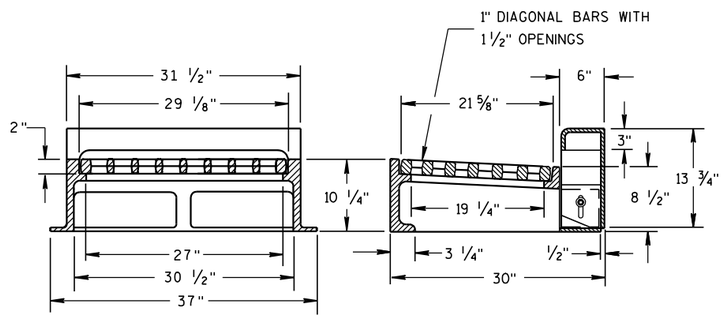
USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

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"

(APPROXIMATE WEIGHT 648 LBS.)

FRAME..... 355 LBS.
GRATE..... 156 LBS.
CURB BOX..... 137 LBS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER

153

ENT

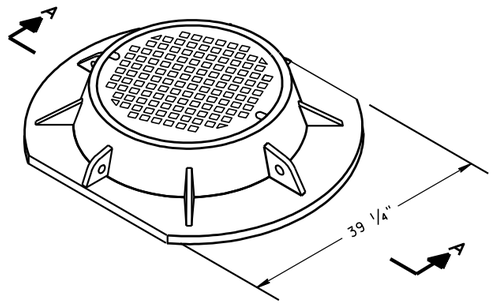
FHWA

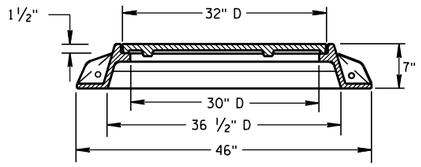
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S.D.D. 8 A 5-18b

6

S.D.D. 8 A 5-18b



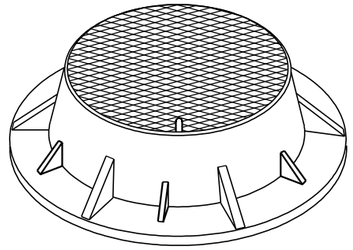


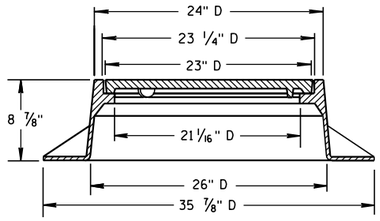
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.

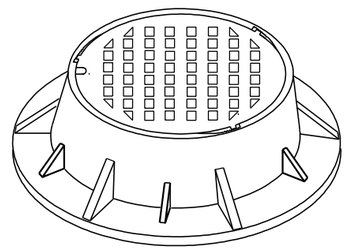


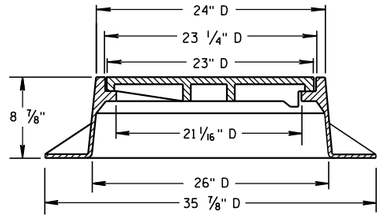


TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

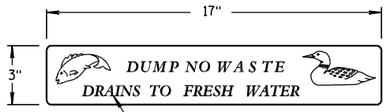
GENERAL NOTES

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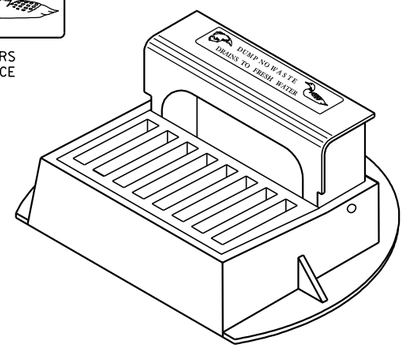
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

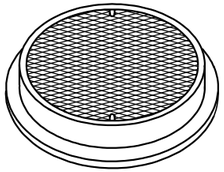
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

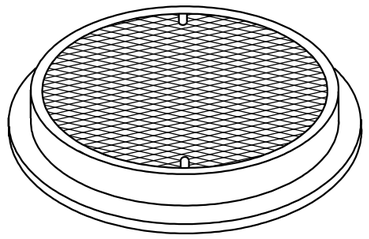
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

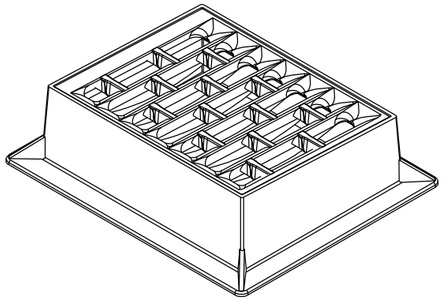


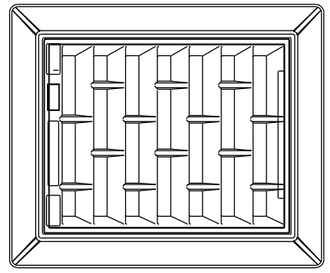
LOGO DETAIL

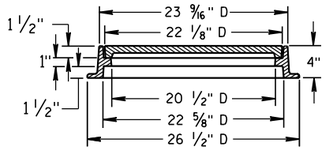








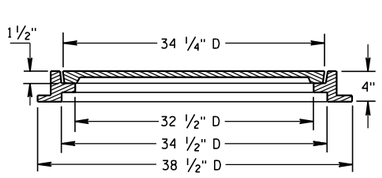




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

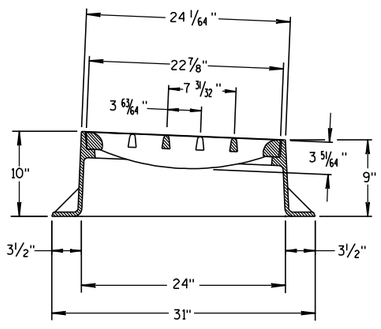
FRAME.....81 LBS.
LID.....77 LBS.

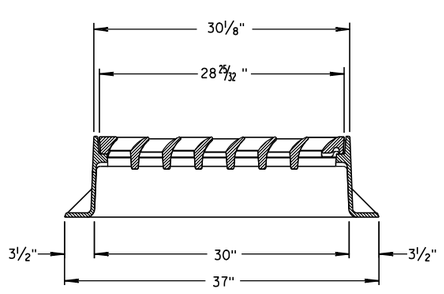


TYPE "M"

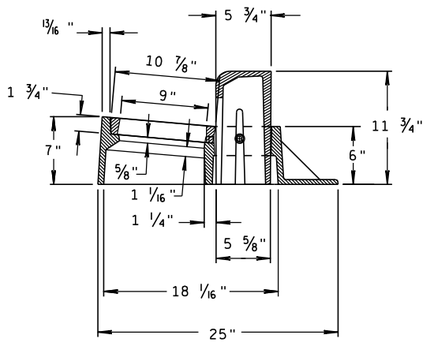
(APPROXIMATE WEIGHT 377 LBS.)

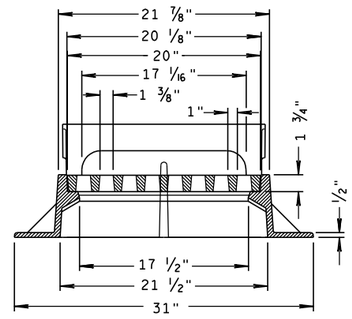
FRAME..... 125 LBS.
LID..... 252 LBS.





INLET COVER TYPE "BW"





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

FRAME.....206 LBS.
GRATE..... 46 LBS.
CURB BOX..... 92 LBS.

INLET COVERS, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

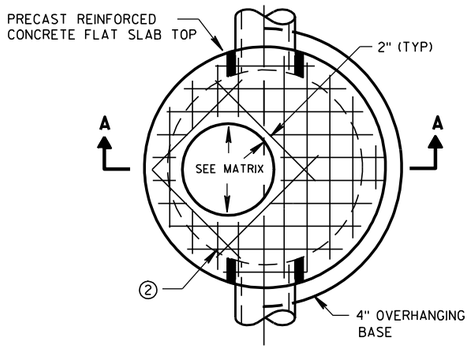
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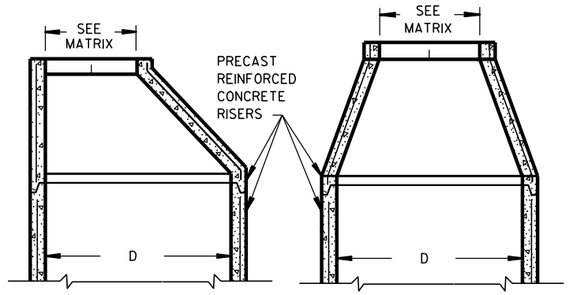
S.D.D. 8 A 5-18d

6

S.D.D. 8 A 5-18d

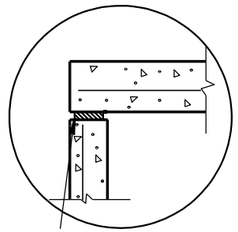


PLAN VIEW CIRCULAR OPENING



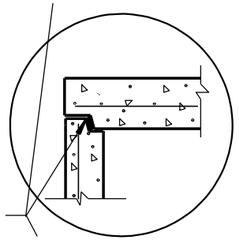
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

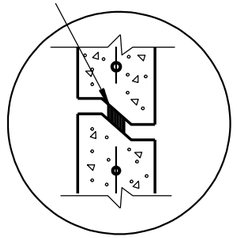


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

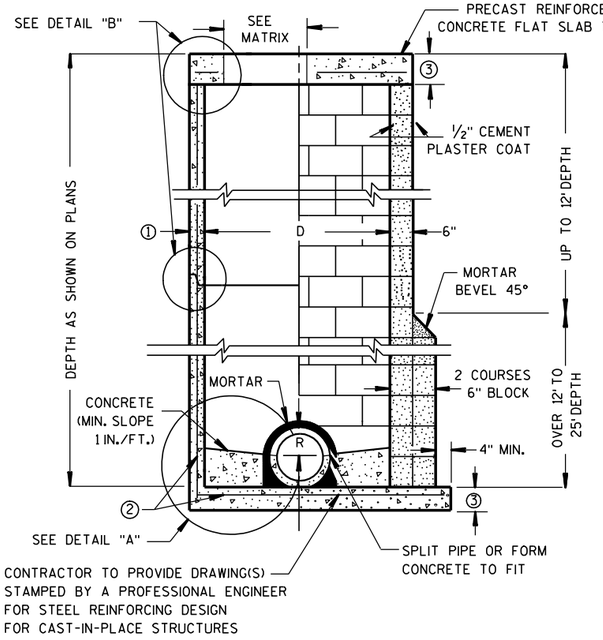


TOP WITH TONGUE AND GROOVE JOINT



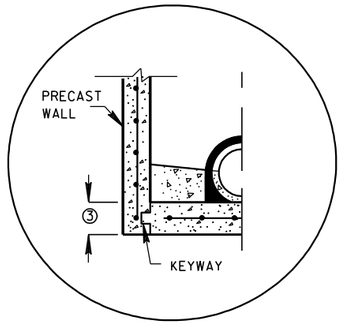
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

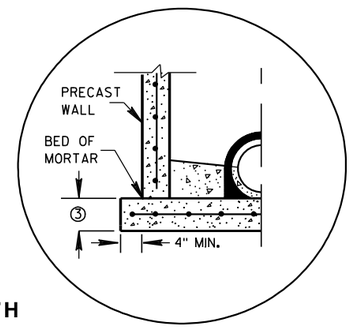


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

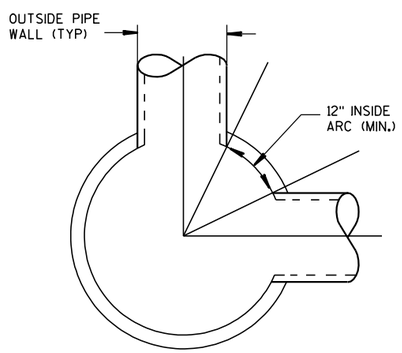


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

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

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

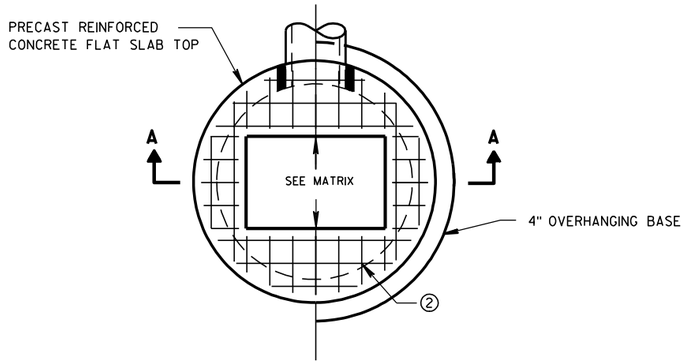
APPROVED

6/5/2012
DATE

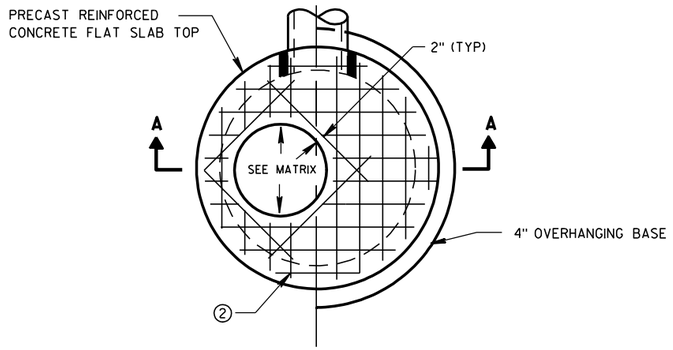
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

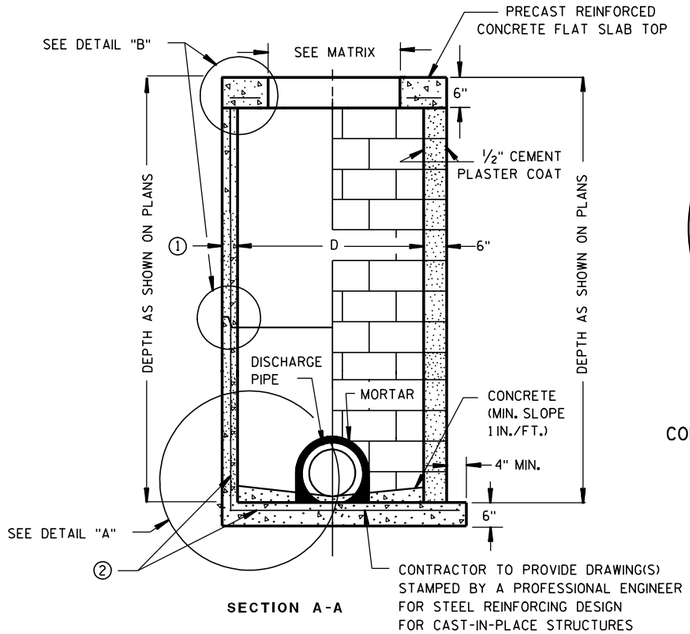
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

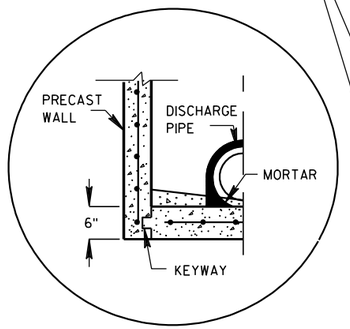


SECTION A-A

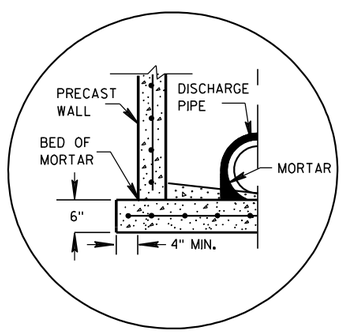
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

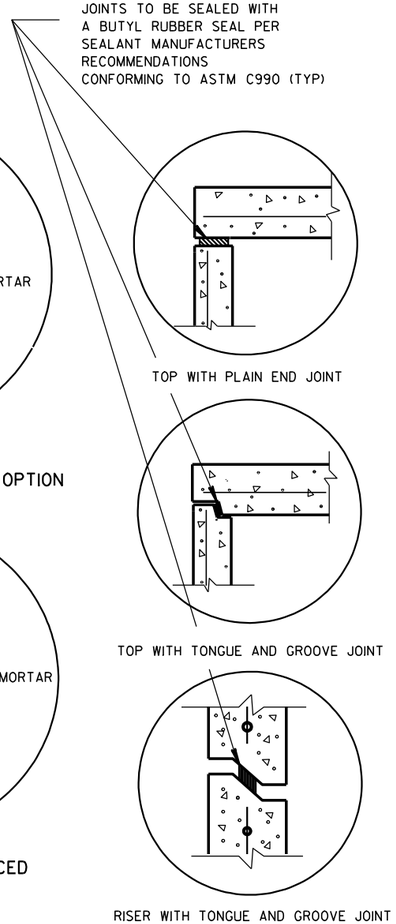


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "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.

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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.

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

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

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

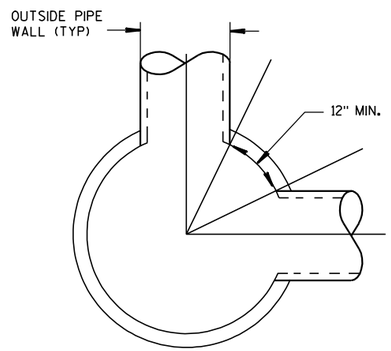
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① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

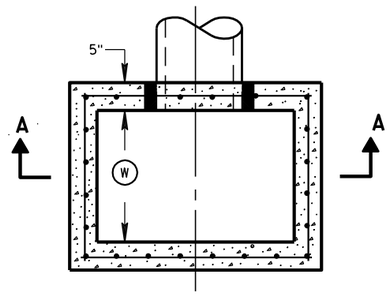
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

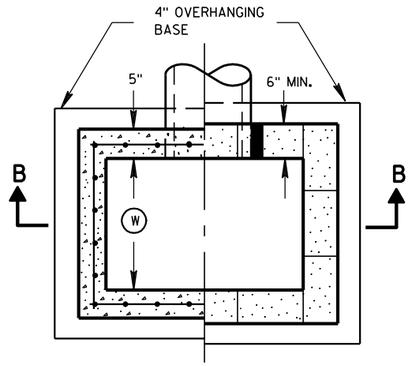
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

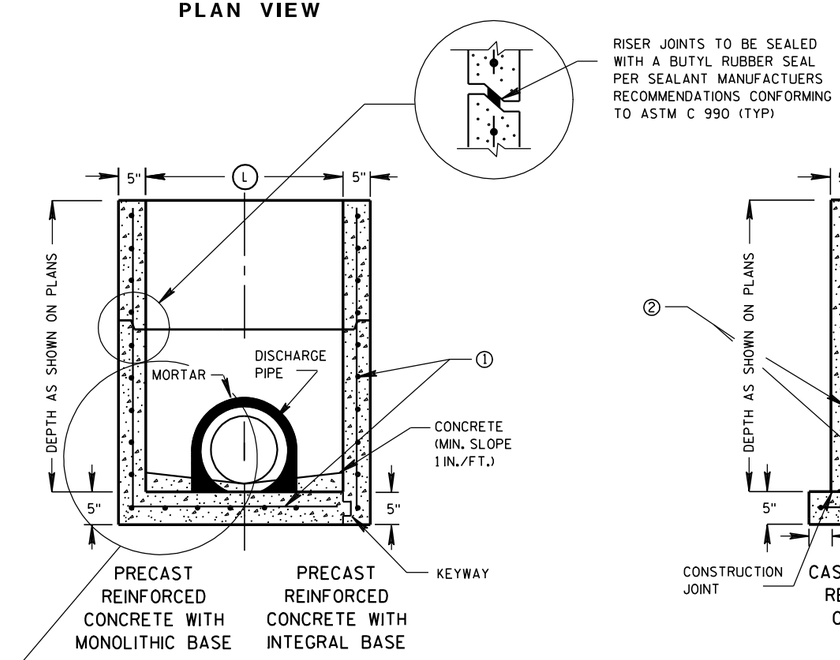
INLETS 3-FT AND 4-FT DIAMETER



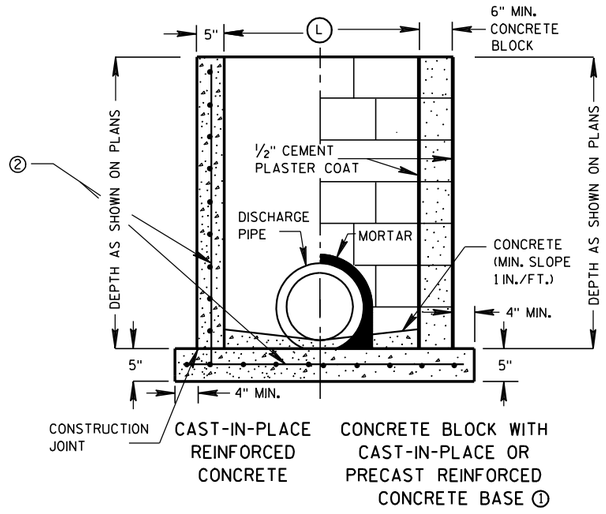
PLAN VIEW



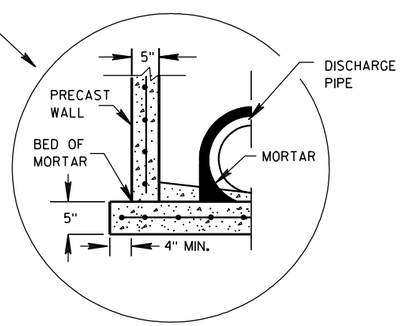
PLAN VIEW



SECTION A-A



SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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ALL PRECAST INLET 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 SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH 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.

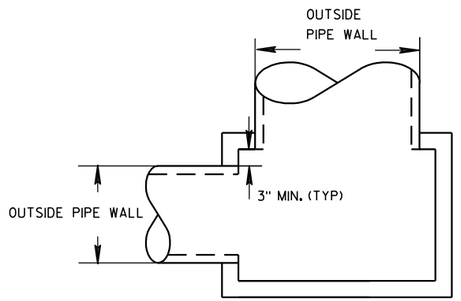
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

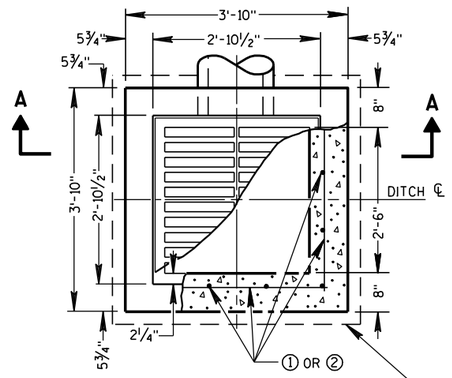
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS D ENGINEER
FHWA

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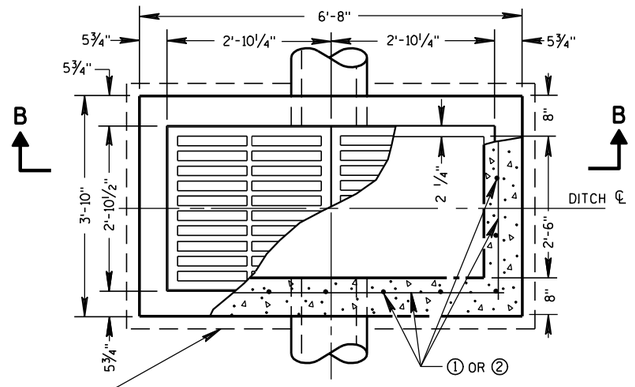
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S.D.D. 8 C 7-1

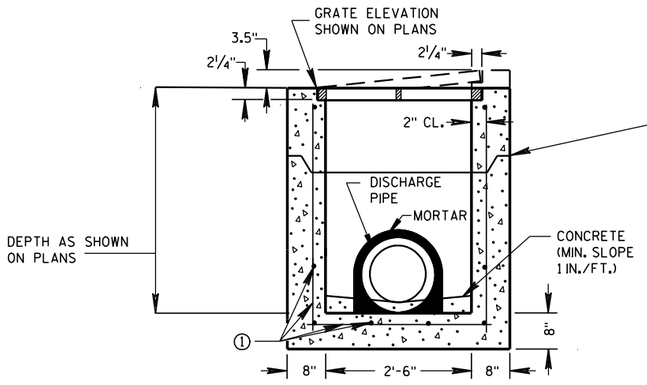


PLAN VIEW

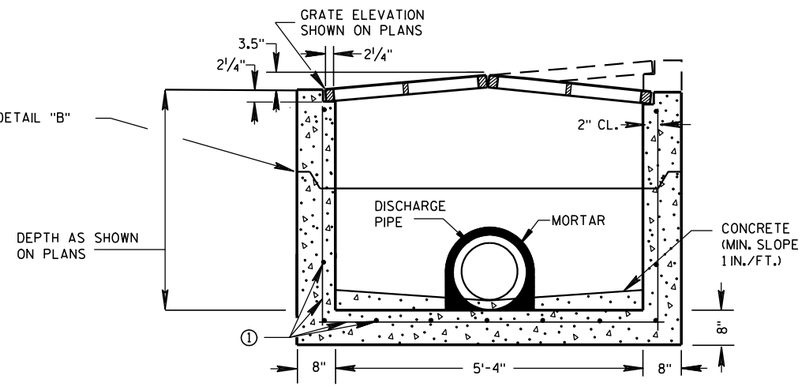


PLAN VIEW

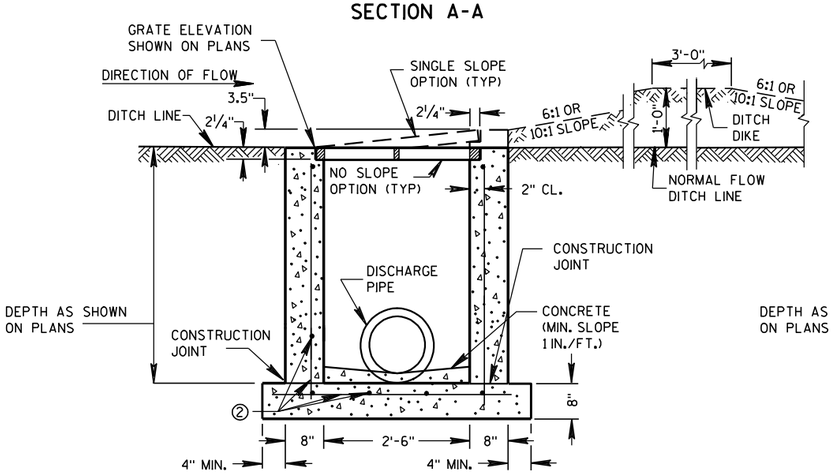
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



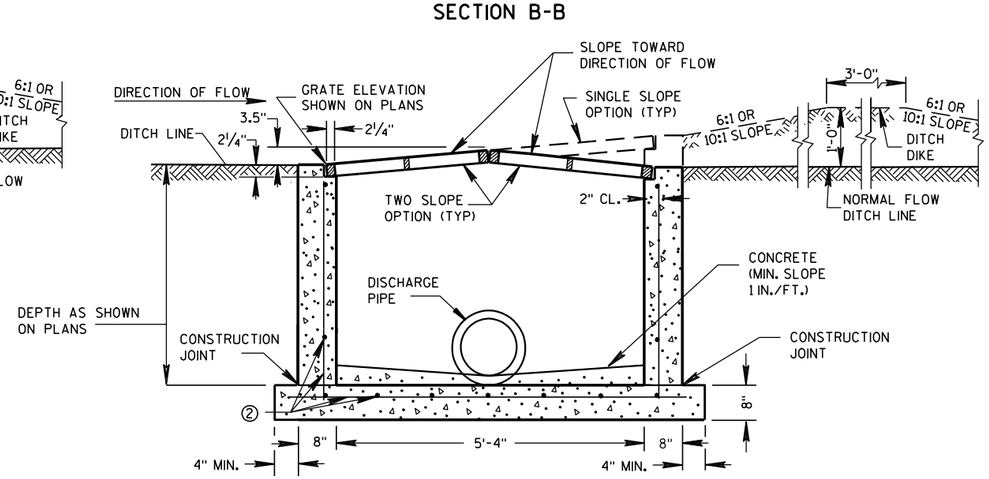
PRECAST REINFORCED CONCRETE SECTION A-A



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

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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.

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

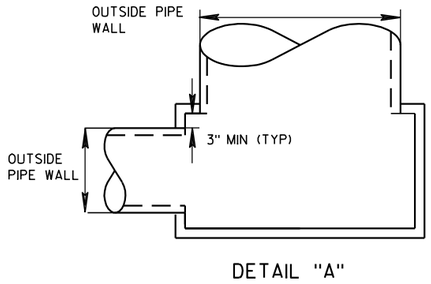
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

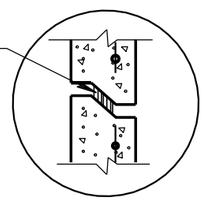
PIPE MATRIX

	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)



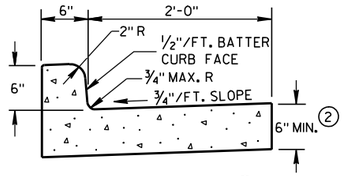
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

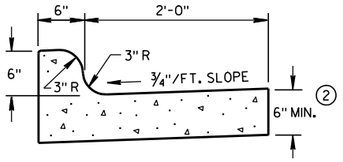
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

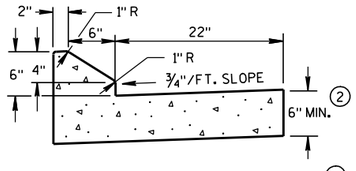
6
S.D.D. 8 C 8-1



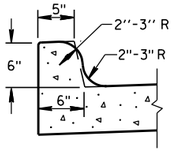
TYPES A & D (1)



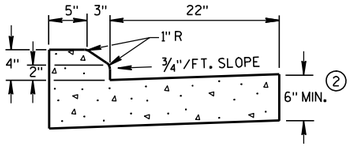
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

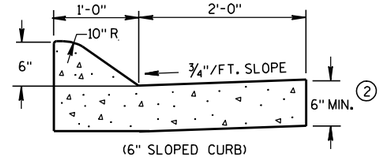


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

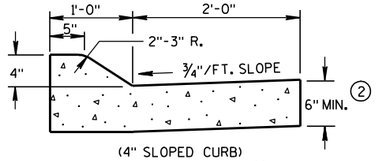


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

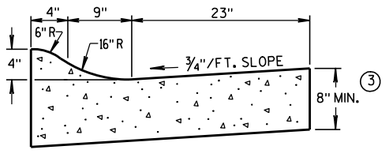


(6" SLOPED CURB)



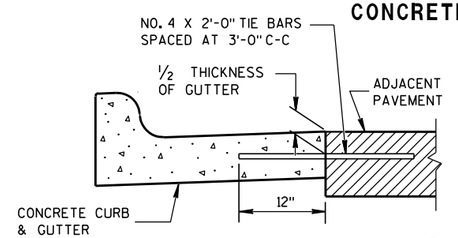
(4" SLOPED CURB)

TYPES A & D (1)

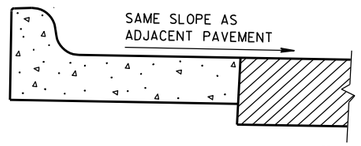


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



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

GENERAL NOTES

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

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

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

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

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

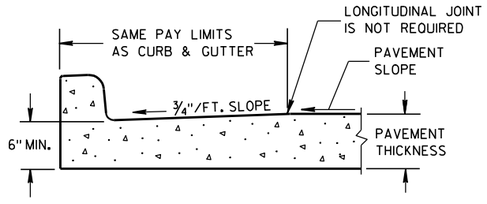
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

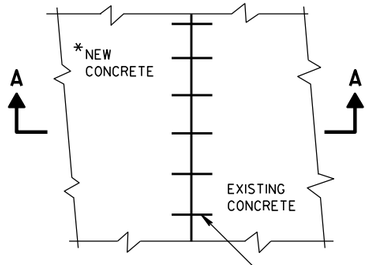
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

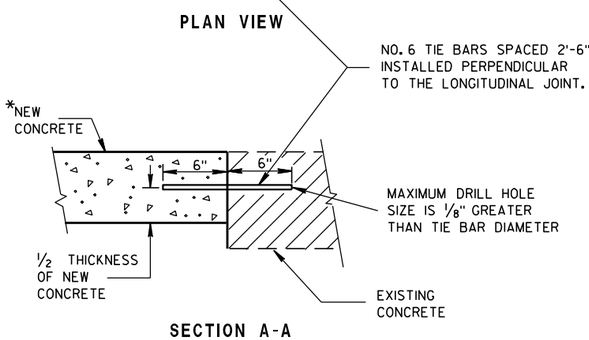


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



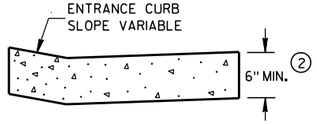
PLAN VIEW

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

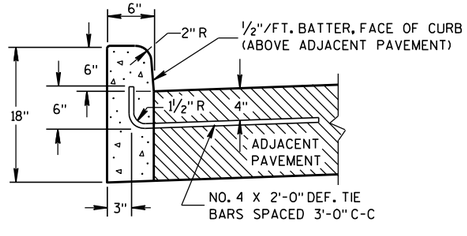


SECTION A-A

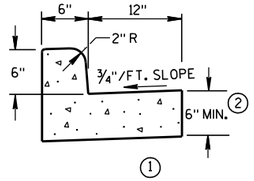
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

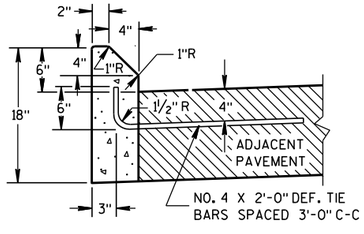


(1) TYPES A & D

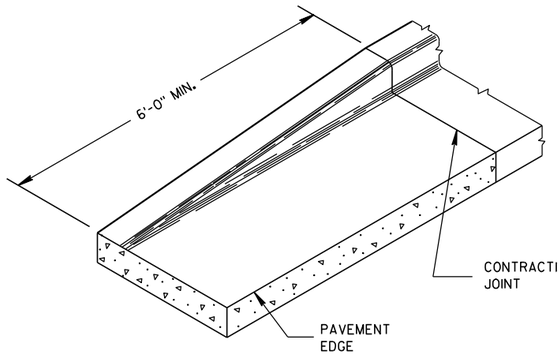


(1) TYPES A & D

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

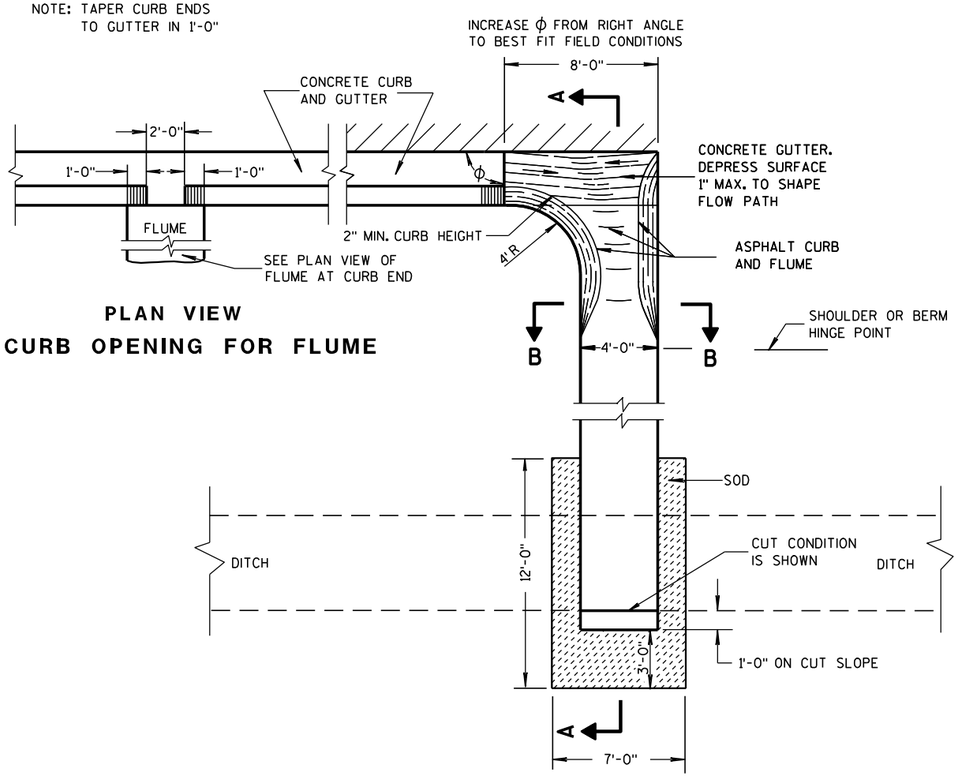
APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA ENT

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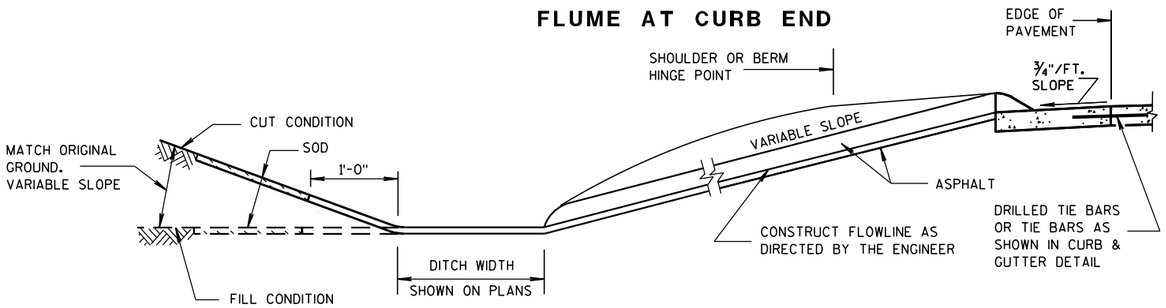
S.D.D. 8 D 1-17

ASPHALTIC FLUME

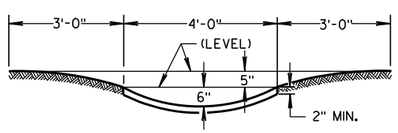


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

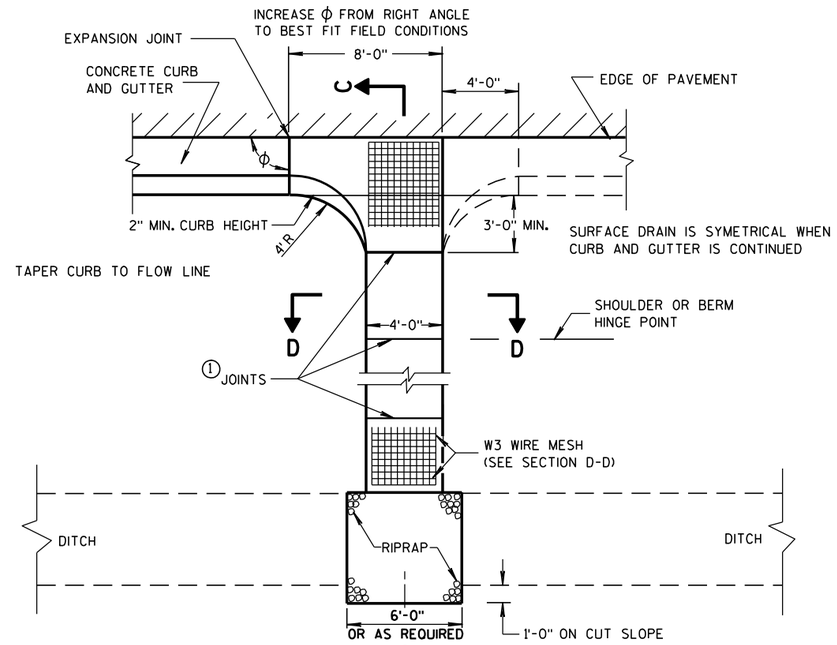
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

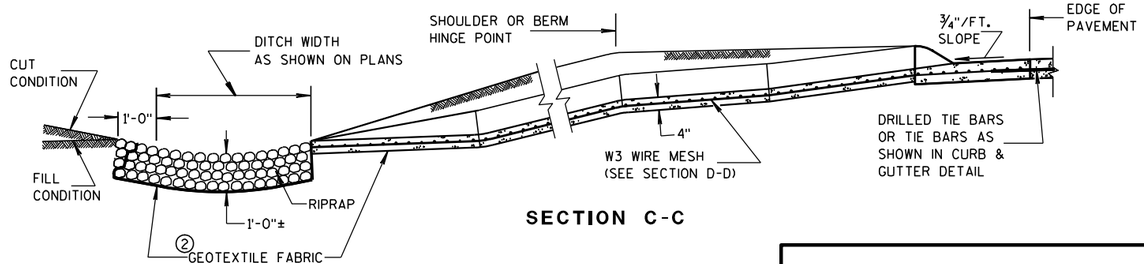
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

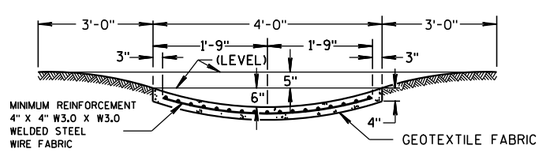
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08 DATE — /S/ Jerry H. ... ROADWAY STANDARDS ENGINEER — MENT

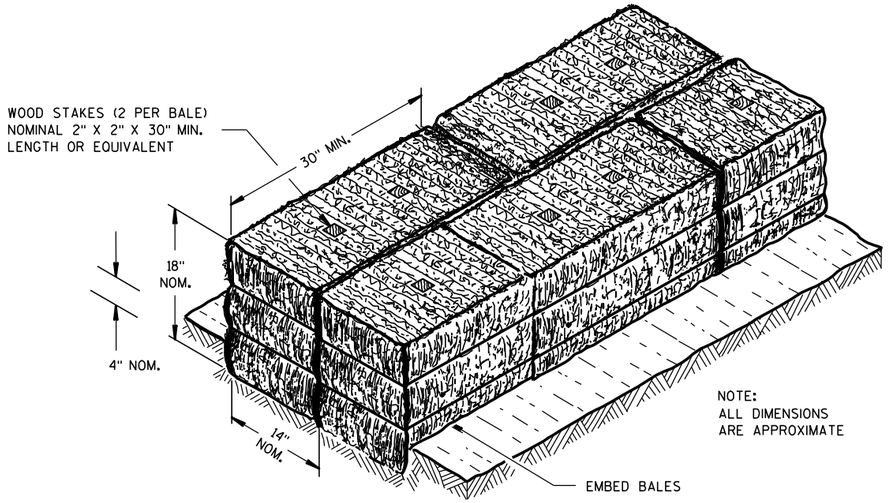
FHWA

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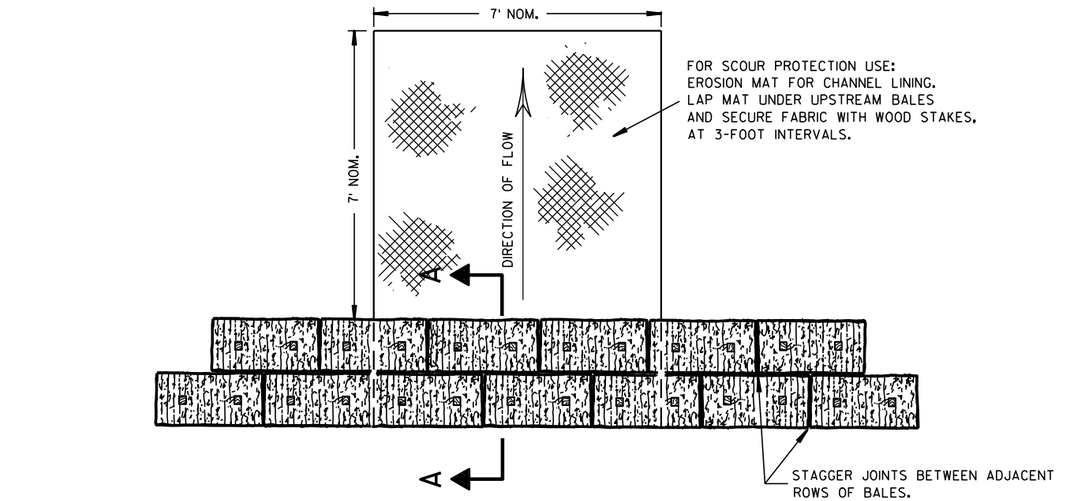
S.D.D. 8 D 4-5

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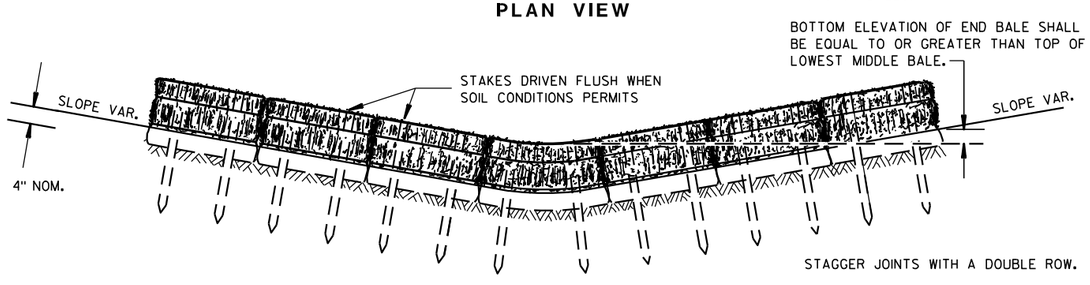
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



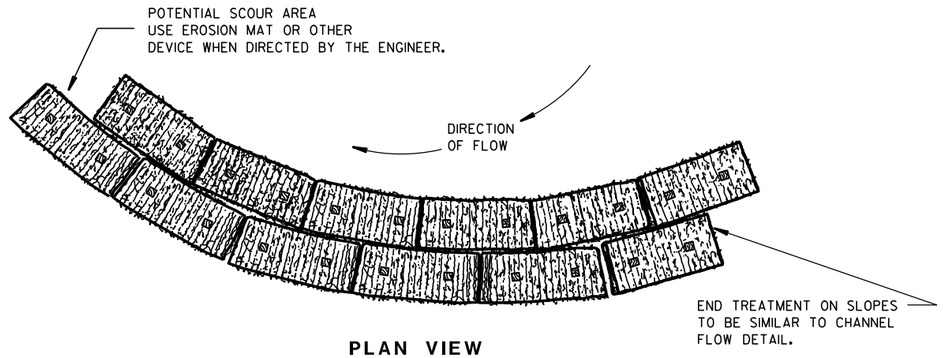
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

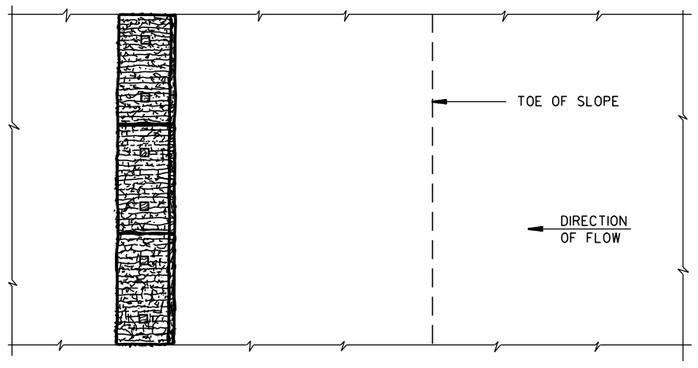
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

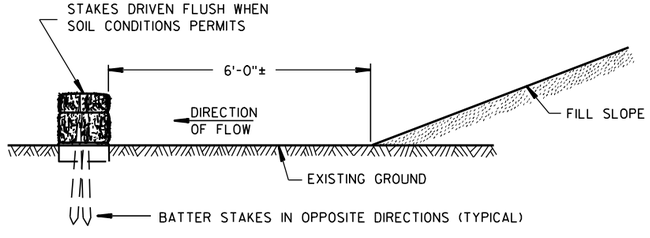


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

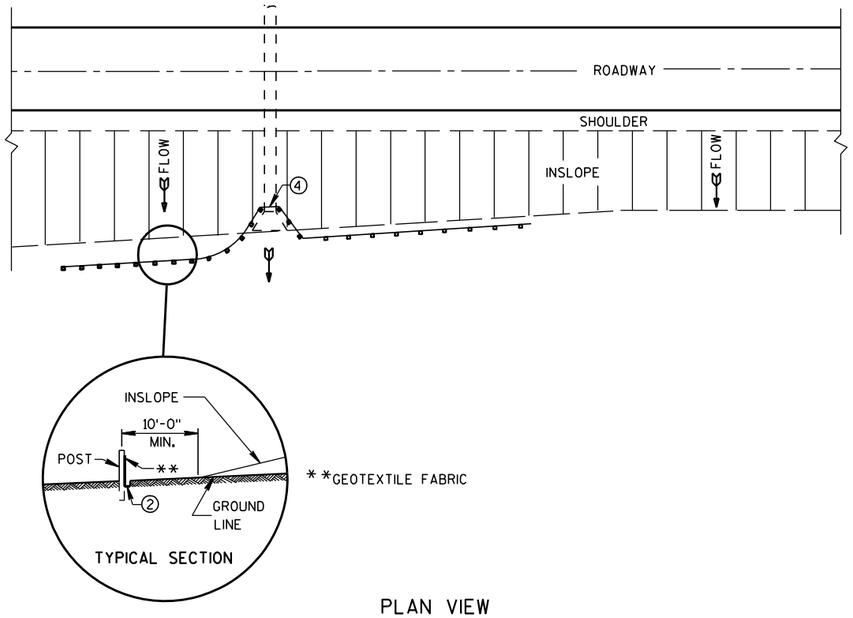
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

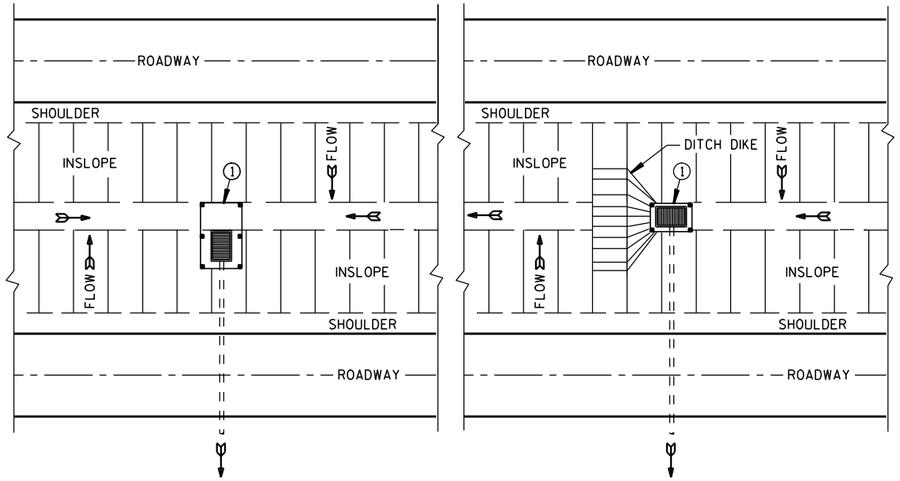
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S.D.D. 8 E 8-3



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.

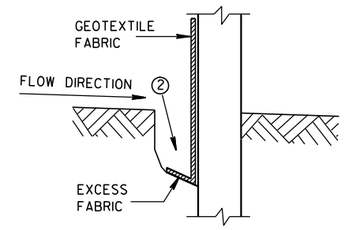
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

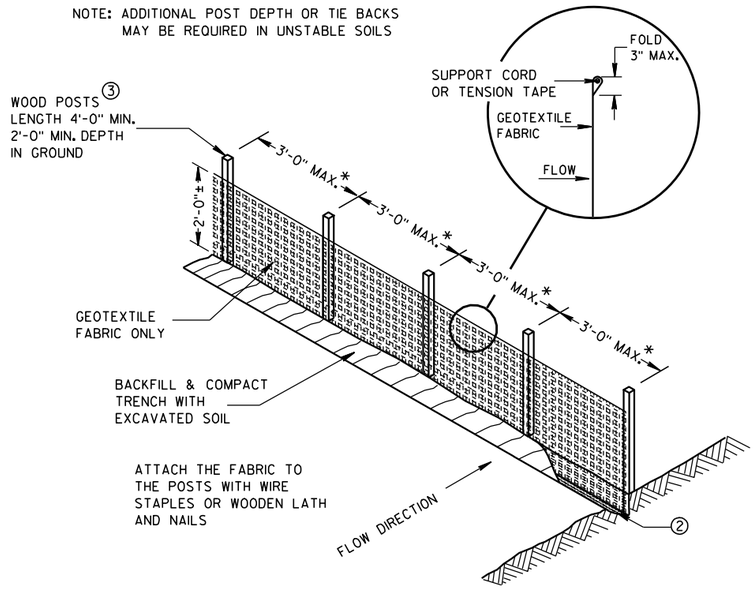
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

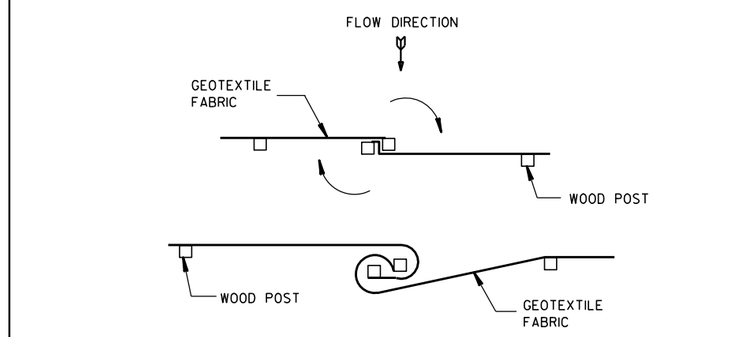
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



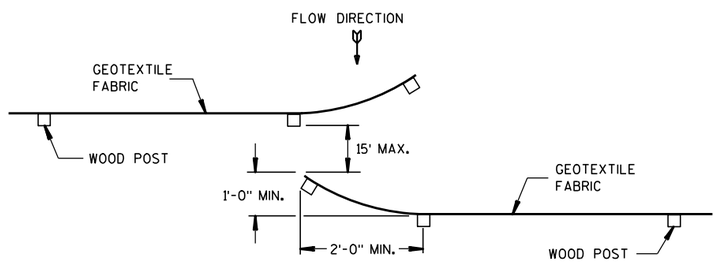
TRENCH DETAIL



SILT FENCE

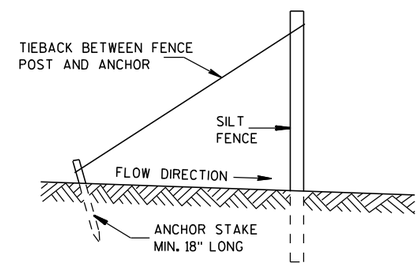


TWIST METHOD



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

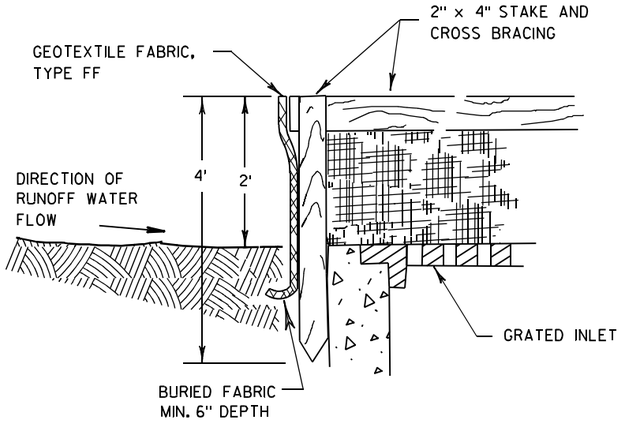
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

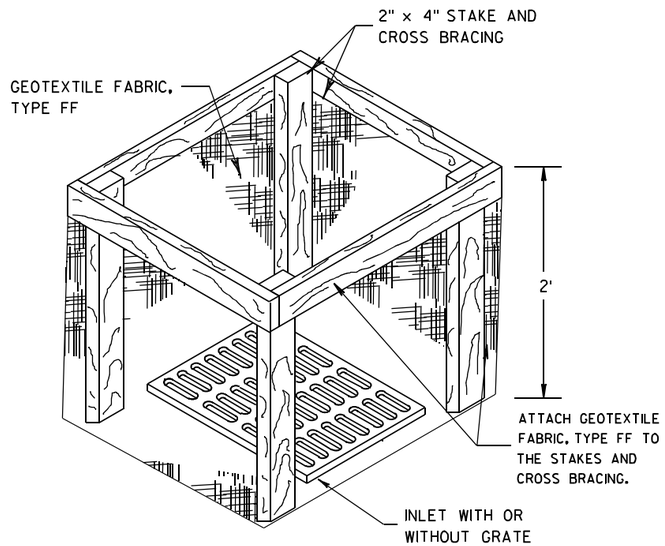
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S.D.D. 8 E 9-6

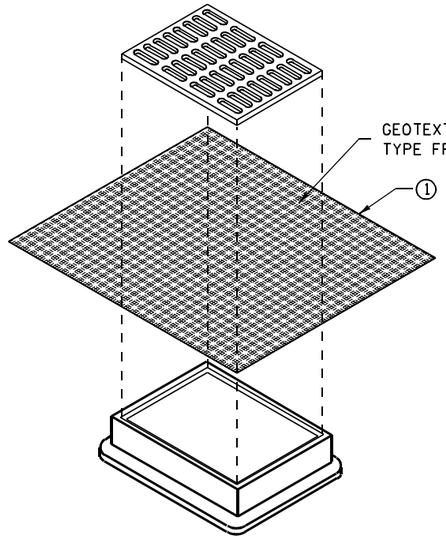
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S.D.D. 8 E 9-6



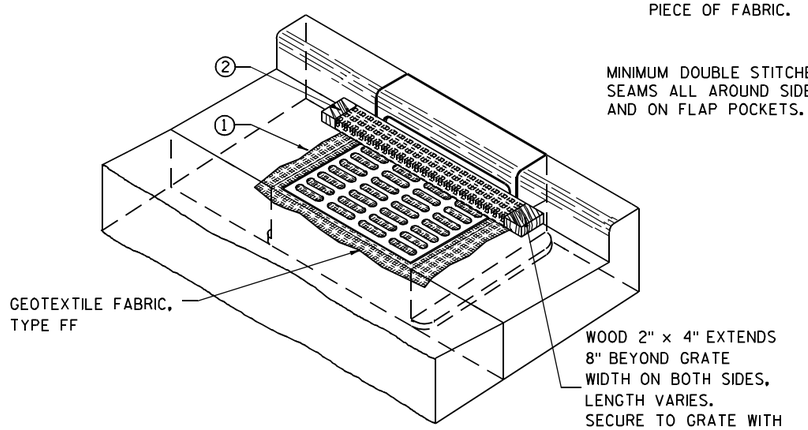


INLET PROTECTION, TYPE A

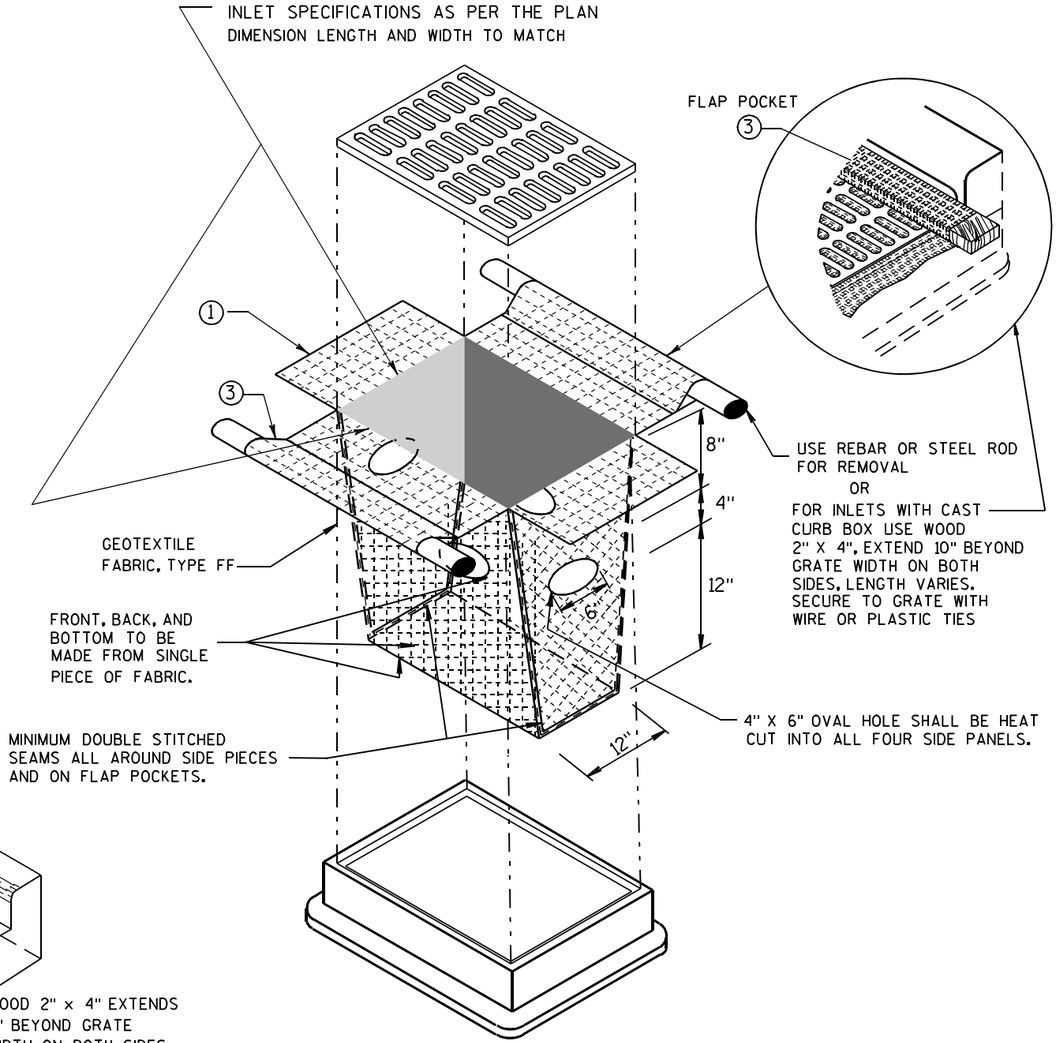


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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.

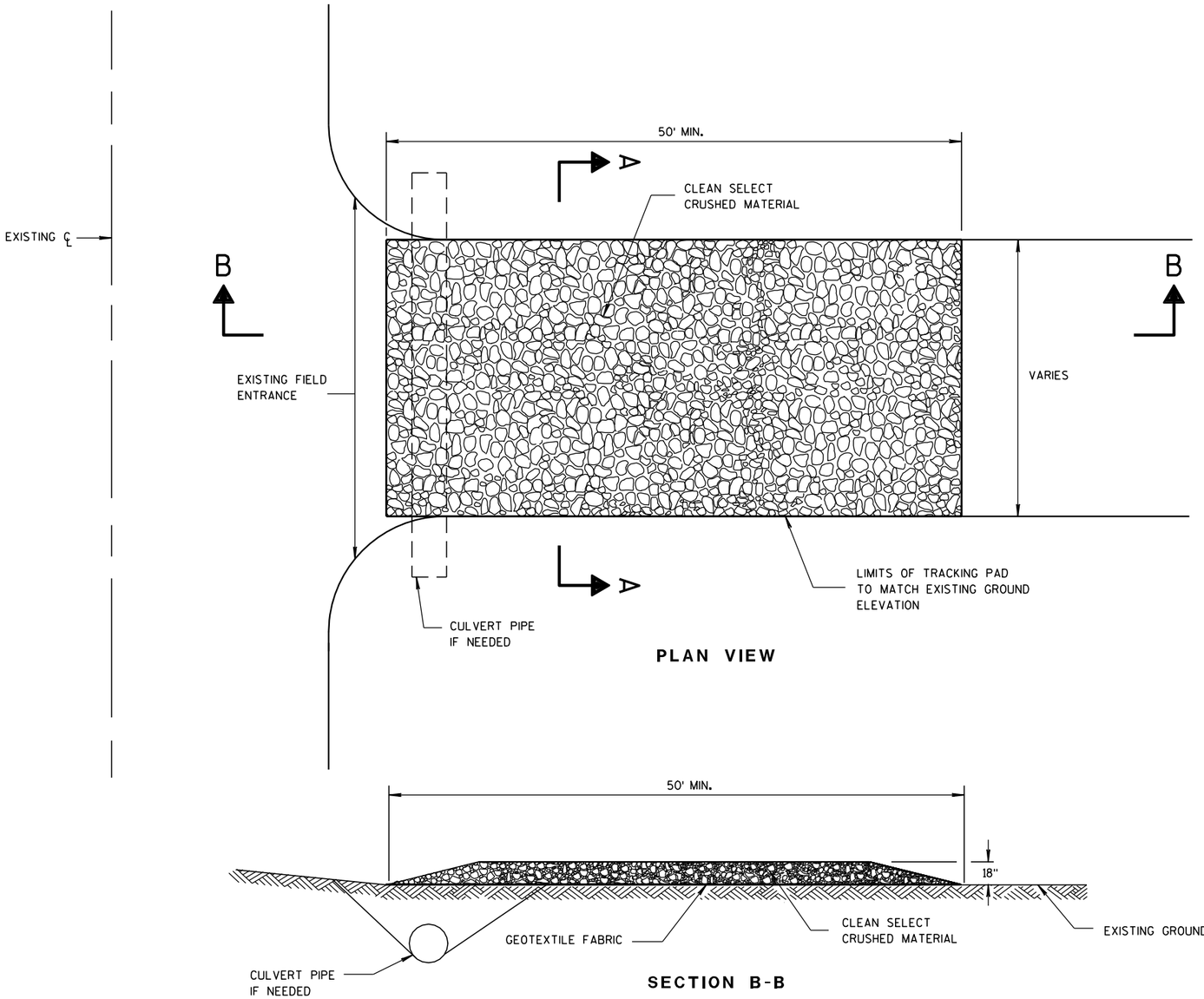
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

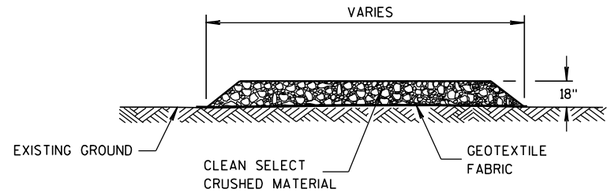
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
FHWA

ENT

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

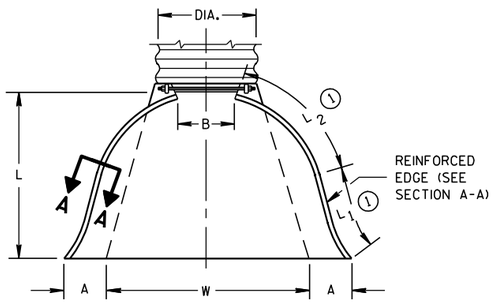
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

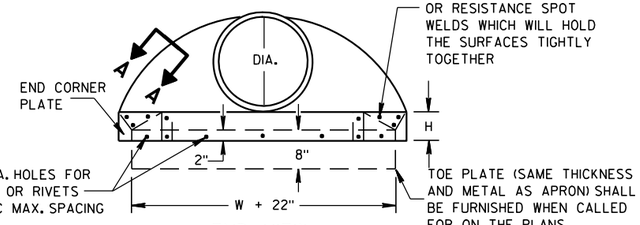
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

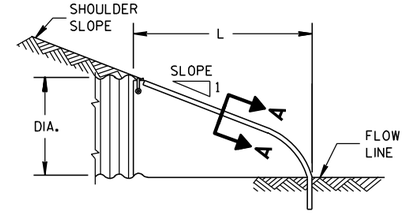
* MINIMUM
** MAXIMUM



PLAN VIEW

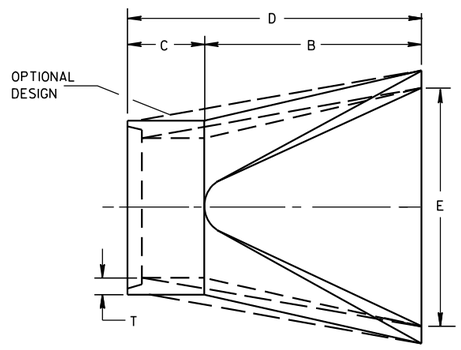


END VIEW

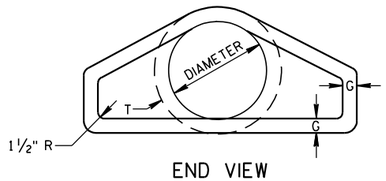


SIDE ELEVATION

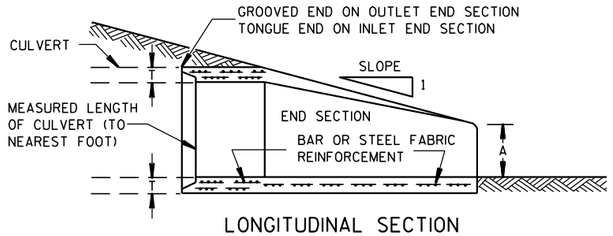
METAL ENDWALLS



PLAN

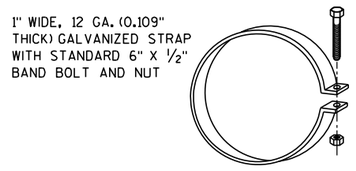


END VIEW



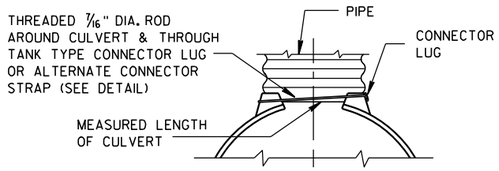
LONGITUDINAL SECTION

CONCRETE ENDWALLS

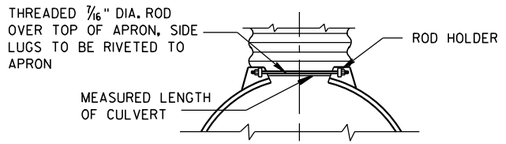


ALTERNATE FOR TYPE 1 CONNECTION

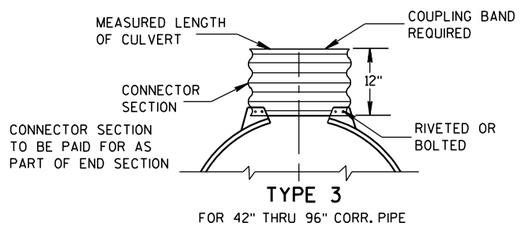
END SECTION CONNECTOR STRAP



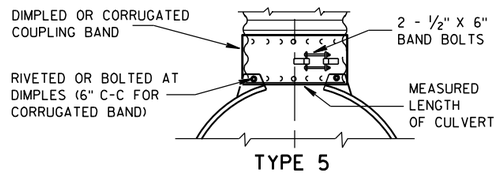
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

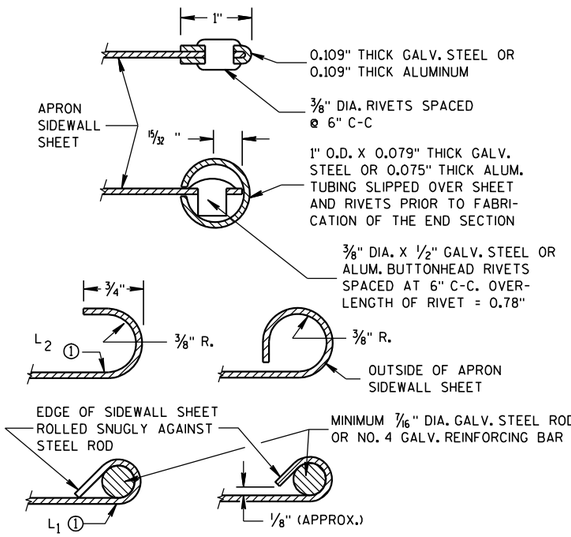
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

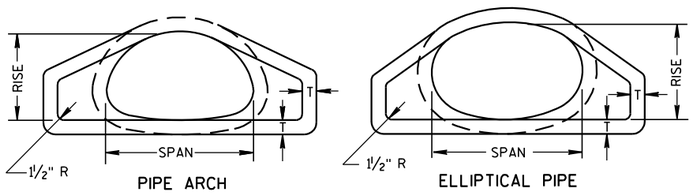
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

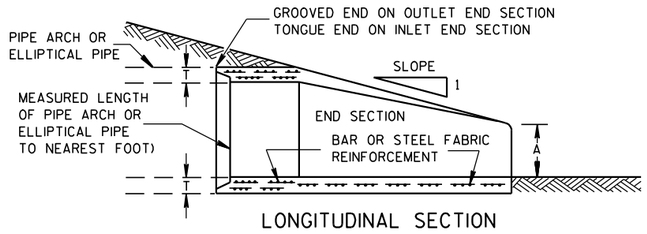
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

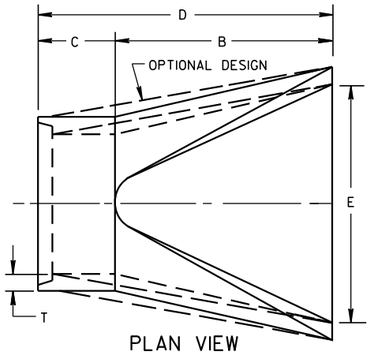
S.D.D. 8 F 1-11



END VIEW

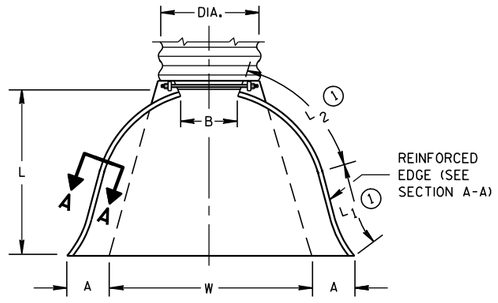


LONGITUDINAL SECTION

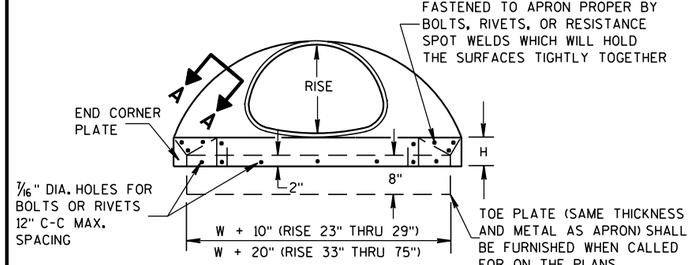


PLAN VIEW

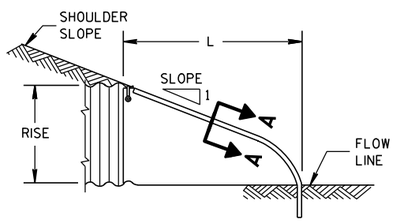
CONCRETE ENDWALLS



PLAN VIEW

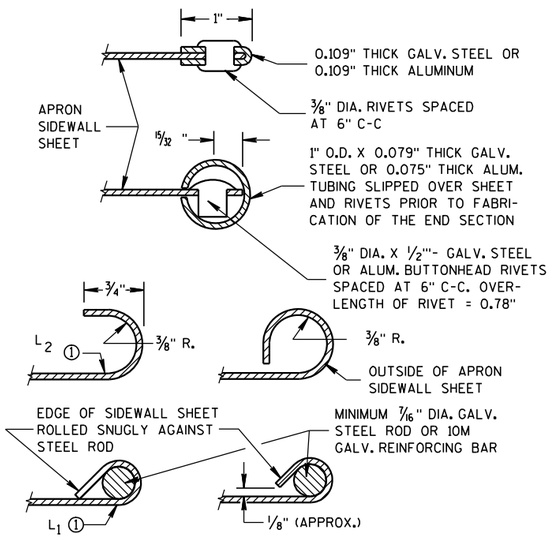


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

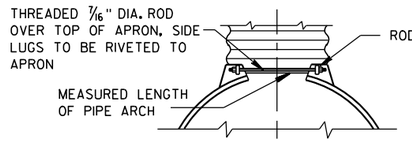
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

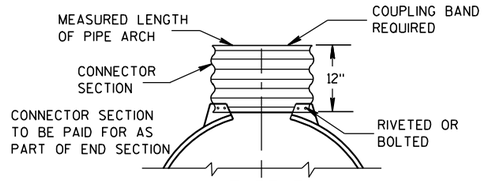
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



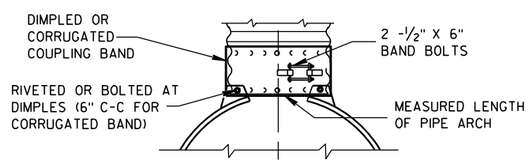
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

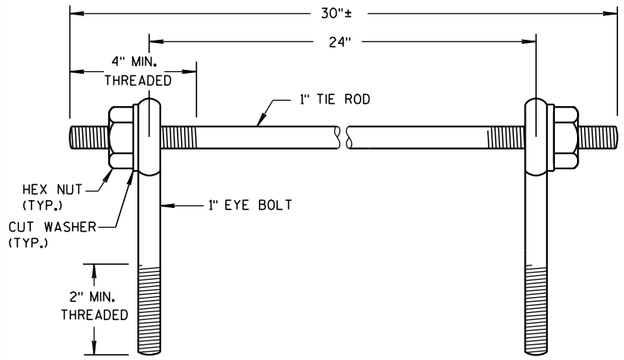
FHWA

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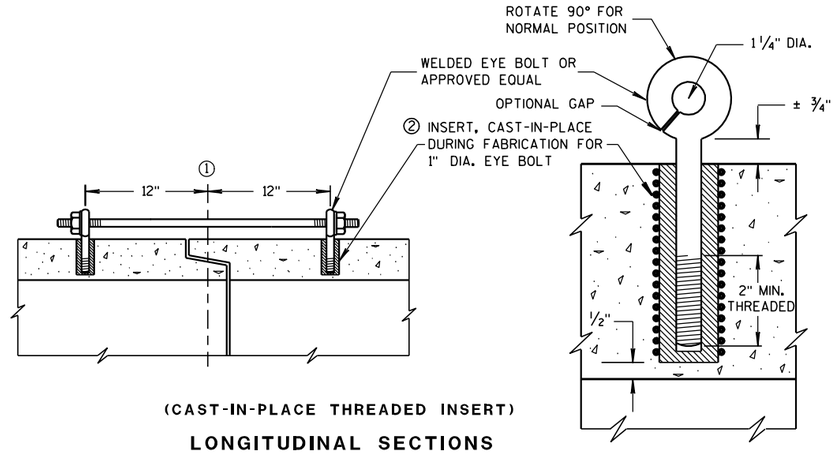
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

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

CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

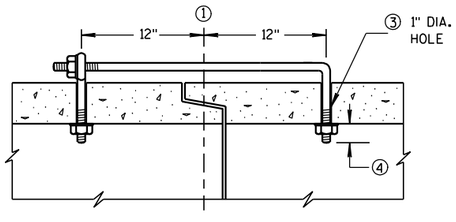
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

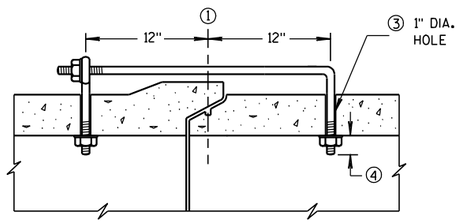
⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

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



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

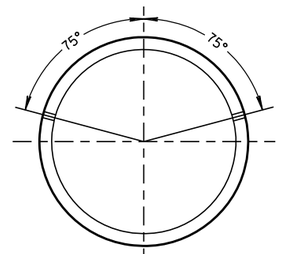
EYE BOLT DIMENSION TABLE

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

ADJUSTABLE TIE ROD TABLE

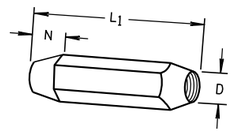
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES

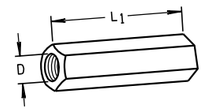


PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



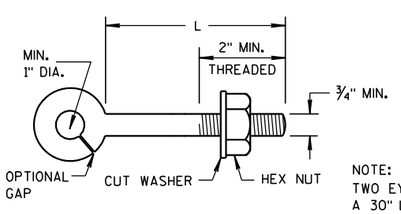
TAPERED



PLAIN

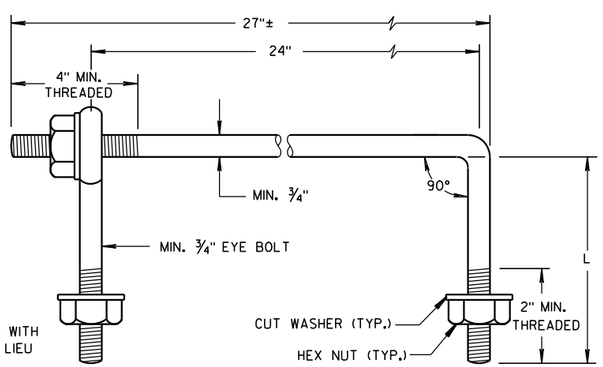
RIGHT AND LEFT THREADS

SLEEVE NUTS



EYE BOLT

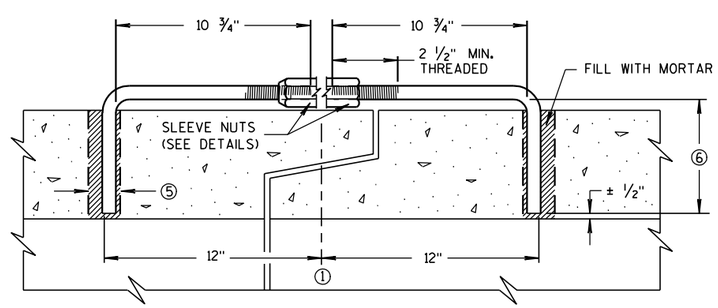
NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

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

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



LONGITUDINAL SECTION

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

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

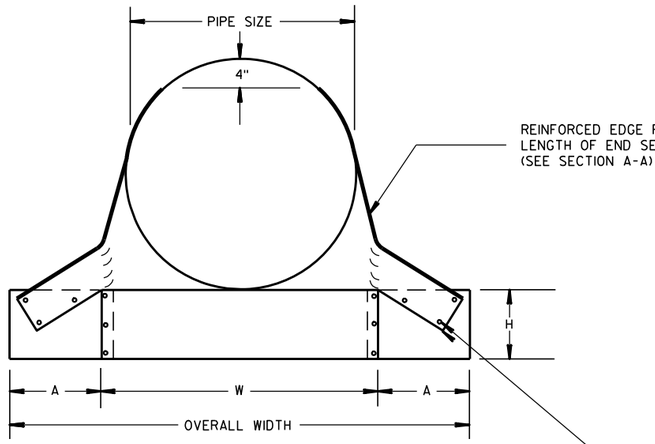
APPROVED
12/17/07 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 F 4-6

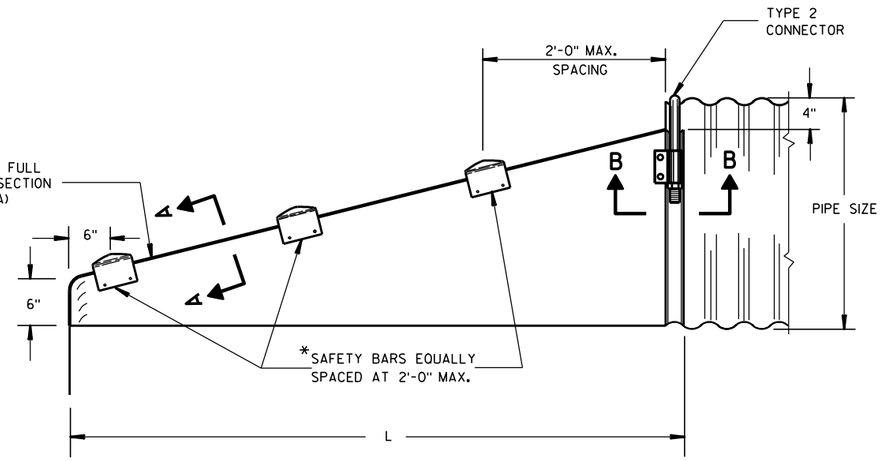
6

S.D.D. 8 F 4-6



FRONT VIEW

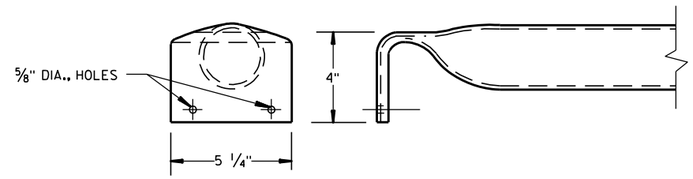
BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



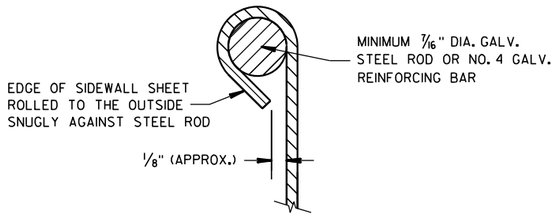
SIDE VIEW

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

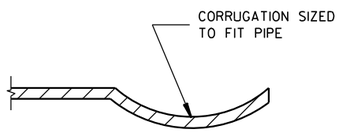
3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.



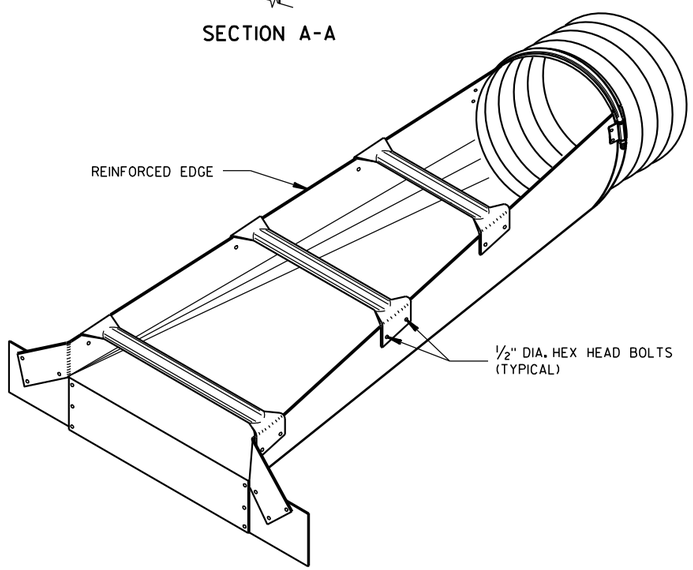
DETAIL OF SAFETY BAR



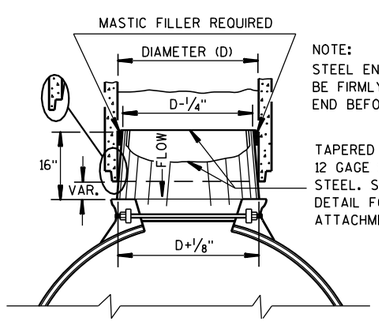
SECTION A-A



SECTION B-B



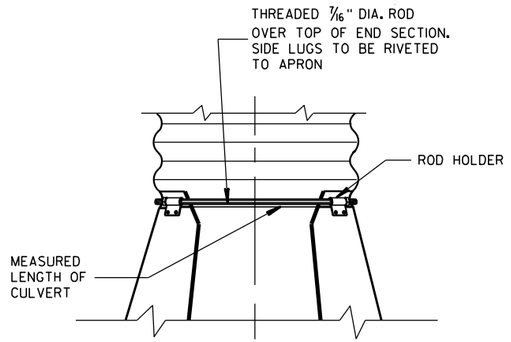
ISOMETRIC VIEW



NOTE:
STEEL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

TAPERED SLEEVE TO BE 12 GAGE SMOOTH GALVANIZED STEEL. SEE SECTION B-B DETAIL FOR END SECTION ATTACHMENT.

STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL

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.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS	
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	6:1	30
18	.064	8	6	24	40	6:1	48
21	.064	8	6	27	43	6:1	66
24	.064	8	6	30	46	6:1	84
30	.109	12	9	36	60	6:1	120
36	.109	12	9	42	66	6:1	156
42	.109	16	12	48	80	5.63 TO 1	180
48	.109	16	12	54	86	4.74 TO 1	180
54	.109	16	12	60	92	——	——

STEEL APRON ENDWALLS FOR PIPE ARCH

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS	
	SPAN	RISE		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES
15	17	13	.064	8	6	23	39	6:1	18
18	21	15	.064	8	6	27	43	6:1	30
21	24	18	.064	8	6	30	46	6:1	48
24	28	20	.064	8	6	34	50	6:1	60
30	35	24	.079	12	9	41	65	6:1	84
36	42	29	.109	12	9	48	72	6:1	114
42	49	33	.109	16	12	55	87	6:1	138
48	57	38	.109	16	12	63	95	6:1	168
54	64	43	.109	16	12	70	102	5.45 TO 1	180

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SIDE DRAINS SLOPED SECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

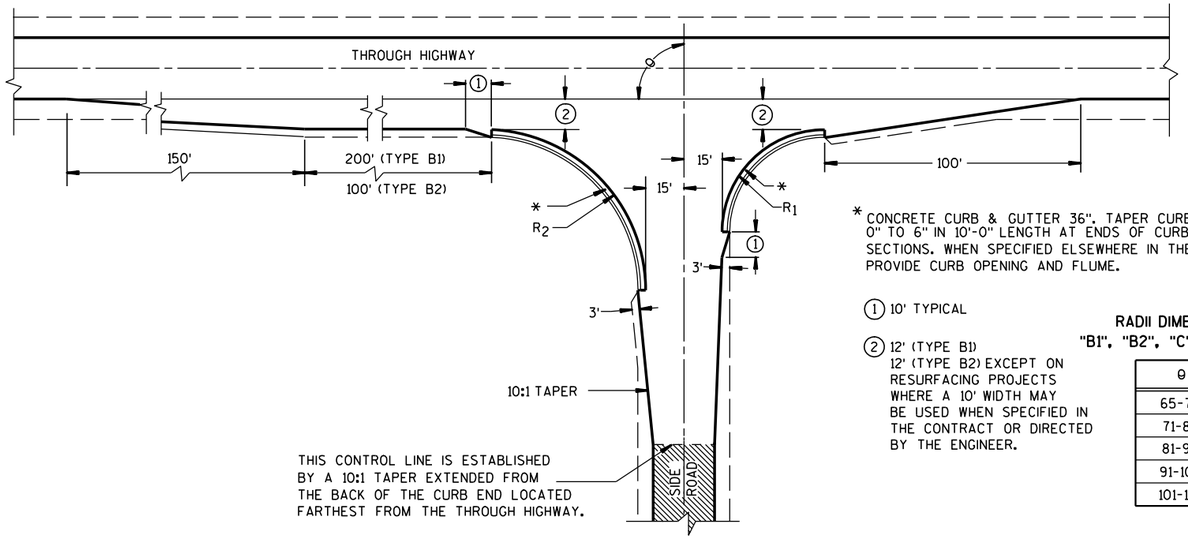
APPROVED

4/17/95
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP ENGINEER

FHWA

6
S.D.D. 8 F 7-3



TYPE "B1" AND "B2"

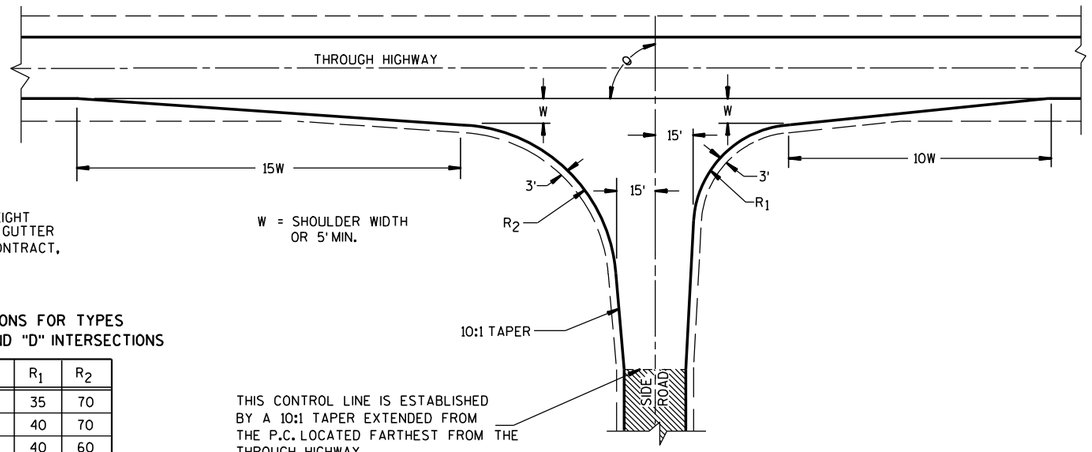
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL

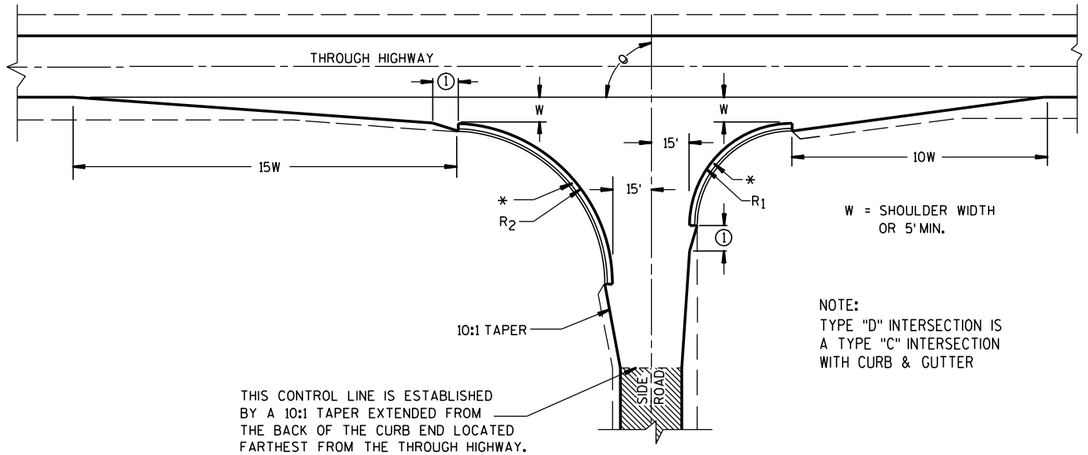
② 12' (TYPE B1)
12' (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 10' WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

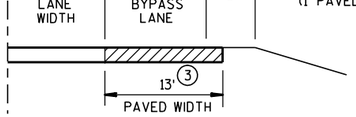
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

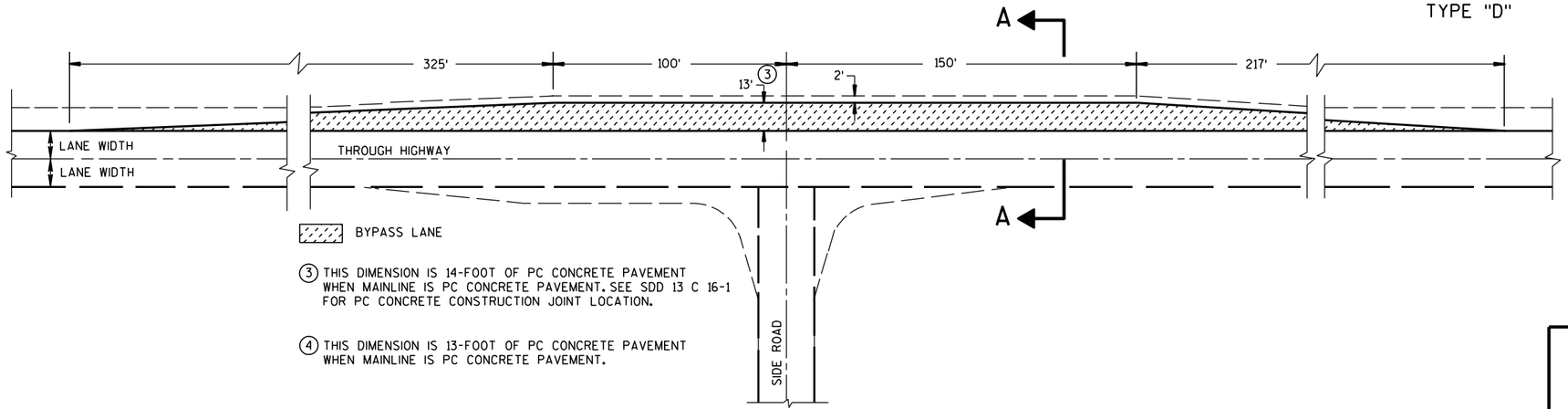
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



③ THIS DIMENSION IS 14-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

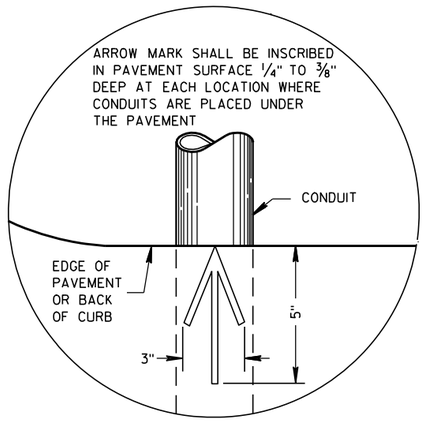
④ THIS DIMENSION IS 13-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

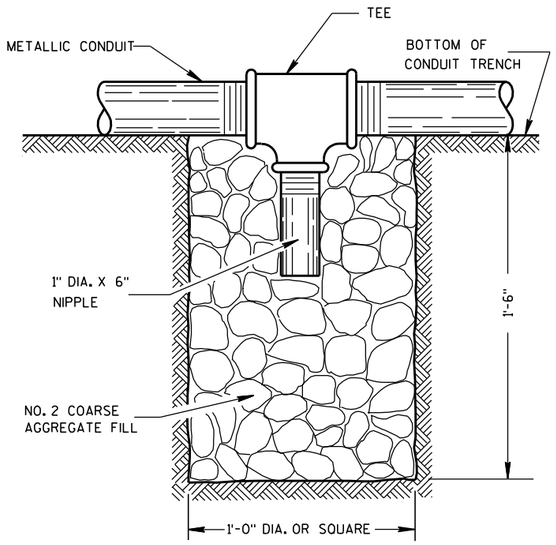
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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S.D.D. 9 A 1-12a



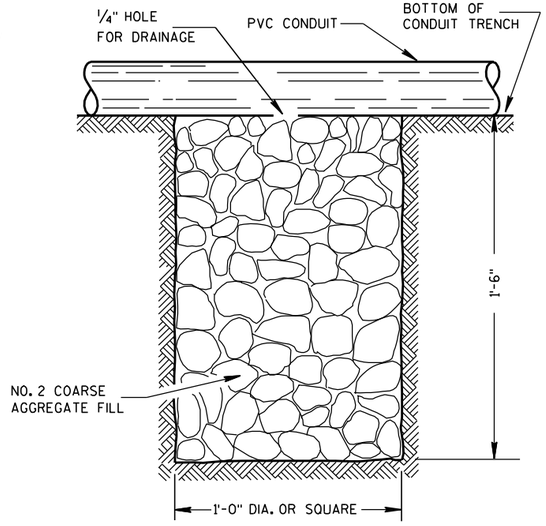
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

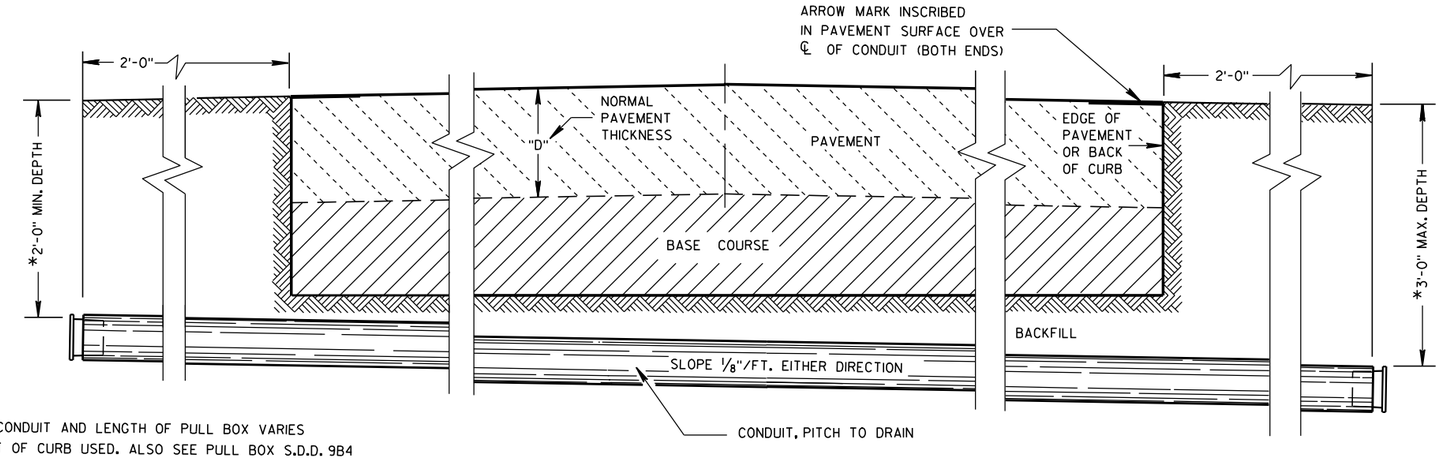
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

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S.D.D. 9 B 2-7

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

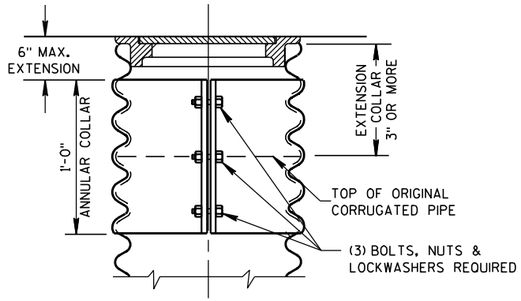
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

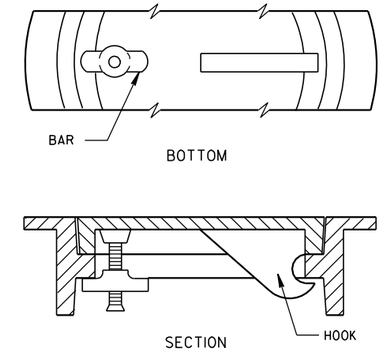
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

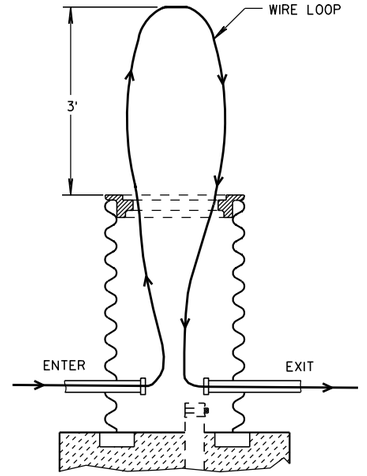


CORRUGATED PIPE EXTENDER

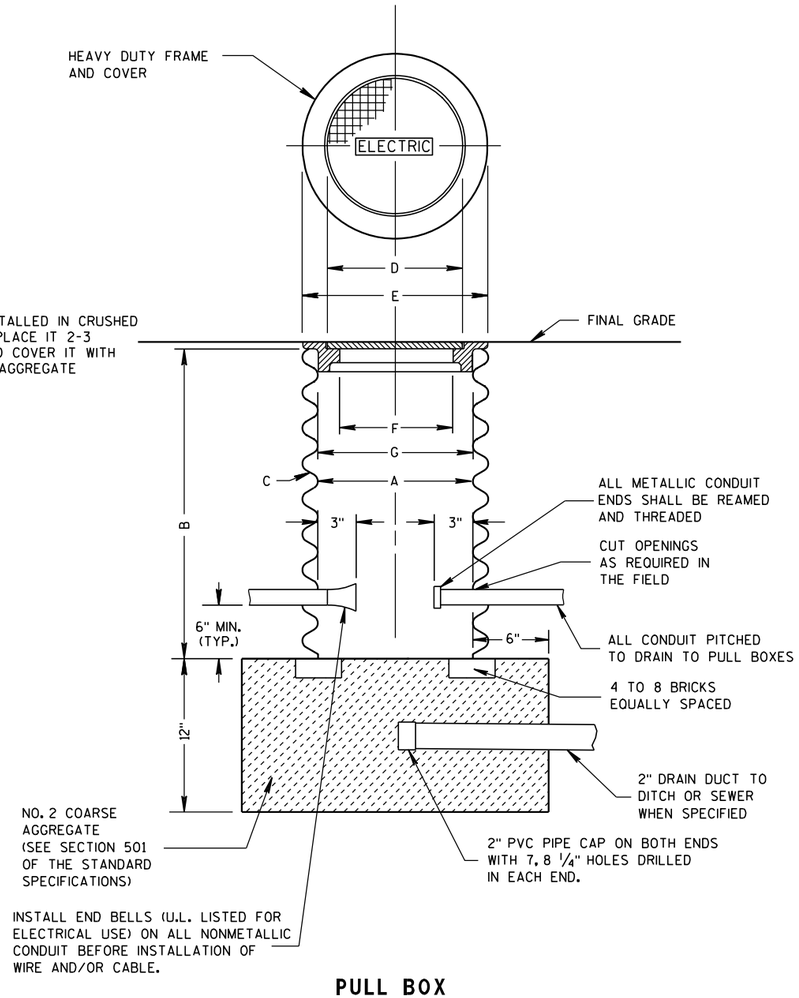


ALTERNATE COVER (LOCKING)

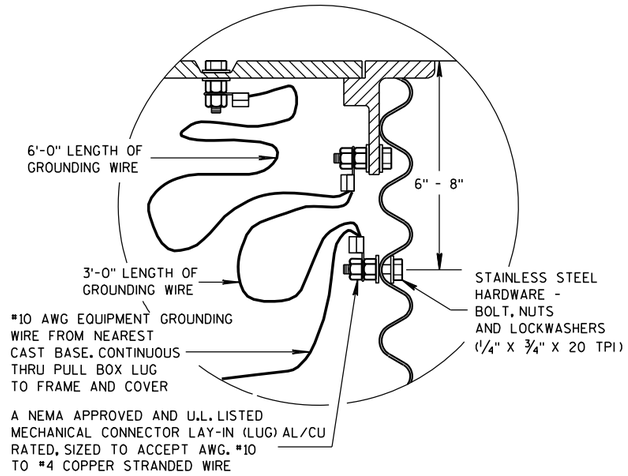
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

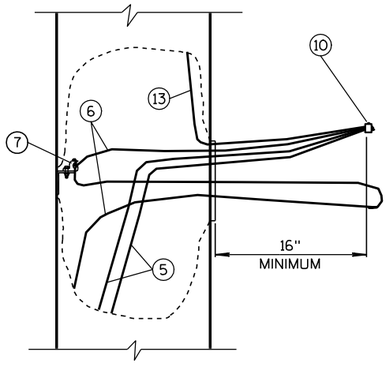
PULL BOX

STATE OF WISCONSIN
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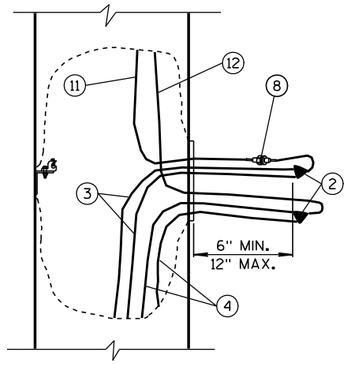
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9/27/06 DATE
/S/ Balu Ananthanarayanan
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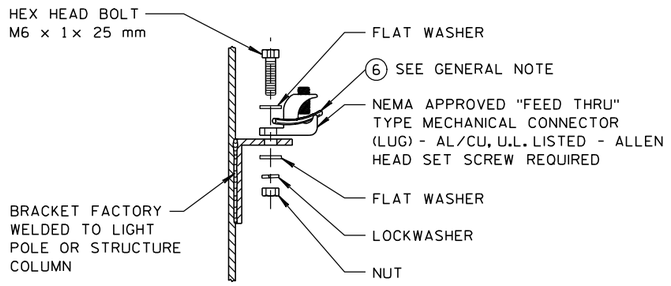


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



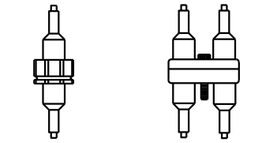
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



FUSE ASSEMBLIES

GENERAL NOTES

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

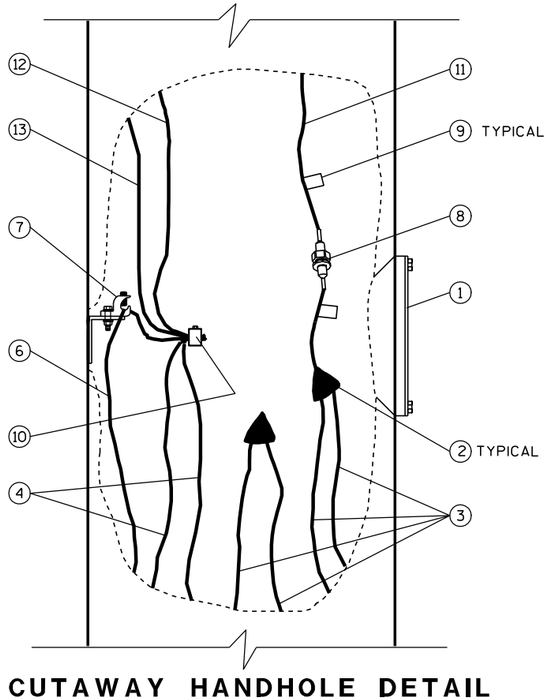
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

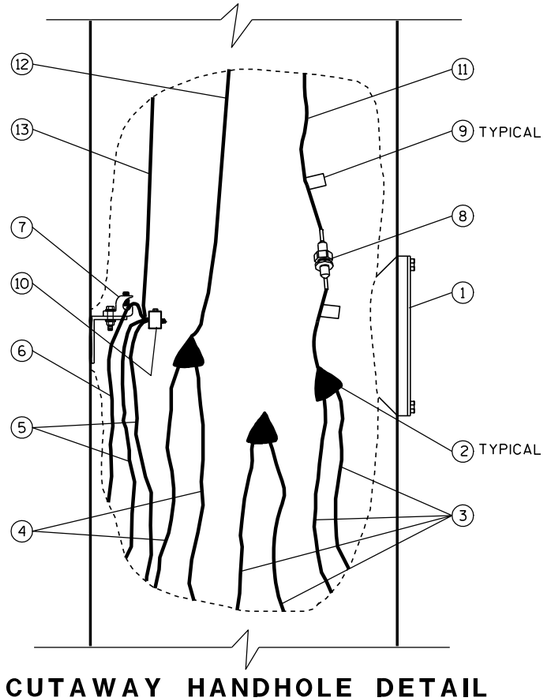
THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

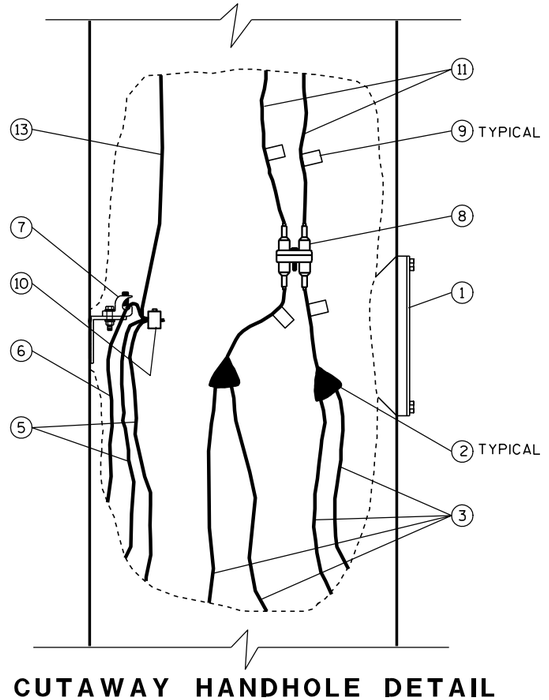
CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



CUTAWAY HANDHOLE DETAIL
GROUNDED NEUTRAL SYSTEMS
1-φ



CUTAWAY HANDHOLE DETAIL
ISOLATED NEUTRAL SYSTEMS
1-φ SHOWN; 3-φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL
PHASE-TO-PHASE SYSTEMS
1-φ SHOWN; 3-φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 DATE
/S/ John Corbin STATE ELECTRICAL ENGI
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S.D.D. 10 A 1-2

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S.D.D. 10 A 1-2

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

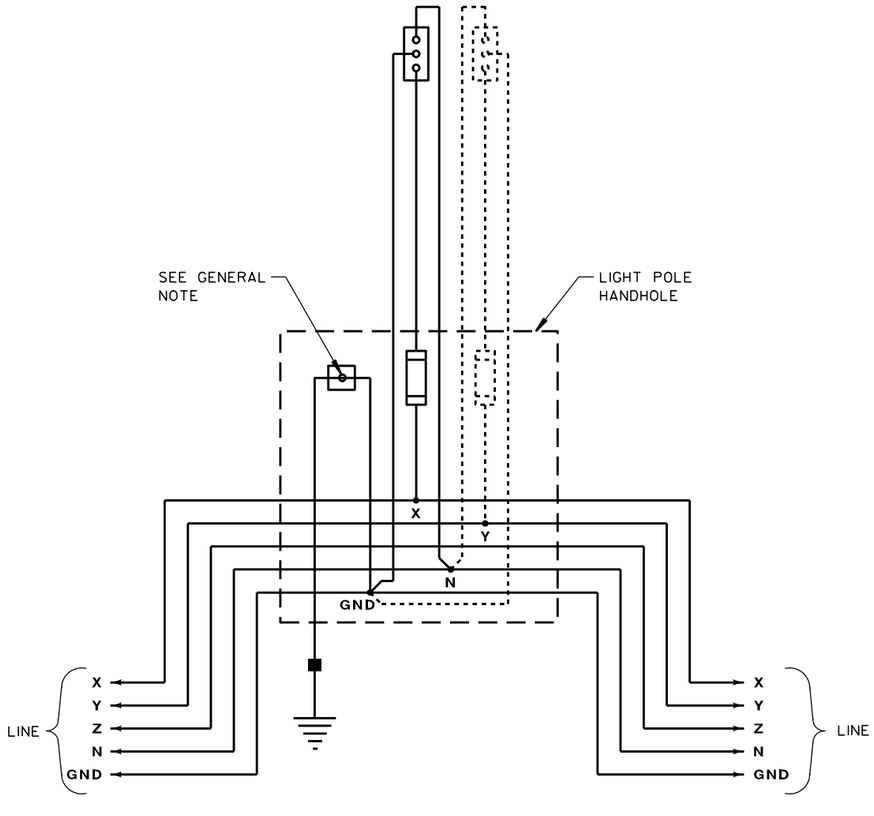
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

HANDHOLE FUSE SCHEDULES

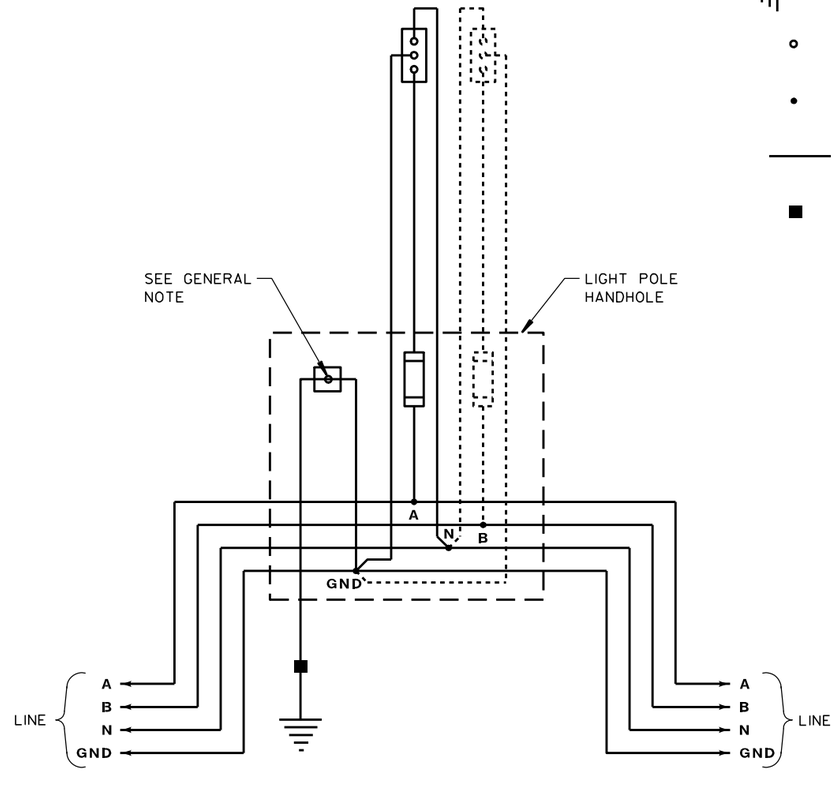
LINE VOLTAGE	BALLAST WATTAGE	
φ-GROUND	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

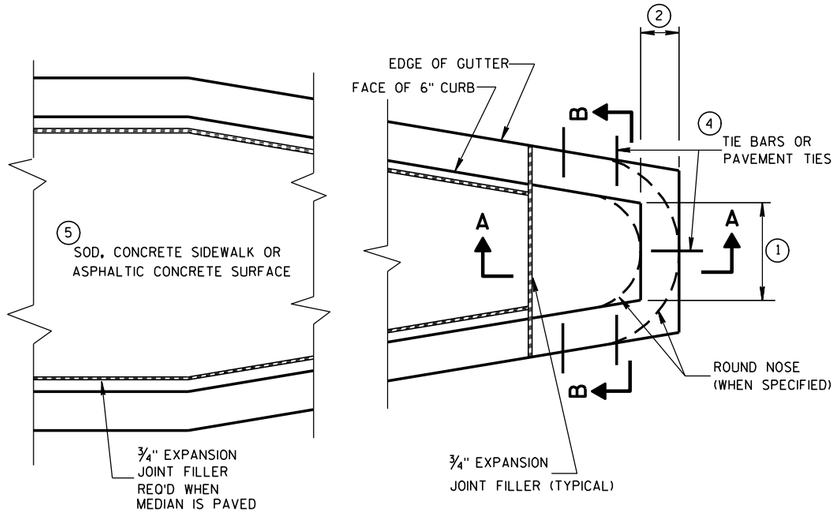
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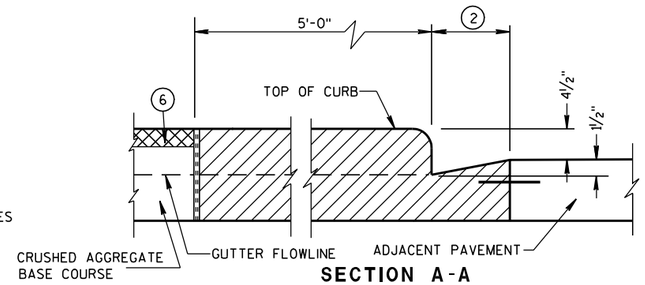
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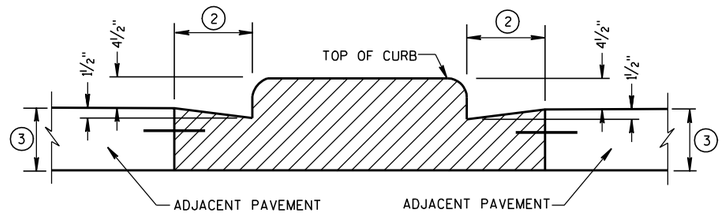
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SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

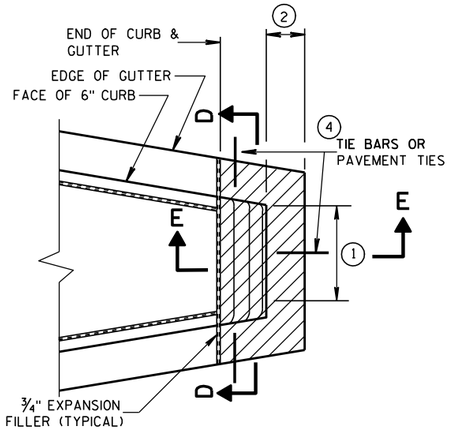
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

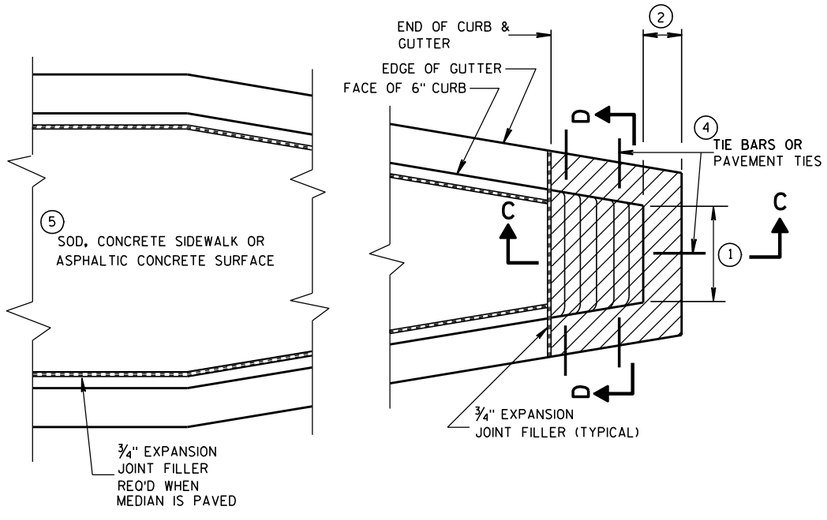
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

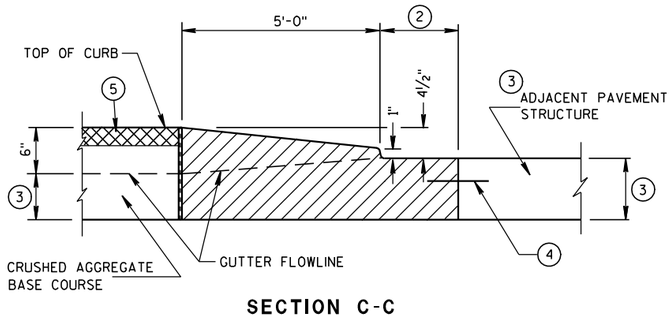
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING 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.

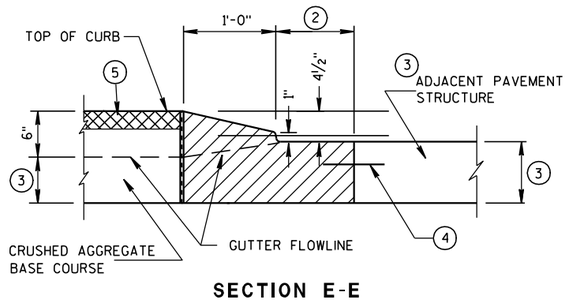
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.







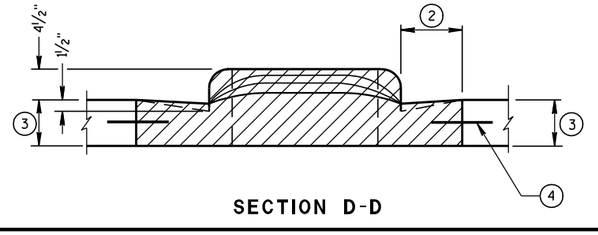
SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

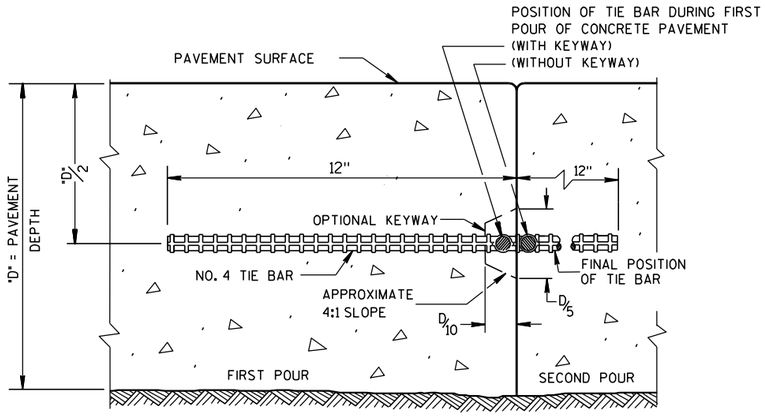
CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
6/8/2006 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	174 NT

6

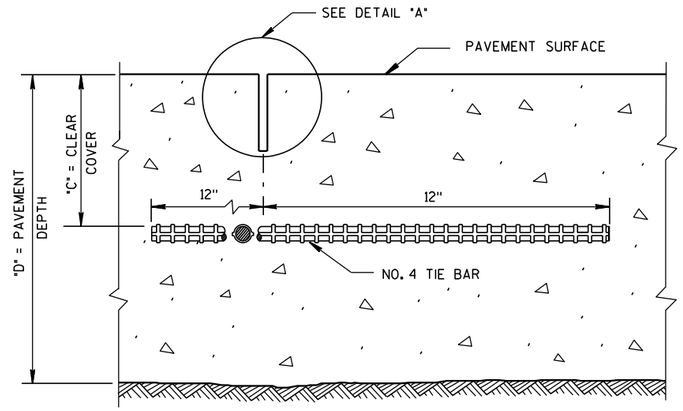
S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

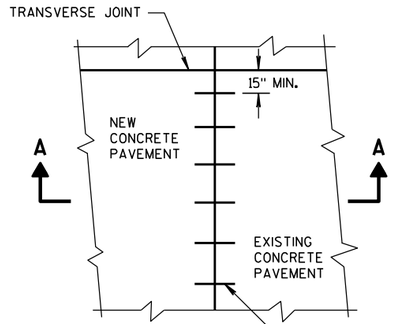
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

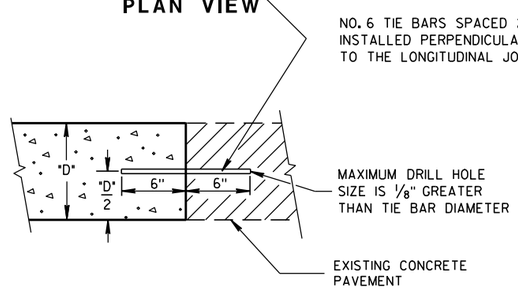
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

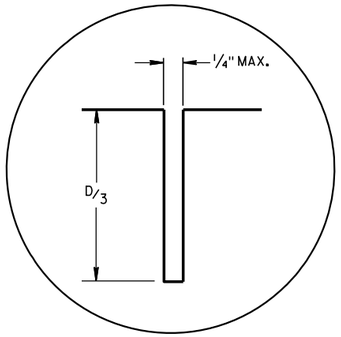
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

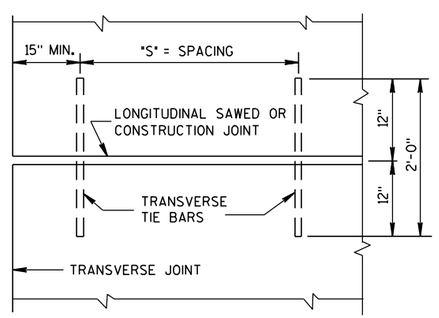


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

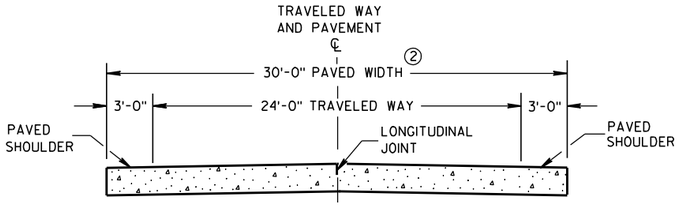
10-5-2010
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DI ENGINEER

FHWA

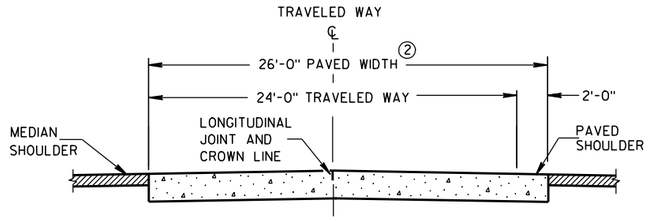
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S.D.D. 13 C 1-15

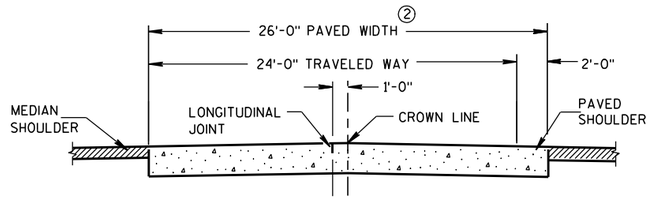


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B

①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT 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, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

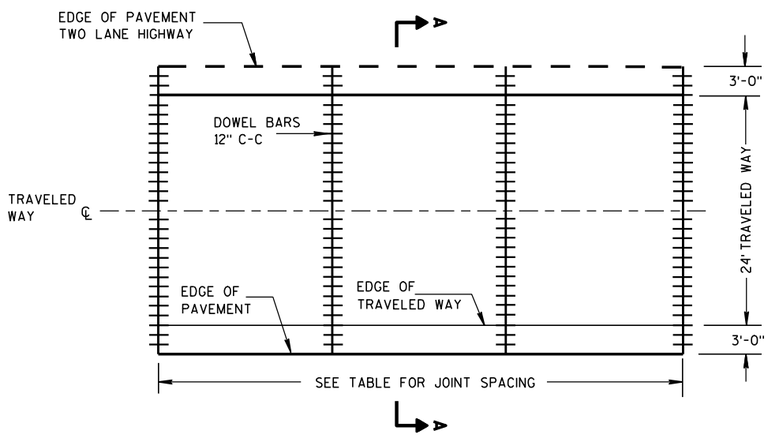
THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

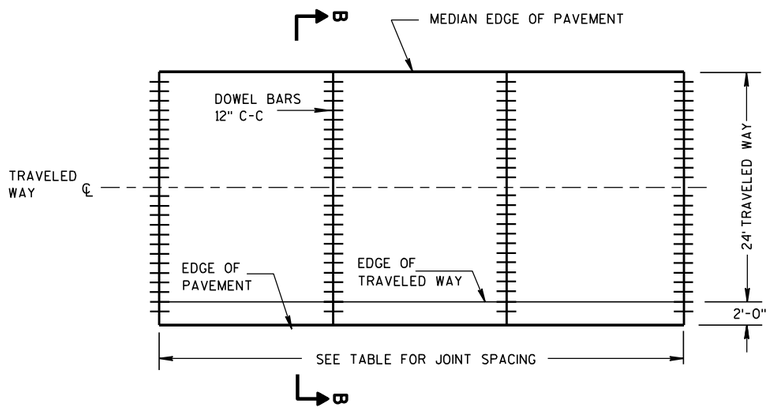
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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'



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY

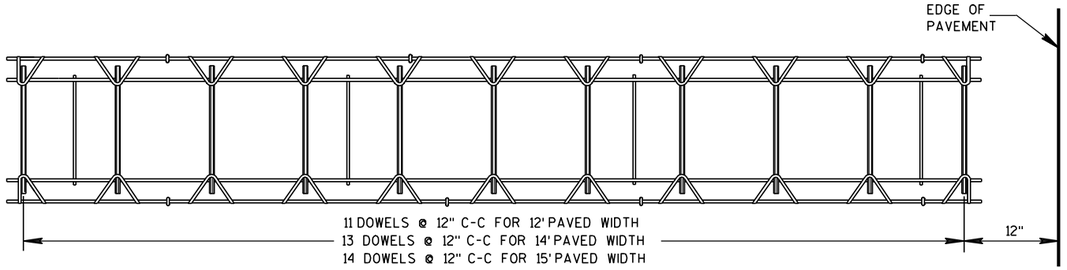


CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 13 C 11-10a



PLAN VIEW

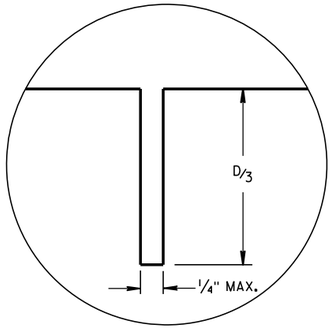


⑤

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

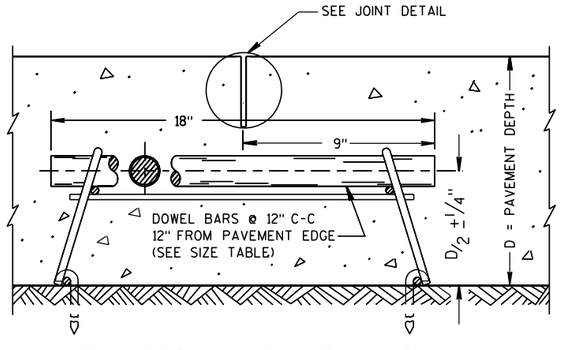
② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

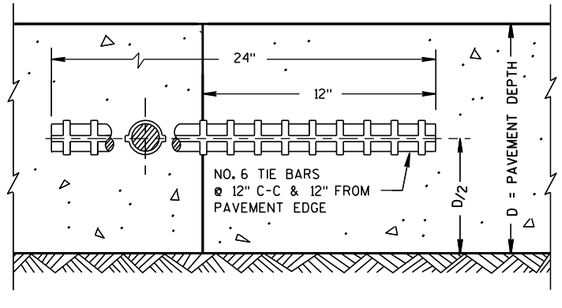
④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

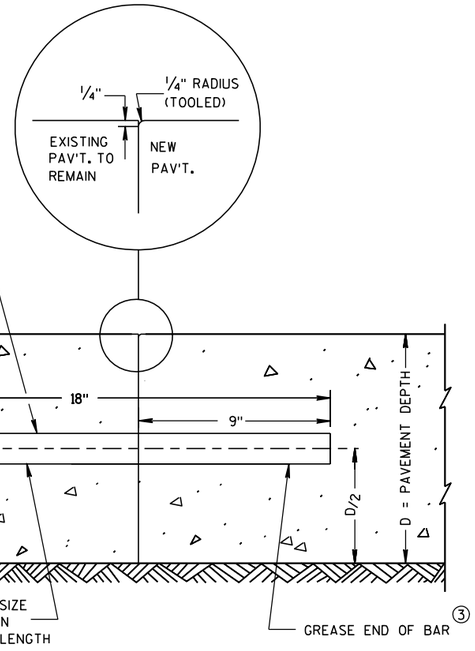
⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.



DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ **DOWEL BAR DETAIL**

RIRAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

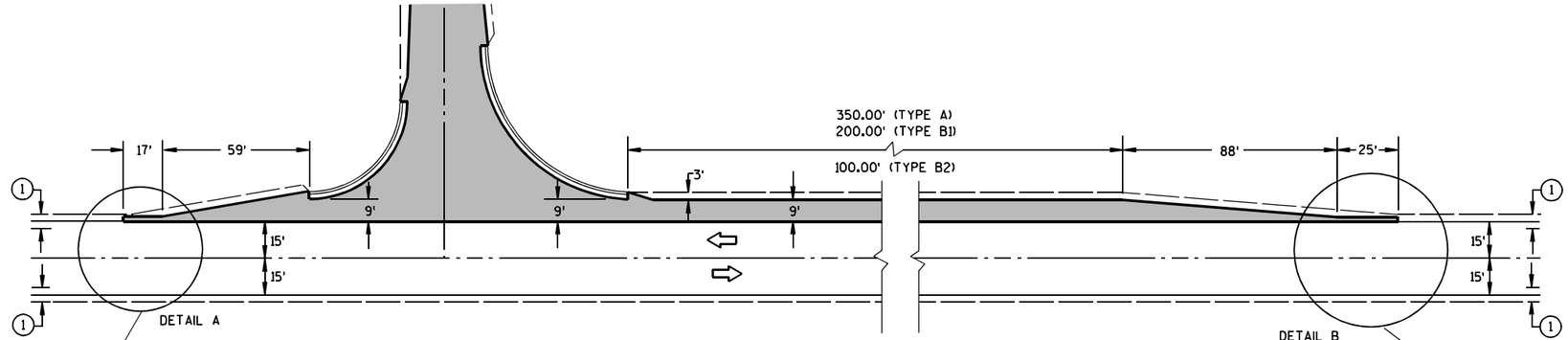
12/11/09 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE — NEER

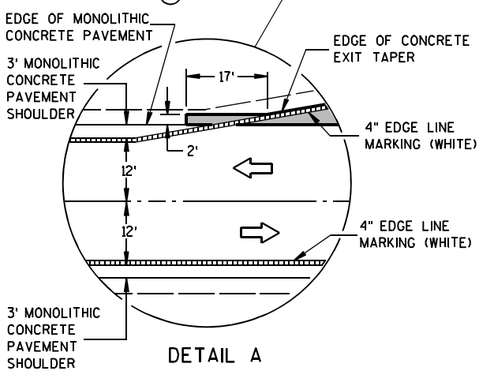
FHWA

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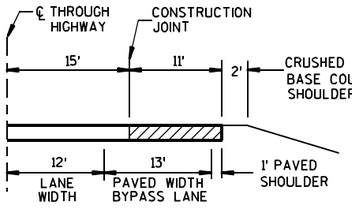
S.D.D. 13 C 11-10b



RIGHT TURN LANE AND EXIT TAPER

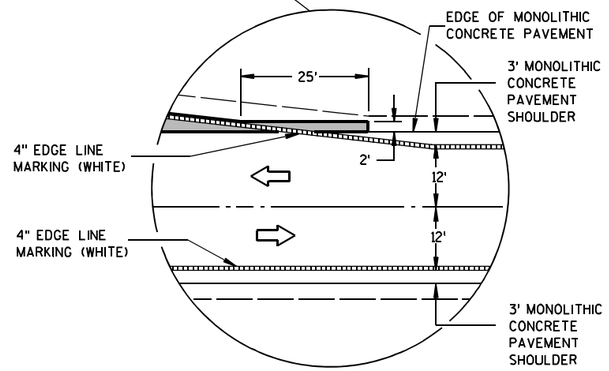


DETAIL A



SECTION A-A

(SHOWING BYPASS LANE AND SHOULDER)



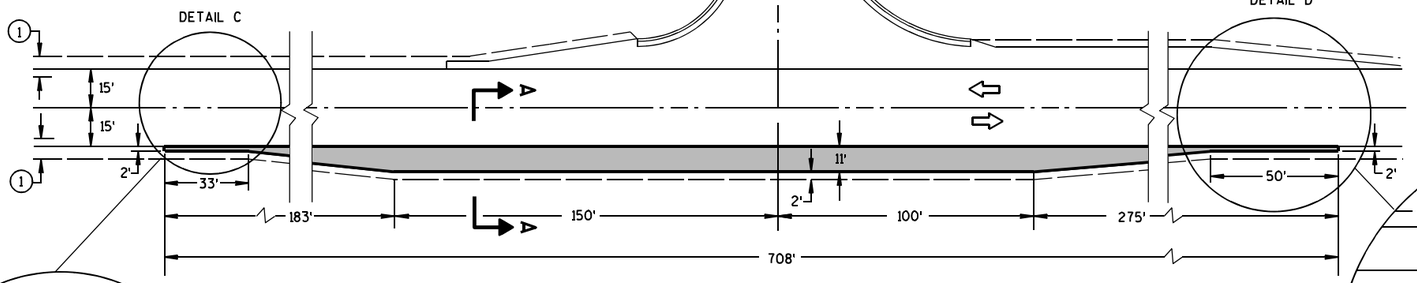
DETAIL B

GENERAL NOTES

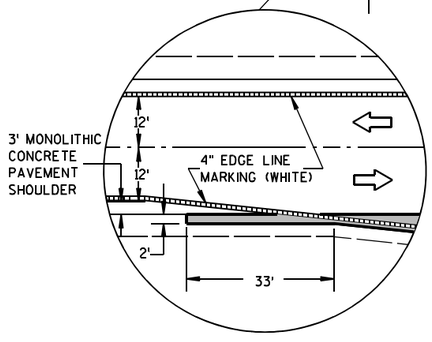
CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

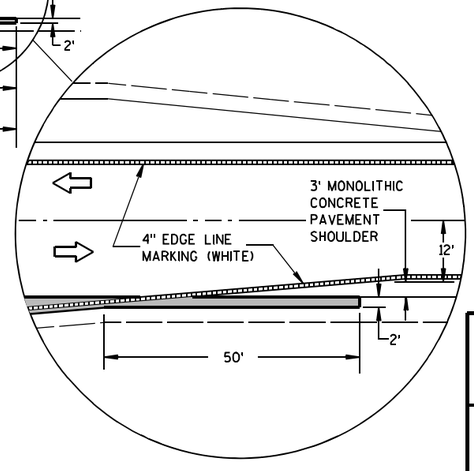
SHOULDER WIDTH TABLE (1)		
DESIGN CLASS	PAVED	TOTAL
A1	3 ft.	6 ft.
C3, L4	3 ft.	6 ft.
A2	3 ft.	10 ft.
C4, L5	3 ft.	8 ft.



TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE



DETAIL C



DETAIL D

CONCRETE PAVEMENT JOINT DETAILS

CONCRETE JOINT DETAIL FOR TEE INTERSECTION BYPASS LANE AND RIGHT TURN LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

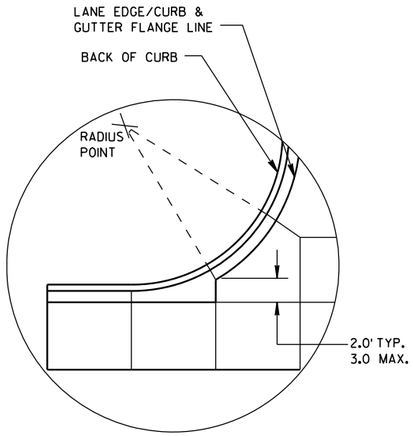
5/27/1998
DATE

/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER

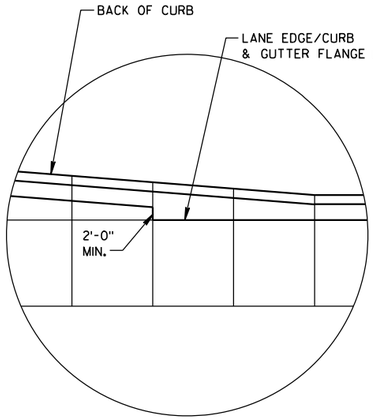
FHWA

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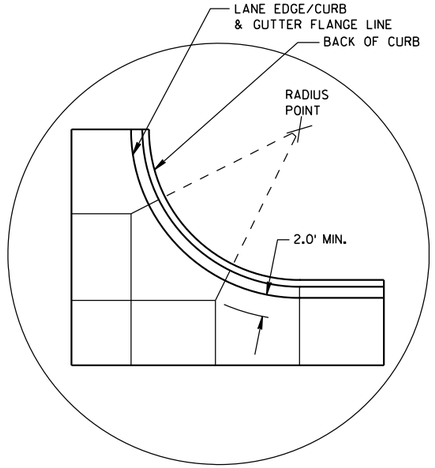
S.D.D. 13 C 16-1



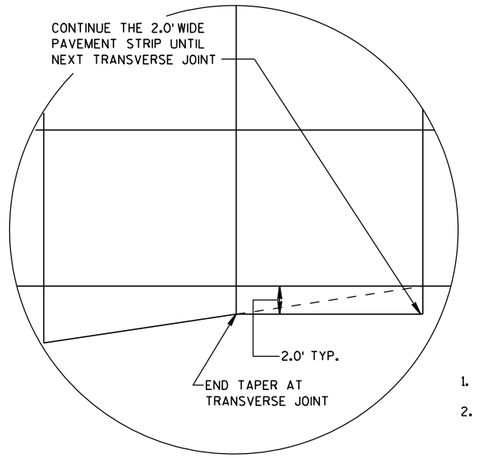
DETAIL "A"



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.

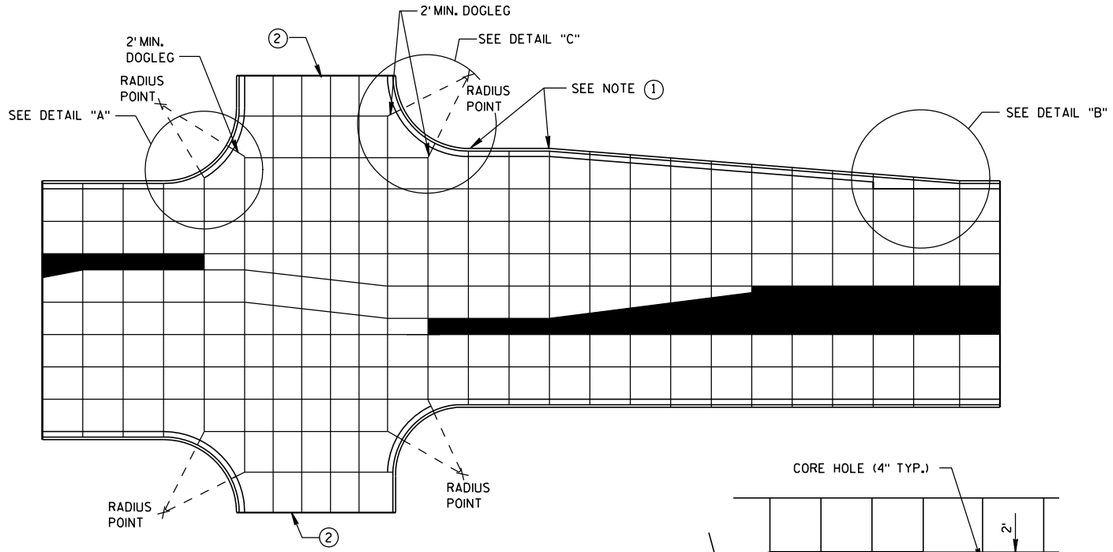
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

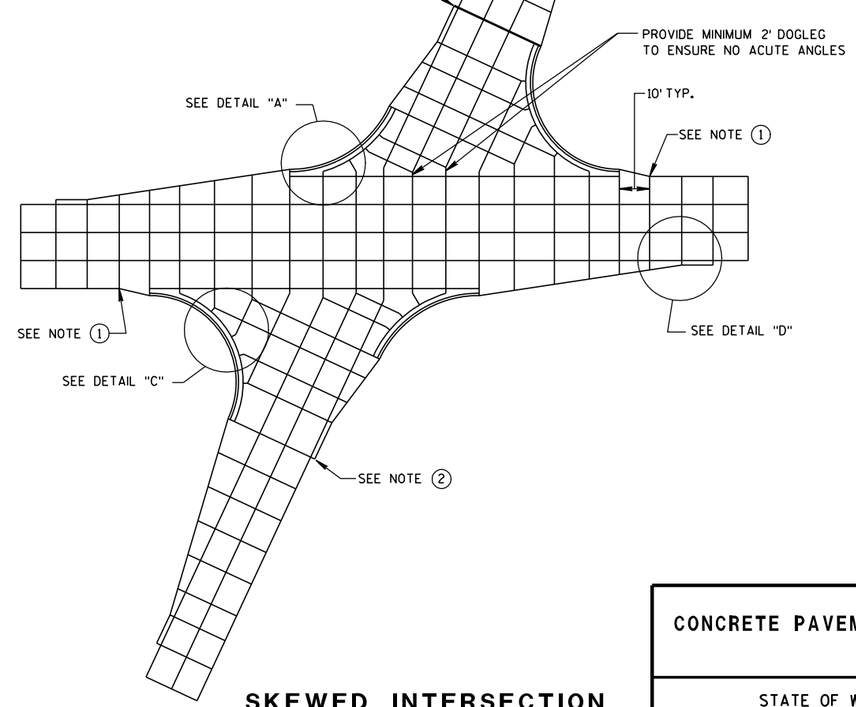
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



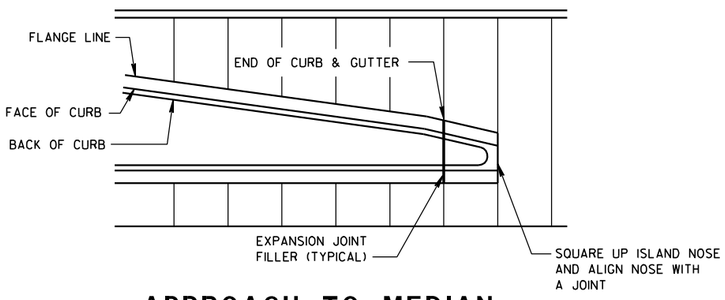
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

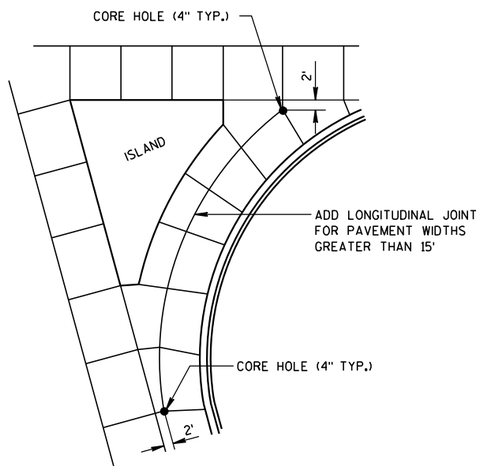
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

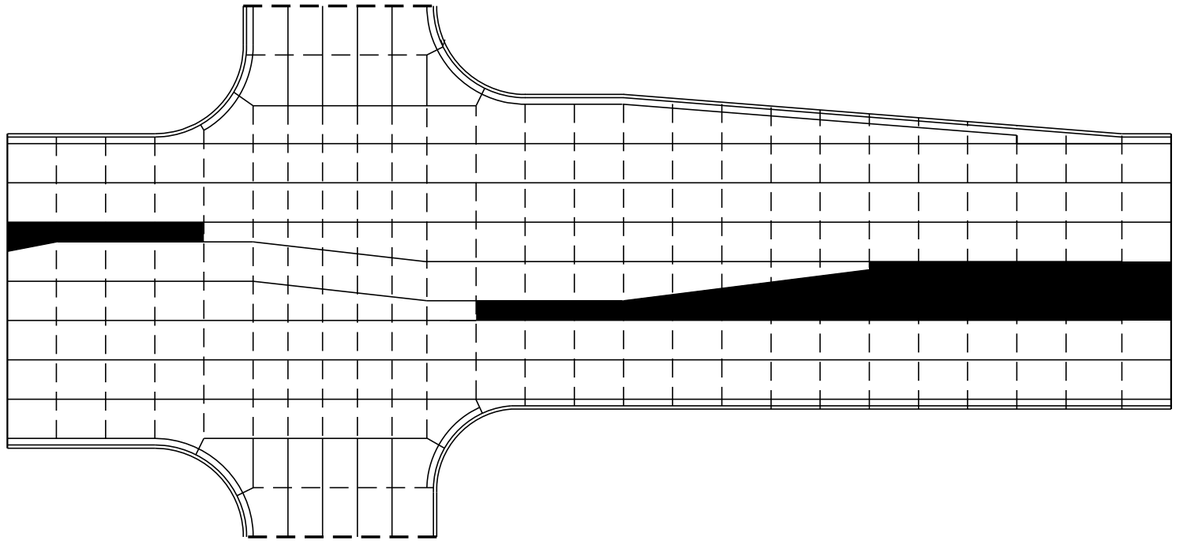
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S.D.D. 13 C 18-1a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

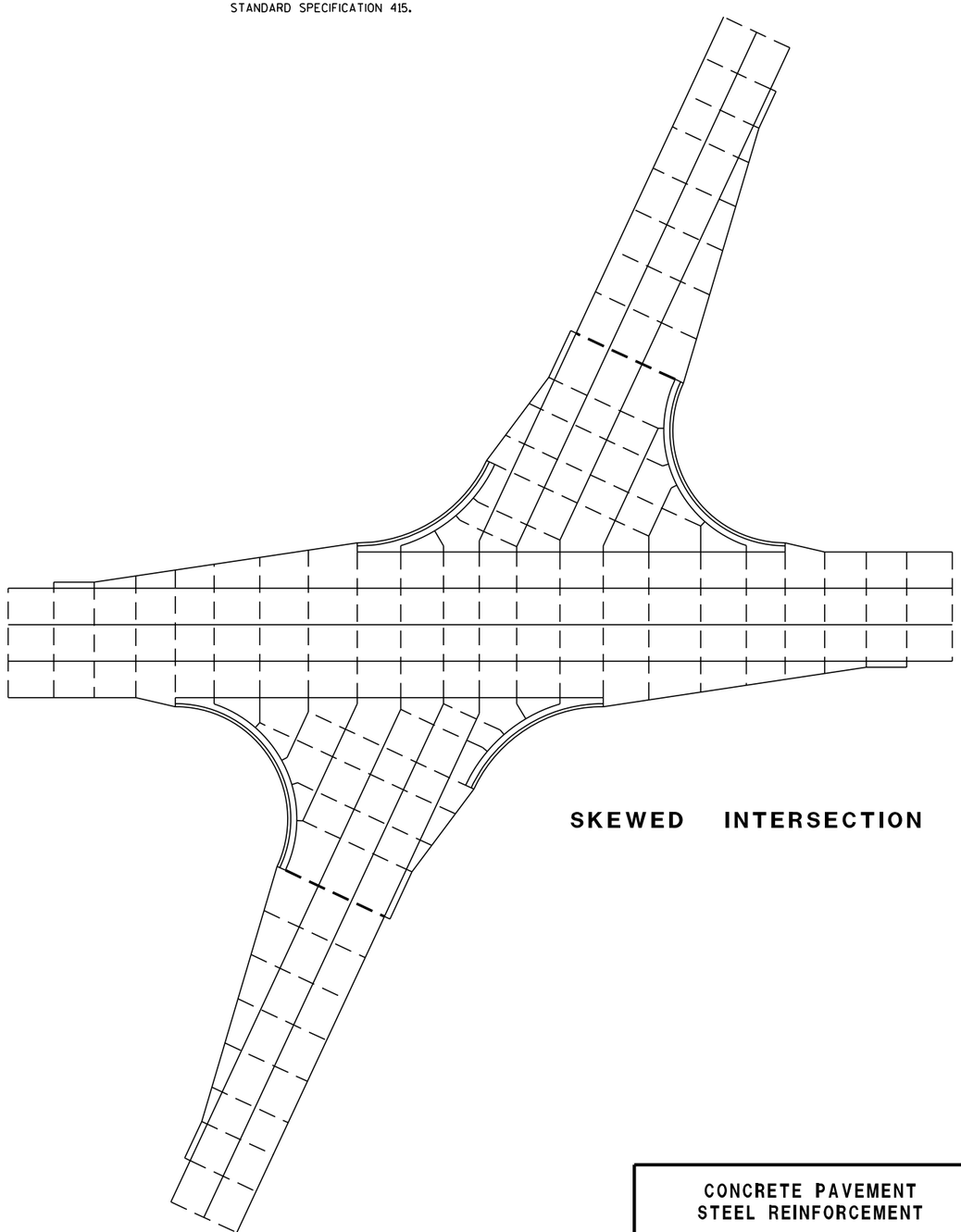
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

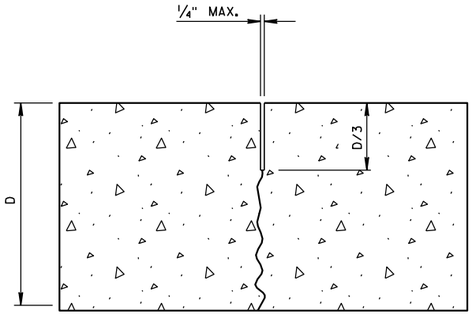
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S.D.D. 13 C 18-1b

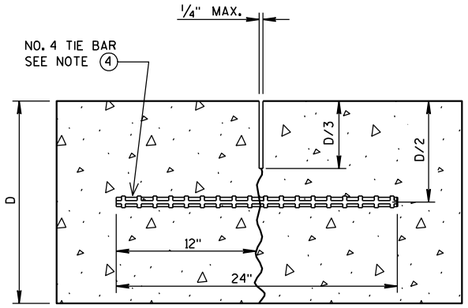
S.D.D. 13 C 18-1b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



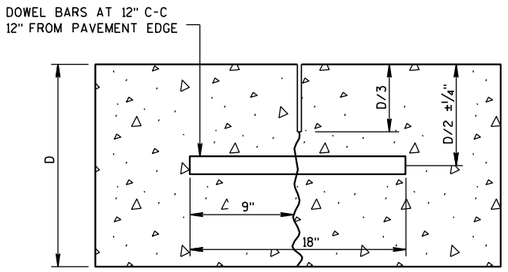
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

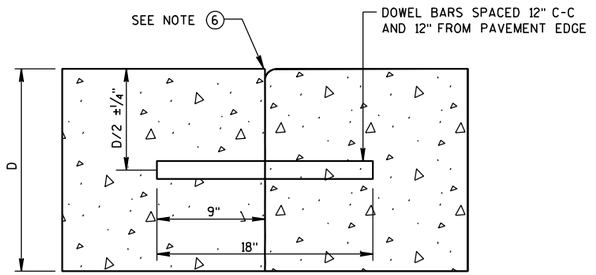
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



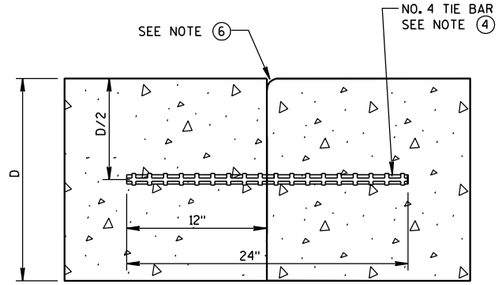
DOWELED-TRANSVERSE

CONTRACTION JOINTS

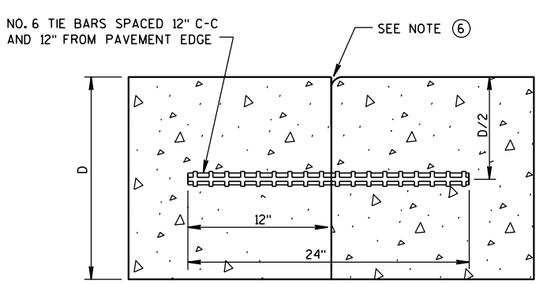
SEE NOTE (2)



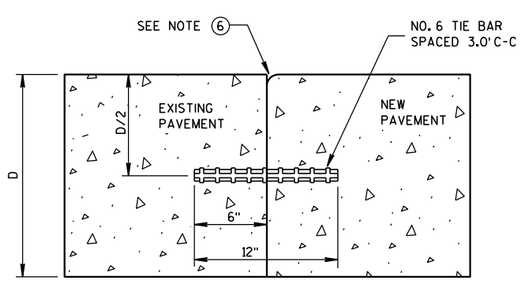
DOWELED TRANSVERSE



TIED LONGITUDINAL



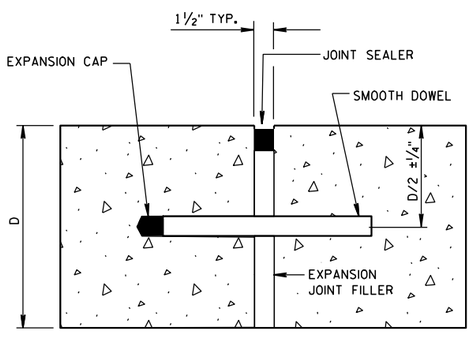
TIED TRANSVERSE
SEE NOTE (3)



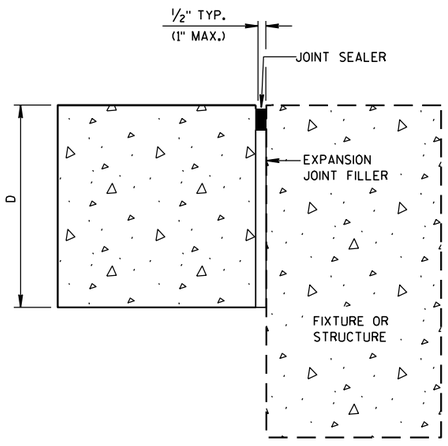
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE
SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

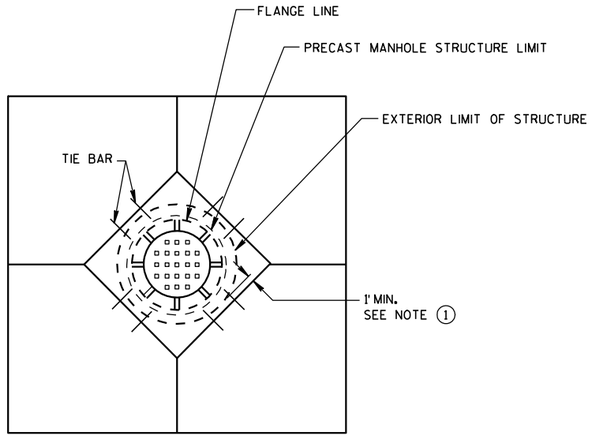
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

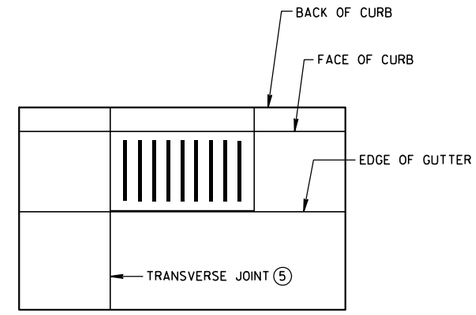
S.D.D. 13 C 18-1c

6

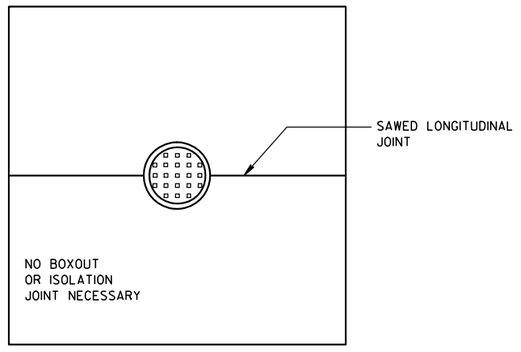
S.D.D. 13 C 18-1c



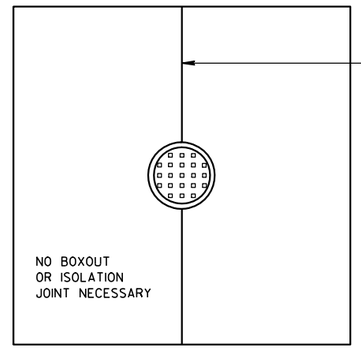
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



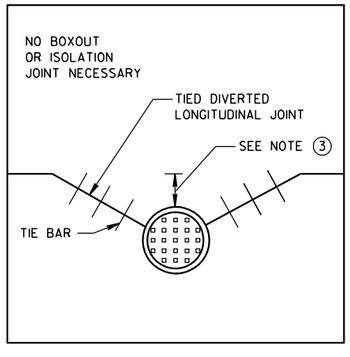
INLET WITH TRANSVERSE JOINT



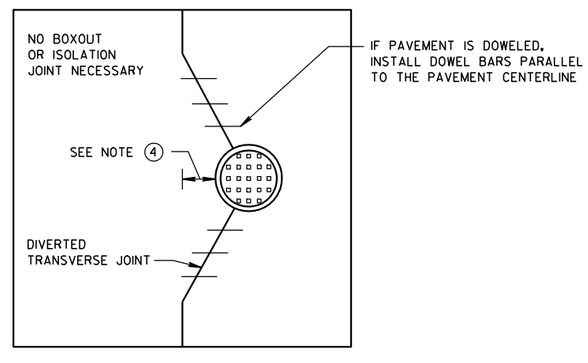
MANHOLE WITH LONGITUDINAL JOINT



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 GREATER THAN 2 FEET, DO NOT DIVERT JOINT AND SAW LONGITUDINAL JOINT AS NORMAL. IF DISTANCE IS 2 FEET OR LESS, DIVERT LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE.
4. IF DISTANCE FROM THE EDGE OF MANHOLE TO THE NEAREST TRANSVERSE JOINT IS GREATER THAN 4 FEET, REDIRECT JOINT TO INTERSECT MANHOLE. IF DISTANCE IS 4 FEET OR LESS, PLACE REBAR REINFORCEMENT AROUND 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
10-5-2010 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D ENGINEER
FHWA

6

S.D.D. 13 C 18-1d

GENERAL NOTES

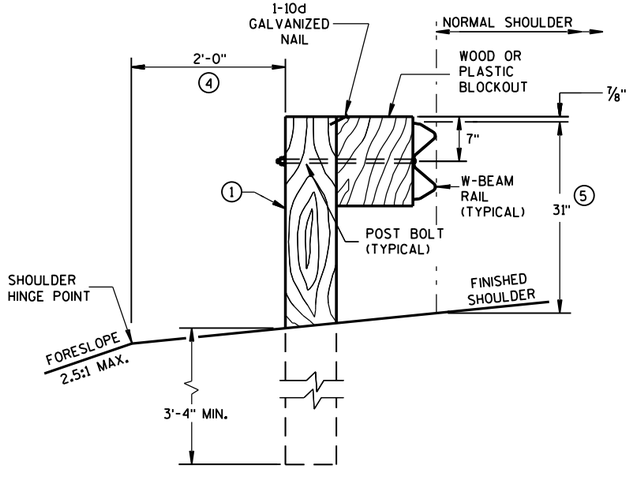
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

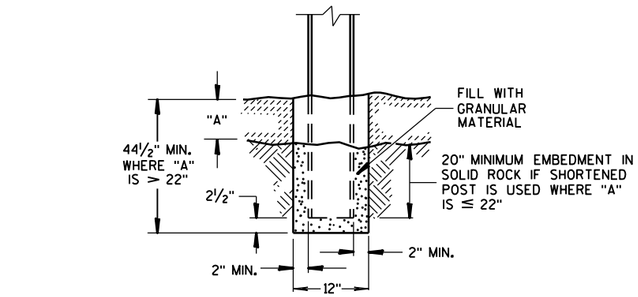
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



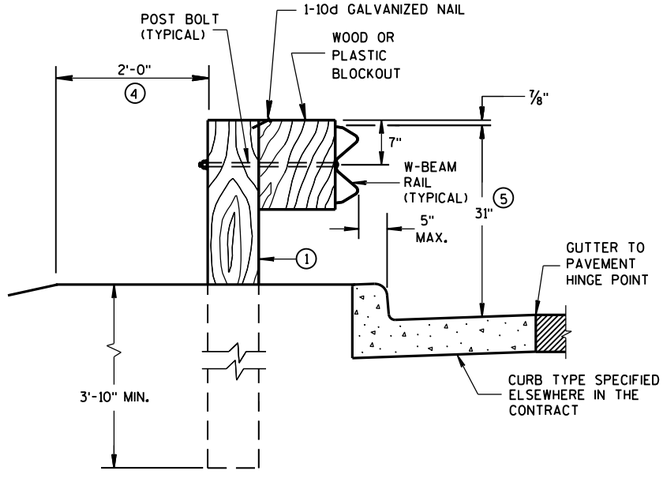
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



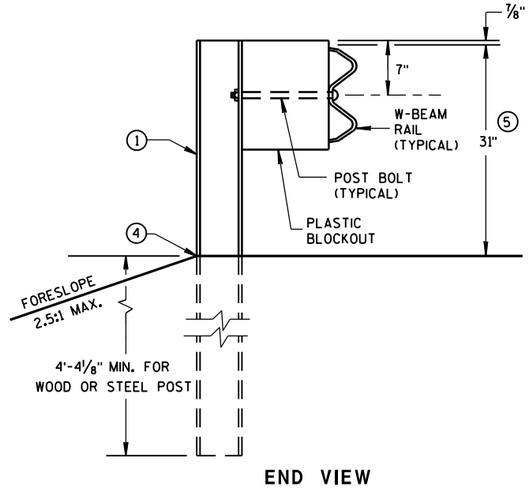
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



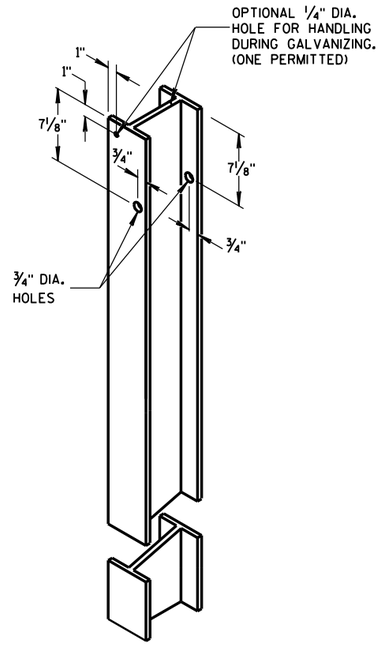
END VIEW

LOCATED ALONG A CURBED ROADWAY

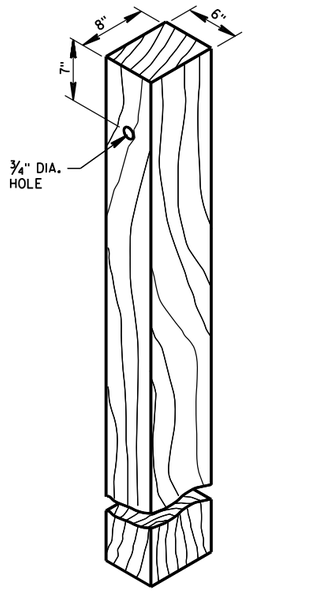


END VIEW

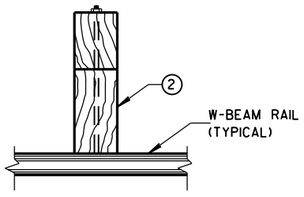
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



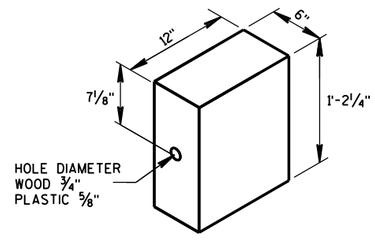
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



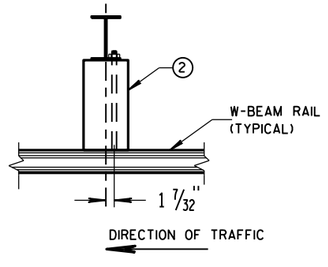
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

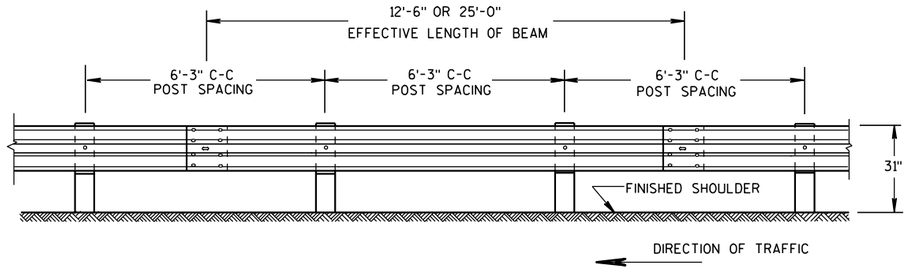


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

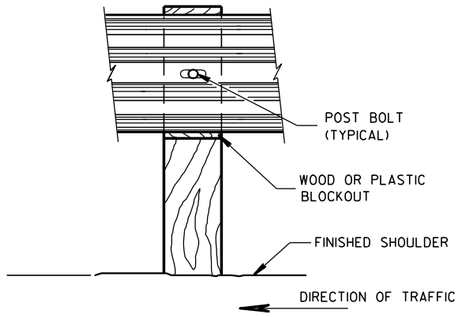
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



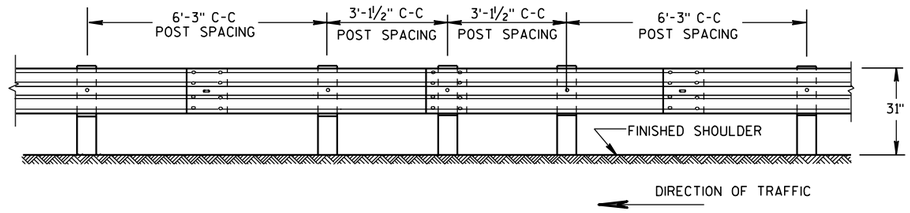
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

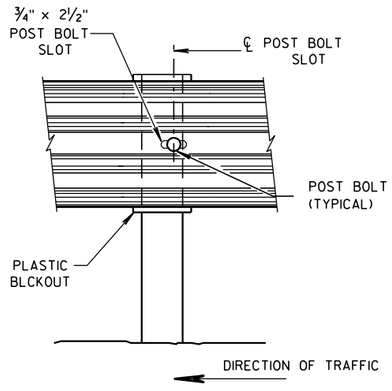
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

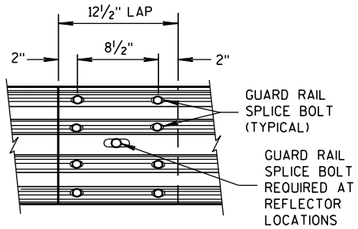


FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

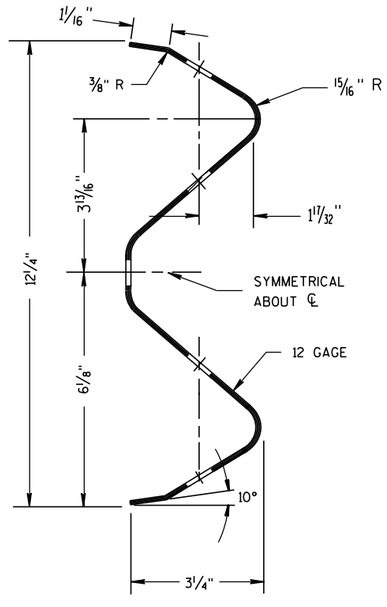


FRONT VIEW AT STEEL POST

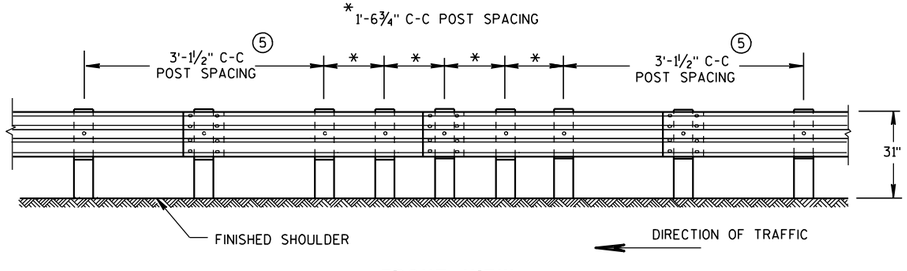


FRONT VIEW

MID-SPAN BEAM SPLICE

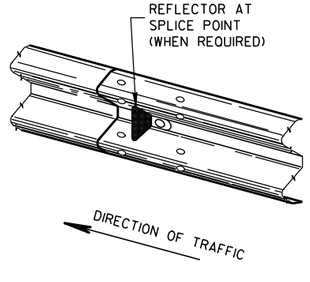


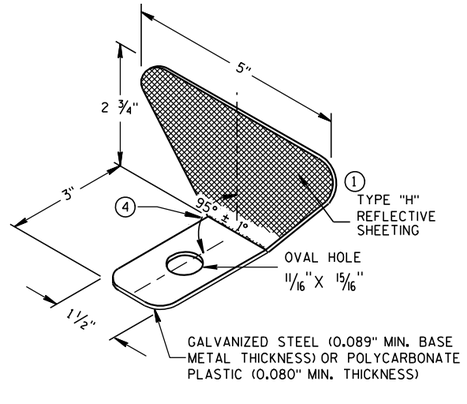
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

REFLECTOR SPACING ②

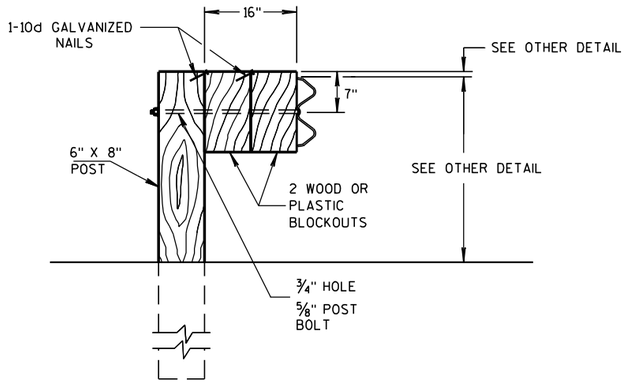
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1 ③	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ④	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

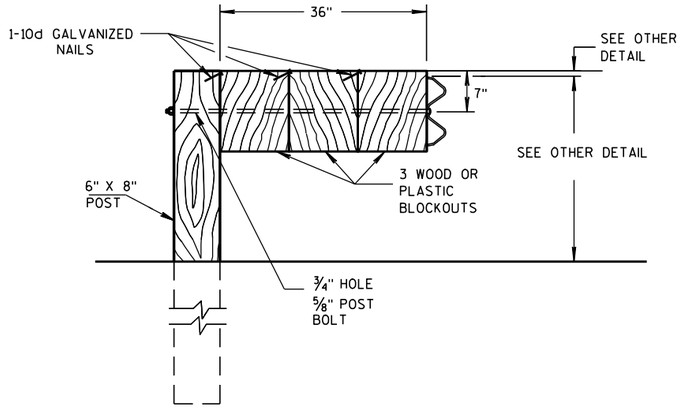
S.D.D. 14 B 42-2b

S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

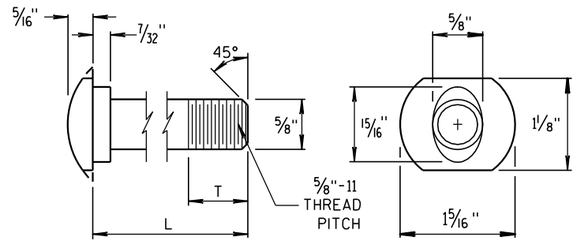


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

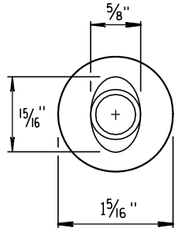
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

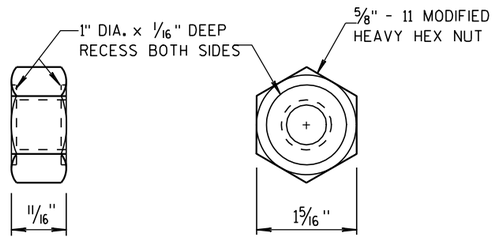


POST BOLT TABLE

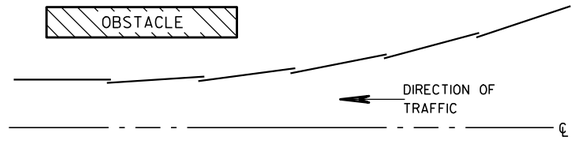
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

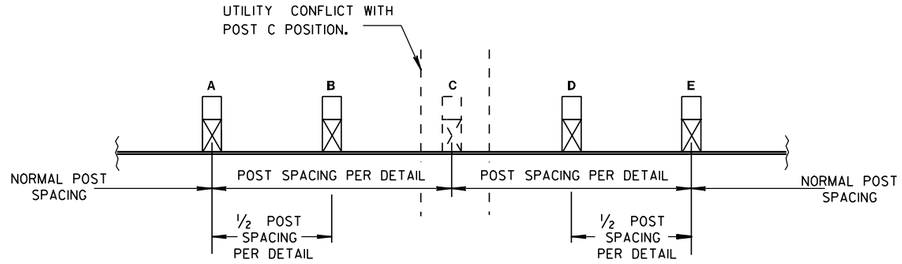


POST BOLT AND RECESS NUT

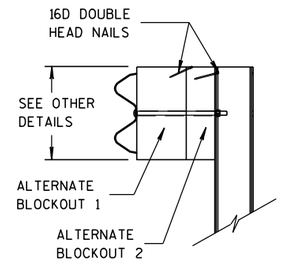


PLAN VIEW

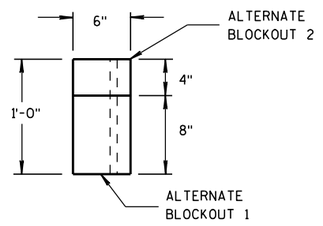
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

ENT

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S.D.D. 14 B 42-2c

6

S.D.D. 14 B 42-2c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

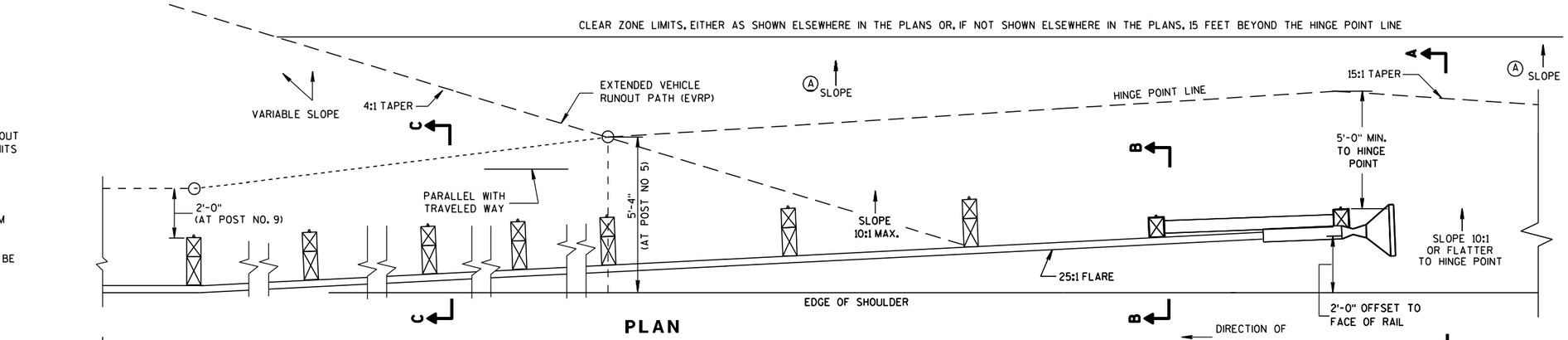
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

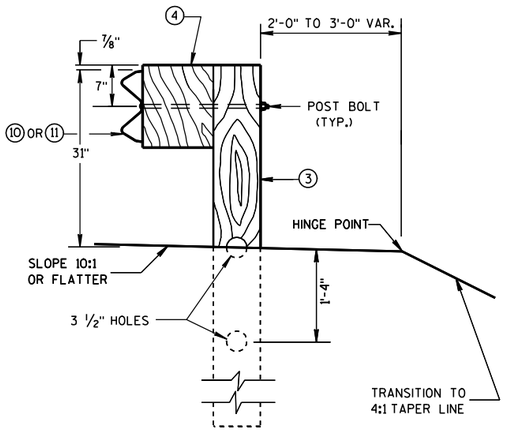
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

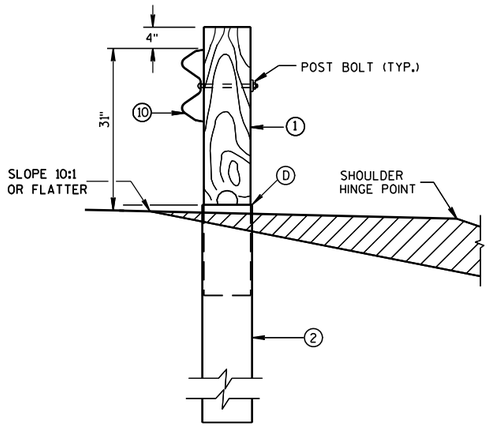
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

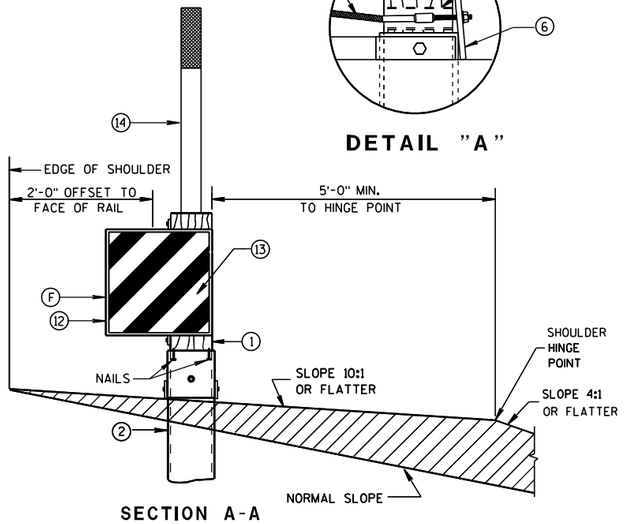




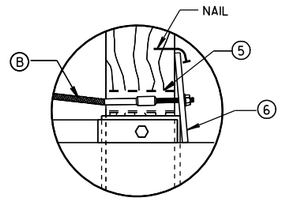
SECTION C-C
TYPICAL AT POST NOS. 3-9



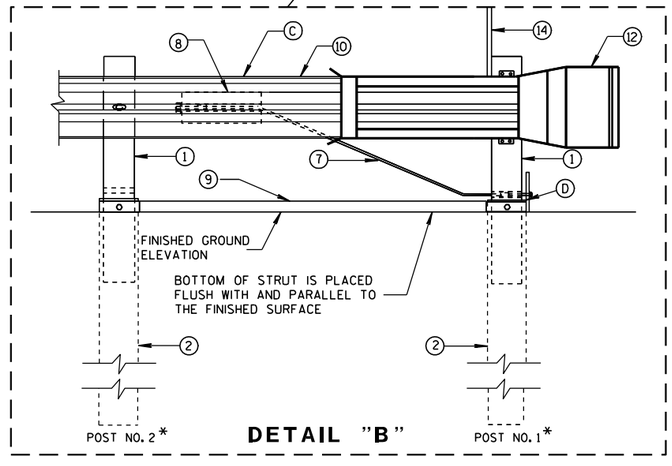
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



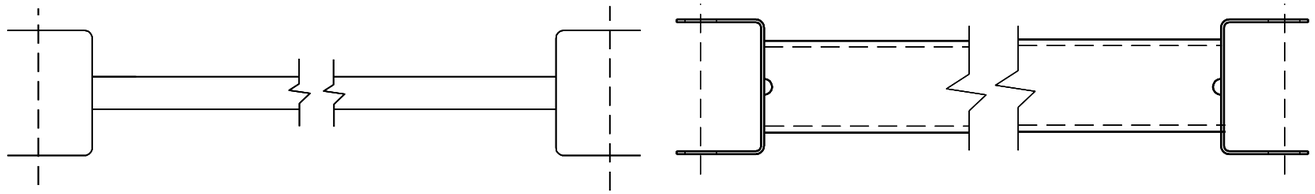
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 44-1a

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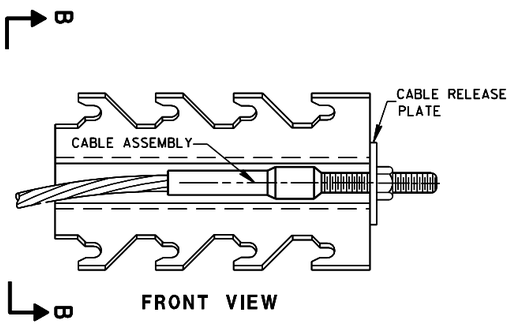


(9) (H)

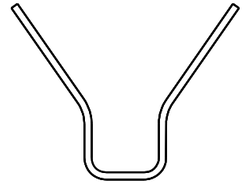
GENERIC GROUND STRUT

BILL OF MATERIALS

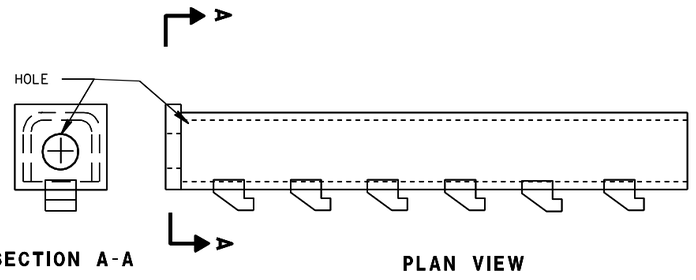
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



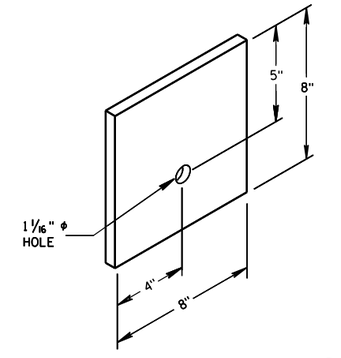
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



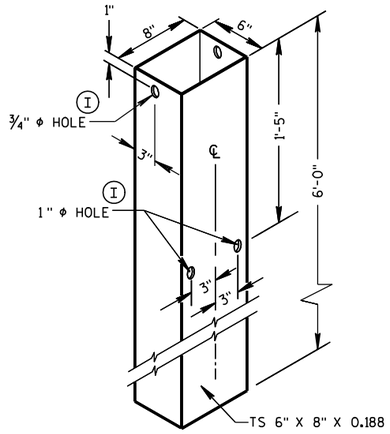
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

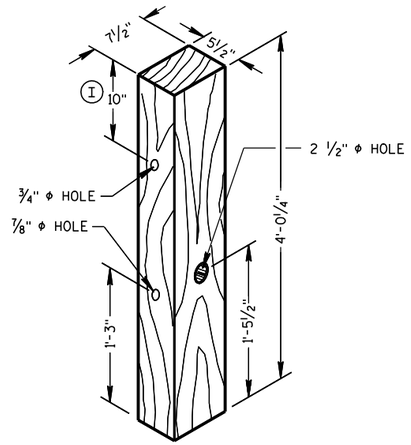
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 44-1b

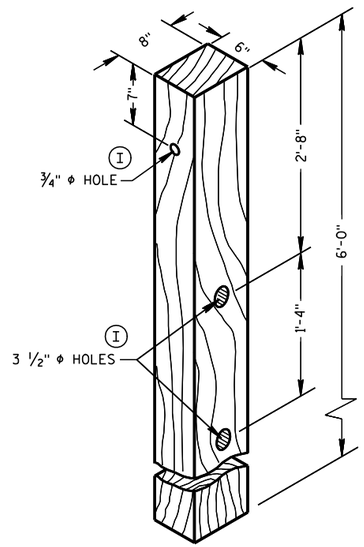


FOUNDATION TUBE (2)



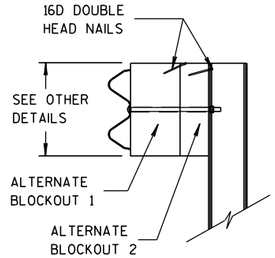
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

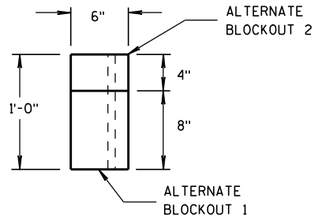


POSTS NUMBER 3-9

WOOD CRT POST (3)

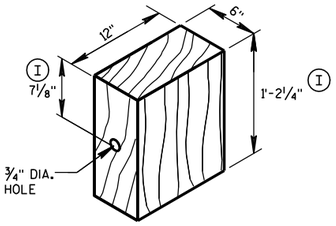


SIDE VIEW



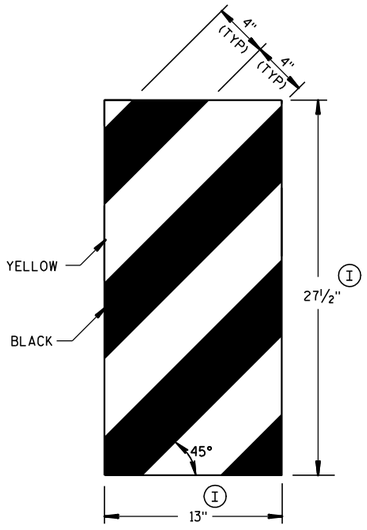
TOP VIEW

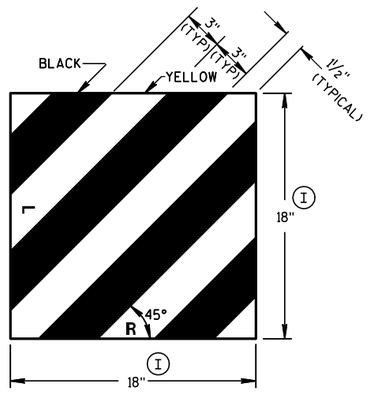
ALTERNATE WOOD BLOCKOUT DETAIL



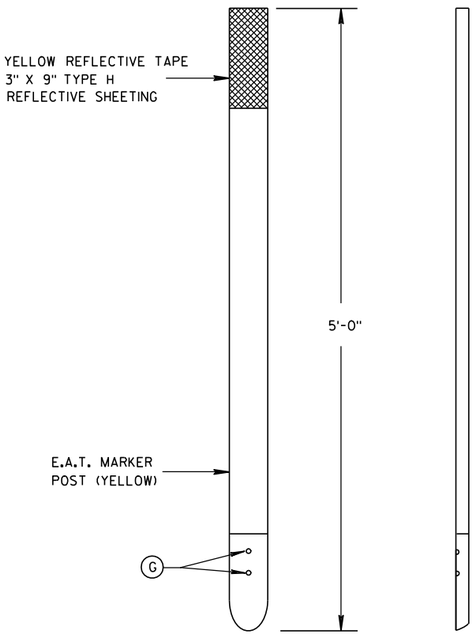
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





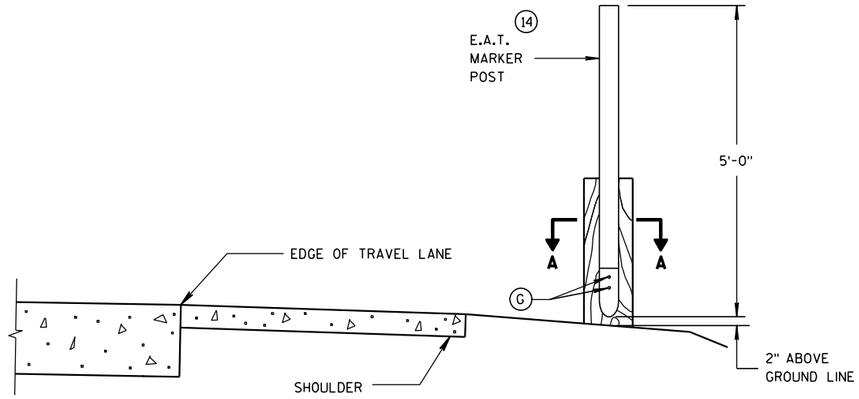
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

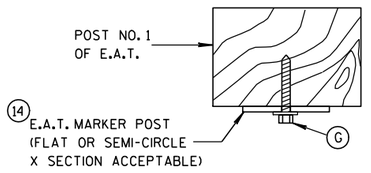
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

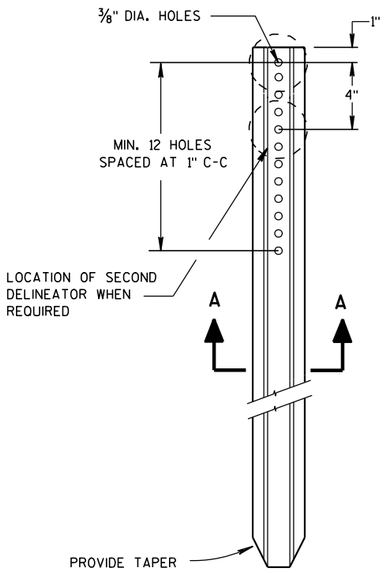
5/23/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

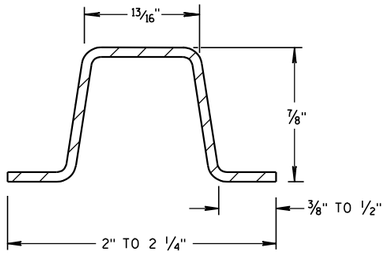
FHWA

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S.D.D. 14 B 44-1c

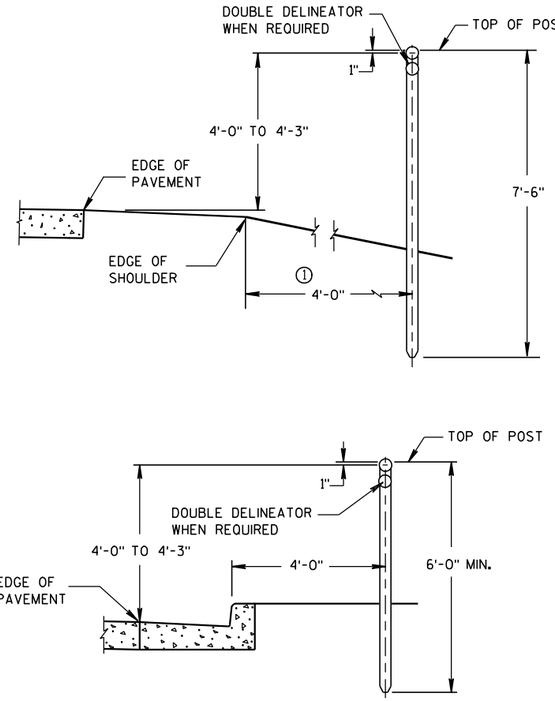


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

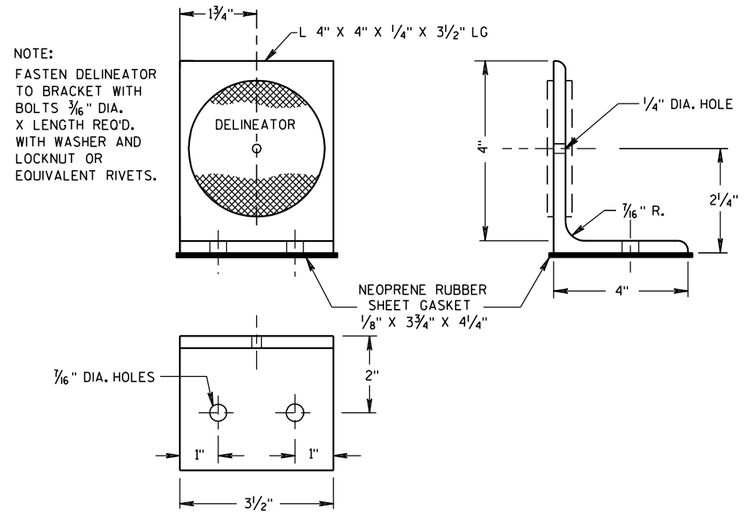


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

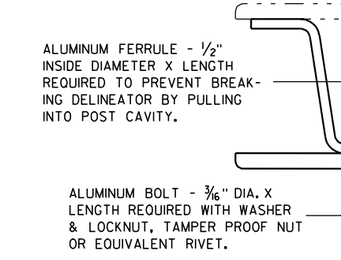
GENERAL NOTES

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

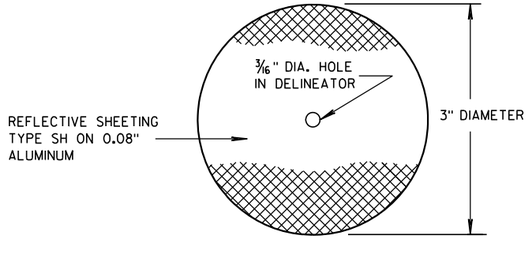
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



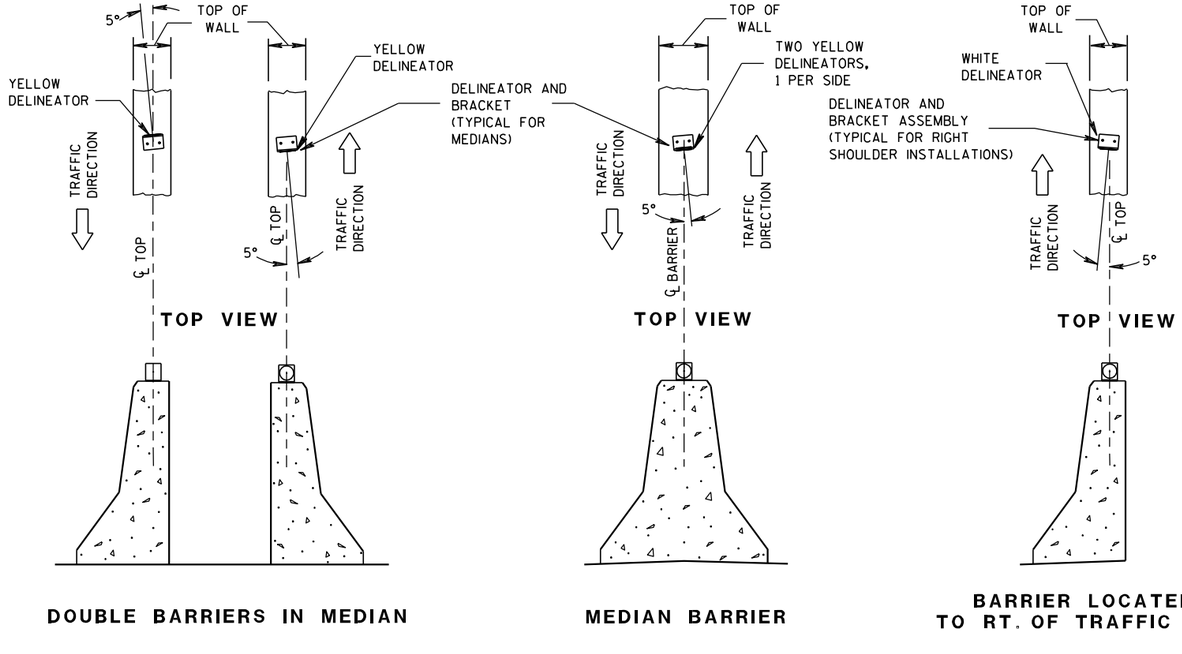
DELINEATOR BRACKET



MOUNTING DETAIL FOR DELINEATOR



DELINEATOR

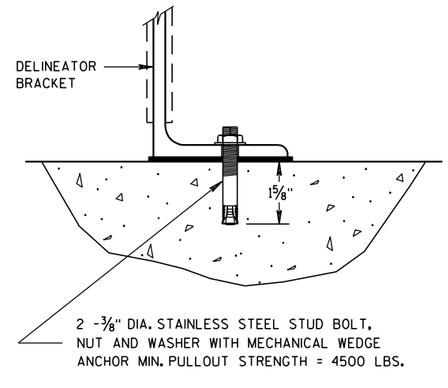


DOUBLE BARRIERS IN MEDIAN

MEDIAN BARRIER

BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

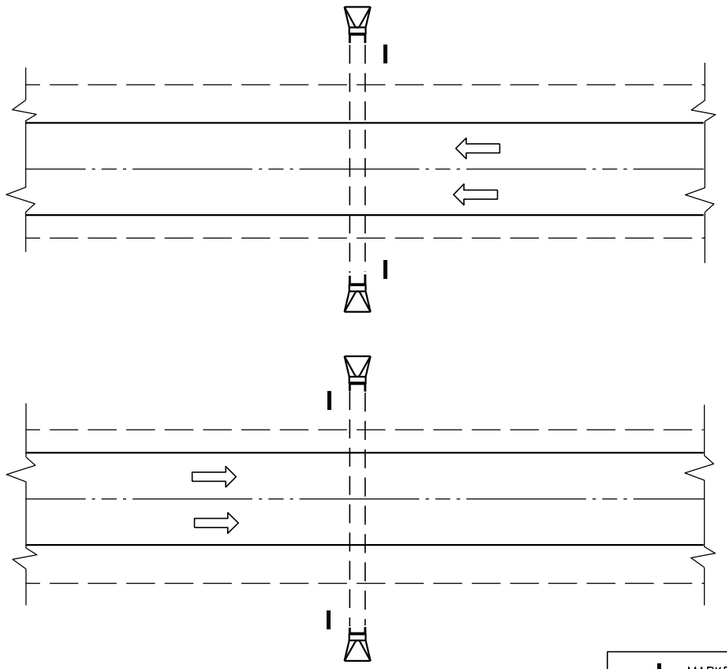
APPROVED
1/25/2011 — DATE
/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER
189
DESIGN
FHWA

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S.D.D. 15 A 2-7

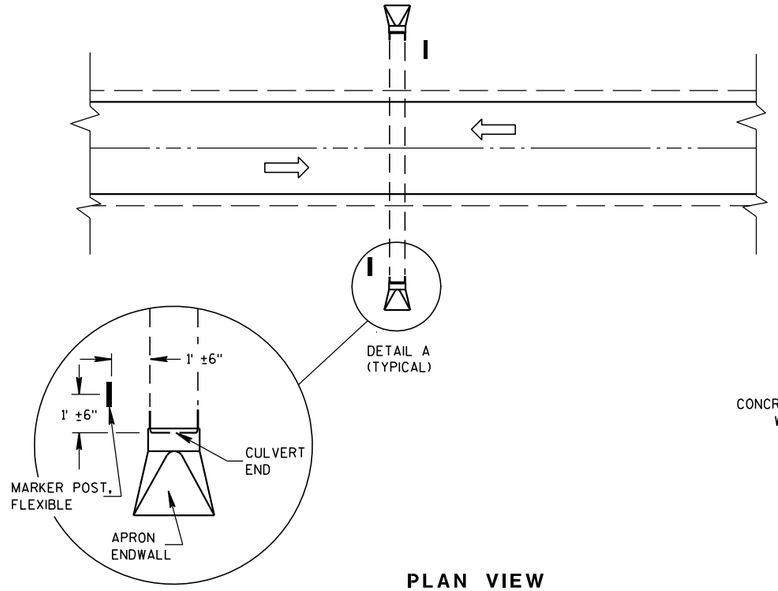
GENERAL NOTES

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.



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

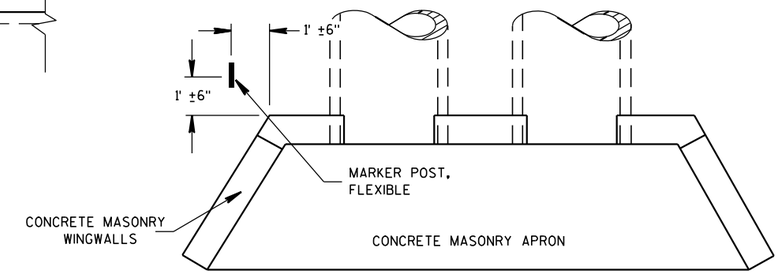
PLAN VIEW

UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

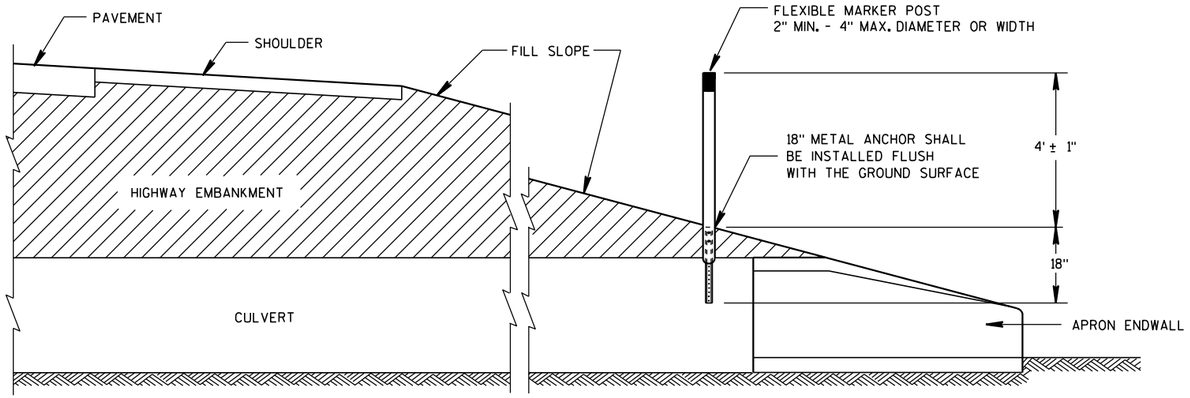
DIRECTION OF TRAFFIC FLOW

FLEXIBLE MARKER POST LOCATION



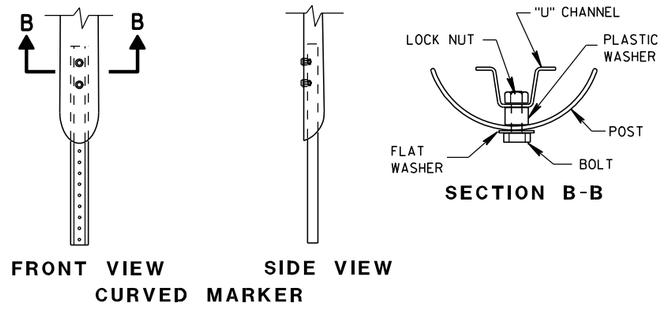
PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH



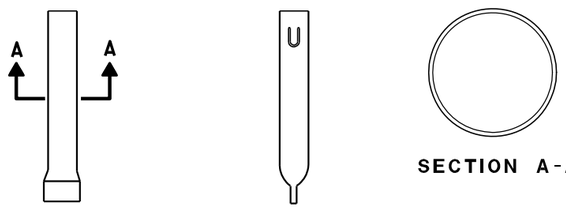
CROSS SECTION

FLEXIBLE MARKER POST



SECTION B-B

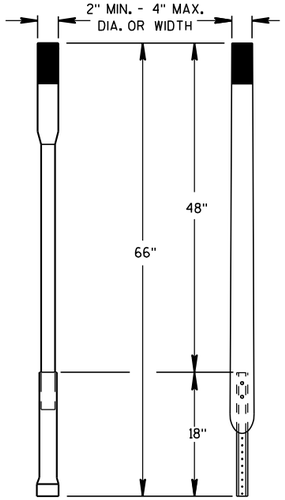
FRONT VIEW SIDE VIEW
CURVED MARKER



SECTION A-A

FRONT VIEW SIDE VIEW
ROUND MARKER

FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE, FOR CULVERT END
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10/1/98 DATE /S/ Rory L. Rhinesmith CHEIF ROADWAY DEVELOP ENGINEER
FHWA

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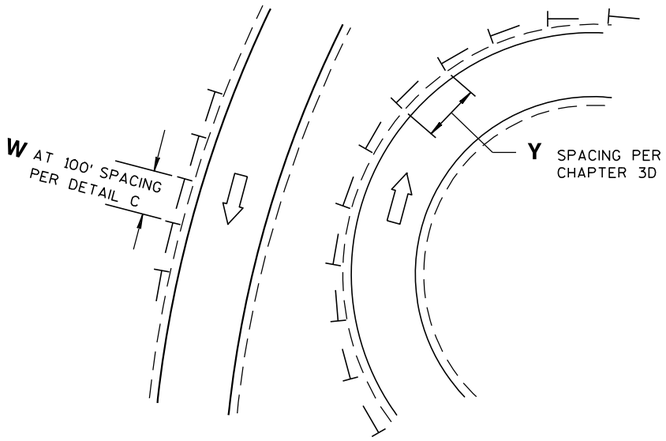
S.D.D. 15 A 3-1

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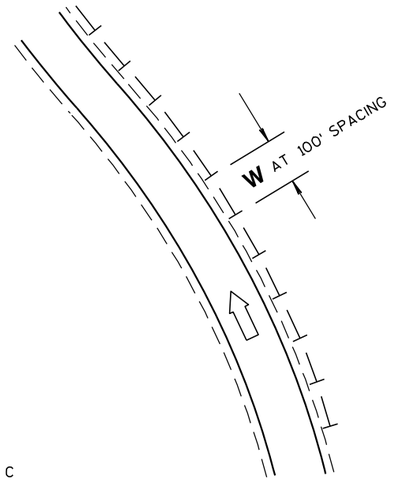
S.D.D. 15 A 3-1

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



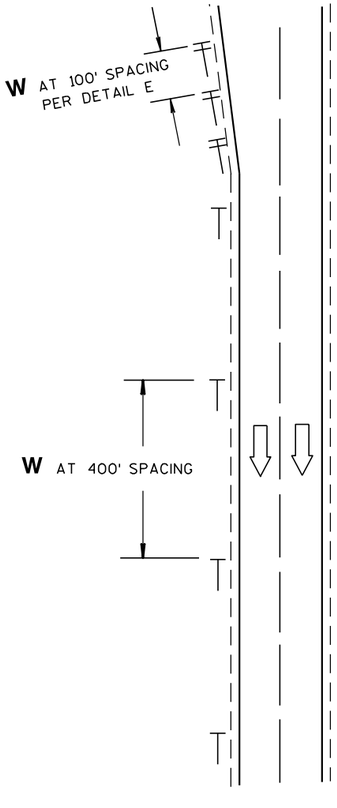
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



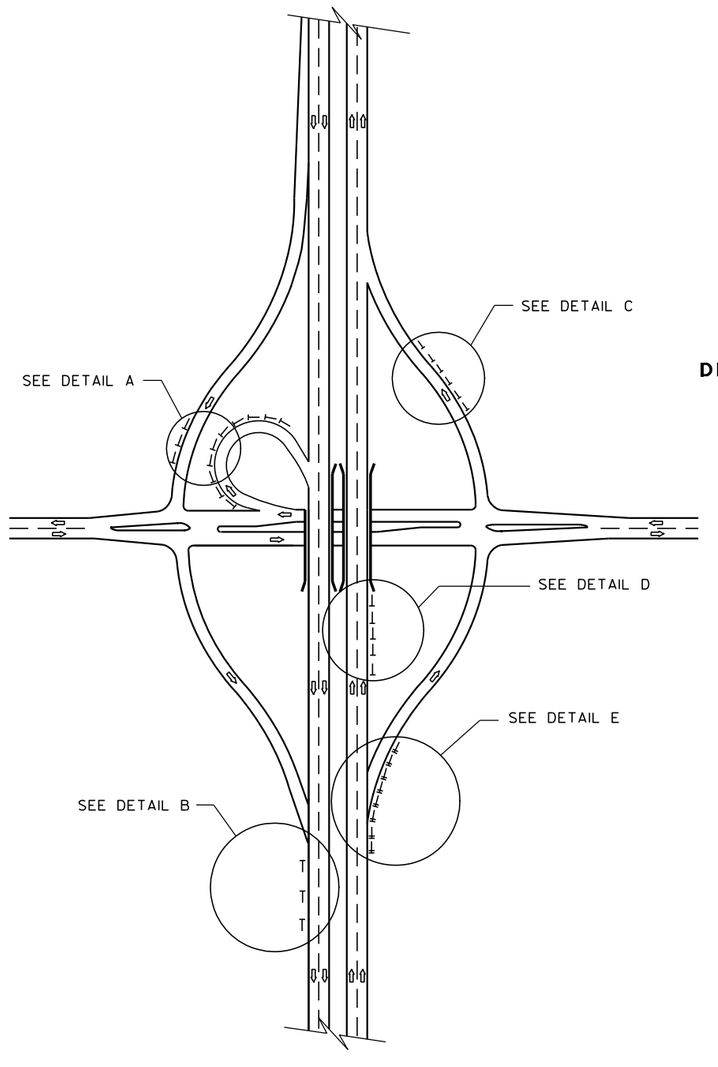
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

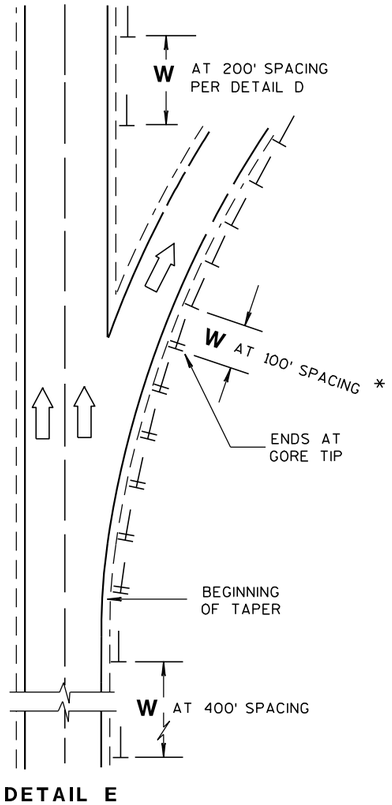
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



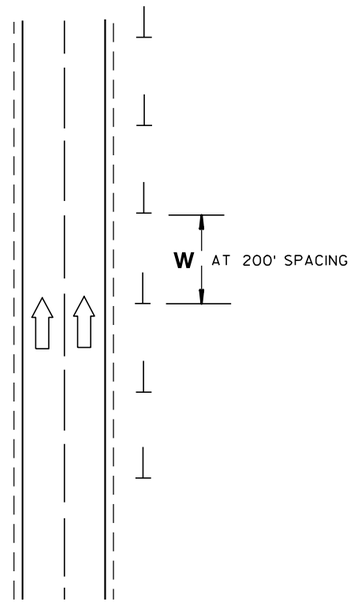
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA

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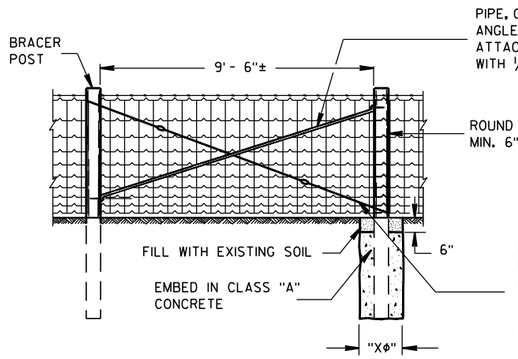
S.D.D. 15 A 6-2

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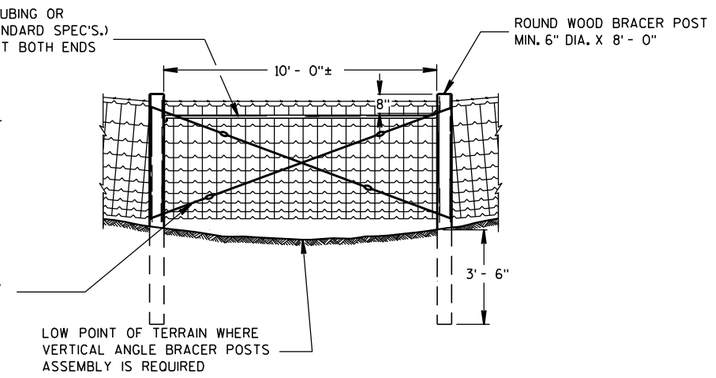
S.D.D. 15 A 6-2

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

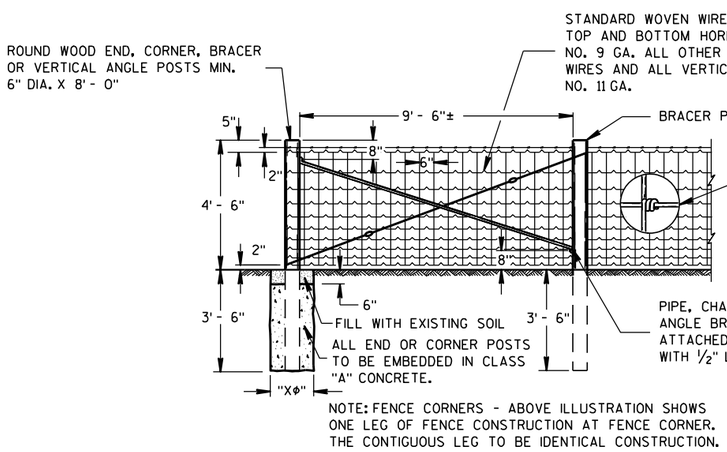
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

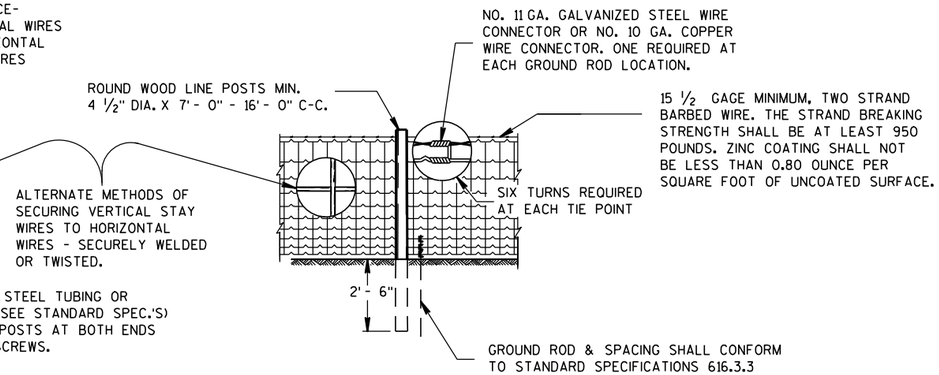
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



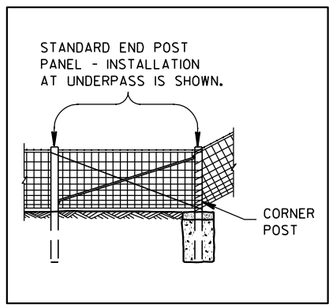
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

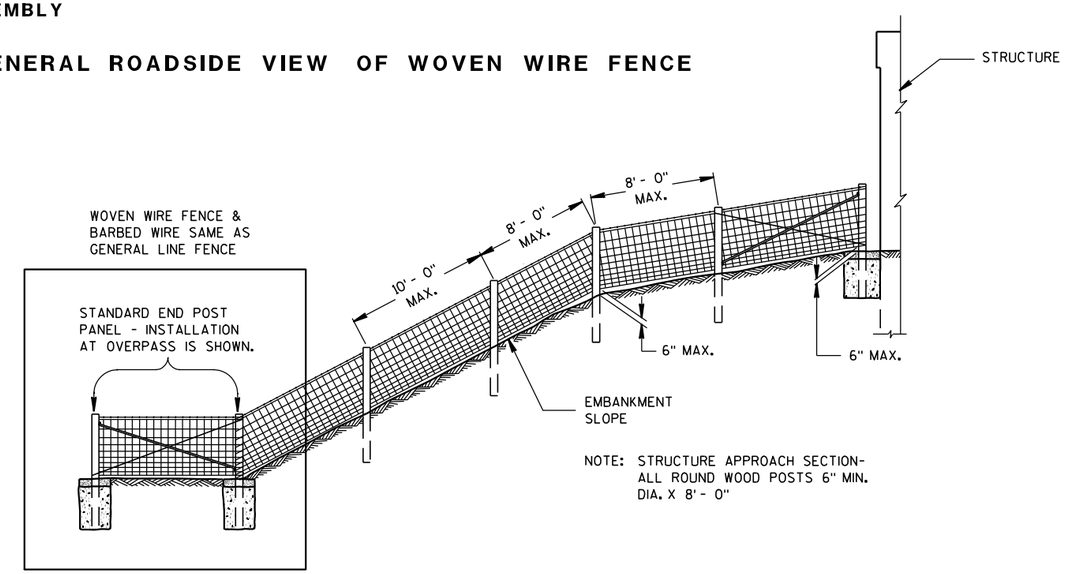


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



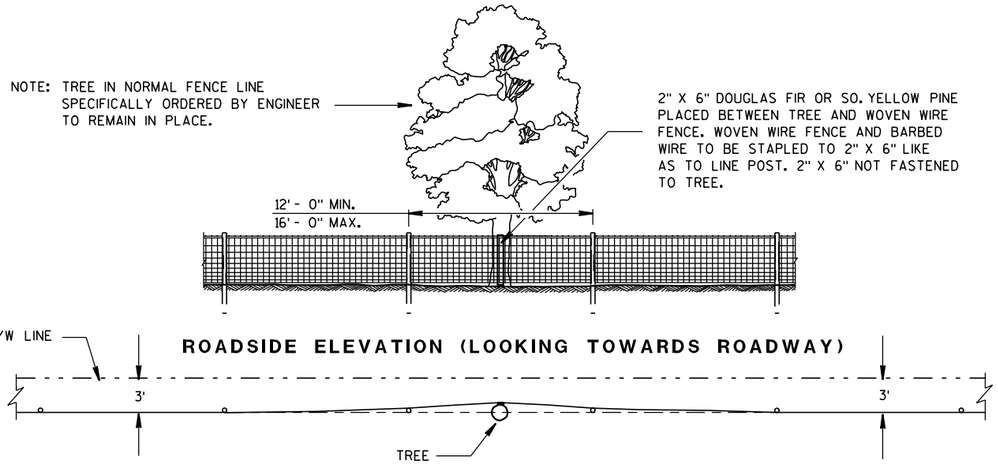
FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

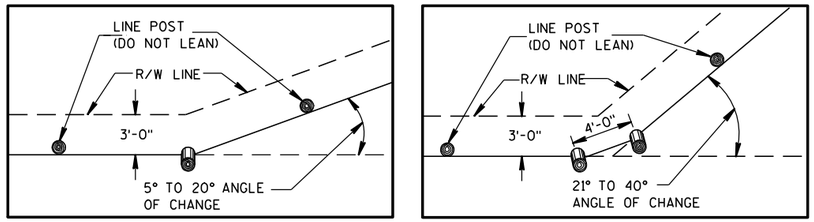
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S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



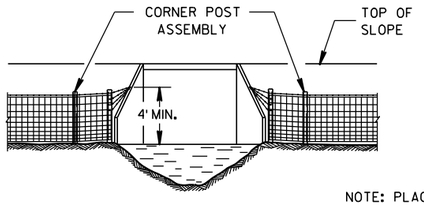
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

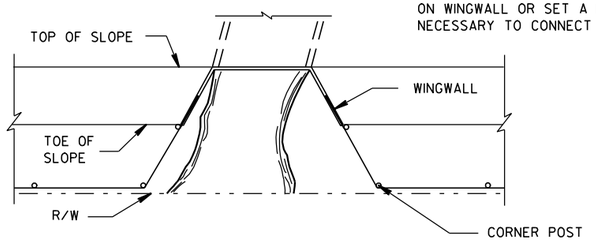
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

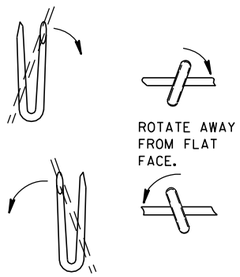
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



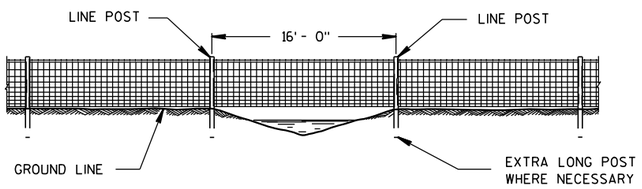
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



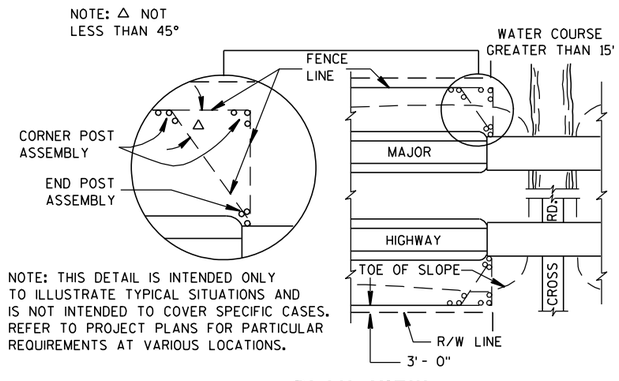
FENCE INSTALLATION TO WINGWALLS



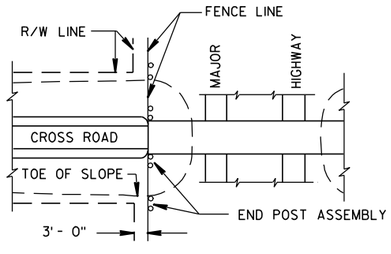
LINE POST



FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

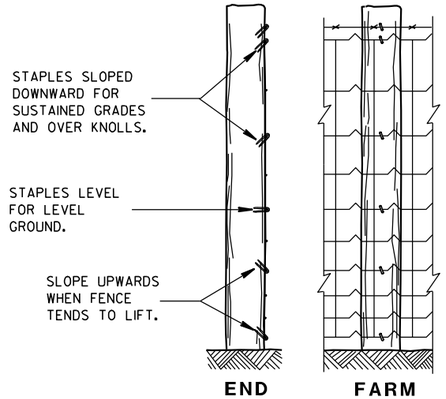


PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL

FENCE LOCATION AT STRUCTURES

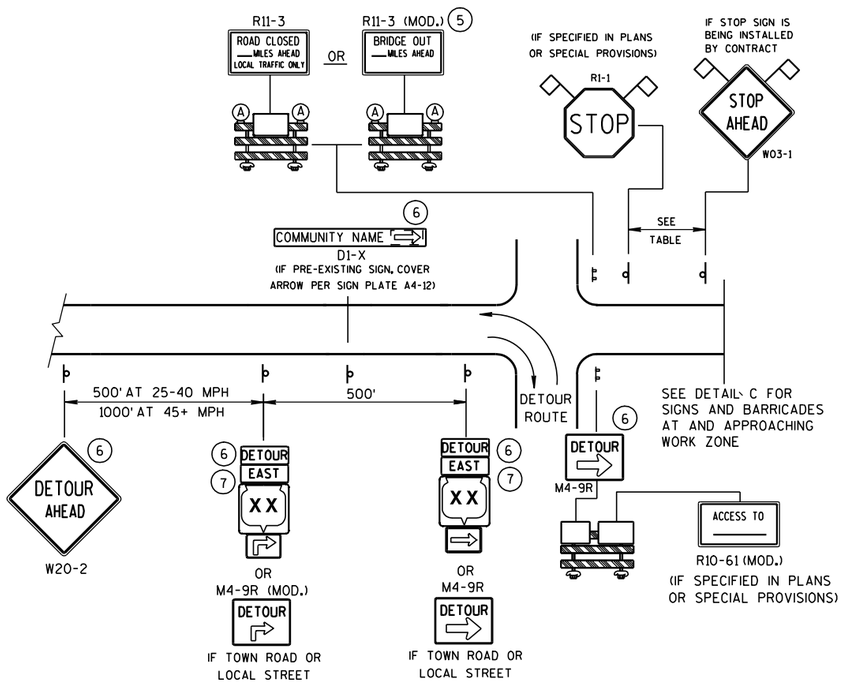
FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

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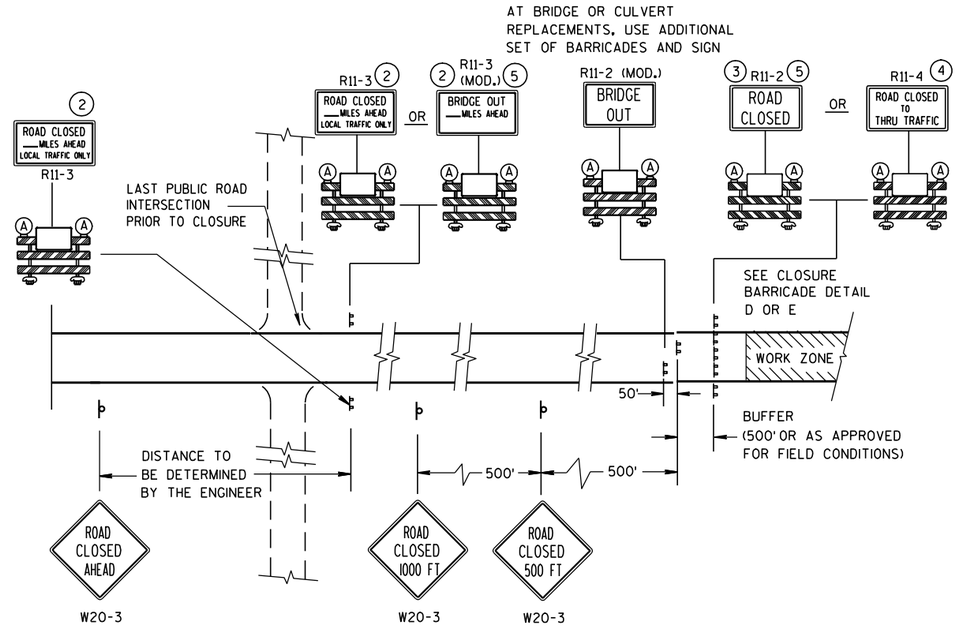
S.D.D. 15 B 1-8b



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

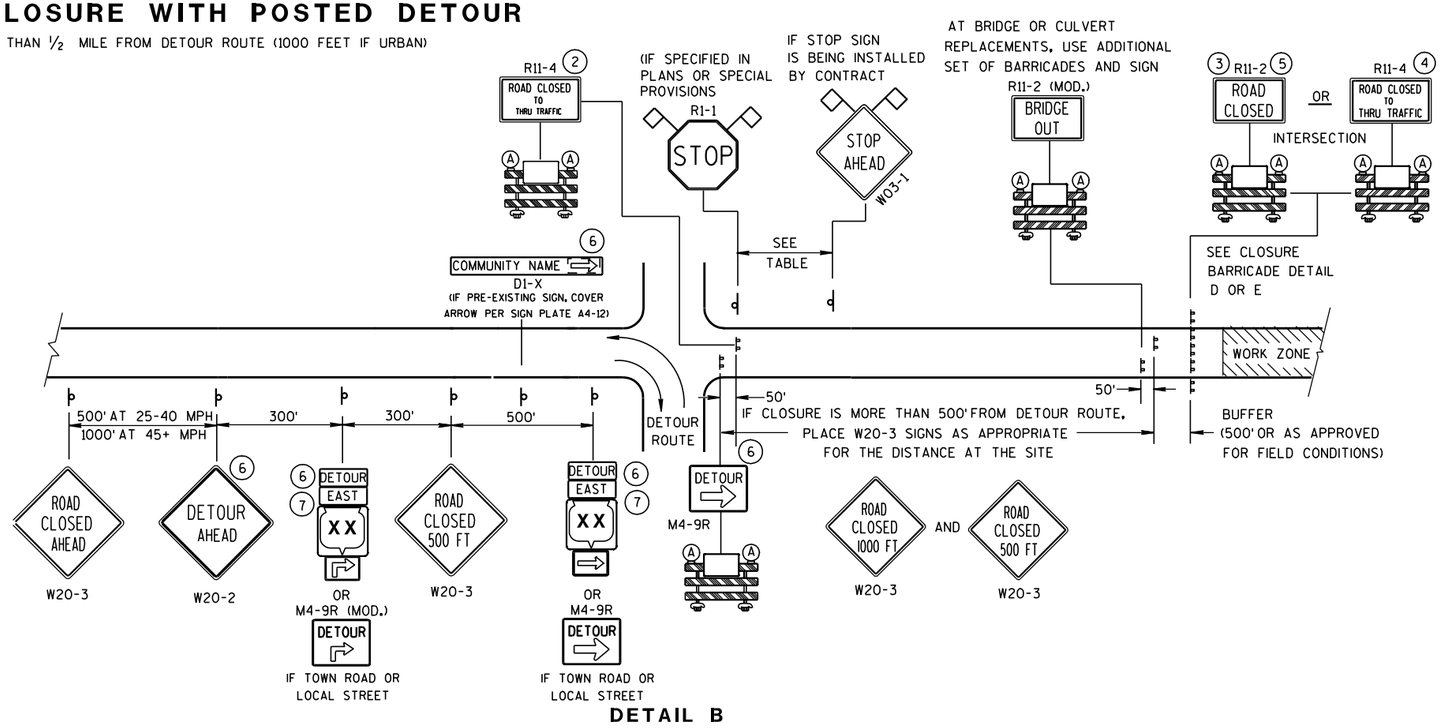


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

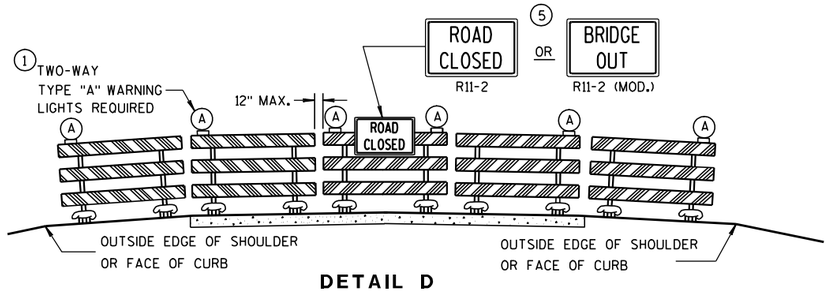
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

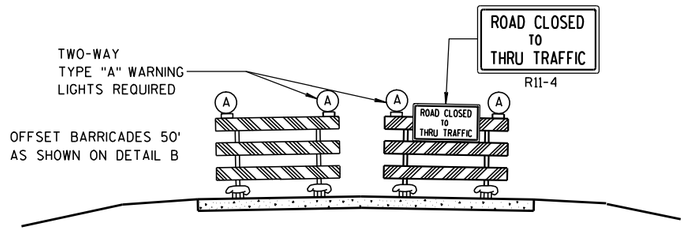
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

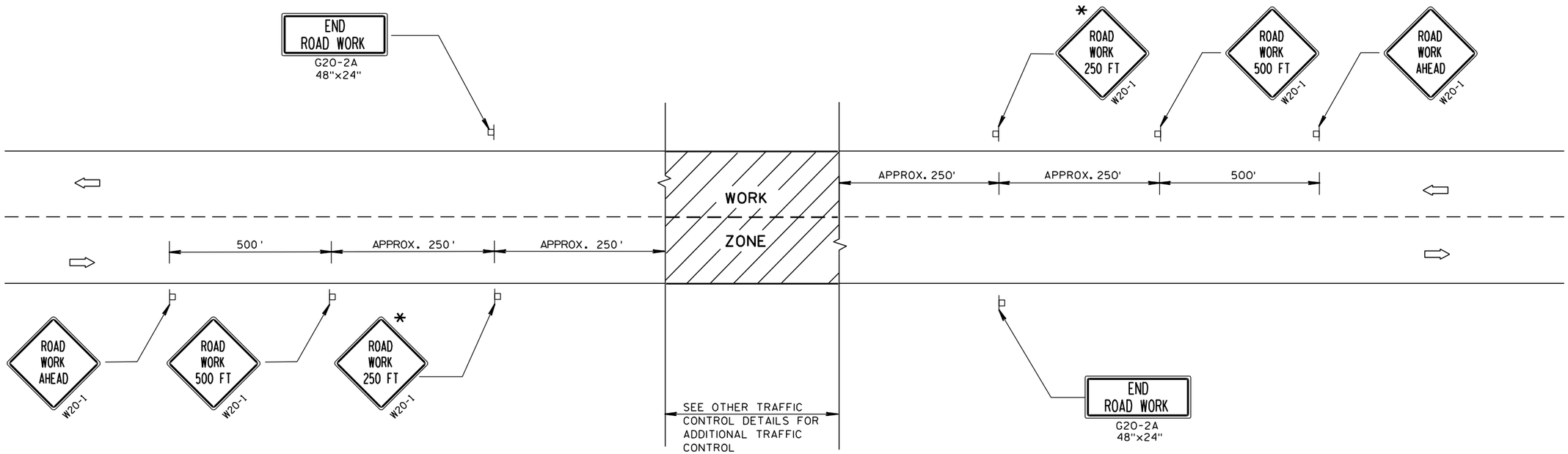
9/16/03 — DATE

/S/ Thomas N. [illegible] — CHIEF SIGNS AND MARKINGS ENGINEER

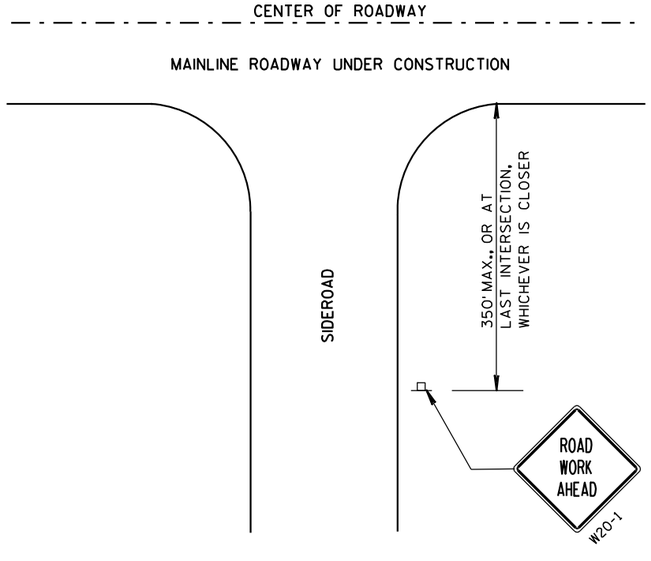
FHWA

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S.D.D. 15 C 2-4b



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/00
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

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S.D.D. 15 C 5-1

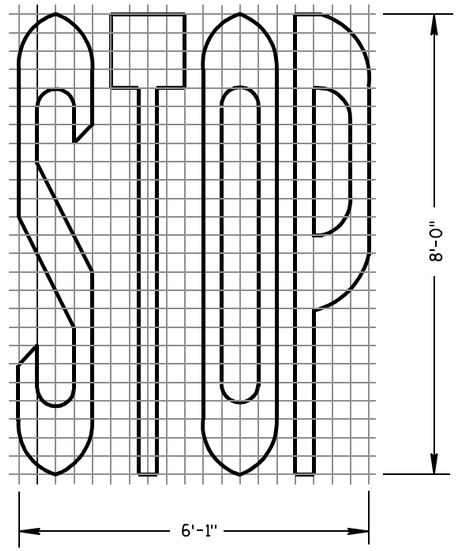
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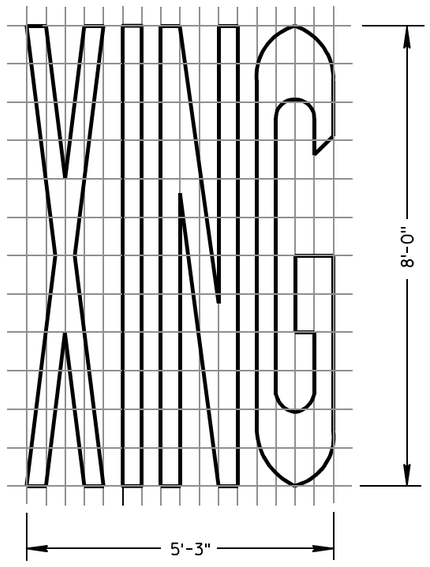
S.D.D. 15 C 5-1

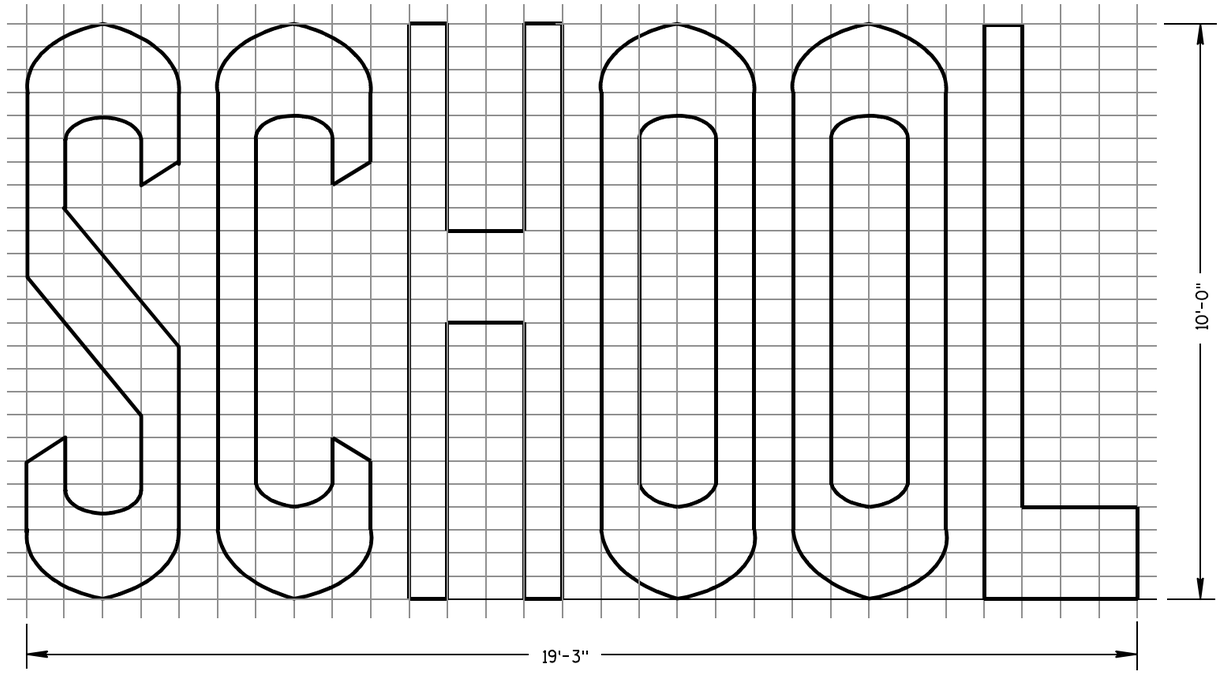
GENERAL NOTES

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

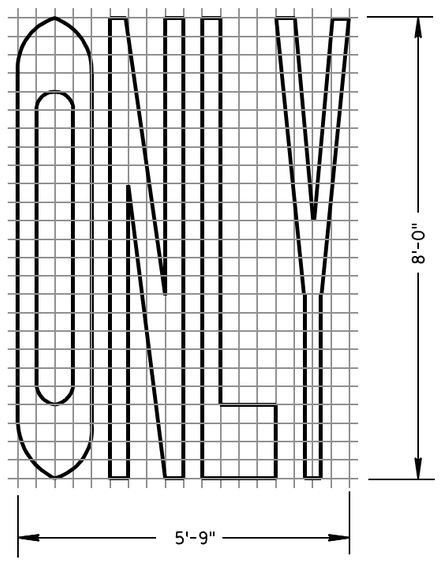
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

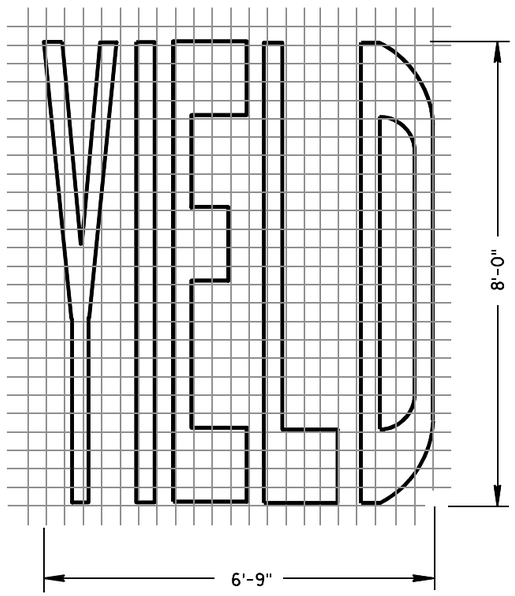


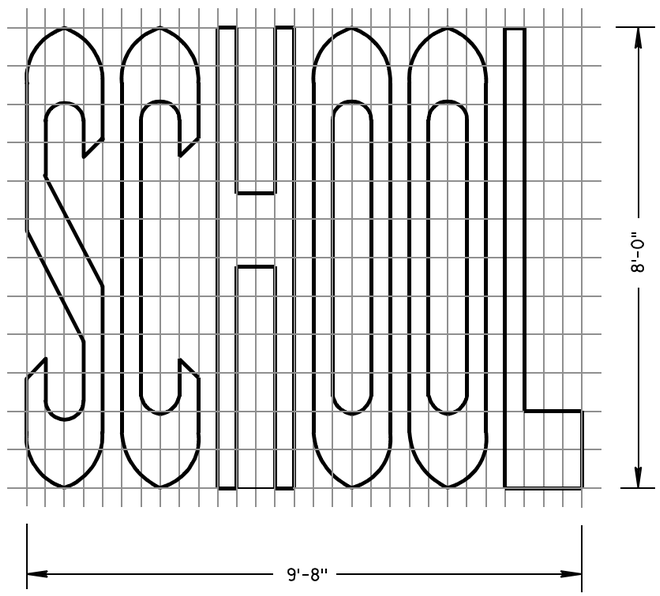




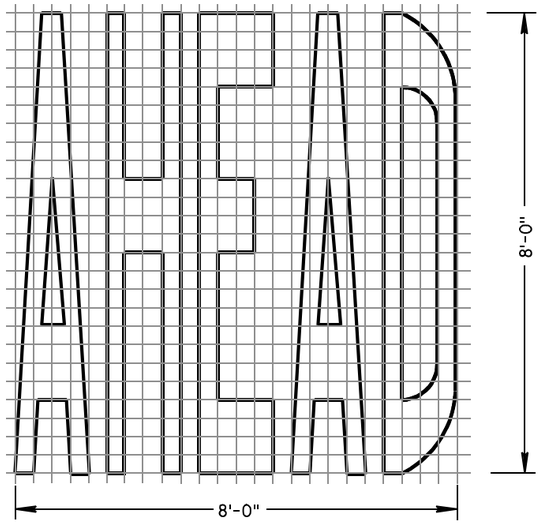
TWO-LANE







SINGLE-LANE



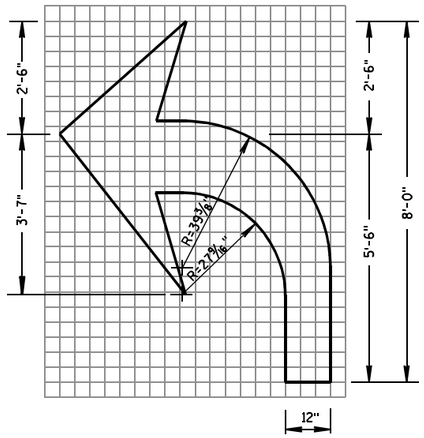
PAVEMENT MARKING WORDS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7-1-11 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	

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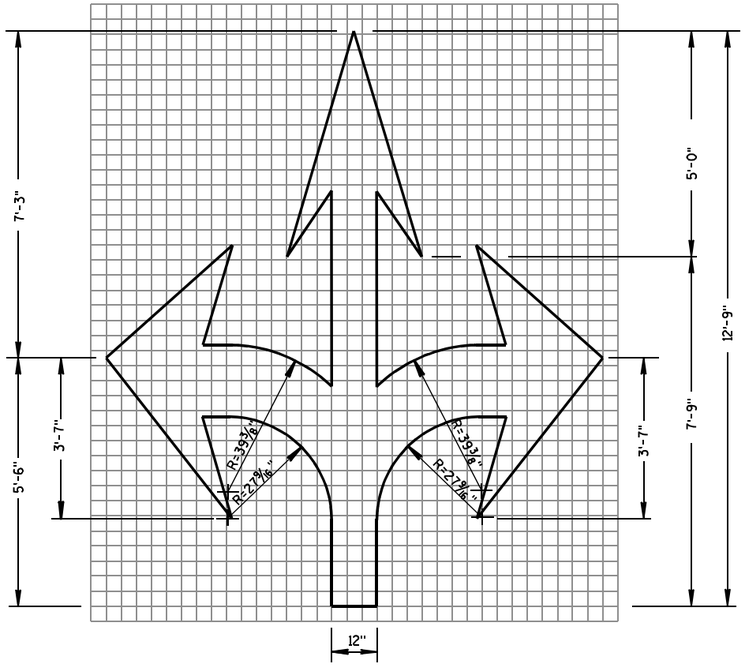
S.D.D. 15 C 7-12b

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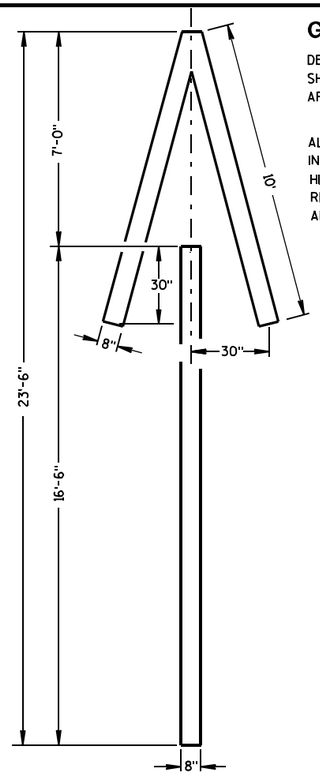
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

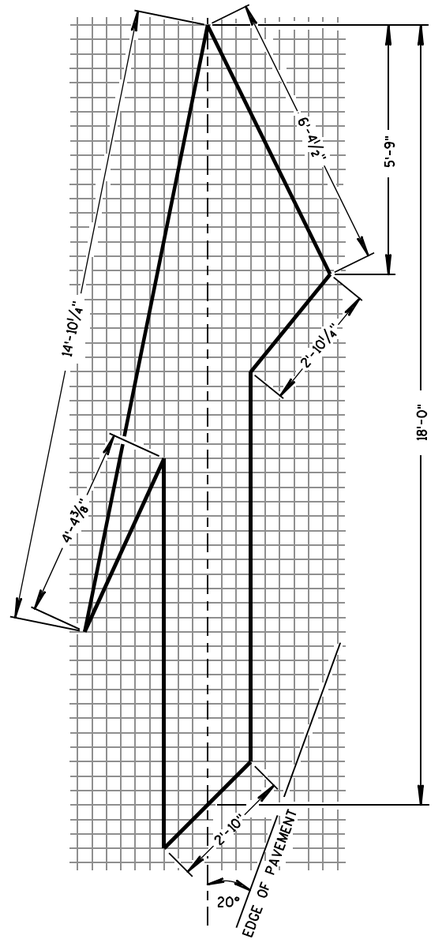


TYPE 4

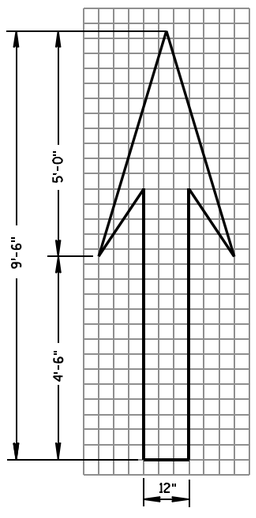
GENERAL NOTES

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

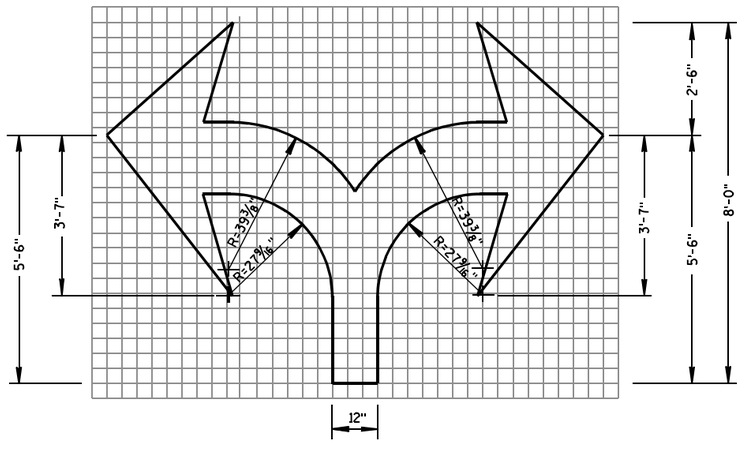
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



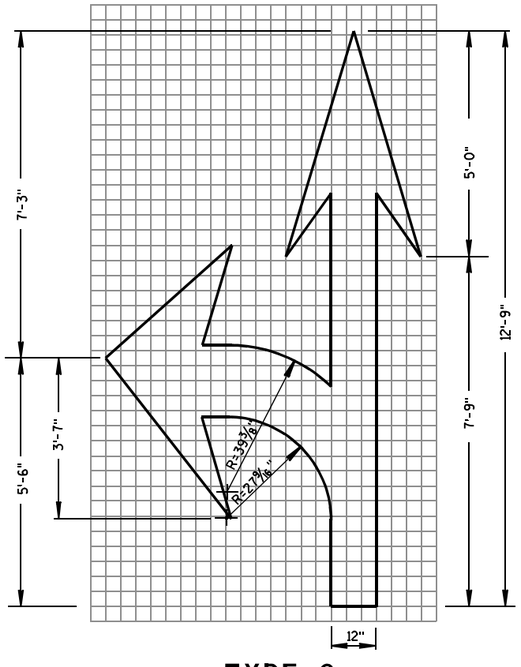
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

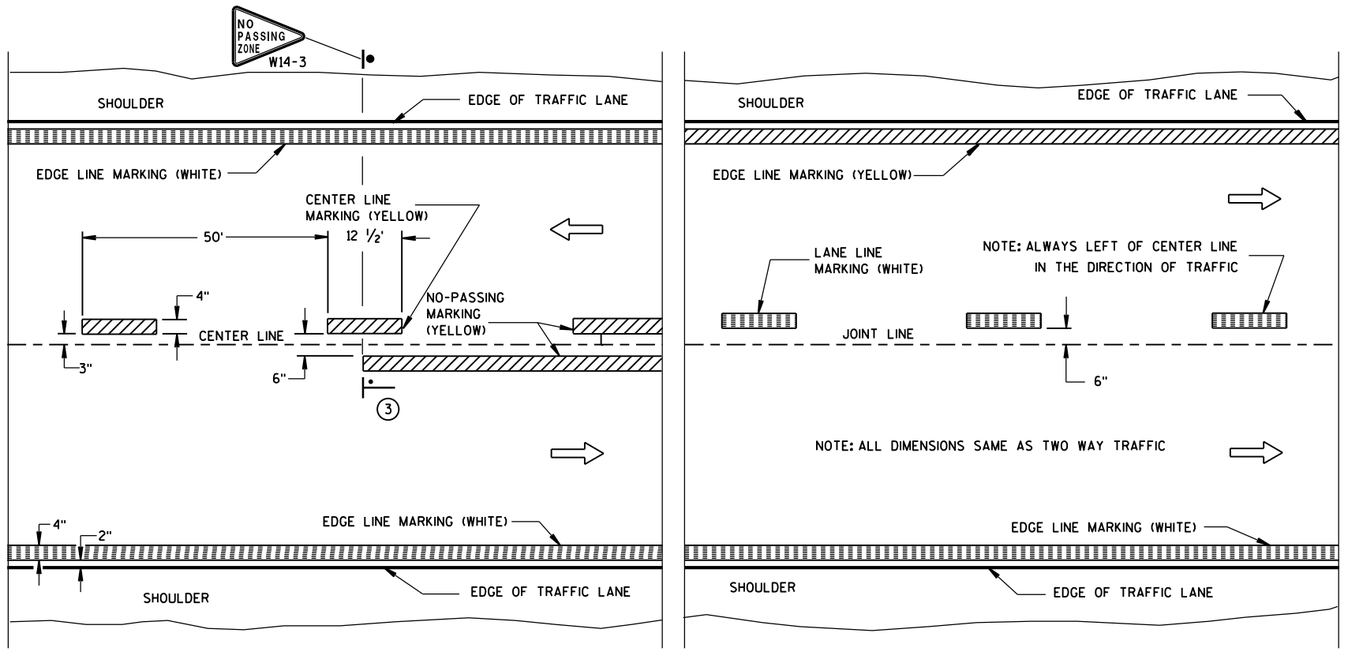
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S.D.D. 15 C 7-12c

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S.D.D. 15 C 7-12c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

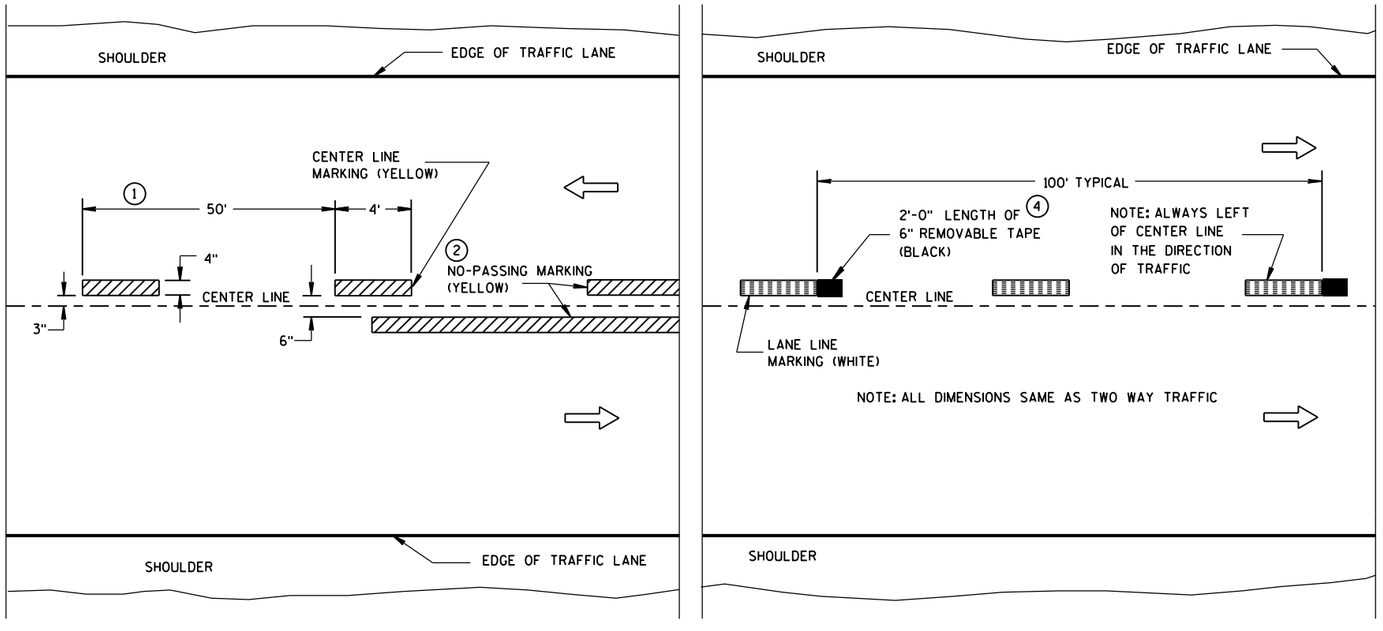
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

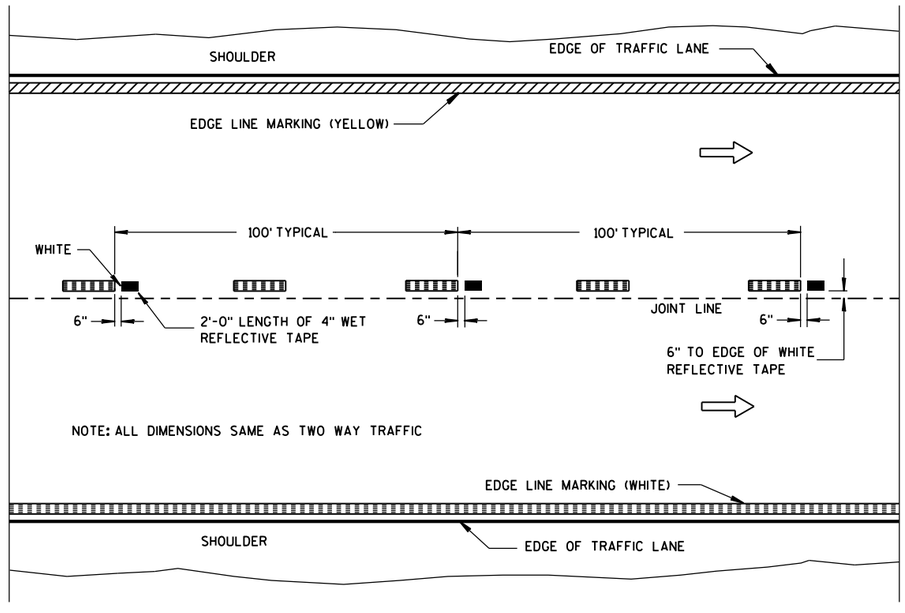


TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

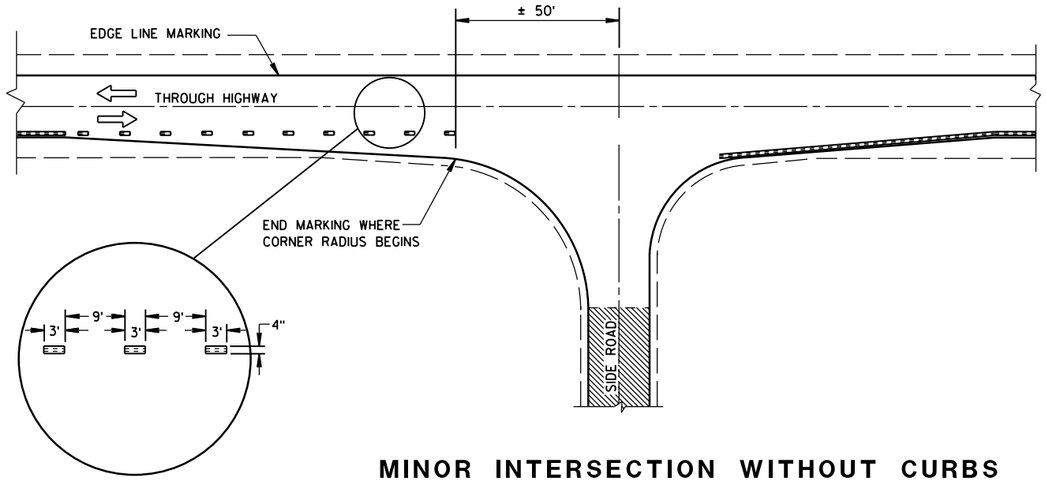
APPROVED
10-1-2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 8-15a

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S.D.D. 15 C 8-15a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

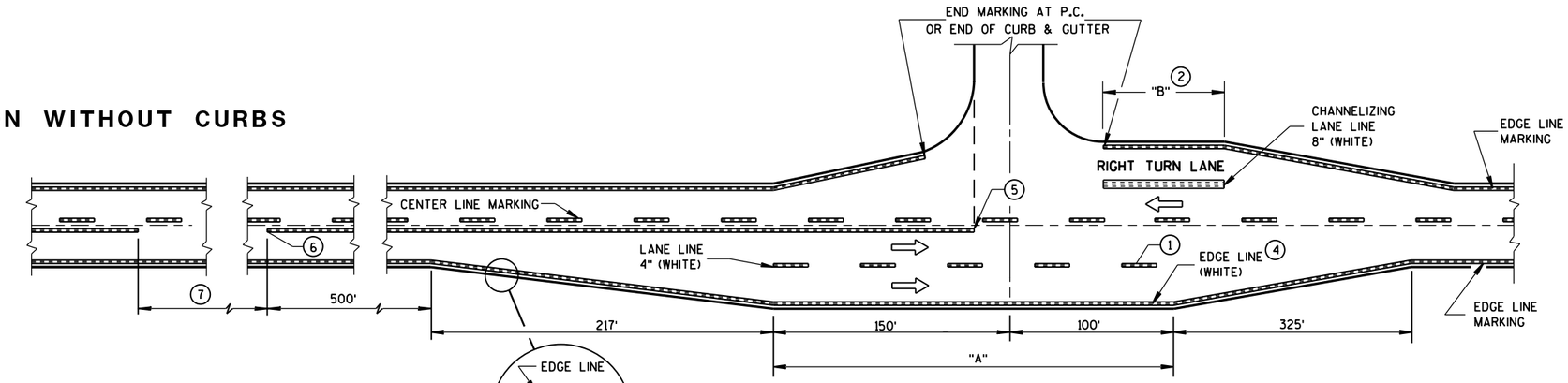
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

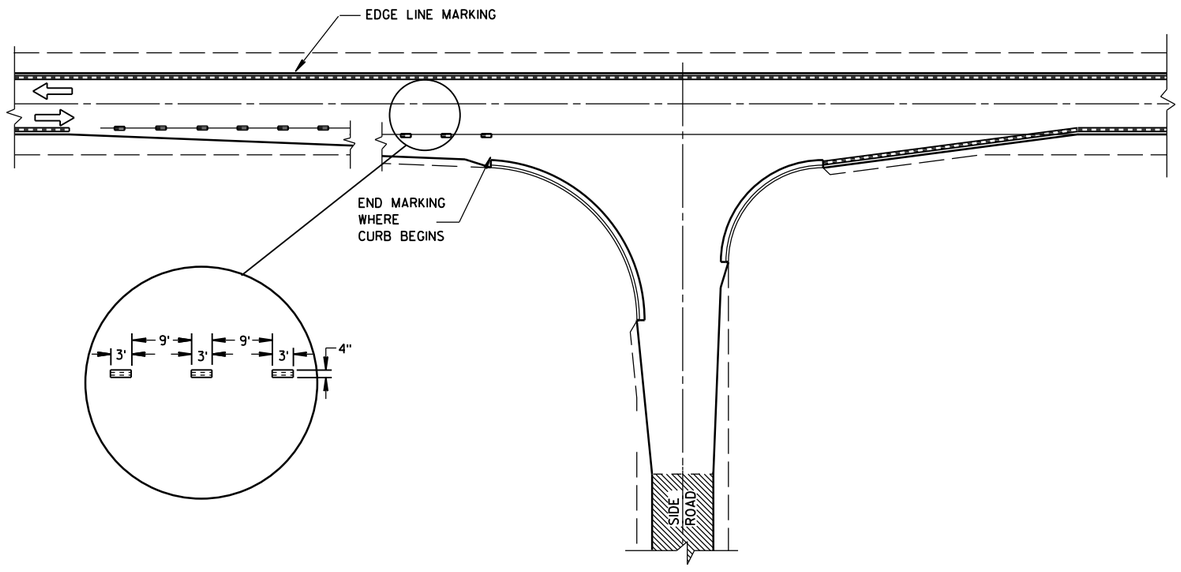
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



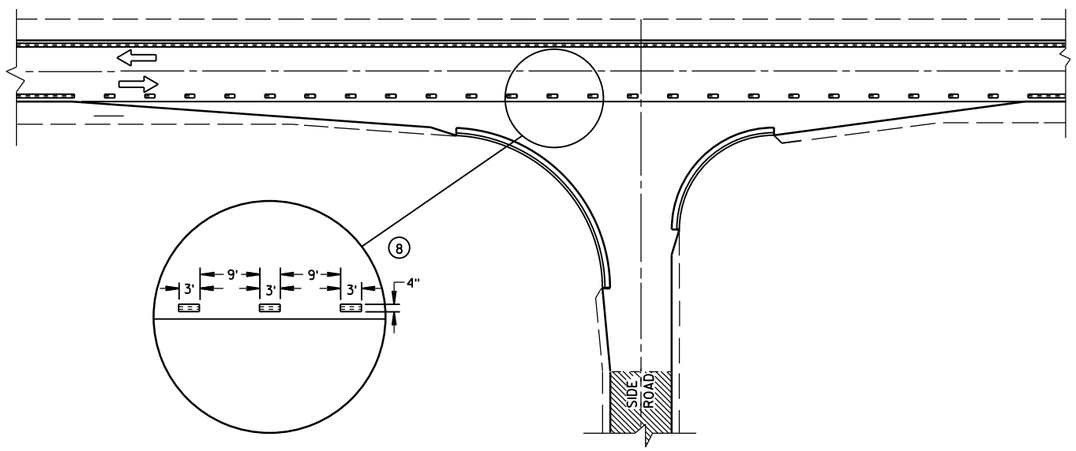
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

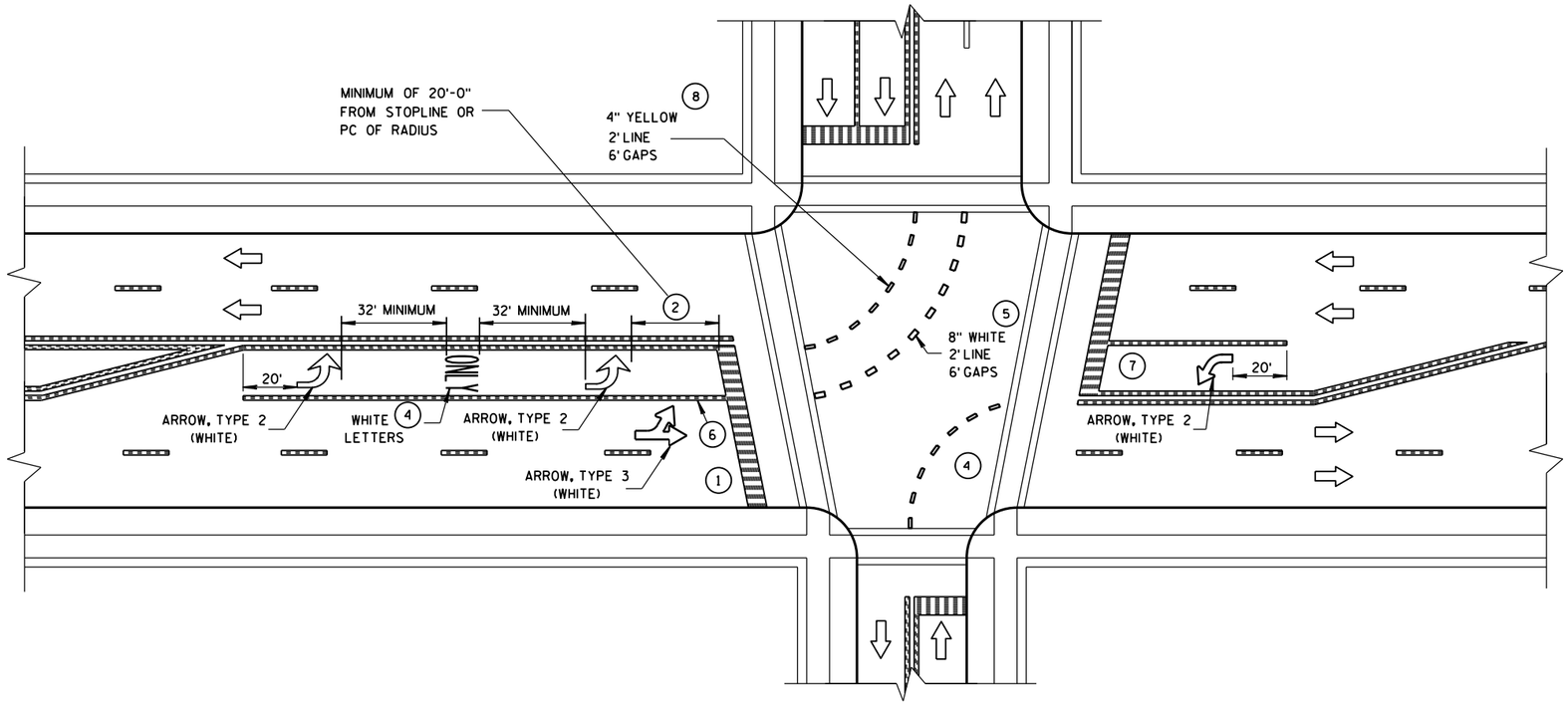
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 200

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S.D.D. 15 C 8-15b

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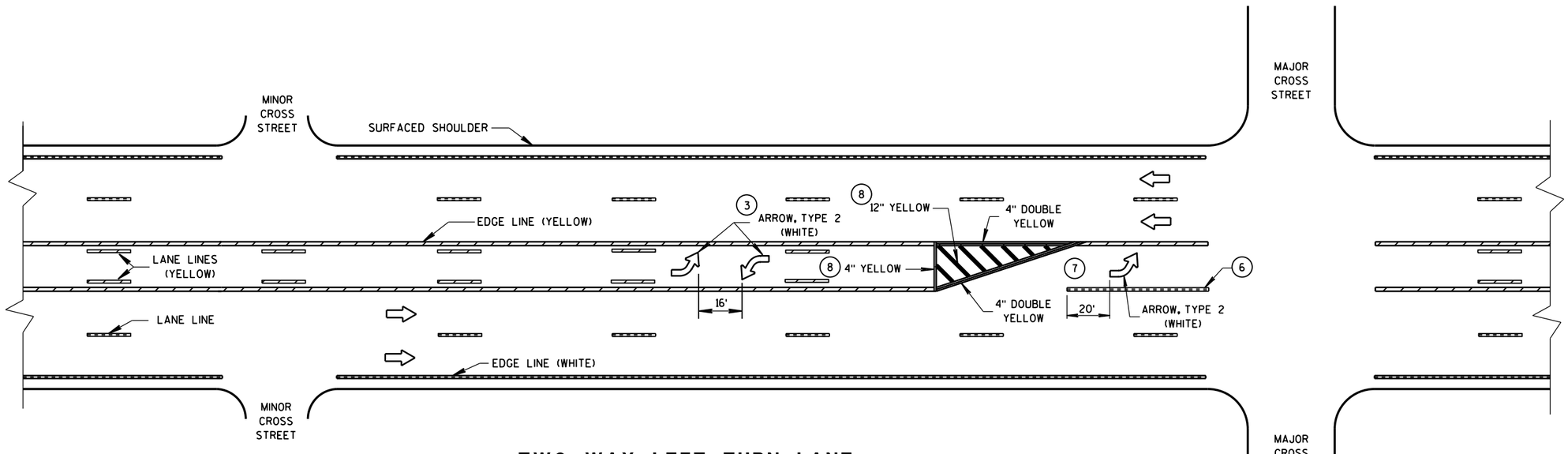
S.D.D. 15 C 8-15b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



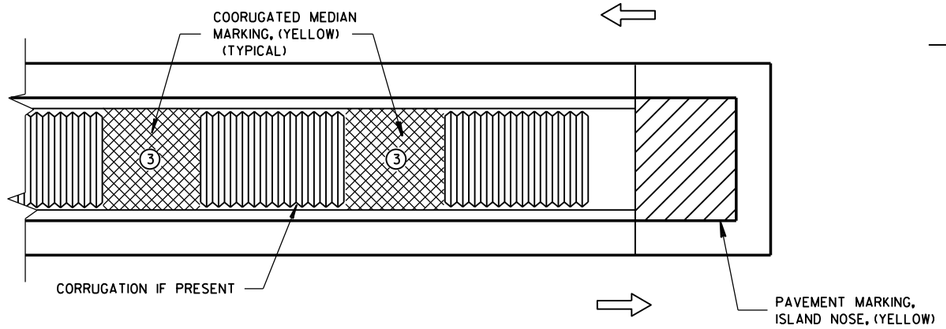
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

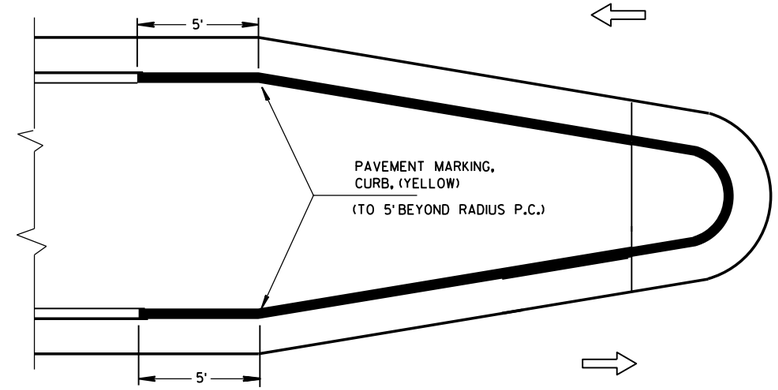
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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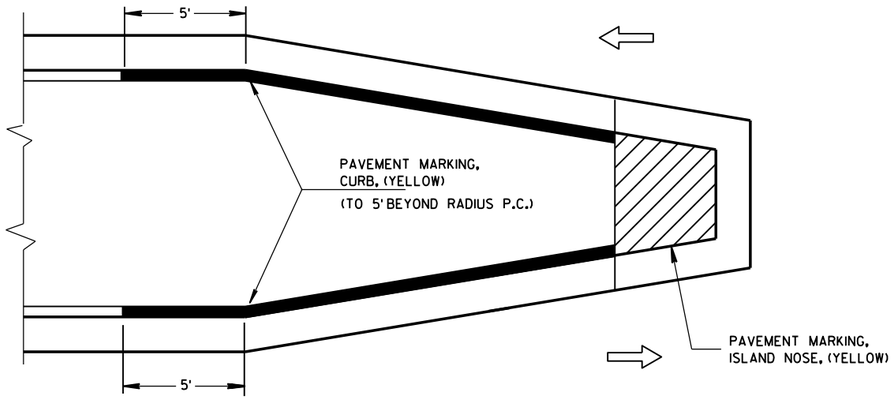
S.D.D. 15 C 8-15e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

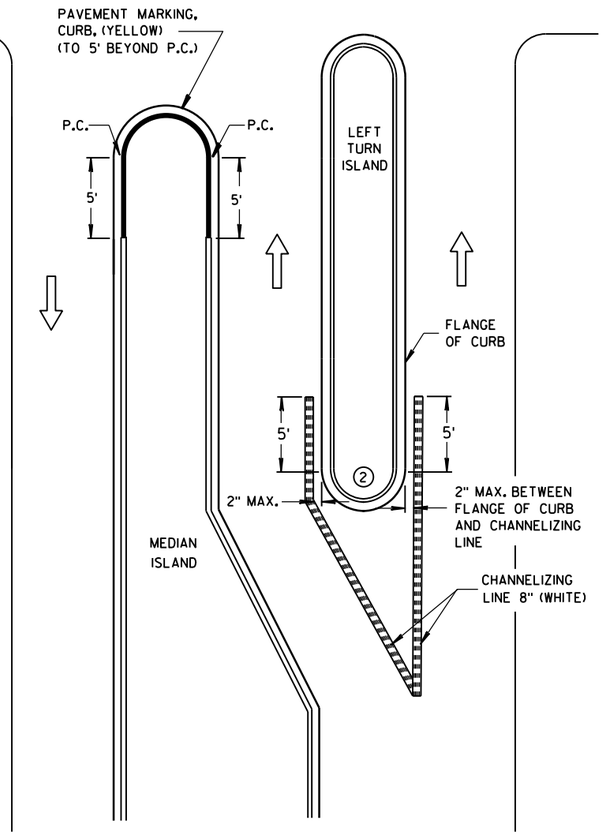


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

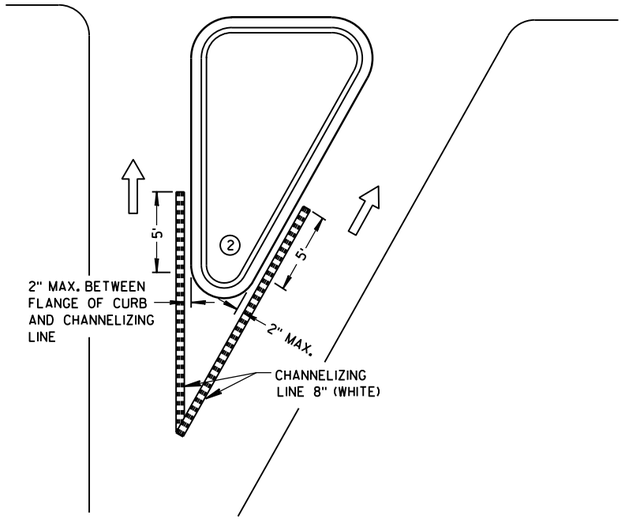
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



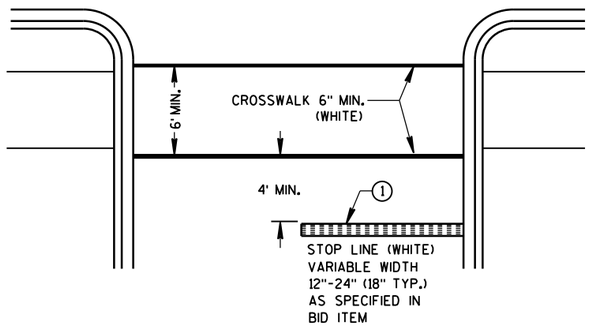
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

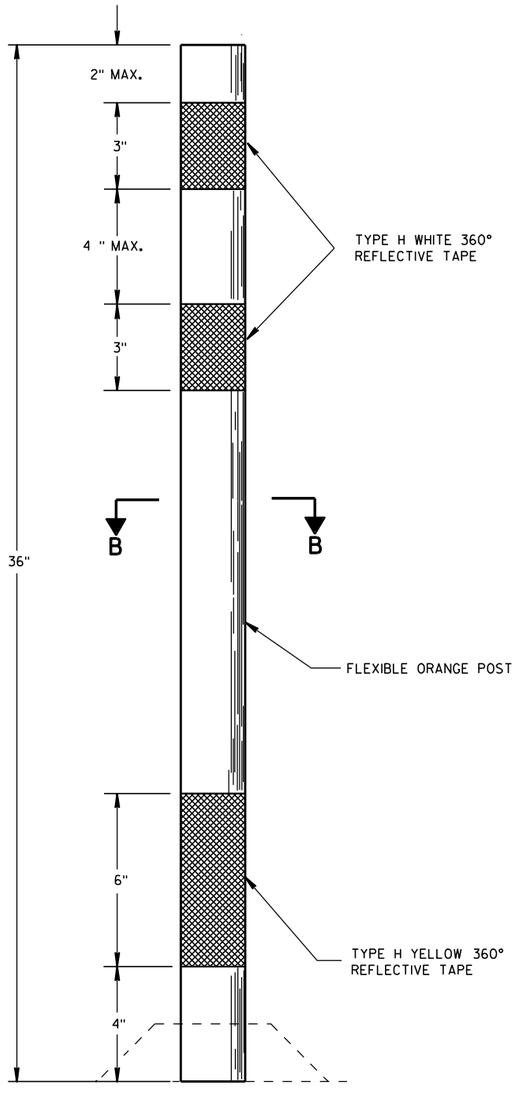
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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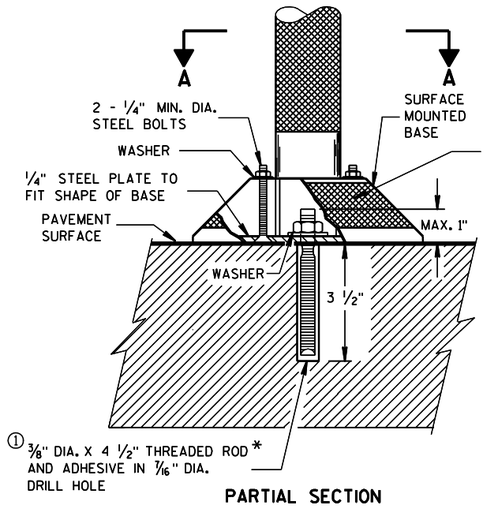
S.D.D. 15 C 8-15f

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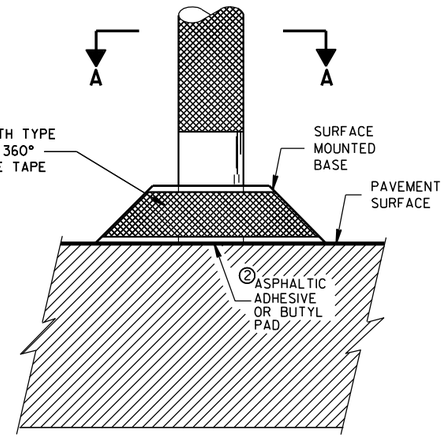
S.D.D. 15 C 8-15f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

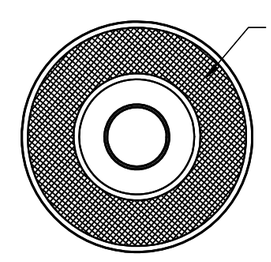
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

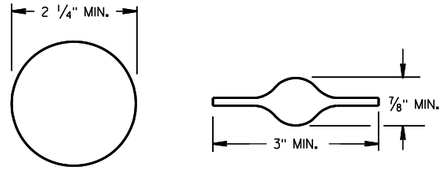
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



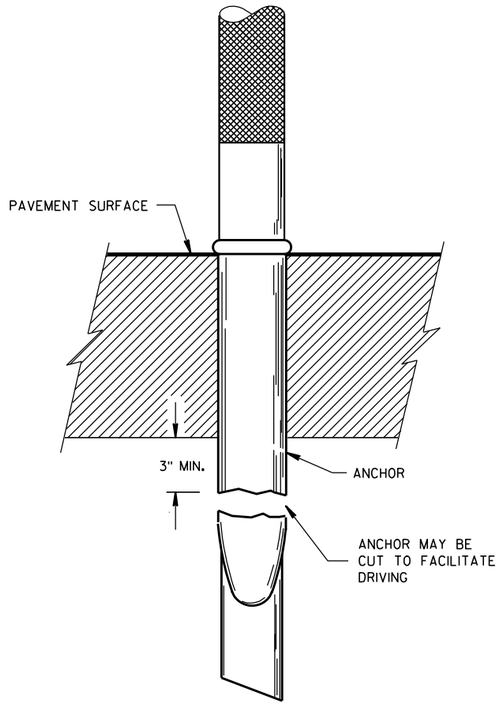
SECTION A-A

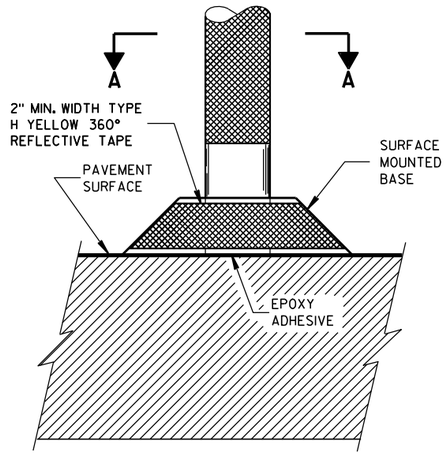
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

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S.D.D. 15 C 11-5

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S.D.D. 15 C 11-5

TWO-LANE ROADWAY

SYMBOLS

WORK AREA

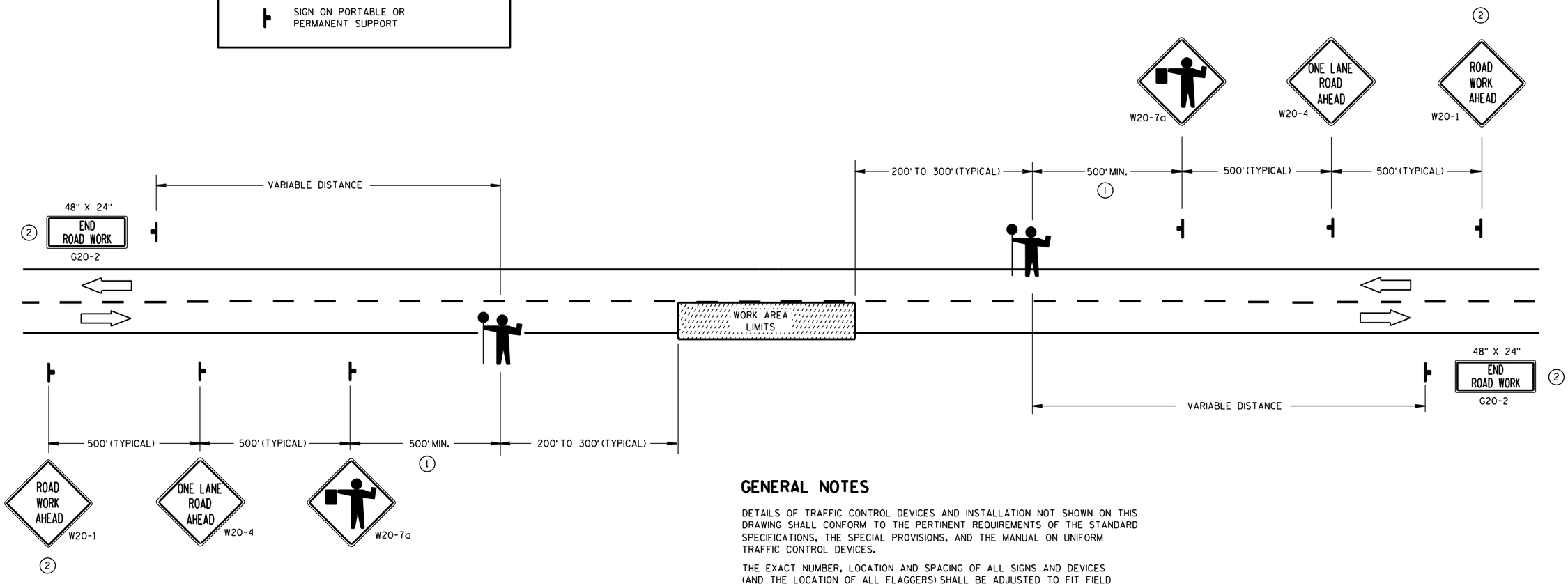
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

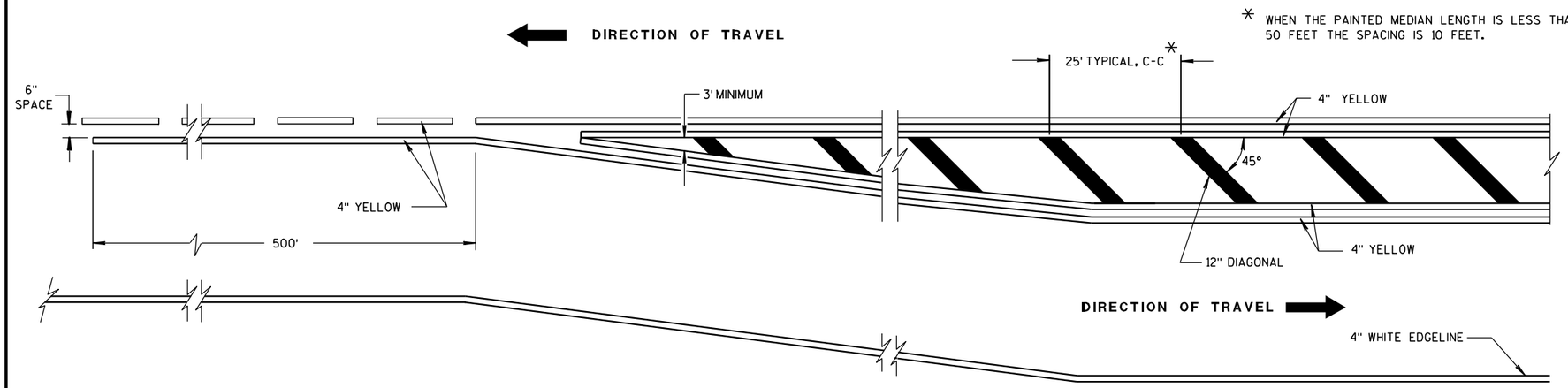
9/5/06 — DATE

/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

FHWA

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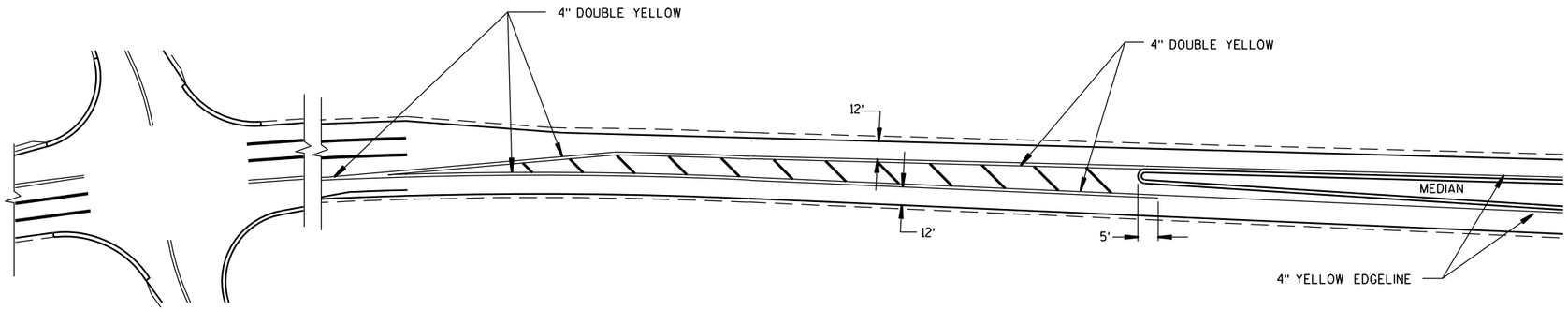
S.D.D. 15 C 12-3



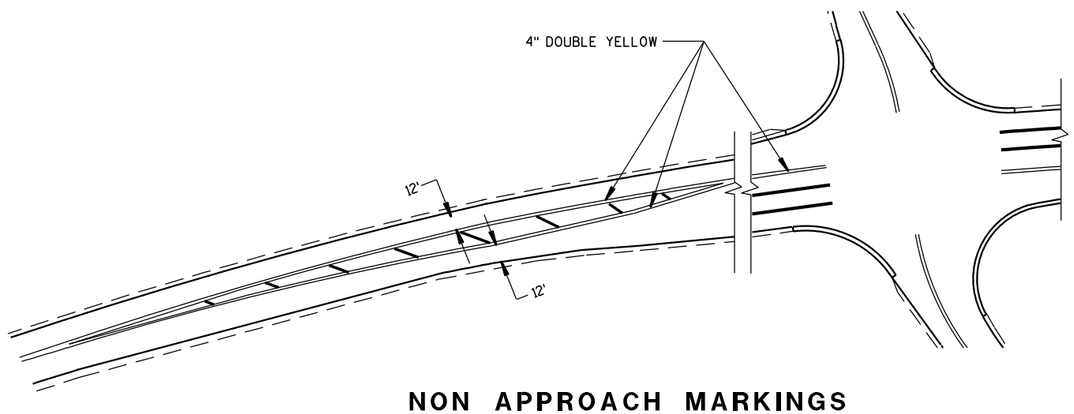
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 205 IGN
FHWA	

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S.D.D. 15 C 18-3

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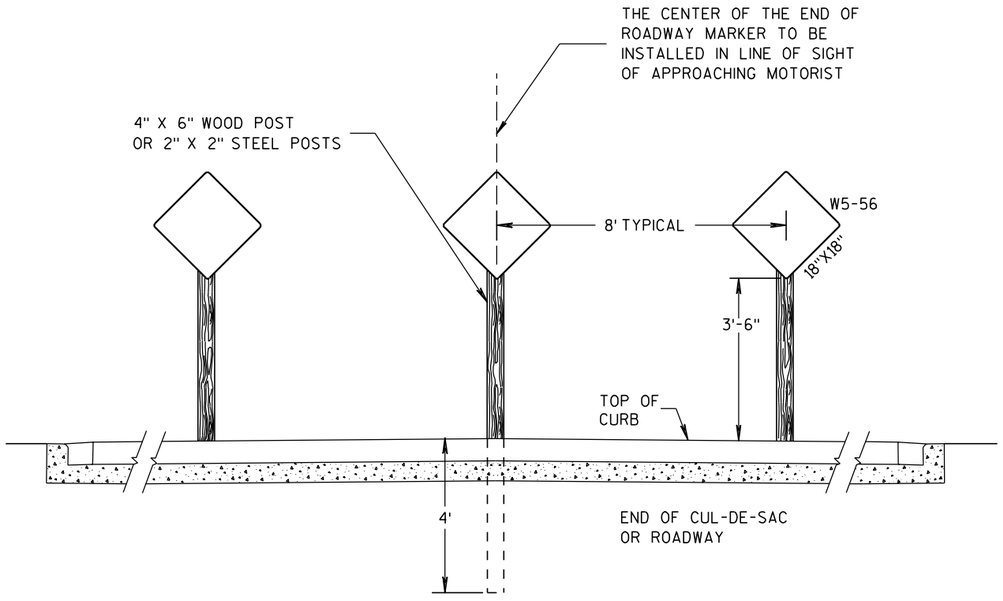
S.D.D. 15 C 18-3

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

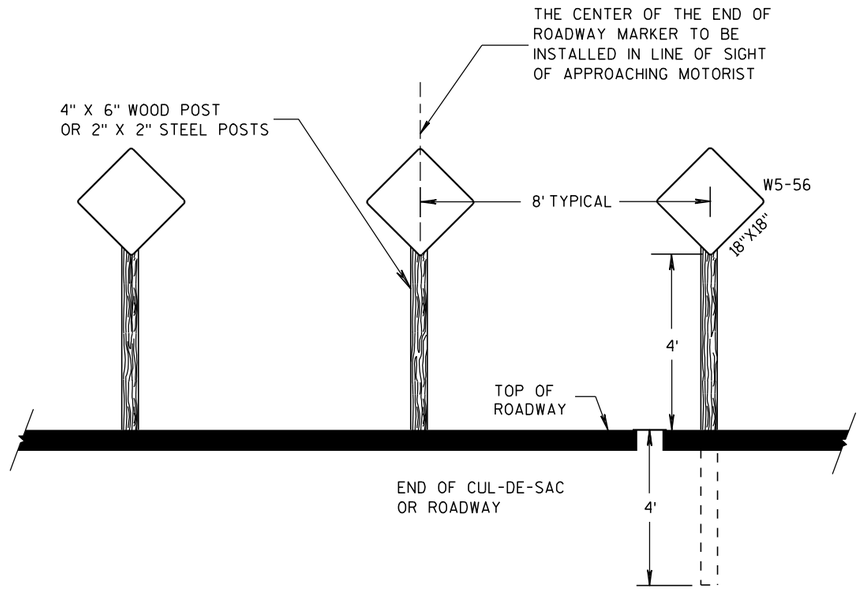
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL URBAN SIGN INSTALLATION

(WITH CURB & GUTTER)



TYPICAL RURAL SIGN INSTALLATION

(WITHOUT CURB & GUTTER)

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/1/2011 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 26-2

6

S.D.D. 15 C 26-2

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

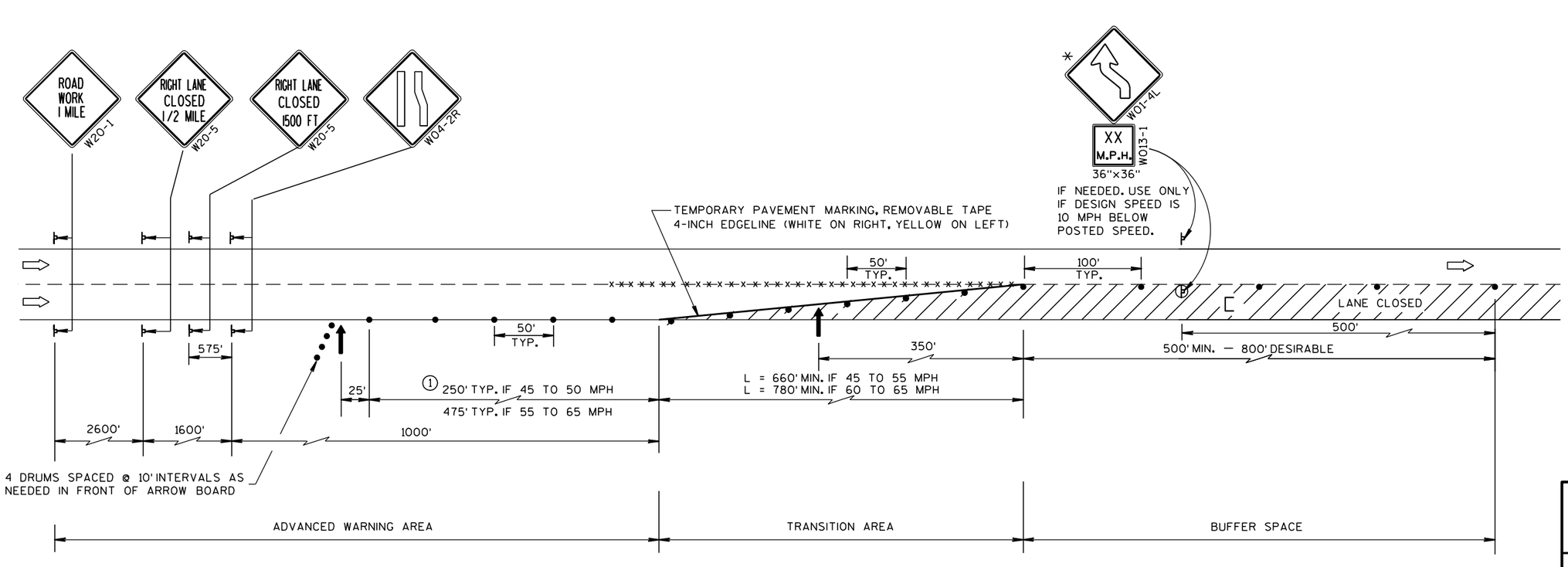
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95 DATE
/S/ Chester J. [illegible]
DIRECTOR, OFFICE O 207 C
FHWA

6

S.D.D. 15 D 12-2

6

S.D.D. 15 D 12-2

SYMBOLS

IC/C	TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
•	DRUM
⊢	POST MOUNTED SIGN
(A)	WARNING LIGHT, TYPE A (FLASHING)
⇨	DIRECTION OF TRAFFIC

GENERAL NOTES

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

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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS 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.

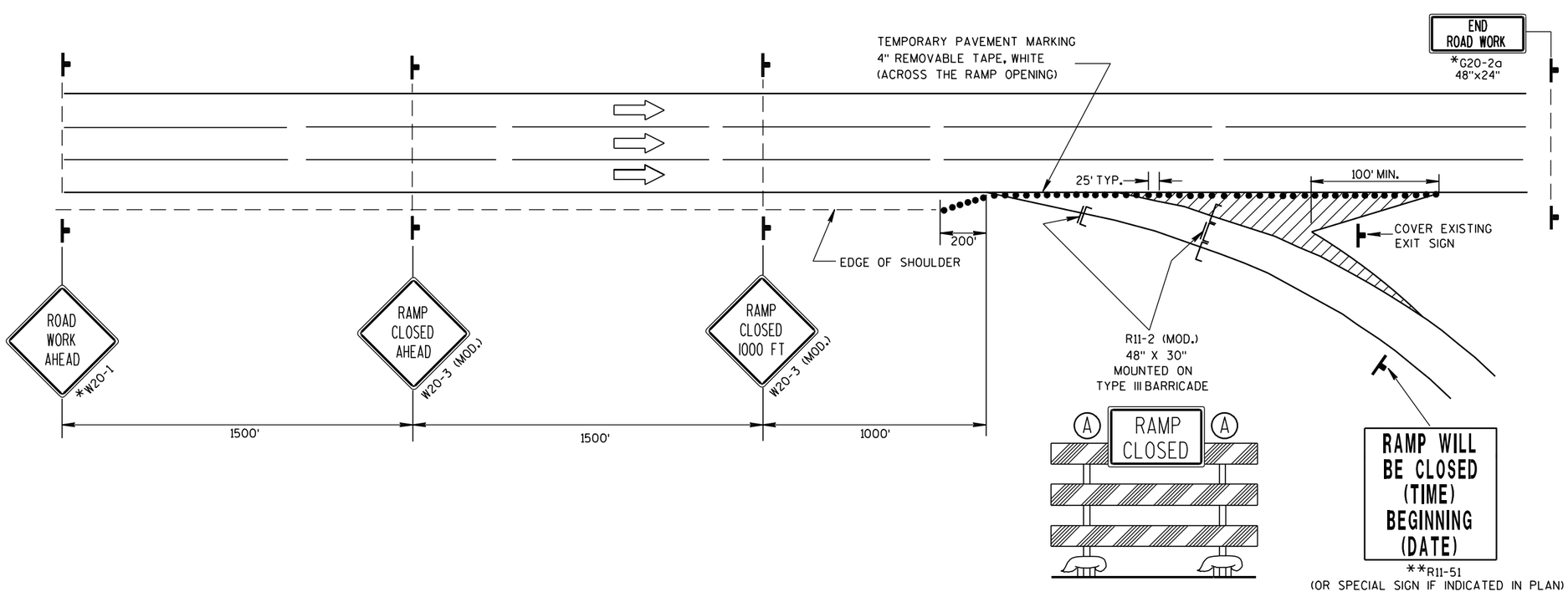
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

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

**USE THE "RAMP WILL BE CLOSED" SIGN IF INDICATED IN MISCELLANEOUS QUANTITIES. PLACE 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

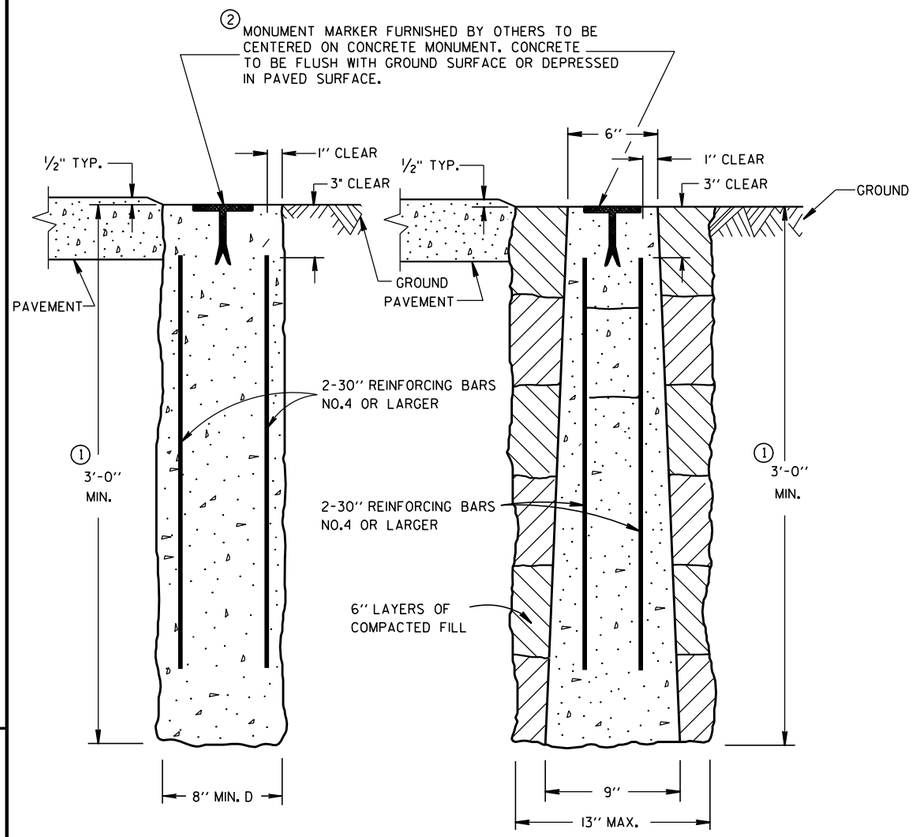
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2000
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MAR 208 INEER

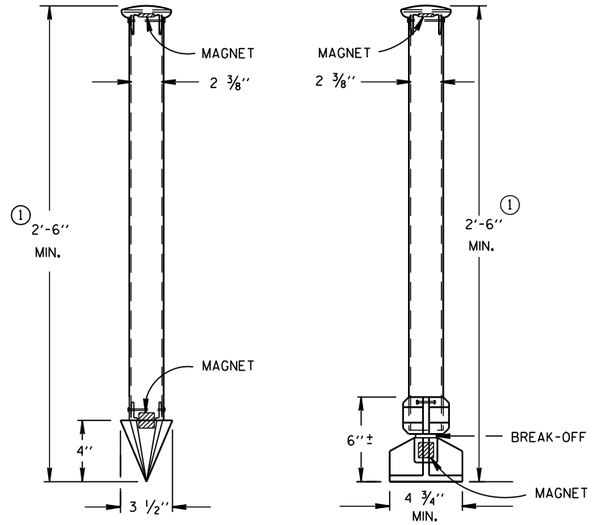
FHWA



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

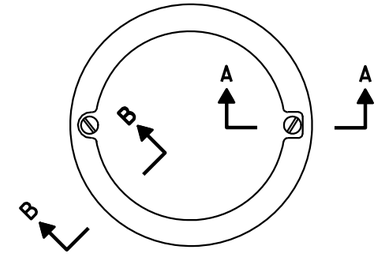
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

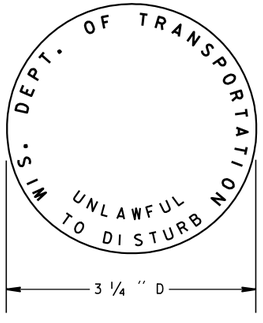
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

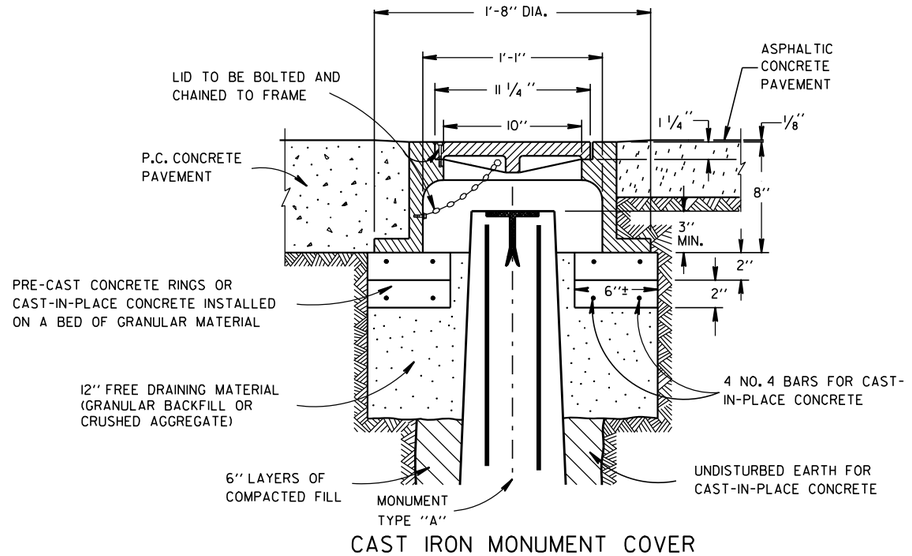
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

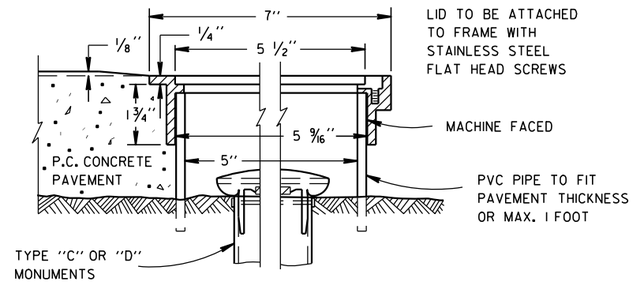


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

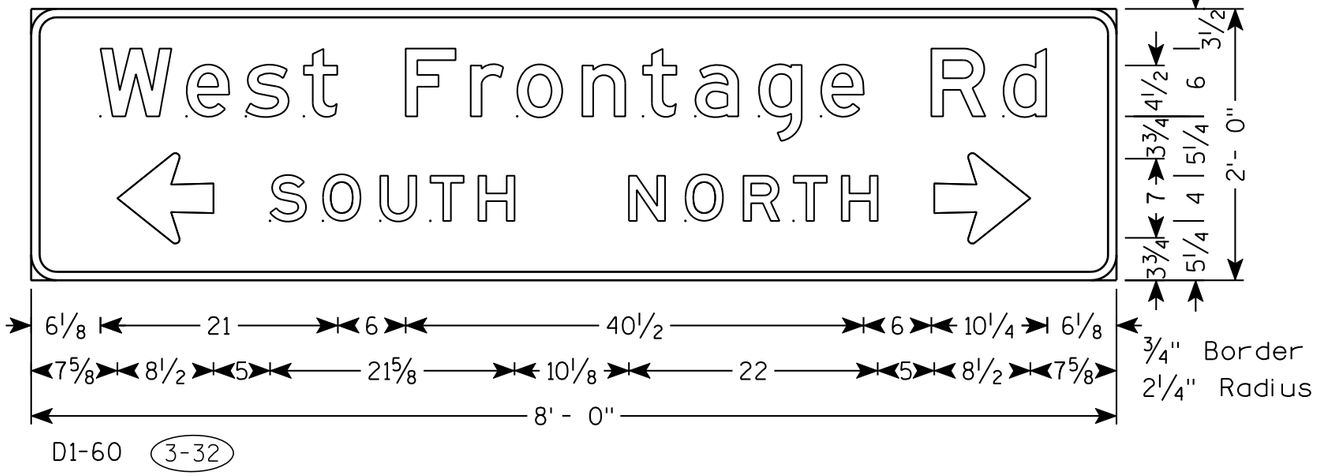
APPROVED
9/22/1999 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6 S.D.D. 16 A 1-6

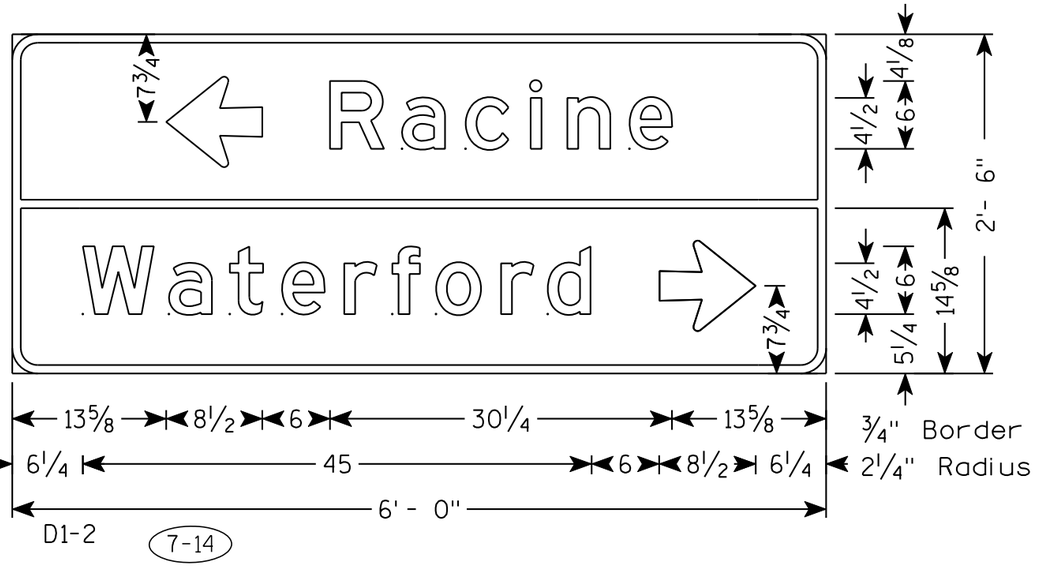
6 S.D.D. 16 A 1-6

NOTES

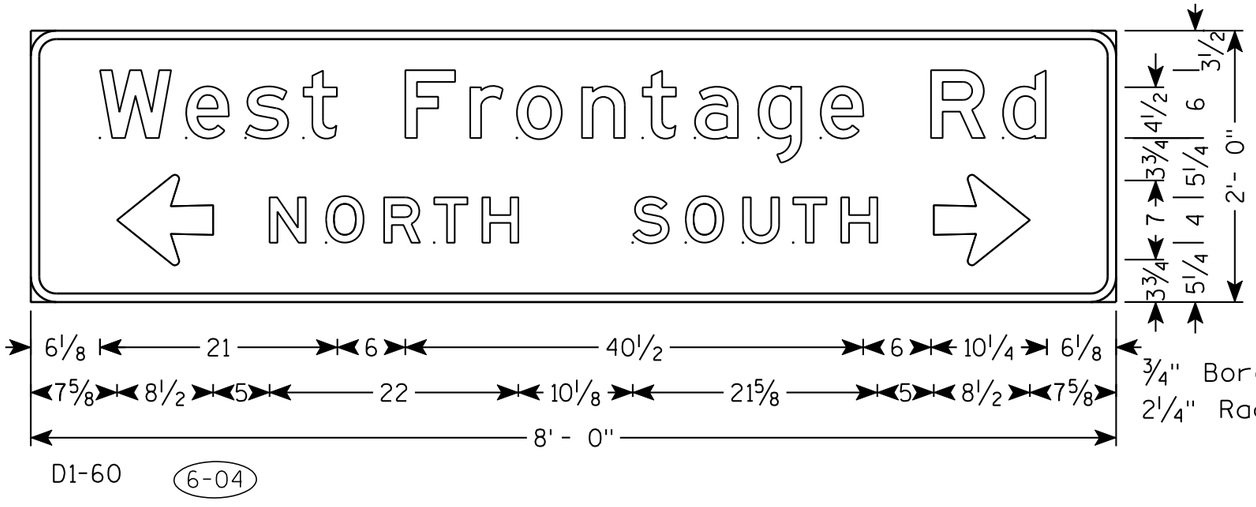
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E



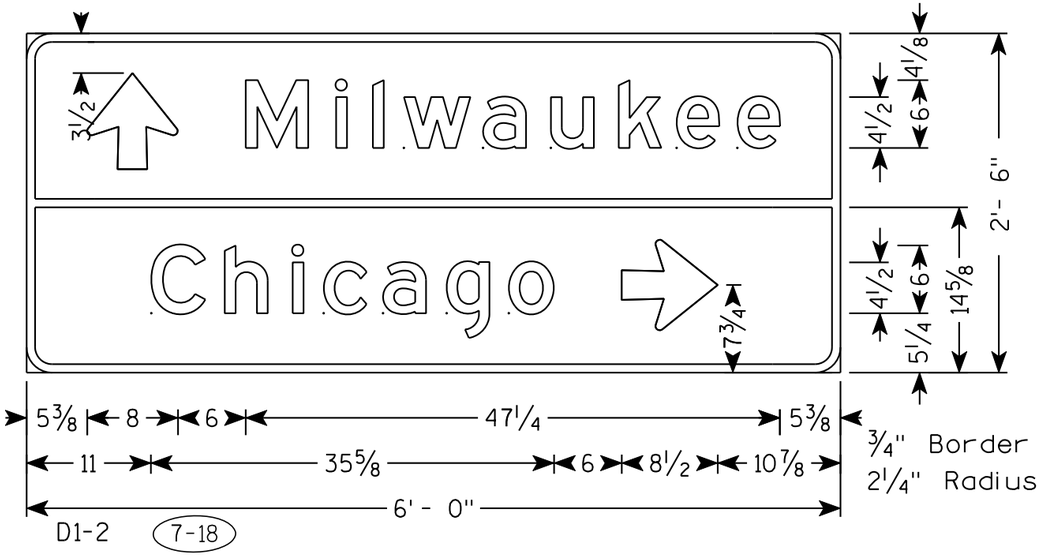
D1-60 (3-32)



D1-2 (7-14)



D1-60 (6-04)



D1-2 (7-18)

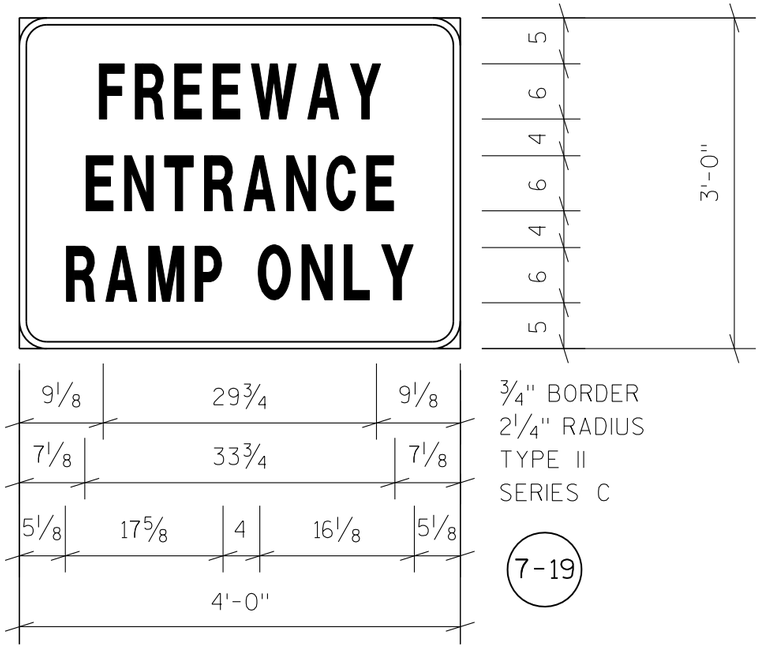
7

7

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	PERMANENT SIGNING	SHEET NO: 210	E

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE TYPE SH REFLECTIVE SHEETING.
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. TYPE II SIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.
6. TYPE I SIGNS - ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAP WORDS ARE "SERIES E"
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES ALL-7 AND ALL-10
11. DO NOT SCALE.



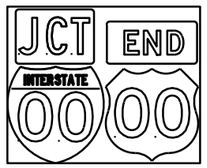
3/4" BORDER
2 1/4" RADIUS
TYPE II
SERIES C

7-19

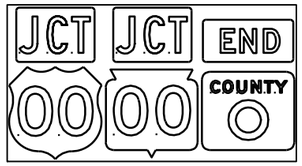
TYPICAL ASSEMBLIES



J1-1



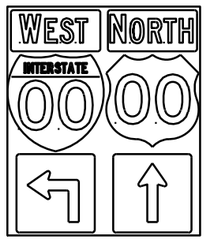
J1-2



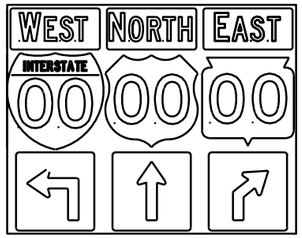
J1-3



J2-1



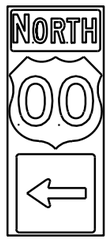
J2-2



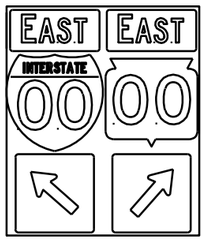
J2-3



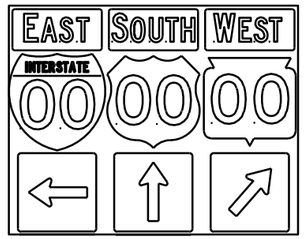
JV



J3-1



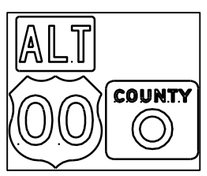
J3-2



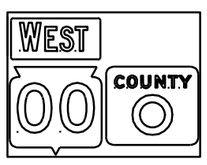
J3-3



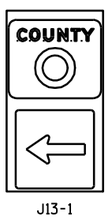
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



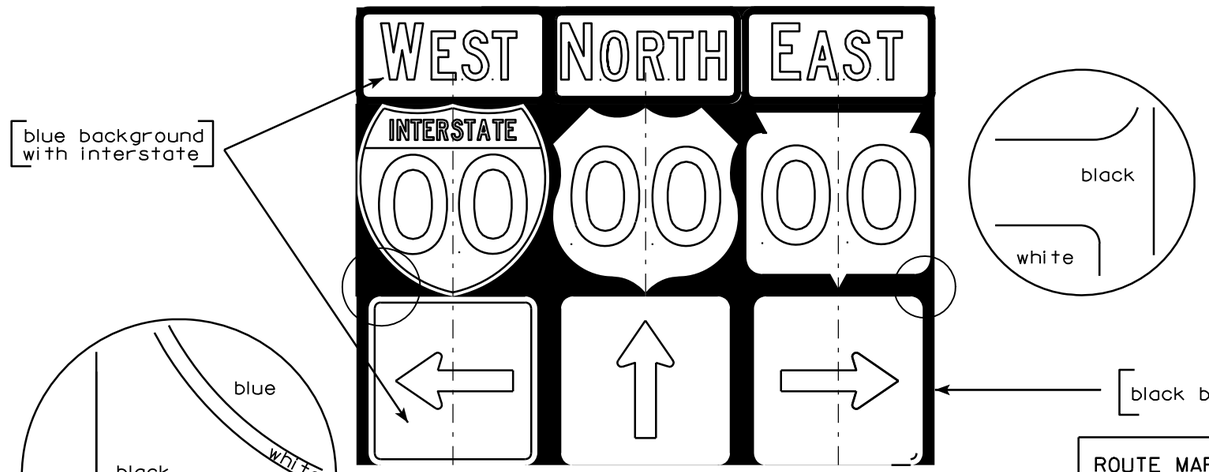
J23-1

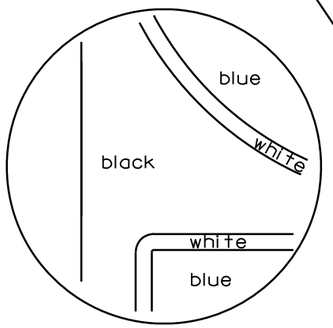


J22-1

NOTES

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





ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/21/09 PLATE NO. A2-1S.6

PROJECT NO:

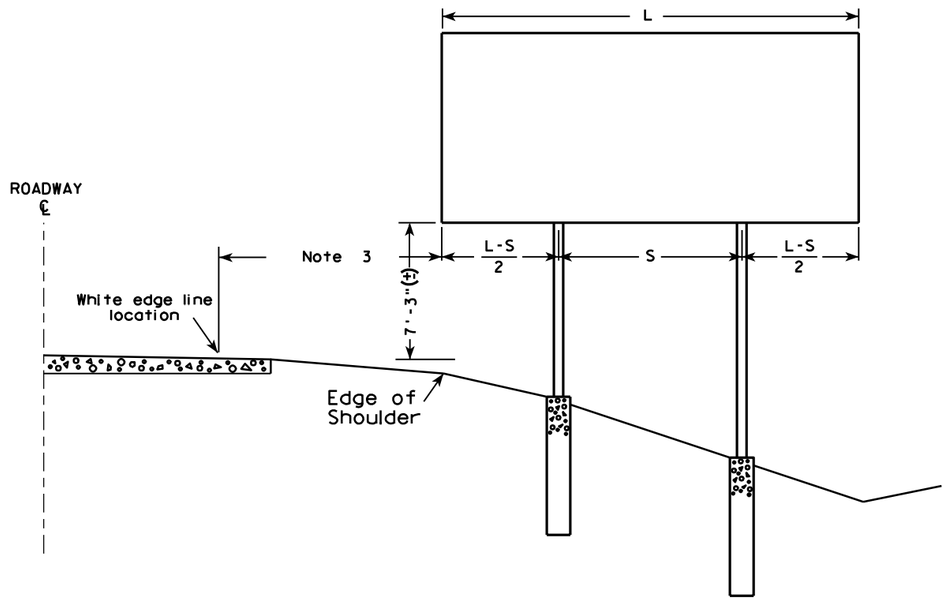
SHEET NO: 212 E

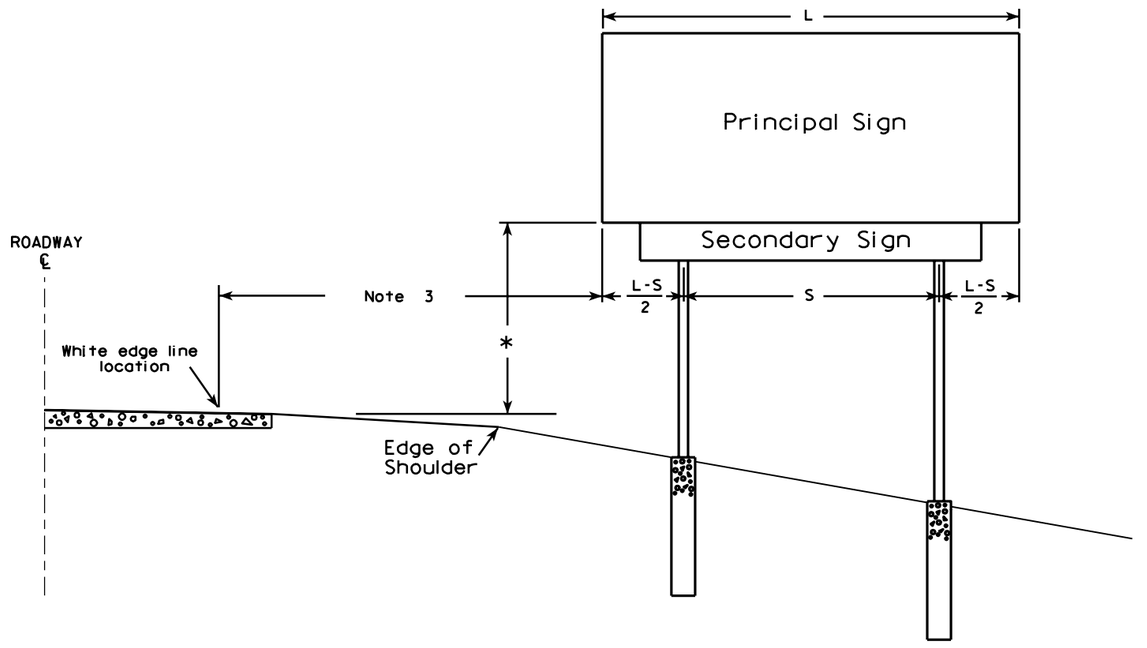
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WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

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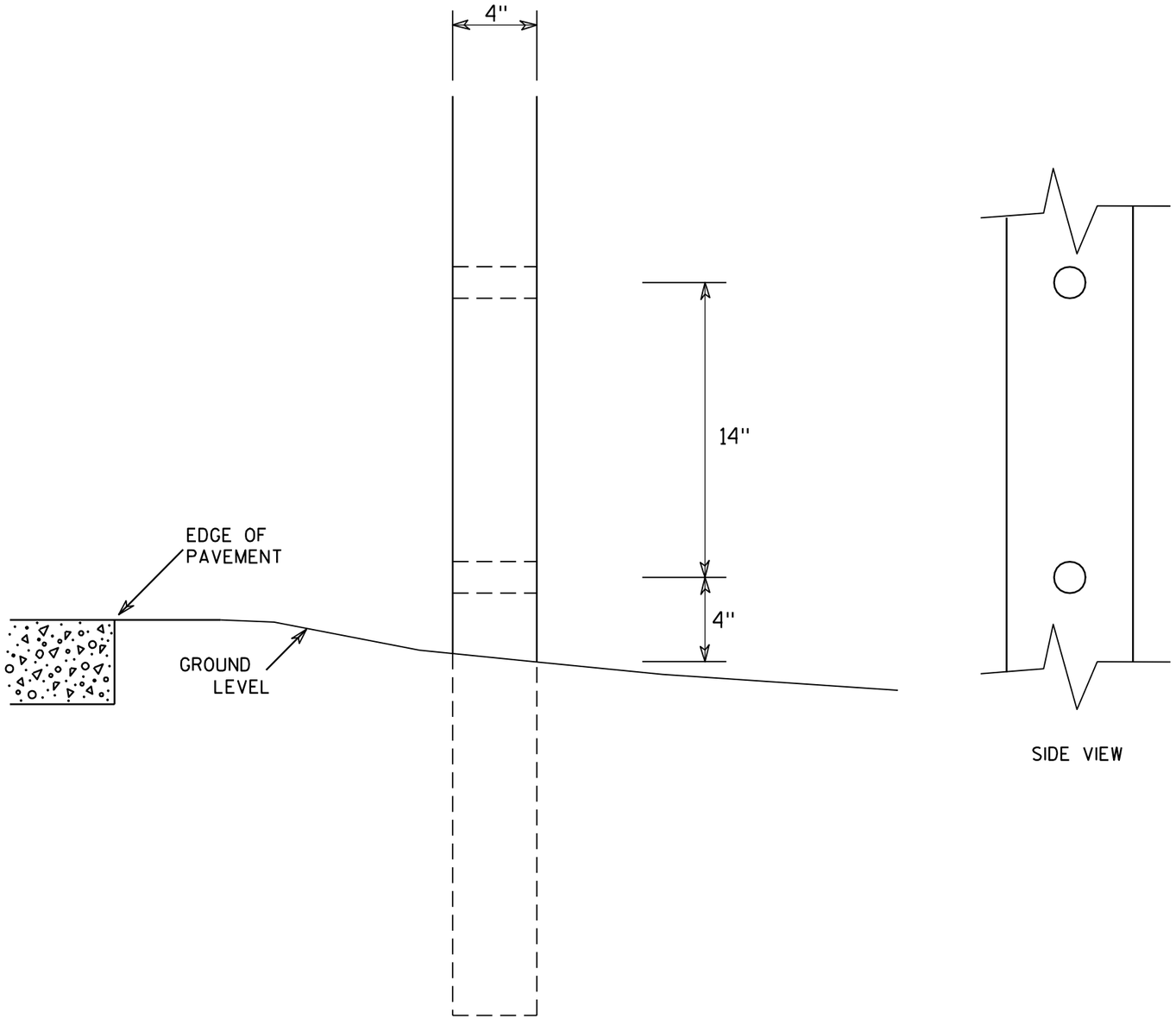
TYPICAL INSTALLATION
OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 213	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

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4 X 6 WOOD POST MODIFICATIONS

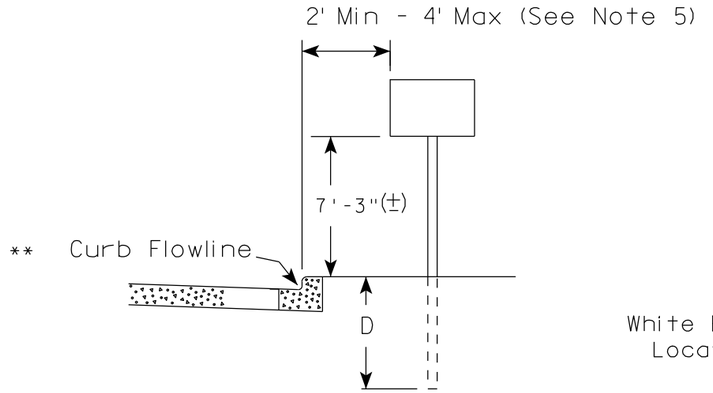
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

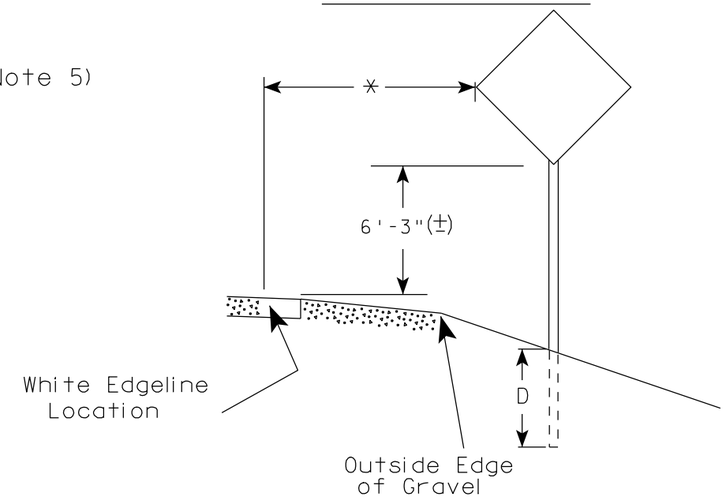
DATE 3/27/97 PLATE NO. A4-11.2

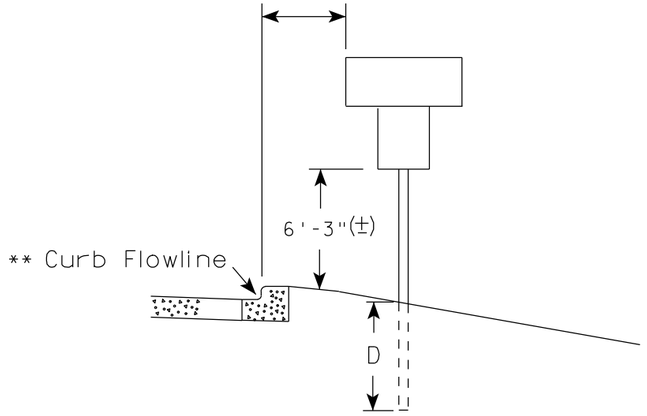
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 214	E

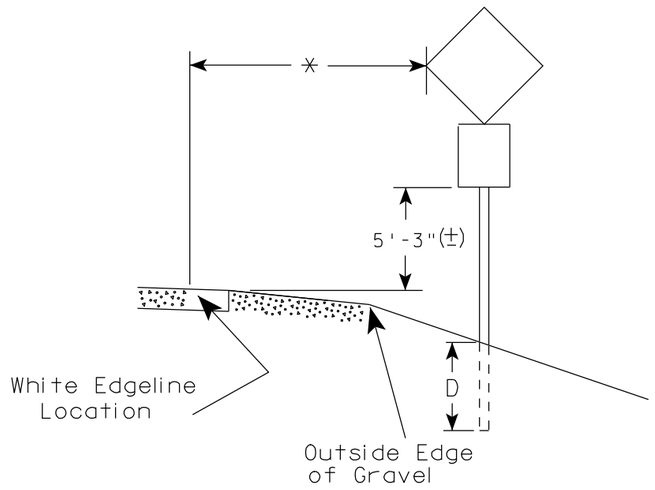
URBAN AREA



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.

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

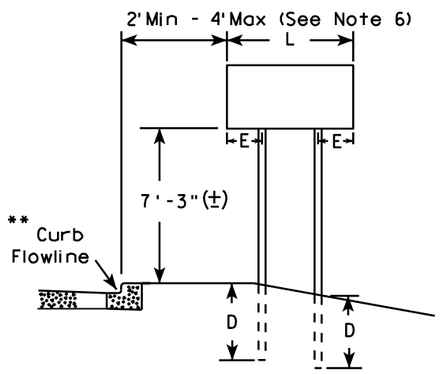
DATE 9/21/2011 PLATE NO. A4-3.16

7

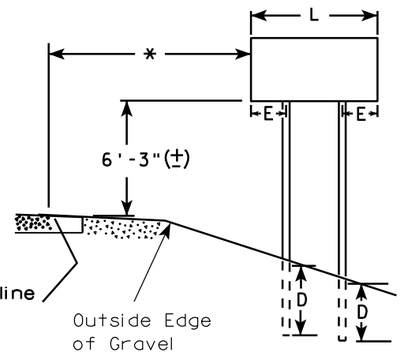
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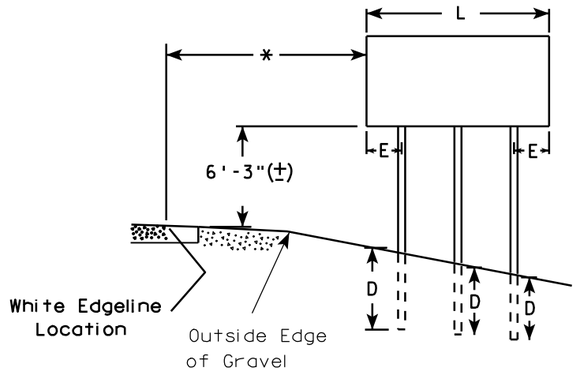
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E

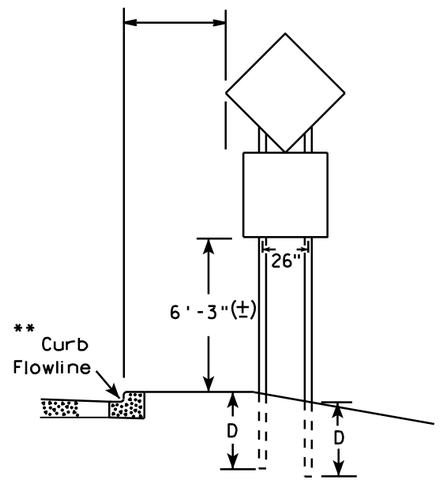
URBAN AREA



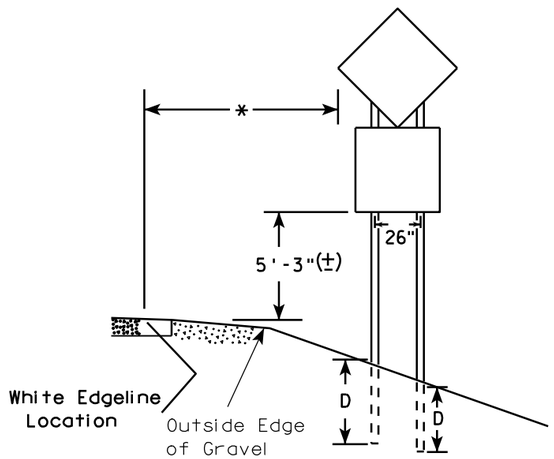
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

***

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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. For multiple post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

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

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

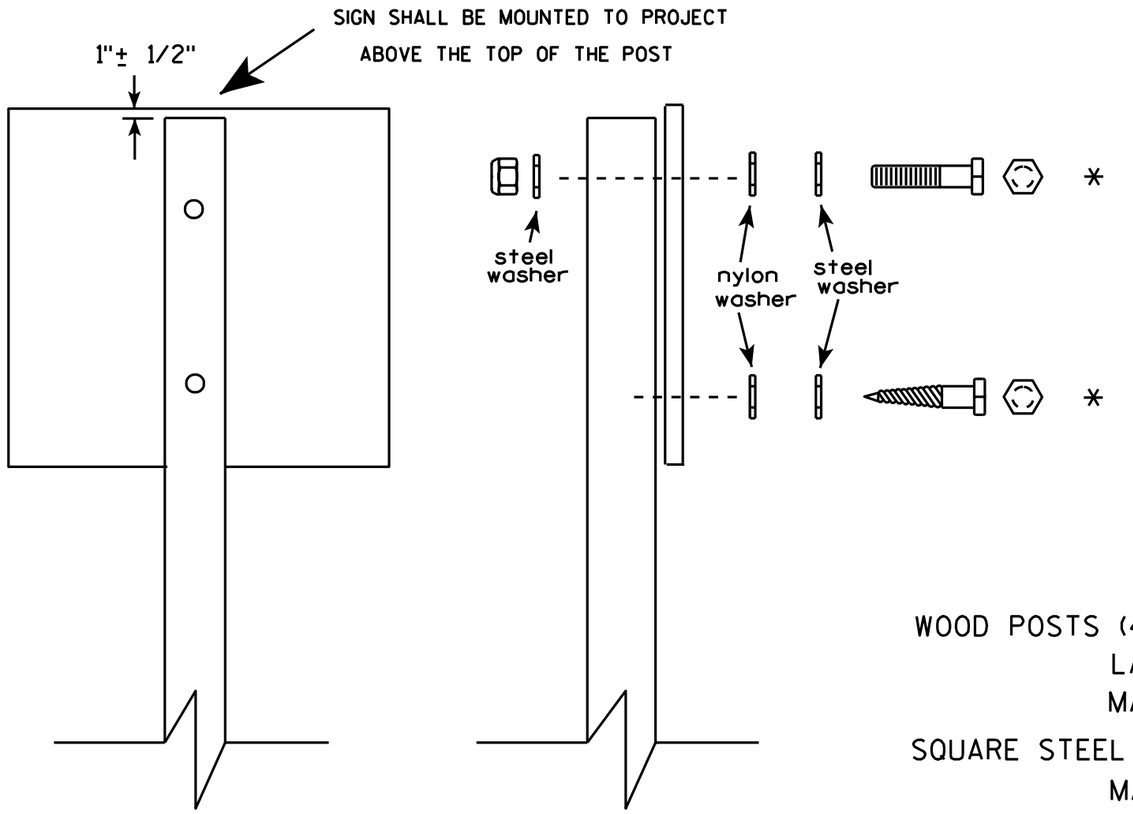
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 216	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A44.DGN PLOT DATE : 21-SEP-2011 13:36 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 109.249131:1.000000 WISDOT/CADDS SHEET 42



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

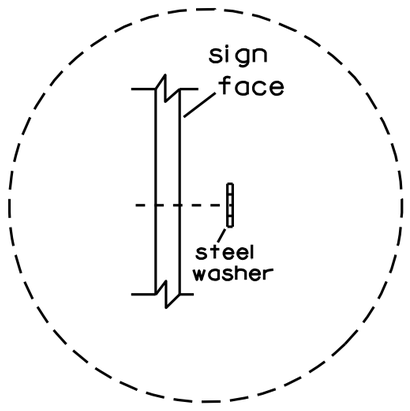
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

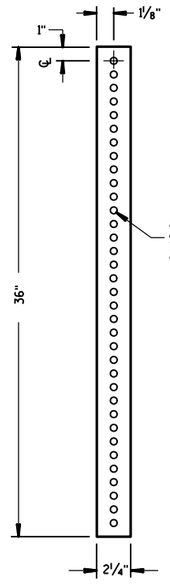
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PROJECT NO:

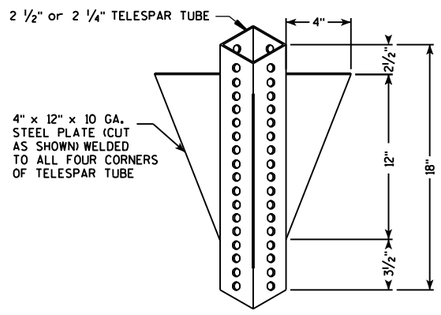
SHEET NO: 217 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

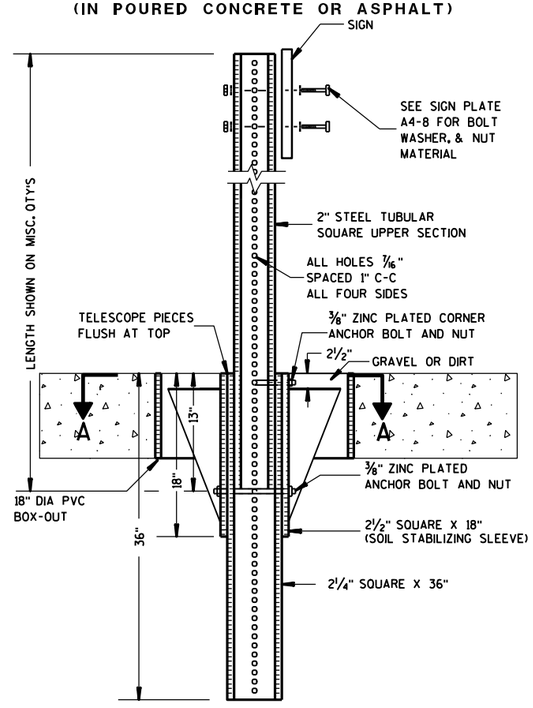
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



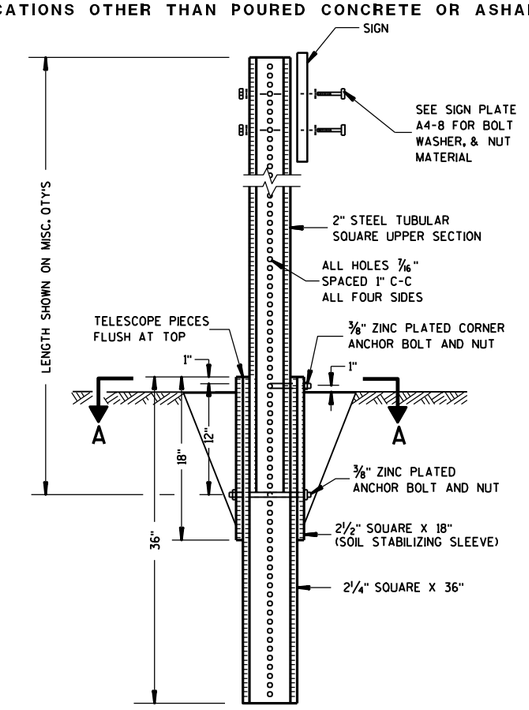
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

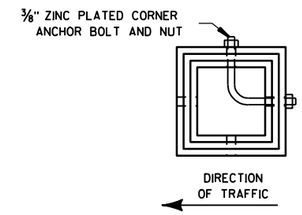


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL SIGN POST A4-9

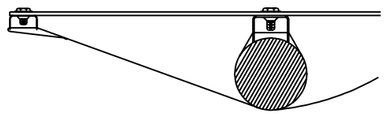
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

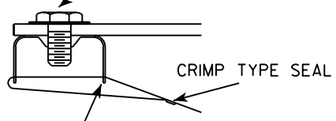
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 218	E

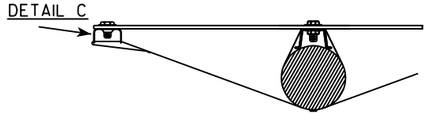
BRACE BANDING

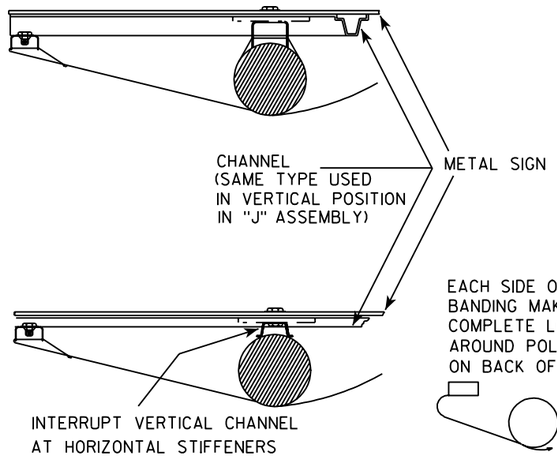


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER



DETAIL C

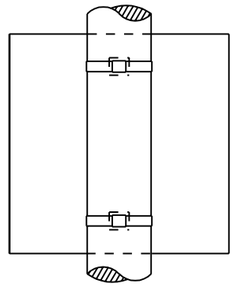


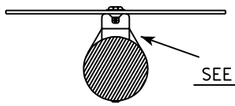


EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

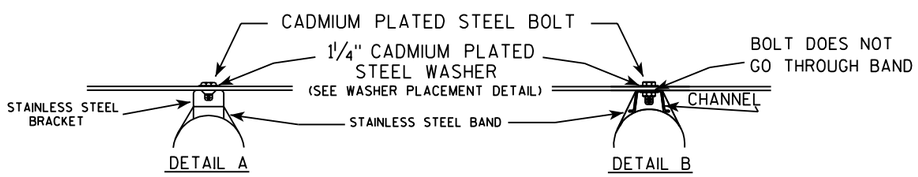
BRACKET BANDING

SINGLE SIGN





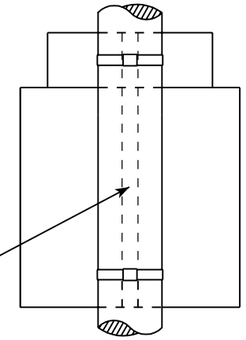
SEE DETAIL A



DETAIL A

DETAIL B

"J" ASSEMBLY

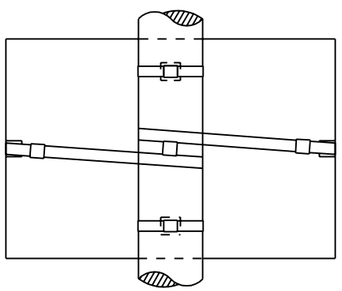


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

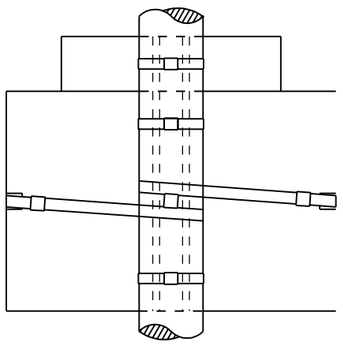
GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

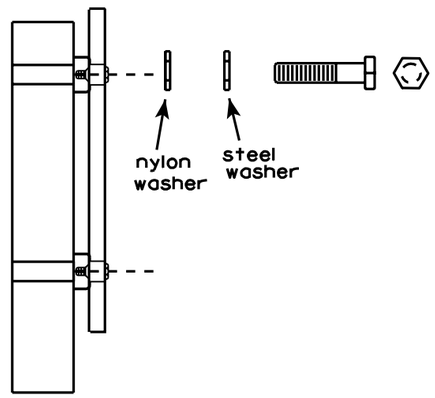


BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.



WASHER PLACEMENT



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

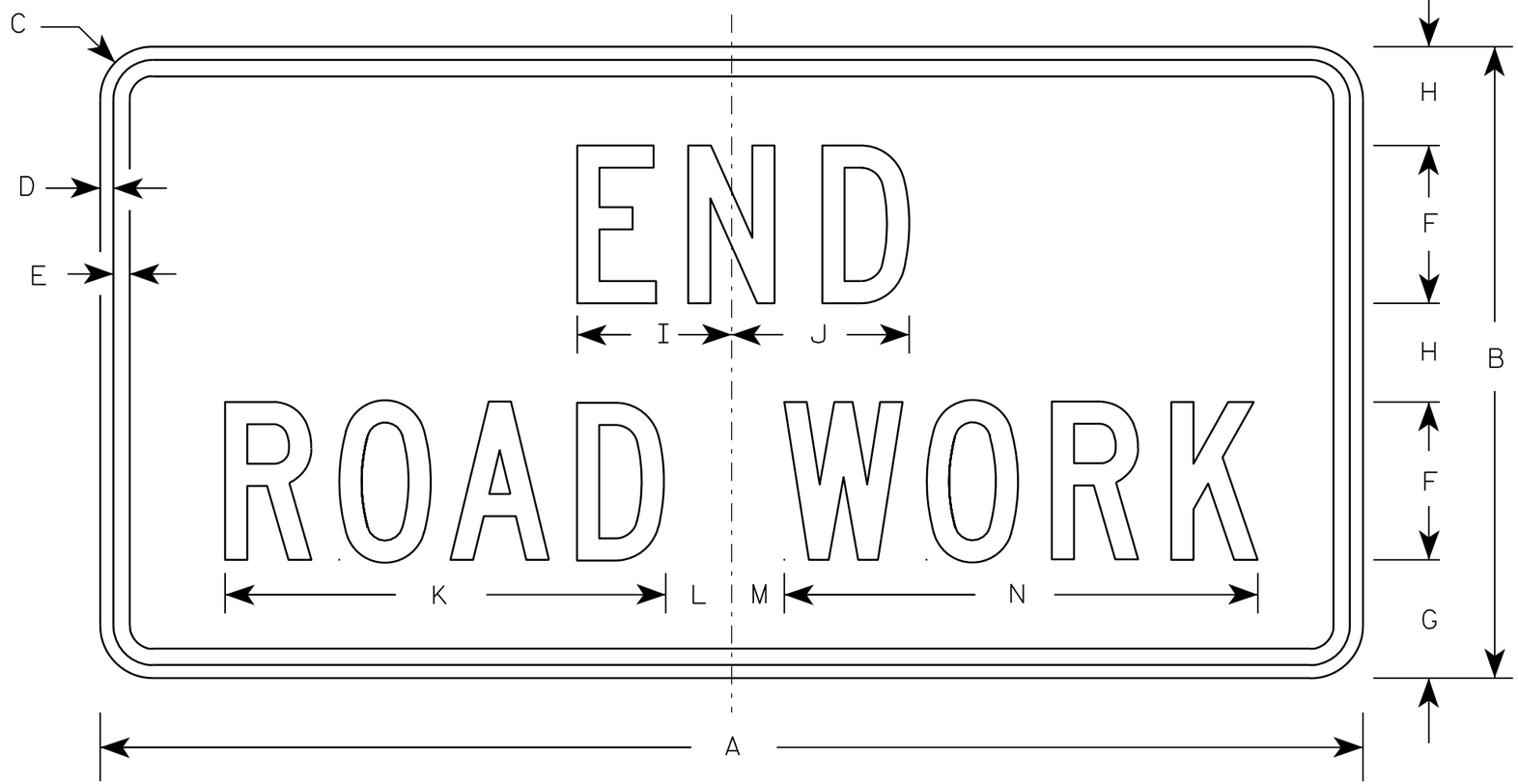
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 219	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

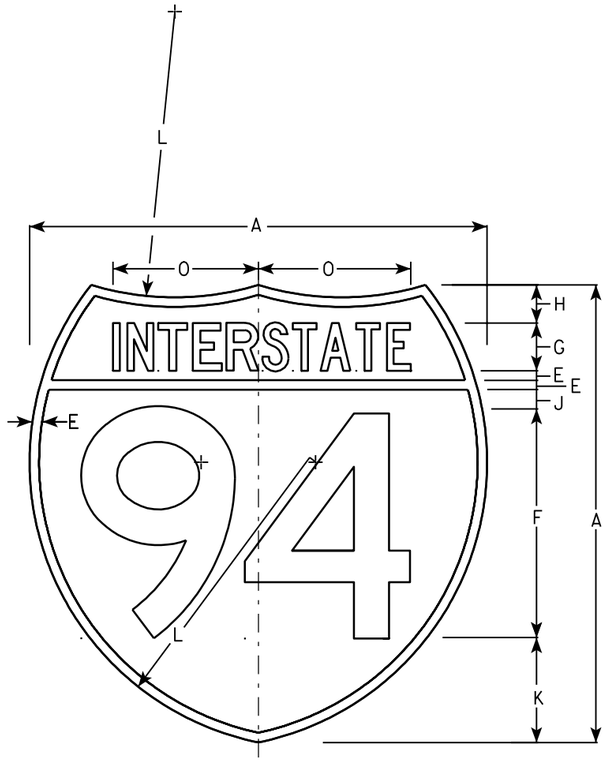
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

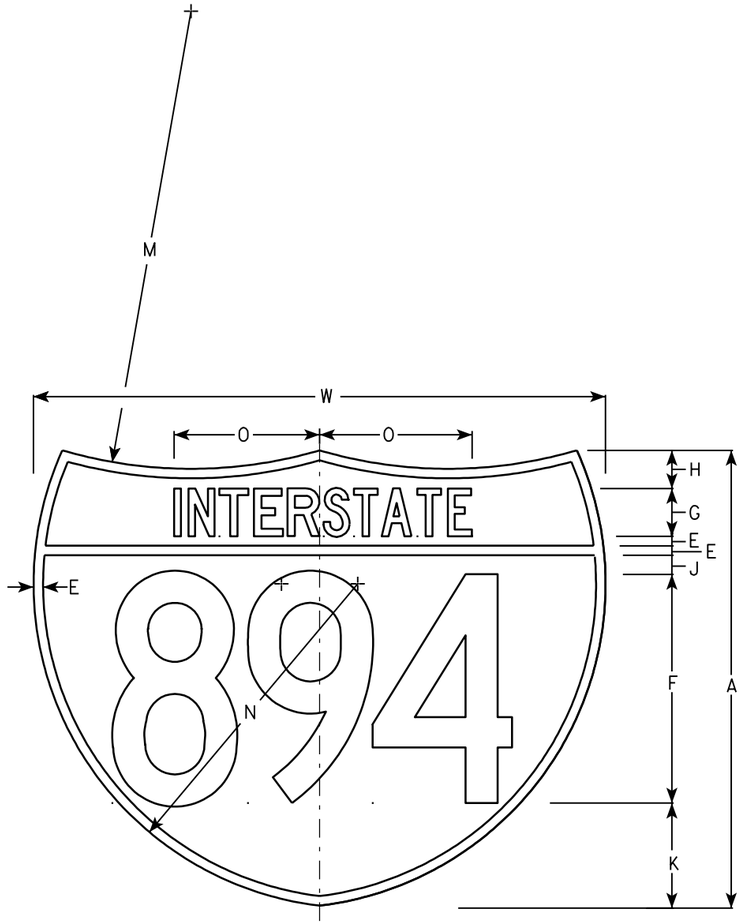
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 220	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

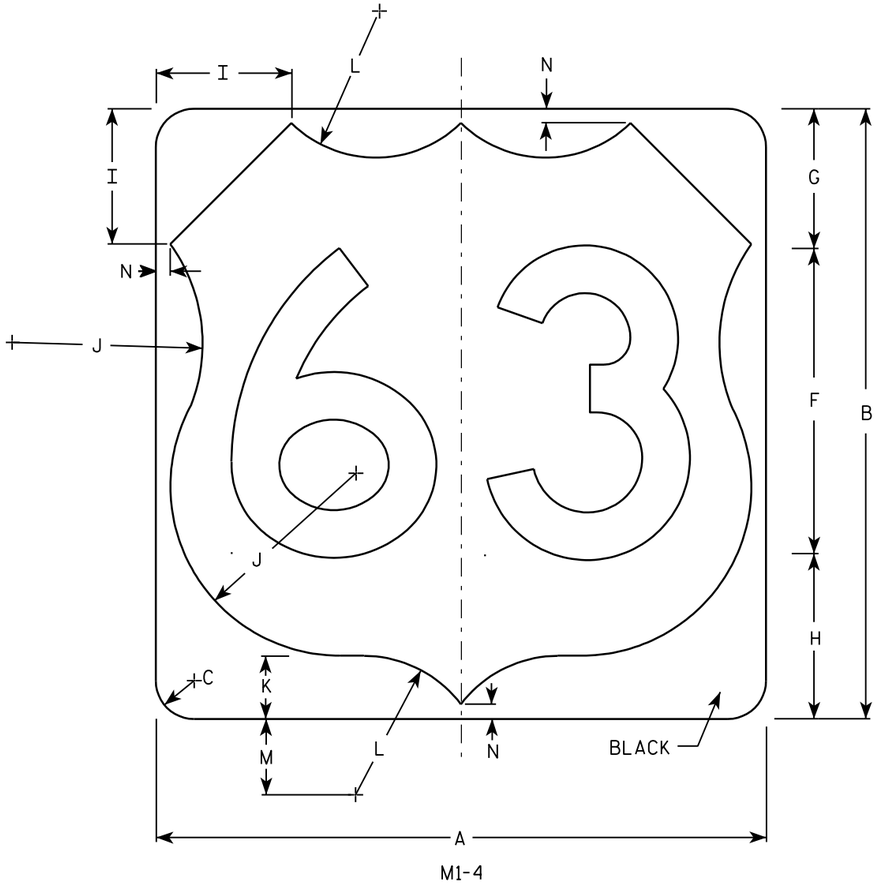
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

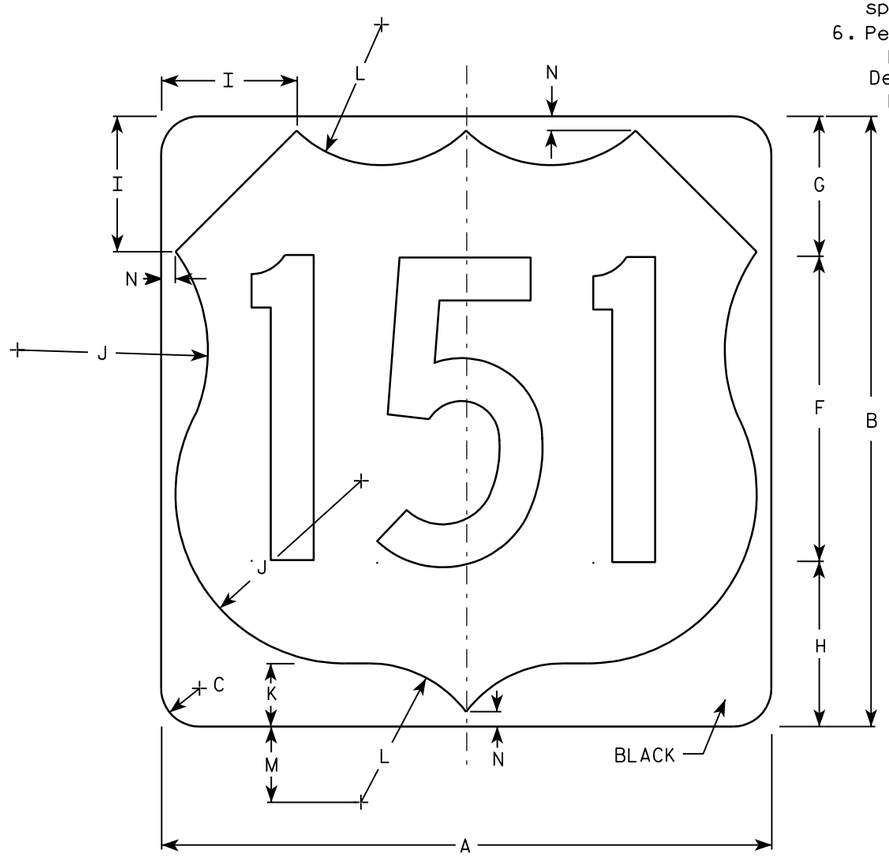
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 221	E

NOTES

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



M1-4



M1-4

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

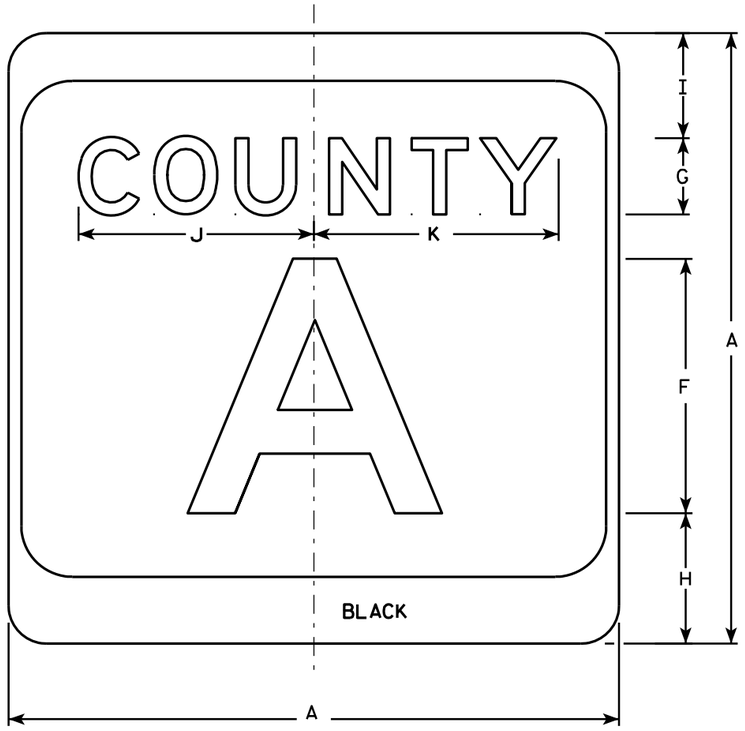
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

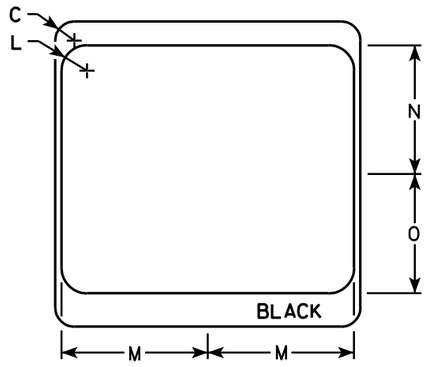
APPROVED Matthew R Rauch
for State Traffic Engineer

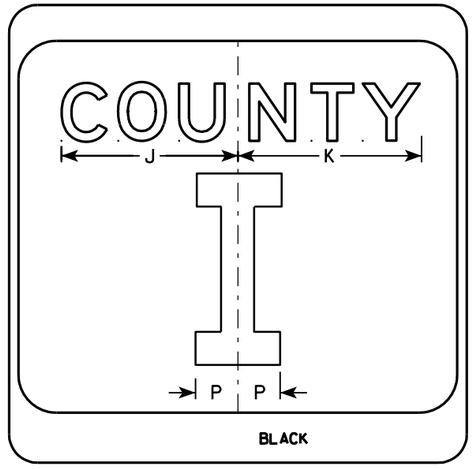
DATE 08/25/05 PLATE NO. M1-4.9

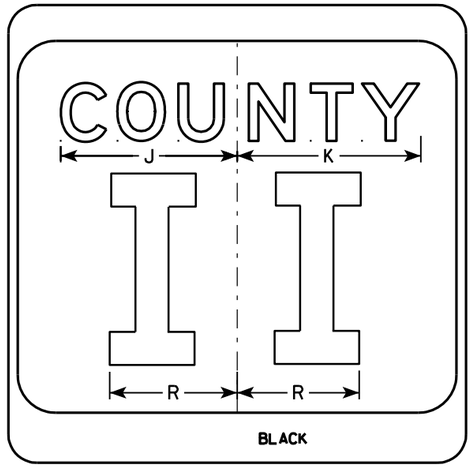
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 222 | E



M1-5A







NOTES

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

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

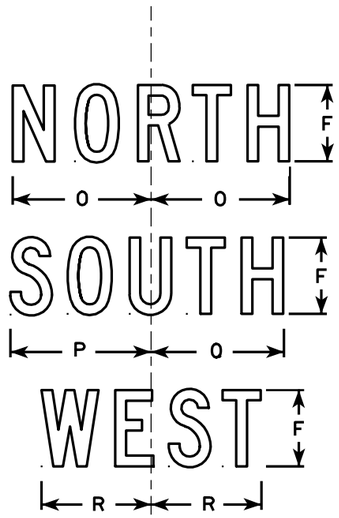
CTH MARKER
M1-5A FOR ASSEMBLIES

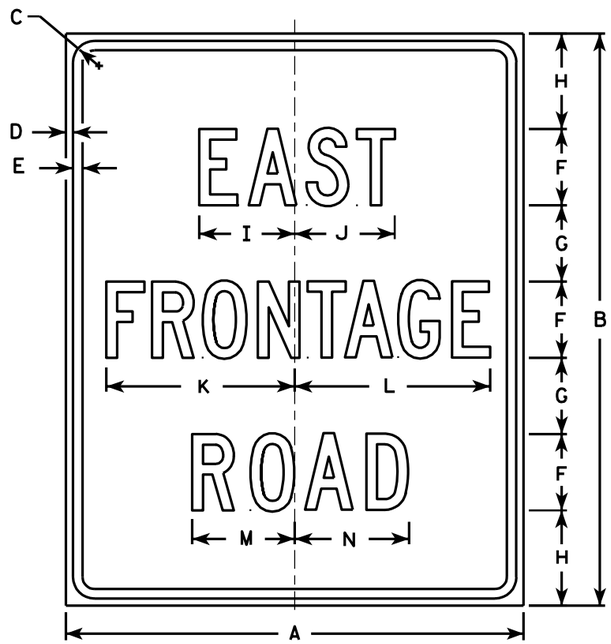
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 223 | E





NOTES

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

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	
4	900 mm X 1050 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	30	1 1/8	3/8	1/2	4	4	5	5	5 1/4	9 7/8	10 1/4	5 3/8	6	7 1/4	7 3/8	7	5 3/4									5.0	.45
3																												
4	36	42	1 3/8	5/8	5/8	6	5	7	7 1/2	7 7/8	14 3/4	15 3/8	8	9	10 7/8	11	10 1/2	8 5/8									10.5	.95
5																												

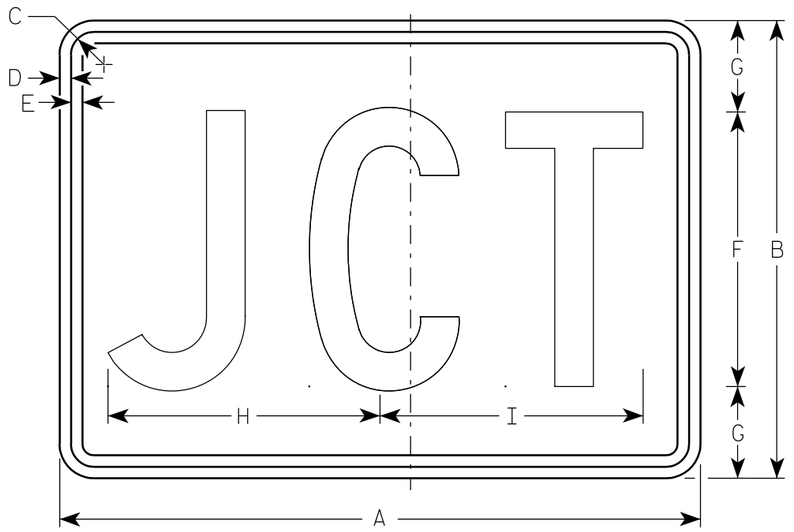
STANDARD SIGN
M1-95A

WISCONSIN DEPT OF TRANSPORTATION

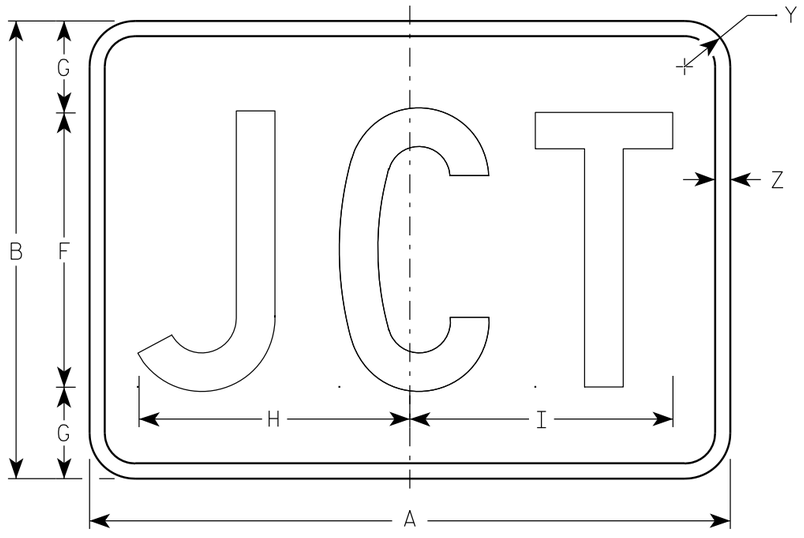
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-95A.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 224	E



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 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																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

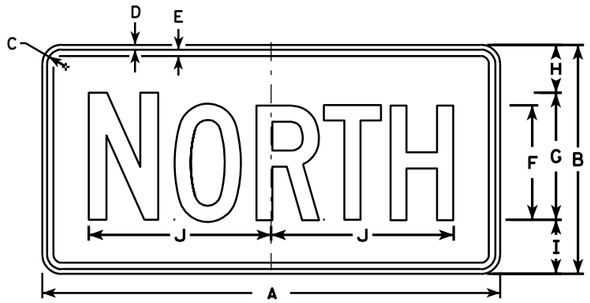
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

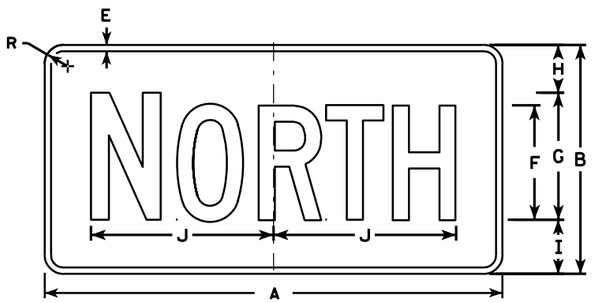
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 225	E



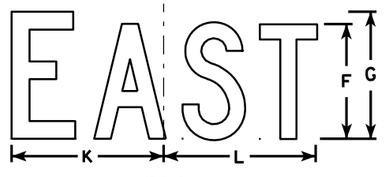
M3-1
MK3-1
MO3-1



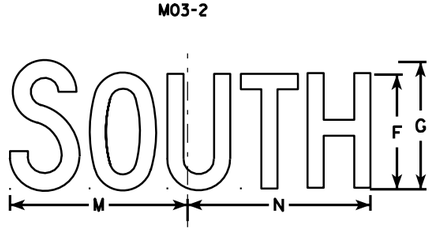
MB3-1
MG3-1
MM3-1
MN3-1



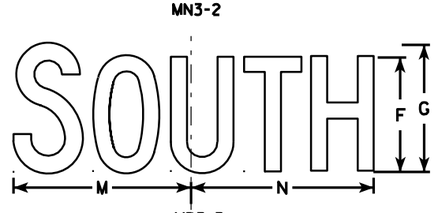
M3-2
MK3-2
MO3-2



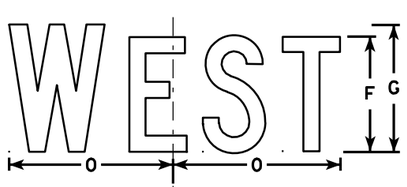
MB3-2
MG3-2
MM3-2
MN3-2



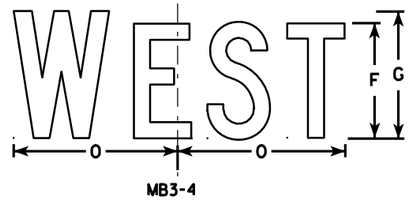
M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   M03-1 thru M03-4 Background - Orange - Reflective
   Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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

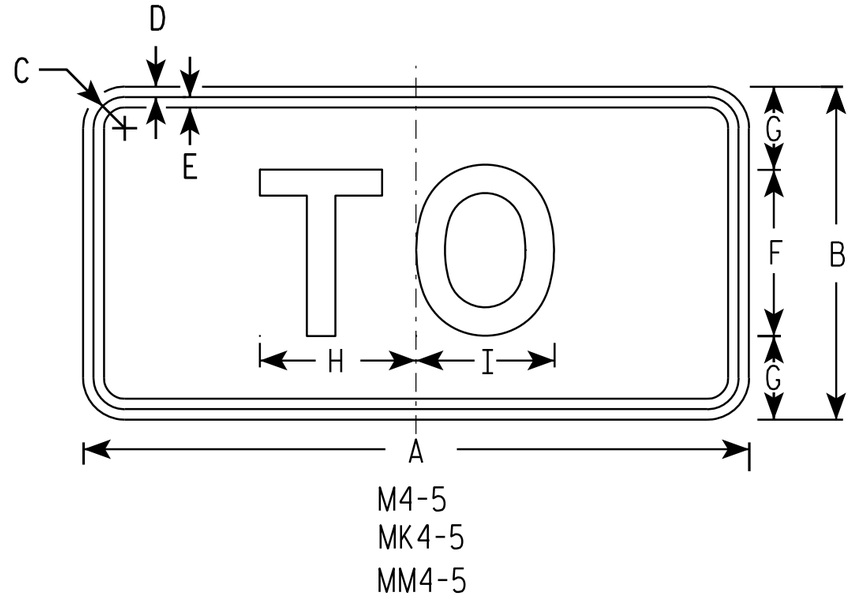
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

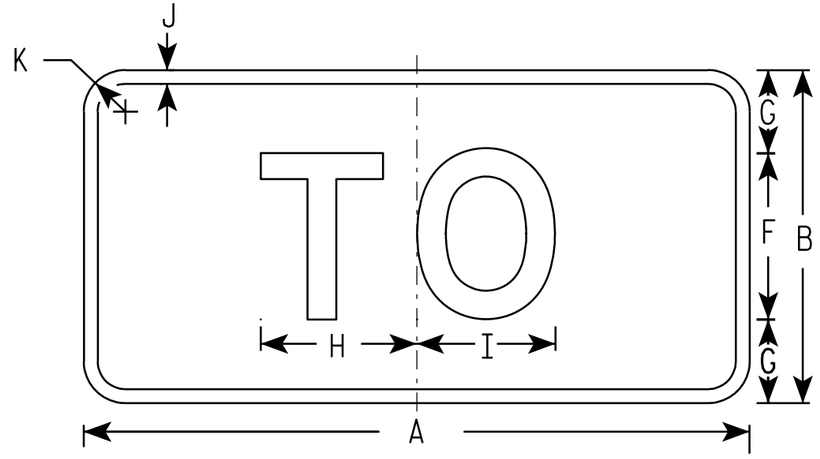
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 226	E



M4-5
MK4-5
MM4-5



MB4-5
MG4-5
MN4-5

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
   Message - Black
   MB4-5 Background - Blue
   Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG4-5 Background - Green
   Message - White - Type H Reflective
   MK4-5 Background - Green
   Message - White - Type H Reflective
   MM4-5 Background - White - Type H Reflective
   Message - Green
   MN4-5 Background - Brown
   Message - White - Type H Reflective

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

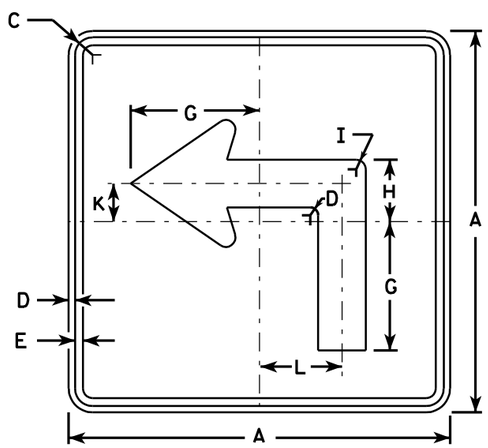
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

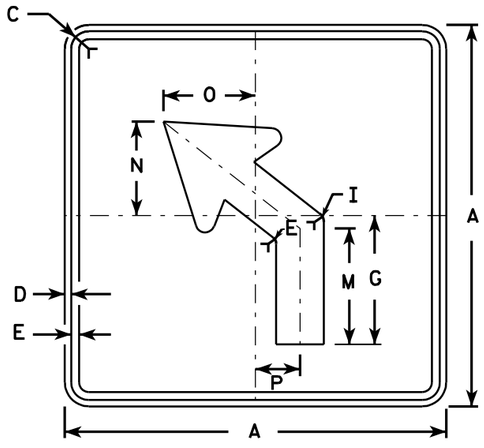
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-5.6

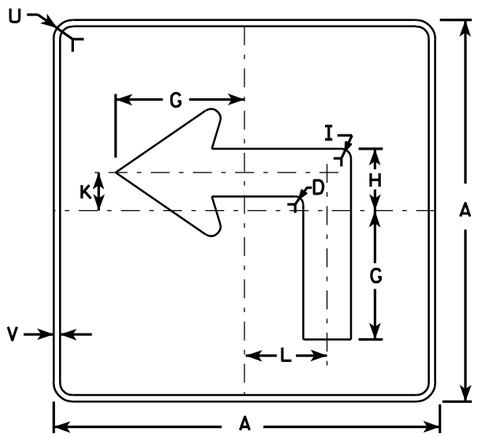
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E



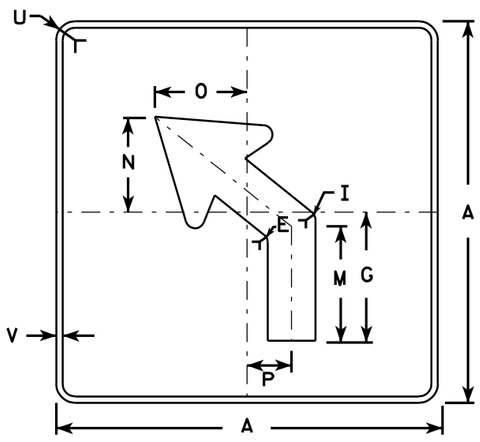
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



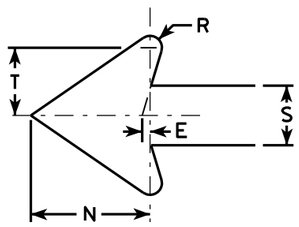
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



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



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



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

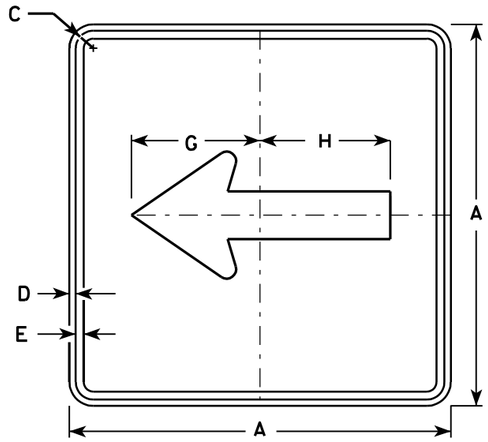
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

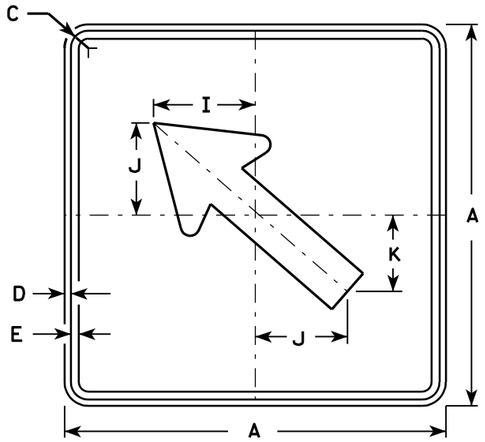
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M5-1.11

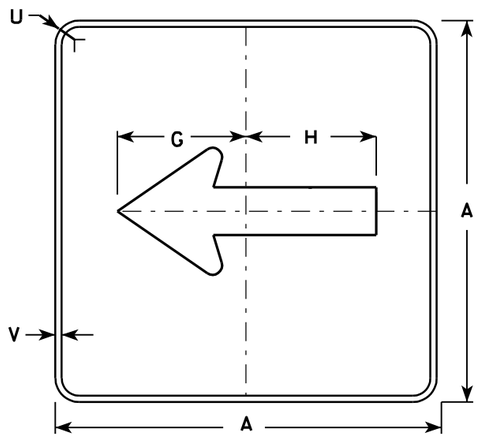
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 228	E



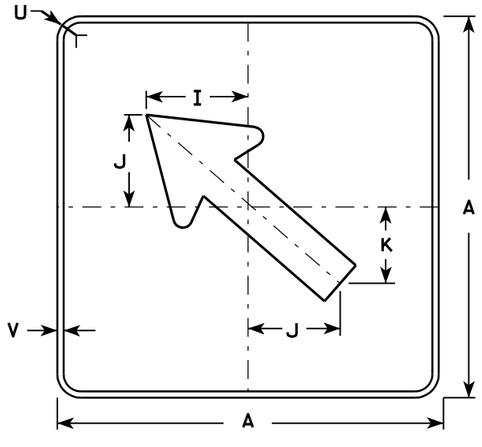
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



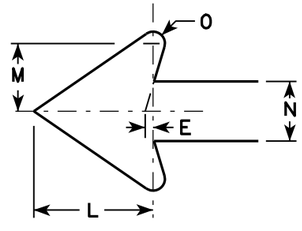
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

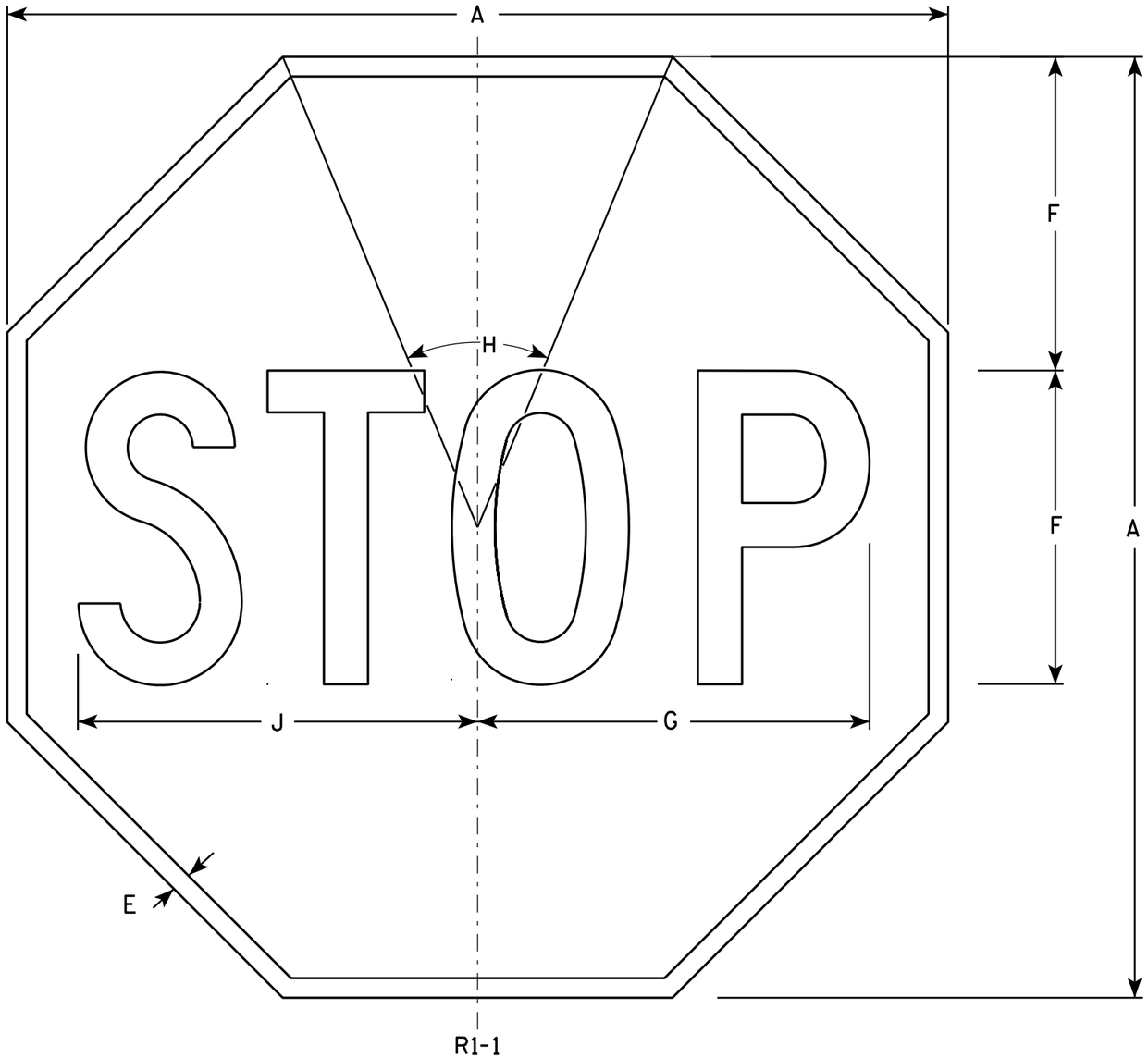
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 229	E



NOTES

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

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

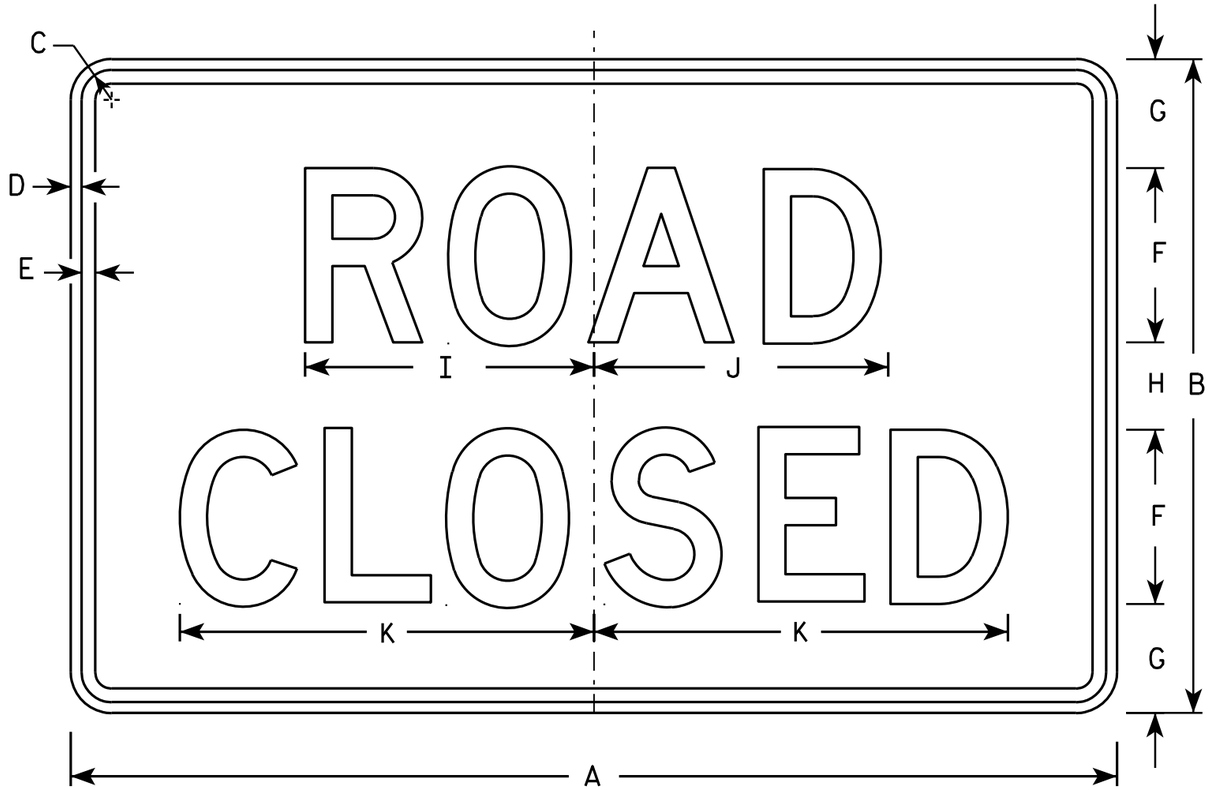
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

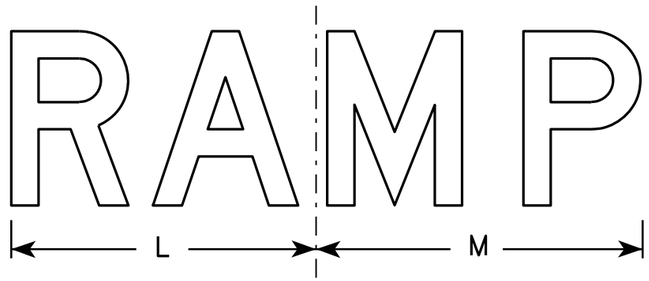
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E



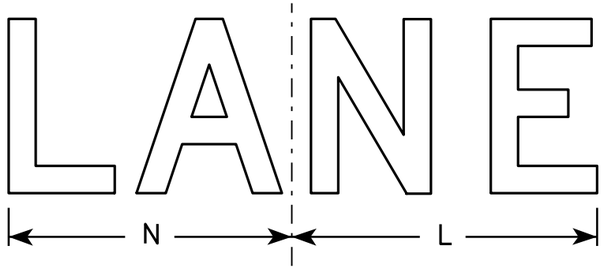
R11-2

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

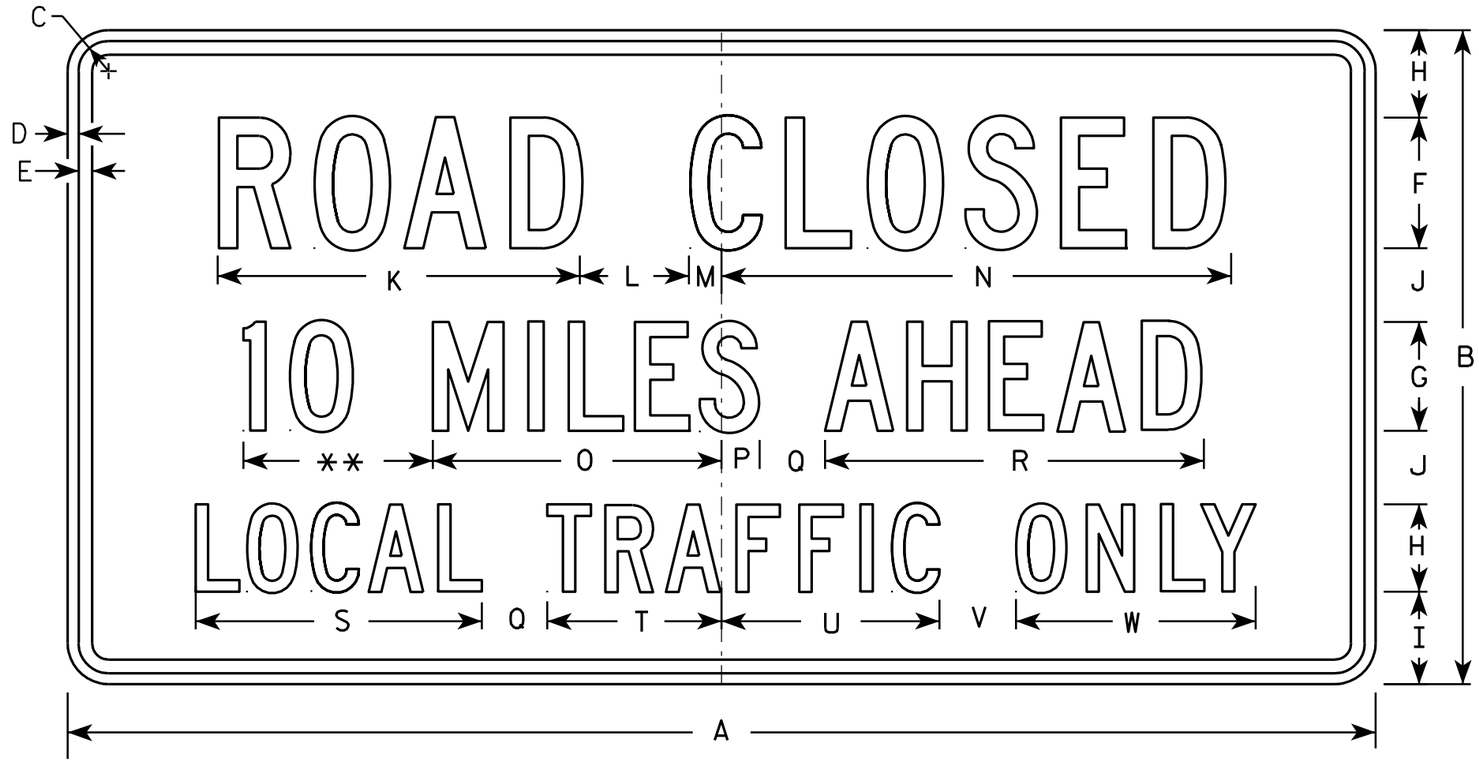
STANDARD SIGN
R11-2

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: 231 | E



R11-3

NOTES

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

** See Note 5

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

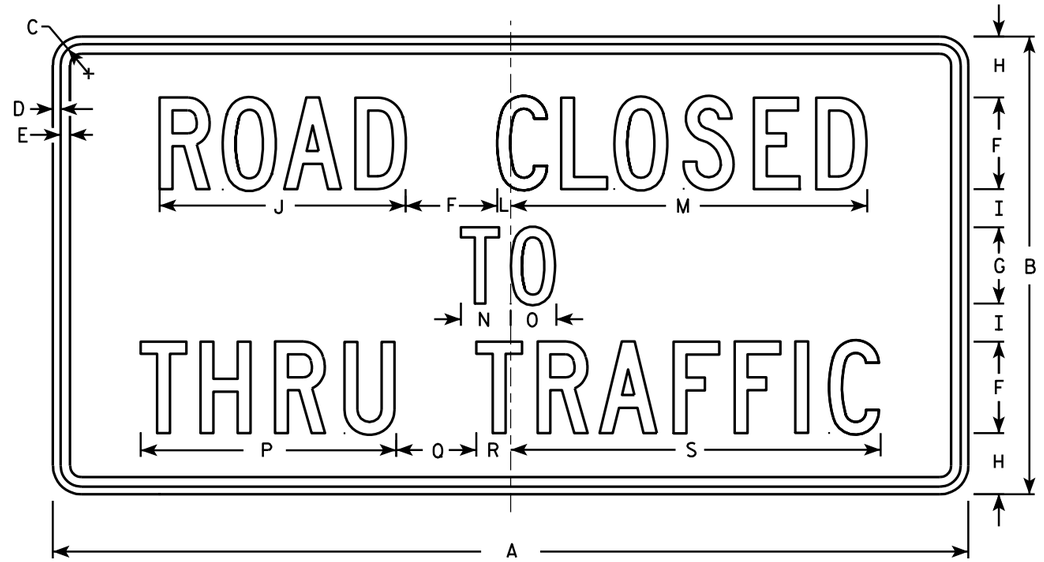
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 232 | E



R11-4

NOTES

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

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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

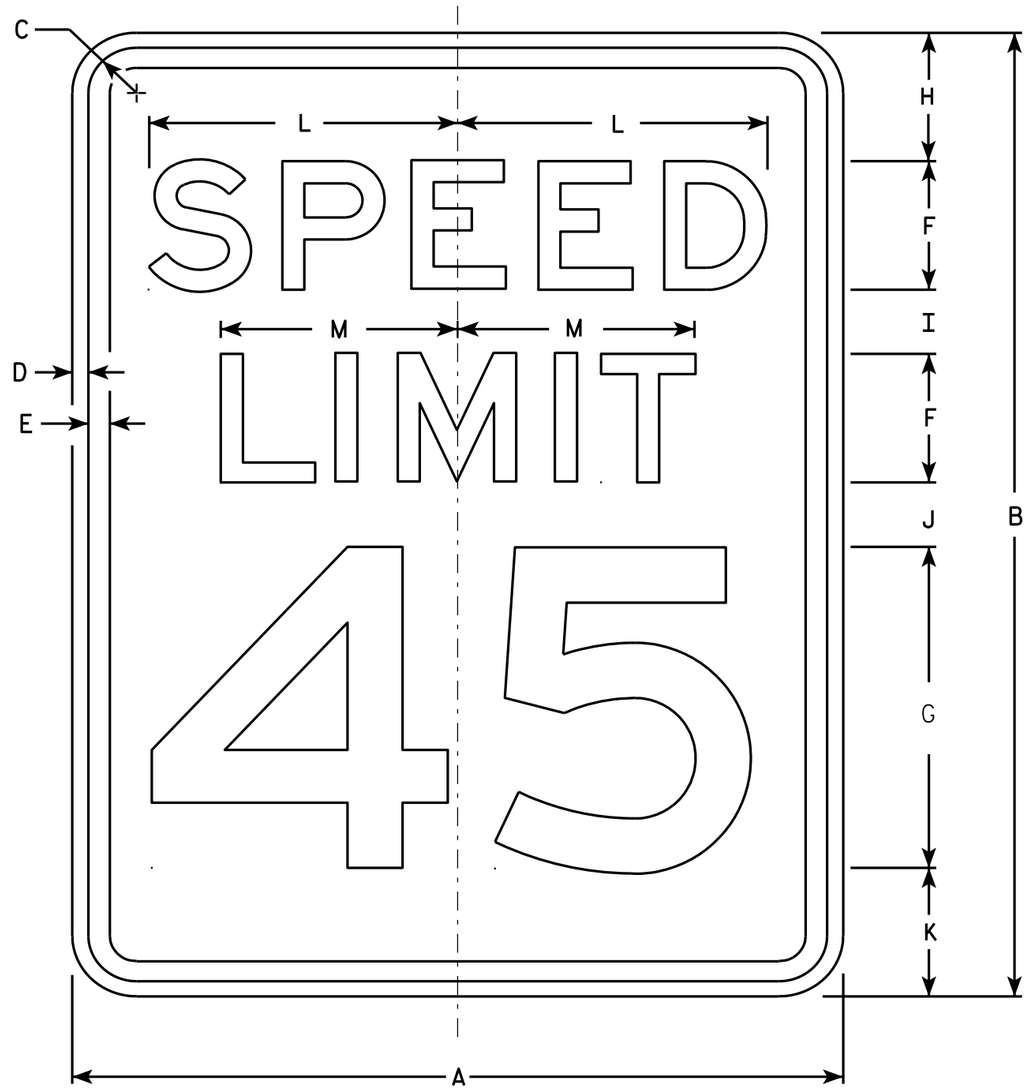
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | E



R2-1

NOTES

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

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

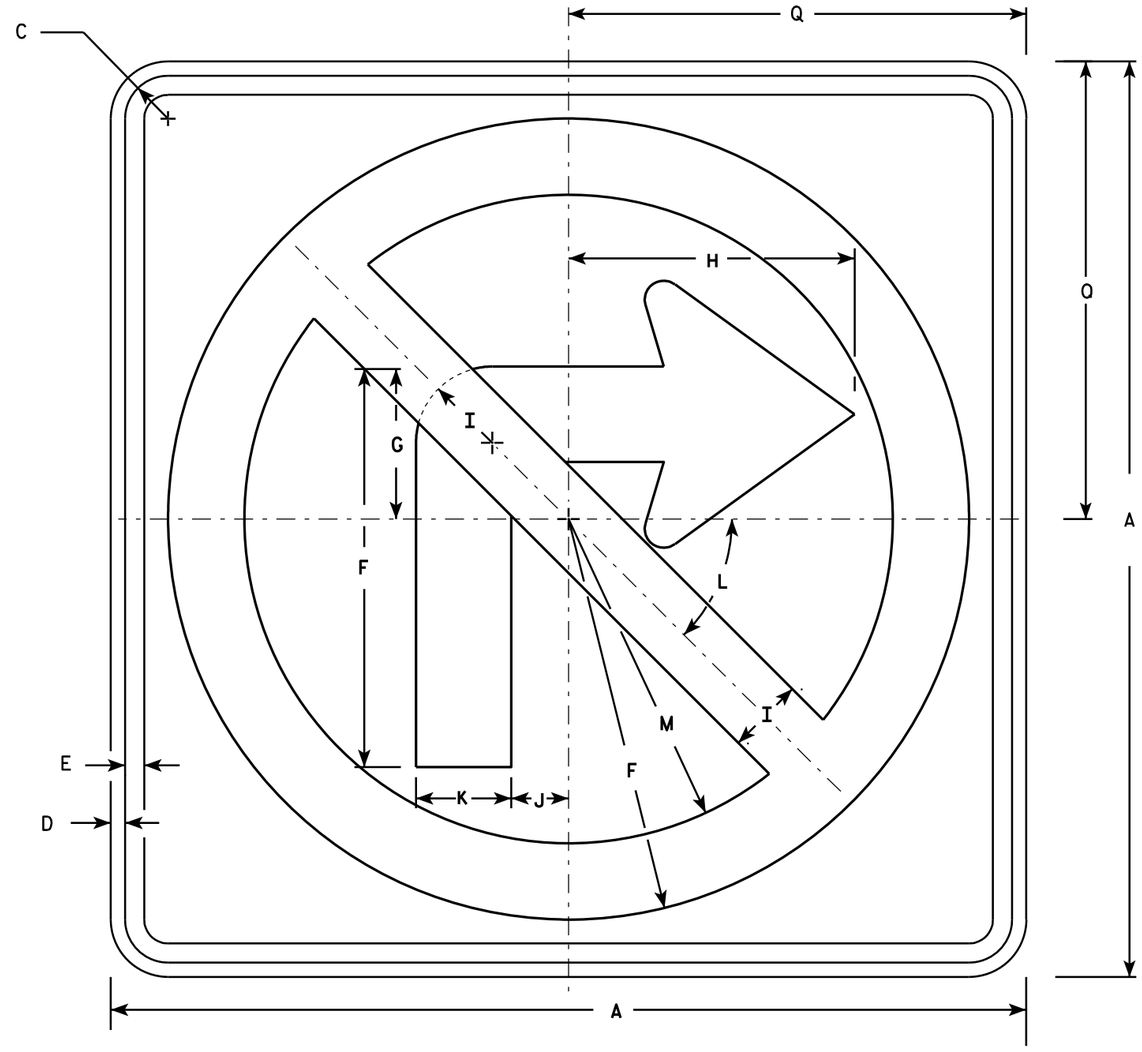
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

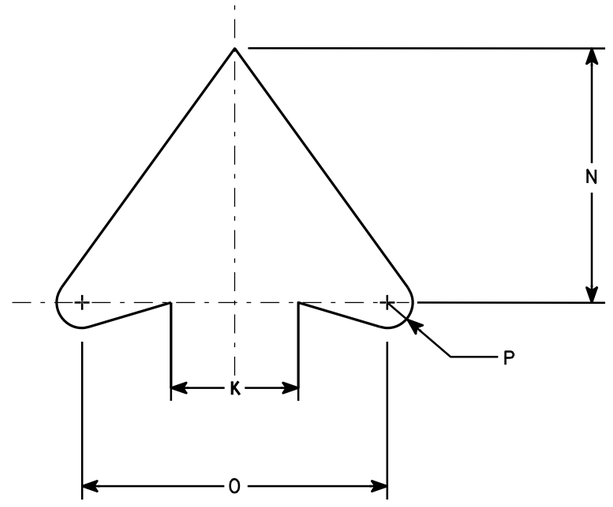
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

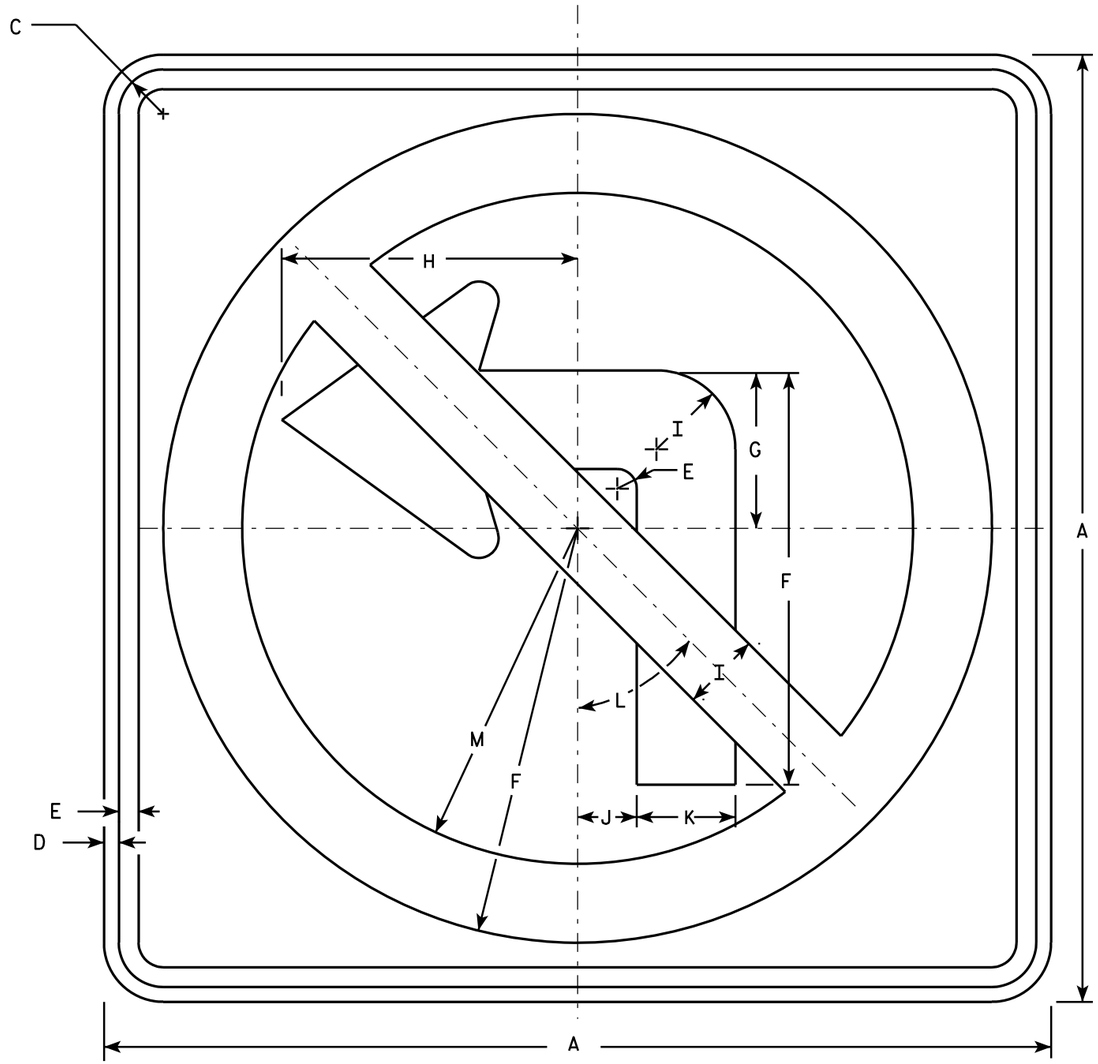
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

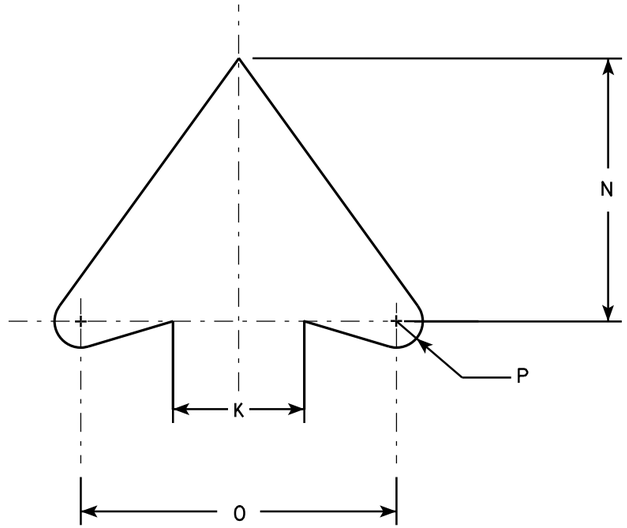
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 235	E



R3-2

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 - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

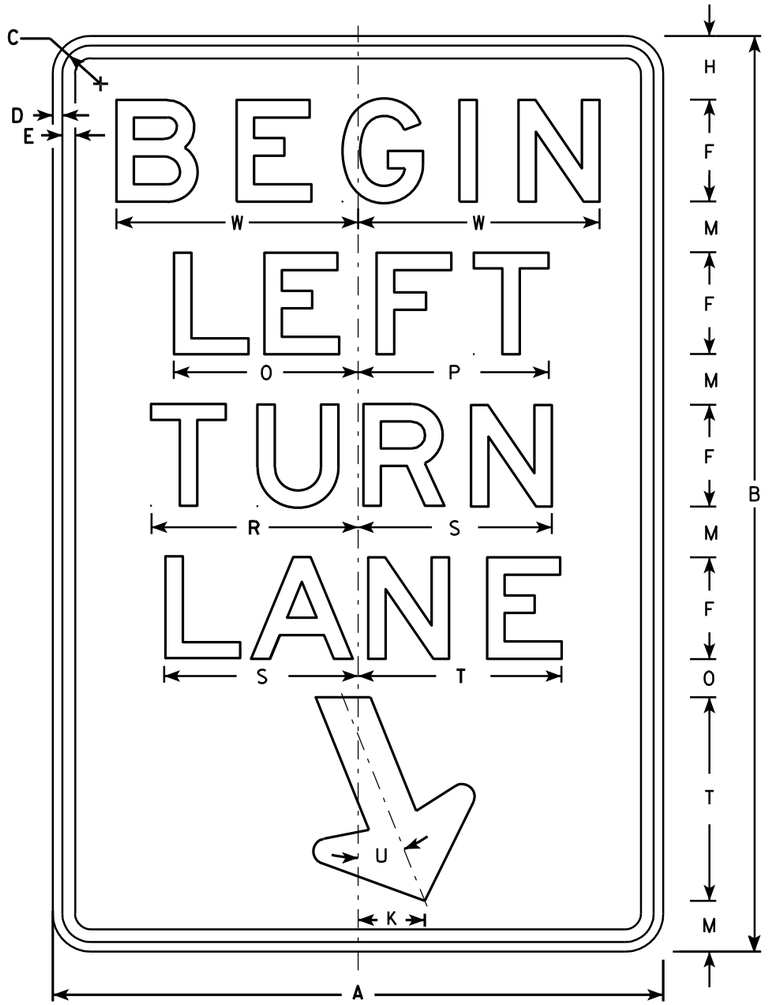
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

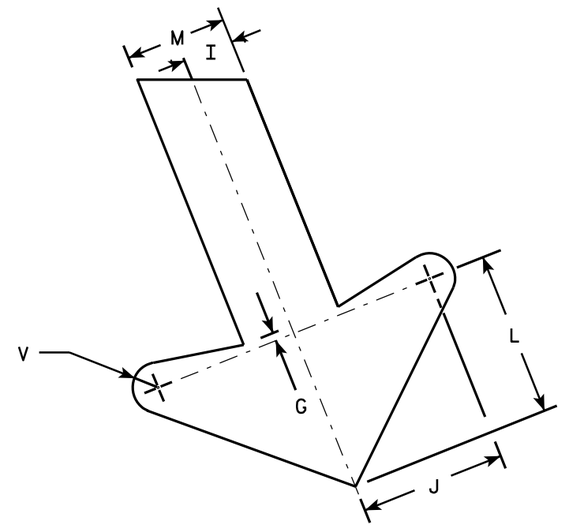
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 236	E



R3-20L

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	7 1/4	7 1/2		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	7 1/4	7 1/2		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	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

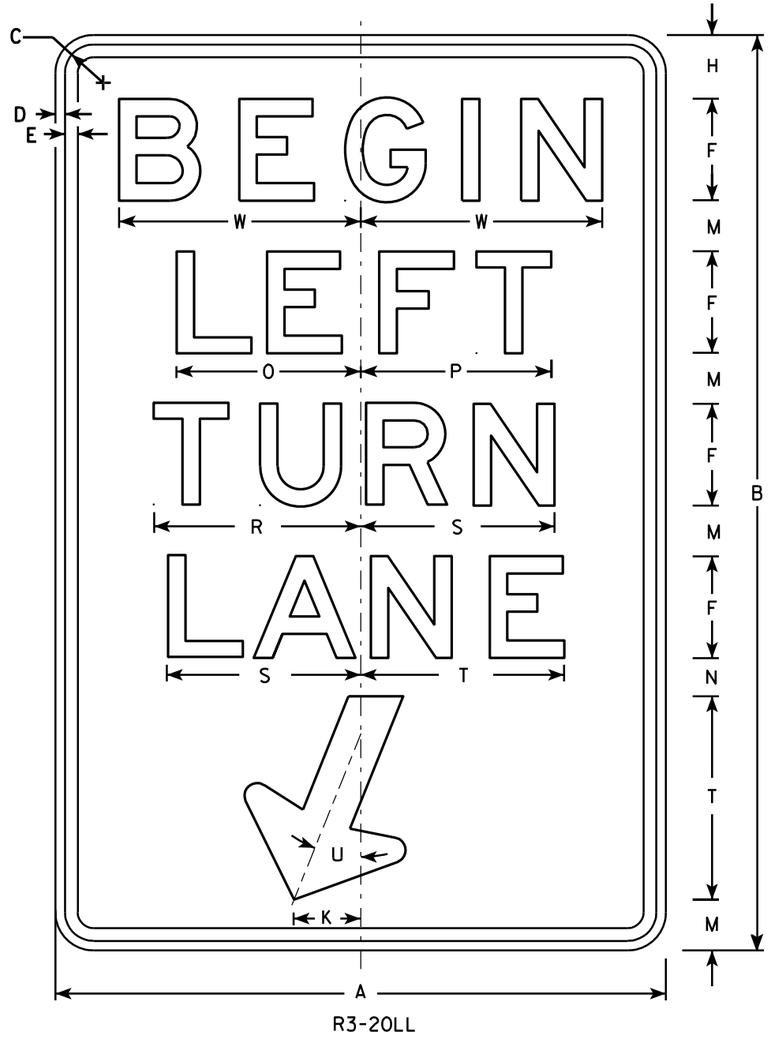
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

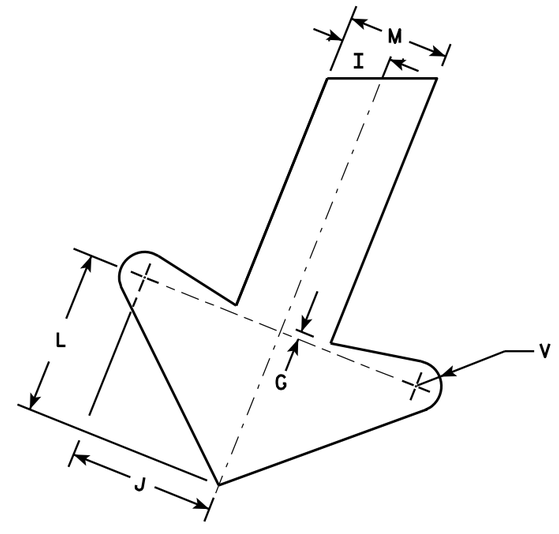
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 237 | E



R3-20LL

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	7 1/4	7 1/2		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	7 1/4	7 1/2		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	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

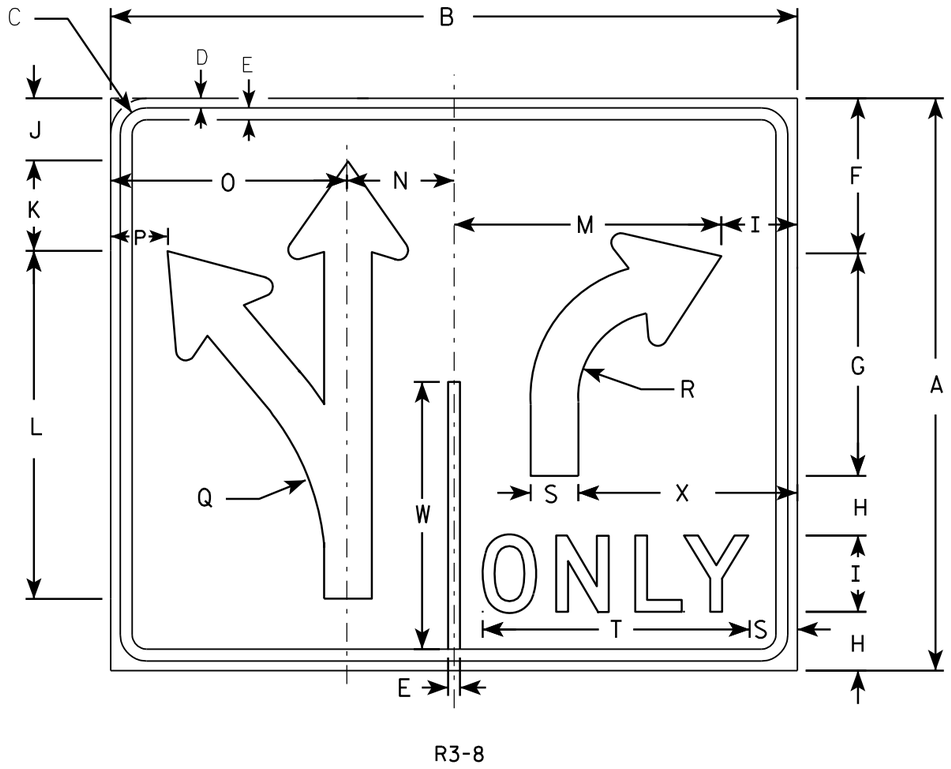
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

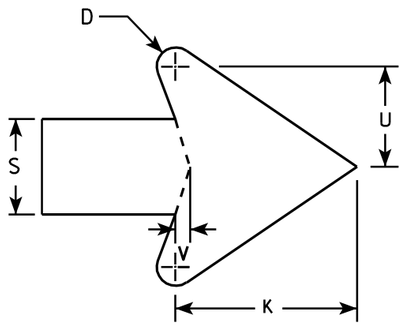
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 238 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42



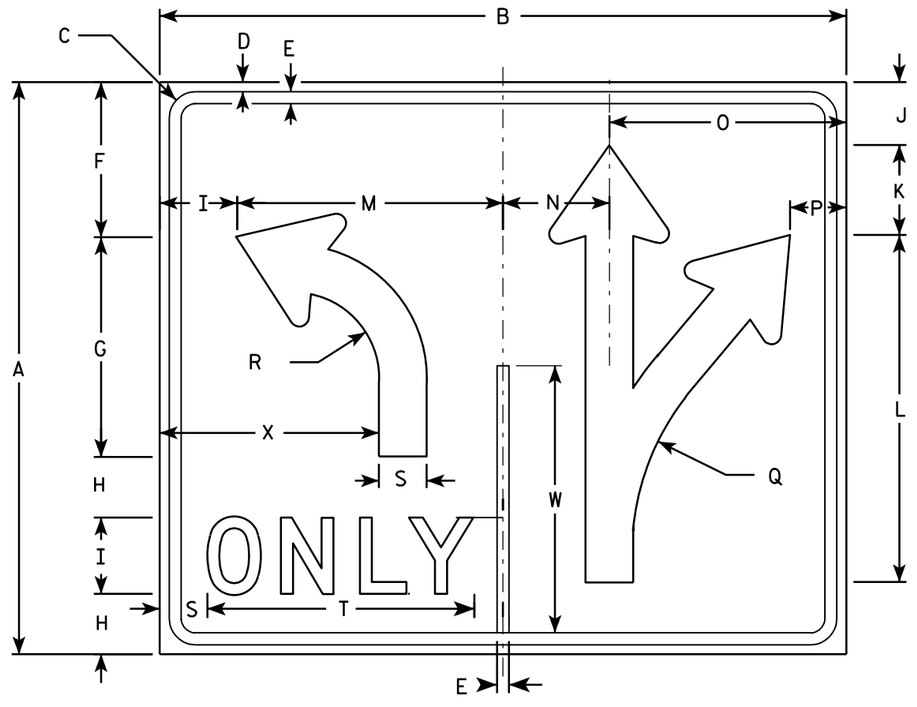
R3-8



ARROW DETAIL

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.



R3-8A

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	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

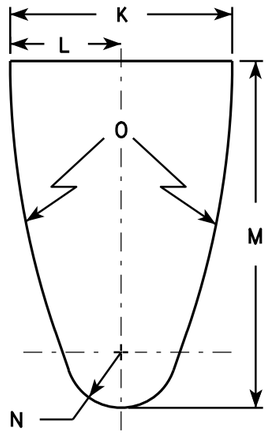
STANDARD SIGN
R3-8 & R3-8A

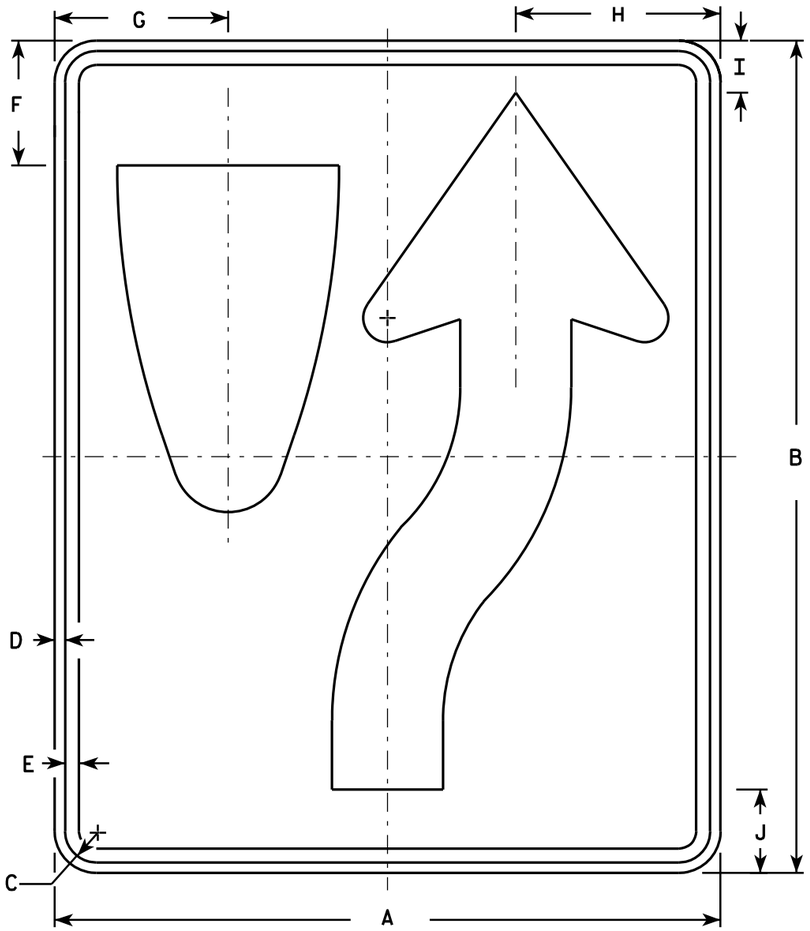
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 239	E

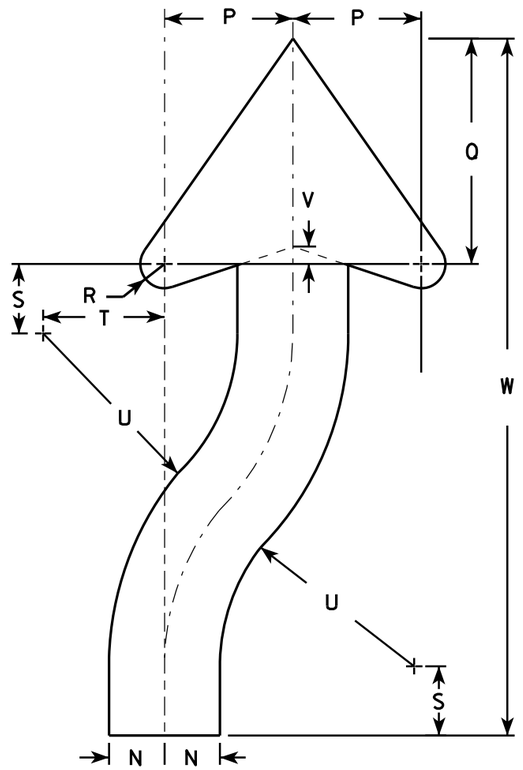




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

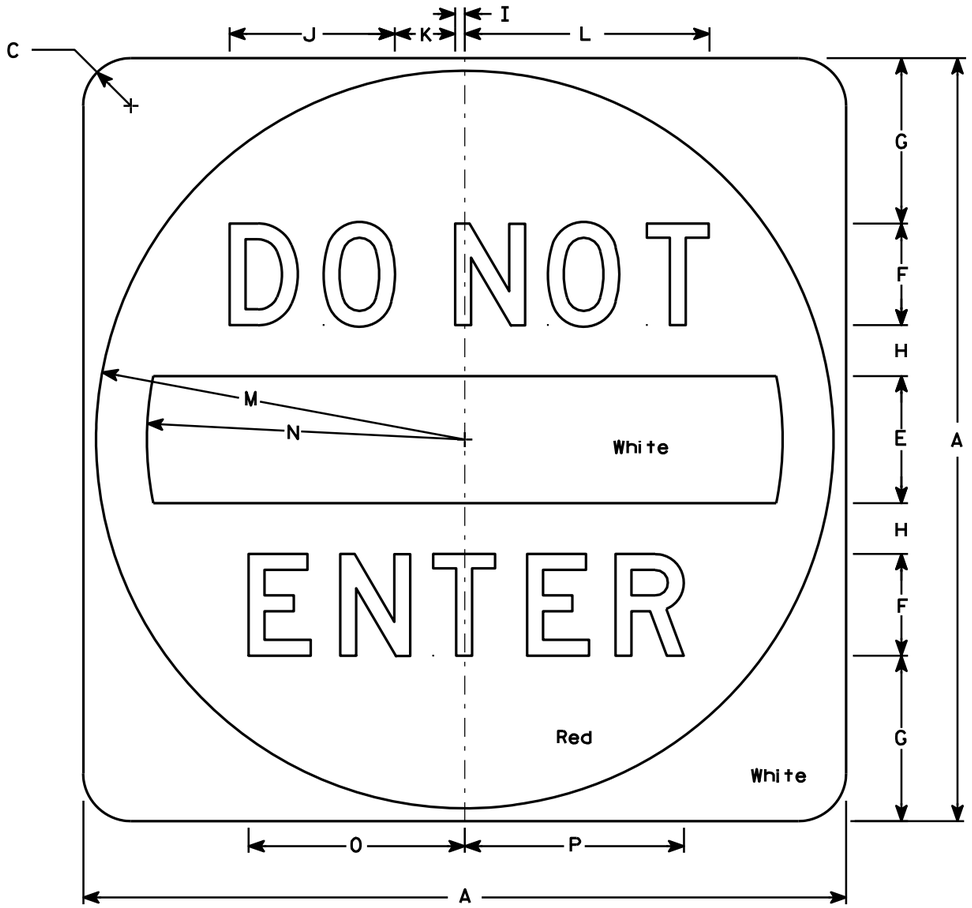
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 240	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

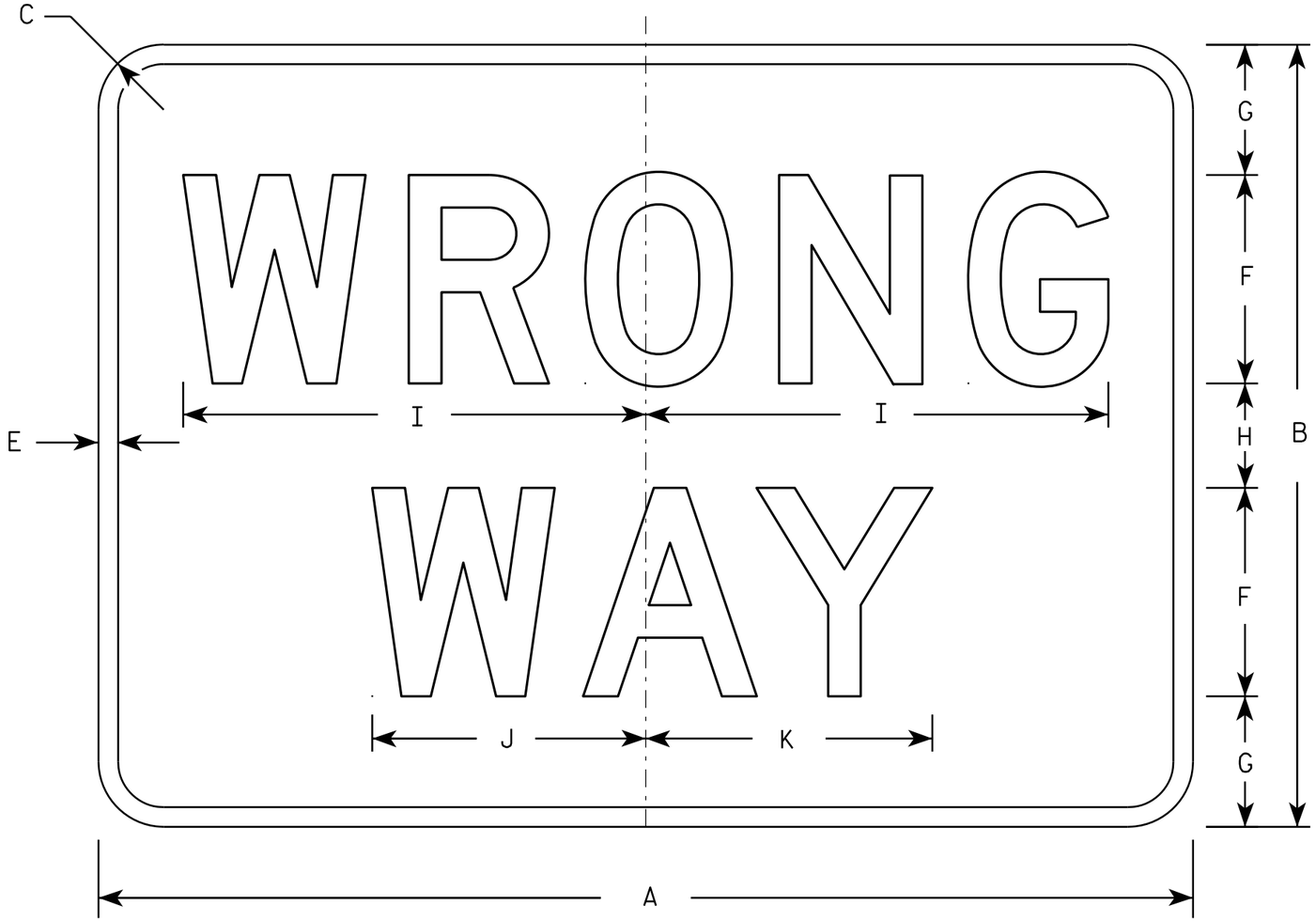
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 241 | E



R5-1A

NOTES

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

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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E



R5-57

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 - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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

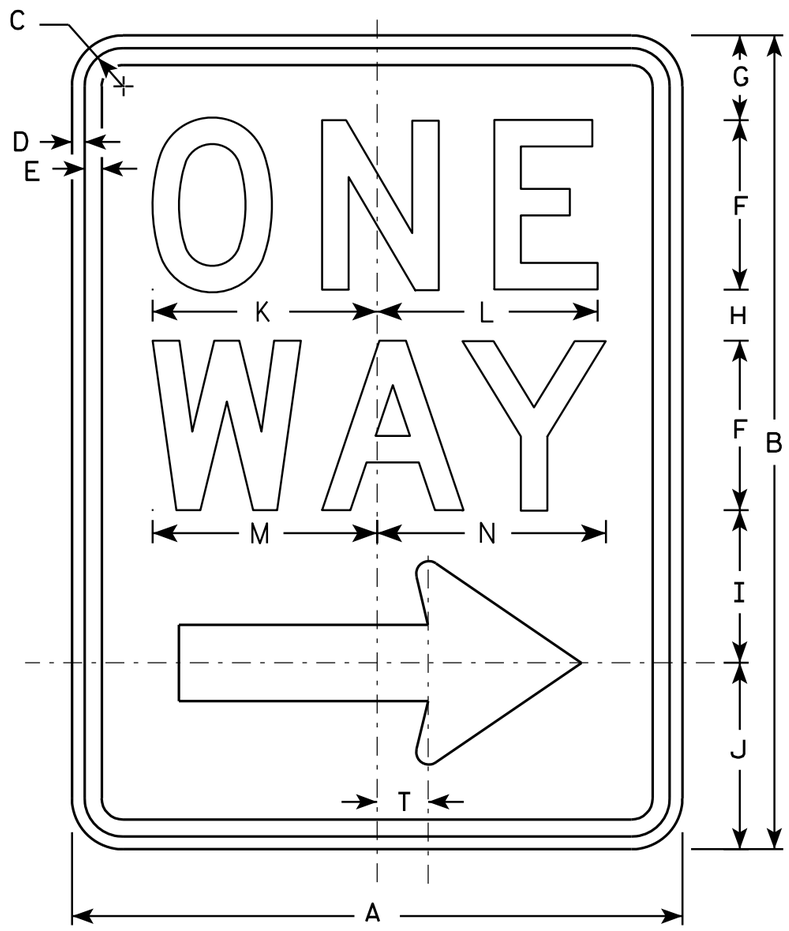
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

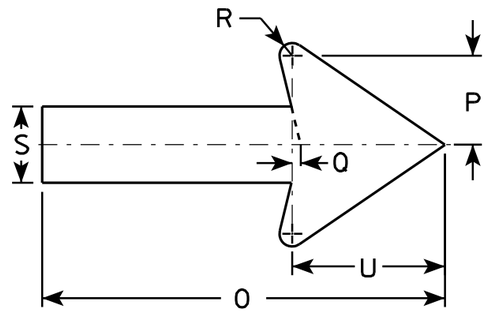
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 243 | E



R6-2R

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. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

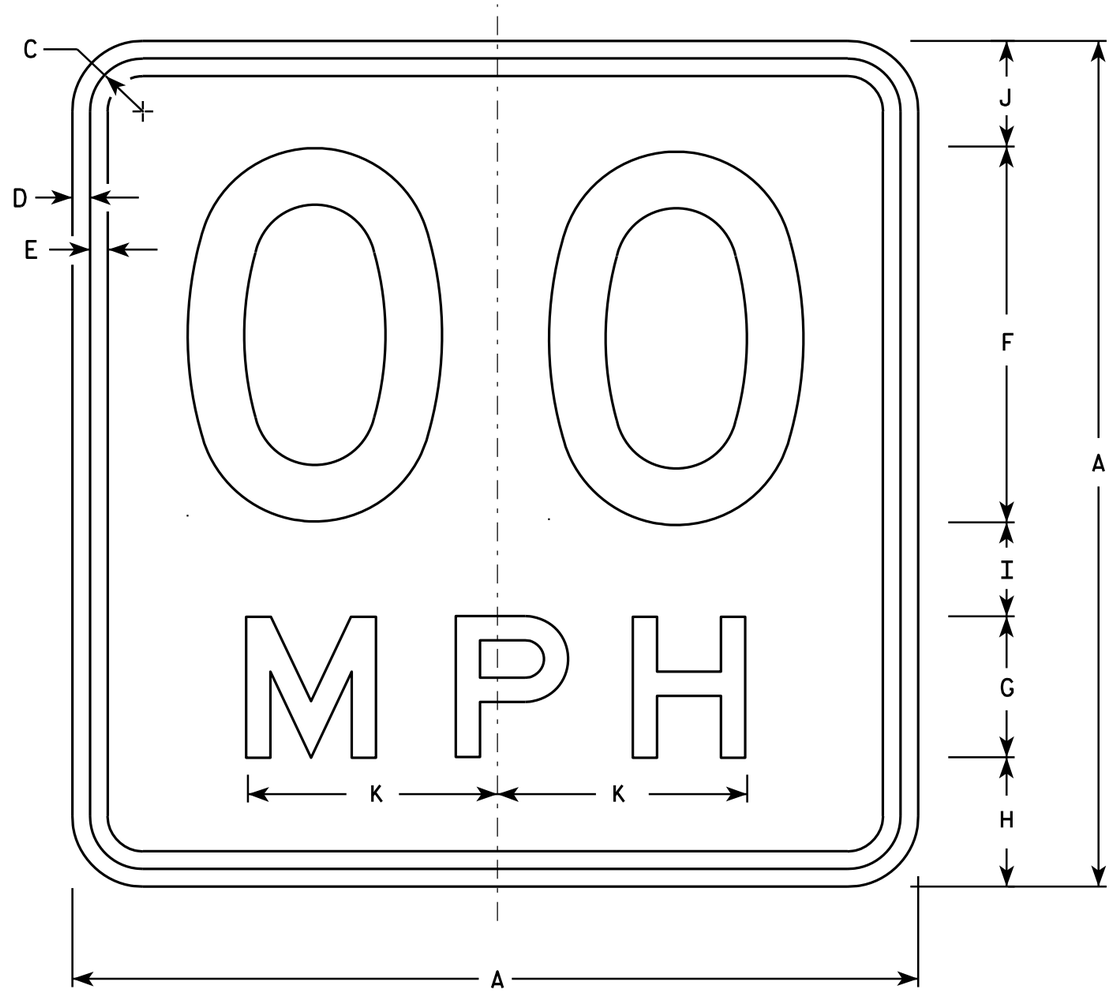
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 244	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

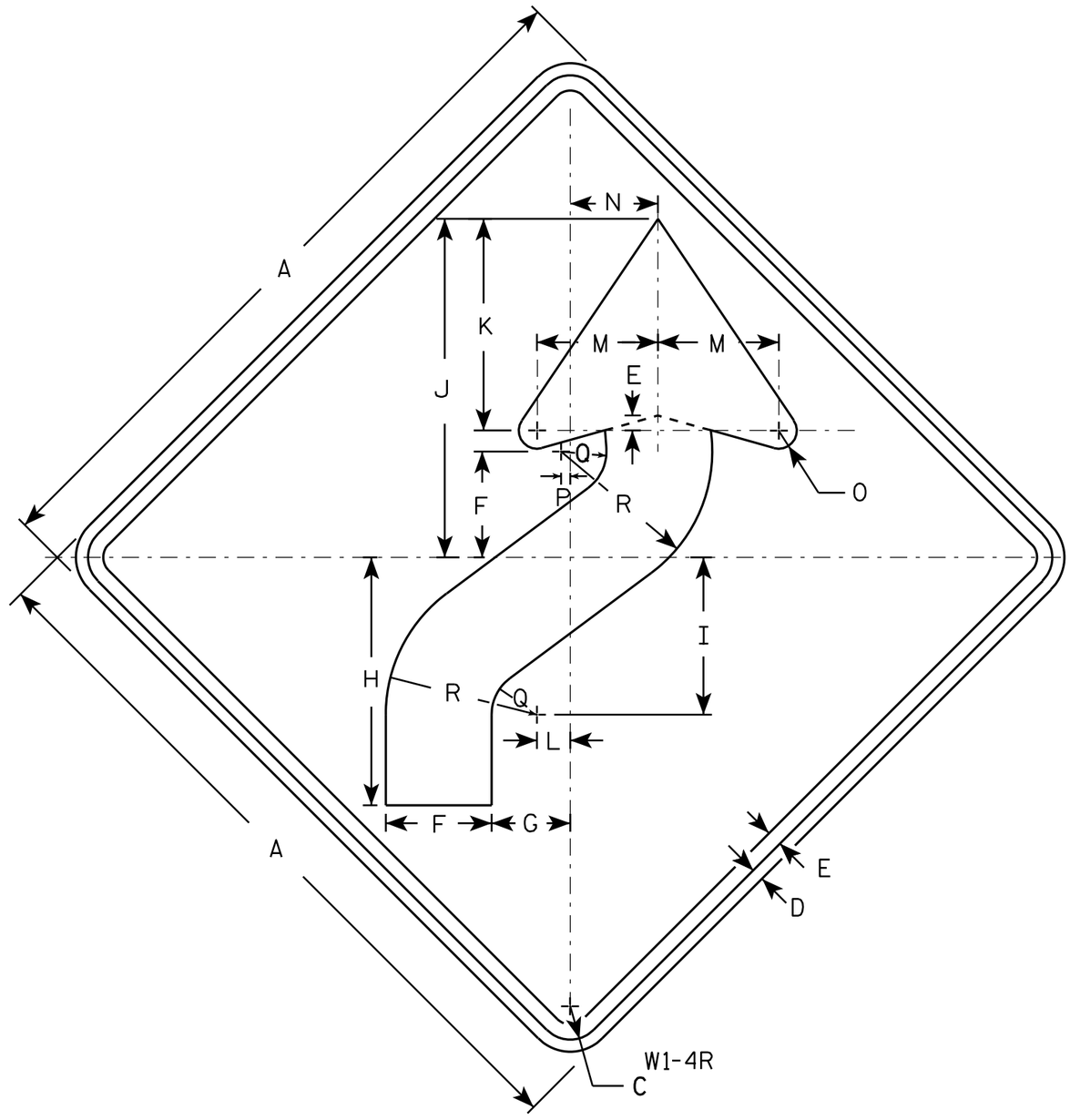
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

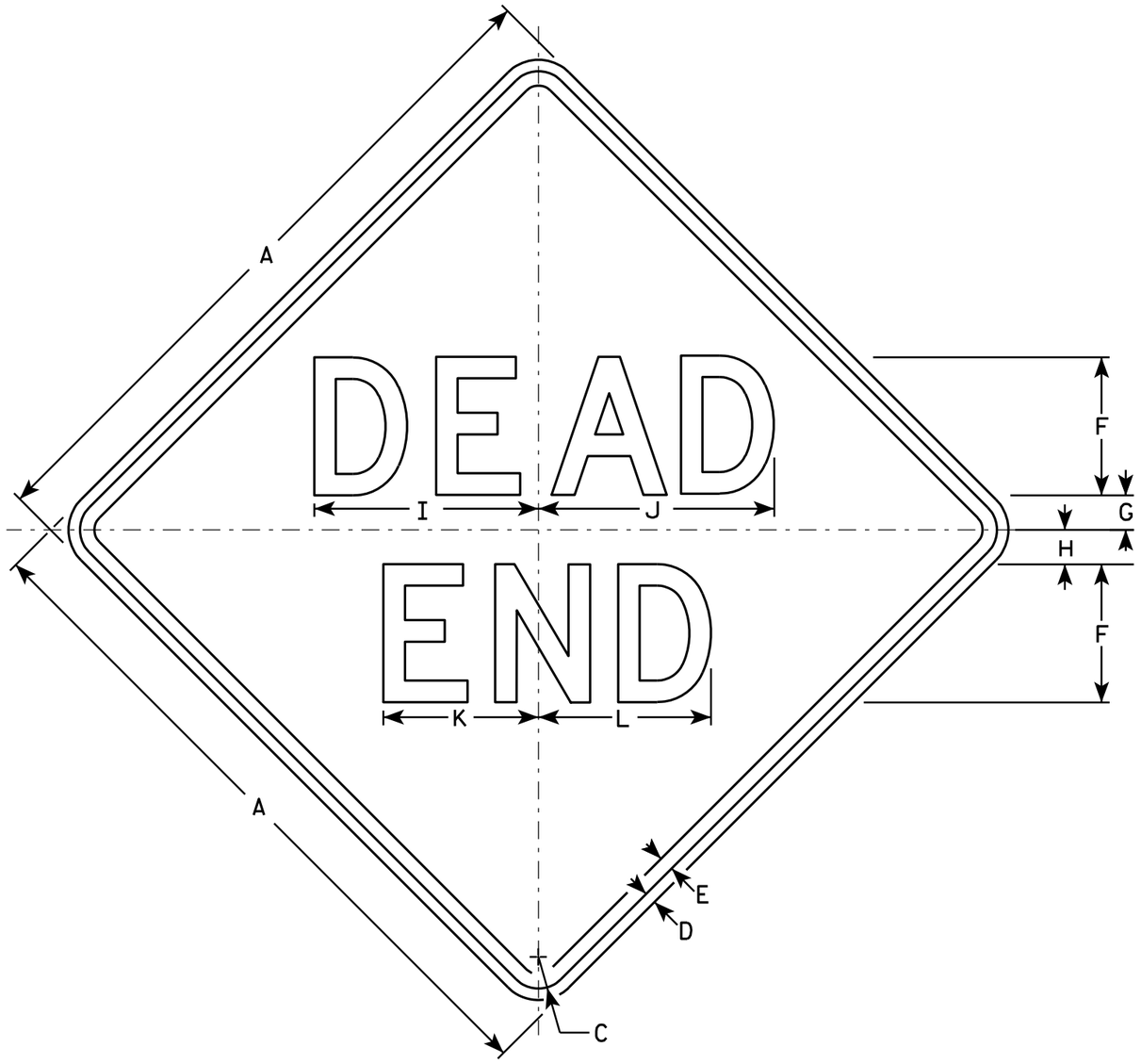
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E



W14-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

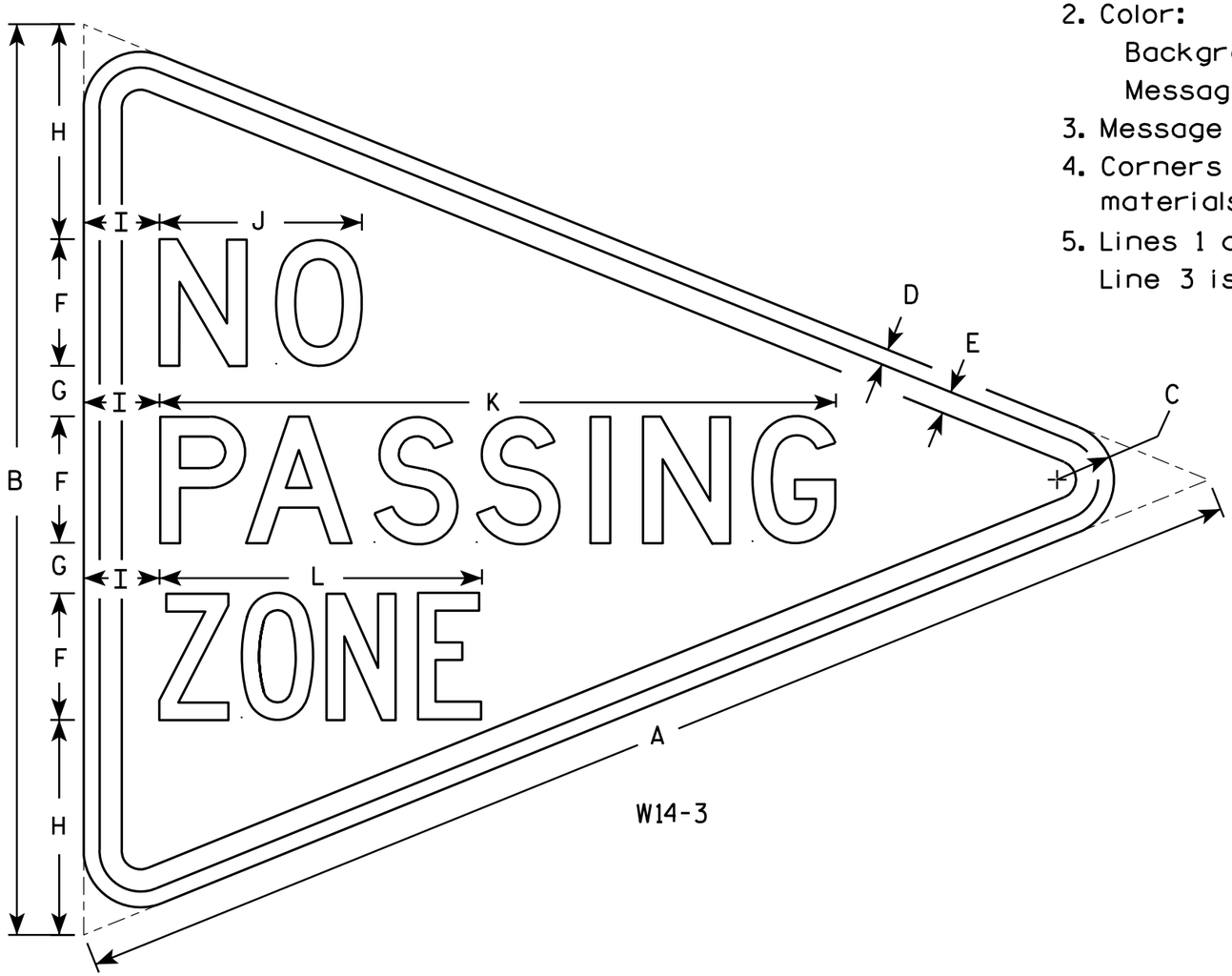
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W14-1.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 247	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

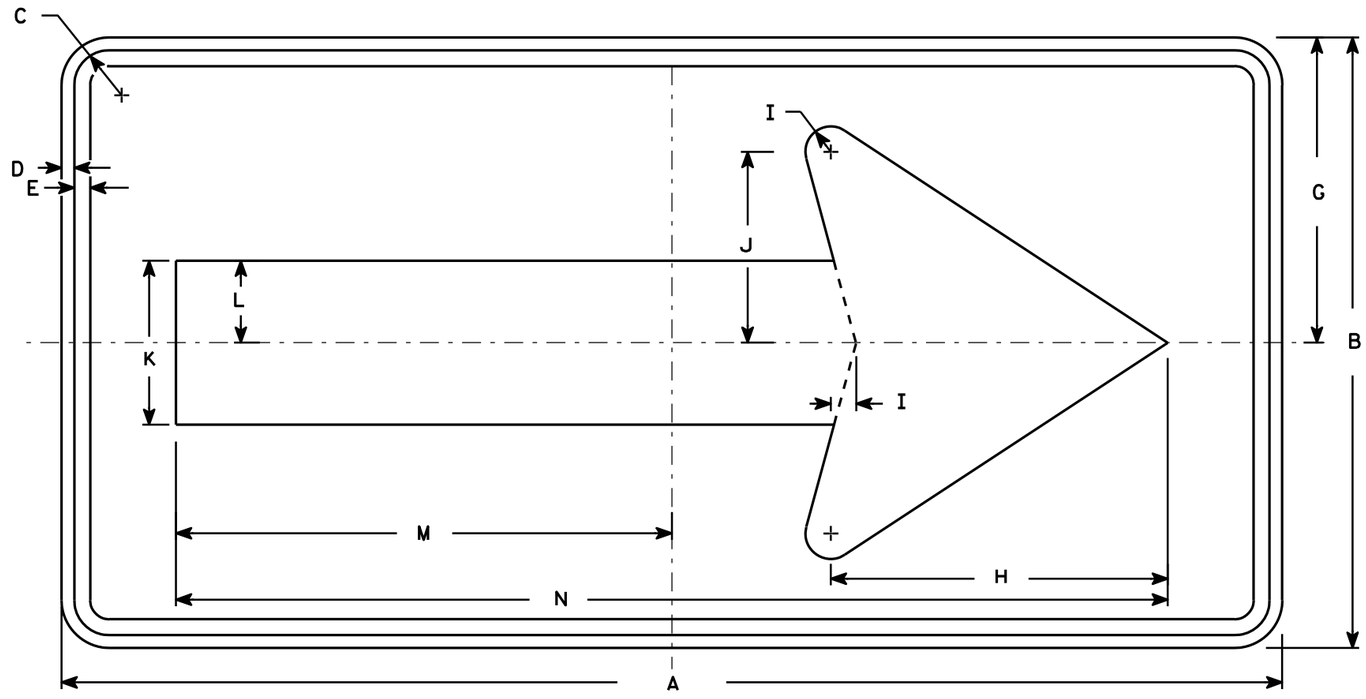
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	E



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
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	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

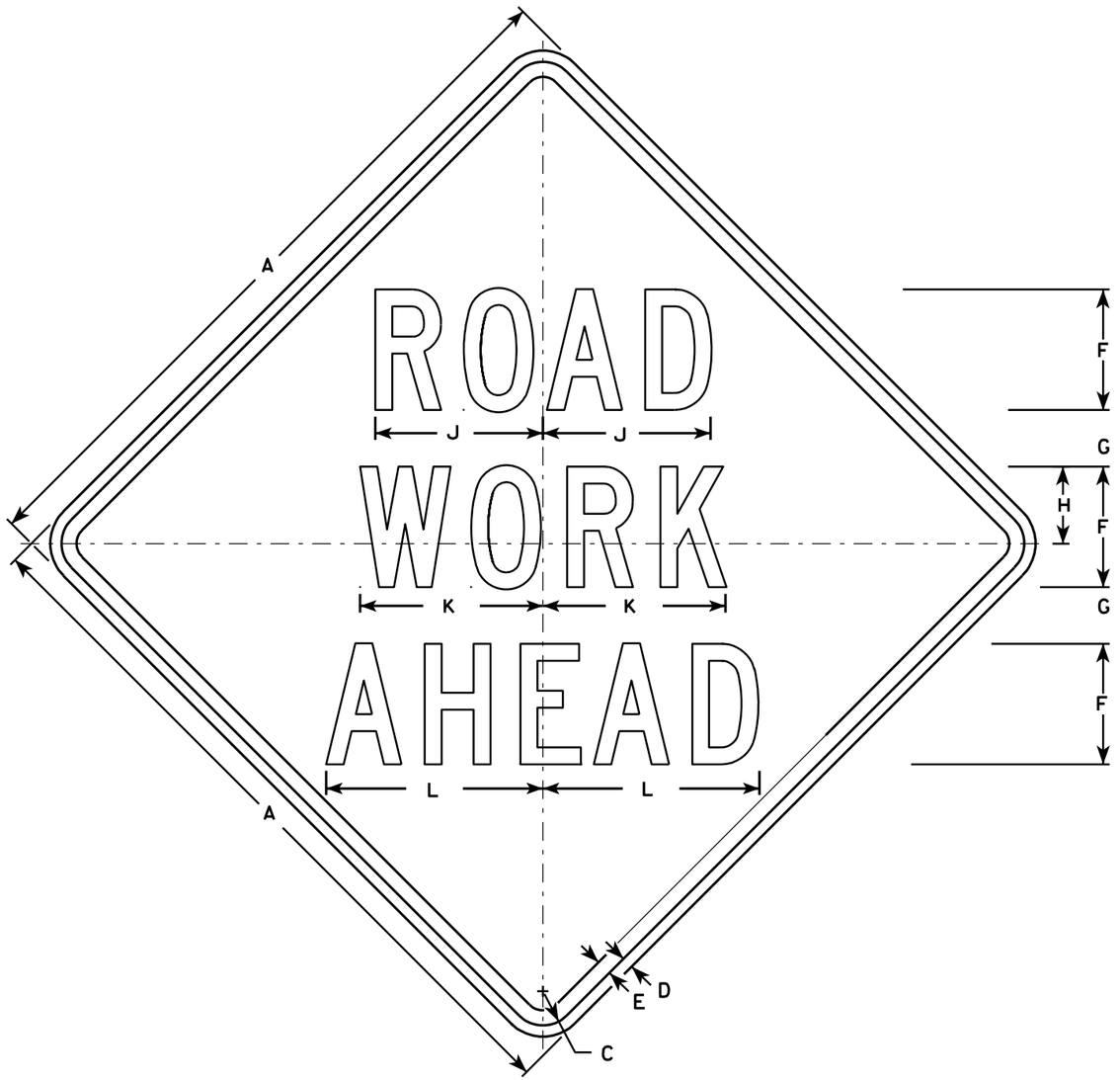
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

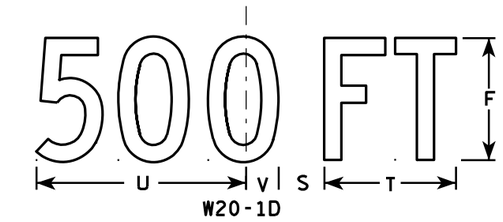
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

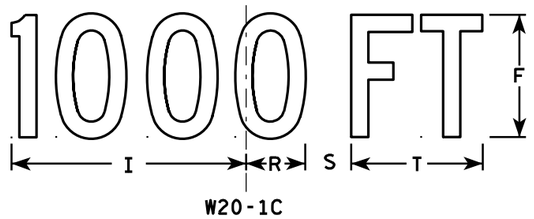
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 249



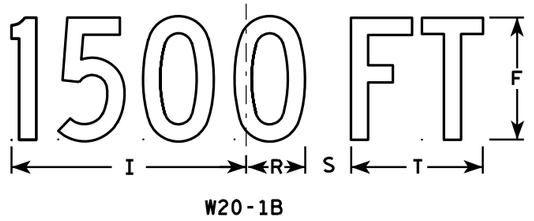
W20-1A



W20-1D



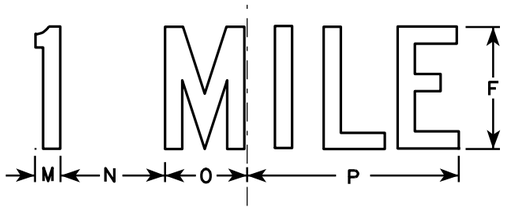
W20-1C



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:

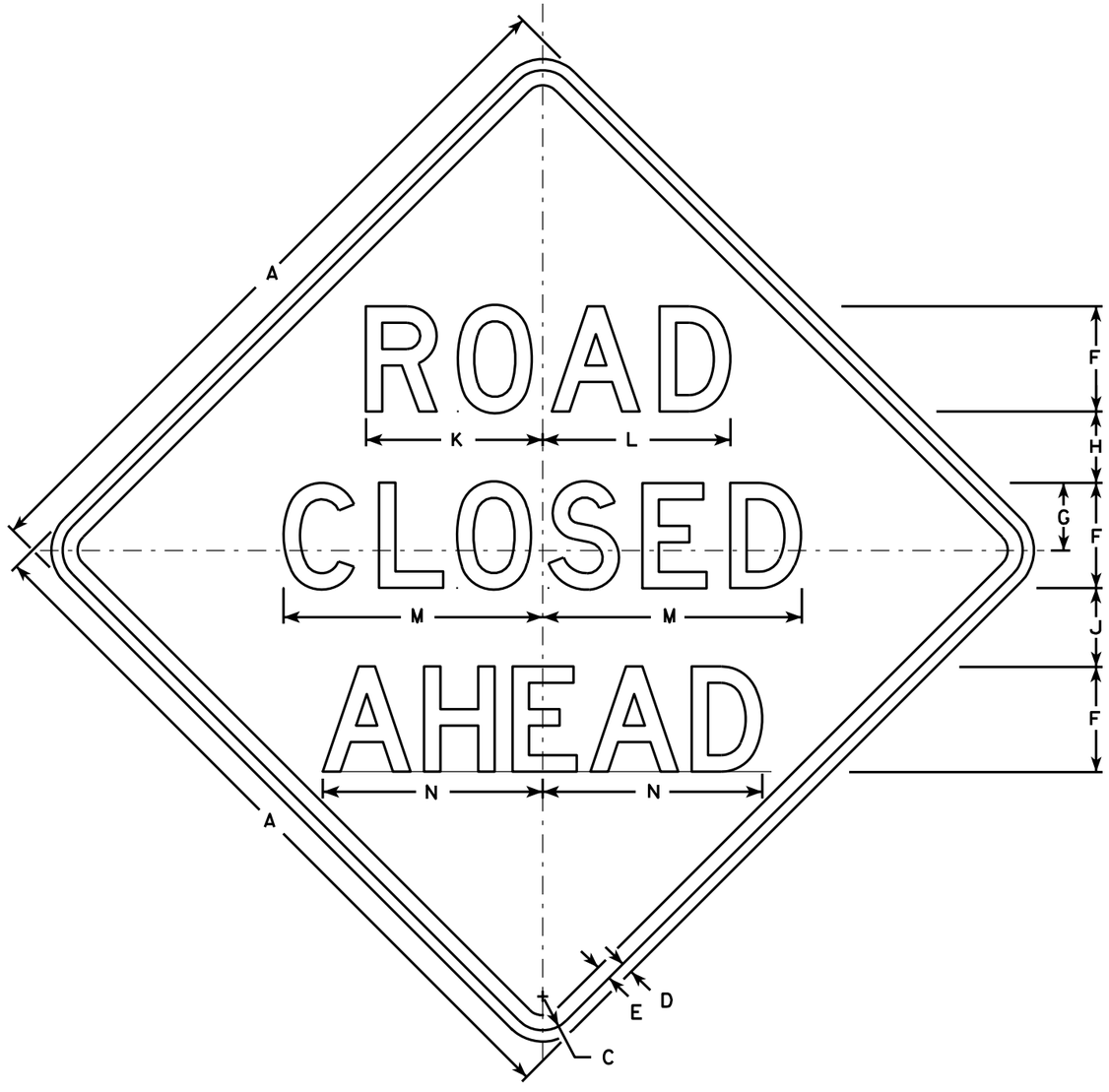
SHEET NO: 250 E

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

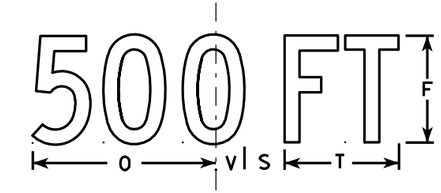
WISDOT/CADDS SHEET 42

7

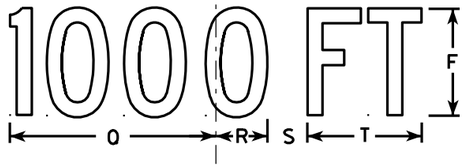
7



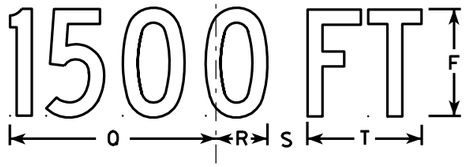
W20-3A



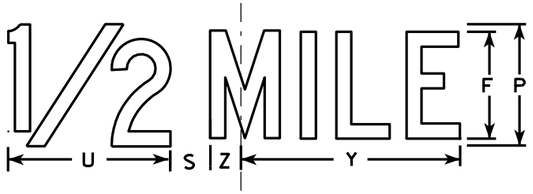
W20-3D



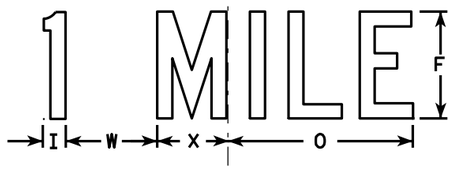
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

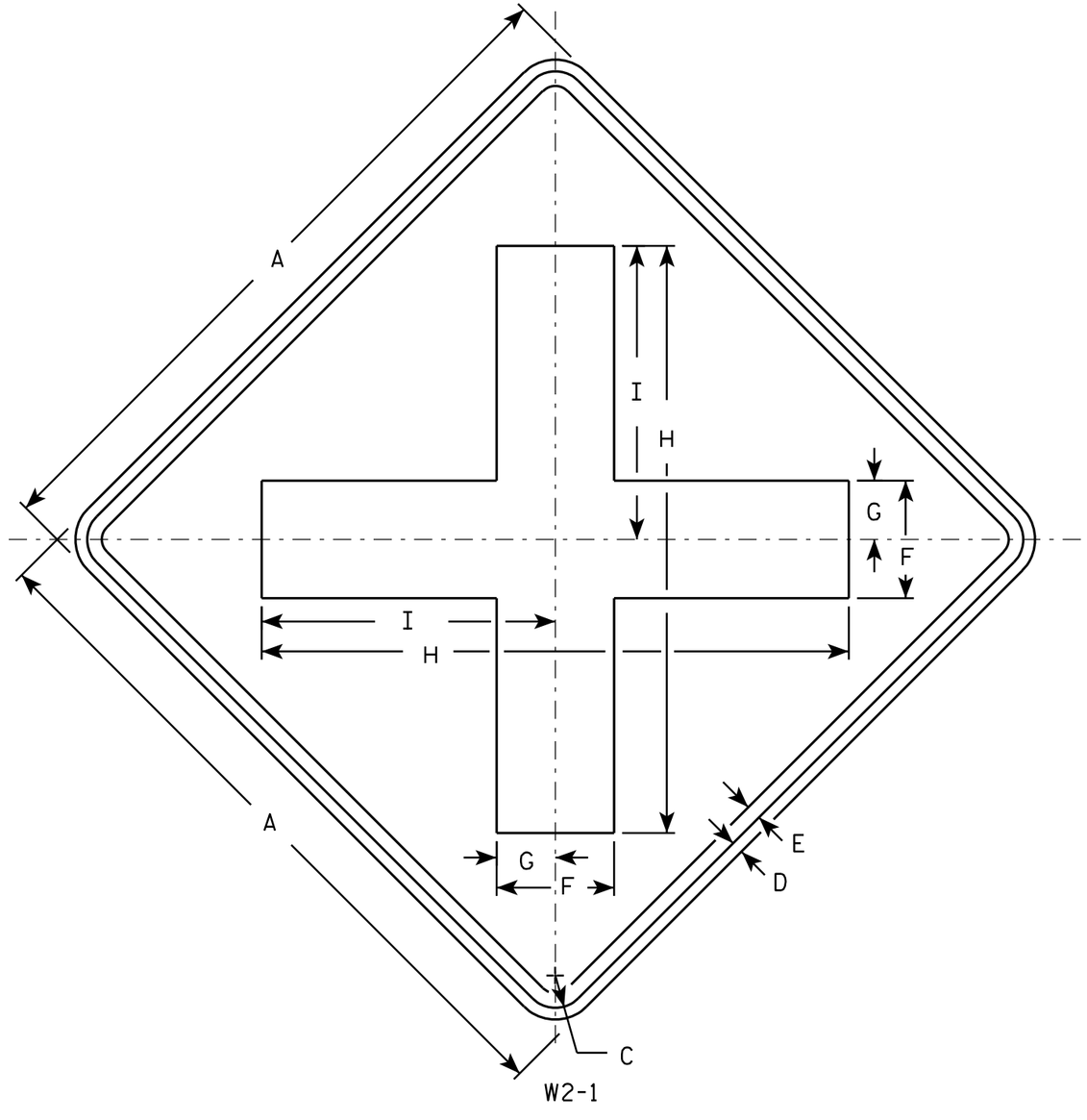
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 251 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

WISDOT/CADDS SHEET 42

7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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	24		1 1/8	3/8	1/2	4	2	20	10																		4.0
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0
4	48		2 1/4	3/4	1	8	4	40	20																		16.0
5																											

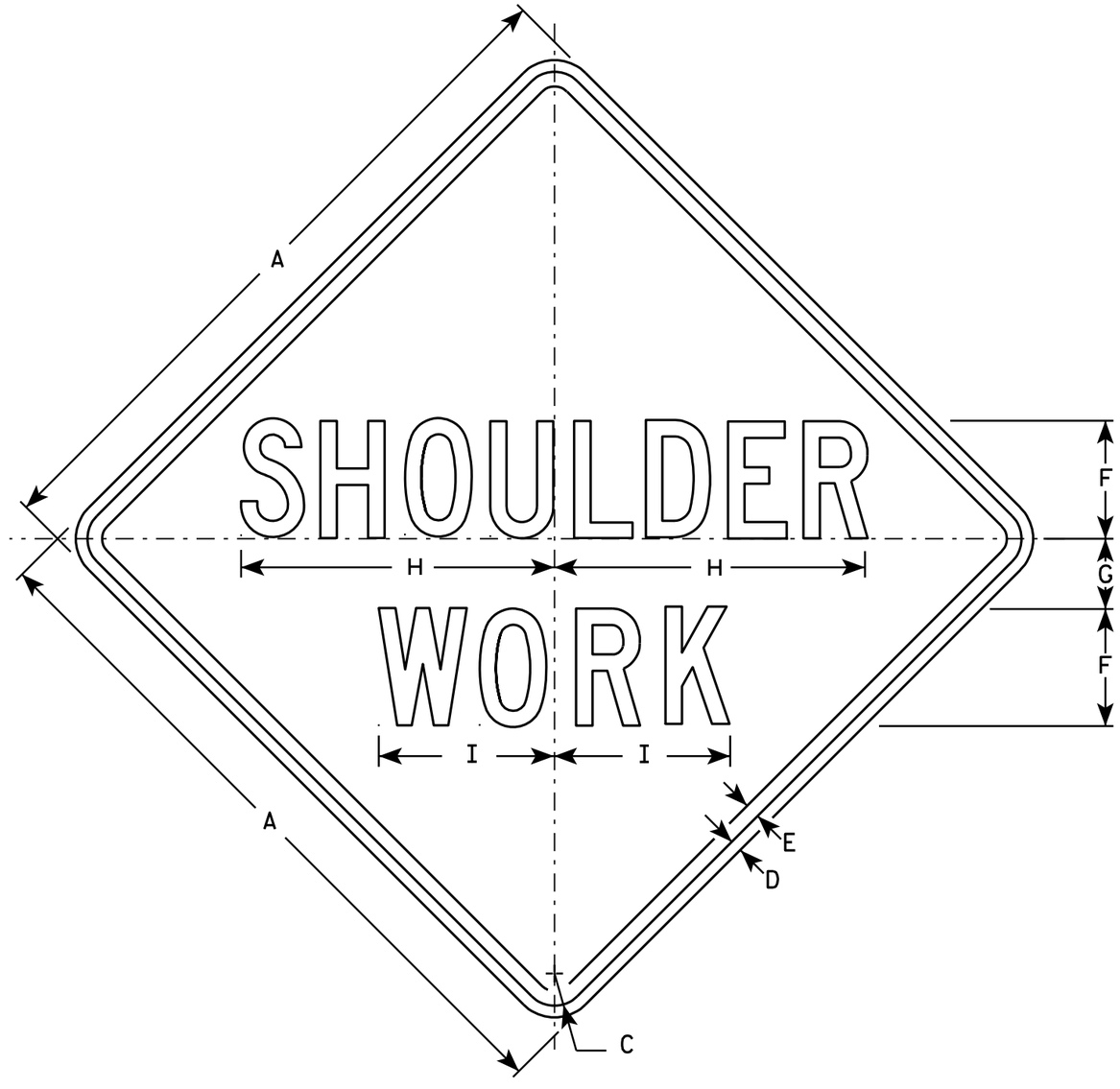
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E



W21-5

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	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

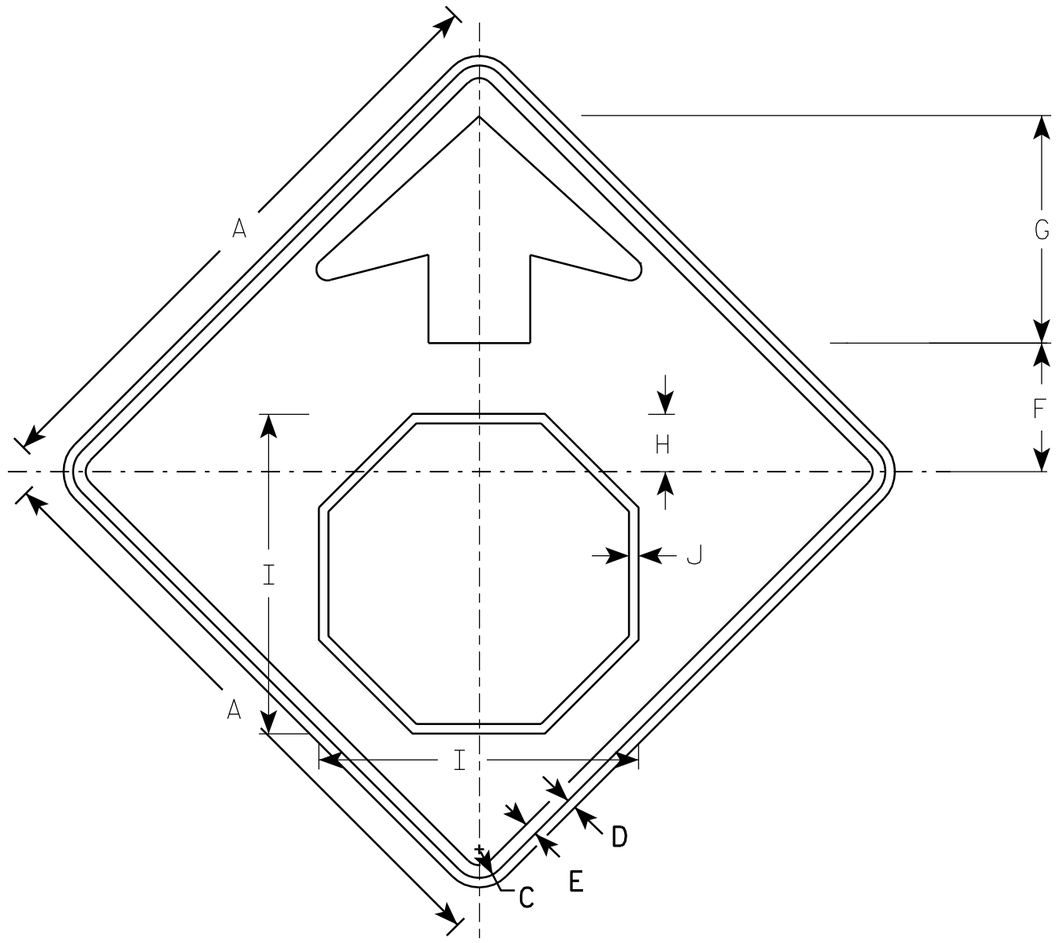
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

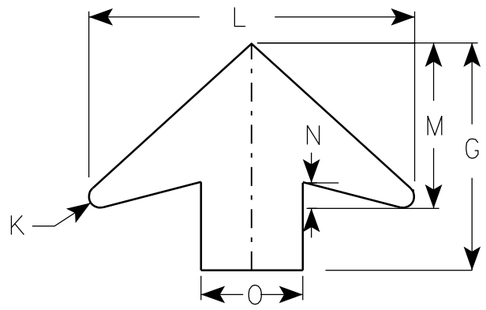
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 253	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

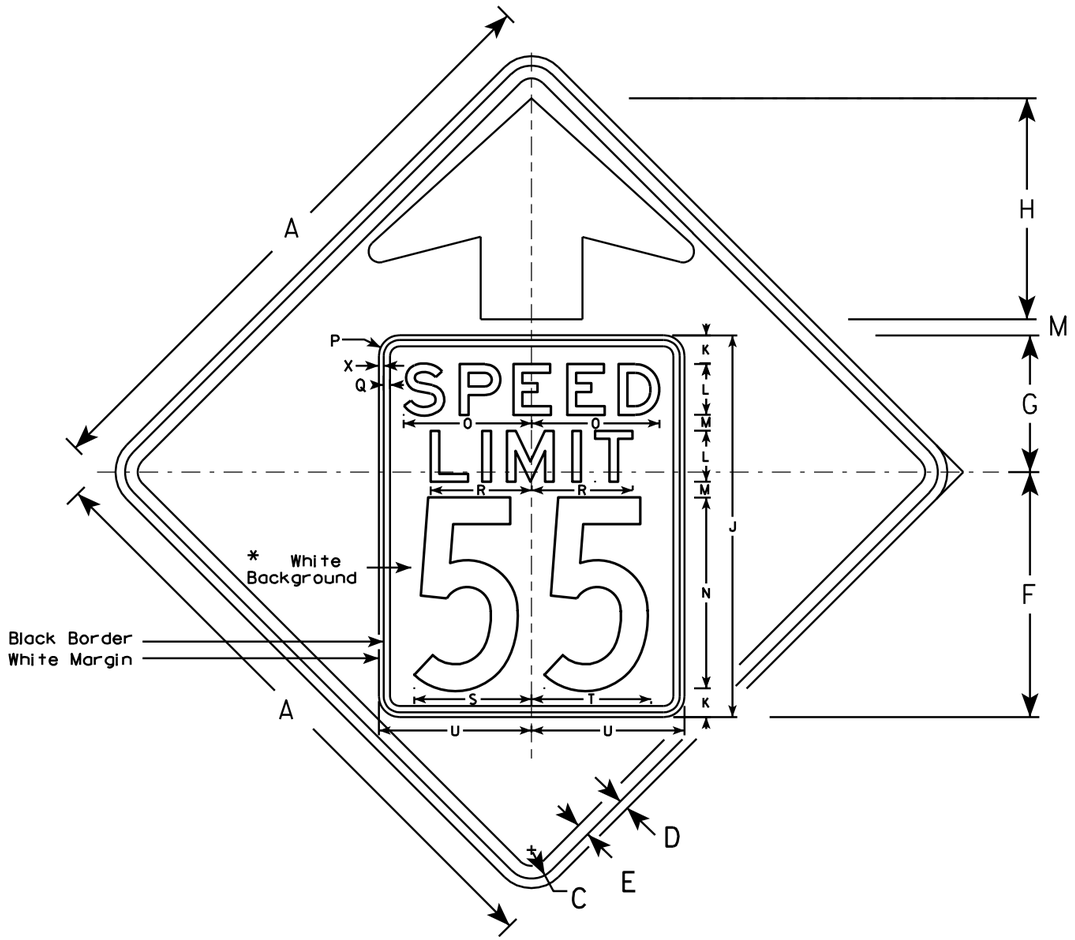
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 254 E

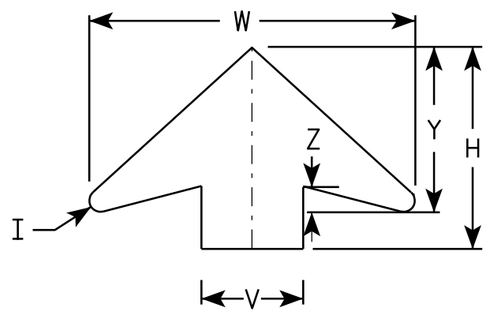


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

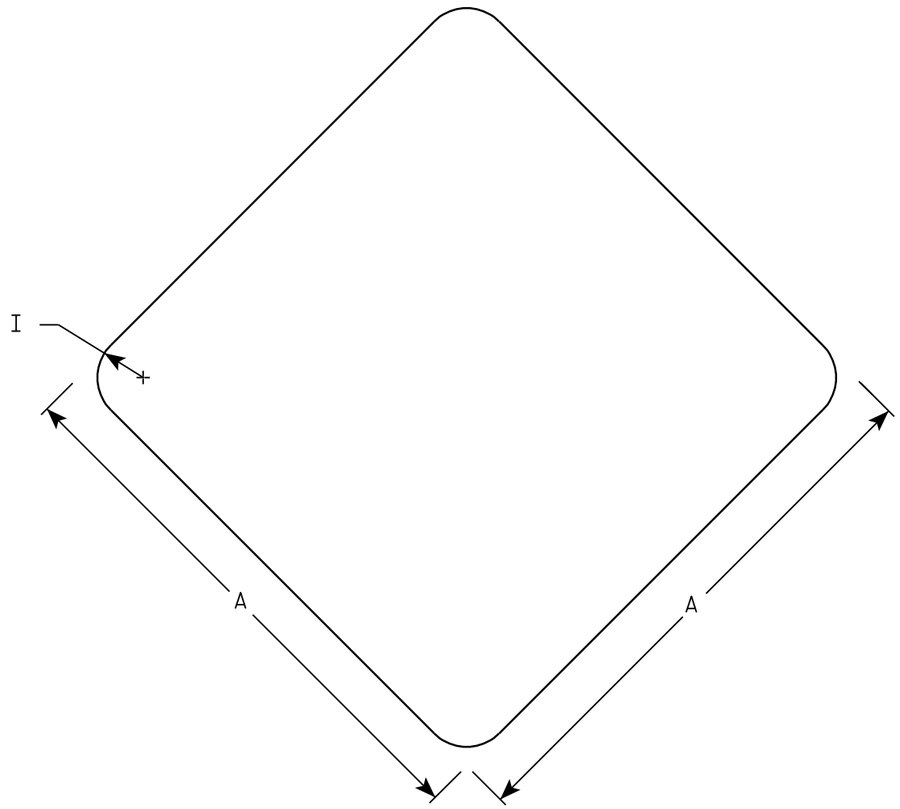
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 255 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

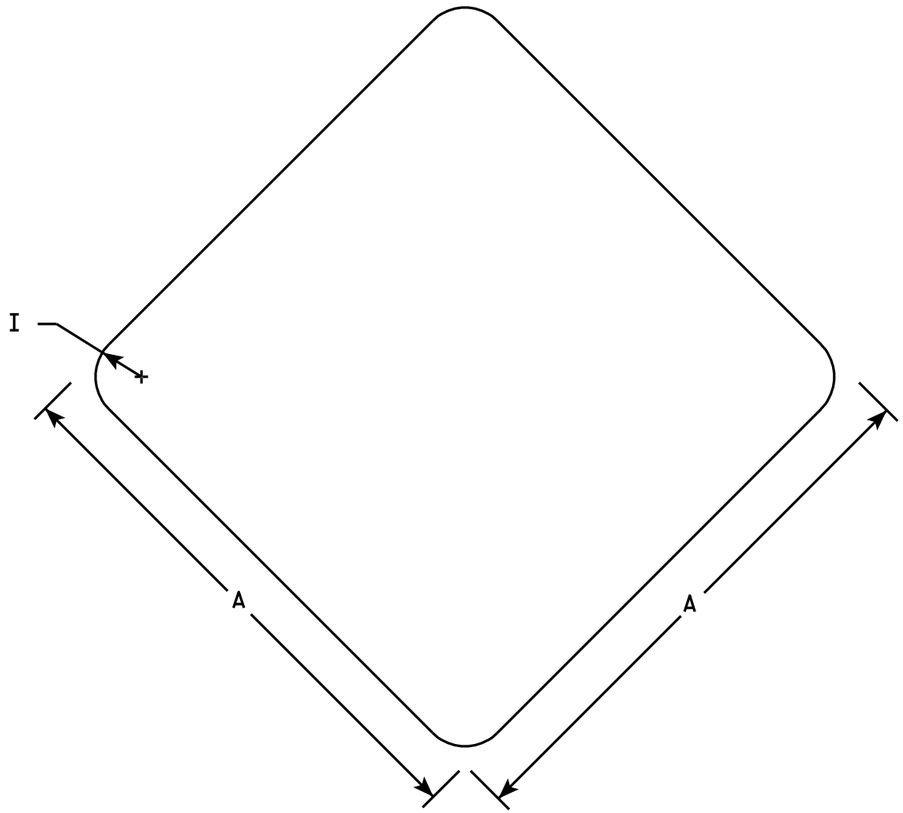
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 256	E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

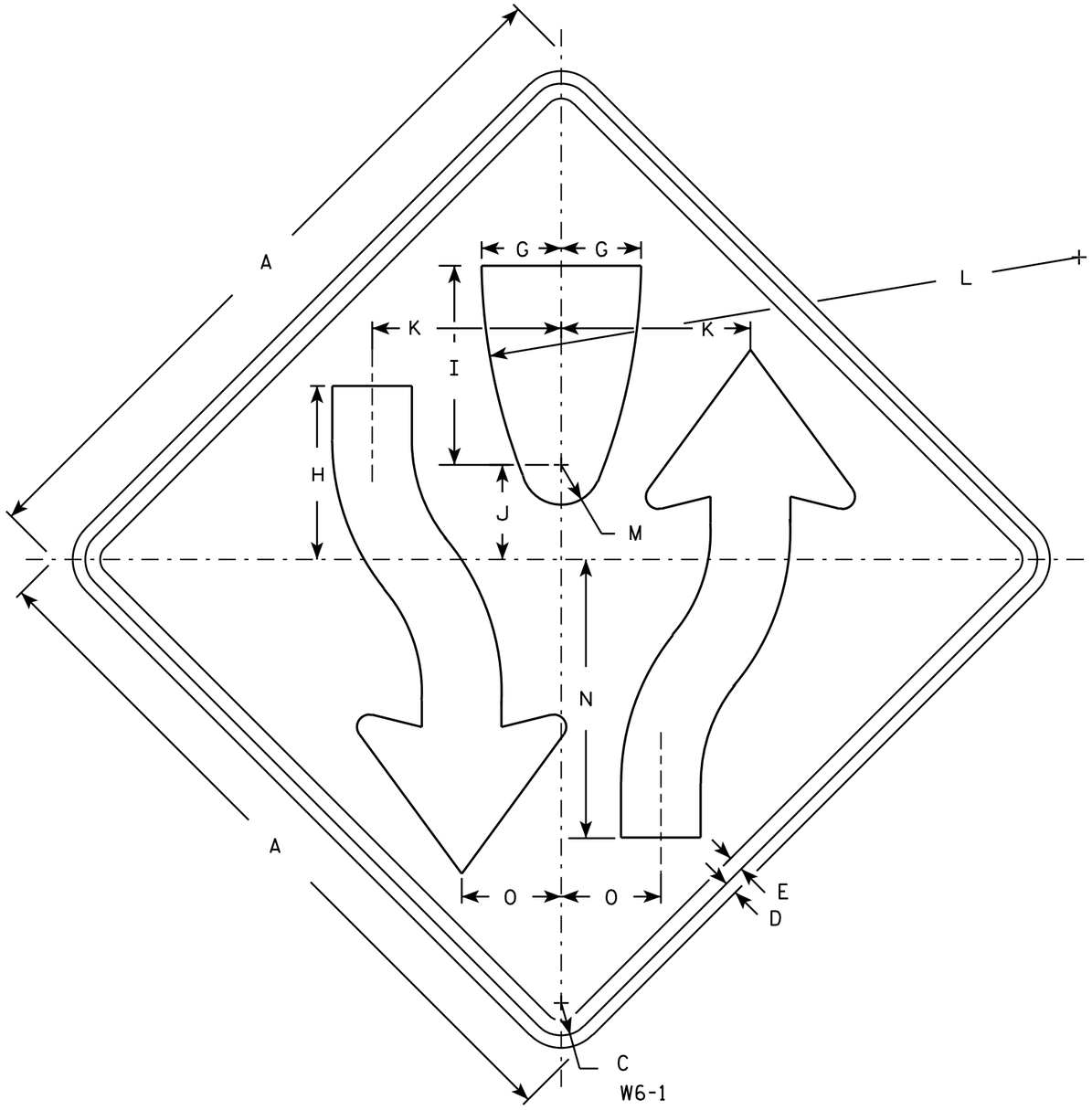
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

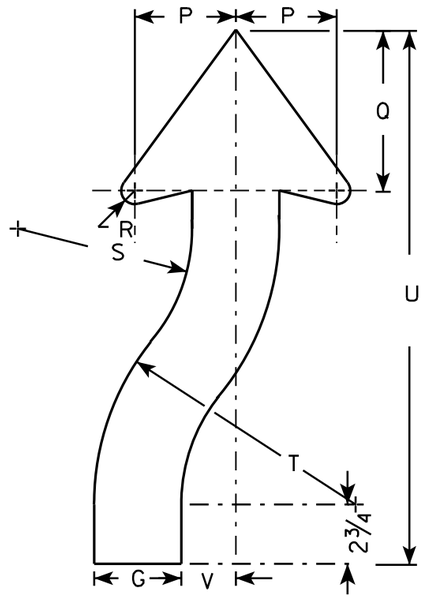
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 257	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



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	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

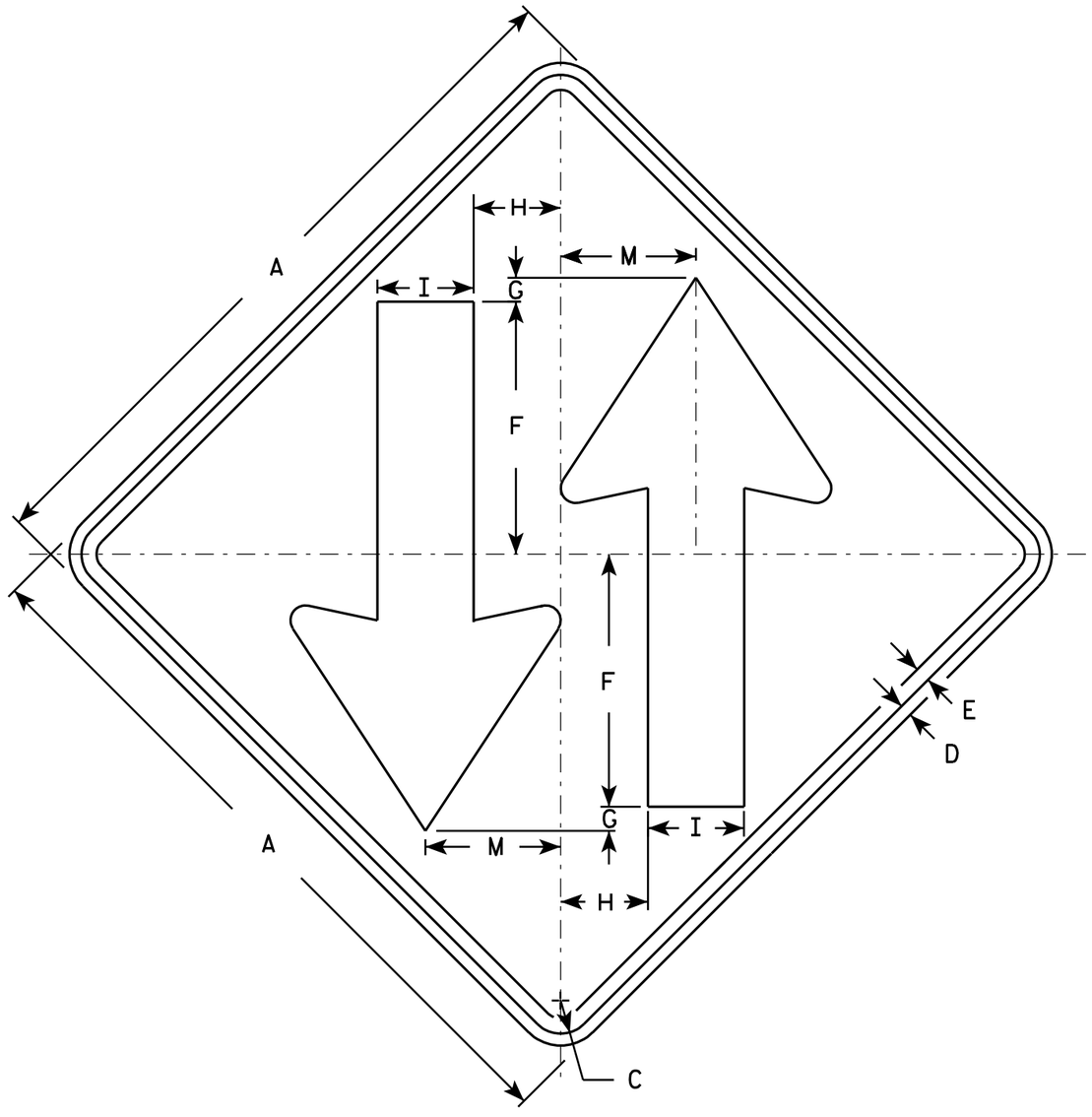
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 258	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W61.DGN PLOT DATE : 22-MAR-2011 13:21 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

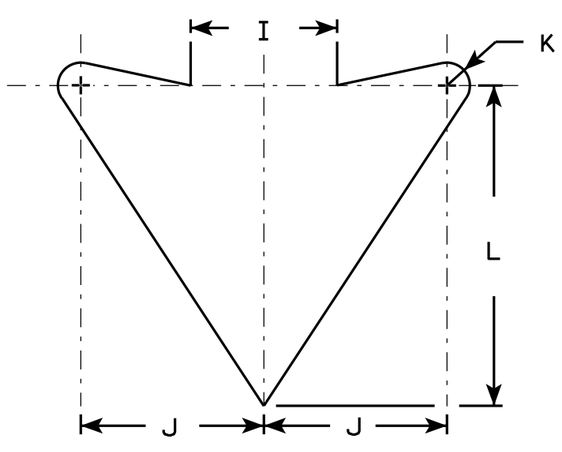
WISDOT/CADDS SHEET 42



W6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.



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	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-3.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 259 | E

EARTHWORK

	CATEGORY - 0100		A			B	H	I	J	K
			Item #205.0100		*	*	*	*	*	*
Division	From/To Station	Location	Excavation Common (1)		Reduced EBS in Fill (4)	Expanded EBS Backfill (3)	Unexpanded Fill	Expanded Fill	Mass Ordinate +/- (4)	Waste (5)
			Cut	EBS Excavation (2)	Factor 0.80	Factor 1.30	(CY)	(CY) Factor 1.25	(CY)	(CY)
1	2037+00 - 2058+50	West Frontage Road	25,978	0		0	7,486	9,358	16,620	16,620
1	4053+50 - 4071+00	West Frontage Road	15,127	2,077		2,700	3,684	2,528	9,899	9,899
1	33+50-39+00	CTH K	1,395	0	0	0	254	317	1,078	1,078
1	11+00-18+00	Fuhrman	804	0	0	0	432	540	264	264
1	16+50-20+00	Javco Driveway	63	0	0	0	2,282	2,852	-2,789	-2,789
2	2030+50-2037+00	West Frontage Road	18,118	804		1,046	16	-784	17,856	17,856
2	4071+00 - 4085+50	West Frontage Road	5,243	0		0	11,256	14,070	-8,827	-8,827
	Grand Total (CY)		69,610		0	3,745	25,410	28,881	34,102	34,102

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
The existing pavement structure is not shown in the cross sections.
Additional quantities shown elsewhere
2) EBS Excavation to be backfilled with Borrow or Cut.
3) Expanded EBS Backfill - This is to be filled with Borrow or Cut material. EBS Backfill Factor = 1.3.
4) The Mass Ordinate + or - Qty calculated for the Project. A plus quantity indicates an excess of material and a minus indicates a shortage of material.
5) All EBS material to be wasted

* FOR INFORMATION ONLY

WEST FRONTAGE ROAD DETAILS												
			AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			
STATION	Real Station	Distance	EBS	Cut	Fill FILL	Cut	Fill	EBS Note 1	Cut	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 2	Mass Ordinate CY
2030+50 AH	203,050		105	322	11	0.00	0.00	0.00	0	0	0	0.00
2031+00	203,100	50	113	403	3	671.81	13.18	202.44	672	-186	263	595
2031+50	203,150	50	114	472	0	810.74	3.01	210.80	1483	-393	537	1338
2032+00	203,200	50	75	563	0	958.94	0.06	175.25	2442	-568	765	2245
2032+50	203,250	50	79	618	0	1,093.56	0.00	142.58	3535	-711	950	3295
2033+00	203,300	50	0	551	0	1,082.44	0.00	73.27	4618	-784	1046	4356
2033+50	203,350	50	0	582	0	1,048.80	0.00	0.00	5666	-784	1046	5405
2034+00	203,400	50	0	634	0	1,125.63	0.00	0.00	6792	-784	1046	6530
2034+50	203,450	50	0	696	0	1,231.89	0.00	0.00	8024	-784	1046	7762
2035+00	203,500	50	0	800	0	1,385.54	0.00	0.00	9409	-784	1046	9148
2035+50	203,550	50	0	1021	0	1,686.17	0.00	0.00	11096	-784	1046	10834
2036+00	203,600	50	0	1197	0	2,053.67	0.00	0.00	13149	-784	1046	12888
2036+50	203,650	50	0	1377	0	2,382.89	0.00	0.00	15532	-784	1046	15270
2037+00	203,700	50	0	1416	0	2,585.97	0.00	0.00	18118	-784	1046	17856
TOTALS						18,118	16	804				

WEST FRONTAGE ROAD DETAILS													
				AREA (SF)		Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			
STATION	Real Station	Distance	EBS	Cut	Fill	Cut	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Mass Ordinate
				FILL				Note 1		1.25	1.30 Note 2	CY
2037+00	203,700		0	1416	0	0.00	0.00	0.00	0	0	0	0.00
2037+50	203,750	50	0	1306	0	2,520.56	0.00	0.00	2521	0	0	2521
2038+00	203,800	50	0	1104	0	2,231.68	0.00	0.00	4752	0	0	4752
2038+50	203,850	50	0	940	0	1,893.28	0.00	0.00	6646	0	0	6646
2039+00	203,900	50	0	489	0	1,323.48	0.00	0.00	7969	0	0	7969
2039+50	203,950	50	0	324	78	752.43	72.37	0.00	8721	90	0	8631
2040+00	204,000	50	0	349	445	623.19	484.52	0.00	9345	696	0	8649
2040+50	204,050	50	0	522	854	807.06	1,202.54	0.00	10152	2199	0	7952
2041+00	204,100	50	0	580	0	1,020.84	790.39	0.00	11173	3187	0	7985
2041+50	204,150	50	0	563	1137	1,058.94	1,052.74	0.00	12231	4503	0	7728
2042+00	204,200	50	0	345	2	841.50	1,054.59	0.00	13073	5821	0	7252
2042+50	204,250	50	0	105	30	417.10	29.63	0.00	13490	5858	0	7632
2043+00	204,300	50	0	162	57	247.32	80.56	0.00	13737	5959	0	7778
2043+50	204,350	50	0	41	60	187.92	108.33	0.00	13925	6095	0	7831
2044+00	204,400	50	0	85	36	116.86	88.89	0.00	14042	6206	0	7836
2044+50	204,450	50	0	382	44	432.54	74.07	0.00	14475	6298	0	8176
2045+00	204,500	50	0	643	58	948.87	94.44	0.00	15424	6416	0	9007
2045+50	204,550	50	0	303	47	875.87	97.22	0.00	16299	6538	0	9762
2046+00	204,600	50	0	222	12	486.52	54.19	0.00	16786	6606	0	10180
2046+50	204,650	50	0	220	12	409.38	21.51	0.00	17195	6633	0	10563
2047+00	204,700	50	0	264	6	448.25	16.19	0.00	17644	6653	0	10991
2047+50	204,750	50	0	246	9	472.32	13.77	0.00	18116	6670	0	11446
2048+00	204,800	50	0	279	4	485.55	12.04	0.00	18601	6685	0	11916

WEST FRONTAGE ROAD DETAILS

STATION	Real Station	Distance	AREA (SF) EBS	AREA (SF) Cut FILL	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS Note 1	Cumulative Vol (CY) Cut	Cumulative Vol (CY) Expanded Fill 1.25	Cumulative Vol (CY) Expanded EBS Backfill 1.30 Note 2	Mass Ordinate CY
2048+50	204,850	50	0	249	7	488.38	10.08	0.00	19090	6698	0	12392
2049+00	204,900	50	0	149	21	368.46	26.23	0.00	19458	6730	0	12728
2049+50	204,950	50	0	64	89	197.81	102.57	0.00	19656	6859	0	12798
2050+00	205,000	50	0	41	119	97.63	193.00	0.00	19754	7100	0	12654
2050+50	205,050	50	0	49	128	83.69	228.74	0.00	19837	7386	0	12452
2051+00	205,100	50	0	3	300	48.56	396.76	0.00	19886	7882	0	12004
2051+50	205,150	50	0	53	157	52.34	423.76	0.00	19938	8411	0	11527
2052+00	205,200	50	0	106	25	147.54	168.69	0.00	20086	8622	0	11464
2052+50	205,250	50	0	136	10	224.11	32.54	0.00	20310	8663	0	11647
2053+00	205,300	50	0	130	11	246.56	19.31	0.00	20557	8687	0	11869
2053+50	205,350	50	0	145	8	254.85	17.26	0.00	20811	8709	0	12103
2054+00	205,400	50	0	162	127	284.06	124.94	0.00	21095	8865	0	12231
2054+50	205,450	50	0	196	4	330.89	121.03	0.00	21426	9016	0	12410
2055+00	205,500	50	0	274	0	434.50	3.81	0.00	21861	9021	0	12840
2055+50	205,550	50	0	333	0	561.67	0.37	0.00	22423	9021	0	13401
2056+00	205,600	50	0	412	0	689.75	0.00	0.00	23112	9021	0	14091
2056+50	205,650	50	0	715	0	1,042.98	0.00	0.00	24155	9021	0	15134
2057+00	205,700	50	0	105	23	758.81	20.84	0.00	24914	9047	0	15867
2057+50	205,750	50	0	124	68	211.62	83.73	0.00	25126	9152	0	15974
2058+00	205,800	50	0	274	55	368.43	113.81	0.00	25494	9294	0	16200
2058+50 BK	205,850	50	0	248	0	483.63	50.93	0.00	25978	9358	0	16620
TOTALS						25,978	7,486	0				

WEST FRONTAGE ROAD DETAILS

STATION	Real Station	Distance	AREA (SF) EBS	AREA (SF) Cut FILL	AREA (SF) Fill FILL	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS Note 1	Cumulative Vol (CY) Cut	Cumulative Vol (CY) Expanded Fill 1.25	Cumulative Vol (CY) Expanded EBS Backfill 1.30 Note 2	Mass Ordinate CY
4053+50 AH	405,350		144	190	64	0.00	0.00	0.00	0	0	0	0.00
4054+00	405,400	50	136	210	34	370.57	90.91	258.60	371	-145	336	179
4054+50	405,450	50	154	478	0	637.56	31.76	268.50	1008	-374	685	697
4055+00	405,500	50	228	877	0	1,254.43	0.00	353.97	2263	-728	1145	1845
4055+50	405,550	50	0	686	0	1,447.21	0.00	211.19	3710	-939	1420	3229
4056+00	405,600	50	0	588	0	1,180.06	0.00	0.00	4890	-939	1420	4409
4056+50	405,650	50	0	519	0	1,024.96	0.00	0.00	5915	-939	1420	5434
4057+00	405,700	50	0	382	0	834.22	0.00	0.00	6749	-939	1420	6268
4057+50	405,750	50	0	258	1	592.53	1.18	0.00	7342	-937	1420	6859
4058+00	405,800	50	0	184	12	409.17	11.85	0.00	7751	-923	1420	7253
4058+50	405,850	50	0	170	18	327.35	27.09	0.00	8078	-889	1420	7547
4059+00	405,900	50	0	148	20	294.17	35.23	0.00	8372	-845	1420	7797
4059+50	405,950	50	0	140	22	267.02	38.99	0.00	8639	-796	1420	8015
4060+00	406,000	50	0	122	13	243.02	32.55	0.00	8882	-755	1420	8218
4060+50	406,050	50	0	99	18	204.63	29.15	0.00	9087	-719	1420	8386
4061+00	406,100	50	0	193	0	269.84	16.91	0.00	9357	-698	1420	8635
4061+50	406,150	50	0	412	8	559.66	7.60	0.00	9916	-688	1420	9185
4062+00	406,200	50	0	391	32	743.27	37.38	0.00	10660	-642	1420	9881
4062+50	406,250	50	0	116	6	469.65	35.71	0.00	11129	-597	1420	10306
4063+00	406,300	50	0	107	46	207.12	48.72	0.00	11336	-536	1420	10452
4063+50	406,350	50	0	60	2	154.56	45.19	0.00	11491	-479	1420	10551
4064+00	406,400	50	0	144	19	188.27	20.23	0.00	11679	-454	1420	10714
4064+50	406,450	50	0	116	1	240.55	19.23	0.00	11920	-430	1420	10930
4065+00	406,500	50	0	69	34	171.40	33.03	0.00	12091	-389	1420	11060
4065+50	406,550	50	0	48	67	108.02	94.07	0.00	12199	-271	1420	11051
4066+00	406,600	50	0	38	91	79.51	146.78	0.00	12279	-88	1420	10947
4066+50	406,650	50	0	30	128	63.20	202.53	0.00	12342	165	1420	10757
4067+00	406,700	50	0	18	174	43.94	278.85	0.00	12386	514	1420	10452
4067+50	406,750	50	0	13	205	28.23	350.81	0.00	12414	952	1420	10042
4068+00	406,800	50	0	13	199	24.06	374.14	0.00	12438	1420	1420	9598
4068+50	406,850	50	0	42	178	51.00	348.69	0.00	12489	1856	1420	9213
4069+00	406,900	50	0	76	120	109.08	276.08	0.00	12598	2201	1420	8977
4069+50	406,950	50	277	389	223	430.52	317.69	256.31	13029	2342	1753	8934
4070+00	407,000	50	172	527	239	848.80	427.65	415.45	13878	2461	2293	9123
4070+50	407,050	50	83	239	3	709.75	223.91	235.94	14587	2505	2600	9482
4071+00	407,100	50	0	344	84	539.74	79.95	76.80	15127	2528	2700	9899
TOTALS						15,127	3,684	2,077				

WEST FRONTAGE ROAD DETAILS

STATION	Real Station	Distance	AREA (SF) EBS	AREA (SF) Cut FILL	AREA (SF) Fill FILL	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Incremental Vol (CY) (Unadjusted) EBS Note 1	Cumulative Vol (CY) Cut	Cumulative Vol (CY) Expanded Fill 1.25	Cumulative Vol (CY) Expanded EBS Backfill 1.30 Note 2	Mass Ordinate CY
4071+00	407,100		0	344	84	0.00	0.00	0.00	0	0	0	0.00
4071+50	407,150	50	0	217	104	519.00	174.02	0.00	519	218	0	301
4072+00	407,200	50	0	176	105	363.14	193.70	0.00	882	460	0	422
4072+50	407,250	50	0	161	230	311.49	310.40	0.00	1194	848	0	346
4073+00	407,300	50	0	150	330	287.79	519.12	0.00	1481	1497	0	-15
4073+50	407,350	50	0	123	378	252.27	656.07	0.00	1734	2317	0	-583
4074+00	407,400	50	0	82	363	189.15	686.26	0.00	1923	3174	0	-1252
4074+50	407,450	50	0	32	328	105.72	639.78	0.00	2029	3974	0	-1946
4075+00	407,500	50	0	3	335	33.19	614.23	0.00	2062	4742	0	-2680
4075+50	407,550	50	0	1	349	4.28	633.94	0.00	2066	5534	0	-3468
4076+00	407,600	50	0	3	361	3.88	657.68	0.00	2070	6356	0	-4287
4076+50	407,650	50	0	8	360	10.08	668.06	0.00	2080	7192	0	-5112
4077+00	407,700	50	0	14	359	20.06	666.13	0.00	2100	8024	0	-5924
4077+50	407,750	50	0	11	363	22.55	668.75	0.00	2123	8860	0	-6738
4078+00	407,800	50	0	9	367	17.84	676.24	0.00	2140	9705	0	-7565
4078+50	407,850	50	0	16	342	22.82	656.20	0.00	2163	10526	0	-8362
4079+00	407,900	50	0	21	313	33.94	606.14	0.00	2197	11283	0	-9086
4079+50	407,950	50	0	32	267	48.59	536.85	0.00	2246	11954	0	-9709
4080+00	408,000	50	0	35	223	61.88	453.67	0.00	2308	12522	0	-10214
4080+50	408,050	50	0	34	180	64.11	373.24	0.00	2372	12988	0	-10616
4081+00	408,100	50	0	23	138	52.95	294.55	0.00	2425	13356	0	-10932
4081+50	408,150	50	0	14	121	34.14	239.51	0.00	2459	13656	0	-11197
4082+00	408,200	50	0	64	40	72.50	149.07	0.00	2531	13842	0	-11311
4082+50	408,250	50	0	80	48	133.68	82.11	0.00	2665	13945	0	-11280
4083+00	408,300	50	0	149	15	211.93	58.28	0.00	2877	14018	0	-11141
4083+50	408,350	50	0	180	9	304.62	22.34	0.00	3182	14045	0	-10864
4084+00	408,400	50	0	230	5	379.34	13.28	0.00	3561	14062	0	-10501
4084+50	408,450	50	0	280	1	471.73	5.63	0.00	4033	14069	0	-10036
4085+00	408,500	50	0	329	0	563.66	1.04	0.00	4596	14070	0	-9474
4085+50	408,550	50	0	370	0	646.85	0.00	0.00	5243	14070	0	-8827
TOTALS						5,243	11,256	0				

1) All EBS Excavation is to be wasted
2) Will be backfilled with Borrow or Cut

CTH K DETAILS

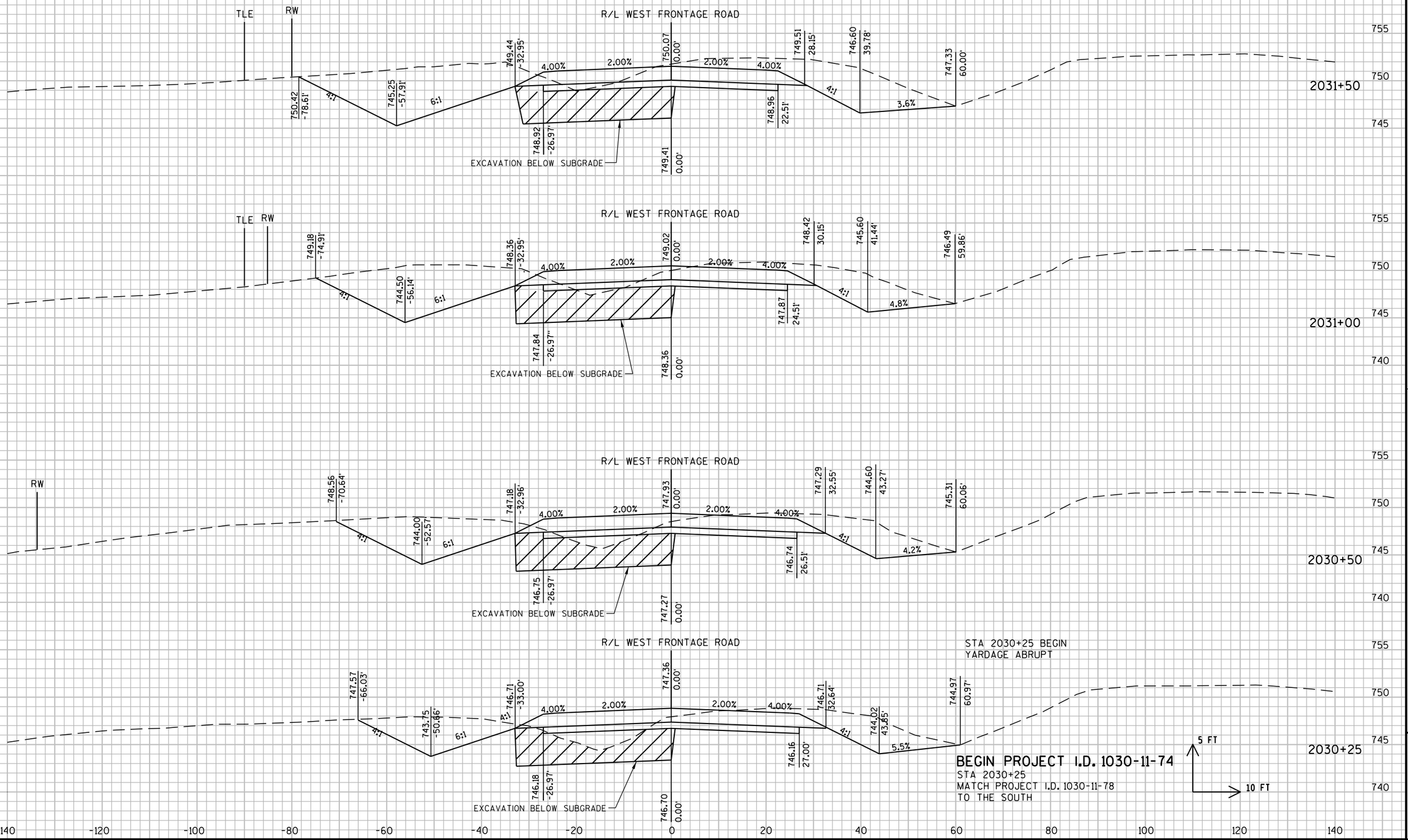
STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate CY
27+50 AH	2,750		16	1	0.00	0.00	0	0	0.00
28+00	2,800	50	21	1	33.82	1.22	34	2	32
28+50	2,850	50	16	3	33.53	2.95	67	5	62
29+00	2,900	50	11	25	24.80	25.43	92	37	55
29+50	2,950	50	26	19	34.42	40.21	127	87	39
30+00	3,000	50	22	12	44.11	27.96	171	122	48
30+50	3,050	50	20	8	38.11	18.39	209	145	64
31+00	3,100	50	22	4	38.71	11.44	248	160	88
31+50	3,150	50	38	1	56.16	4.39	304	165	139
32+00	3,200	50	29	6	62.23	6.23	366	173	193
32+50	3,250	50	70	15	91.51	19.60	457	197	260
33+00	3,300	50	49	25	110.05	36.91	567	243	324
33+50	3,350	50	62	0	102.56	22.94	670	272	398
34+00	3,400	50	89	2	140.08	1.53	810	274	536
34+50	3,450	50	75	0	152.03	1.95	962	276	686
35+00	3,500	0	58	0	0.00	0.00	962	276	686
35+50	3,550	50	19	2	71.42	2.36	1034	279	754
36+00	3,600	50	21	2	37.49	3.44	1071	284	787
36+50	3,650	50	38	0	55.36	1.49	1126	286	841
37+00	3,700	50	20	7	53.68	6.11	1180	293	887
37+50	3,750	50	23	6	39.38	11.67	1219	308	912
38+00	3,800	50	20	0	39.81	5.56	1259	315	945
38+50	3,850	50	14	0	31.48	0.00	1291	315	976
39+00	3,900	50	99	2	104.63	1.85	1395	317	1078
TOTALS					1,395	254			

FUHRMAN DETAILS

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate CY
			Cut	Fill	Cut	Fill	Cut	Expanded Fill 1.25	
11+00 AH	1,100		99	0	0.00	0.00	0	0	0.00
11+50	1,150	50	53	0	141.31	0.00	141	0	141
12+00	1,200	50	33	1	80.06	0.80	221	1	220
12+50	1,250	50	25	9	54.29	9.52	276	13	263
13+00	1,300	50	32	8	53.06	16.55	329	34	295
13+50	1,350	50	17	30	45.30	35.38	374	78	296
14+00	1,400	50	8	47	23.24	70.99	397	167	231
14+50	1,450	50	18	26	24.43	67.66	422	251	171
15+00	1,500	50	40	0	54.36	24.22	476	281	195
15+50	1,550	50	59	0	92.06	0.00	568	281	287
16+00	1,600	50	25	7	77.58	6.91	646	290	356
16+50	1,650	50	27	16	48.36	22.11	694	318	376
17+00	1,700	50	16	27	40.14	39.77	734	367	367
17+50	1,750	50	15	41	28.56	62.35	763	445	317
18+00	1,800	50	30	41	41.34	75.61	804	540	264
TOTALS					804	432			

JAVCO DETAILS

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate CY
			Cut	Fill	Cut	Fill	Cut	Expanded Fill 1.25	
16+50 AH	1,650		0	2	0.00	0.00	0	0	0.00
17+00	1,700	50	0	71	0.00	67.28	0	84	-84
17+50	1,750	50	0	222	0.00	270.49	0	422	-422
18+00	1,800	50	0	373	0.00	550.50	0	1110	-1110
18+50	1,850	50	0	356	0.00	675.27	0	1954	-1954
19+00	1,900	50	0	161	0.00	479.06	0	2553	-2553
19+50	1,950	50	28	46	26.07	191.97	26	2793	-2767
20+00	2,000	50	12	4	37.05	46.93	63	2852	-2789
TOTALS					63	2,282			

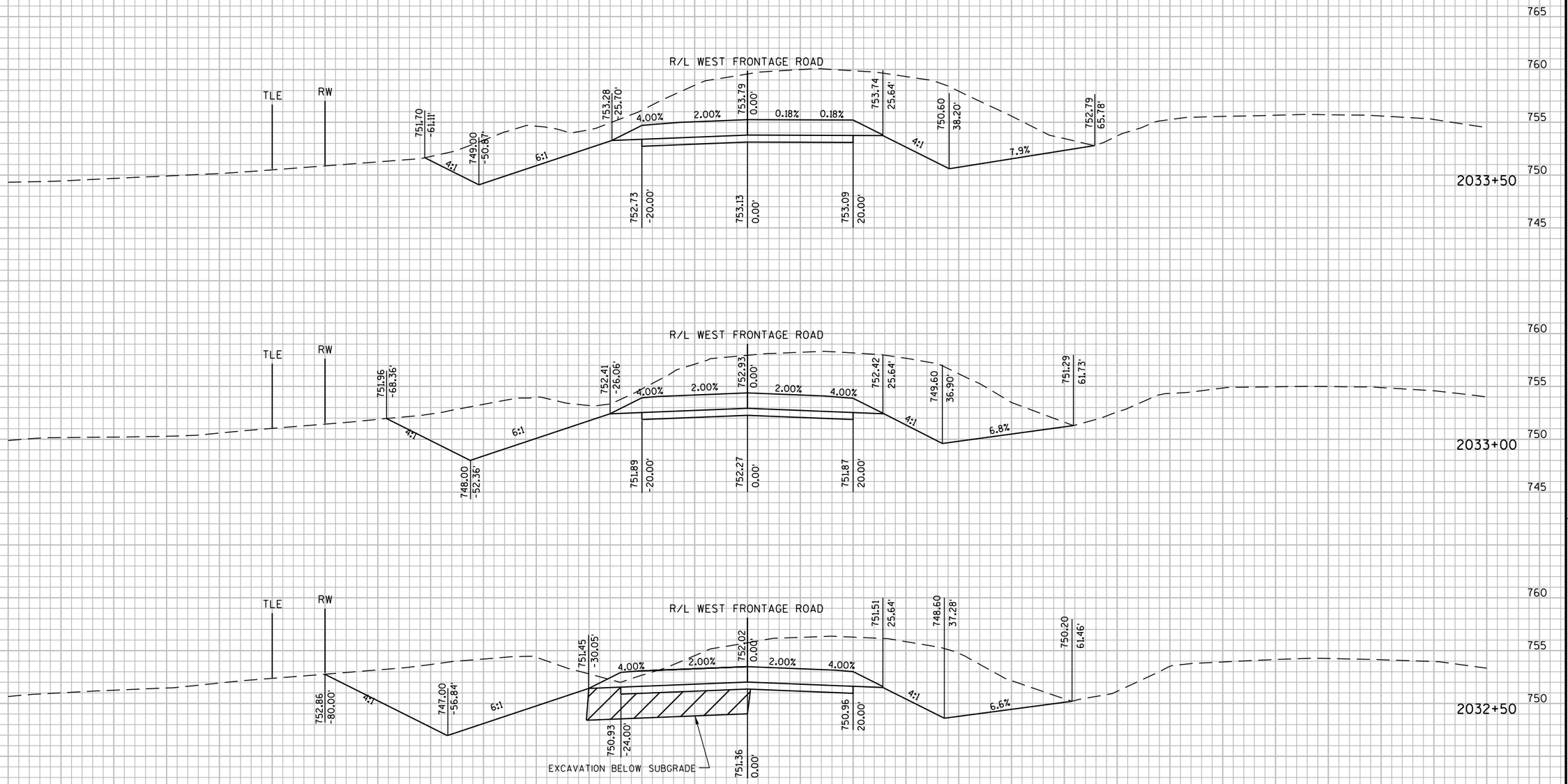


9

9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET E

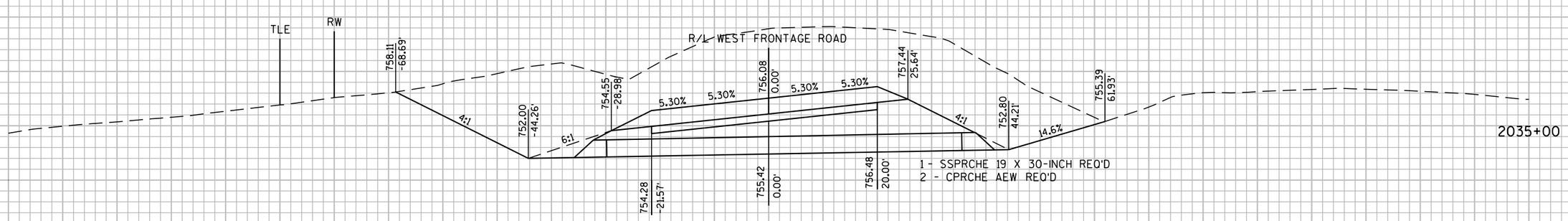
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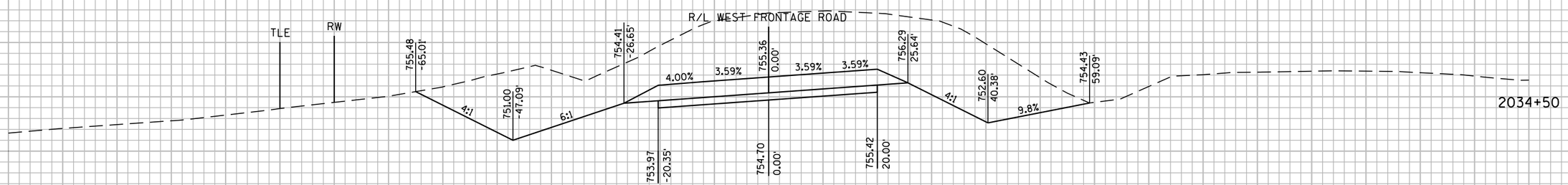


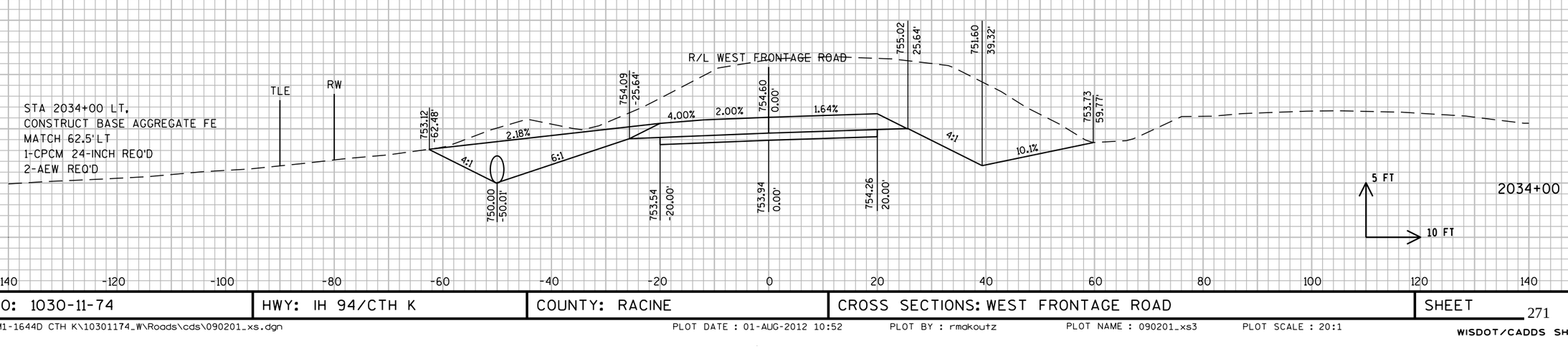
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 270 E

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WISDOT/CADDS SHEET 21





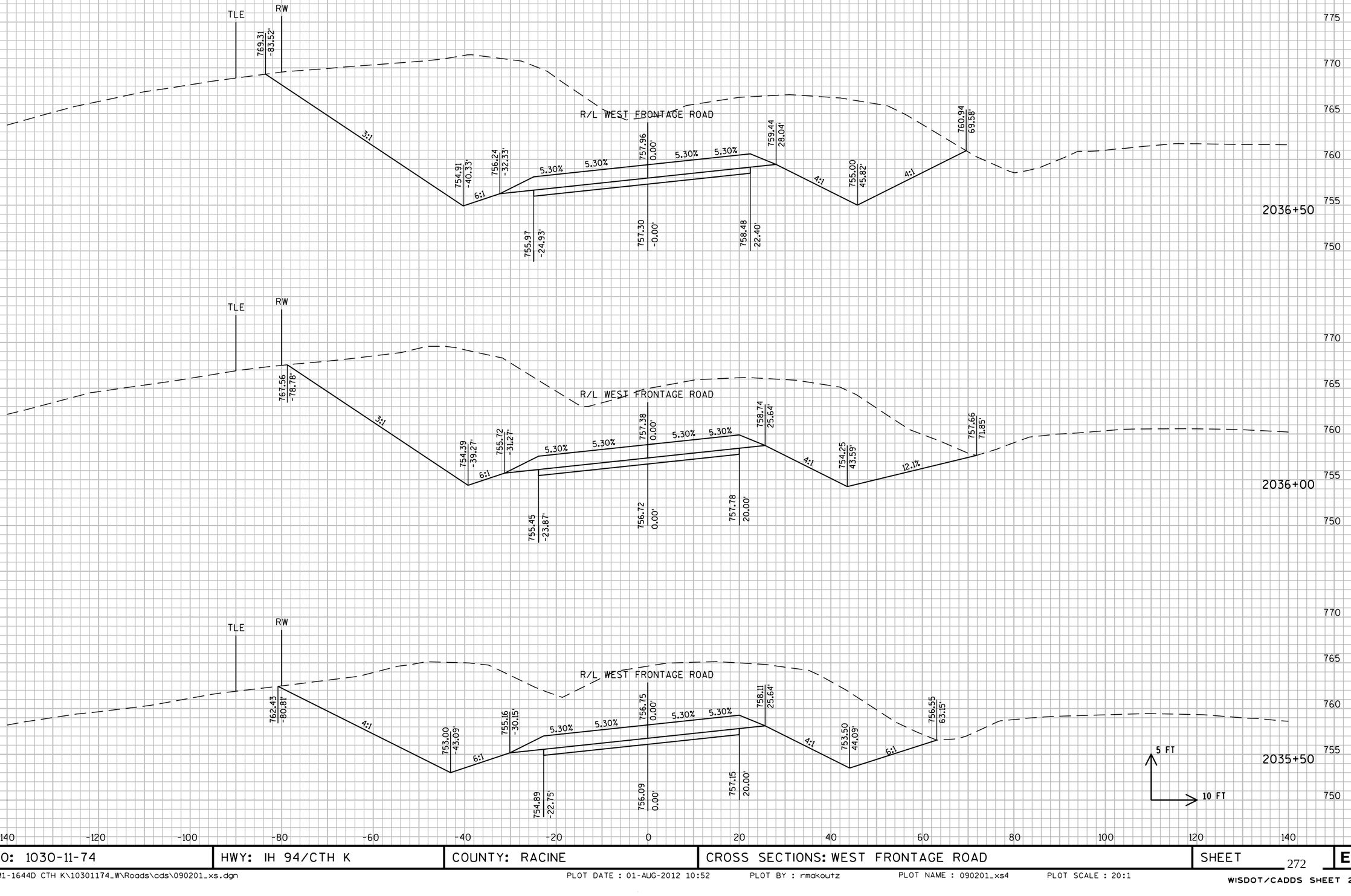


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 271 E

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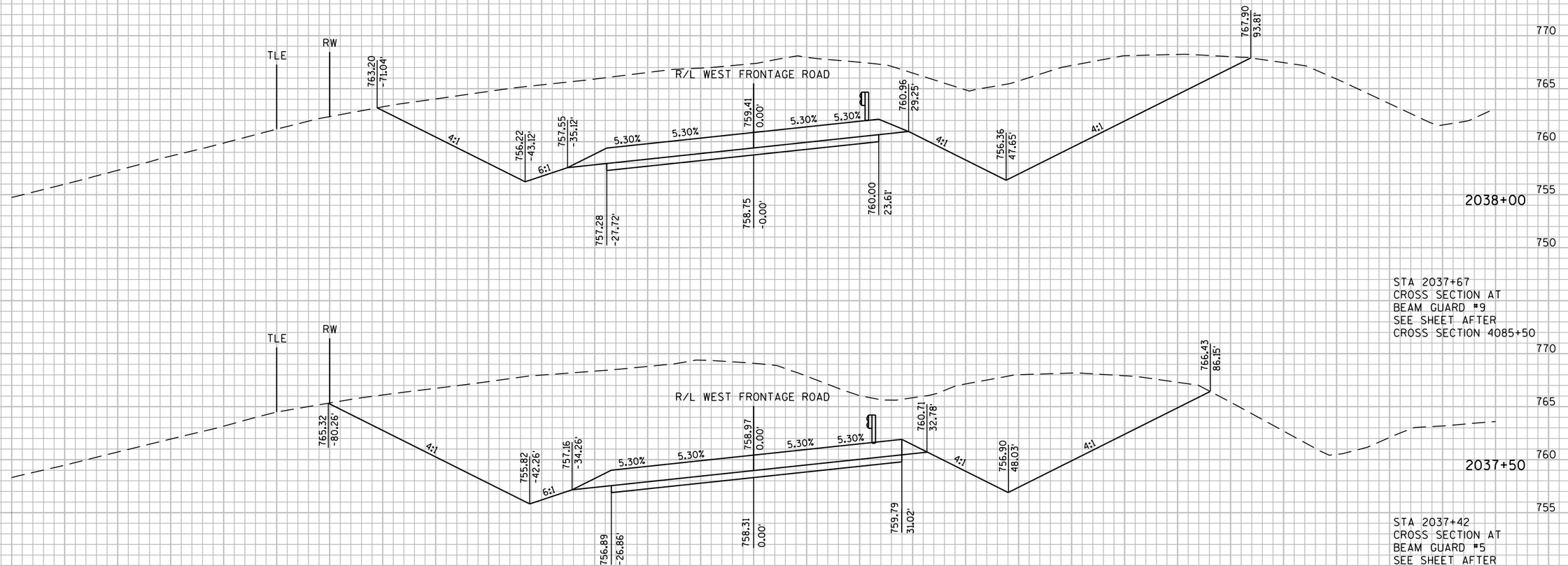
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 272	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:52 PLOT BY : rmakoutz PLOT NAME : 090201_xs4 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

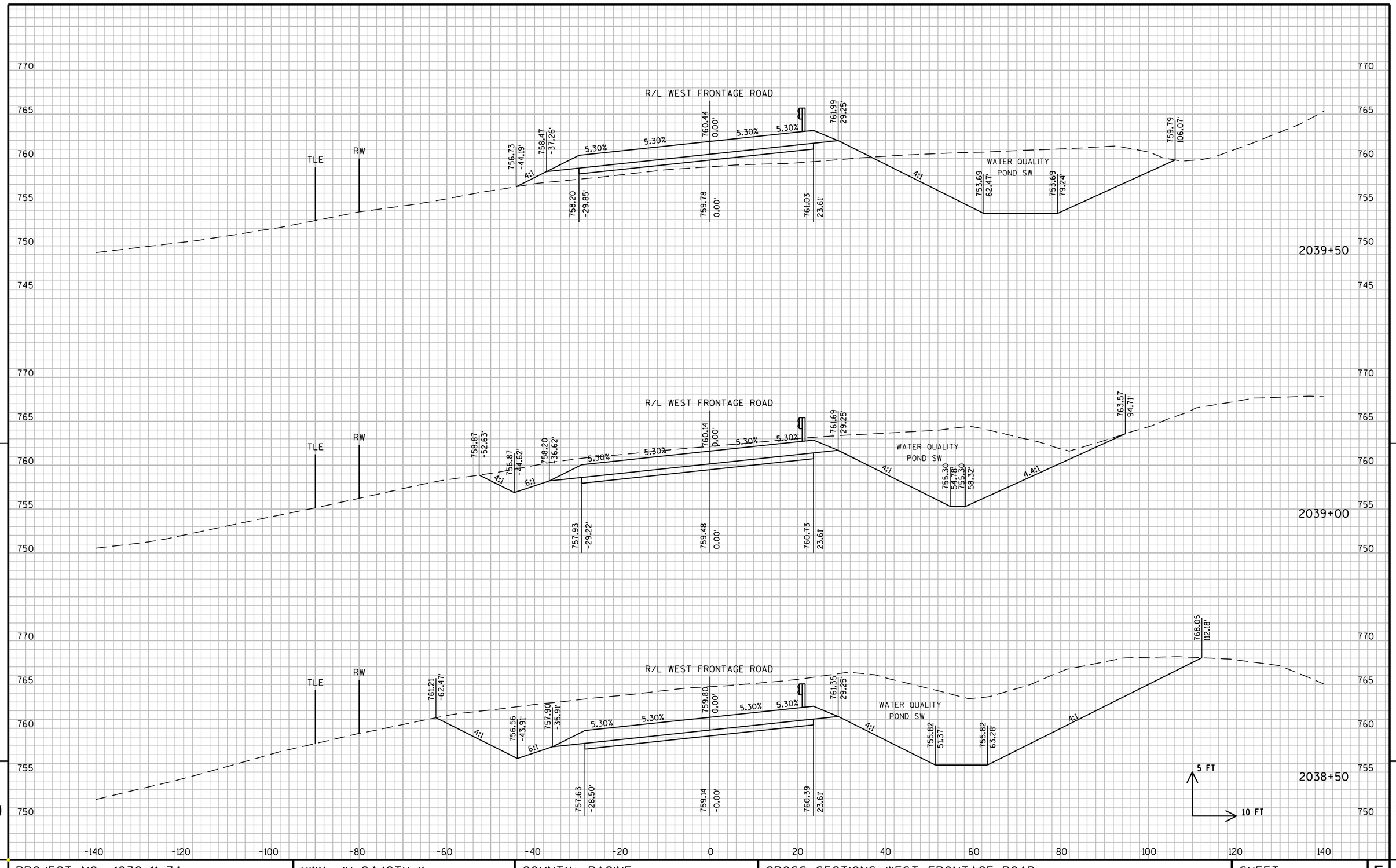


9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 273 E

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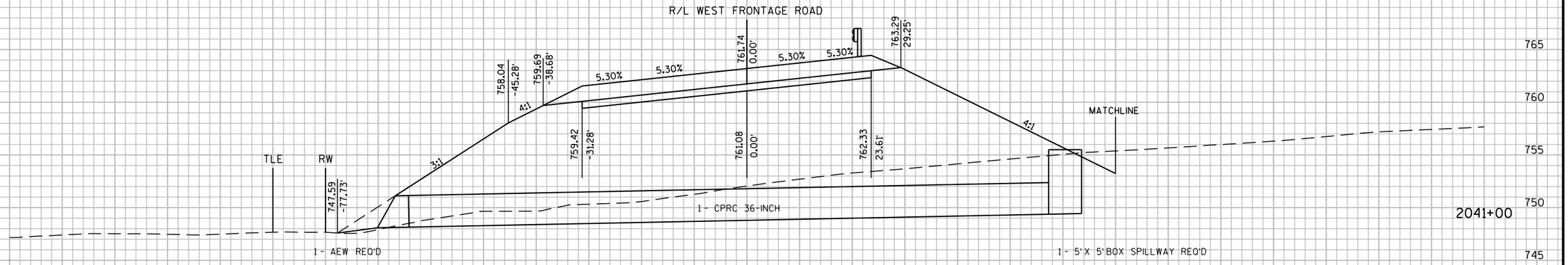
WISDOT/CADDS SHEET 21

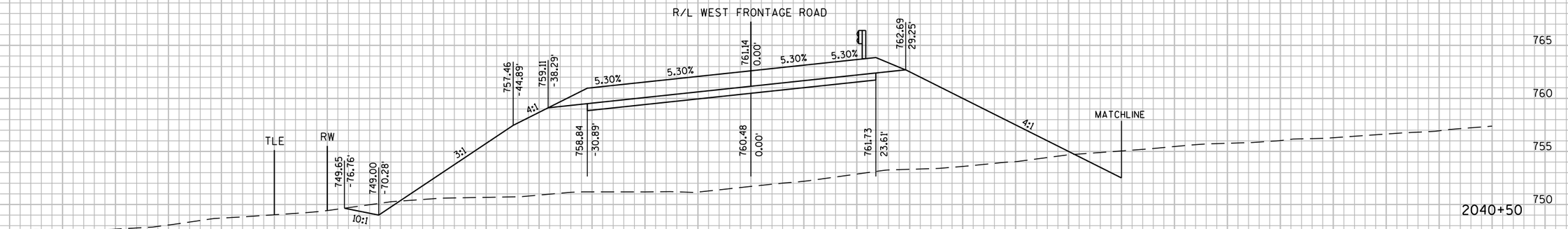


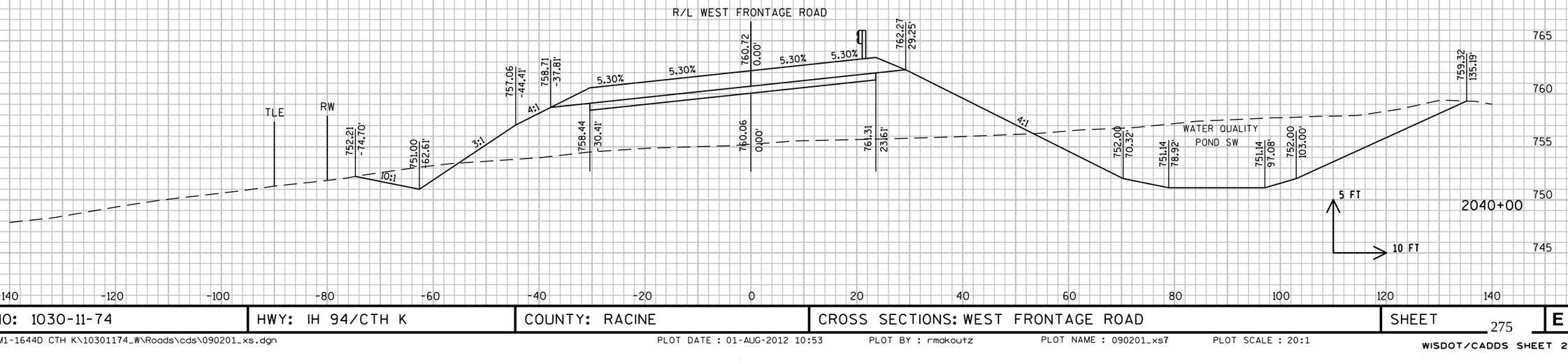
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 274 E

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WISDOT/CADDS SHEET 21



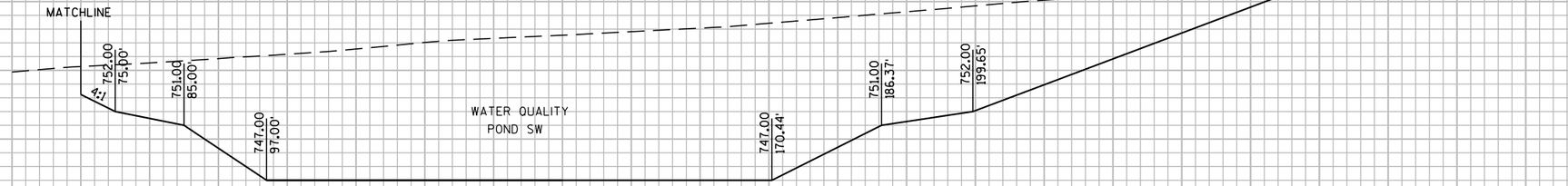




PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 275 E

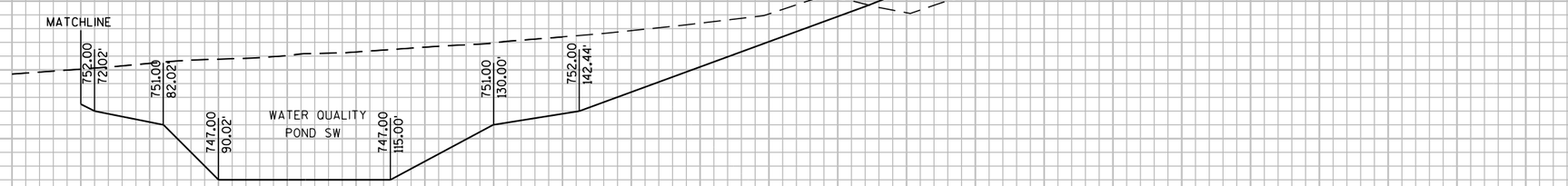
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WISDOT/CADDS SHEET 21



2041+00

OFFSETS FOR THESE CROSS SECTIONS ARE REFERENCED TO THE SOUTHWEST FRONTAGE ROAD ALIGNMENT



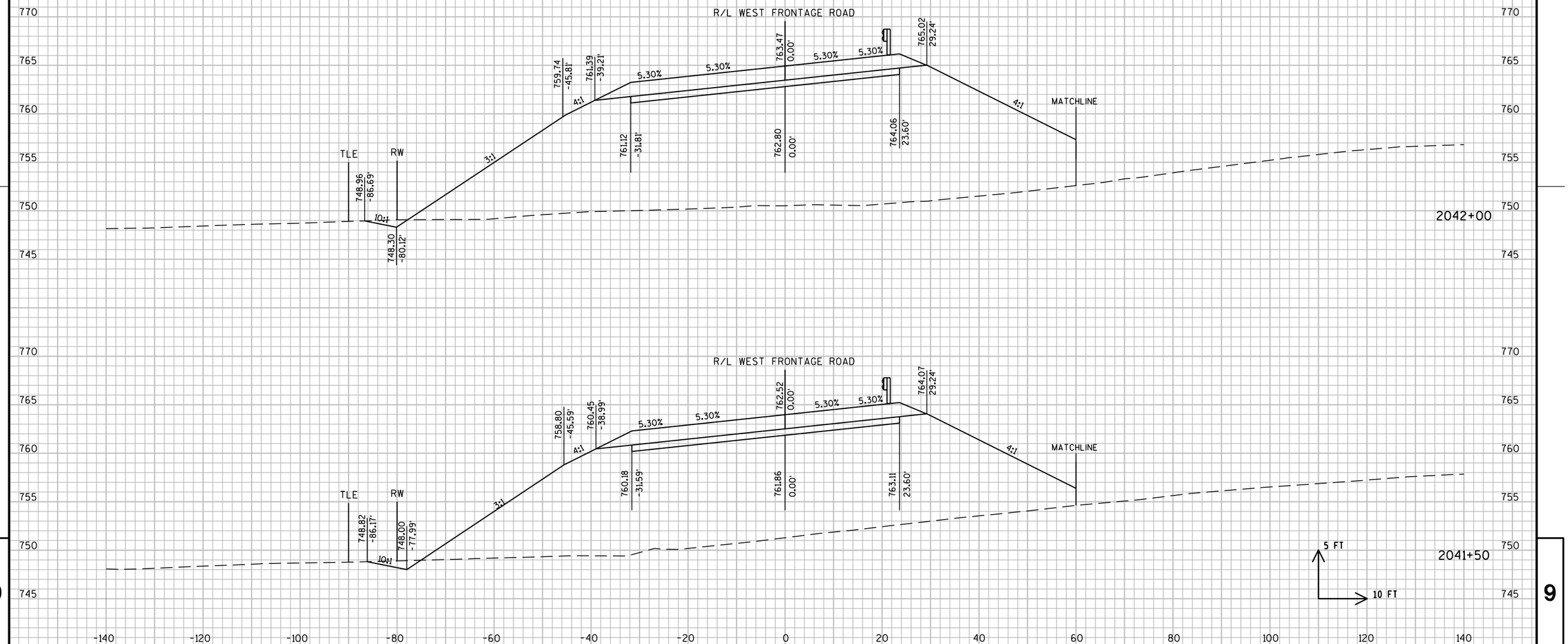
2040+50

5 FT
10 FT

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WATER QUALITY POND SW	SHEET 276 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090206_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090206_xs PLOT SCALE : 20:1

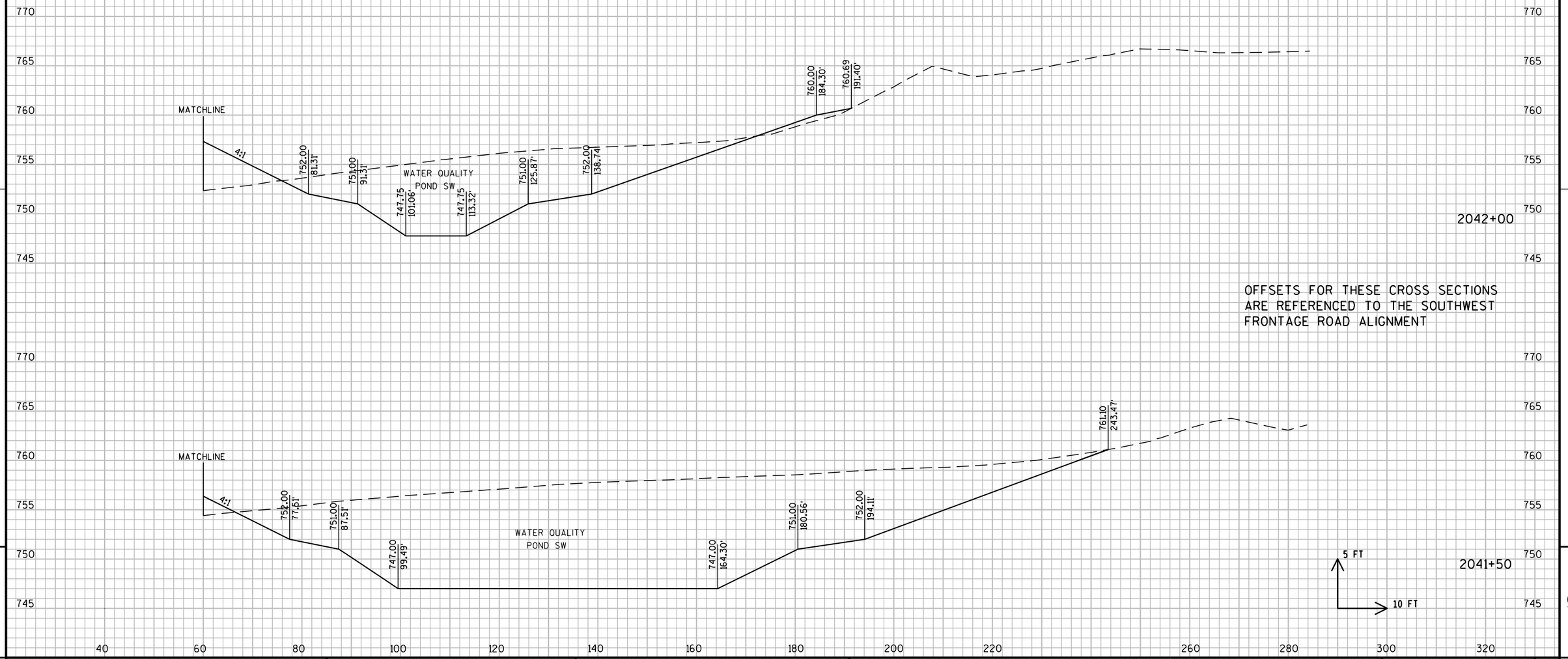
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 277 E

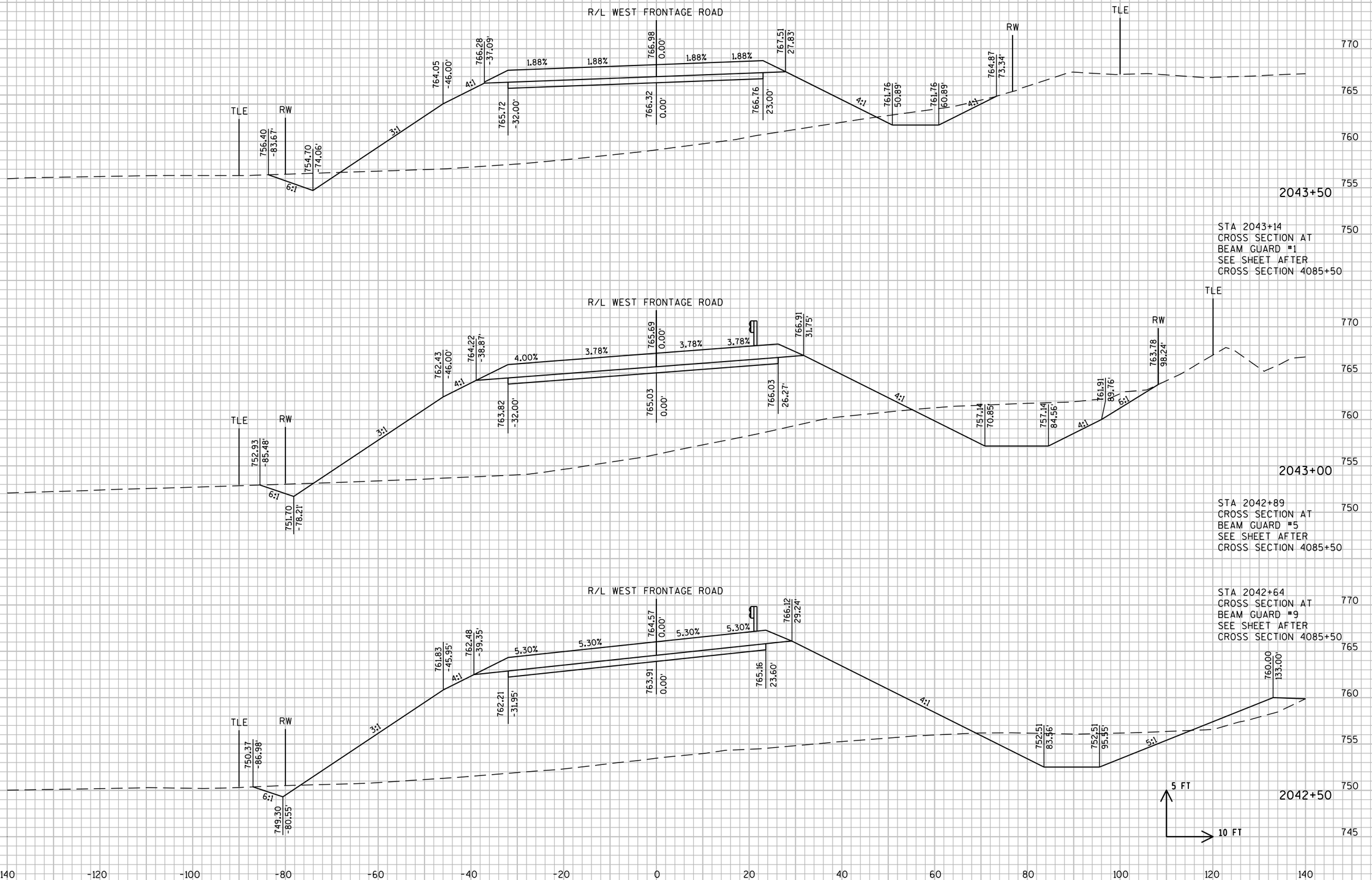
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WISDOT/CADDS SHEET 21

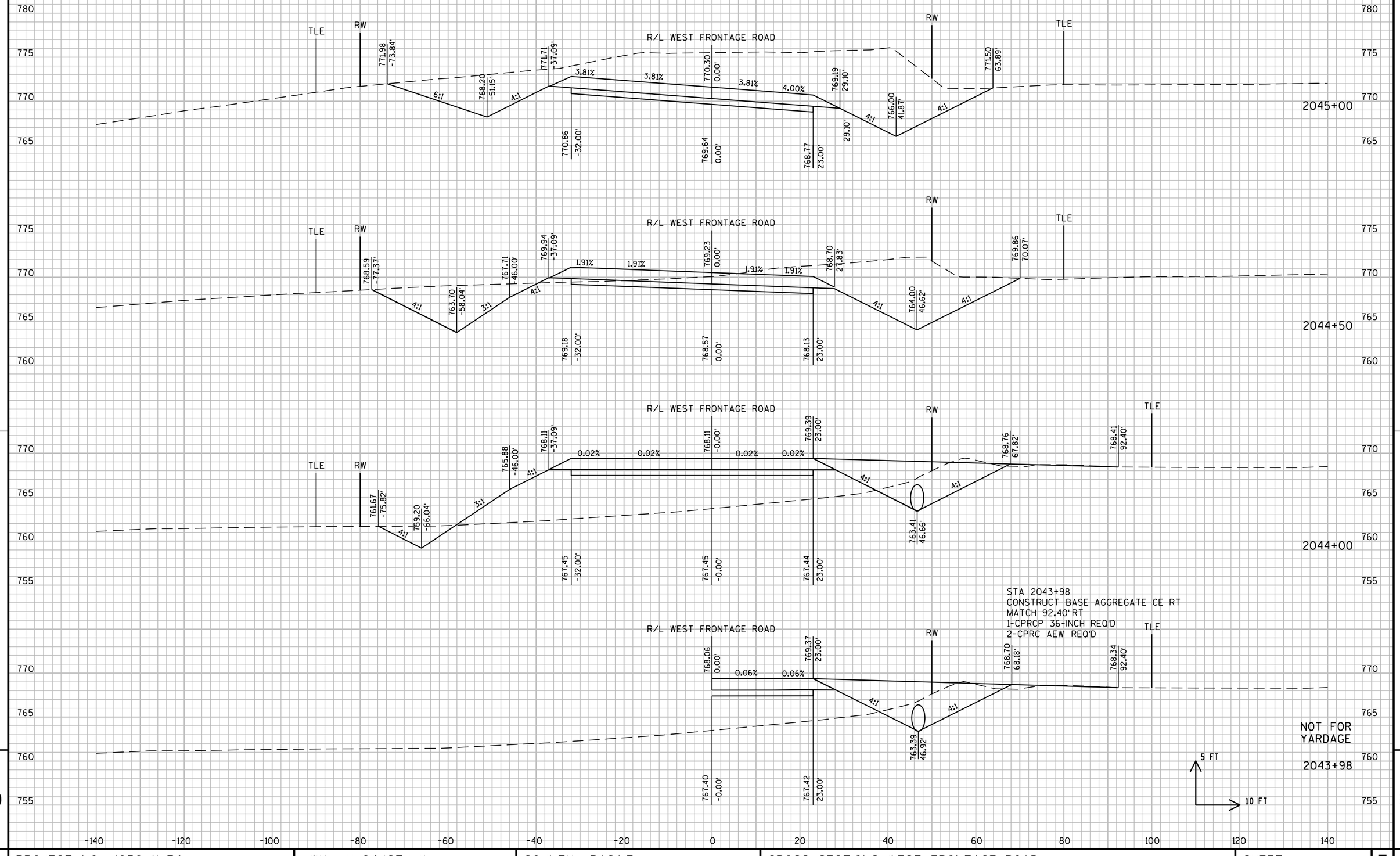


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WATER QUALITY POND SW	SHEET 278	E



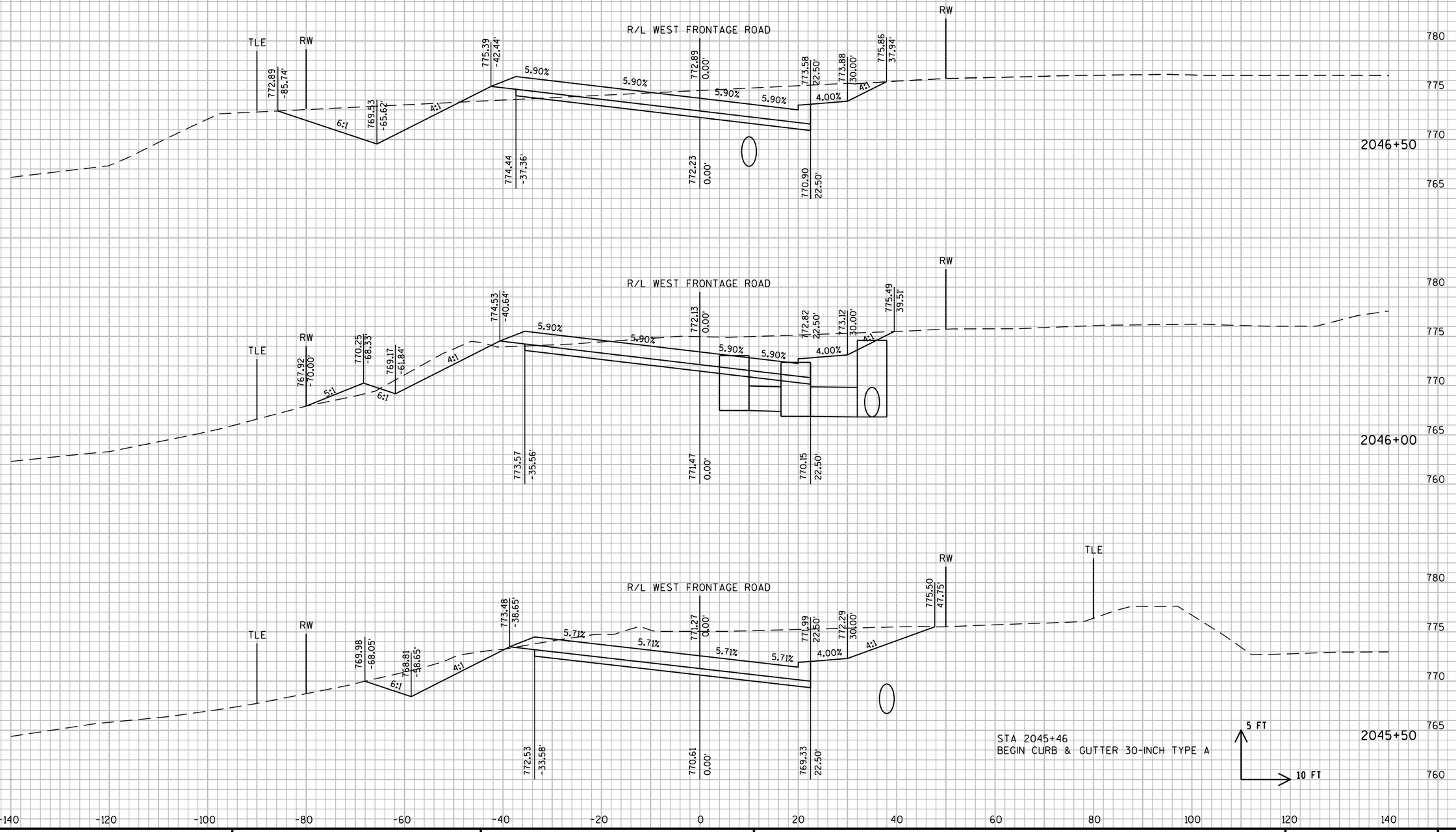
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 279	E



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 280 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs10 PLOT SCALE : 20:1

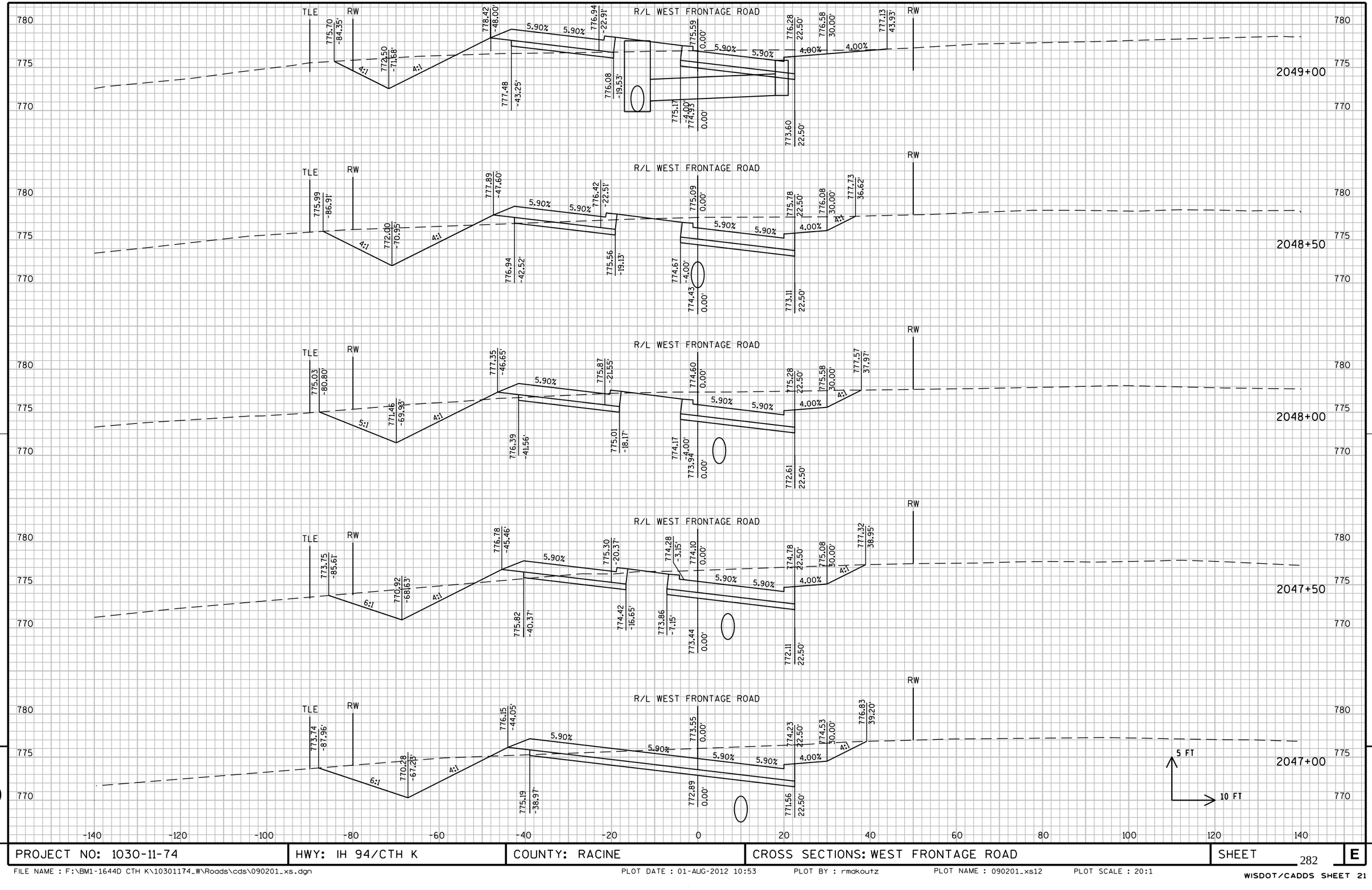
WISDOT/CADDS SHEET 21



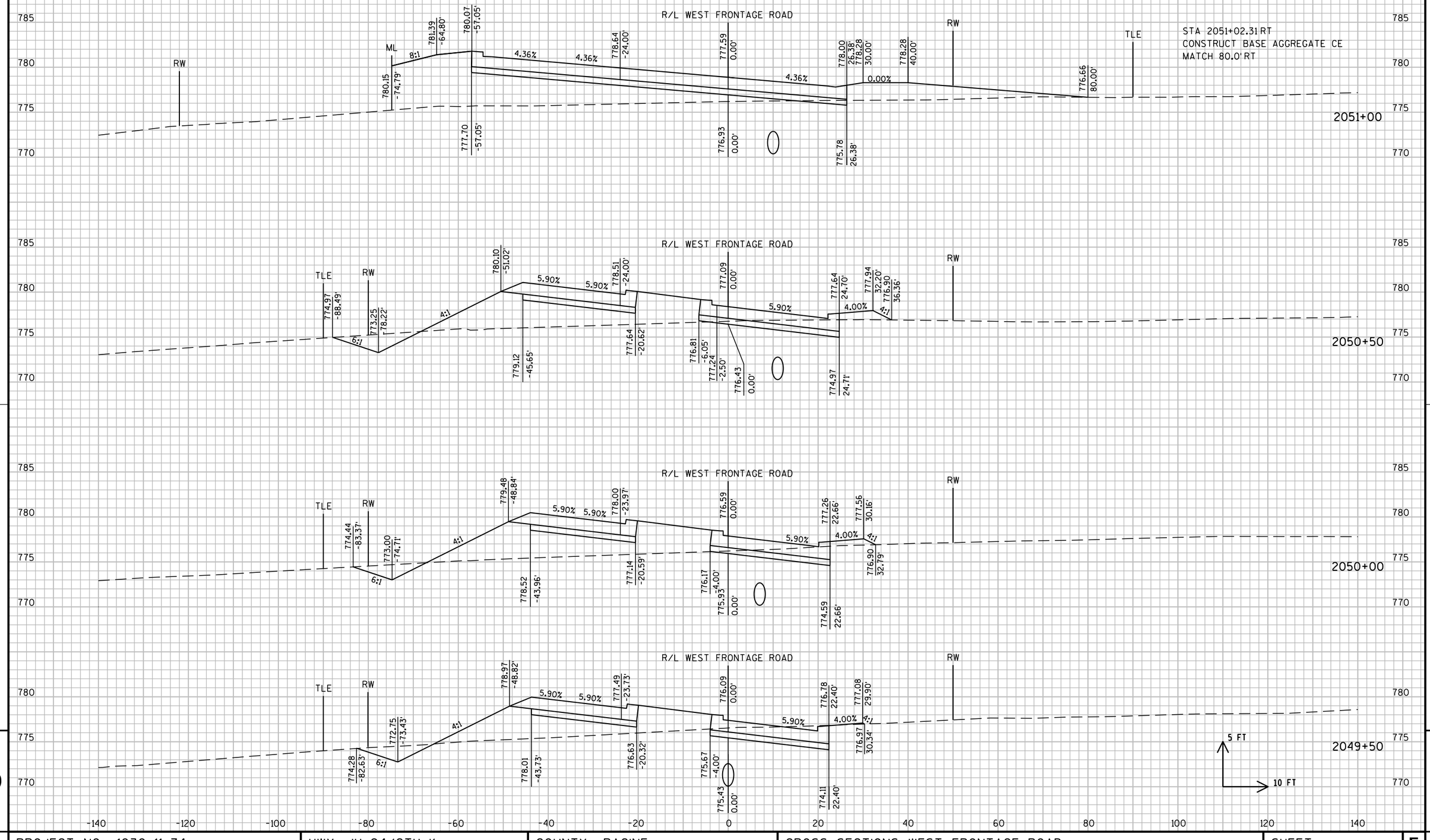
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 281 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs11 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



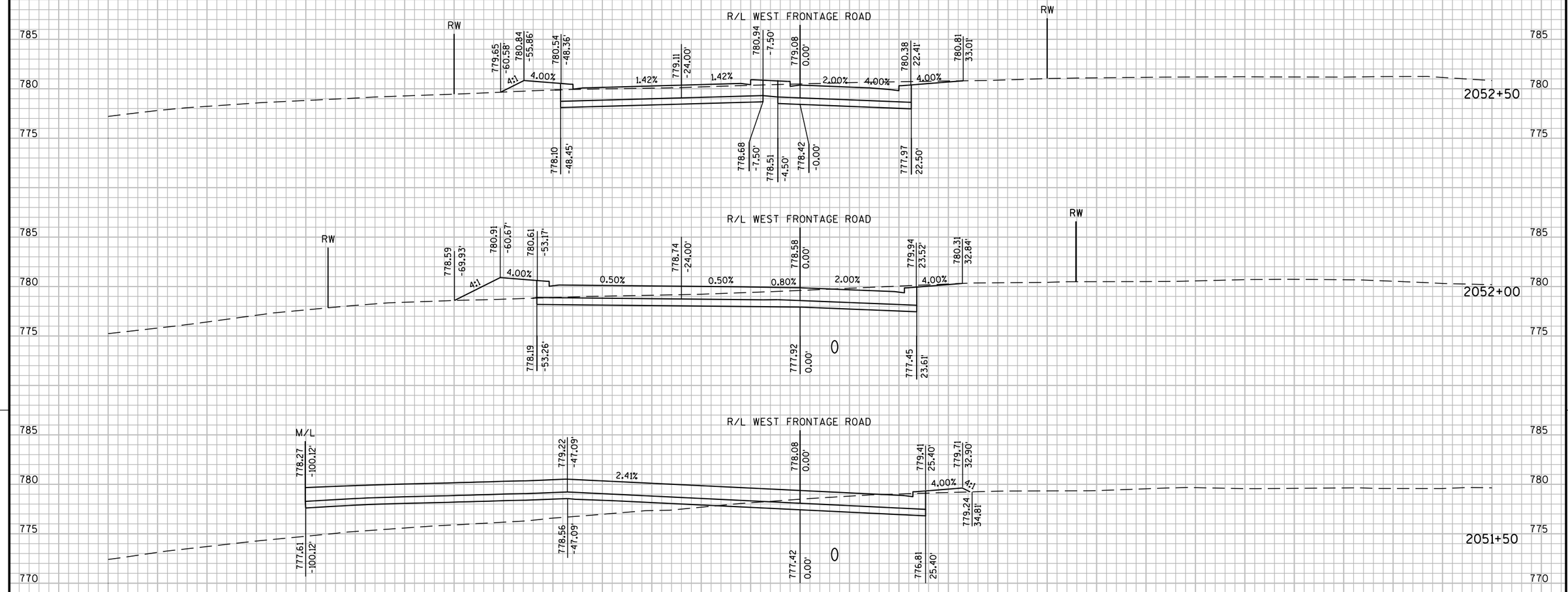
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 282	E



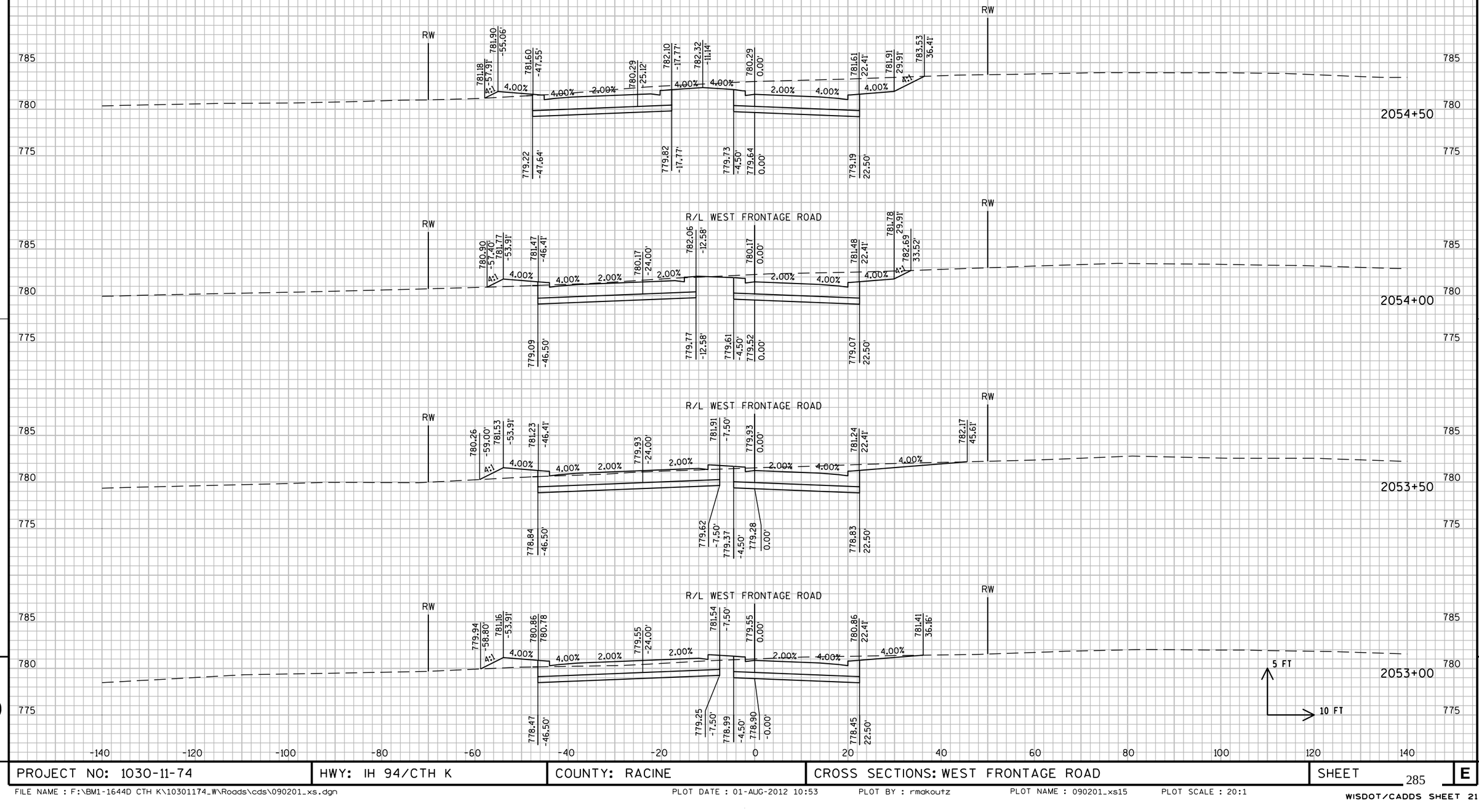
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 283 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs13 PLOT SCALE : 20:1

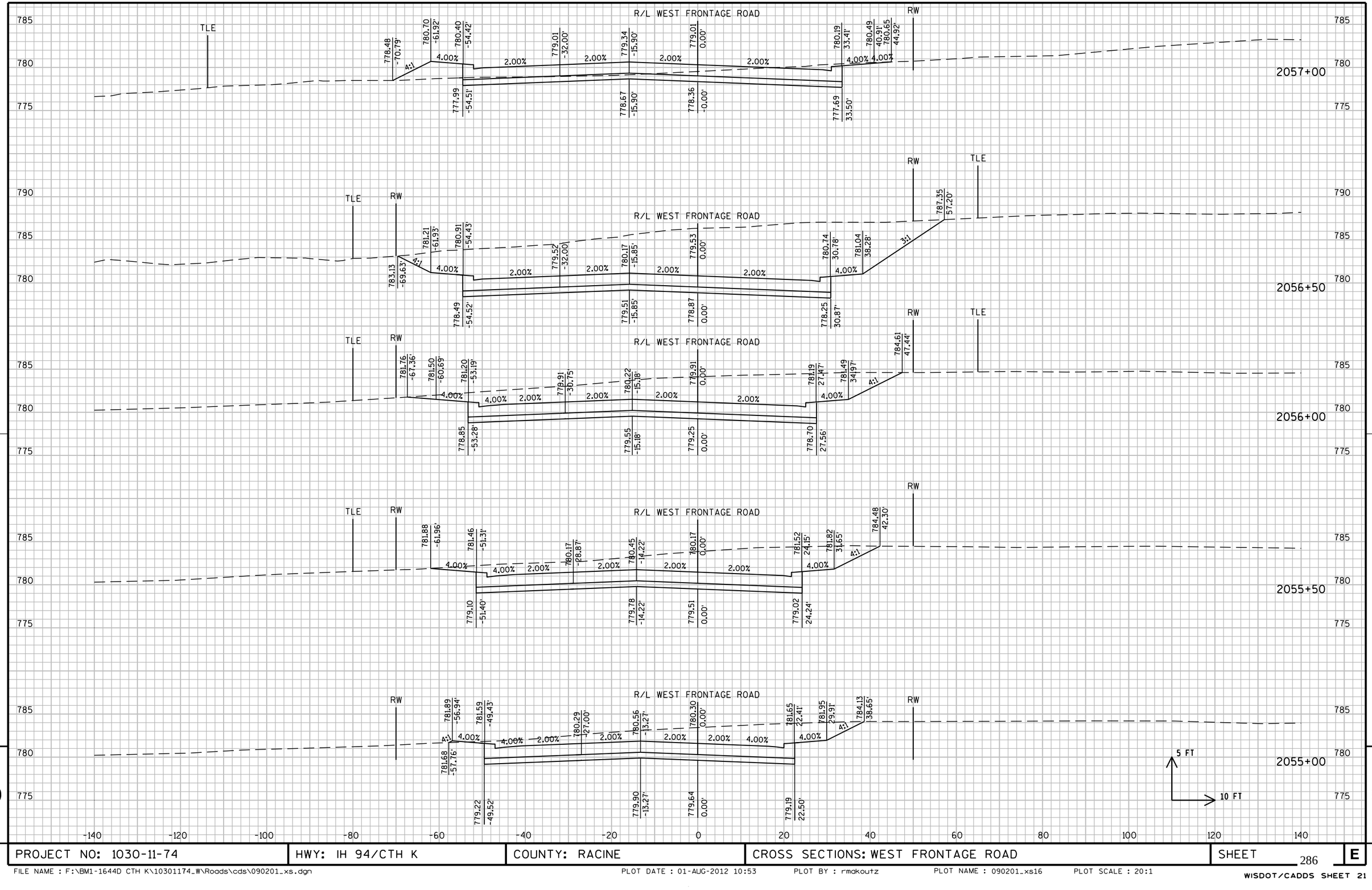
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 284 E



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 285	E

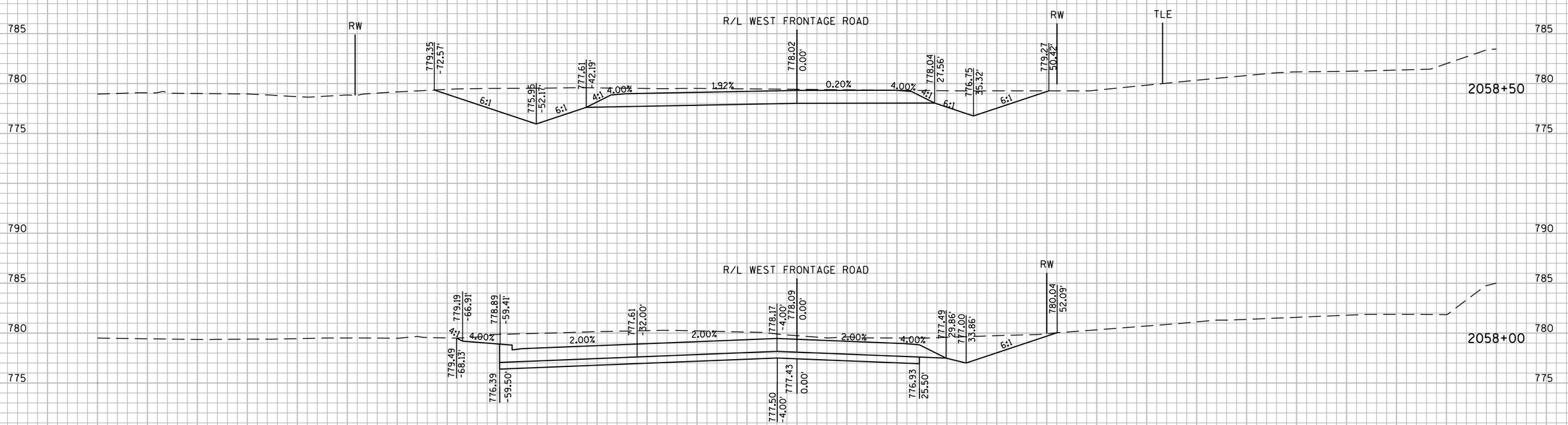


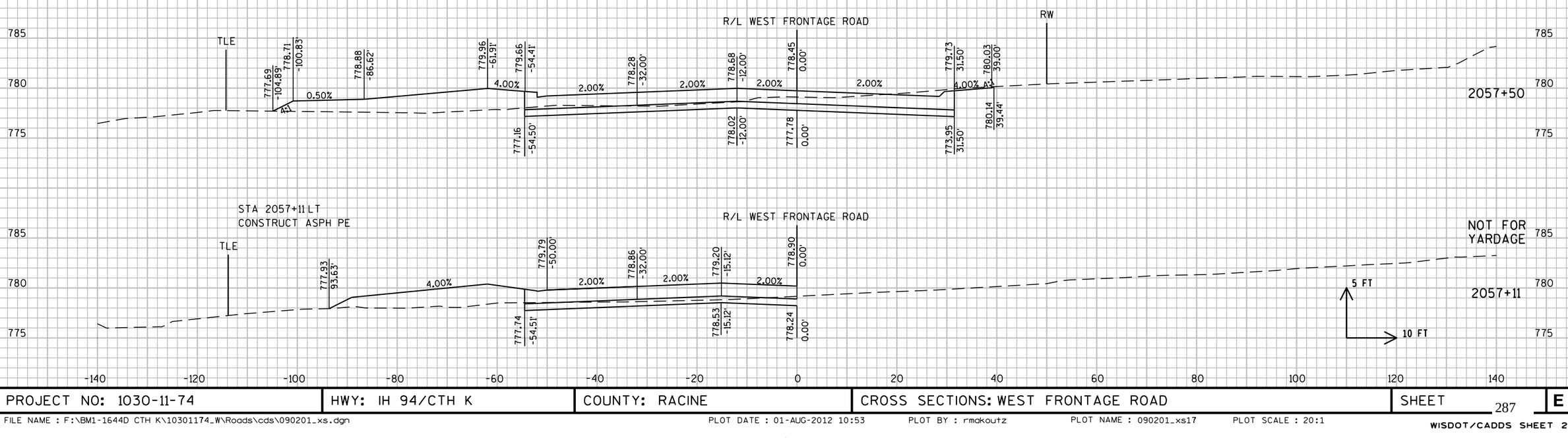
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 286 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs16 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

STA 2058+86 END
YARDAGE ABRUPT

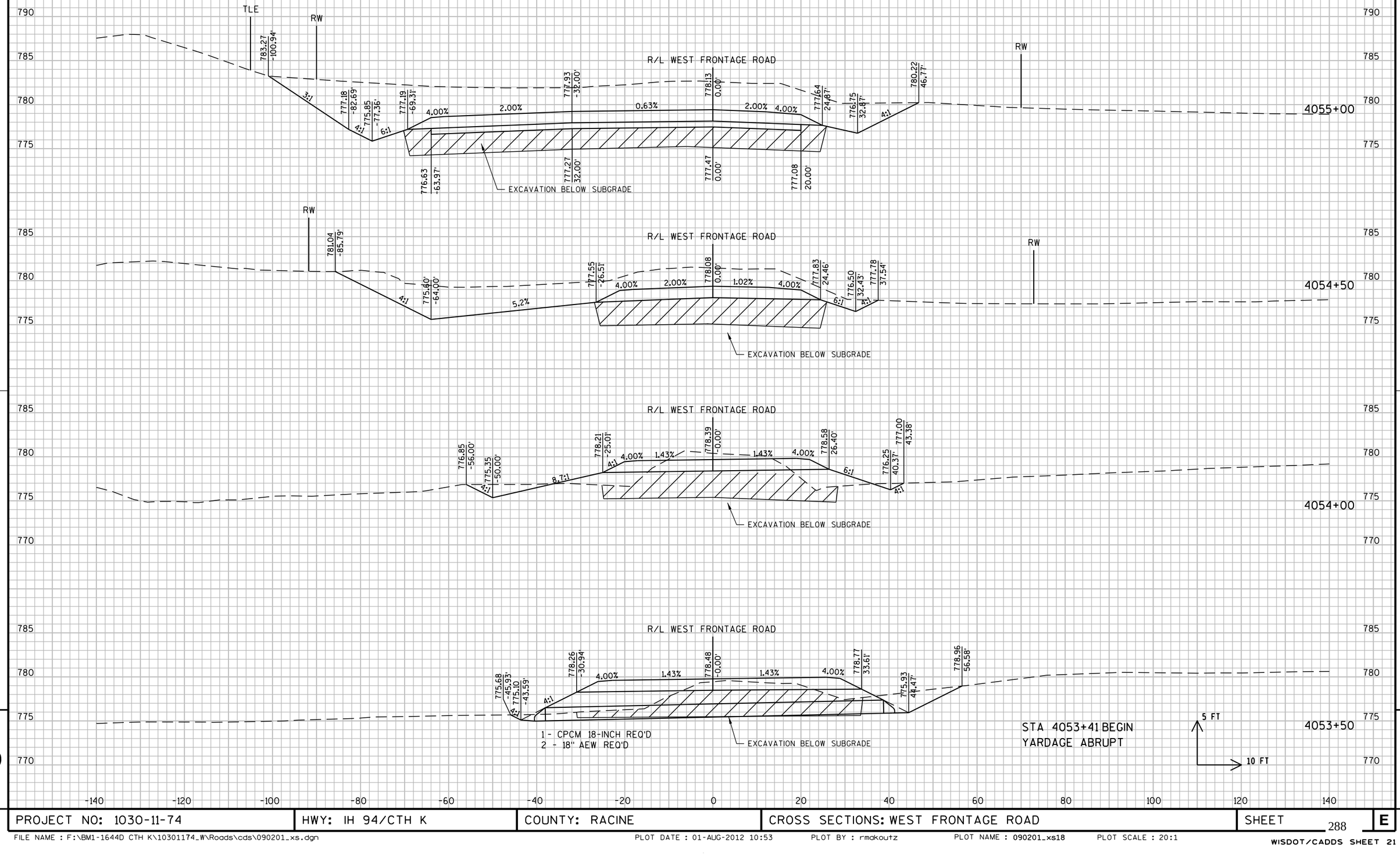




-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 287	E

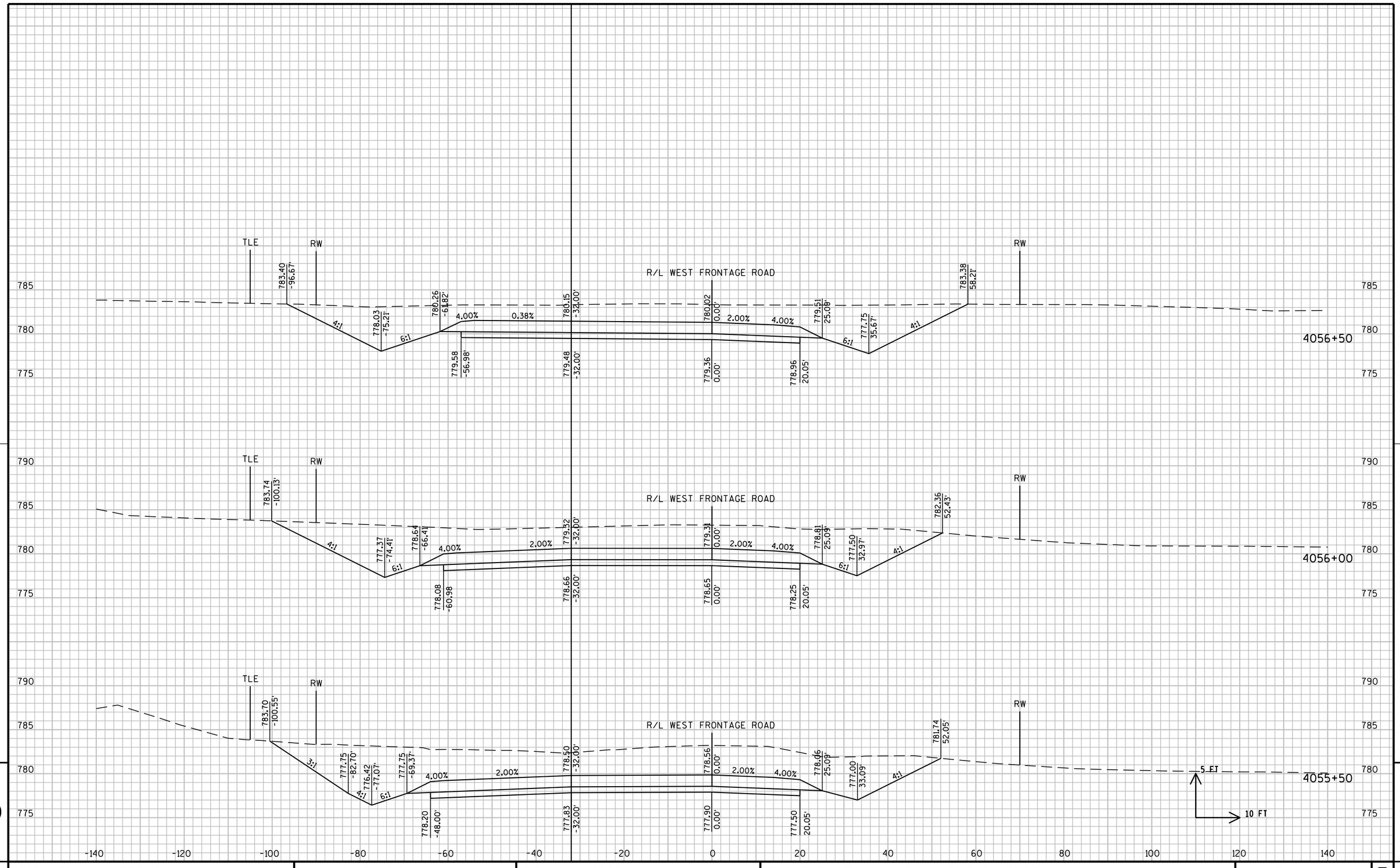


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 288 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs18 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

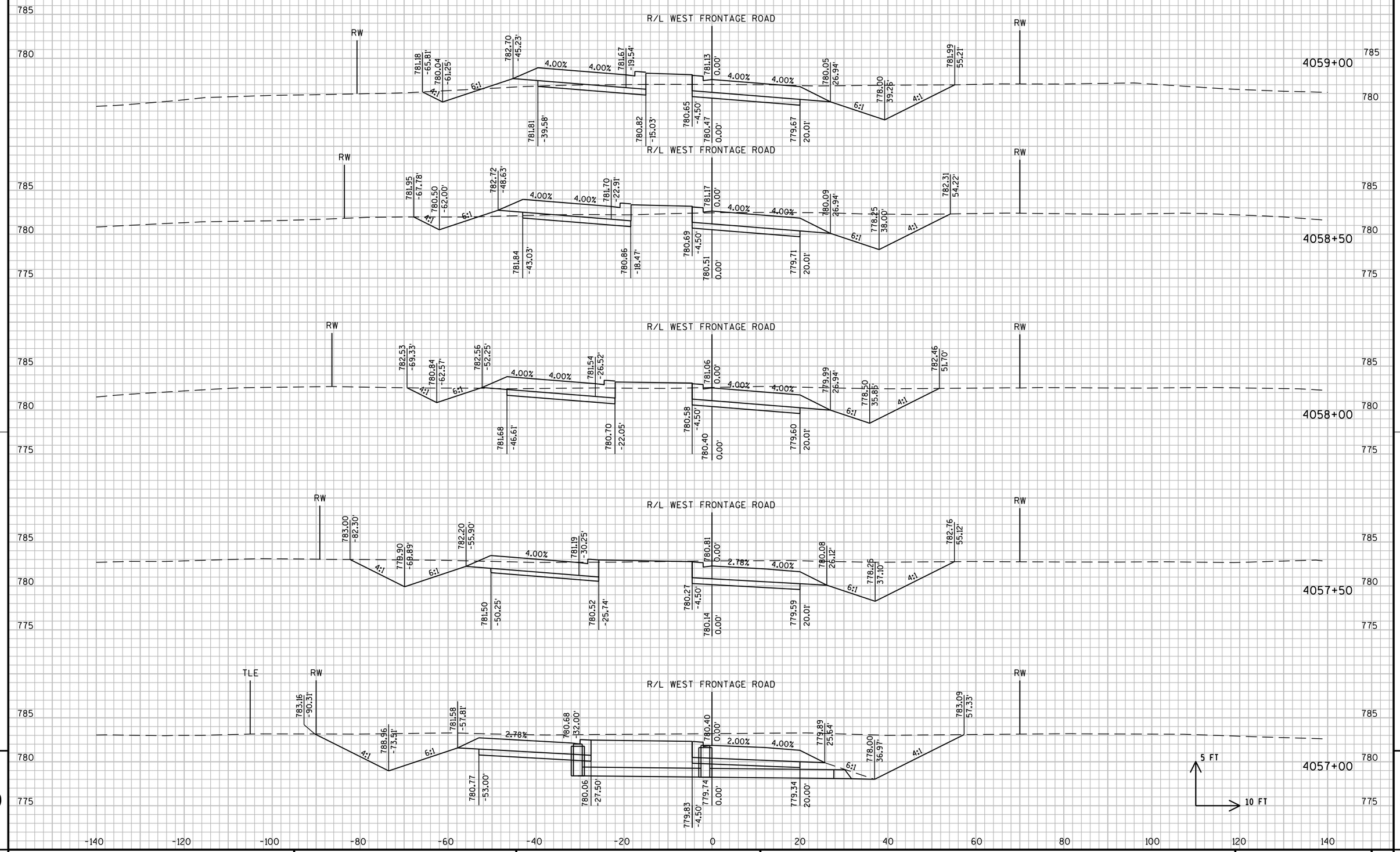
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 289 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs19 PLOT SCALE : 20:1

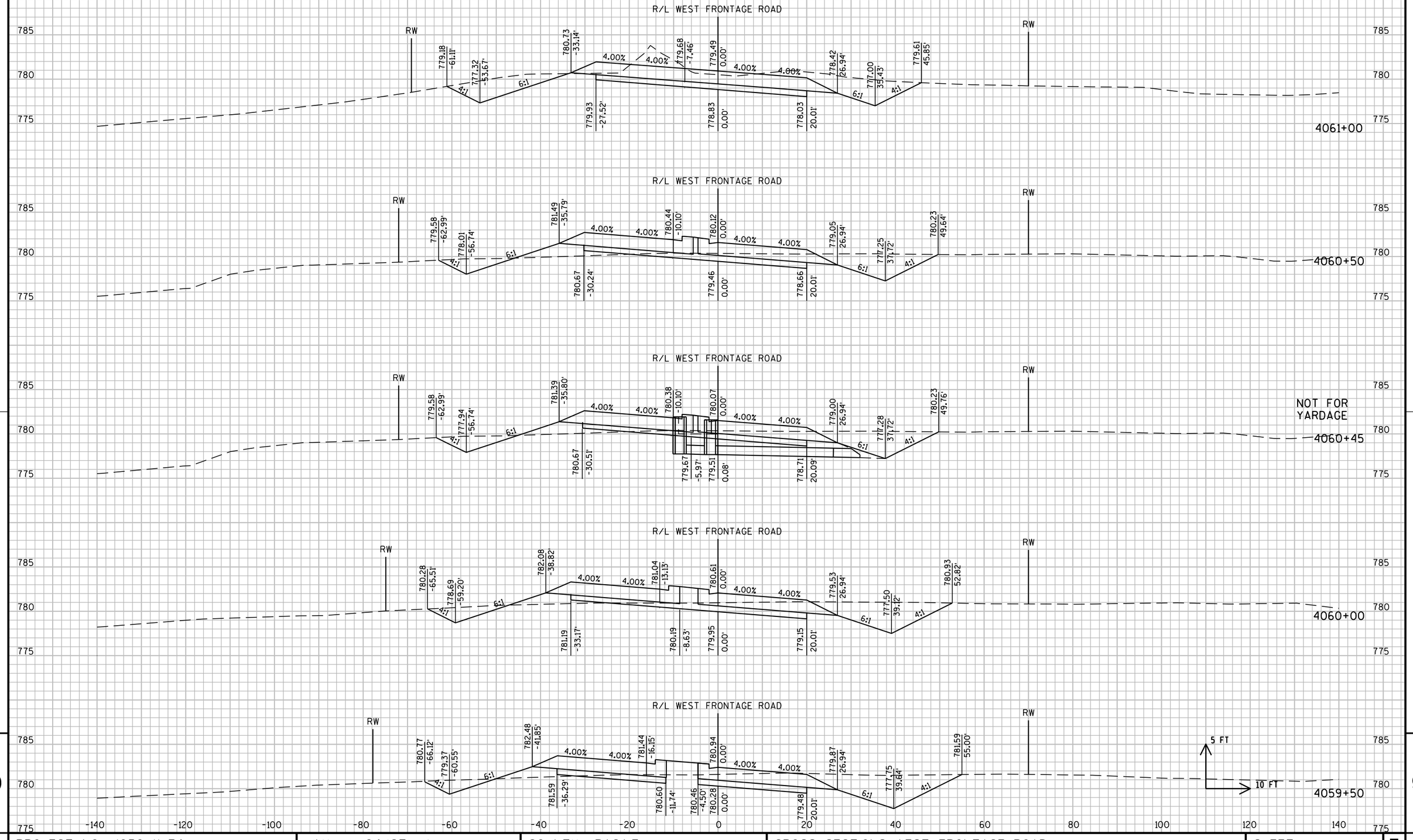
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 290	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs20 PLOT SCALE : 20:1

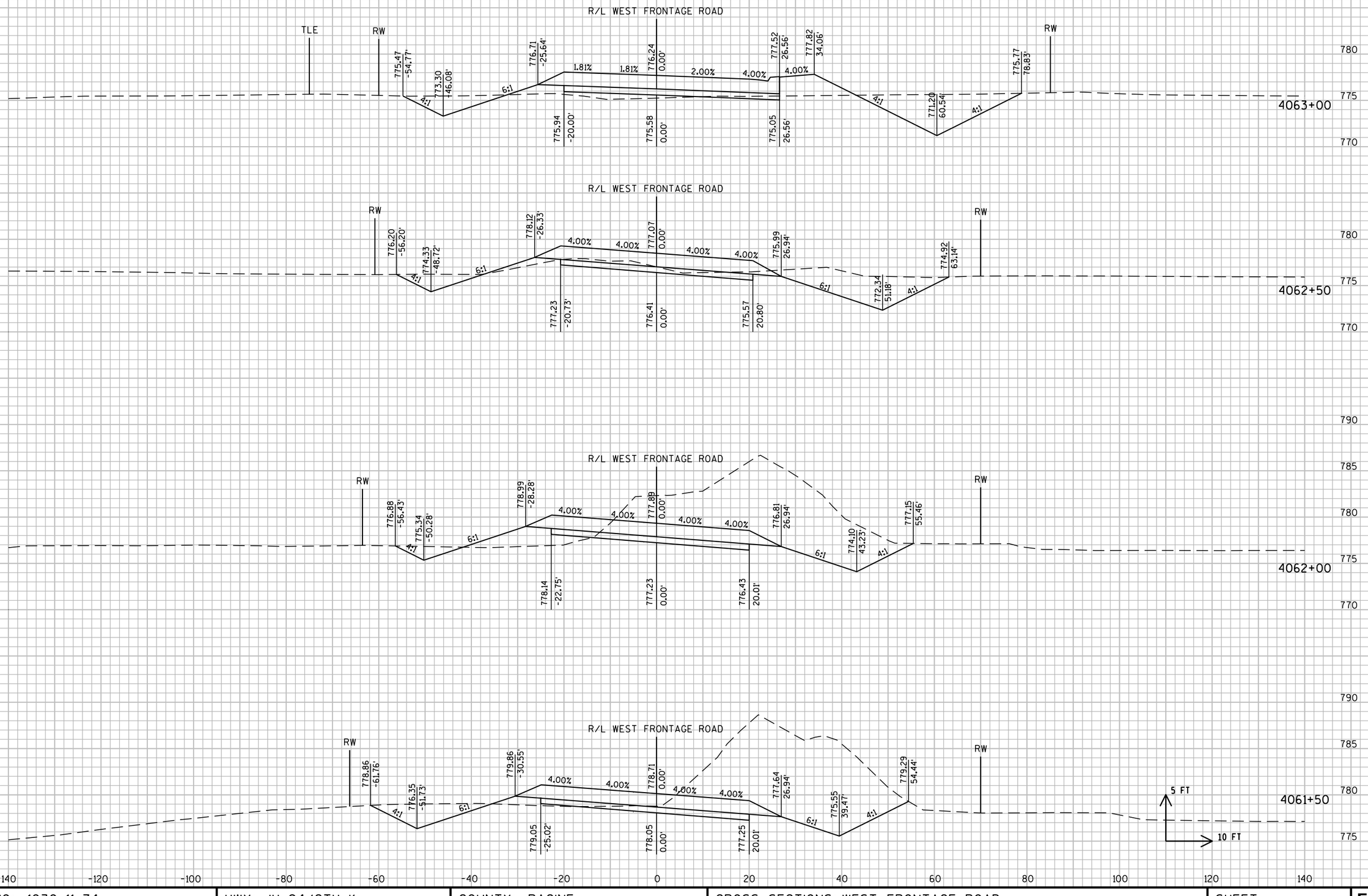
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs21 PLOT SCALE : 20:1

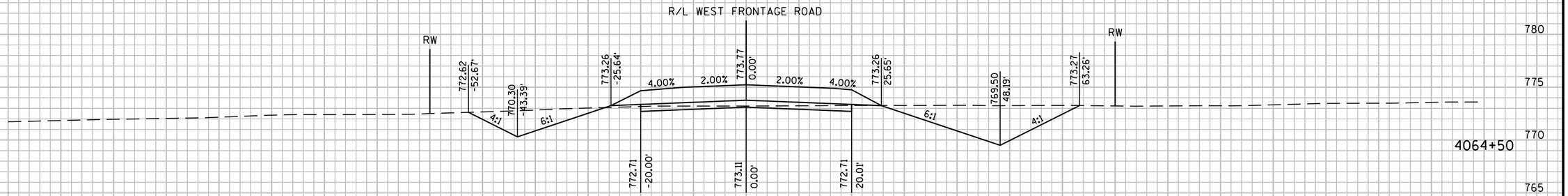
WISDOT/CADDS SHEET 21

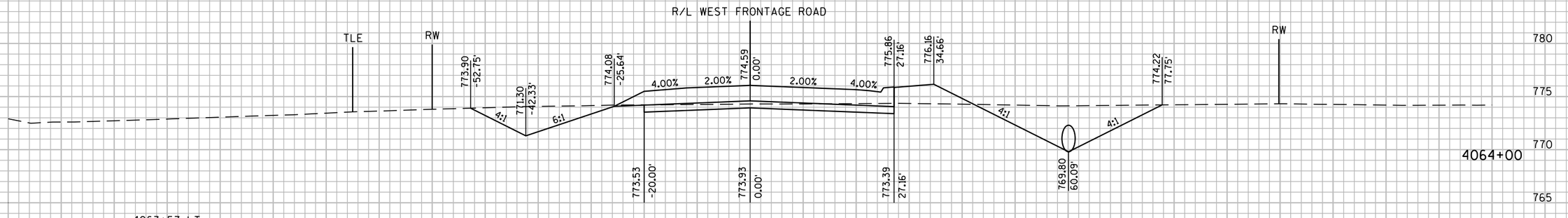


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 292 E

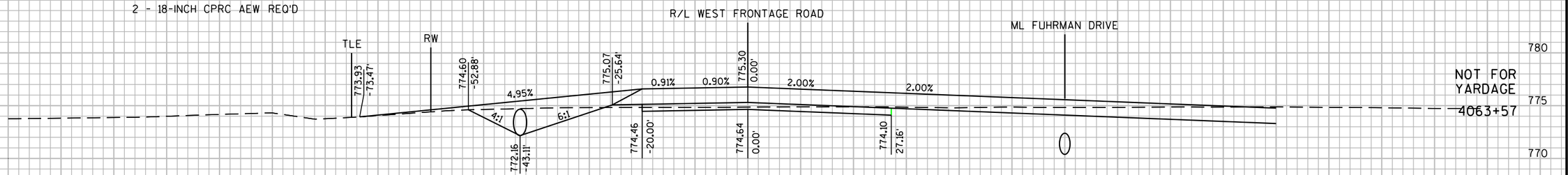
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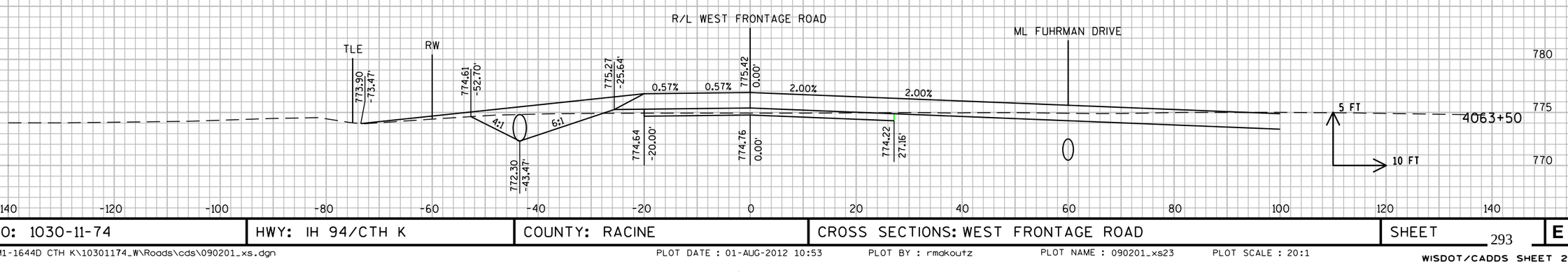
WISDOT/CADDS SHEET 21



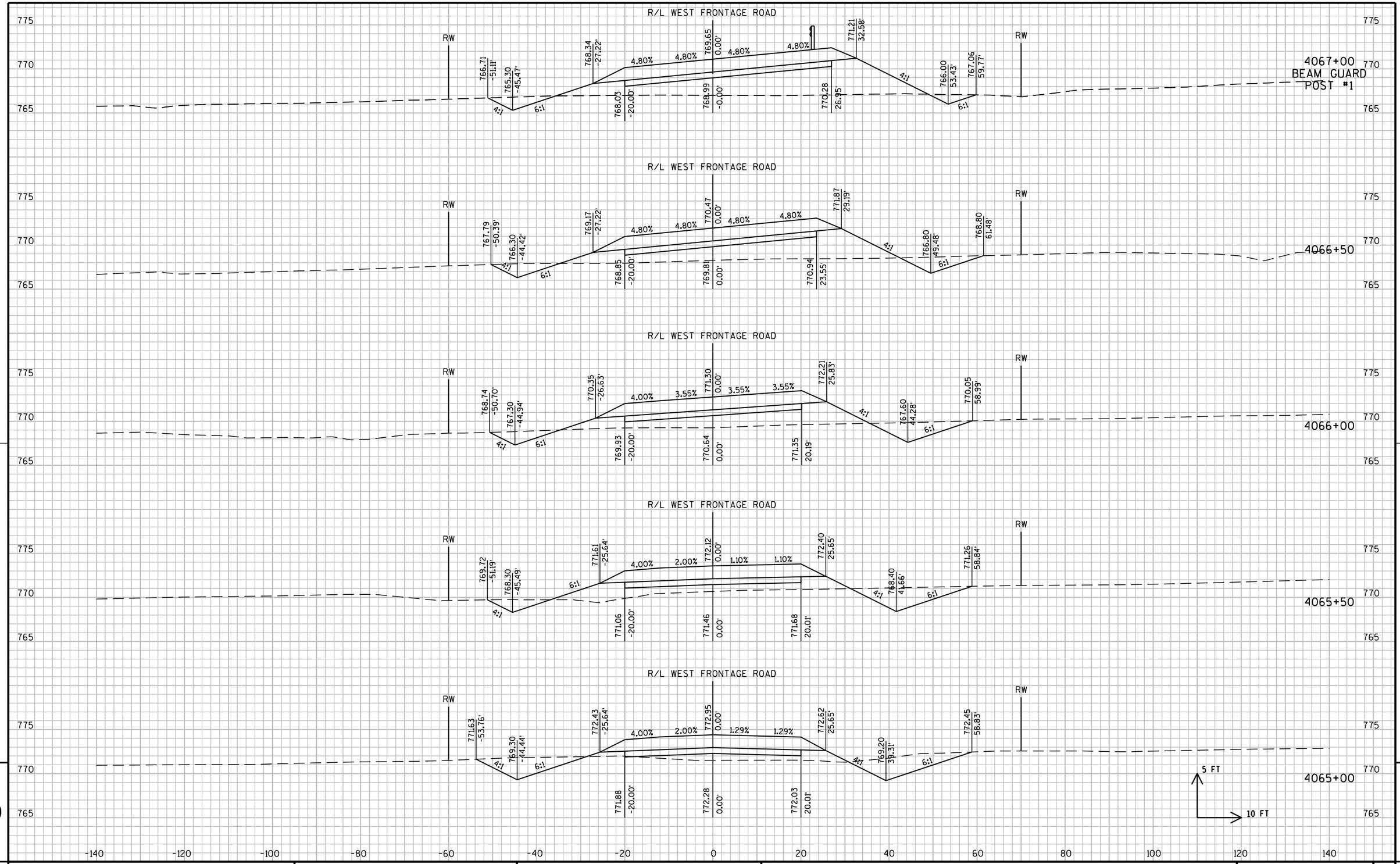


4063+57 LT
CONSTRUCT ASPHALTIC PE
1 - 18-INCH CPRC REQ'D
2 - 18-INCH CPRC AEW REQ'D



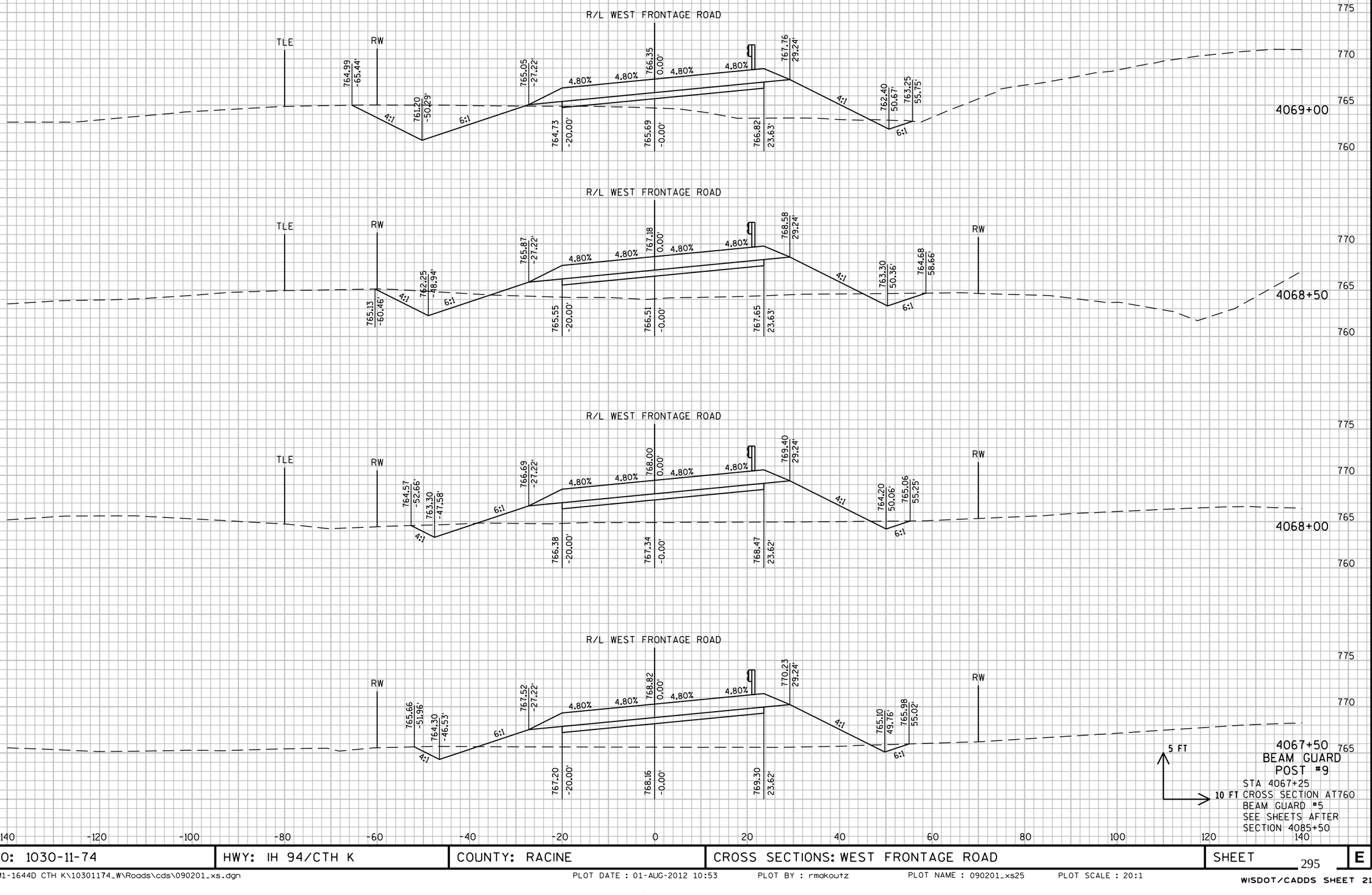


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 293	E



9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 294	E



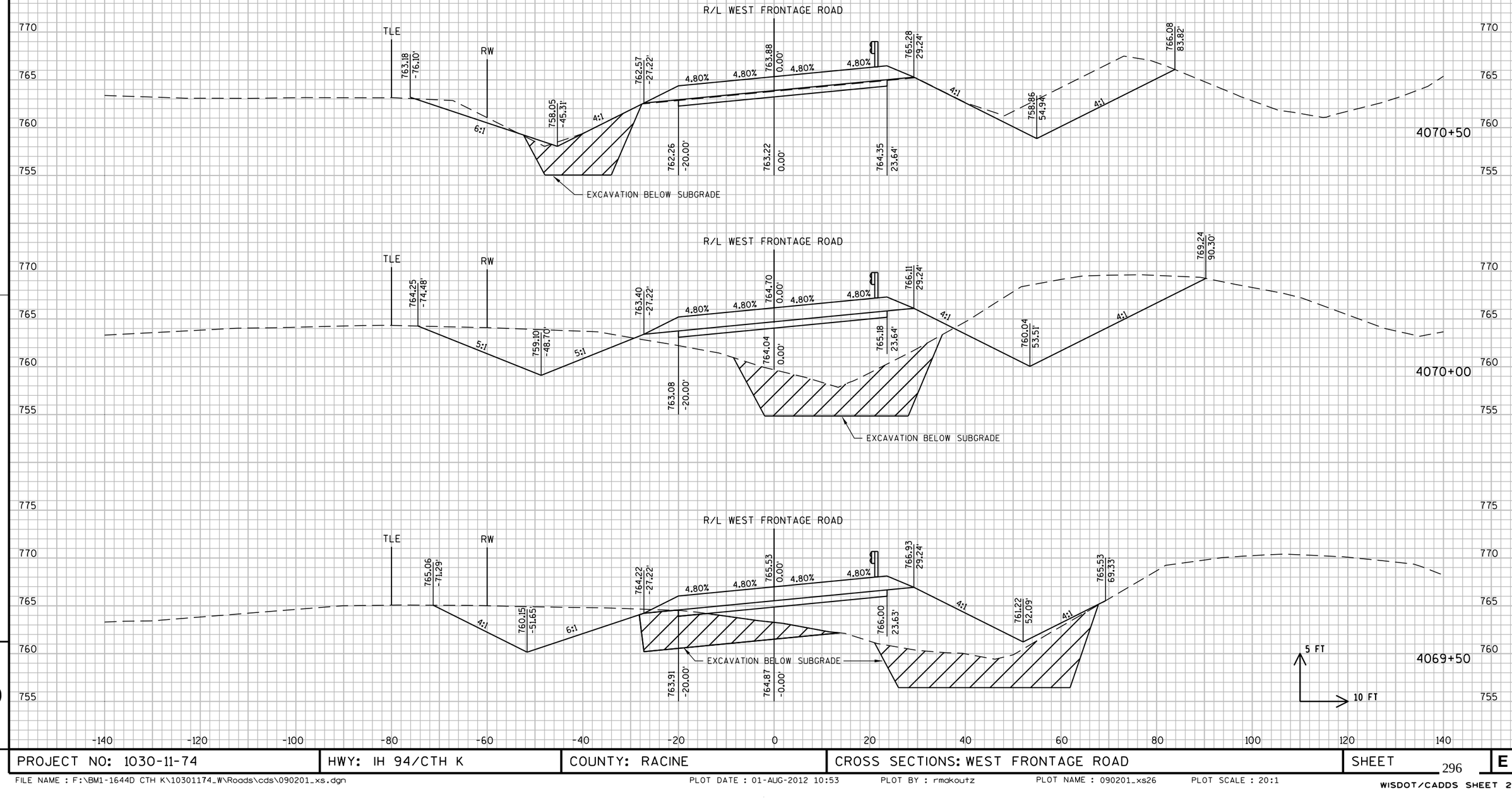
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 295 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs25 PLOT SCALE : 20:1

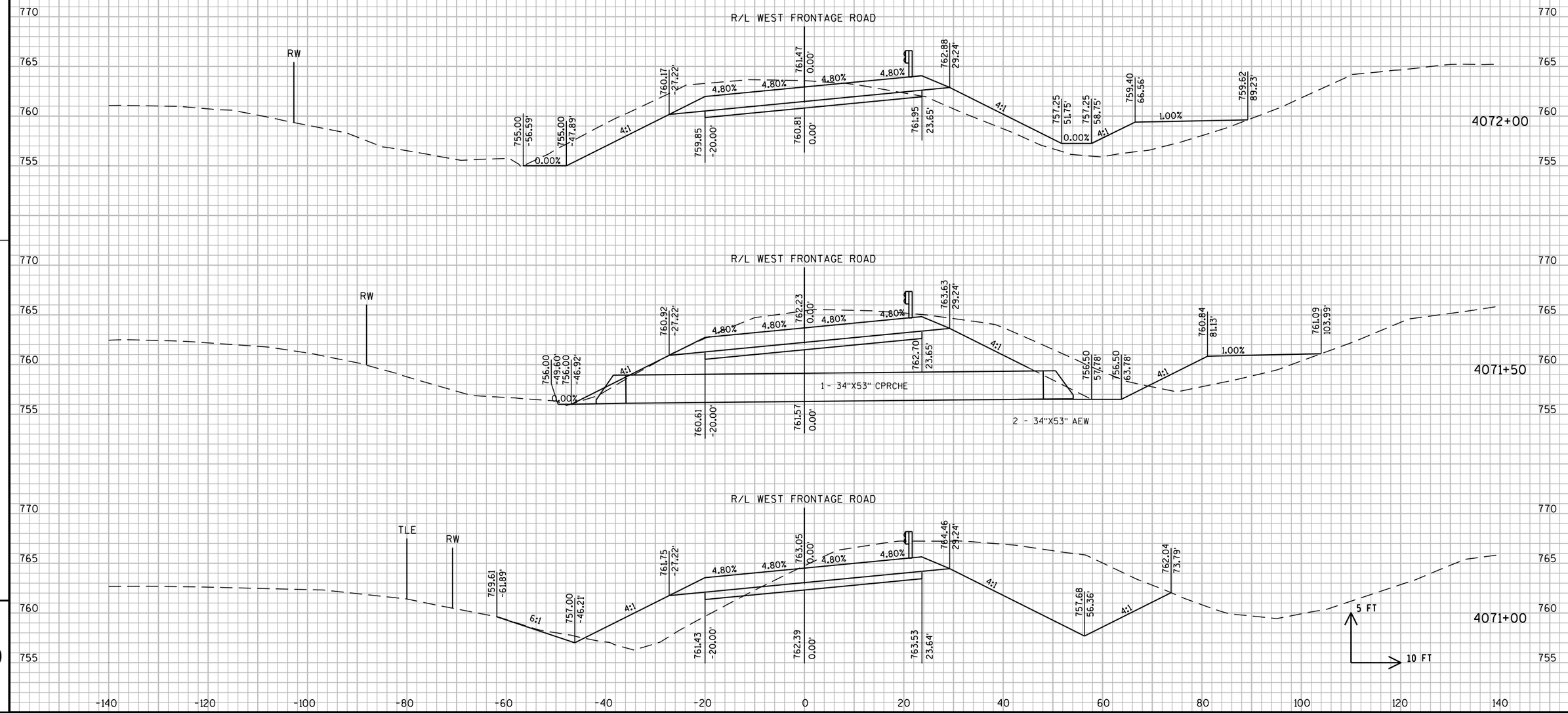
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 296 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs26 PLOT SCALE : 20:1

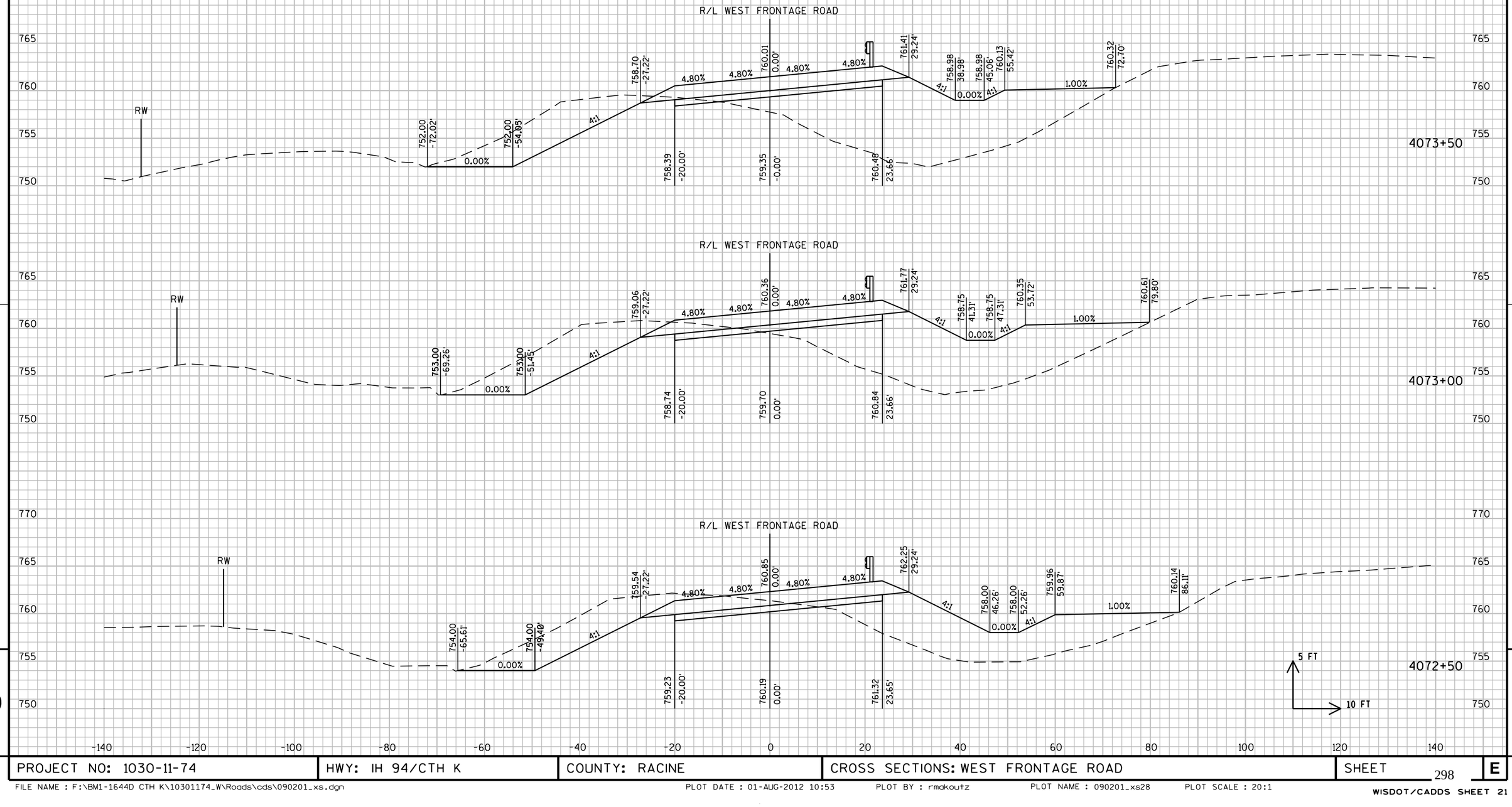
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 297 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs27 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



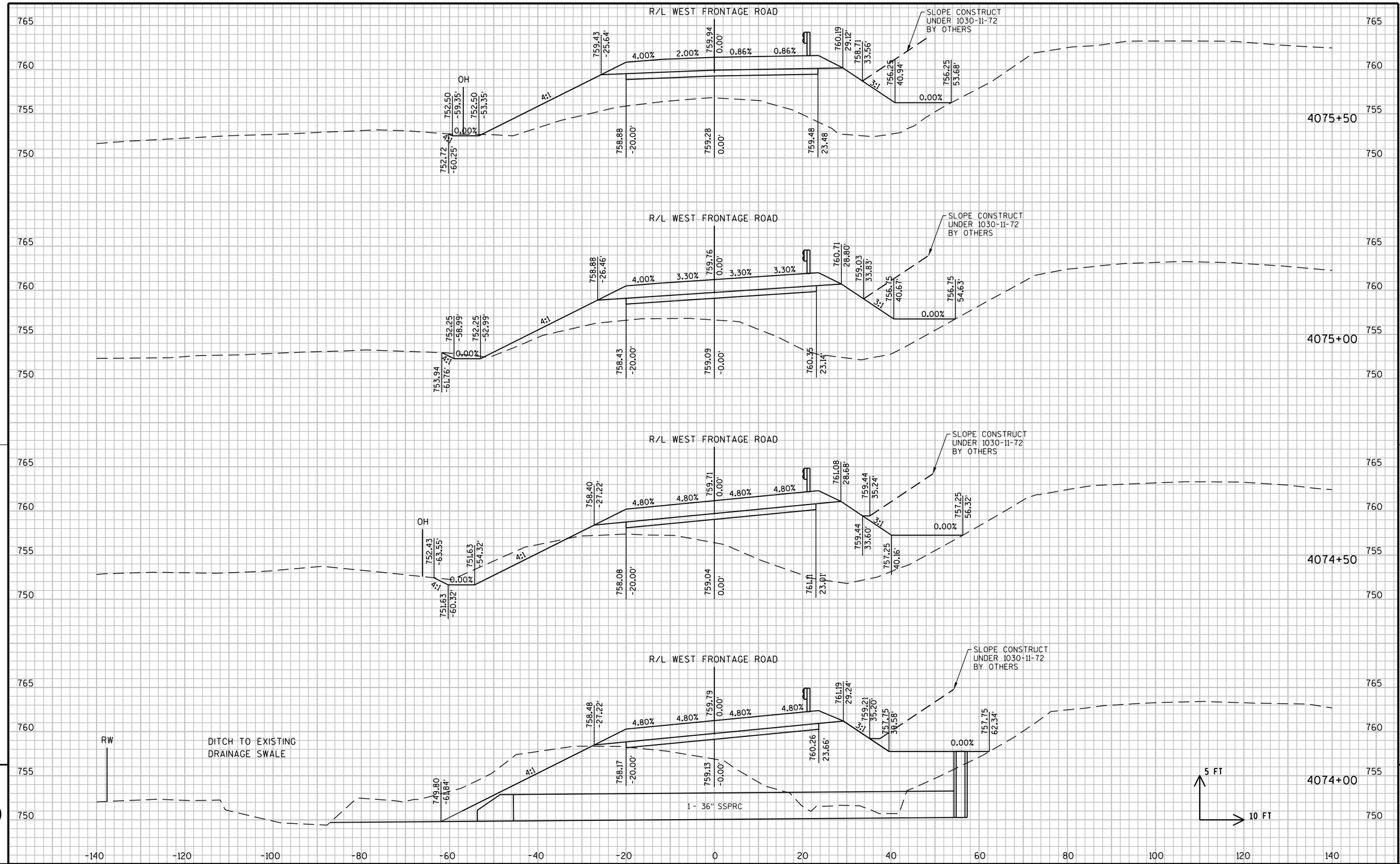
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 298 E

9

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs28 PLOT SCALE : 20:1

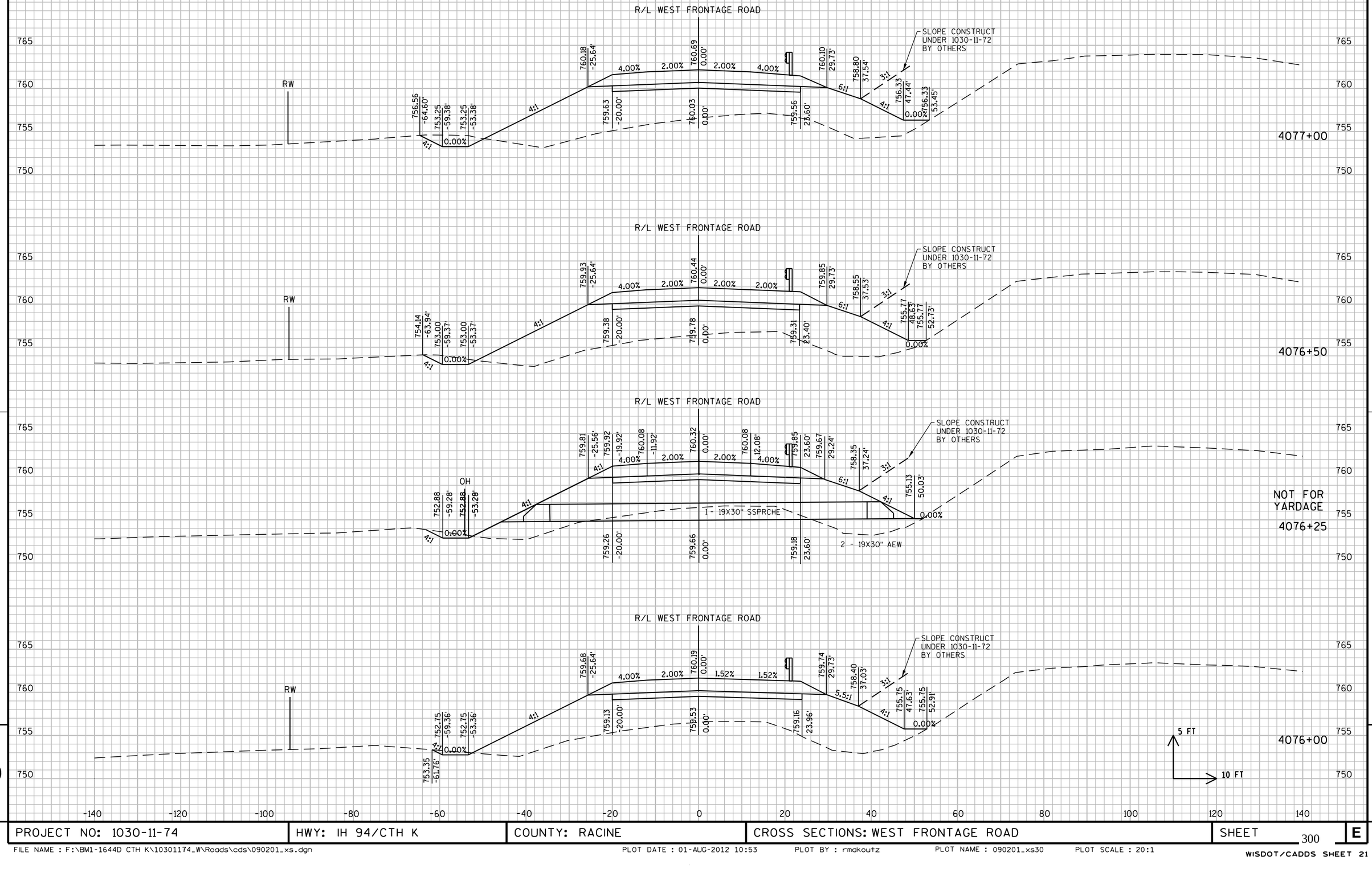
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 299	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs29 PLOT SCALE : 20:1

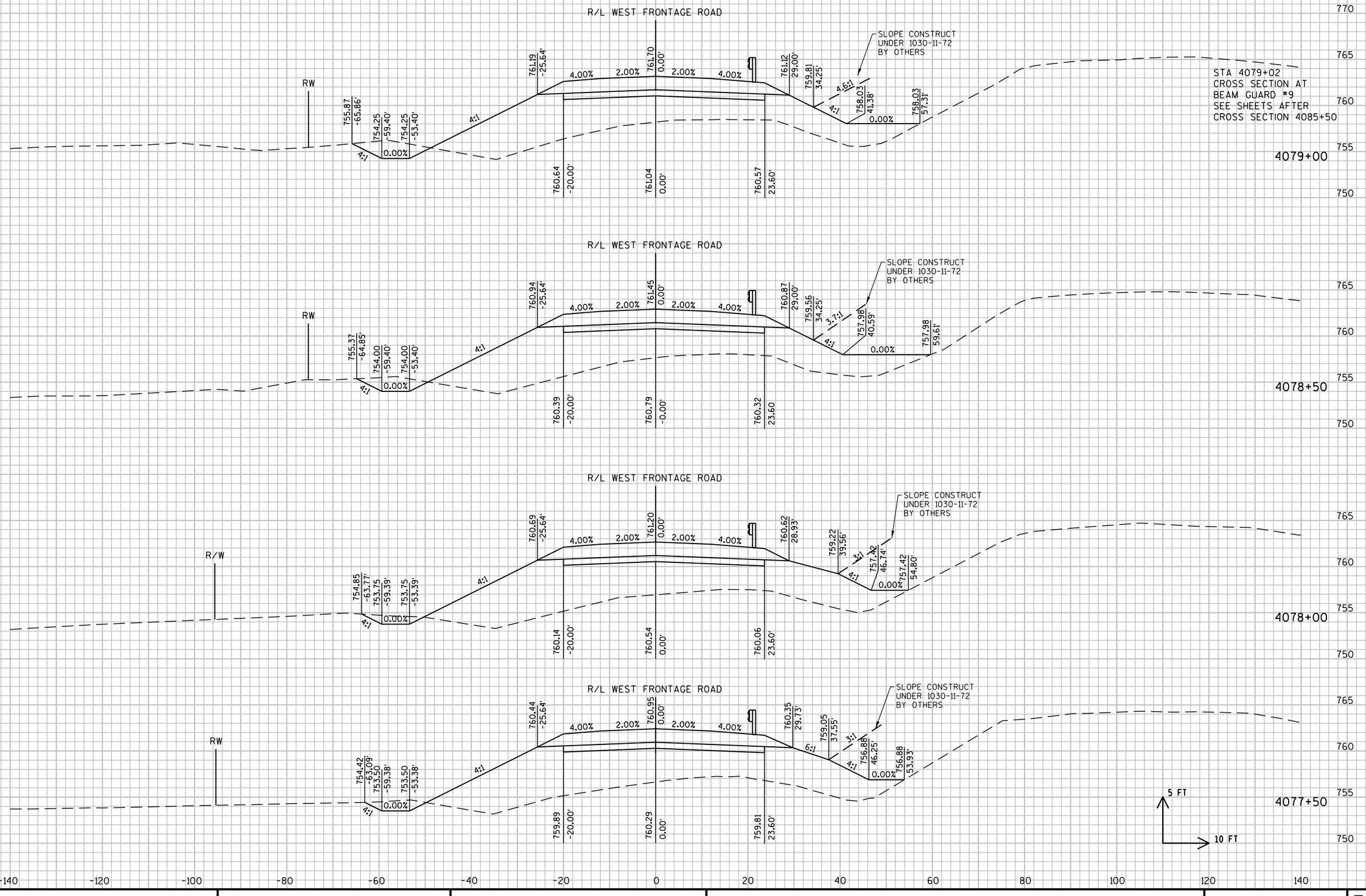
WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 300	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs30 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

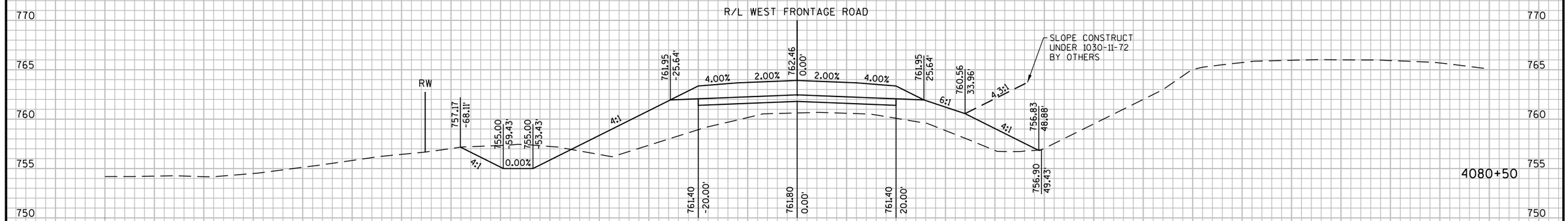


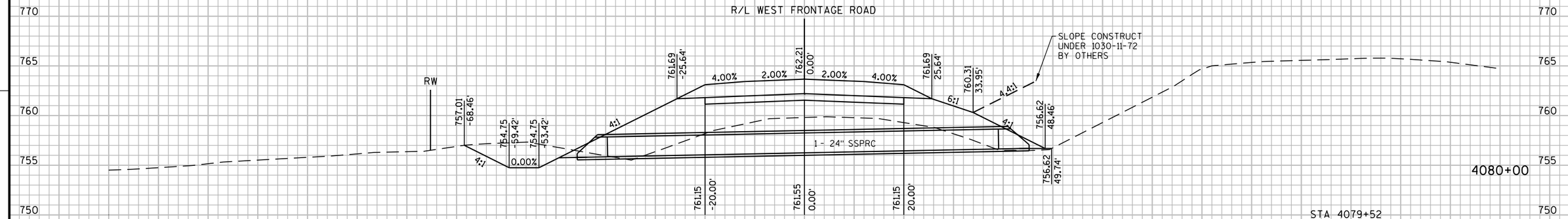
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 301 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs31 PLOT SCALE : 20:1

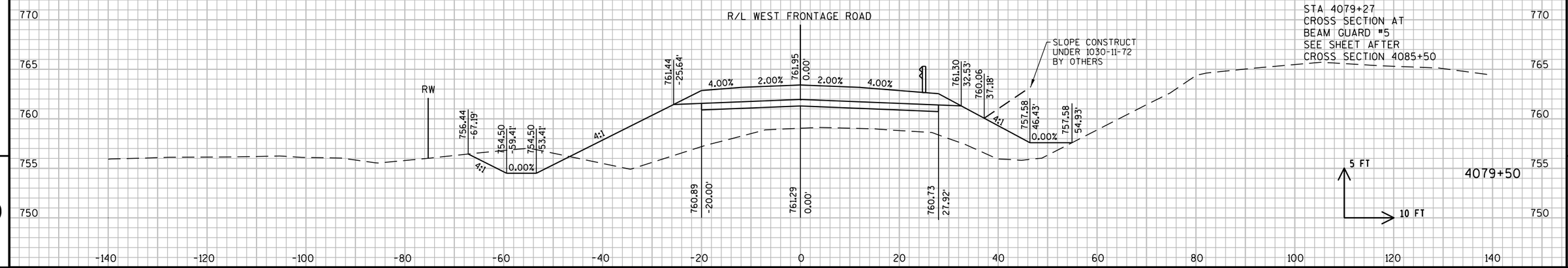
WISDOT/CADDS SHEET 21





STA 4079+52
CROSS SECTION AT
BEAM GUARD #1
SEE SHEET AFTER
CROSS SECTION 4085+50

STA 4079+27
CROSS SECTION AT
BEAM GUARD #5
SEE SHEET AFTER
CROSS SECTION 4085+50



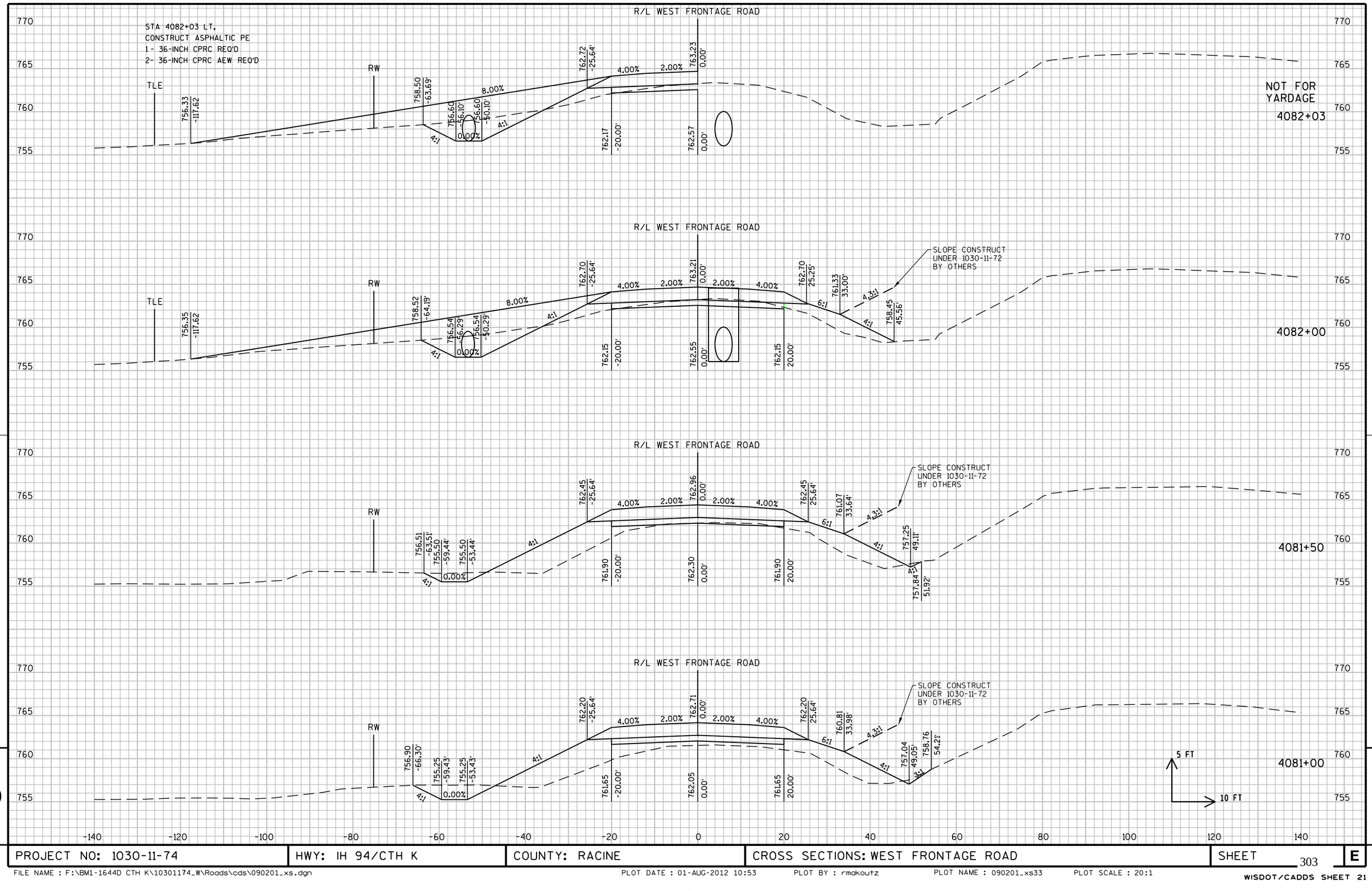
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9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 302 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs32 PLOT SCALE : 20:1

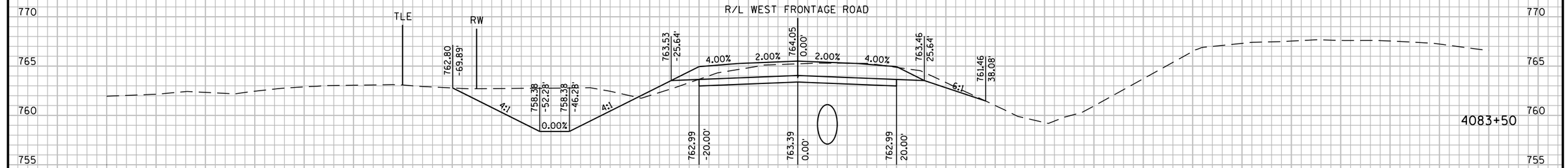
WISDOT/CADDS SHEET 21

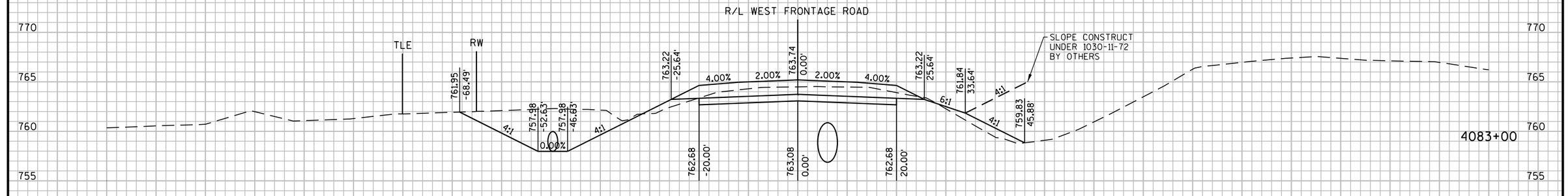


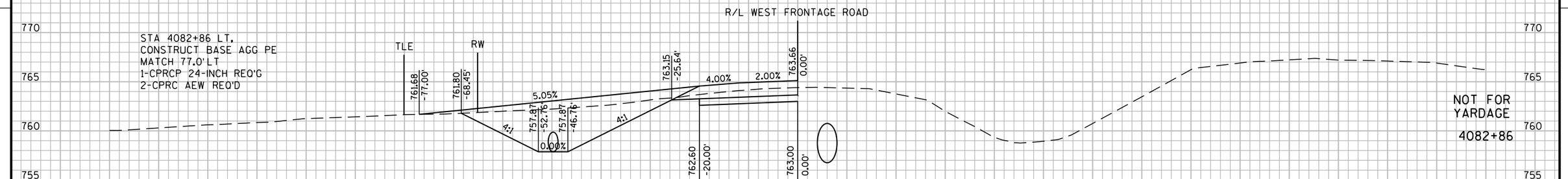
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET	E

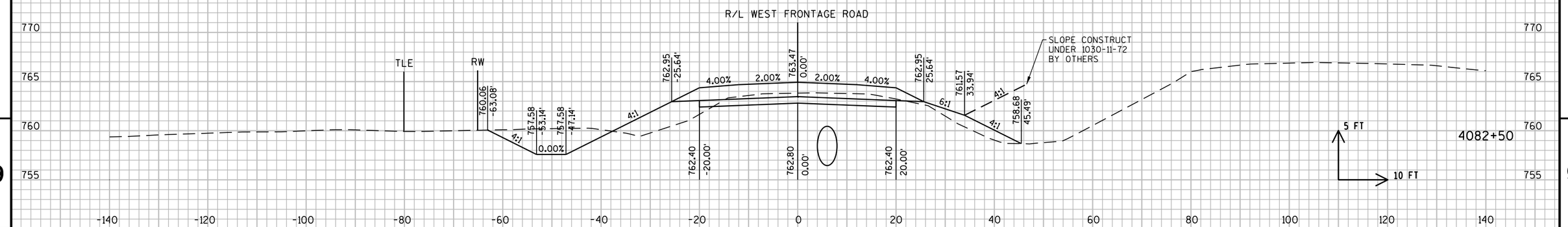
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WISDOT/CADDS SHEET 21









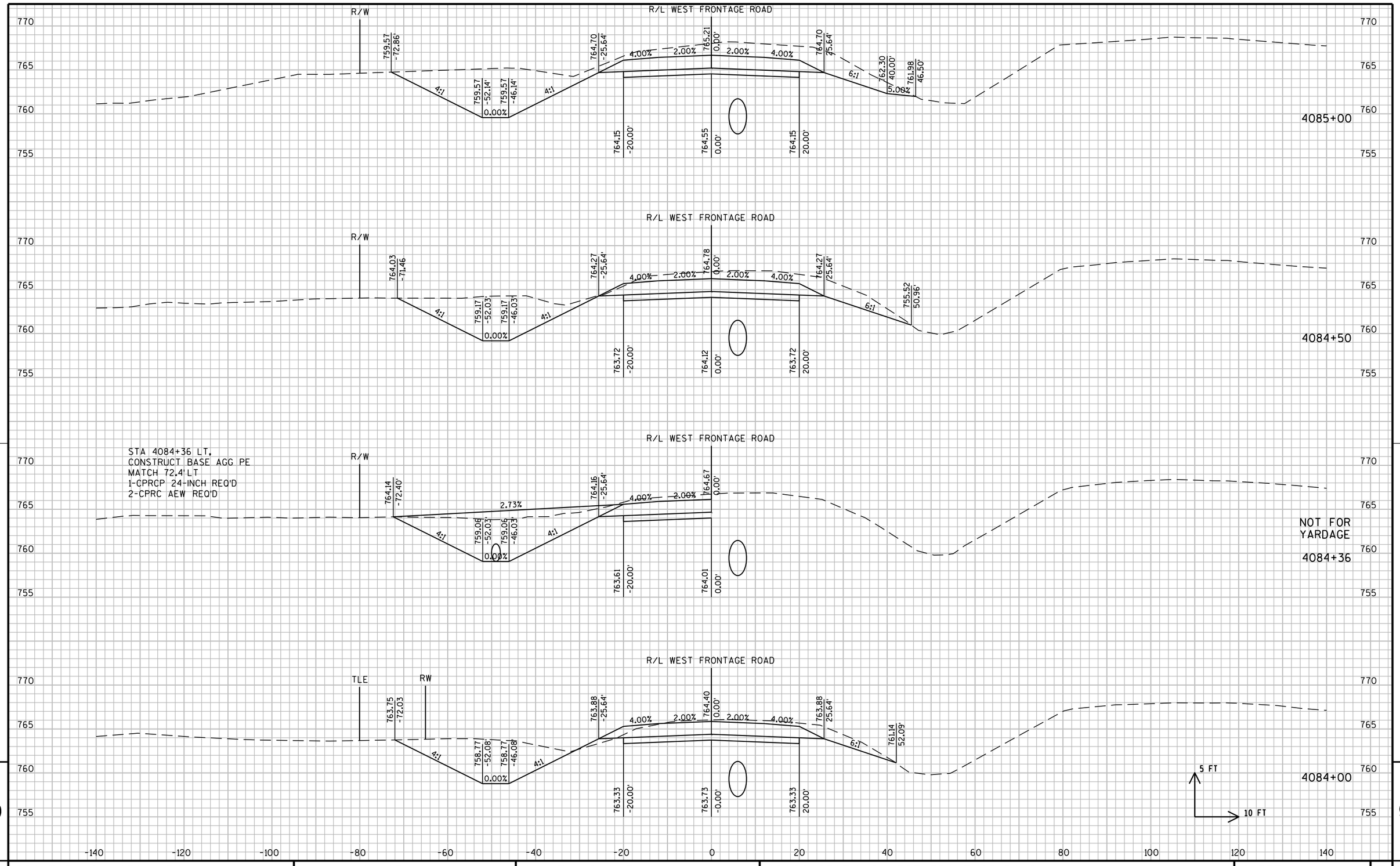
-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 304 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs34 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



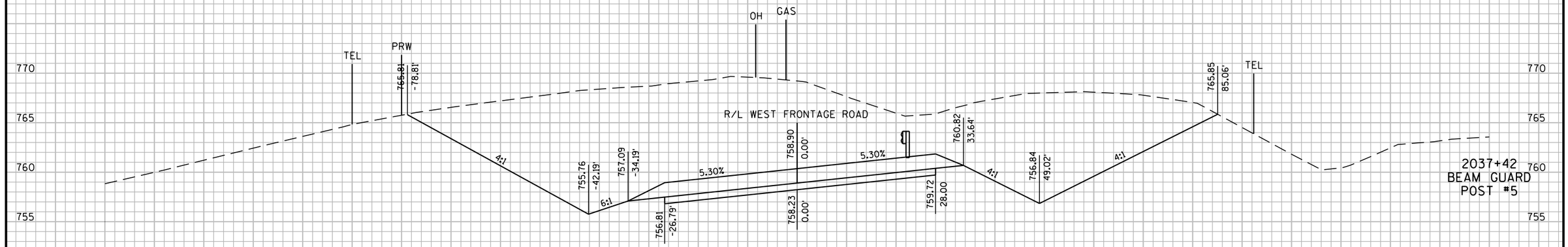
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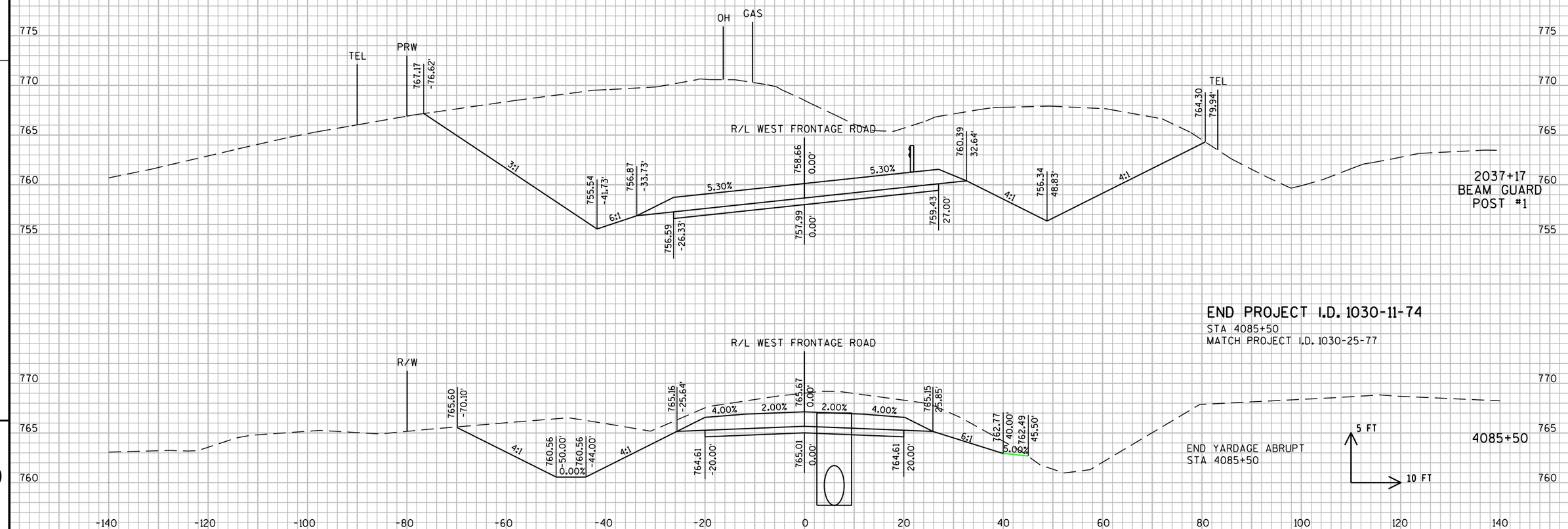
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 305 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs35 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21





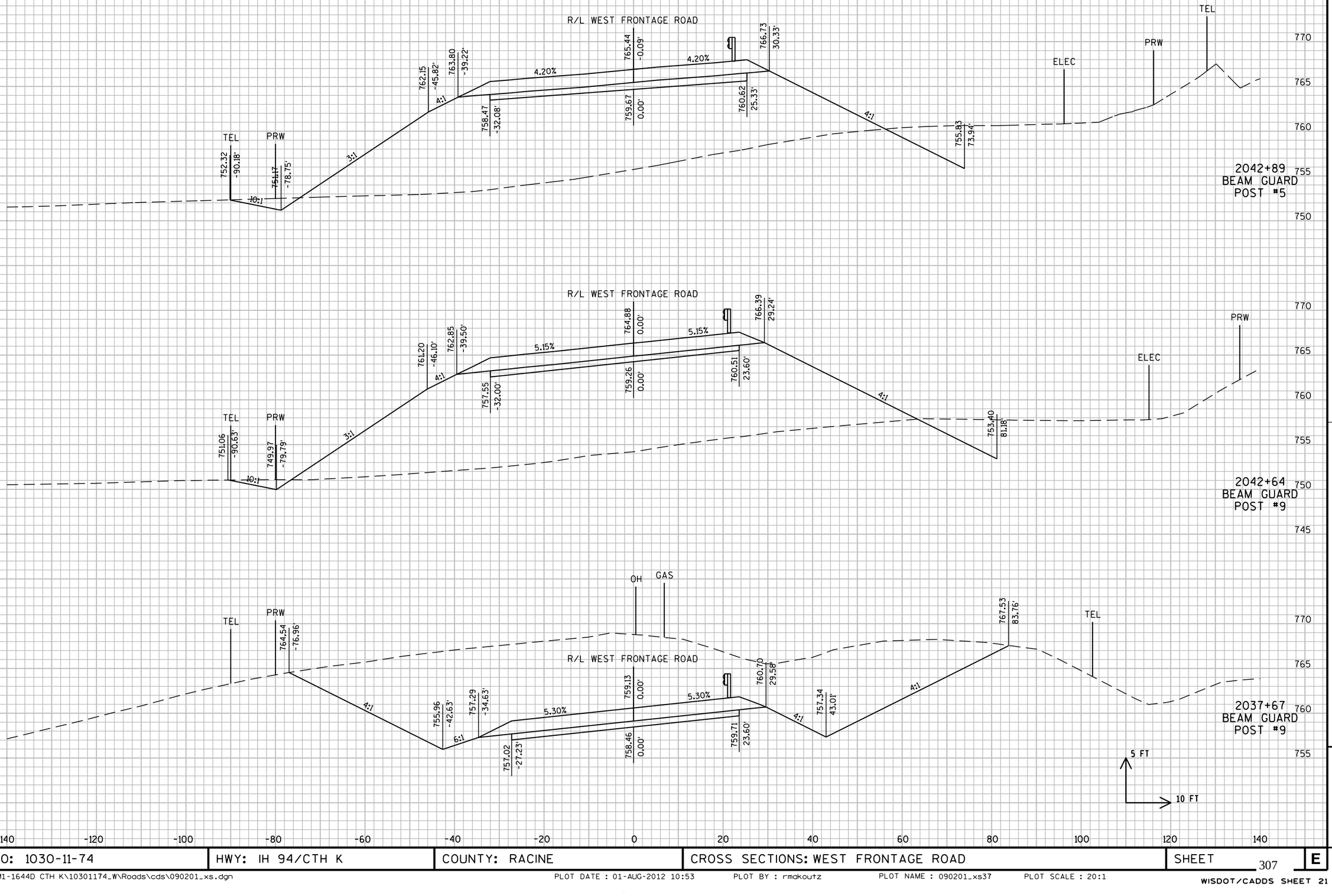
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 306 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs36 PLOT SCALE : 20:1

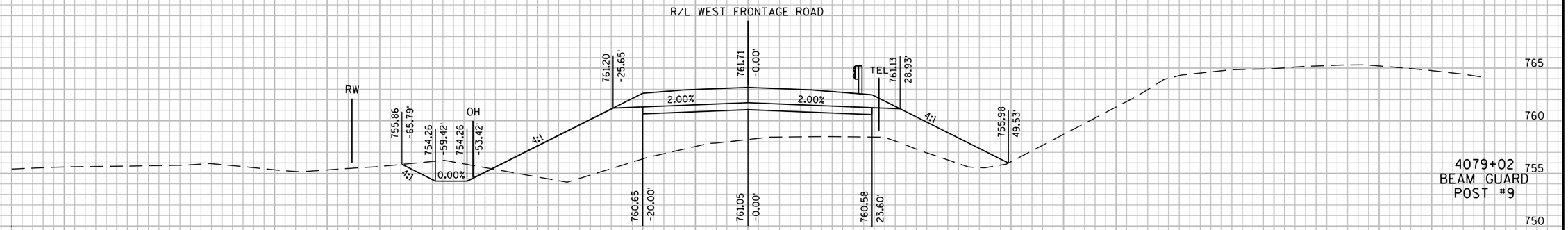
WISDOT/CADDS SHEET 21

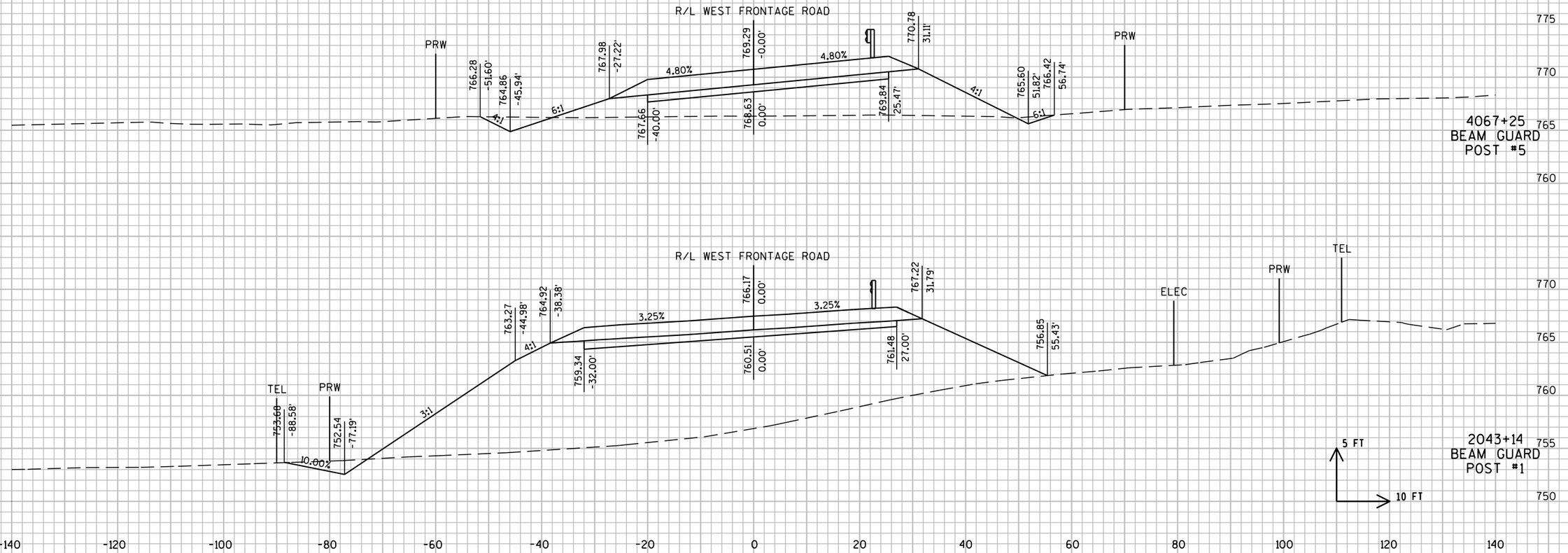


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 307 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:53 PLOT BY : rmakoutz PLOT NAME : 090201_xs37 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



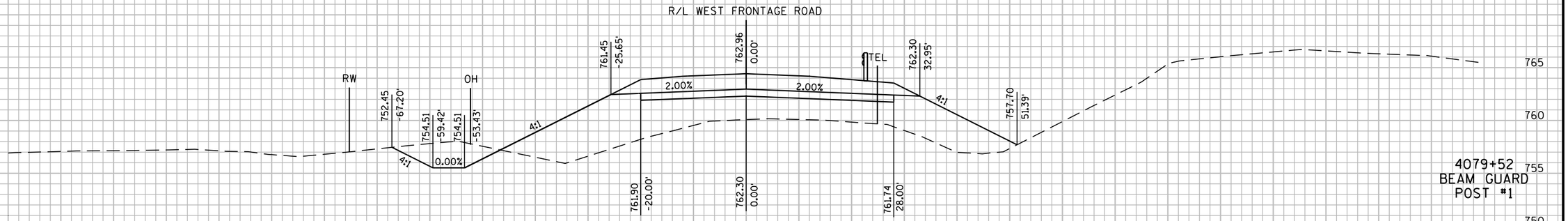


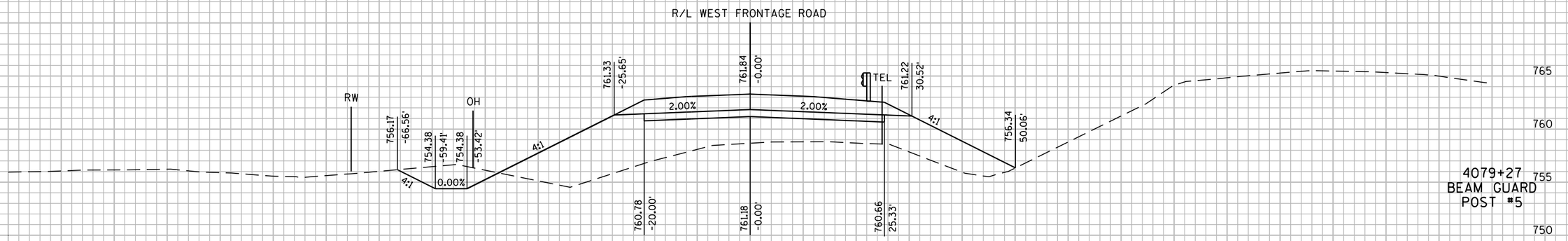
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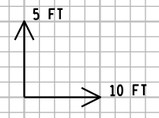
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 308 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs38 PLOT SCALE : 20:1





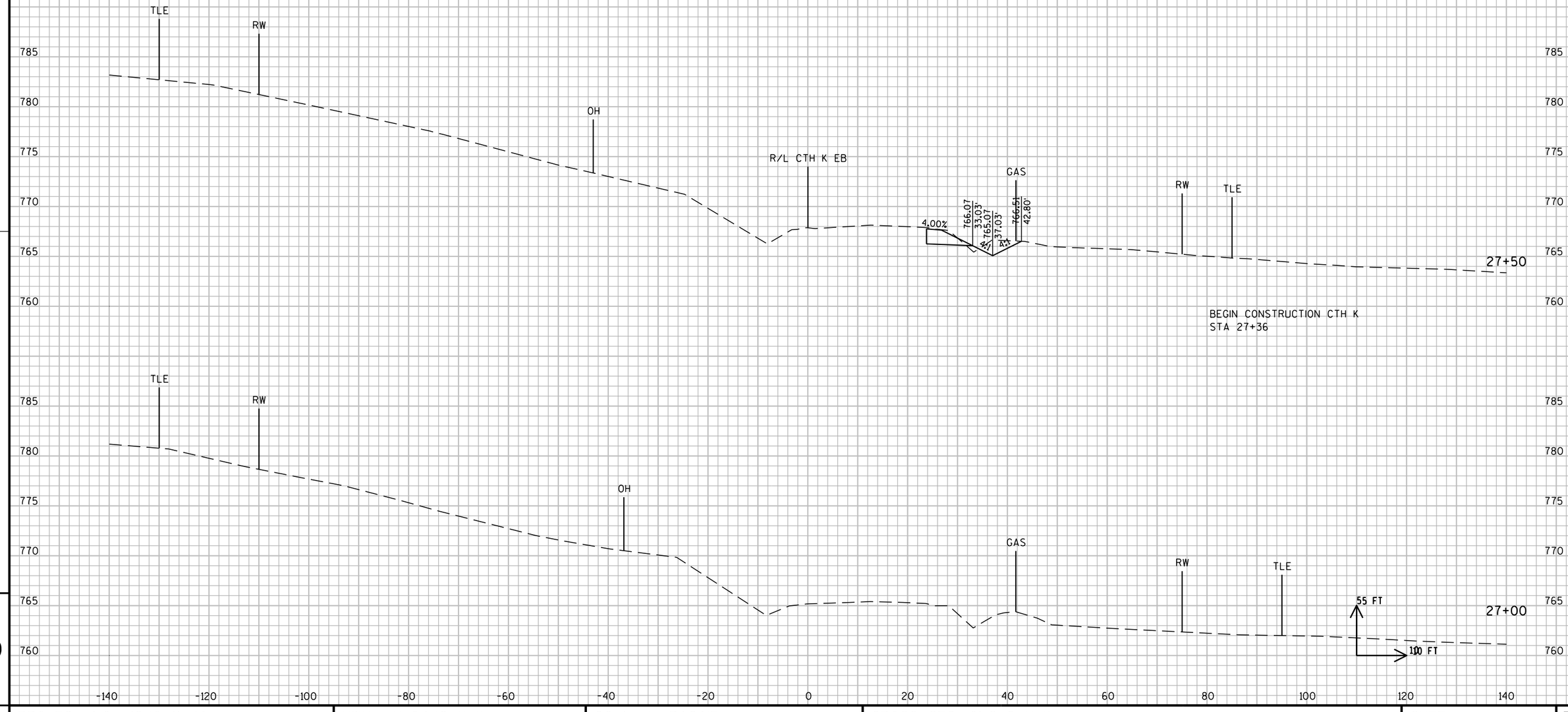


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: WEST FRONTAGE ROAD	SHEET 309	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs39 PLOT SCALE : 20:1

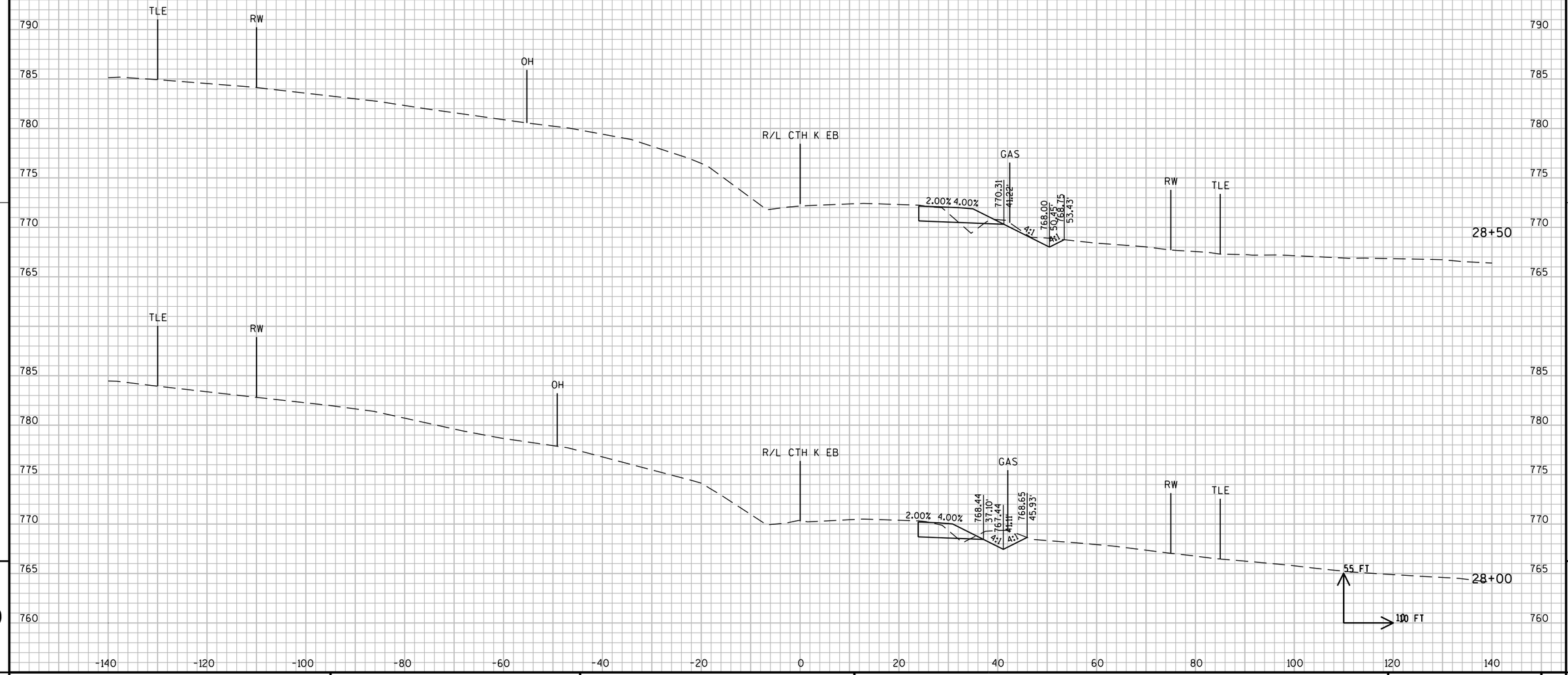
WISDOT/CADDS SHEET 21



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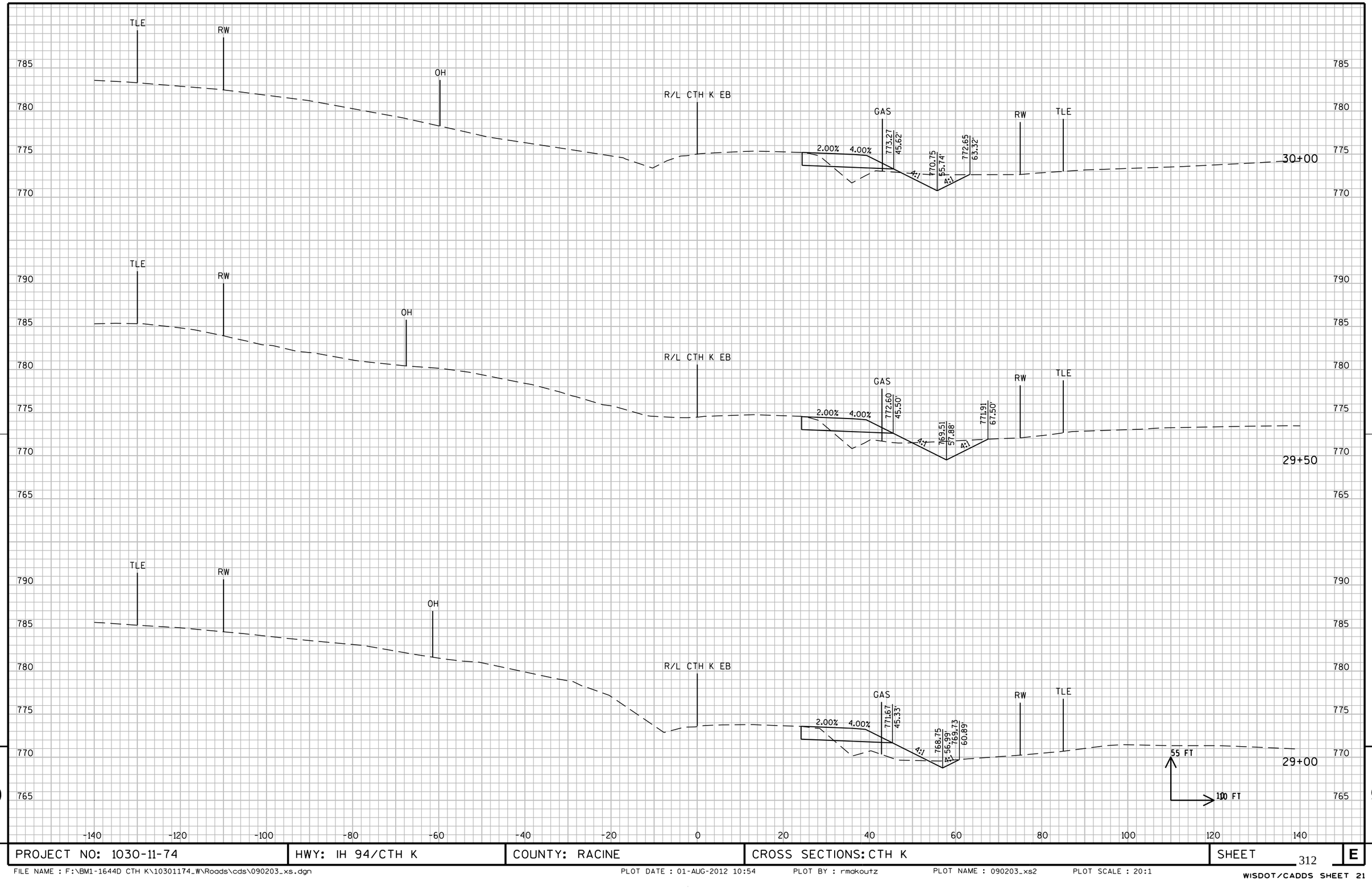
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET 310	E



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs1 PLOT SCALE : 20:1

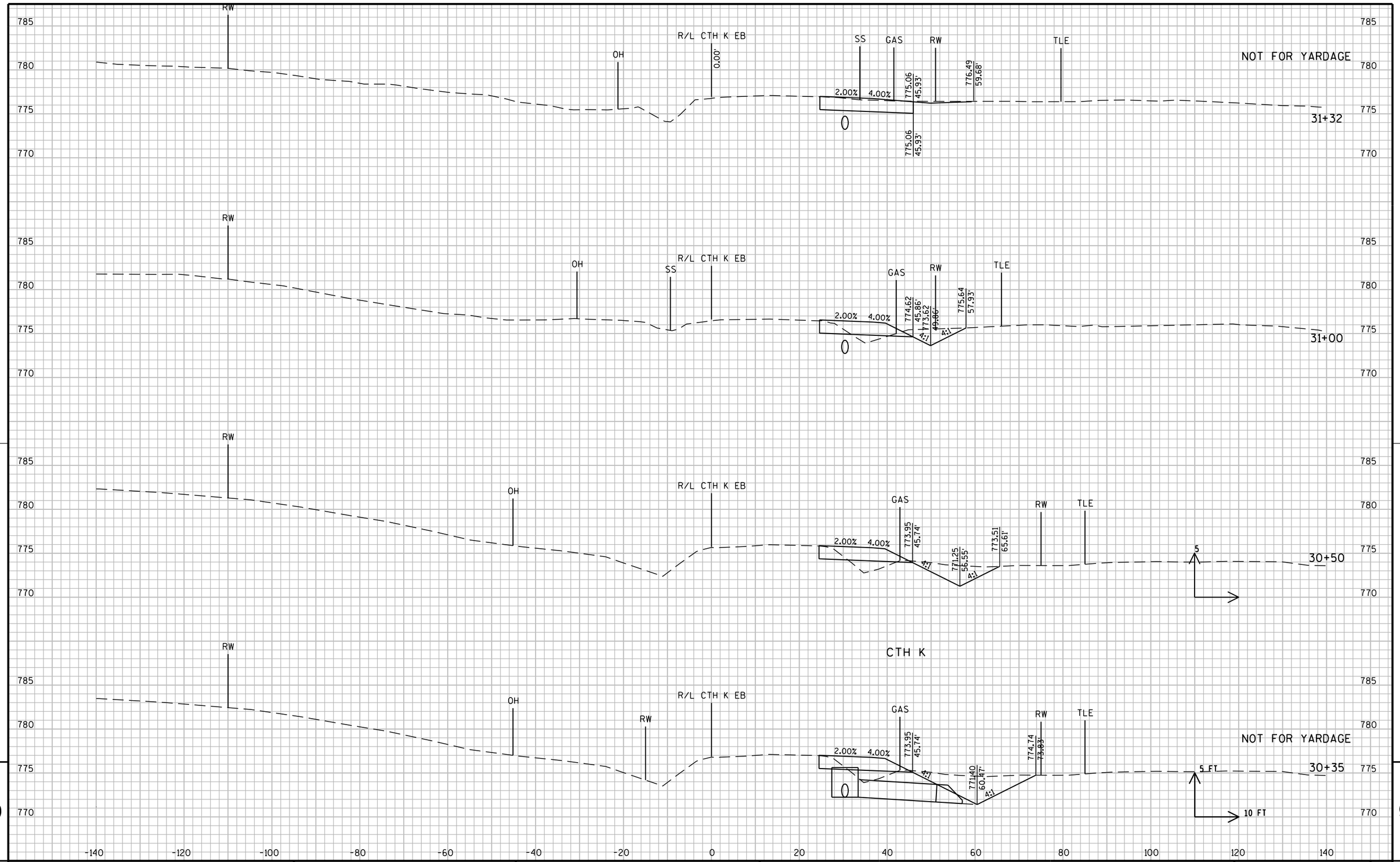


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs2 PLOT SCALE : 20:1
WISDOT/CADDS SHEET 21

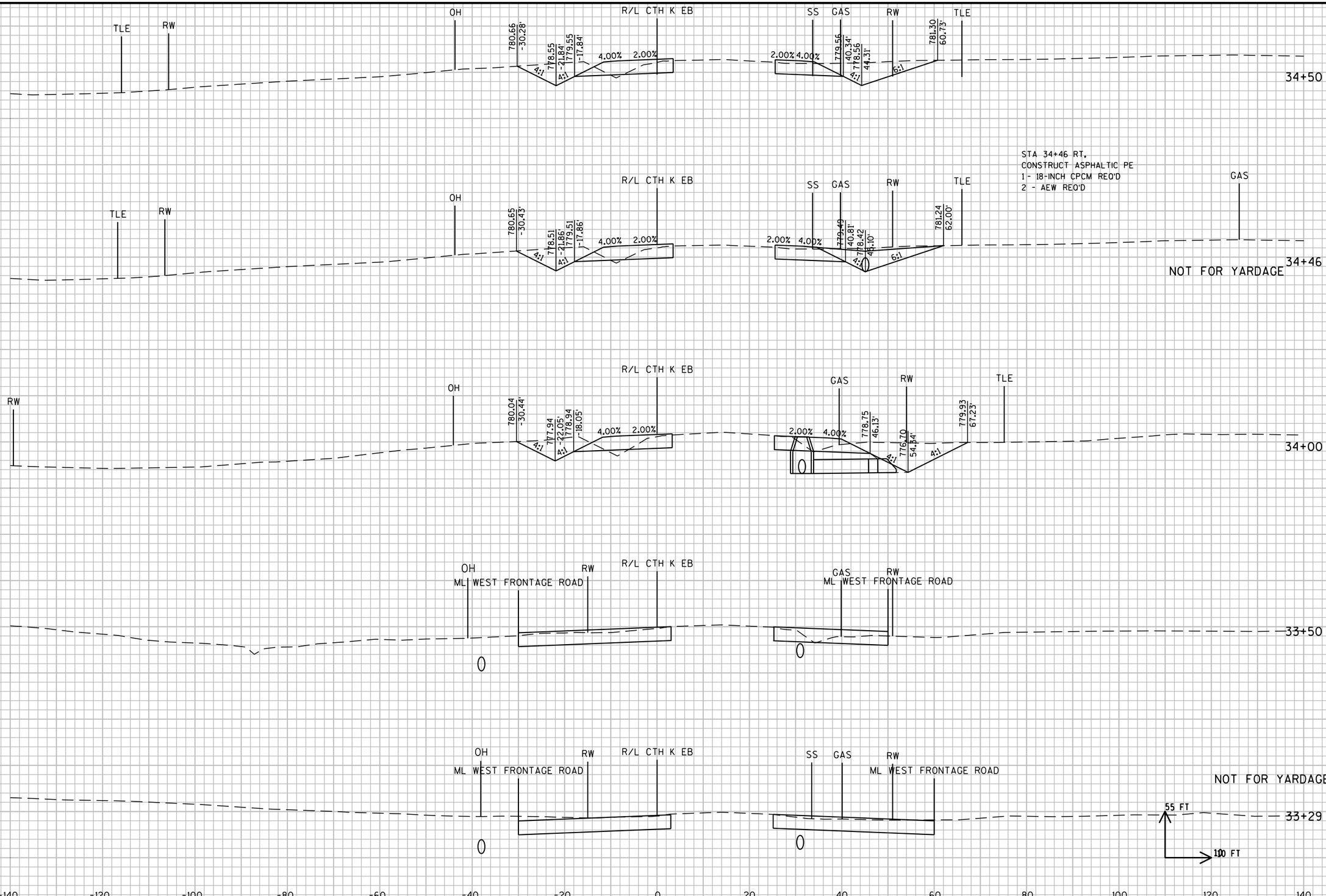


PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS:	SHEET 313 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs3 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

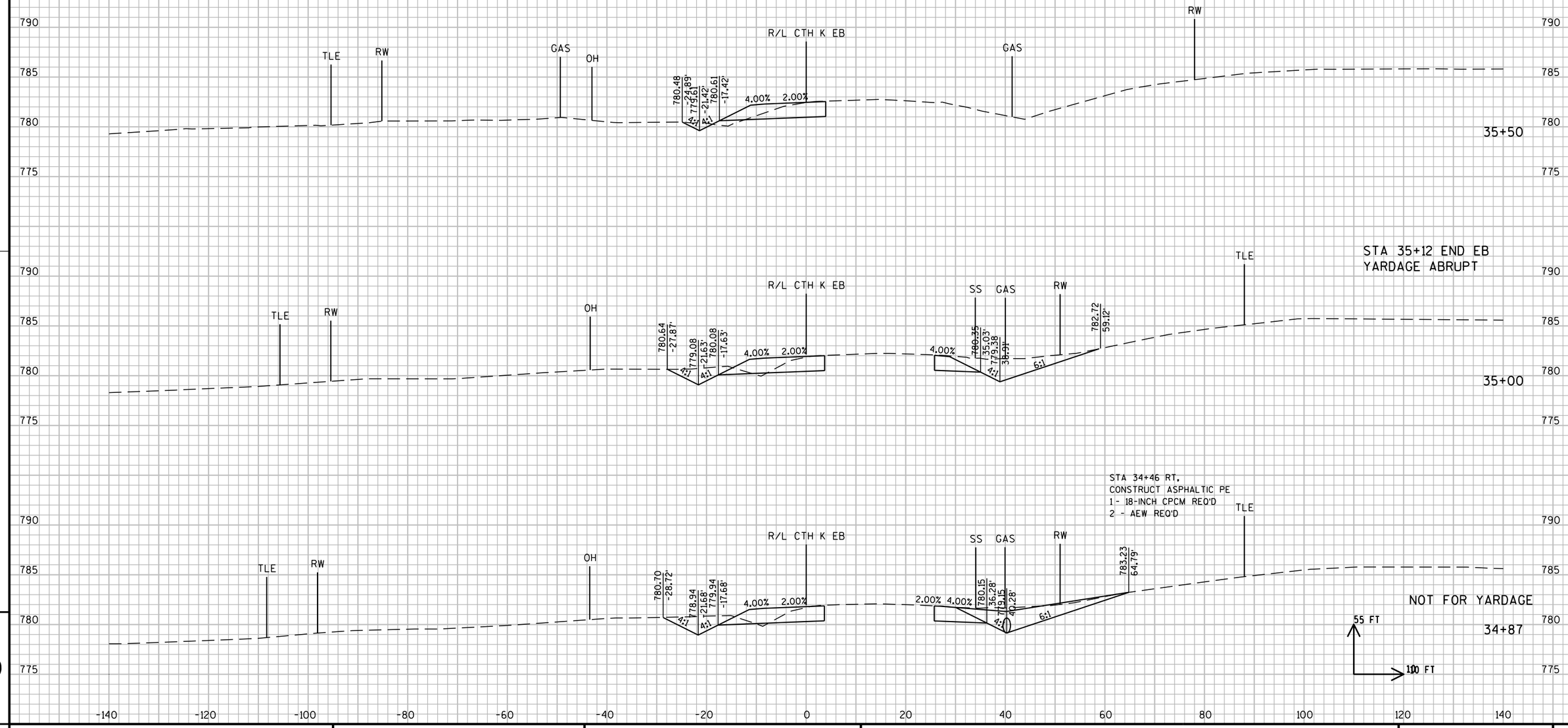
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET 314	E



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET 315	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs5 PLOT SCALE : 20:1

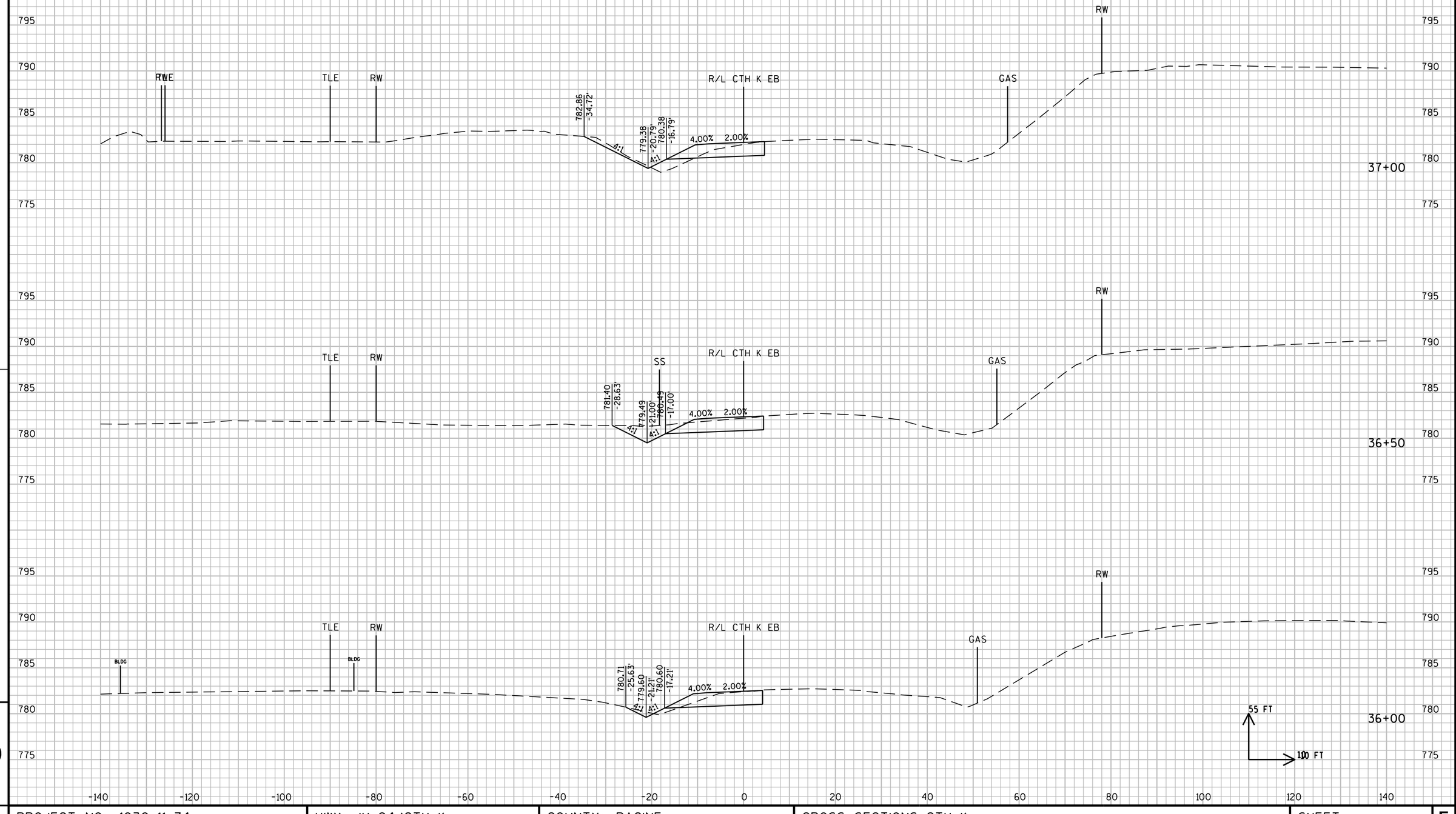
WISDOT/CADDS SHEET 21



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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET	E

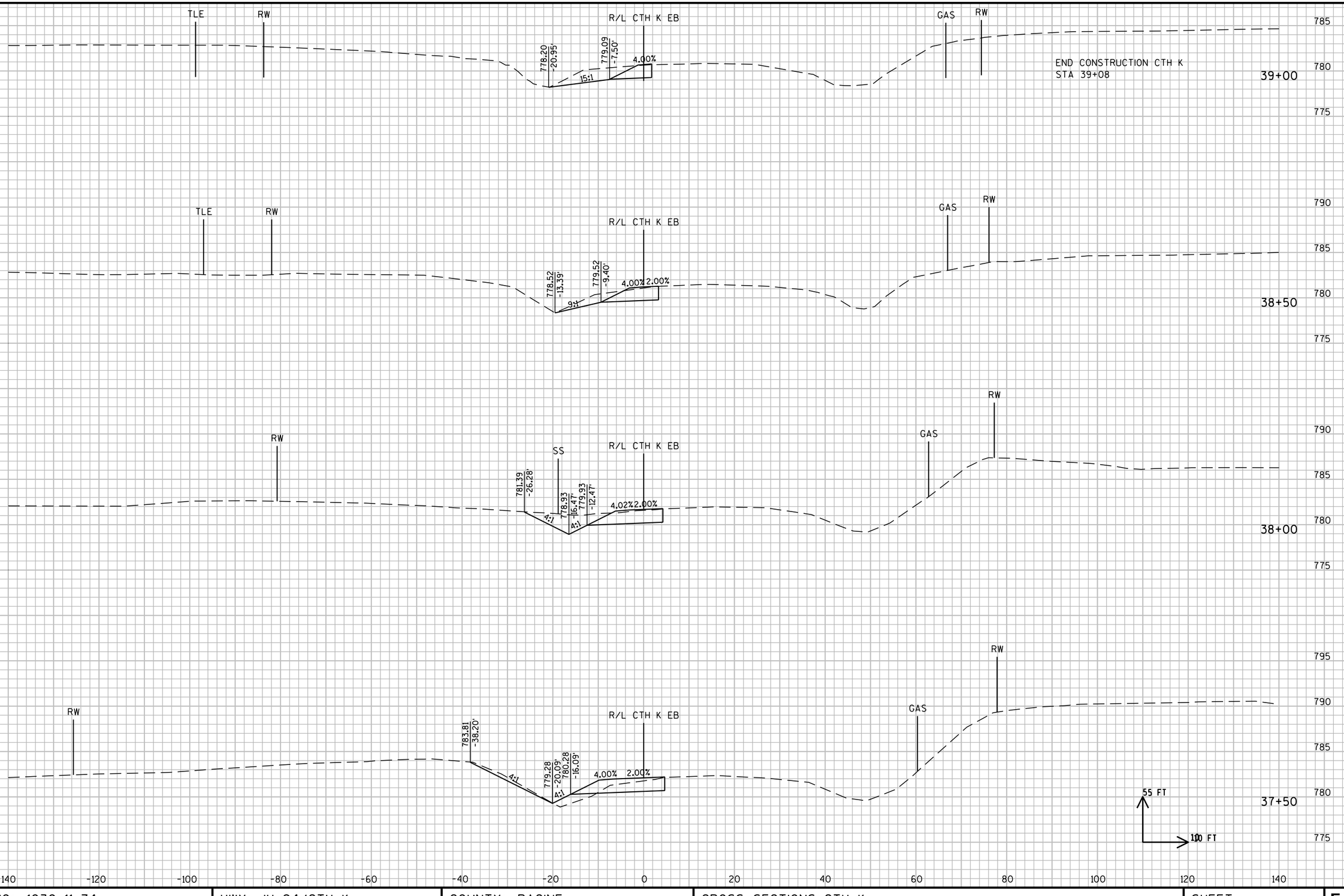
FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs6 PLOT SCALE : 20:1



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET 317 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs7 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

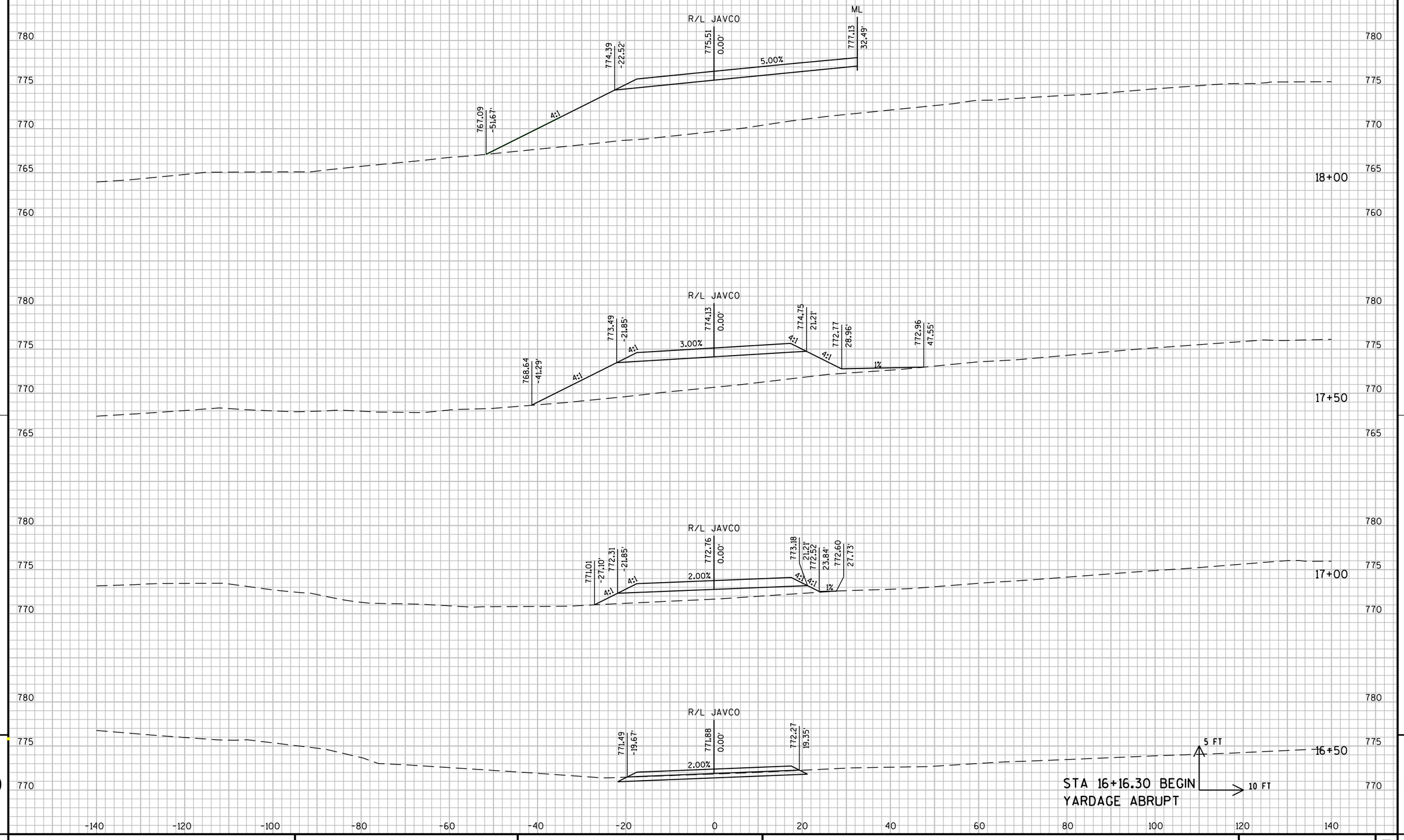


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: CTH K	SHEET 318	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090203_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090203_xs8 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



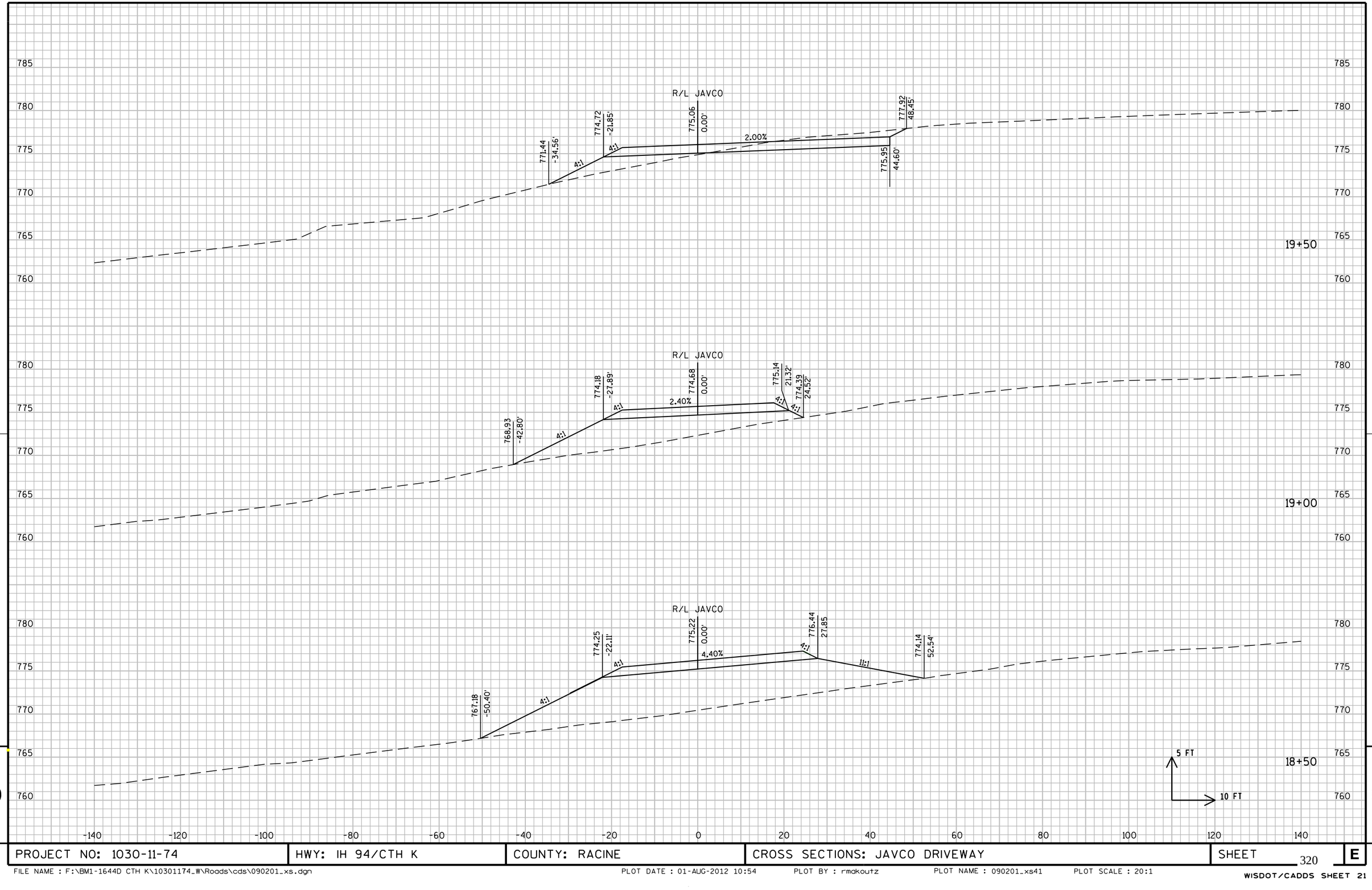
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: JAVCO DRIVEWAY	SHEET 319	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs40 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

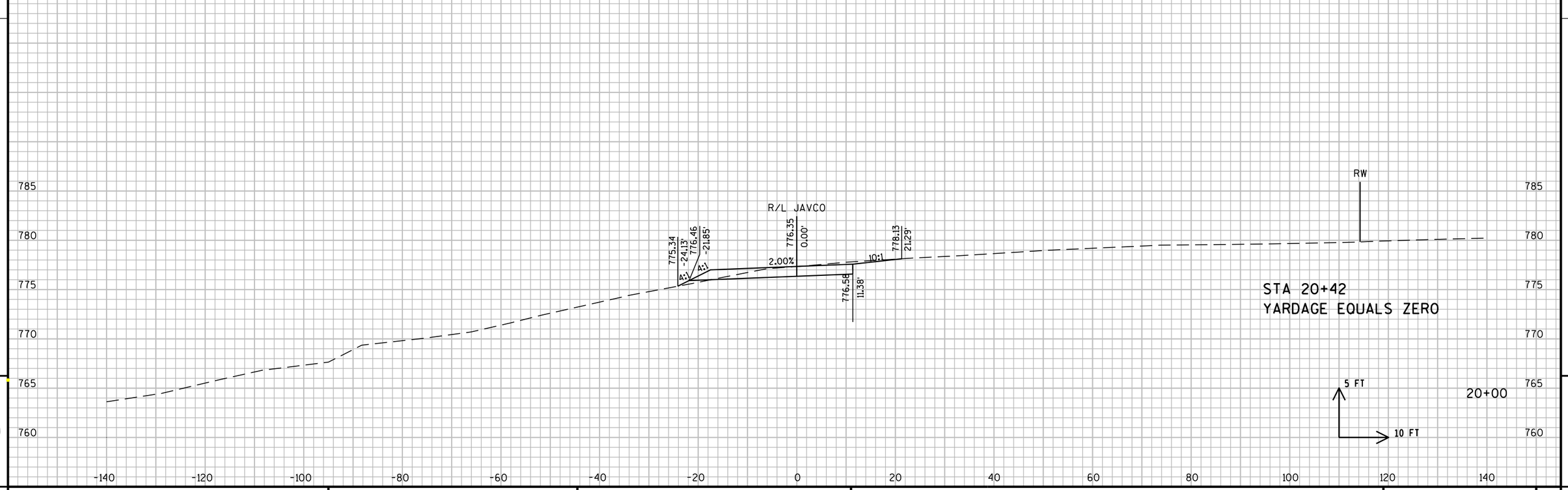


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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: JAVCO DRIVEWAY	SHEET 320	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs41 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21

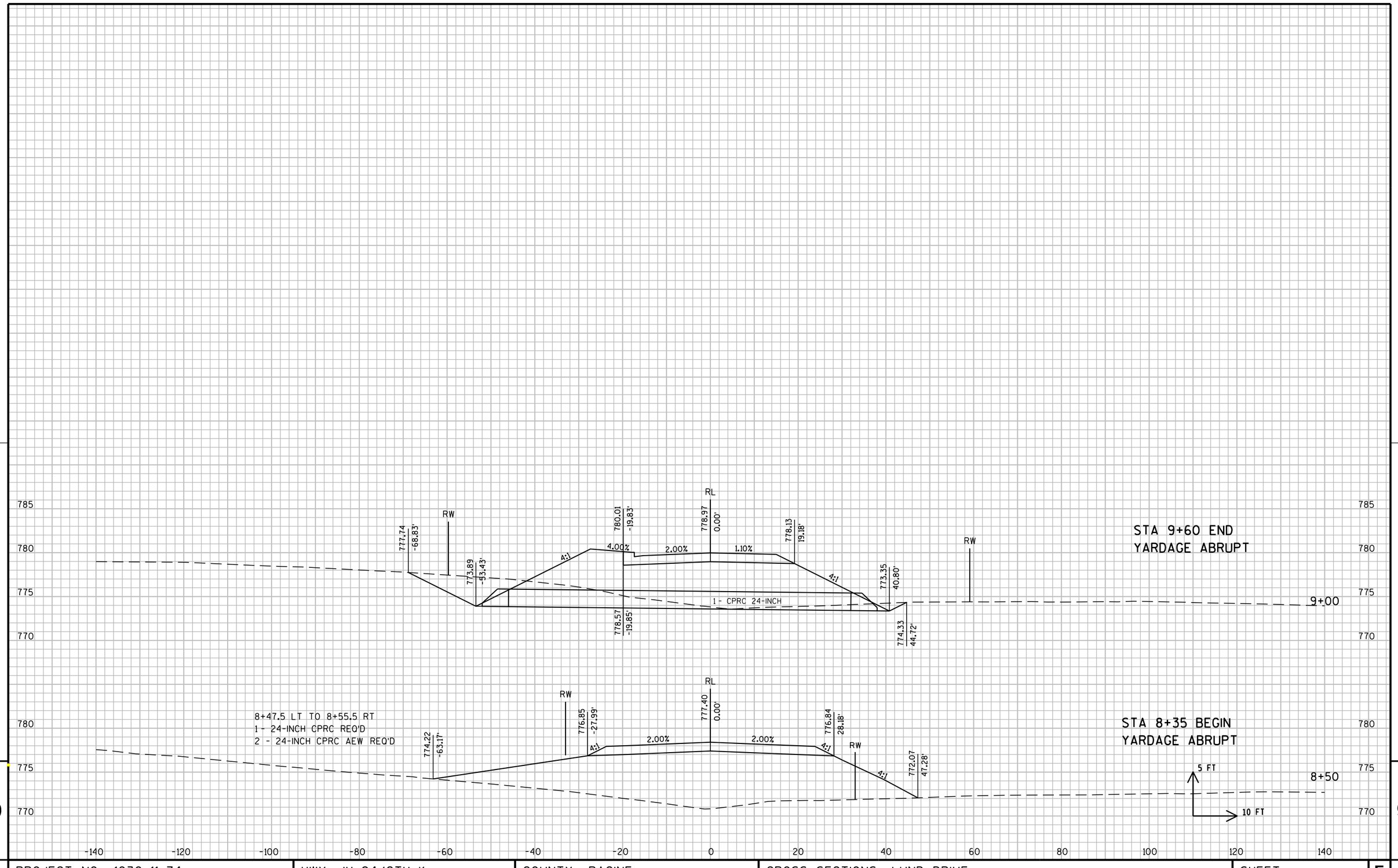


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9

PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: JAVCO DRIVEWAY	SHEET	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs42 PLOT SCALE : 20:1



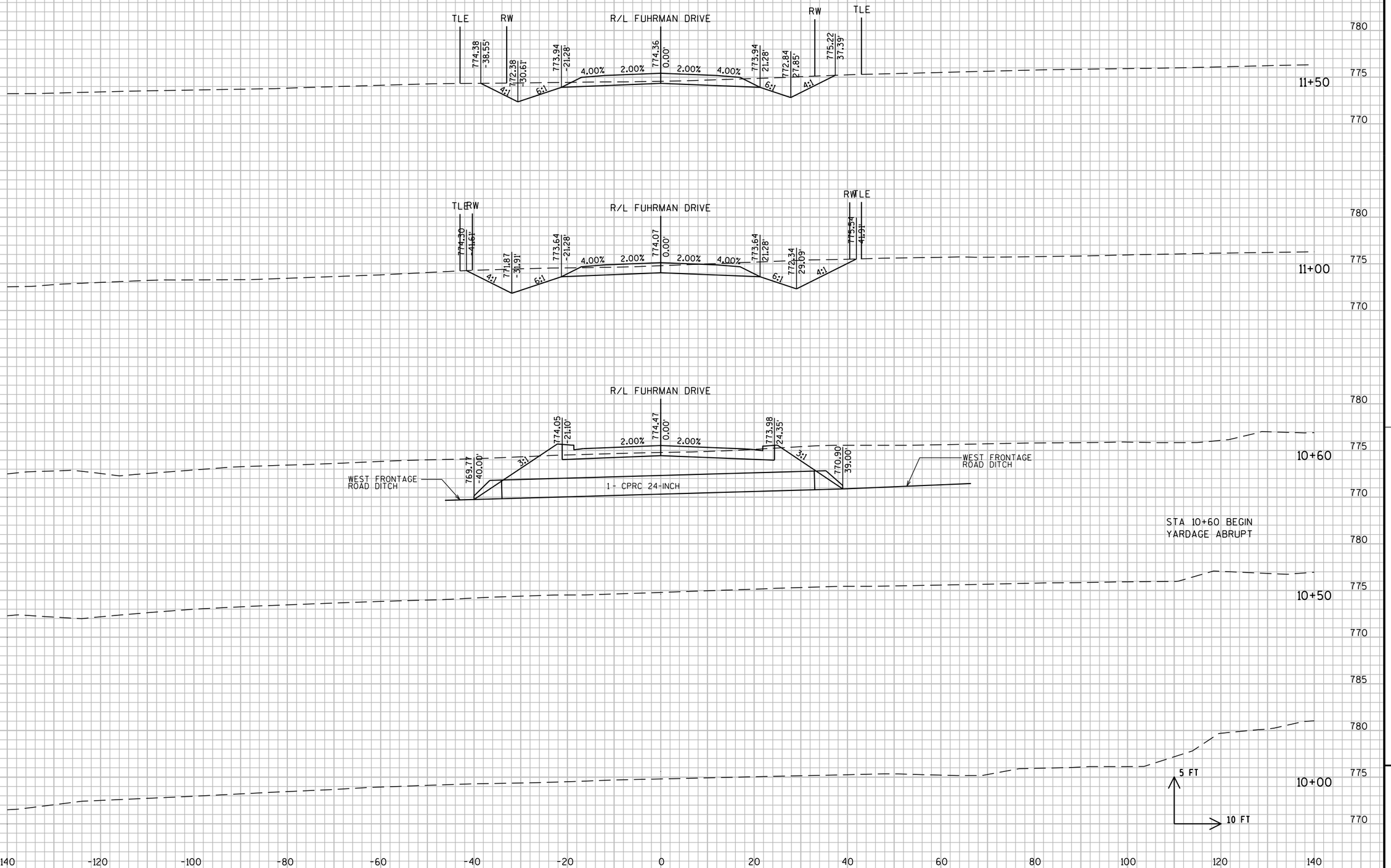
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PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: LUND DRIVE	SHEET 322	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090201_xs.dgn PLOT DATE : 01-AUG-2012 10:54 PLOT BY : rmakoutz PLOT NAME : 090201_xs43 PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



9

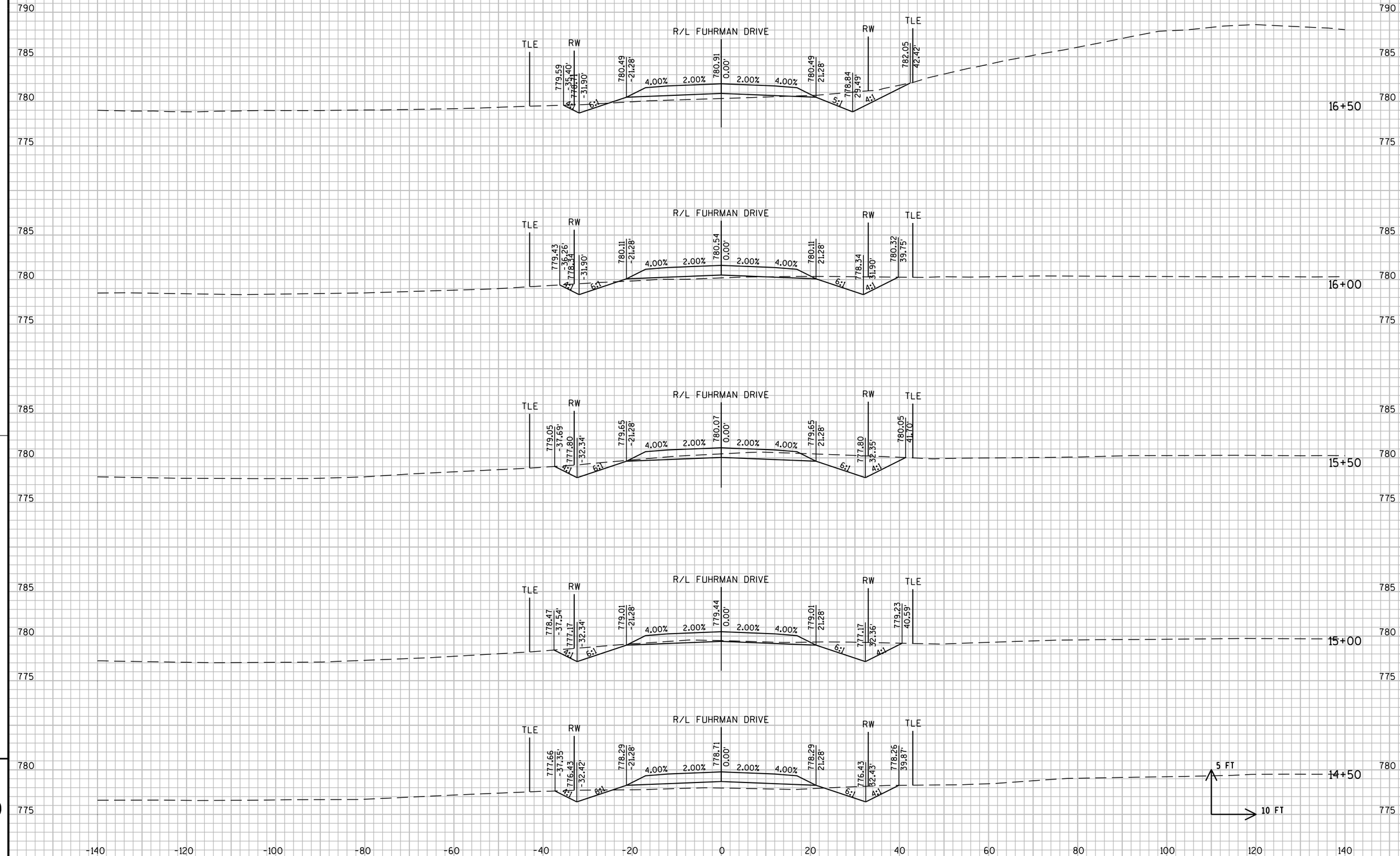
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: FUHRMAN DRIVE	SHEET 323	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090204_xs.dgn PLOT DATE : 29-AUG-2012 10:18 PLOT BY : cfranzen PLOT NAME : 090204_xs PLOT SCALE : 20:1

WISDOT/CADDS SHEET 21



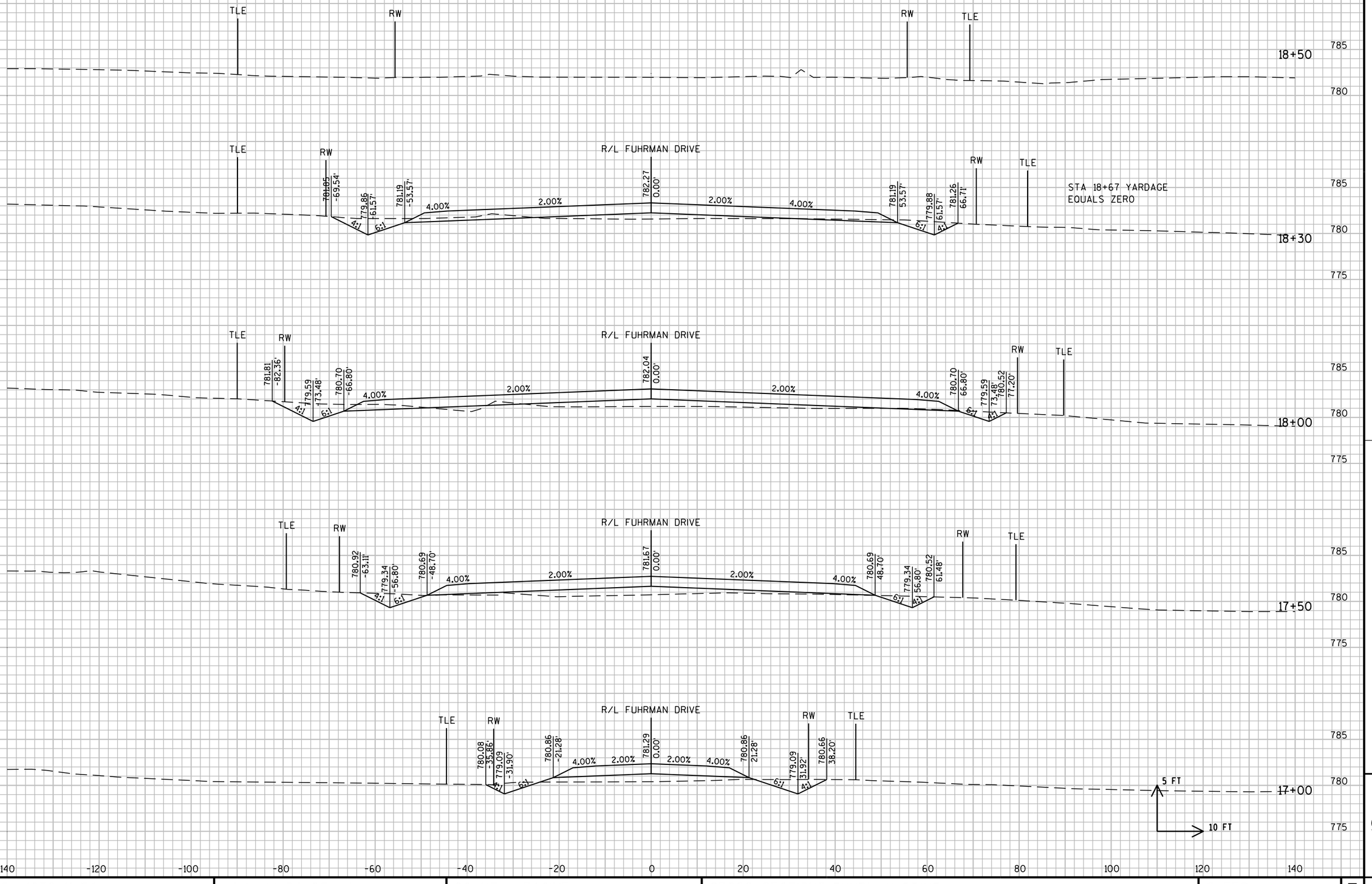
PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: FUHRMAN DRIVE	SHEET 324	E



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: FUHRMAN DRIVE	SHEET 325	E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090204_xs.dgn PLOT DATE : 29-AUG-2012 16:28 PLOT BY : cfranzen PLOT NAME : 090204_xs2 PLOT SCALE : 20.00004:1

WISDOT/CADDS SHEET 21



PROJECT NO: 1030-11-74	HWY: IH 94/CTH K	COUNTY: RACINE	CROSS SECTIONS: FUHRMAN DRIVE	SHEET 326 E

FILE NAME : F:\BM1-1644D CTH K\10301174_W\Roads\cds\090204_xs.dgn PLOT DATE : 29-AUG-2012 16:28 PLOT BY : cfranzen PLOT NAME : 090204_xs3 PLOT SCALE : 20.00004:1

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

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