

SWL AUGUST 2014

PROJECT ID: 5990-00-84

COUNTY: ROCK

WITH:

ORDER OF SHEETS

Section No. 1 Title

Section No. 2 Typical Sections and Details (Includes Erosion Control)

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

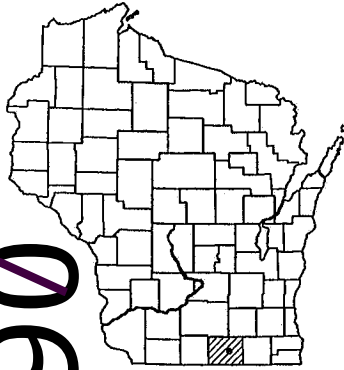
Section No. 8 Structure Plans

Section No. 9 Computer Earthwork Data

Section No. 9 Cross Sections

TOTAL SHEETS = 172

06



N

DESIGN DESIGNATION

A.A.D.T. (2015) = 4,000

A.A.D.T. (2035) = 6,400

D.H.V. (2035) = 870

D.D. = 59/41

T. = 4.6%

DESIGN SPEED = 30 MPH

ESALS = 540,200

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

PROPERTY LINE

LOT LINE

LIMITED HIGHWAY EASEMENT

EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT

PROPOSED CULVERT (Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND

MARSH OR ROCK PROFILE (To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CITY OF JANESVILLE, JACKSON STREET

(ROCK RIVER BRIDGE B-53-0287)

LOCAL STREET

ROCK COUNTY

STATE PROJECT NUMBER

5990-00-84

END PROJECT 5990-00-84

STA. 14+50.00

STRUCTURE B-53-0287

BEGIN PROJECT 5990-00-84

STA. 6+00.00

N = 264,228.25

E = 494,630.25

LAYOUT

SCALE 0 500 FT. 1000 FT.

TOTAL NET LENGTH OF CENTERLINE = 0.161 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Rock County NAD 83 (1991)

STATE PROJECT

5990-00-84

FEDERAL PROJECT

PROJECT

WISC 2014296

CONTRACT

1

ACCEPTED FOR

CITY

JANESVILLE

4/10/14

Carl J. Wilson

Director of Public Works

ORIGINAL PLANS PREPARED BY

MSA

PROFESSIONAL SERVICES

TRANSPORTATION • MUNICIPAL • REMEDIATION

DEVELOPMENT • ENVIRONMENTAL

2901 International Lane, Suite 300 Madison, WI 53704

608-242-7779 1-800-446-0679 Fax: 608-242-6664

WISCONSIN

BRADLEY S. REENTS

E-41069

MADISON

WI

PROFESSIONAL ENGINEER

DATE: 04/10/14

Bradley S. Reents

Professional Engineer

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor

MSA PROFESSIONAL SERVICES, INC.

Designer

MSA PROFESSIONAL SERVICES, INC.

Management Consultant

KJOHNSON ENGINEERS

C.O. Examiner

APPROVED FOR THE DEPARTMENT

DATE: 4/30/14

Management Consultant Signature

E

FILE NAME : \$\$\$...designfile....\$\$

PLOT DATE : \$\$\$...plottingdate...\$\$

PLOT BY : \$\$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$\$...plotscale....\$\$

WISDOT/CADDS SHEET 10

GENERAL NOTES

TYPICAL FINISHED SECTIONS SHOW THE GENERAL ROADWAY FEATURES THROUGHOUT THE PROJECT. PAVEMENT SLOPES, BORDER SLOPES, ETC., MAY VARY WITHIN THE STATION LIMITS OF EACH SECTION.

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS. SEE DETAIL SHEETS AND CROSS SECTIONS FOR SLOPES AND GRADES.

ALL LENGTHS ARE IN FEET EXCEPT AS SHOWN.

OFFSETS FOR INLETS AND MANHOLES ARE GIVEN TO THE CENTER OF STRUCTURE. STORM SEWER PIPE LENGTHS ARE TO CENTER OF STRUCTURES.

CONCRETE PIPE SHALL HAVE JOINT TIES INSTALLED ON THE LAST TWO PIPE JOINTS AND THE ENDWALL JOINT AT THE DISCHARGE END.

ELEVATIONS SHOWN ON THE STORM SEWER SHEETS ARE AT THE FLANGE OF THE CASTING. A MINIMUM 6" OF ADJUSTMENT RINGS REQUIRED, UNLESS OTHERWISE NOTED.

EARTHWORK WASTE MATERIAL SHOWN ON THE EARTHWORK SUMMARY SHALL BE HAULED FROM THE PROJECT, EXCEPT AS DIRECTED BY ENGINEER.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FACE OF CURB.

ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, FERTILIZER AND SOD. DISTURBED AREAS BEHIND THE BACK OF NEW SIDEWALK SHALL BE TOPSOILED, SEEDED, FERTILIZED AND E-MATTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR RESTORATION WILL ONLY BE FOR AREAS SHOWN ON THE PLANS WITHIN THE SLOPE INTERCEPTS.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE OF CONSTRUCTION OPERATIONS AND MAINTAINED AS DETERMINED BY ENGINEER.

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE NOT SHOWN.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN IN THE PLANS. SIDEWALK REPLACEMENT SHOULD BE TO THE NEAREST JOINT. LIMITS ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE ENGINEER.

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

THE LIMITS OF PAVEMENT REMOVAL ON SIDE STREETS IS APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER.

THE REMOVAL OF CONCRETE DRIVEWAYS SHALL BE MEASURED AND PAID AS REMOVING CONCRETE SIDEWALK.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER. AN UNDISTRIBUTED QUANTITY OF SELECT CRUSHED MATERIAL IS INCLUDED FOR EBS BACKFILL.

PIPE ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

GRADES SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

THE EROSION CONTROL FEATURES ARE SHOWN ON THE PLAN AND ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

THE 4" HMA PAVEMENT TYPE E-1 SHALL BE CONSTRUCTED USING A 2¼" LOWER LAYER OF 19 MM NOMINAL SIZE AGGREGATE AND A 1¾" UPPER LAYER OF 12.5 MM NOMINAL SIZE AGGREGATE. THE 2" ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING 2" OF 12.5 MM NOMINAL SIZE AGGREGATE.

SAWING OF CONCRETE SIDEWALK SHALL BE INCIDENTAL TO THE BID ITEM OF REMOVING CONCRETE SIDEWALK.

PROOF ROLLING OF SUBBASE IS REQUIRED BEFORE PLACEMENT OF BASE COURSE AND IS INCIDENTAL TO COMMON EXCAVATION. PROOF ROLLING SHALL BE WITNESSED BY THE ENGINEER.

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	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

INDEX OF TYPICAL SECTIONS & DETAIL SHEETS

1. GENERAL NOTES

2. PROJECT OVERVIEW

3. TYPICAL SECTIONS

4. CONSTRUCTION DETAILS

5. RAMP DETAILS

6. SIDEWALK AND CURB & GUTTER STAKING DETAILS

7. EROSION CONTROL

8. STORM SEWER
9. LANDSCAPING PLAN AND DETAILS

10. PERMANENT SIGNING AND PAVEMENT MARKINGS

11. LIGHTING AND CONDUIT

12. DETOUR PLAN

13. TRAFFIC CONTROL OVERVIEW

14. CONTROL POINT TIES

15. ALIGNMENT OVERVIEW



Dial 811 or (800) 242-8511 **DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

www.DiggersHotline.com

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: ERIC HEGGELUND
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
PHONE: (608) 275-3301
EMAIL: eric.heggelund@wisconsin.gov

DESIGN CONTACTS

MSA PROFESSIONAL SERVICES
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2901 INTERNATIONAL LANE, SUITE 300
MADISON, WI 53704-3133
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E-MAIL: breents@msa-ps.com

CITY OF JANESVILLE
ATTN: MATT MCGRATH
18 N. JACKSON STREET
JANESVILLE, WI 53547
PHONE: (608) 755-3160
FAX: (608) 755-3189
E-MAIL: mcgrathm@ci.janesville.wi.us

UTILITIES

SANITARY SEWER, STORM SEWER, AND WATERMAIN:
CITY OF JANESVILLE ENGINEERING
ATTN: MATT MCGRATH
18 N. JACKSON STREET
JANESVILLE, WI 53547
PHONE: (608) 755-3168
FAX: (608) 755-3189
E-MAIL: mcgrathm@ci.janesville.wi.us

TELEPHONE:
AT&T WISCONSIN
ATTN: SHANE LEVAKE
301 E. MILWAUKEE STREET
JANESVILLE, WI 53545
PHONE: (608) 755-5586
E-MAIL: sl3184@att.com

CABLE TELEVISION:
CHARTER COMMUNICATIONS
ATTN: RANDY STEURER
1348 PLAINFIELD AVENUE
JANESVILLE, WI 53545
PHONE: (608) 373-7544
E-MAIL: randy.steurer@chartercom.com

GAS AND ELECTRIC:
ALLIANT ENERGY
ATTN: RON ROHM
3730 KENNEDY ROAD
JANESVILLE, WI 53545-8812
PHONE: (608) 757-7514
E-MAIL: ronaldrohm@alliantenergy.com

STANDARD ABBREVIATIONS

AC

ACW

AH

ALUM.

A.P.

ASPH

BAD

BK

BLK

BOC

BOW

BM

CL or C/L

Δ

CONC

CSM

CTH

CY

D

DIA

E

EB

EBS

EOP

ET AL

EXIST or EX.

EW

FOC

FT

FT2

GN

GV

HB

HERCP

IN

INV

IP

L

LC

LCB

LF

LS

LT

MH

MI

MON

N

NB

NO

PE

PT

PC

PI

PT

PL

POB

R

RP

R

RL or R/L

REQ'D

RT

R/W

RD

S

SB

SO

SAN

STD

STH

STM

SEC

SSPRC

SSPRCHE

STA

STR

SY

T

TAN

TEMP

TLE

TYP

T or TN

W

WB

WM

X

Y

ACRES

APRON ENDWALL

AHEAD

ALUMINUM

ACCESS POINT

ASPHALT

BASE AGGREGATE DENSE

BACK

BLOCK

BACK OF CURB

BACK OF SIDEWALK

BENCHMARK

CENTERLINE

CENTRAL ANGLE or DELTA

CONCRETE

CERTIFIED SURVEY MAP

COUNTY TRUNK HIGHWAY

CUBIC YARD

DEGREE OF CURVE

DIAMETER

EAST

EASTBOUND

EXCAVATION BELOW SUBGRADE

EDGE OF PAVEMENT

AND OTHERS

EXISTING

END WALL

FACE OF CURB

FOOT

SQUARE FEET

GRID NORTH

GAS VALVE

HOSE BIB

HORIZONTAL ELLIPTICAL CONCRETE PIPE

INCH

INVERT

IRON PIPE

LENGTH

LENGTH OF CURVE

LONG CHORD

LONG CHORD BEARING

LINEAR FEET

LUMP SUM

LEFT

MANHOLE

MILE

MONUMENT

NORTH

NORTHBOUND

NUMBER

PERMANENT EASEMENT

POINT

POINT OF CURVATURE

POINT OF INTERSECTION

POINT OF TANGENCY

PROPERTY LINE

POINT OF BEGINNING

RADIUS

RADIUS POINT

RANGE

REFERENCE LINE

REQUIRED

RIGHT

RIGHT-OF-WAY

ROAD

SOUTH

SOUTHBOUND

SQUARE

SANITARY SEWER

STANDARD

STATE TRUNK HIGHWAY

STORM SEWER

SECTION

STORM SEWER PIPE REINFORCED CONCRETE

STORM SEWER PIPE REINFORCED CONCRETE

HORIZONTAL ELLIPTICAL

STATION

STRUCTURE

SQUARE YARD

TANGENT

TANGENT

TEMPORARY

TEMPORARY LIMITED EASEMENT

TYPICAL

TOWN

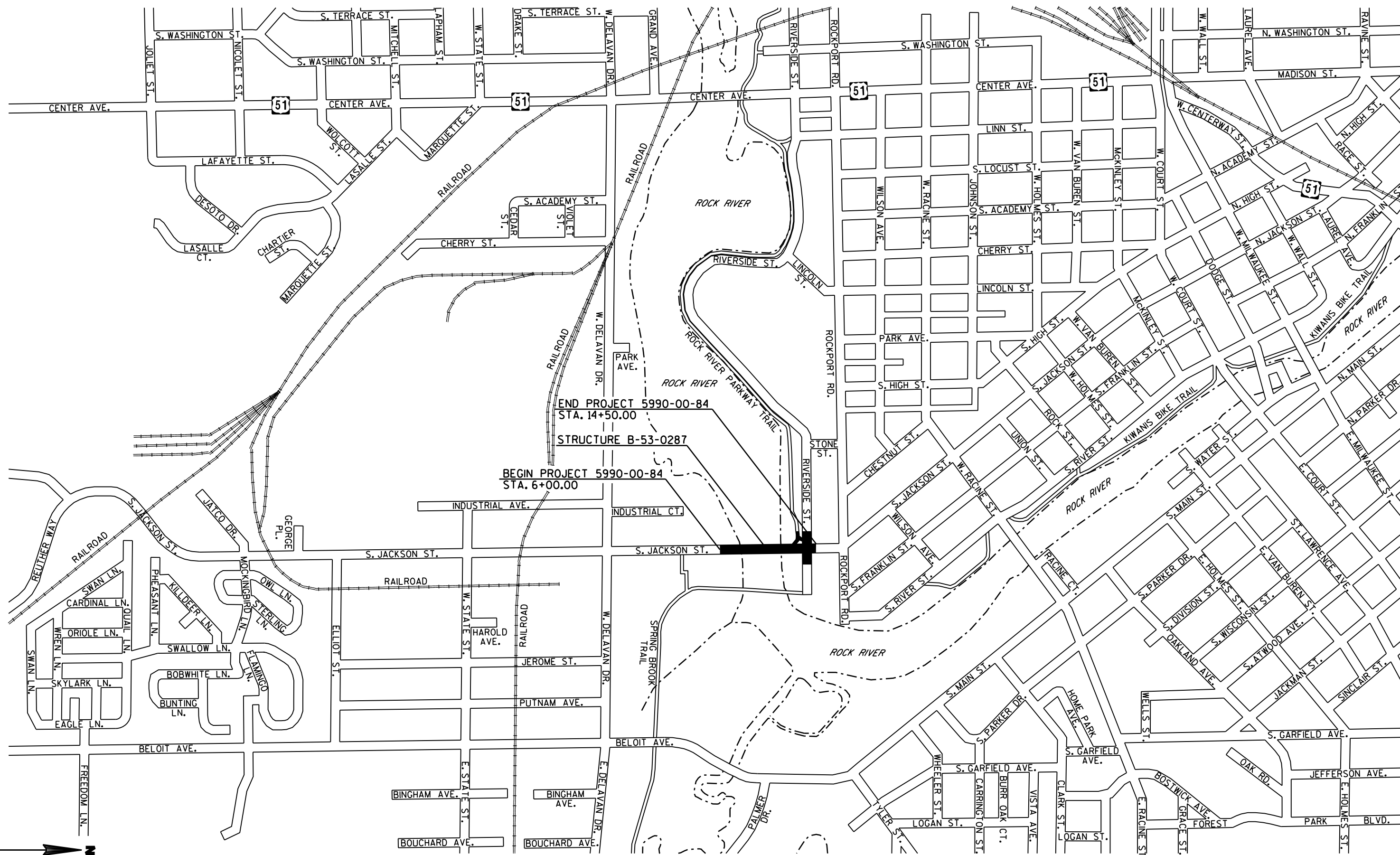
WEST

WESTBOUND

WATERMAIN

EAST GRID COORDINATE

NORTH GRID COORDINATE



PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

PROJECT OVERVIEW

SHEET

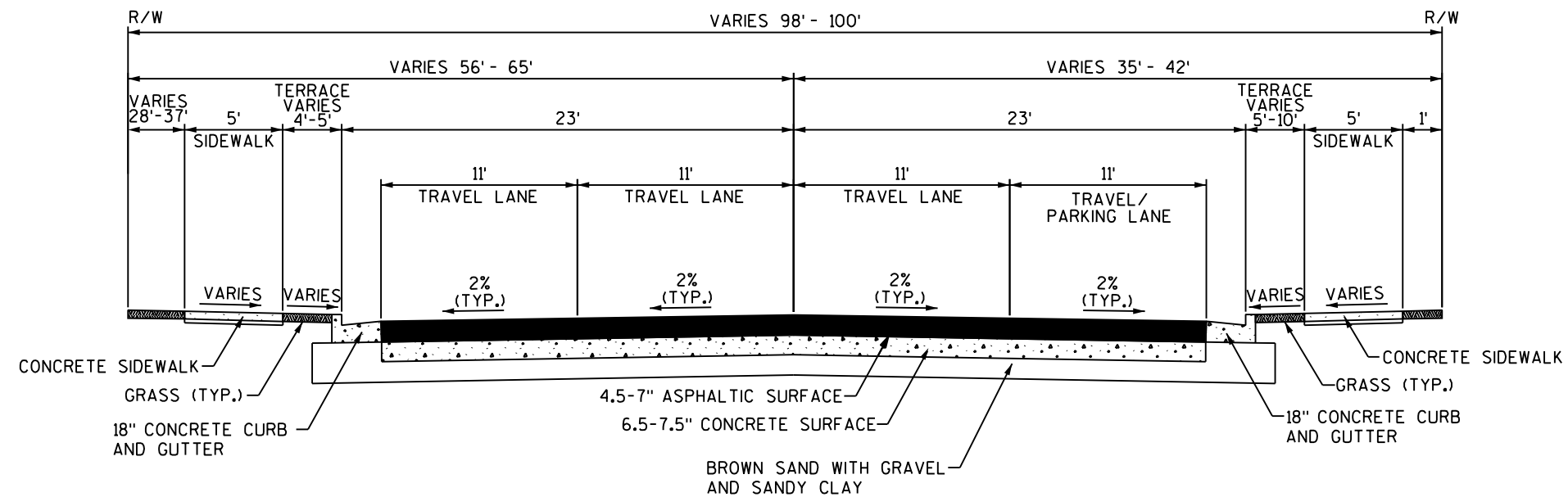
E

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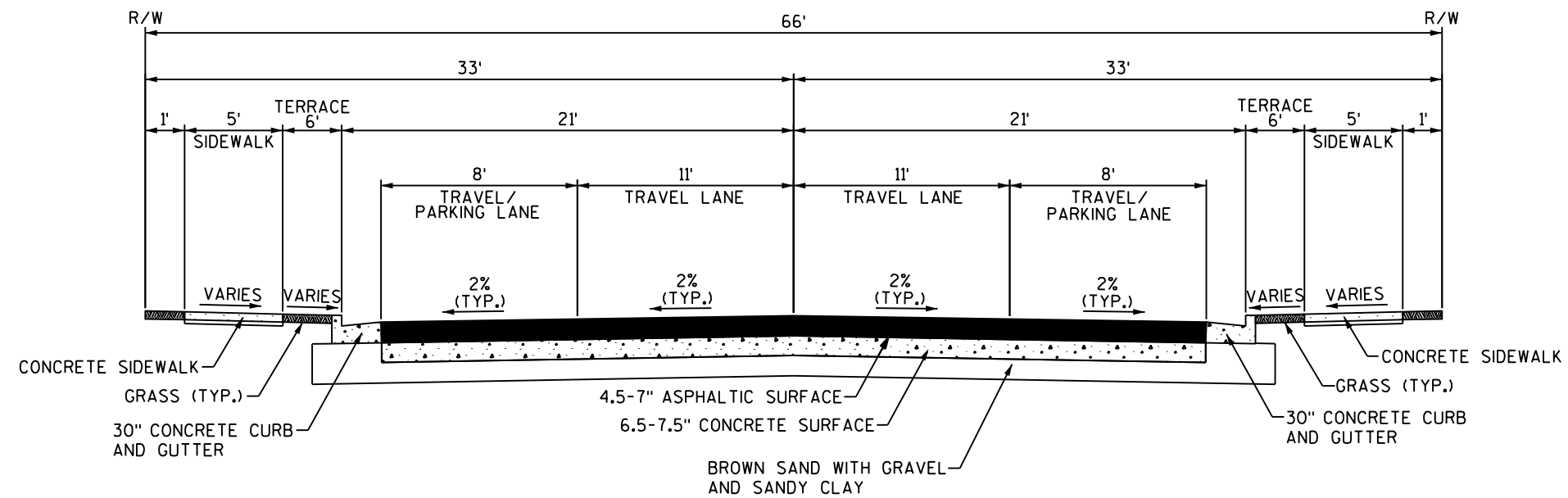
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Project Overview.dgn 4/30/2014 11:00:43 AM jdolens



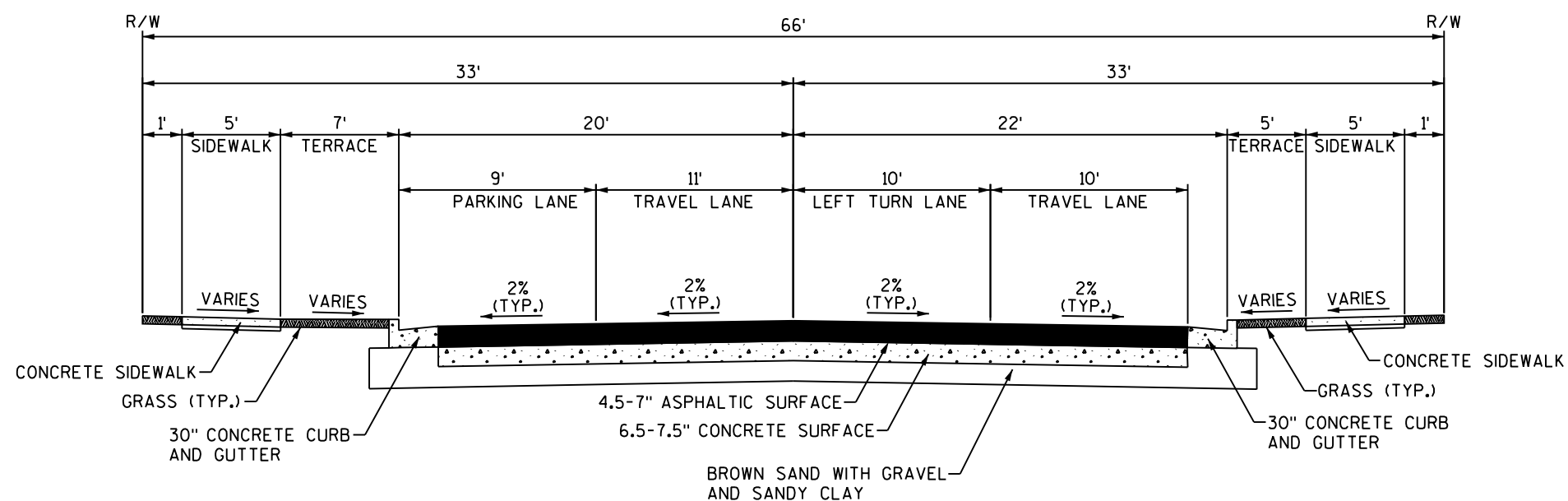
EXISTING TYPICAL SECTION - JACKSON STREET

(B.O.P. - SOUTH BRIDGE ABUTMENT)
STA. 6+00.00 TO STA. 8+02.38



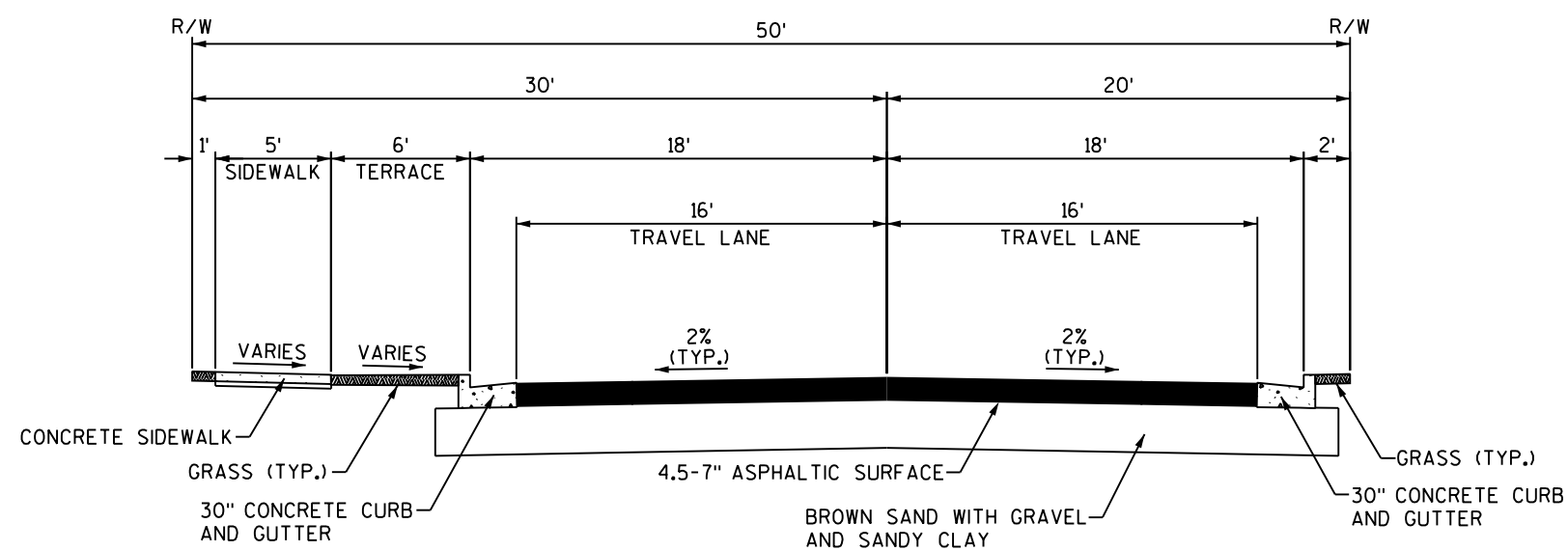
EXISTING TYPICAL SECTION - JACKSON STREET

(NORTH BRIDGE ABUTMENT - RIVERSIDE STREET)
STA. 11+73.63 TO STA. 13+75.00



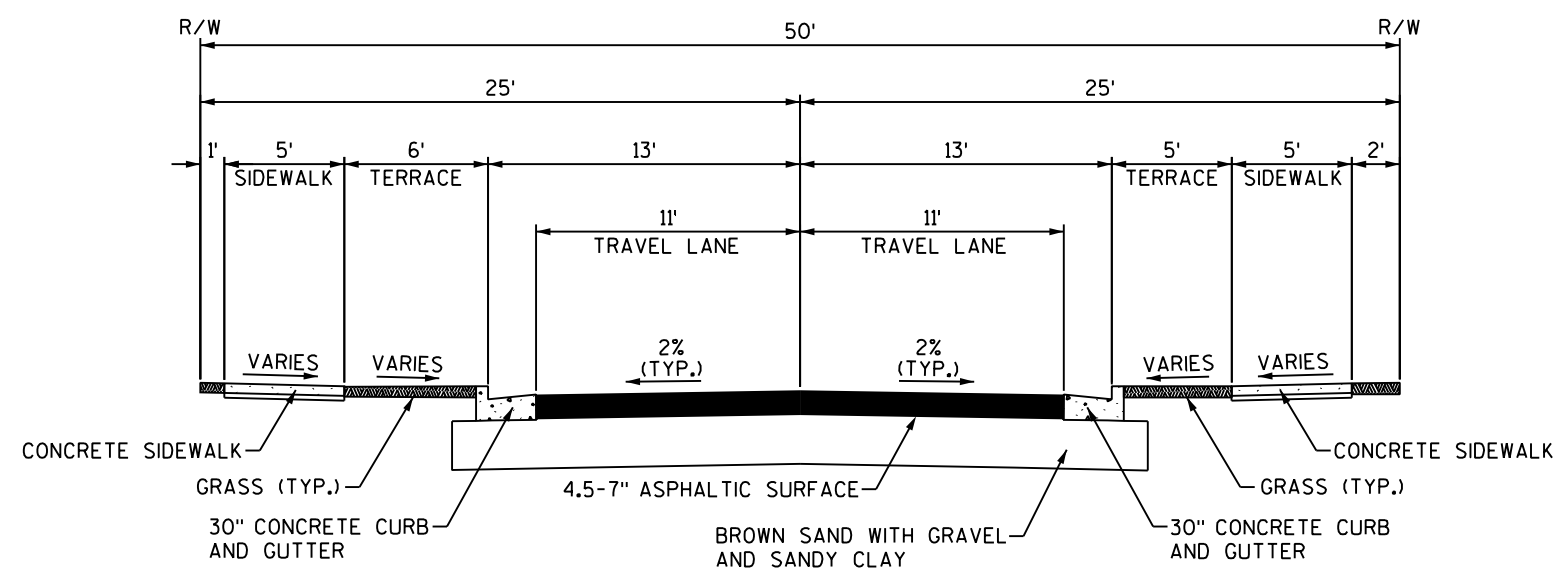
EXISTING TYPICAL SECTION - JACKSON STREET

(RIVERSIDE STREET - E.O.P.)
STA. 13+75.00 TO STA. 14+50.00

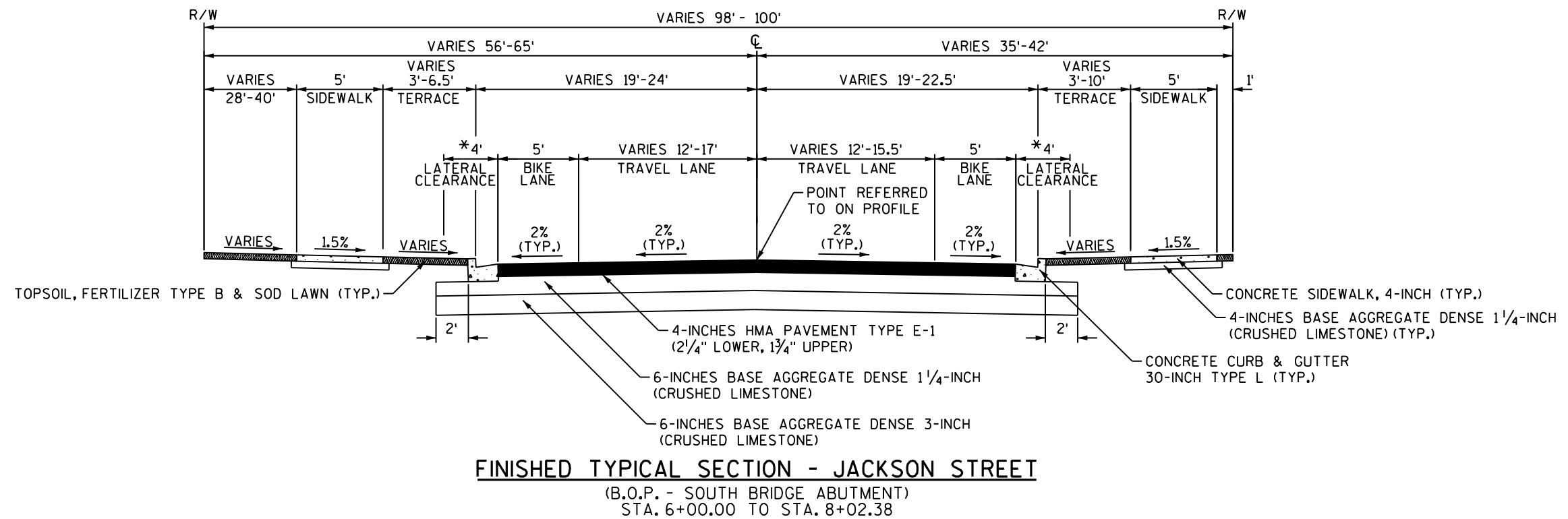


EXISTING TYPICAL SECTION - RIVERSIDE STREET

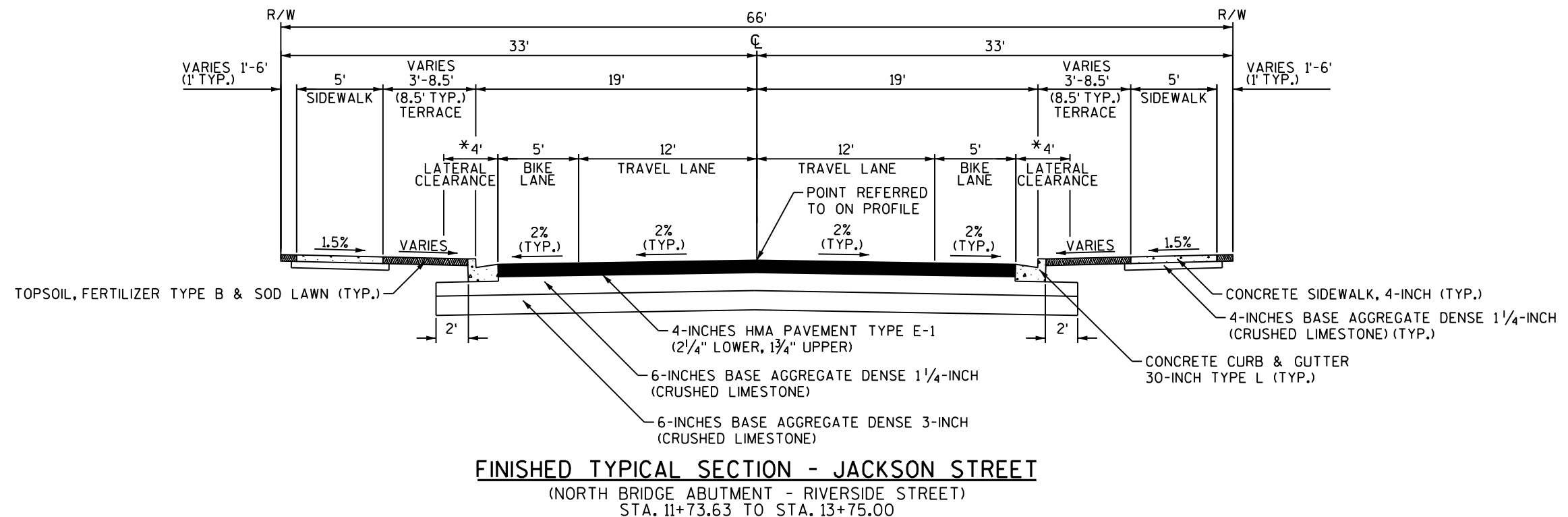
STA. 201+10.00 - STA. 202+00.00

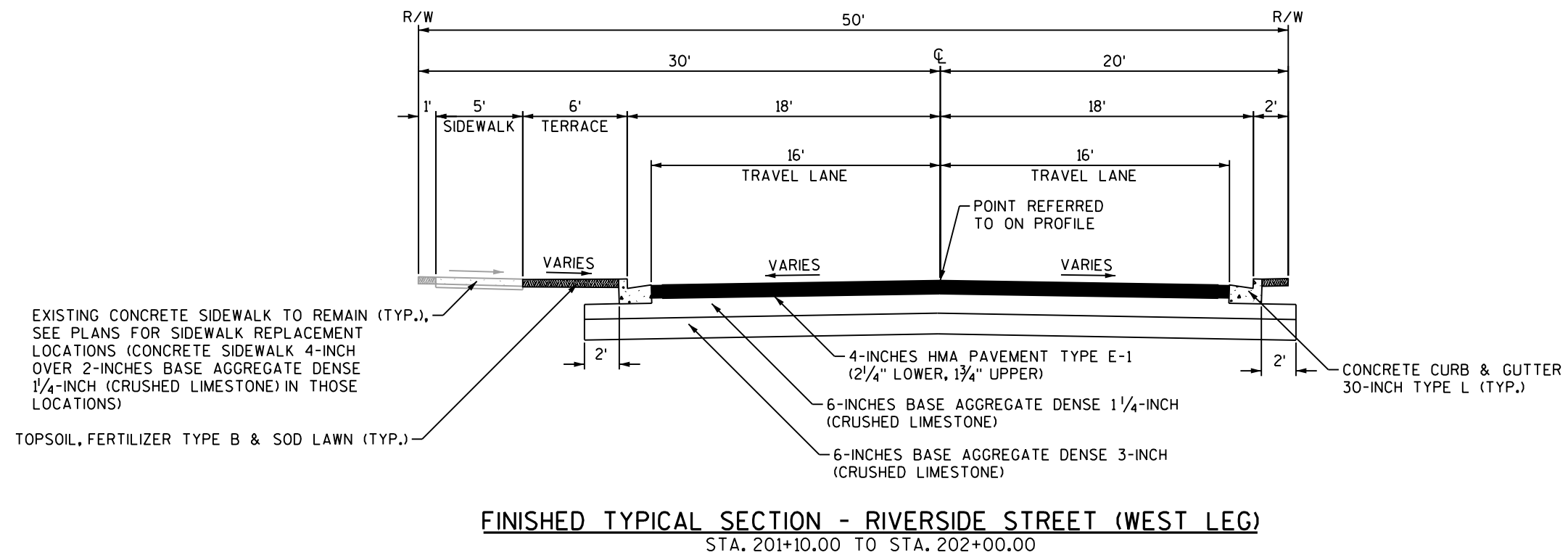
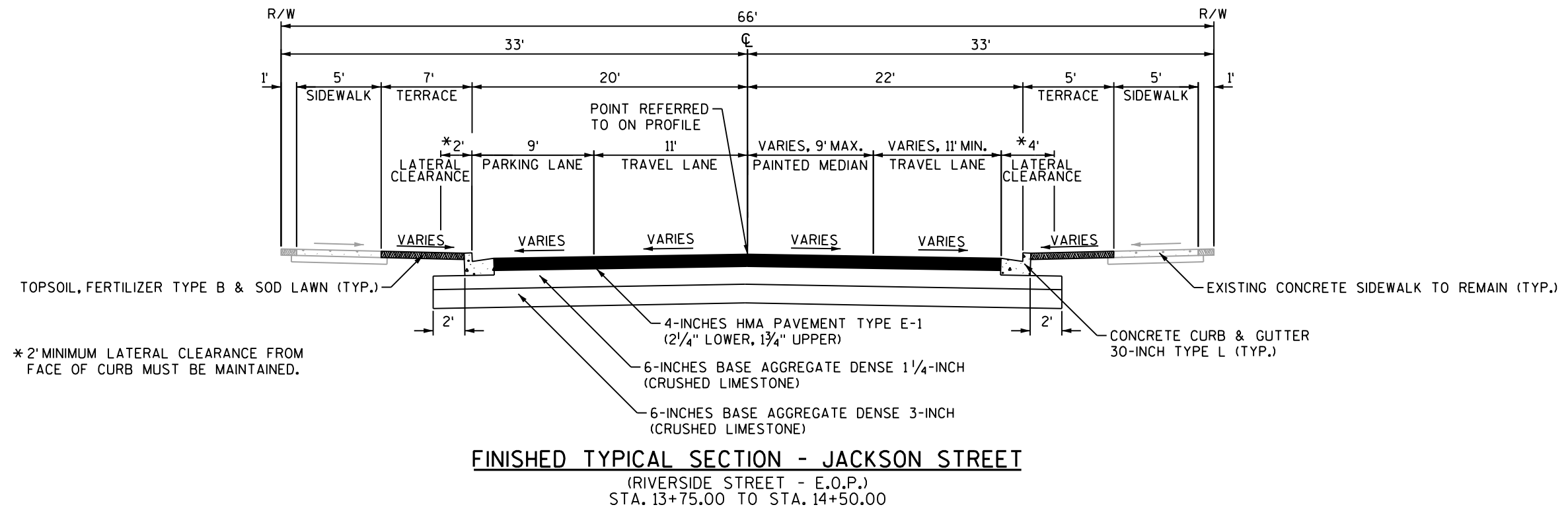


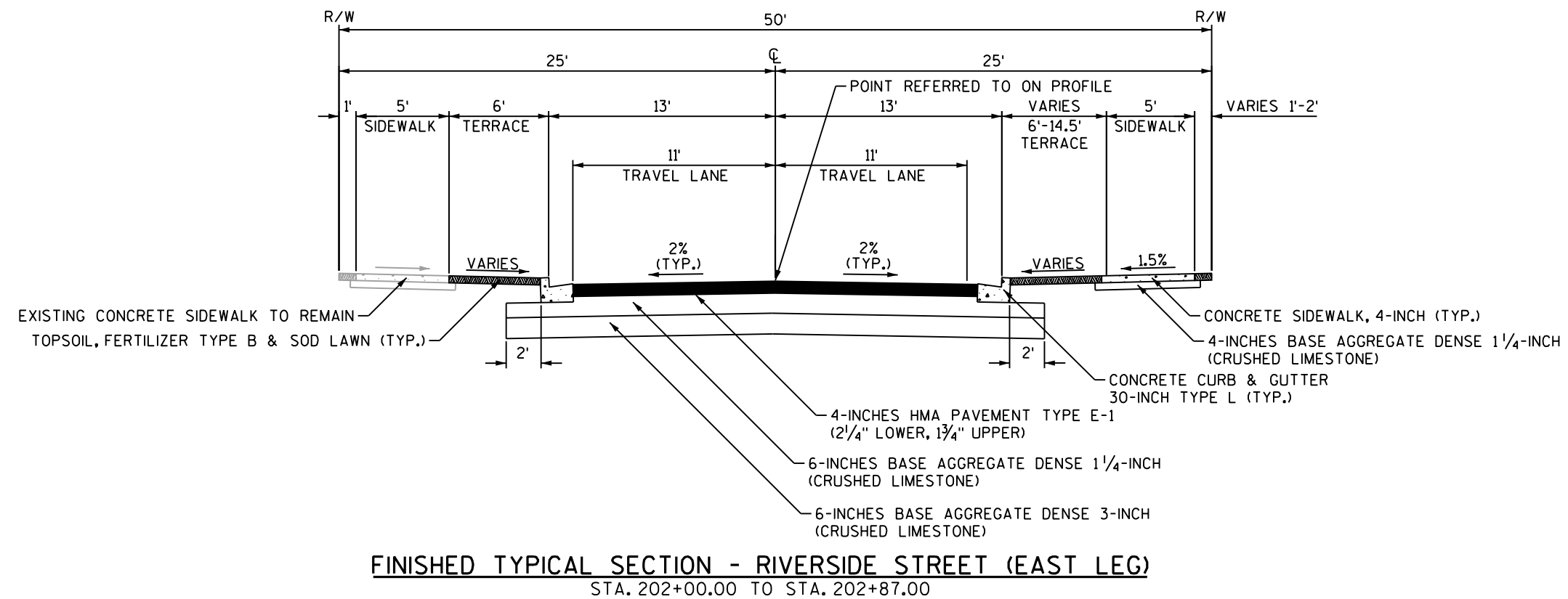
EXISTING TYPICAL SECTION - RIVERSIDE STREET
STA. 202+00.00 - STA. 202+87.00

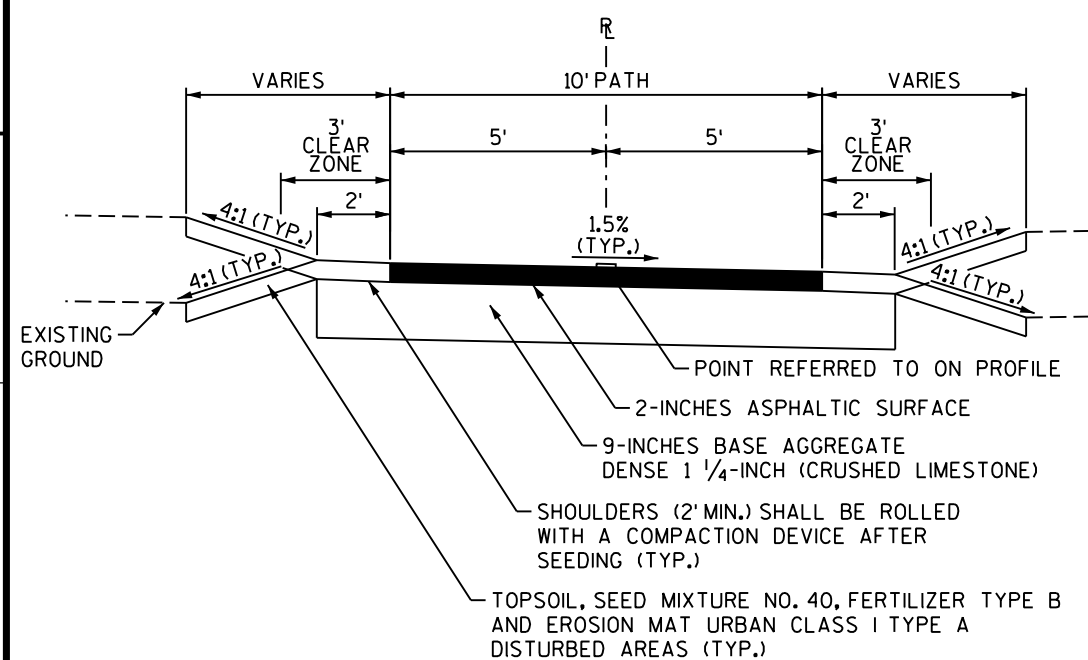


*2' MINIMUM LATERAL CLEARANCE FROM
FACE OF CURB MUST BE MAINTAINED.



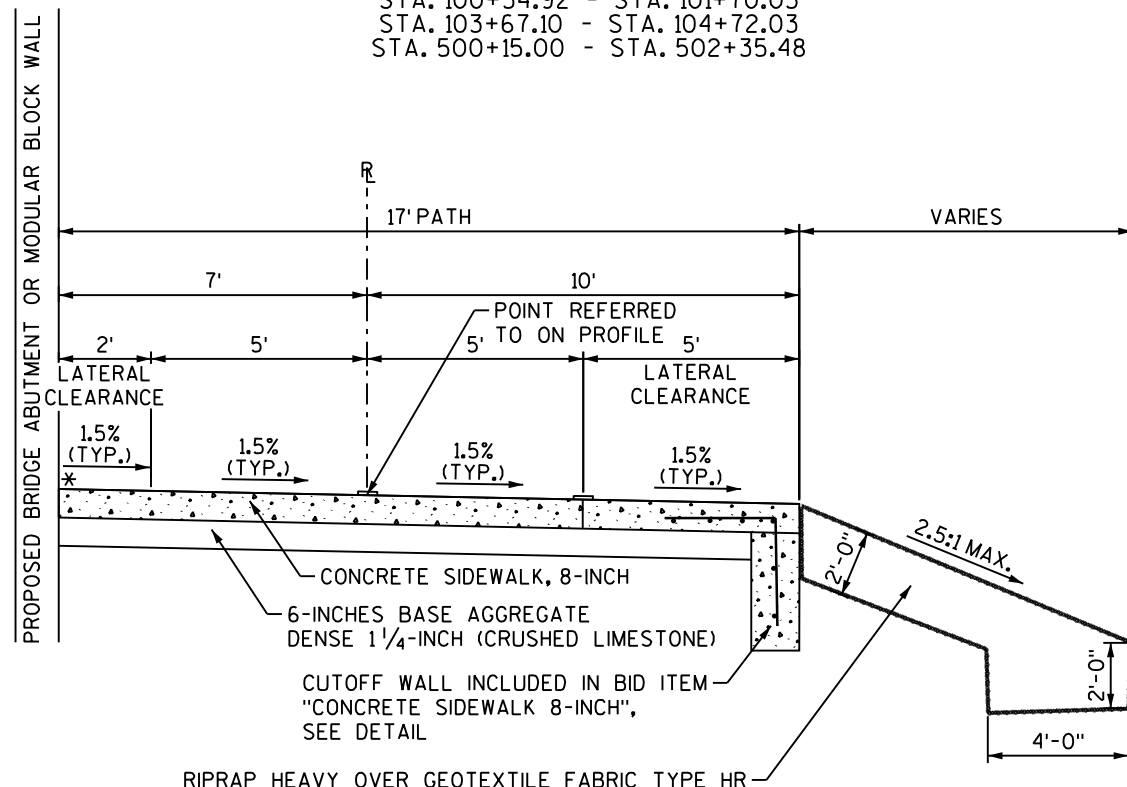
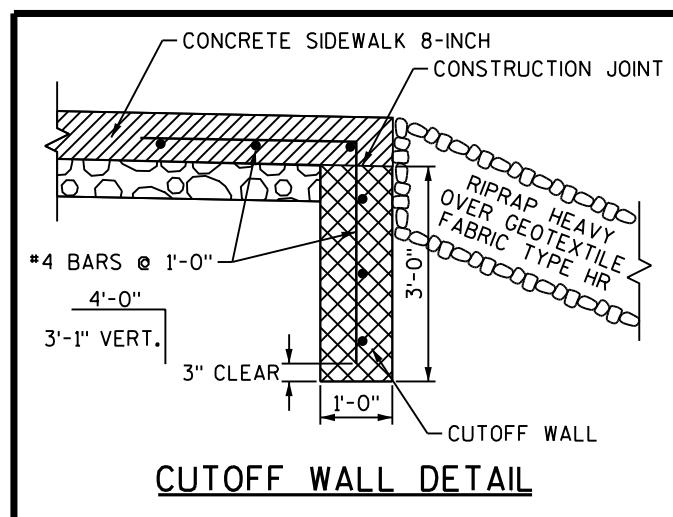
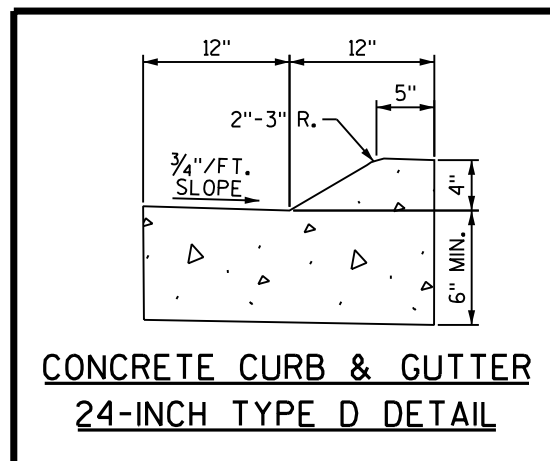
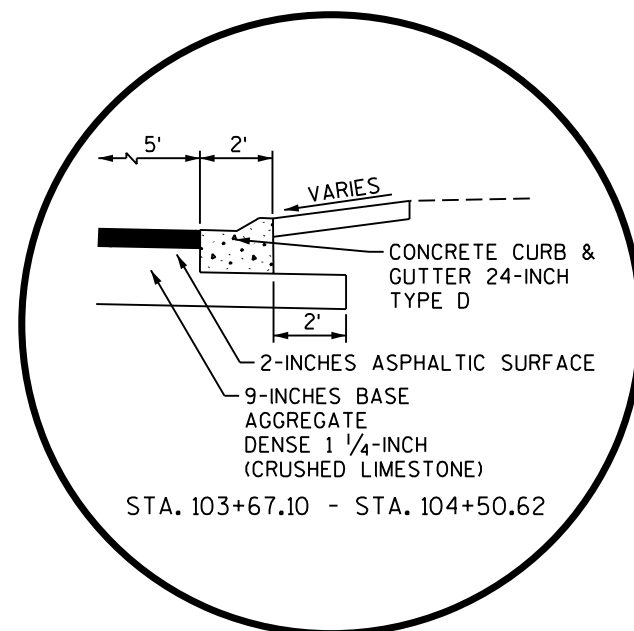






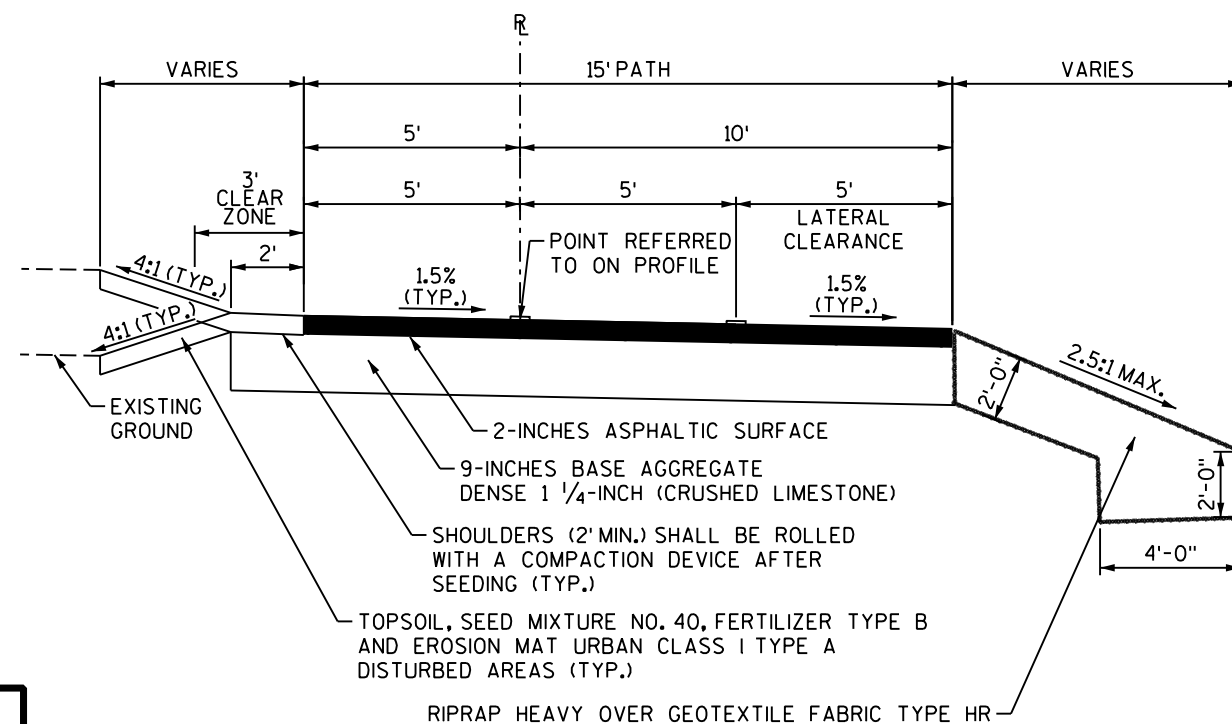
FINISHED TYPICAL SECTION - MULTI-USE PATH

STA. 100+34.92 - STA. 101+70.03
 STA. 103+67.10 - STA. 104+72.03
 STA. 500+15.00 - STA. 502+35.48



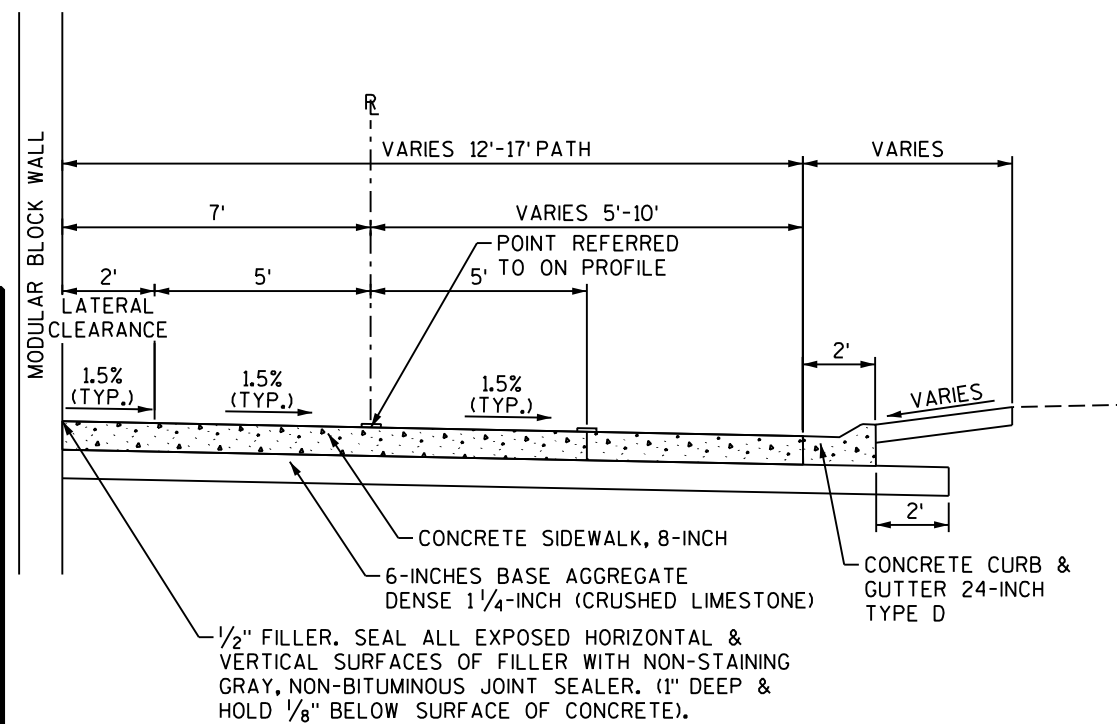
FINISHED TYPICAL SECTION - MULTI-USE PATH (UNDER BRIDGE)

STA. 101+99.00 - STA. 103+34.55



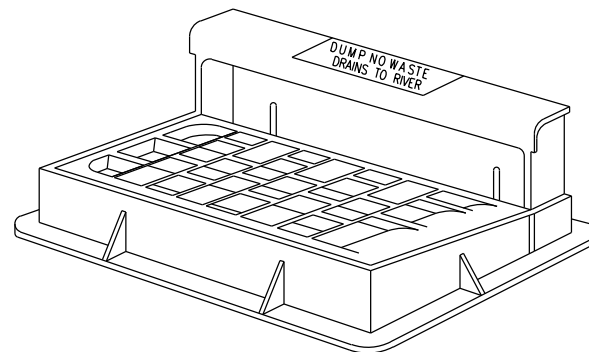
FINISHED TYPICAL SECTION - MULTI-USE PATH

STA. 101+70.03 - STA. 101+99.00

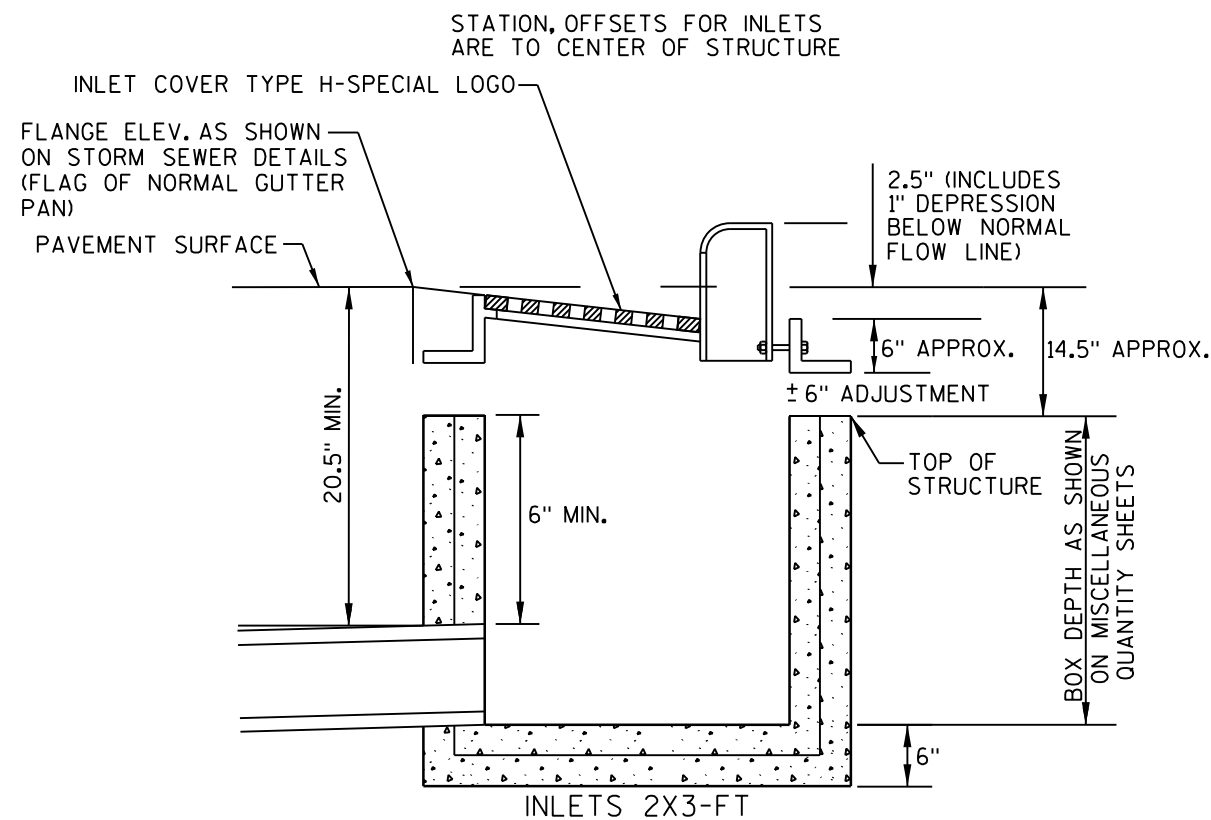


FINISHED TYPICAL SECTION - MULTI-USE PATH

STA. 103+34.55 - STA. 103+67.10

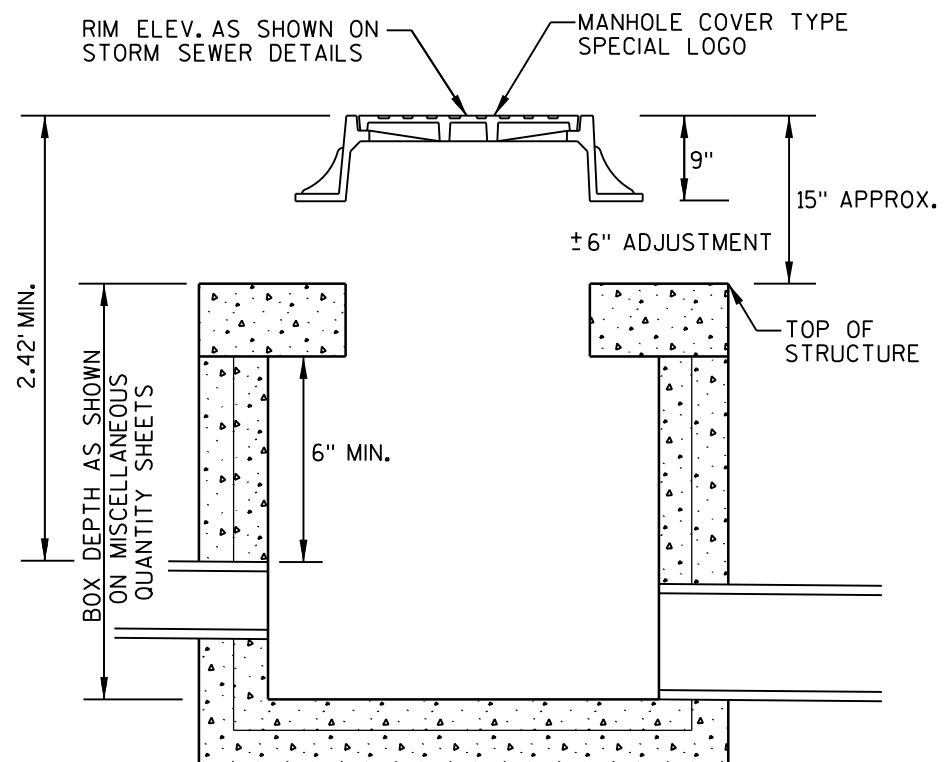


INLET COVER TYPE H-SPECIAL LOGO DETAIL



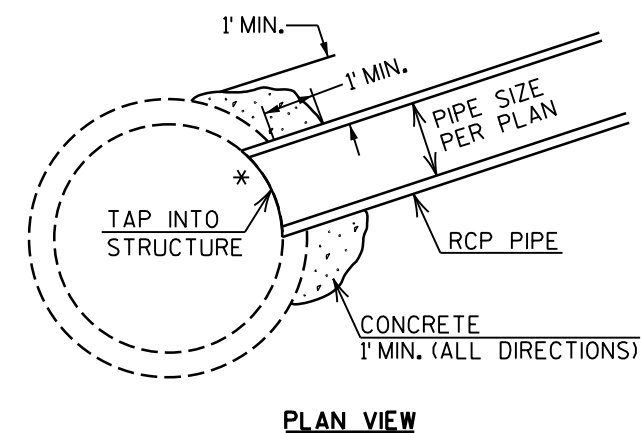
DETAIL FOR COMPUTING INLET ELEVATIONS
SCALE: NONE

STATION, OFFSETS FOR MANHOLES
ARE TO CENTER OF STRUCTURE

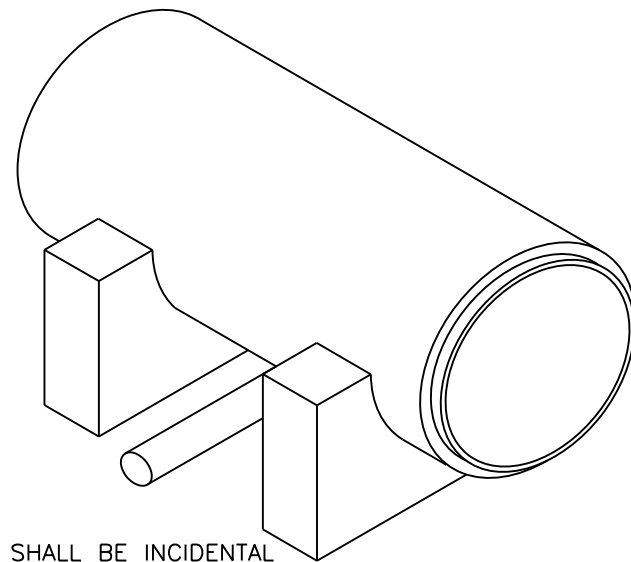


DETAIL FOR COMPUTING MANHOLE ELEVATIONS
SCALE: NONE

NOTE: CONCRETE INCIDENTAL TO
INSTALLATION OF STORM SEWER PIPE
* NO PIPE TO PROTRUDE INTO MANHOLE

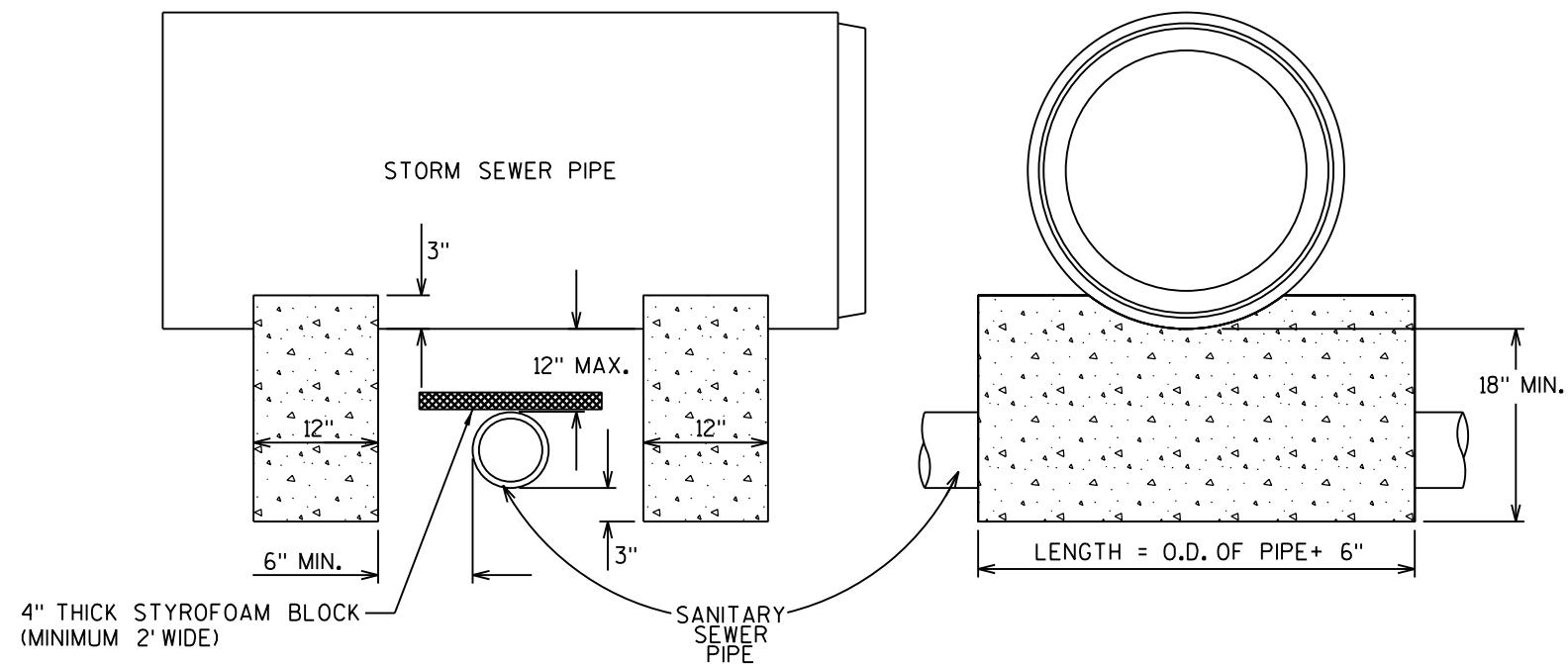


MANHOLE CONNECTION DETAIL
SCALE: NONE

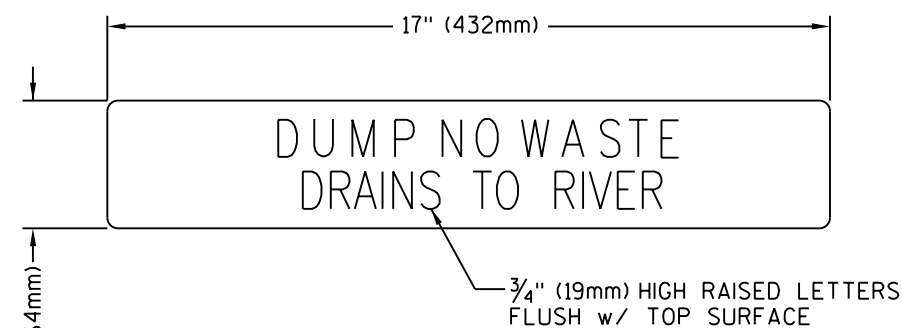


NOTES:

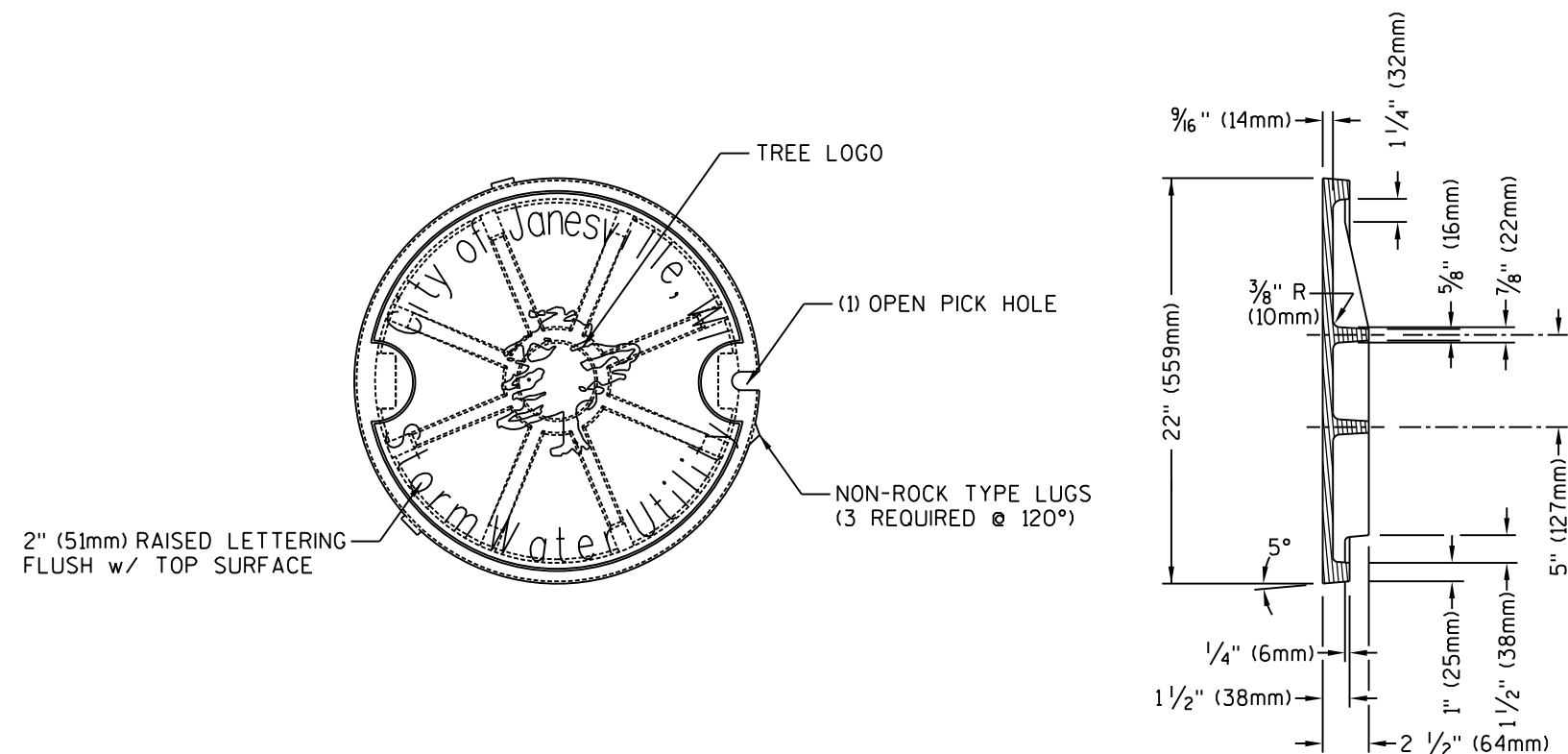
1. CONCRETE PIPE SUPPORTS SHALL BE INCIDENTAL TO STORM SEWER PIPE BID ITEM.
2. FIELD POURED, CONCRETE PIPE SUPPORTS SHALL BE INSTALLED FOR STORM SEWERS WHEN CLEARANCE BETWEEN BOTTOM OF PIPE & TOP OF SANITARY SEWER PIPE IS 12" OR LESS.

**CONCRETE SUPPORT DETAIL**

SCALE: NONE

**INLET CASTING SPECIAL LOGO DETAIL**

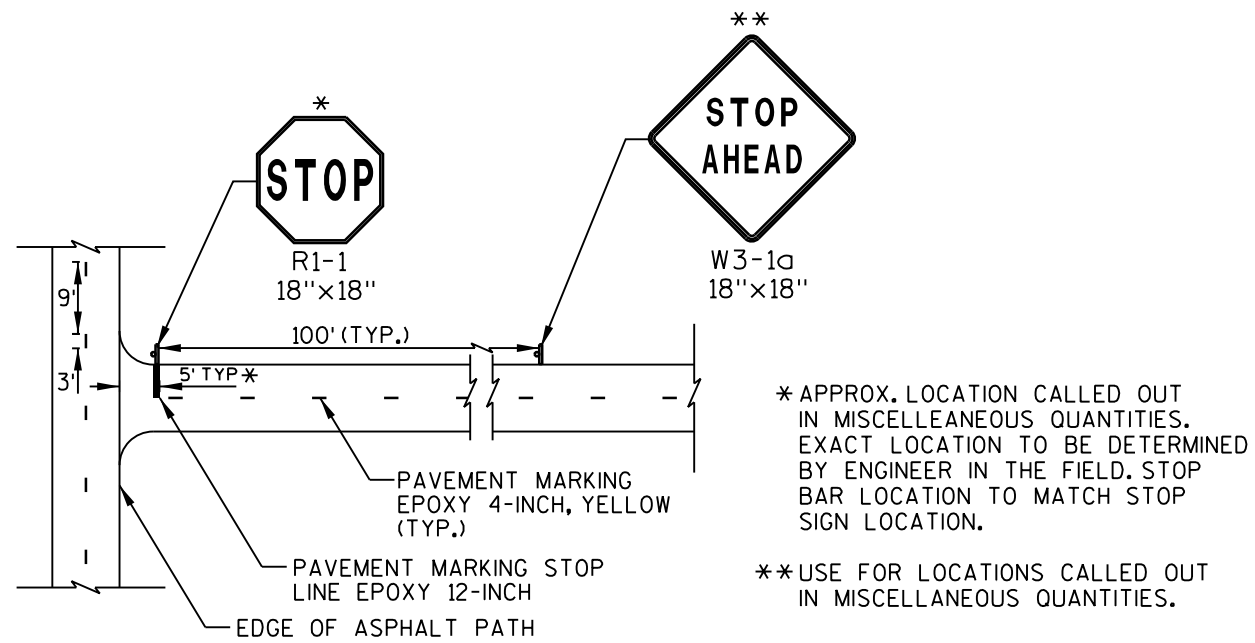
SCALE: NONE



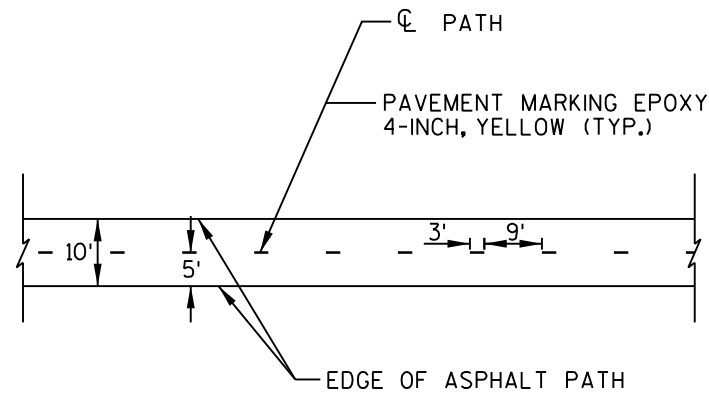
NOTE: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND [METRIC]
 MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
 FINISH: NO PAINT
 WEIGHT: 95#

MANHOLE COVER TYPE SPECIAL LOGO DETAIL

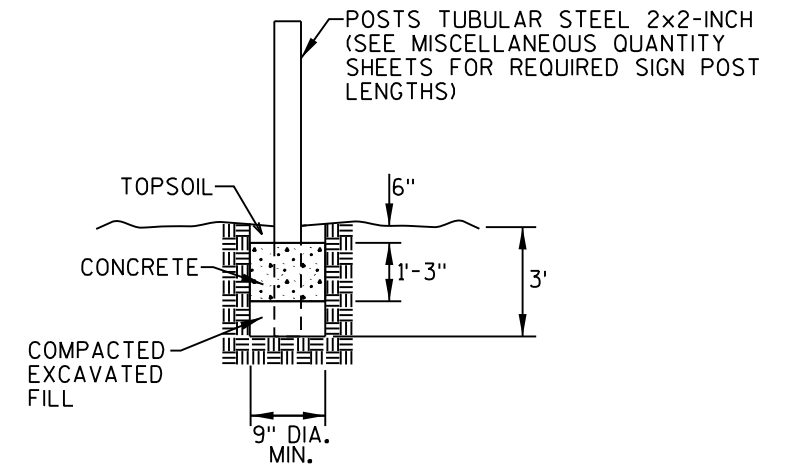
SCALE: NONE



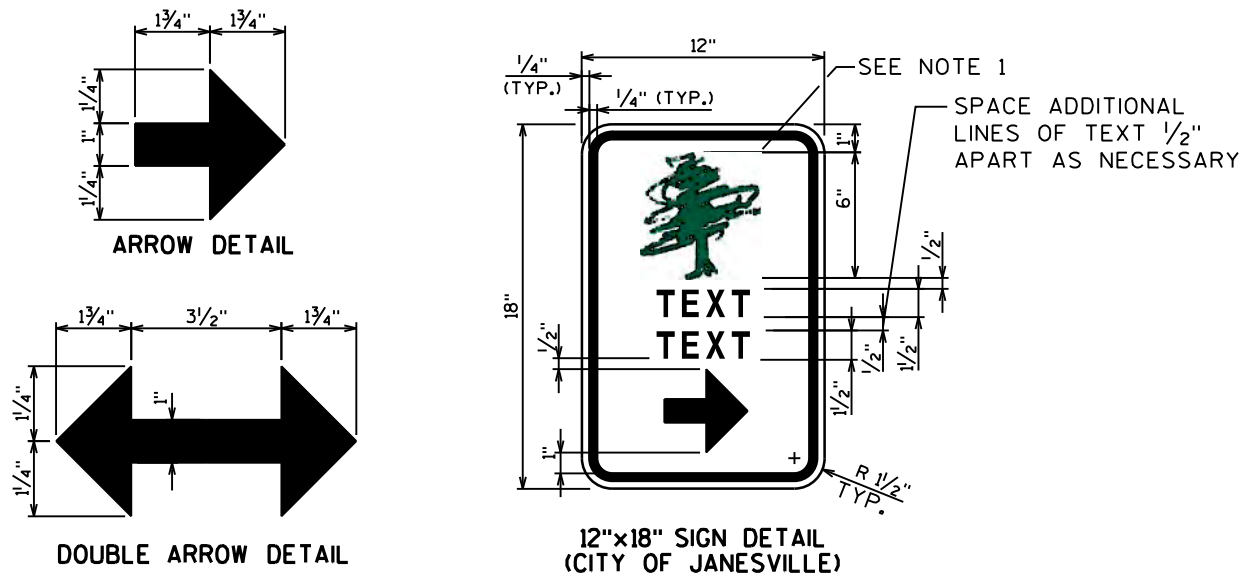
TYPICAL PATH INTERSECTION PAVEMENT MARKING
SCALE: NONE



TYPICAL PATH CL PAVEMENT MARKING
SCALE: NONE

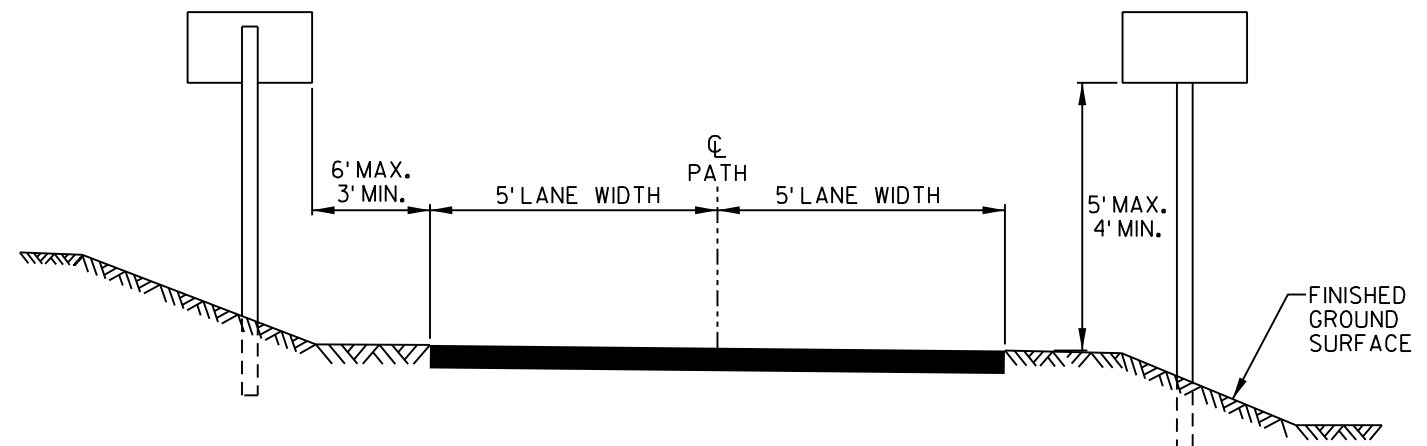


PATH SIGN POST BASE DETAIL
SCALE: NONE

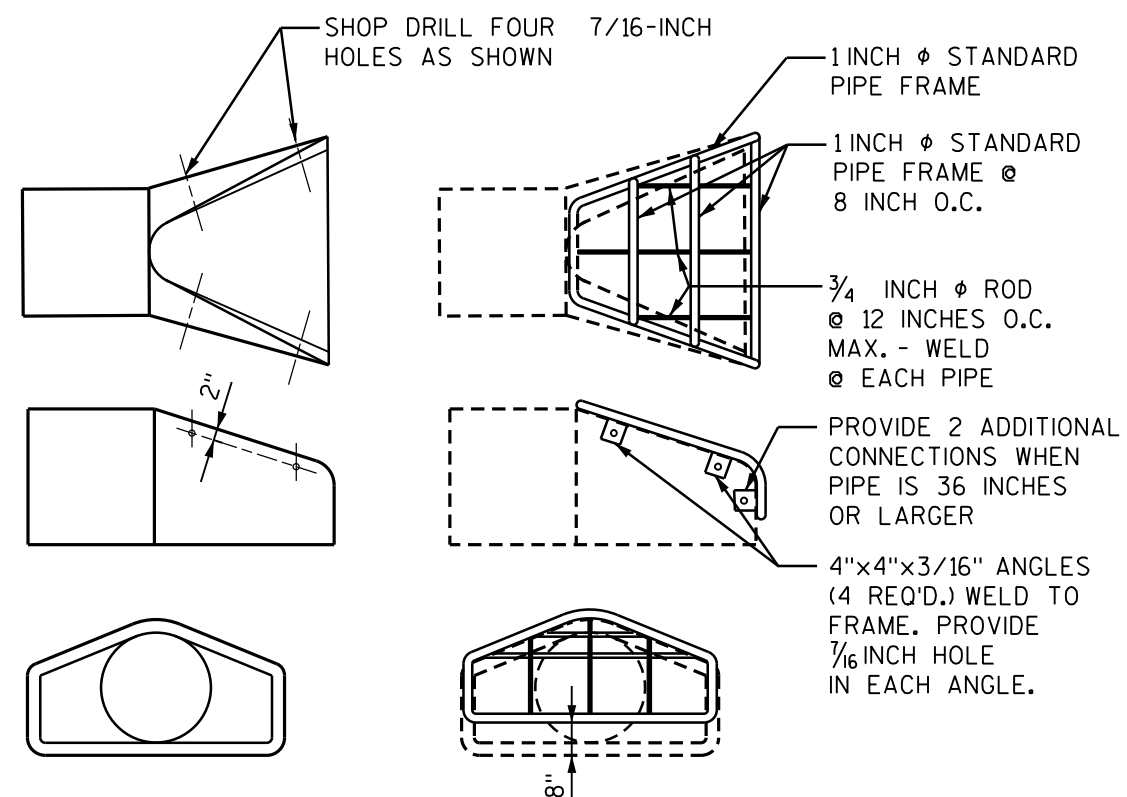


- NOTES:
- (1) CITY OF JANESVILLE TREE GRAPHIC TO BE OBTAINED FROM CITY OF JANESVILLE PARKS DEPARTMENT. CONTACT CULLEN SLAPAK (608-755-3025).
 - (2) ALL TEXT, ARROWS, AND GRAPHICS TO BE GREEN AND CENTERED ON THE VERTICAL AXIS OF THE SIGN; BACKGROUND TO BE WHITE.
 - (3) TO BE PAID FOR UNDER BID ITEM "SIGNS TYPE II REFLECTIVE H"

SPECIAL INFORMATIONAL SIGN DETAILS
SCALE: NONE



SIGN PLACEMENT ON BIKE PATH DETAIL
SCALE: NONE



REINFORCED CONCRETE APRON ENDWALL

PIPE GRATE

GENERAL NOTES:

1. THE CONTRACTOR SHALL BOLT THE PIPE GRATE TO THE ENDWALL WITH FOUR 3/8 INCH x 6 INCH STAINLESS STEEL ZINC COATED MACHINE BOLTS WITH NUTS ON INSIDE WALL.

2. PAINTING SPECIFICATIONS

THE PIPE GRATE SHALL RECEIVE THE FOLLOWING PREPARATION AND PAINTING.

PREPARATION:

BARE SURFACES BY THOROUGH SCRAPING, WIRE BRUSHING AND CLEANING. APPLY THE THREE COAT SYSTEM LISTED.

EACH COAT SHALL BE AN OVERALL COAT.

FIRST COAT: RUST-OLEUM X-60 RED BARE METAL PRIMER OR EQUAL

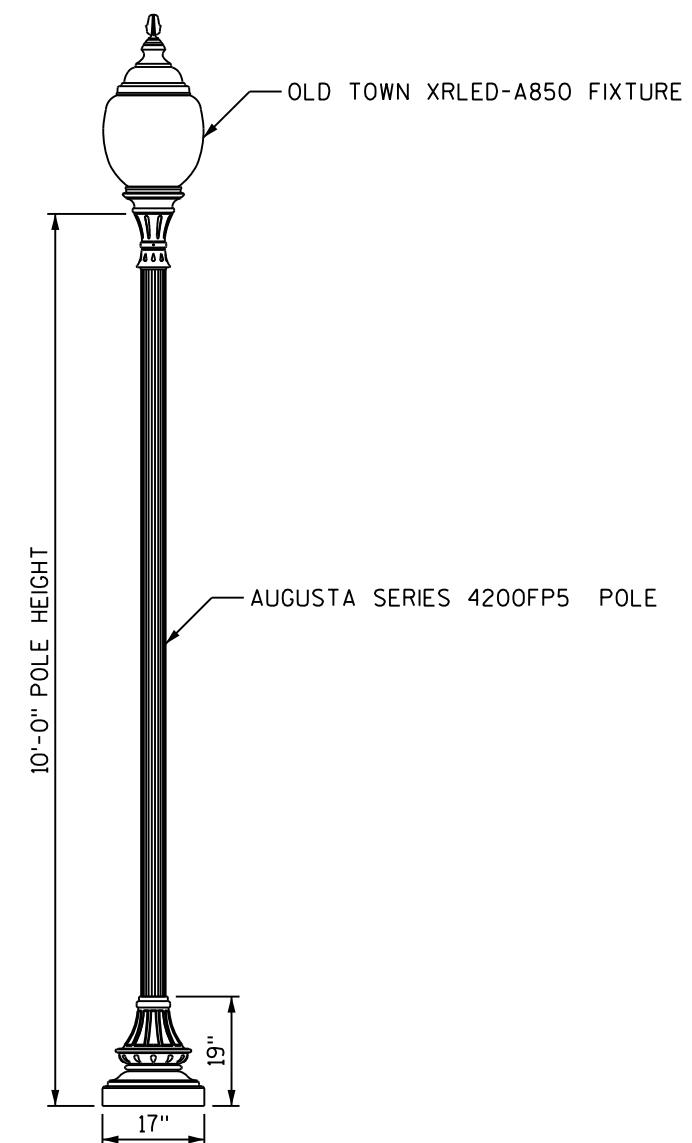
SECOND COAT: RUST-OLEUM 960 ZINC CHROMATE PRIMER OR EQUAL

THIRD COAT: RUST-OLEUM 1282 HIGH GLOSS AND METALIC FINISH OR EQUAL

ALLOW 24 - 48 HOURS DRYING TIME BETWEEN COATS.

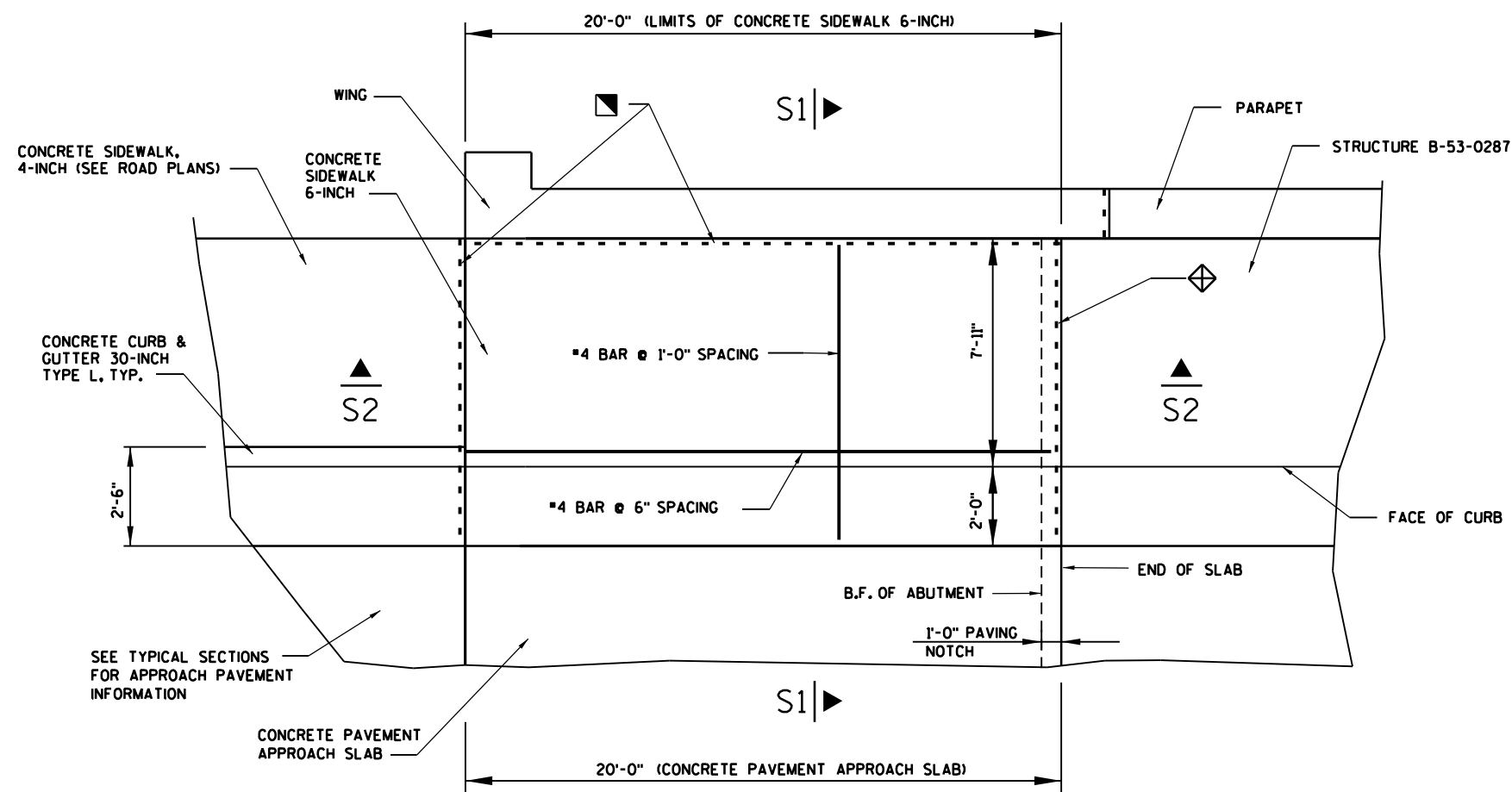
PIPE GRATE DETAIL

SCALE: NONE



LIGHT POLE DETAIL

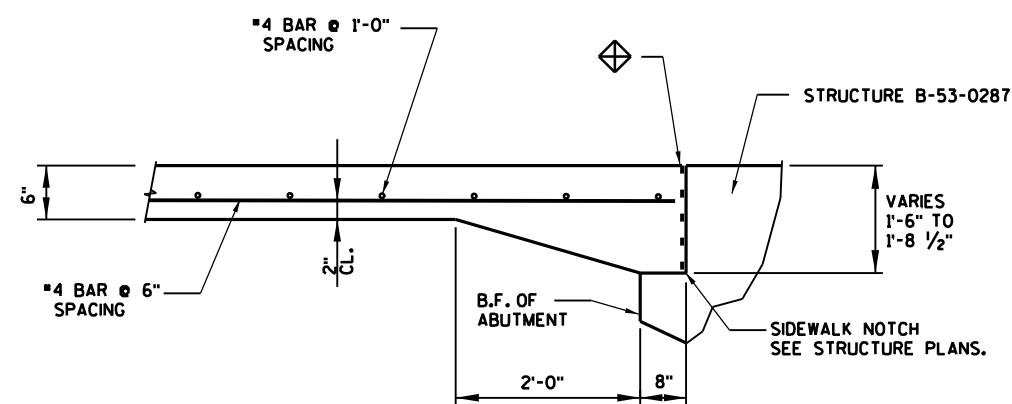
SCALE: NONE

**NOTE:**

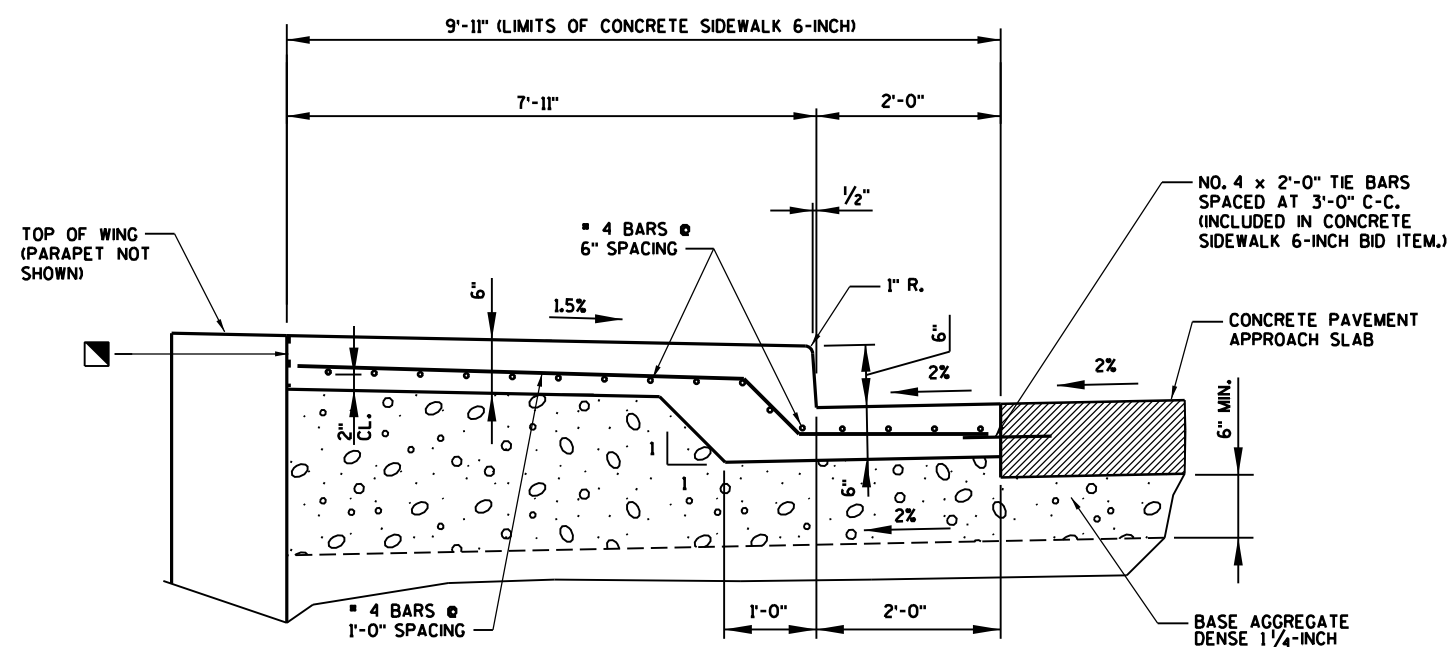
SEE S.D.D. "CONCRETE PAVEMENT APPROACH SLAB" FOR ANY ADDITIONAL DETAILS, BUT MAINTAIN 20'-0" LENGTH AS SHOWN.

APPROACH SIDEWALK PLAN**LEGEND**

- 1/2" FILLER. EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH".
- 3/4" FILLER @ B.F. OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH".

**SECTION S2 THRU SIDEWALK**

PAID FOR AS "CONCRETE SIDEWALK 6-INCH"

**SECTION S1 THRU SIDEWALK****CONCRETE SIDEWALK 6-INCH DETAIL**

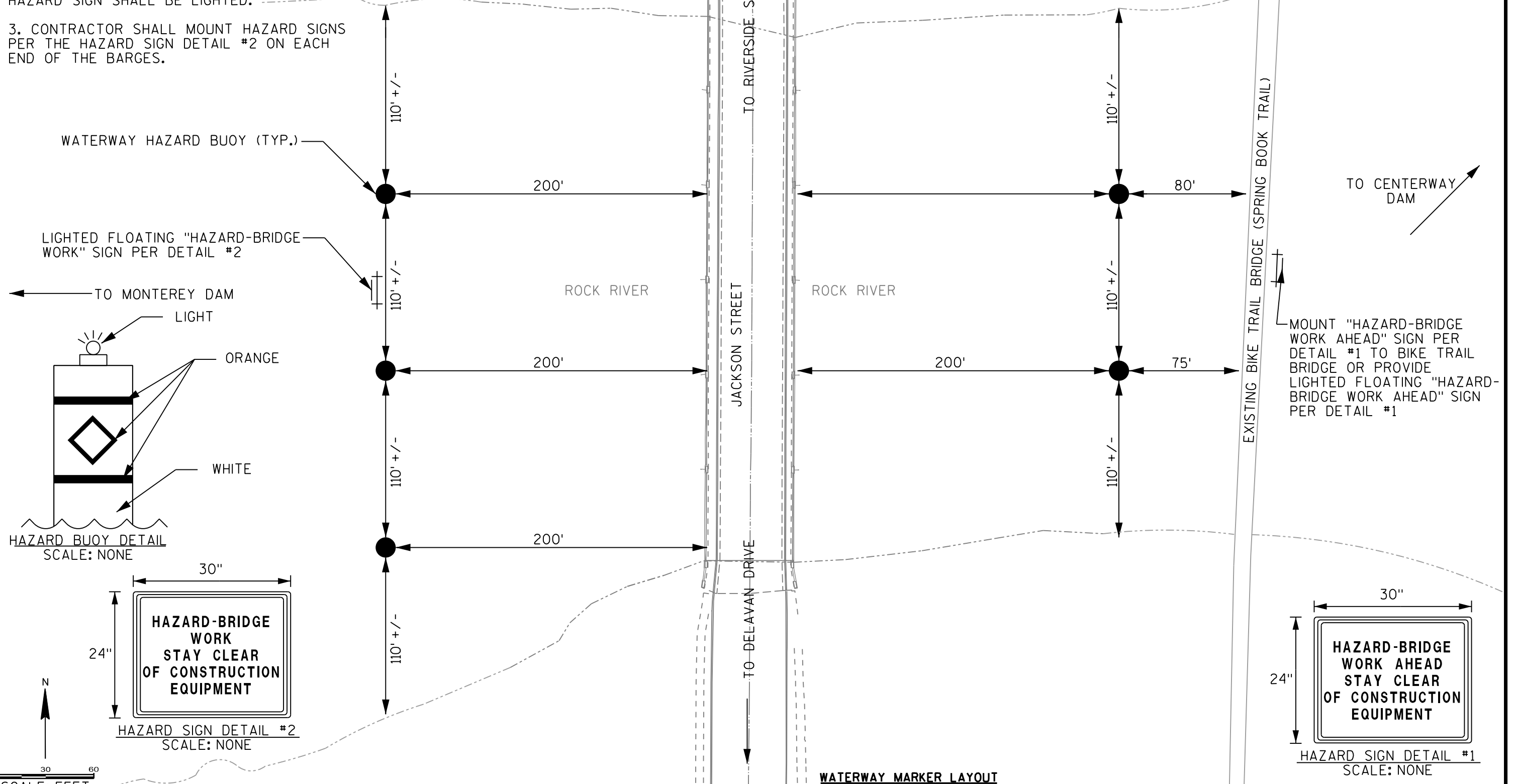
SCALE: NONE

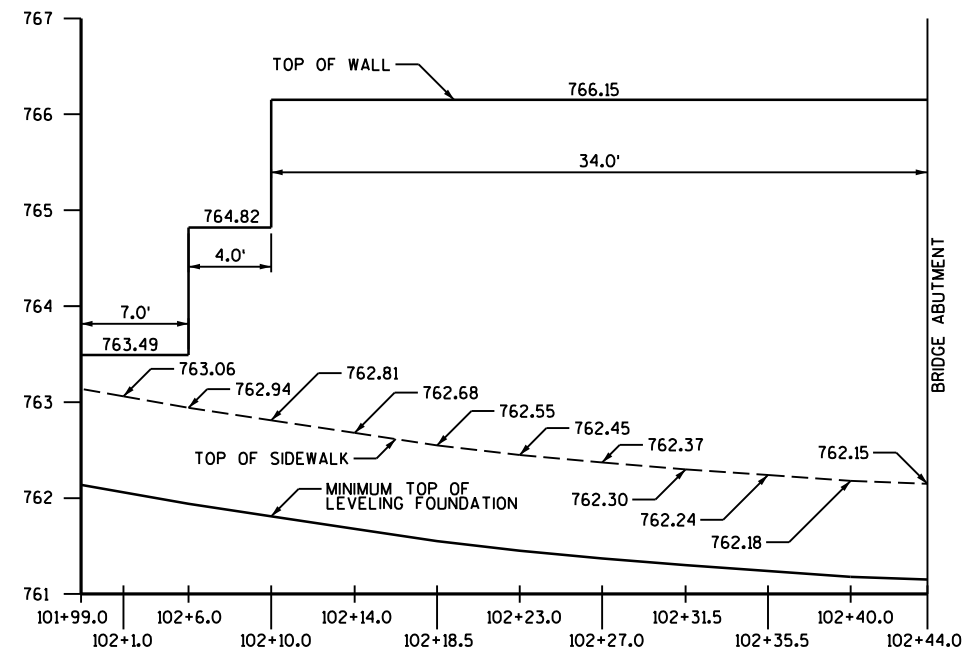
2

NOTES:

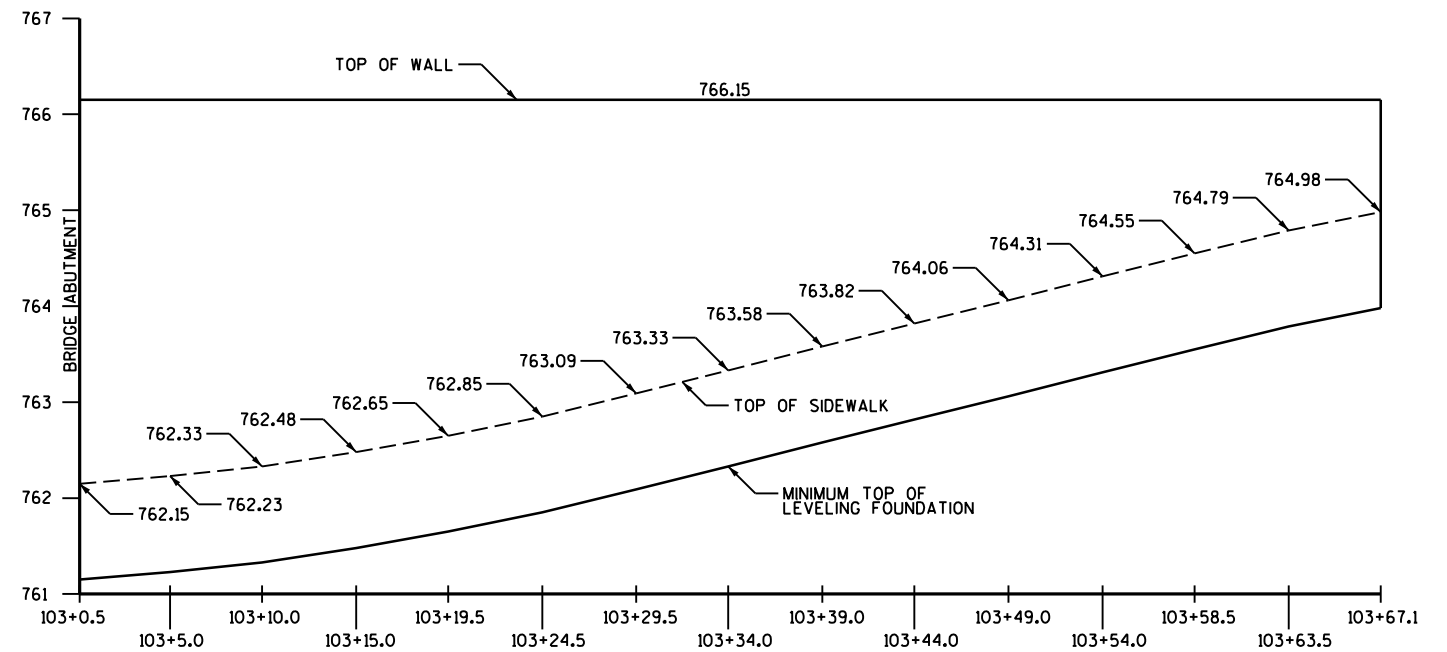
1. CONTRACTOR SHALL INSTALL HAZARD BUOYS PRIOR TO THE START OF BRIDGE CONSTRUCTION/BRIDGE DEMOLITION. HAZARD BUOYS ARE TO REMAIN IN PLACE UNTIL COMPLETION OF BRIDGE CONSTRUCTION.
2. CONTRACTOR SHALL INSTALL HAZARD SIGNS PRIOR TO THE START OF CONSTRUCTION PER THE HAZARD SIGN DETAIL #1 SUCH THAT IT IS VISIBLE TO WATERWAY TRAFFIC PRIOR TO REACHING THE HAZARD BOUYS. HAZARD SIGN SHALL BE LIGHTED.
3. CONTRACTOR SHALL MOUNT HAZARD SIGNS PER THE HAZARD SIGN DETAIL #2 ON EACH END OF THE BARGES.

2 |

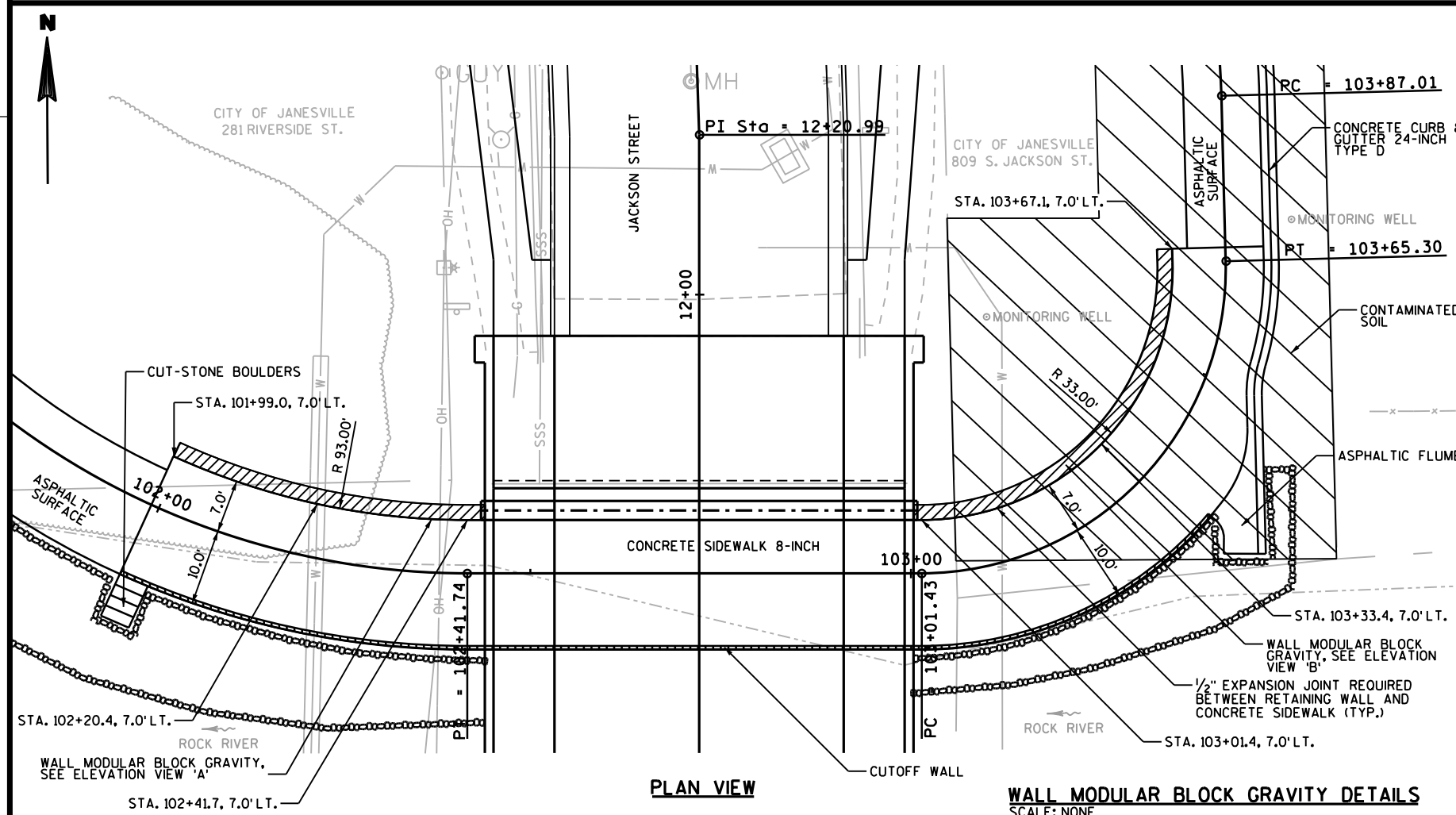




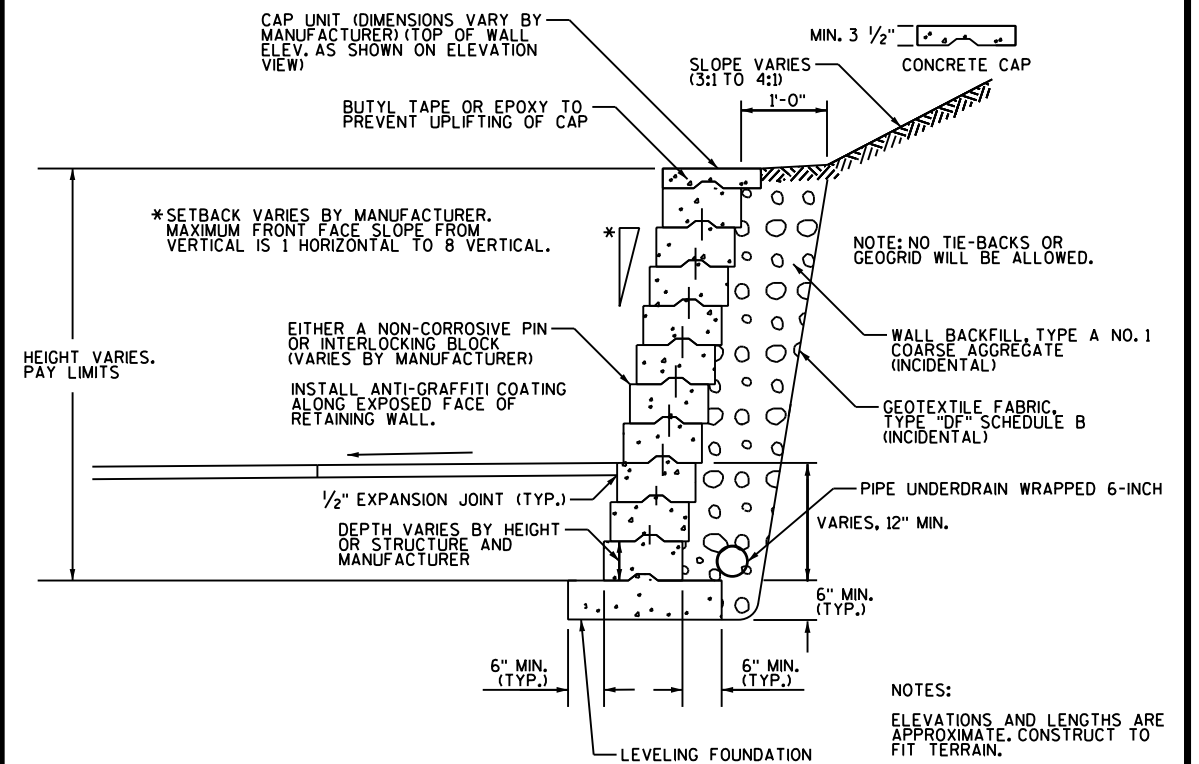
ELEVATION VIEW 'A'



ELEVATION VIEW 'B'

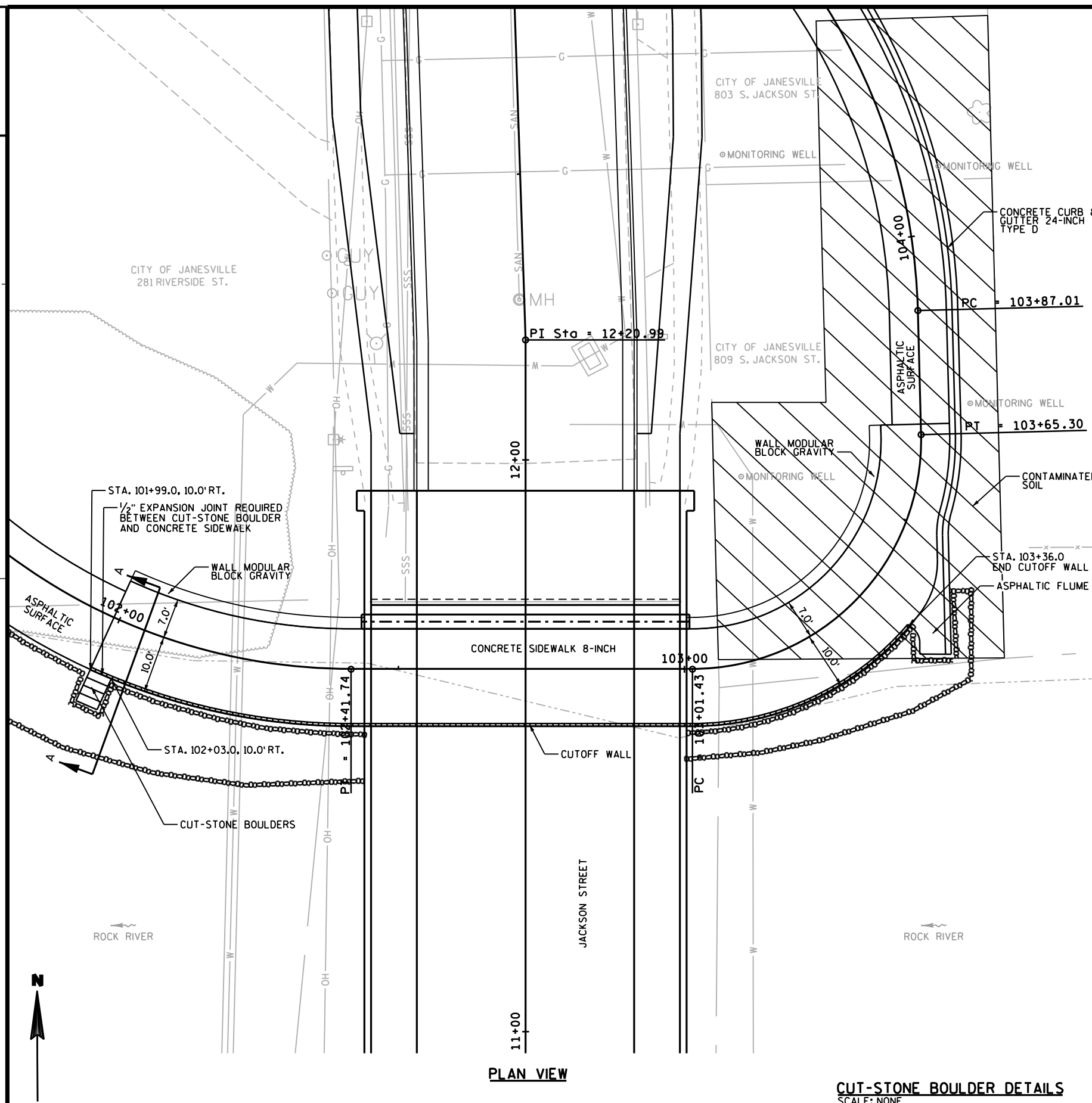


PLAN VIEW

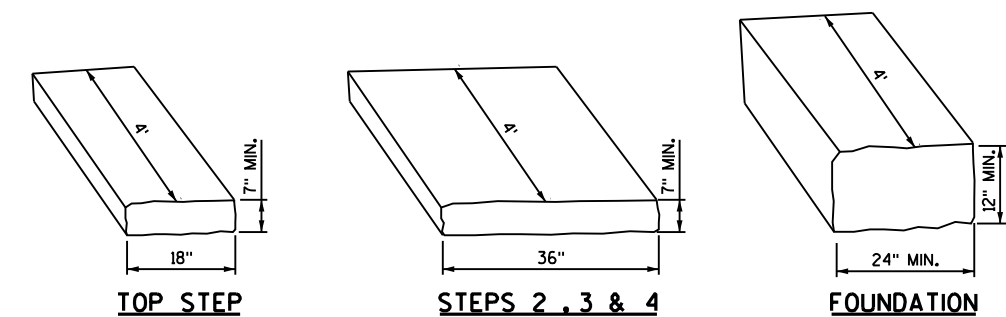
WALL MODULAR BLOCK GRAVITY DETAILS
SCALE: NONE

SECTION VIEW

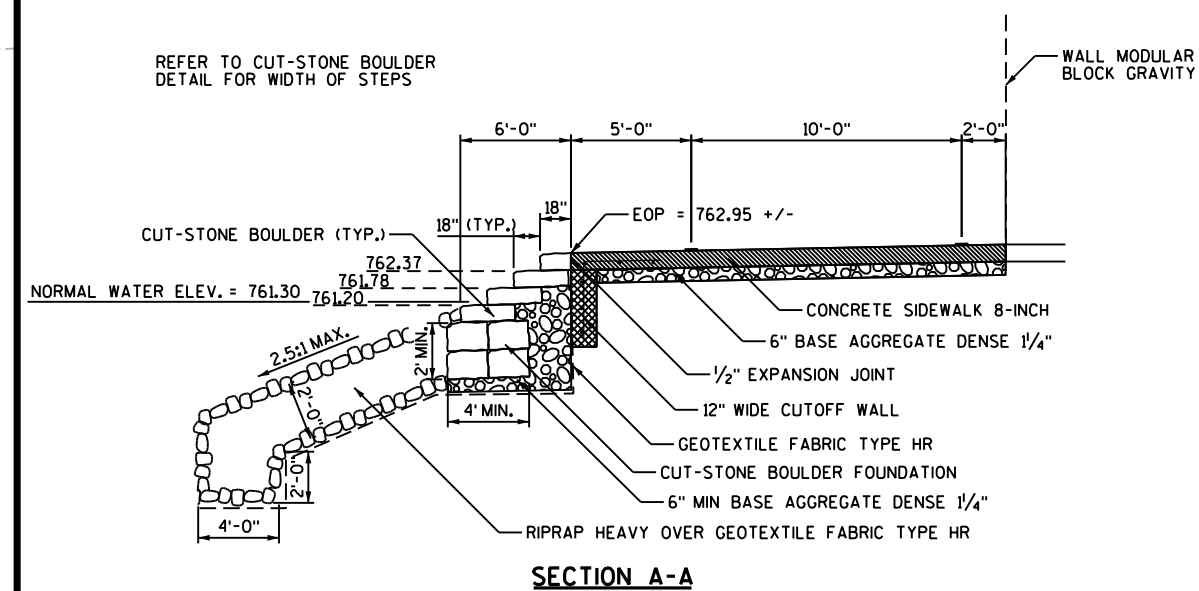
NOTES:
ELEVATIONS AND LENGTHS ARE APPROXIMATE. CONSTRUCT TO FIT TERRAIN.
DRAWING NOT TO SCALE.
ALLOWABLE SOIL BEARING CAPACITY = 1,200 PSF
COLOR: STANDARD CONCRETE
TEXTURE: LIMESTONE



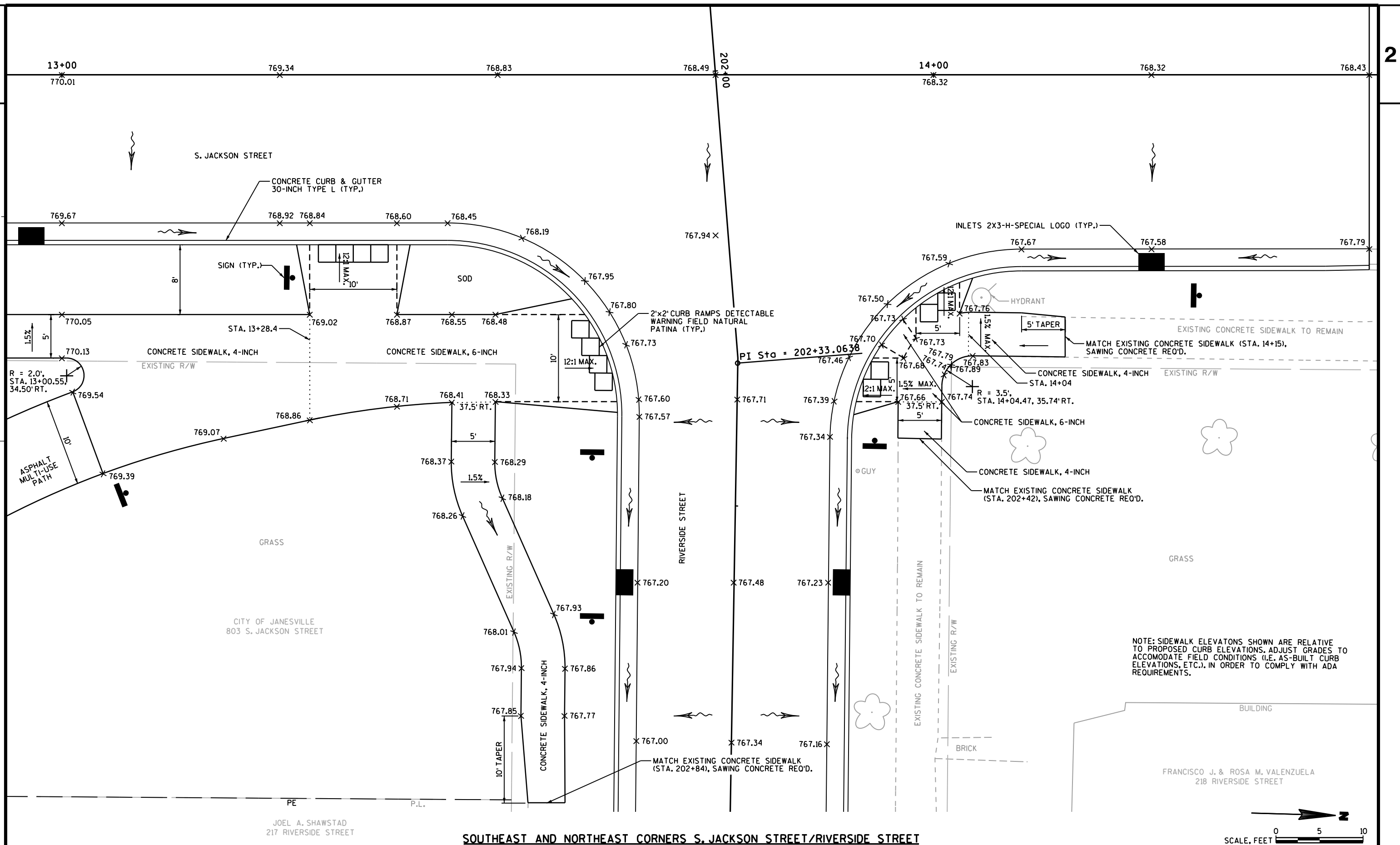
CUT-STONE BOULDER DETAILS
SCALE: NONE



CUT-STONE BOULDERS

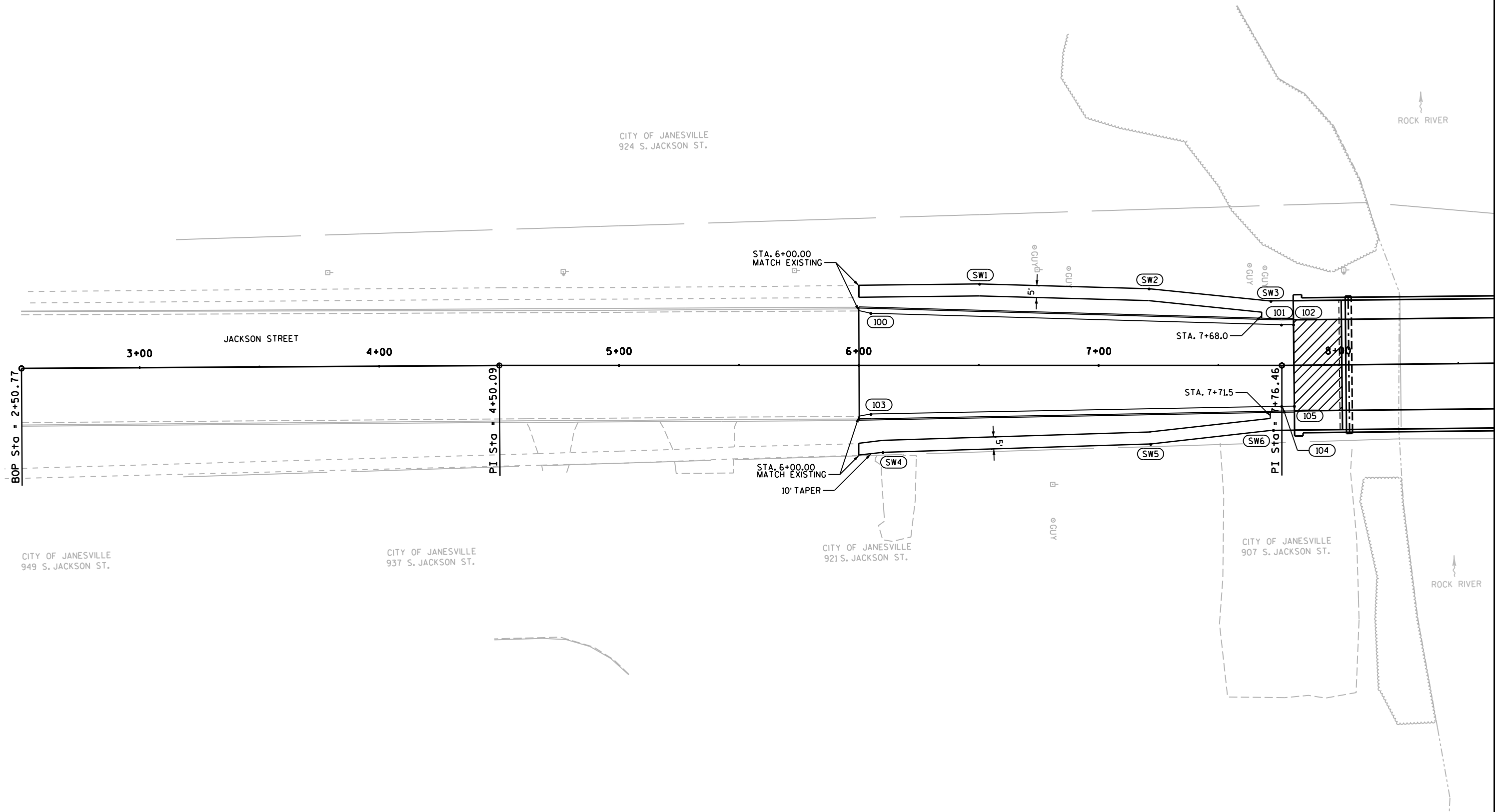


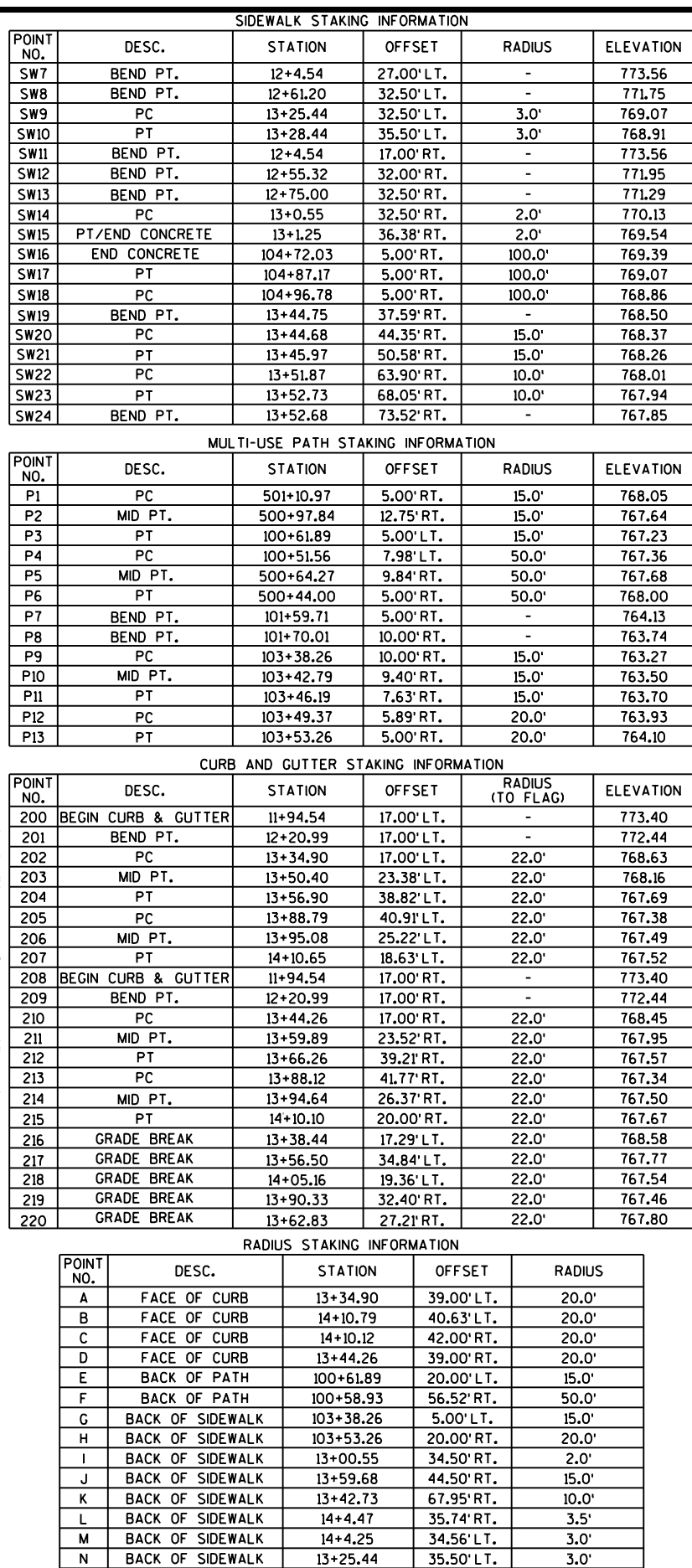


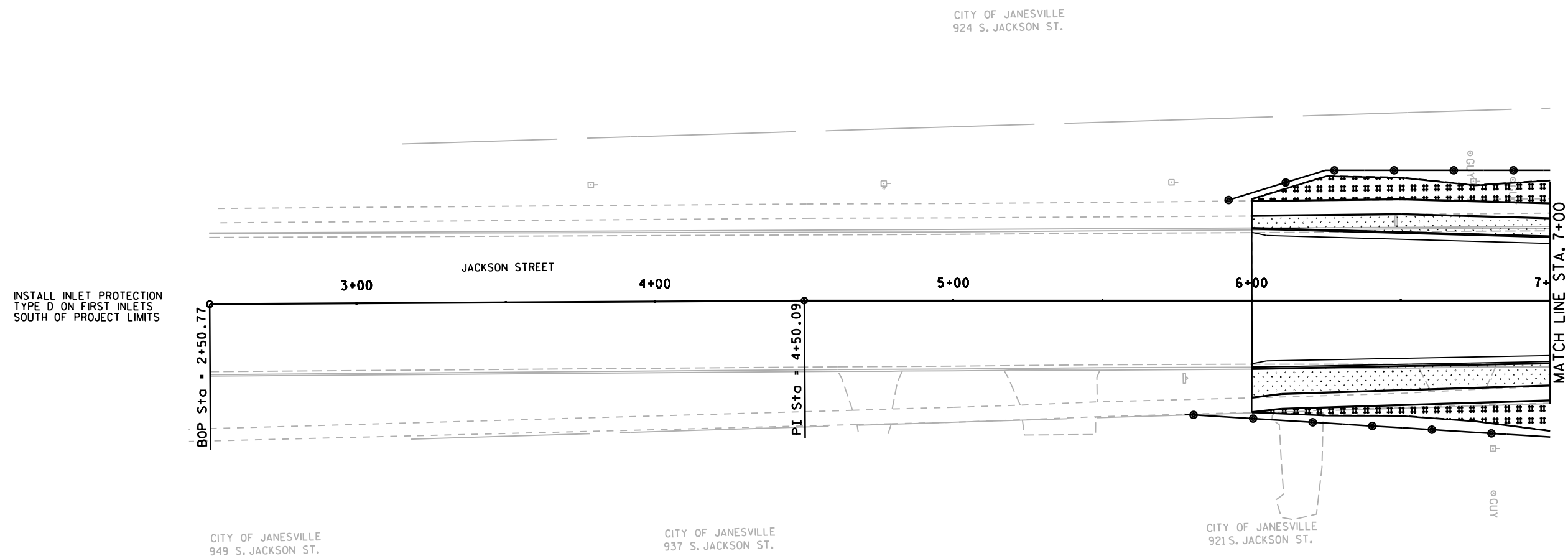


CURB AND GUTTER STAKING INFORMATION					
POINT NO.	DESC.	STATION	OFFSET	RADIUS (TO FLAG)	ELEVATION
100	BEND PT.	6+05.00	21.82' LT.	-	768.57
101	BEND PT.	7+76.46	17.00' LT.	-	773.29
102	END CURB & GUTTER	7+81.46	17.00' LT.	-	773.46
103	BEND PT.	6+05.00	20.23' RT.	-	768.59
104	BEND PT.	7+76.46	17.00' RT.	-	773.29
105	END CURB & GUTTER	7+81.46	17.00' RT.	-	773.46

SIDEWALK STAKING INFORMATION					
POINT NO.	DESC.	STATION	OFFSET	RADIUS	ELEVATION
SW1	BEND PT.	6+50.31	34.04' LT.	-	769.98
SW2	BEND PT.	7+21.03	32.05' LT.	-	772.01
SW3	BEND PT.	7+71.83	26.87' LT.	-	773.63
SW4	BEND PT.	6+10.00	36.22' RT.	-	769.48
SW5	BEND PT.	7+21.72	32.73' RT.	-	772.10
SW6	BEND PT.	7+72.88	26.96' RT.	-	773.67







NOTE:
AN UNDISTRIBUTED AMOUNT OF TOPSOIL, SEED, FERTILIZER
AND MULCH IS INCLUDED IN THE MISCELLANEOUS QUANTITY
SHEETS TO RESTORE DISTURBED AREAS BEHIND THE SIDEWALK.

LEGEND

- | | |
|--|--|
| | SILT FENCE |
| | INLET PROTECTION |
| | INLET PROTECTION FOR EXISTING INLET (TYPE) |
| | INLET PROTECTION FOR PROPOSED INLET (TYPE) |
| | EROSION MAT URBAN CLASS I TYPE B |
| | MULCHING |
| | SOD |
| | TURBIDITY BARRIER |

PROJECT NO:5990-00-84

HWY: JACKSON STREET

COUNTY: ROCK

EROSION CONTROL

SHEET

E

FILE NAME : \$\$....designfile....\$\$

PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

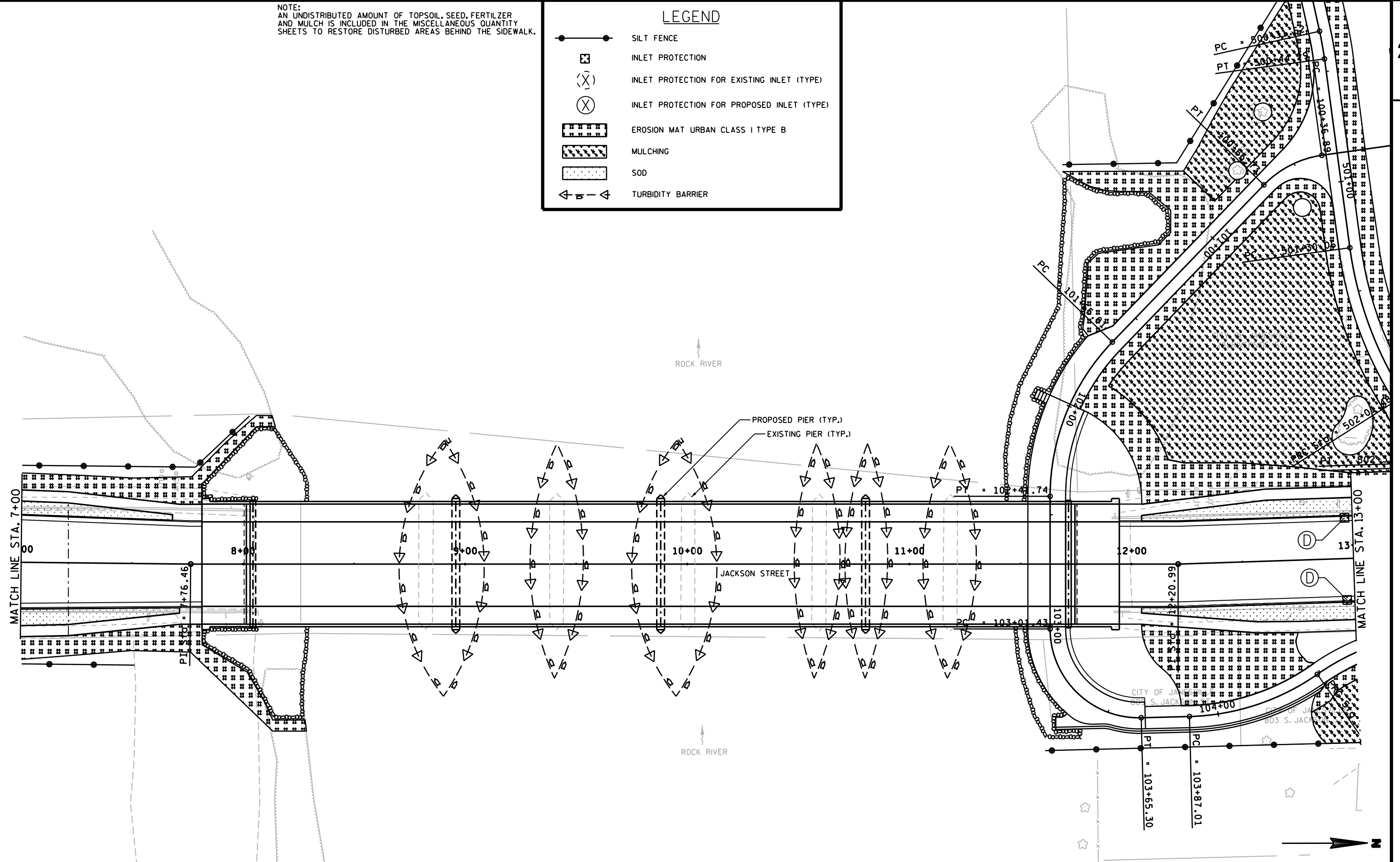
WISDOT/CADDs SHEET 42

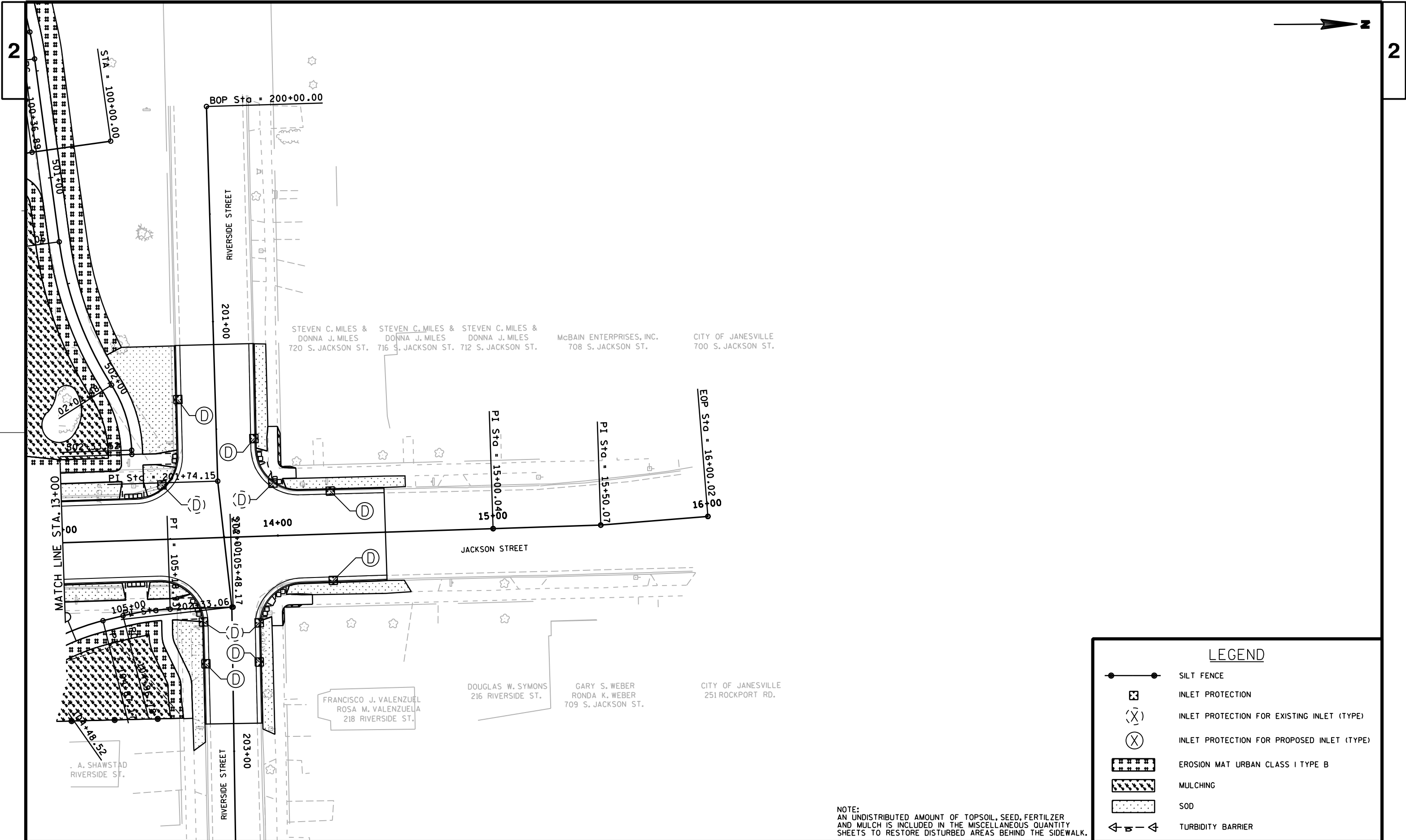
EC_01.dgn 4/30/2014 11:01:26 AM jdolens

NOTE:
AN UNDISTRIBUTED AMOUNT OF TOPSOIL, SEED, FERTILIZER
AND MULCH IS INCLUDED IN THE MISCELLANEOUS QUANTITY
SHEETS TO RESTORE DISTURBED AREAS BEHIND THE SIDEWALK.

LEGEND

- SILT FENCE
- ⊠ INLET PROTECTION
- (X) INLET PROTECTION FOR EXISTING INLET (TYPE)
- (X) INLET PROTECTION FOR PROPOSED INLET (TYPE)
- ▤ EROSION MAT URBAN CLASS I TYPE B
- ▥ MULCHING
- ▦ SOD
- ← — — — → TURBIDITY BARRIER





PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

EROSION CONTROL

SHEET

E

FILE NAME : \$\$....designfile....\$\$

PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

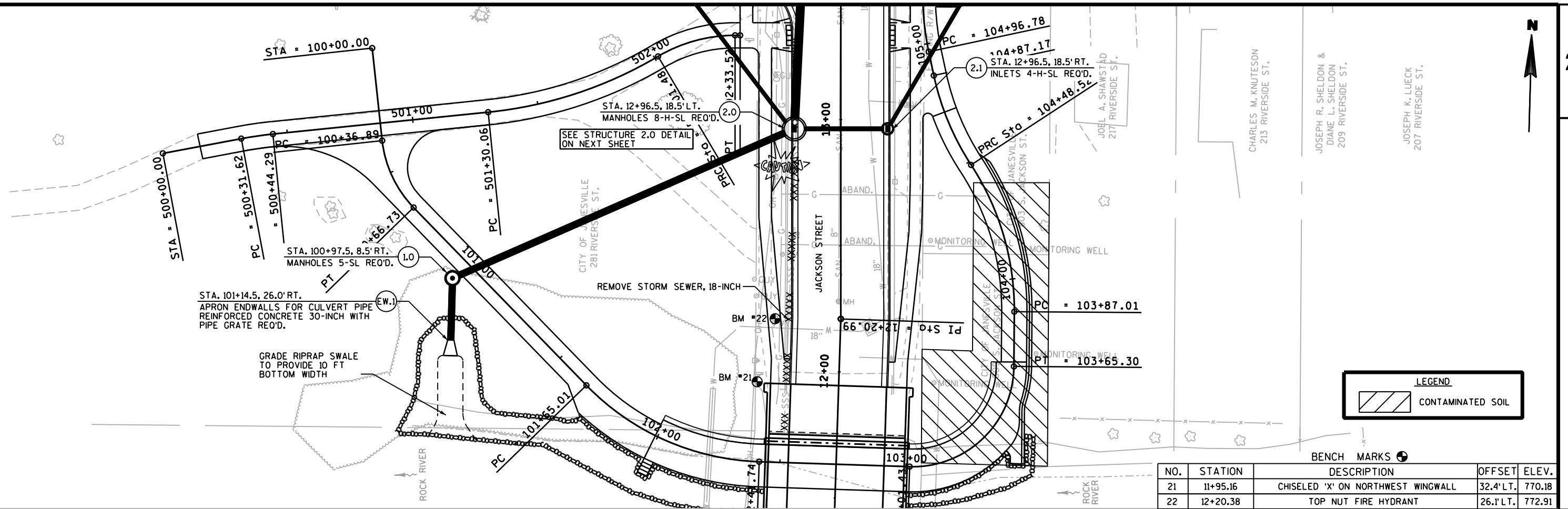
PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

WISDOT/CADDs SHEET 42

EC_03.dgn 4/30/2014 11:01:34 AM jdolens

NOTE:
AN UNDISTRIBUTED AMOUNT OF TOPSOIL, SEED, FERTILIZER
AND MULCH IS INCLUDED IN THE MISCELLANEOUS QUANTITY
SHEETS TO RESTORE DISTURBED AREAS BEHIND THE SIDEWALK.



772

772

770

770

768

768

766

766

764

764

762

762

760

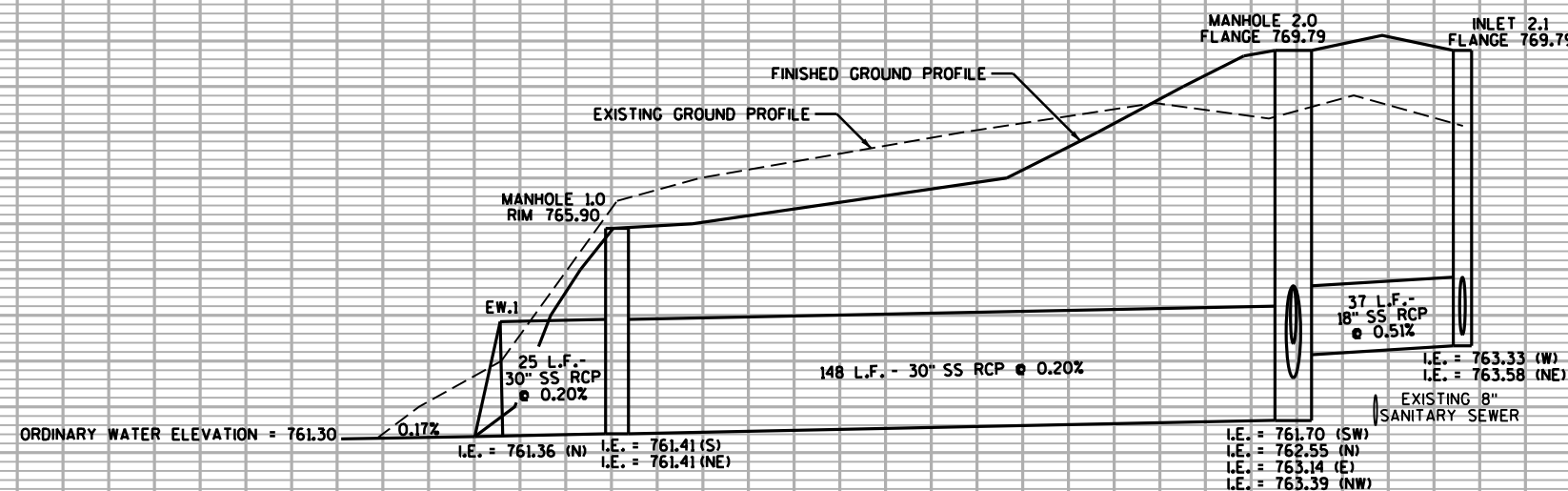
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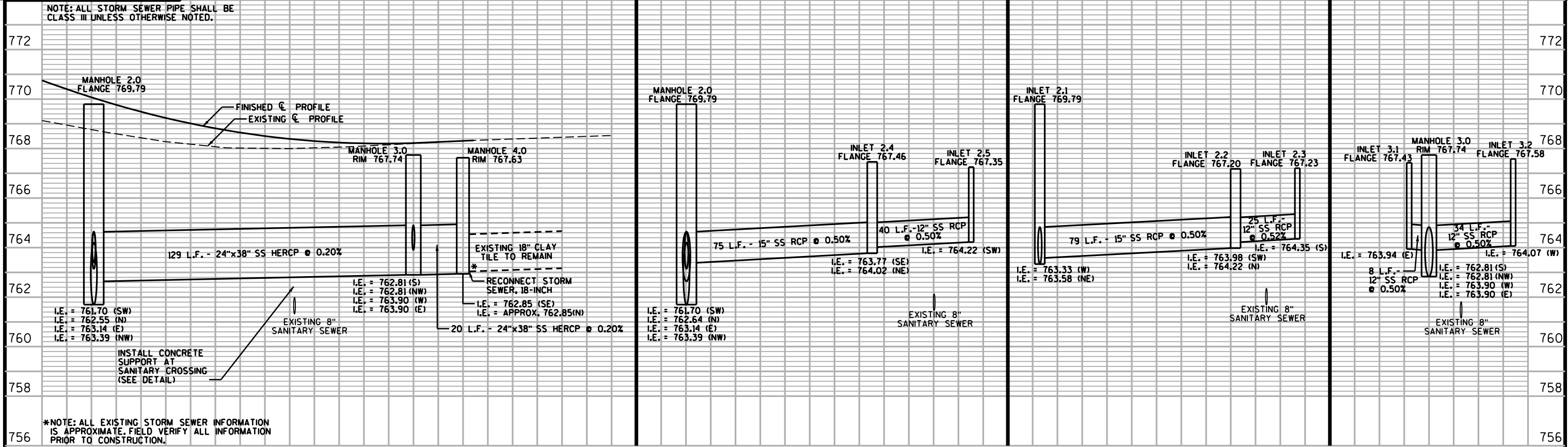
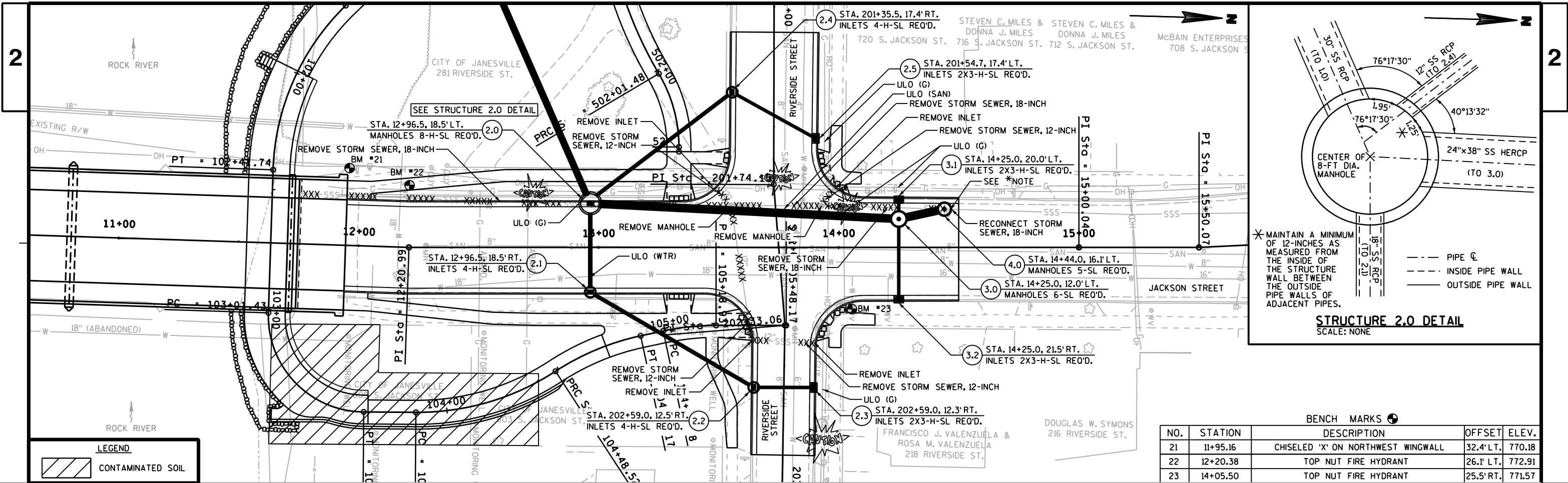
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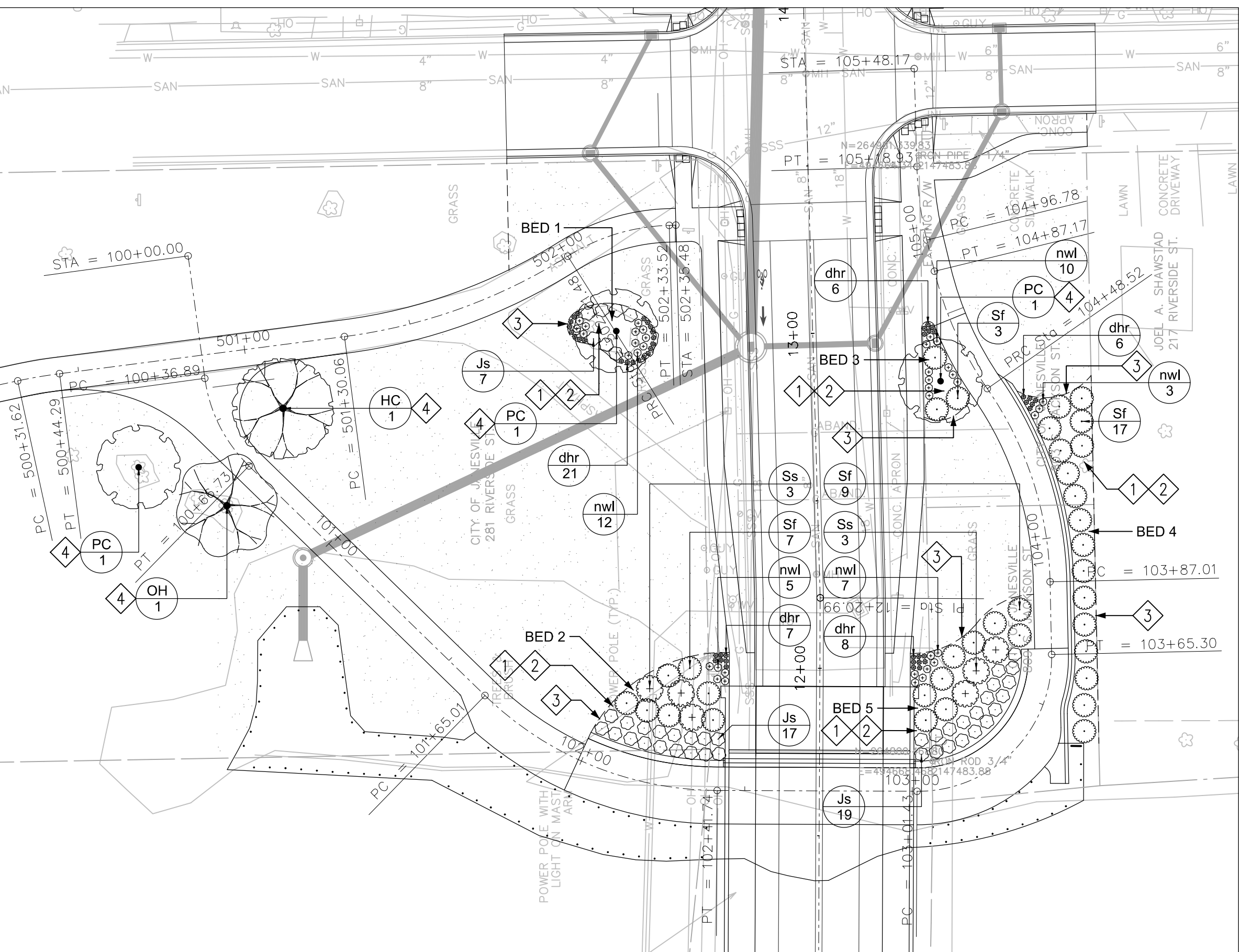
756

756





LOCATION: JACKSON STREET 11+00 JS TO 14+00 JS)



NOTES

THE CONTRACTOR SHALL FIELD LOCATE ALL PUBLIC AND PRIVATE EXISTING AND PROPOSED UTILITIES BEFORE DIGGING AND SHALL ADJUST PLANT LOCATIONS AS NECESSARY TO AVOID CONFLICTS AND ACCOMMODATE UTILITY REQUIREMENTS. MINIMUM UTILITY OFFSETS ARE AS FOLLOWS (GIVEN FROM CENTER OF LINE):
-- GAS: 24-INCHES
-- ELECTRIC: 36-INCHES
-- CITY SANITARY, STORM, WATER: 10-FOET OR AS INDICATED IN DRAWINGS.

CONTACT CITY OF JANESVILLE PARKS DIVISION AT LEAST ONE WEEK PRIOR TO PLANTING TREES TO MARK THE PLANTING LOCATIONS AND SCHEDULE A TIME TO INSPECT NURSERY STOCK. PLANTING STOCK TO BE APPROVED BY THE CITY OF JANESVILLE PARKS DIVISION AND THE FIELD ENGINEER PRIOR TO INSTALLATION.

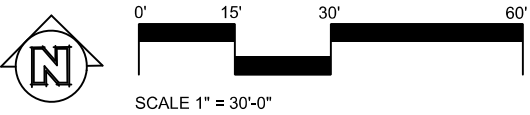
PLANS PREPARED BY:
KEN SAIKI DESIGN, MADISON, WI (608) 251-3600

PLANT KEY

SYM	COMMON NAME
HC	Horsechestnut, Baumann Common
PC	Pear, Autumn Blaze Gallery
OH	Oak, Heritage
Js	Juniper, Broadmoor Savin
Sf	Sumac, 'Gro-Low' Fragrant
Ss	Sumac, Smooth
dhr	Daylily, 'Happy Returns'
nwl	Nepeta, 'Walker's Low'

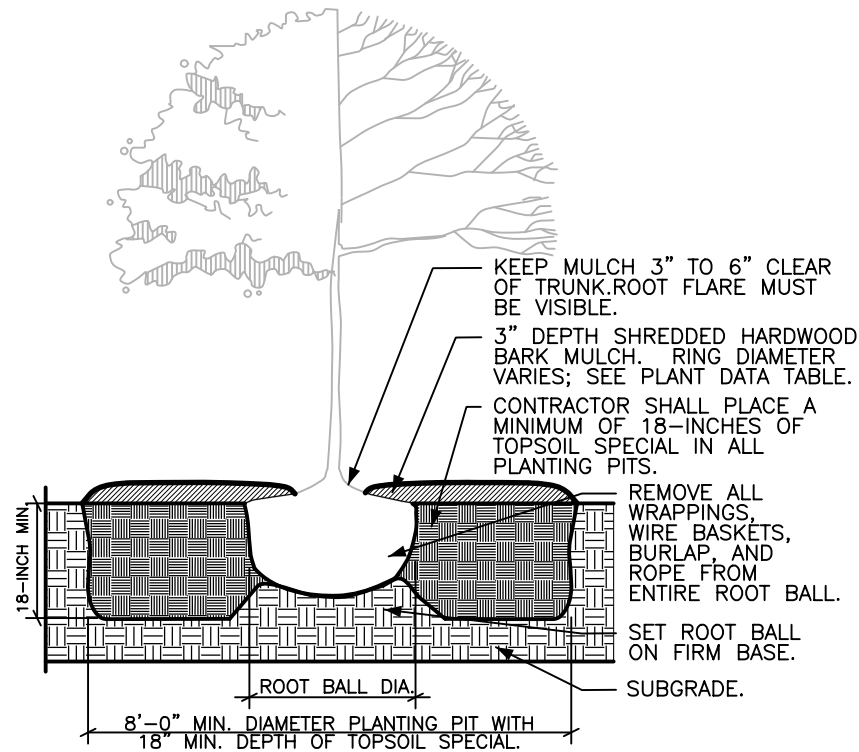
LEGEND

- (abc) — PLANT SYMBOL
xx — QUANTITY
- 1 SHREDDED HARDWOOD BARK MULCH
- 2 PLANTING MIXTURE
- 3 SHOVEL CUT EDGING
- 4 TOPSOIL SPECIAL

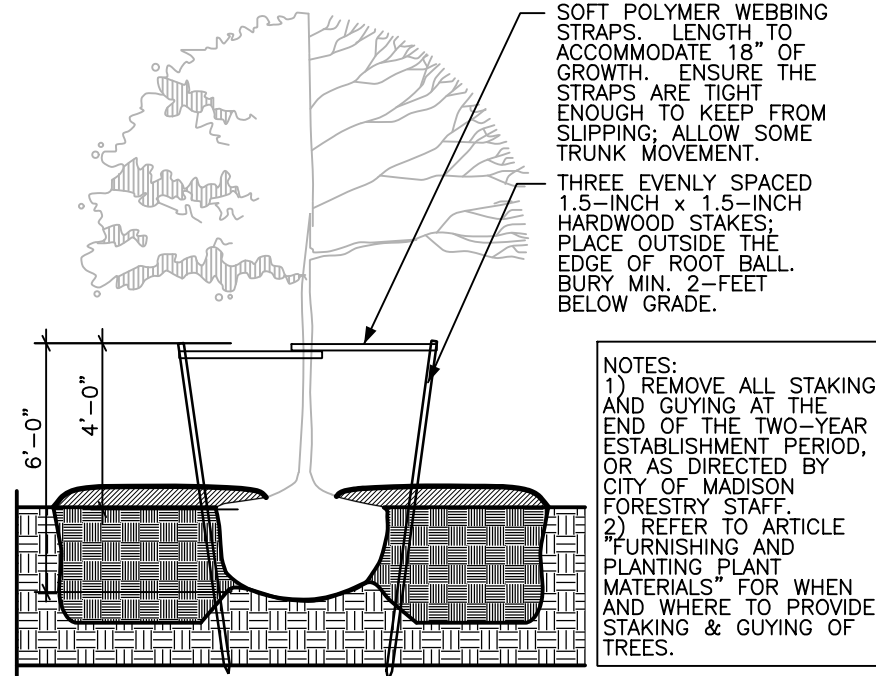


PLANT DATA TABLE

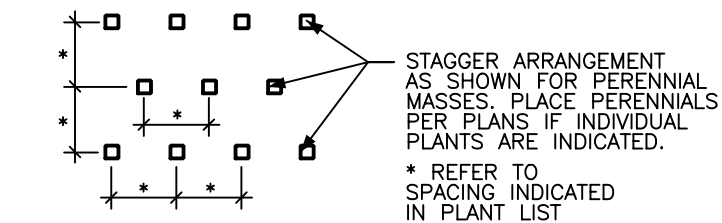
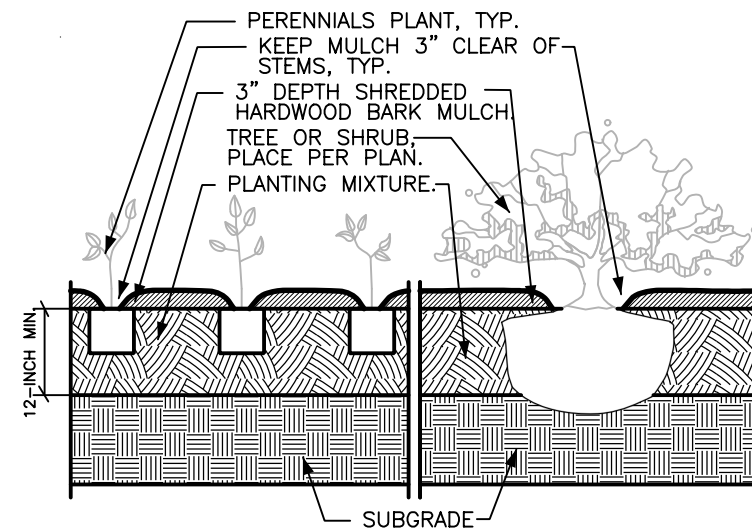
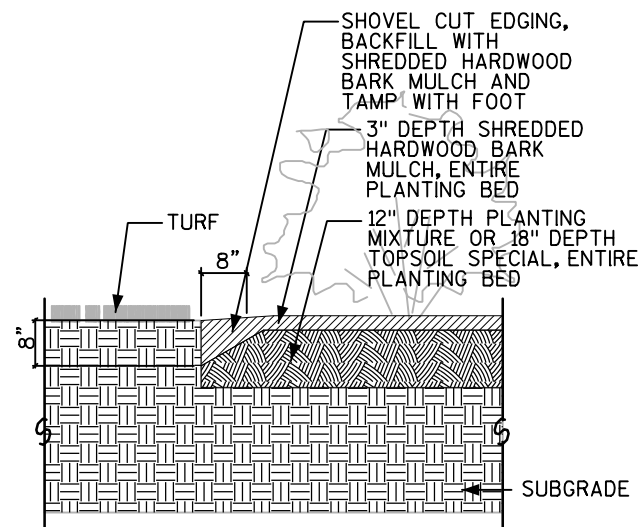
Symbol	Common Name	Scientific Name	Type	Average Mature Height	Size When Planted	Root Zone Mode	Minimum Size					Brace Or Guy	Fertilizer Units Required	Rodent Protection Required	Mulch Ring Required	Plant Bed Detail
							Ball/Pot		Root	Plant Hole						
							Diameter	Depth	Spread	Diameter	Depth					
	Deciduous Trees															
HC	Horsechestnut, Baumann Common	<i>Aesculus hippocastanum 'Baumannii'</i>	2T	50-75' Ht.	3" Cal.	B&B	32"	19"	-----	56"	19"	See SPV	6	No	68"	-----
PC	Pear, Autumn Blaze Callery	<i>Pyrus calleryana 'Autumn Blaze'</i>	3T	35' Ht.	3" Cal.	B&B	32"	19"	-----	56"	19"	See SPV	6	No	68"	Bed 1, 3
OH	Oak, Heritage	<i>Quercus x macdanielli 'Clemons'</i>	1T	50-60' Ht.	3" Cal.	B&B	32"	19"	-----	56"	19"	See SPV	4	No	68"	-----
	Evergreens															
Js	Juniper, Broadmoor Savin	<i>Juniperus sabina 'Broadmoor'</i>	2E	1' Ht.	2' Sp.	CONT	12"	8"	-----	36"	8"	-----	2	No	BED	Bed 1, 2, 5
	Deciduous Ornamental Shrubs															
Sf	Sumac, Gro-Low Fragrant	<i>Rhus aromatica 'Gro-Low'</i>	1S	2-3' Ht.	2' Sp.	CONT	10"	6.5"	-----	34"	6.5"	-----	2	No	BED	Bed 2, 3, 4, 5
Ss	Sumac, Smooth	<i>Rhus glabra</i>	3S	10-15' Ht.	4' Ht.	CONT/B&B	14"	9"	-----	38"	9"	-----	4	No	BED	Bed 2, 5
	Perennials / Ornamental Grasses															
dhr	Daylily, 'Happy Returns'	<i>Hemerocallis 'Happy Returns'</i>	1V	12-18" Ht.	1 gal.	CONT	8"	10"	-----	16"	10"	-----	1	No	BED	Bed 1, 2, 3, 4, 5
nwl	Nepeta, 'Walker's Low'	<i>Nepeta x fassenii 'Walker's Low'</i>	1V	18-24" Ht.	1 gal.	CONT	8"	10"	-----	16"	10"	-----	1	No	BED	Bed 1, 2, 3, 4, 5



① TREE PLANTING

DETAIL
NOT TO SCALE

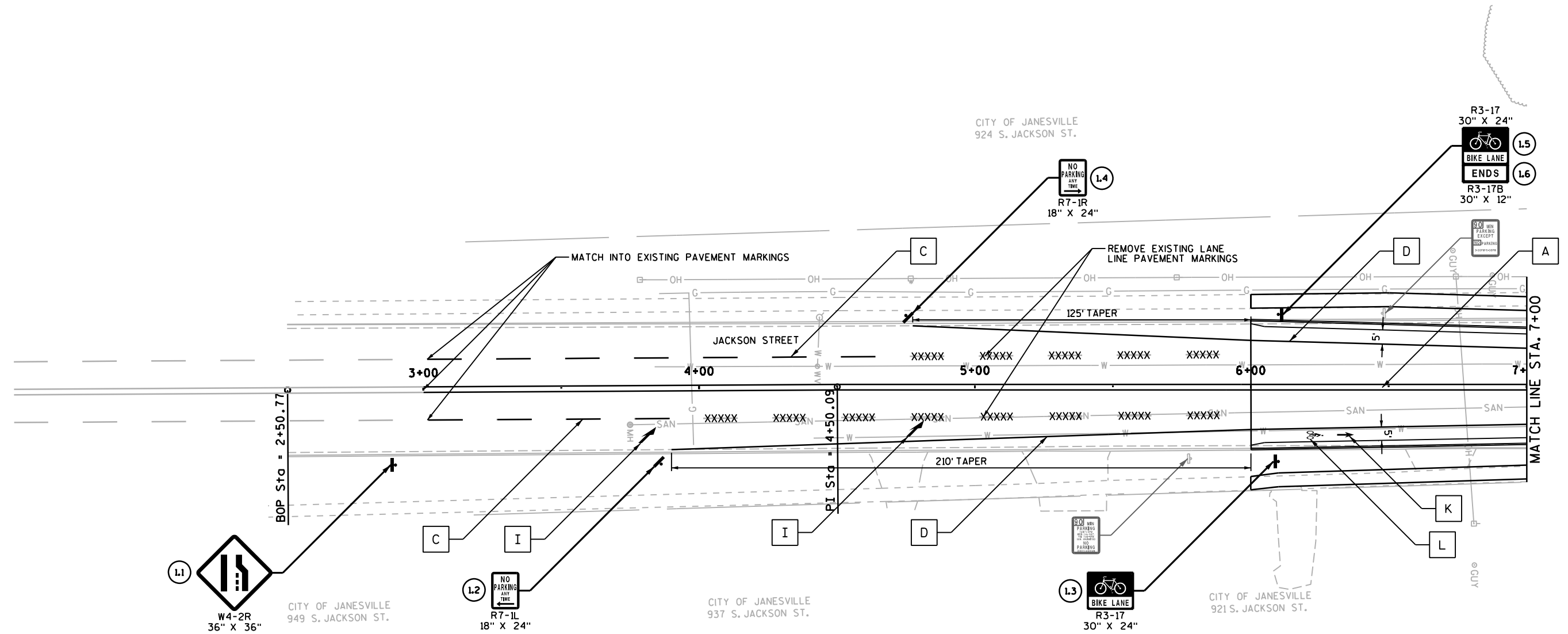
② TREE STAKING & GUYING

DETAIL
NOT TO SCALE④ PERENNIALS & SHRUBS
IN PLANTING BEDSDETAIL
NOT TO SCALE

NOTE:
REMOVE ALL DEBRIS, SLAG
PILES, AND TRASH FROM
PLANTING BED PRIOR TO
PLACING PLANTING MIXTURE OR
TOPSOIL SPECIAL

⑤ SHOVEL CUT EDGING

DETAIL
NOT TO SCALE



NOTE:
ALL EXISTING SIGNS AND POSTS WITHIN THE PROJECT LIMITS
TO BE REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

PERMANENT SIGNING AND PAVEMENT MARKINGS

SHEET

E

FILE NAME : \$\$....designfile....\$\$

PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

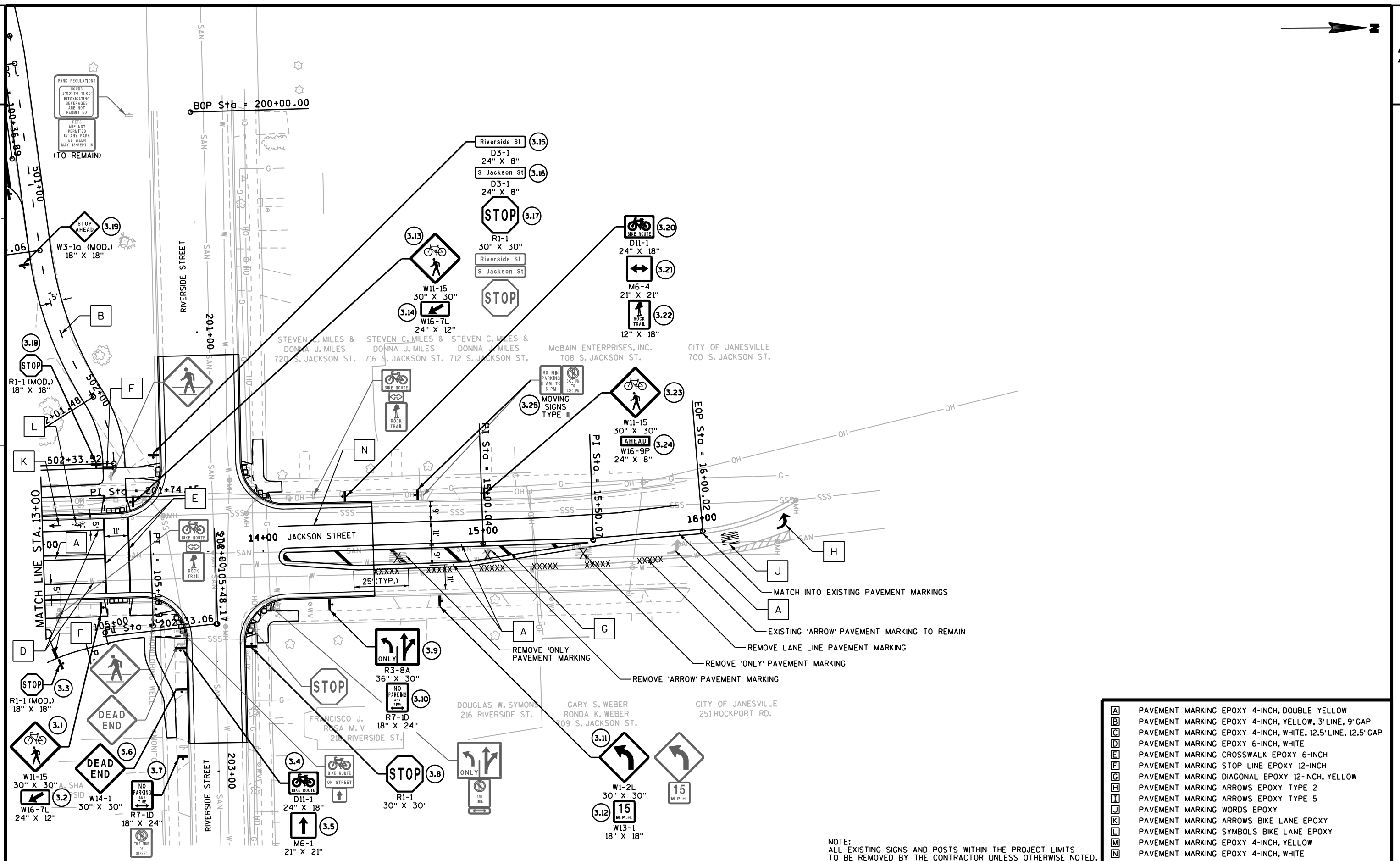
WISDOT/CADDs SHEET 42

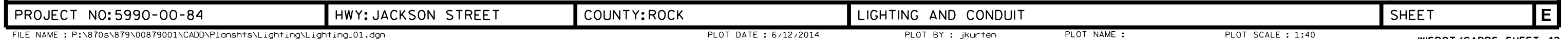
PM_01.dgn 4/30/2014 11:01:40 AM jdolens

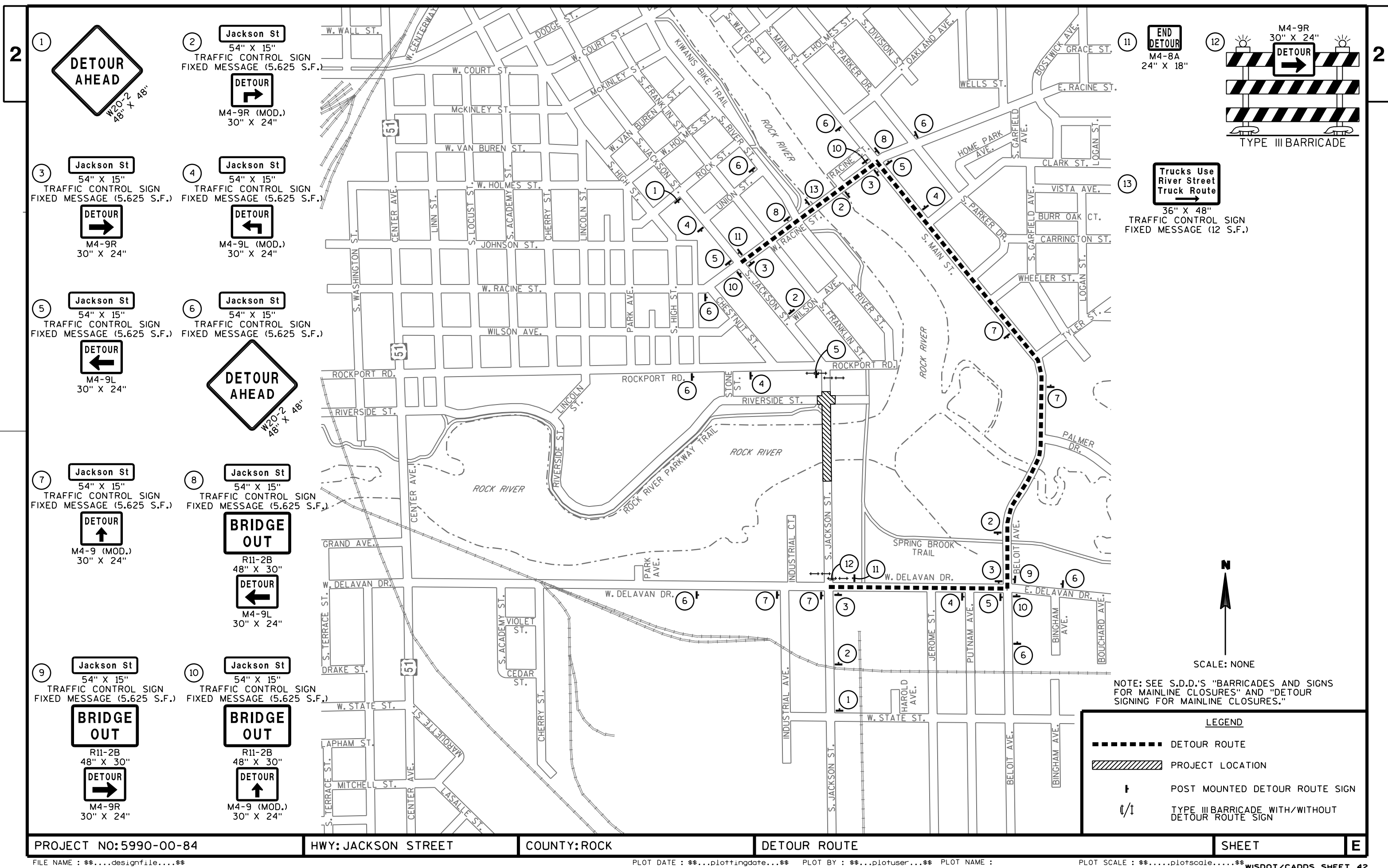
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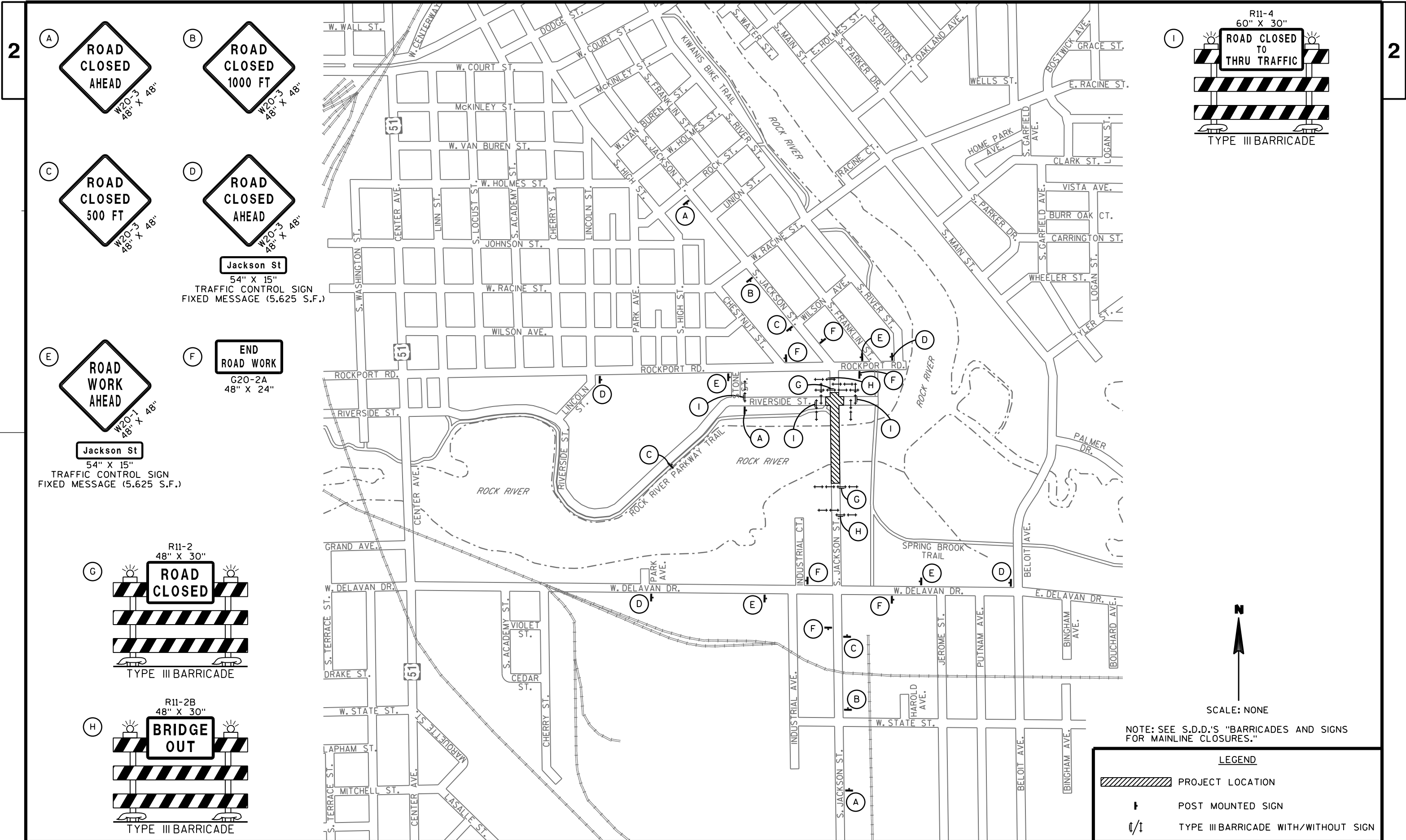
A	PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
B	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, 3' LINE, 9' GAP
C	PAVEMENT MARKING EPOXY 4-INCH, WHITE, 12.5' LINE, 12.5' GAP
D	PAVEMENT MARKING EPOXY 6-INCH, WHITE
E	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
F	PAVEMENT MARKING STOP LINE EPOXY 12-INCH
G	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
H	PAVEMENT MARKING ARROWS EPOXY TYPE 2
I	PAVEMENT MARKING ARROWS EPOXY TYPE 5
J	PAVEMENT MARKING WORDS EPOXY
K	PAVEMENT MARKING ARROWS BIKE LANE EPOXY
L	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
M	PAVEMENT MARKING EPOXY 4-INCH, YELLOW
N	PAVEMENT MARKING EPOXY 4-INCH, WHITE











A

ROAD
CLOSED
AHEAD
W20-3
48" X 48"

B

ROAD
CLOSED
1000 FT
W20-3
48" X 48"

C

ROAD
CLOSED
500 FT
W20-3
48" X 48"

D

ROAD
CLOSED
AHEAD
W20-3
48" X 48"

E

ROAD
WORK
AHEAD
W20-1
48" X 48"

Jackson St
54" X 15"
TRAFFIC CONTROL SIGN
FIXED MESSAGE (5.625 S.F.)

F

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

G

R11-2
48" X 30"
ROAD
CLOSED
TYPE III BARRICADE

H

R11-2B
48" X 30"
BRIDGE
OUT
TYPE III BARRICADE

I

R11-4
60" X 30"
ROAD CLOSED
TO
THRU TRAFFIC
TYPE III BARRICADE

NOTE: SEE S.D.D.'S "BARRICADES AND SIGNS FOR MAINLINE CLOSURES."

LEGEND

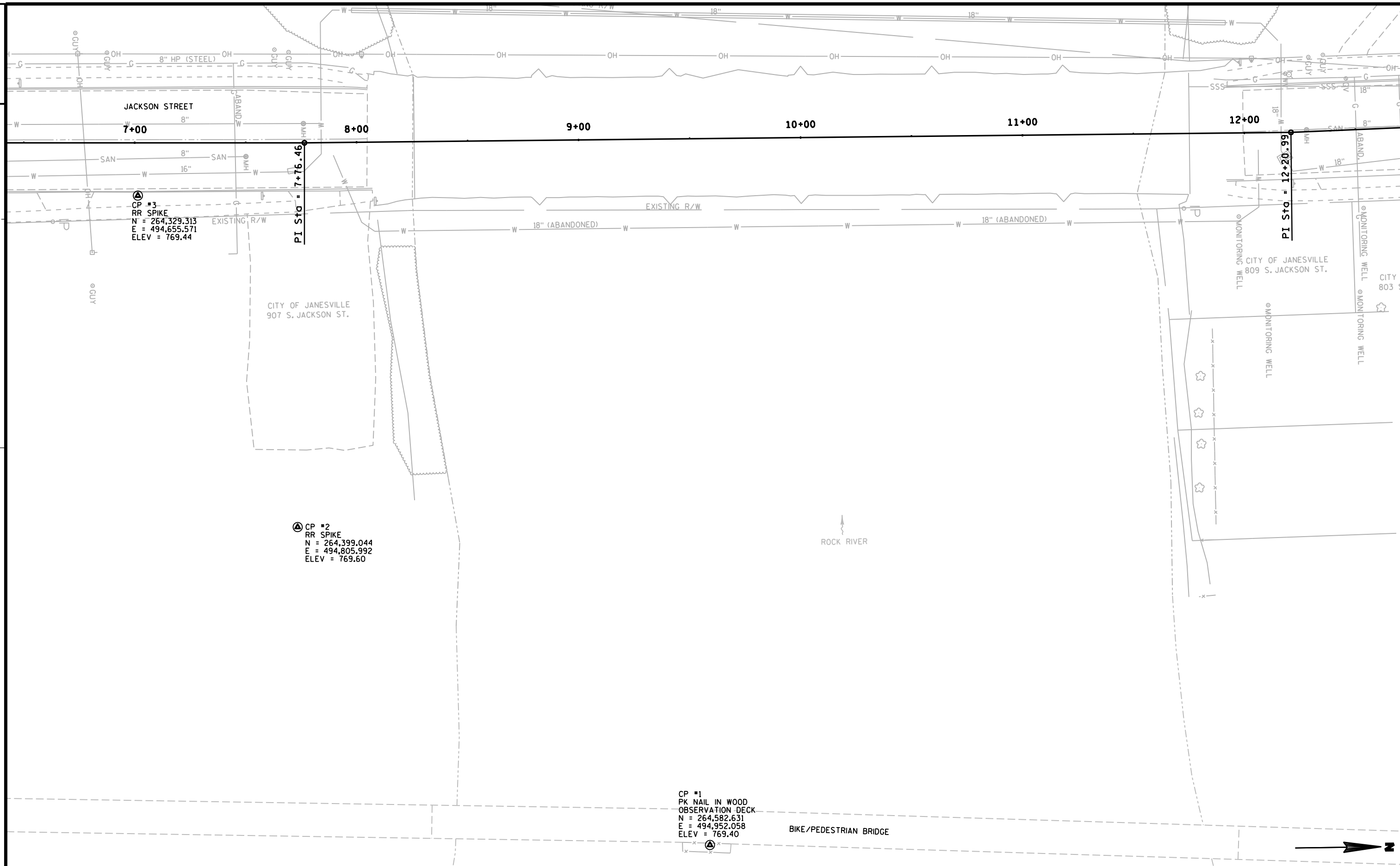
PROJECT LOCATION

POST MOUNTED SIGN

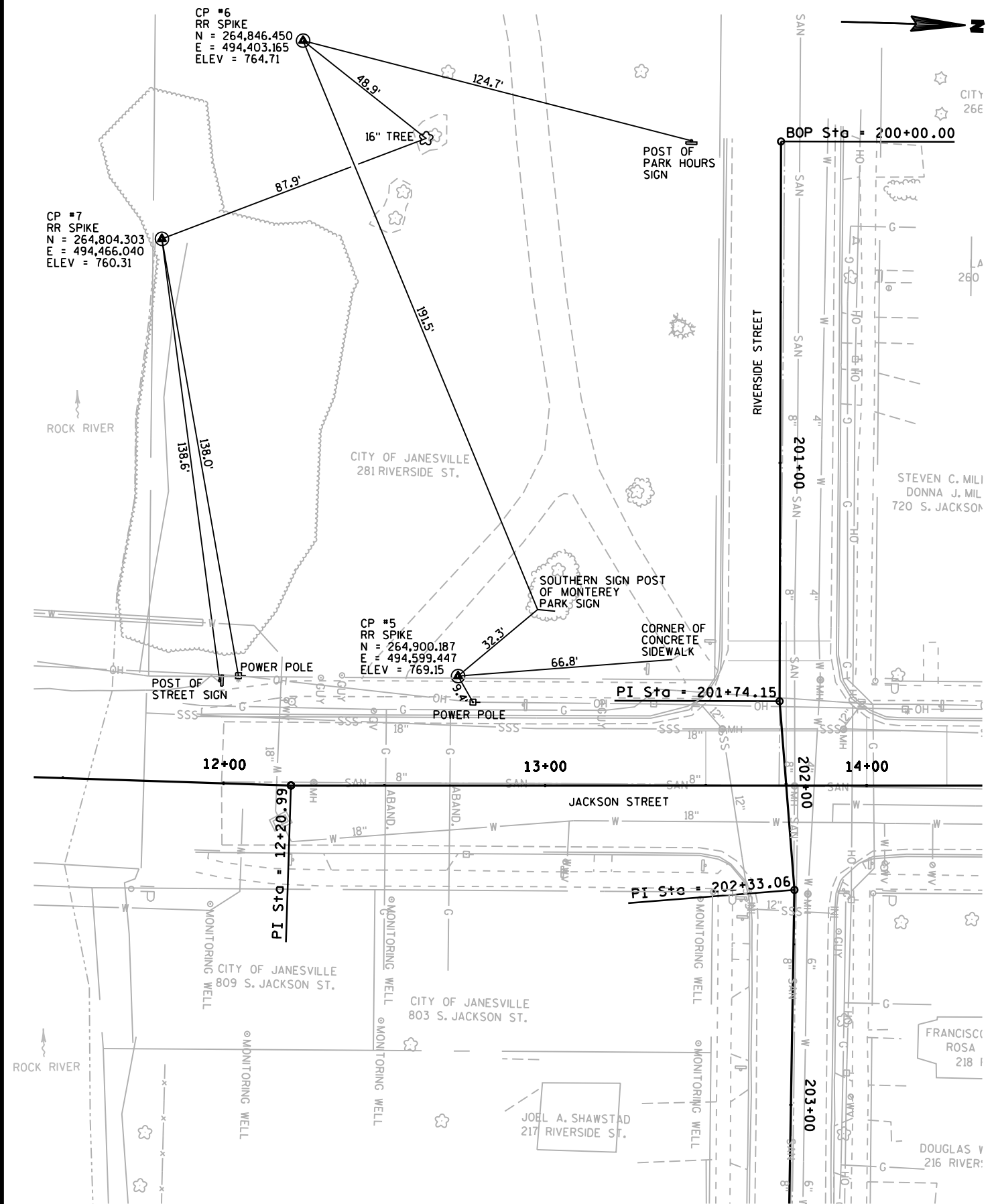
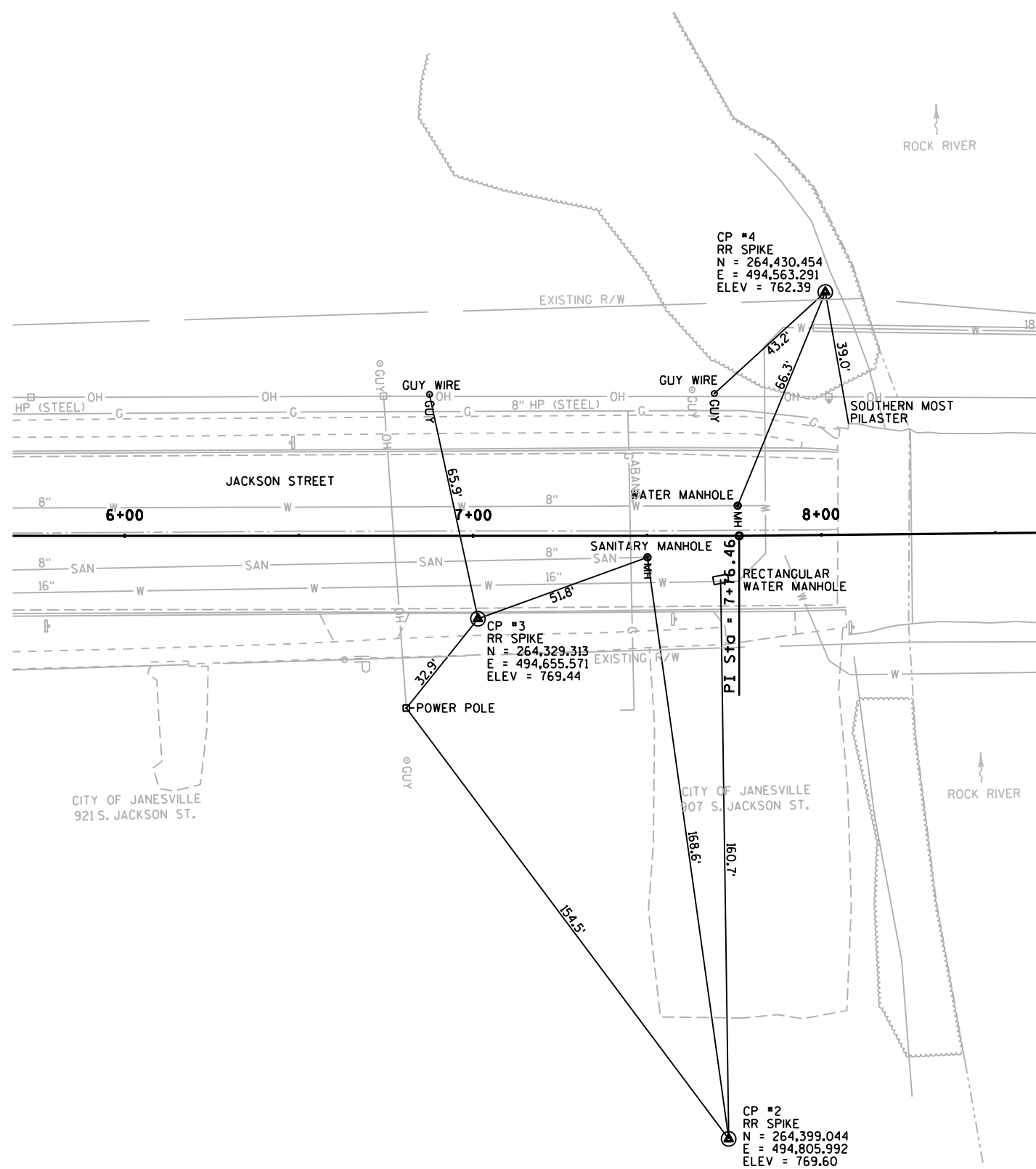
TYPE III BARRICADE WITH/WITHOUT SIGN

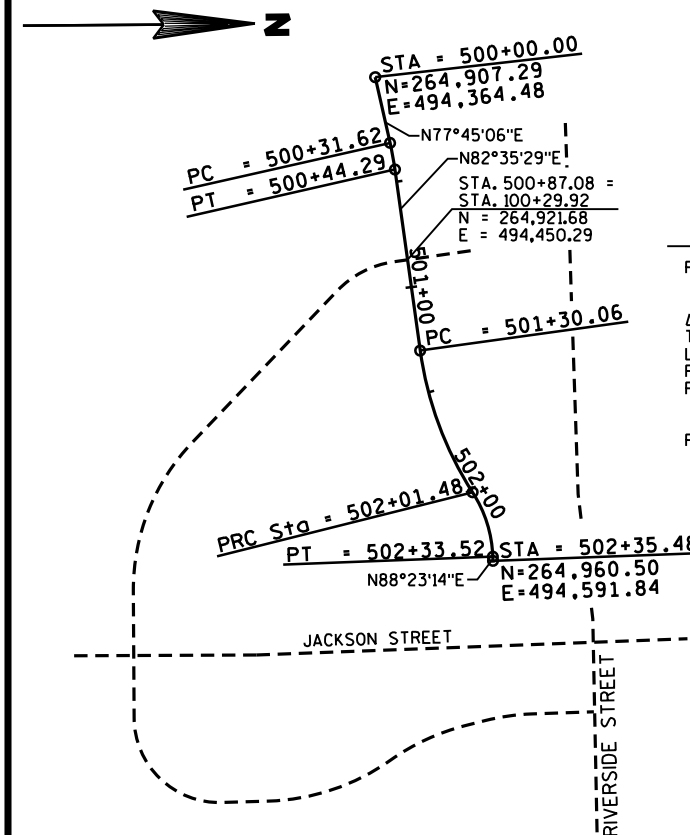
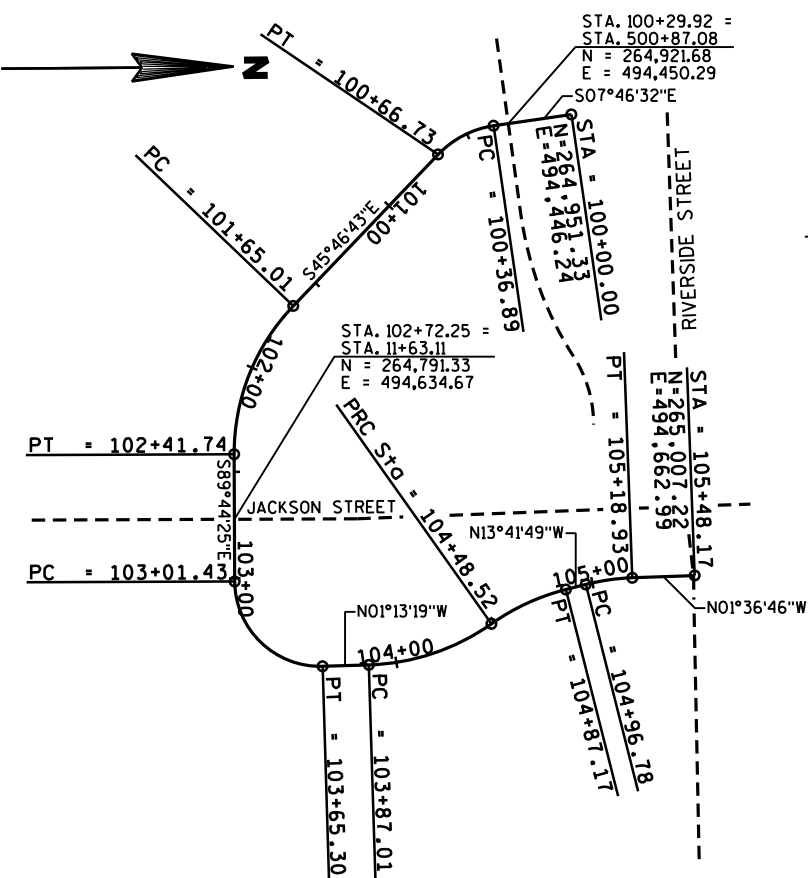
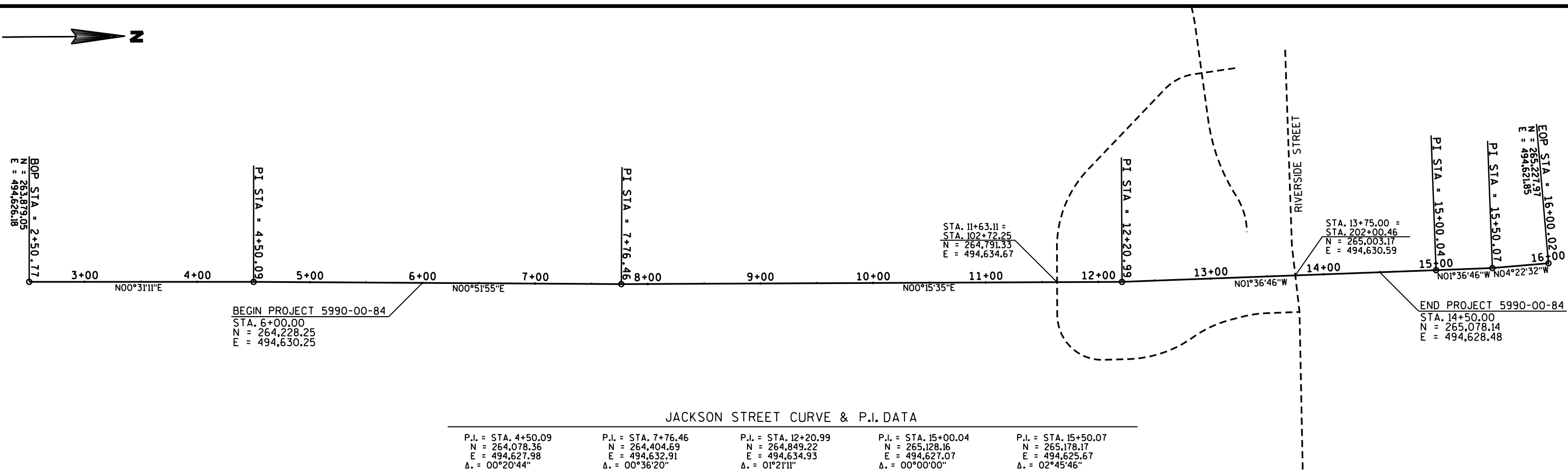
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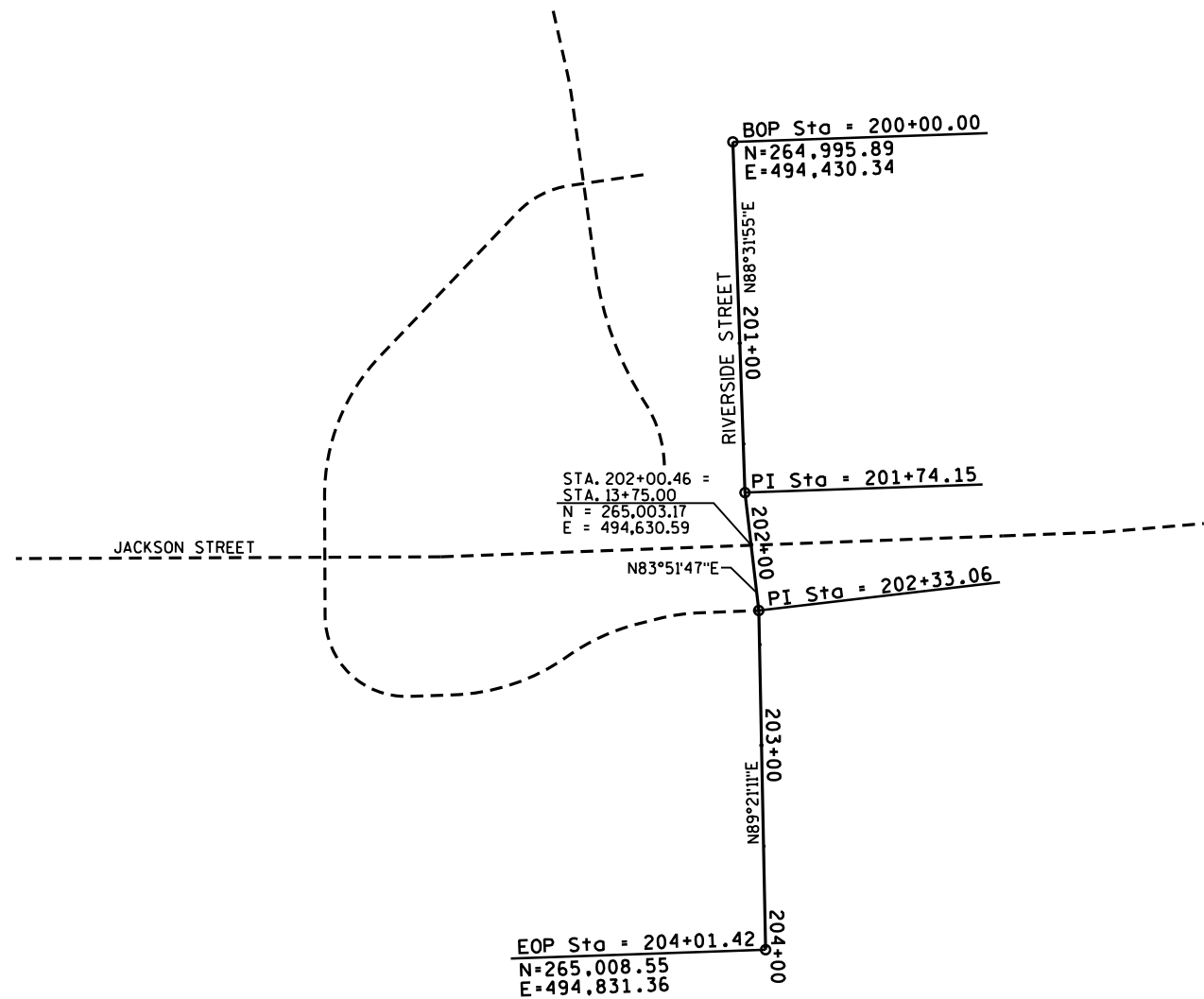
2



PROJECT NO:5990-00-84	HWY: JACSON STREET	COUNTY: ROCK	CONTROL POINT TIES	SHEET	E
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RIVERSIDE STREET CURVE & P.I. DATA

P.I. = STA. 201+74.15	P.I. = STA. 202+33.06
N = 265,000.35	N = 265,006.65
E = 494,604.43	E = 494,663.01
Δ. = 04°40'08"	Δ. = 05°29'24"

DATE 17JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE		5990-00-84			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	5.000	5.000
0020	201.0205	GRUBBING	STA	5.000	5.000
0030	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 10+00	LS	1.000	1.000
0040	204.0100	REMOVING PAVEMENT	SY	2,525.000	2,525.000
0050	204.0110	REMOVING ASPHALTIC SURFACE	SY	350.000	350.000
0060	204.0150	REMOVING CURB & GUTTER	LF	1,180.000	1,180.000
0070	204.0155	REMOVING CONCRETE SIDEWALK	SY	608.000	608.000
0080	204.0210	REMOVING MANHOLES	EACH	2.000	2.000
0090	204.0220	REMOVING INLETS	EACH	4.000	4.000
0100	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	104.000	104.000
0110	204.0245	REMOVING STORM SEWER (SIZE) 02. 18-INCH	LF	269.000	269.000
0120	205.0100	EXCAVATION COMMON	CY	1,360.000	1,360.000
0130	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-53-0287	LS	1.000	1.000
0140	208.0100	BORROW	CY	1,828.000	1,828.000
0150	210.0100	BACKFILL STRUCTURE	CY	920.000	920.000
0160	213.0100	FINISHING ROADWAY (PROJECT) 01. 5990-00-84	EACH	1.000	1.000
0170	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	1,595.000	1,595.000
0180	305.0130	BASE AGGREGATE DENSE 3-INCH	TON	990.000	990.000
0190	312.0110	SELECT CRUSHED MATERIAL	TON	215.000	215.000
0200	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	170.000	170.000
0210	455.0120	ASPHALTIC MATERIAL PG64-28	TON	26.000	26.000
0220	455.0605	TACK COAT	GAL	56.000	56.000
0230	460.1101	HMA PAVEMENT TYPE E-1	TON	514.000	514.000
0240	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	330.000	330.000
0250	465.0105	ASPHALTIC SURFACE	TON	69.000	69.000
0260	465.0315	ASPHALTIC FLUMES	SY	6.000	6.000
0270	502.0100	CONCRETE MASONRY BRIDGES	CY	1,589.000	1,589.000
0280	502.3100	EXPANSION DEVICE (STRUCTURE) 01. B-53-0287	LS	1.000	1.000
0290	502.3200	PROTECTIVE SURFACE TREATMENT	SY	3,565.000	3,565.000
0300	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	2,576.000	2,576.000
0310	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	29,190.000	29,190.000
0320	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	191,460.000	191,460.000
0330	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	42.000	42.000
0340	506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	14.000	14.000
0350	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-53-0287	EACH	48.000	48.000
0360	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	44.000	44.000
0370	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	1.000	1.000
0380	550.1100	PIILING STEEL HP 10-INCH X 42 LB	LF	9,560.000	9,560.000
0390	601.0419	CONCRETE CURB & GUTTER 30-INCH TYPE L	LF	1,055.000	1,055.000
0400	602.0405	CONCRETE SIDEWALK 4-INCH	SF	3,940.000	3,940.000
0410	602.0415	CONCRETE SIDEWALK 6-INCH	SF	1,655.000	1,655.000
0420	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	88.000	88.000
0430	606.0300	RIPRAP HEAVY	CY	655.000	655.000
0440	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	107.000	107.000
0450	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	154.000	154.000

DATE 17JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE				5990-00-84	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0460	608.0318	STORM SEWER PIPE REINFORCED CONCRETE	LF	37.000	37.000
		CLASS III 18-INCH			
0470	608.0330	STORM SEWER PIPE REINFORCED CONCRETE	LF	173.000	173.000
		CLASS III 30-INCH			
0480	610.0124	STORM SEWER PIPE REINFORCED CONCRETE	LF	149.000	149.000
		HORIZONTAL ELLIPTICAL CLASS HE-III			
		24X38-INCH			
0490	611.2005	MANHOLES 5-FT DIAMETER	EACH	2.000	2.000
0500	611.2006	MANHOLES 6-FT DIAMETER	EACH	1.000	1.000
0510	611.2008	MANHOLES 8-FT DIAMETER	EACH	1.000	1.000
0520	611.3004	INLETS 4-FT DIAMETER	EACH	3.000	3.000
0530	611.3230	INLETS 2X3-FT	EACH	4.000	4.000
0540	611.8120.S	COVER PLATES TEMPORARY	EACH	5.000	5.000
0550	611.9800.S	PIPE GRATES	EACH	1.000	1.000
0560	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	460.000	460.000
0570	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01.4-INCH	SY	32.000	32.000
0580	616.0700.S	FENCE SAFETY	LF	350.000	350.000
0590	619.1000	MOBILIZATION	EACH	1.000	1.000
0600	624.0100	WATER	MGAL	40.000	40.000
0610	625.0100	TOPSOIL	SY	4,035.000	4,035.000
0620	627.0200	MULCHING	SY	1,785.000	1,785.000
0630	628.1104	EROSION BALES	EACH	25.000	25.000
0640	628.1504	SILT FENCE	LF	745.000	745.000
0650	628.1520	SILT FENCE MAINTENANCE	LF	1,490.000	1,490.000
0660	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	9.000	9.000
0670	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	6.000	6.000
0680	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	1,845.000	1,845.000
0690	628.6005	TURBIDITY BARRIERS	SY	2,356.000	2,356.000
0700	628.7020	INLET PROTECTION TYPE D	EACH	14.000	14.000
0710	628.7560	TRACKING PADS	EACH	4.000	4.000
0720	629.0210	FERTILIZER TYPE B	CWT	3.000	3.000
0730	630.0140	SEEDING MIXTURE NO. 40	LB	60.000	60.000
0740	631.0300	SOD WATER	MGAL	18.000	18.000
0750	631.1000	SOD LAWN	SY	800.000	800.000
0760	632.0101	TREES (SPECIES, ROOT, SIZE) 01. HORSECHESTNUT, 'BAUMANN' COMMON, B&B, 3-INCH CAL.	EACH	1.000	1.000
0770	632.0101	TREES (SPECIES, ROOT, SIZE) 02. PEAR, AUTUMN BLAZE CALLERY, B&B, 3-INCH CAL.	EACH	3.000	3.000
0780	632.0101	TREES (SPECIES, ROOT, SIZE) 03. OAK, HERITAGE, B&B, 3-INCH CAL.	EACH	1.000	1.000
0790	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 01. SUMAC, 'GRO-LOW' FRAGRANT, CG, 24-INCH SPREAD	EACH	36.000	36.000
0800	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 02. SUMAC, SMOOTH, CG OR B&B, 4 FT HT	EACH	6.000	6.000
0810	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 03. JUNIPER, 'BROADMOOR' SAVIN, CG, 24-INCH SPREAD	EACH	43.000	43.000
0820	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	26.000	26.000
0830	633.5200	MARKERS CULVERT END	EACH	1.000	1.000
0840	634.0809	POSTS TUBULAR STEEL 2X2-INCH X 9.5-FT	EACH	8.000	8.000
0850	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	18.000	18.000
0860	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	6.000	6.000
0870	637.2210	SIGNS TYPE II REFLECTIVE H	SF	181.520	181.520

DATE 17JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE				5990-00-84	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0880	638.2102	MOVING SIGNS TYPE II	EACH	2.000	2.000
0890	638.2602	REMOVING SIGNS TYPE II	EACH	33.000	33.000
0900	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	18.000	18.000
0910	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0920	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5990-00-84	EACH	1.000	1.000
0930	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	12,375.000	12,375.000
0940	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	15,125.000	15,125.000
0950	643.0900	TRAFFIC CONTROL SIGNS	DAY	7,975.000	7,975.000
0960	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	254.000	254.000
0970	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 5990-00-84	EACH	1.000	1.000
0980	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	12,375.000	12,375.000
0990	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	1,240.000	1,240.000
1000	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	3,460.000	3,460.000
1010	646.0116	PAVEMENT MARKING EPOXY 6-INCH	LF	1,790.000	1,790.000
1020	646.0600	REMOVING PAVEMENT MARKINGS	LF	315.000	315.000
1030	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	1.000	1.000
1040	647.0196	PAVEMENT MARKING ARROWS EPOXY TYPE 5	EACH	2.000	2.000
1050	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	4.000	4.000
1060	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	4.000	4.000
1070	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	1.000	1.000
1080	647.0556	PAVEMENT MARKING STOP LINE EPOXY 12-INCH	LF	25.000	25.000
1090	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	55.000	55.000
1100	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	70.000	70.000
1110	647.0955	REMOVING PAVEMENT MARKINGS ARROWS	EACH	1.000	1.000
1120	647.0965	REMOVING PAVEMENT MARKINGS WORDS	EACH	2.000	2.000
1130	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	12.000	12.000
1140	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	575.000	575.000
1150	650.5000	CONSTRUCTION STAKING BASE	LF	575.000	575.000
1160	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	1,180.000	1,180.000
1170	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-53-0287	LS	1.000	1.000
1180	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	40.000	40.000
1190	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 5990-00-84	LS	1.000	1.000
1200	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5990-00-84	LS	1.000	1.000
1210	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	575.000	575.000
1220	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	40.000	40.000
1230	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	230.000	230.000
1240	652.0315	CONDUIT RIGID NONMETALLIC SCHEDULE 80 1 1/4-INCH	LF	140.000	140.000
1250	652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	1,970.000	1,970.000
1260	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	2.000	2.000
1270	653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	12.000	12.000
1280	654.0205	CONCRETE CONTROL CABINET BASES TYPE 7	EACH	1.000	1.000
1290	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	330.000	330.000
1300	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	1,904.000	1,904.000
1310	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STATION 7+00, 50.0' LT.	LS	1.000	1.000
1320	690.0150	SAWING ASPHALT	LF	143.000	143.000

DATE 17JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE				5990-00-84	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1330	690.0250	SAWING CONCRETE	LF	100.000	100.000
1340	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000
1350	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	10,062.000	10,062.000
1360	999.1500.S	CRACK AND DAMAGE SURVEY	LS	1.000	1.000
1370	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,000.000	1,000.000
1380	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	450.000	450.000
1390	SPV.0035	SPECIAL 01. TOPSOIL SPECIAL	CY	14.000	14.000
1400	SPV.0035	SPECIAL 02. PLANTING MIXTURE	CY	132.000	132.000
1410	SPV.0045	SPECIAL 01. TEMPORARY CROSSWALK ACCESS	DAY	275.000	275.000
1420	SPV.0060	SPECIAL 01. UTILITY LINE OPENING (ULO)	EACH	11.000	11.000
1430	SPV.0060	SPECIAL 02. ADJUSTING MANHOLE COVERS	EACH	3.000	3.000
1440	SPV.0060	SPECIAL 03. MANHOLE COVER TYPE SPECIAL LOGO	EACH	3.000	3.000
1450	SPV.0060	SPECIAL 04. INLET COVER TYPE H SPECIAL LOGO	EACH	8.000	8.000
1460	SPV.0060	SPECIAL 05. PERENNIALS, DAYLILY (HAPPY RETURNS), CG, 1 GAL.	EACH	48.000	48.000
1470	SPV.0060	SPECIAL 06. PERENNIALS, NEPETA (WALKERS LOW), CG, 1 GAL.	EACH	37.000	37.000
1480	SPV.0060	SPECIAL 07. MOVING PARK SIGN AND SUPPORTS	EACH	1.000	1.000
1490	SPV.0060	SPECIAL 08. LUMINAIRES UNDERDECK	EACH	12.000	12.000
1500	SPV.0060	SPECIAL 09. DECORATIVE LIGHT POST TOP UNIT	EACH	10.000	10.000
1510	SPV.0060	SPECIAL 10. LIGHTING CONTROL CABINET	EACH	1.000	1.000
1520	SPV.0090	SPECIAL 01. CONCRETE CURB AND GUTTER 24-INCH TYPE D	LF	125.000	125.000
1530	SPV.0090	SPECIAL 02. PARAPET CONCRETE TYPE 'TX'	LF	827.000	827.000
1540	SPV.0090	SPECIAL 03. SHOVEL CUT EDGING	LF	315.000	315.000
1550	SPV.0090	SPECIAL 04. CONSTRUCTION STAKING MULTI-USE PATH	LF	660.000	660.000
1560	SPV.0105	SPECIAL 01. CONSTRUCTION ACCESS	LS	1.000	1.000
1570	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK 8-INCH	SF	2,790.000	2,790.000
1580	SPV.0165	SPECIAL 02. ANTI-GRAFFITI COATING	SF	10,475.000	10,475.000
1590	SPV.0165	SPECIAL 03. CUT-STONE BOULDERS	SF	74.000	74.000
1600	SPV.0165	SPECIAL 04. WALL MODULAR BLOCK GRAVITY LRFD	SF	485.000	485.000
1610	SPV.0180	SPECIAL 01. FASCIA PANELS	SY	413.000	413.000
1620	SPV.0180	SPECIAL 02. SHREDDED HARDWOOD BARK MULCH	SY	407.000	407.000
1630	SPV.0195	SPECIAL 01. EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL	TON	265.000	265.000

3

CLEARING & GRUBBING					
CATEGORY	STATION	TO STATION	LOCATION	(201.0105)	(201.0205)
				CLEARING STA	GRUBBING STA
010	7+55	8+30	LT & RT	2	2
	11+65	13+30	LT & RT	3	3
	PROJECT TOTALS			5	5

REMOVING PAVEMENT				
CATEGORY	STATION	TO STATION	LOCATION	(204.0100)
				SY
010	6+00	8+05	LT & RT	1,000
	12+00	14+50	LT & RT	1,525
PROJECT TOTAL				2,525

REMOVING ASPHALTIC SURFACE				
CATEGORY	STATION	TO STATION	LOCATION	(204.0110)
				SY
010	500+15	502+35	LT & RT	350
PROJECT TOTAL				350

REMOVING CONCRETE SIDEWALK				
CATEGORY	STATION	TO STATION	LOCATION	(204.0155)
				SY
010	6+00	8+25	LT	130
	6+00	8+25	RT	155
	11+75	13+54	LT	110
	11+75	13+64	RT	175
	13+93	14+10	LT	20
	13+93	14+15	RT	18
PROJECT TOTAL				608

NOTE: INCLUDES CONCRETE DRIVEWAYS

REMOVING CURB & GUTTER				
CATEGORY	STATION	TO STATION	LOCATION	(204.0150)
				LF
010	6+00	8+25	LT	225
	6+00	8+25	RT	225
	11+75	201+10	LT	240
	11+75	202+87	RT	250
	201+10	14+50	LT	120
	202+87	14+50	RT	120
PROJECT TOTAL				1,180

EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL				
CATEGORY	STATION	TO STATION	LOCATION	(SPV.0195.01)
				TON
010	11+65	12+10	33' TO 67' RT	250
	11+65	12+10	67' TO 83' RT	15
PROJECT TOTAL				265

REMOVING STORM SEWER					
CATEGORY	STATION	TO STATION	LOCATION	(204.0245.01)	(204.0245.02)
				12-INCH LF	18-INCH LF
010	11+75	13+55	LT	-	180
	13+55	13+93	LT	-	38
	13+55	13+47	LT	11	-
	13+55	13+64	LT & RT	57	-
	13+64	13+90	RT	26	-
	13+93	13+98	LT	10	-
	13+93	14+44	LT	-	51
	PROJECT TOTALS			104	269

REMOVING STORM SEWER STRUCTURES				
CATEGORY	STATION	LOCATION	(204.0210)	(204.0220)
			REMOVING MANHOLES EACH	REMOVING INLETS EACH
010	13+47	25' LT	-	1
	13+55	18' LT	1	-
	13+64	39' RT	-	1
	13+90	40' RT	-	1
	13+93	18' LT	1	-
	13+98	25' LT	-	1
PROJECT TOTALS			2	4

EARTHWORK PROJECT I.D. 5990-00-84

Division	From/To Station	Location	Common Excavation (1)		Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation (3)				Factor				
1	6+00 - 8+02.38	Jackson Street - South Approach	119	0	0	119	998	1248	-1129	-1129	(item #208.0100) 1129	
2	11+73.63 - 14+50	Jackson Street - North Approach	148	0	0	148	1140	1426	-1277	-1277	1277	
	201+10 - 202+87	Riverside Street	114	0	0	114	0	0	114	114	-114	
	500+15 + 502+25	Multi Use Path	90	0	0	90	26	32	58	58	-58	
	100+34.92 - 104+72	Multi Use River Path	674	0	0	406	0	0	406	406	-406	
	STRUCTURE B-53-0287		0	0	0	0	0	0	0	0	0	
	UNDISTRIBUTED EBS		0	215	0	0	0	0	0	0	0	
Grand Total			1145	215	0	877	2164	2705	-1828	-1828	1828	
			1360									

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) EBS Excavation to be backfilled with Breaker Run material.
- 4) Salvaged/Unusable Pavement Material
- 5) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

3

BASE AGGREGATE DENSE						
CATEGORY	STATION	TO STATION	LOCATION	(305.0120)	(305.0130)	COMMENTS
				1 1/4-INCH	3-INCH	
010	6+00	8+01	LT & RT	350	350	
	6+00	8+01	LT	15	-	SIDEWALK
	6+00	8+01	RT	15	-	SIDEWALK
	11+75	14+50	LT & RT	640	640	
	11+75	13+55	LT	15	-	SIDEWALK
	11+75	13+64	RT	25	-	SIDEWALK
	13+91	14+10	LT	5	-	SIDEWALK
	13+91	14+10	RT	5	-	SIDEWALK
	100+35	101+99	LT & RT	155	-	MULTI-USE PATH
	101+99	103+67	LT & RT	135	-	MULTI-USE PATH
	103+67	104+87	LT & RT	60	-	MULTI-USE PATH
	500+15	502+35	LT & RT	175	-	MULTI-USE PATH
PROJECT TOTALS				1,595	990	

SELECT CRUSHED MATERIAL			
CATEGORY	DESCRIPTION	(312.0110)	COMMENTS
		TON	
010	5990-00-84	215	UNDISTRIBUTED
PROJECT TOTAL		215	

CONCRETE PAVEMENT APPROACH SLAB				
CATEGORY	STATION	TO STATION	LOCATION	(415.0410)
				SY
010	7+81	8+01	LT & RT	85
	11+75	11+95	LT & RT	85
PROJECT TOTAL				170

HMA PAVEMENT								
CATEGORY	STATION	TO STATION	LOCATION	(455.0120)	(455.0605)	(460.1101)	(465.0105)	NOTES
				ASPHALTIC MATERIAL PG-64-28 TON	TACK COAT GAL	HMA PAVEMENT TYPE E-1 TON	ASPHALTIC SURFACE TON	
010	6+00	7+81	LT & RT	9	19	176	0	
	11+95	14+50	LT & RT	17	37	338	0	
	100+35	101+99	LT & RT	0	0	0	28	MULTI-USE PATH
	103+67	104+72	LT & RT	0	0	0	13	MULTI-USE PATH
	500+15	502+35	LT & RT	0	0	0	28	MULTI-USE PATH
PROJECT TOTALS				26	56	514	69	

CONCRETE CURB & GUTTER						
CATEGORY	STATION	TO STATION	LOCATION	(601.0419)	(SPV.0090.01)	(650.5500)
				30-INCH TYPE L LF	24-INCH TYPE D LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
010	6+00	7+81	LT	180	-	180
	6+00	7+81	RT	180	-	180
	103+35	104+50	RT	-	125	125
	11+95	201+10	LT	225	-	225
	11+95	202+87	RT	230	-	230
	201+10	14+50	LT	120	-	120
	202+87	14+50	RT	120	-	120
PROJECT TOTALS				1,055	125	1,180

CONCRETE SIDEWALK						
CATEGORY	STATION	TO STATION	LOCATION	(602.0405)	(602.0415)	(SPV.0165.01)
				4-INCH SF	6-INCH SF	8-INCH SF
010	6+00	7+81	LT	940	-	-
	6+00	7+81	RT	935	-	-
	7+81	8+01	LT	-	160	-
	7+81	8+01	RT	-	160	-
	101+99	103+67	LT & RT	-	-	2,790
	11+75	11+95	LT	-	160	-
	11+75	11+95	RT	-	160	-
	11+95	13+28	LT	695	-	-
	11+95	13+28	RT	960	-	-
	13+28	13+54	LT	-	310	-
	13+28	13+64	RT	-	465	-
	202+38	202+84	RT	235	-	-
	13+91	14+04	LT	-	135	-
	14+04	14+10	LT	35	-	-
	201+49	201+61	LT	55	-	-
	13+91	14+04	RT	-	105	-
	14+04	14+15	RT	60	-	-
	202+38	202+42	LT	25	-	-
PROJECT TOTALS				3,940	1,655	2,790

CURB RAMP DETECTABLE WARING FIELD NATURAL PATINA			
CATEGORY	STATION	LOCATION	(602.0515)
			SF
010	13+33	LT	16
	13+33	RT	16
	13+54	LT	8
	13+63	RT	16
	13+92	LT	8
	13+92	RT	8
	14+01	LT	8
	14+01	RT	8
PROJECT TOTAL			88

ASPHALTIC FLUMES			
CATEGORY	STATION	LOCATION	(465.0315)
			SY
010	103+40	RT	6
PROJECT TOTAL			6

CUT-STONE BOULDERS		
CATEGORY	LOCATION	(SPV.0165.03)
		SF
010	STEP 1	6
	STEP 2	12
	STEP 3	12
	STEP 4	12
	FOUNDATION	32
PROJECT TOTAL		74

WALL MODULAR BLOCK GRAVITY LRFD						
CATEGORY	STATION	TO STATION	LOCATION	SF	(SPV.0165.04)	(612.0406)
					(SPV.0165.02) ANTI-GRAFFITI COATING SF	PIPE UNDERDRAIN WRAPPED 6-INCH LF
010	101+99	102+44	LT	200	160	65
	103+00	103+67	LT	285	215	75
PROJECT TOTALS				485	375	140

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

RIPRAP HEAVY					
CATEGORY	STATION	TO STATION	LOCATION	CY	(645.0120)
					GEOTEXTILE FABRIC TYPE HR SY
010	101+00	102+00	RT	175	390
PROJECT TOTALS				175	390

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

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STORM SEWER STRUCTURES																
STRUCTURE		STATION		LOCATION	(522.1030)	(611.9800.S)	(611.2005)	(611.2006)	(611.2008)	(611.3004)	(611.3230)	(SPV.0060.03)	(SPV.0060.04)	(650.4000)	ELEVATION	FEET
					APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	PIPE GRATES	MANHOLES 5-FT DIAMETER	MANHOLES 6-FT DIAMETER	MANHOLES 8-FT DIAMETER	INLETS 4-FT DIAMETER	INLETS 2x3-FT	MANHOLE COVER TYPE SPECIAL LOGO	INLET COVER TYPE H SPECIAL LOGO	CONSTRUCTION STAKING STORM SEWER		
CATEGORY	I.D.				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
010	EW.1	101+14.5	26.0' RT		1	1	-	-	-	-	-	-	-	1	-	-
	1.0	100+97.5	8.5' RT		-	-	1	-	-	-	-	1	-	1	764.65	3.24
	2.0	12+96.5	18.5' LT		-	-	-	-	1	-	-	-	1	1	768.58	6.88
	2.1	12+96.5	18.5' RT		-	-	-	-	-	1	-	-	1	1	768.58	5.25
	2.2	202+59.0	12.5' RT		-	-	-	-	-	1	-	-	1	1	765.99	2.01
	2.3	202+59.0	12.3' LT		-	-	-	-	-	-	1	-	1	1	766.02	1.67
	2.4	201+35.5	17.4' RT		-	-	-	-	-	1	-	-	1	1	766.25	2.48
	2.5	201+54.7	17.4' LT		-	-	-	-	-	-	1	-	1	1	766.14	1.92
	3.0	14+25.0	12.0' LT		-	-	-	1	-	-	-	1	-	1	766.49	3.59
	3.1	14+25.0	20.0' LT		-	-	-	-	-	-	1	-	1	1	766.22	2.28
	3.2	14+25.0	21.5' RT		-	-	-	-	-	-	1	-	1	1	766.37	2.30
	4.0	14+44.0	16.1' LT		-	-	1	-	-	-	-	1	-	1	766.38	3.44
PROJECT TOTALS					1	1	2	1	1	3	4	3	8	12		

STORM SEWER PIPE REINFORCED CONCRETE								
STRUCTURE I.D.		STRUCTURE I.D.		(608.0312)	(608.0315)	(608.0318)	(608.0330)	(610.0124)
				CLASS III 12-INCH	CLASS III 15-INCH	CLASS III 18-INCH	CLASS III 30-INCH	HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH
CATEGORY	FROM	TO	LF	LF	LF	LF	LF	PIPE JOINT TIES EACH
010	EW.1	1.0	-	-	-	-	25	12
	1.0	2.0	-	-	-	-	148	-
	2.0	2.1	-	-	37	-	-	-
	2.0	3.0	-	-	-	-	129	-
	2.0	2.4	-	75	-	-	-	-
	2.1	2.2	-	79	-	-	-	-
	2.2	2.3	25	-	-	-	-	-
	2.4	2.5	40	-	-	-	-	-
	3.0	4.0	-	-	-	-	20	-
	3.0	3.1	8	-	-	-	-	-
	3.0	3.2	34	-	-	-	-	-
PROJECT TOTALS				107	154	37	173	12

**PIPE JOINT TIES ARE A NON-BID ITEM (FOR INFORMATION ONLY)

COVER PLATES TEMPORARY			
CATEGORY	STATION	LOCATION	(611.8120.S)
			EACH
010	7+50	6' RT	1
	12+18	11' RT	1
	13+78	ON LINE	1
	201+67	13' LT	1
	202+35	4' LT	1
PROJECT TOTAL			5

MARKERS CULVERT END			
CATEGORY	STATION	LOCATION	(633.5200)
			EACH
010	101+14.5	26.0' RT	1
PROJECT TOTAL			1

INSULATION BOARD POLYSTYRENE, 4-INCH			
CATEGORY	STATION	LOCATION	(612.0902.S)
			SY
010	11+60	50' LT	11
	12+96	12' RT	3.5
	13+85	14' LT	3.5
	14+25	6' RT	3.5
	14+25	12' RT	3.5
	201+52	12' LT	3.5
202+59	4' LT		3.5
PROJECT TOTAL			32

UTILITY LINE OPENING (ULO)				
CATEGORY	STATION	LOCATION	(SPV.0060.01)	NOTES
			EACH	
010	12+96	12' RT	1	WATER
	12+96	24' LT	1	GAS
	13+78	15' LT	1	SANITARY
	14+02	13' LT	1	GAS
	14+25	25' LT	1	GAS
	201+55	21' LT	1	GAS
202+59	16' LT		1	GAS
	UNDISTRIBUTED		4	
PROJECT TOTAL			11	

ADJUSTING MANHOLE COVERS SPECIAL			
CATEGORY	STATION	LOCATION	(SPV.0060.02)
			EACH
030	13+78	ON LINE	1
	201+67	13' LT	1
	202+35	4' LT	1
	PROJECT TOTAL		3

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FINISHING ITEMS								
CATEGORY	STATION	TO STATION	LOCATION	(625.0100)	(627.0200)	(629.0210)	(628.2008)	(630.0140)
				TOPSOIL	MULCHING	FERTILIZER	EROSION MAT	SEEDING MIXTURE
				SY	SY	TYPE B	URBAN CLASS 1	NO. 40
						CWT	TYPE B	
010	6+00	8+14	LT	276	0	0.2	179	3
	6+00	8+29	RT	327	0	0.2	192	3
	12+05	13+54	LT	110	0	0.1	0	0
	12+05	13+57	RT	105	0	0.1	0	0
	14+03	14+60	LT	33	0	0.0	0	0
	14+04	14+61	RT	34	0	0.0	0	0
	500+15	101+70	RT	507	218	0.3	289	9
	500+15	501+88	LT	150	0	0.1	150	3
	100+35	102+42	LT	1,406	1,001	0.9	405	25
	103+65	104+50	LT	210	0	0.1	210	4
	104+50	105+23	RT	295	220	0.2	75	5
	201+10	201+60	RT	120	0	0.1	0	0
	201+10	201+69	LT	32	3	0.0	0	0
	202+40	203+00	RT	53	0	0.0	0	0
	202+33	202+92	LT	33	1	0.0	0	0
UNDISTRIBUTED				344	342	0.7	345	8
PROJECT TOTALS				4,035	1,785	3.0	1,845	60

EROSION BALES			
CATEGORY	STATION	TO STATION	(628.1104) EACH
010	UNDISTRIBUTED		25
PROJECT TOTAL			25

SILT FENCE					
CATEGORY	STATION	TO STATION	LOCATION	(628.1504)	(628.1520)
				LF	MAINTENANCE LF
010	5+75	7+50	RT	225	450
	5+90	8+05	LT	175	350
	100+35	101+23	RT	150	300
	103+38	105+23	RT	195	390
PROJECT TOTALS				745	1,490

MOBILIZATIONS EROSION CONTROL			
CATEGORY	DESCRIPTION	(628.1905)	(628.1910)
		EACH	EMERGENCY EACH
010	5990-00-84	9	6
PROJECT TOTALS		9	6

TRACKING PADS		
CATEGORY	STATION	(628.7560) EACH
010	6+00	1
	13+00	1
	201+10	1
	202+87	1
PROJECT TOTAL		4

WATER		
CATEGORY	DESCRIPTION	(624.0100) MGAL
010	COMPACTION	26
	DUST CONTROL	10
	UNDISTRIBUTED	4
PROJECT TOTAL		40

TURBIDITY BARRIERS		
CATEGORY	STATION	(628.6005) SY
010	8+90	354
	9+41	312
	9+95	354
	10+60	312
	10+80	312
UNDISTRIBUTED		400
PROJECT TOTAL		2,356

INLET PROTECTION TYPE D			
CATEGORY	STATION	LOCATION	(628.7020) EACH
010	FIRST INLETS SOUTH OF BRIDGE		2
	12+97	19' LT	1
	12+97	19' RT	1
	13+47	25' LT	1
	13+64	39' RT	1
	13+90	40' RT	1
	13+98	25' LT	1
	14+25	20' LT	1
	14+25	22' RT	1
	201+36	17' RT	1
	201+55	17' LT	1
	202+59	13' RT	1
	202+59	12' LT	1
PROJECT TOTAL			14

SOD					
CATEGORY	STATION	TO STATION	LOCATION	(631.0300)	(631.1000)
				SOD WATER MGAL	SOD LAWN SY
010	6+00	7+68	LT	2.2	97
	6+00	7+72	RT	3.0	135
	12+05	13+54	LT	2.5	110
	12+05	13+57	RT	2.4	105
	14+03	14+60	LT	0.8	35
	14+04	14+61	RT	0.8	35
	201+10	201+60	LT	0.7	29
	201+10	201+60	RT	2.7	120
	202+38	202+92	LT	0.7	32
	202+38	203+00	RT	1.2	53
UNDISTRIBUTED				1.1	49
PROJECT TOTALS				18.0	800

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PERMANENT SIGNING										
CATEGORY	NO	STATION	LOCATION	CODE	SIZE IN X IN	(637.2210)	(634.0809)	(634.0814)	(634.0816)	NOTES
						SIGNS TYPE II REFLECTIVE H	POSTS TUBULAR STEEL 2X2-INCH 9.5-FT EACH	POSTS TUBULAR STEEL 2X2-INCH 14-FT EACH	POSTS TUBULAR STEEL 2X2-INCH 16-FT EACH	
010	1.1	2+90	RT	W4-2R	36 x 36	9.00	-	1	-	
	1.2	3+85	RT	R7-1L	18 X 24	3.00	-	1	-	
	1.3	6+10	RT	R3-17	30 X 24	5.00	-	1	-	
	1.4	4+75	LT	R7-1R	18 X 24	3.00	-	1	-	
	1.5	6+10	LT	R3-17	30 X 24	5.00	-	1	-	
	1.6	6+10	LT	R3-17B	30 X 12	2.50	-	-	-	
	2.1	12+15	RT	W11-15	30 X 30	6.25	-	1	-	
	2.2	12+15	RT	W16-9P	24 X 8	1.33	-	-	-	
	2.3	12+55	RT	S1-1	36 X 36	9.00	-	-	1	
	2.4	12+55	RT	S4-51	24 X 48	8.00	-	-	-	
	2.5	12+95	RT	R3-17	30 X 24	5.00	-	-	1	
	2.6	12+95	RT	R3-17B	30 X 12	2.50	-	-	-	
	2.7	12+95	RT	R7-1D	18 X 24	3.00	-	-	-	
	2.8	103+75	RT	W3-1A (MOD.)	18 X 18	2.25	1	-	-	
	2.9	104+00	LT	W1-1R (MOD.)	18 X 18	2.25	1	-	-	
	2.10	104+65	LT	D11-1	24 X 18	2.25	-	1	1	
	2.11	104+65	LT	M6-4	21 X 21	3.06	-	-	-	
	2.12	104+65	LT	ROCK TRAIL	12 X 18	1.50	-	-	-	
	2.13	12+60	LT	R7-1D	18 X 24	3.00	-	1	-	
	2.14	12+90	LT	R3-17	30 X 24	5.00	-	-	1	
	2.15	12+90	LT	R2-1	24 X 30	5.00	-	-	-	30 MPH
	2.16	101+50	LT	W3-1A (MOD.)	18 X 18	2.25	1	-	-	
	2.17	101+00	RT	W1-1L (MOD.)	18 X 18	2.25	1	-	-	
	2.18	100+40	LT	R1-1 (MOD.)	18 X 18	2.25	1	-	-	
	3.1	13+25	RT	W11-15	30 X 30	6.25	-	1	-	
	3.2	13+25	RT	W16-7L	24 X 12	2.00	-	-	-	
	3.3	104+74	RT	R1-1 (MOD.)	18 X 18	2.25	1	-	-	
	3.4	202+45	RT	D11-1	24 X 18	3.00	-	1	-	
	3.5	202+45	RT	M6-1	21 X 21	3.06	-	-	-	
	3.6	202+65	RT	W14-1	30 X 30	6.25	-	1	-	
	3.7	202+90	RT	R7-1D	18 X 24	3.00	-	1	-	
	3.8	202+43	LT	R1-1	30 X 30	6.25	-	1	-	
	3.9	14+30	RT	R3-8A	36 X 30	7.50	-	-	1	
	3.10	14+30	RT	R7-1D	18 X 24	3.00	-	-	-	
	3.11	14+80	RT	W1-2L	30 X 30	6.25	-	1	-	
	3.12	14+80	RT	W13-1	18 X 18	2.25	-	-	-	
	3.13	13+40	LT	W11-15	30 X 30	6.25	-	1	-	
	3.14	13+40	LT	W16-7L	24 X 12	2.00	-	-	-	
	3.15	201+55	RT	D3-1	24 X 8	1.33	-	1	-	RIVERSIDE STREET
	3.16	201+55	RT	D3-1	24 X 8	1.33	-	-	-	S JACKSON STREET
	3.17	201+55	RT	R1-1	30 X 30	6.25	-	-	-	
	3.18	502+34	RT	R1-1 (MOD.)	18 X 18	2.25	1	-	-	
	3.19	501+35	RT	W3-1A (MOD.)	18 X 18	2.25	1	-	-	
	3.20	14+35	LT	D11-1	24 X 18	3.00	-	-	1	
	3.21	14+35	LT	M6-4	21 X 21	3.06	-	-	-	
	3.22	14+35	LT	ROCK TRAIL	12 X 18	1.50	-	-	-	
	3.23	15+00	LT	W11-15	30 X 30	6.25	-	1	-	
	3.24	15+00	LT	W16-9P	24 X 8	1.33	-	-	-	
	3.25	14+70	LT	EXISTING		-	-	1	-	MOVING SIGNS TYPE II
PROJECT TOTALS						181.52	8	18	6	

REMOVING SIGNS TYPE II				
CATEGORY	STATION	LOCATION	(638.2602)	(638.3000)
			REMOVIGN SMALL SIGN SUPPORTS EACH	EACH
010	5+78	RT	1	1
	6+48	LT	1	1
	7+58	RT	1	1
	8+08	RT	1	1
	11+99	LT	1	1
	12+22	RT	3	1
	12+93	LT	3	1
	13+05	RT	3	1
	13+31	LT	1	1
	13+51	RT	1	1
	201+56	RT	3	1
	202+35	LT	1	1
	202+35	RT	3	1
	202+42	RT	1	1
	202+89	RT	1	1
	14+01	RT	3	1
	14+23	LT	3	1
	14+80	RT	2	1
PROJECT TOTALS			33	18

MOVING SIGNS TYPE II					
CATEGORY	FROM STATION	LOCATION	TO STATION	LOCATION	(638.2102)
					EACH
010	14+73	LT	14+70	LT	2
PROJECT TOTAL					2

MOVING PARK SIGN AND SUPPORTS					
CATEGORY	FROM STATION	LOCATION	TO STATION	LOCATION	(SPV.0060.07)
					EACH
010	13+00	55' LT	13+00	55' LT	1
PROJECT TOTAL					1

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TREES					
		(632.0101.01) HORSECHESTNUT, 'BAUMANN' COMMON, B&B, 3-INCH CAL. (HC)	(632.0101.02) PEAR, AUTUMN BLAZE CALLERY, B&B, 3-INCH CAL. (PC)	(632.0101.03) OAK, HERITAGE, B&B, 3-INCH CAL. (OH)	
CATEGORY	STATION	TO STATION	EACH	EACH	EACH
010	11+70	13+50	1	3	1
PROJECT TOTALS			1	3	1

SHRUBS						
			(632.0201.01) SUMAC, 'GRO-LOW' FRAGRANT CG, 24-INCH SPREAD (SF)	(632.0201.02) SUMAC, SMOOTH CG OR B&B, 4 FT HT (SS)	(632.0201.03) JUNIPER, 'BROADMOOR' SAVIN, CG, 24-INCH SPREAD (JS)	
CATEGORY	STATION	TO STATION	EACH	EACH	EACH	
010	11+70	13+50	36	6	43	
PROJECT TOTALS			36	6	43	

LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES		
CATEGORY	DESCRIPTION	(632.9101) EACH
010	5990-00-84	26
PROJECT TOTAL		26

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PERENNIALS				
			(SPV.0060.05) DAYLILY, (HAPPY RETURNS) CG, 1 GAL. (DHR)	(SPV.0060.06) NEPETA, (WALKERS LOW) CG, 1 GAL. (NWL)
CATEGORY	STATION	TO STATION	EACH	EACH
010	11+70	13+50	48	37
PROJECT TOTALS			48	37

SHOVEL CUT EDGING		
		(SPV.0090.03) LF
CATEGORY	LOCATION	
010	BED 1	71
	BED 2	50
	BED 3	18
	BED 4	134
	BED 5	42
PROJECT TOTAL		315

TOPSOIL SPECIAL		
		(SPV.0035.01) CY
CATEGORY	DESCRIPTION	
010	TREE PLANTING PITS	14
PROJECT TOTAL		14

PLANTING MIXTURE		
		(SPV.0035.02) CY
CATEGORY	LOCATION	
010	BED 1	11
	BED 2	34
	BED 3	8
	BED 4	37
	BED 5	42
PROJECT TOTAL		132

SHREDDED HARDWOOD BARK MULCH		
		(SPV.0180.02) SY
CATEGORY	LOCATION	
010	BED 1	38
	BED 2	102
	BED 3	29
	BED 4	112
	BED 5	126
PROJECT TOTAL		407

TRAFFIC CONTROL										
		*		*				*		
		(643.0420)		(643.0705)		(643.0900)		(643.1000)		
		BARRICADES	BARRICADES	WARNING LIGHTS	WARNING LIGHTS	SIGNS		SIGNS		
		TYPE III	TYPE III	TYPE A	TYPE A	SIGNS		FIXED MESSAGE	FIXED MESSAGE	
CATEGORY	DESCRIPTION	NO. DEVICES	DAYS	NO. DEVICES	DAYS	NO. DEVICES	DAYS	NO. DEVICES	SF	DURATION
010	PROJECT DURATION	38	10,450	47	12,925	29	7,975	8	45.0	275 DAYS
PROJECT TOTALS		38	10,450	47	12,925	29	7,975	8	45.0	
* ADDITIONAL QUANTITIES FOUND ELSEWHERE										

TRAFFIC CONTROL DETOUR										
		*	*	*			*			
		(643.0420)	(643.0705)	(643.3000)			(643.1000)			
		BARRICADES	WARNING LIGHTS	WARNING LIGHTS			SIGNS	SIGNS		
		TYPE III	TYPE A	TYPE A			FIXED MESSAGE	FIXED MESSAGE		
CATEGORY	DESCRIPTION	NO. DEVICES	DAYS	NO. DEVICES	DAYS	NO. DEVICES	DAYS	NO. DEVICES	SF	DURATION
010	PROJECT DURATION	7	1,925	8	2,200	45	12,375	36	209.0	275 DAYS
PROJECT TOTALS		7	1,925	8	2,200	45	12,375	36	209.0	
* ADDITIONAL QUANTITIES FOUND ELSEWHERE										

FENCE SAFETY			
			(616.0700.S) LF
CATEGORY	STATION	LOCATION	
010	500+45	RT	30
	500+50	LT	30
	501+30	LT	30
	501+85	LT	30
	104+20	RT	30
UNDISTRIBUTED			200
PROJECT TOTAL			350

TEMPORARY CROSSWALK ACCESS		
		(SPV.0045.01) DAY
CATEGORY	LOCATION	
010	RIVERSIDE STREET INTERSECTION AND PATH AREA	275
PROJECT TOTAL		275

3

PAVEMENT MARKING EPOXY										
CATEGORY	STATION	TO STATION	LOCATION	(646.0106) 4-INCH		(646.0116) 6-INCH	(647.0556) STOP LINE	(647.0726) DIAGONAL	(647.0766) CROSSWALK	NOTES
				YELLOW	WHITE	WHITE	12-INCH	12-INCH	6-INCH	
				LF	LF	LF	LF	LF	LF	
010	3+00	4+77	LT	-	90	-	-	-	-	12.5' LINE, 12.5' GAP
	3+00	3+90	RT	-	45	-	-	-	-	12.5' LINE, 12.5' GAP
	3+00	13+28	LT & RT	2,060	-	-	-	-	-	DOUBLE YELLOW CENTERLINE
	3+90	13+28	RT	-	-	940	-	-	-	EDGE LINE
	4+77	13+28	LT	-	-	850	-	-	-	EDGE LINE
	13+28	14+04	LT & RT	-	-	-	-	-	70	RIVERSIDE STREET INTERSECTION
	14+05	16+00	LT & RT	675	195	-	-	55	-	PAINTED MEDIAN
	500+15	502+35	LT & RT	55	-	-	5	-	-	MULTI-USE PATH
	100+34	104+72	LT & RT	340	-	-	20	-	-	MULTI-USE PATH
PROJECT TOTALS				3,130	330	1,790	25	55	70	
				3,460						

PAVEMENT MARKING ARROWS, SYMBOLS AND WORDS							
CATEGORY	STATION	LOCATION	(647.0166) ARROWS EPOXY TYPE 2	(647.0196) ARROWS EPOXY TYPE 5	(647.0206) ARROWS BIKE LANE EPOXY	(647.0306) SYMBOLS BIKE LANE EPOXY	(647.0356) WORDS EPOXY
			EACH	EACH	EACH	EACH	EACH
010	3+80	RT	-	1	-	-	-
	4+80	RT	-	1	-	-	-
	6+20	RT	-	-	-	1	-
	6+30	RT	-	-	1	-	-
	9+80	LT	-	-	1	-	-
	9+80	RT	-	-	-	1	-
	9+90	LT	-	-	-	1	-
	9+90	RT	-	-	1	-	-
	13+05	LT	-	-	1	-	-
	13+15	LT	-	-	-	1	-
	16+10	RT	-	-	-	-	1
	16+35	RT	1	-	-	-	-
PROJECT TOTALS			1	2	4	4	1

REMOVING PAVEMENT MARKINGS							
CATEGORY	STATION	TO STATION	LOCATION	(646.0600)	(647.0955) ARROWS	(647.0965) WORDS	NOTES
				LF	EACH	EACH	
010	4+00	6+00	RT	100	-	-	12.5' LINES
	4+75	6+00	LT	65	-	-	12.5' LINES
	14+50	16+00	RT	150	-	-	LANE LINE
	14+60	-	RT	-	-	1	ONLY'
	15+05	-	RT	-	1	-	LEFT TURN ARROW
	15+95	-	RT	-	-	1	ONLY'
PROJECT TOTALS				315	1	2	

CONDUIT & ELECTRICAL WIRE					
CATEGORY	DESCRIPTION	TO DESCRIPTION	(652.0225)	*	*
			CONDUIT RIGID	(652.0325)	(655.0625)
			NONMETALLIC	CONDUIT RIGID	ELECTRICAL
			SCHEDULE 40	NONMETALLIC	WIRE
			2-INCH	SCHEDULE 80	LIGHTING
			LF	2-INCH	6 AWG
010	CB1	PB1	60	40	168
	PB1	PB2	-	100	62
	PB1	WINGWALL	80	90	273
	PB2	WINGWALL	90	80	91
PROJECT TOTALS			230	310	594
*ADDITIONAL QUANTITIES FOUND ELSEWHERE					

LIGHTING CABINET ITEMS					
CATEGORY	STATION	LOCATION	(654.0205)	(656.0200.01)	(SPV.0060.10)
			CONCRETE CONTROL	ELECTRICAL SERVICE	LIGHTING
			CABINET BASES	METER BREAKER	CONTROL
			TYPE 7	PEDESTAL	CABINET
			EACH	LS	EACH
010	7+00	50.0' LT	1	1	1
PROJECT TOTALS			1	1	1

PULL BOXES STEEL 24x42-INCH				
CATEGORY	DESCRIPTION	STATION	LOCATION	(653.0140) EACH
010	PB1	7+00	24.5' LT	1
	PB2	7+00	24.5' RT	1
PROJECT TOTAL				2

CONSTRUCTION ACCESS			
CATEGORY	STATION	LOCATION	(SPV.0105.01) LS
	010	-	1
PROJECT TOTALS			1

3

3

3

CONSTRUCTION STAKING											
				(650.4500) SUBGRADE	(650.5000) BASE	(650.6500) STRUCTURE LAYOUT (STRUCTURE)	(650.7000) CONCRETE PAVEMENT	(650.8500) ELECTRICAL INSTALLATIONS (PROJECT)	(650.9910) SUPPLEMENTAL CONTROL (PROJECT)	(650.9920) SLOPE STAKES	(SPV.0090.04) MULTI-USE PATH
CATEGORY	STATION	TO STATION	LOCATION	LF	LF	LS	LF	LS	LS	LF	LF
010	6+00	8+00	LT & RT	200	200	-	20	-	-	200	-
	11+75	14+50	LT & RT	275	275	-	20	-	-	275	-
	201+10	201+60	LT & RT	50	50	-	-	-	-	50	-
	202+37	202+87	LT & RT	50	50	-	-	-	-	50	-
	100+35	104+75	LT & RT	-	-	-	-	-	-	-	440
	500+15	502+35	LT & RT	-	-	-	-	-	-	-	220
	PROJECT 5990-0084			-	-	-	-	1	1	-	-
CATEGORY 010 SUBTOTALS				575	575	0	40	1	1	575	660
020	STRUCTURE B-53-287			-	-	1	-	-	-	-	-
CATEGORY 020 SUBTOTALS				0	0	1	0	0	0	0	0
PROJECT TOTALS				575	575	1	40	1	1	575	660

SAWING ASPHALT				
CATEGORY	STATION	TO STATION	LOCATION	(690.0150)
				LF
010	6+06	6+18	RT	12
	7+51	8+07	RT	67
	500+15	500+15	LT & RT	10
	201+10	201+10	LT & RT	32
	202+87	202+87	LT & RT	22
PROJECT TOTAL				143

SAWING CONCRETE			
CATEGORY	STATION	LOCATION	(690.0250)
			LF
010	6+00	LT & RT	47
	14+50	LT & RT	43
	201+10	LT	2.5
	201+10	RT	2.5
	202+87	LT	2.5
	202+87	RT	2.5
PROJECT TOTAL			100



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	PE ACRES	TLE ACRES
1	CITY OF JANESVILLE	TLE	--	0.011

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

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED
81	AT&T WISCONSIN	TCE

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ROCK COUNTY, NAD 83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

PLATTED RIGHT-OF-WAY IS BASED ON ORIGINAL PLATS OF THE CITY OF JANESVILLE (WILLOW GRANGE ADDITION TO JANESVILLE AND RIVERSIDE ADDITION TO JANESVILLE) AND OTHER SURVEYS OF RECORD AND AIDED BY FIELD SURVEY OF MONUMENTED PROPERTY CORNERS, OCCUPATION, AND EVIDENCE OF POSSESSION. REFERENCES TO SECTIONS OF THE PUBLIC LAND SURVEY ARE APPROXIMATE AND DERIVED FROM CITY OF JANESVILLE ENGINEERING MAPS.

JANESVILLE

CITY OF JANESVILLE
949 S. JACKSON ST.

TO JANESVILLE

TLE POINT	STATION	OFFSET
T1	6+00.00	37.53 R
T2	6+00.00	39.53 R
T3	6+20.82	38.88 R
T4	6+53.33	40.06 R

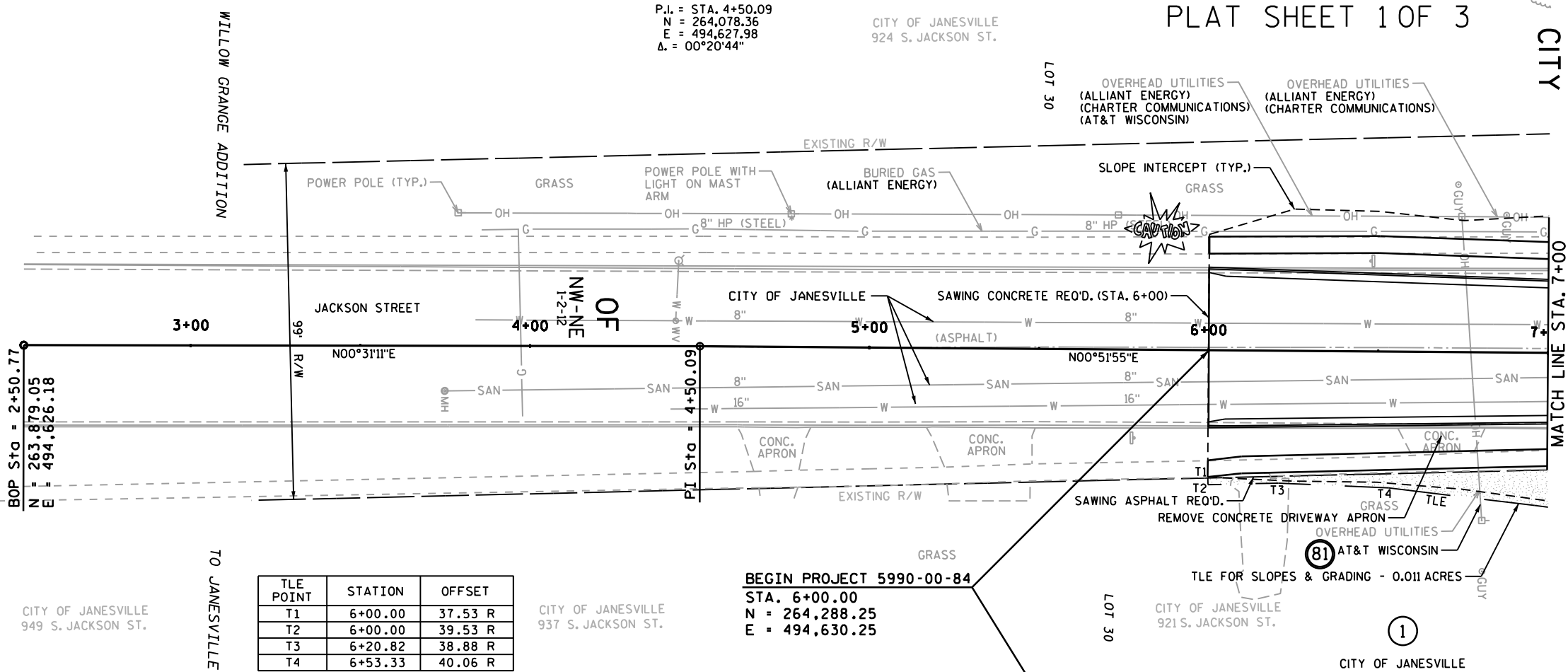
CITY OF JANESVILLE
937 S. JACKSON ST.

P.I. = STA. 4+50.09
N = 264,078.36
E = 494,627.98
Δ = 00°20'44"

CITY OF JANESVILLE
924 S. JACKSON ST.

PLAT SHEET 1 OF 3

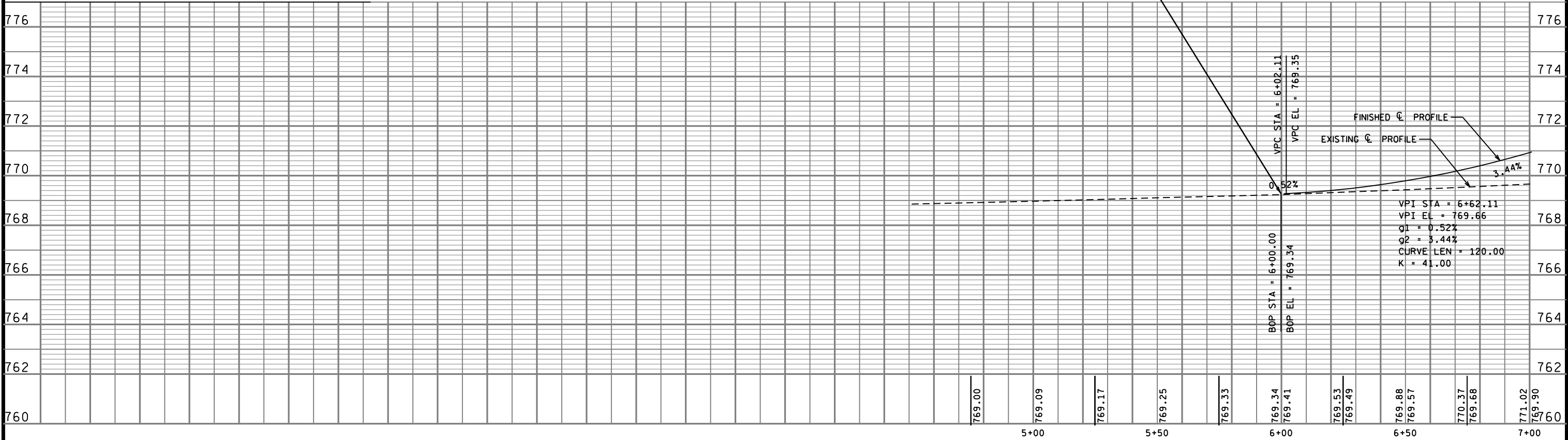
CITY



BEGIN PROJECT 5990-00-84

STA. 6+00.00
N = 264,288.25
E = 494,630.25

① AT&T WISCONSIN
CITY OF JANESVILLE



PROJECT NO: 5990-00-84

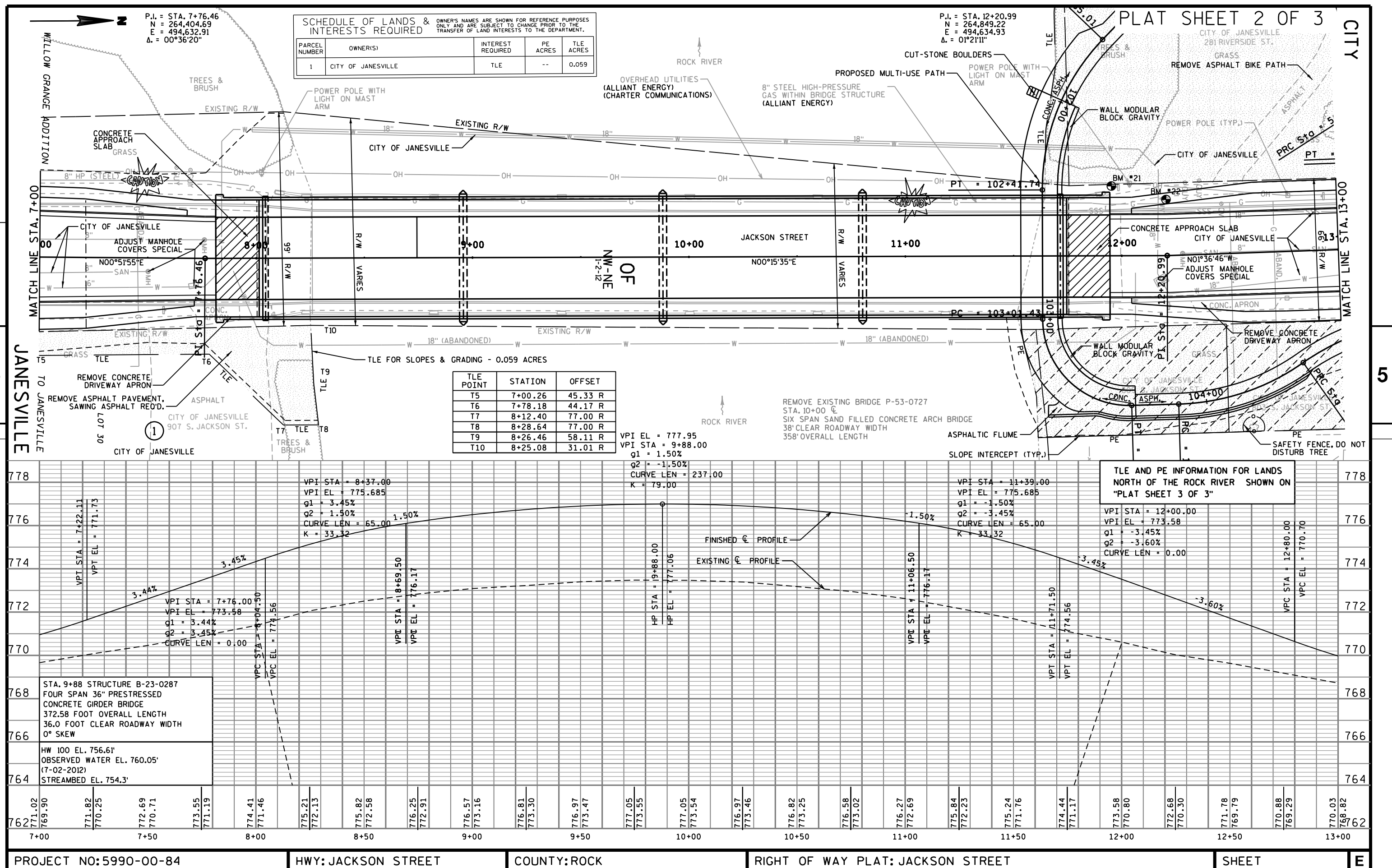
HWY: JACKSON STREET

COUNTY: ROCK

RIGHT OF WAY PLAT: JACKSON STREET

SHEET

E



CITY

PLAT SHEET 3 OF 3



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	PE ACRES	TLE ACRES
1	CITY OF JANESVILLE	TLE, PE	0.224	0.823

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

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

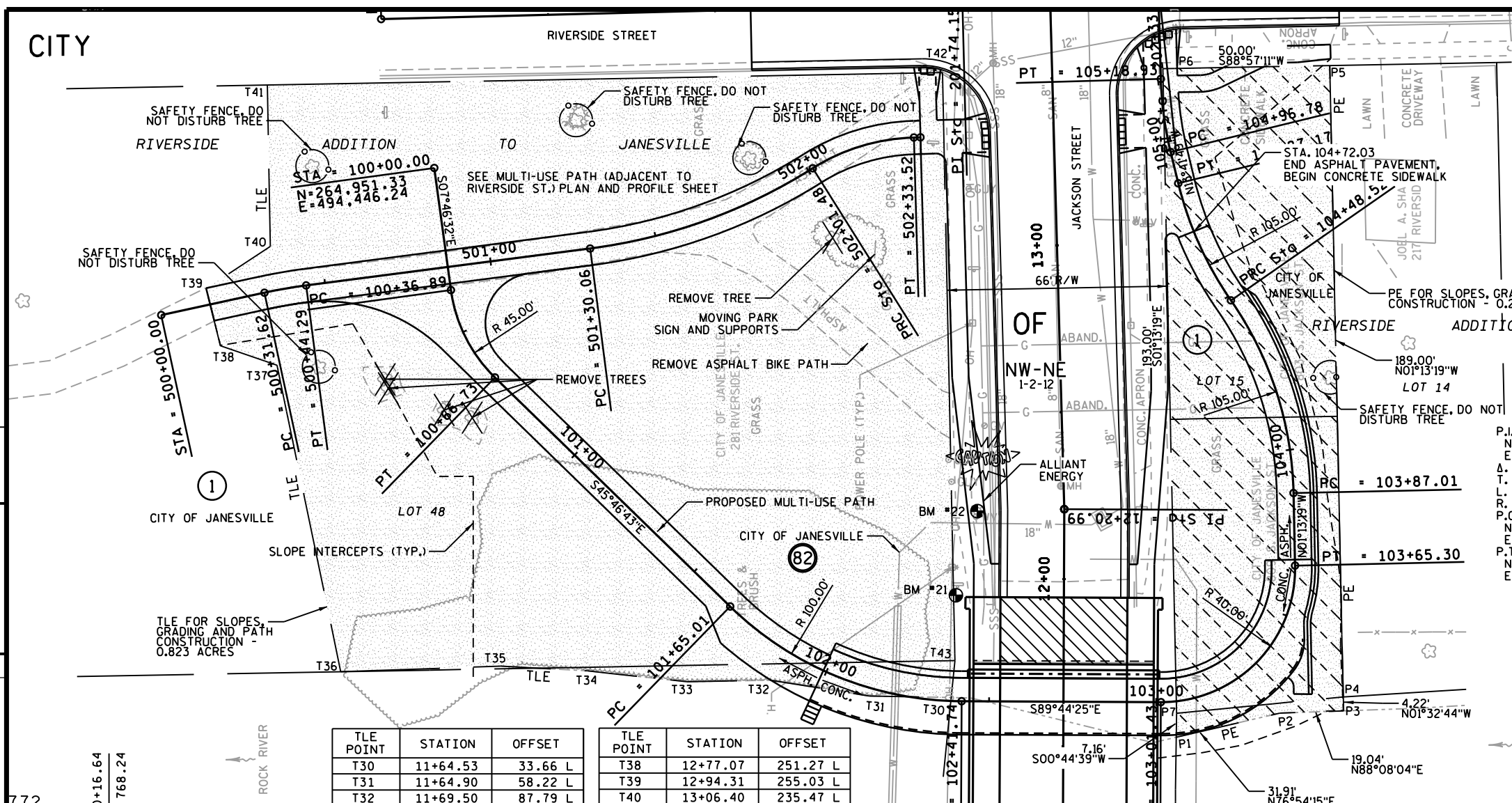
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED
82	CITY OF JANESVILLE	TCE

PE POINT	STATION	OFFSET
P1	11+52.99	33.78 R
P2	11+60.36	64.83 R
P3	11+61.07	83.86 R
P4	11+65.29	83.72 R
P5	13+51.61	83.15 R
P6	13+52.09	33.15 R
P7	11+60.15	33.84 R

P.I. = STA. 100+52.38 N = 264,899.43 E = 494,453.33 Δ = 38°00'11" T = 15.50' L = 29.85' R = 45.00' P.C. = STA. 100+36.89 N = 264,914.78 E = 494,451.23 P.T. = STA. 100+66.73 N = 264,888.62 E = 494,464.43	P.I. = STA. 102+05.38 N = 264,791.92 E = 494,563.79 Δ = 43°57'42" T = 40.36' L = 76.73' R = 100.00' P.C. = STA. 101+65.01 N = 264,820.08 E = 494,534.87 P.T. = STA. 102+41.74 N = 264,791.74 E = 494,604.16	P.I. = STA. 103+42.48 N = 264,791.28 E = 494,704.89 Δ = 88°31'06" T = 41.05' L = 63.87' R = 40.00' P.C. = STA. 103+01.43 N = 264,791.47 E = 494,663.84 P.T. = STA. 103+65.30 N = 264,832.32 E = 494,704.02	P.I. = STA. 104+18.68 N = 264,885.69 E = 494,702.88 Δ = 33°33'46" T = 31.66' L = 61.51' R = 105.00' P.C. = STA. 103+87.01 N = 264,854.04 E = 494,703.55 P.T. = STA. 104+48.52 N = 264,911.70 E = 494,684.81
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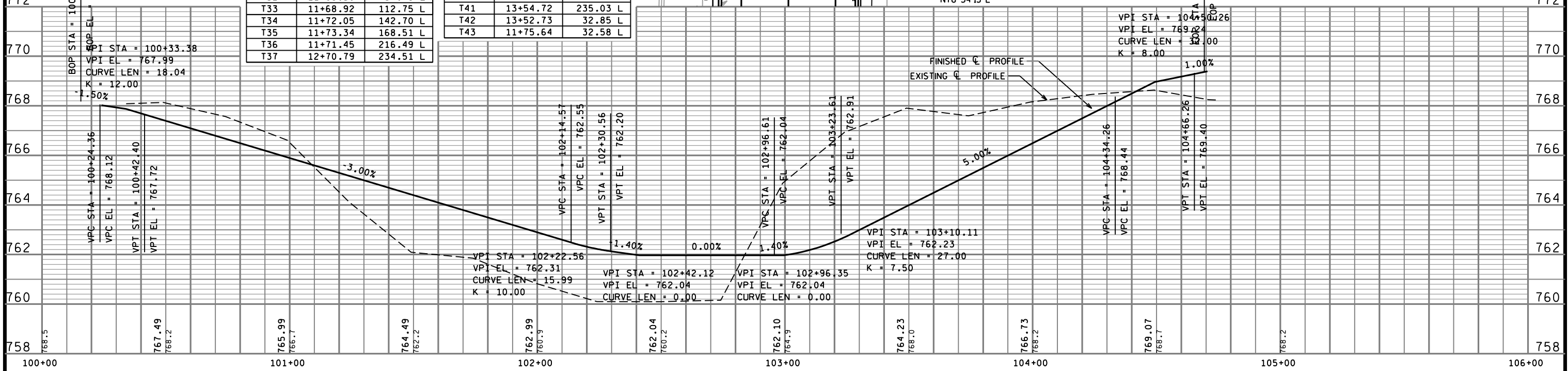
P.I. = STA. 104+68.06 N = 264,927.75 E = 494,673.66 Δ = 21°05'16" T = 19.54' L = 38.65' R = 105.00' P.C. = STA. 104+48.52 N = 264,911.70 E = 494,684.81 P.T. = STA. 104+87.17 N = 264,946.74 E = 494,669.04	P.I. = STA. 105+07.90 N = 264,966.88 E = 494,664.13 Δ = 12°05'03" T = 11.11' L = 22.15' R = 105.00' P.C. = STA. 104+96.78 N = 264,956.08 E = 494,666.76 P.T. = STA. 105+18.93 N = 264,977.99 E = 494,663.82
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JANESVILLE



TLE POINT	STATION	OFFSET
T30	11+64.53	33.66 L
T31	11+64.90	58.22 L
T32	11+69.50	87.79 L
T33	11+68.92	112.75 L
T34	11+72.05	142.70 L
T35	11+73.34	168.51 L
T36	11+71.45	216.49 L
T37	12+70.79	234.51 L

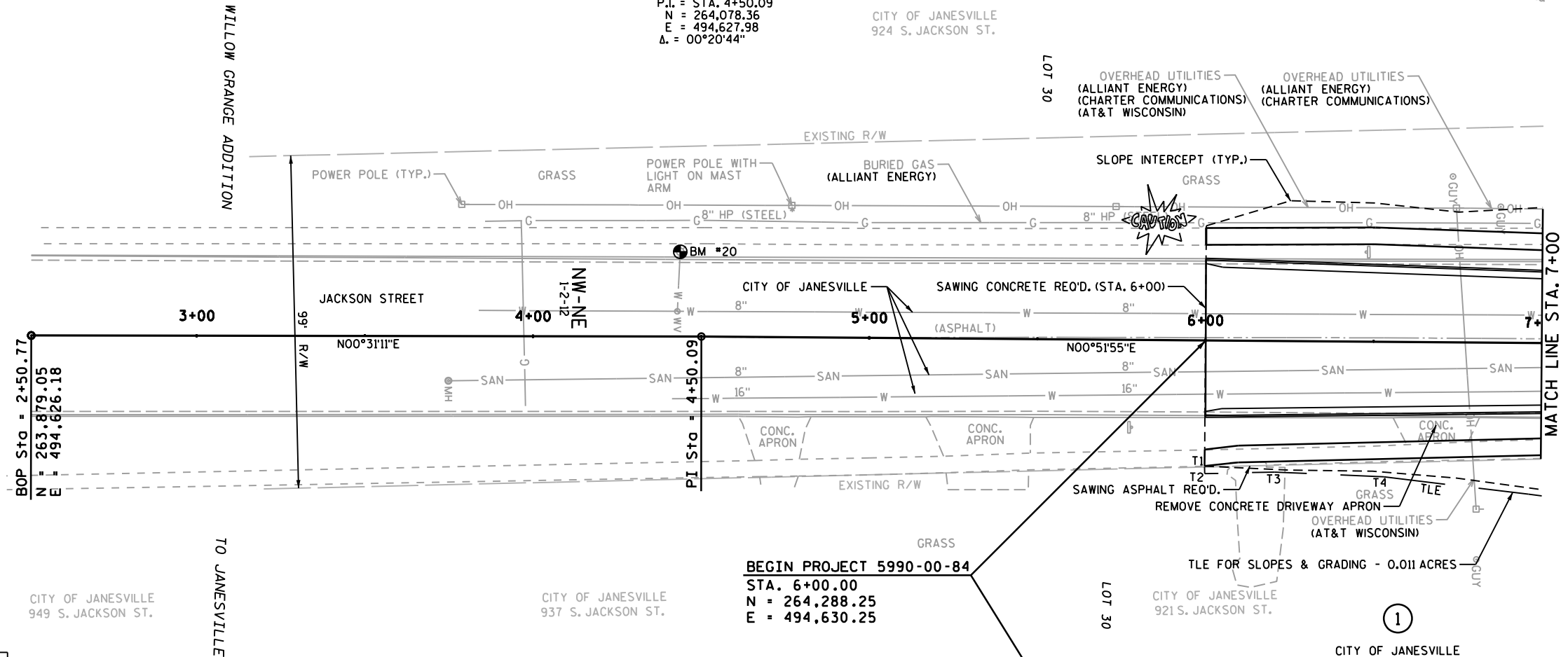
TLE POINT	STATION	OFFSET
T38	12+77.07	251.27 L
T39	12+94.31	255.03 L
T40	13+06.40	235.47 L
T41	13+54.72	235.03 L
T42	13+52.73	32.85 L
T43	11+75.64	32.58 L





P.I. = STA. 4+50.09
N = 264,078.36
E = 494,627.98
Δ = 00°20'44"

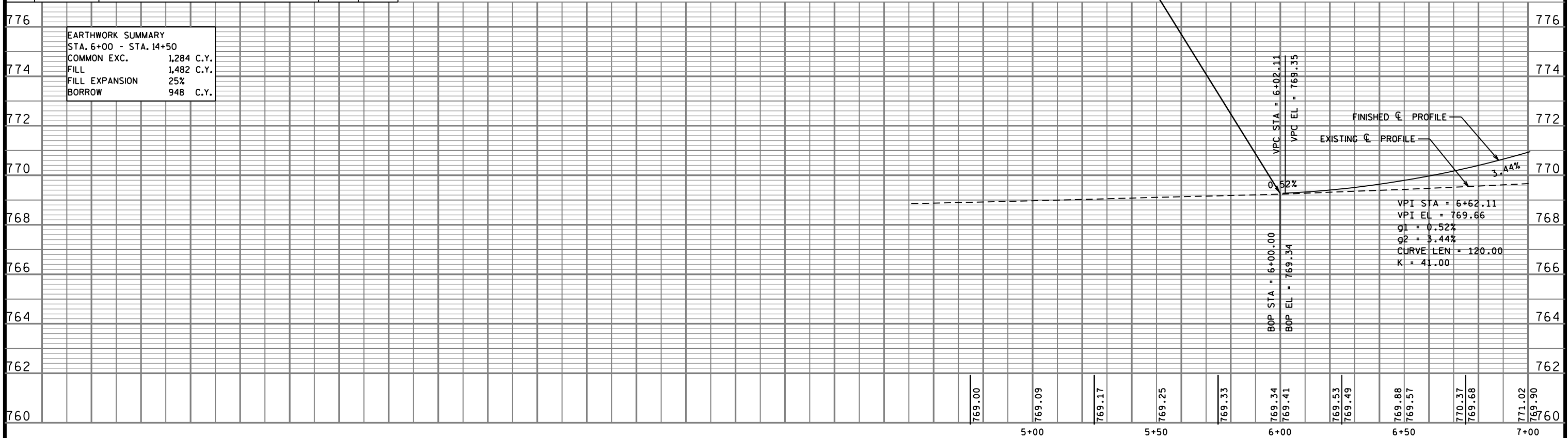
CITY OF JANESVILLE
924 S. JACKSON ST.



BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
20	4+43.7	TOP NUT FIRE HYDRANT	25.1' LT.	770.99

EARTHWORK SUMMARY	
STA. 6+00 - STA. 14+50	
COMMON EXC.	1,284 C.Y.
FILL	1,482 C.Y.
FILL EXPANSION	25%
BORROW	948 C.Y.



PROJECT NO: 5990-00-84

HWY: JACKSON STREET

COUNTY: ROCK

PLAN AND PROFILE: JACKSON STREET

SHEET

E

FILE NAME : \$\$....designfile....\$\$

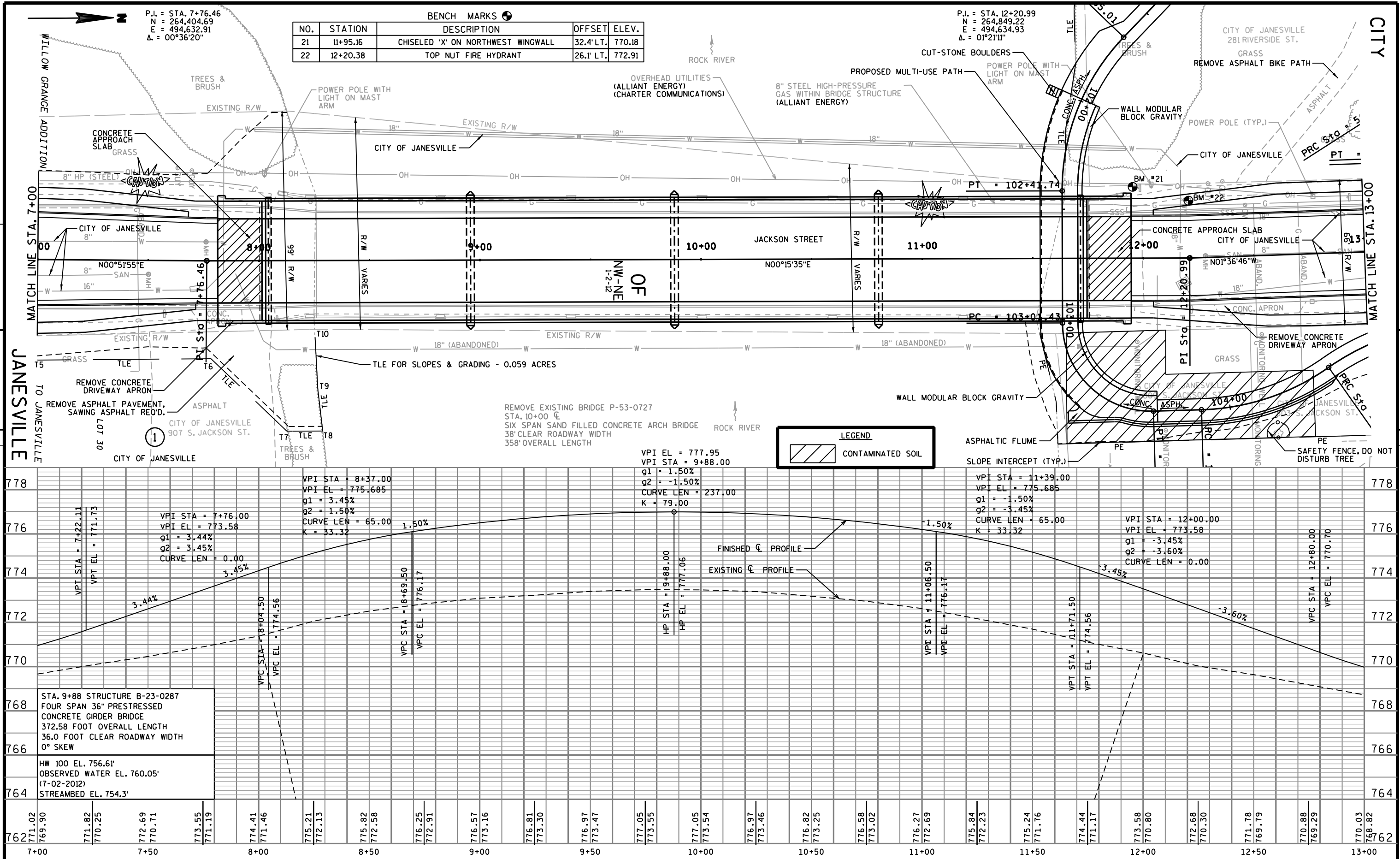
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PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

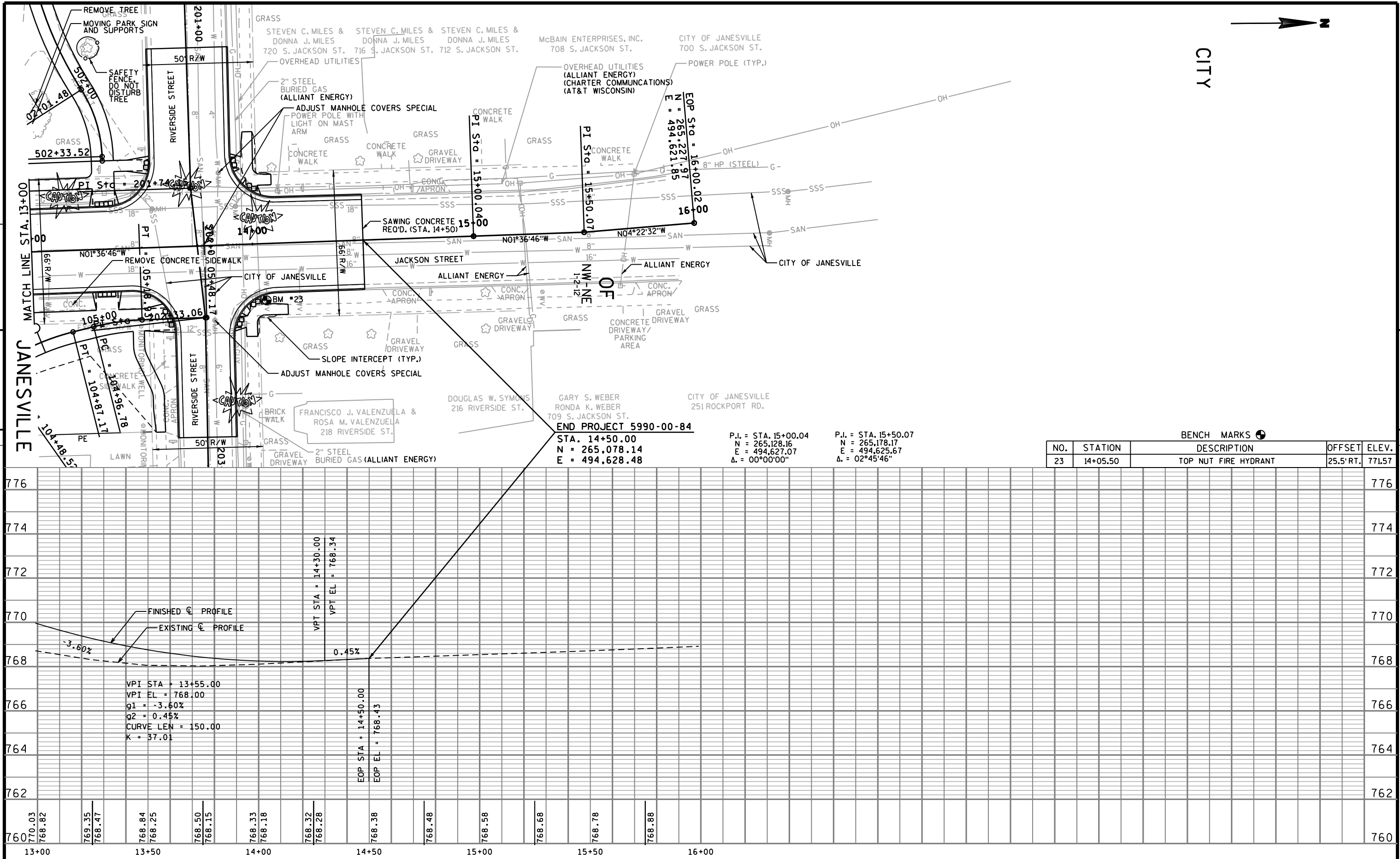
WISDOT/CADDs SHEET 40



NO.	STATION	DESCRIPTION	OFFSET	ELEV.
21	11+95.16	CHISELED 'X' ON NORTHWEST WINGWALL	32.4' LT.	770.18
22	12+20.38	TOP NUT FIRE HYDRANT	26.1' LT.	772.91

LEGEND

CONTAMINATED SOIL



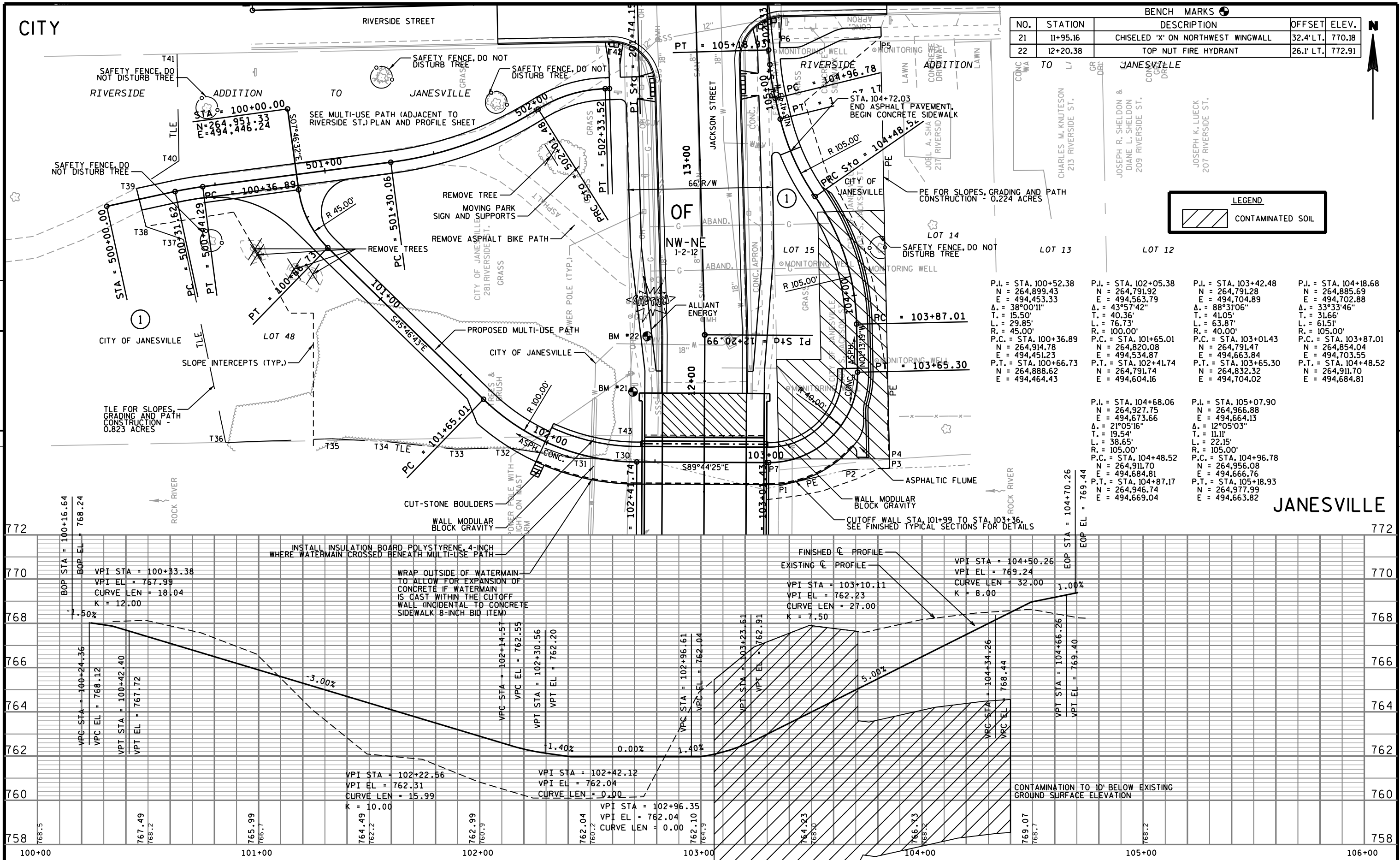
PROJECT NO: 5990-00-84	HWY: JACKSON STREET	COUNTY: ROCK	PLAN AND PROFILE: JACKSON STREET	SHEET	E
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CITY

RIVERSIDE STREET

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
21	11+95.16	CHISELED 'X' ON NORTHWEST WINGWALL	32.4' LT.	770.18
22	12+20.38	TOP NUT FIRE HYDRANT	26.1' LT.	772.91



LEGEND

CONTAMINATED SOIL

P.I. = STA. 100+52.38 N = 264,899.43 E = 494,453.33 Δ = 38°00'11" T = 15.50' L = 29.85' R = 45.00' P.C. = STA. 100+36.89 N = 264,914.78 E = 494,451.23 P.T. = STA. 100+66.73 N = 264,888.62 E = 494,464.43	P.I. = STA. 102+05.38 N = 264,791.92 E = 494,563.79 Δ = 43°57'42" T = 40.36' L = 76.73' R = 100.00' P.C. = STA. 101+65.01 N = 264,820.08 E = 494,534.87 P.T. = STA. 102+41.74 N = 264,791.74 E = 494,604.16	P.I. = STA. 103+42.48 N = 264,791.28 E = 494,704.89 Δ = 88°31'06" T = 41.05' L = 63.87' R = 40.00' P.C. = STA. 103+01.43 N = 264,791.47 E = 494,663.84 P.T. = STA. 103+65.30 N = 264,832.32 E = 494,704.02	P.I. = STA. 104+18.68 N = 264,885.69 E = 494,702.88 Δ = 33°33'46" T = 31.66' L = 61.51' R = 105.00' P.C. = STA. 103+87.01 N = 264,854.04 E = 494,703.55 P.T. = STA. 104+48.52 N = 264,911.70 E = 494,684.81
P.I. = STA. 104+68.06 N = 264,927.75 E = 494,673.66 Δ = 21°05'16" T = 19.54' L = 38.65' R = 105.00' P.C. = STA. 104+48.52 N = 264,911.70 E = 494,684.81 P.T. = STA. 104+87.17 N = 264,946.74 E = 494,669.04	P.I. = STA. 105+07.90 N = 264,966.88 E = 494,664.13 Δ = 12°05'03" T = 11.11' L = 22.15' R = 105.00' P.C. = STA. 104+96.78 N = 264,956.08 E = 494,666.76 P.T. = STA. 105+18.93 N = 264,977.99 E = 494,663.82		

PROJECT NO: 5990-00-84

HWY: JACKSON STREET

COUNTY: ROCK

PLAN AND PROFILE: MULTI-USE PATH

SHEET

E

FILE NAME: \$\$....designfile....\$\$

PLOT DATE: \$\$....plottingdate....\$\$

PLOT BY: \$\$....plotuser....\$\$

PLOT NAME:

PLOT SCALE: \$\$....plotscale....\$\$

WISDOT/CADDs SHEET 40

P.I. = STA. 500+37.96
N = 264,915.35
E = 494,401.57
Δ = 04°50'23"
T = 6.34'
L = 12.67'
R = 150.00'
P.C. = STA. 500+31.62
N = 264,914.00
E = 494,401.57
P.T. = STA. 500+44.29
N = 264,916.16
E = 494,407.86

P.I. = STA. 501+66.34
N = 264,931.90
E = 494,528.88
Δ = 24°48'02"
T = 36.28'
L = 71.42'
R = 165.00'
P.C. = STA. 501+30.06
N = 264,927.22
E = 494,492.91
P.T. = STA. 502+01.48
N = 264,951.24
E = 494,559.58

P.I. = STA. 502+17.89
N = 264,959.99
E = 494,573.46
Δ = 30°35'47"
T = 16.41'
L = 32.04'
R = 60.00'
P.C. = STA. 502+01.48
N = 264,951.24
E = 494,559.58
P.T. = STA. 502+33.52
N = 264,960.45
E = 494,589.87

STA. 500+15.0
SAWING ASPHALT RECD.

SAFETY FENCE, DO
NOT DISTURB TREE

STA = 500+00.00
N = 264,907.29
E = 494,364.48

SLOPE INTERCEPTS (TYP.)

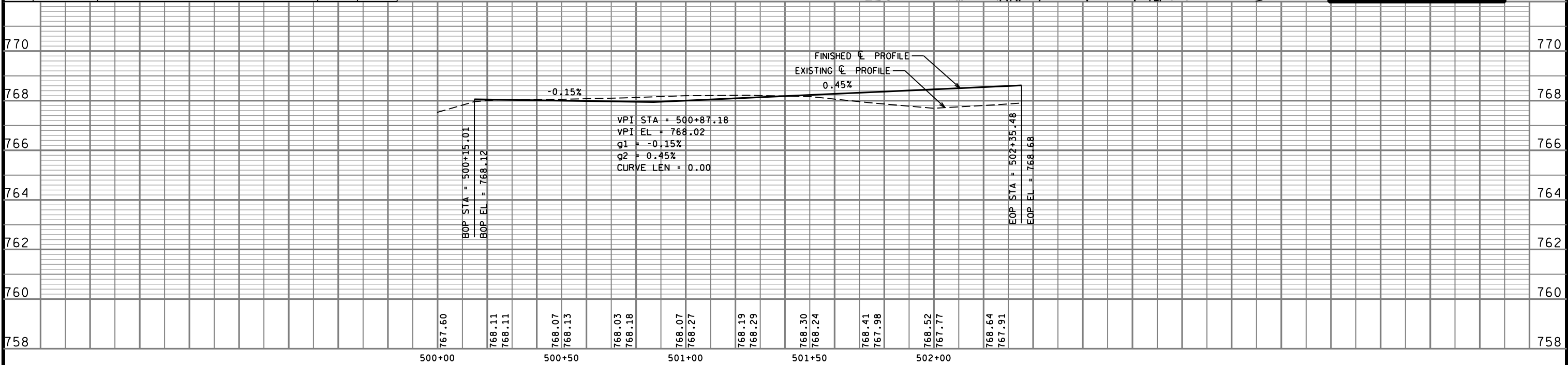
ROCK RIVER

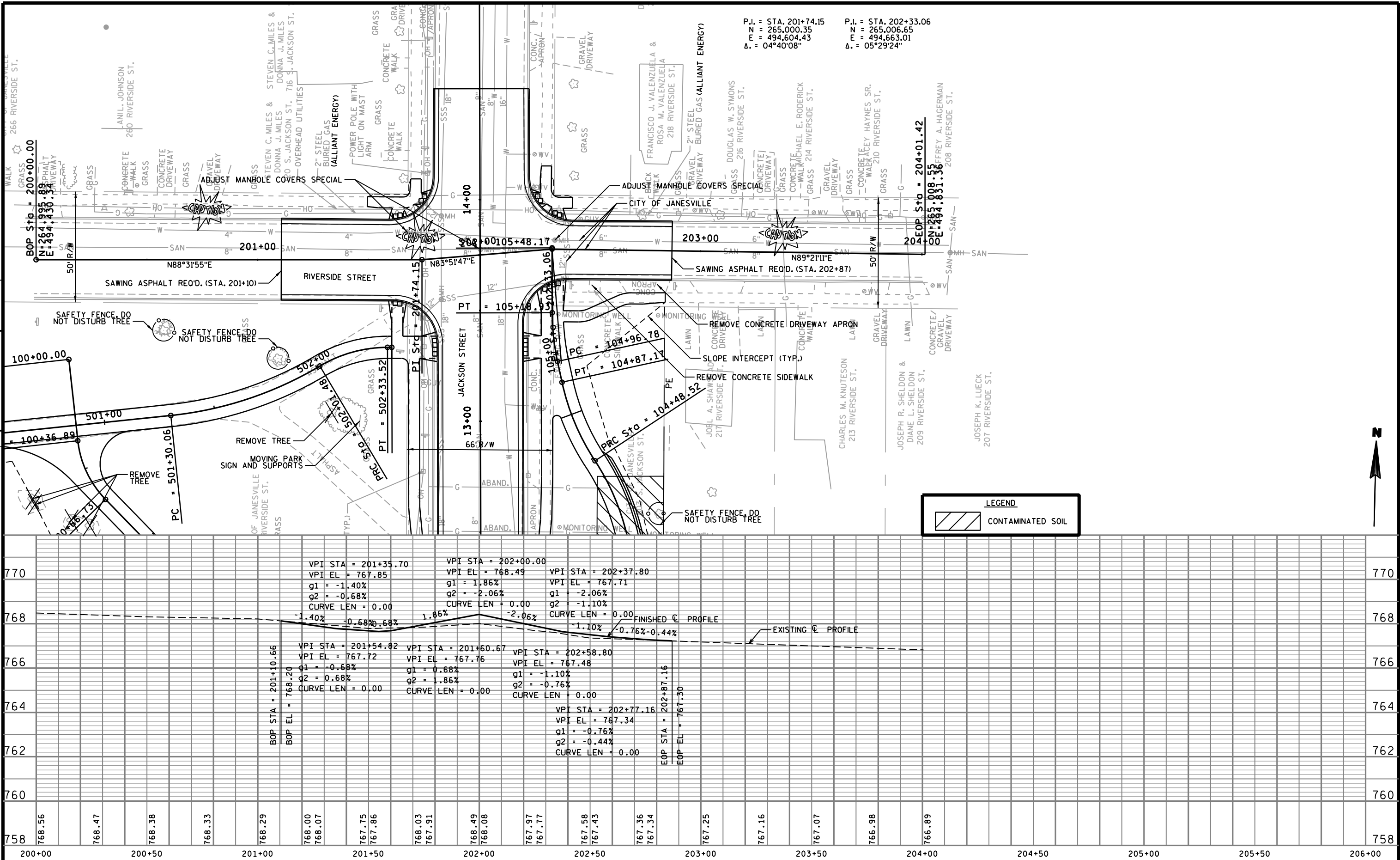
BOP STA = 500+15.01
BOP EL = 768.12

VPI STA = 500+87.18
VPI EL = 768.02
G1 = -0.15%
G2 = 0.45%
CURVE LEN = 0.00

EOP STA = 502+35.48
EOP EL = 768.68

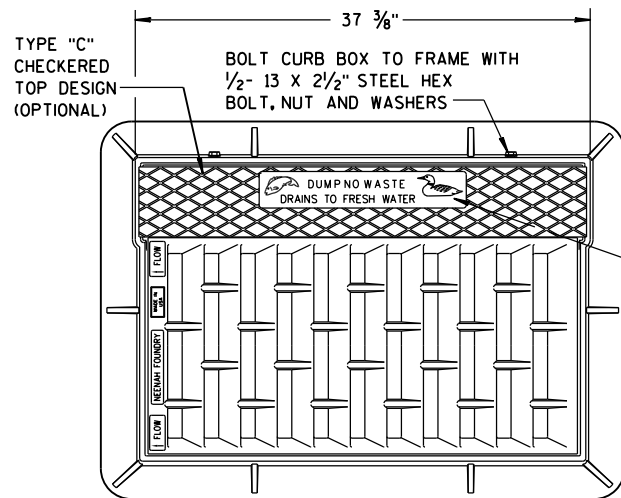
BENCH MARKS				
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
21	11+95.16	CHISELED 'X' ON NORTHWEST WINGWALL	32.4' LT.	770.18
22	12+20.38	TOP NUT FIRE HYDRANT	26.1' LT.	772.91



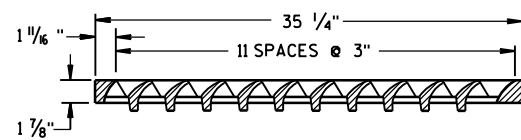
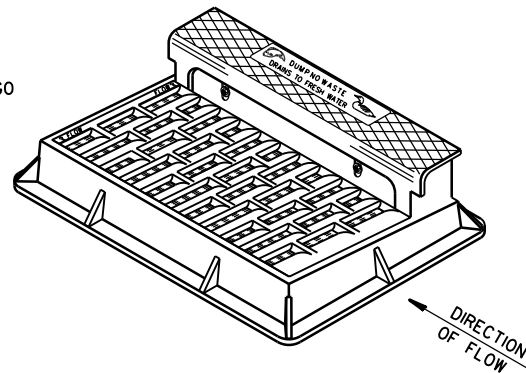


Standard Detail Drawing List

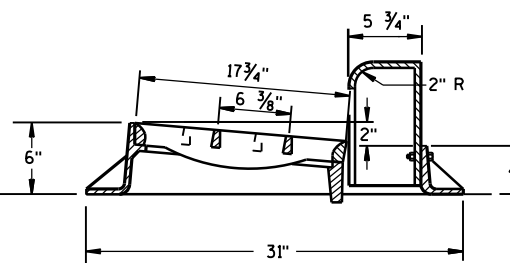
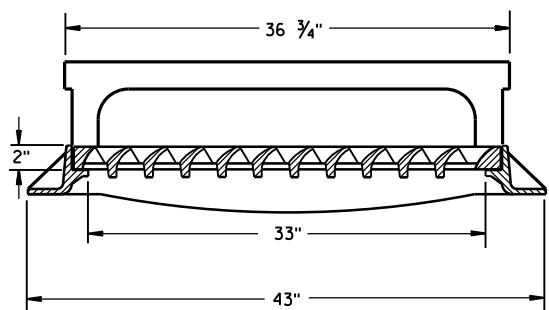
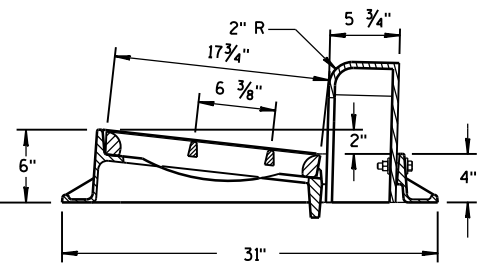
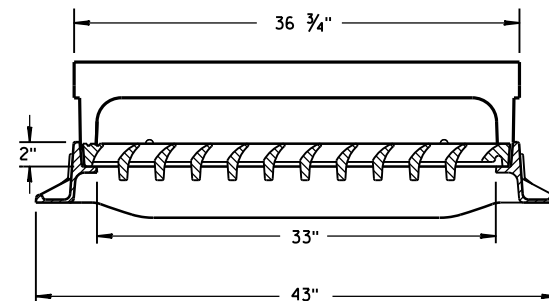
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09B02-07	CONDUIT
09B04-10	PULL BOX
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
12A03-10	NAME PLATE (STRUCTURES)
13B02-06	CONCRETE PAVEMENT APPROACH SLAB
14A02-01	TREE PLANTING DETAIL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C29-03A	BICYCLE LANE MARKING
15C29-03D	URBAN BICYCLE LANE MARKING
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



**NOTE:
GRATE IS REVERSIBLE.**

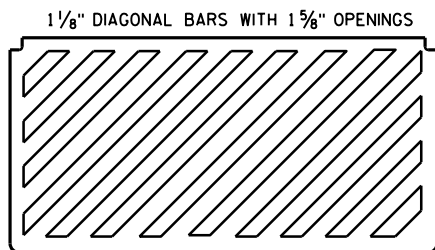


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

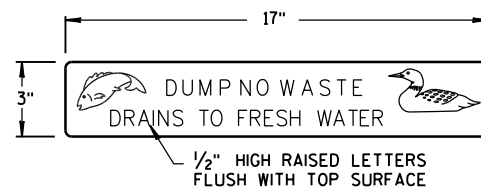


TYPE "H"

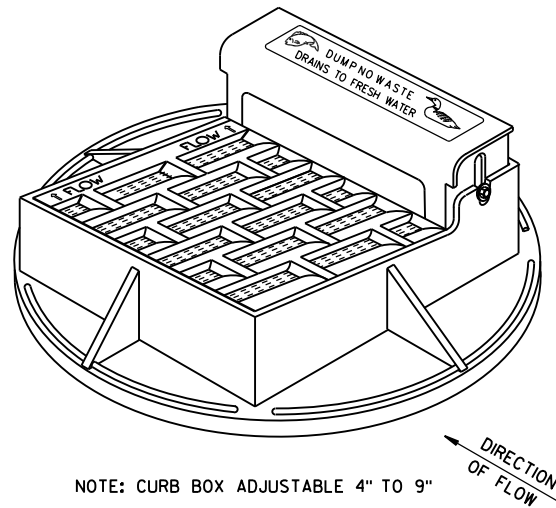
NOTE: EITHER CASTING IS ACCEPTABLE



**SPECIAL GRATE FOR
TYPE "H" COVER**
(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

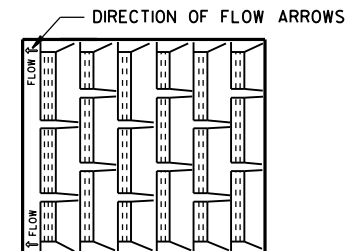


LOGO DETAIL

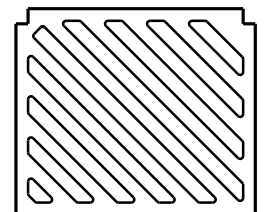


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

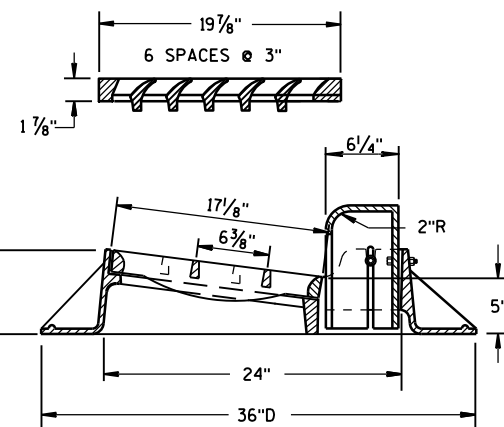
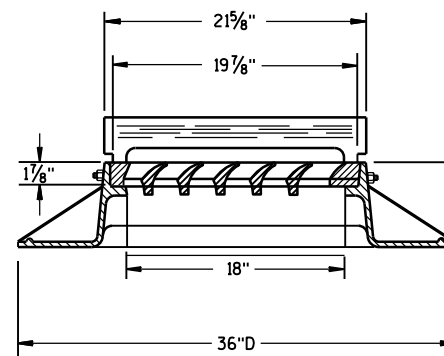
**NOTE:
GRATE IS REVERSIBLE.**



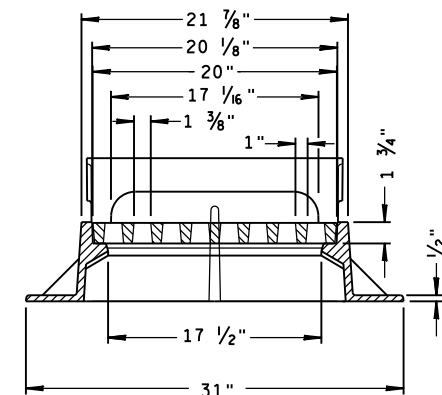
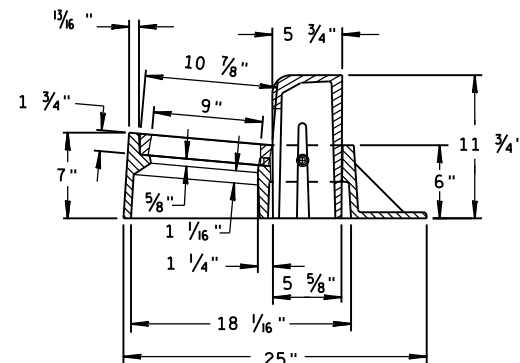
1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



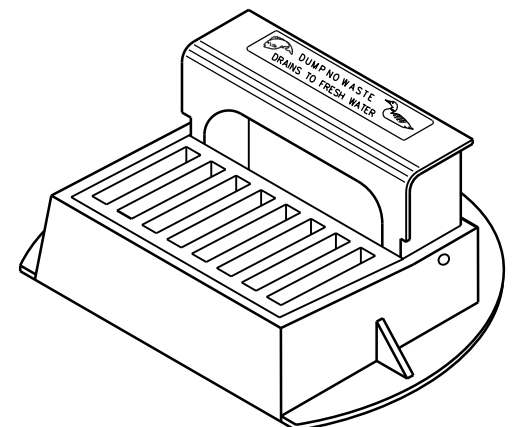
**SPECIAL GRATE FOR
TYPE "A" COVER**
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



TYPE "Z"

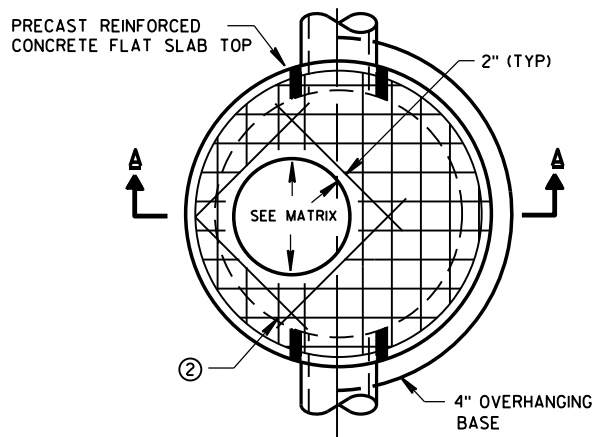


**INLET COVERS
TYPE A, H, A-S, H-S & Z**

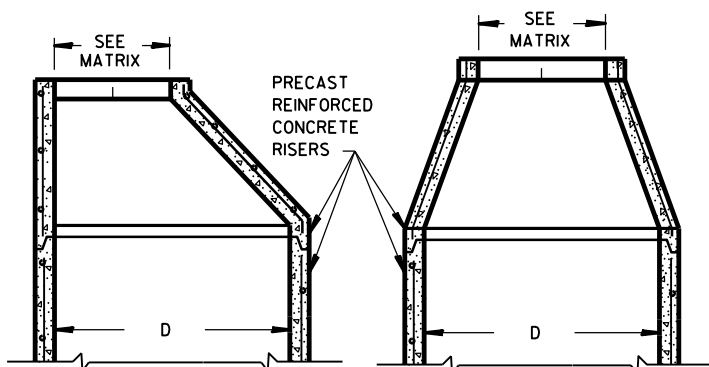
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
II-27-13
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

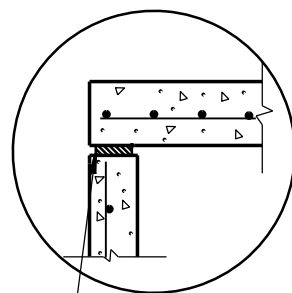


PLAN VIEW CIRCULAR OPENING

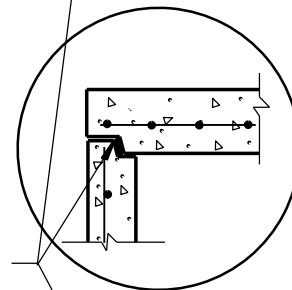


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

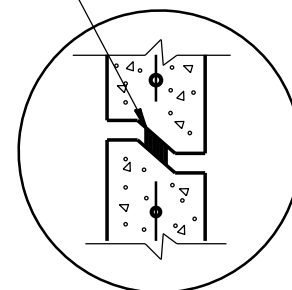
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT



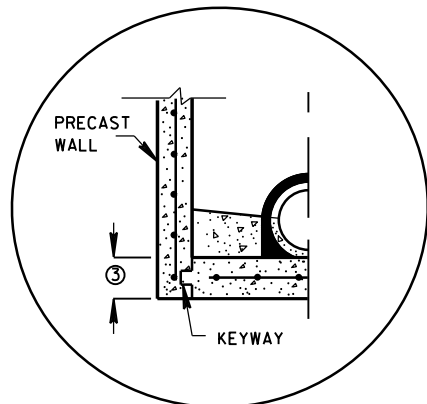
TOP WITH TONGUE AND GROOVE JOINT



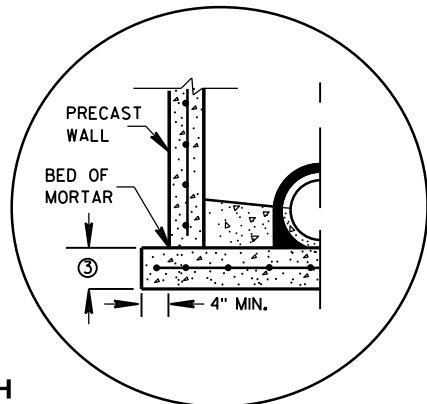
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

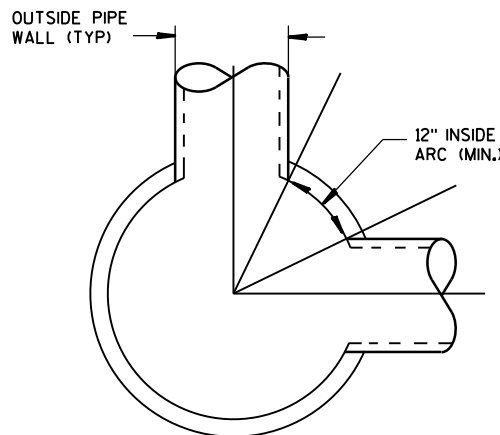


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

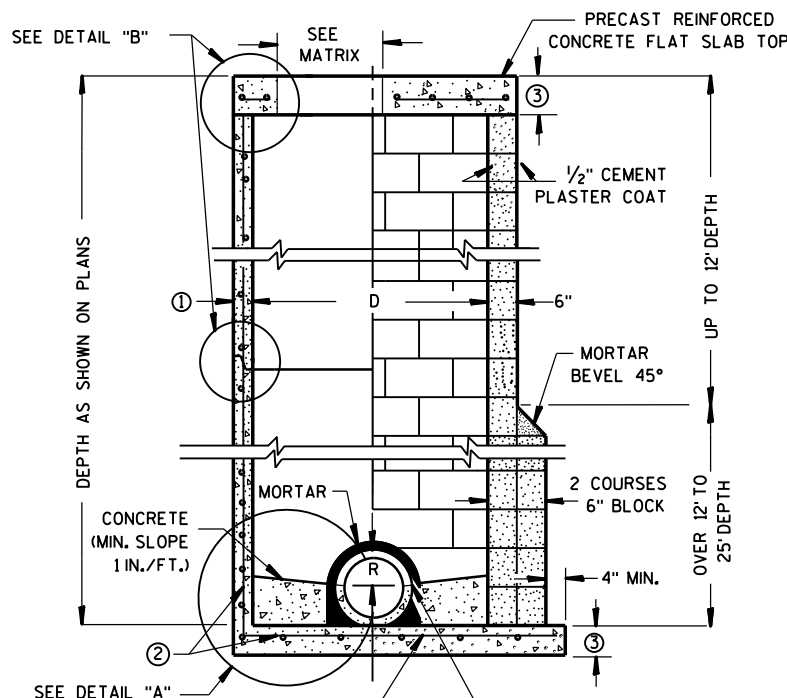


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



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

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

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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 1/2" 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 PERMITTED 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 SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 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

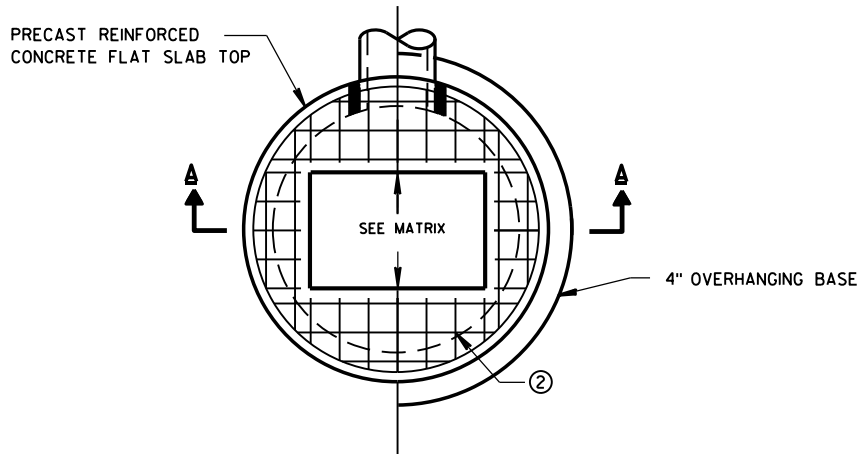
PIPE MATRIX

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

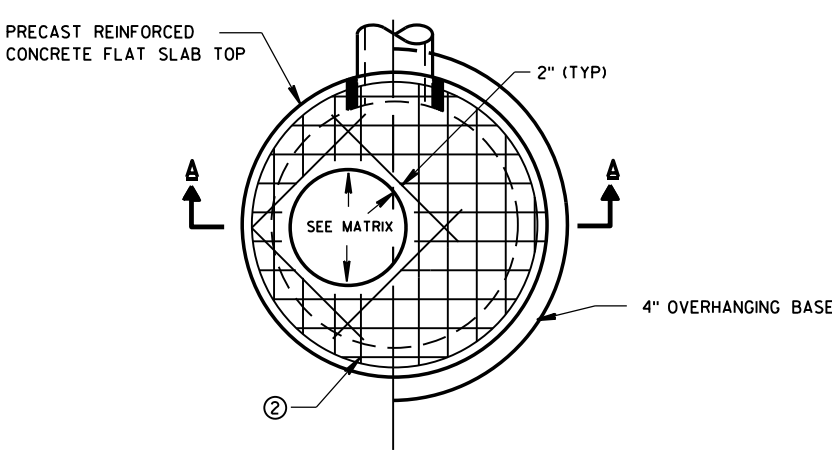
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

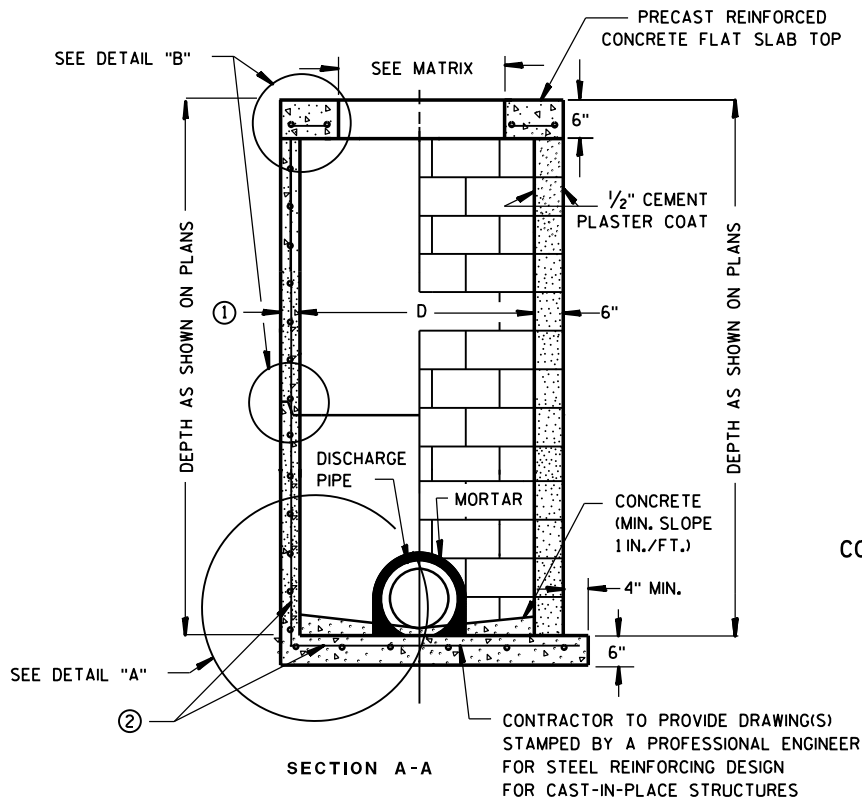


PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

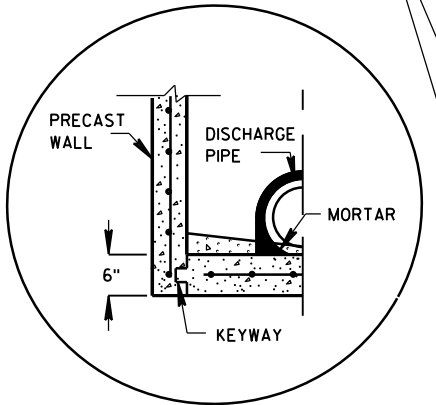
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



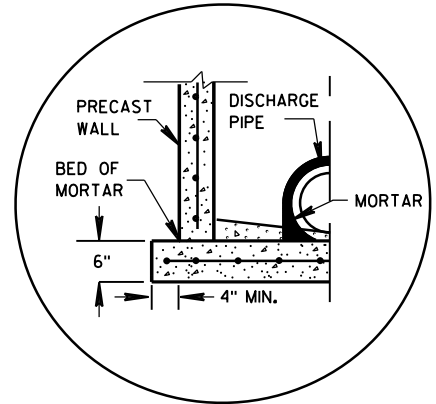
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

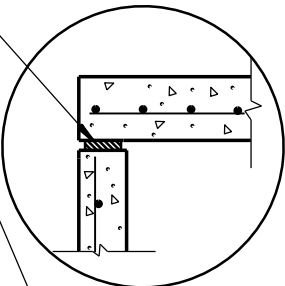


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

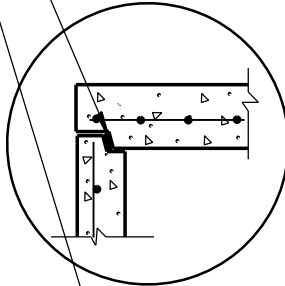


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

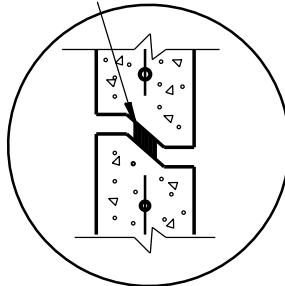
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

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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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.

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.

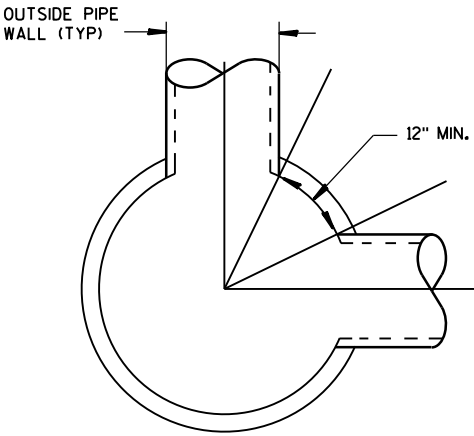
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

- ① MINIMUM WALL THICKNESS SHALL BE 4-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	X	X	
	2X2.5			X								
	2X3						X					
	2.5X3					X						



DETAIL "C"

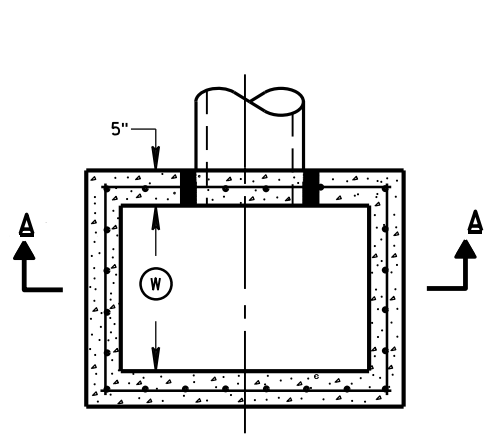
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

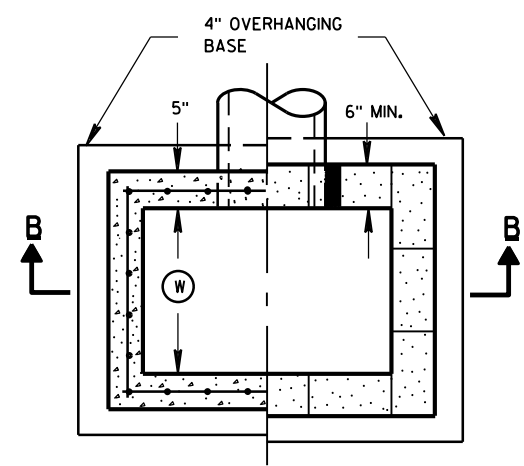
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

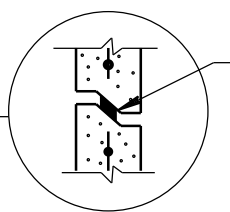
APPROVED
6/5/2012 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



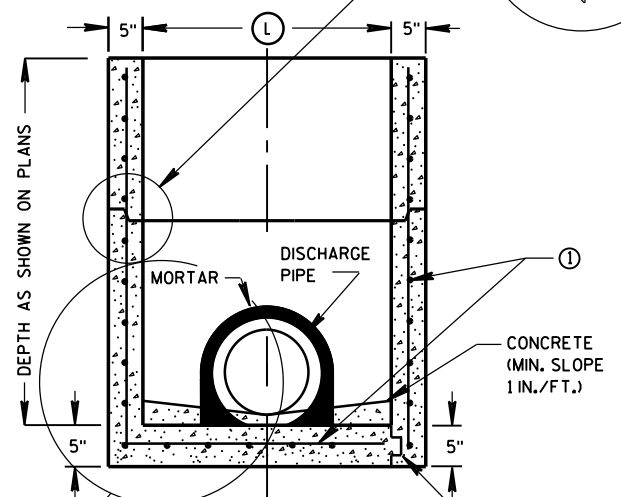
PLAN VIEW



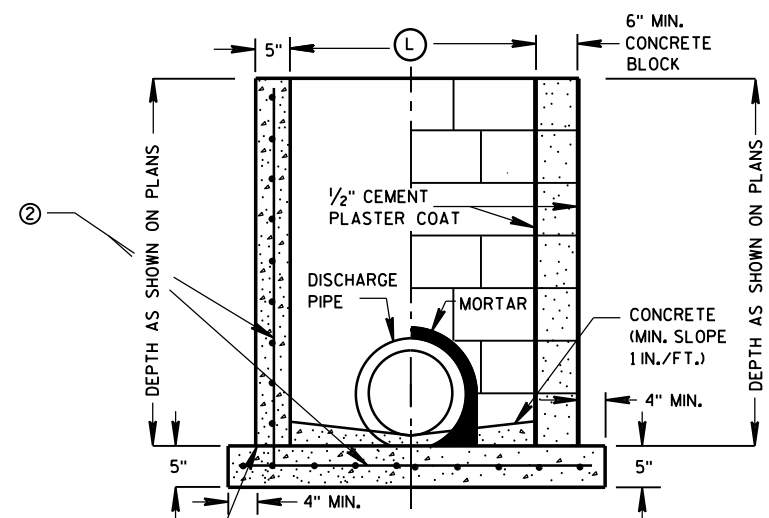
PLAN VIEW



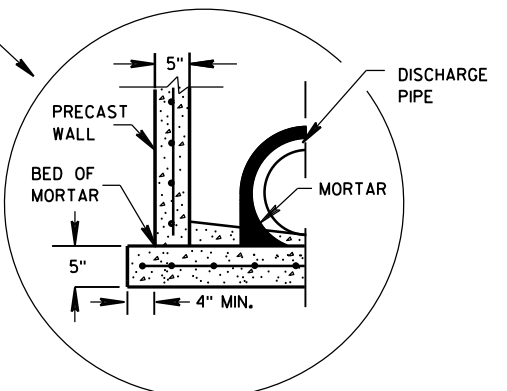
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

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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.

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

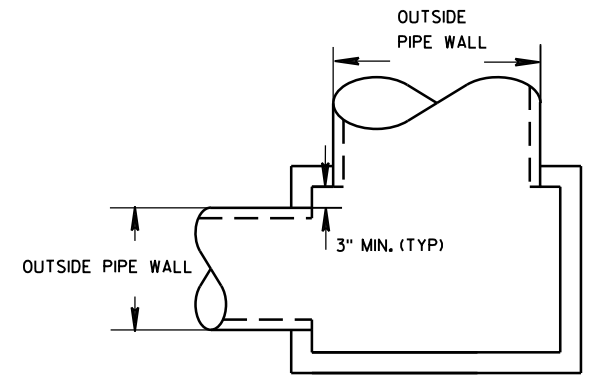
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH ① (FT)	LENGTH ② (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

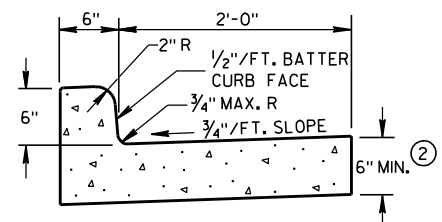


DETAIL "A"

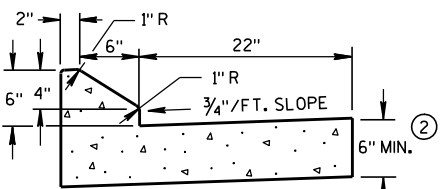
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

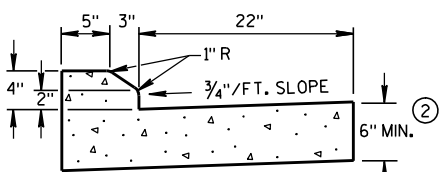
APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA ENGINEER



TYPES A & D ①

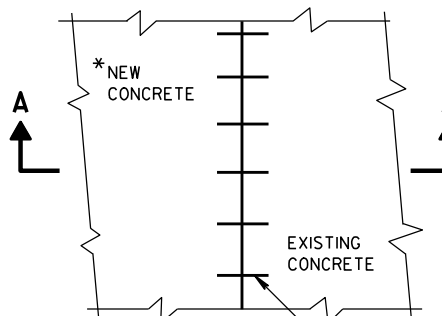


6" SLOPED CURB TYPES G & J ①



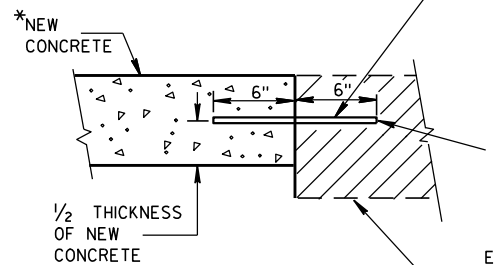
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



PLAN VIEW

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

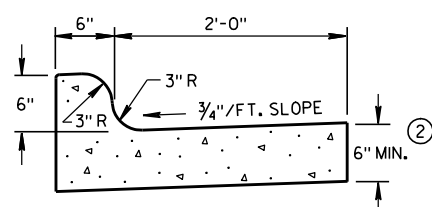


SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

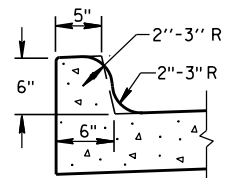
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

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

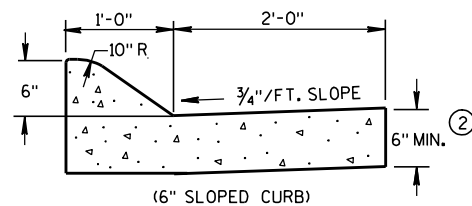
EXISTING
CONCRETE



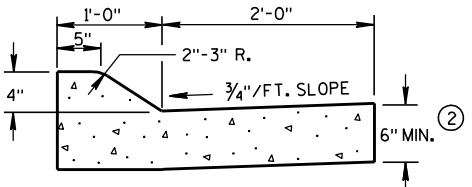
TYPES K & L ①



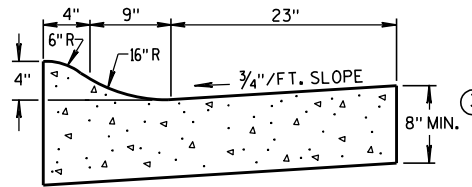
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)

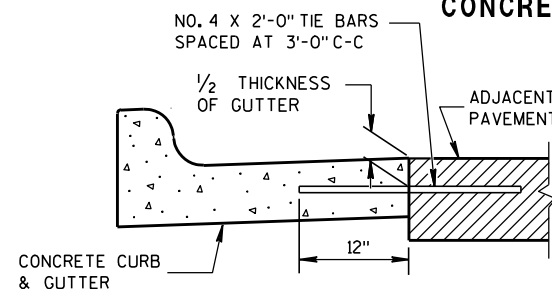


TYPES A & D ①

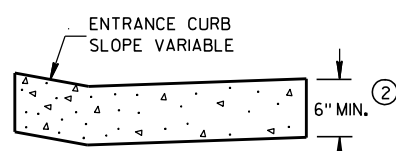


4" SLOPED CURB TYPES R & T ① ④

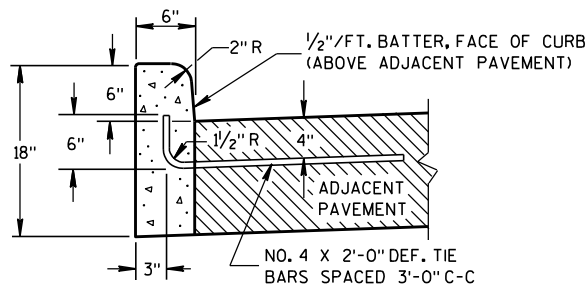
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

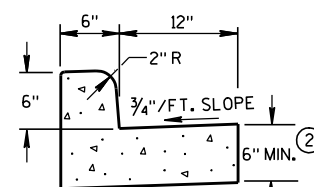


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

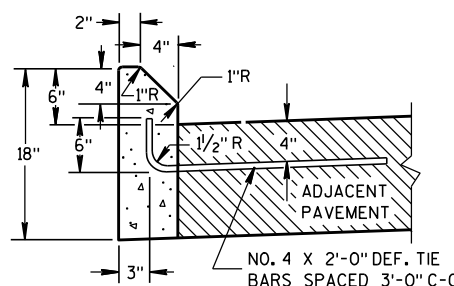


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

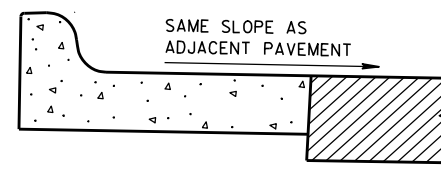
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

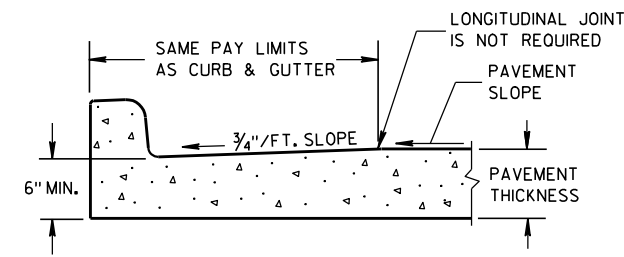
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

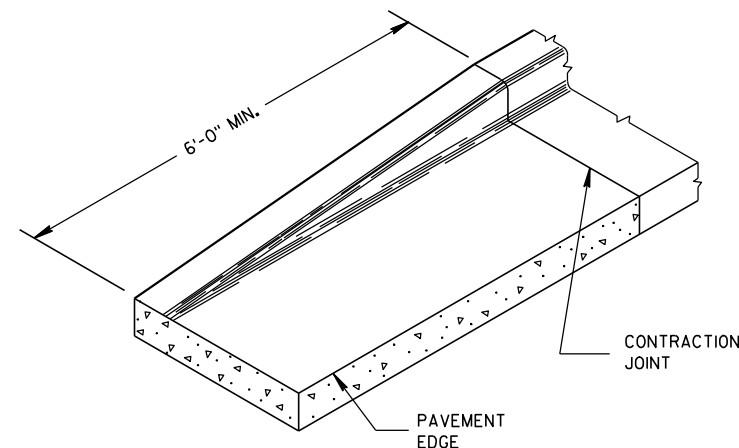
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER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



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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

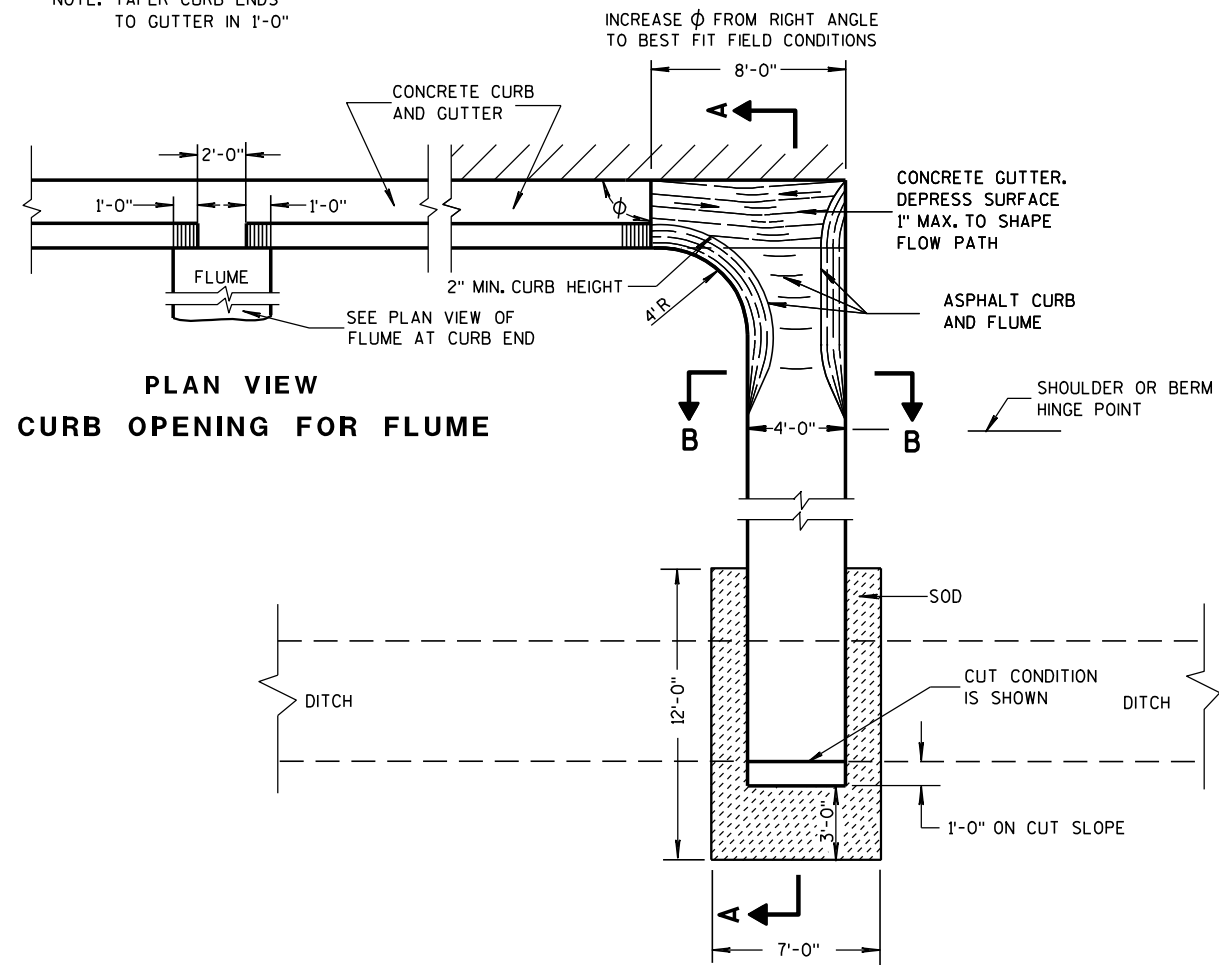
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

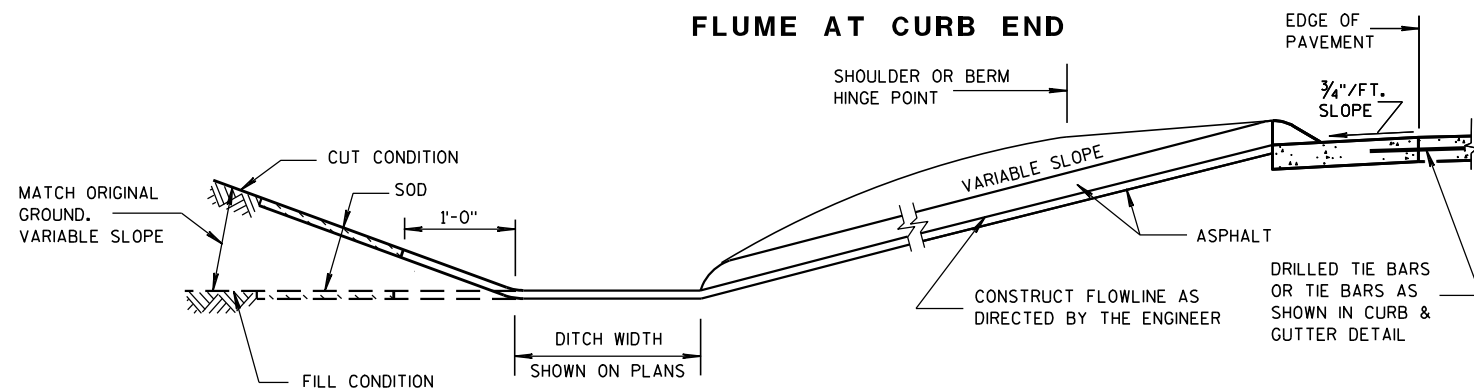
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS
TO GUTTER IN 1'-0"

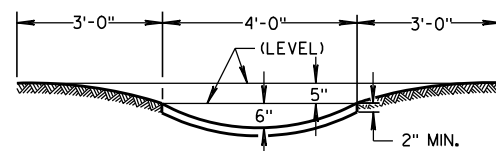


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

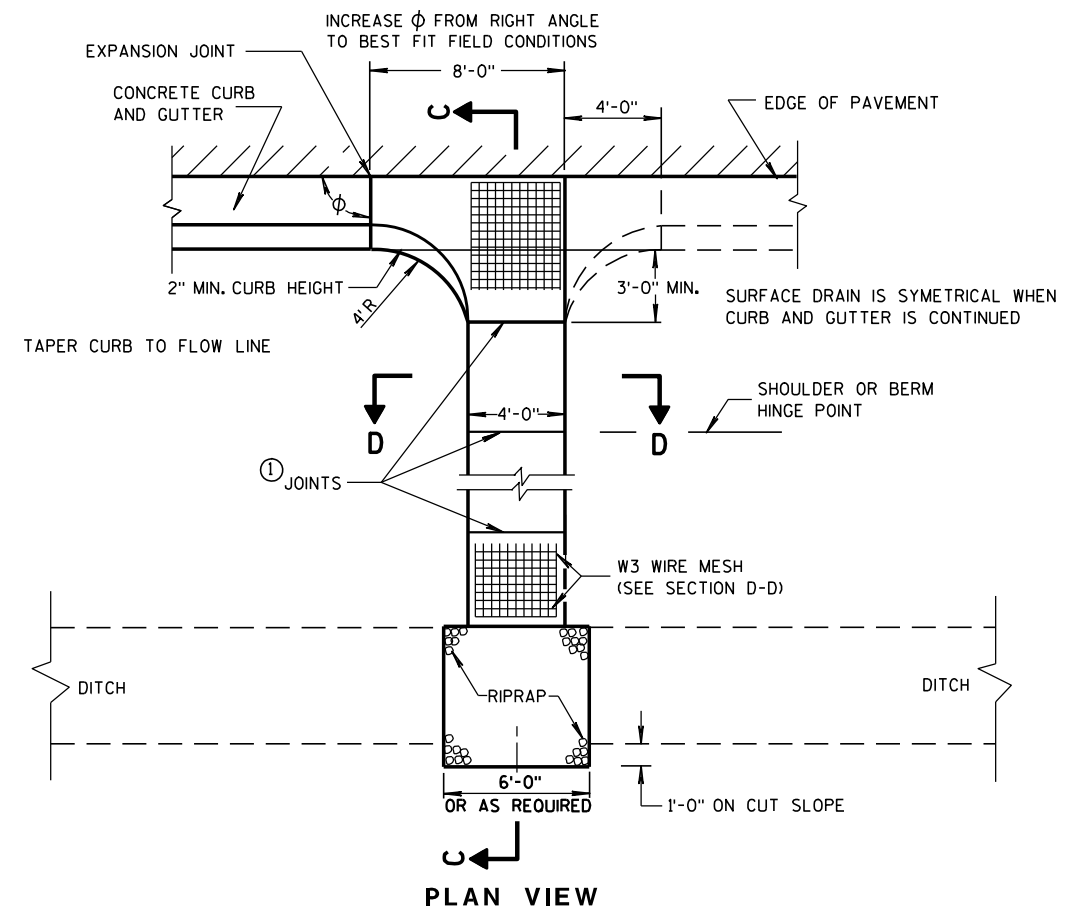
GENERAL NOTES

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

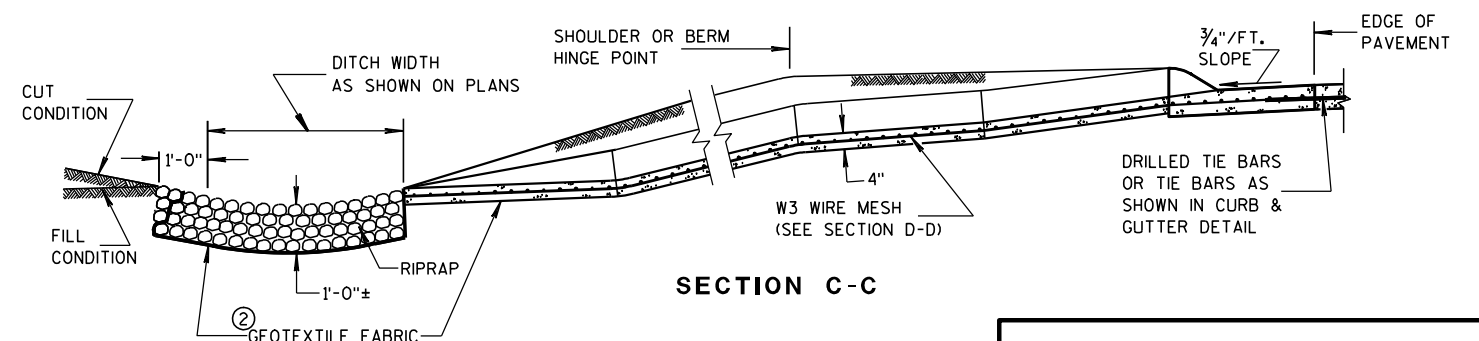
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ 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

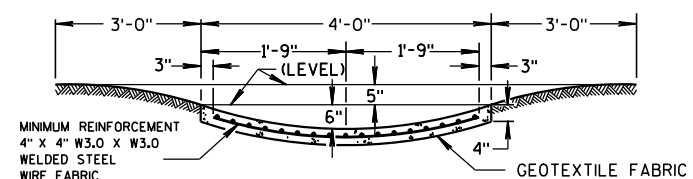
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08

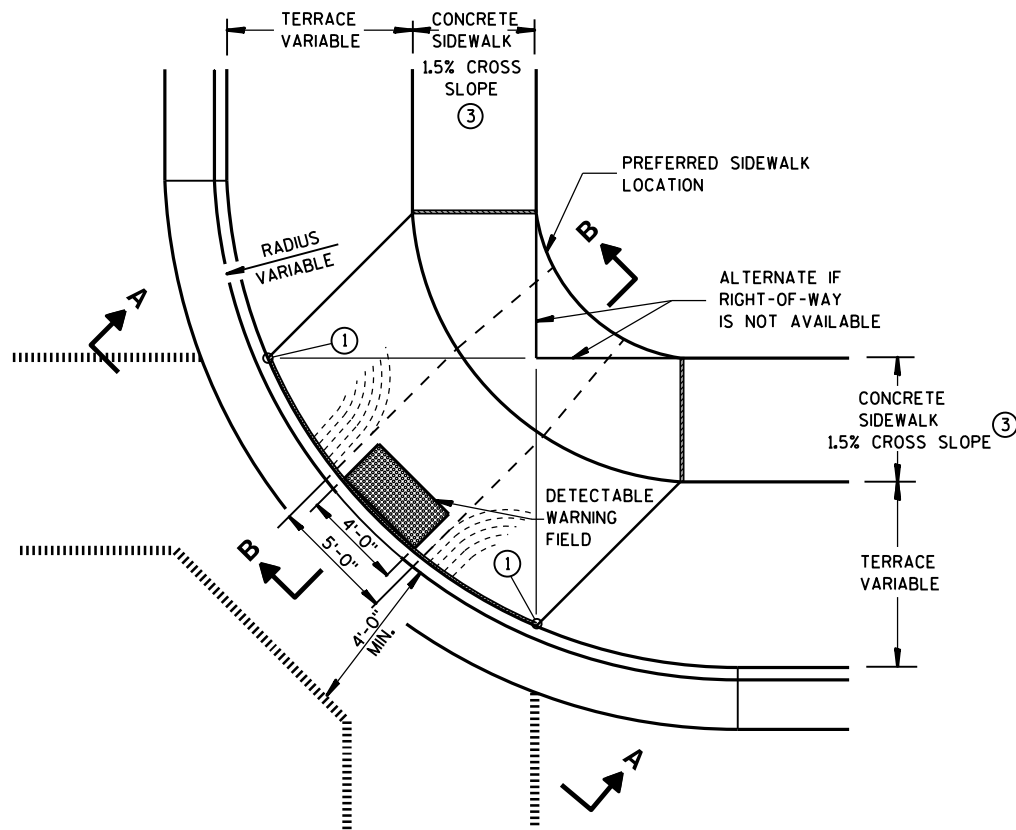
DATE

FHWA

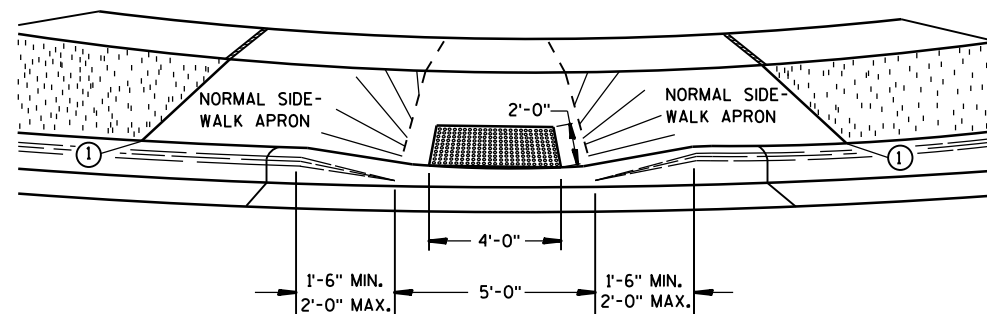
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

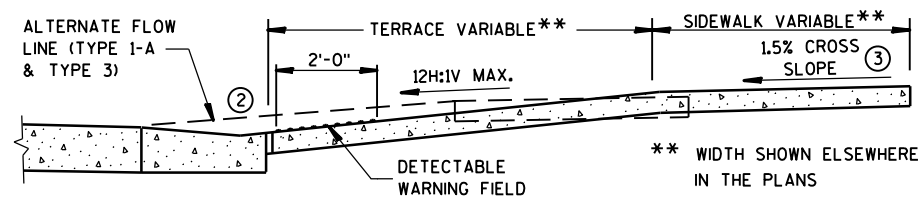
ENGINEER



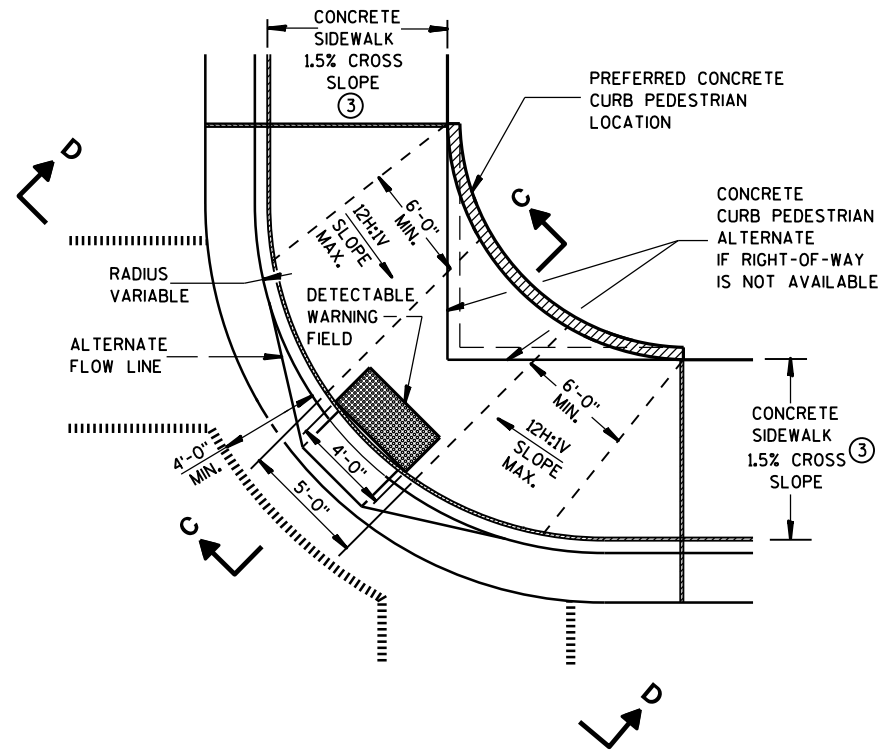
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



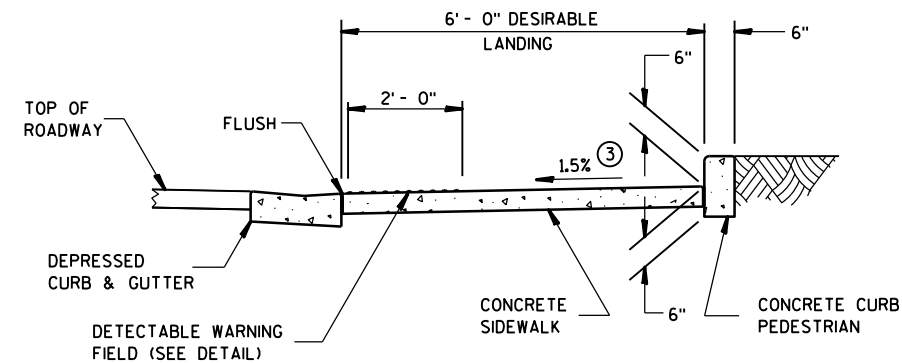
VIEW A-A



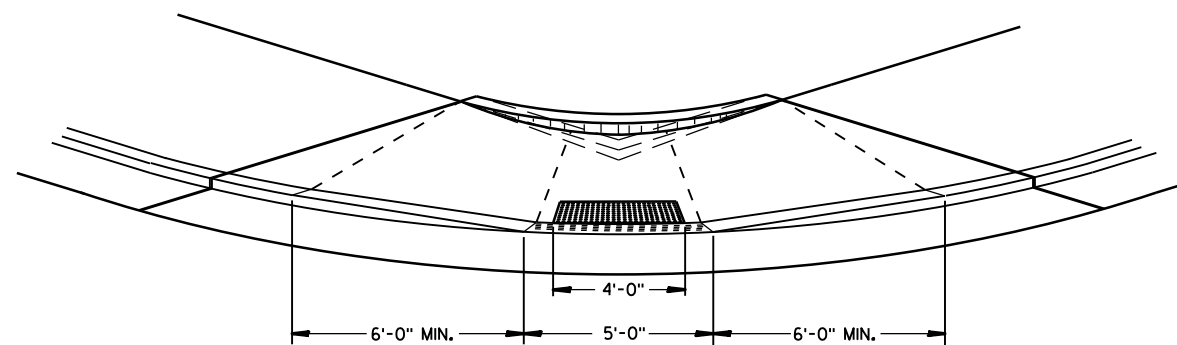
SECTION B-B



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



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

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

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

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

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

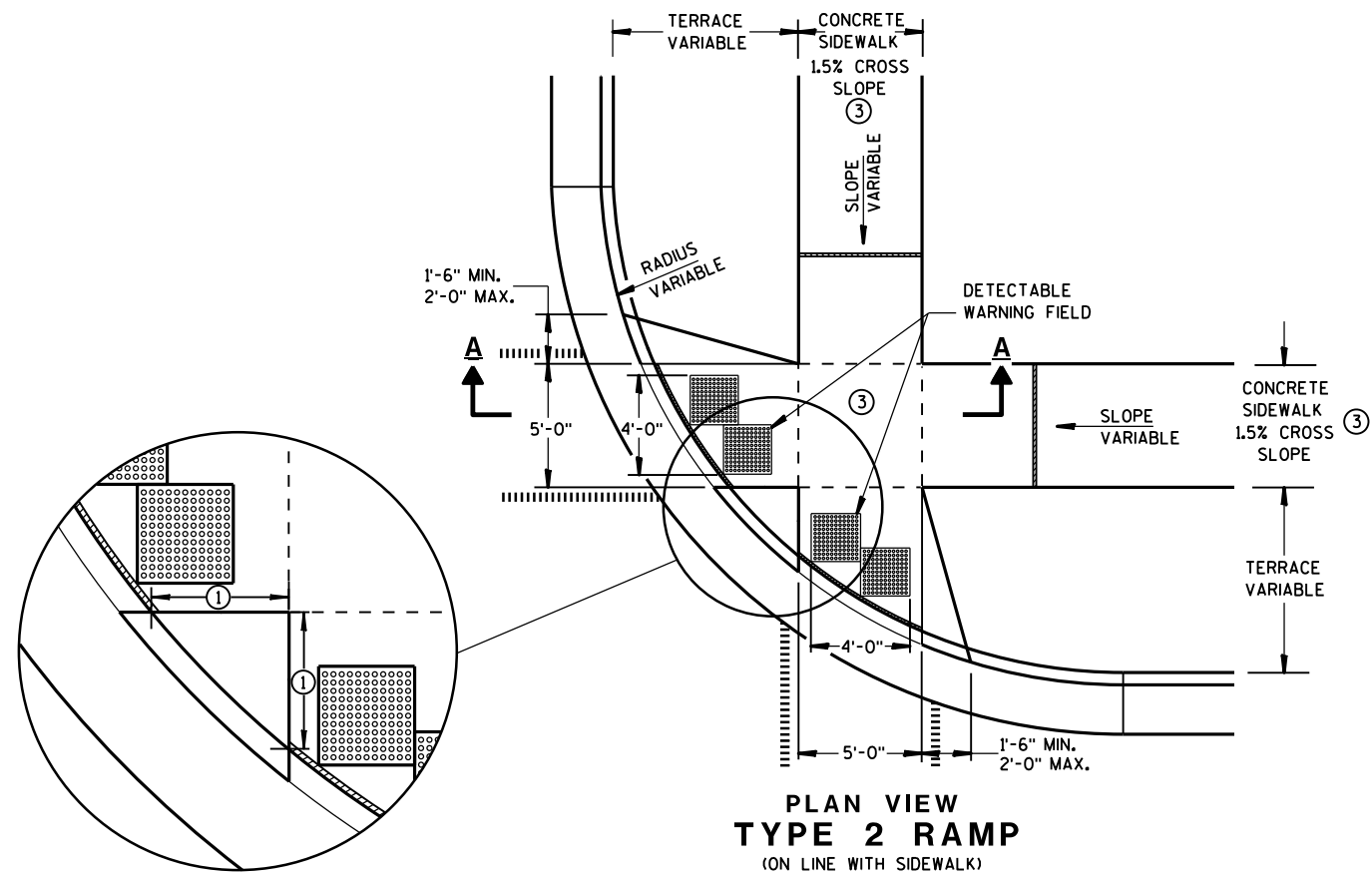
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE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

LEGEND

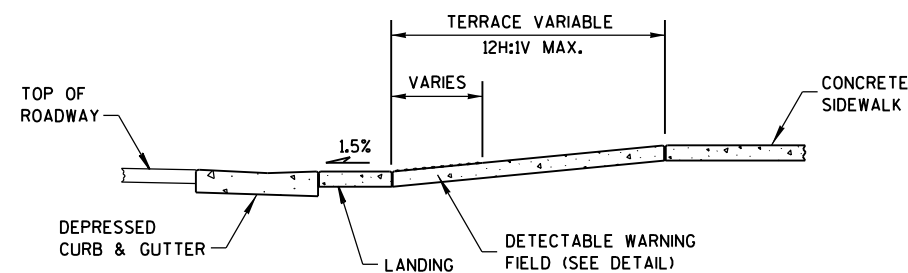
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

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

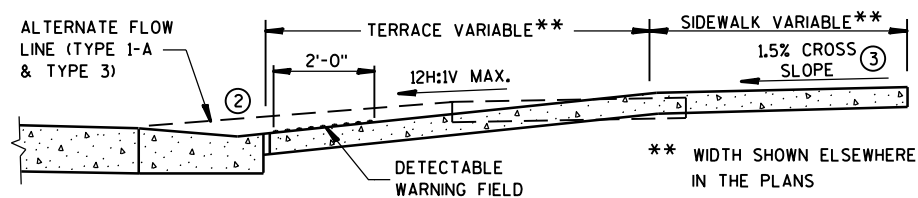
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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



SECTION A-A



SECTION B-B

GENERAL NOTES

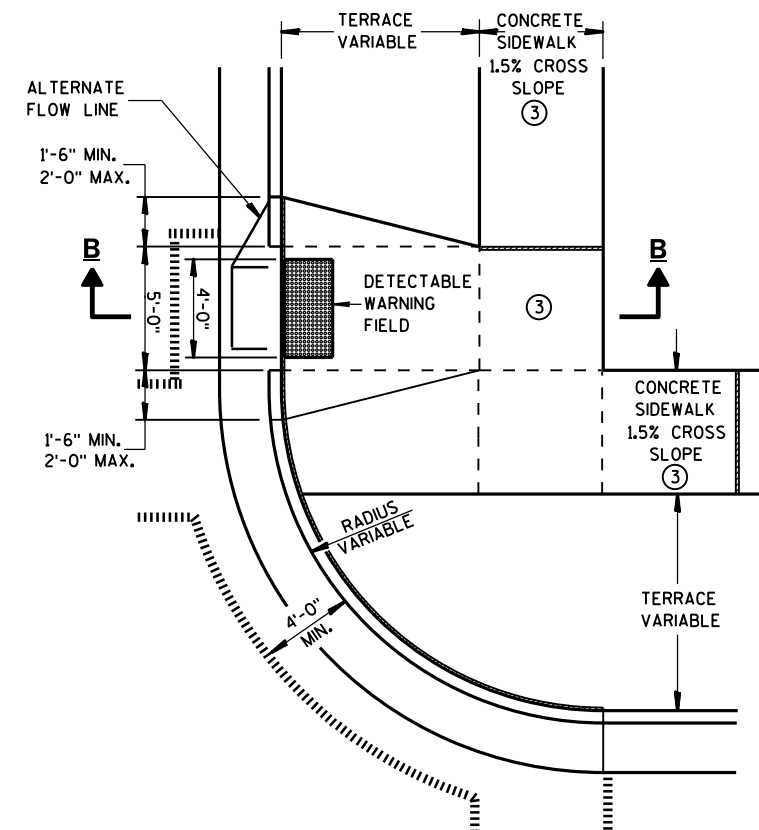
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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

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

LEGEND

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



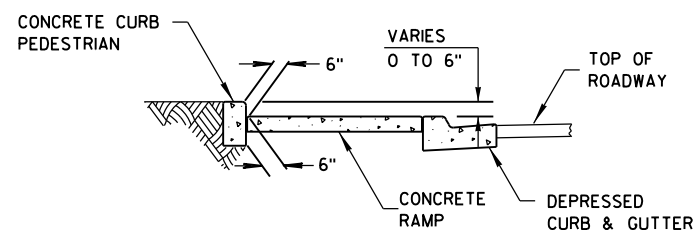
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

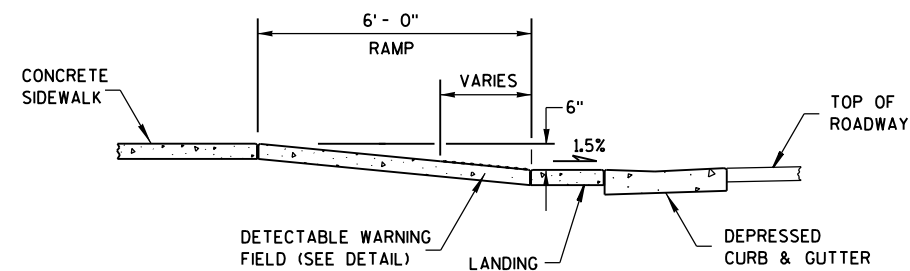
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



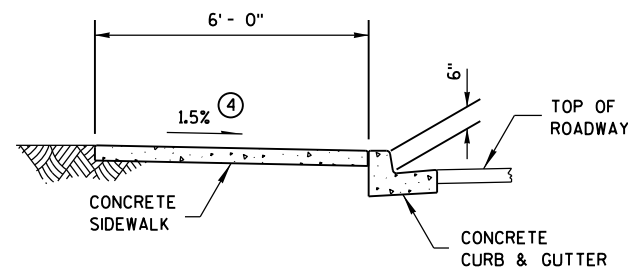
SECTION C-C FOR TYPE 4A



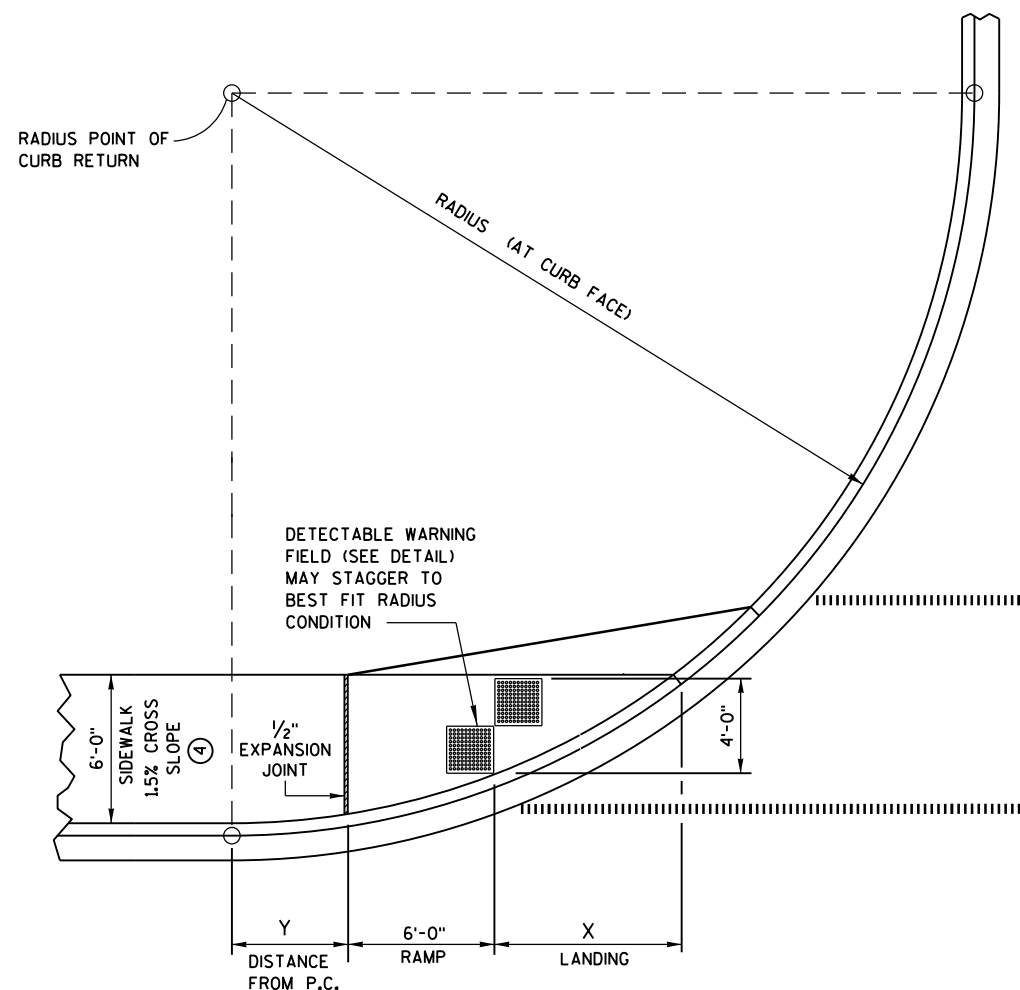
SECTION B-B FOR TYPE 4A

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW

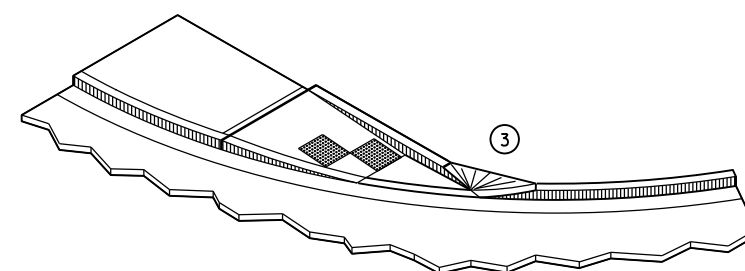
GENERAL NOTES

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

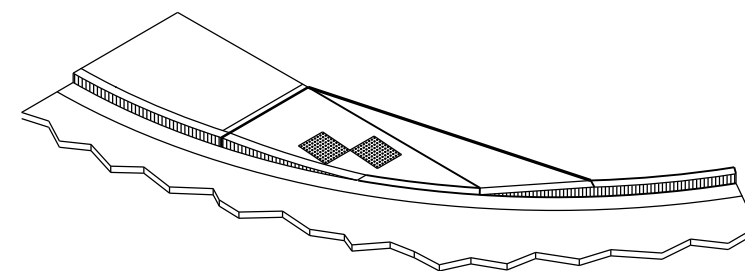
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

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

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



ISOMETRIC VIEW FOR TYPE 4A



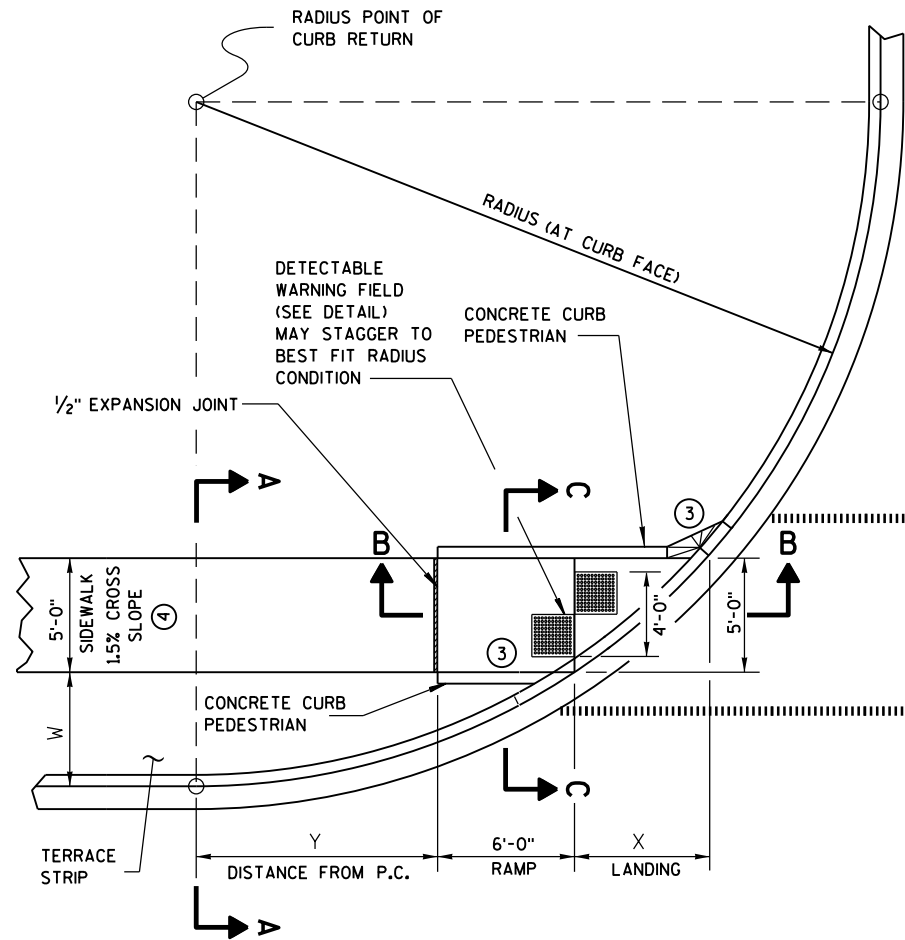
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

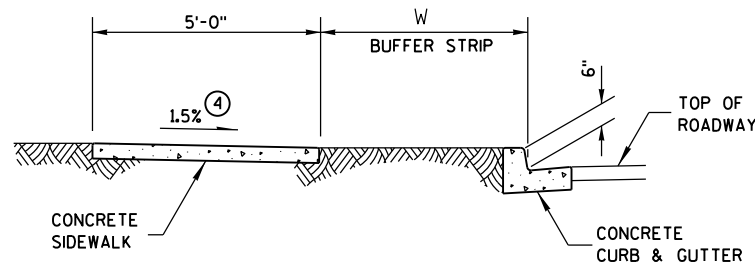
- | | |
|---|------------------------------------|
| | 1/2" EXPANSION JOINT-SIDEWALK |
|  | CONTRACTION JOINT FIELD LOCATED |
|  | PAVEMENT MARKING CROSSWALK (WHITE) |

CURB RAMPS TYPES 4A AND 4A1

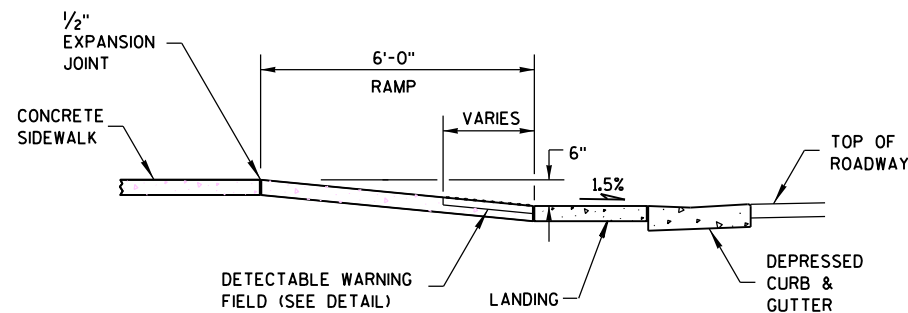
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A FOR TYPE 4B

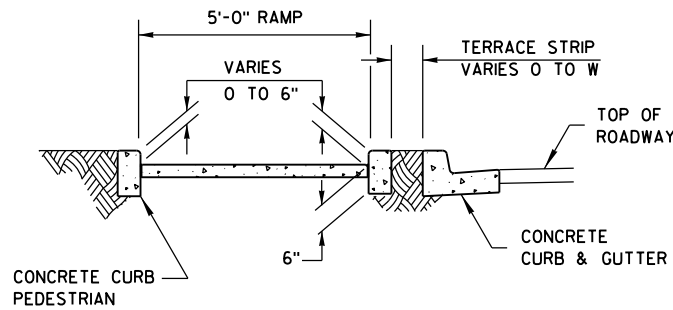


SECTION B-B FOR TYPE 4B

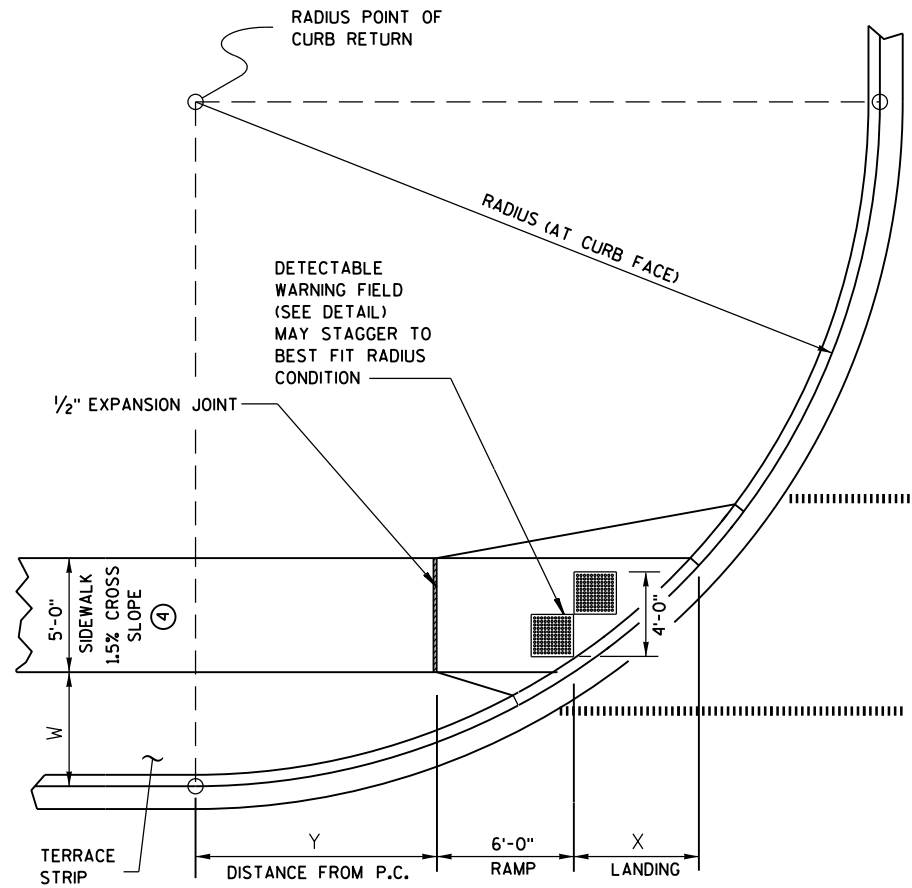
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - - - CONTRACTION JOINT FIELD LOCATED
 - ||||| PAVEMENT MARKING CROSSWALK (WHITE)

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



**CURB RAMP TYPE 4B1
PLAN VIEW**

GENERAL NOTES

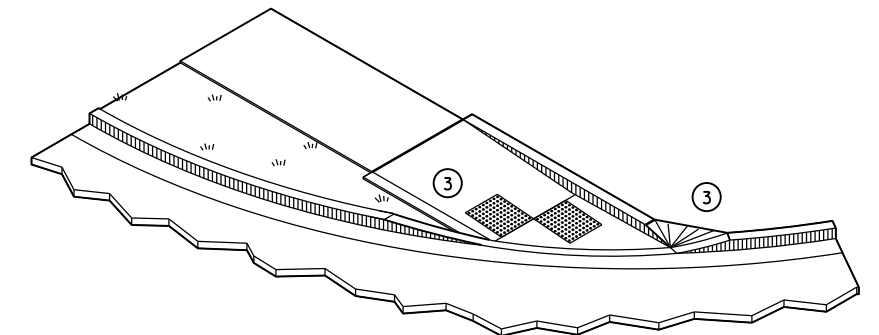
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

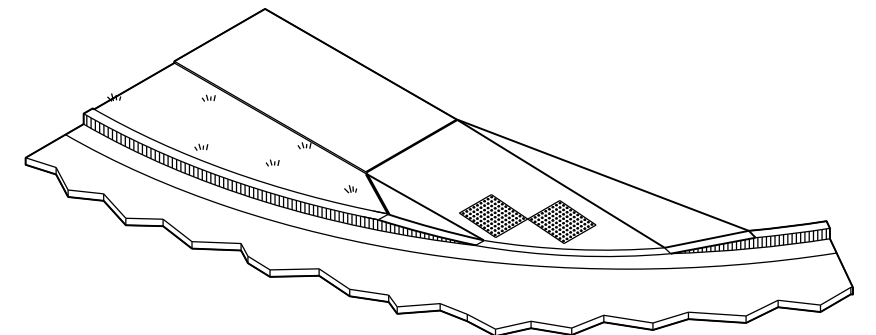
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

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



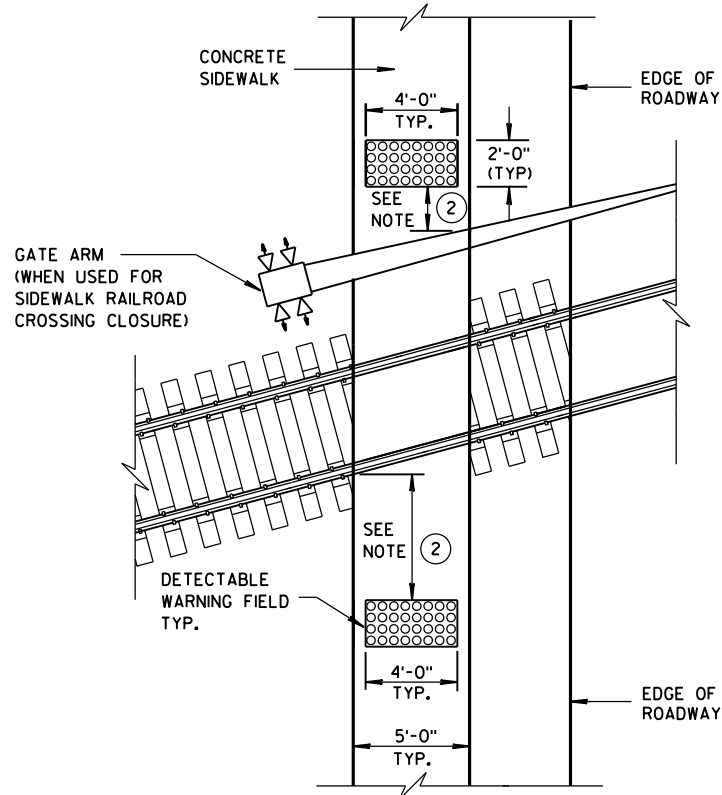
ISOMETRIC VIEW FOR TYPE 4B



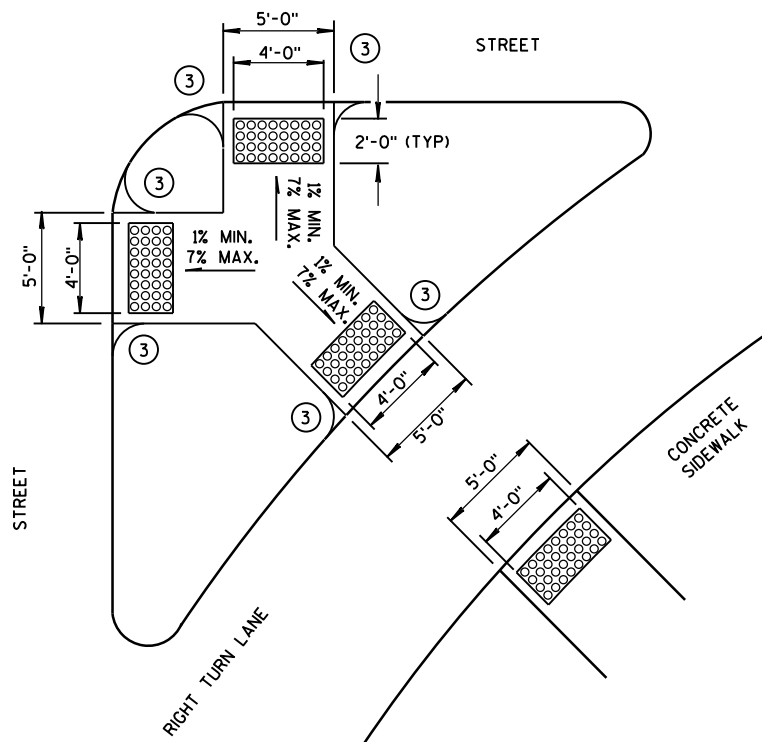
ISOMETRIC VIEW FOR TYPE 4B1

**CURB RAMPS
TYPE 4B AND 4B1**

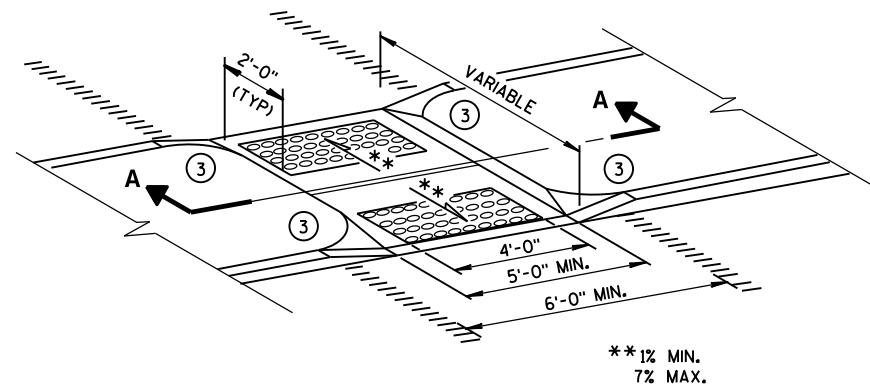
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



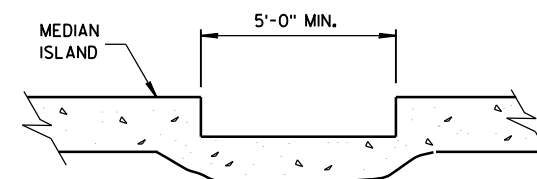
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



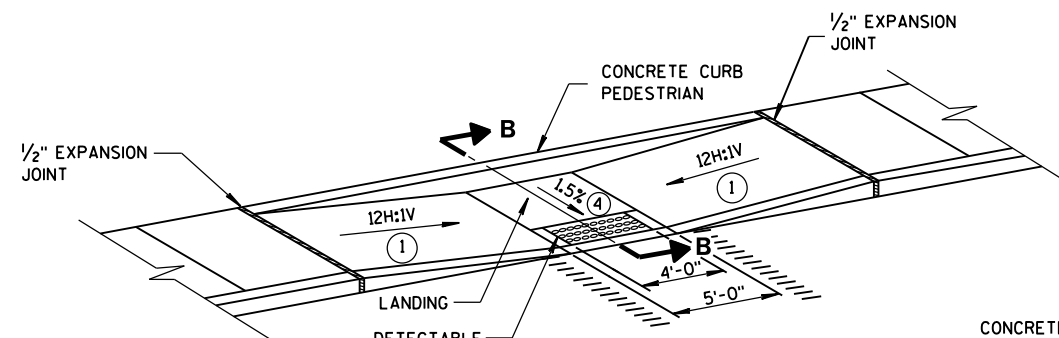
TYPE 6
DETECTABLE WARNING AT ISLANDS



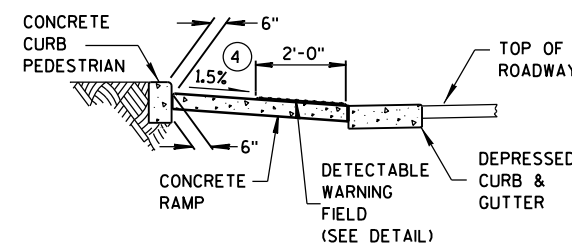
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



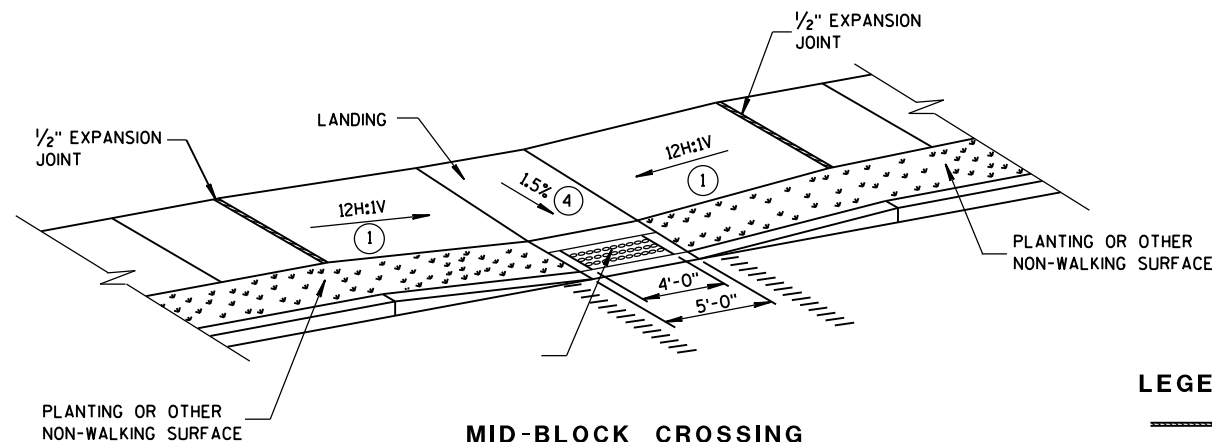
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

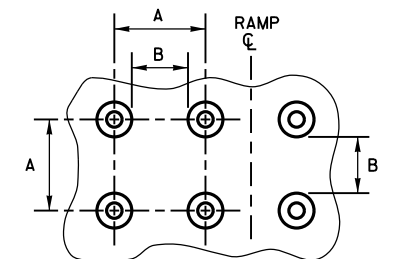
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

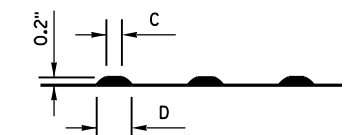
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

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



PLAN VIEW

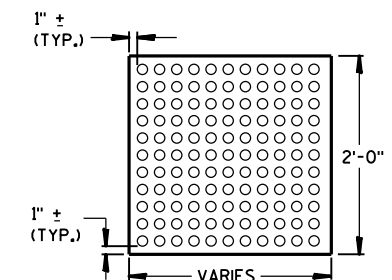


ELEVATION VIEW

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

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

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

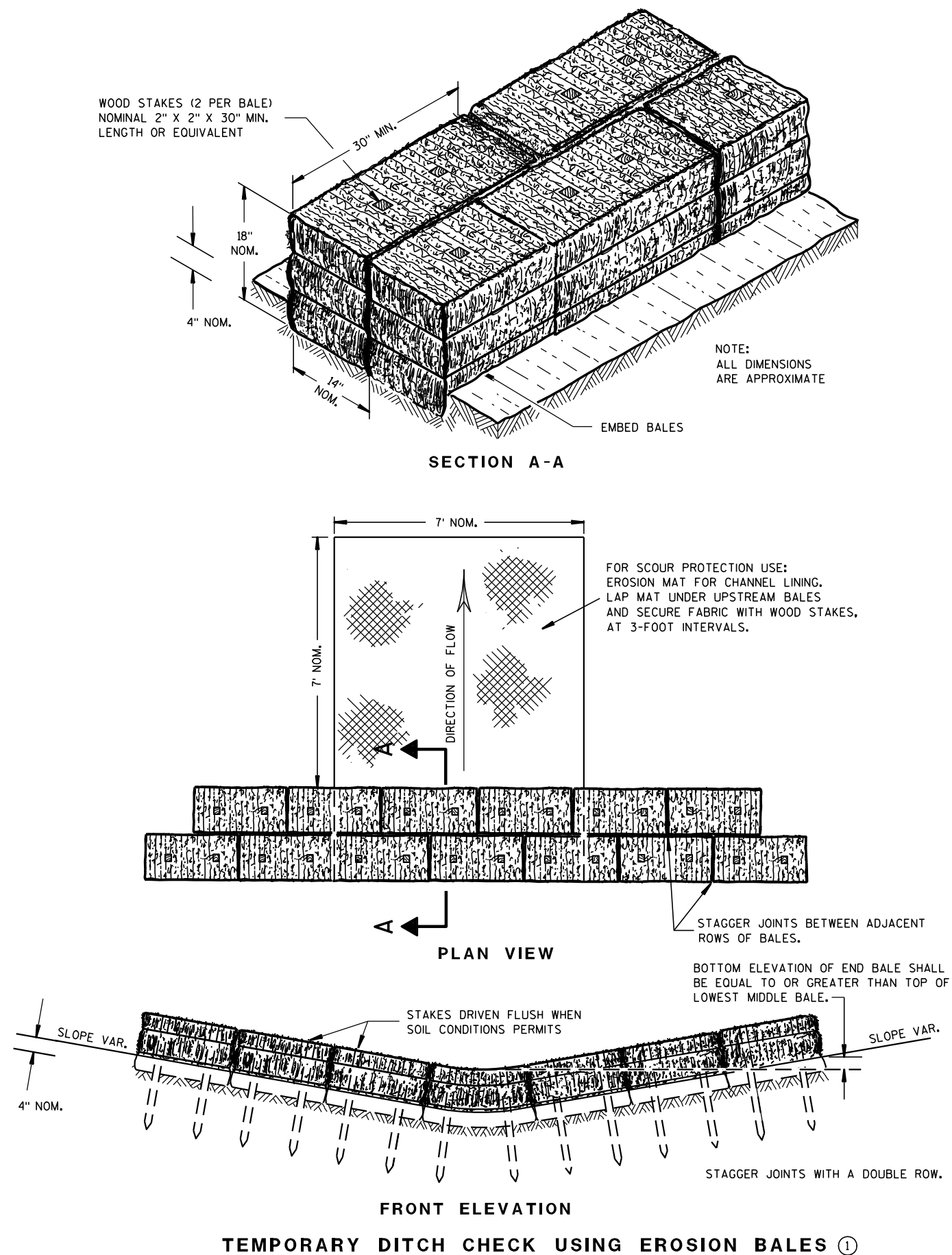
LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

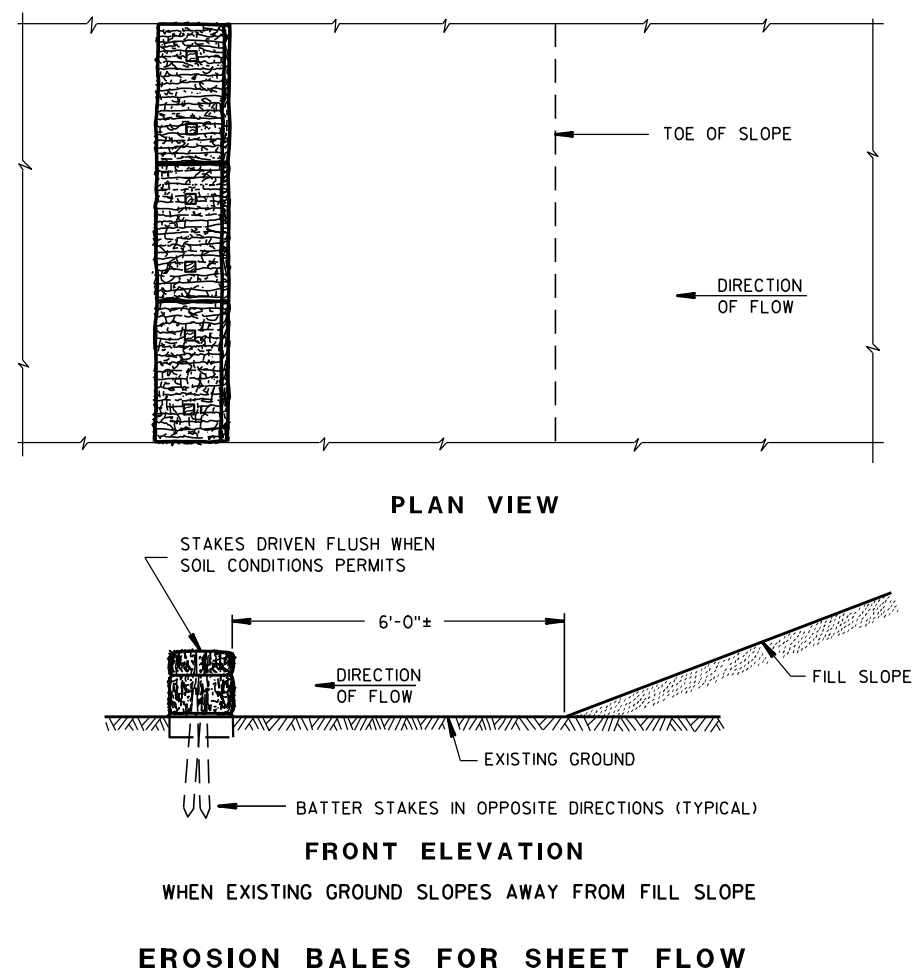
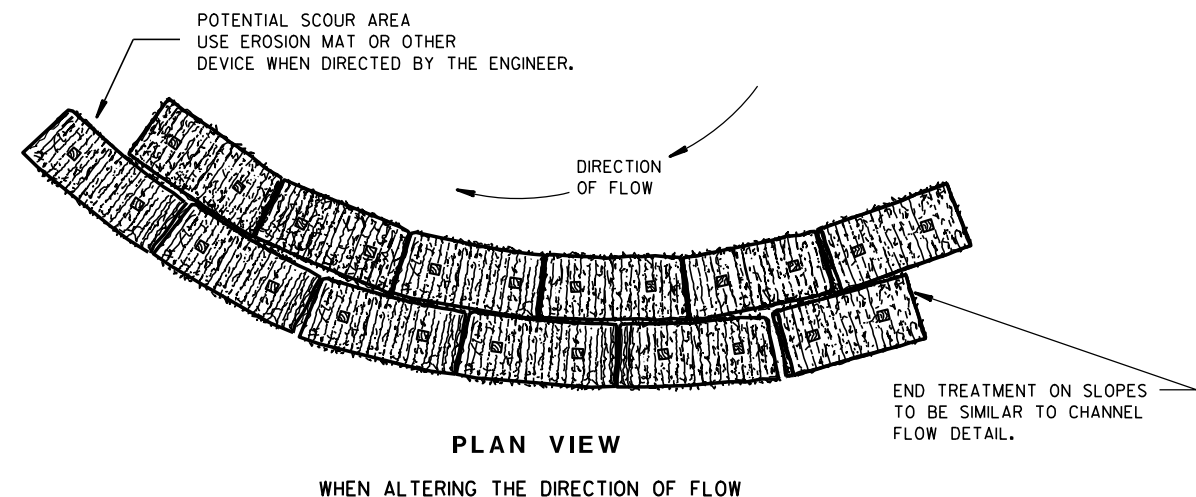
APPROVED
2-6-2013 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



GENERAL NOTES

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

- ① 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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

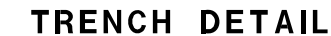
6/04/02
DATE

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

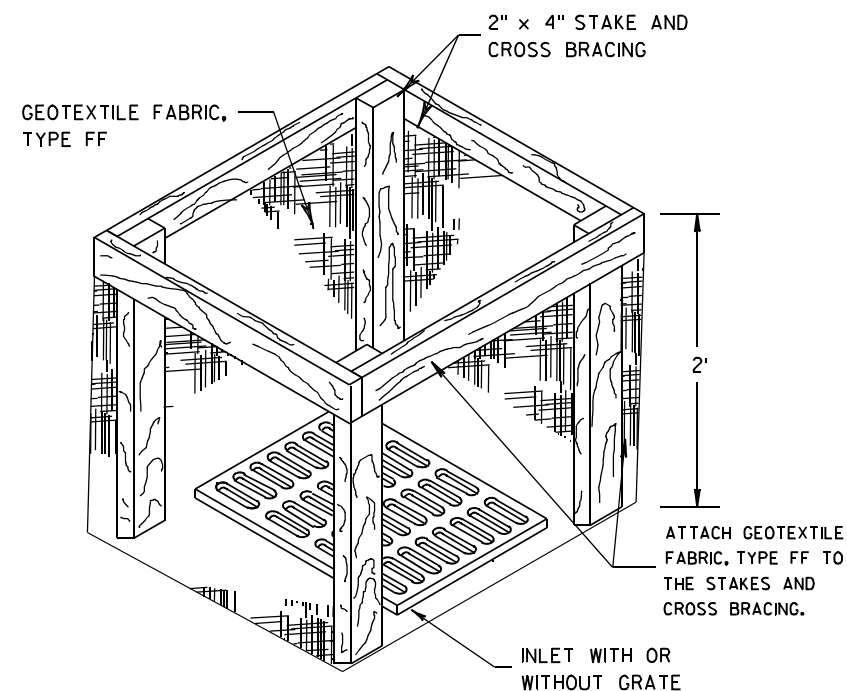
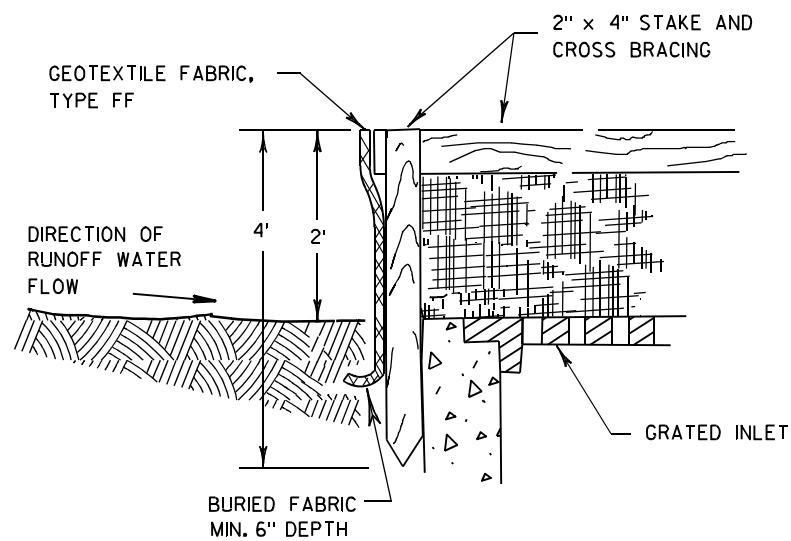
FHWA



- 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 1½" X 1½" 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

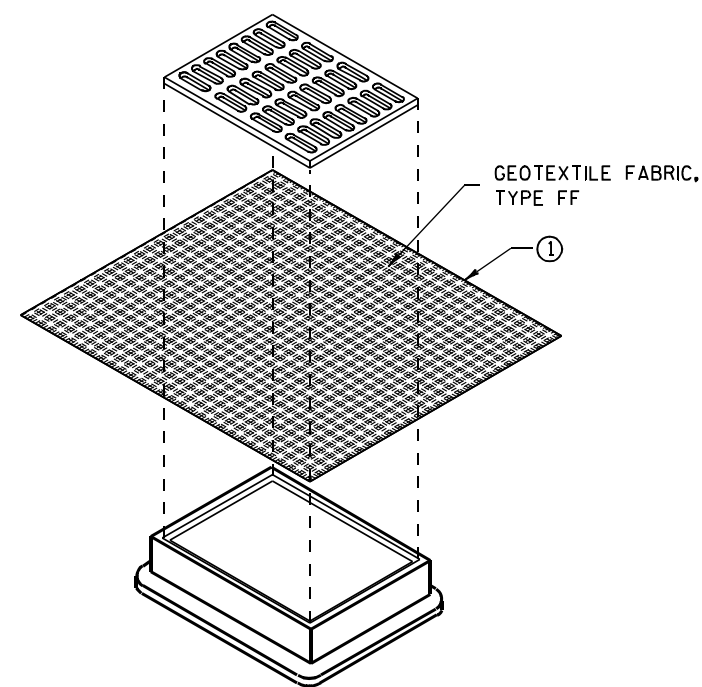
GENERAL NOTES

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

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

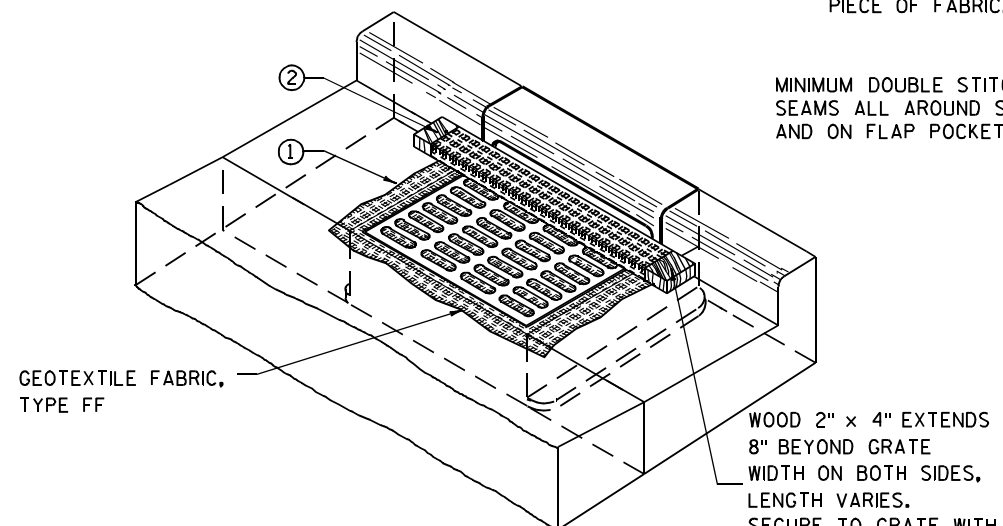
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

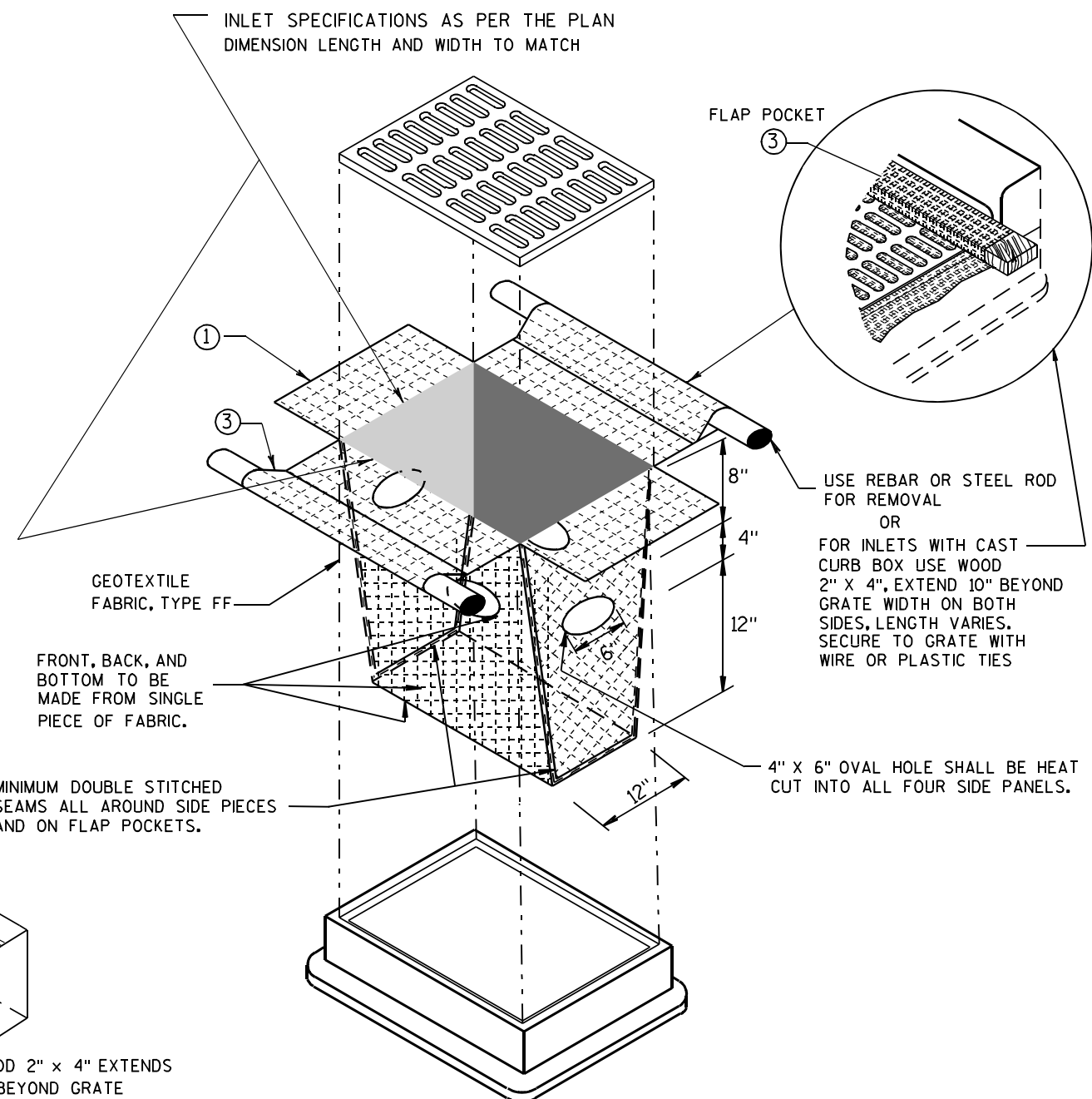
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



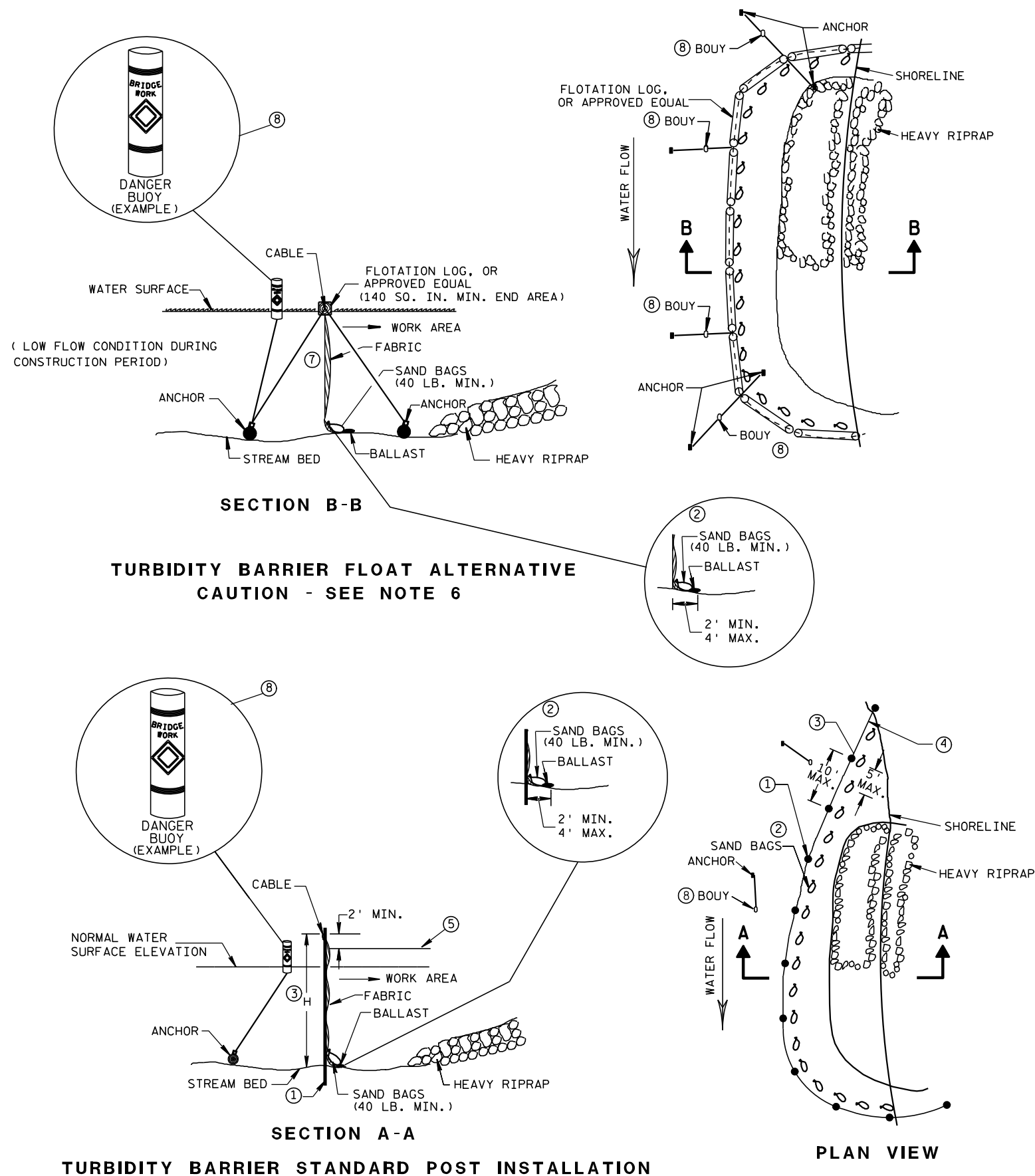
INLET PROTECTION, TYPE D

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

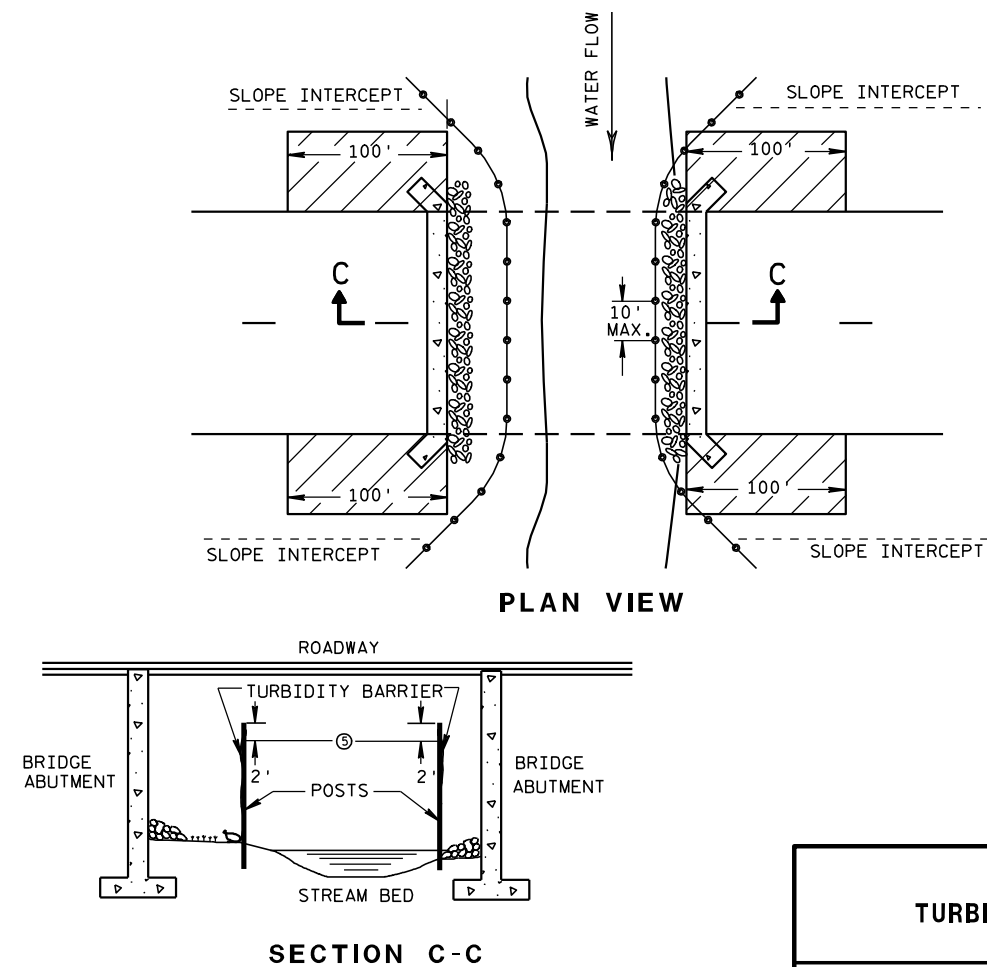


GENERAL NOTES

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

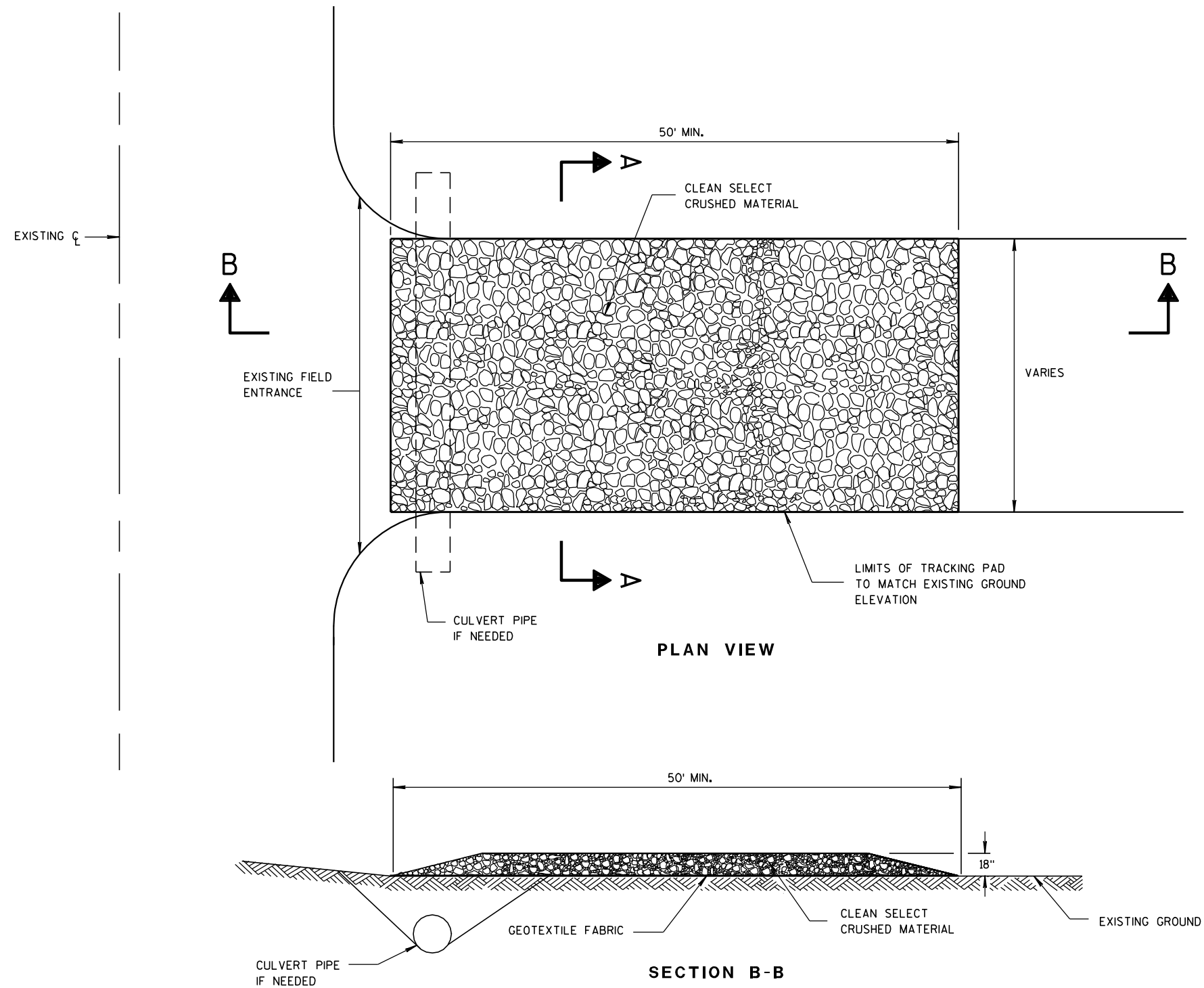
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FWHA

/S/ Beth Connestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



TRACKING PAD

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.

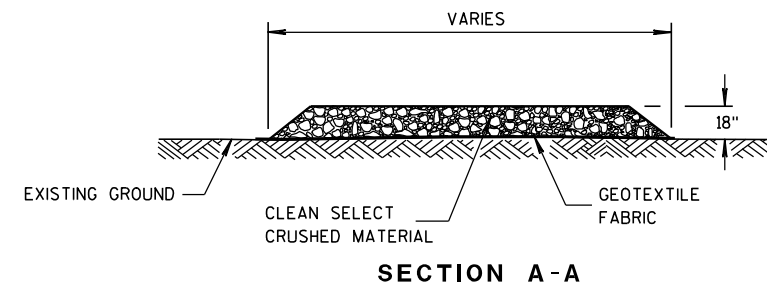
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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.

**TRACKING PAD**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011

DATE

FHWA

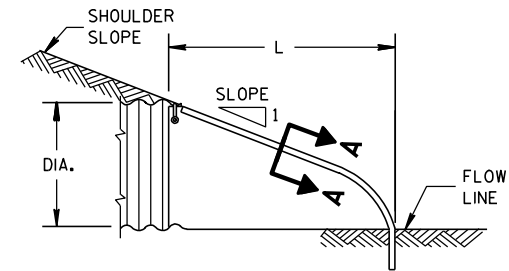
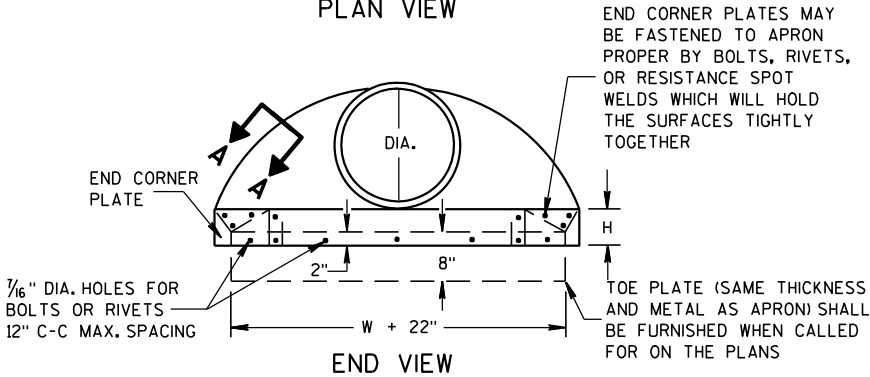
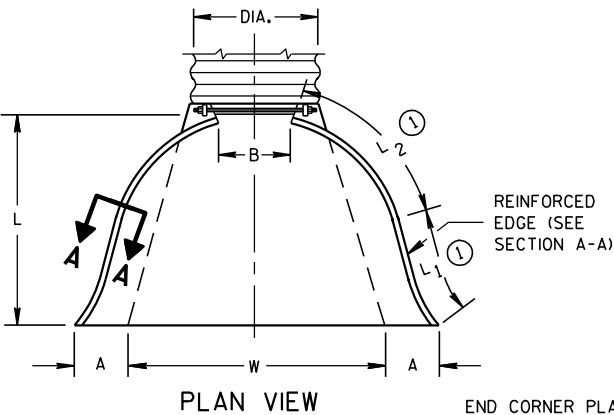
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

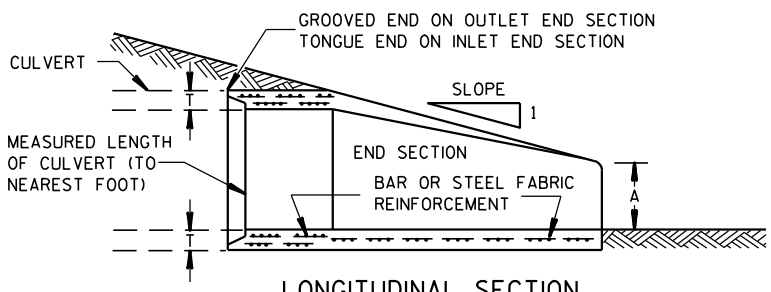
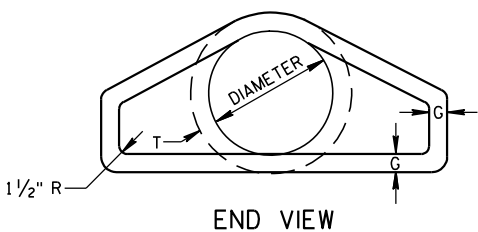
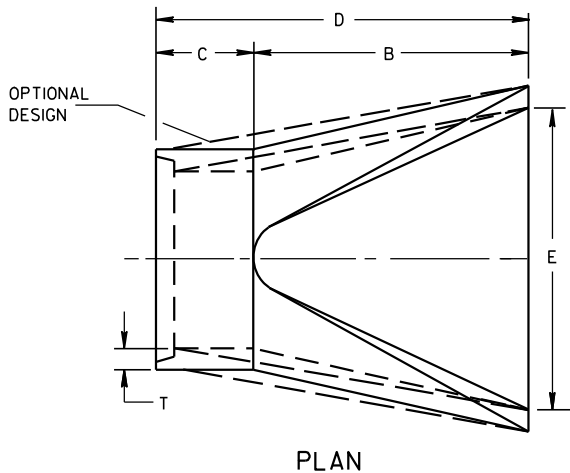
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



METAL ENDWALLS

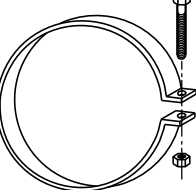
REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 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

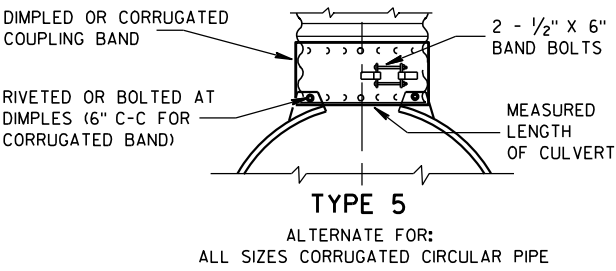
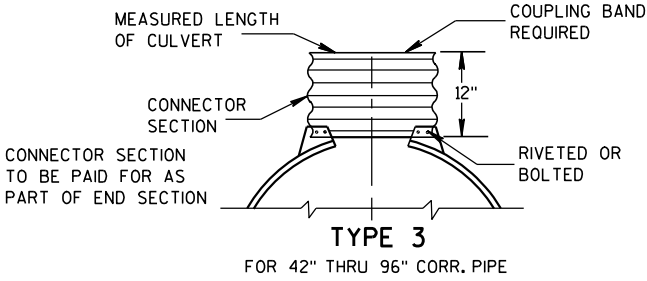
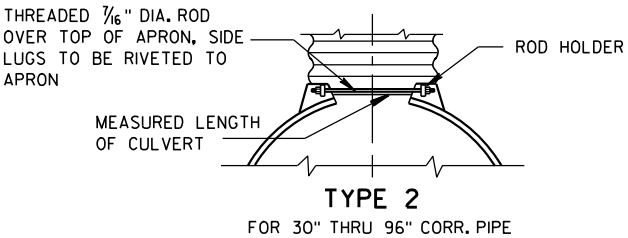
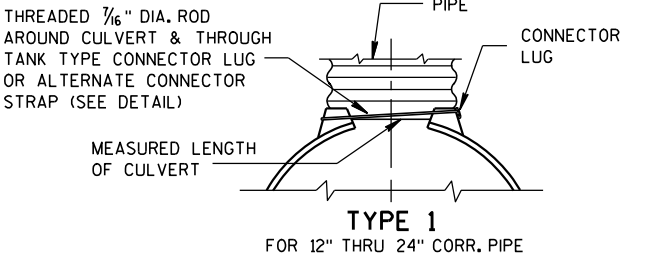


CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



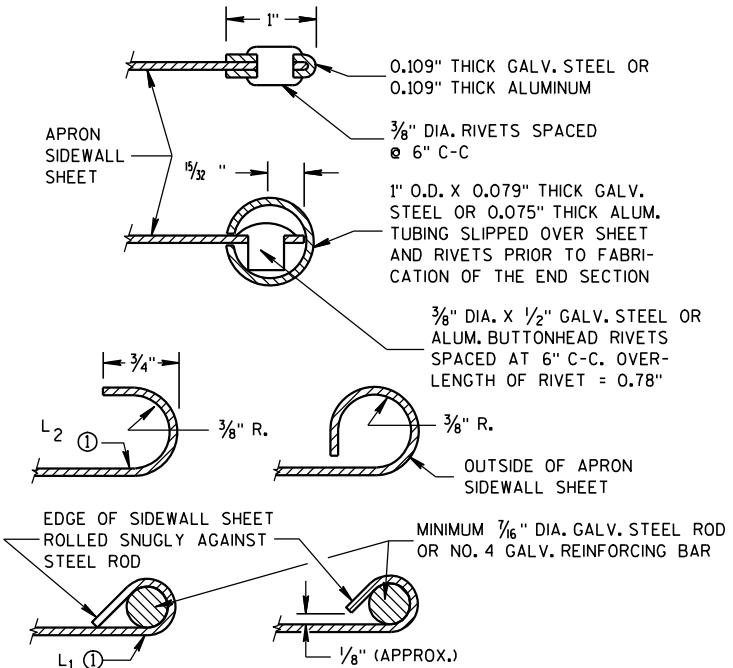
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

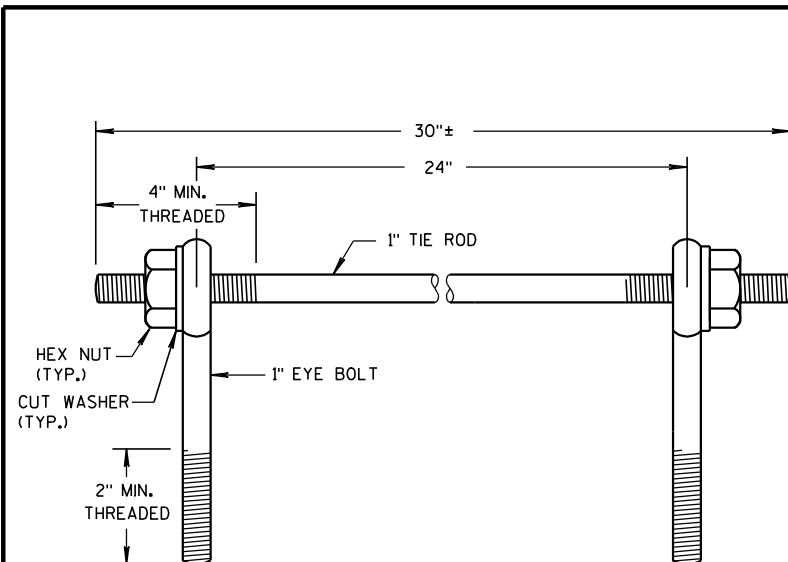
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

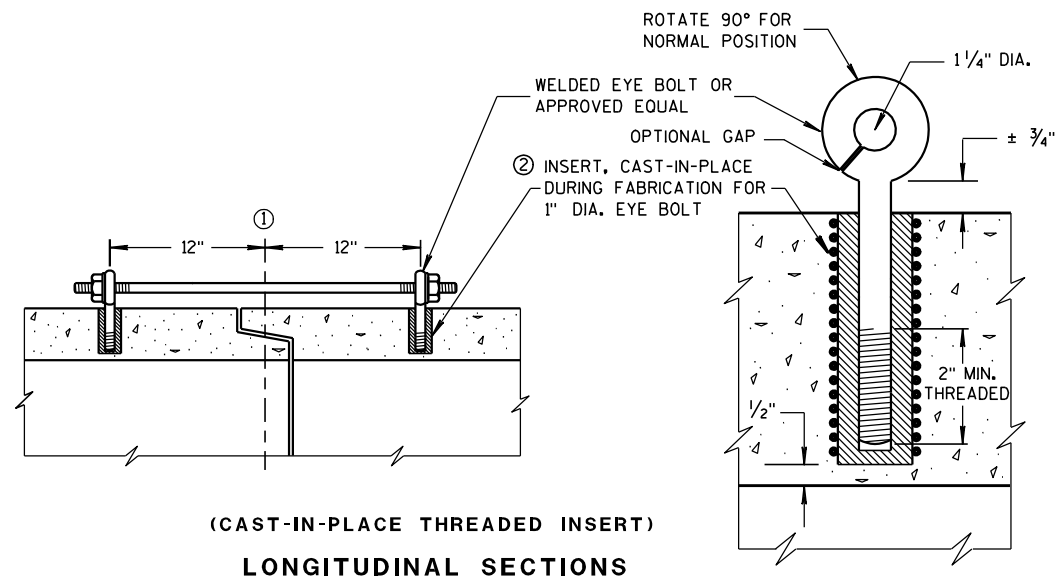
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



EYE BOLTS AND TIE ROD

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

(CAST-IN-PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

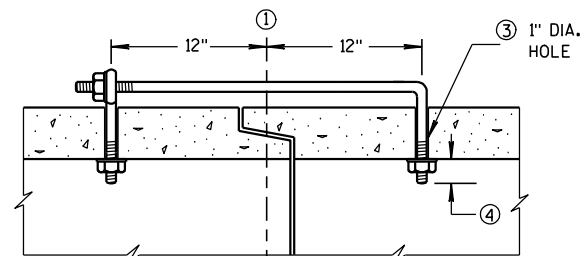
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

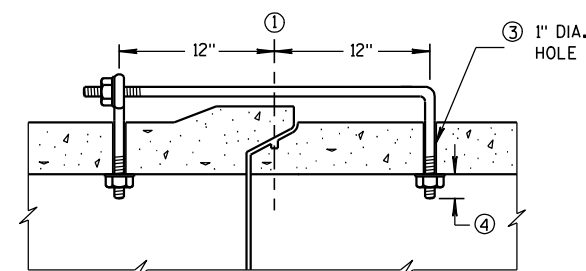
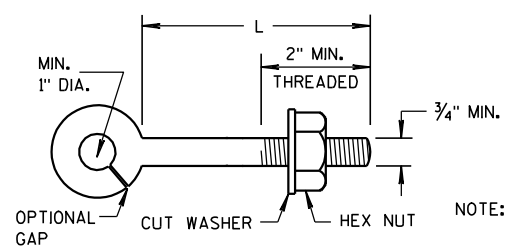
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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

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



(TONGUE & GROOVE PIPE)

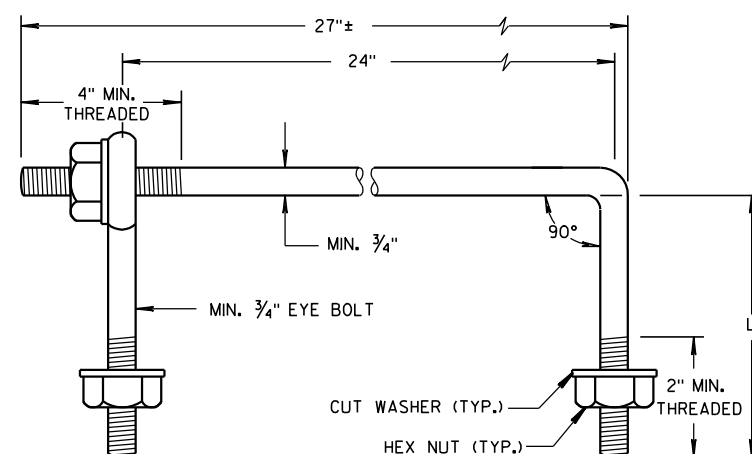
(MODIFIED BELL PIPE)
LONGITUDINAL SECTION

EYE BOLT

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

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

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



EYE BOLT AND TIE ROD

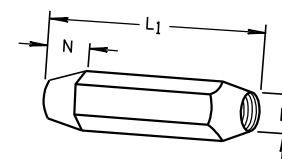
EYE BOLT DIMENSION TABLE

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"	

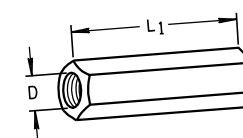
ADJUSTABLE TIE ROD TABLE

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 1/16

DIMENSIONS SHOWN ARE IN INCHES



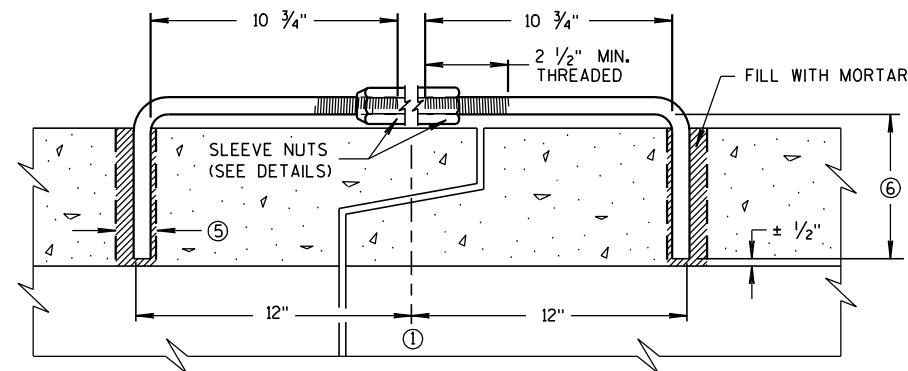
TAPERED



PLAIN

RIGHT AND LEFT THREADS

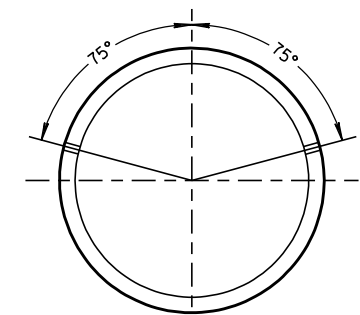
SLEEVE NUTS



LONGITUDINAL SECTION

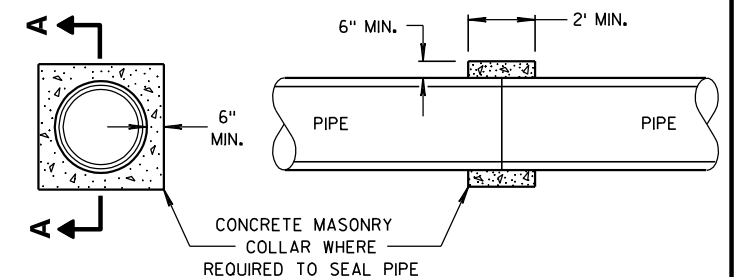
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE
PIPE AND CONCRETE
COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012

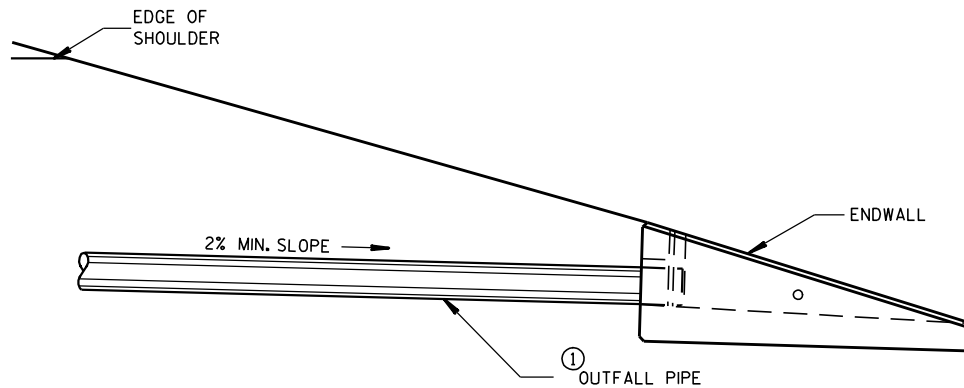
DATE

FHWA

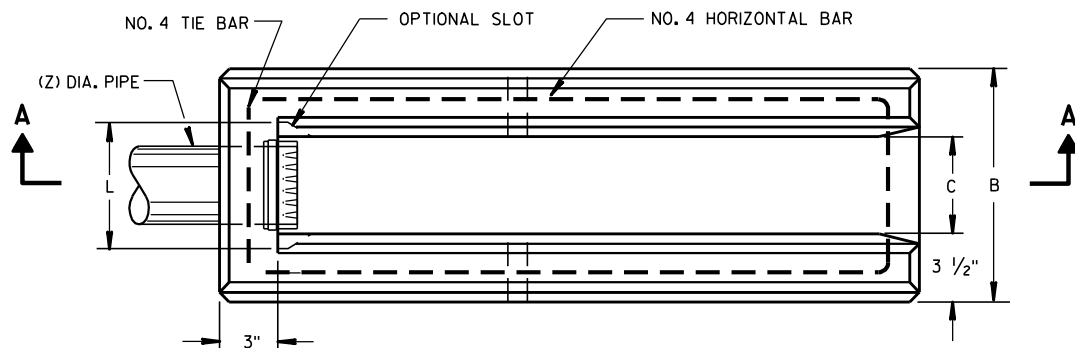
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

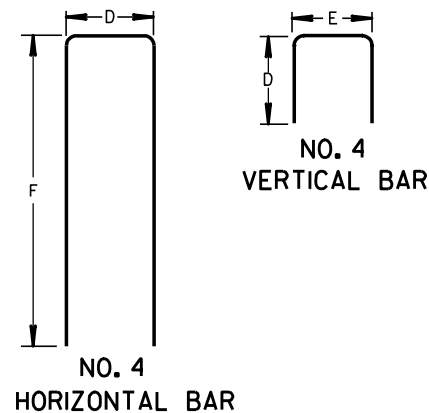
** APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



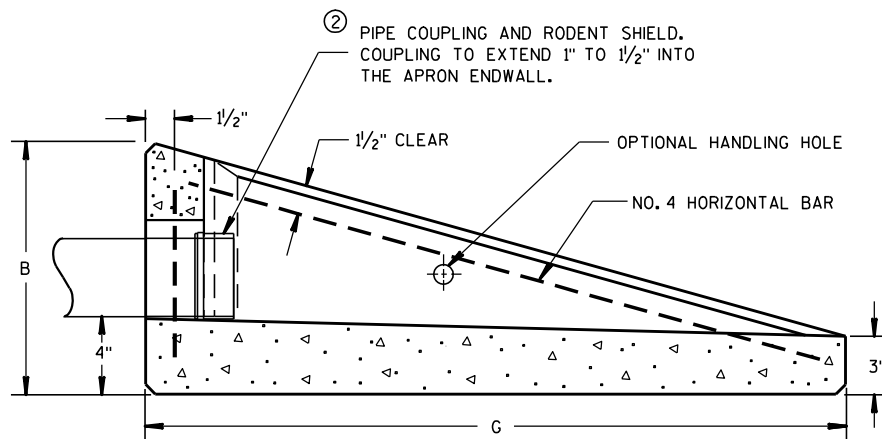
INSTALLATION DETAIL



PLAN VIEW

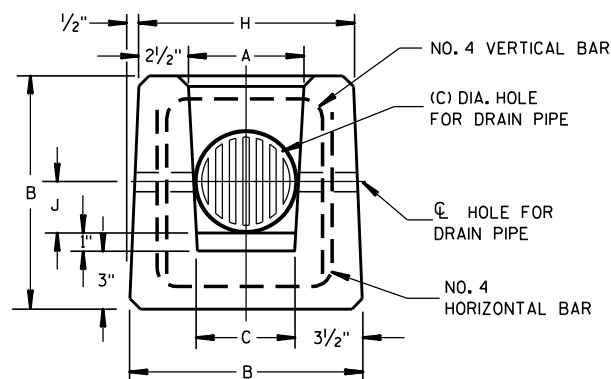


BAR STEEL REINFORCEMENT DETAILS



SECTION A-A

CONCRETE APRON ENDWALL FOR UNDERDRAIN



END VIEW

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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

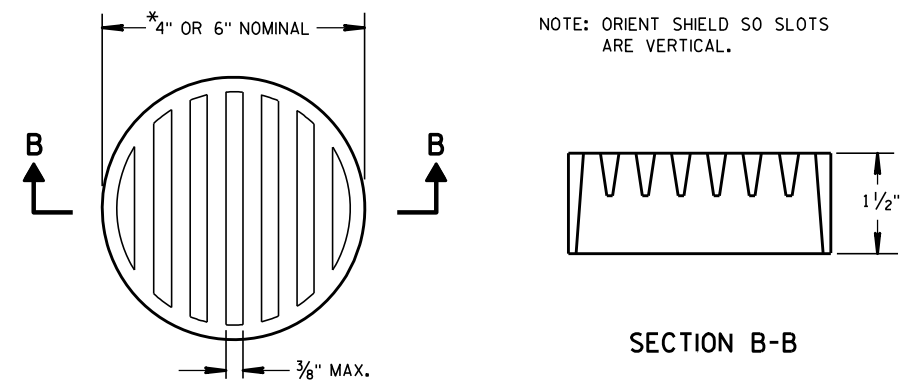
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

- ① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

- ② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

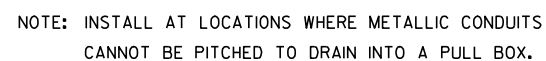
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

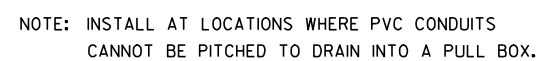
3/10/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



DRAIN SUMP FOR METALLIC CONDUIT



DRAIN SUMP FOR PVC CONDUIT

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.

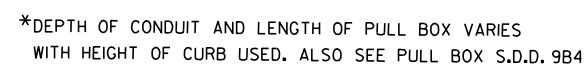
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>10/23/03</u> DATE	<u>/S/ Balu Ananthanarayanan</u> STATE ELECTRICAL ENGINEER FOR HWYS
FHWA	

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.

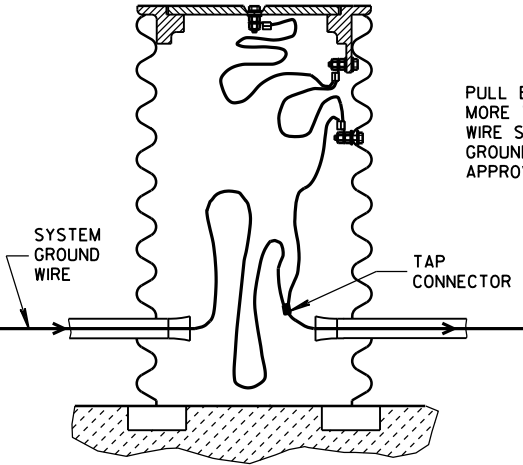
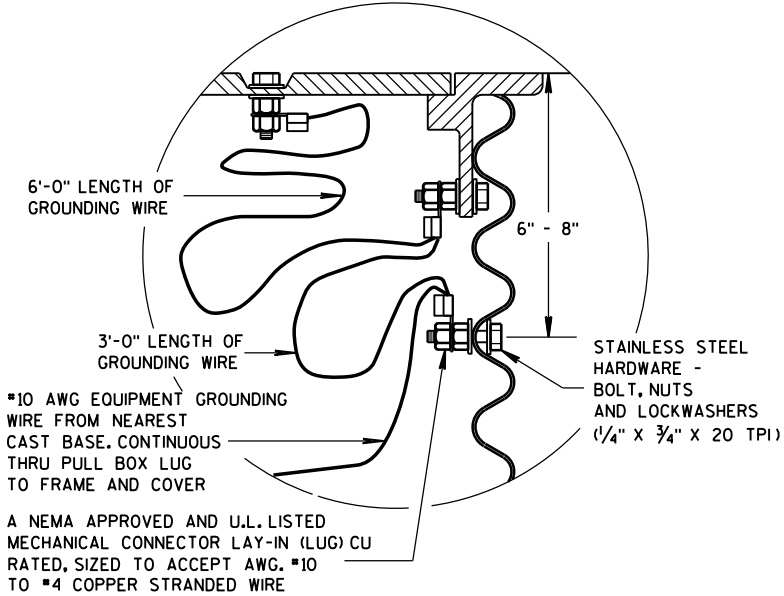
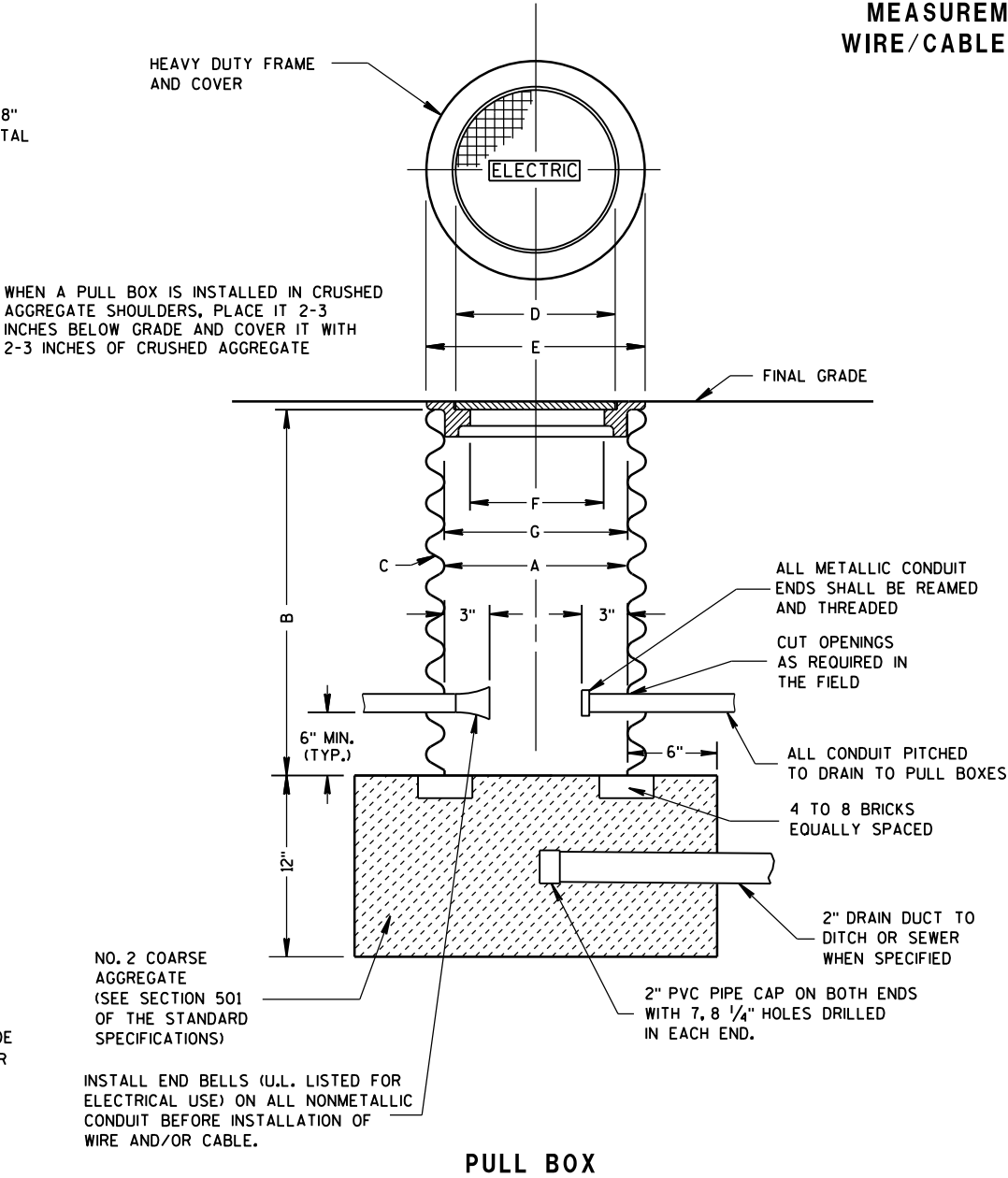
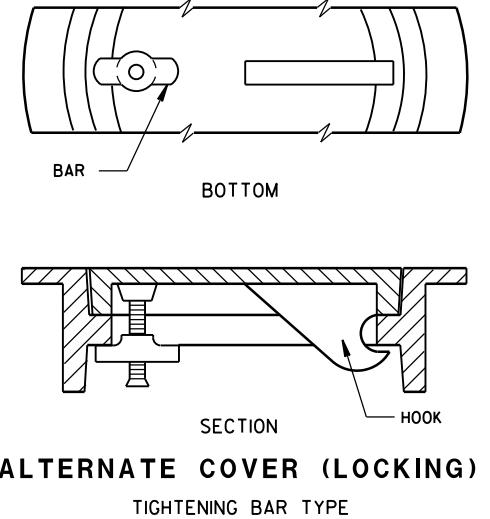
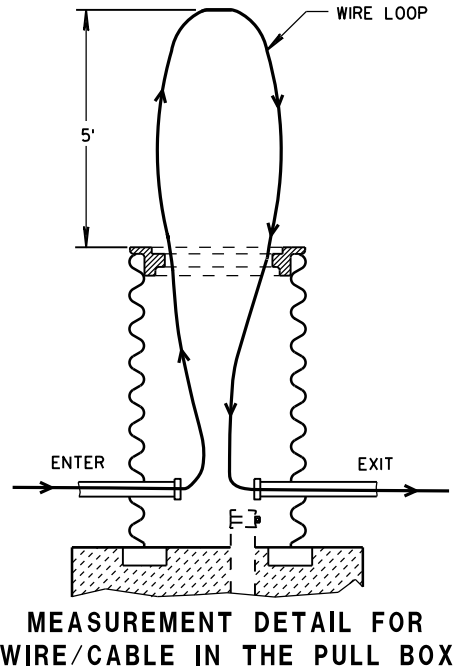
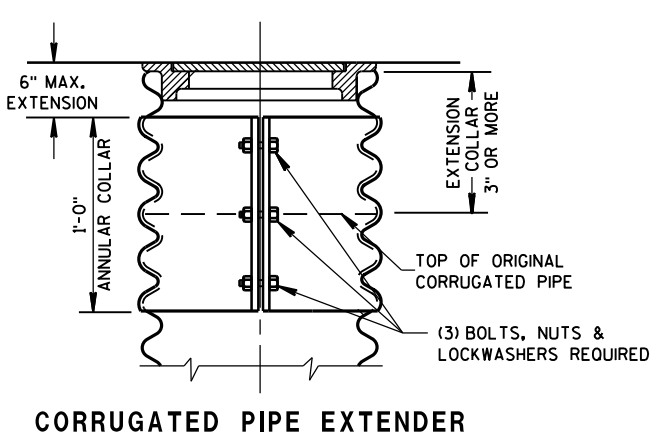
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

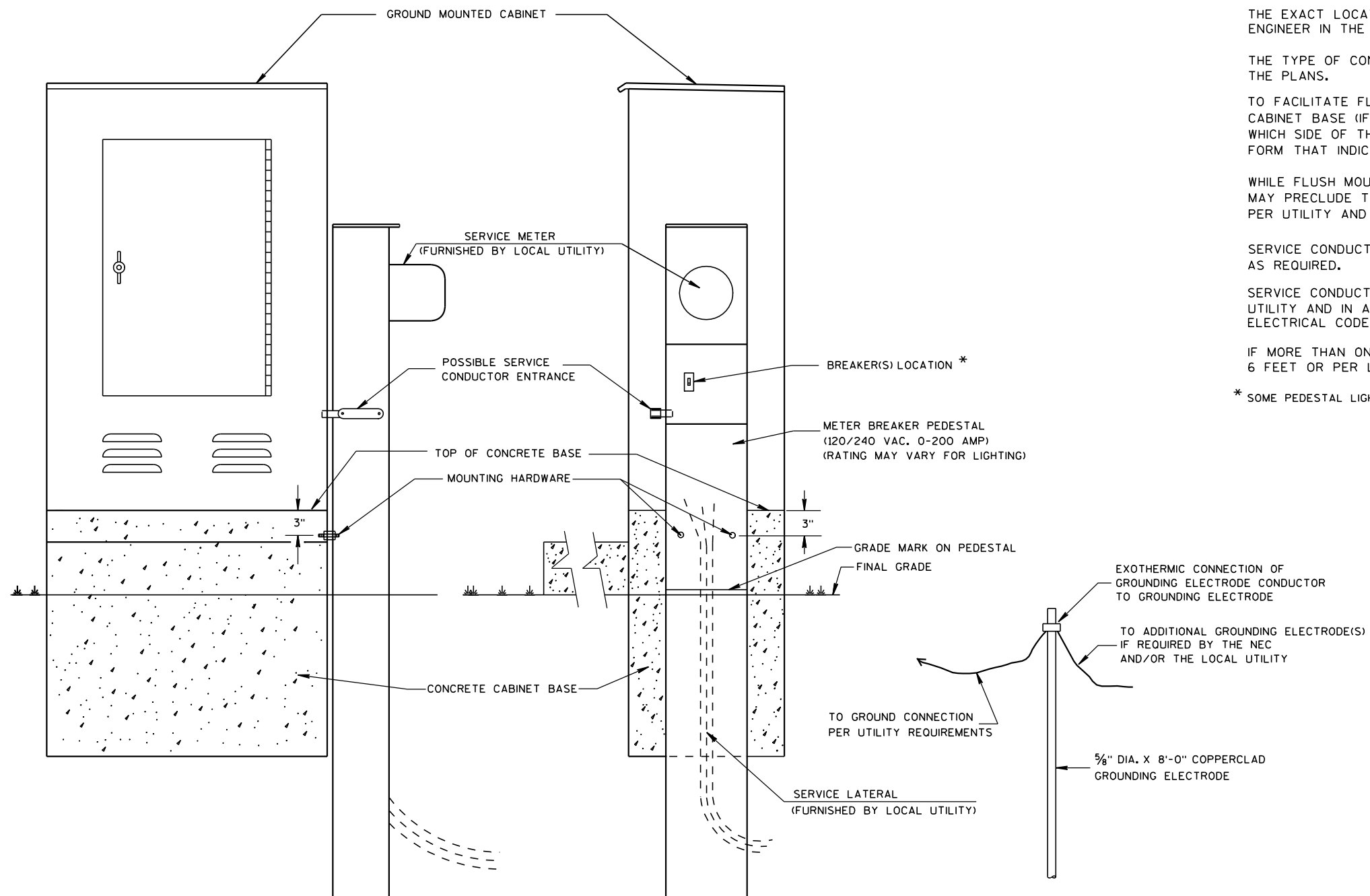
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

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.



PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-7-2013 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH, THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

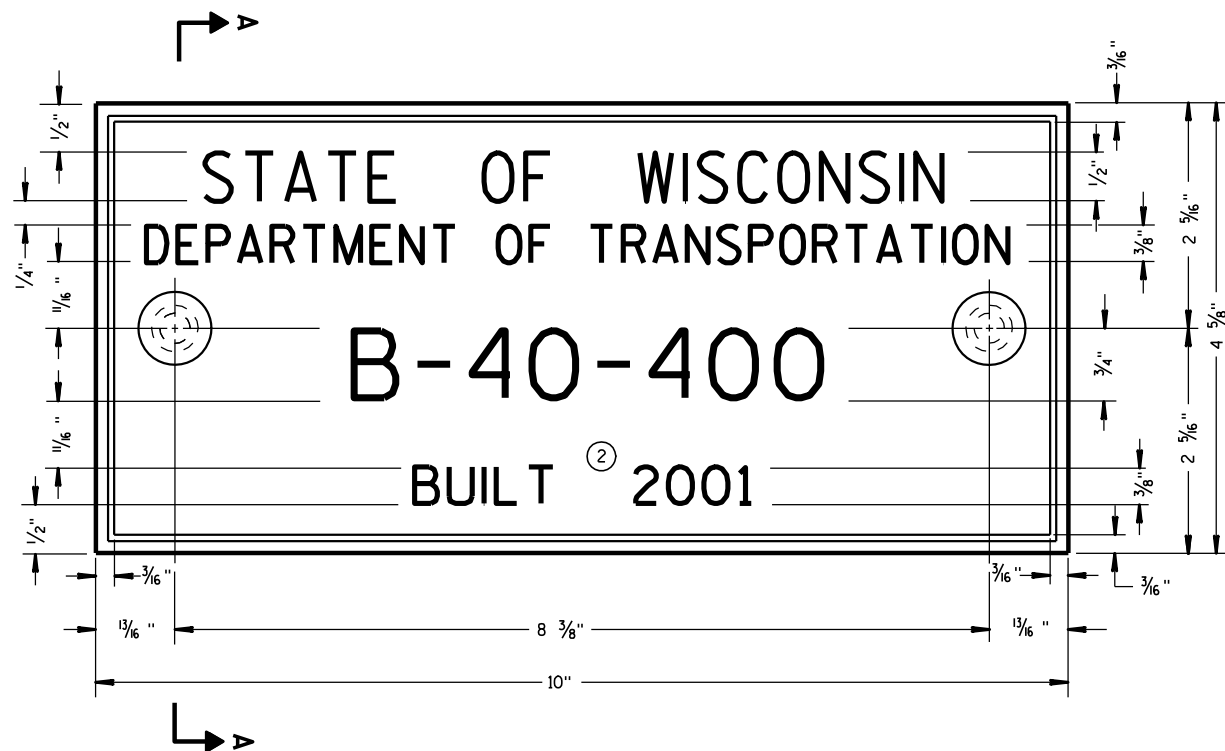
10/27/09

DATE

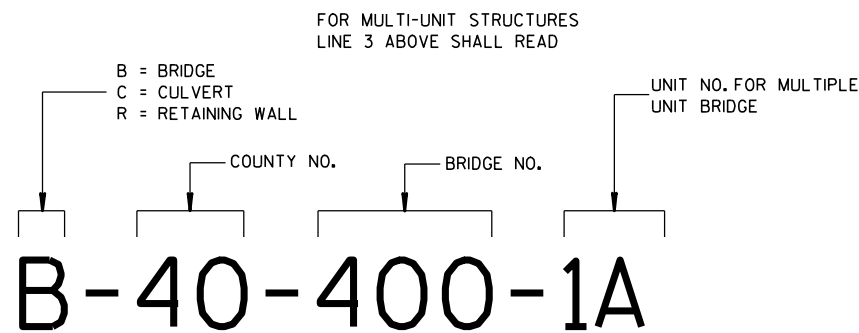
FHWA

/S/ Joanna L. Bush

STATE ELECTRICAL ENGINEER FOR HWYS



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



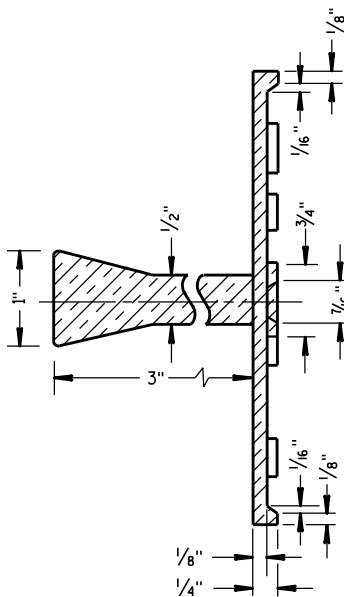
NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

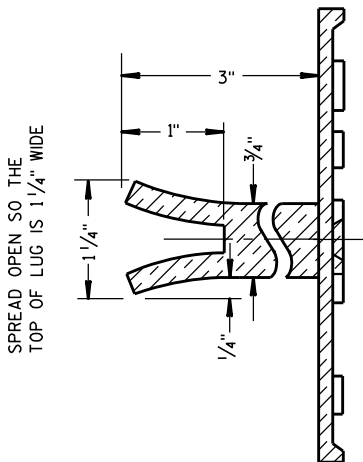
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

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

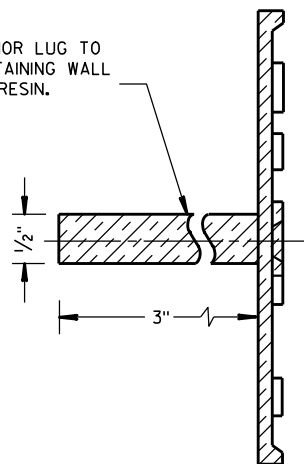


SECTION A-A



ALTERNATE LUG

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

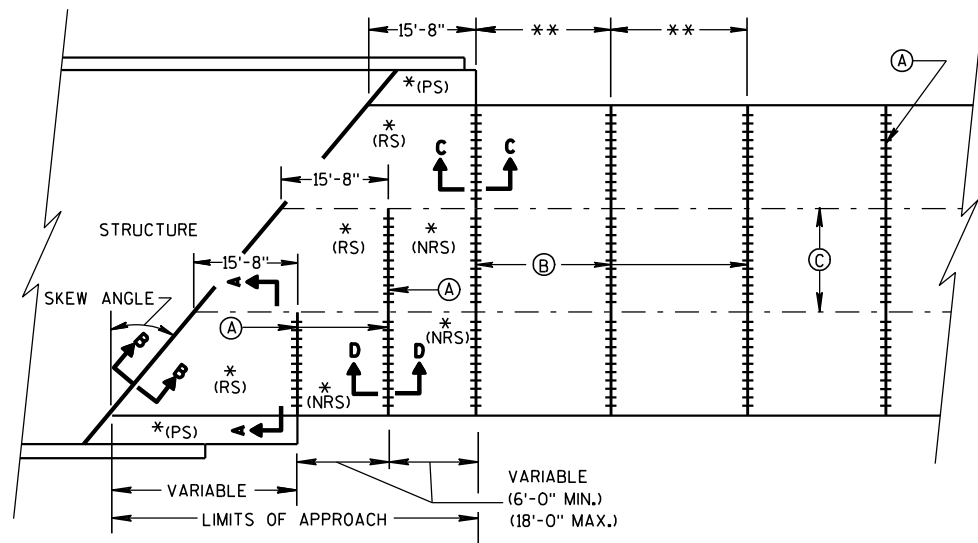


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

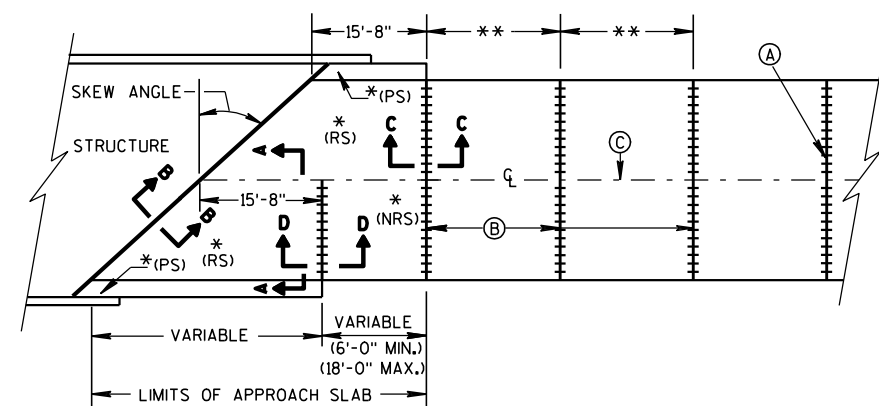
NAME PLATE
(STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

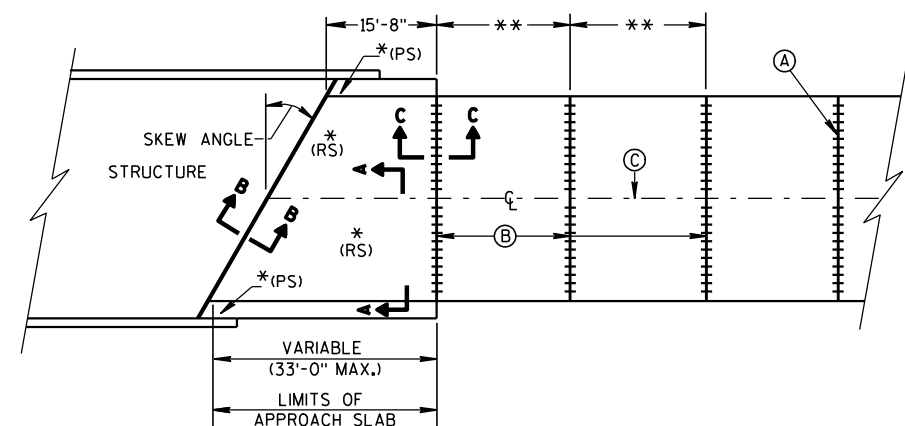
APPROVED
3/26/10
DATE
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA



**SKewed APPROACH
(PAVEMENT MORE THAN 2 LANES)**

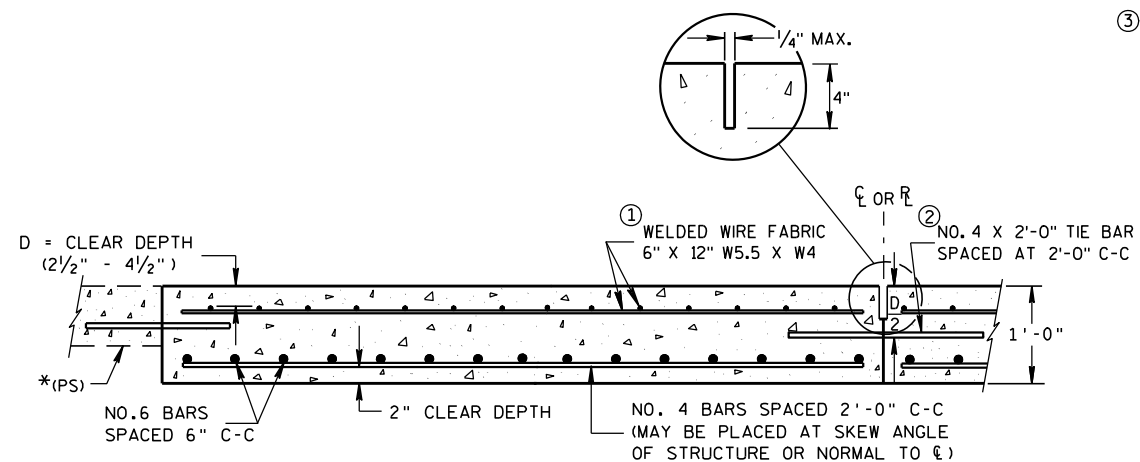


**SKEWS > 30°
(PAVEMENT WIDTH ≤ 30')**

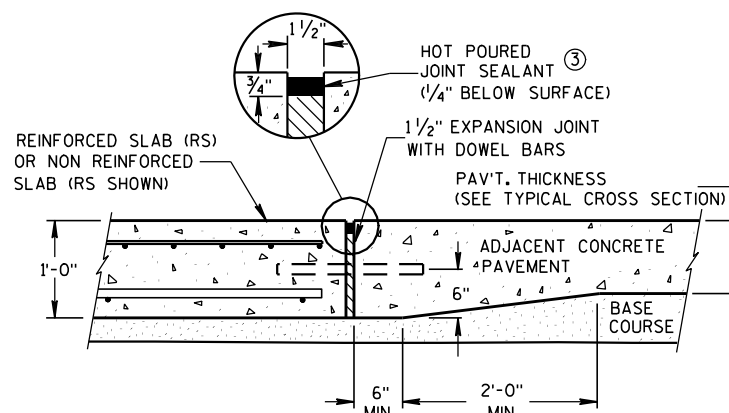


**SKEWS ≤ 30°
(PAVEMENT WIDTH ≤ 30')
APPROACH SLAB AND ADJACENT PAVEMENT**

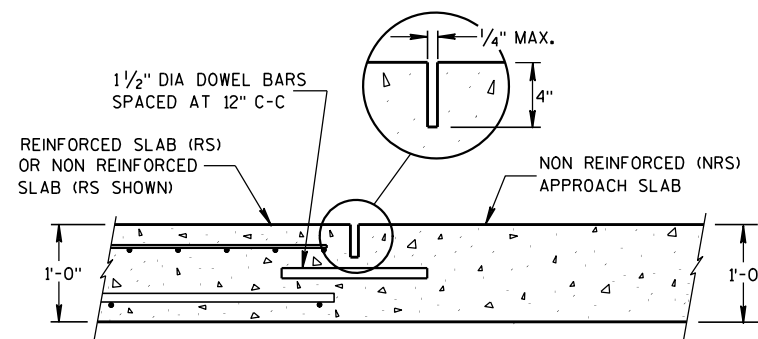
- * (RS) = REINFORCED CONCRETE SLAB
 * (PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
 (SEE DETAILS ELSEWHERE IN THE PLAN)
 * (NRS) = NON-REINFORCED CONCRETE SLAB
 ** STANDARD TRANSVERSE JOINT SPACING
 (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
 (A) STANDARD CONTRACTION JOINT NORMAL TO R_L OR R_C
 (B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO R_L OR R_C
 (C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



**SECTION A-A
REINFORCEMENT POSITIONING DETAIL**



**SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**



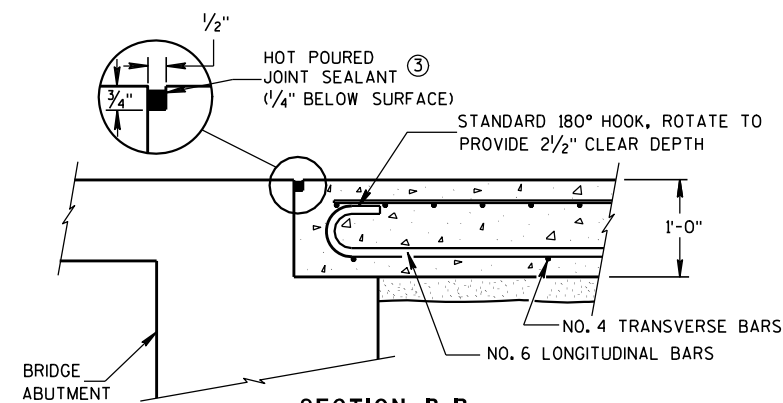
**SECTION D-D
CONTRACTION JOINT**

GENERAL NOTES

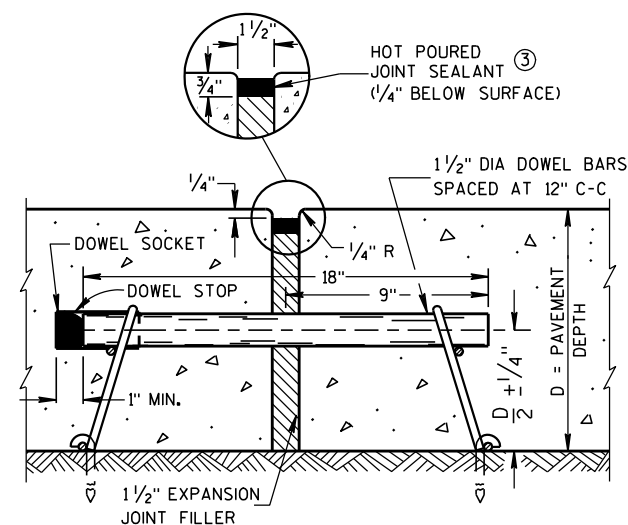
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

- THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



**SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT**



EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

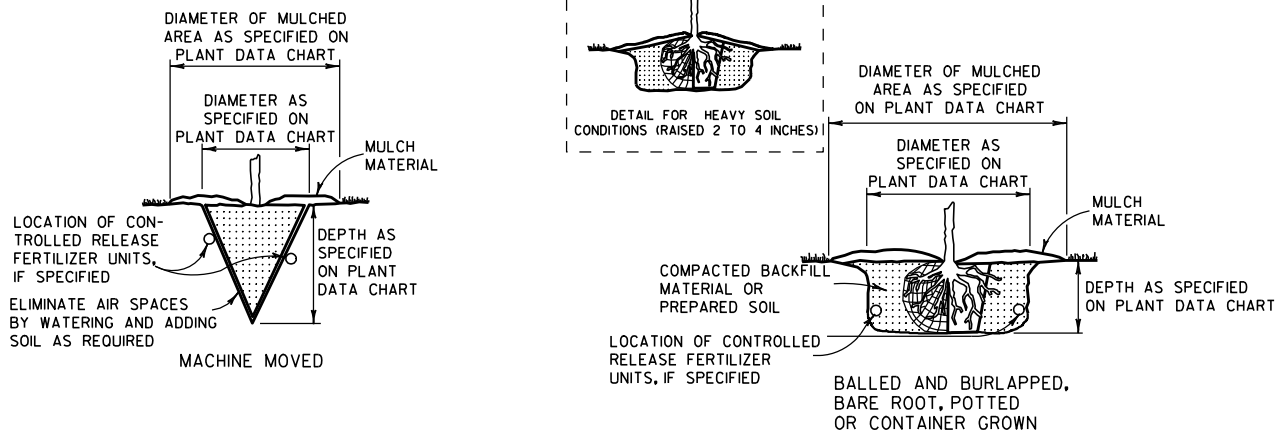
APPROVED

12/11/2009

DATE

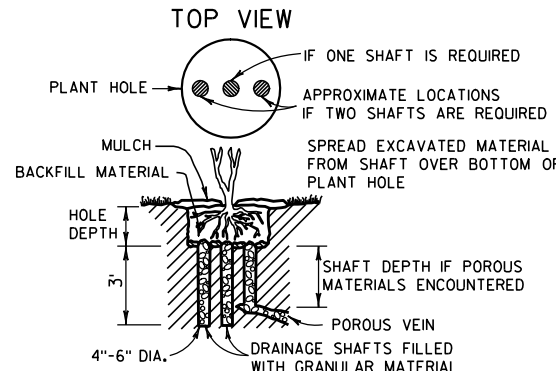
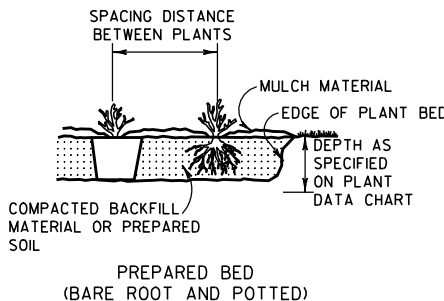
FHWA

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

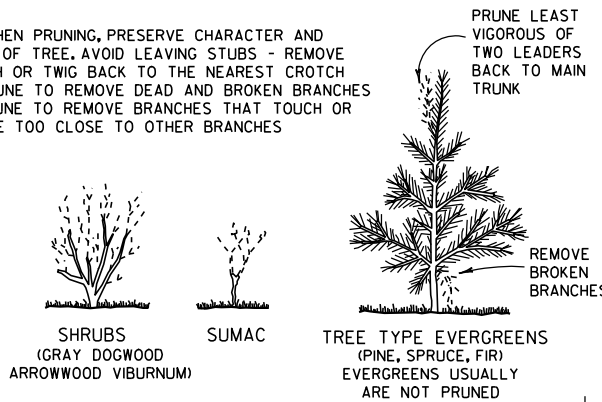
NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



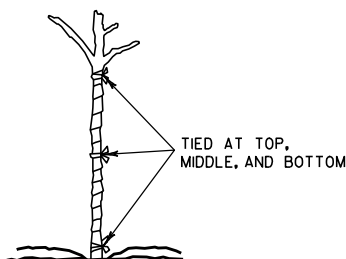
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

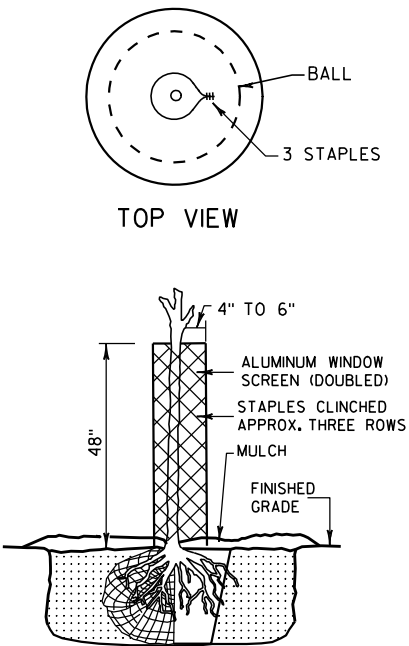
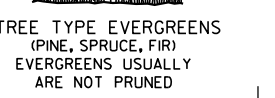
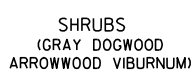
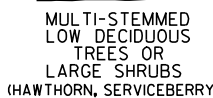
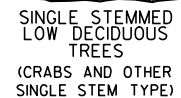
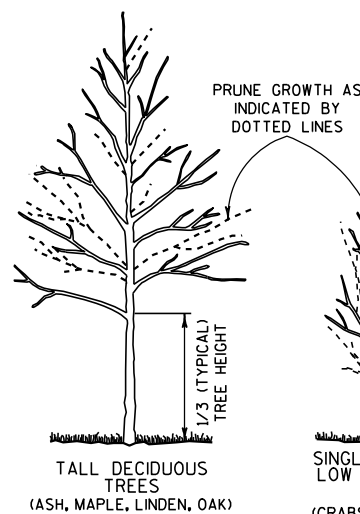
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



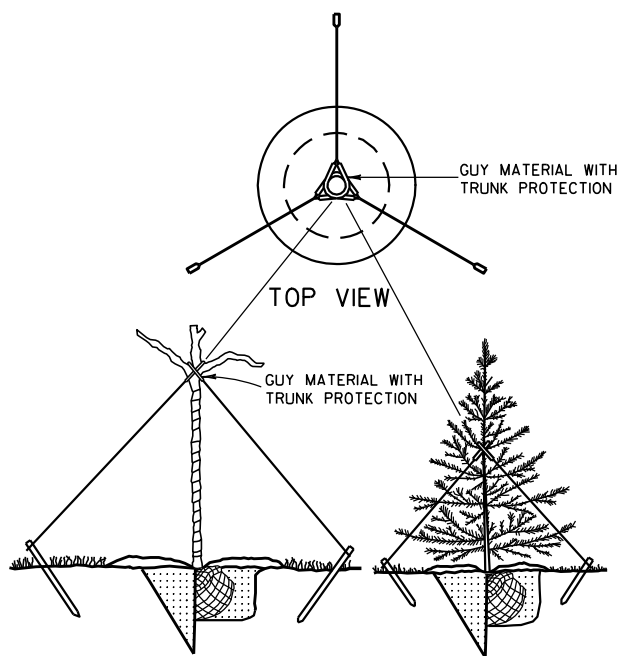
PRUNING



WRAPPING

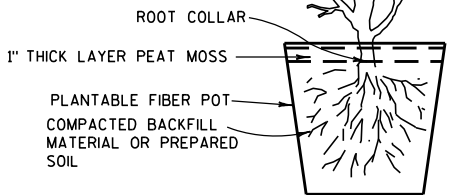


RODENT PROTECTION

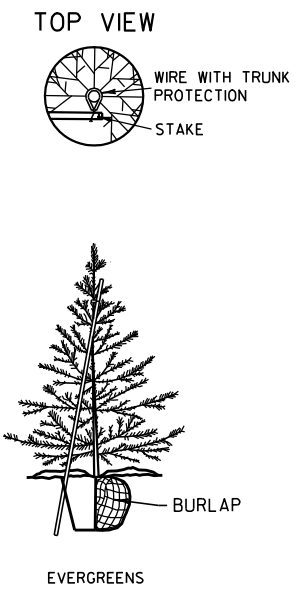
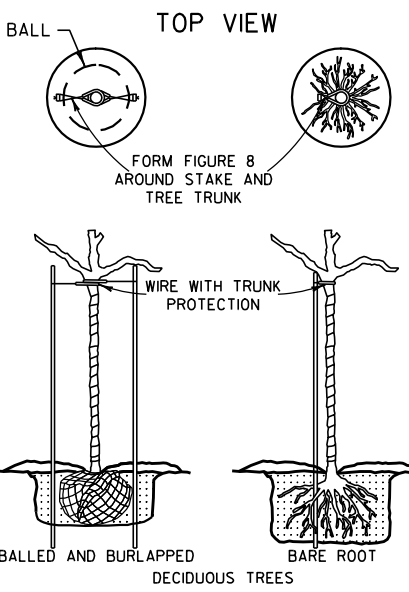
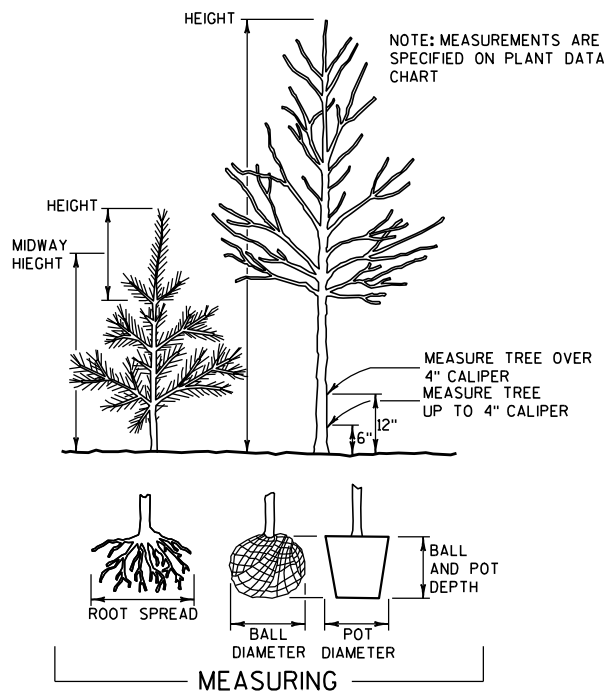


GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING



BRACING

NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

NOTES

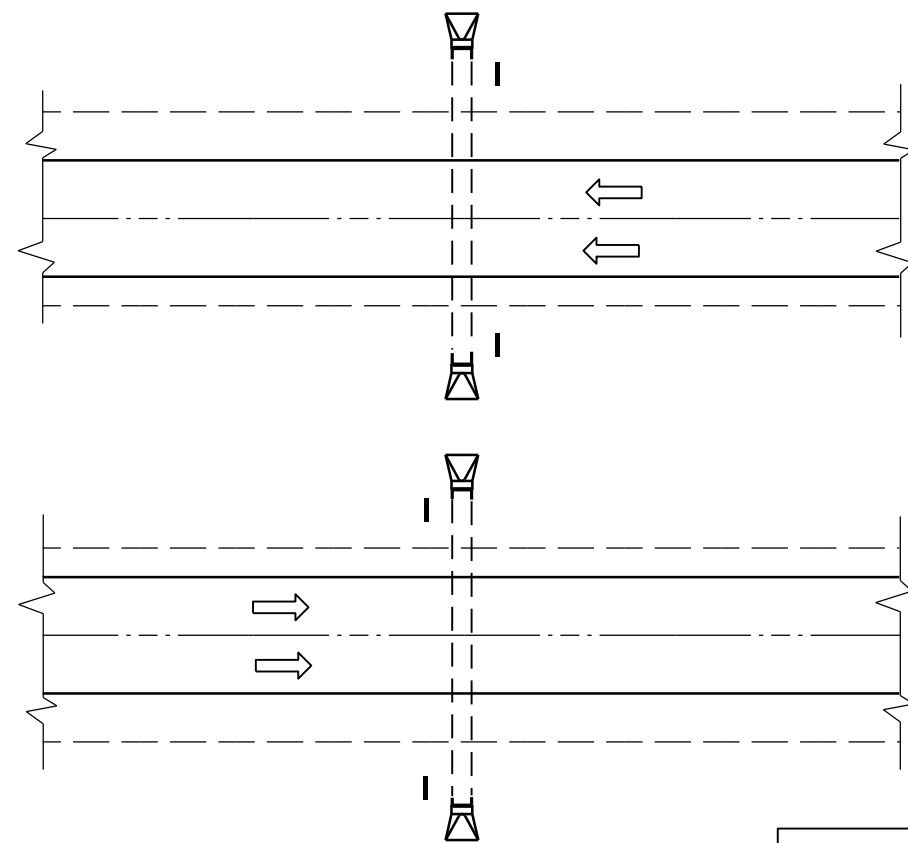
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

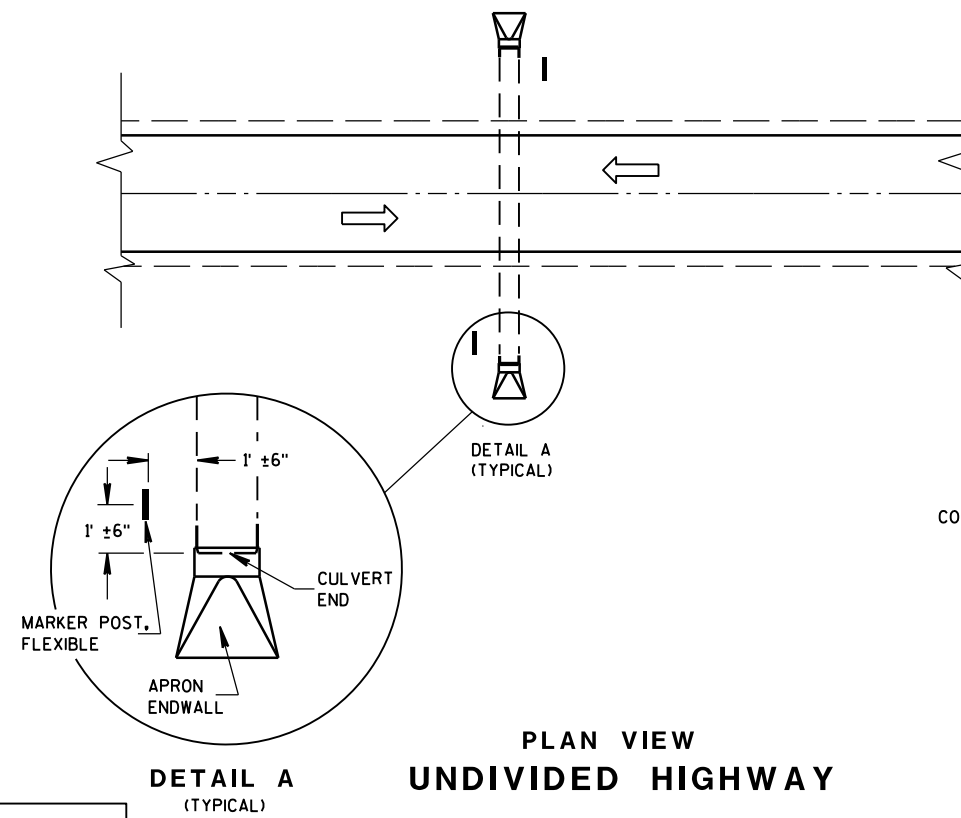
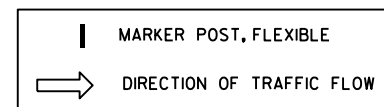
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94 /S/ Rory L. Rhinesmith
DATE CHIEF METHODS DEVELOPMENT ENGINEER
FHWA



PLAN VIEW
DIVIDED HIGHWAY

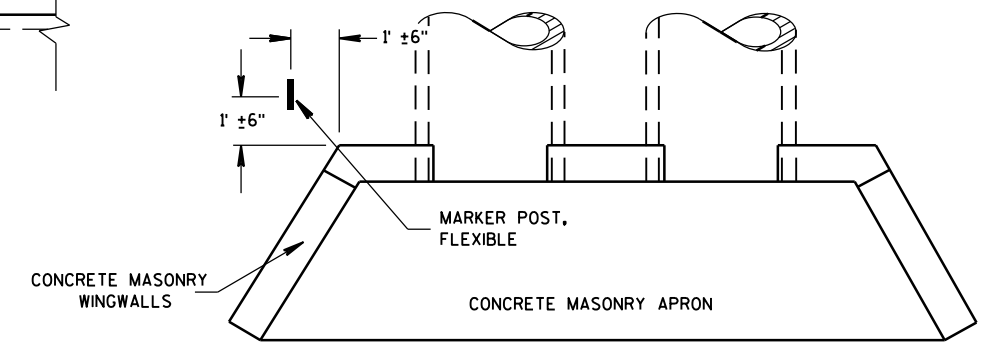


PLAN VIEW
UNDIVIDED HIGHWAY

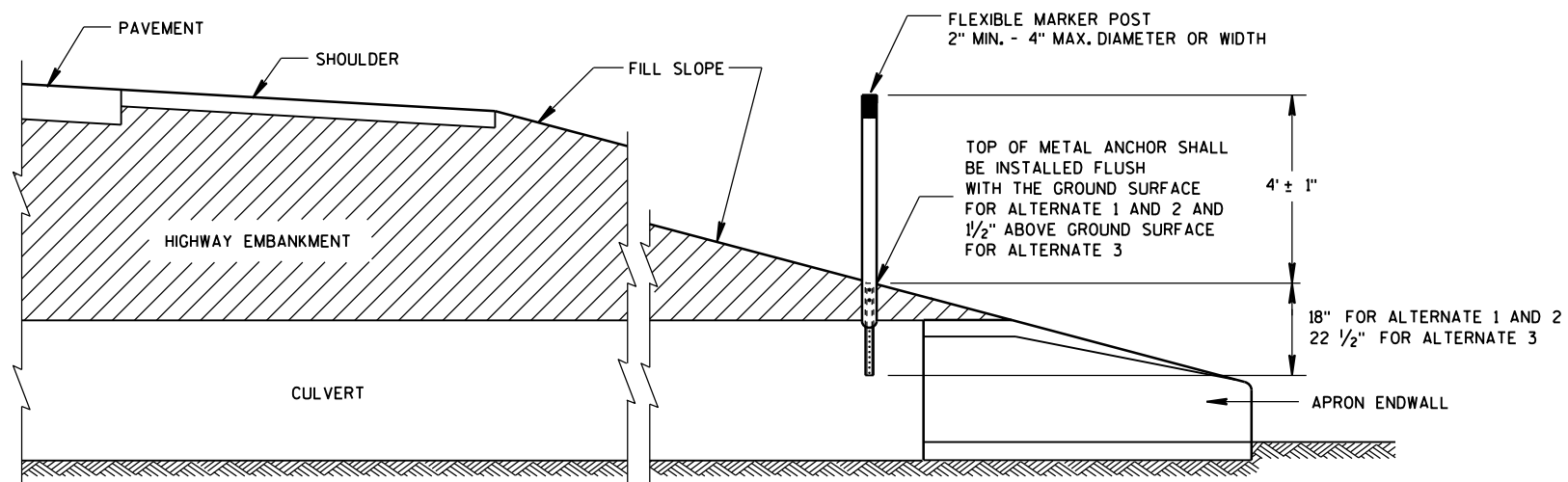
FLEXIBLE MARKER POST LOCATION

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.



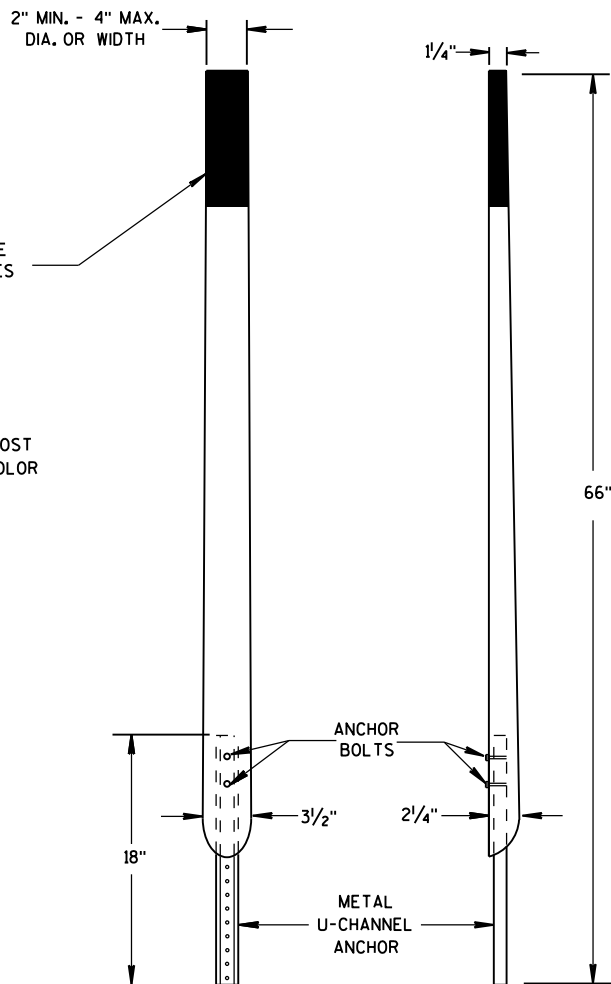
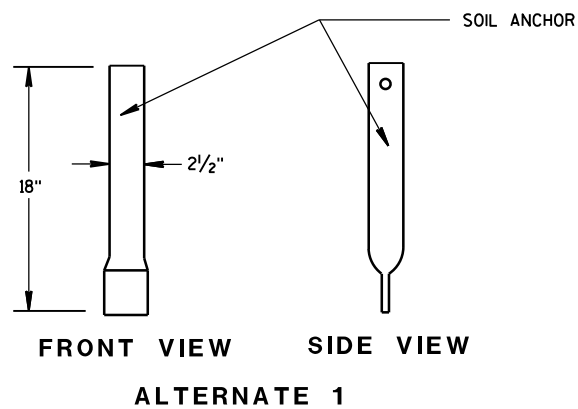
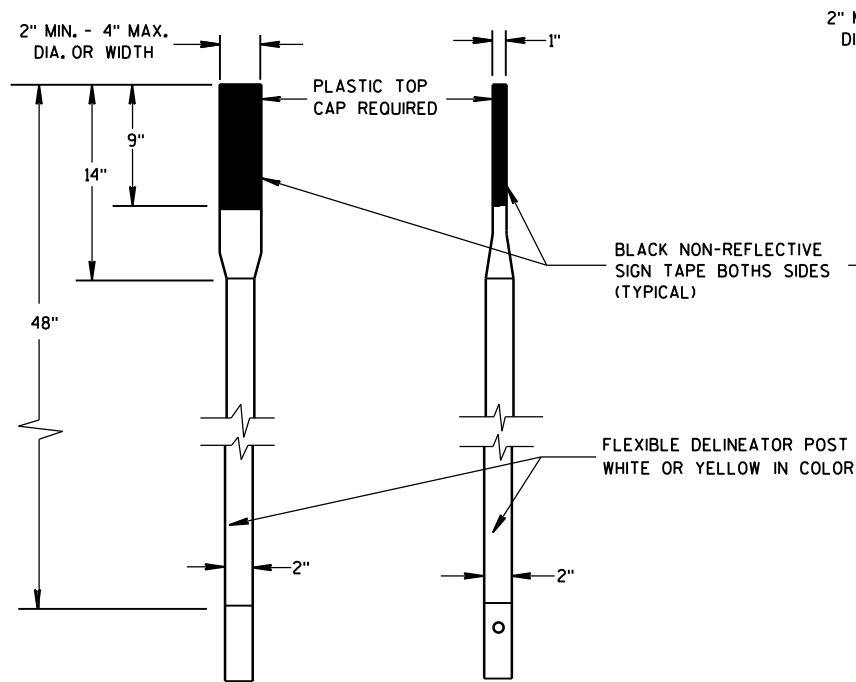
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

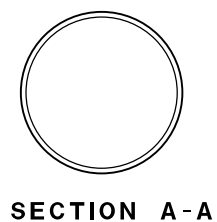
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

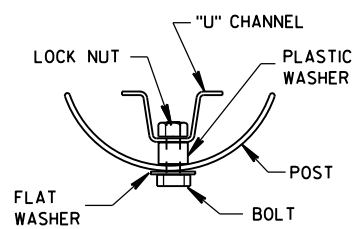
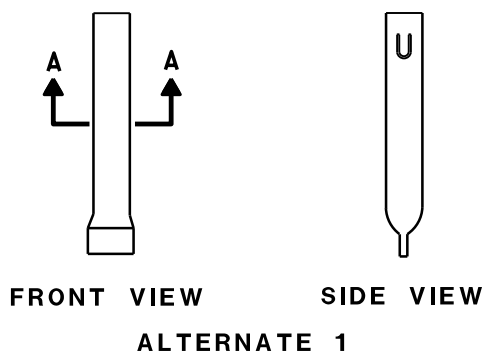


FRONT VIEW SIDE VIEW
ALTERNATE 2

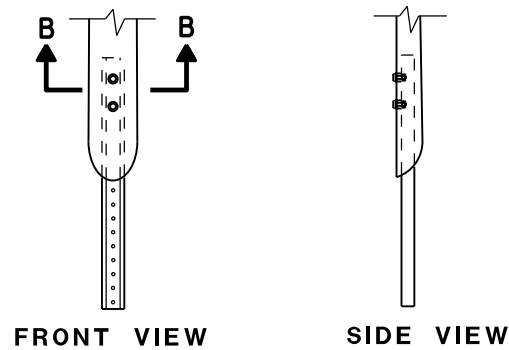
FLEXIBLE MARKER POSTS



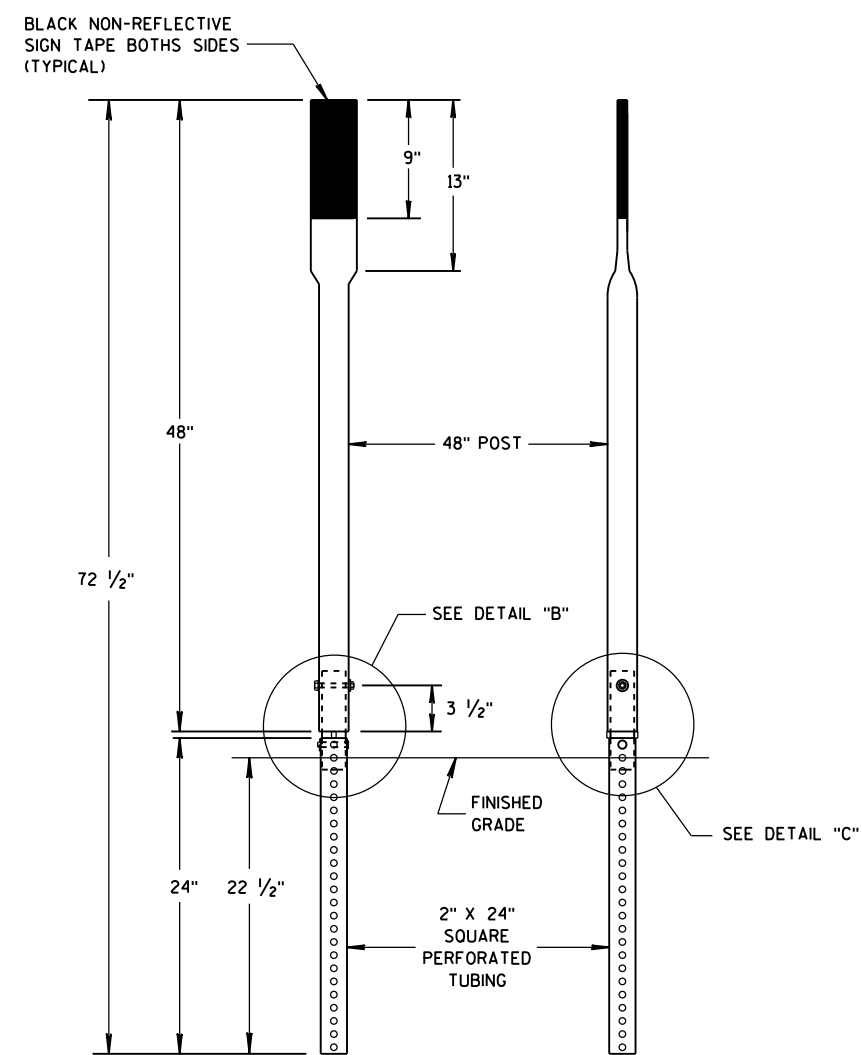
SECTION A-A



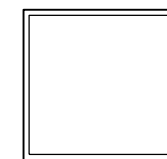
SECTION B-B



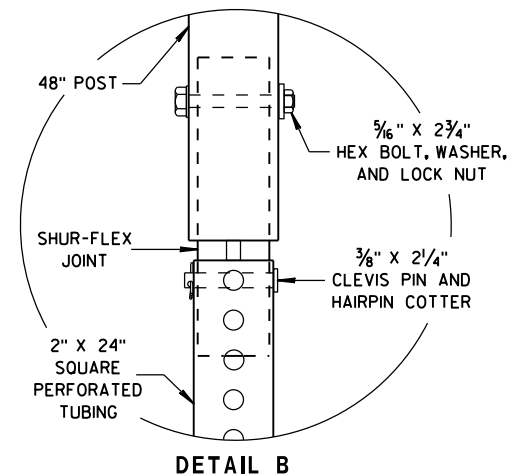
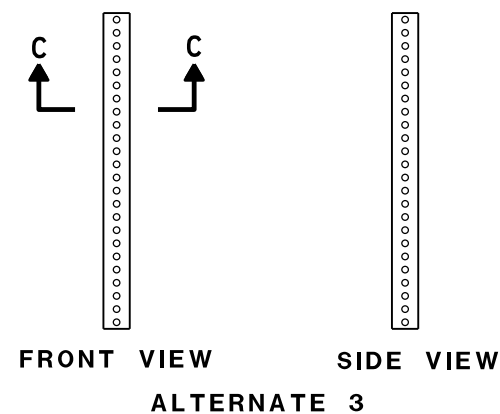
FRONT VIEW SIDE VIEW
ALTERNATE 2
FLEXIBLE MARKER POST ANCHORS



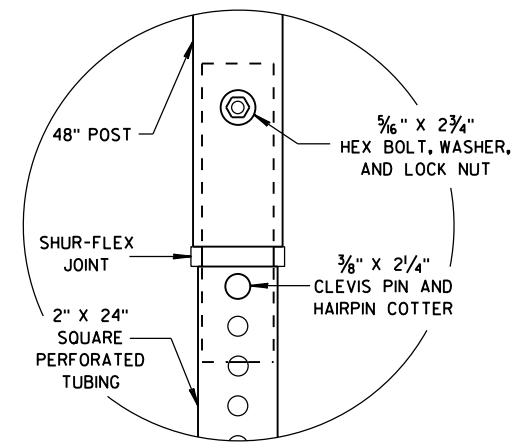
FRONT VIEW SIDE VIEW
ALTERNATE 3



SECTION C-C



DETAIL B



DETAIL C

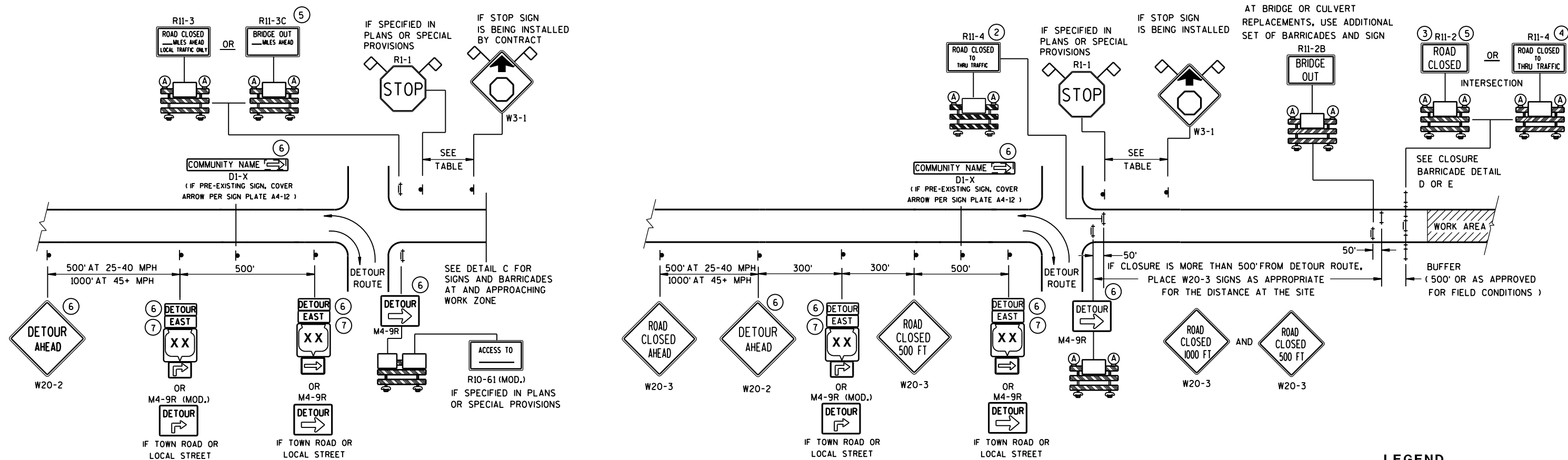
FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

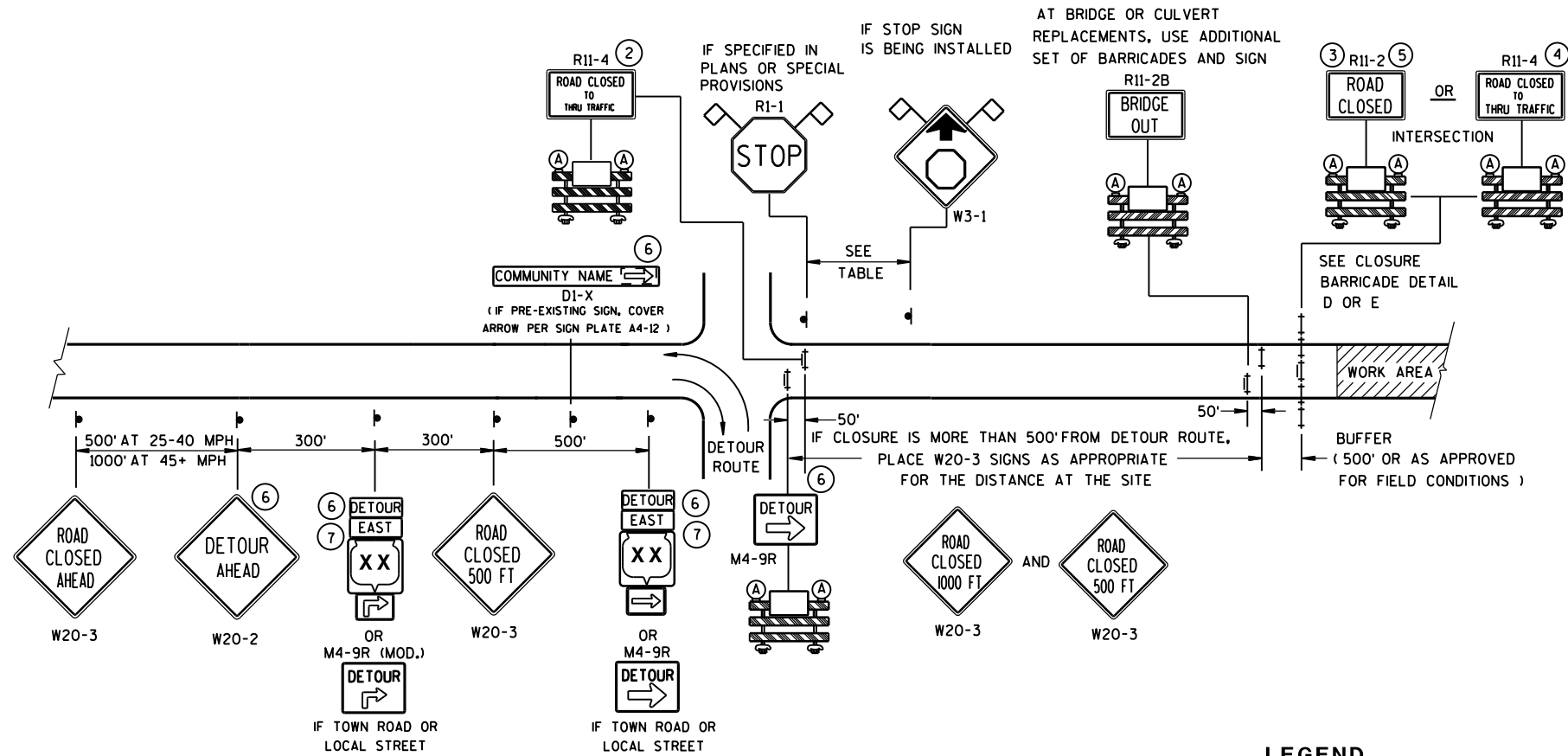
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

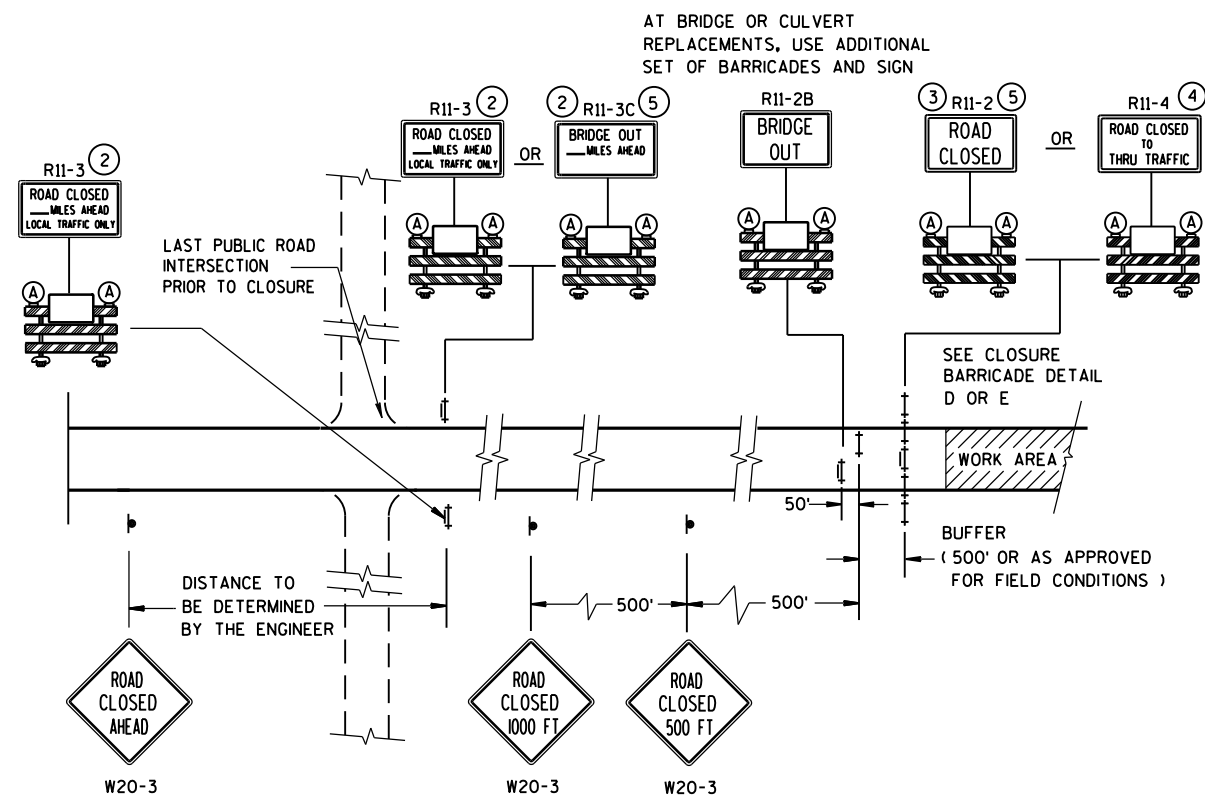
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



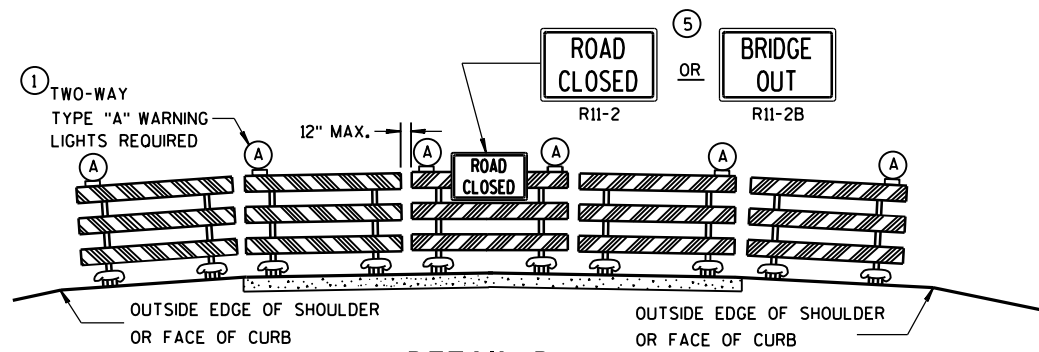
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

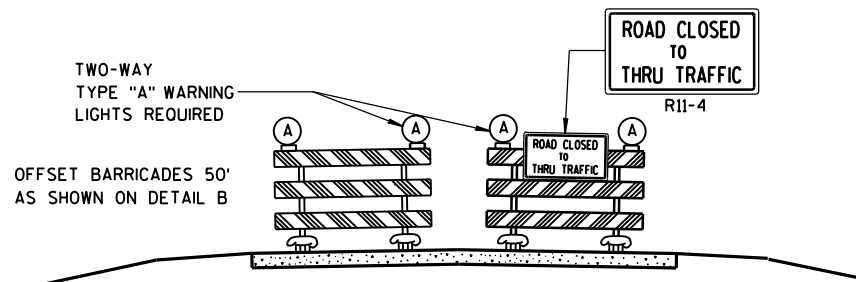
- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8
 M3-X
-  M1-4 OR  M1-5A OR  M1-6
-  M05-1 OR  M06-1
-  FLAGS, 16" X 16" MIN., (ORANGE)

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
<u>8/2013</u> DATE	<u>/S/ Travis Feltes</u> STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

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

M4-9 SHALL BE 30" X 24".

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

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

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

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

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

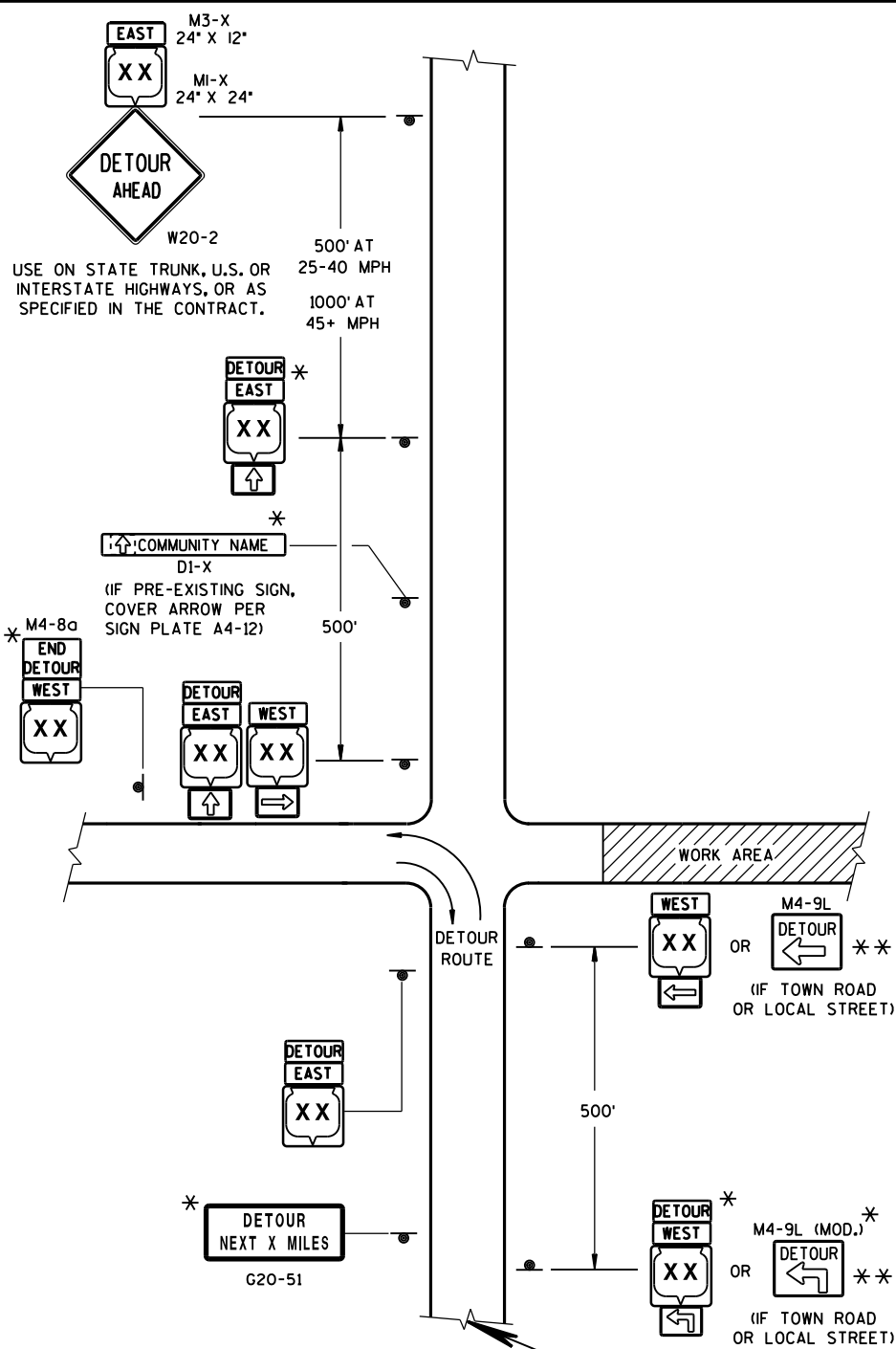
R1-1 SHALL BE 36" X 36".

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



LEGEND

● SIGN ON PERMANENT SUPPORT

▨ WORK AREA

DETOUR EAST M4-8 M3-X

XX OR COUNTY XX OR XX MI-4 MI-5A MI-6

OR OR OR M05-1 M06-1 M06-1

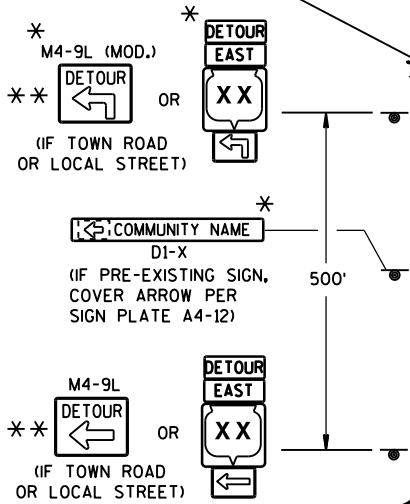
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

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

MATCH POINT

DETAIL F
DETOUR SIGNING

USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.



GENERAL NOTES

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

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

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

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

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

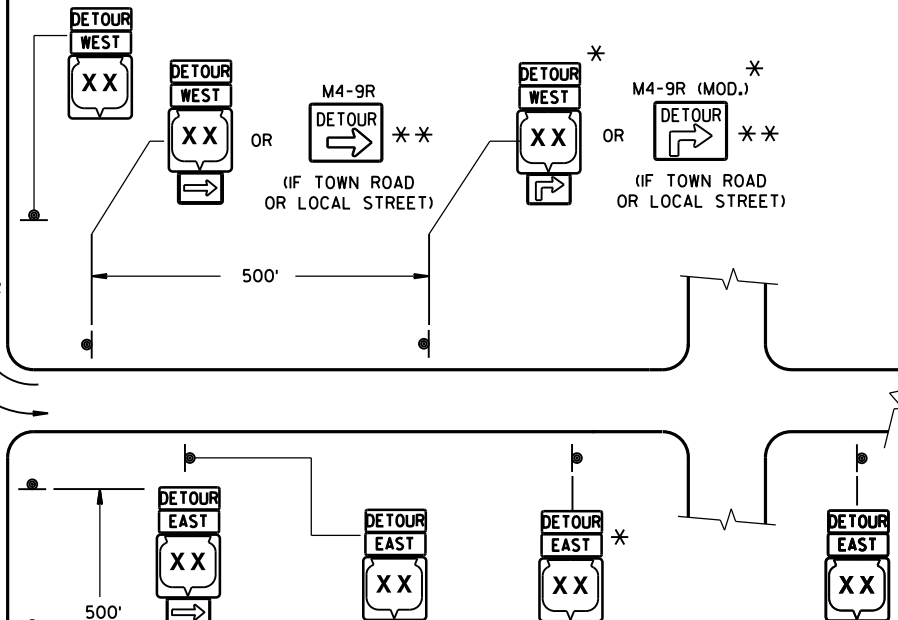
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

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

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

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

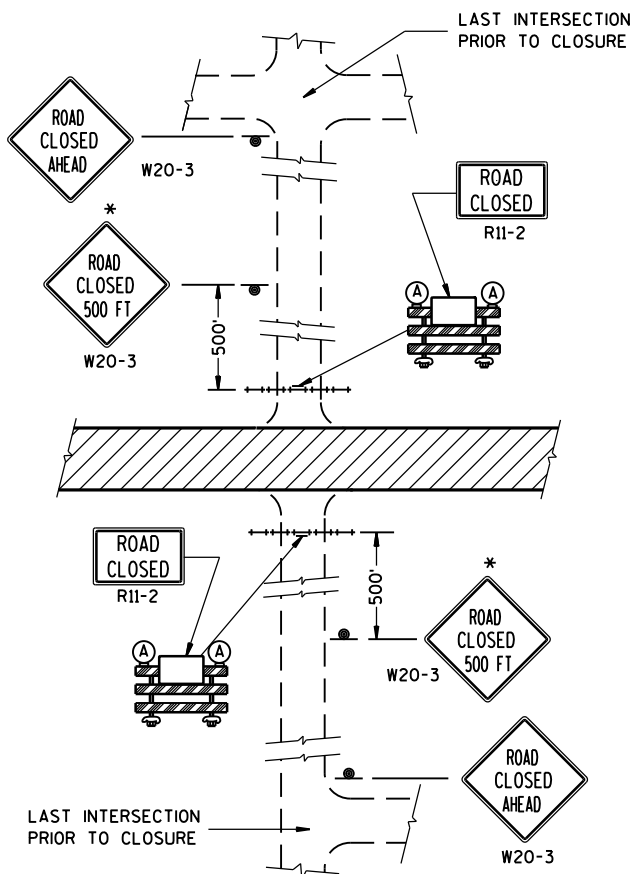


PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)

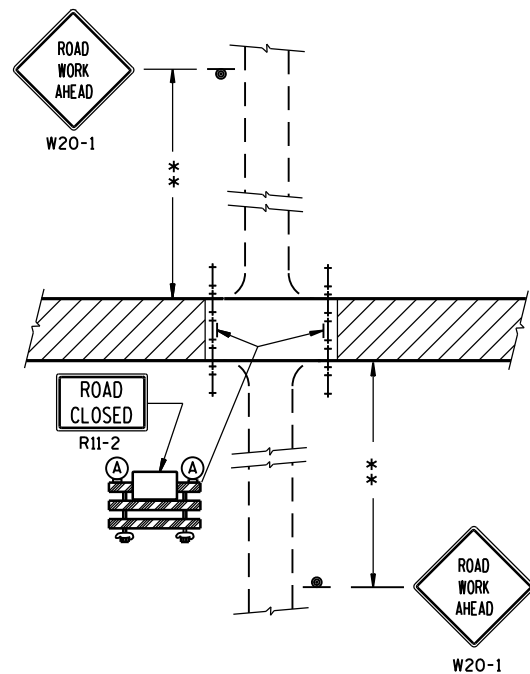
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

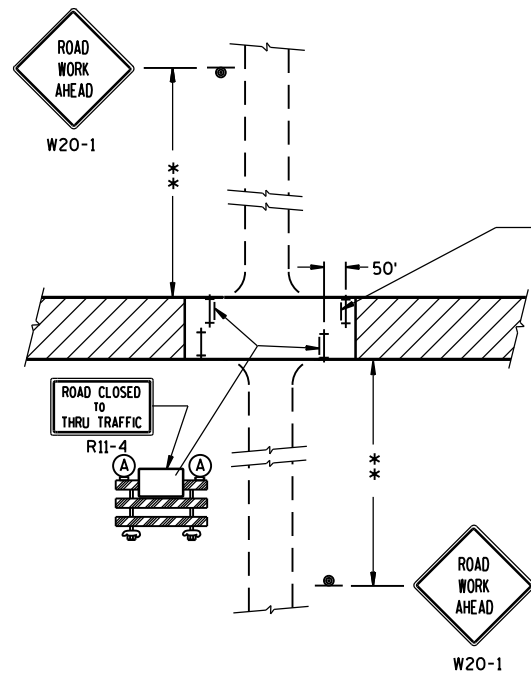
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



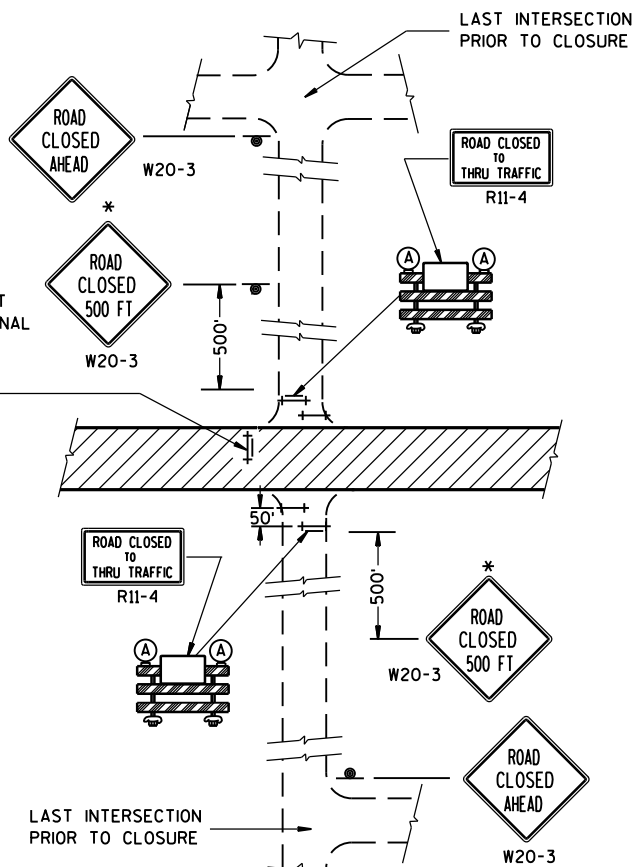
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

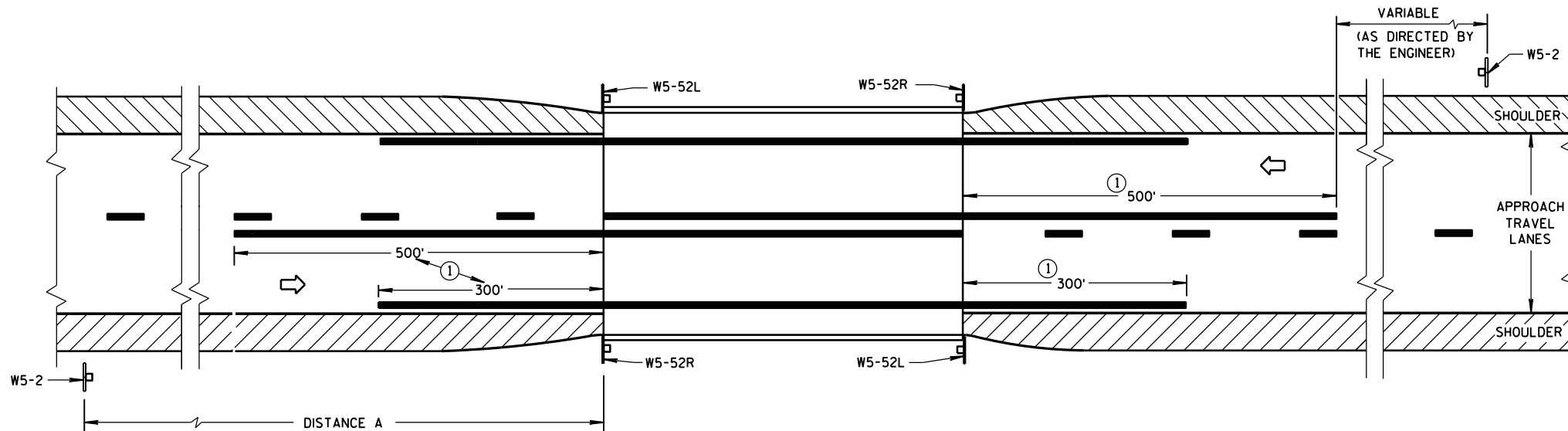
8/2013

DATE

FHWA

/S/ Travis Feltes

STATE TRAFFIC ENGINEER OF DESIGN



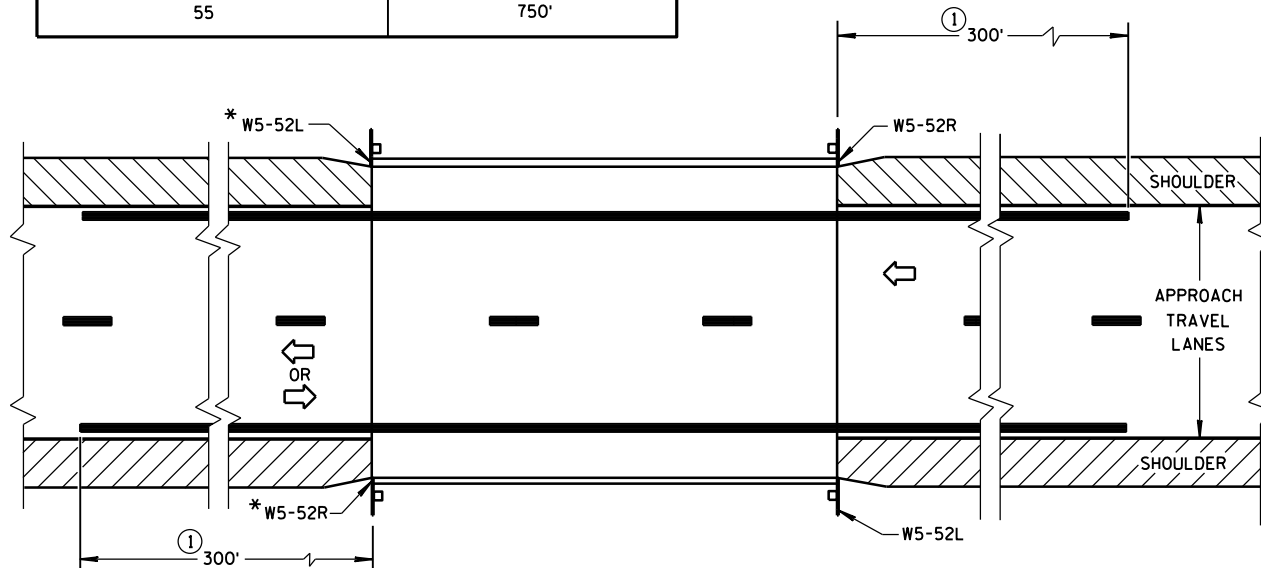
SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

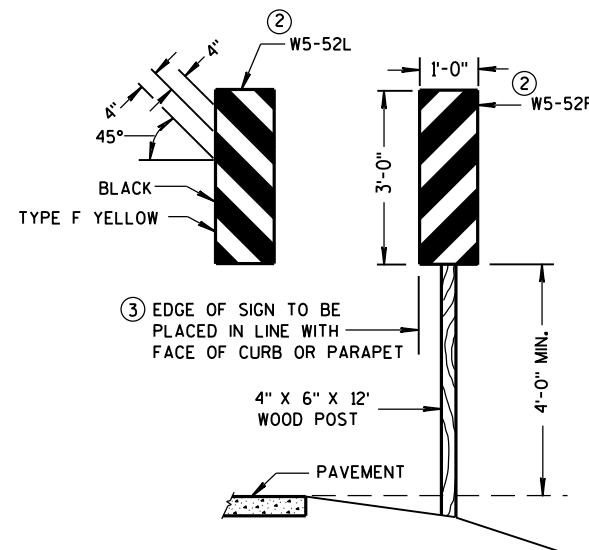


*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



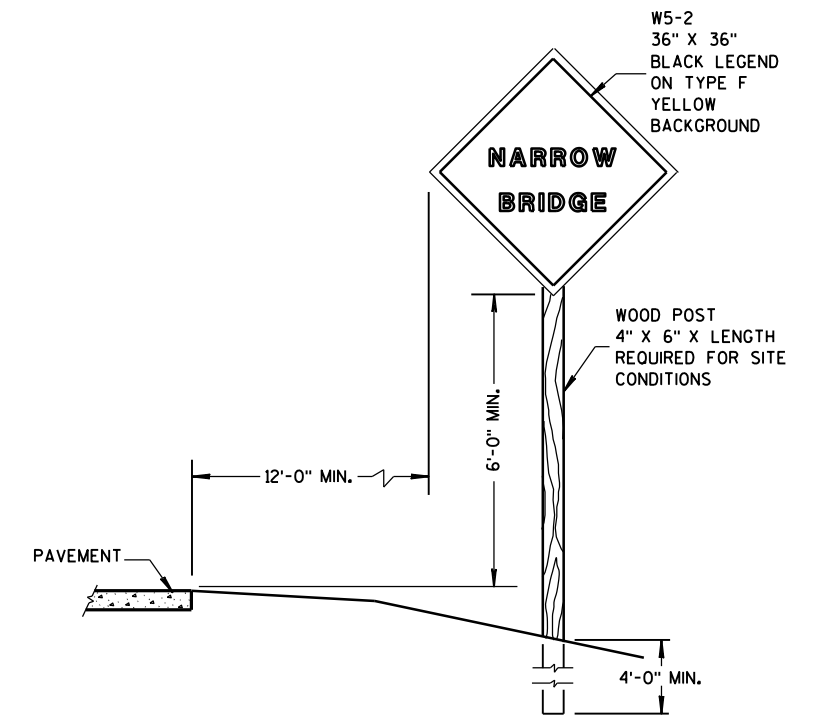
OBJECT MARKER PLACEMENT

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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3-2014
DATE

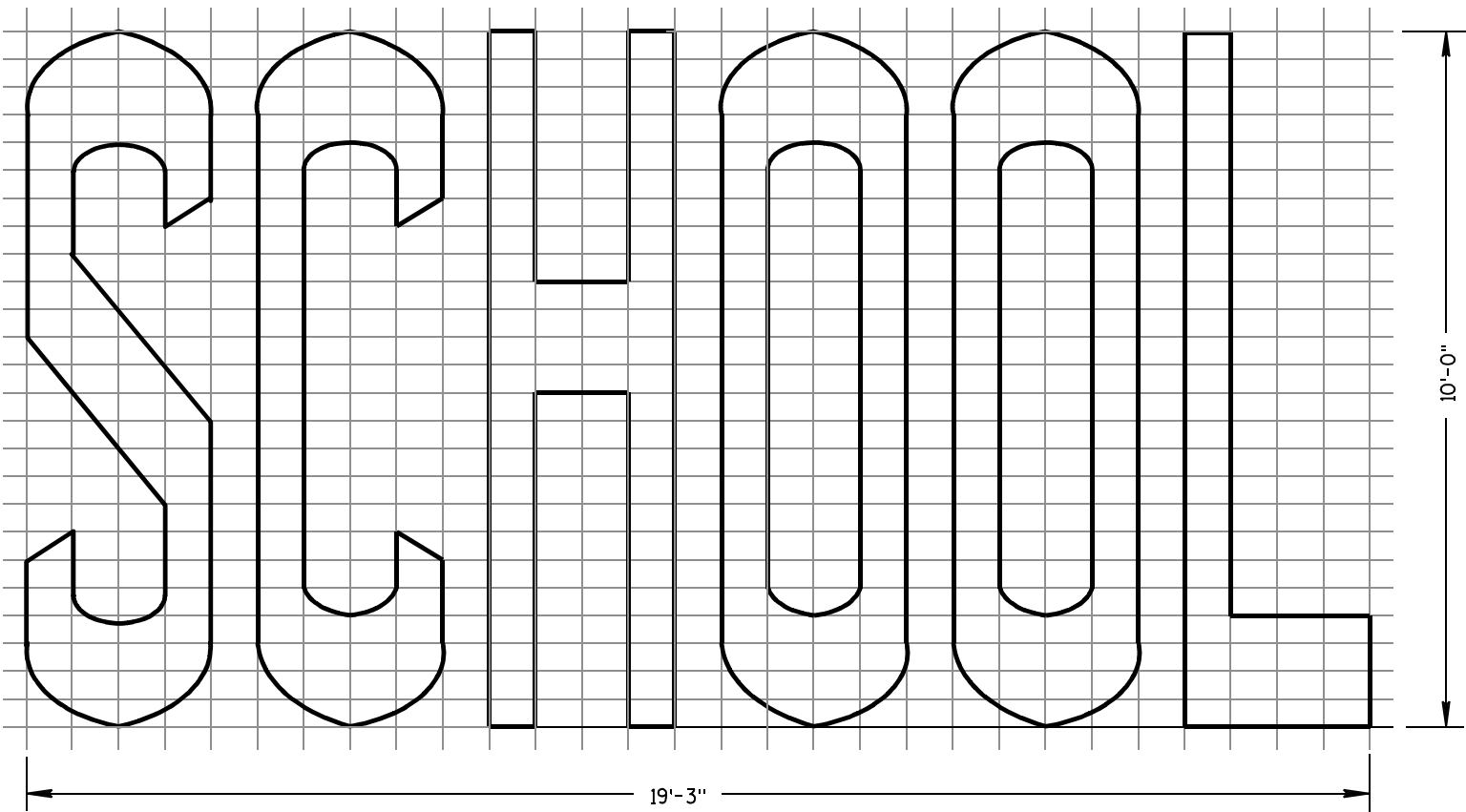
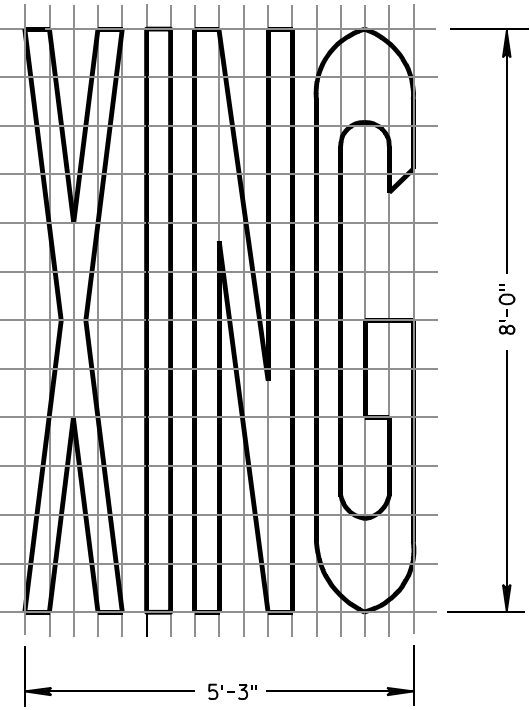
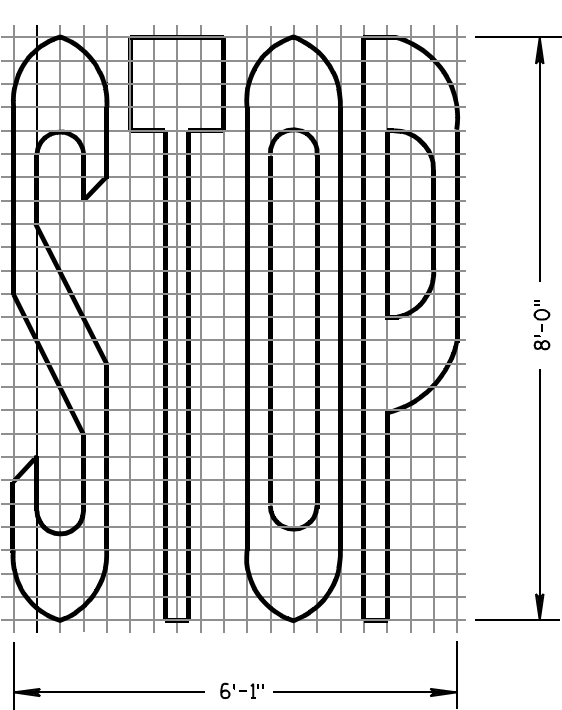
FHWA

/S/ Travis Fettes
STATE TRAFFIC ENGINEER OF DESIGN

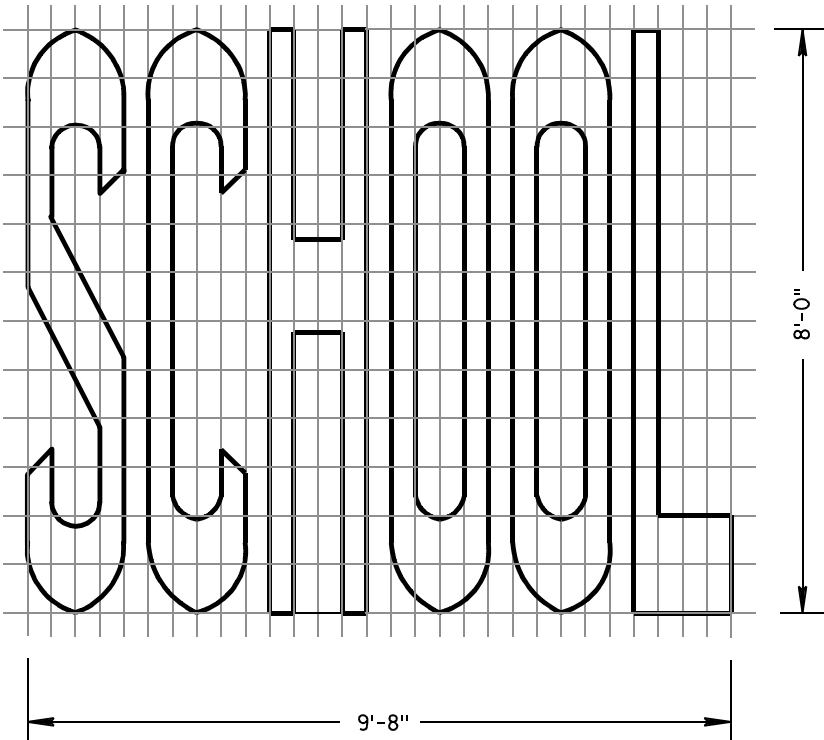
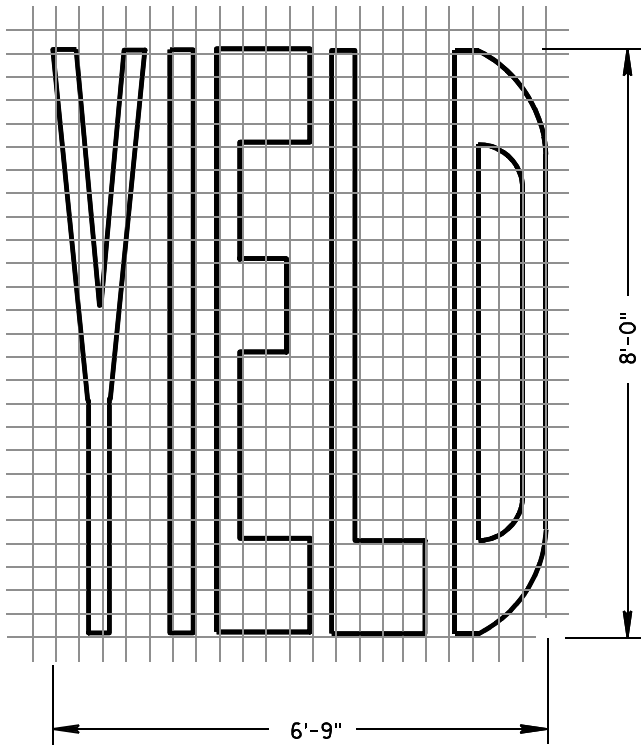
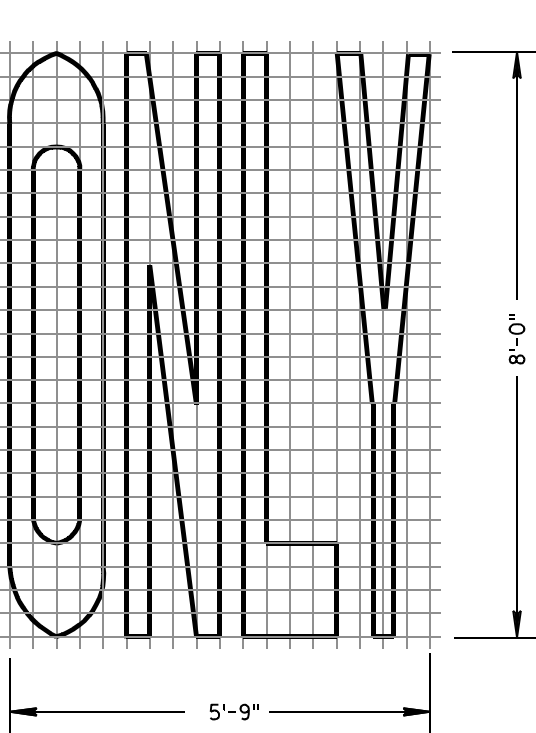
GENERAL NOTES

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.

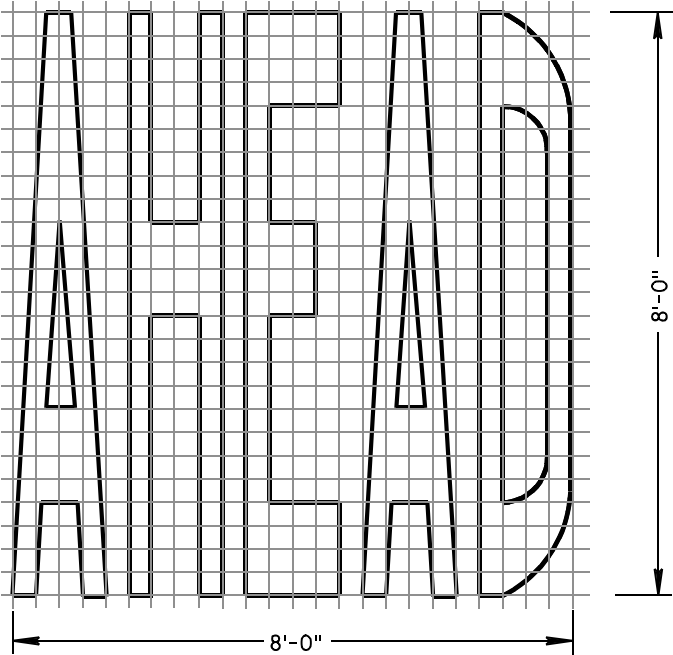
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

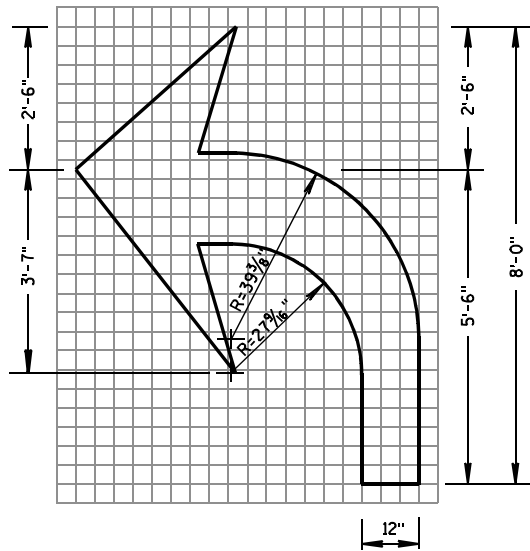
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

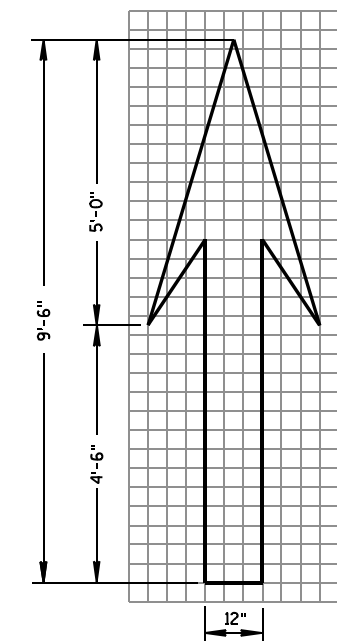
7-1-11
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

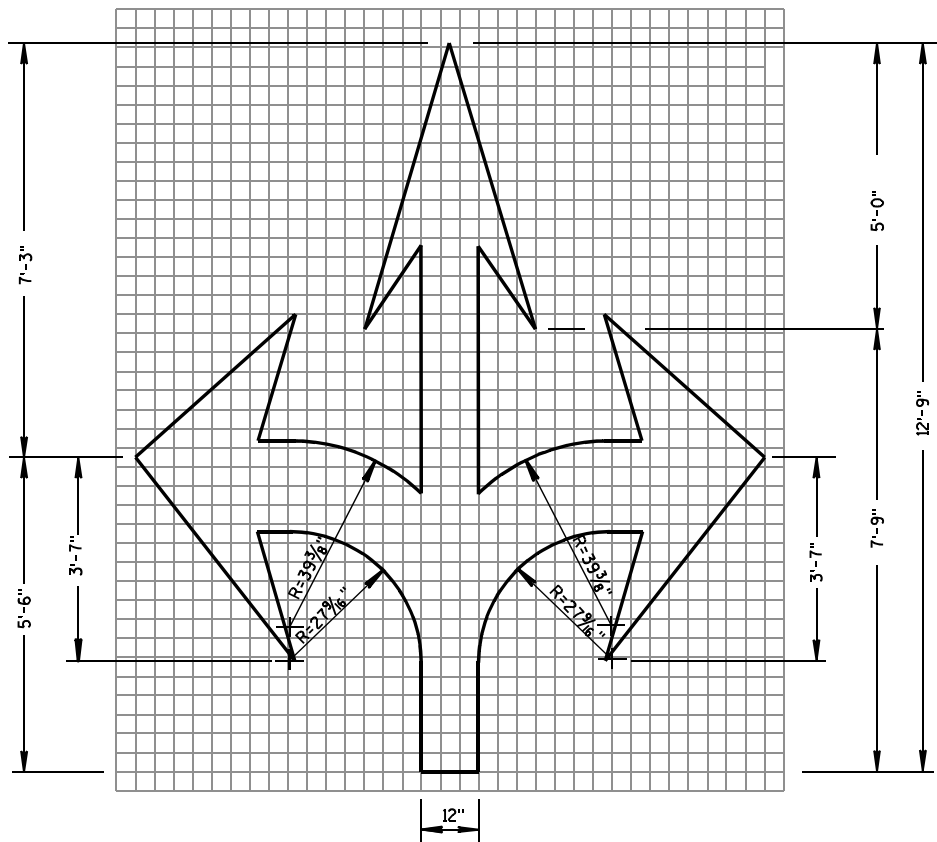
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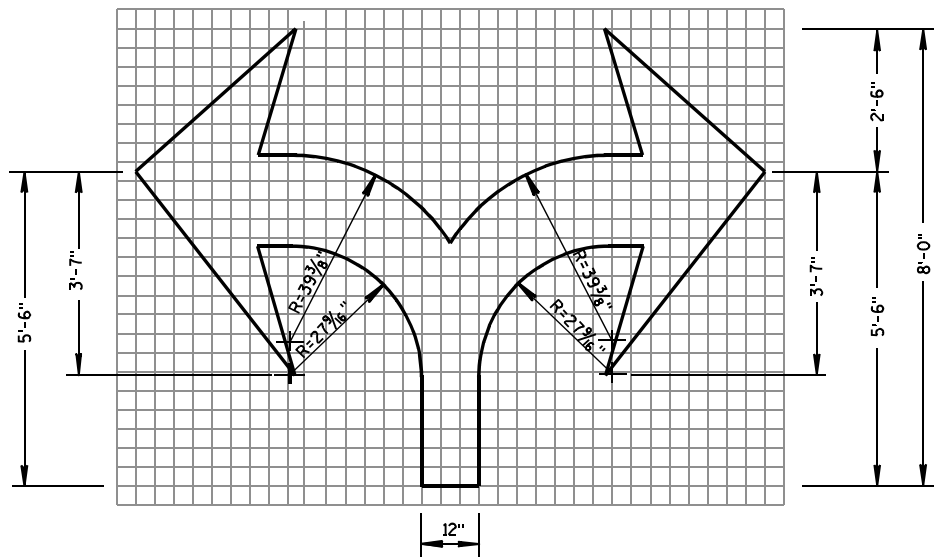
TYPE 2



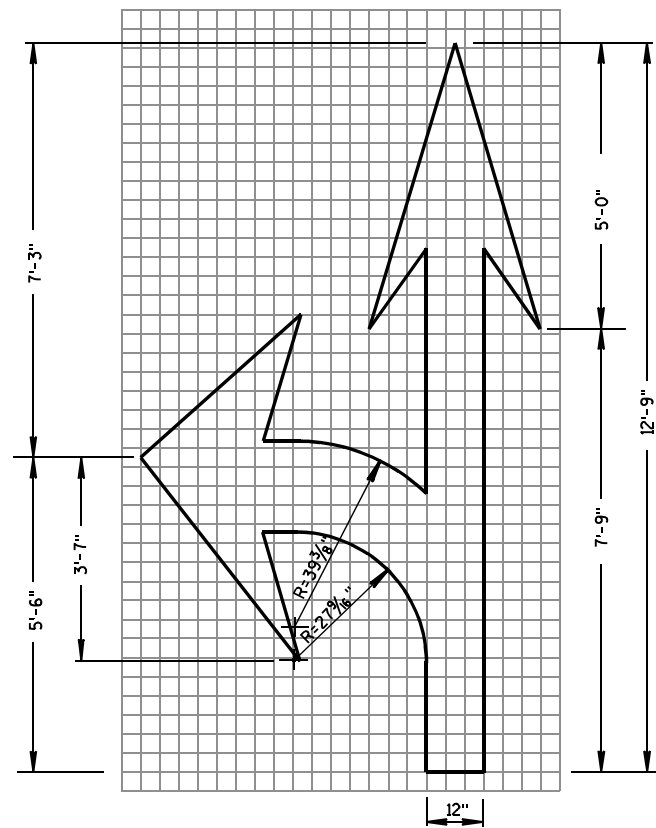
TYPE 1



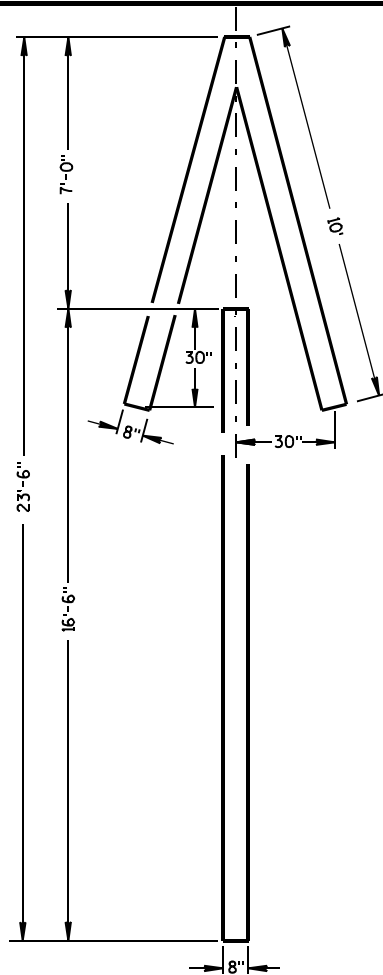
TYPE 6



TYPE 7



TYPE 3

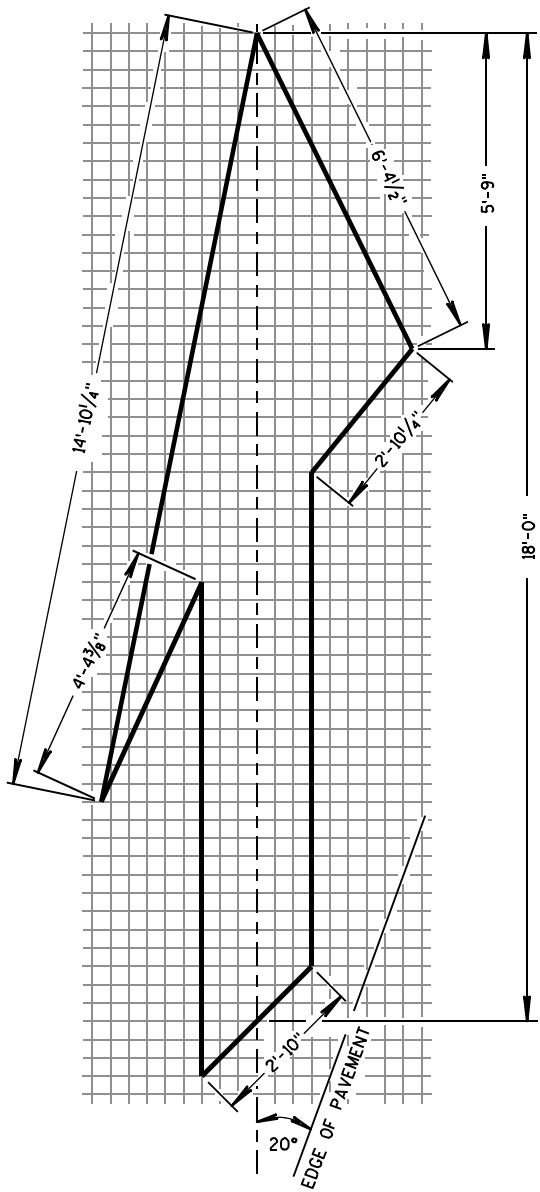


TYPE 4

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

PAVEMENT MARKING ARROWS

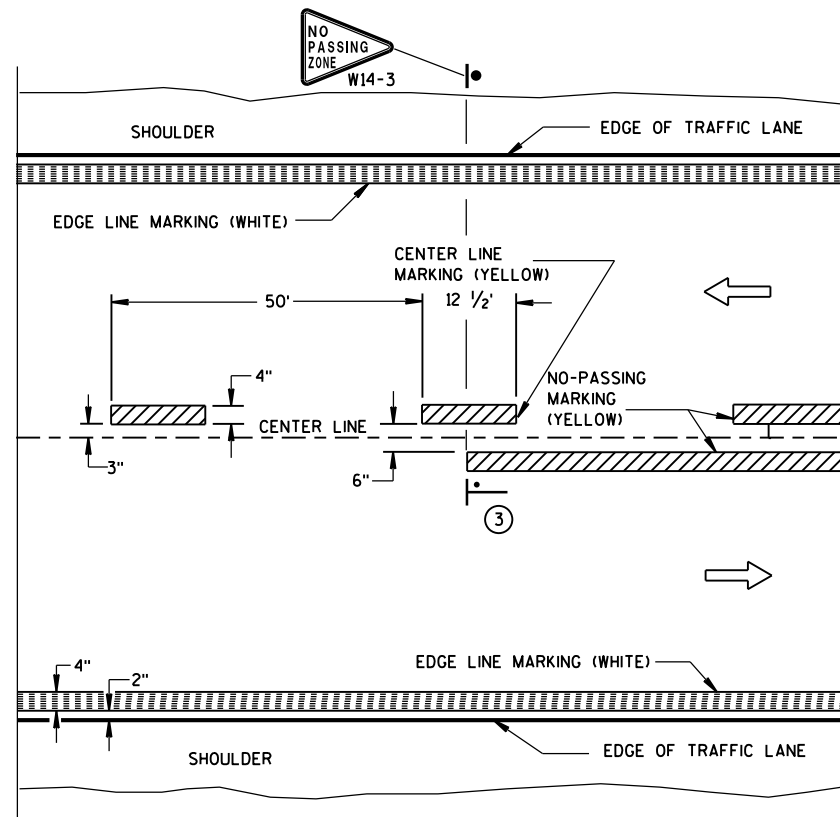
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

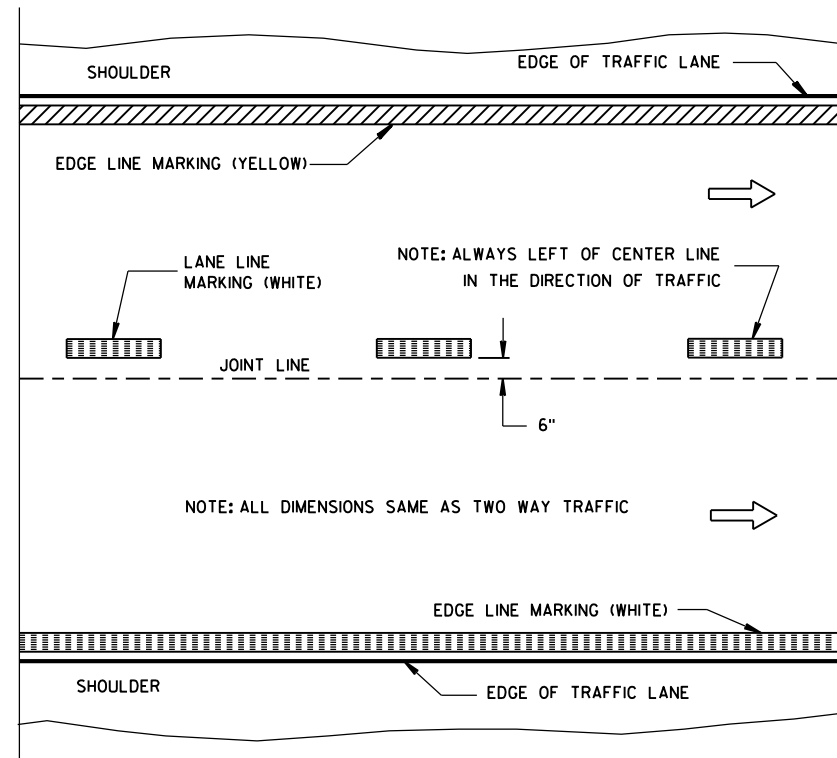
7/1/11
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

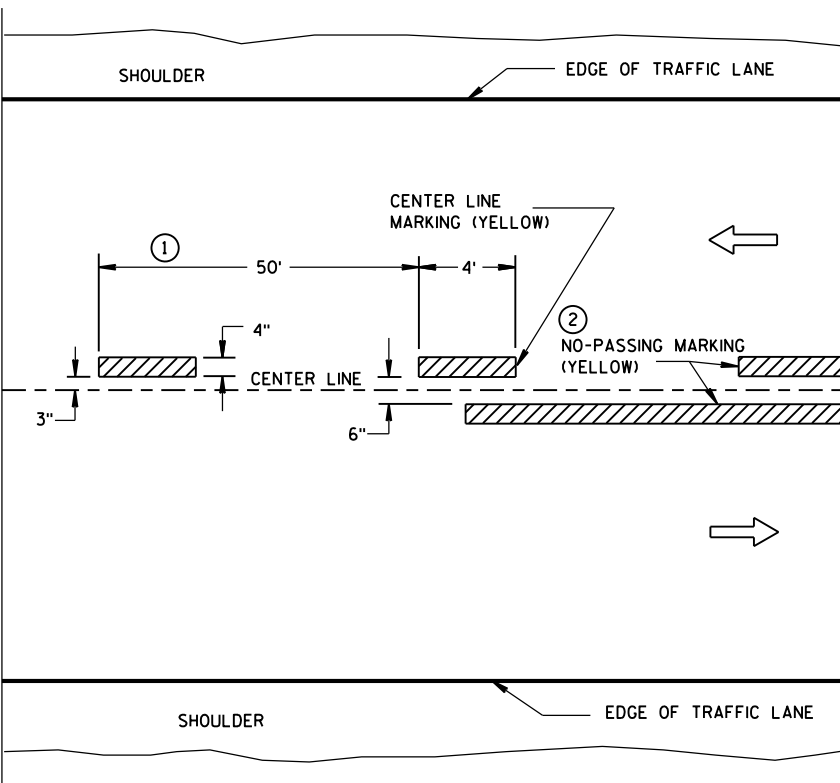


TWO WAY TRAFFIC

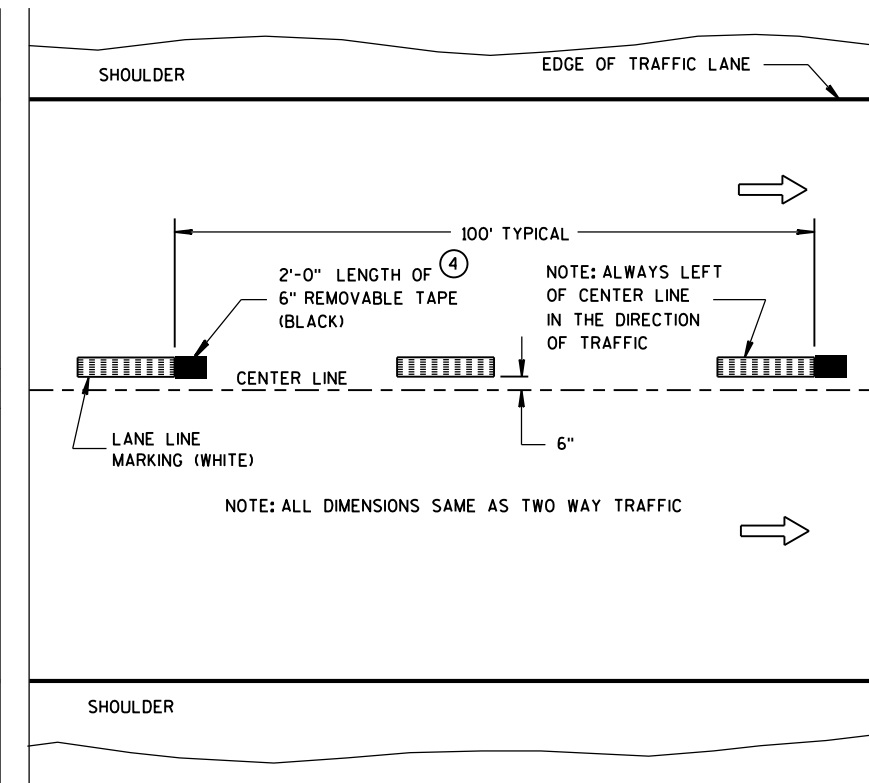


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

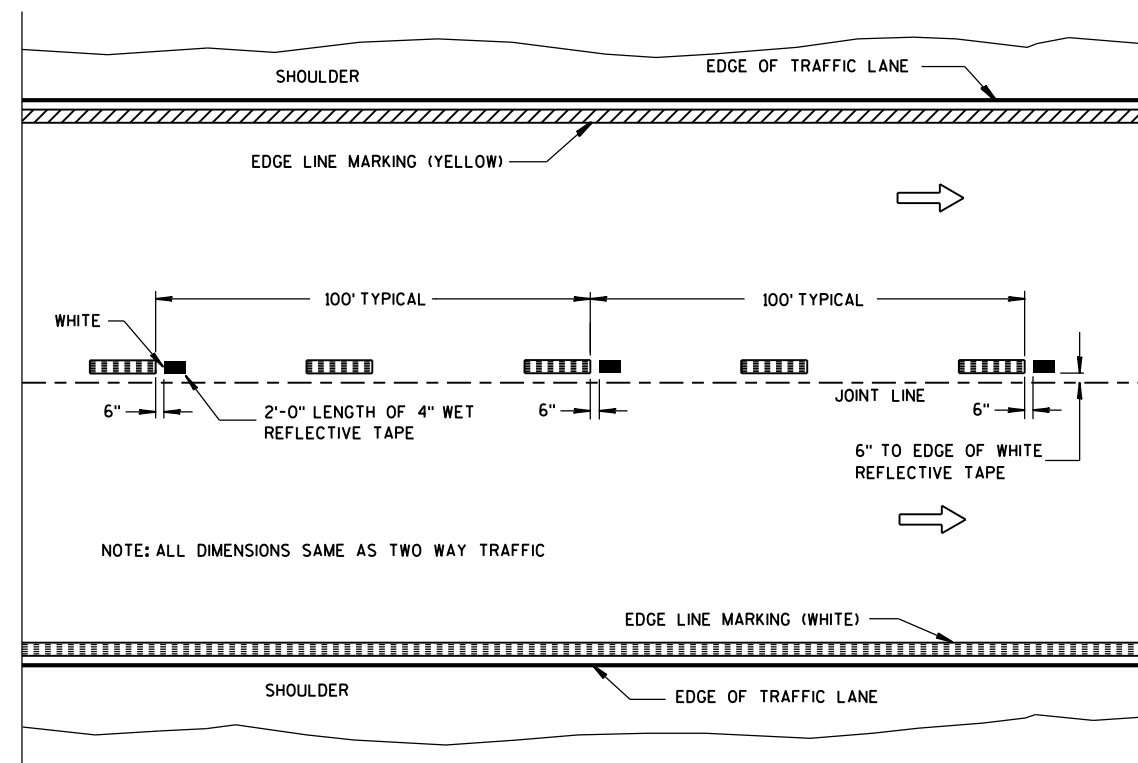
GENERAL NOTES

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



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

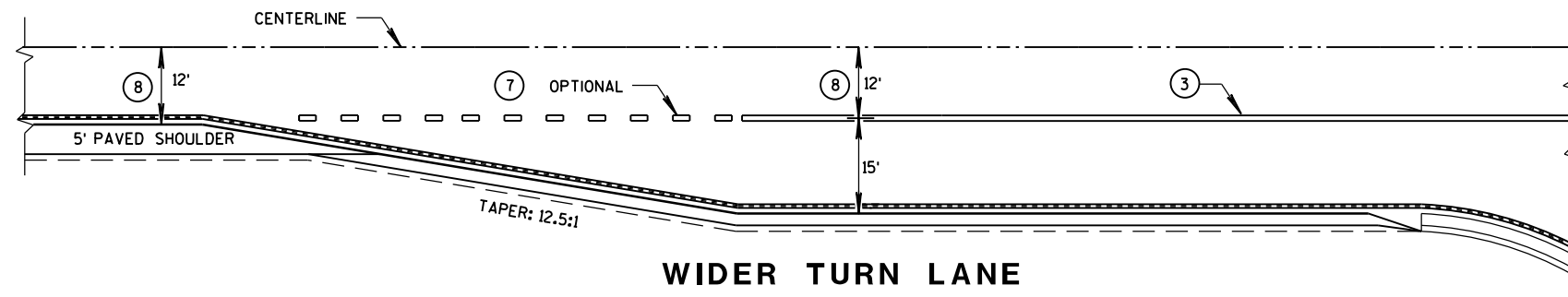
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

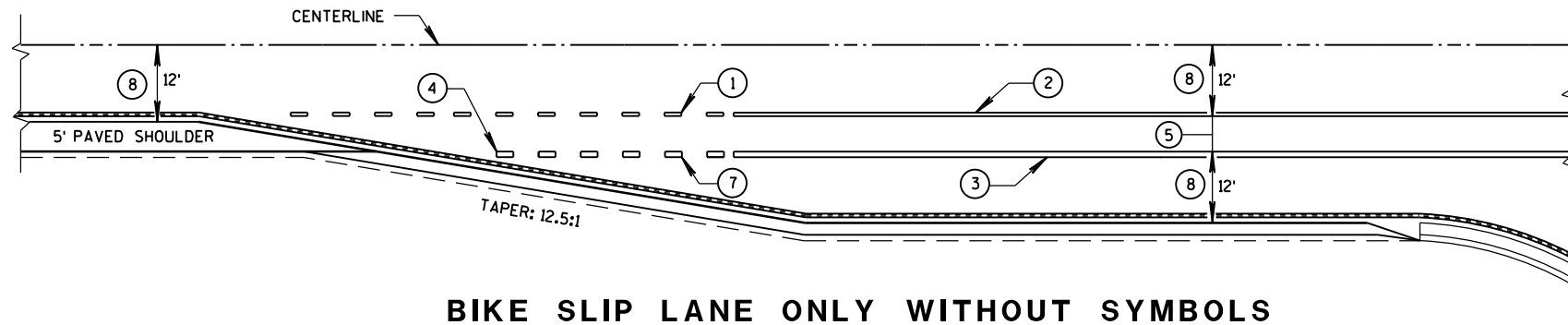
APPROVED
5-13-2013
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

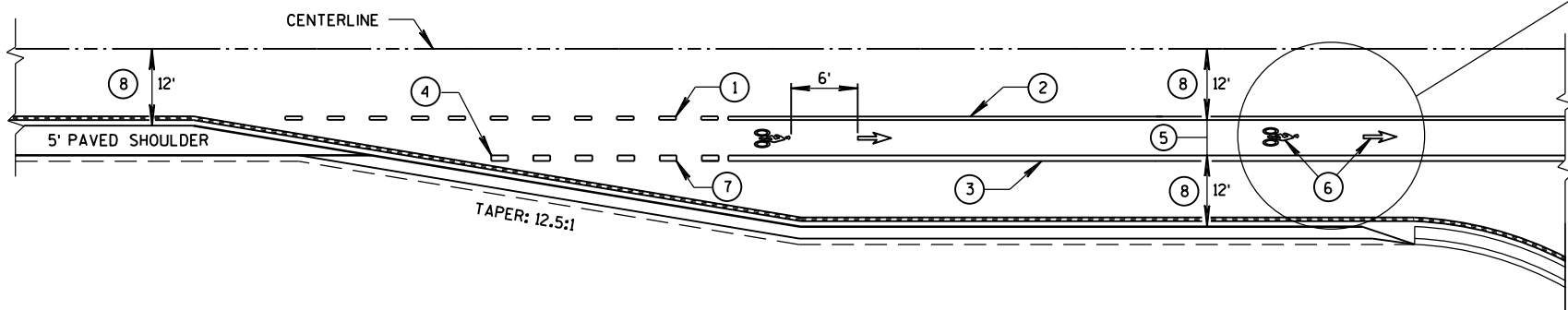


GENERAL NOTES

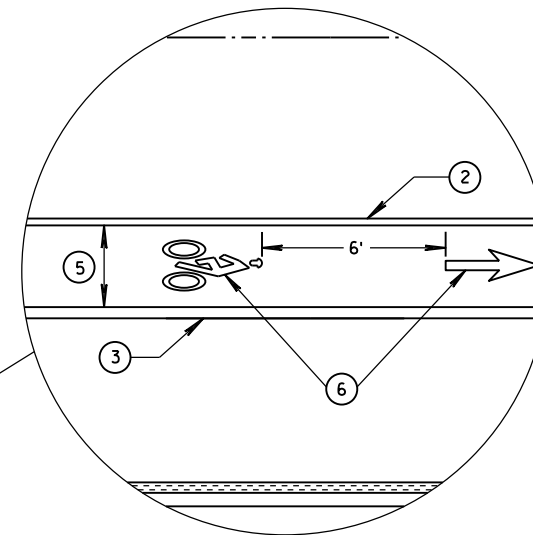
- ① 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
- ② 4-INCH, WHITE.
- ③ 8-INCH, WHITE.
- ④ IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
- ⑤ BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE. BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
- ⑥ REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ⑦ 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
- ⑧ REFER TO CONTRACT PLANS.



BIKE SLIP LANE ONLY WITHOUT SYMBOLS



BIKE LANE WITH SYMBOLS



BICYCLE LANE MARKING

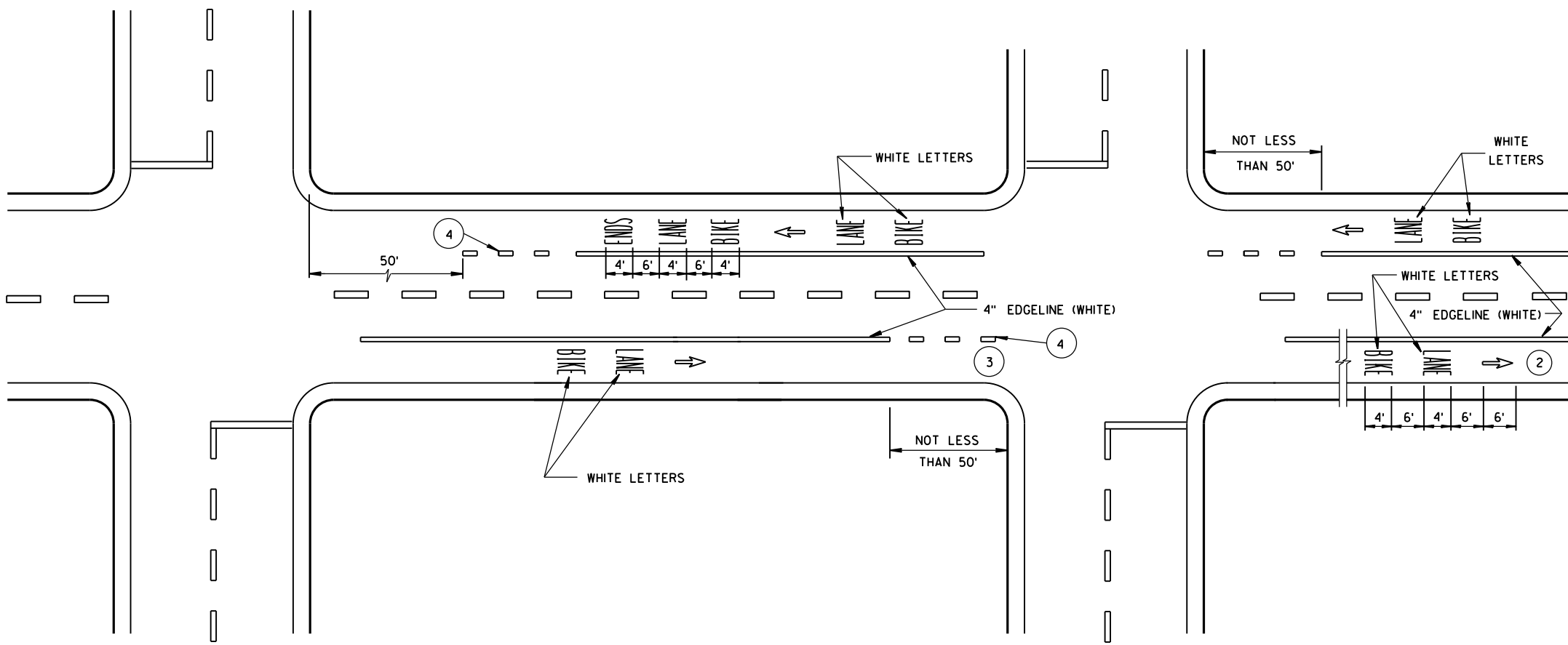
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

FHWA

/S/ Travis Feltz
STATE TRAFFIC ENGINEER



DESIGNATED BICYCLE LANE
NO PARKING

GENERAL NOTES

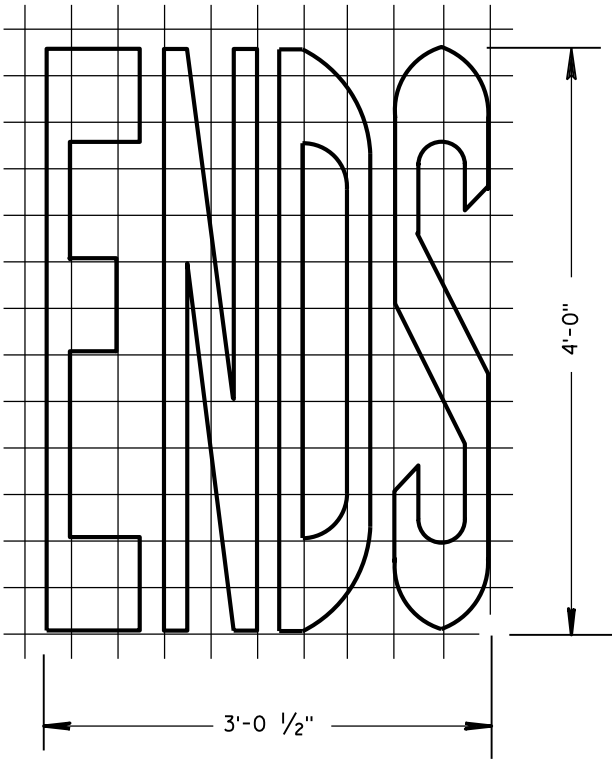
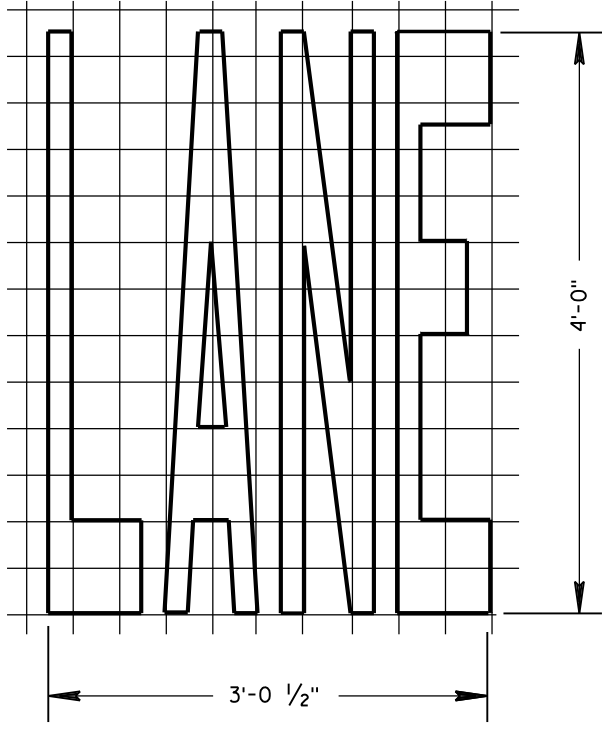
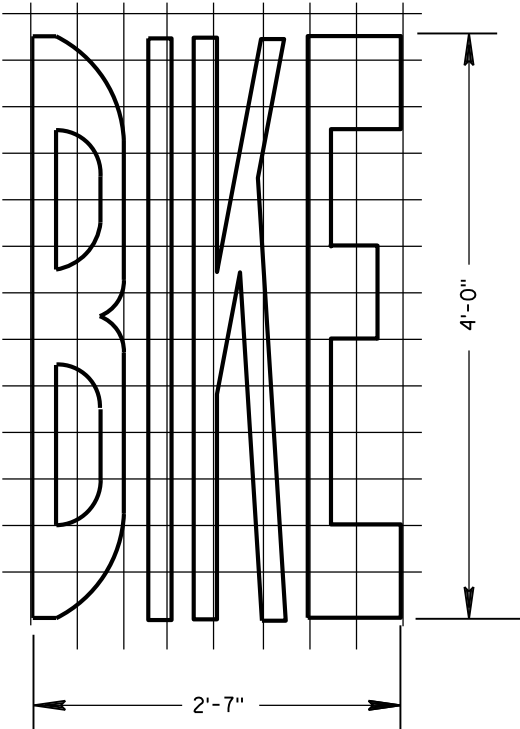
- 1 DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- 2 THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
- 3 DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
- 4 3' LINE, 9' GAP - 4" WIDE, WHITE.

URBAN BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/30/2013 DATE	/S/ Travis Fettes STATE TRAFFIC ENGINEER
FHWA	

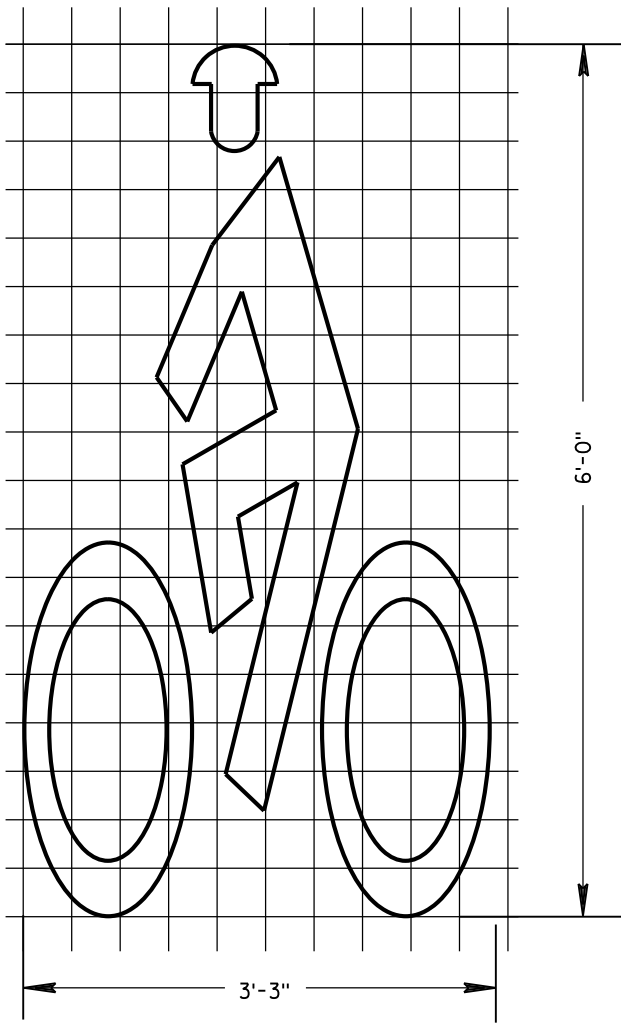
GENERAL NOTES

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.

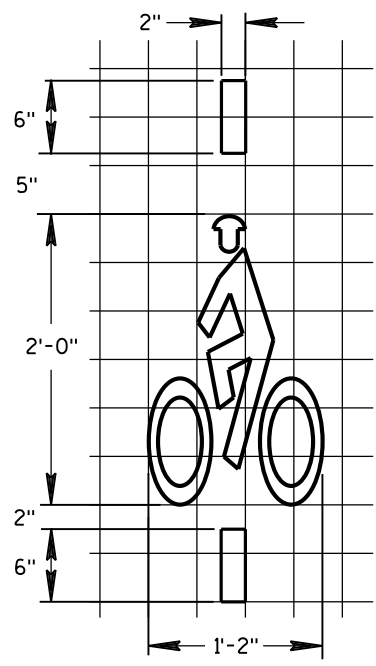
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



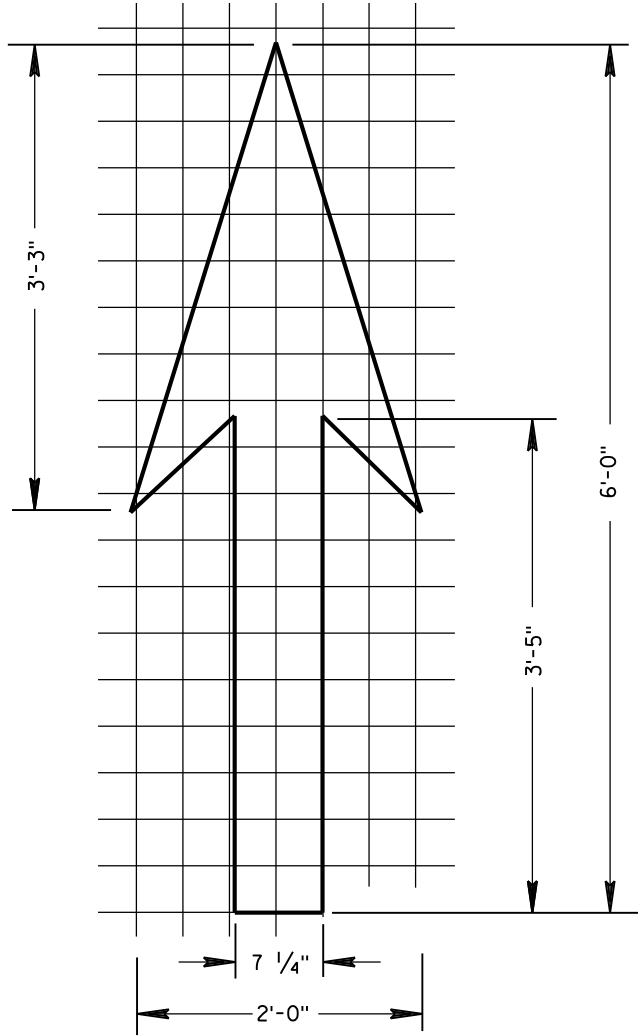
BIKE LANE WORDS



BIKE LANE SYMBOL

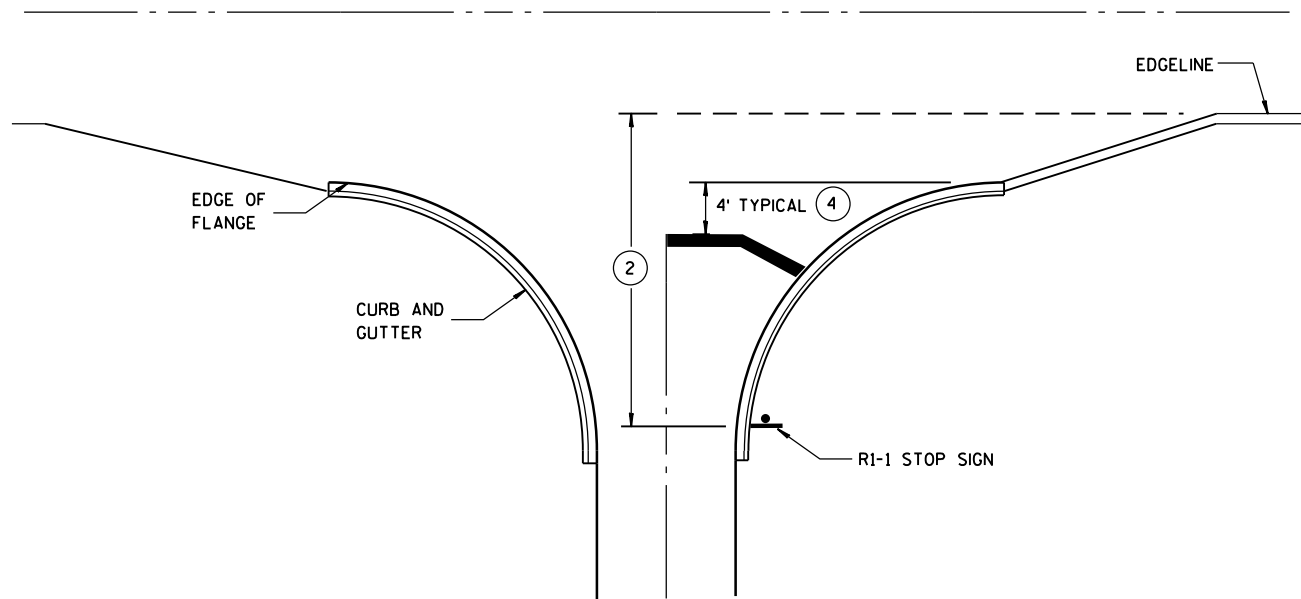


BICYCLE DETECTOR PAVEMENT MARKING

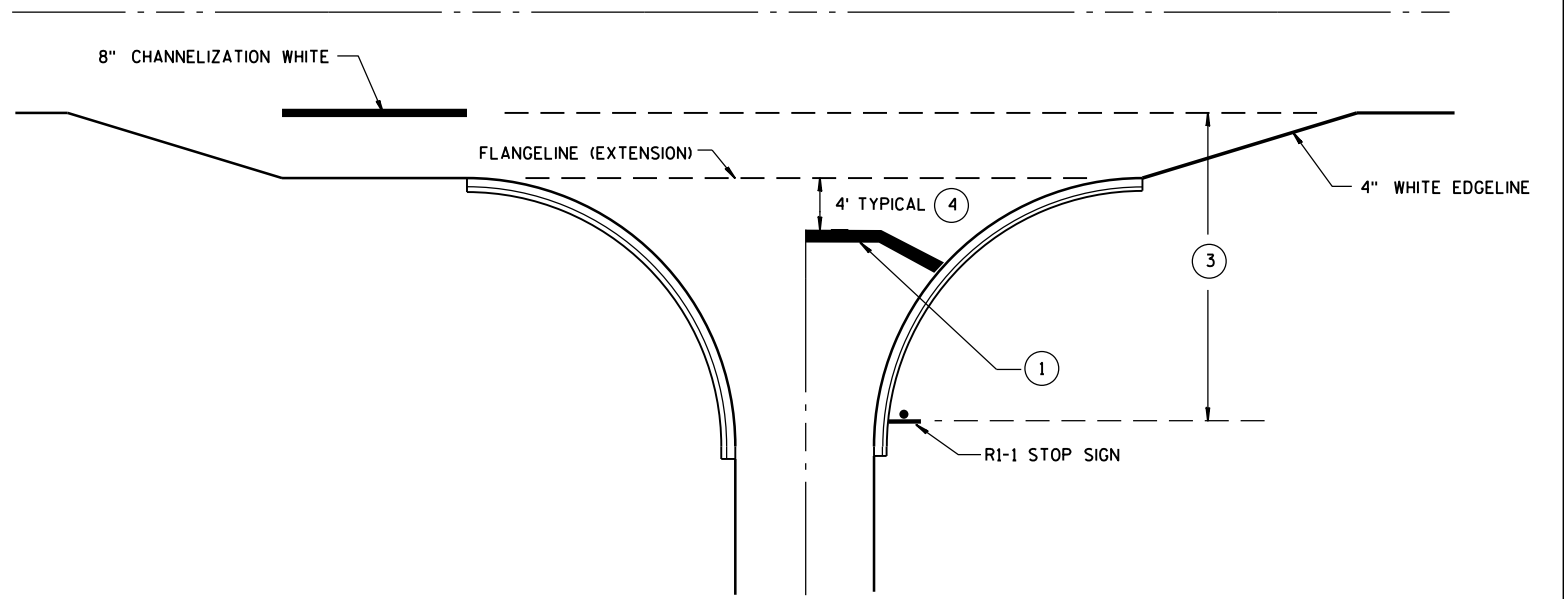


BIKE LANE ARROW

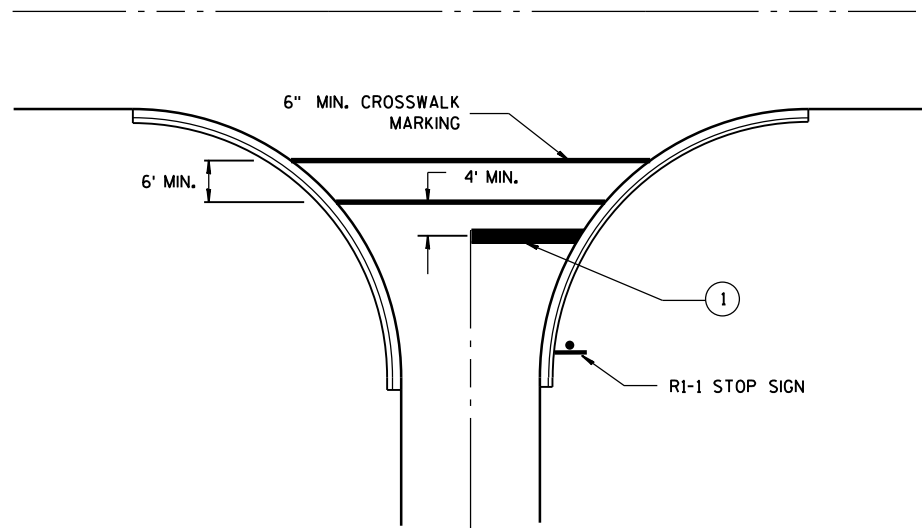
PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-30-2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER
FHWA	



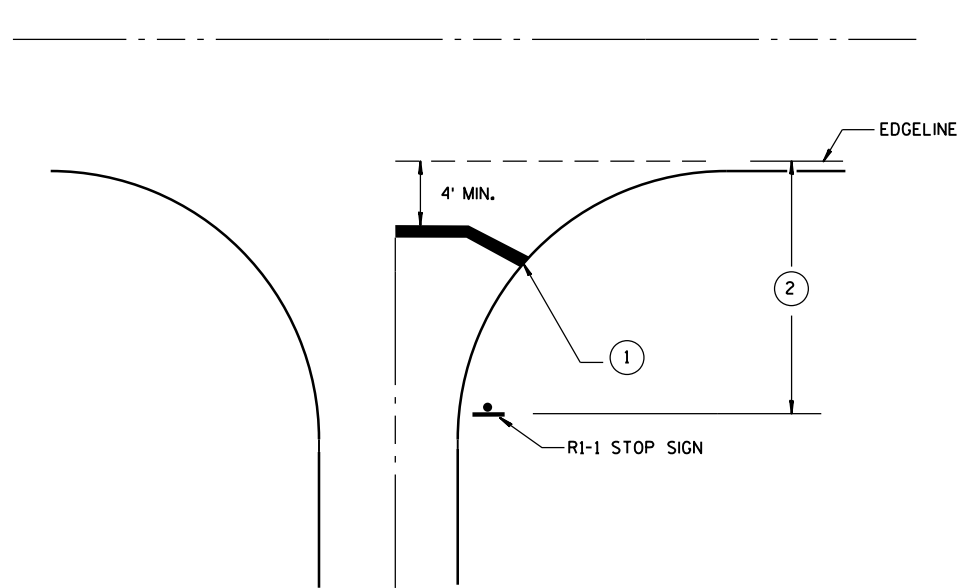
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING

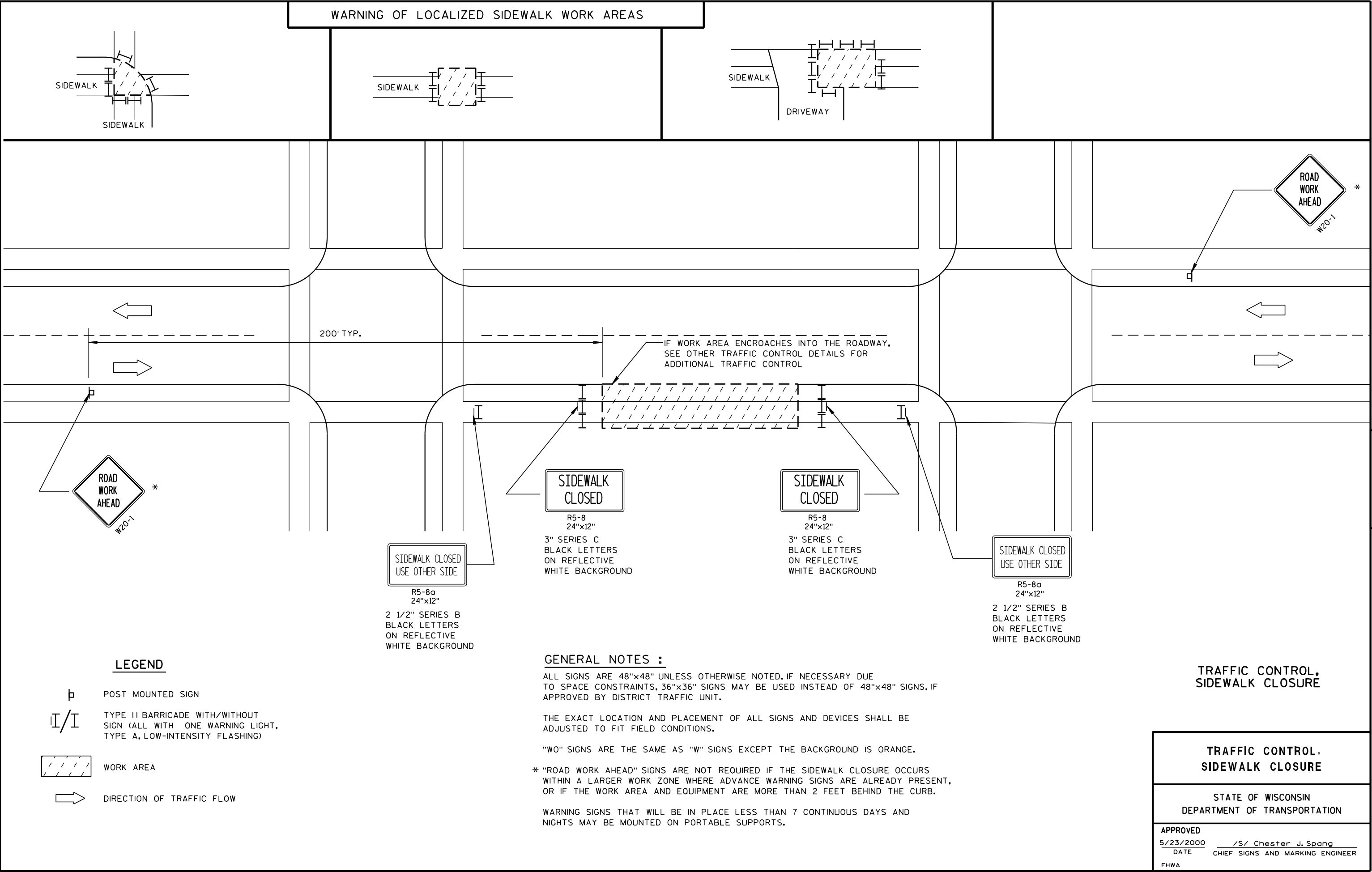


TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

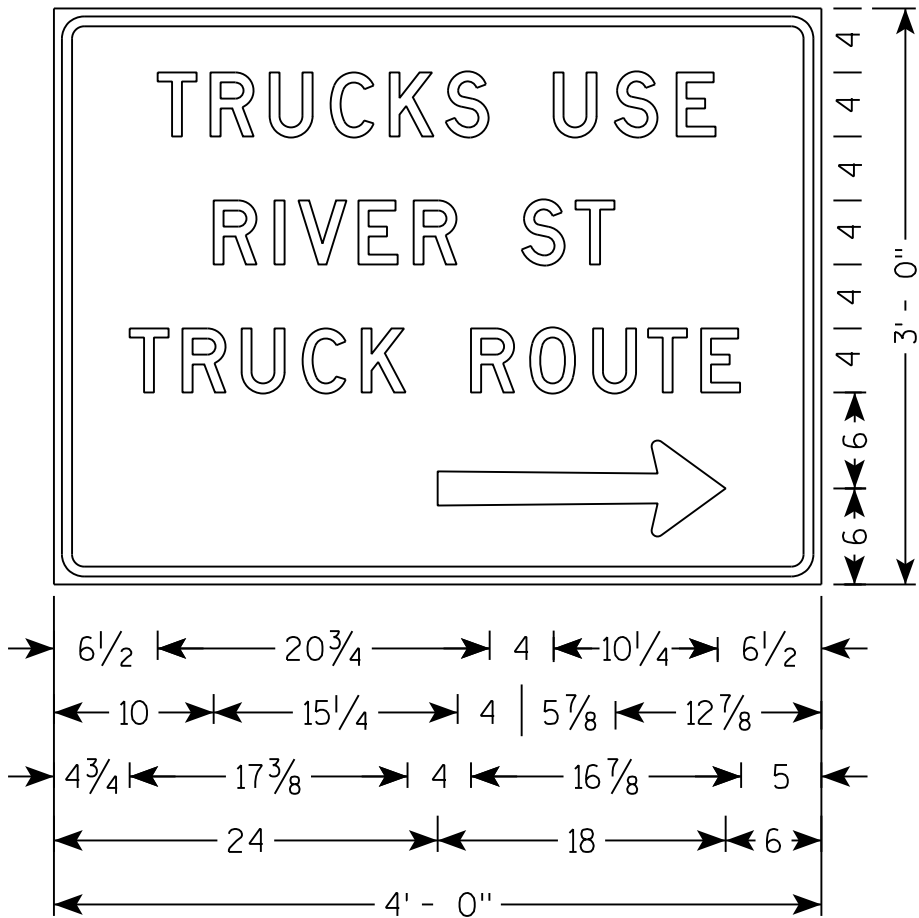
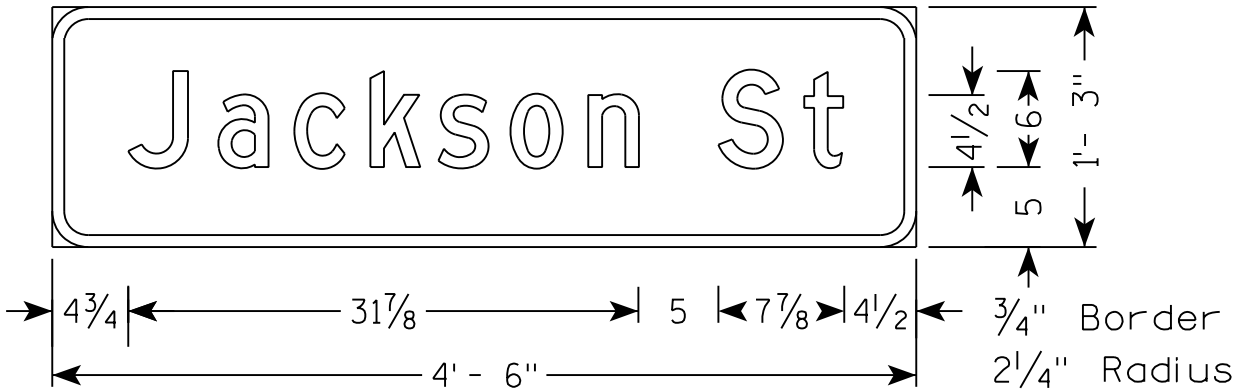
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP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

STOP LINE AND CROSSWALK PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/30/2013 DATE	/S/ Travis Feltz STATE TRAFFIC ENGINEER
FHWA	

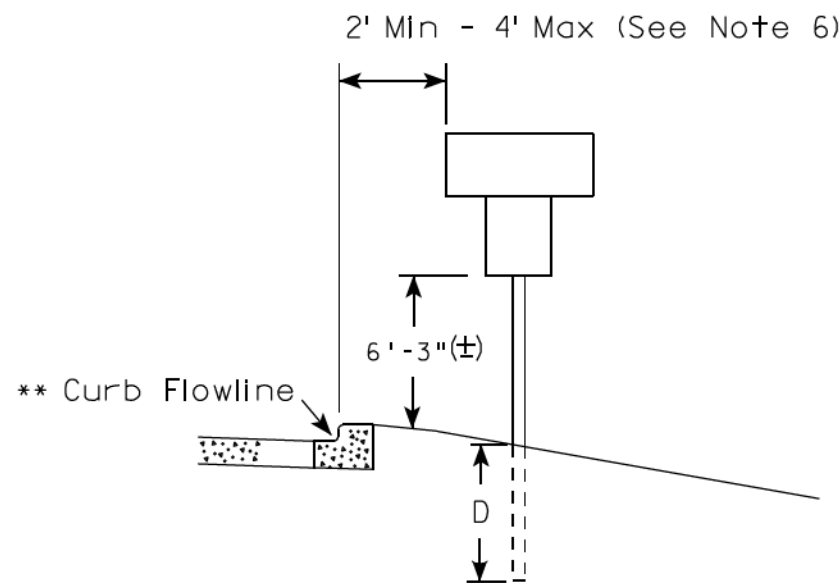
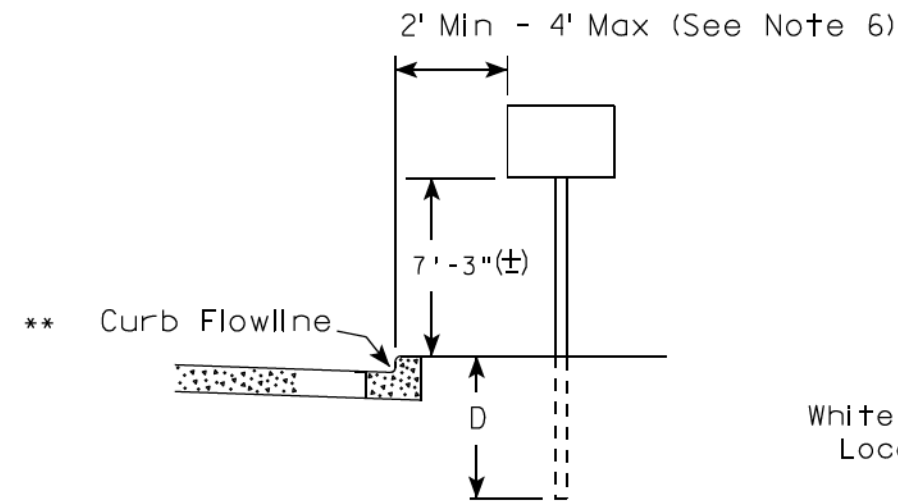


NOTES

- 1. All Signs Type II - Type F Reflective
- 2. Color:
Background - ORANGE
Message - BLACK
- 3. Message Series - D

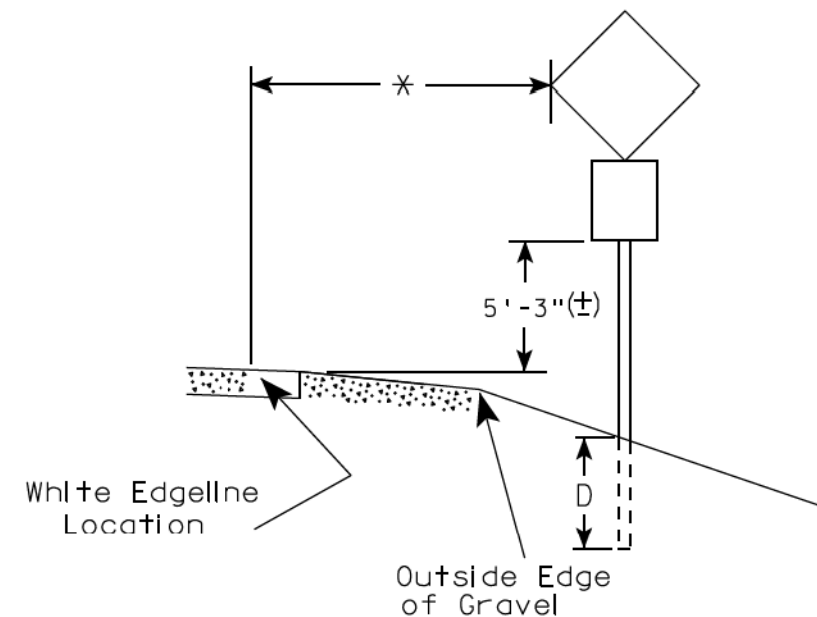
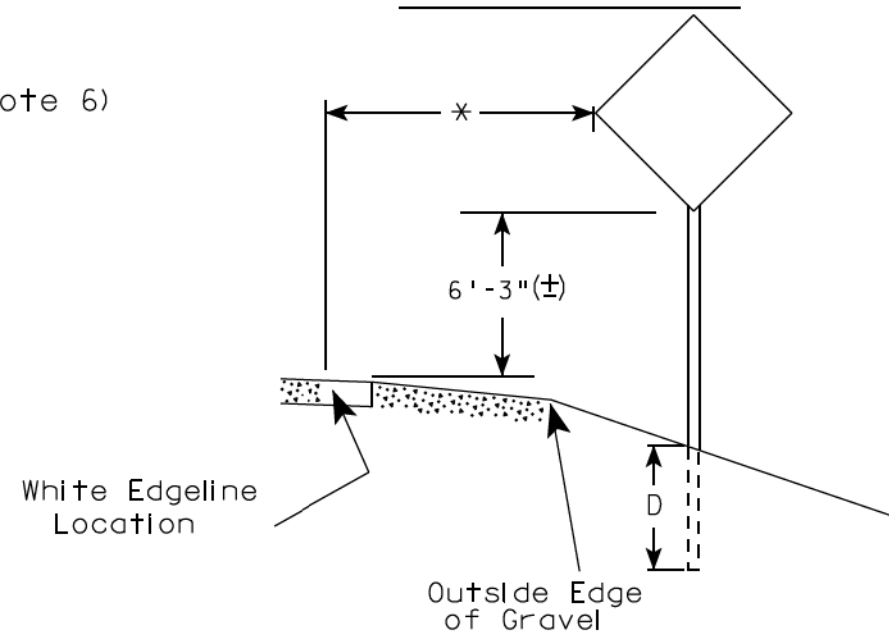


URBAN AREA



✱✱ 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.

RURAL AREA (See Note 2)



* 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, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (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), Enhanced Reference Markers, 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 9/30/13 PLATE NO. A4-3.18

PROJECT NO: 5990-00-84

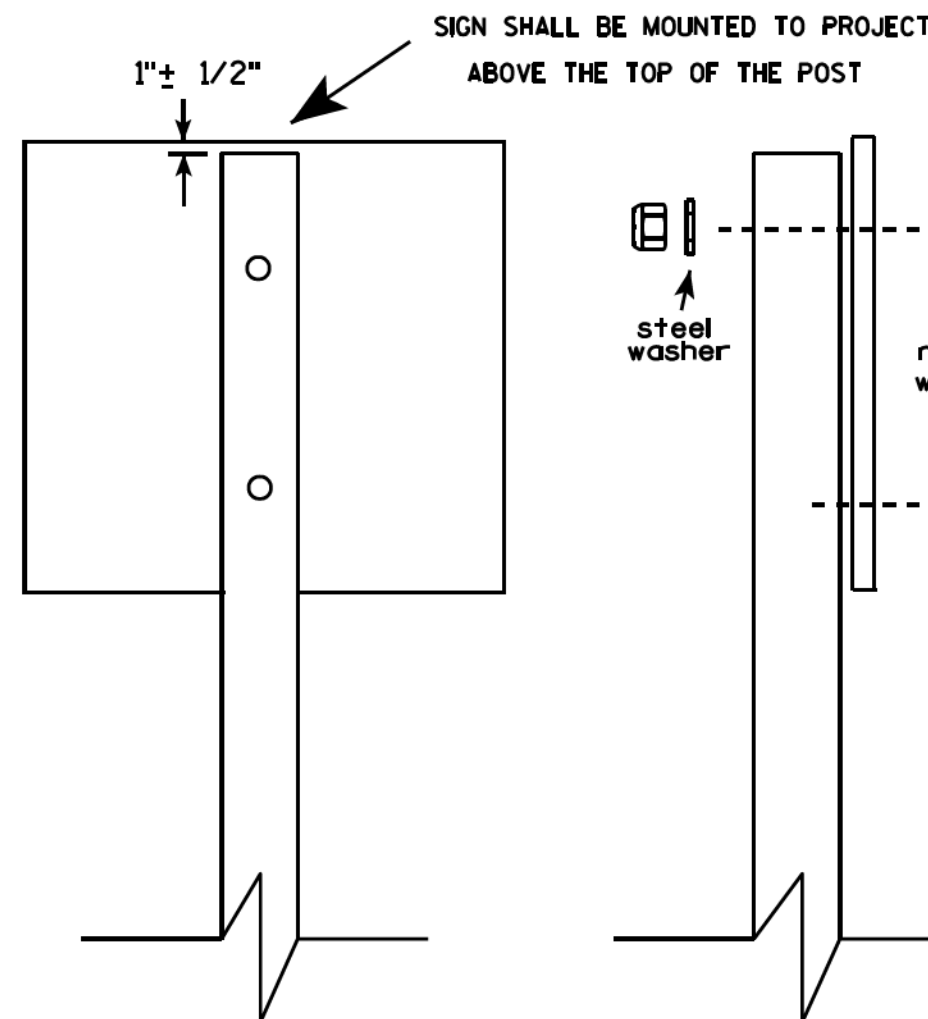
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



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

- Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- 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 - $\frac{3}{8}$ " X 3"

MACHINE BOLTS - $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts

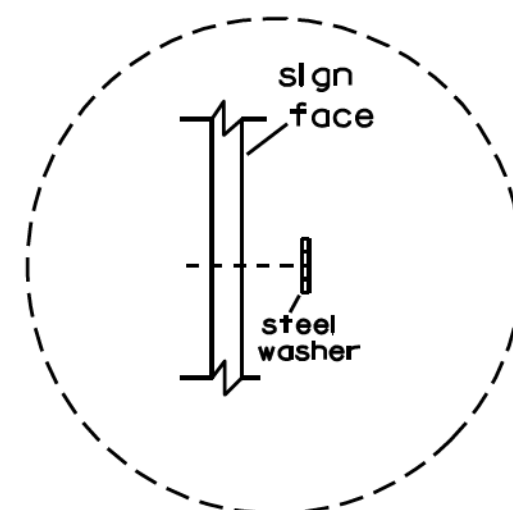
RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL

O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL

1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON for all Type H signs.



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.

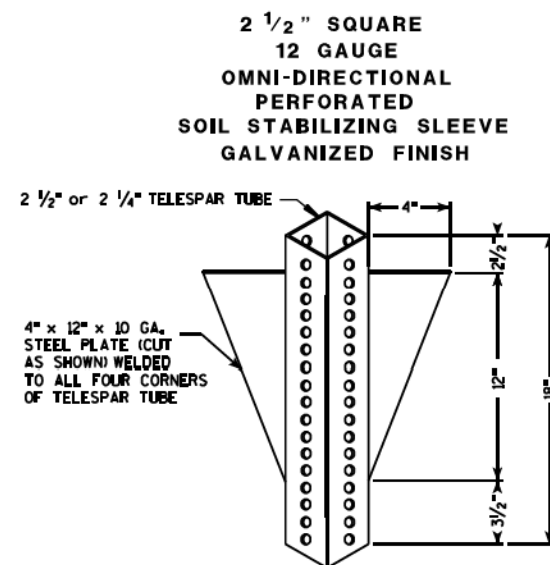
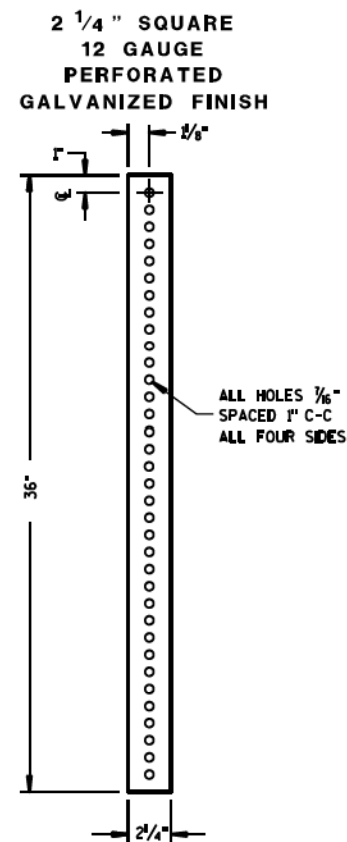
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

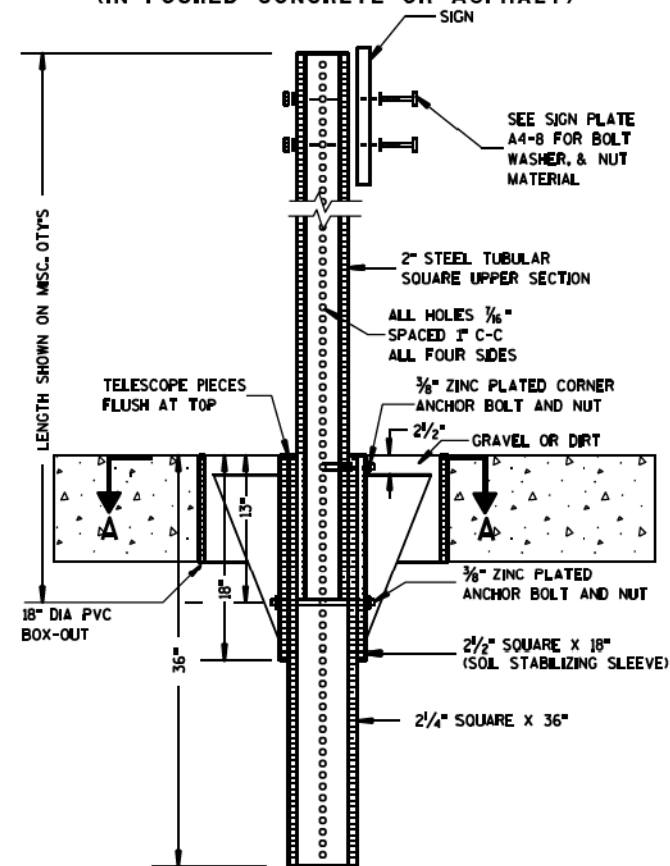
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

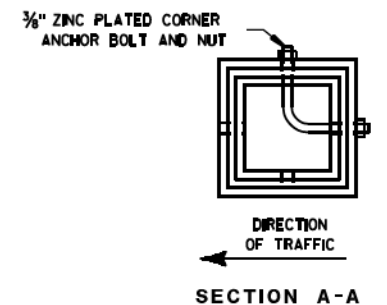
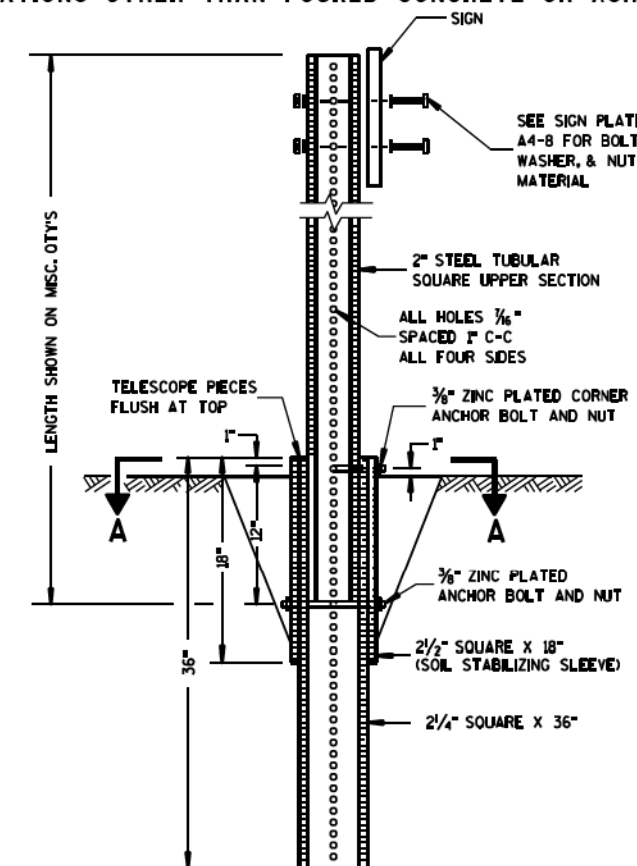
TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM



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



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



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

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

TUBULAR STEEL SIGN POST A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:5990-00-84

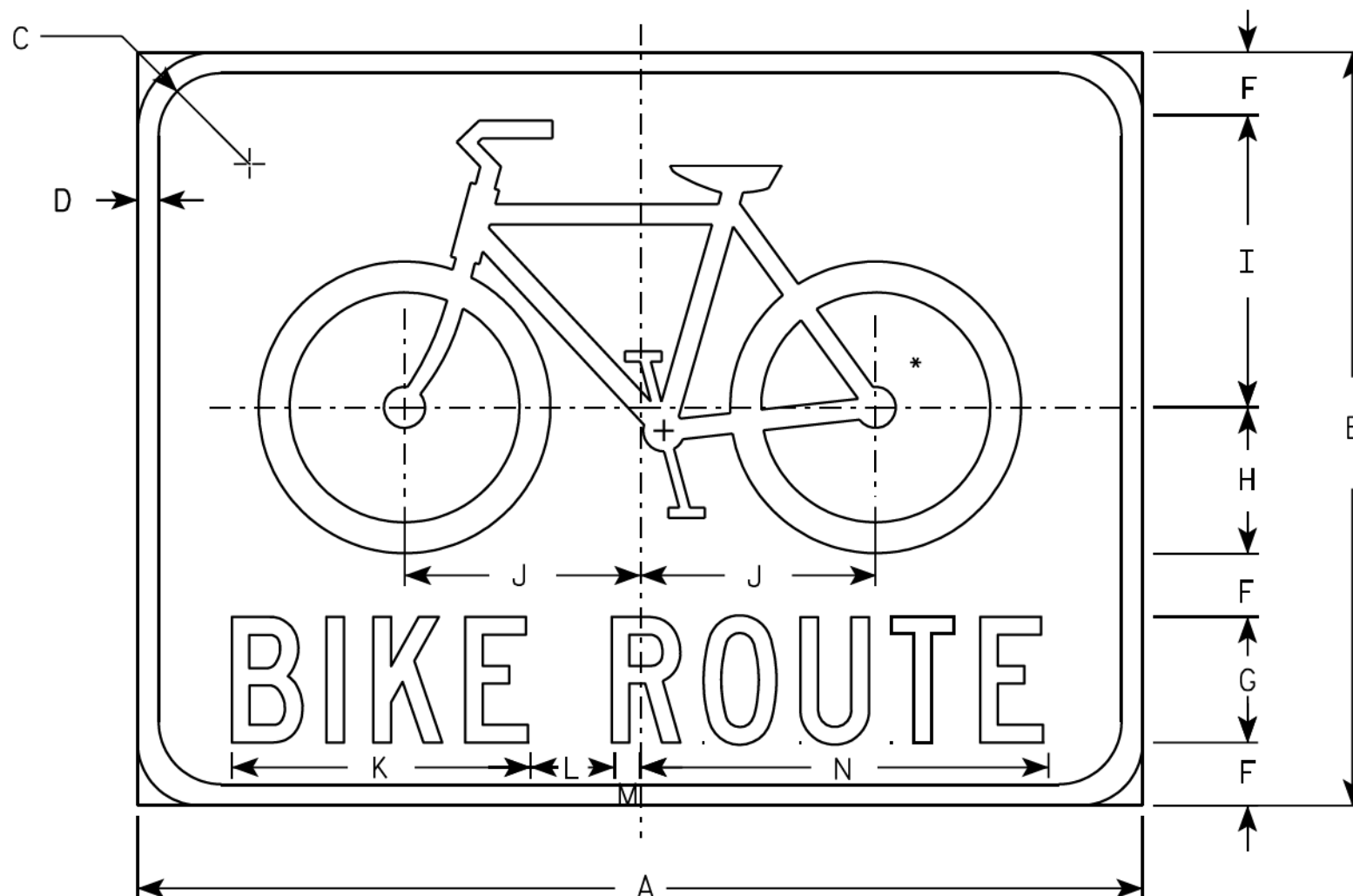
HWY:JACKSON STREET

COUNTY:ROCK

SIGN PLATES

SHEET

E



D11-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
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.

* See W11-1 for symbol design

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
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.	Area m ²
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4													3.0	0.27
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13													5.0	0.45
4																												
5																												

STANDARD SIGN
D11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

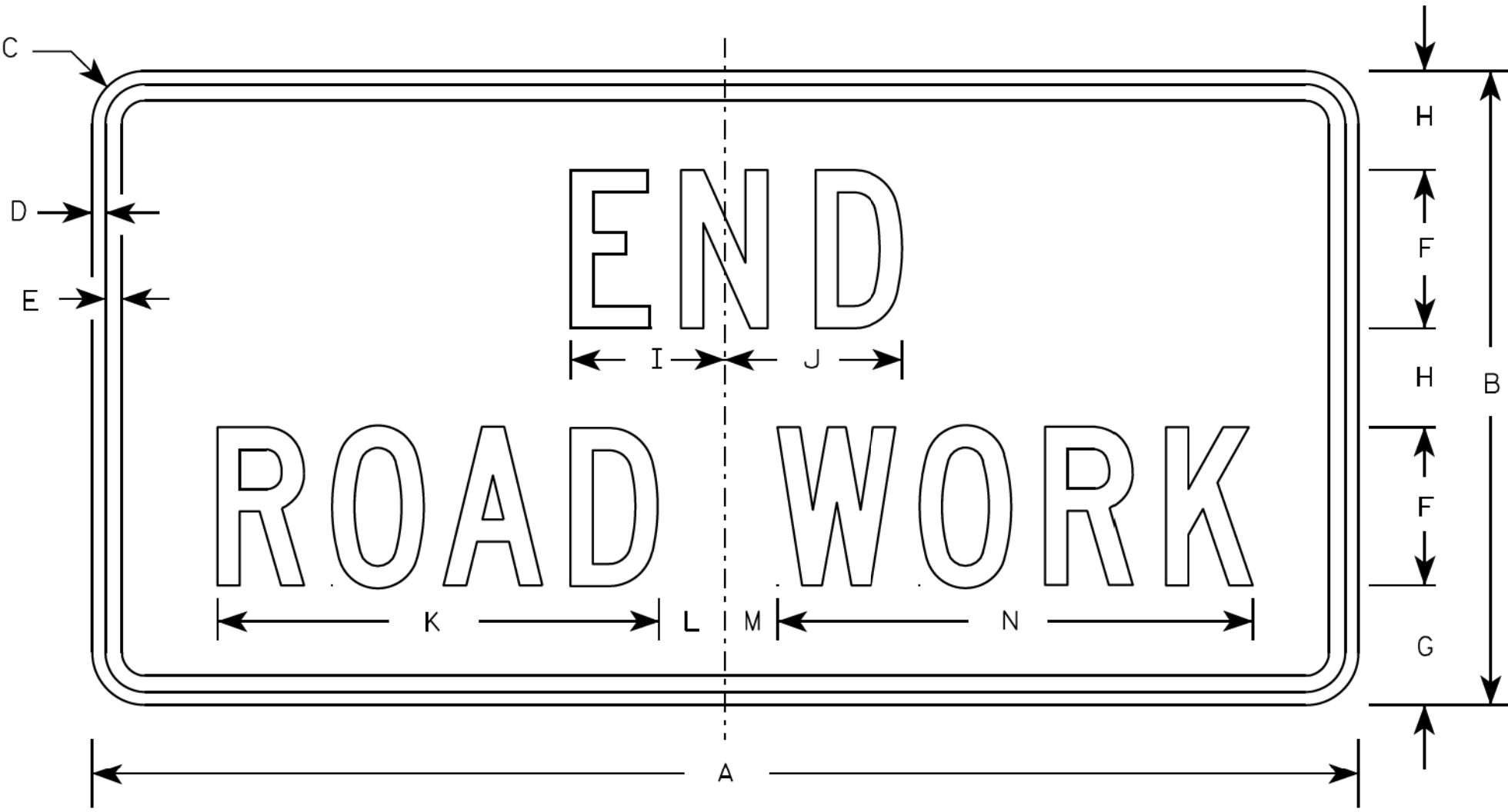
SIGN PLATES

SHEET

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 - 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.



G20-2A

Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 ⅛	¾	½	4	3 ¾	2 ½	4 ⅛	4 ⅛	11 ⅛	2	1	12 ⅛													4.5	0.41
2	48	24	1 ½	½	⅝	6	4 ½	3 ¾	5 ⅞	6 ¾	16 ¾	2 ½	1 ¾	18 ½													8.0	0.72
3	48	24	1 ½	½	⅝	6	4 ½	3 ¾	5 ⅞	6 ¾	16 ¾	2 ½	1 ¾	18 ½													8.0	0.72
4	48	24	1 ½	½	⅝	6	4 ½	3 ¾	5 ⅞	6 ¾	16 ¾	2 ½	1 ¾	18 ½													8.0	0.72
5	48	24	1 ½	½	⅝	6	4 ½	3 ¾	5 ⅞	6 ¾	16 ¾	2 ½	1 ¾	18 ½													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.B

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

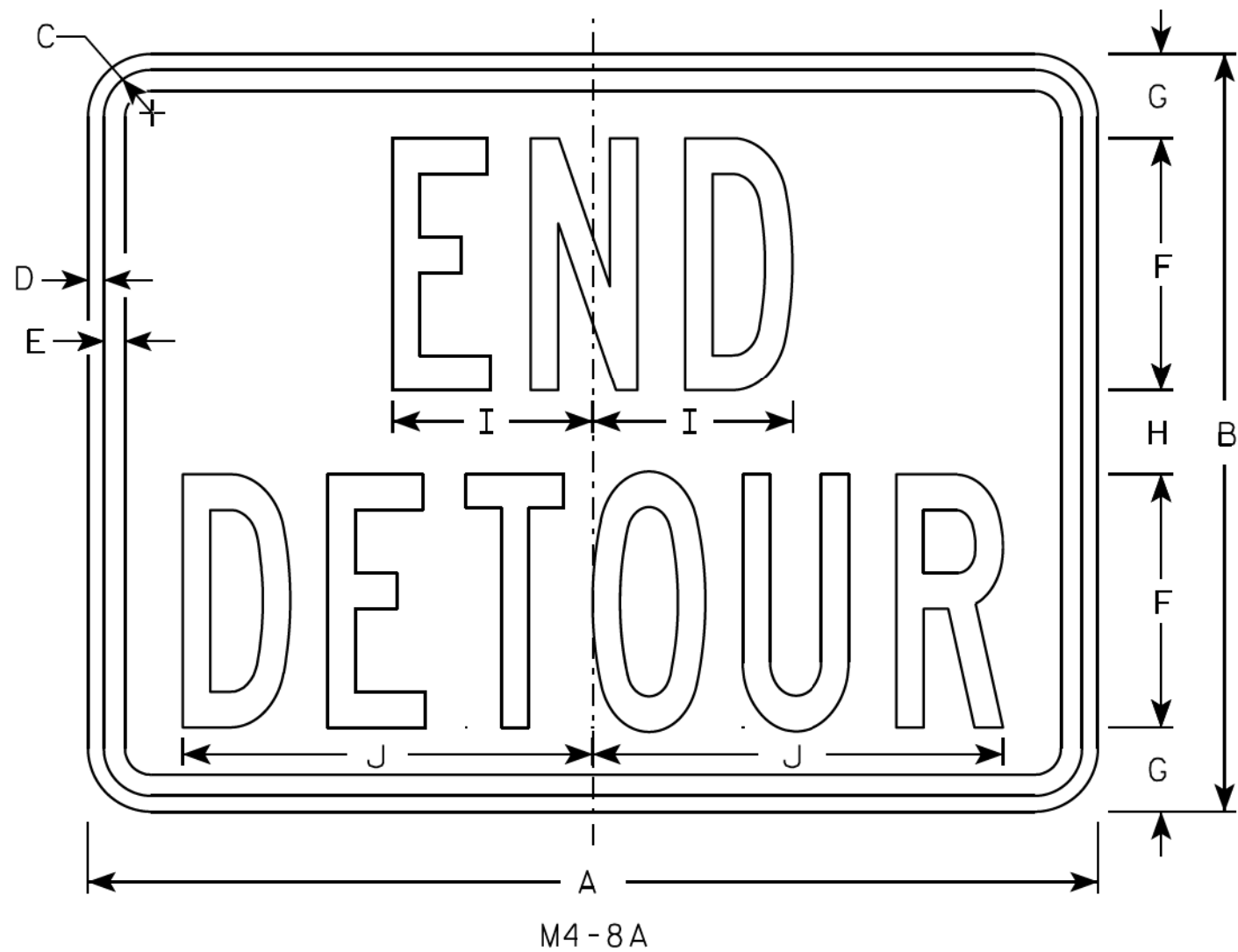
SIGN PLATES

SHEET

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 - Orange
Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-8A

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																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:5990-00-84

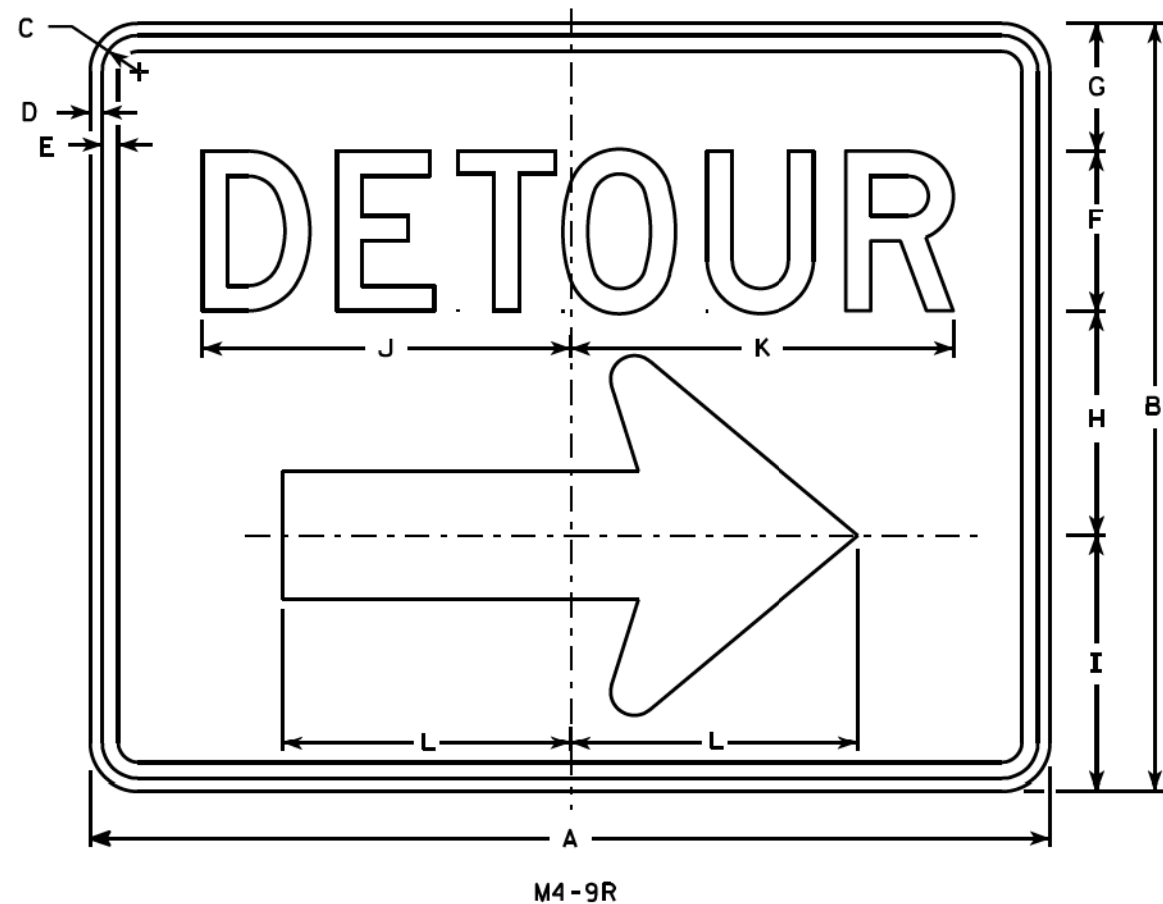
HWY: JACSON STREET

COUNTY: ROCK

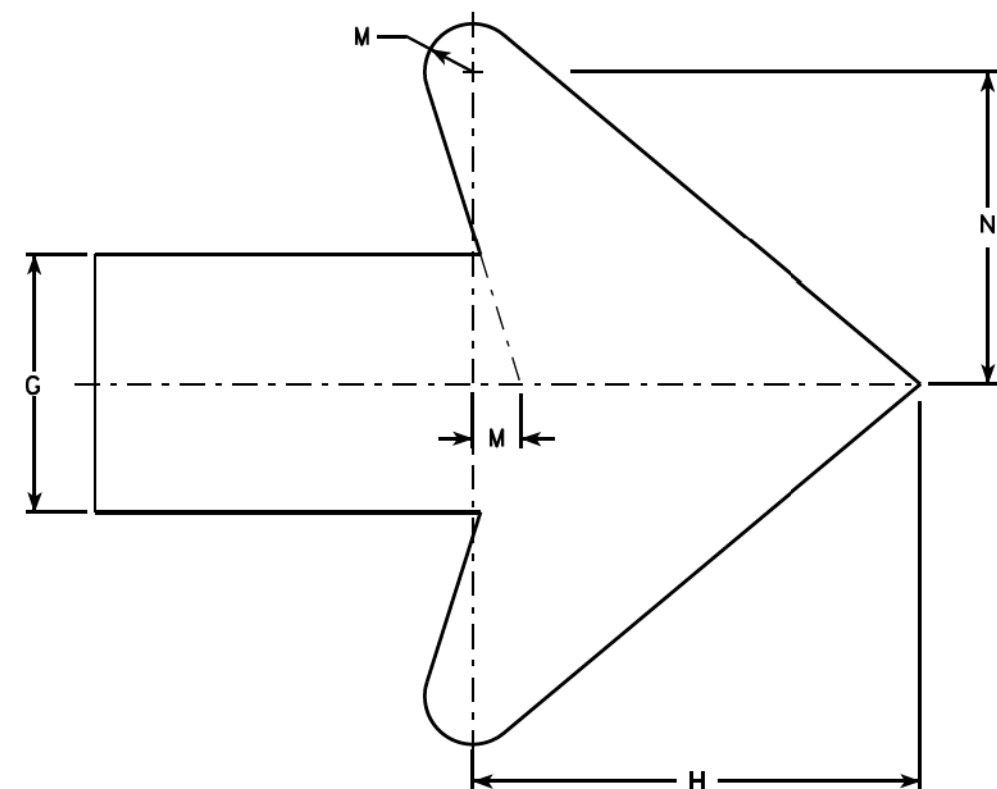
SIGN PLATES

SHEET

E



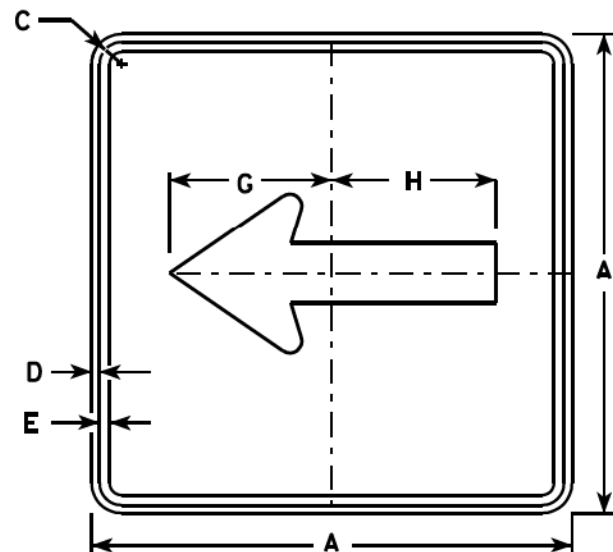
- NOTES**
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Orange
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall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



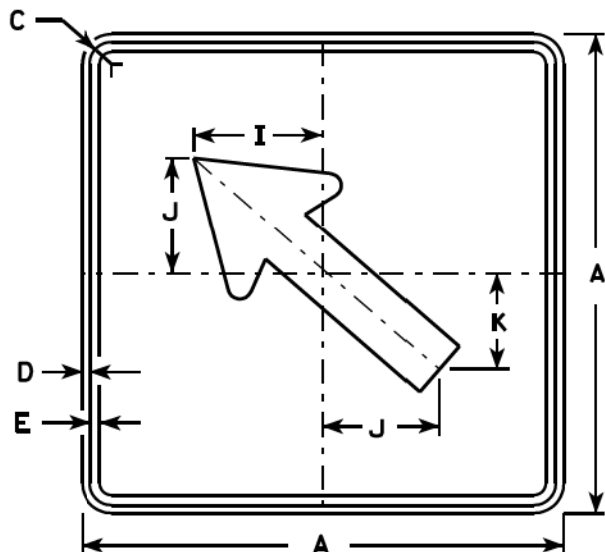
Arrow Detail

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

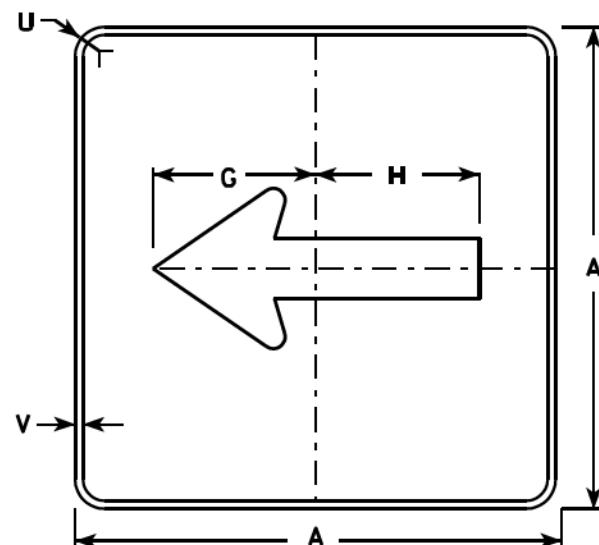
STANDARD SIGN M4-9 R & L	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/9/11	PLATE NO. M4-9R.4



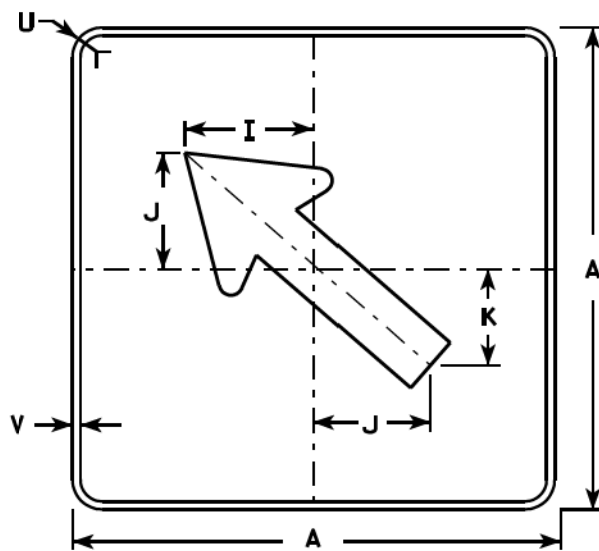
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MP6-2
MR6-2



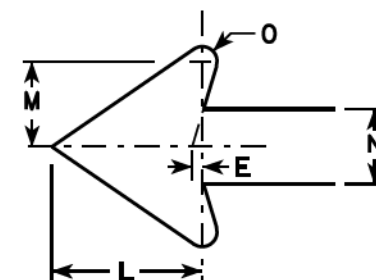
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
 - Background - See note 4
 - Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White - Type H Reflective Message - Black
MB6-1 and MB6-2 Background - Blue Message - White - Type H 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 - Type F Reflective Message - Black
MP6-1 and MP6-2 Background - White - Type H Reflective Message - Blue
MR6-1 and MR6-2 Background - Brown Message - Yellow - 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	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:5990-00-84

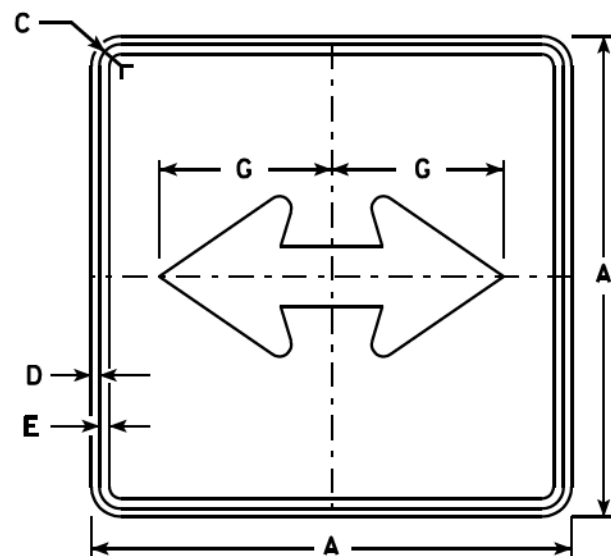
HWY: JACSON STREET

COUNTY: ROCK

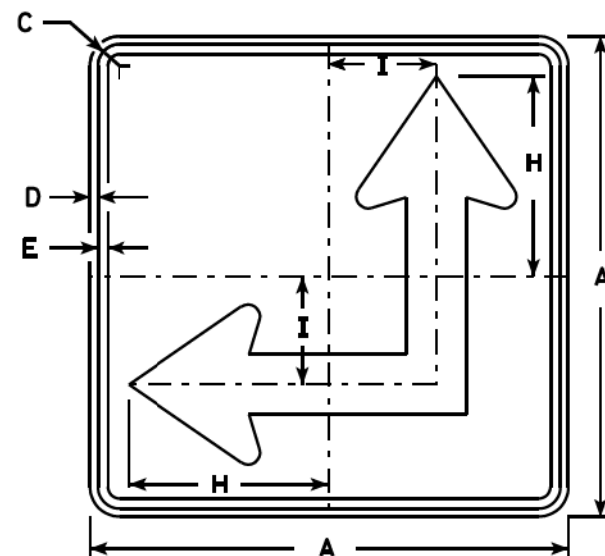
SIGN PLATES

SHEET

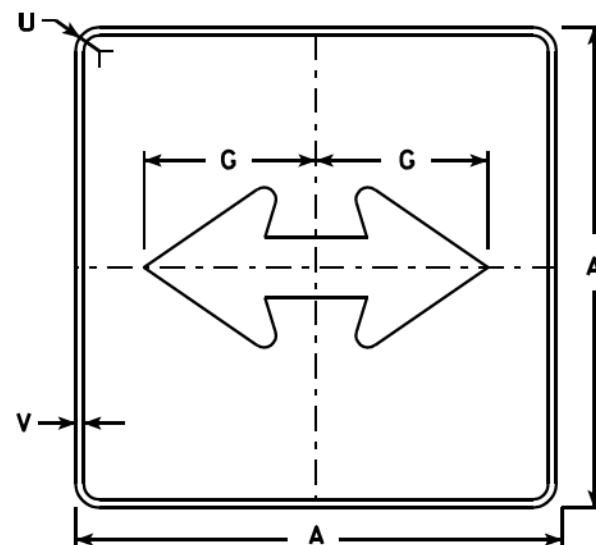
E



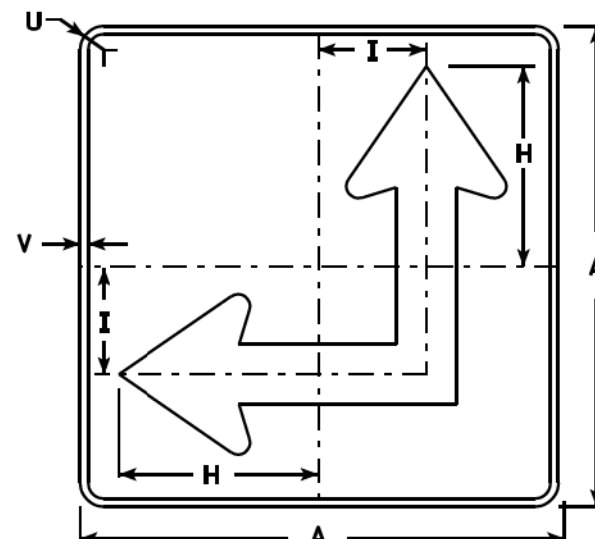
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MP6 - 4
MR6 - 4



M6 - 6
MK6 - 6
MM6 - 6
MO6 - 6
MP6 - 6
MR6 - 6



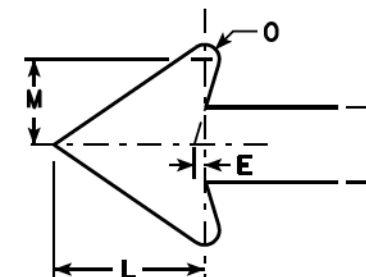
MB6 - 4
MG6 - 4
MN6 - 4



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See Note 4
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White - Type H Reflective
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White - Type H Reflective
MG6-4 and MG6-6 Background - Green
Message - White - Type H Reflective
MK6-4 and MK6-6 Background - Green
Message - White - Type H Reflective
MM6-4 and MM6-6 Background - White - Type H Reflective
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White - Type H Reflective
MO6-4 and MO6-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White - Type H Reflective
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO: 5990-00-84

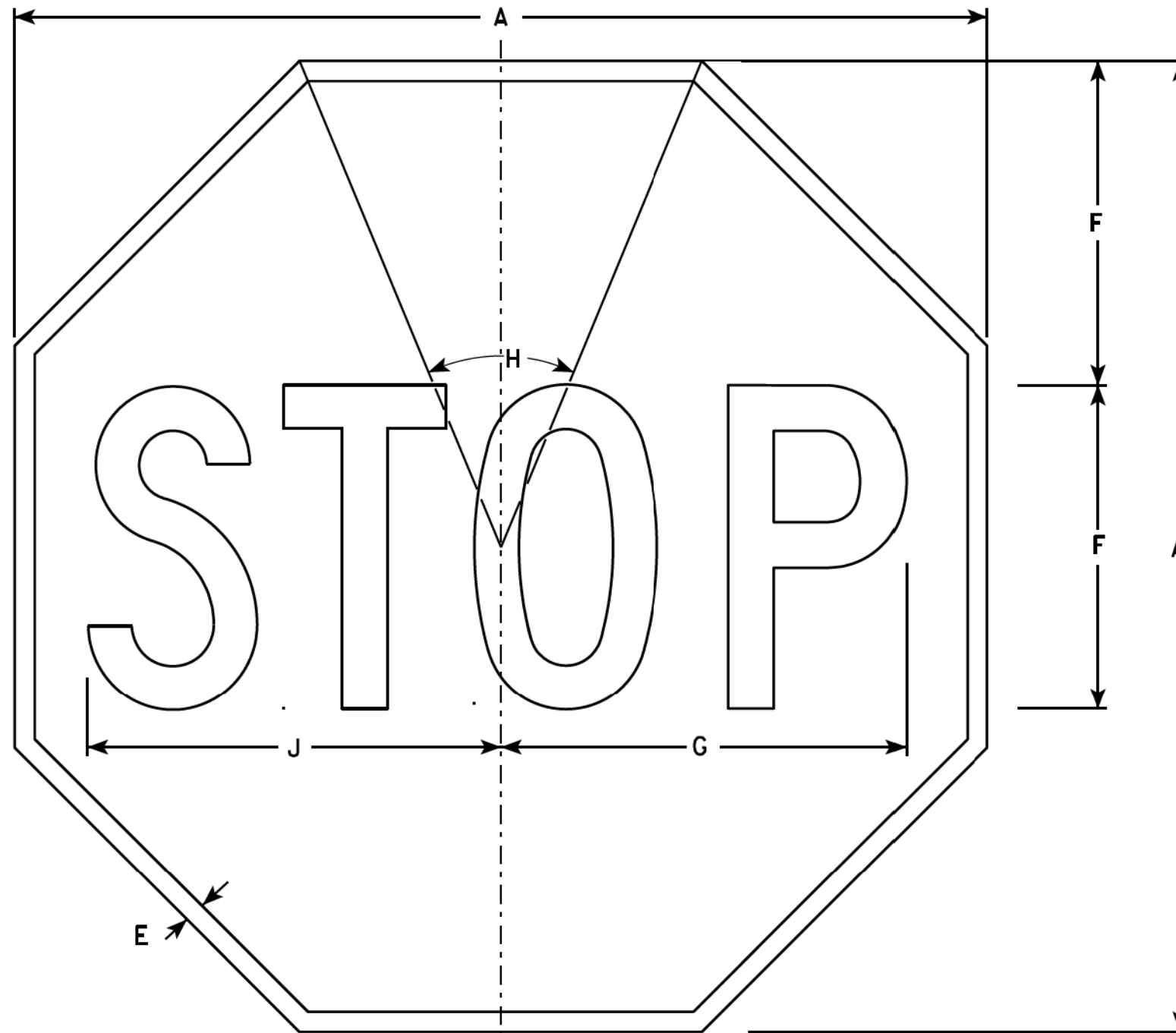
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - 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	Avg sq. ft.
1	24				$\frac{3}{8}$	8	10	45°		10 $\frac{1}{4}$																	3.31
2S	30				$\frac{5}{8}$	10	12 $\frac{1}{2}$	45°		12 $\frac{3}{4}$																	5.18
2M	36				$\frac{3}{4}$	12	15	45°		15 $\frac{3}{8}$																	7.46
3	36				$\frac{3}{4}$	12	15	45°		15 $\frac{3}{8}$																	7.46
4	48				1	16	20	45°		20 $\frac{1}{2}$																	13.25
5	48				1	16	20	45°		20 $\frac{1}{2}$																	13.25
6	18				$\frac{3}{8}$	6	7 $\frac{3}{4}$	45°		7 $\frac{3}{4}$																	1.86
7	12				$\frac{1}{4}$	4	5	45°		5 $\frac{1}{8}$																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-112

PROJECT NO:5990-00-84

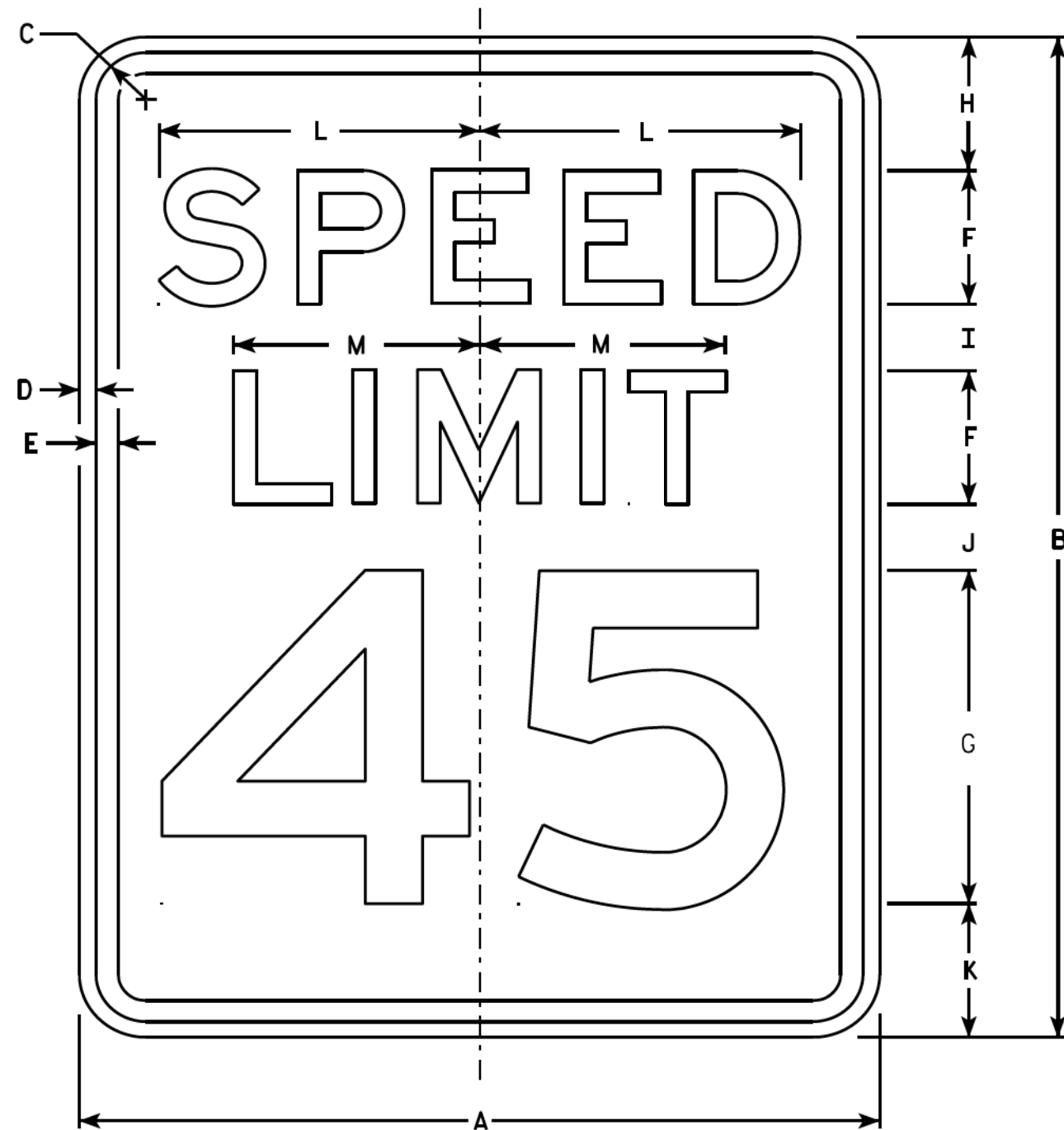
HWY: JACSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

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. R2-113

PROJECT NO:5990-00-84

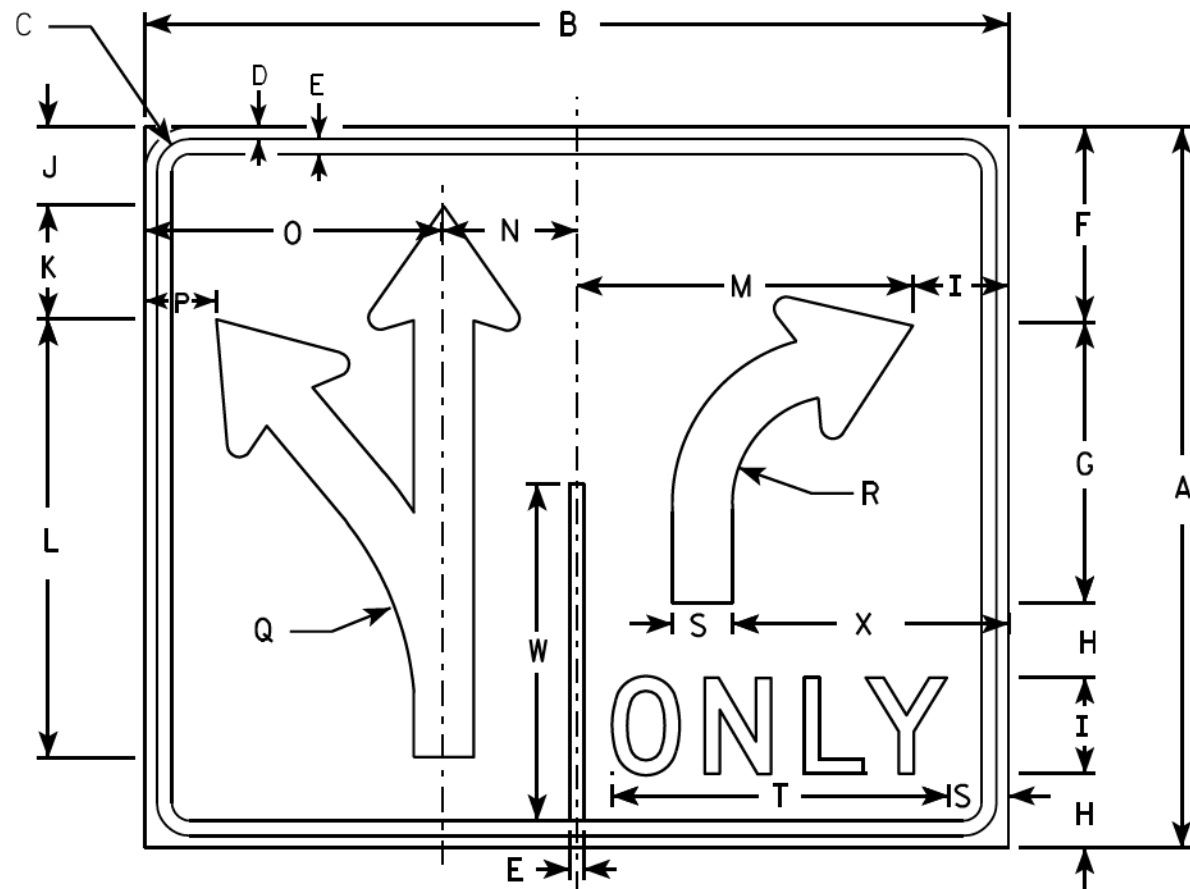
HWY: JACSON STREET

COUNTY: ROCK

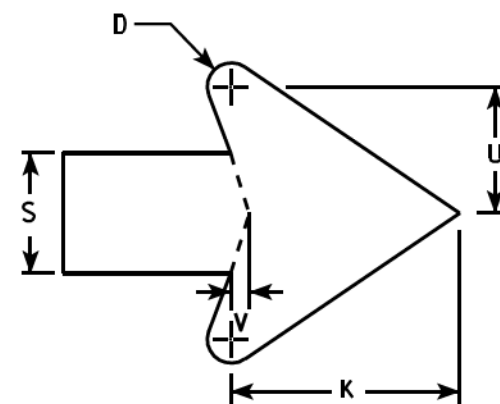
SIGN PLATES

SHEET

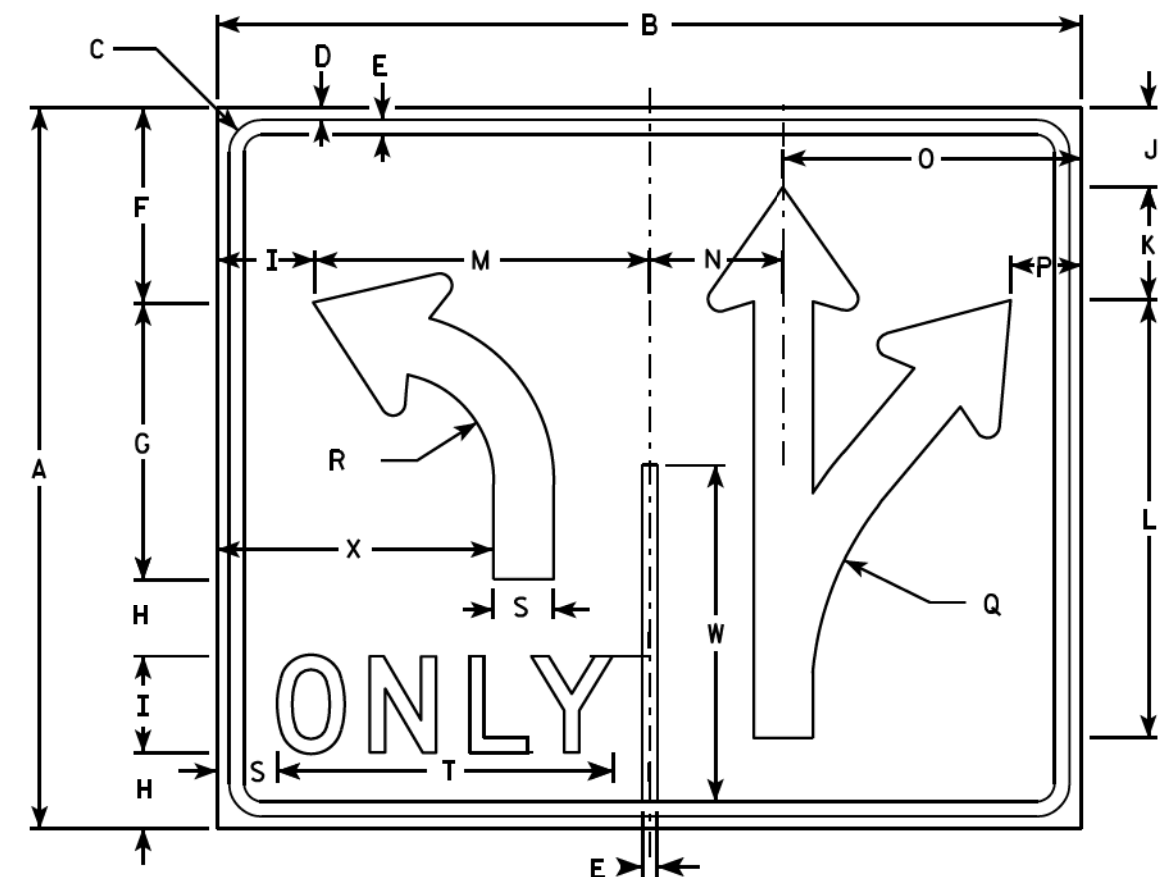
E



R3-8



ARROW DETAIL



R3-8A

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.

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: 5990-00-84

HWY: JACKSON STREET

COUNTY: ROCK

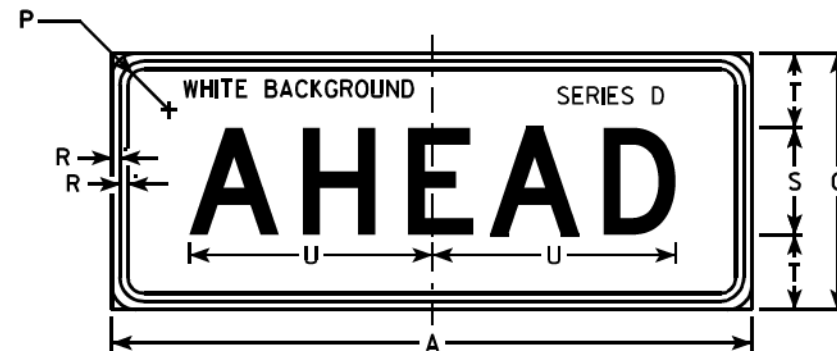
SIGN PLATES

SHEET

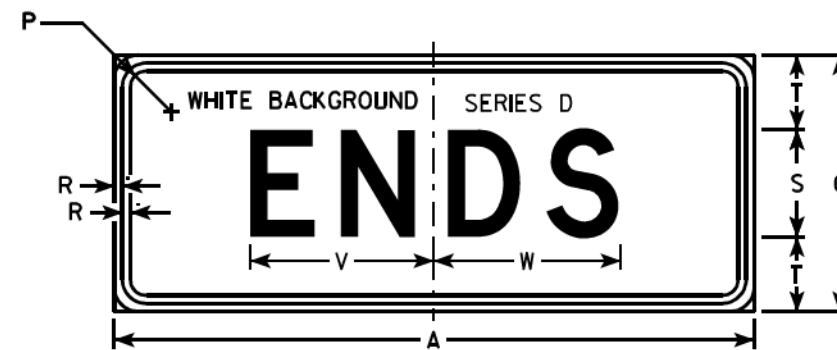
E



R3-17



R3-17ap



R3-17bp

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - AS SHOWN
Message - BLACK
3. Message Series - C or as noted on the Signs.
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.

																											R3-17	R3-17ap	R3-17b
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.	Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN	
R3-17 & R3-17a&bp	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Raush</i> for State Traffic Engineer
DATE 4/12/2011	PLATE NO. R3-17.2

PROJECT NO: 5990-00-84

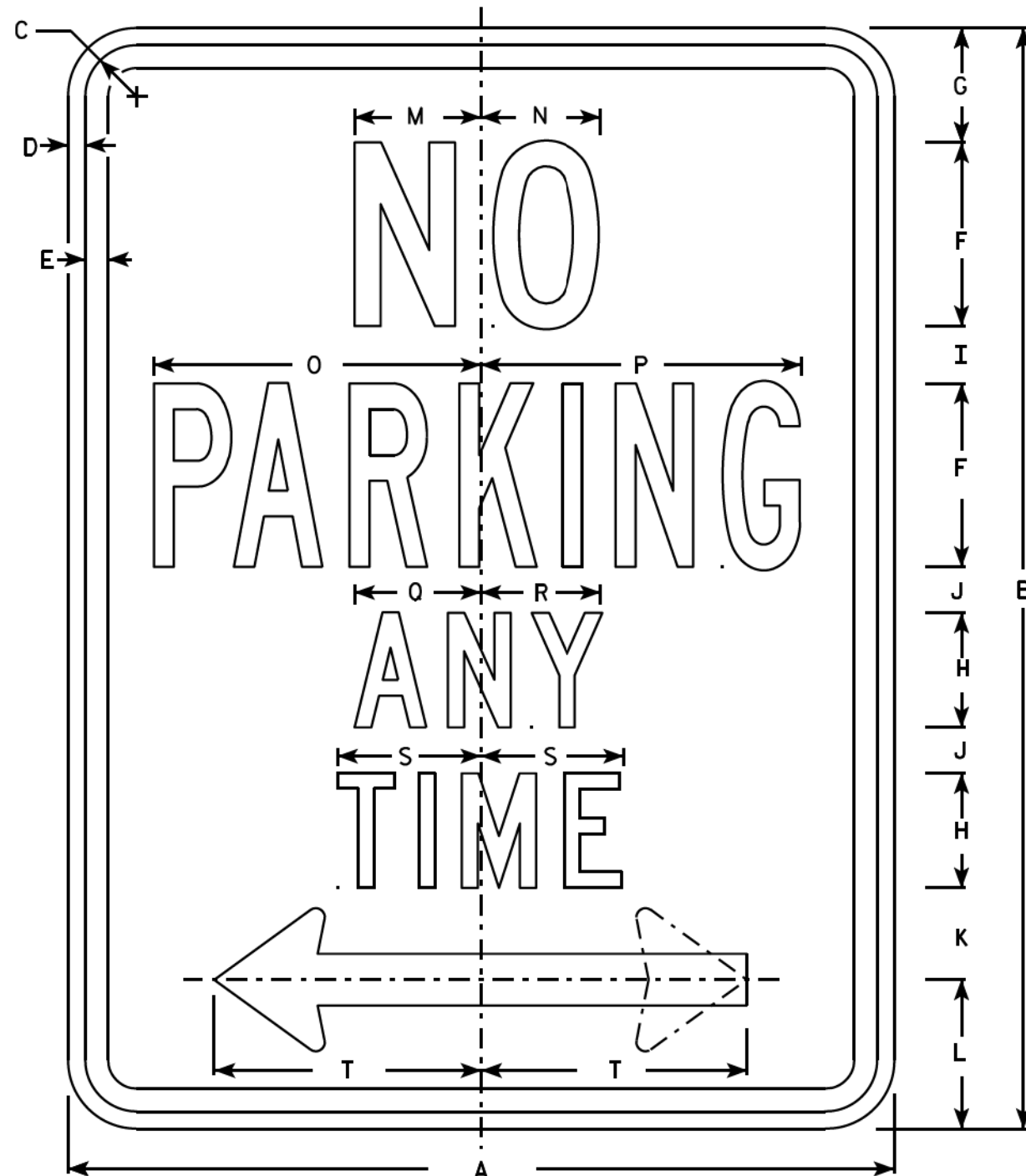
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

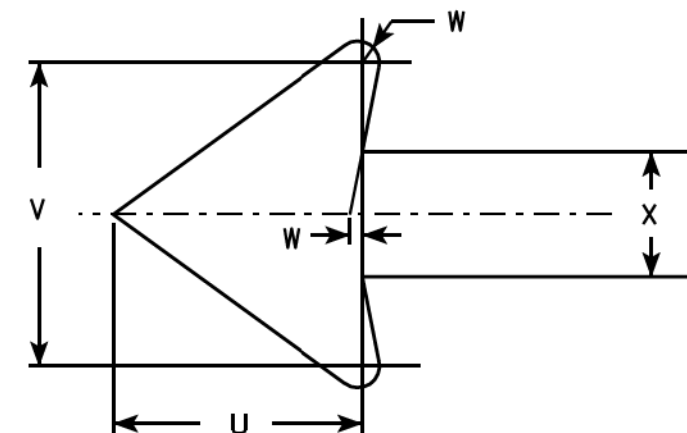
E



R7-1

NOTES

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



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

STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-19

PROJECT NO: 5990-00-84

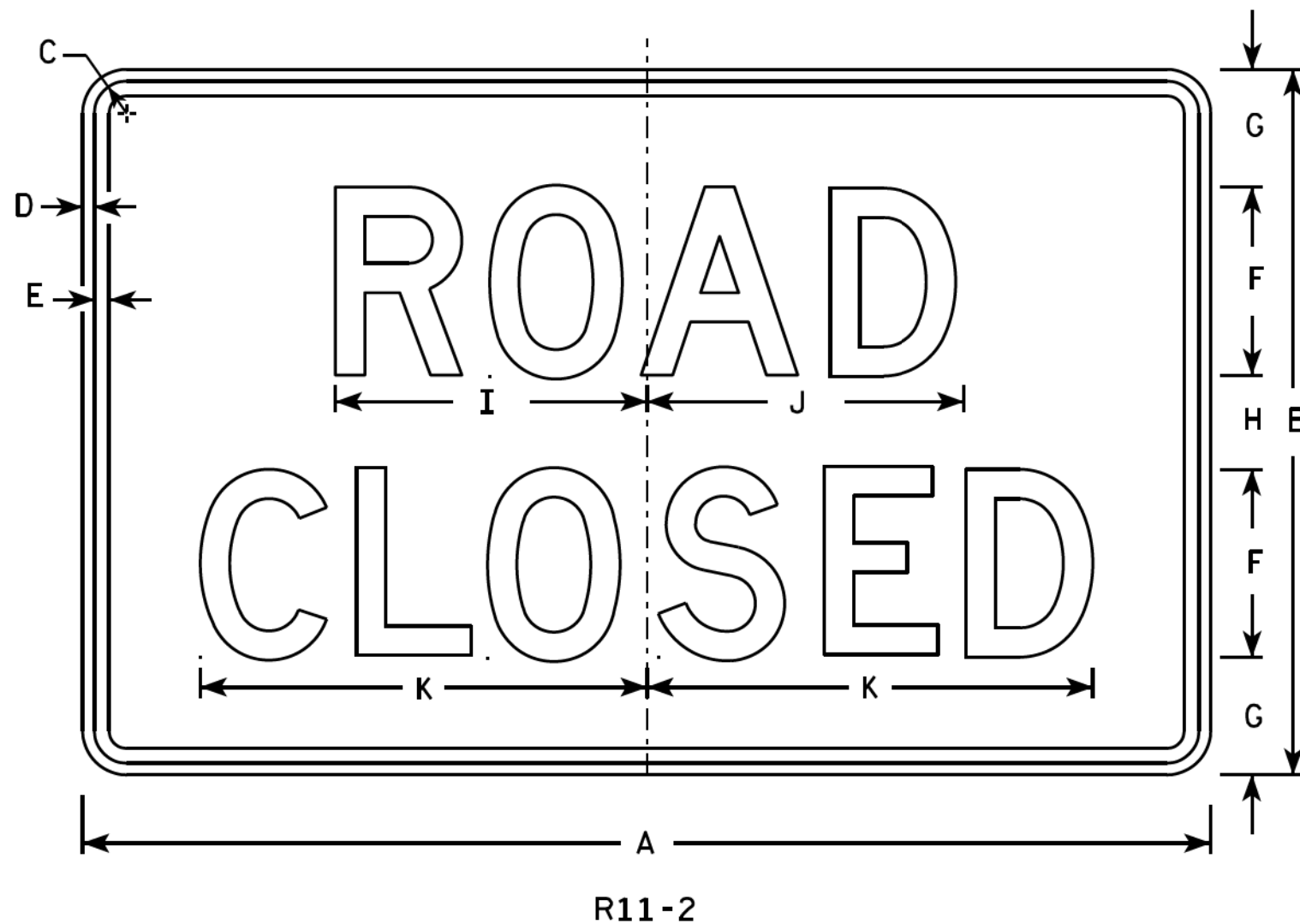
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

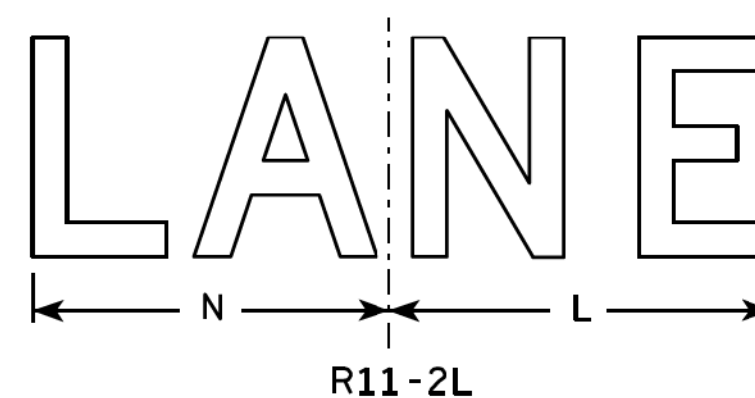
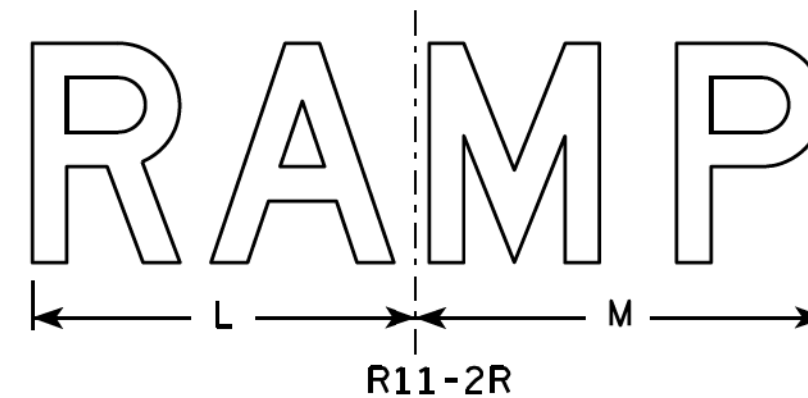
SHEET

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 - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



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

STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: 5990-00-84

HWY: JACKSON STREET

COUNTY: ROCK

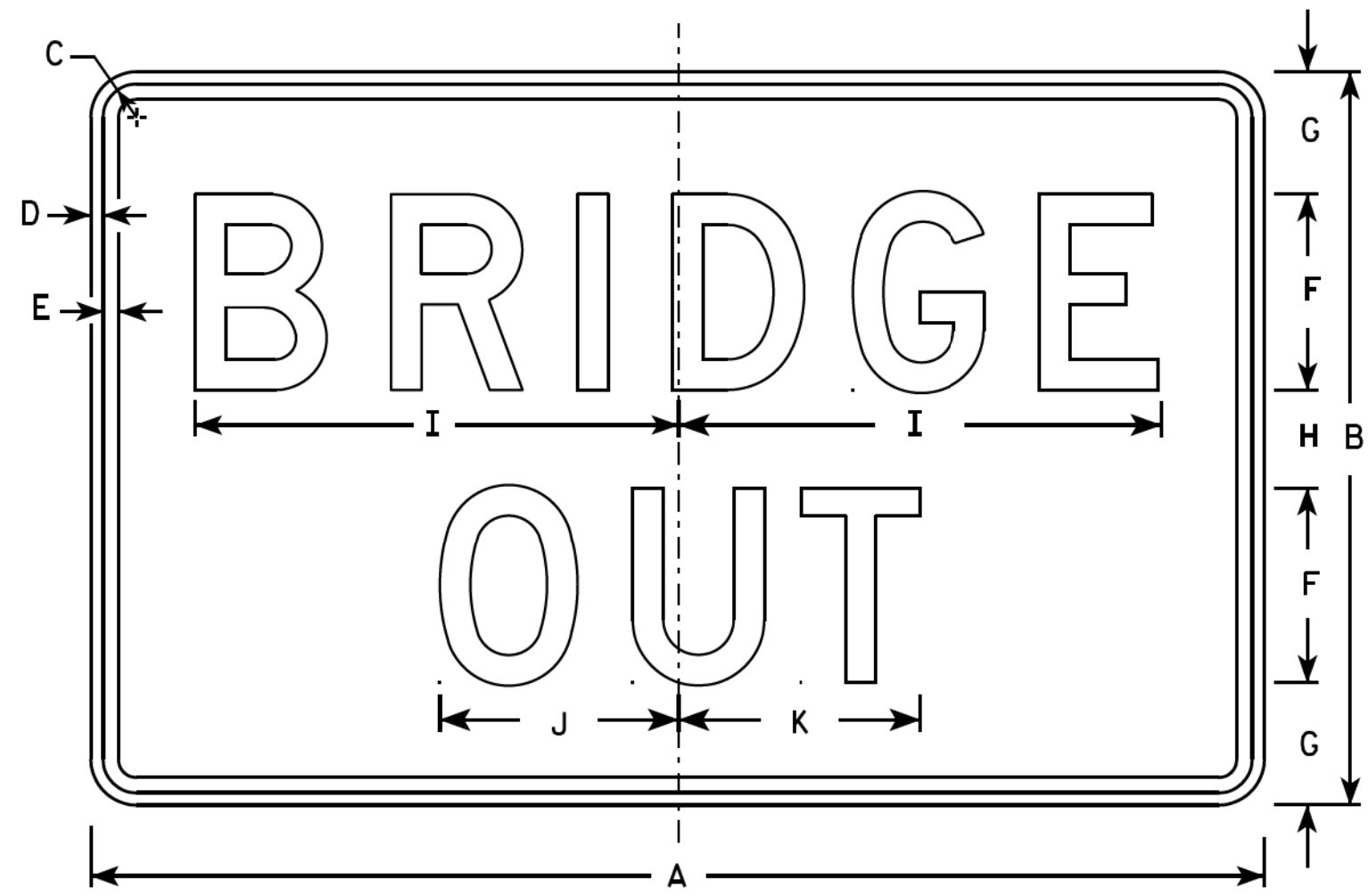
SIGN PLATES

SHEET

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 - 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.



R11-2B

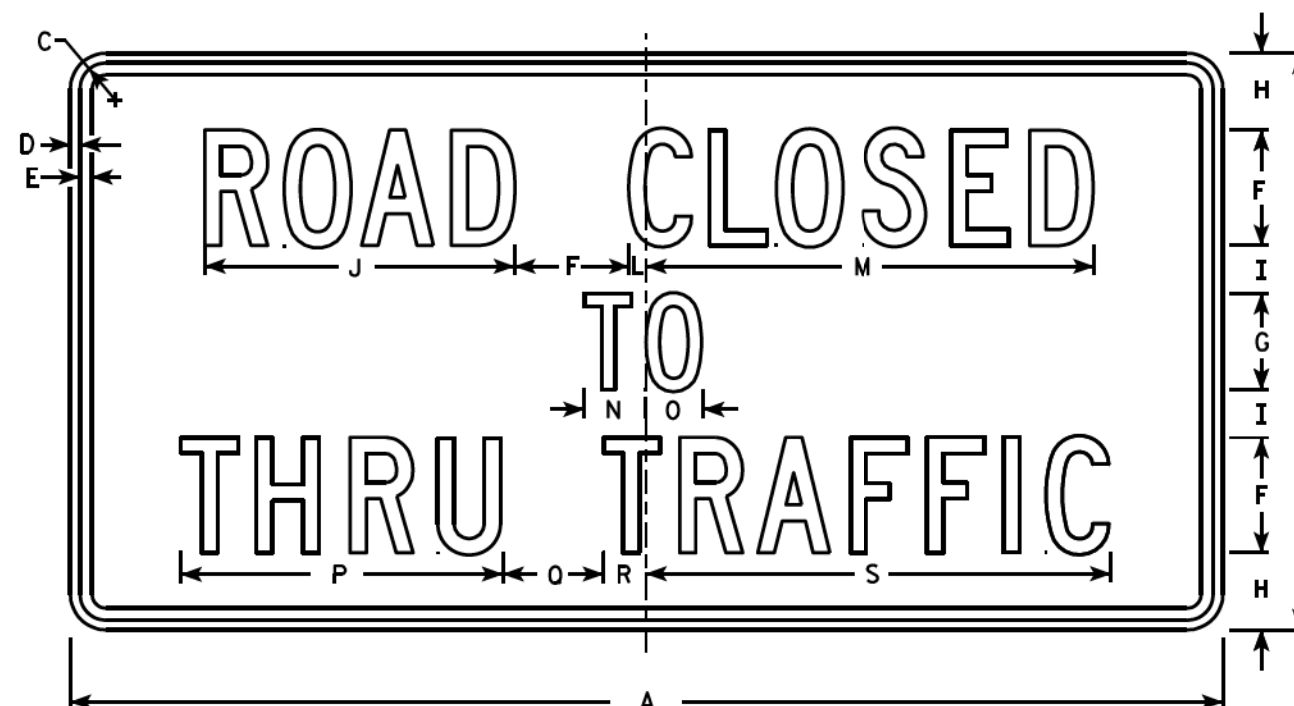
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew P. Rauch*
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2



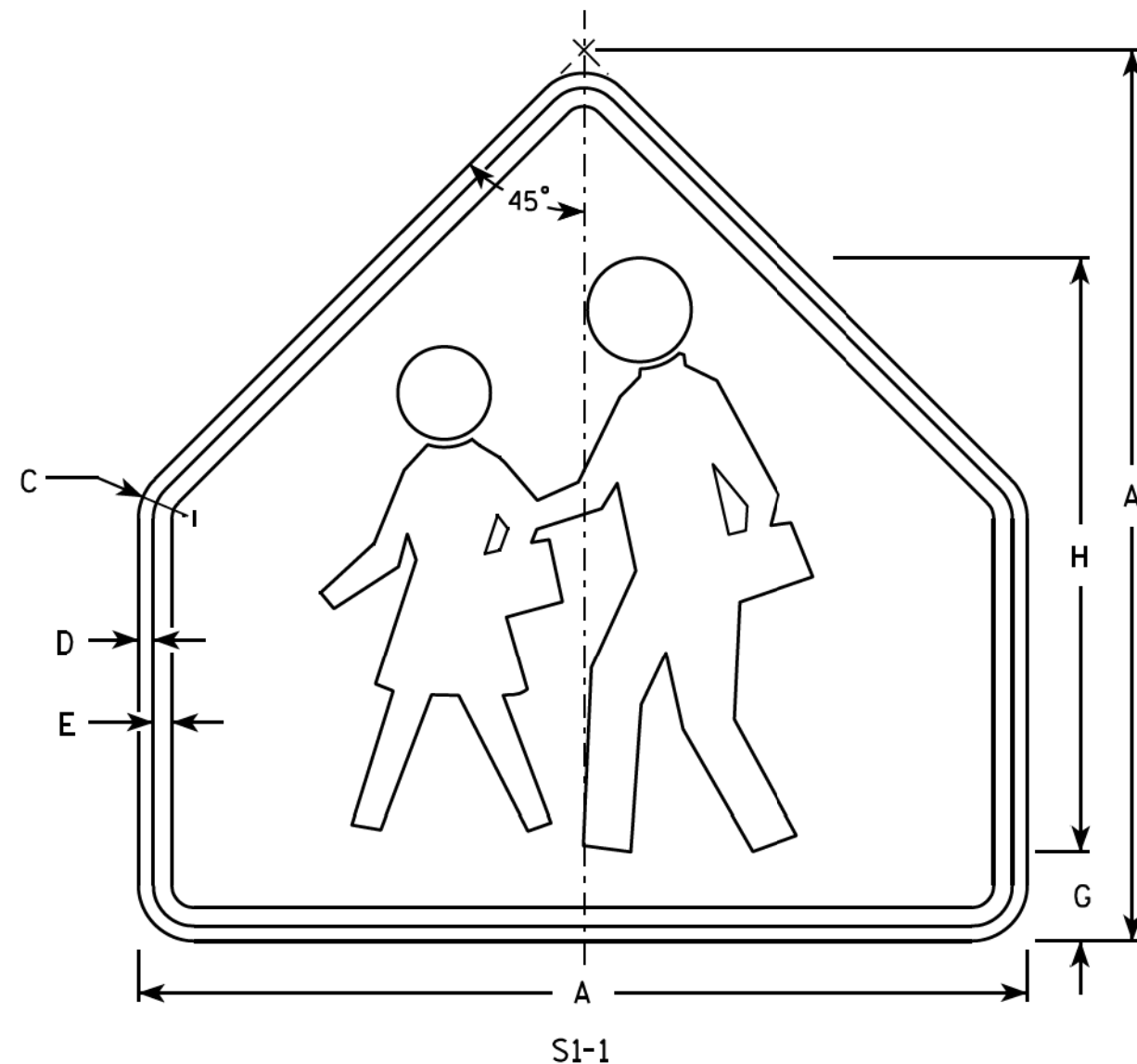
R11-4

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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/1/11	PLATE NO. R11-4.3



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow-Green
Message - Black
- 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		1 ³ / ₈	¹ / ₂	⁵ / ₈		3	20																			4.69
2	36		1 ⁵ / ₈	⁵ / ₈	³ / ₄		3 ¹ / ₂	24																			6.75
3	36		1 ⁵ / ₈	⁵ / ₈	³ / ₄		3 ¹ / ₂	24																			6.75
4	48		2 ¹ / ₄	³ / ₄	1		4 ³ / ₄	32																			12
5																											

STANDARD SIGN S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:5990-00-84

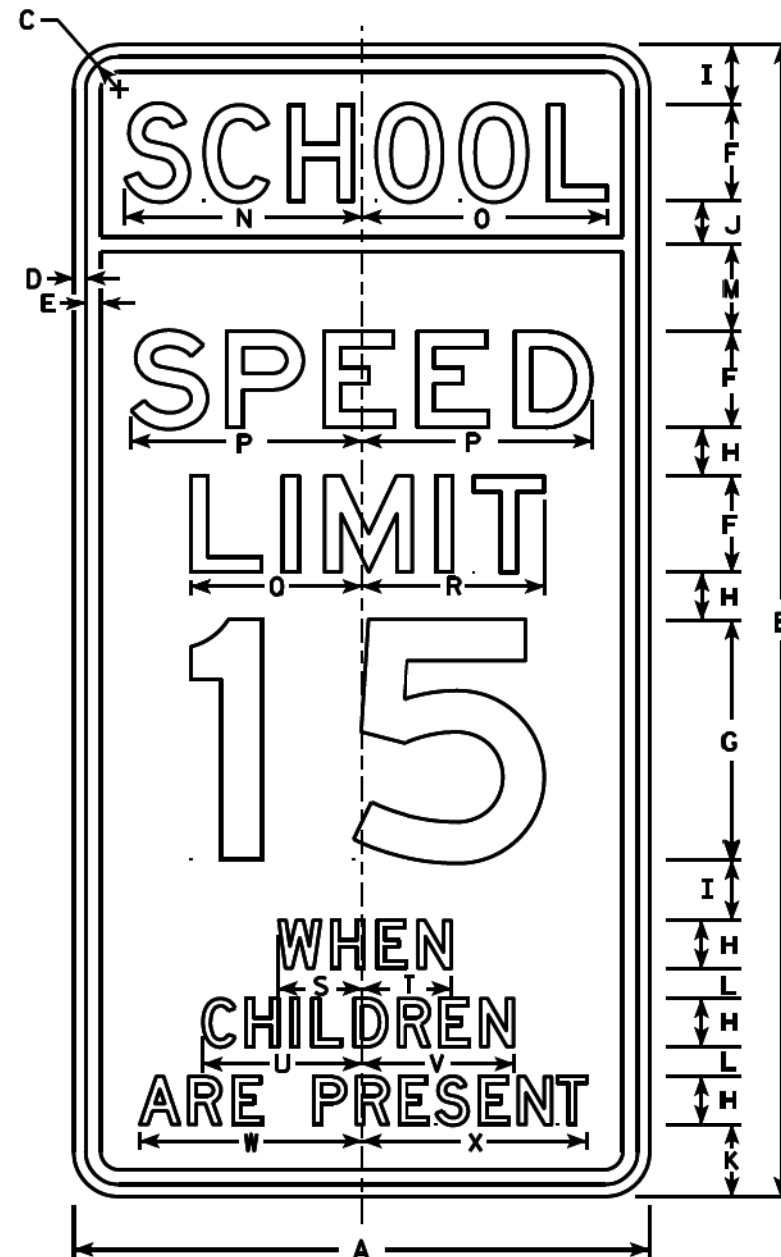
HWY: JACSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



NOTES

1. Sign is Type II - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition. (See note 5).
2. Color:
Background - See note 5
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. Top panel (SCHOOL) background - Yellow Green -Type F Reflective.
Lower panel background - White -Type H Reflective.
6. From top to bottom:
Lines 1, 5, 6 & 7 are series D
Lines 2, 3 & 4 are series E
7. Line 4 substitute appropriate numerals and
adjust spacing to achieve proper balance.

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
4	
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.	Area m2
1																												
2	24	48	1 3⁄8	½	5⁄8	4	10	2	2 ½	1 ¾	3	1 ¼	3 ¾	9 7⁄8	10 ¼	9 5⁄8	7 ⅛	7 5⁄8	3 ½	3 3⁄8	6 5⁄8	6 3⁄8	9 ¼	9 3⁄8			8.00	0.72
3	36	72	2 ¼	¾	1	6	15	3	3 ¾	2 ¾	4 ½	1 7⁄8	5 ½	15	15 ¼	14 ½	11 ¼	11 ½	5 ½	5 ¾	10	9 ¾	14	14 ⅛			18.00	1.62
4																												
5																												

STANDARD SIGN S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/26/10 PLATE NO. S4-51.9

PROJECT NO: 5990-00-84

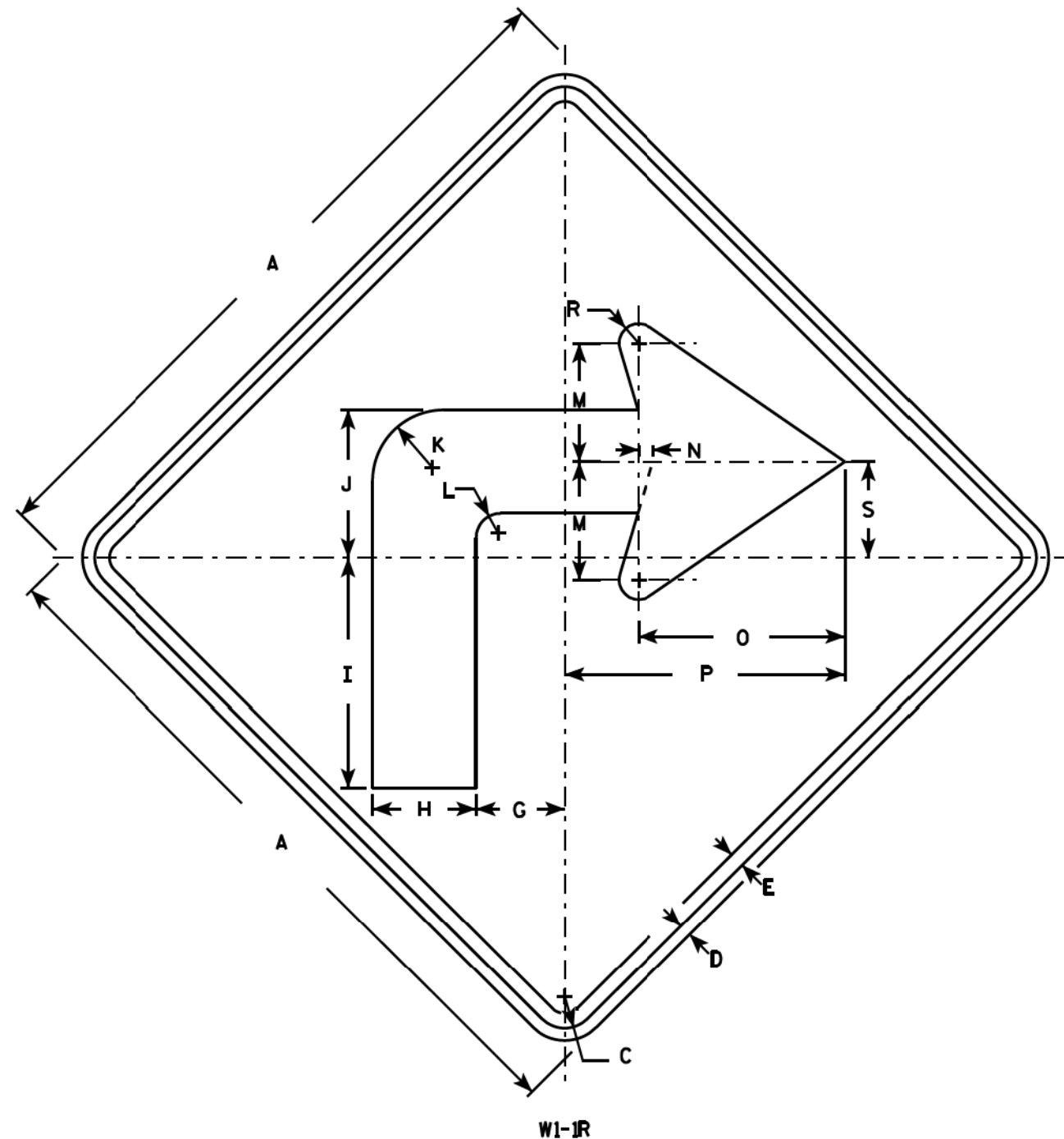
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

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. W1-1L is the same as W1-1R 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	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-11

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

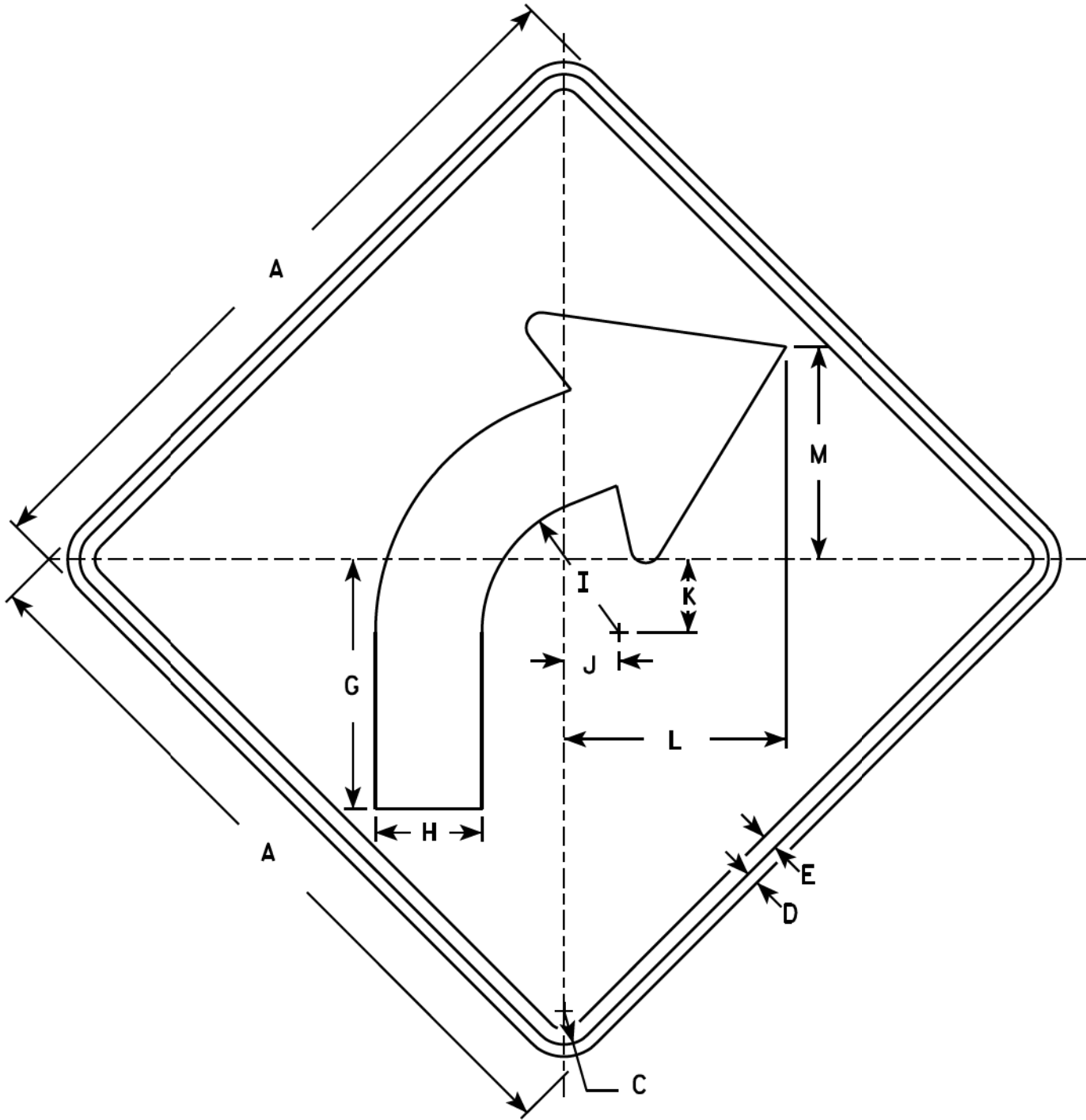
SIGN PLATES

SHEET

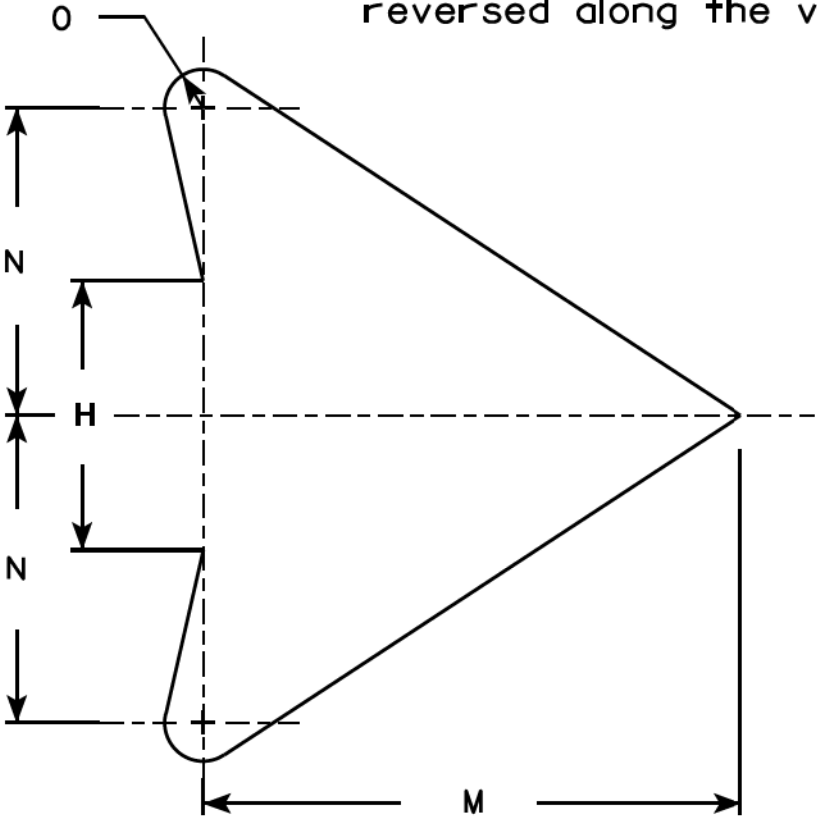
E

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. W1-2L is the same as W1-2R except the arrow is
reversed along the vertical centerline.



W1-2R



ARROW DETAIL

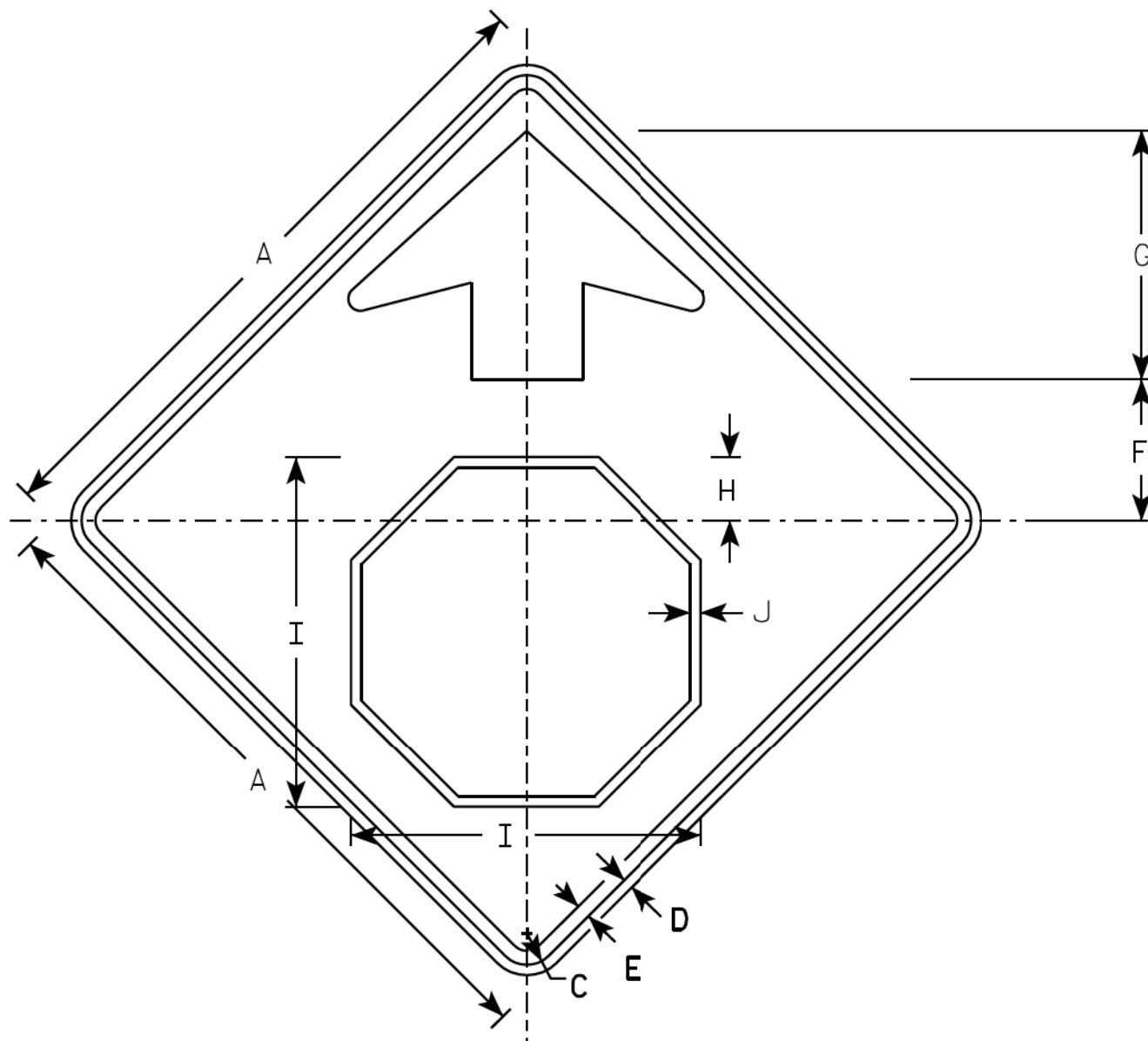
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

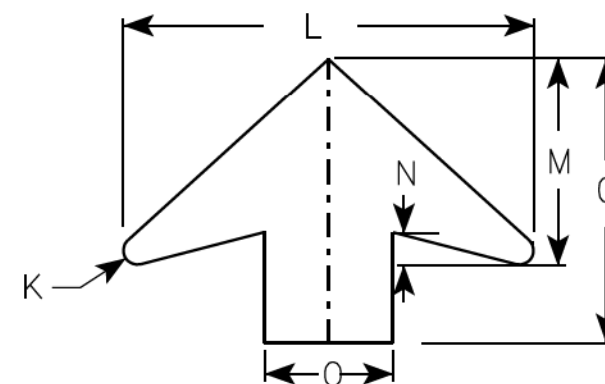
DATE 5/15/12 PLATE NO. W1-2.10



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

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

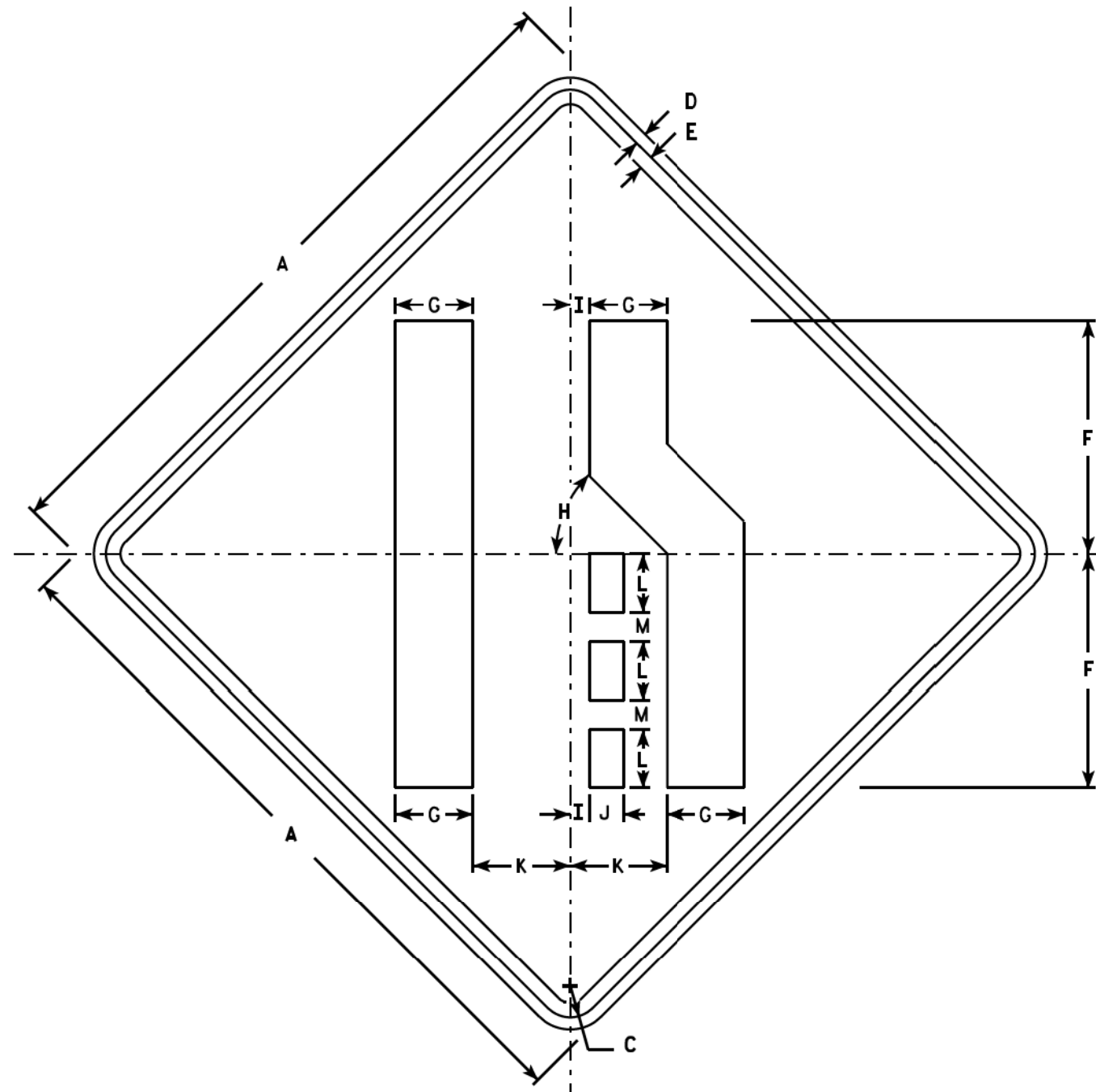
APPROVED

Matthew R. Rauch

for State Traffic Engineer

DATE 6/7/10

PLATE NO. W3-1.12



W4-2R

NOTES

1. Sign Is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - 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. W4-2L is the same as W4-2R except the symbols 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	30		1 3⁄8	1⁄2	5⁄8	10	3 3⁄8	45°	7⁄8	1 1⁄2	4 1⁄4	2 1⁄2	1 1⁄4														6.25
2S	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
2M	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
3	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
4	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0
5	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0

STANDARD SIGN

W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2-14

PROJECT NO:5990-00-84

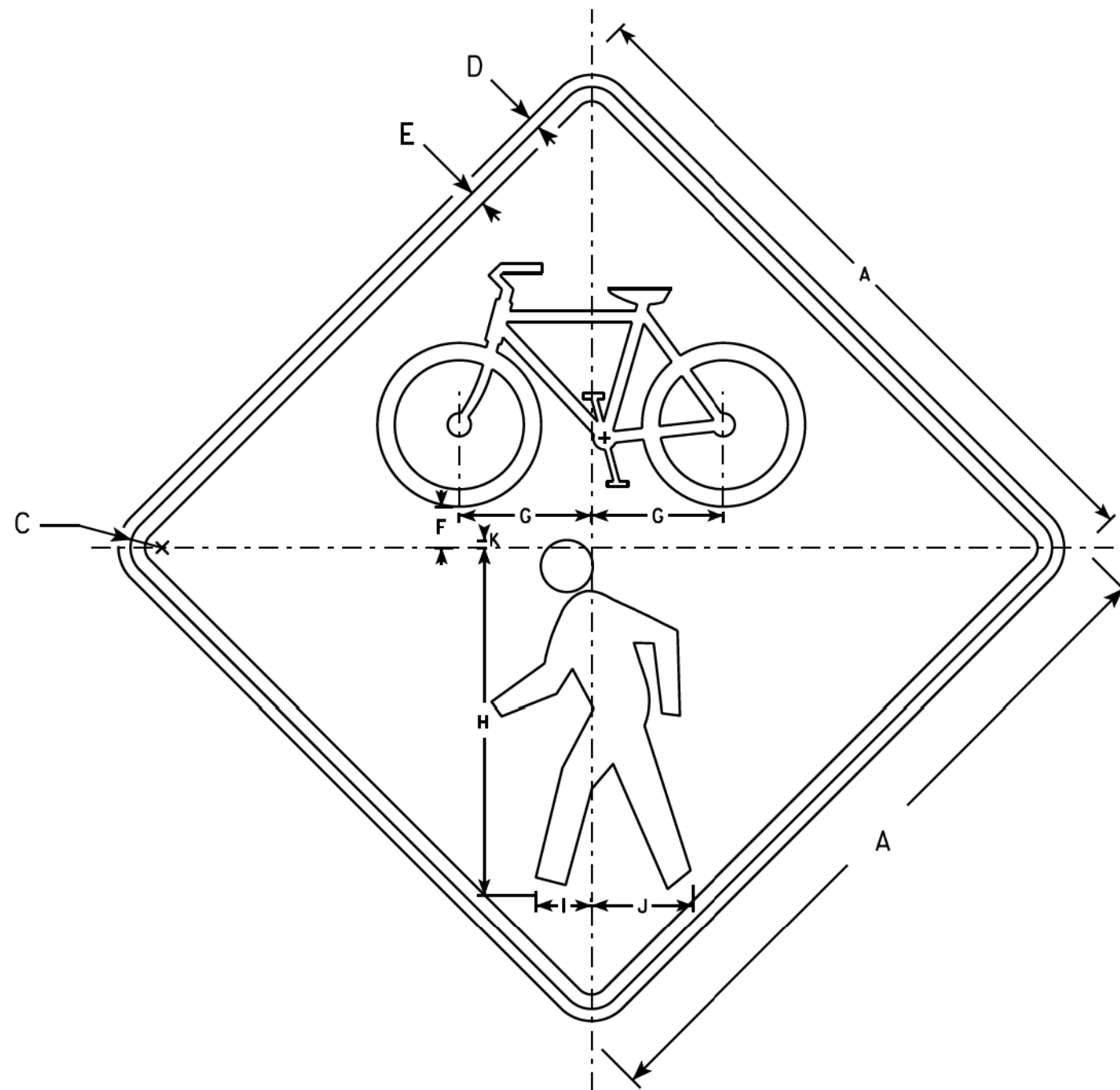
HWY: JACSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
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	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN

W11-15

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

PROJECT NO:5990-00-84

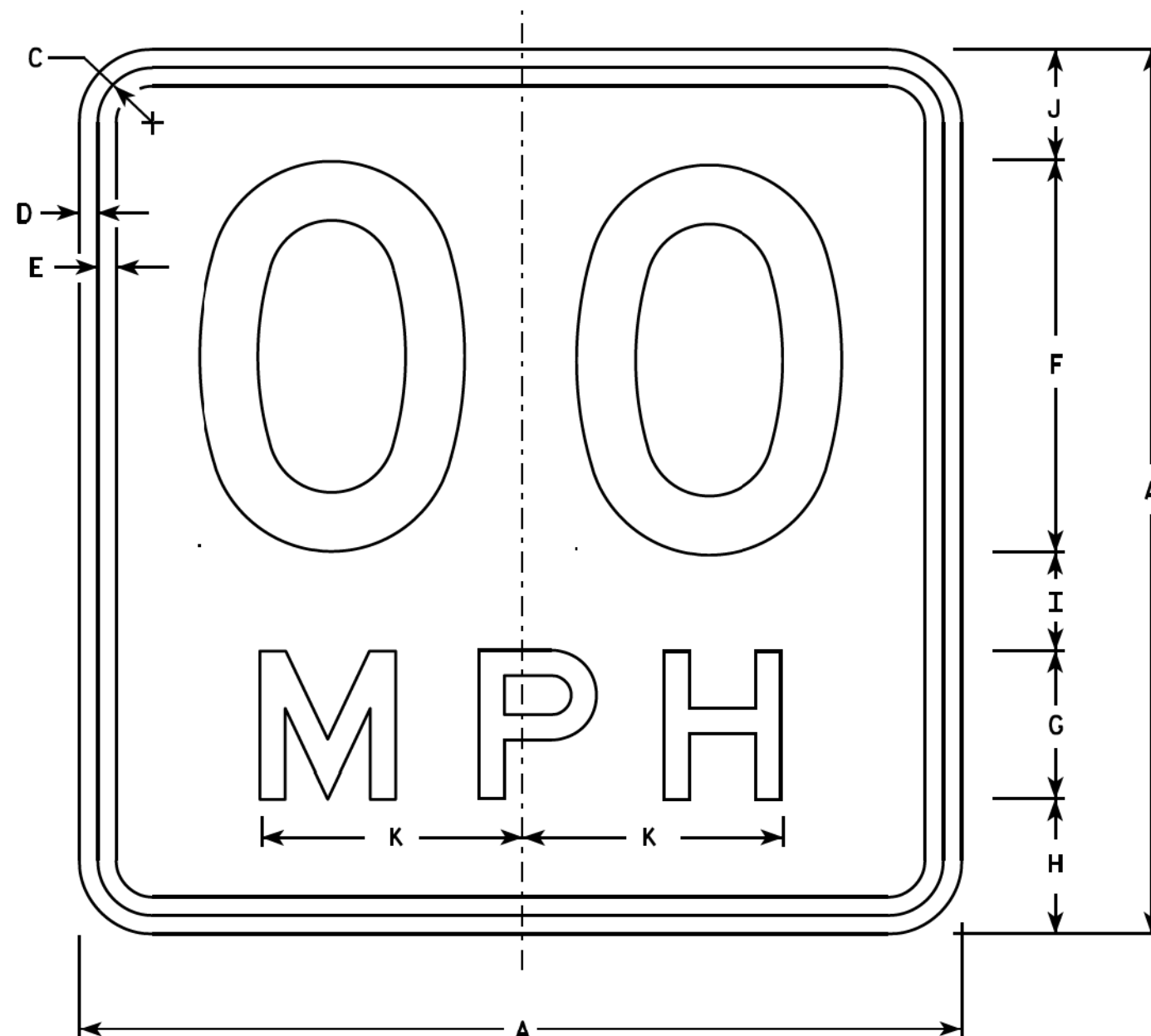
HWY: JACSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

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 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

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.

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. W13-116

PROJECT NO: 5990-00-84

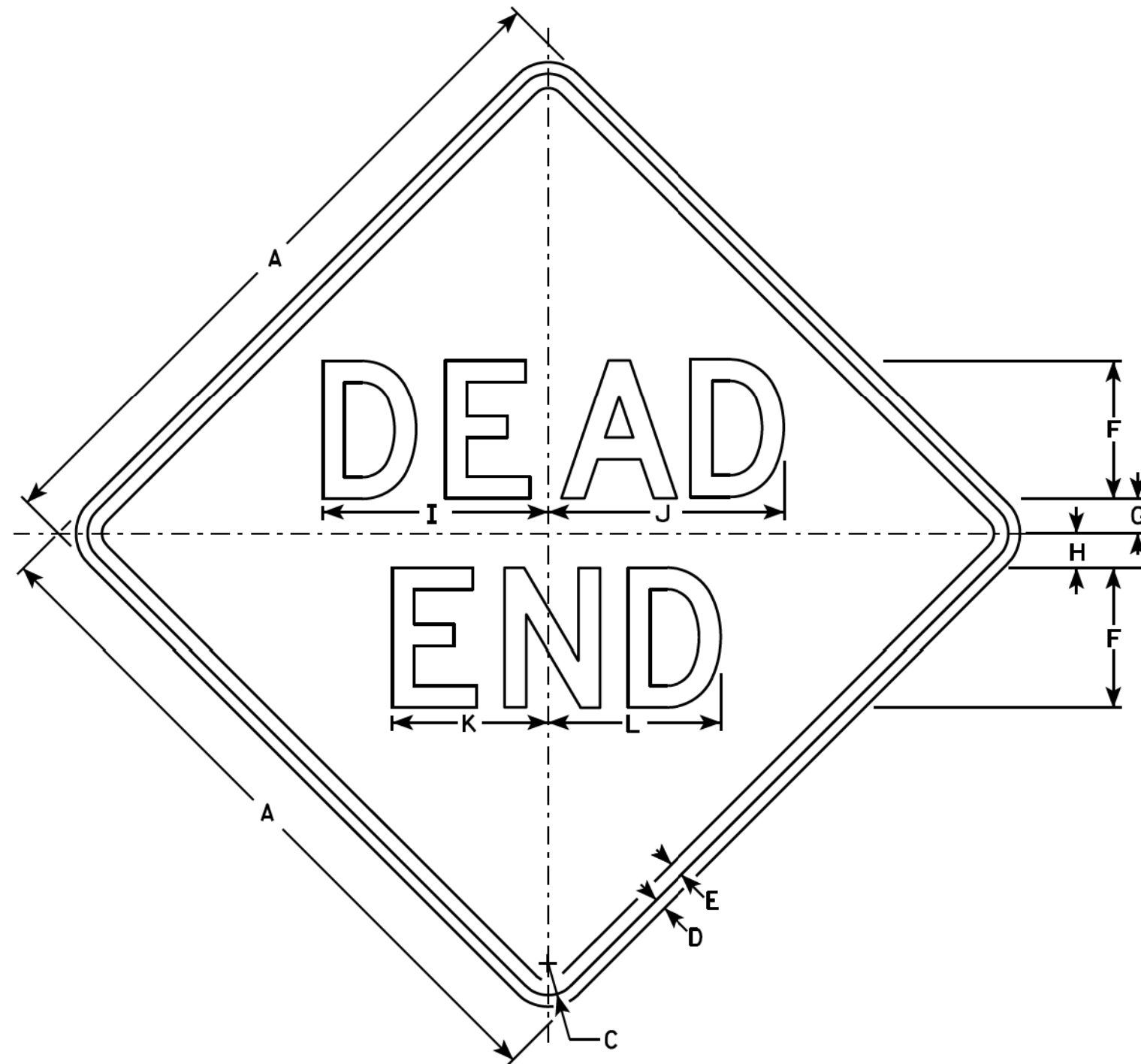
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



W14-1

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 - 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	Areq. 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 3/13/13 PLATE NO. W14-1.7

PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

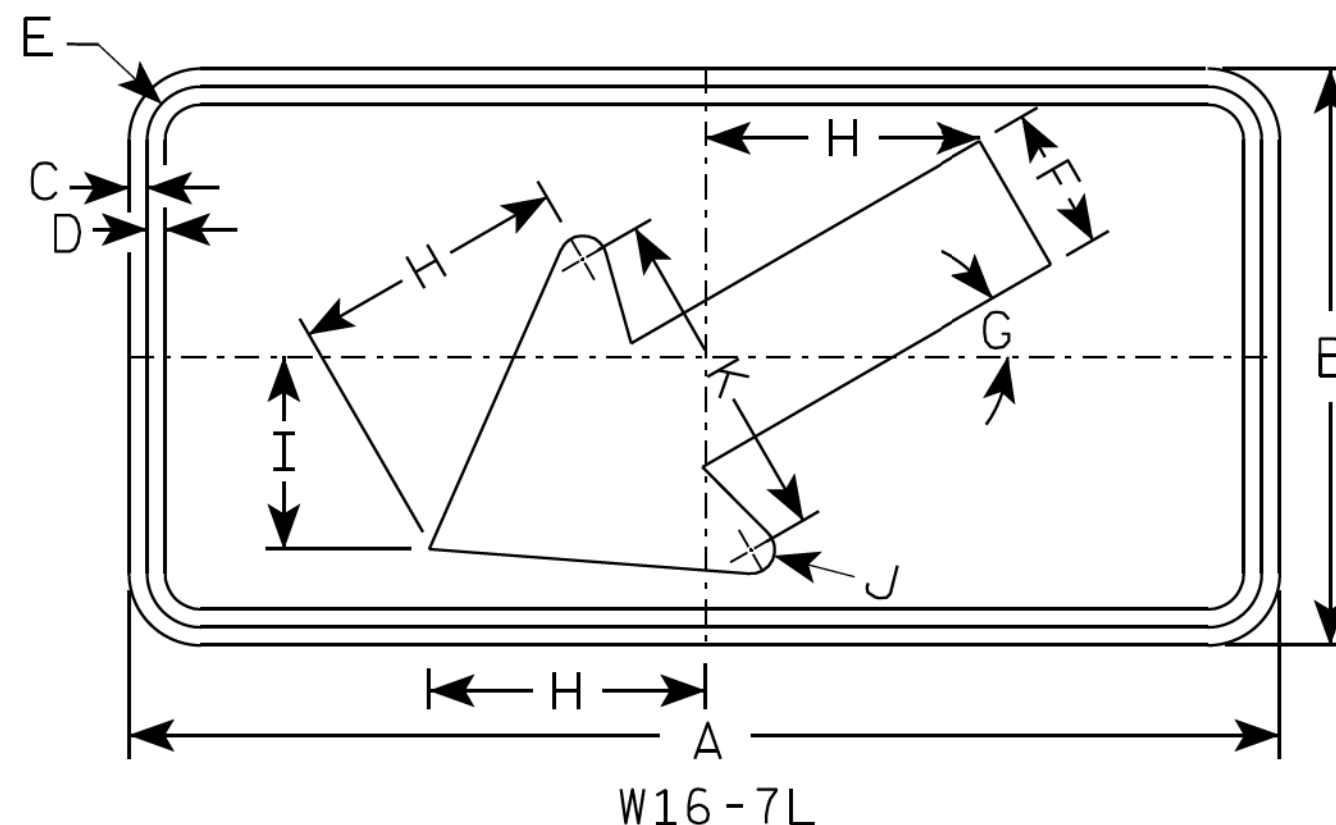
SIGN PLATES

SHEET

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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

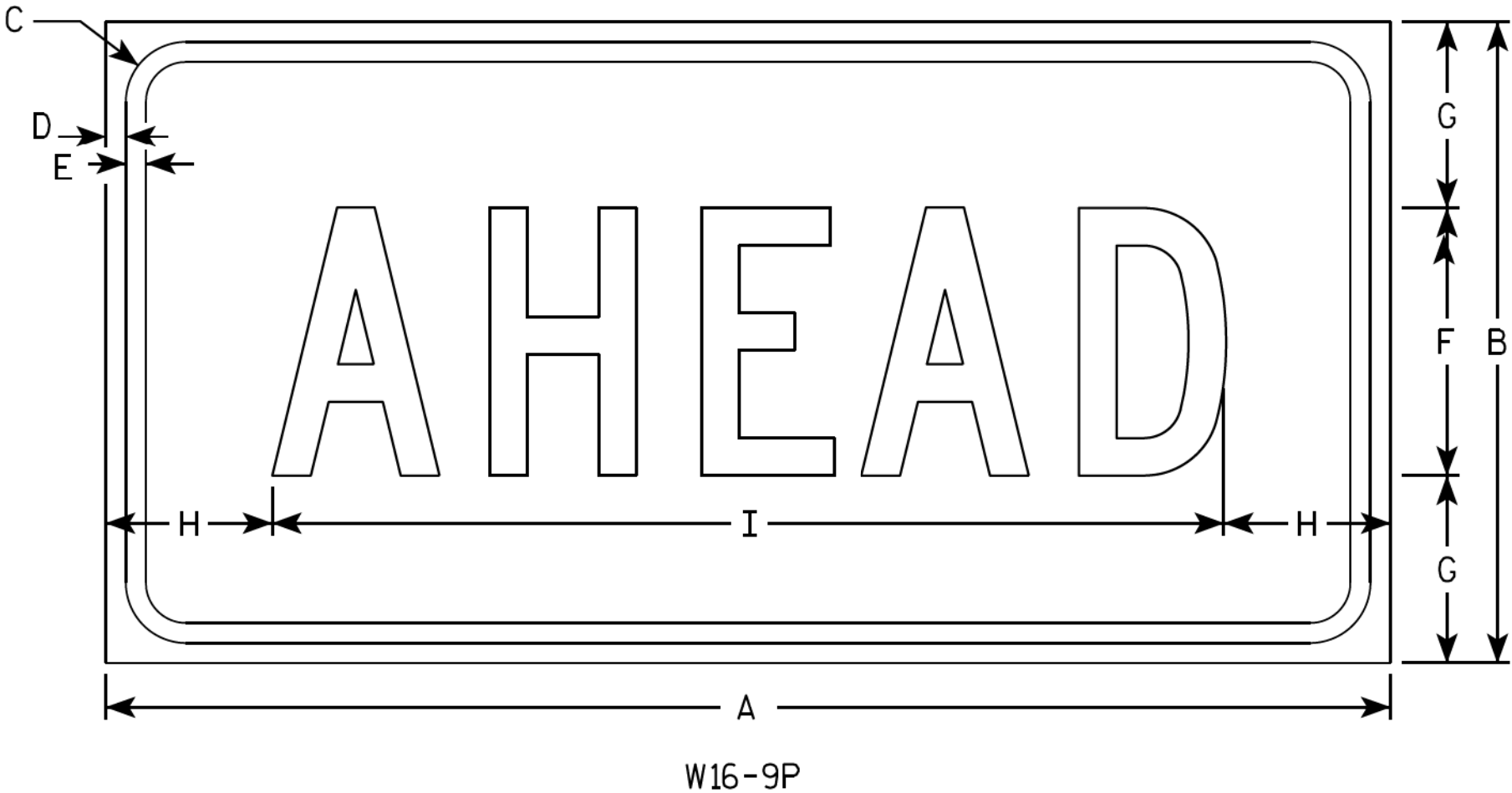


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	$\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{1}{8}$	3	30°	5 $\frac{3}{4}$	4	$\frac{1}{2}$	7																2.0
2M	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
3	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
4																											8
5																											8

STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Raub</i> For State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5

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
- 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.



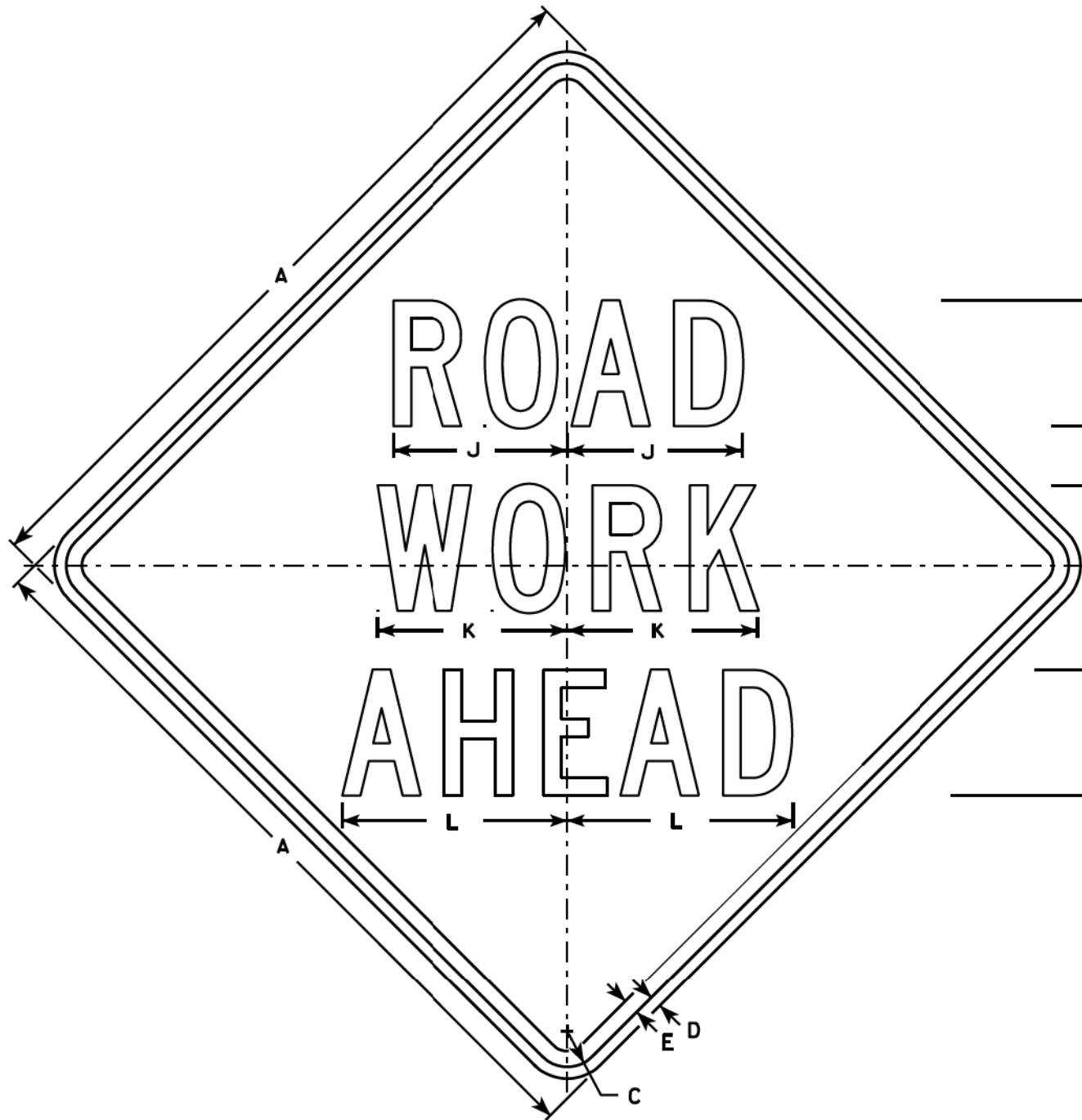
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

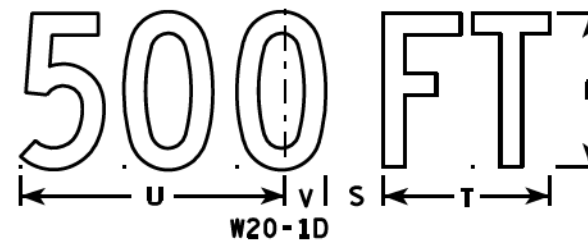
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

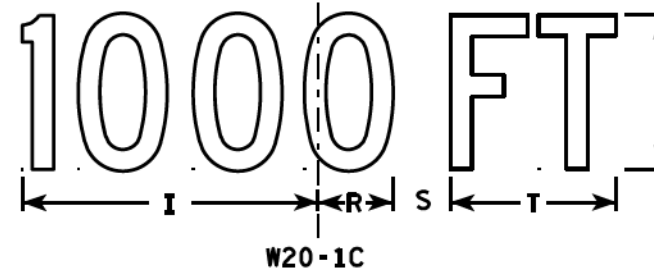
DATE 12/28/10 PLATE NO. W16-9P.6



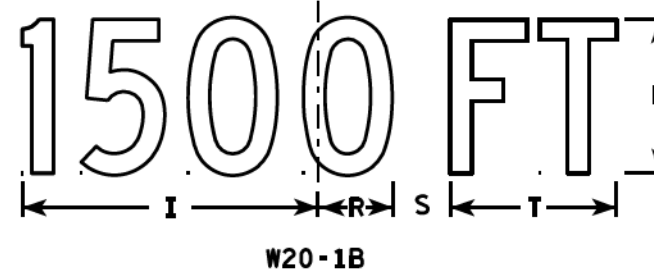
W20-1A



W20-1D



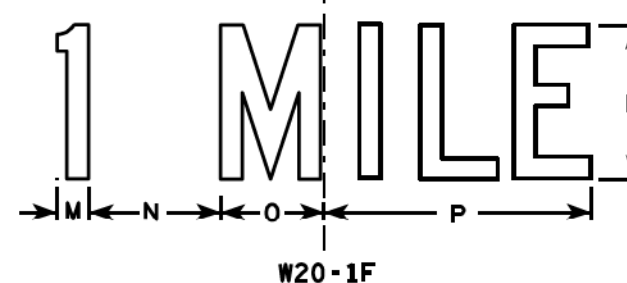
W20-1C



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. Raush*
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-19

PROJECT NO: 5990-00-84

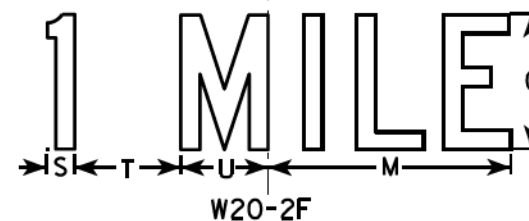
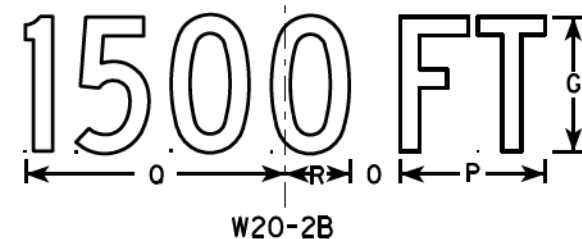
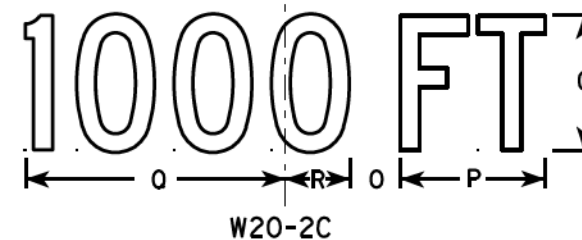
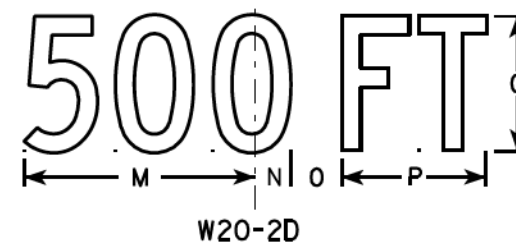
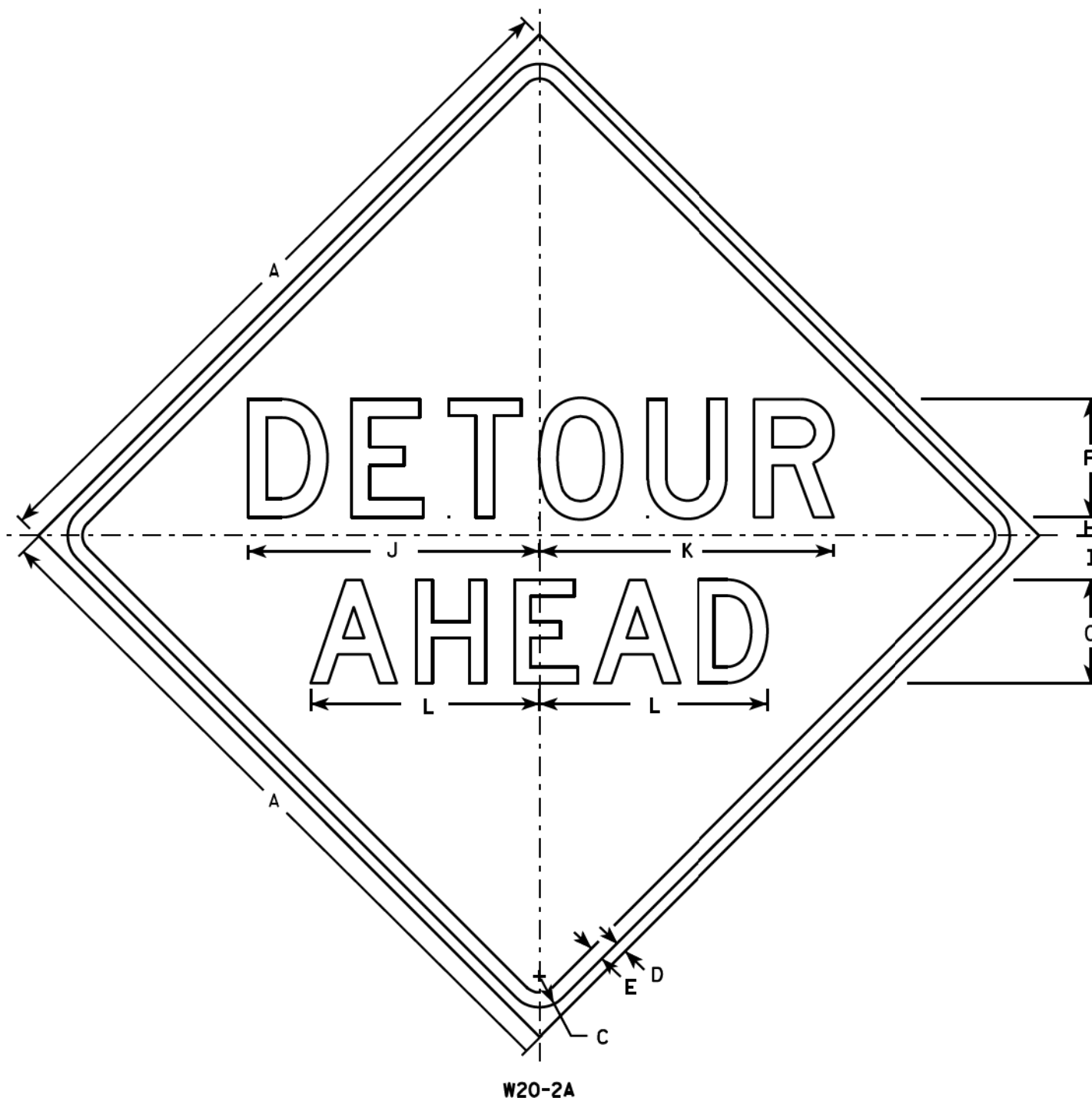
HWY: JACKSON STREET

COUNTY: ROCK

SIGN PLATES

SHEET

E



NOTES

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

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

STANDARD SIGN	
W20-2A,B,C,D,F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-2.6

PROJECT NO:5990-00-84

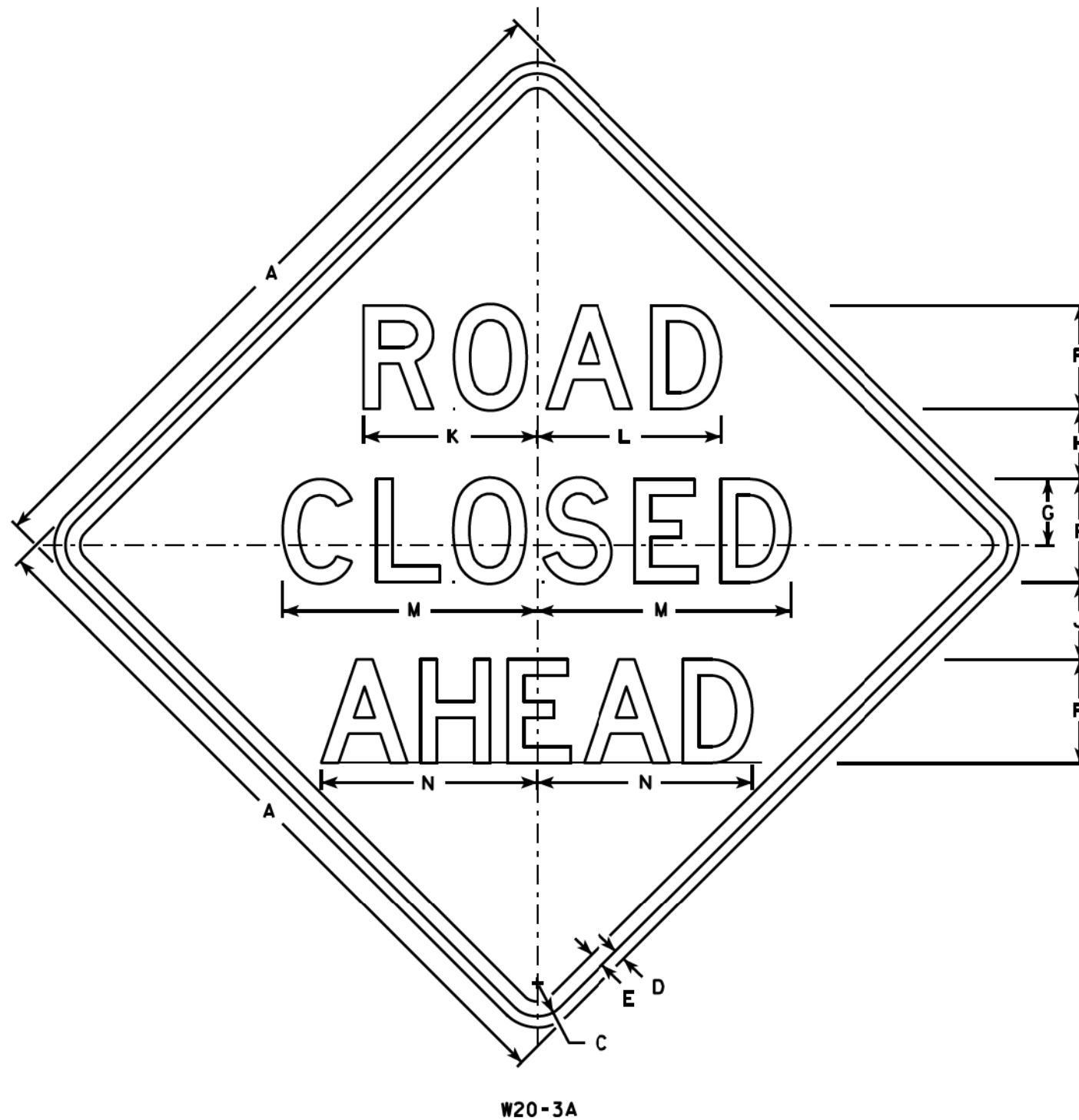
HWY: JACSON STREET

COUNTY: ROCK

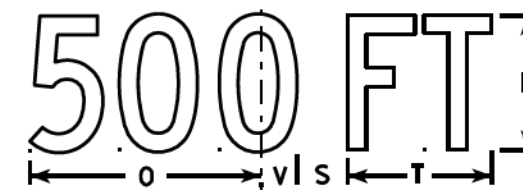
SIGN PLATES

SHEET

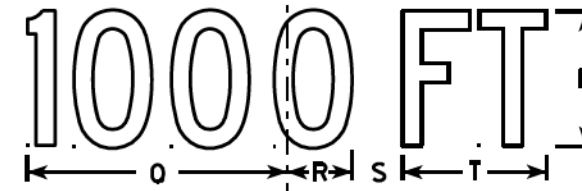
E



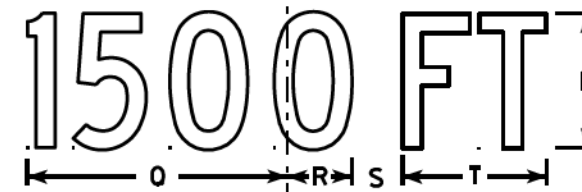
W20-3A



W20-3D



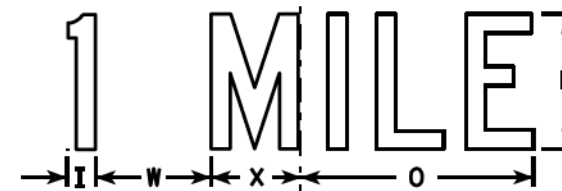
W20-3C



W20-3B



W20-3G



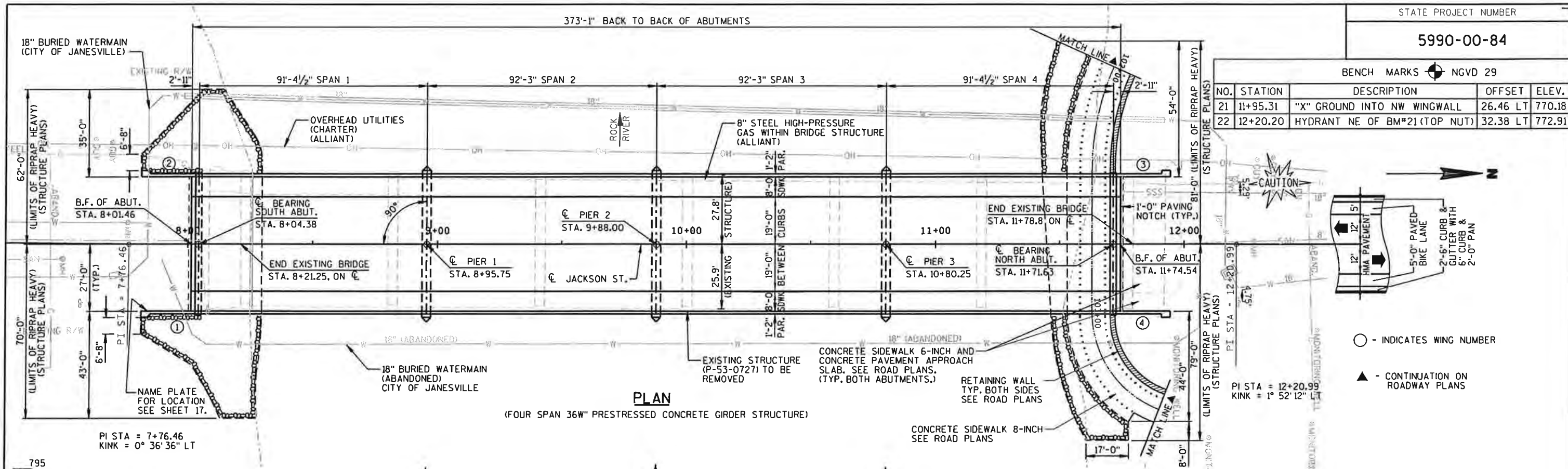
W20-3F

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - see note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 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	<i>Matthew R. Raush</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-3.7

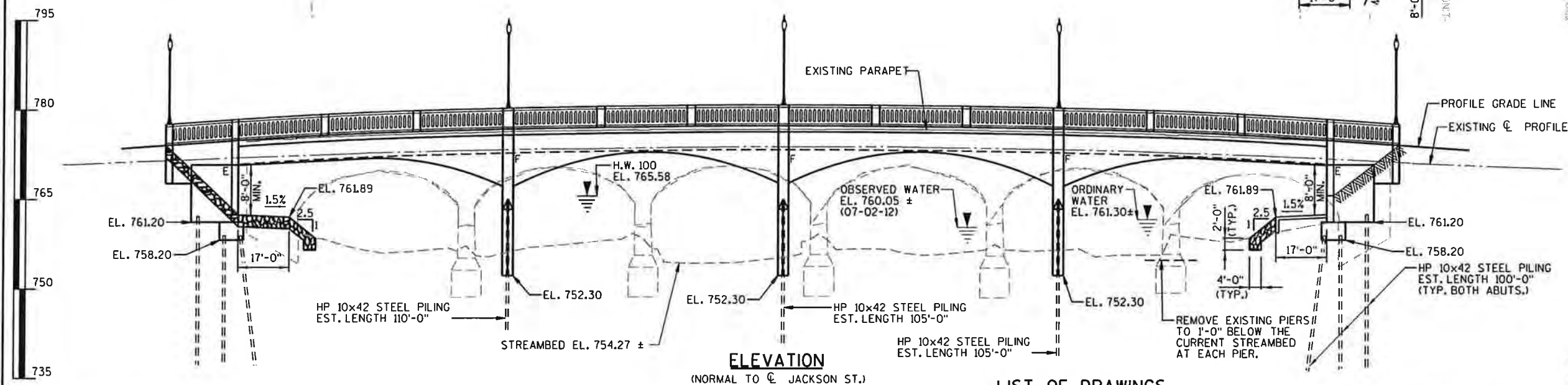


STATE PROJECT NUMBER

5990-00-84

BENCH MARKS NGVD 29

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
21	11+95.31	"X" GROUND INTO NW WINGWALL	26.46 LT	770.18
22	12+20.20	HYDRANT NE OF BM#21 (TOP NUT)	32.38 LT	772.91

CONSULTANT DESIGN CONTACT:
DANIEL WAGNER
(608) 355-8952BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

DESIGN DATA

LIVE LOAD:

DESIGN RATING : HL-93
INVENTORY RATING FACTOR : 1.05
OPERATIONAL RATING FACTOR : 1.48
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS.
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

FASCIA PANEL CONCRETE MASONRY $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY, SUPERSTRUCTURE $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY, SUBSTRUCTURE $f'_c = 3,500$ P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ P.S.I.
36W-INCH PRESTRESSED GIRDERS $f'_c = 8,000$ P.S.I.
CONCRETE MASONRY STRANDS - 0.60" ϕ WITH AN ULTIMATE TENSILE STRENGTH OF $f_y = 270,000$ P.S.I.
PILING STEEL HP $f_y = 50,000$ P.S.I.

TRAFFIC DATA:

A.A.D.T. (2015) = 4000
A.A.D.T. (2035) = 6400
R.D.S. = 30 MPH

FOUNDATION DATA:

ABUTMENTS AND PIERS TO BE SUPPORTED ON PILING STEEL HP 10-INCH x 42 LB. DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS ARE 100'-0" AT THE ABUTMENTS, 110'-0" AT PIER 1, AND 105'-0" AT PIERS 2 & 3.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

100 YEAR FREQUENCY

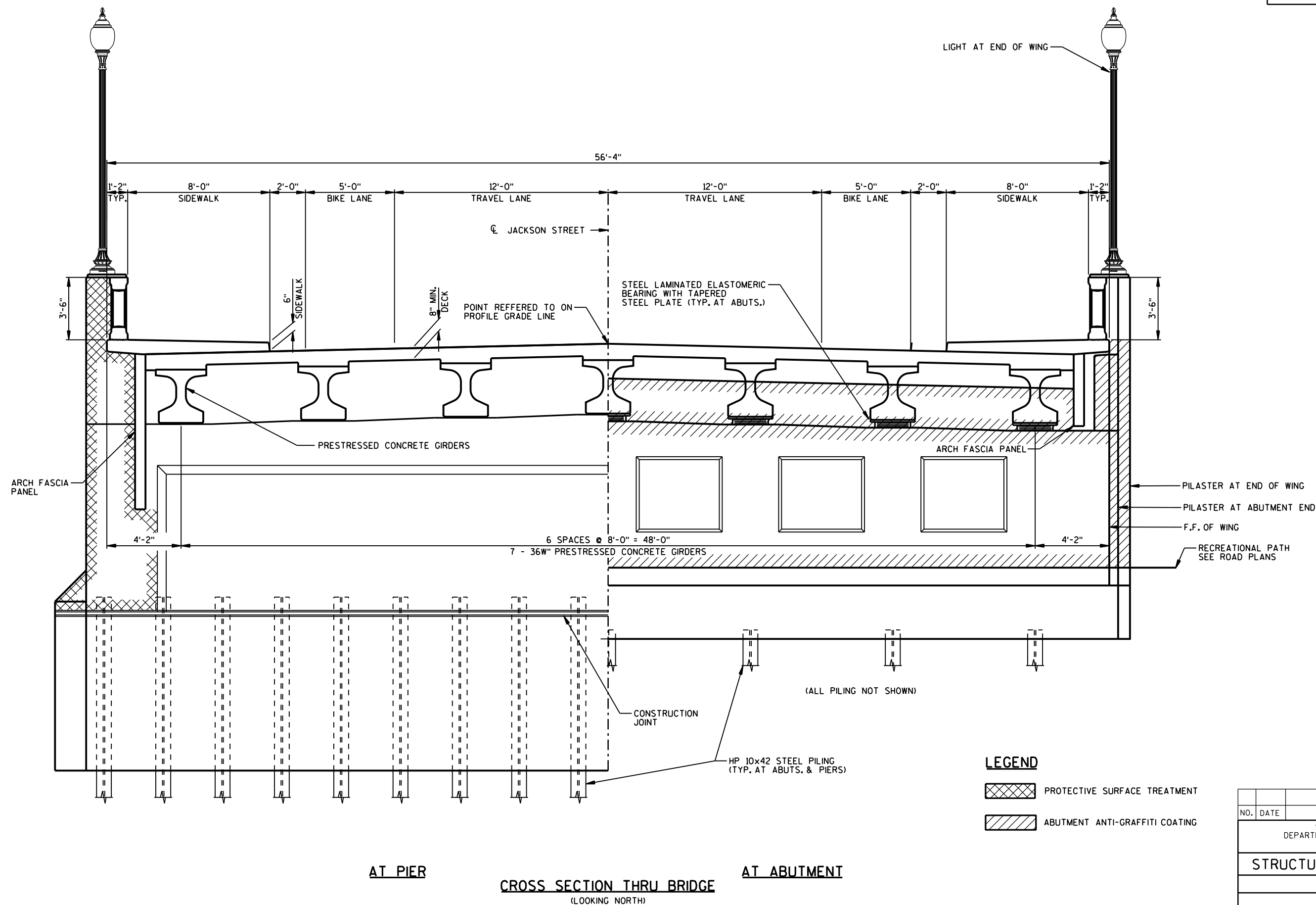
DRAINAGE AREA 3,310 SQ. MI.
0 100 16,600 C.F.S.
VELOCITY 5.65 F.P.S.
WATERWAY AREA 2,936 SQ. FT.
HIGH WATER 100 ELEVATION 765.58 ±
ROADWAY OVERFLOW DESIGN FREQUENCY N/A
SCOUR CRITICAL CODE 5
0₂ HIGH WATER ELEVATION (5,800 C.F.S.) 761.18 ±

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION
3. QUANTITIES, PROFILE & NOTES
4. SUBSURFACE EXPLORATION
5. ABUTMENTS
6. ABUTMENT DETAILS
7. WING DETAILS
8. PIERS
9. PIER DETAILS
10. 36W" PRESTRESSED GIRDER DETAILS
11. PRESTRESSED GIRDER BEARINGS
12. STEEL DIAPHRAGM DETAILS
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE SECTIONS
15. SUPERSTRUCTURE SECTIONS & DETAILS
16. EXPANSION DEVICE
17. VERTICAL FACE PARAPET "TX"
18. VERTICAL FACE PARAPET "TX" DETAILS
19. END SPANS FASCIA DETAILS
20. CENTER SPANS FASCIA DETAILS
21. ELECTRICAL CONDUIT PLAN & DETAILS



NO.	DATE	REVISION	BY
MSA TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL 1230 South Boulevard Baraboo, WI 53913 608-356-2771 1-800-362-4505 Fax: 608-356-2770			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION ACCEPTED <i>William C. Dreher</i> KAR 05/14/14 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-53-0287			
JACKSON STREET OVER ROCK RIVER			
COUNTY	ROCK	TOWN/CITY/VILLAGE	JANESVILLE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	JRS	DESIGN CK'D.	DHW
DRAWN BY	RLR	PLANS CK'D.	DHW
GENERAL PLAN			SHEET 1 OF 21



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY RLR		PLANS CK'D. DHW	
CROSS SECTION		SHEET 2 OF 21	

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUT.	PIER 1	PIER 2	PIER 3	NORTH ABUT.	SUPER	TOTAL
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-	-	-	-	-	-	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES (B-53-0287)	LS	-	-	-	-	-	-	1
210.0100	BACKFILL STRUCTURE	CY	460	-	-	-	460	-	920
502.0100	CONCRETE MASONRY BRIDGES	CY	192	142	145	142	192	776	1589
502.3100.01	EXPANSION DEVICE (B-53-0287)	LS	-	-	-	-	-	-	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	35	35	35	-	3160	3565
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	-	-	-	-	-	2576	2576
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	6590	5315	5380	5315	6590	-	29190
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	6440	80	80	80	6440	178340	191460
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	-	-	-	-	42	42
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	-	-	-	-	-	14	14
506.4000.01	STEEL DIAPHRAGMS (B-53-0287)	EACH	-	-	-	-	-	48	48
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	22	-	-	-	22	-	44
550.1100	PIILING STEEL HP 10-INCH x 42 LB	LF	1900	1980	1890	1890	1900	-	9560
606.0300	RIPRAP HEAVY	CY	320	-	-	-	160	-	480
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	120	-	-	-	200	-	320
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	550	-	-	-	300	-	850
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	-	-	-	-	-	40	40
652.0315	CONDUIT RIGID NONMETALLIC SCHEDULE 80 1 1/4-INCH	LF	-	-	-	-	-	140	140
652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	-	-	-	-	-	1660	1660
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	-	-	-	-	-	12	12
655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	-	-	-	-	-	330	330
655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	-	-	-	-	-	1310	1310
SPV.0060.08	LUMINAIRES UNDERDECK	EACH	-	-	-	-	-	12	12
SPV.0060.09	DECORATIVE LIGHT POST TOP UNIT	EACH	-	-	-	-	-	10	10
SPV.0090.02	PARAPET CONCRETE TYPE 'TX'	LF	-	-	-	-	-	827	827
SPV.0165.02	ANTI-GRAFFITI COATING	SF	875	-	-	-	875	8350	10100
SPV.0180.01	FASCIA PANELS	SY	-	-	-	-	-	413	413
	NON-BID ITEMS								
	PREFORMED FILLER	SIZE	-	-	-	-	-	-	½", ¾"

STATE PROJECT NUMBER

5990-00-84

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE ABUTMENTS AND PIERS.

THIS STRUCTURE WILL REPLACE EXISTING BRIDGE, P-53-0727, A 358 FOOT LONG, SIX SPAN, EARTH FILLED CONCRETE SPANDREL ARCH BRIDGE SET ON CONCRETE ABUTMENTS AND CONCRETE PIERS FOUNDED ON TIMBER PILING.

AT THE BACK FACES OF ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE. THE BACKFILL STRUCTURE ESTIMATED QUANTITIES ASSUMED A 1½:1 EXCAVATION SLOPE AT THE ABUTMENTS.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NGVD 29 BENCHMARK LOCATED APPROXIMATELY 0.74 MILES SOUTHWEST OF THE EXISTING BRIDGE CENTER. A BRONZE WISDOT GEODETIC SURVEY CONTROL STATION "IV06". ELEVATION 781.88.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, FACE AND TOP OF SIDEWALK, PARAPETS, PILASTERS, LIGHT STANDARDS, SIDEWALK OVERHANGS, AND FASCIA PANEL FRONT & BOTTOM FACES WHERE ANTI-GRAFFITI COATING IS NOT USED.

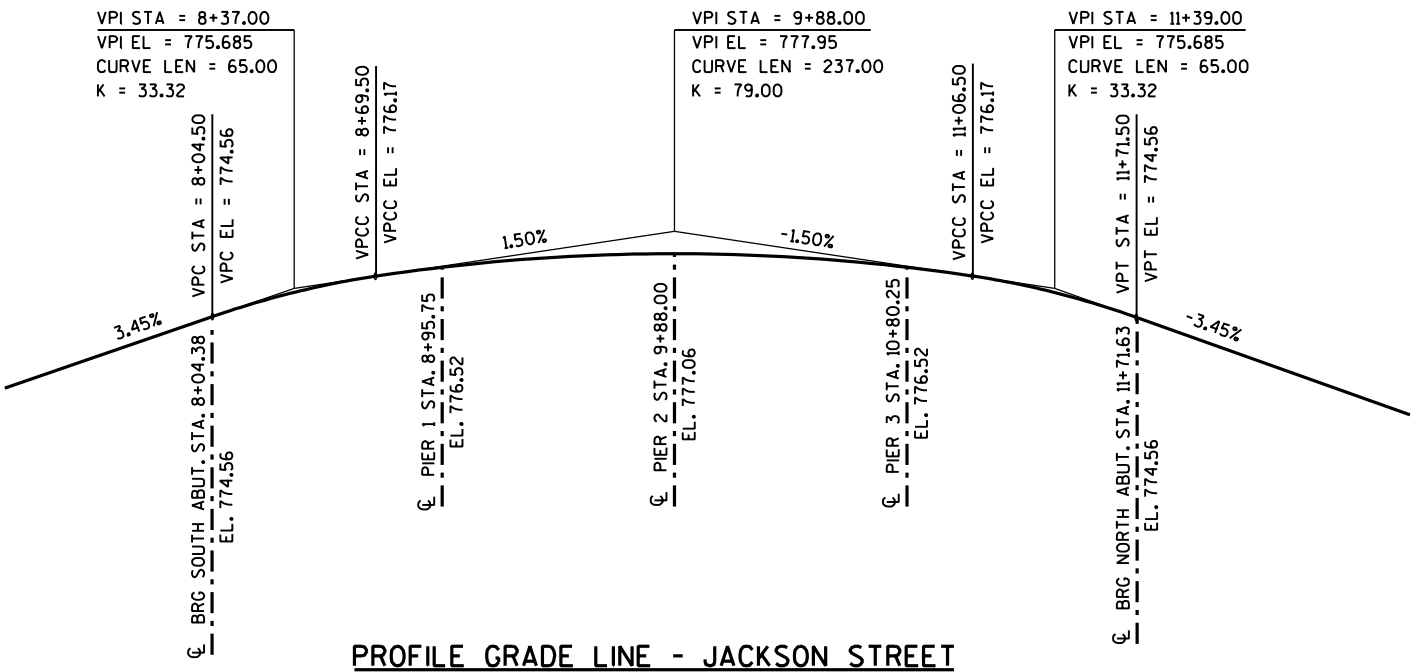
PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE PIER ENDS ABOVE THE CONSTRUCTION JOINT. LIMITS OF THE PROTECTIVE SURFACE TREATMENT TO THE PIER ENDS ARE SHOWN WITH CROSS HATCHING IN THE BRIDGE CROSS SECTION ON SHEET 2.

ANTI-GRAFFITI COATING SHALL BE APPLIED TO THE ABUTMENT FRONT FACE AND ALL EXPOSED SURFACE OF THE ABUTMENT SIDES AND WINGS BETWEEN THE GROUND LINE AND THE BOTTOM OF THE PARAPET. LIMITS OF THE ABUTMENT ANTI-GRAFFITI COATING ARE SHOWN WITH HATCHING IN THE BRIDGE CROSS SECTION ON SHEET 2. ANTI-GRAFFITI COATING SHALL BE APPLIED TO ALL EXPOSED PRESTRESSED CONCRETE GIRDER SURFACES FROM THE FRONT FACE OF THE ABUTMENTS TO 30 FEET OFF EACH ABUTMENT. ANTI-GRAFFITI COATING SHALL BE APPLIED TO THE FRONT, BOTTOM, AND BACK FACES OF THE FASCIA PANELS IN SPANS #1 & #4.

THE AREA OF PARAPET USED TO DETERMINE QUANTITY OF PROTECTIVE SURFACE TREATMENT SHALL BE THE LENGTH TIMES THE SUM OF THE INSIDE HEIGHT, TOP WIDTH AND OUTSIDE HEIGHT FOR EACH PARAPET.

APPLY BRIDGE SEAT PROTECTION, AS PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF BOTH ABUTMENTS.

THE EXISTING BRIDGE PLANS ARE AVAILABLE ON THE WISDOT HSI SITE.

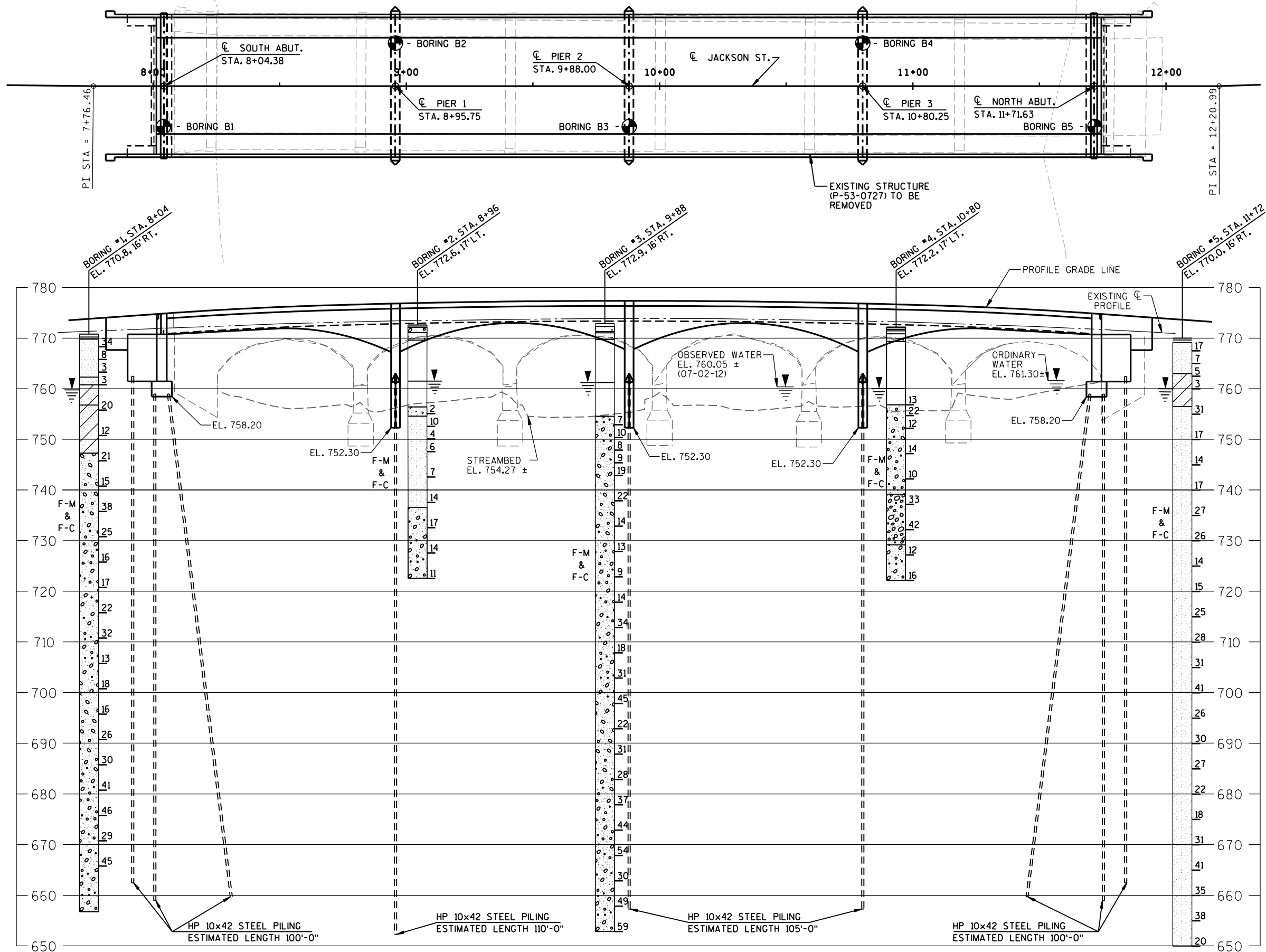


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
QUANTITIES, PROFILE & NOTES		SHEET 3 OF 21	

PLANS PREPARED BY:
MSA PROFESSIONAL SERVICES, INC.
BARABOO, WISCONSIN

BORINGS PERFORMED BY AND
SUBSURFACE REPORT PREPARED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

BORING 1 PERFORMED 01-28-13
BORING 2 PERFORMED 02-13-13
BORING 3 PERFORMED 02-12-13
BORING 4 PERFORMED 02-15-13
BORING 5 PERFORMED 02-05-13



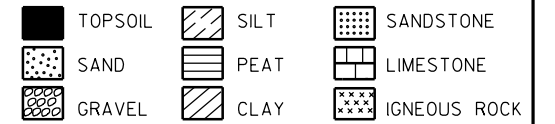
STATE PROJECT NUMBER

5990-00-84

ABBREVIATIONS

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

MATERIAL SYMBOLS



LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6
95/6=95 BLOWS FOR 6"
PENETRATION
PROBING TAKEN WITH
A 350* WT.
FALLING 18" ON A 2"
O.D. POINT.

LEGEND OF BORING

ELEV. BORING NO.
STA.
UNCONFINED STRENGTH 7.7 7
BLOWS PER FT. USING 140* WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE— S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

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

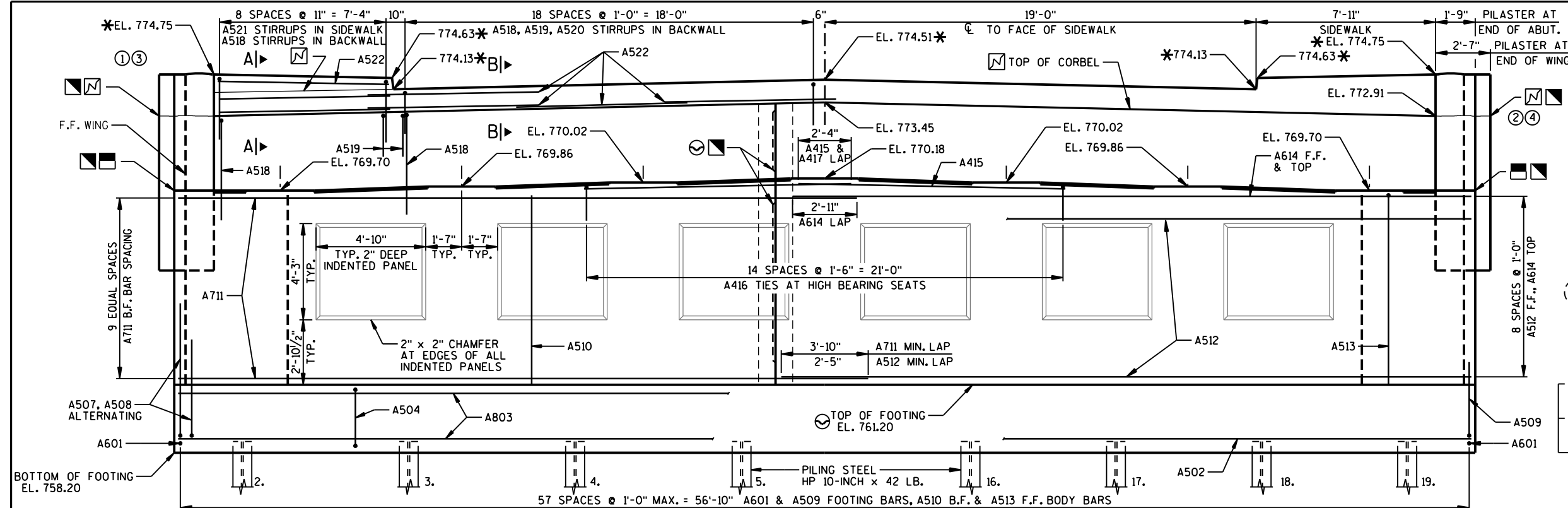
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

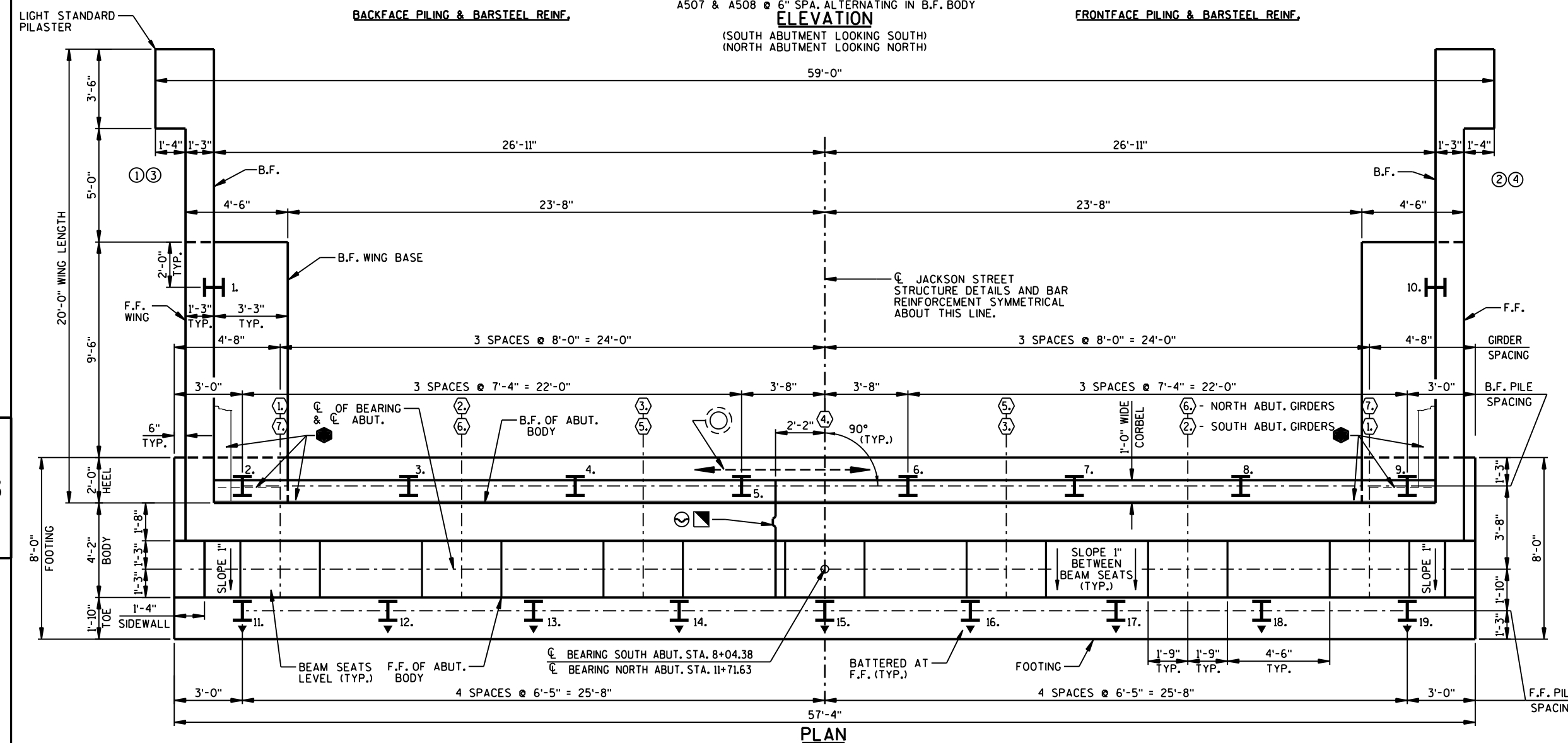
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CKD. DHW
SUBSURFACE EXPLORATION		SHEET 4 OF 21	

LEGEND

- * — ELEVATIONS GIVEN AT F.F. OF BACKWALL.
 - — INDICATES WING NUMBER.
 - — INDICATES GIRDER NUMBER
 - F.F. — FRONT FACE B.F. — BACK FACE CL. — CLEAR
 - ⊗ — KEYED CONSTRUCTION JOINT ON ABUTMENT FORMED BY BEVELED 2 x 8. PLACE 1'-6" WIDE RMW ON B.F. AT JOINT ABOVE FOOTING.
 - — HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND ACROSS B.F. OF ABUTMENT AND B.F. OF WINGS.
 - ⊙ — PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND TO RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE (SEE DETAIL SHEET 6).
 - ▣ — 3/4" "V" GROOVE ON FRONT FACE OF KEYED CONSTRUCTION JOINT.
 - ▣ — KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
 - ⊞ — CONSTRUCTION JOINT. STRIKE OFF AND LEAVE ROUGH.
- AT LEAST ONE JOINT MUST BE USED. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE. PLACE ● ON B.F. OF WING.

**BACKFACE PILING & BARSTEEL REINF.****ELEVATION**

(SOUTH ABUTMENT LOOKING SOUTH)
(NORTH ABUTMENT LOOKING NORTH)

FRONTFACE PILING & BARSTEEL REINF.**PLAN**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-53-0287			
DRAWN BY RLR		PLANS CK'D. DHW	
ABUTMENTS		SHEET 5 OF 21	

BILL OF BARS (ONE ABUTMENT)

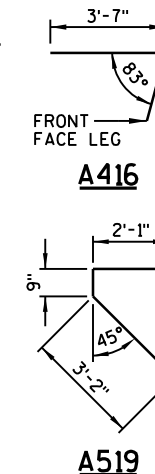
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



MARK	A	B
A504	5'-9"	2'-
A513	8'-2"	3'-
A435	3'-4"	10

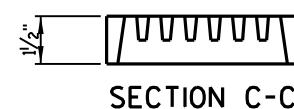
MARK	C
A605	1'-0"
A507	1'-2"
A508	5'-5"
A509	10'
A925	1'-7"

MARK	D	E
A518	5'-1"	1'-4"
A520	1'-8"	1'-4"
A521	2'-8"	1'-4"
A527	6'-11"	11'
A528	7'-6"	11'
A434	5'-8"	1'-0"



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DWH
ABUTMENT DETAILS		SHEET 6 OF	

FILE= 59023-06-ABUTDET.DGN
DATE=4/21/2014



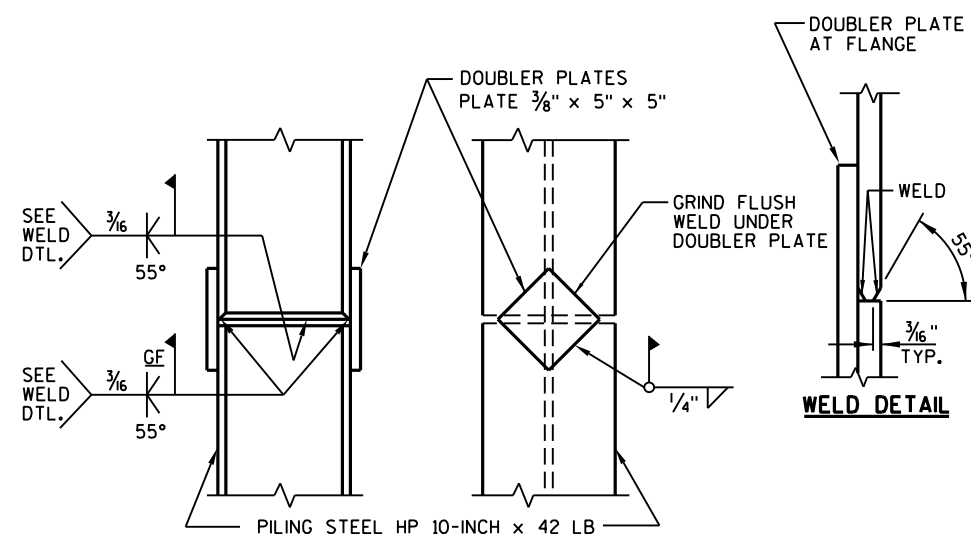
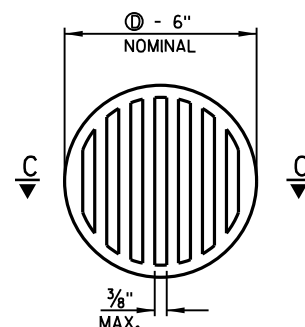
RODENT SHIELD NOTES:

ORIENT SHIELD SO SLOTS ARE VERTICAL.

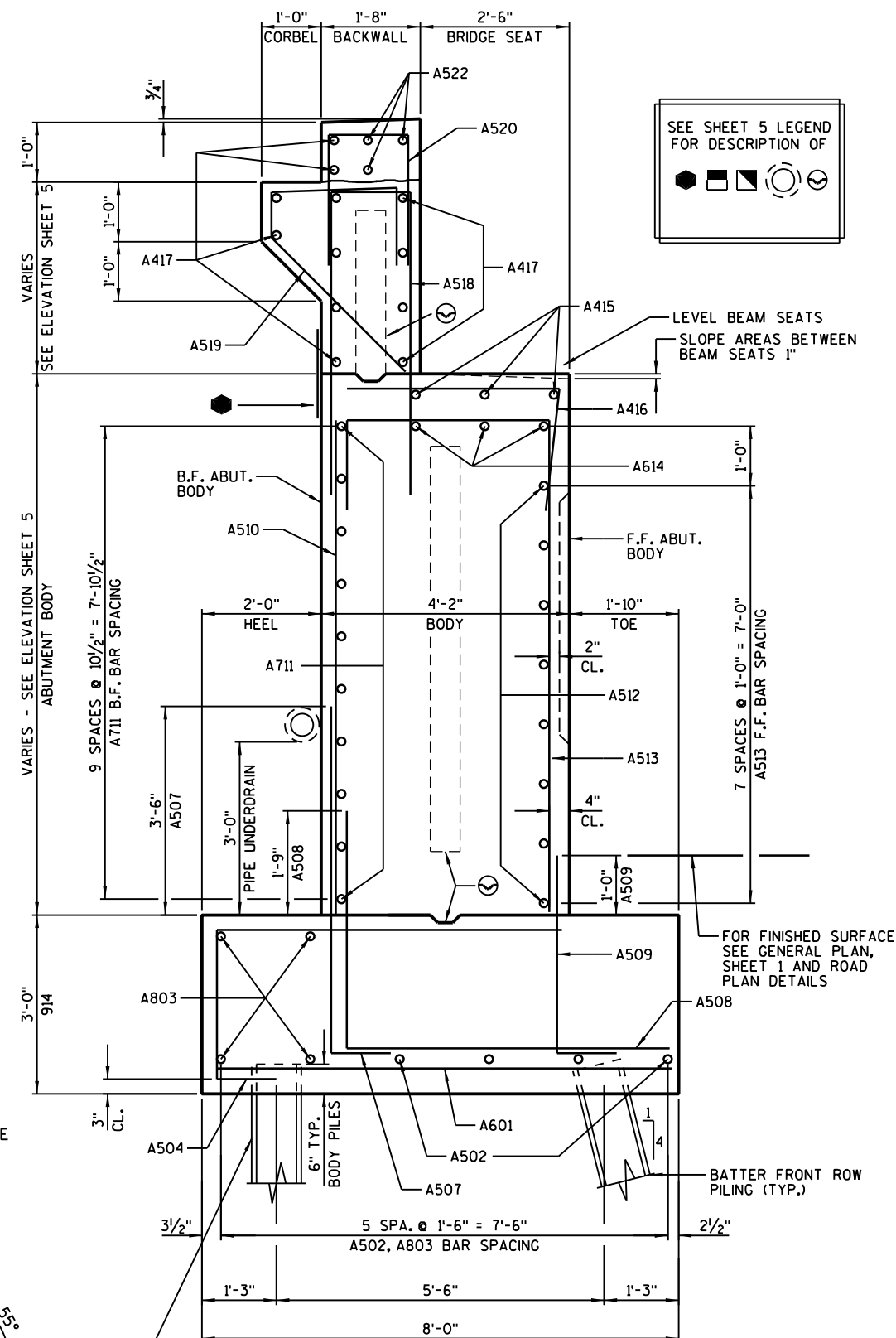
THE RODENT SHIELD SHALL BE A
PVC GRATE SIMILAR TO THIS DETAIL.
THE GRATE IS COMMERCIALY AVAILABLE
AS A FLOOR STRAINER.
A PIPE COUPLING IS REQUIRED FOR THE
ATTACHMENT OF THIS SHIELD TO THE
PIPE UNDERDRAIN. THE SHIELD SHALL BE
FASTENED TO THE PIPE COUPLING WITH
TWO OR MORE NO. 10 X 1-INCH STAINLESS
STEEL SHEET METAL SCREWS. THE
RODENT SHIELD SHALL BE INCLUDED IN THE
BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

RODENT SHIELD

① - DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

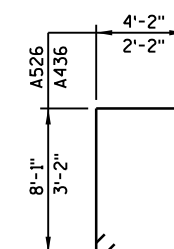


PILE SPLICE DETAILS

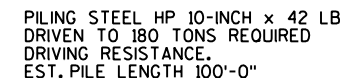
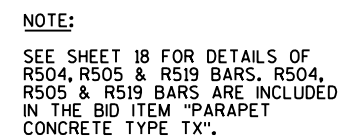


TYPICAL SECTION THRU ABUTMENT

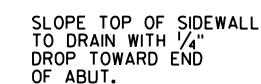
— ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH x 42 LB.
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE
AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED PILE LENGTHS ARE 100'-0" AT THE ABUTMENTS.



A526, A436



SECTION W-W THRU WING



SECTION S-S THRU SIDEWALL

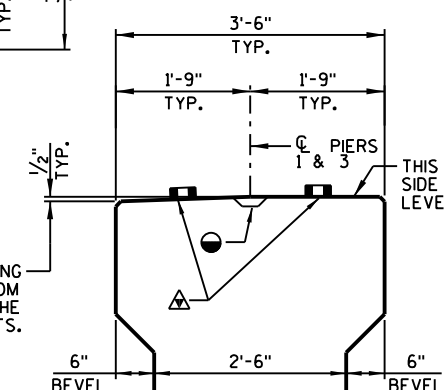


(R504, R505, R519 NOT SHOWN)

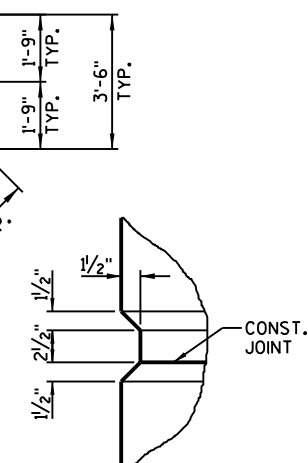
NOTE:
WINGS 1 & 3 SHOWN
WINGS 2 & 4 SIMILAR

SEE SHEET 5 LEGEND
FOR DESCRIPTION OF

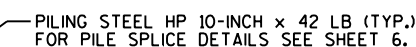
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
WING DETAILS		SHEET 7 OF 21	



BEARING SEAT DETAIL
PIERS 1 & 3



DETAIL - RUSTICATION GROOVE
AT CONSTRUCTION JOINT



PIER BOTTOM PLAN & PILE PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
PIERS		SHEET 8 OF 2	

FD

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6" ϕ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

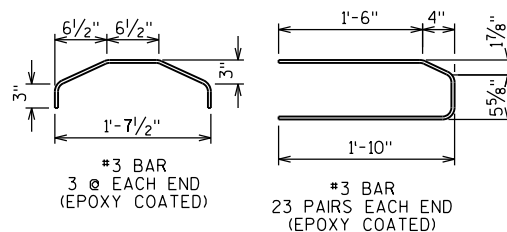
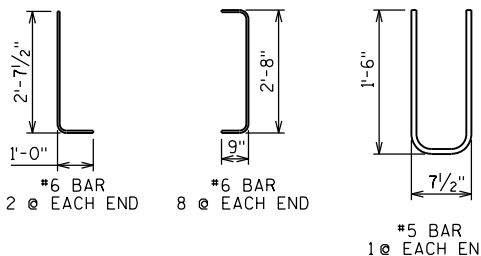
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

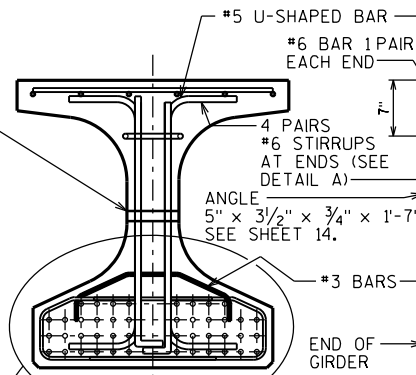
ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

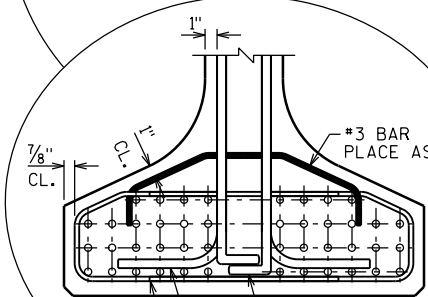


GIRDER LENGTH = "L"

FORM HOLES IN WEB WITH 1/4" SCHEDULE 40 GALVANIZED PIPE. SEE SHEET 14 FOR ANGLE DETAIL.



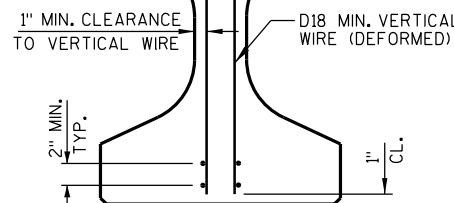
SECTION A-A

DETAIL A
BOTTOM FLANGE

NO. 4 BAR, EPOXY COATED. PLACE AT STIRRUP SPACING REQUIRED FOR NON WWF STIRRUPS. EMBED INTO GIRDER 1'-3".

AREA OF HORIZ. WIRE SHALL BE > 40% OF VERT. WIRE AREA (ASTM A497)

HORIZ. WIRES SHALL BE LOCATED IN TOP AND BOTTOM FLANGES AND NOT IN THE WEB.



SECTION THRU GIRDER

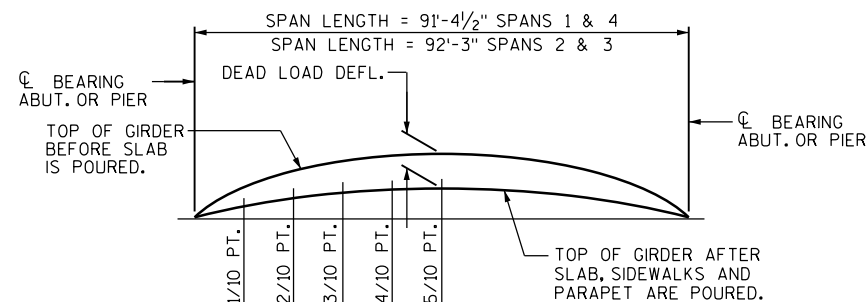
SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS
ASTM A497 (Fy = 70 Ksi)

ABUTMENT END (EXPANSION)

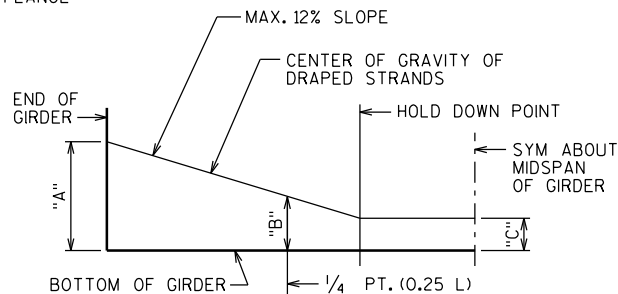
PIER END (FIXED)

SIDE VIEW & TYPICAL SECTION

- (A) DETAIL TYP. AT EACH END
(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN. VALUES INCLUDE A MAGNIFICATION FACTOR OF 1.4 TO ACCOUNT FOR CREEP BETWEEN RELEASE AND INSTALLATION.

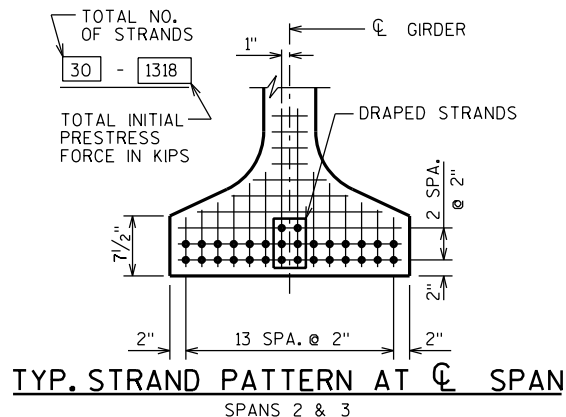
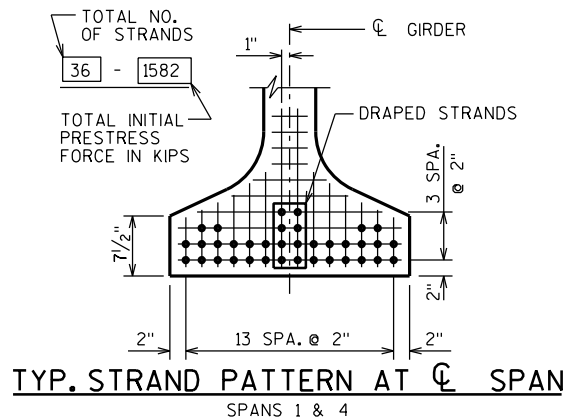
SPAN	CAMBER (IN.)
1 & 4	4 3/8"
2 & 3	3 1/2"

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

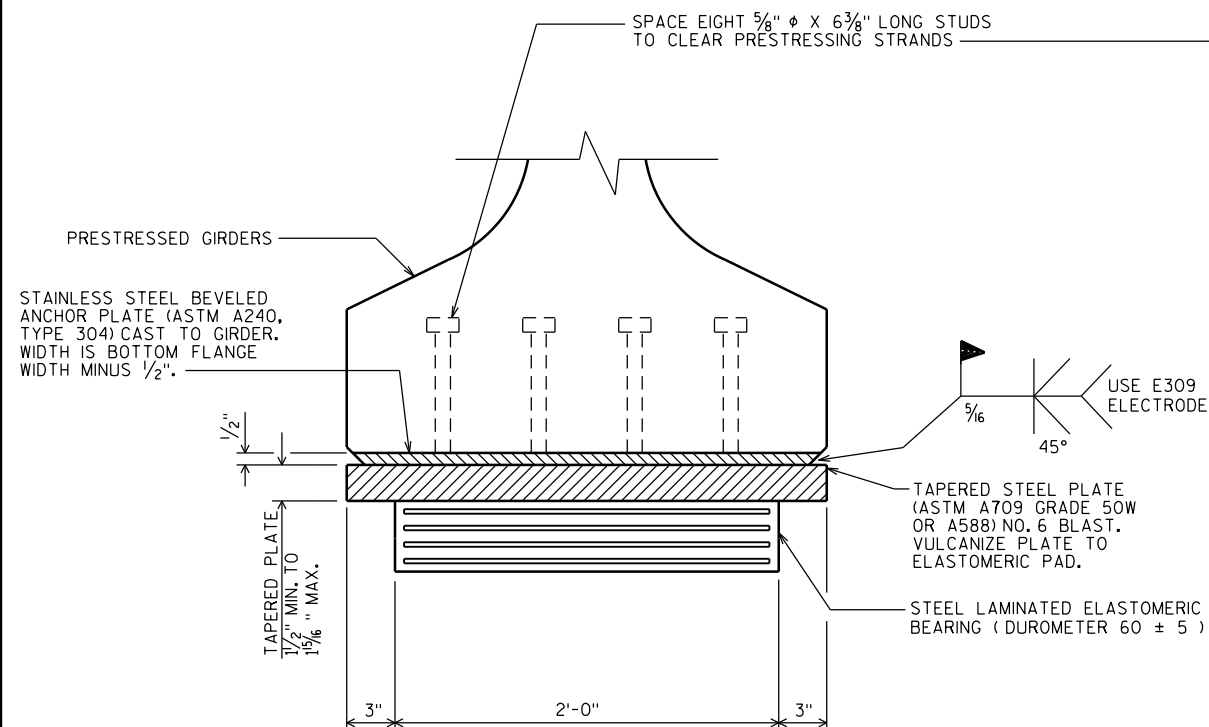
* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

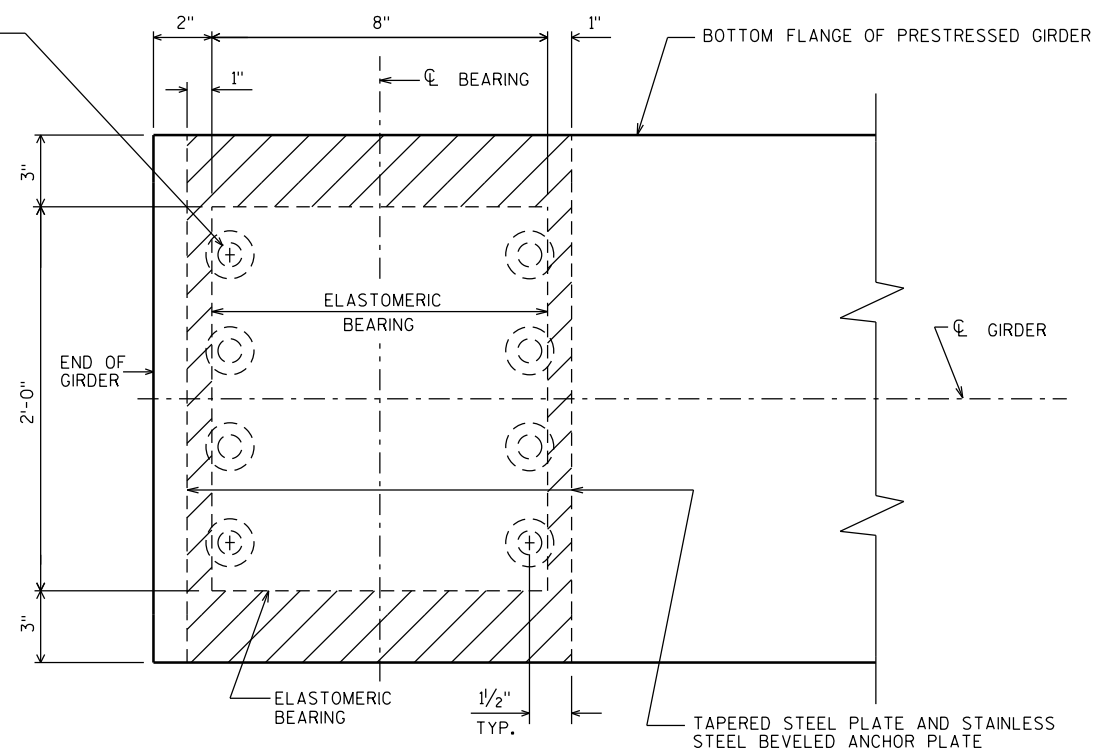
GIRDER DATA																								
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.)				TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
																			"A"	"B" MIN.	"B" MAX.	"C"		
1 & 4	INT. 2-6	92'-0"	0.80	1.51	2.06	2.41	2.52	2.39	2.02	1.46	0.76	8,000	7"	8"	7"	0.60	36	6800	31	11.5	14.5	5	-	-
1 & 4	EXT. 1&7	92'-0"	0.68	1.29	1.75	2.05	2.14	2.02	1.71	1.23	0.64	8,000	7"	8"	7"	0.60	36	6800	31	11.5	14.5	5	-	-
2 & 3	INT. 2-6	92'-0"	0.73	1.40	1.93	2.27	2.39	2.28	1.94	1.41	0.74	8,000	7"	7"	7"	0.60	30	6800	32	11	14	4	-	-
2 & 3	EXT. 1&7	92'-0"	0.59	1.14	1.58	1.87	1.97	1.88	1.60	1.16	0.61	8,000	7"	7"	7"	0.60	30	6800	32	11	14	4	-	-



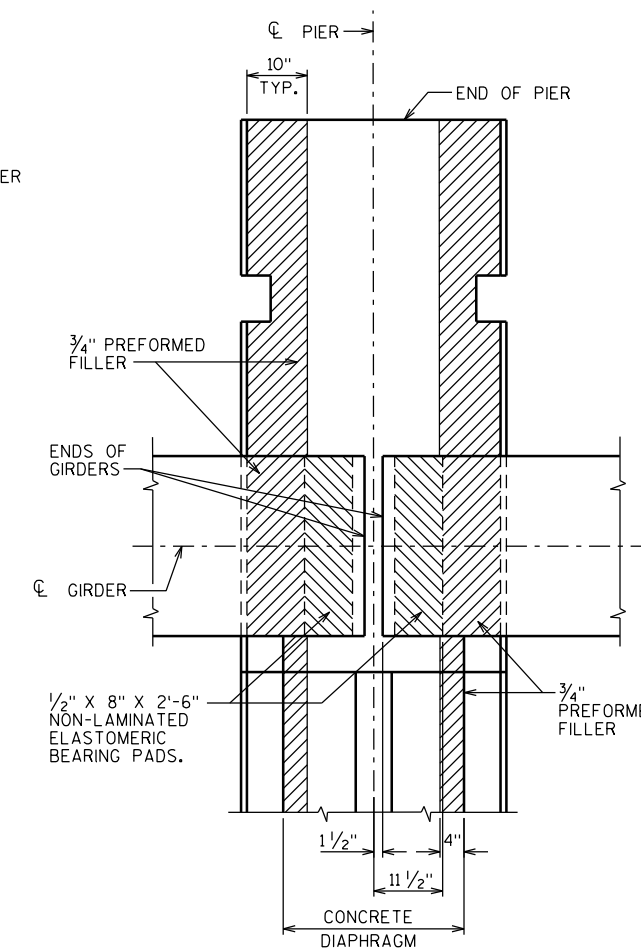
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
36W" PRESTRESSED GIRDER DETAILS		SHEET 10 OF 21	



END VIEW AT ABUTMENTS

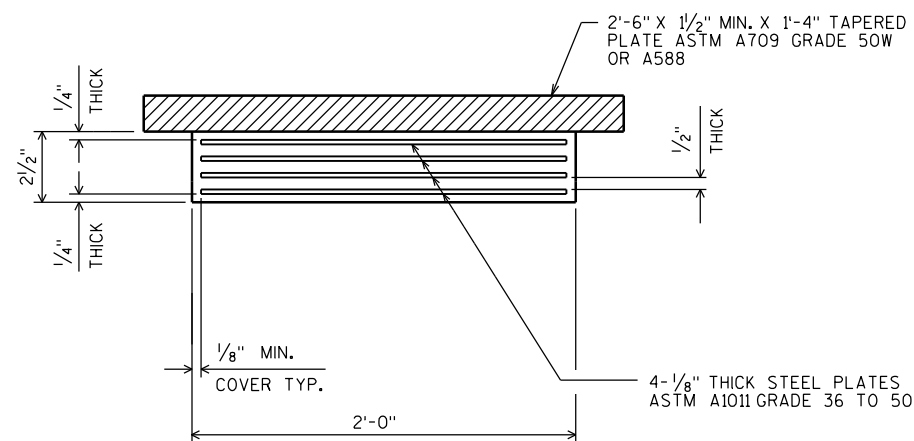


PLAN VIEW AT ABUTMENTS

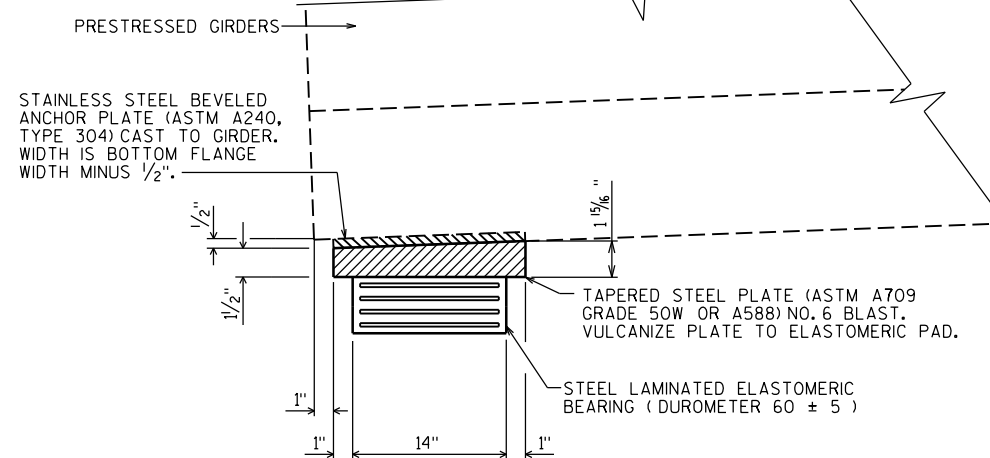


PLAN - BEARING PADS AT PIERS

SEE SHEET 14 FOR ELEVATION AT PIER



SECTION THRU ELASTOMERIC BEARING



ELEVATION VIEW AT ABUTMENTS

ELASTOMERIC BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

ALL MATERIAL USED FOR BEARINGS AT THE ABUTMENTS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
PRESTRESSED GIRDER BEARINGS		SHEET 11 OF 21	

NOTES

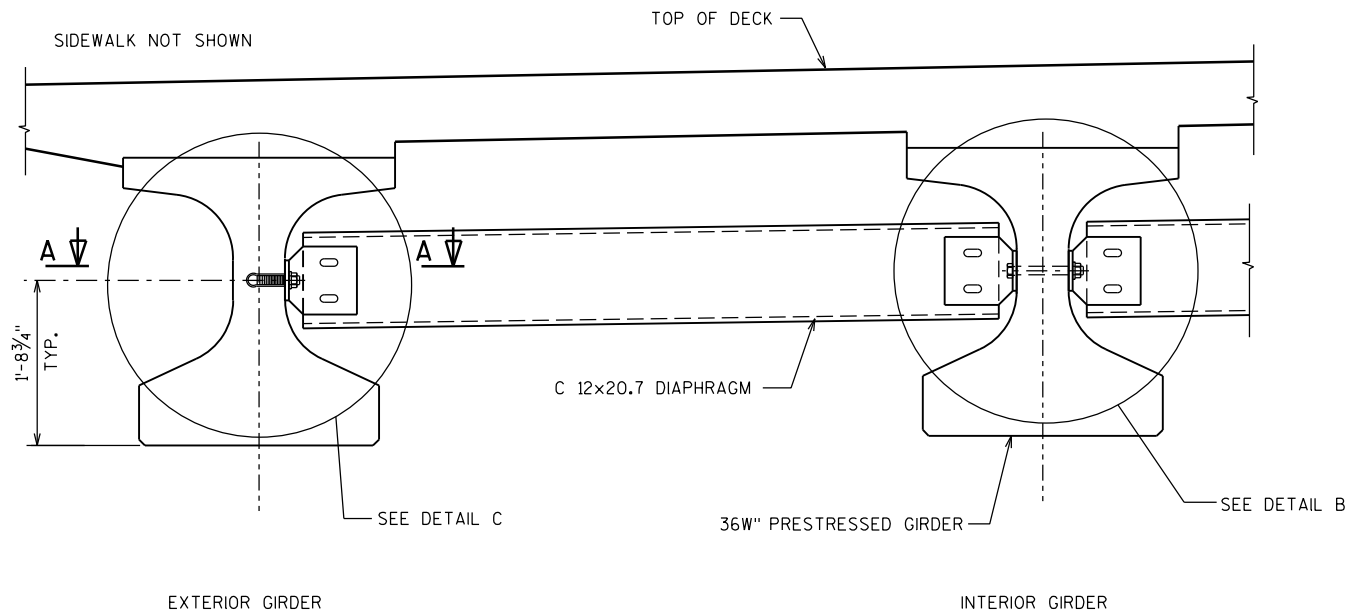
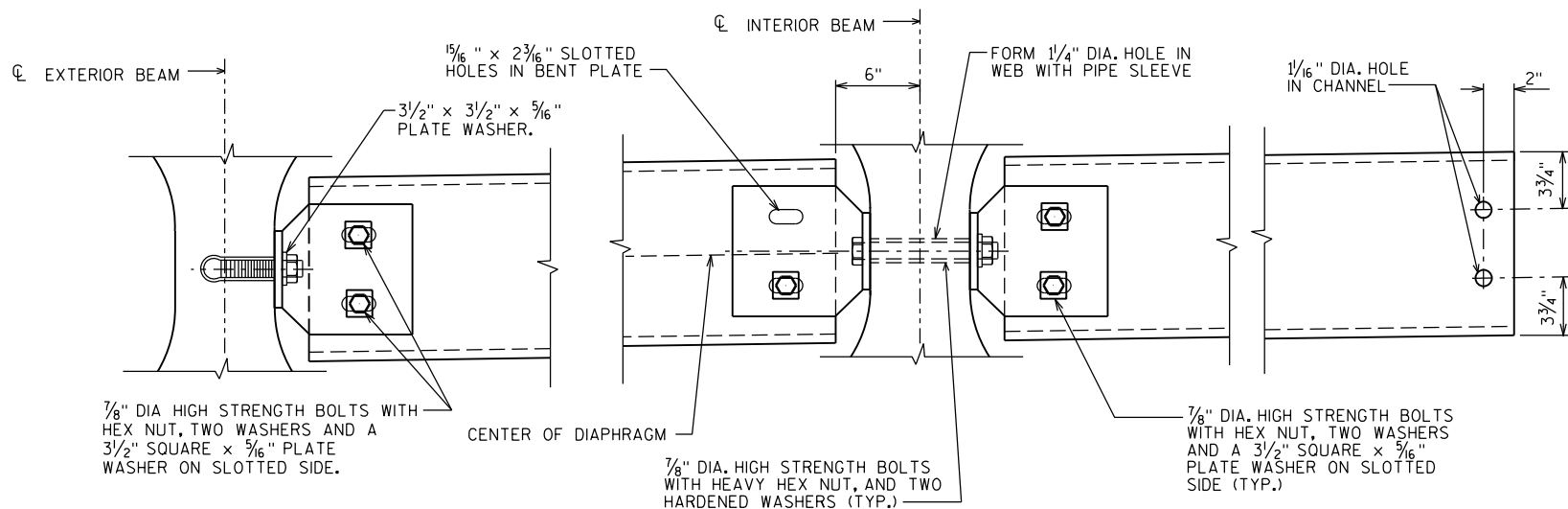
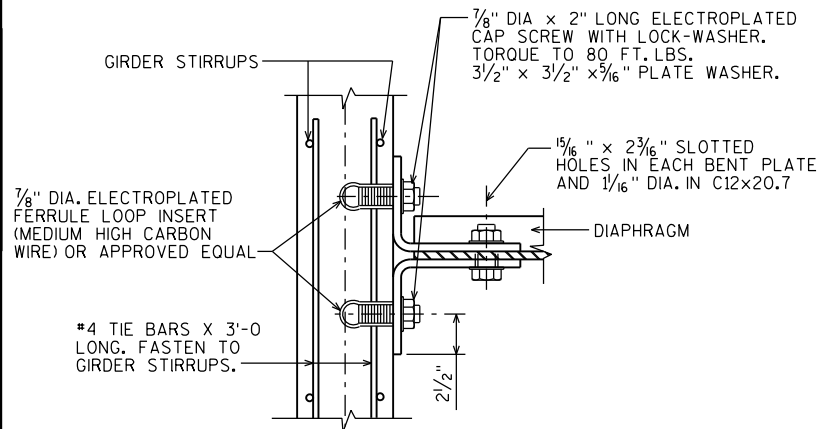
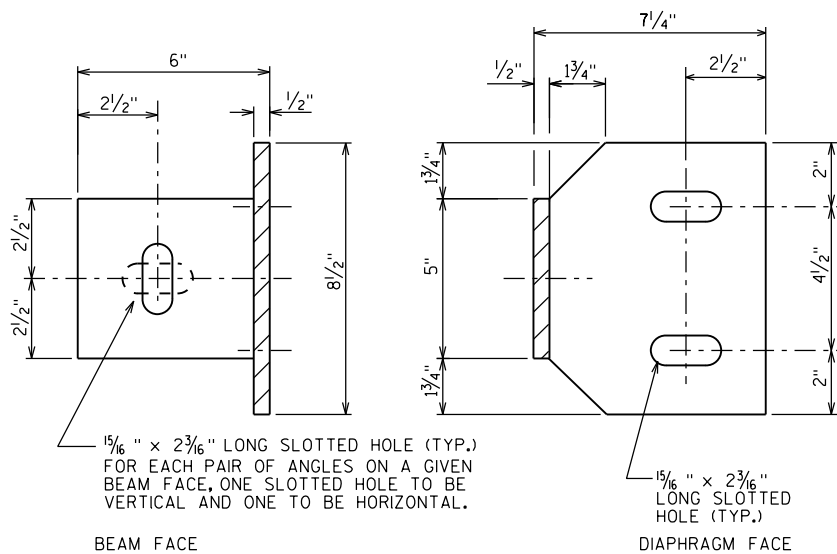
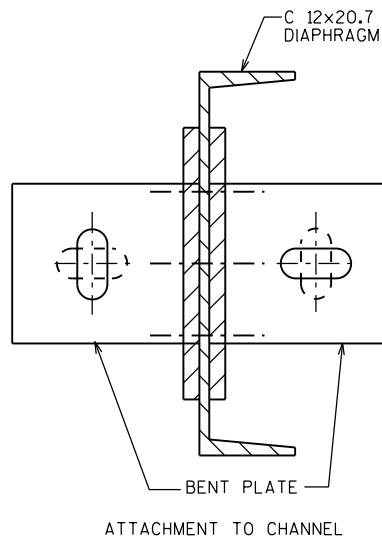
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-53-0287", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

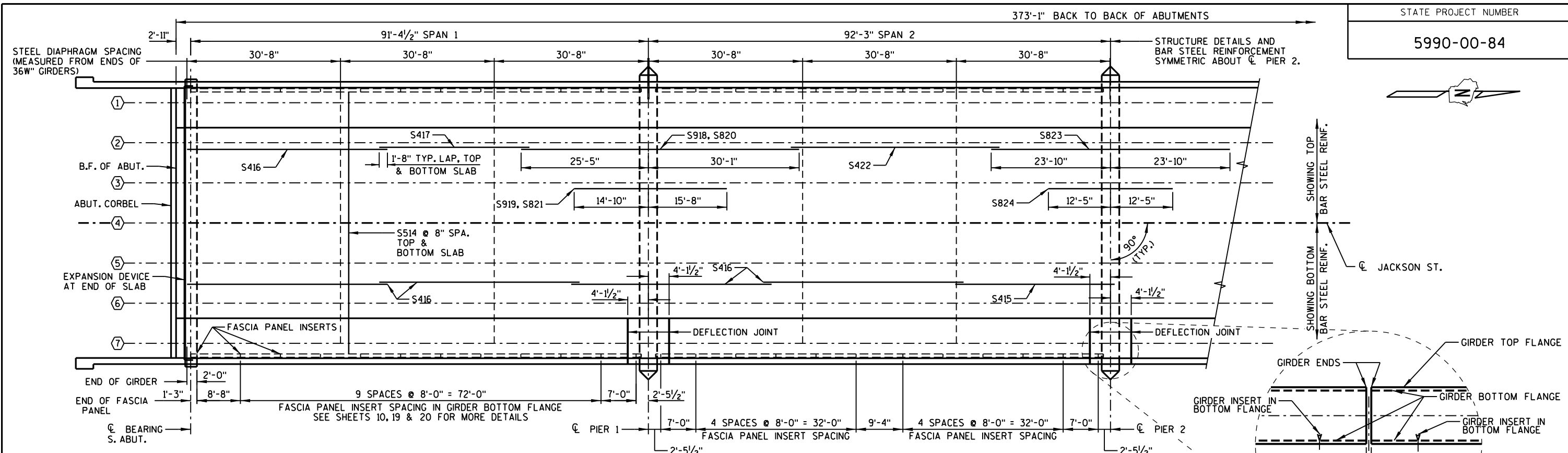
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

FOR STEEL DIAPHRAGM SPACING SEE SHEET 13.

**PART TRANSVERSE SECTION AT DIAPHRAGM****DETAIL C****DETAIL B****SECTION A-A**
(FOR EXTERIOR ATTACHMENT)**BEAM FACE****DIAPHRAGM FACE****ATTACHMENT TO CHANNEL**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY RLR		PLANS CK'D. DHW	
STEEL DIAPHRAGM DETAILS		SHEET 12 OF 21	



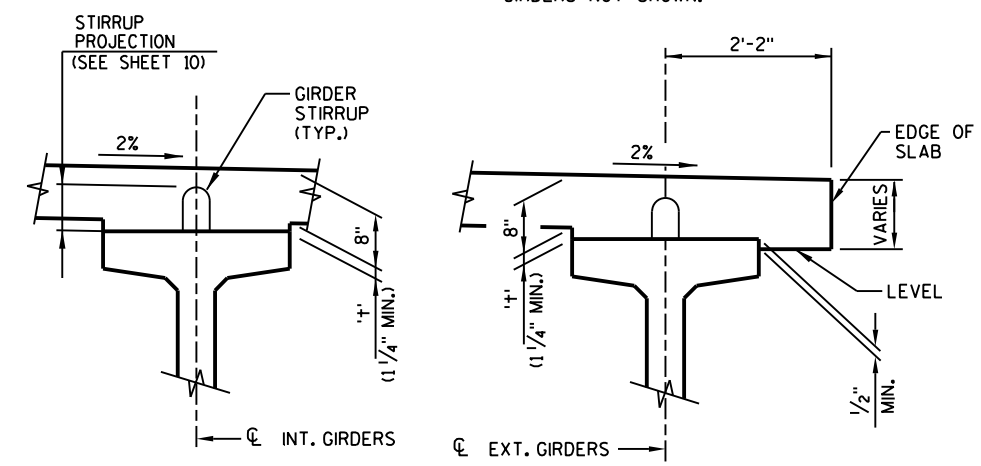
HALF PLAN

TOP OF SLAB ELEVATIONS @ C/L OF GIRDERS

LOCATION	SPAN POINT	EAST DECK EDGE	C/L GIRDER 7	C/L GIRDER 6	C/L GIRDER 5	C/L JACKSON STREET C/L GIRDER 4	C/L GIRDER 3	C/L GIRDER 2	C/L GIRDER 1	WEST DECK EDGE
S. ABUT.	1	774.04	774.08	774.24	774.40	774.56	774.40	774.24	774.08	774.04
	1.1	774.34	774.38	774.54	774.70	774.86	774.70	774.54	774.38	774.34
	1.2	774.62	774.66	774.82	774.98	775.14	774.98	774.82	774.66	774.62
	1.3	774.87	774.91	775.07	775.23	775.39	775.23	775.07	774.91	774.87
	1.4	775.10	775.14	775.30	775.46	775.62	775.46	775.30	775.14	775.10
	1.5	775.30	775.34	775.50	775.66	775.82	775.66	775.50	775.34	775.30
	1.6	775.48	775.52	775.68	775.84	776.00	775.84	775.68	775.52	775.48
	1.7	775.63	775.67	775.83	775.99	776.15	775.99	775.83	775.67	775.63
	1.8	775.76	775.81	775.97	776.13	776.29	776.13	775.97	775.81	775.76
	1.9	775.89	775.93	776.09	776.25	776.41	776.25	776.09	775.93	775.89
PIER 1	2	776.00	776.04	776.20	776.36	776.52	776.36	776.20	776.04	776.00
	2.1	776.10	776.14	776.30	776.46	776.62	776.46	776.30	776.14	776.10
	2.2	776.19	776.24	776.40	776.56	776.72	776.56	776.40	776.24	776.19
	2.3	776.27	776.32	776.48	776.64	776.80	776.64	776.48	776.32	776.27
	2.4	776.34	776.39	776.55	776.71	776.87	776.71	776.55	776.39	776.34
	2.5	776.40	776.45	776.61	776.77	776.93	776.77	776.61	776.45	776.40
	2.6	776.45	776.50	776.66	776.82	776.98	776.82	776.66	776.50	776.45
	2.7	776.49	776.53	776.69	776.85	777.01	776.85	776.69	776.53	776.49
	2.8	776.52	776.56	776.72	776.88	777.04	776.88	776.72	776.56	776.52
	2.9	776.53	776.58	776.74	776.90	777.06	776.90	776.74	776.58	776.53
PIER 2	3	776.54	776.58	776.74	776.90	777.06	776.90	776.74	776.58	776.54
	3.1	776.53	776.58	776.74	776.90	777.06	776.90	776.74	776.58	776.53
	3.2	776.52	776.56	776.72	776.88	777.04	776.88	776.72	776.56	776.52
	3.3	776.49	776.53	776.69	776.85	777.01	776.85	776.69	776.53	776.49
	3.4	776.45	776.50	776.66	776.82	776.98	776.82	776.66	776.50	776.45
	3.5	776.40	776.45	776.61	776.77	776.93	776.77	776.61	776.45	776.40
	3.6	776.34	776.39	776.55	776.71	776.87	776.71	776.55	776.39	776.34
	3.7	776.27	776.32	776.48	776.64	776.80	776.64	776.48	776.32	776.27
	3.8	776.19	776.24	776.40	776.56	776.72	776.56	776.40	776.24	776.19
	3.9	776.10	776.14	776.30	776.46	776.62	776.46	776.30	776.14	776.10
PIER 3	4	776.00	776.04	776.20	776.36	776.52	776.36	776.20	776.04	776.00
	4.1	775.89	775.93	776.09	776.25	776.41	776.25	776.09	775.93	775.89
	4.2	775.76	775.81	775.97	776.13	776.29	776.13	775.97	775.81	775.76
	4.3	775.63	775.67	775.83	775.99	776.15	775.99	775.83	775.67	775.63
	4.4	775.48	775.52	775.68	775.84	776.00	775.84	775.68	775.52	775.48
	4.5	775.30	775.34	775.50	775.66	775.82	775.66	775.50	775.34	775.30
	4.6	775.10	775.14	775.30	775.46	775.62	775.46	775.30	775.14	775.10
	4.7	774.87	774.91	775.07	775.23	775.39	775.23	775.07	774.91	774.87
	4.8	774.62	774.66	774.82	774.98	775.14	774.98	774.82	774.66	774.62
	4.9	774.34	774.38	774.54	774.70	774.86	774.70	774.54	774.38	774.34
N. ABUT.	5	774.04	774.08	774.24	774.40	774.56	774.40	774.24	774.08	774.04

NOTE:
ONE TRANSVERSE OPTIONAL CONSTRUCTION JOINT MAY BE USED IN THE CONCRETE DECK POUR, THE LOCATION IS SUBJECT TO THE APPROVAL OF THE ENGINEER.

NOTE:
SIDEWALK OVER EXTERIOR GIRDERS NOT SHOWN.



SLAB HAUNCH DETAIL

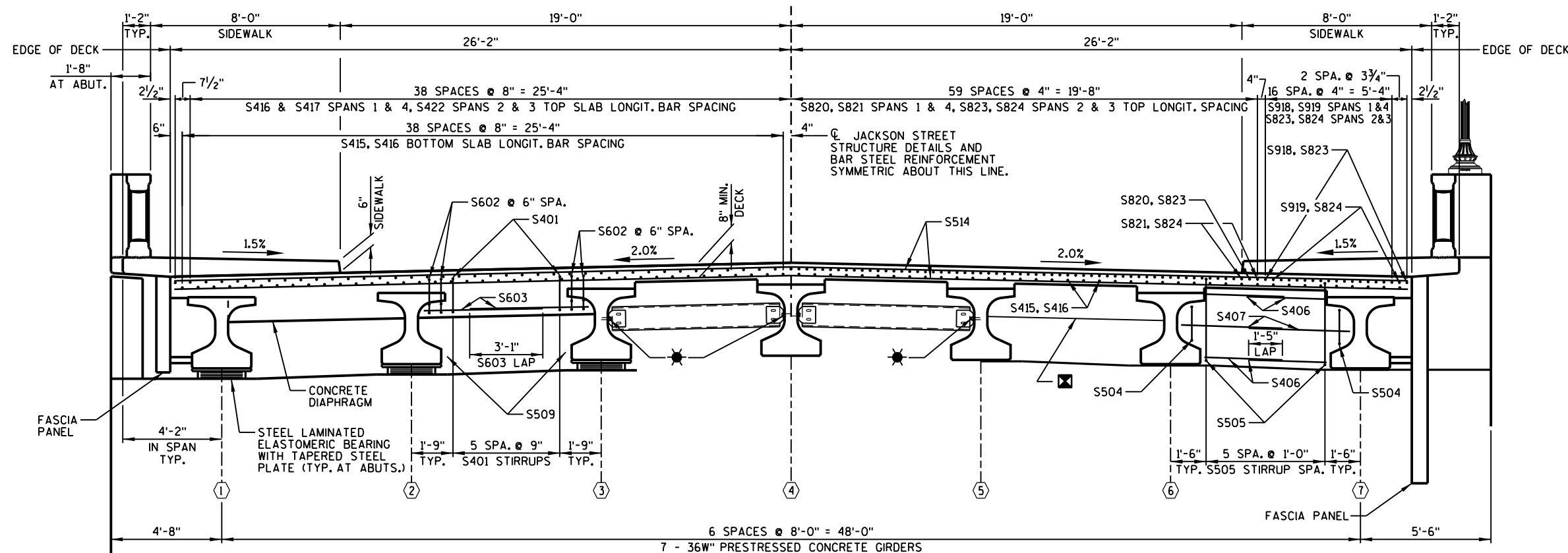
TO DETERMINE '+', ELEV. OF TOP OF GIRDERS AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN, TO DETERMINE THE TOP OF SLAB ELEVATION FOR POINT REFERRED USE TABLE ON THIS SHEET AND ADJUST FOR CROSS SLOPE OVER GIRDER, THEN FOLLOW THIS PROCESS:

- TOP OF SLAB ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
- + DEADLOAD DEFLECTION (SEE SHEET 10)
- SLAB THICKNESS
-
- = HAUNCH HEIGHT '+'

IF 1 1/4" MINIMUM HAUNCH HEIGHT '+' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAX. HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3".

NOTE: AN AVERAGE HAUNCH ("+") OF 3/16" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES."

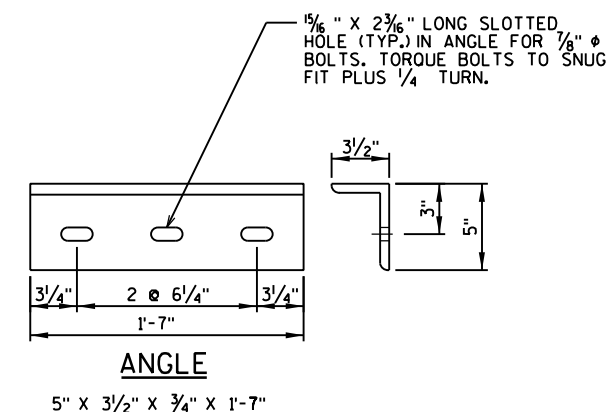
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
SUPERSTRUCTURE		SHEET 13 OF 21	



AT ABUTMENTS

IN SPANS
CROSS SECTION THRU BRIDGE
(LOOKING NORTH)

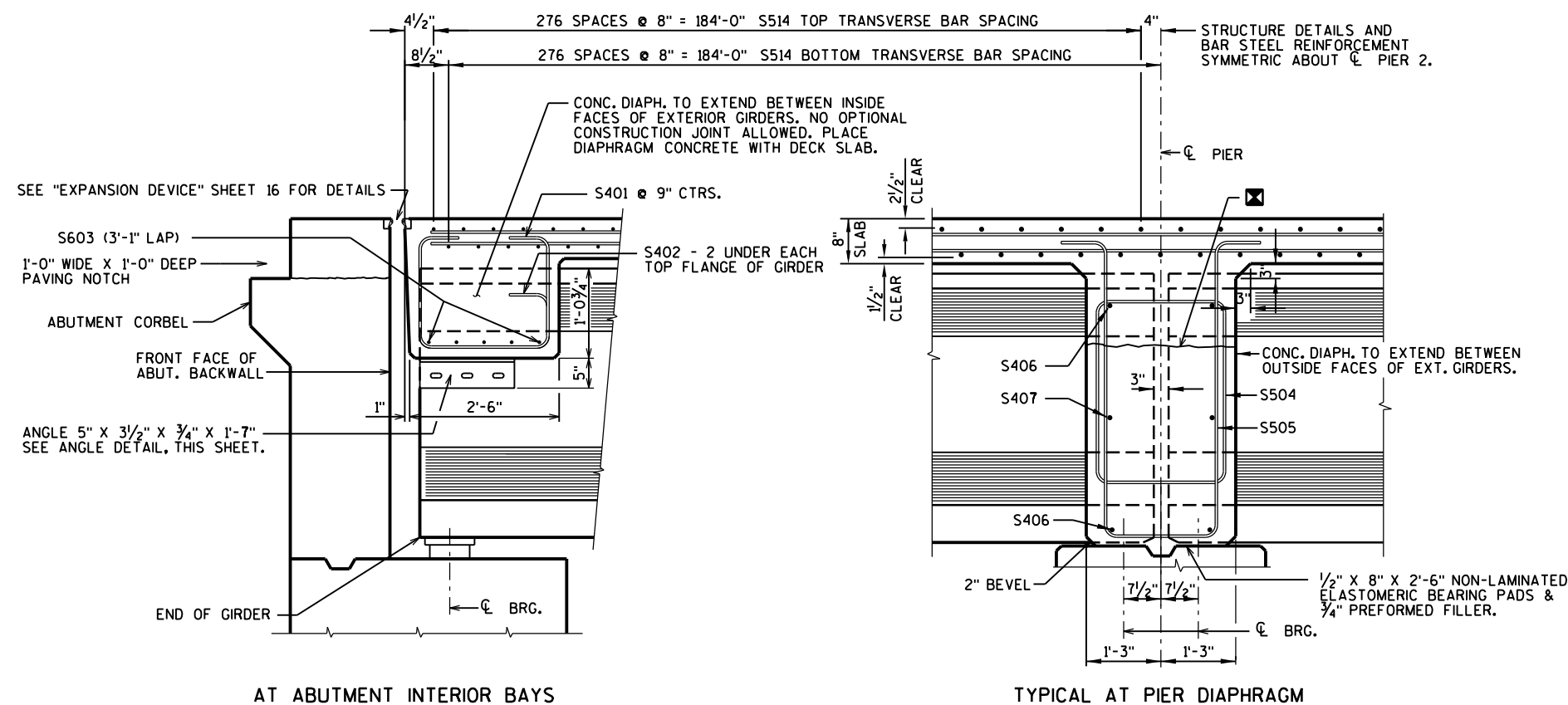
AT PIERS



PROVIDE 3/2" X 3/2" X 5/16" PLATE WASHERS AT ALL LOCATIONS EXCEPT AT EXTERIOR FACES OF EXTERIOR GIRDERS WHERE 3/2" X 3/2" X 1/2" PLATE WASHERS SHALL BE PROVIDED.

LEGEND

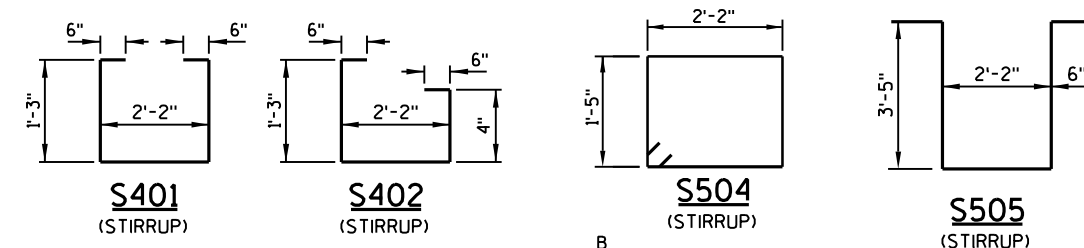
- - INDICATES GIRDER NUMBER
- ☒ - OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDERS. IF USED SLAB POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.
- ★ - FOR DETAILS OF STEEL DIAPHRAGMS AND DIAPHRAGM INSERTS, SEE SHEET 12. FOR LAYOUT AND SPACING OF STEEL DIAPHRAGMS, SEE HALF PLAN, SHEET 13.



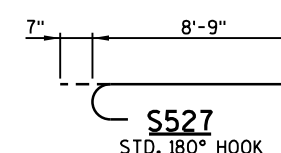
PART LONGITUDINAL SECTION

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
SUPERSTRUCTURE SECTIONS		SHEET 14 OF 21	

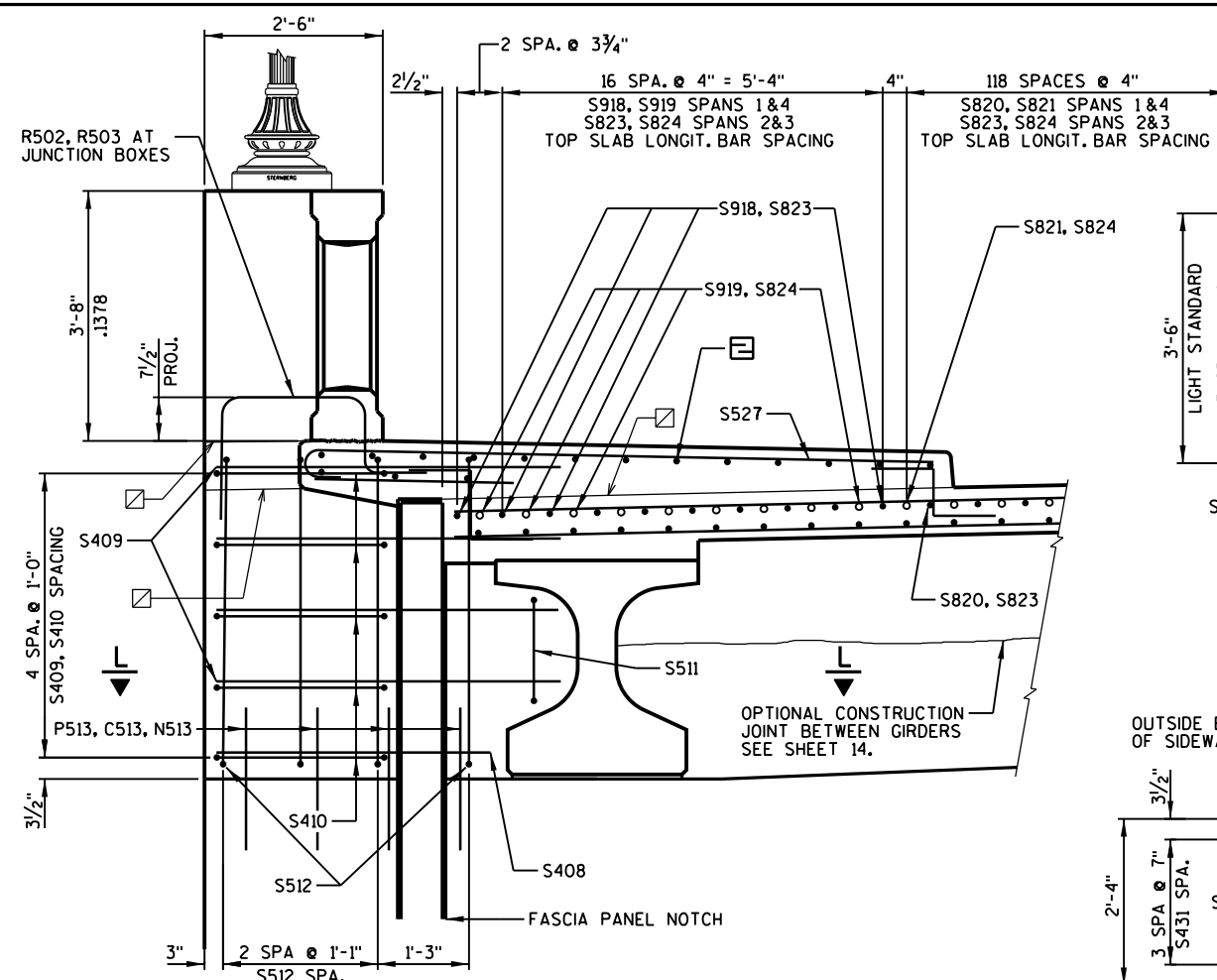
MARK	NUMBER REQ'D.	LENGTH	BENT	DESCRIPTION
S401	72	5'-4"	X	DIAPH. @ ABUT. - STIRRUP - VERT.
S402	48	4'-6"	X	DIAPH. @ ABUT. - STIRRUP - VERT.
S603	120	5'-0"		DIAPH. @ ABUT. - BETWEEN GIRDERS - HORIZ.
S504	36	7'-9"	X	DIAPH. @ PIER - STIRRUP - VERT.
S505	108	9'-6"	X	DIAPH. @ PIER - STIRRUP - VERT.
S406	144	3'-4"		DIAPH. @ PIER - HORIZ.
S407	72	4'-3"		DIAPH. @ PIER - HORIZ.
S408	12	3'-10"		LIGHT STANDARD @ PIER END - HORIZ.
S409	48	4'-10"		LIGHT STANDARD @ PIER END - HORIZ.
S410	60	6'-2"	X	LIGHT STANDARD @ PIER END - HORIZ.
S511	12	5'-2"	X	LIGHT STANDARD @ PIER END - VERT.
S512	60	8'-0"	X	LIGHT STANDARD @ PIER END - VERT.
S413	24	7'-0"		SLAB - END @ EXPANSION DEVICE - HORIZ.
S514	1107	52'-0"		SLAB - TOP & BOTTOM - TRANS.
S415	156	31'-10"		SLAB - BOTTOM @ PIER 2 - LONGIT.
S416	782	40'-0"		SLAB - BOTTOM & TOP @ SLAB ENDS - LONGIT.
S417	158	30'-0"		SLAB - TOP - SPANS 1&4 - LONGIT.
S918	40	55'-6"		SLAB - TOP - EXTERIOR OVER PIERS 1&3 - LONGIT.
S919	36	30'-6"		SLAB - TOP - EXTERIOR OVER PIERS 1&3 - LONGIT.
S820	118	55'-6"		SLAB - TOP - INTERIOR OVER PIERS 1&3 - LONGIT.
S821	120	30'-6"		SLAB - TOP - INTERIOR OVER PIERS 1&3 - LONGIT.
S422	158	41'-8"		SLAB - TOP - SPANS 2&3 - LONGIT.
S823	79	47'-8"		SLAB - TOP - OVER PIER 2 - LONGIT.
S824	78	24'-10"		SLAB - TOP - OVER PIER 2 - LONGIT.
S425	2956	2'-6"	X	SIDEWALK INTO SLAB - VERT.
S426	494	2'-10"		SIDEWALK - BOTTOM - TRANS.
S527	1478	9'-4"	X	SIDEWALK - BOTTOM - TRANS.
S428	192	30'-6"		SIDEWALK - SPANS 1&4 - LONGIT.
S429	192	29'-0"		SIDEWALK - SPANS 2&3 - LONGIT.
S430	96	7'-10"		SIDEWALK - OVER PIERS - LONGIT.
S431	16	4'-6"	X	SIDEWALK - EDGE - OVER ABUT. - TRANS.
S432	8	4'-2"	X	SIDEWALK - EDGE - OVER ABUT. - TRANS.



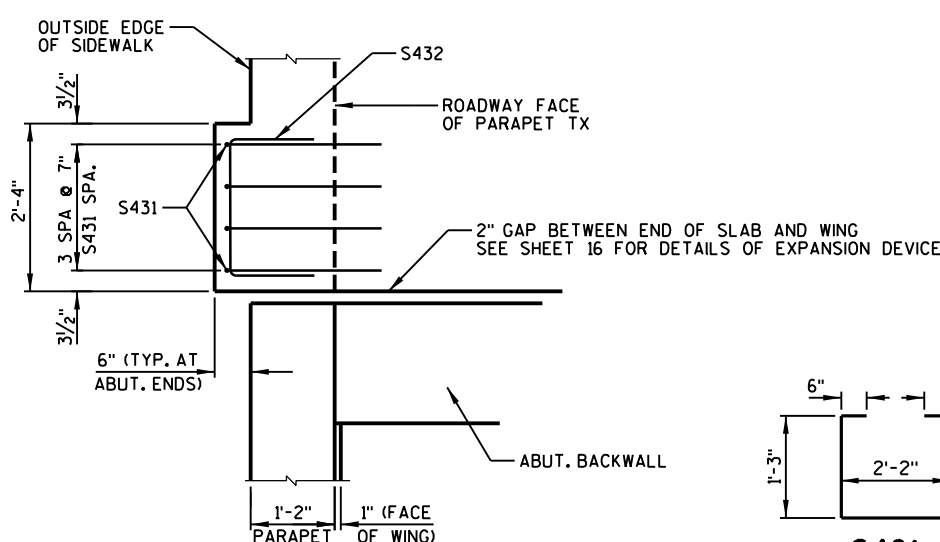
MARK	A	B
S410	2'-0"	2'-4"
S511	2'-0"	1'-5"
S512	2'-0"	4'-3"
S431	2'-2"	4"
S432	1'-2"	2'-0"



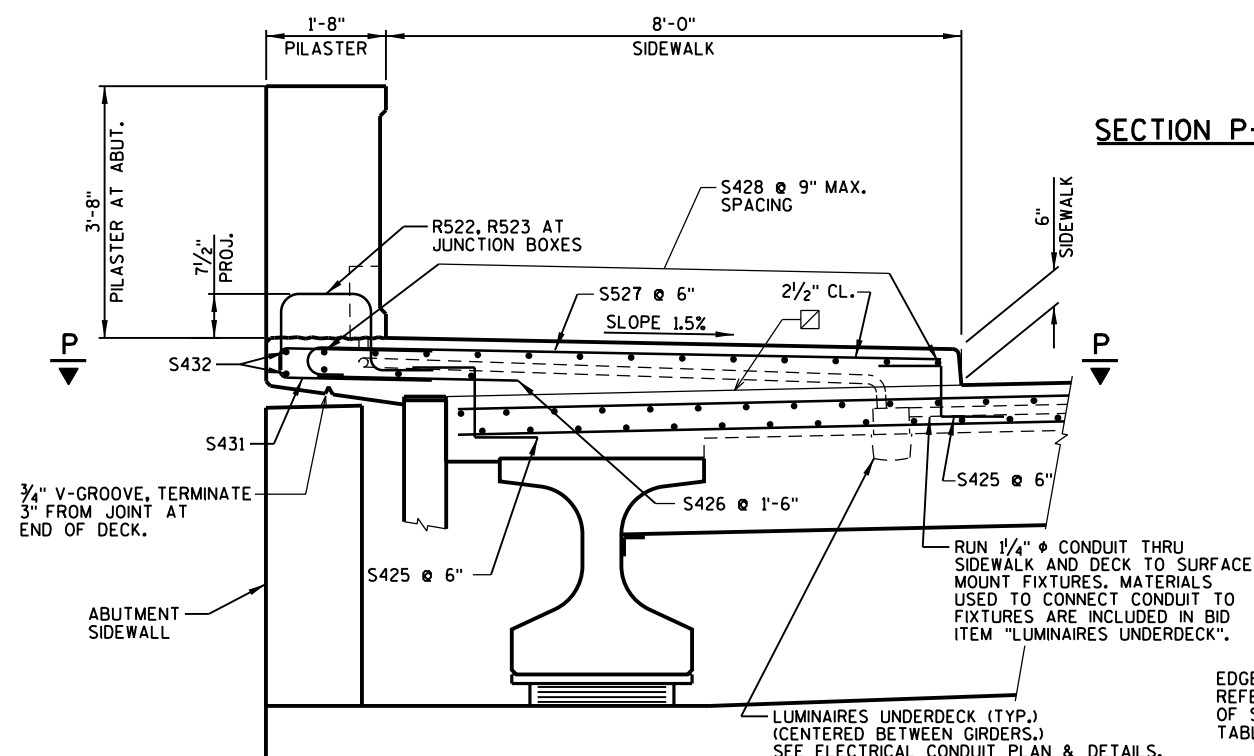
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DWH
SUPERSTRUCTURE SECTIONS & DETAILS		SHEET 15 OF 2	



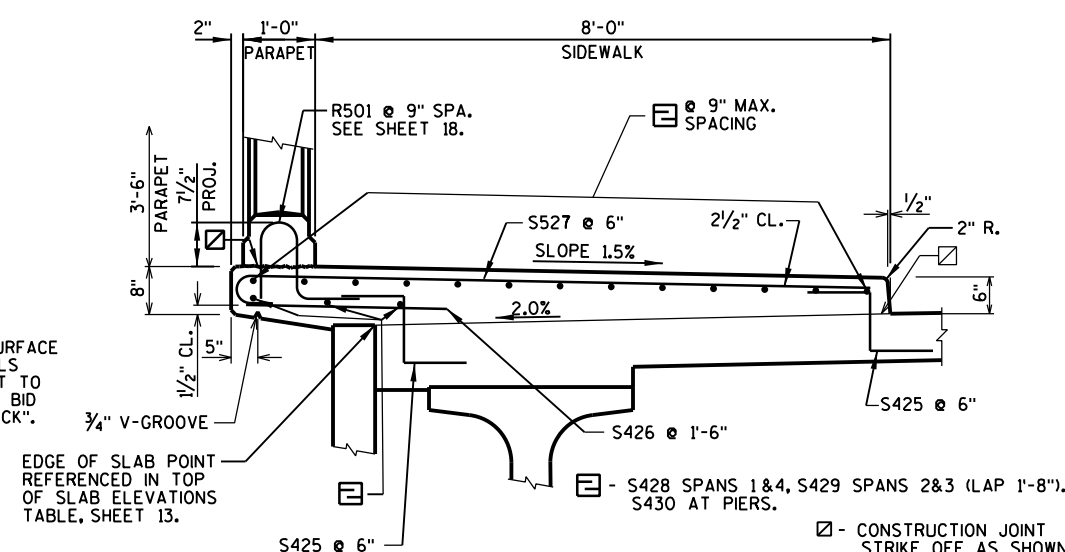
SECTION THRU SIDEWALK AT PIERS



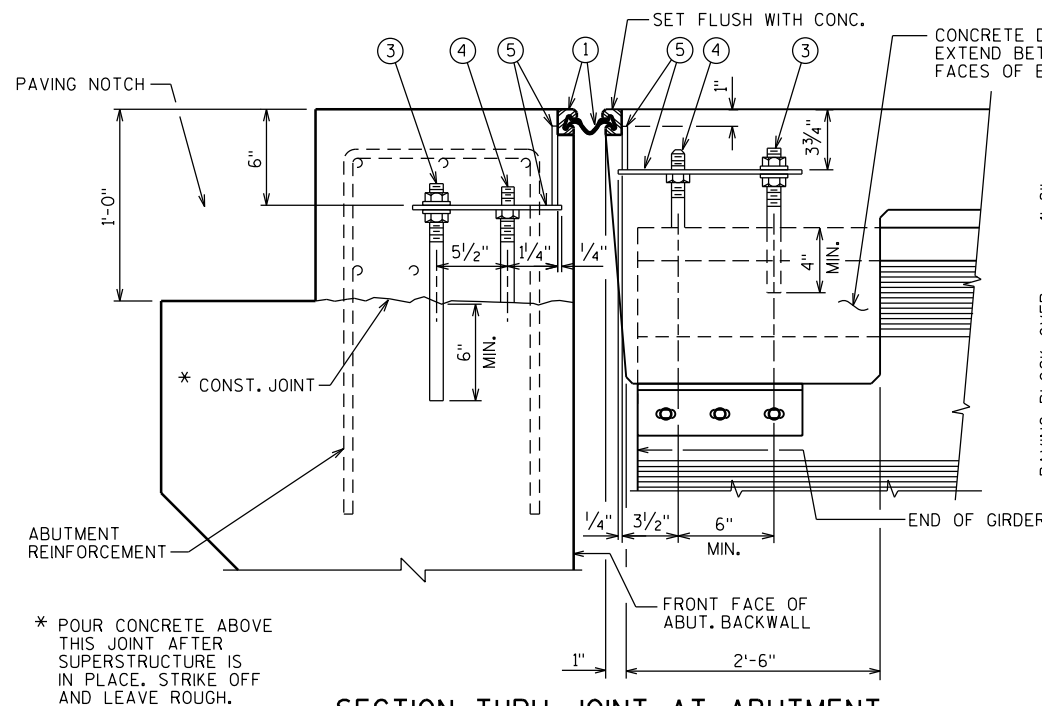
SECTION P-P THRU PILASTER AT ABUTMENT END



SECTION THRU SIDEWALK AT ABUTMENTS



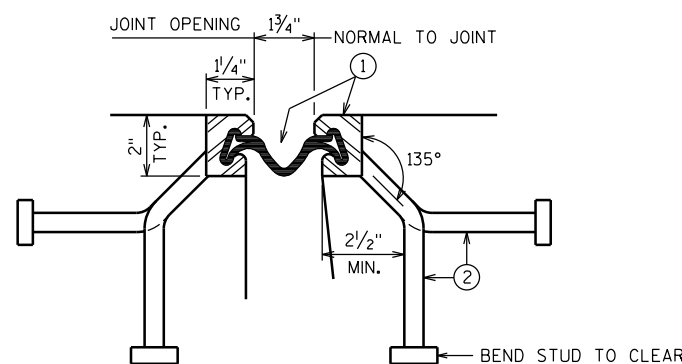
TYPICAL SECTION THRU SIDEWALK



SECTION THRU JOINT AT ABUTMENT

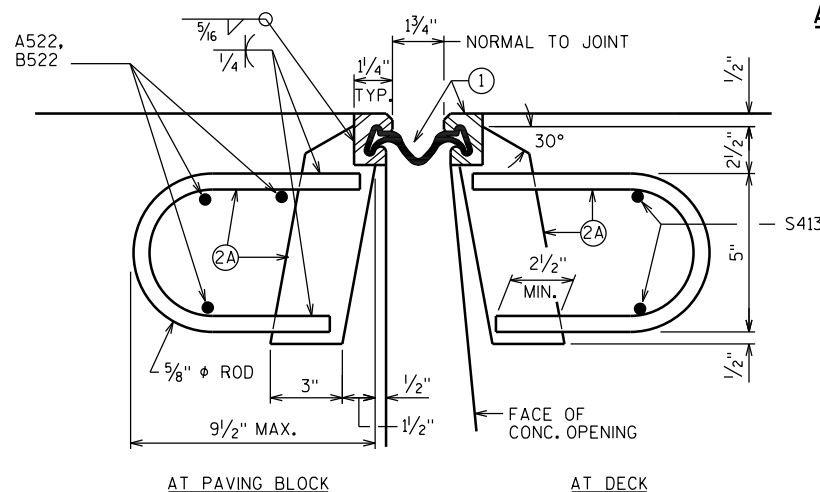
NORMAL TO ϕ SUBSTRUCTURE

* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.



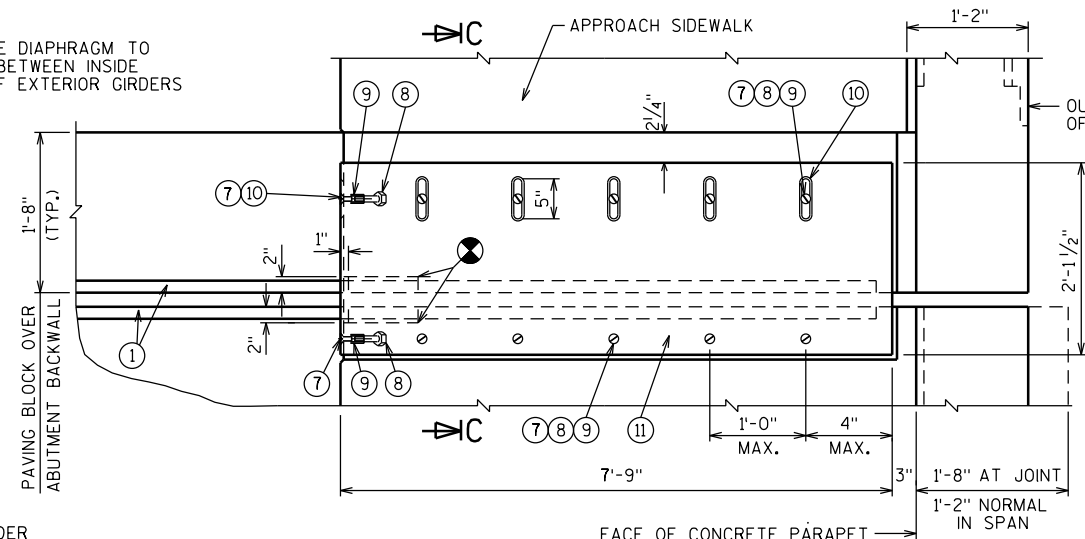
SECTION THRU JOINT

IN DECK AND SIDEWALKS OUTSIDE OF GIRDERS 2 OR 6



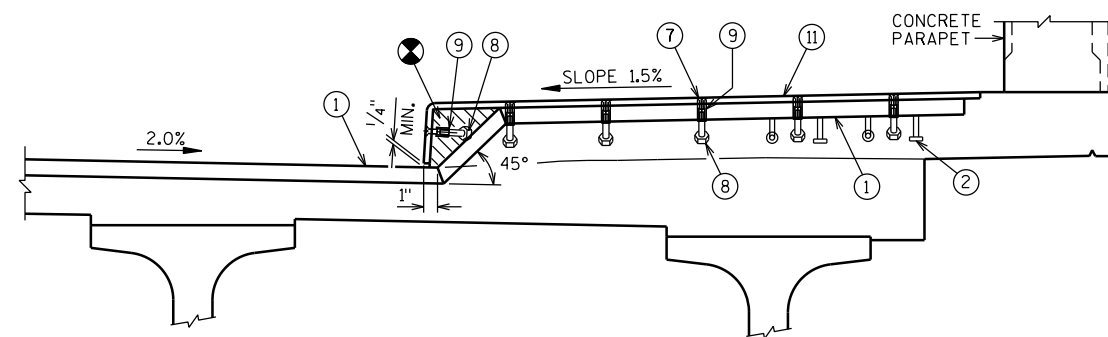
SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN GIRDERS 2 AND 6.

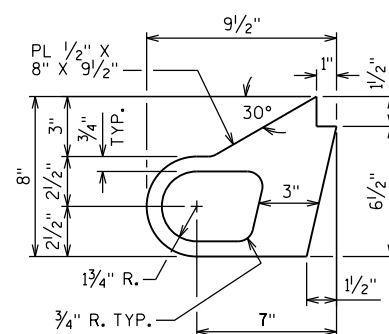


PLAN AT SIDEWALK

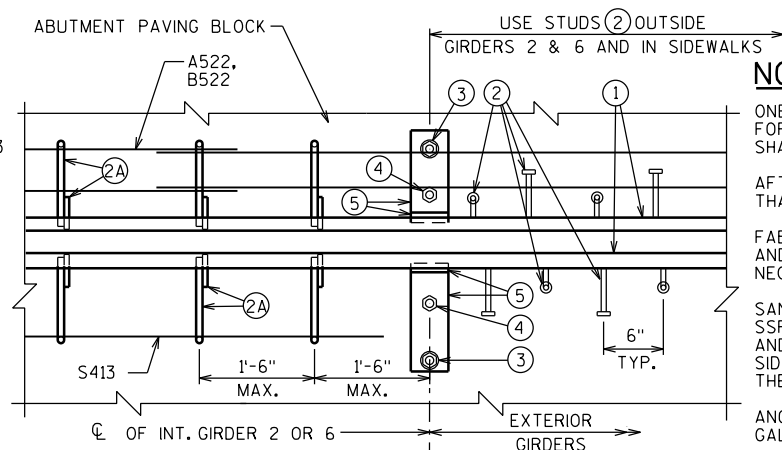
BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.



SECTION AT SIDEWALK



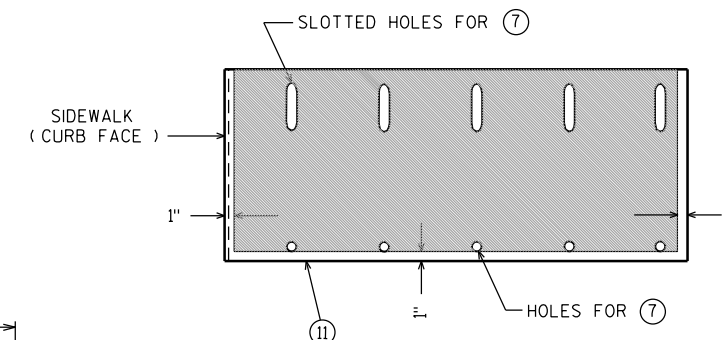
ALTERNATE STRIP SEAL ANCHOR



PART PLAN

LEGEND

- ① NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
- ② STUDS $\frac{5}{8}$ " ϕ X $6\frac{3}{8}$ " LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
- ②A $\frac{1}{2}$ " THICK ANCHOR PLATE WITH $\frac{5}{8}$ " ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
- ③ $\frac{3}{4}$ " ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ϕ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
- ④ $\frac{3}{4}$ " ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- ⑤ FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$ " BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE $1\frac{1}{2}$ " ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
- ⑦ $\frac{3}{4}$ " ϕ X $1\frac{1}{2}$ " STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE, RECESS $\frac{1}{16}$ " BELOW PLATE SURFACE.
- ⑧ $\frac{3}{4}$ " ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
- ⑨ $\frac{3}{4}$ " ϕ X $2\frac{1}{4}$ " GALVANIZED THREADED COUPLING.
- ⑩ 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
- ⑪ SIDEWALK COVER PLATE $\frac{3}{8}$ " X $2'-1\frac{1}{2}$ " X LIMITS SHOWN. BEND DOWN FACE OF COVER PLATE WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

PLAN OF SIDEWALK COVER PLATE
WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

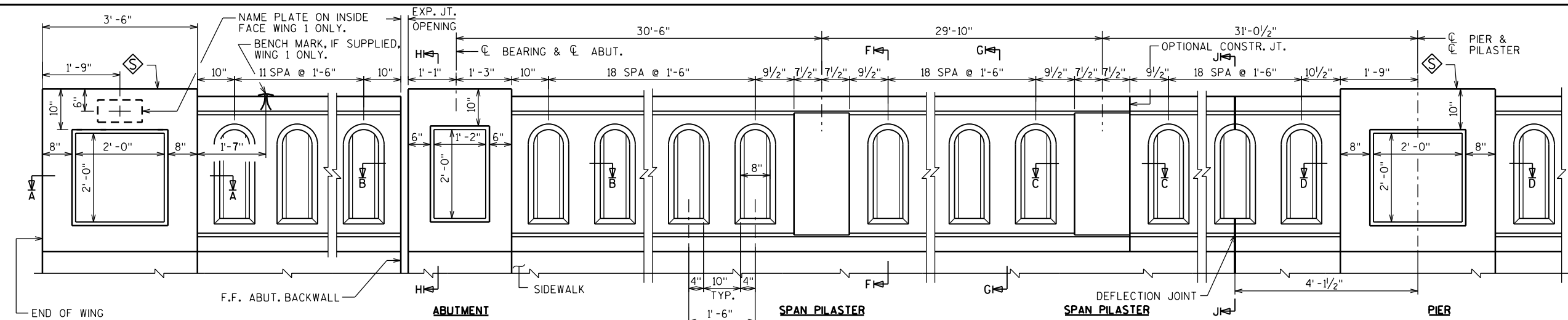
FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

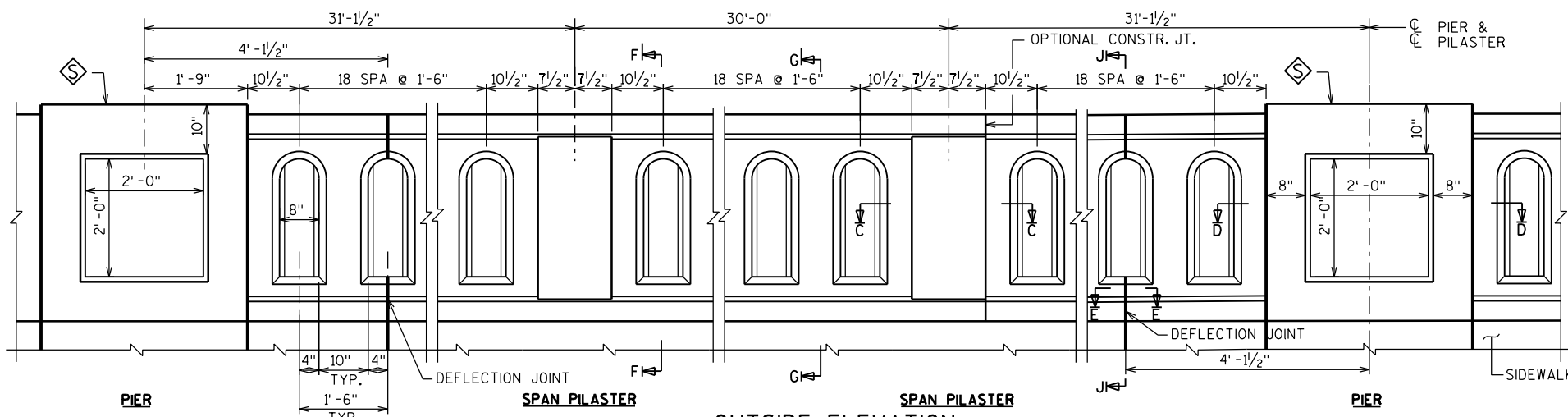
ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-53-0287".

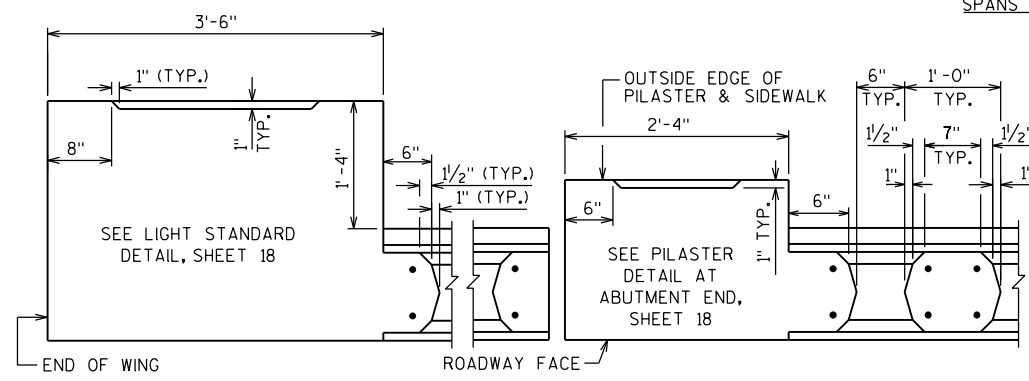
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		RLR	PLANS CK'D. DHW
EXPANSION DEVICE		SHEET 16 OF 21	



SPAN PILASTER
OUTSIDE ELEVATION
SPANS 1 & 4

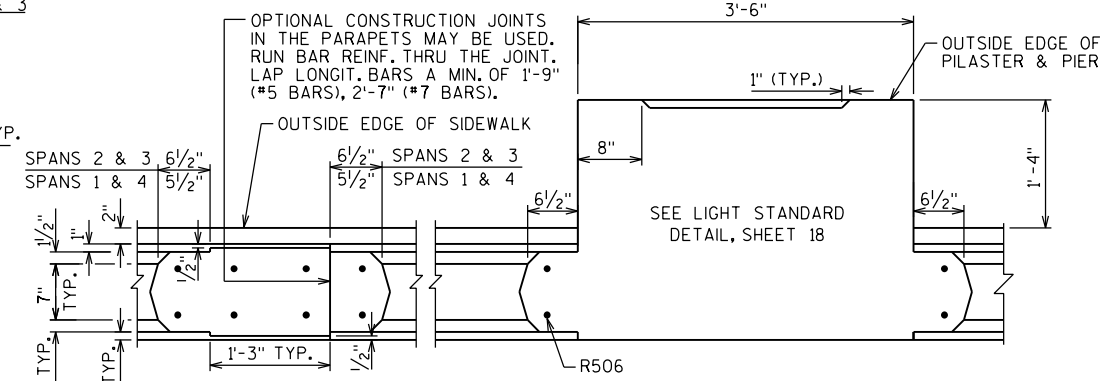


SPAN PILASTER
OUTSIDE ELEVATION
SPANS 2 & 3



SECTION A-A

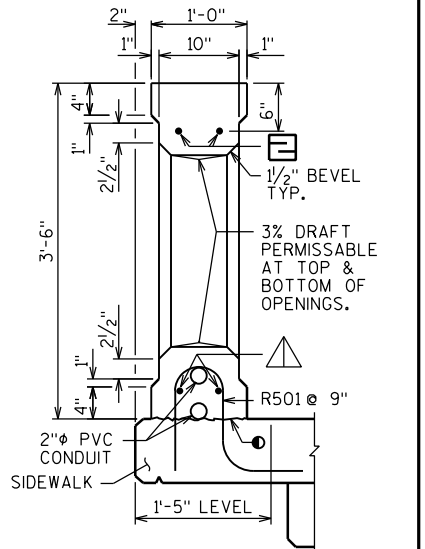
SECTION B-B



SECTION C-C

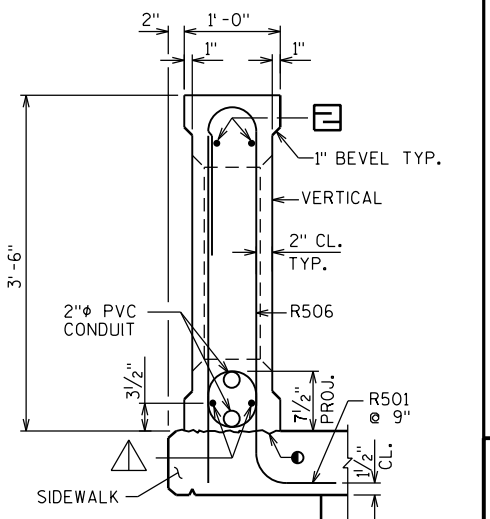
SECTION D-D

STATE PROJECT NUMBER
5990-00-84



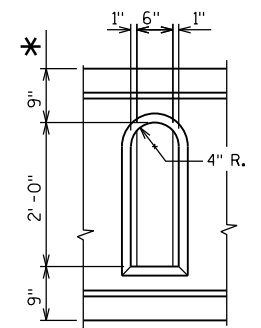
SECTION F-F

- LEGEND**
- R510 - SPANS 1 & 4
 - R512 - SPANS 2 & 3
 - R514 OVER PIERS
 - R711 - SPANS 1 & 4
 - R713 - SPANS 2 & 3
 - R715 OVER PIERS
 - TOP OF LIGHT STANDARD SHALL BE LEVEL. (TYP.)
 - CONSTRUCTION JOINT, STRIKE OFF AS SHOWN AND LEAVE ROUGH.



SECTION G-G

* - VERTICAL DIMENSIONS ARE MEASURED AT THE CENTER OF WINDOW. GRADES NOT SHOWN. WINDOWS SHALL BE VERTICAL.

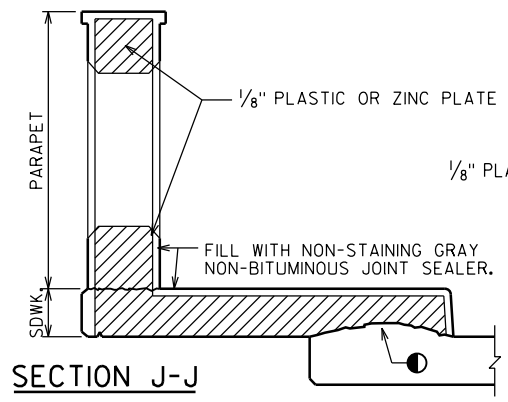


WINDOW DETAILS

NOTES

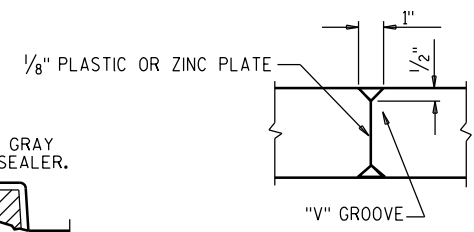
BID ITEM SHALL BE "PARAPET CONCRETE TYPE 'TX'", WHICH SHALL INCLUDE ALL ITEMS SHOWN EXCEPT CONDUIT AND DECORATIVE LIGHT POST TOP UNIT.

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION J-J BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.



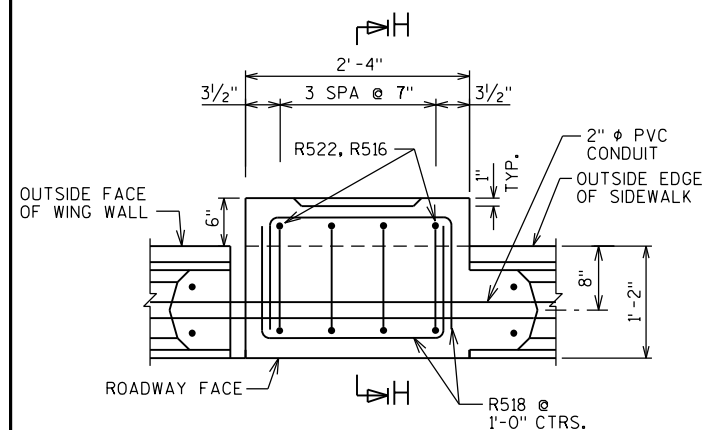
SECTION J-J

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)



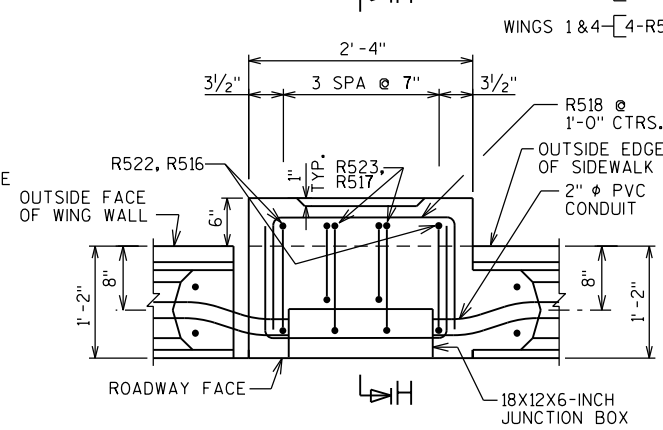
SECTION E-E

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		BJH	PLANS CK'D. DHW
VERTICAL FACE PARAPET "TX"		SHEET 17 OF 21	



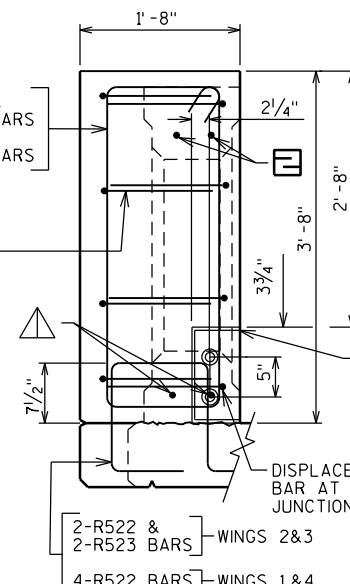
PLAN

(NO JUNCTION BOX AT WINGS 1 & 4)

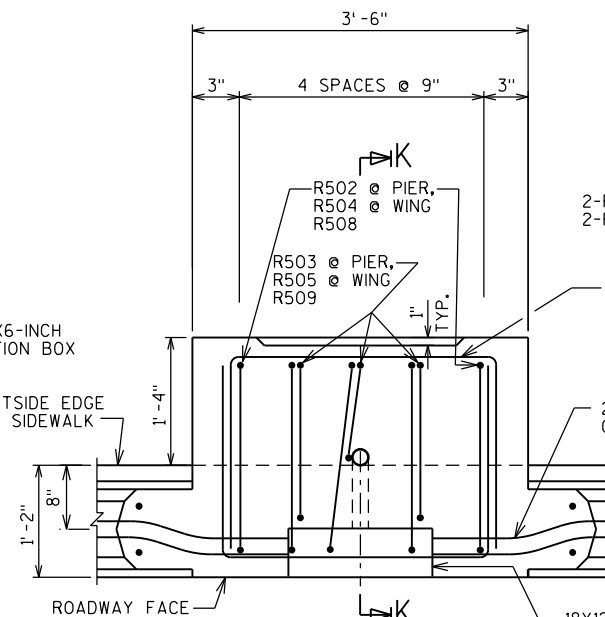


PLAN

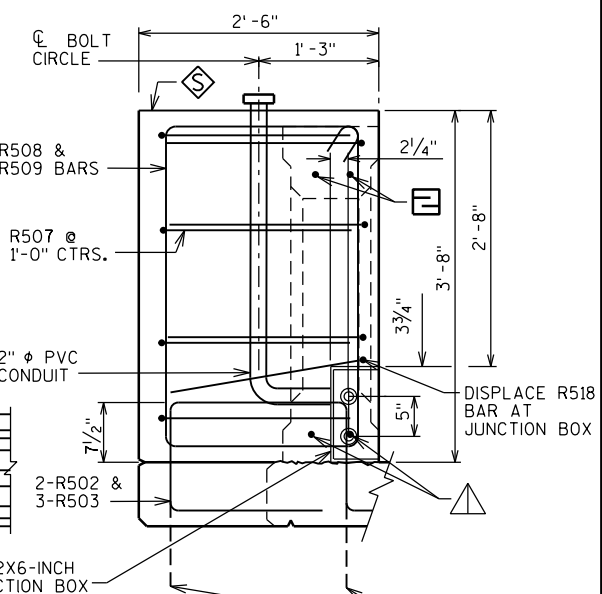
(JUNCTION BOX AT WINGS 2 & 3)



SECTION H-H



PLAN



SECTION K-K

LIGHT STANDARD DETAIL

AT ENDS OF WINGS AND PIERS
(LIGHT STD AT PIER SHOWN, WING SIMILAR)

LEGEND

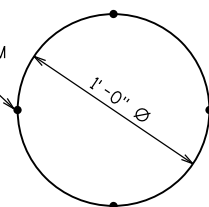
R510 - SPANS 1 & 4
R512 - SPANS 2 & 3
R514 OVER PIERS

R711 - SPANS 1 & 4
R713 - SPANS 2 & 3
R715 OVER PIERS

TOP OF LIGHT STANDARD
SHALL BE LEVEL. (TYP.)

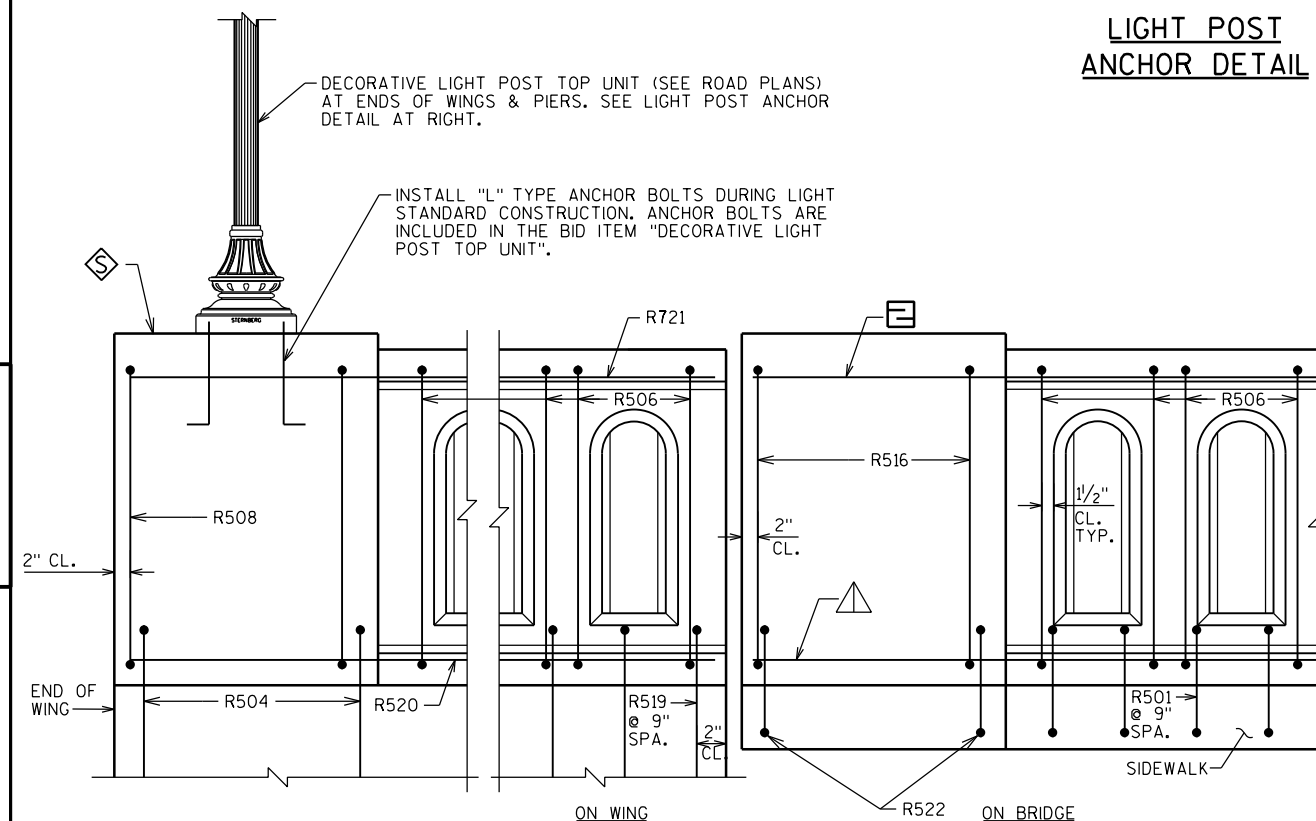
CONSTRUCTION JOINT, STRIKE OFF
AS SHOWN AND LEAVE ROUGH.

FOUR 1/2" DIAMETER, HOT-DIPPED GALVANIZED
"L" TYPE ANCHOR BOLTS (2 1/2" PROJECTION).
ANCHOR BOLTS ARE INCLUDED IN THE BID ITEM
"DECORATIVE LIGHT POST TOP UNIT".

LIGHT POST
ANCHOR DETAIL

DECORATIVE LIGHT POST TOP UNIT (SEE ROAD PLANS)
AT ENDS OF WINGS & PIERS. SEE LIGHT POST ANCHOR
DETAIL AT RIGHT.

INSTALL "L" TYPE ANCHOR BOLTS DURING LIGHT
STANDARD CONSTRUCTION. ANCHOR BOLTS ARE
INCLUDED IN THE BID ITEM "DECORATIVE LIGHT
POST TOP UNIT".



INSIDE ELEVATION SHOWING TYPICAL REINFORCEMENT PLACEMENT

BILL OF BARS

19,950 LBS. COATED

BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
R501	948	3'-4"	X	RAIL ON DECK - STIRRUP - VERT.
R502	12	6'-3"	X	RAIL @ LIGHT STD. - STIRRUP - VERT.
R503	18	5'-3"	X	RAIL @ LIGHT STD. - STIRRUP - VERT.
R504	8	5'-9"	X	RAIL @ WING LIGHT STD. - STIRRUP - VERT.
R505	12	5'-3"	X	RAIL @ WING LIGHT STD. - STIRRUP - VERT.
R506	1040	8'-6"	X	RAIL TOP - STIRRUP - VERT.
R507	80	6'-9"	X	LIGHT STD. - TIE - HORIZ.
R508	20	11'-3"	X	LIGHT STD. - STIRRUP - VERT.
R509	30	8'-10"	X	LIGHT STD. - STIRRUP - VERT.
R510	24	30'-6"		ON DECK SPANS 1 & 4 - LONGIT.
R711	24	31'-1"		ON DECK SPANS 1 & 4 - TOP - LONGIT.
R512	24	29'-1"		ON DECK SPANS 2 & 3 - LONGIT.
R713	24	29'-8"		ON DECK SPANS 2 & 3 - TOP - LONGIT.
R514	12	7'-11"		ON DECK OVER PIERS - LONGIT.
R715	12	7'-11"		ON DECK OVER PIERS - TOP - LONGIT.
R516	12	9'-7"	X	PILASTER @ ABUTMENT - STIRRUP - VERT.
R517	4	7'-2"	X	PILASTER @ ABUTMENT - STIRRUP - VERT.
R518	32	3'-11"	X	PILASTER @ ABUTMENT - TIE - HORIZ.
R519	96	4'-4"	X	RAIL ON WING - STIRRUP INTO WING - VERT.
R520	8	21'-3"		RAIL ON WING - HORIZ.
R721	8	21'-3"		RAIL ON WING - HORIZ. - TOP
R522	12	4'-1"	X	RAIL AT ABUT. PILASTER - STIRRUP - VERT.
R523	4	3'-8"	X	RAIL AT ABUT. PILASTER - STIRRUP - VERT.

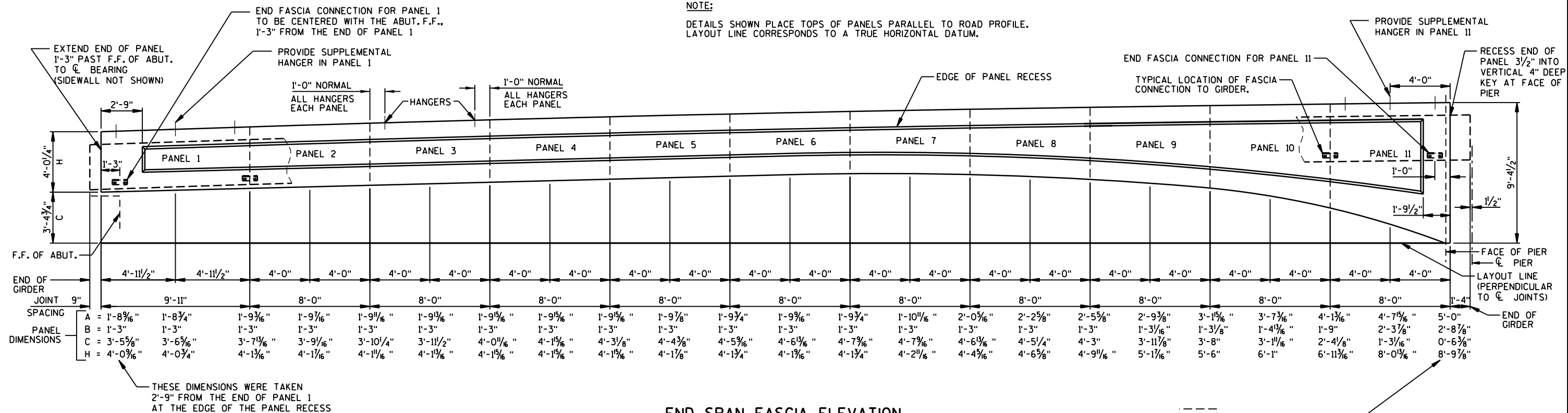
EPOXY COAT ALL PARAPET BAR STEEL REINFORCEMENT.

BILL OF BARS FOR PARAPET IS FOR INFORMATION ONLY. BAR STEEL REINFORCEMENT IS INCLUDED IN BID ITEM "PARAPET CONCRETE TYPE TX".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		PLANS CK'D.	
BJH		DHW	
VERTICAL FACE PARAPET "TX" DETAILS		SHEET 18 OF 21	

NOTE:

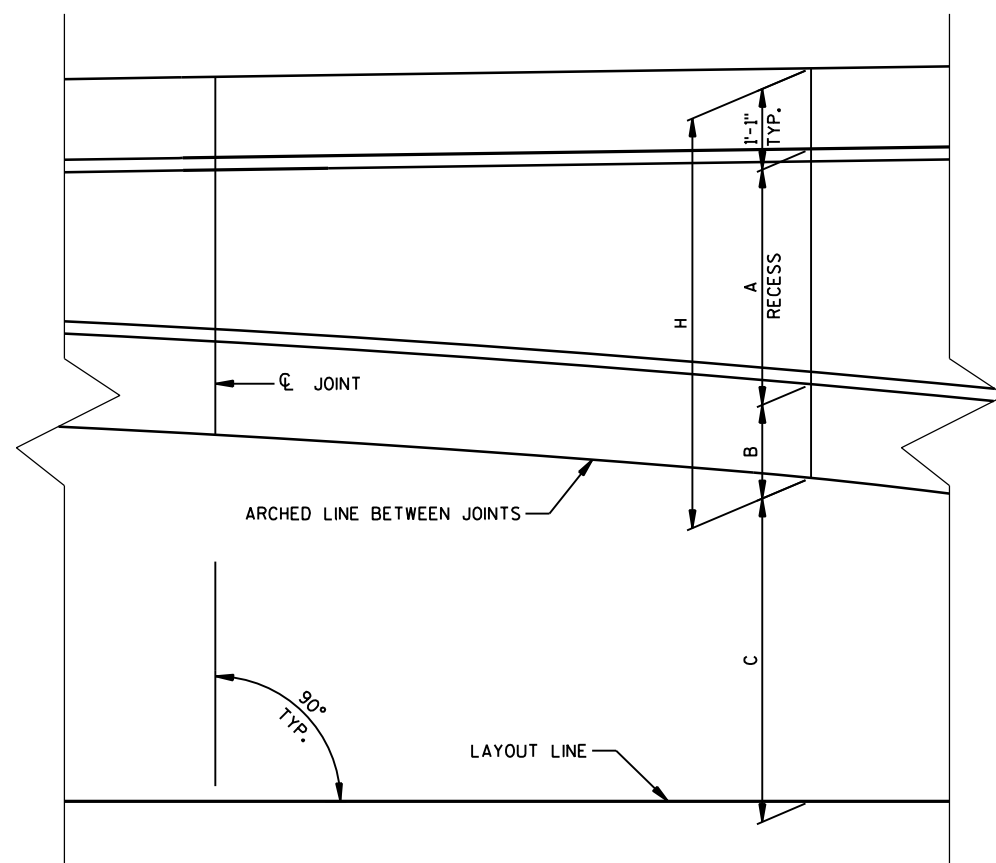
DETAILS SHOWN PLACE TOPS OF PANELS PARALLEL TO ROAD PROFILE.
LAYOUT LINE CORRESPONDS TO A TRUE HORIZONTAL DATUM.



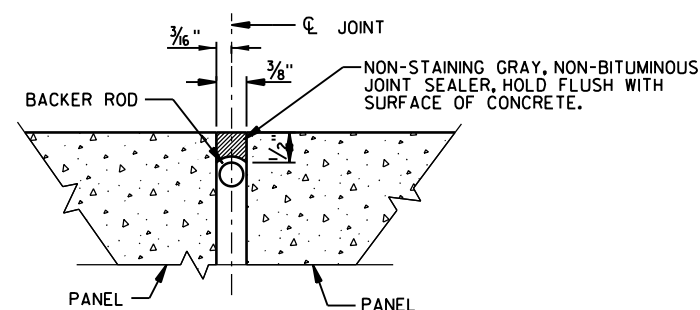
END SPAN FASCIA ELEVATION

SHOWING SPAN 1 RIGHT SIDE LOOKING WEST AND SPAN 4 LEFT SIDE LOOKING EAST. SPAN 1 LEFT SIDE LOOKING EAST AND SPAN 4 RIGHT SIDE LOOKING WEST ARE MIRROR IMAGE.

NOTE: CREST OF ROAD PROFILE IS AT CL PIER 2 AND ELEVATIONS AND GRADES ARE SYMMETRIC ABOUT CL PIER 2.

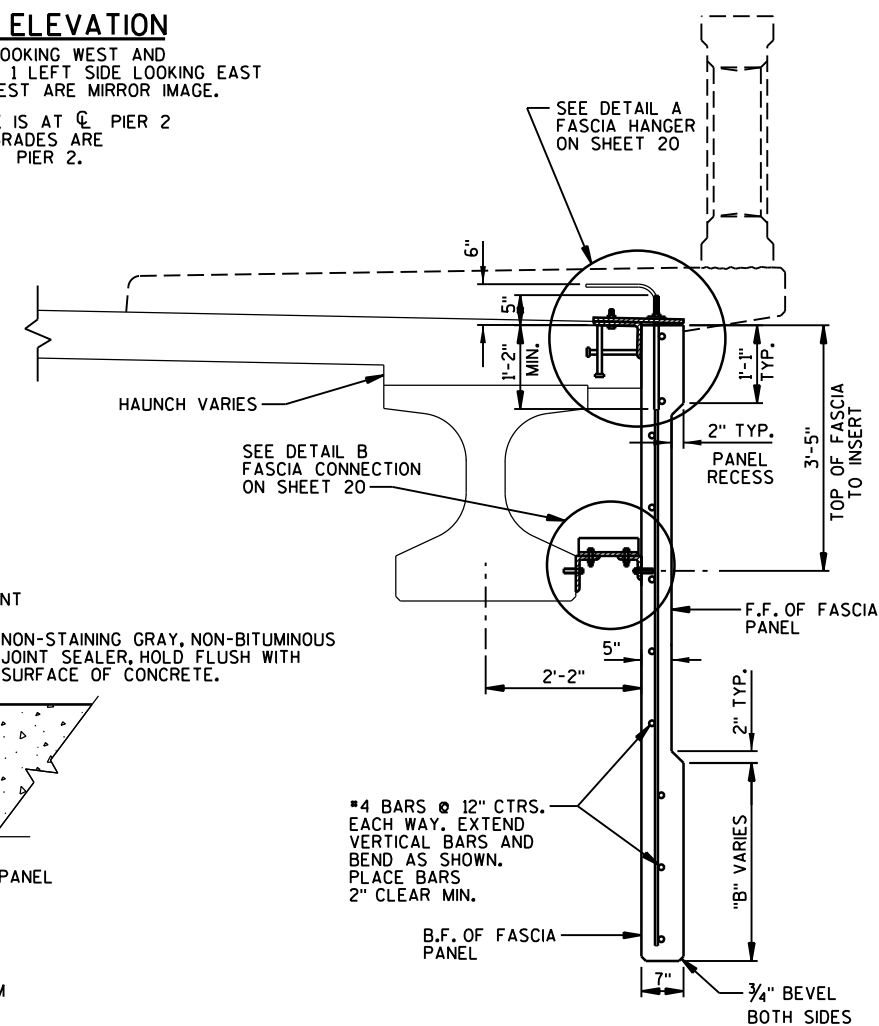


DIMENSIONING DETAIL



JOINT DETAIL

(BETWEEN PANELS)
TYPICAL F.F., B.F. & BOTTOM



TYPICAL SECTION THRU FASCIA PANEL

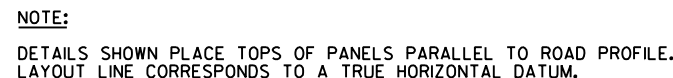
NOTE:

IF "A" FRAME BRACING IS USED TO SUPPORT SIDEWALK FORMS, CONTRACTOR SHALL BLOCK PANELS AND PROTECT SURFACE OF PANELS TO PREVENT DAMAGE.

NOTE:

ALL FASCIA HANGER & CONNECTION STRUCTURAL STEEL ANGLES, PLATES AND MISCELLANEOUS HARDWARE TO BE GALVANIZED. THESE ELEMENTS AND PANEL REINFORCEMENT INCLUDED IN THE BID ITEM "FASCIA PANELS".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-53-0287	
DRAWN BY		JRS	PLANS CK'D. DHW
END SPANS FASCIA DETAILS		SHEET 19 OF 21	



— THESE DIMENSIONS WERE TAKEN
1'-9 1/2" FROM THE END OF PANEL 22
AT THE EDGE OF THE PANEL RECESS

SHOWING SPAN 2 RIGHT SIDE LOOKING WEST AND
SPAN 3 LEFT SIDE LOOKING EAST. SPAN 2 LEFT SIDE LOOKING EAST
AND SPAN 3 RIGHT SIDE LOOKING WEST ARE MIRROR IMAGE.

(1) $\frac{3}{4}$ " ϕ X 4" LG. BOLT THRU HOLE
IN HANGER ANGLE. SPOT WELD
BOLT HEAD IN PLACE. —

HANGER PLATE
15"x6"x $\frac{5}{8}$ " MIN.
2 PER PANEL NORMAL
3 IN PANELS WITH
SUPPLEMENTAL HANGE

HANGER ANGLE, 8" LONG
8"x6"x $\frac{5}{8}$ " MIN. THICKNESS
WITH $\frac{13}{16}$ " ϕ HOLE AS SHOWN
(PLACE 8" LEG HORIZONTAL)
2 PER PANEL NORMAL
3 IN PANELS WITH
SUPPLEMENTAL HANGER —

3/4"φ x 8" LG.
WELDED
ANCHOR STUDS
4 PER ANGLE

— 3/4"φ ANCHOR BOLT
W/ 4" MIN. THREADED END
1 PER HANGER,
2 BOLTS PER PANEL NORMAL.
3 BOLTS IN PANELS WITH
SUPPLEMENTAL HANGER.
SEE SHEET 19 FOR
ANCHOR BOLT DIMENSIONS.

FASCIA CONNECTION
USE $\frac{3}{4}$ " ϕ HIGH STRENGTH
BOLTS THROUGHOUT

INSERT FOR
3/4" ϕ BOLT CAST
IN GIRDER

FLANGE
ANGLE —

— INSERT FOR
3/4" Ø BOLT
CAST IN FASCIA
PANEL, LOCATE 4"
FROM C JOINT

— STRAP
ANGLE

FOR BOLT LOCATIONS
SEE SUPERSTRUCTURE SHEET 13.
BOLT LOCATIONS TO ALIGN
WITH FASCIA PANEL JOINTS.

← Q JOINT BETWEEN
FASCIA PANELS

1 5/16 " ϕ HOLE

6"

3/2"

HORIZONTAL LEG

4"x4"x $\frac{5}{8}$ "x1'-0" LONG
STRAP ANGLE

6"

2" TYP.

2 1/2" TYP.

VERTICAL LEG

LONG

10"

2 1/2" TYP.

2"

2"

1/16" x 2" SLOTTED HOLE

4" x 3" x 5/8" x 0'-10" LONG
BRACE ANGLE

4"x3"x5/8"x0'-10" LONG
BRACE ANGLE

6"x4"x⁵/₈"x6" LONG
FLANGE ANGLE

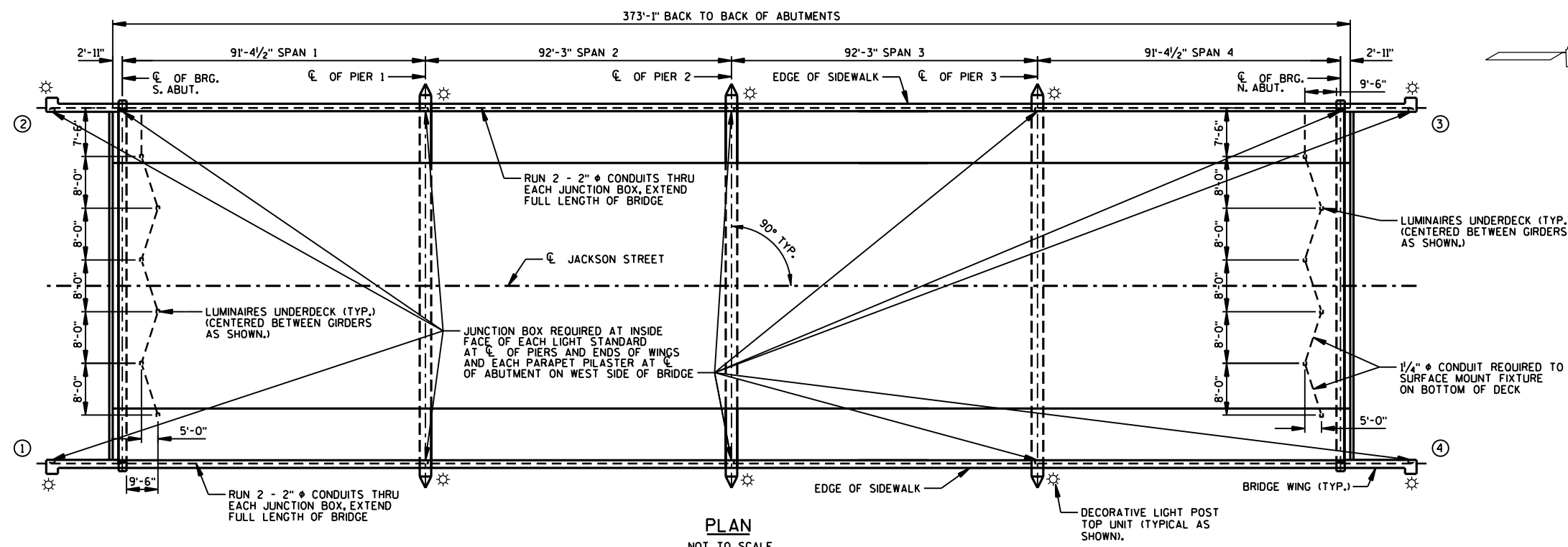
Diagram of the front view of the bracket. It shows a rectangular base with a vertical leg on the left side. The vertical leg is labeled "6" VERTICAL LEG". The base has a slotted hole in the center, labeled "1 5/8" x 2 1/2" SLOTTED HOLE". The total height of the bracket is labeled "3 1/2" on the right side.

7/16 X 2 7/2
SLOTTED HOLE

Technical drawing of a hanger plate. The plate is 6" high and 1'-3" long. It features two holes: a 15/16" x 3" slotted hole on the left and a 15/16" diameter hole on the right. The slotted hole is 3" from the left edge. The center-to-center distance between the holes is 4 1/2". The right hole is 3" from the right edge. The plate is labeled 5/8" HANGER PLATE.

5/8" HANGER PLAT

FILE= 879001-20_FASCIA.DGN
DATE= 4/21/2014



EXPANSION FITTING DETAIL

NOTES

BID ITEMS SHALL BE:

- "CONDUIT RIGID METALLIC 2-INCH"
- "JUNCTION BOXES 18X12X6-INCH", EACH
- "CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH"
- "CONDUIT RIGID NONMETALLIC SCHEDULE 80 1 1/4-INCH"
- "LUMINAIRES UNDERDECK"
- "DECORATIVE LIGHT POST TOP UNIT"

EXPANSION FITTINGS AND ADAPTER FITTINGS TO BE INCLUDED IN THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

APPROVED MANUFACTURERS - JUNCTION BOXES: SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER
(4" TOTAL CONDUIT MOVEMENT).

JUNCTION BOX REQUIREMENTS

- PLACE A 18" X 12" X 6" JUNCTION BOX AT EACH LIGHT STANDARD (CENTERED ON LIGHT CL) AND AT SIDEWALK FACE OF EACH PARAPET PILASTER AT CL ABUTMENT ON WEST SIDE OF BRIDGE.

CONDUIT REQUIREMENTS

- USE (1) - 2" CONDUIT TO PROVIDE ELECTRICAL SERVICE TO LIGHTS MOUNTED ON TOP OF THE PARAPET.

EXPANSION FITTING REQUIREMENTS

- USE AN APPROVED EXPANSION FITTING AT EACH EXPANSION JOINT.
- POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING TO ALLOW FOR EXPANSION/CONTRACTION MOVEMENT OF 1" EACH WAY. INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

POSITION CONDUITS VERTICALLY TO ENSURE DRAINAGE OF CONDENSATE.

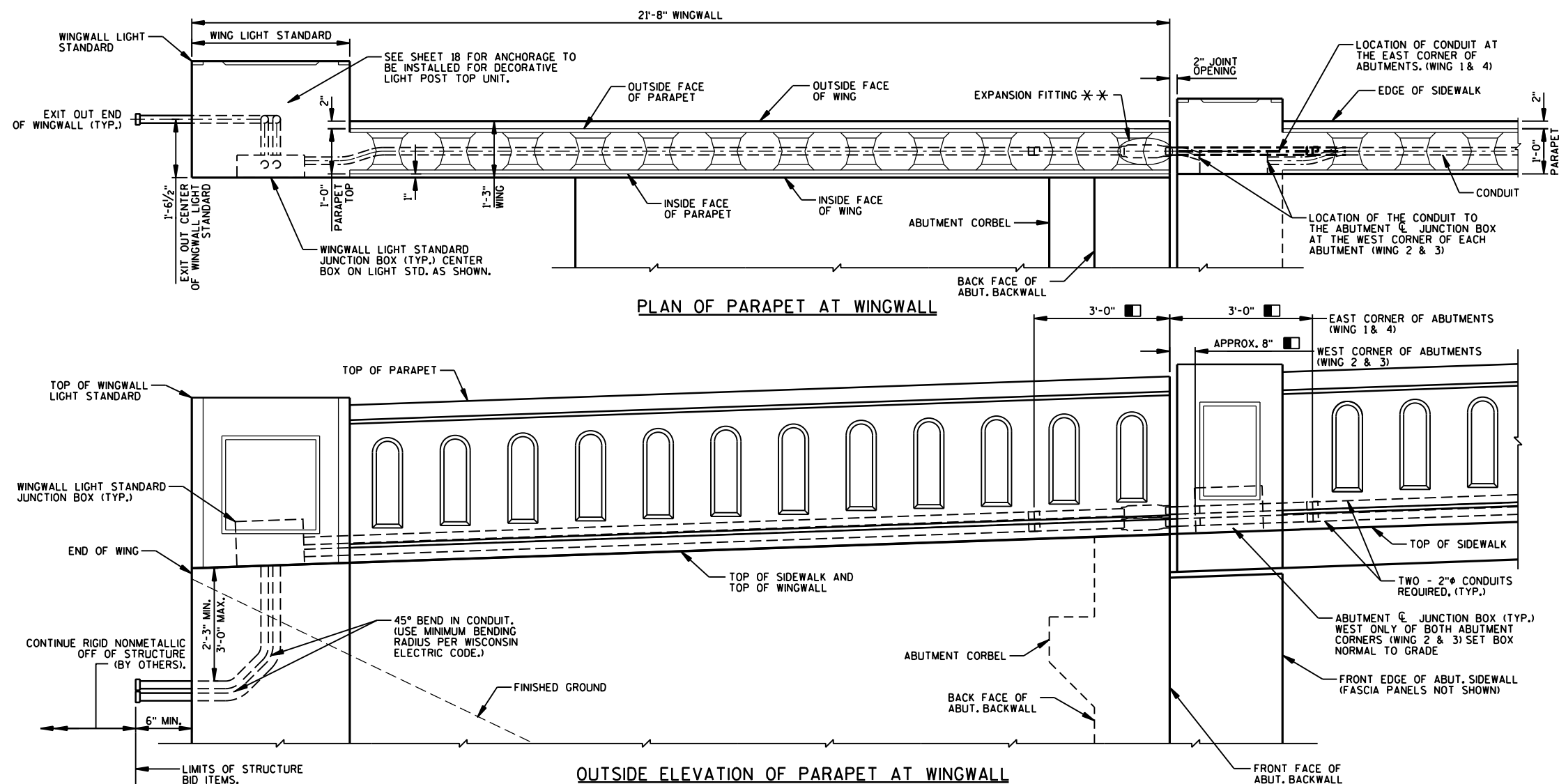
INSTALL JUNCTION BOXES ON INSIDE FACE OF PARAPETS.

BRIDGE CONTRACTOR TO PROVIDE A PULL WIRE IN ALL CONDUIT FOR FUTURE CABLE INSTALLATION BY OTHERS AS PROVIDED IN THE STANDARD SPECIFICATIONS OR SPECIAL PROVISIONS.

LEGEND

○ INDICATES WING NUMBER.

- USE 2" RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT EXTENDING 3'-0" EACH SIDE OF THE JOINT OPENING AT WINGS 1 & 4. AT WINGS 2 & 3 USE RIGID METALLIC CONDUIT EXTENDING 3'-0" INTO THE WING SIDE OF THE OPENING AND 8" DIRECTLY INTO THE ABUTMENT CL JUNCTION BOX SPAN SIDE OF THE OPENING.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-53-0287			
DRAWN BY JRS		PLANS CK'D. DHW	
ELECTRICAL CONDUIT PLAN & DETAILS			SHEET 21 OF 21

EARTHWORK PROJECT I.D. 5990-00-84 - JACKSON STREET

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
					Note 1	Note 2	Note 3	Note 1		Note 8
6+00		64	0	0	0	0	0	0	0	0
6+25	25	51	0	65	53	0	30	53	38	16
6+50	25	34	0	74	40	0	64	93	118	-25
6+75	25	11	0	90	21	0	76	114	213	-99
7+00	25	0	0	129	5	0	101	119	340	-221
7+25	25	0	0	173	0	0	140	119	515	-396
7+50	25	0	0	199	0	0	172	119	730	-611
7+75	25	0	0	218	0	0	193	119	971	-852
8+02.38	27	0	0	218	0	0	221	119	1248	-1129
B-53-0287										
					119	0	998			

EARTHWORK PROJECT I.D. 5990-00-84 - JACKSON STREET

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
					Note 1	Note 2	Note 3	Note 1		Note 8
B-53-0287										
11+73.63		4	0	286	0	0	0	0	0	0
12+00	26.37	4	0	286	4	0	279	4	349	-346
12+25	25	40	0	212	20	0	231	24	637	-613
12+50	25	29	0	180	32	0	181	56	864	-808
12+75	25	6	0	144	16	0	150	72	1052	-979
13+00	25	2	0	111	4	0	118	76	1199	-1123
13+25	25	4	0	87	3	0	92	79	1314	-1235
13+50	25	0	0	53	2	0	65	81	1395	-1314
13+75	25	0	0	0	0	0	25	81	1426	-1344
14+00	25	0	0	0	0	0	0	81	1426	-1344
14+25	25	50	0	0	23	0	0	104	1426	-1321
14+50	25	45	0	0	44	0	0	148	1426	-1277
					148	0	1140			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [[Cut) - ((Fill - Expanded Rock) * Fill Factor)]]

EARTHWORK PROJECT I.D. 5990-00-84 - RIVERSIDE STREET

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00 Note 1	Expanded Fill 1.25	
201+10		0	0	0	0	0	0	0	0	0
201+25	15.00	44	0	0	12	0	0	12	0	12
201+50	25.00	42	0	0	40	0	0	52	0	52
201+59	9.00	42	0	0	14	0	0	66	0	66
JACKSON STREET										66
202+42		26	0	0	0	0	0	0	0	66
202+50	8.00	26	0	0	8	0	0	8	0	74
202+75	25.00	30	0	0	26	0	0	34	0	100
202+87	12.00	32	0	0	14	0	0	48	0	114
					114	0	0			

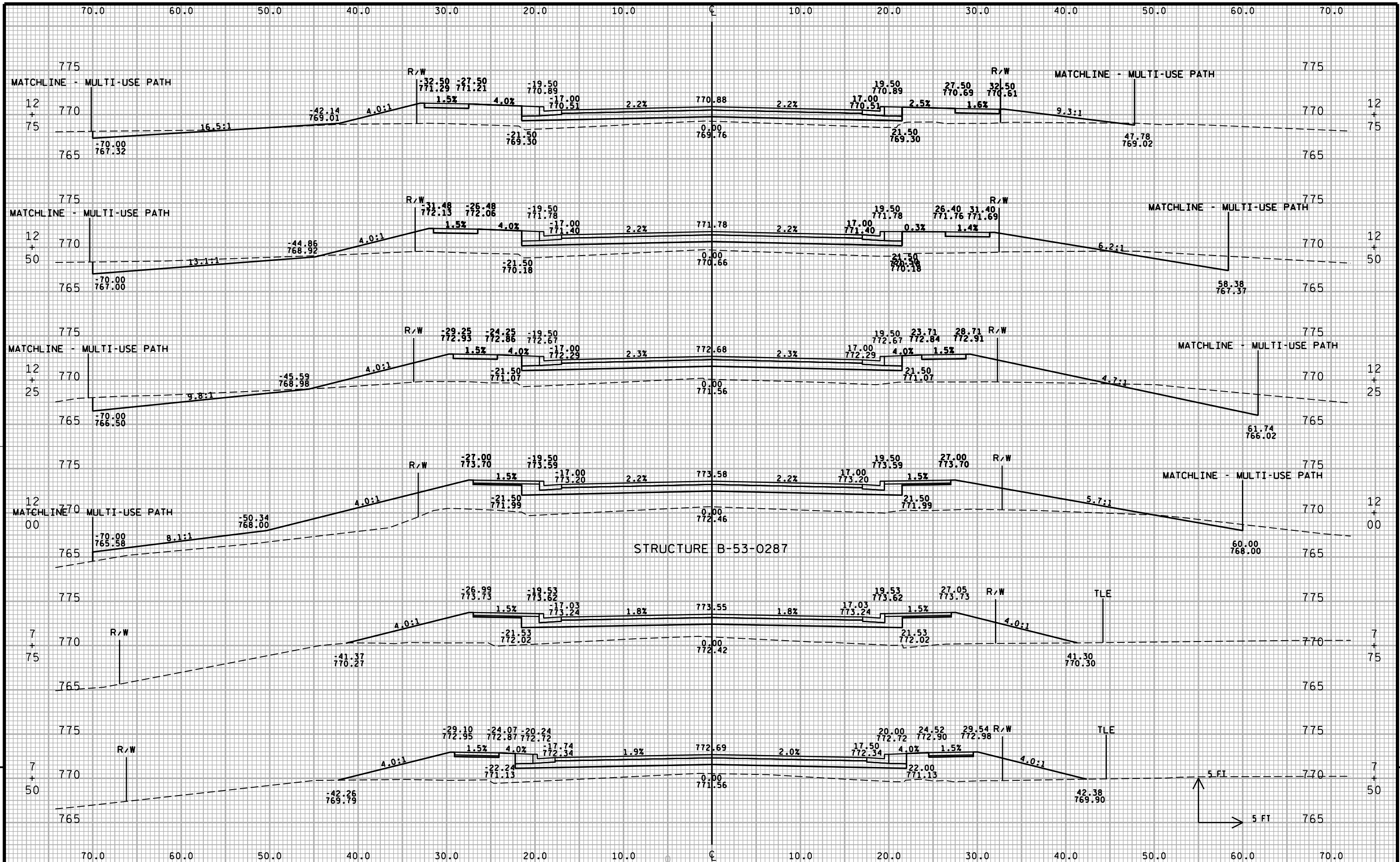
EARTHWORK PROJECT I.D. 5990-00-84 - MULTI-USE RIVER PATH

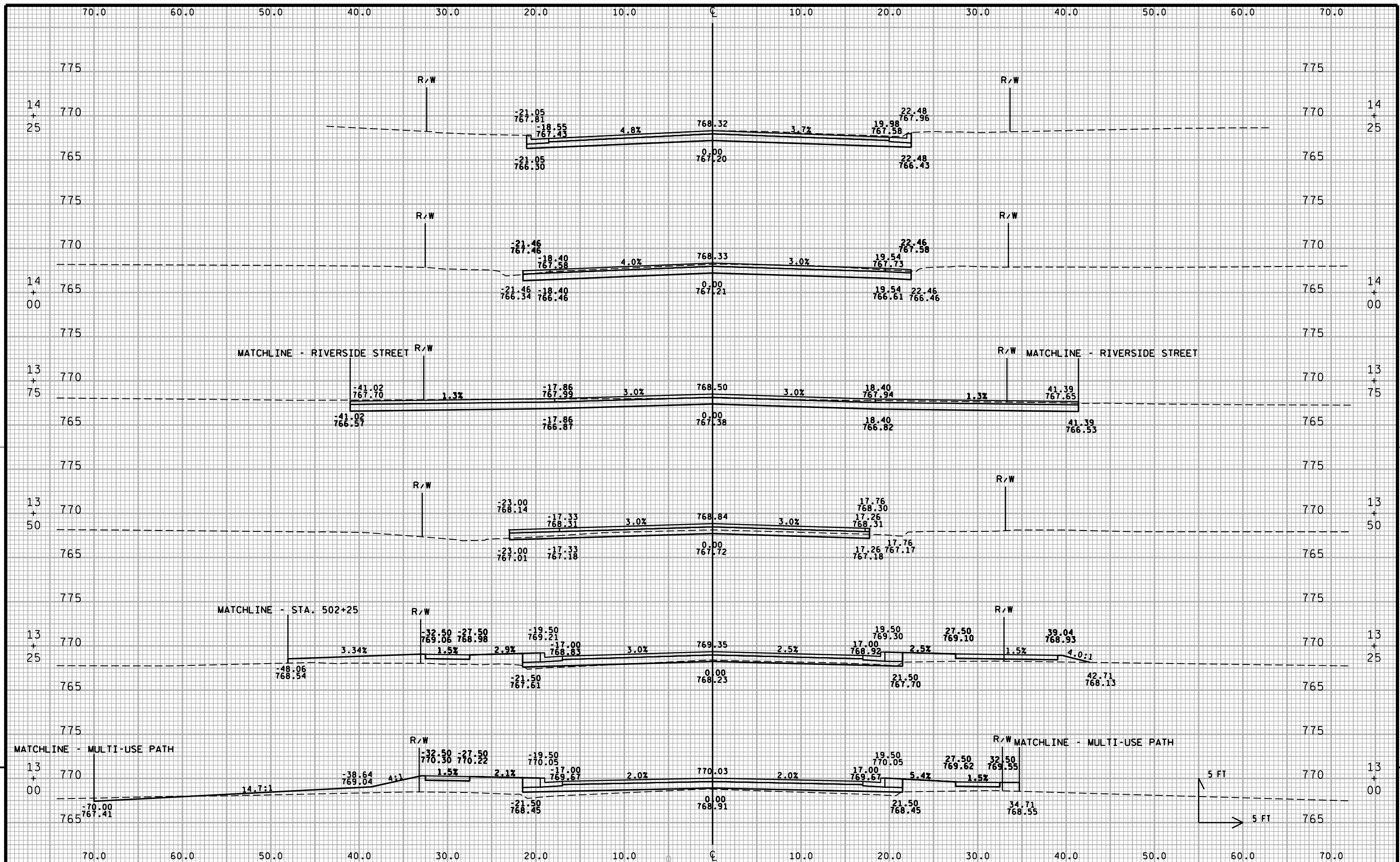
STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00 Note 1	Expanded Fill 1.25	
100+34.92		95	0	0	0	0	0	0	0	0
100+50	15.08	45	0	0	39	0	0	39	0	39
100+75	25.00	63	0	0	50	0	0	89	0	89
101+00	25.00	66	0	0	60	0	0	149	0	149
101+25	25.00	80	0	18	68	0	9	217	11	206
101+50	25.00	43	0	57	57	0	35	274	54	219
101+75	25.00	1	0	62	20	0	55	294	123	171
102+00	25.00	0	0	81	0	0	66	294	206	89
102+25	25.00	3	0	149	1	0	106	296	338	-43
102+50	25.00	3	0	33	3	0	84	299	443	-145
102+75	25.00	3	0	11	3	0	20	301	469	-167
103+00	25.00	63	0	3	31	0	7	332	477	-145
103+25	25.00	97	0	16	74	0	9	406	488	-83
103+50	25.00	120	0	2	100	0	8	506	499	7
103+75	25.00	50	0	0	79	0	1	585	500	85
104+00	25.00	38	0	0	41	0	0	626	500	126
104+25	25.00	27	0	0	30	0	0	656	500	156
104+50	25.00	6	0	2	15	0	1	672	501	170
104+72	22.00	0	0	10	2	0	5	674	507	167
					674	0	406			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor)]

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
500+15.		11	0	1	0	0	0	0	0	0
500+25	10.00	12	0	1	4	0	0	4	1	4
500+50	25.00	13	0	0	11	0	0	15	1	15
500+75	25.00	13	0	0	12	0	0	28	1	27
501+00	25.00	14	0	0	13	0	0	40	1	39
501+25	25.00	13	0	0	12	0	0	53	1	52
501+50	25.00	11	0	0	11	0	0	64	1	63
501+75	25.00	17	0	5	13	0	2	77	4	73
502+00	25.00	4	0	13	10	0	8	86	14	72
502+25	25.00	4	0	18	4	0	14	90	32	58
					90	0	26			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]





PROJECT NO:5990-00-84

HWY: JACSON STREET

COUNTY: ROCK

CROSS SECTIONS: JACSON STREET

SHEET

E

FILE NAME : \$\$....designfile....\$\$

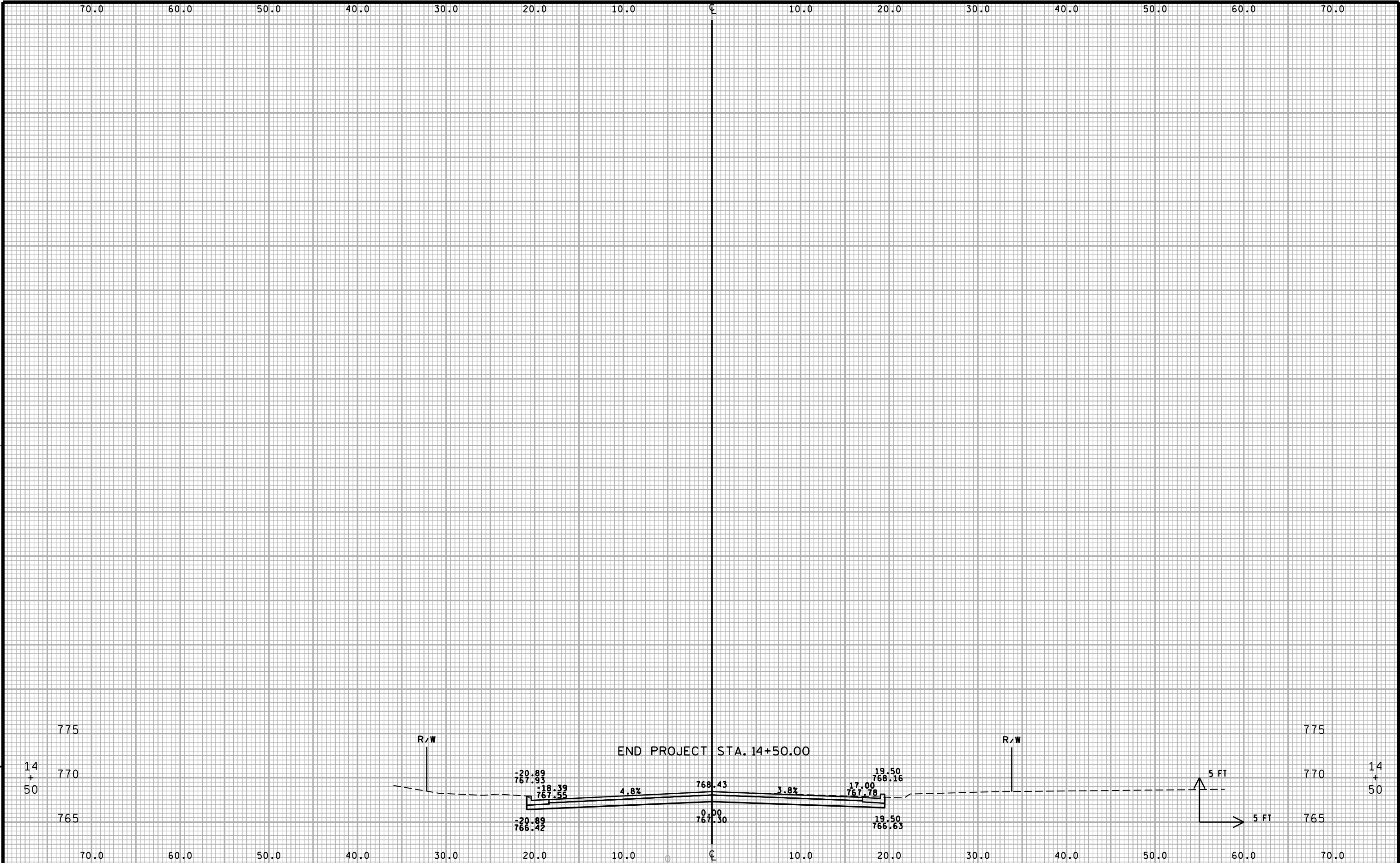
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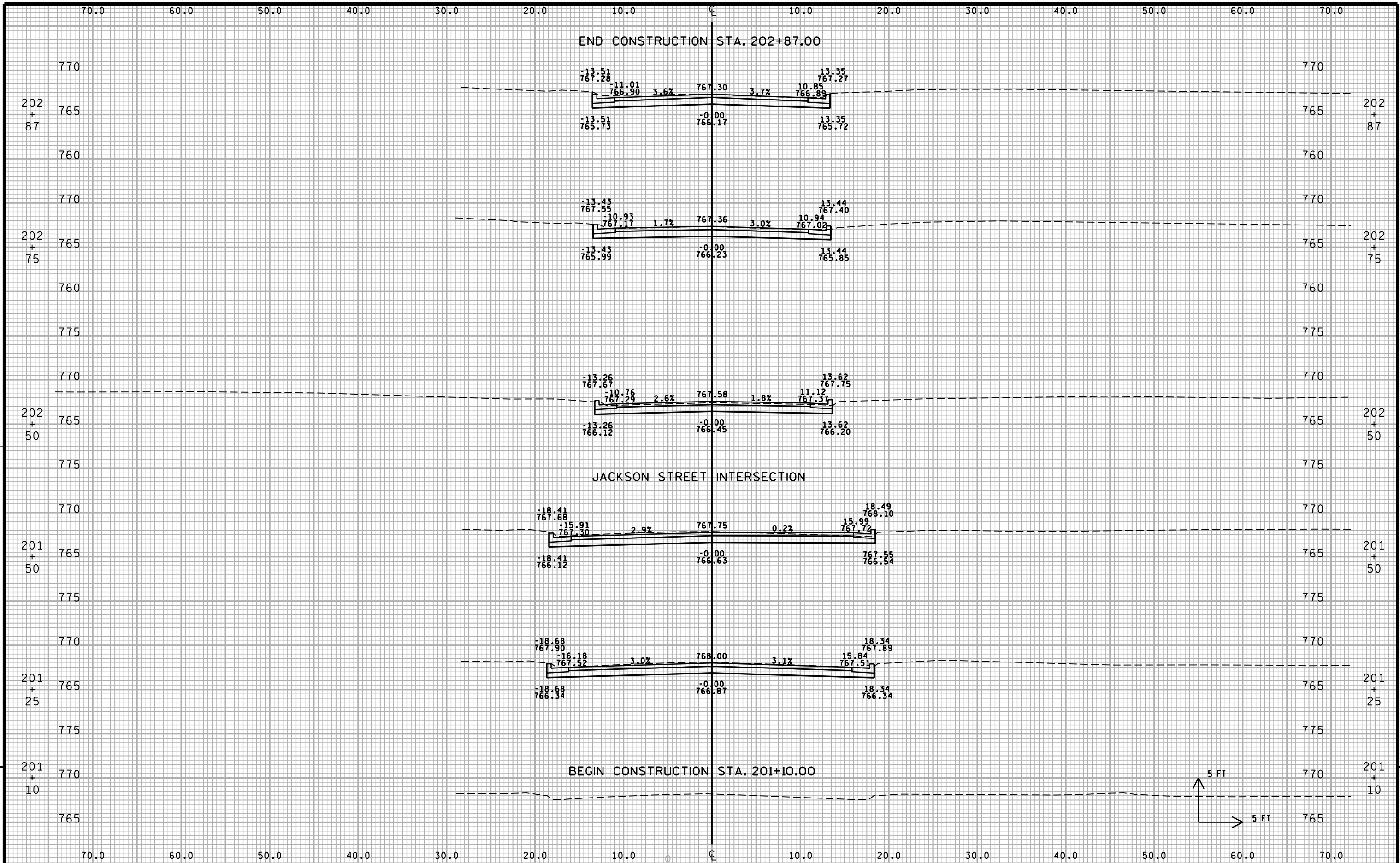
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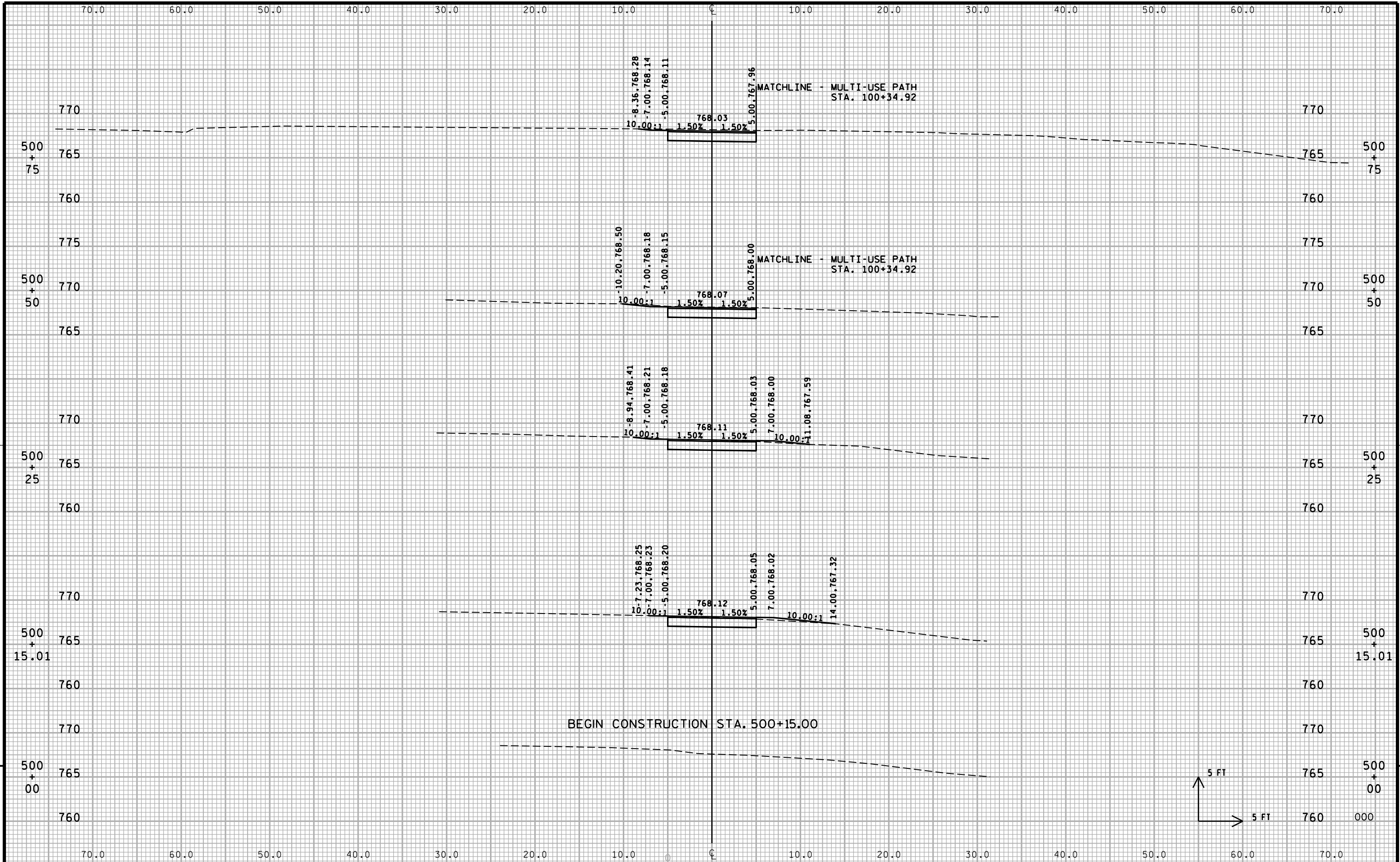
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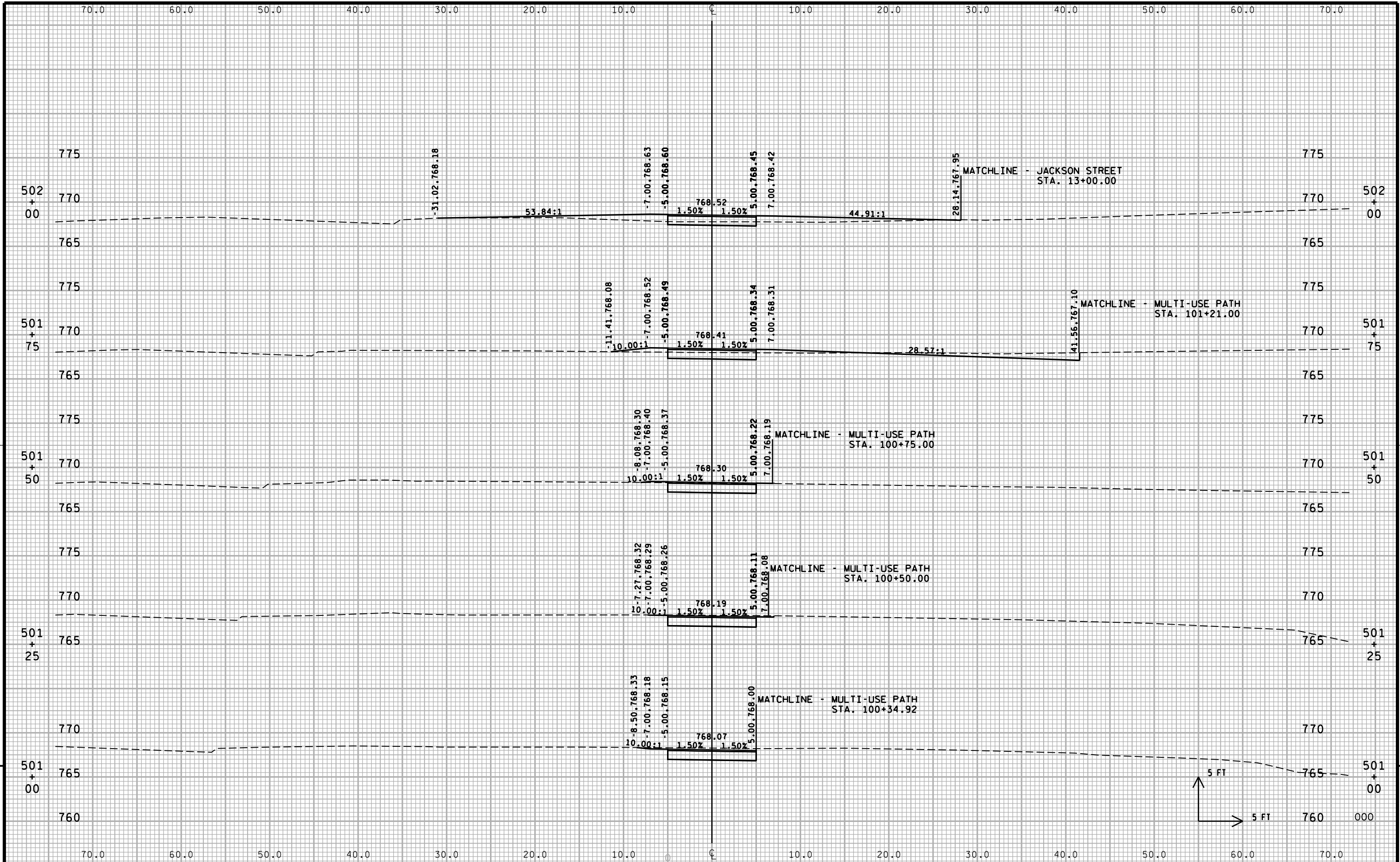
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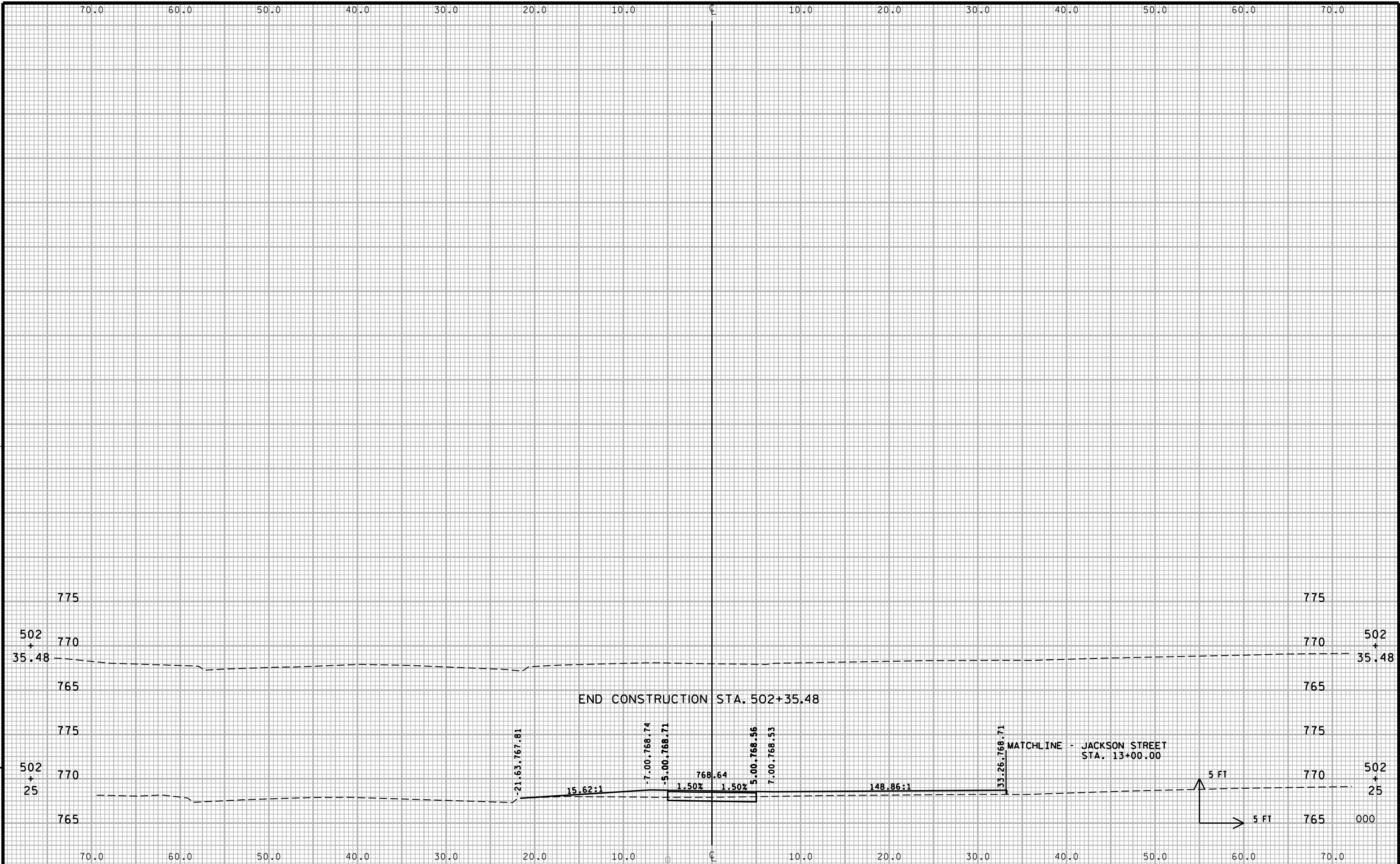
WISDOT/CADDS SHEET 21





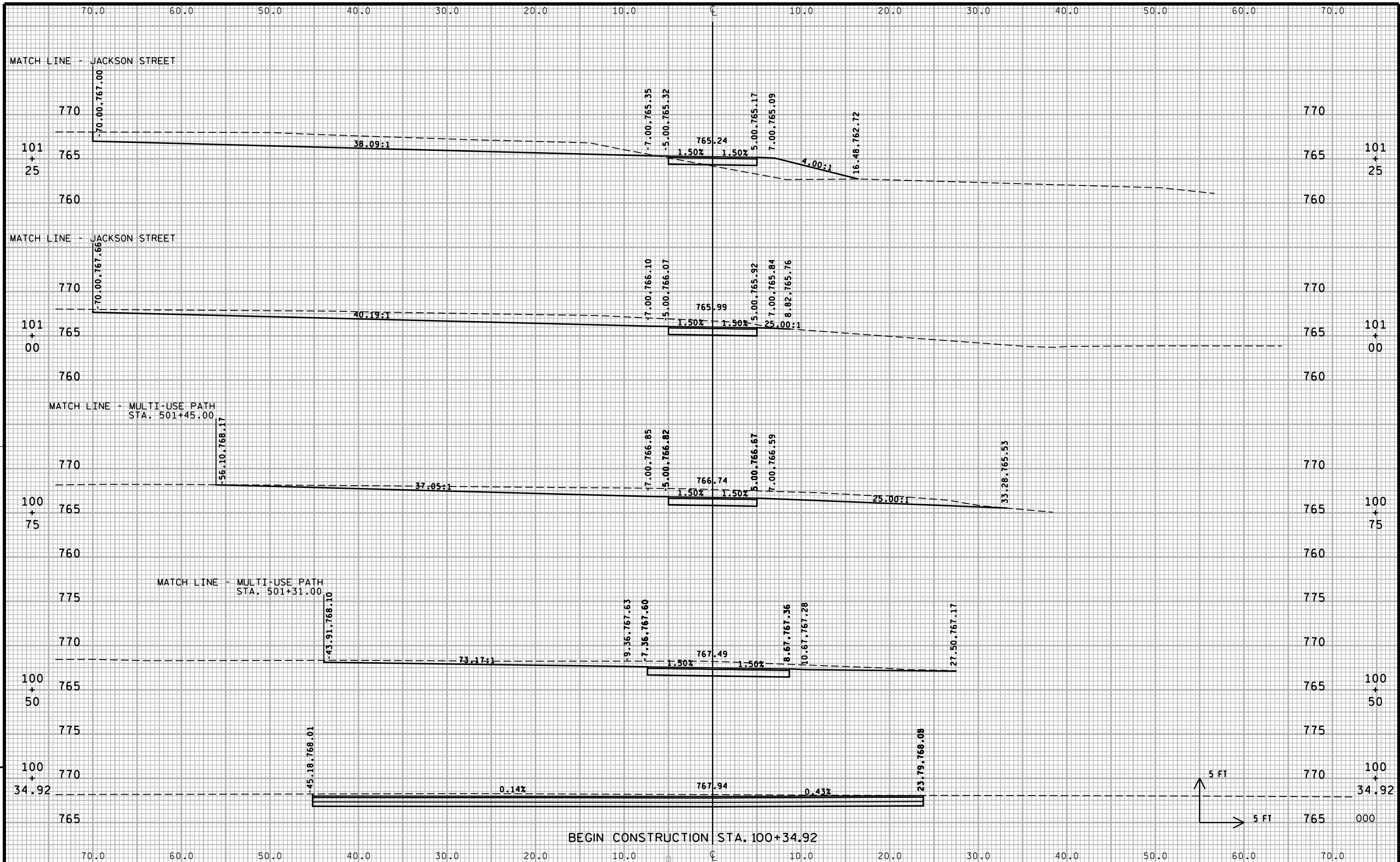


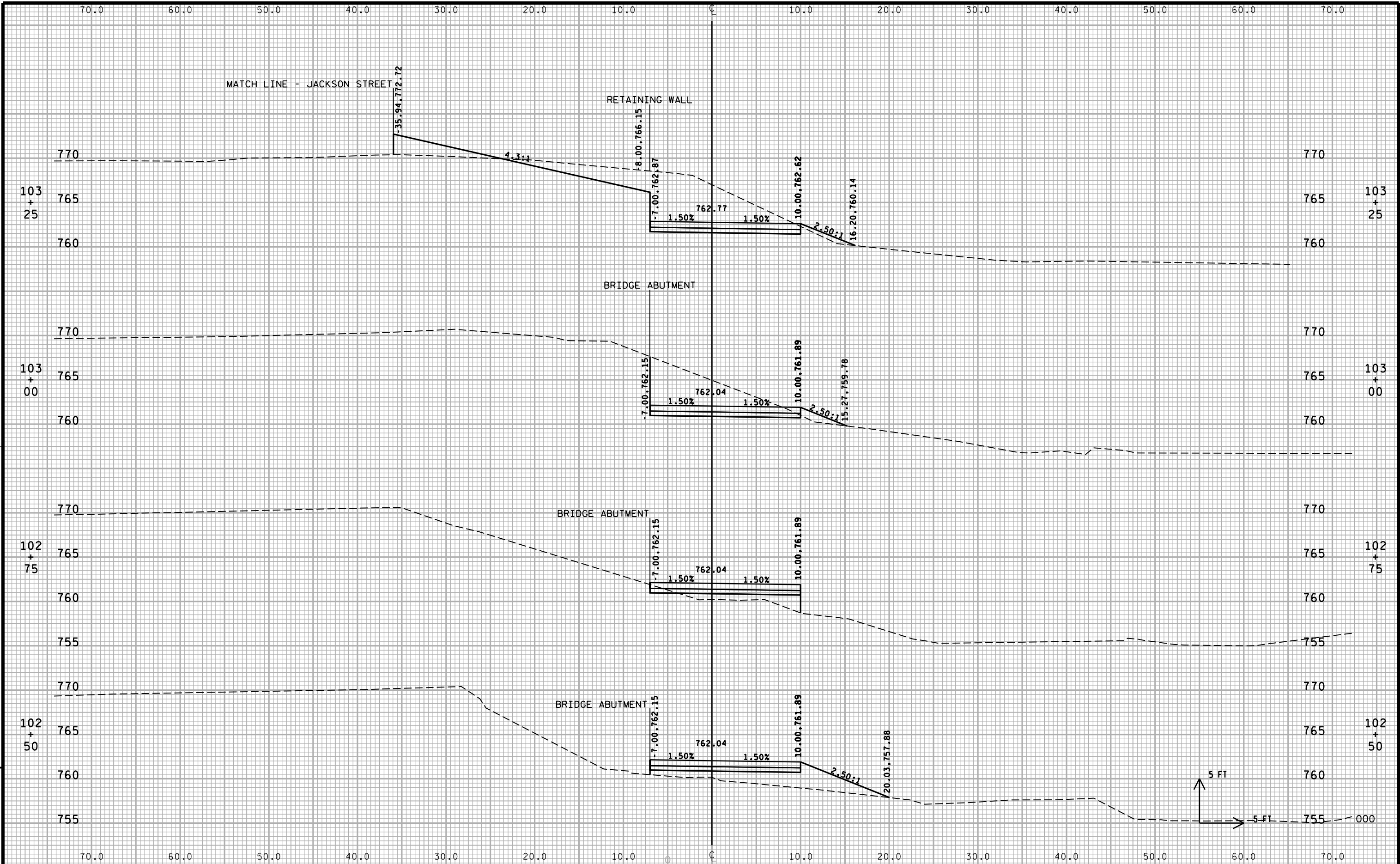


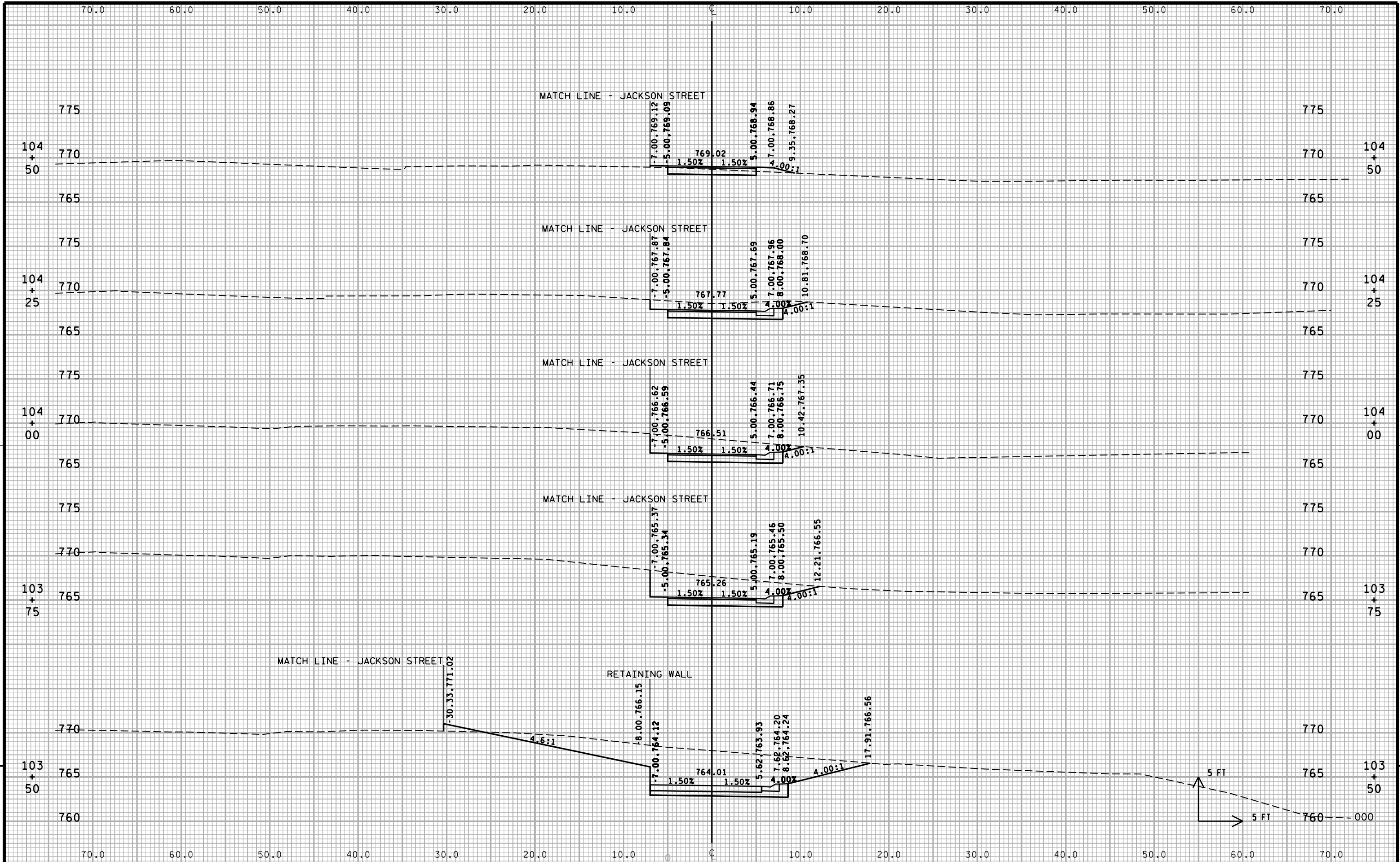


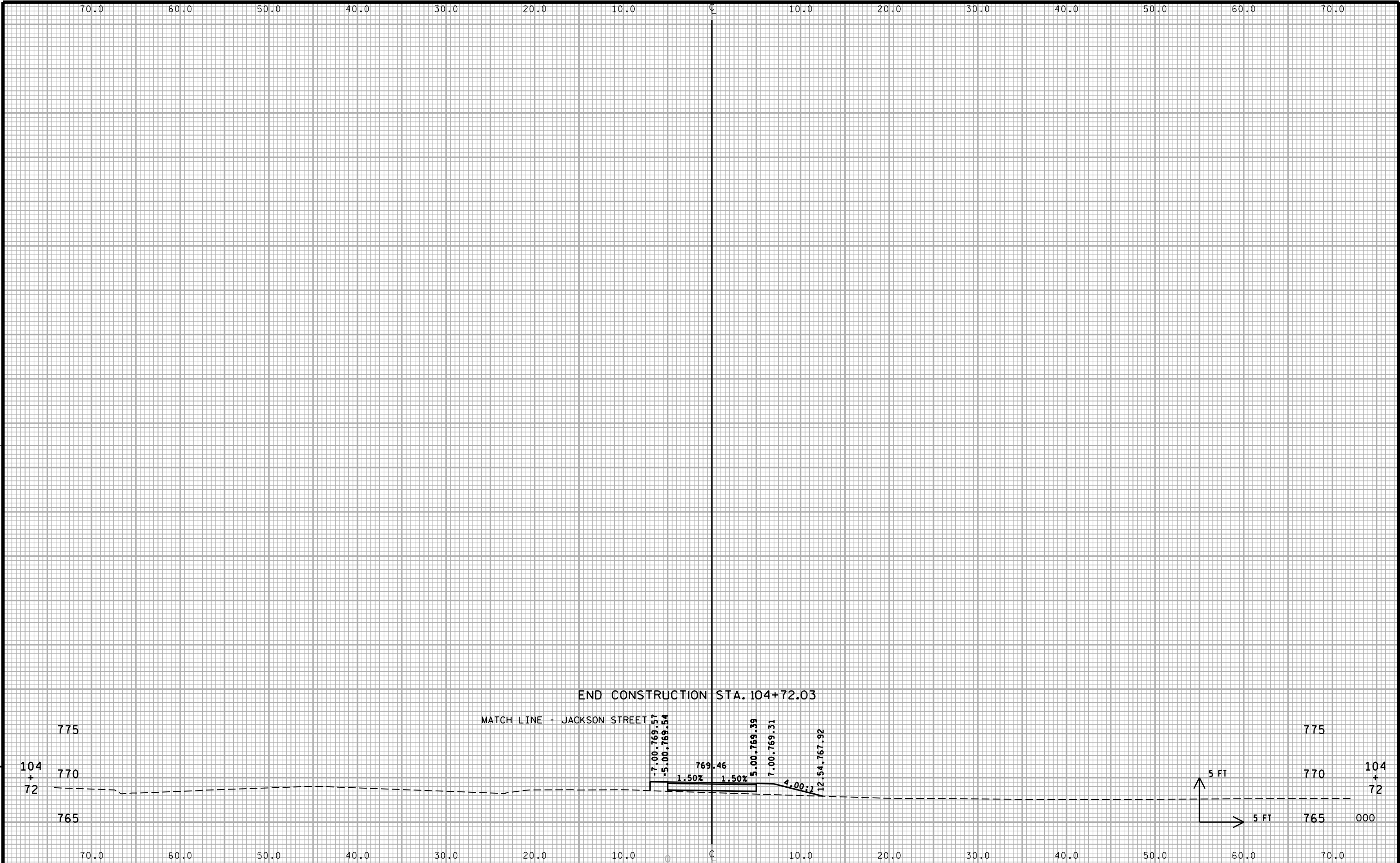
PROJECT NO:5990-00-84	HWY: JACSON STREET	COUNTY: ROCK	CROSS SECTIONS: MULTI-USE PATH	SHEET	E
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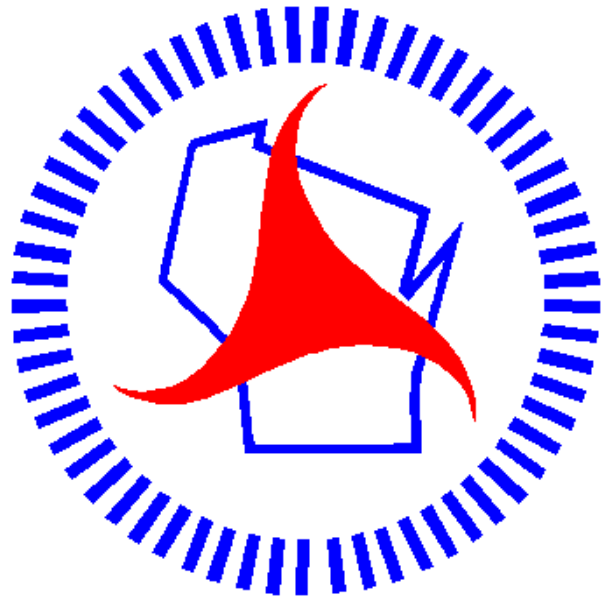






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