MAD

NOV 2016

PROJECT ID: 1401-02-71, -73

WITH: N/A

COUNTY: COLUMBIA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
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 = 630



05

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CITY OF COLUMBUS, JAMES STREET

(INDUSTRIAL DRIVE - RIVER ROAD)

STH 16

COLUMBIA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1401-02-71	WISC 2016340	1
1401-02-73		

STATE PROJECT NUMBER **1401-02-71**

STATE PROJECT NUMBER **1401-02-73**

DESIGN DESIGNATION		INDUSTRIAL-STH 73	STH 73 - MANNING
A.A.D.T. (2017)	=	14,600	8,350
A.A.D.T. (2037)	=	16,100	9,500
D.H.V.	=	2,000	1,180
D.D.	=	60/40	60/40
T.	=	14.8%	14.8%
DESIGN SPEED	=	30 MPH	30 MPH
ESALS	=	6,400,000	6,400,000

CONVENTIONAL SYMBOLS

PLAN

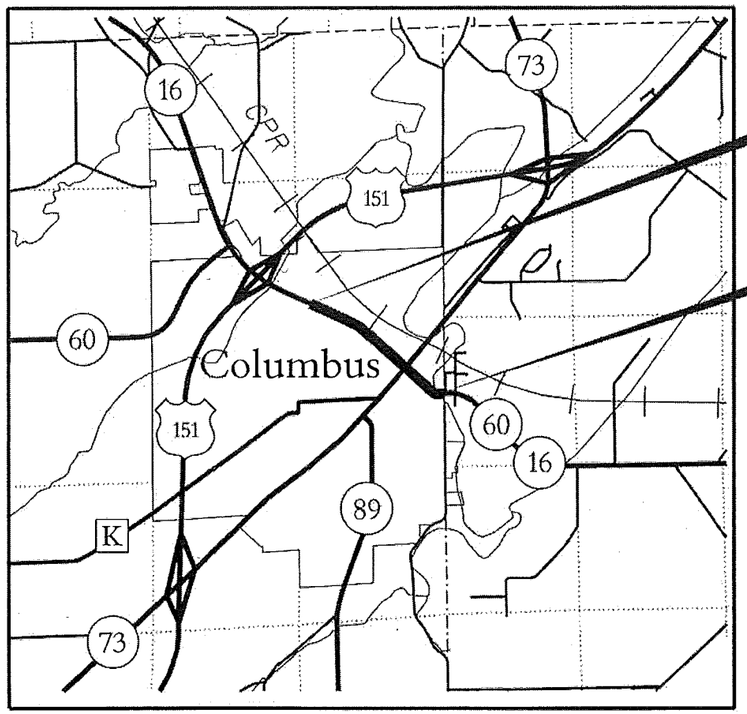
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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



R-12-E

T-10-N

BEGIN PROJECT 1401-02-71
STA. 127+00.00WB
Y= 323715.63
X= 651800.74

END PROJECT 1401-02-71
STA. 194+59.01WB

LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE (1401-12-71) = 1.280 MI.
TOTAL NET LENGTH OF CENTERLINE (1401-02-73) = 0.000 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), COLUMBIA COUNTY NADA 83 (2007).

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88 2007).

ORIGINAL PLANS PREPARED BY

KL Engineering [A] Better Experience

WISCONSIN JOSHUA P. MELBY 43963-6 MADISON, WI PROFESSIONAL ENGINEER

4/20/16 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KL ENGINEERING / WISDOT
Designer	KL ENGINEERING
Project Manager	DAVE PILON
Regional Examiner	
Regional Supervisor	KARLA KNORR
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 4/29/16 (Signature)

E

FILE NAME : G:\WDOTSW\13020-000\DGN\010101_t1.dgn PLOT DATE : 4/11/2016 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 10

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

UTILITY CONTACTS

ATC MANAGEMENT, INC. - ELECTRICTY
ALEX METZ
5303 FEN OAK DRIVE
MADISON, WI 53718
(608) 877-7105
AMETZ@ATCLLC.COM

AT&T WISCONSIN - COMMUNICATION
CHUCK BARTLET
70 E DIVISION STREET
FOND DU LAC, WI 54935
(920) 929-1013
CB1461@ATT.COM

CHARTER COMMUNICATIONS - COMMUNICATION
KIRK UPPERMAN
2701 DANIELS STREET
MADISON, WI 53718
(608) 209-3206
KIRK.UPPERMAN@CHARTER.COM

CITY OF COLUMBUS - COMMUNICATION
PATRICK VANDER SANDEN
105 NORTH DICKASON BOULEVARD
COLUMBUS, WI 53925
(920) 623-5900
PVANDERSANDEN@COLUMBUSWI.US

CITY OF COLUMBUS PUBLIC WORKS - STORM SEWER
DAVIS CLARK
229 EAST SCHOOL STREET
COLUMBUS, WI 53925
(920) 623-5908
DCLARK@COLUMBUSWI.US

COLUMBUS WASTEWATER TREATMENT PLANT - SANITARY SEWER
JOHN NEHMER
537 RIVER ROAD
COLUMBUS, WI 53925
(920) 623-5915
JNEHMER@COLUMBUSWI.US

COLUMBUS WATER & LIGHT DEPARTMENT - ELECTRIC & WATER
ERIC ANTHON
950 MAPLE AVENUE
PO BOX 228
COLUMBUS, WI 53925
(920) 623-5912
EANTHON@COLUMBUSWATERANDLIGHT.COM

VILLAGE OF FALL RIVER - SANITARY FORCE MAIN
CRAIG SCHULTZ
641 S MAIN ST
PO BOX 37
FALL RIVER, WI 53932
(920) 484-3525 (OFFICE)
(920) 382-6379 (MOBILE)
CSCHULTZ@FALLRIVERWI.COM

WE ENERGIES - GAS
SEND ALL CORRESPONDENCE TO:
LA TROY BRUMFIELD
333 W EVERETT STREET, A299
MILWAUKEE, WI 53203
(414) 221-5617
LATROY.BRUMFIELD@WE-ENERGIES.COM

WE ENERGIES - GAS
CONSTRUCTION FIELD CONTACT:
JOHN ANDERSON
1251 W MAIN STREET
SUN PRAIRIE, WI 53590
(920) 262-6884
JOHN.ANDERSON@WE-ENERGIES.COM

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
JOINT DETAILS AND PAVING GRADES
EROSION CONTROL PLAN
STORM SEWER PLAN
SANITARY SEWER AND WATER MAIN
PERMANENT SIGNING PLAN
STREET LIGHTING PLAN
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING PLAN
TRAFFIC CONTROL PLAN
ALIGNMENT DETAILS
CONTROL POINT DETAIL
HAZARDOUS MATERIALS PLAN

ALIGNMENT IDENTIFIERS

EB	STH 16 EASTBOUND
WB	STH 16 WESTBOUND
ID	INDUSTRIAL DR./DIX ST.
M	MEISTER DR.
C	CONTINENTAL DR.
HU	HURELLE ST.
A	APC WAY
MA	MAPLE AVE.
B	BLACKHAWK DR.
CH	CHARLES ST.
L	LEGION CT.
SL	S LEWIS ST.
NL	N LEWIS ST.
SB	S BIRDSEY ST.
NB	N BIRDSEY ST.
SM	S MAIN ST.
NM	N MAIN ST.
SS	S SPRING ST.
NS	N SPRING ST.
NBD	NB S DICKASON BLVD.
SBD	SB S DICKASON BLVD.
DNB	NB N DICKASON BLVD.
DSB	SB N DICKASON BLVD.
S	S LUDINGTON ST.
N	N LUDINGTON ST.
SW	S WATER ST.
NW	N WATER ST.
W	WATERLOO ST.
U	UDEY ST.
MS	MANNING ST.
R	RIVER RD.

ABBREVIATIONS

AEW	APRON ENDWALL
AGG	AGGREGATE
ASPH	ASPHALT
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CY	CUBIC YARD
D	DEGREE OF CURVE
△	DELTA
FE	FIELD ENTRANCE
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PRW	PROPOSE RIGHT-OF-WAY
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
REQD	REQUIRED
RO	RUN OFF LENGTH
RT	RIGHT
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWINGS
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT

DESIGN CONTACTS

WISDOT
DAVE PILON, P.E.
WISDOT SOUTHWEST REGION (MADISON)
2101 WRIGHT STREET
MADISON, WI 54704
(608) 245-2622
DAVID.PILON@DOT.WI.GOV

CONSULTANT
JOSHUA MELBY, P.E.
KL ENGINEERING, INC.
5950 SEMINOLE CENTRE COURT, SUITE 200
MADISON, WI 53711
(608) 663-1218
JMELBY@KLENGINEERING.COM

DNR AREA LIAISON

ERIC HEGGELUND
DEPARTMENT OF NATURAL RESOURCES
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
(608) 275-3308
ERIC.HEGGELUND@WISCONSIN.GOV

GENERAL NOTES

THE CONTRACTOR SHALL CONTACT THE UTILITIES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. ANY LOCAL, MUNICIPAL OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPARATELY.

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

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

PROTECT INLETS WITH PROPER INLET PROTECTION AT LOCATIONS EXHIBITING RISK OF BEING IMPACTED BY CONSTRUCTION OPERATIONS AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATIONS OF PRIVATE ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR AS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTORS EXPENSE.

PLACE TOPSOIL IN ALL GRADED AREAS AS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED. SEED, MULCH AND FERTILIZE OR SOD AND FERTILIZE ALL AREAS 5 DAYS AFTER PLACEMENT OF TOPSOIL.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WATERWAY.

CURB AND GUTTER GRADES AND LAYOUT DATA ARE GIVEN TO THE FLANGE OF THE CURB.

SAWCUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER

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

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

ALL MANHOLE AND INLET OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS. THIS ALSO INCLUDES VERIFICATION OF INVERT ELEVATIONS AT ALL PROPOSED STORM SEWER CONNECTION POINTS TO EXISTING SYSTEMS.

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

SIGNS IN CONFLICT WITH TRAFFIC CONTROL “IN USE” SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM “TRAFFIC CONTROL COVERING SIGNS TYPE 2.

BENCHMARK LOCATIONS SHOWN ON PLAN ARE APPROXIMATE AND SHOULD BE VERIFIED.

5 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 5 FEET AND 6 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 6 FEET

SIDEWALK AND CURB & GUTTER REPLACEMENT SHOULD BE TO THE NEAREST JOINT. LIMITS ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE ENGINEER. MATCH EXISTING SIDEWALK WIDTH.

FOR ALL CURB RAMPS, REFER TO THE STANDARD DETAIL DRAWINGS FOR THE RAMP TAPER DIMENSIONS. SIDEWALK WIDTHS ARE DIMENSIONED IN THE PLAN.

THE CONTRACTOR’S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

HMA PAVEMENT AND ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

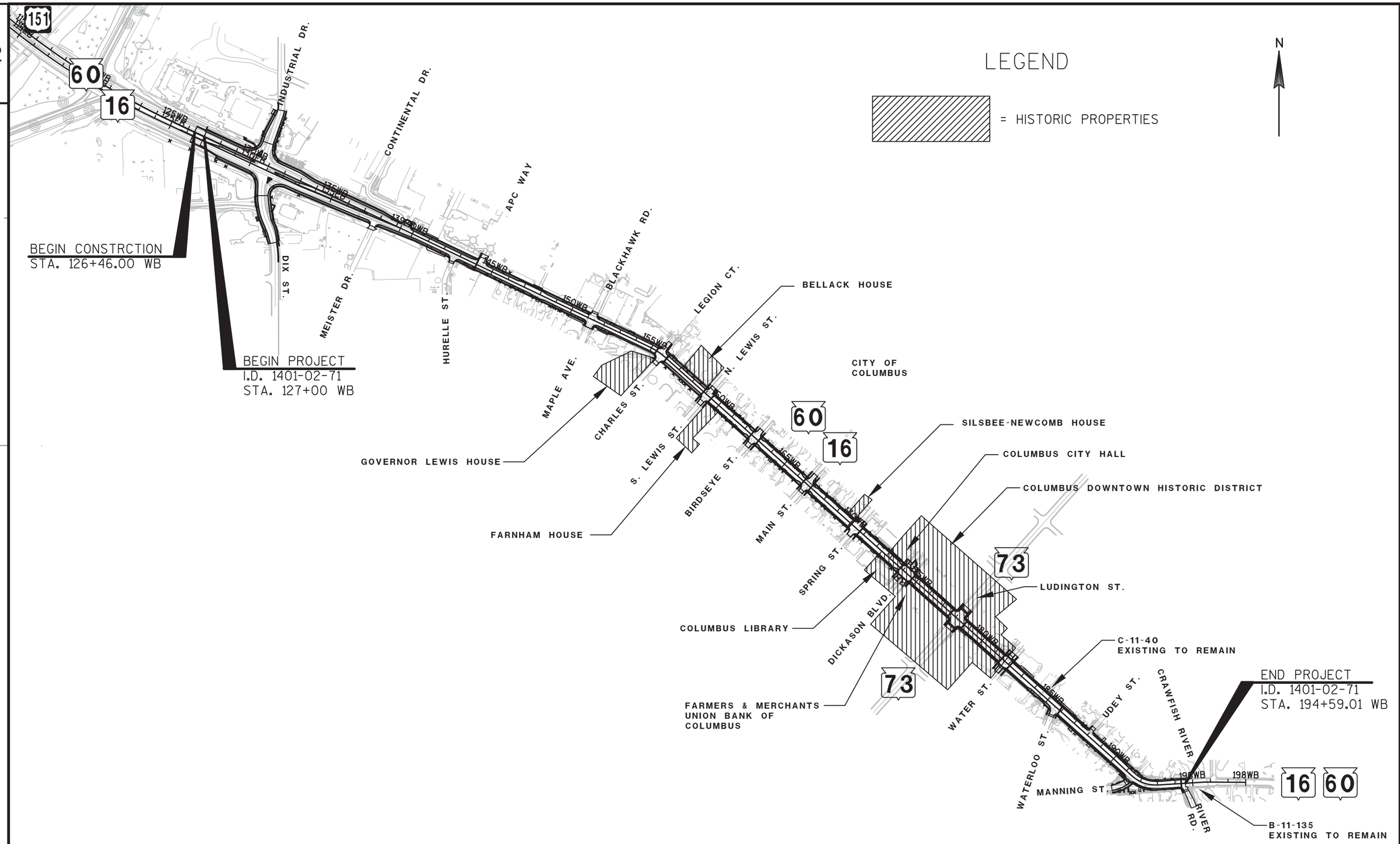
5” HMA PAVEMENT SHALL BE PLACED IN TWO LAYERS. 4” ASPHALTIC SURFACE SHALL BE PLACED IN TWO LAYERS.

THE CONTRACTOR WILL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT THE PEDESTRIAN ACCESS AS LAID OUT IN THE ‘TRAFFIC CONTROL-PEDESTRIAN ACCESS’ SECTION OF THE PLAN.

RUNOFF COEFFICENT TABLE

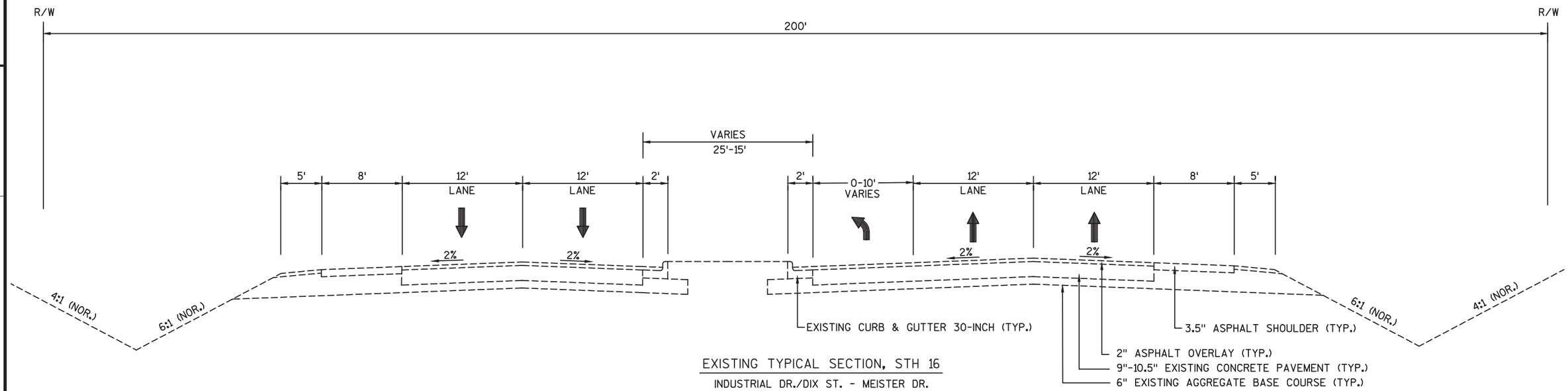
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP-TURB	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE-TRUF			0.25 0.32			0.27 0.34			0.28 0.36			0.30 0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 19.6 ACRES
TOTAL AREA EXPECTED TO BE DISTRIBUTED BY CONSTRUCTION ACTIVITIES = 15.9 ACRES



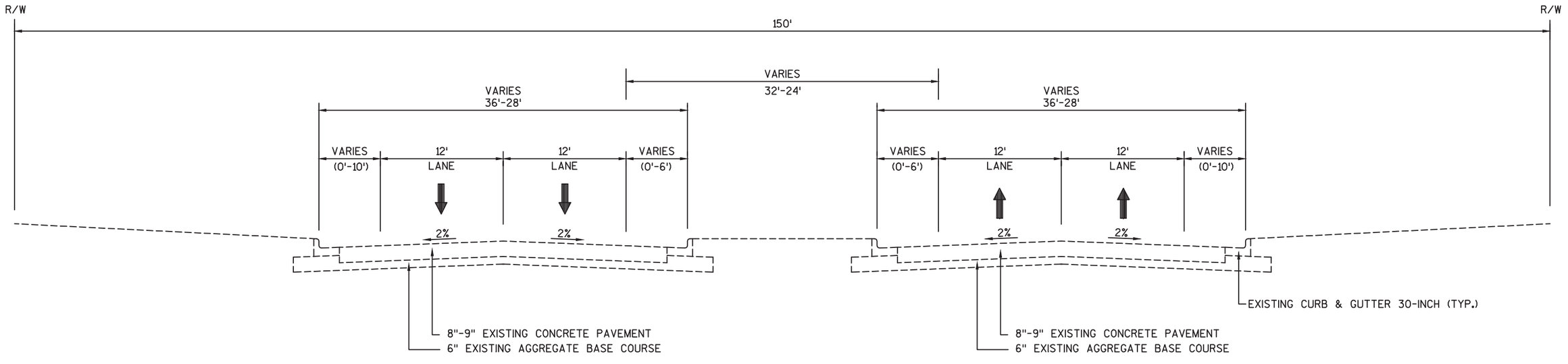
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : \\KL1NAS\DATA1\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PROJECT OVERVIEW\020201_PO.DWG PLOT DATE : 4/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:500 FT



EXISTING TYPICAL SECTION, STH 16

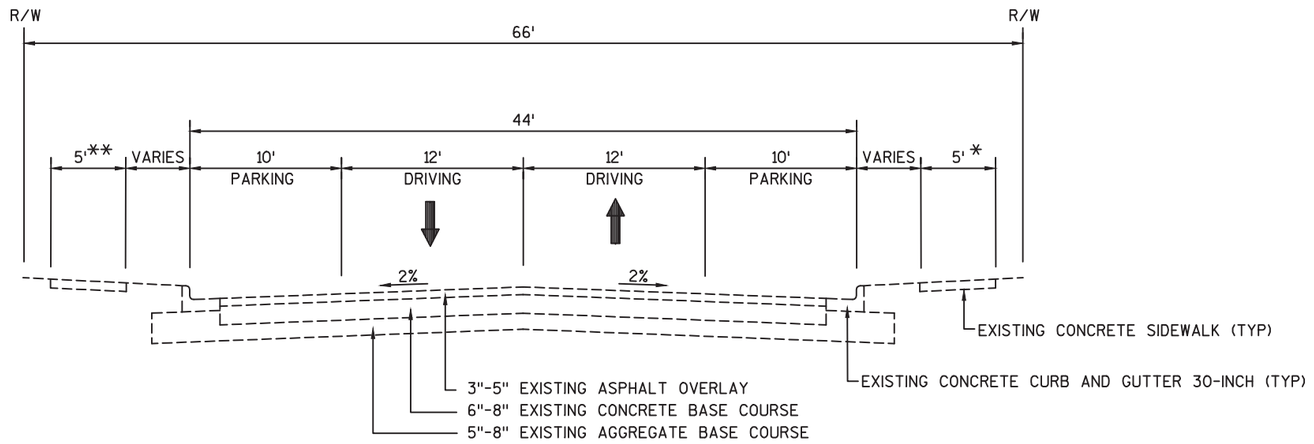
INDUSTRIAL DR./DIX ST. - MEISTER DR.
STA. 127+00 WB - STA. 130+80 WB



EXISTING TYPICAL SECTION, STH 16

INDUSTRIAL DR./DIX ST. - MEISTER DR.
STA. 130+80 WB - STA. 137+75 WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 5	E

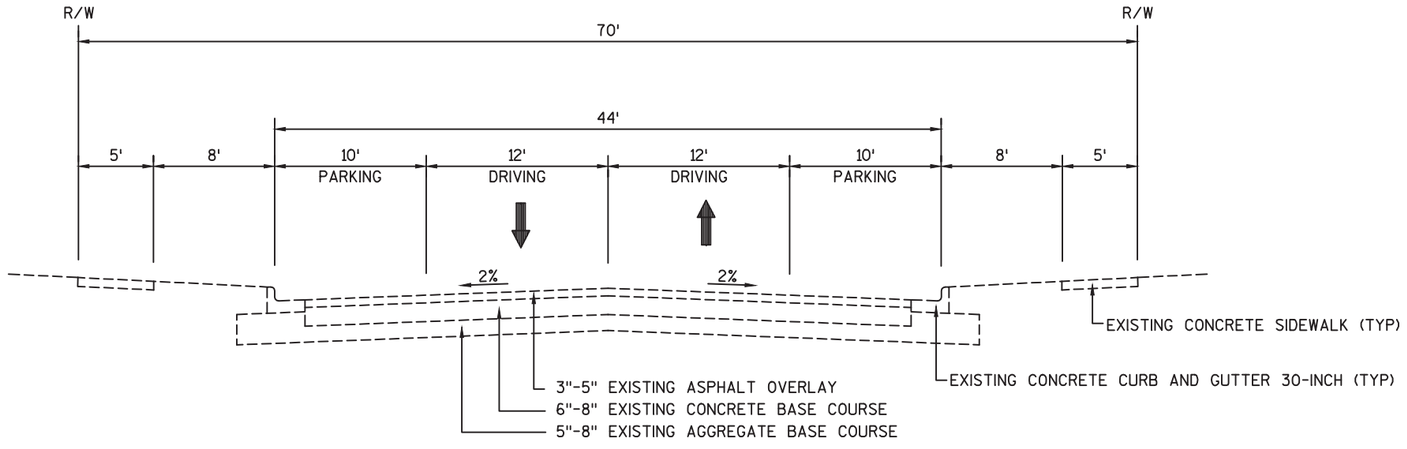


EXISTING TYPICAL SECTION, STH 16

MEISTER DR. - LEGION CT./CHARLES ST.
STA. 137+75 WB - STA. 155+70 WB

137+75 - 151+50 LT - TERRACE
** 151+50 - 155+50 LT - SIDEWALK
155+50 - 155+70 LT - TERRACE

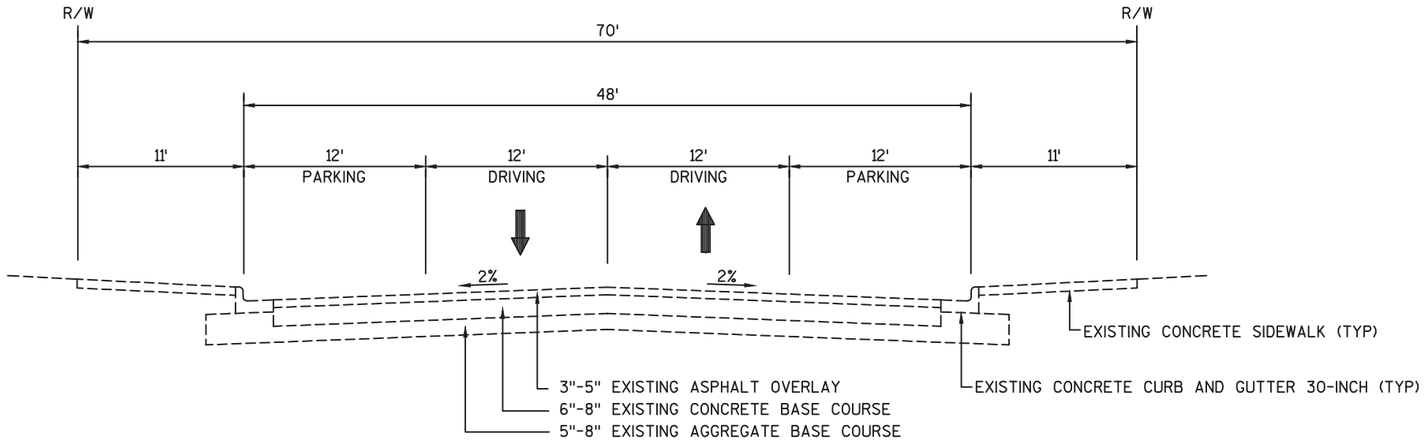
*4 FT SIDEWALK
140+77 - 142+42 (RT)
145+46 - 150+96 (RT)



EXISTING TYPICAL SECTION, STH 16

LEGION CT./CHARLES ST. - DICKASON BLVD.
WATER ST. - MANNING ST.
STA. 155+70 WB - STA. 174+25 WB
STA. 181+80 WB - STA. 192+50 WB

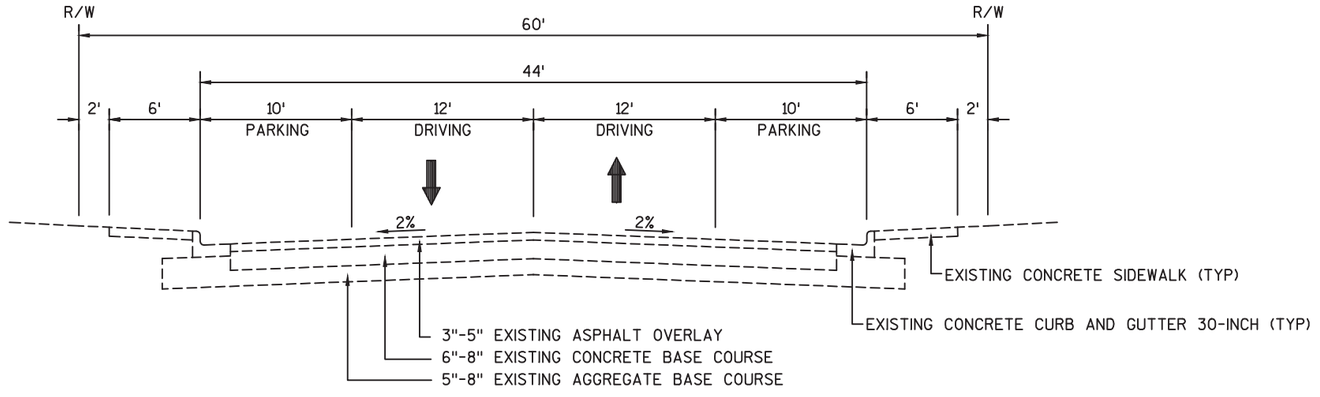
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 6	E



EXISTING TYPICAL SECTION, STH 16

DICKASON BLVD. - WATER ST.

STA. 174+25 WB - STA. 181+80 WB

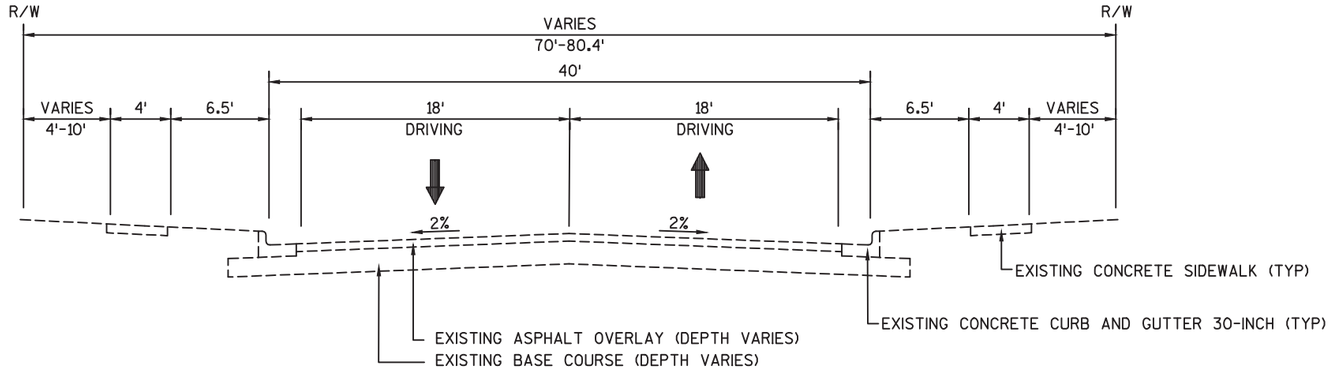


EXISTING TYPICAL SECTION, STH 16

MANNING ST. - RIVER RD.

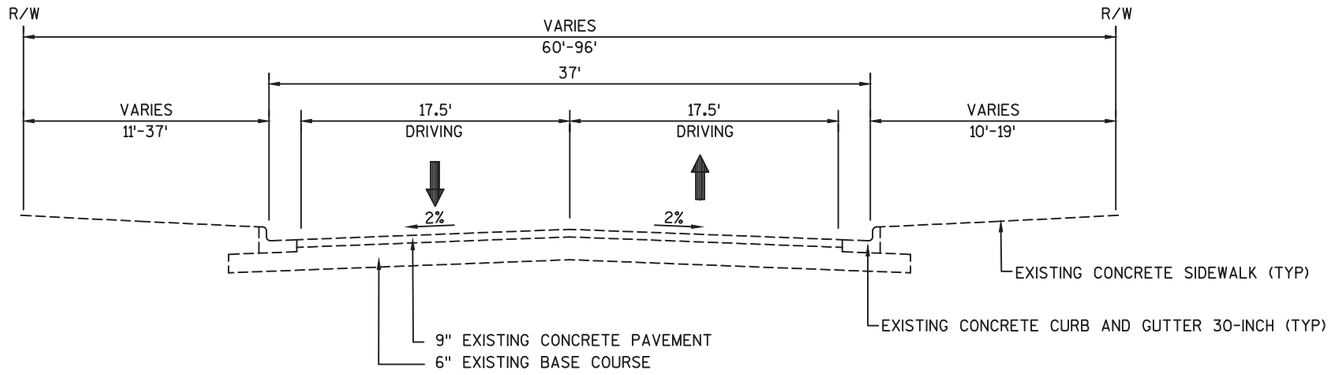
STA. 192+50 WB - STA. 194+59.01 WB

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 7	E



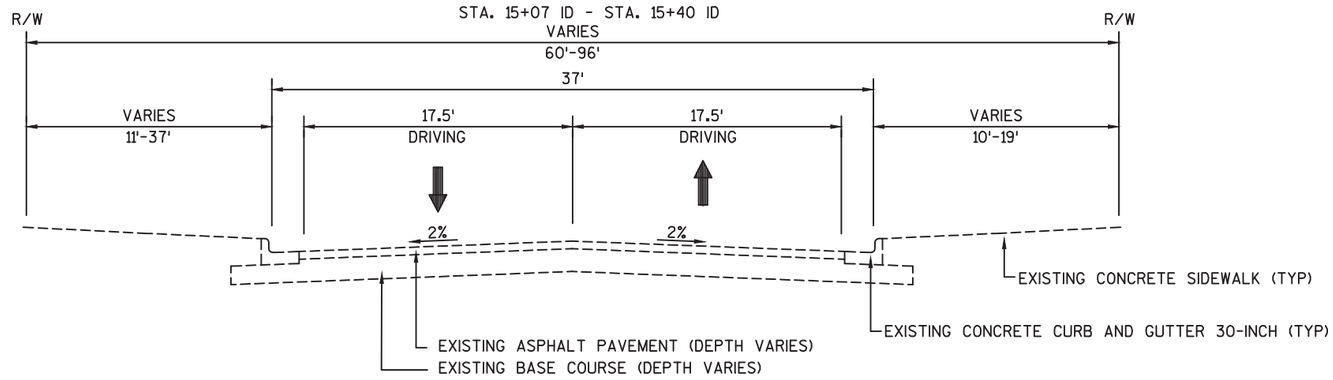
EXISTING TYPICAL SECTION, DIX STREET

STA. 10+00 ID - STA. 13+81 ID



EXISTING TYPICAL SECTION, INDUSTRIAL DRIVE

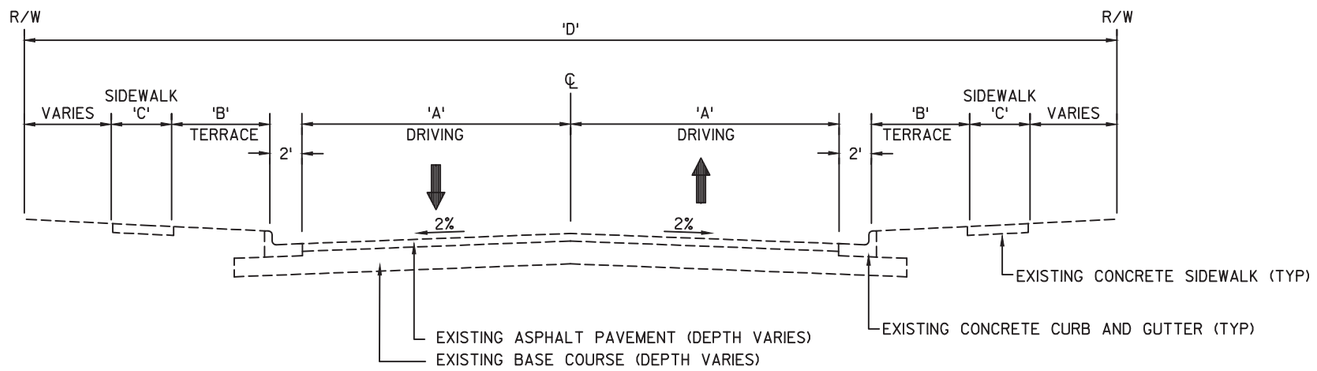
STA. 15+07 ID - STA. 15+40 ID



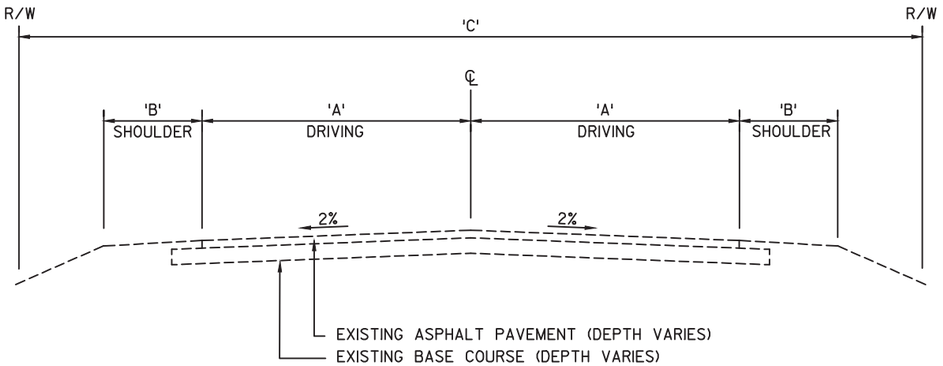
EXISTING TYPICAL SECTION, INDUSTRIAL DRIVE

STA. 15+40 ID - STA. 17+78 ID

STREET	'A'	'B'	'C'	'D'	NOTES
CONTINENTAL	21'	N/A	N/A	60'	
HURELLE	13'	N/A	N/A	50'	
APC WAY	36'	0.5' LT - N/A RT	4' LT - N/A RT	60'	
MAPLE AVE	20'	3'	5' LT - 4' RT	60'	
BLACKHAWK	16'	N/A	N/A	60'	
LEGION	10'	N/A LT - 0.5' RT	N/A LT - 4' RT	40'	NO CURB LT
CHARLES	13'	N/A	N/A	30'	
N. LEWIS	12'	11'	5'	60'	
S. LEWIS	12'	11'	5'	60'	
N. BIRDSEY	12'	10.5' LT - 11.5' RT	5'	60'	
S. BIRDSEY	12'	9.5' LT - 11' RT	5'	60'	
N. MAIN	12'	11' LT - 10.5' RT	4.5' LT - 5' RT	60'	
S. MAIN	12'	10' LT - 11' RT	5'	60'	
N. SPRING	12'	15.5'	5'	70'	
S. SPRING	12'	16' LT - 15' RT	5'	70'	
N. DICKASON	28'	11' LT - 7.5' RT	7.5' LT - 6.5' RT	99'	CONC. TERRACE LT
N. LUDINGTON	22'	0.5'	VARIES	70'	
S. LUDINGTON	22'	0.5'	VARIES	70'	
N. WATER	13'	11' LT - 14' RT	4' LT - 5' RT	66'	
S. WATER	12'	11' LT - 17' RT	5' LT - 4' RT	70'	
WATERLOO	13.5'	10'	4'	66'	
UDEY	11'	2' LT - N/A RT	3' LT - N/A RT	VARIES	NO CURB
MANNING	12.5'	N/A LT - 9' RT	N/A LT - 5' RT	60'	
RIVER	17'	5' LT - N/A RT	4' LT - N/A RT	60'	

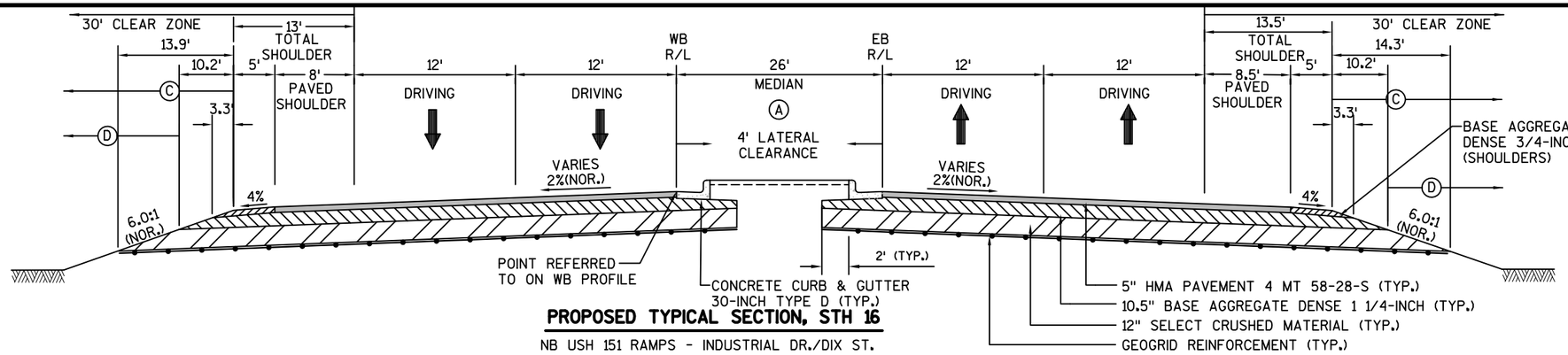


EXISTING TYPICAL SECTION, SIDEROADS



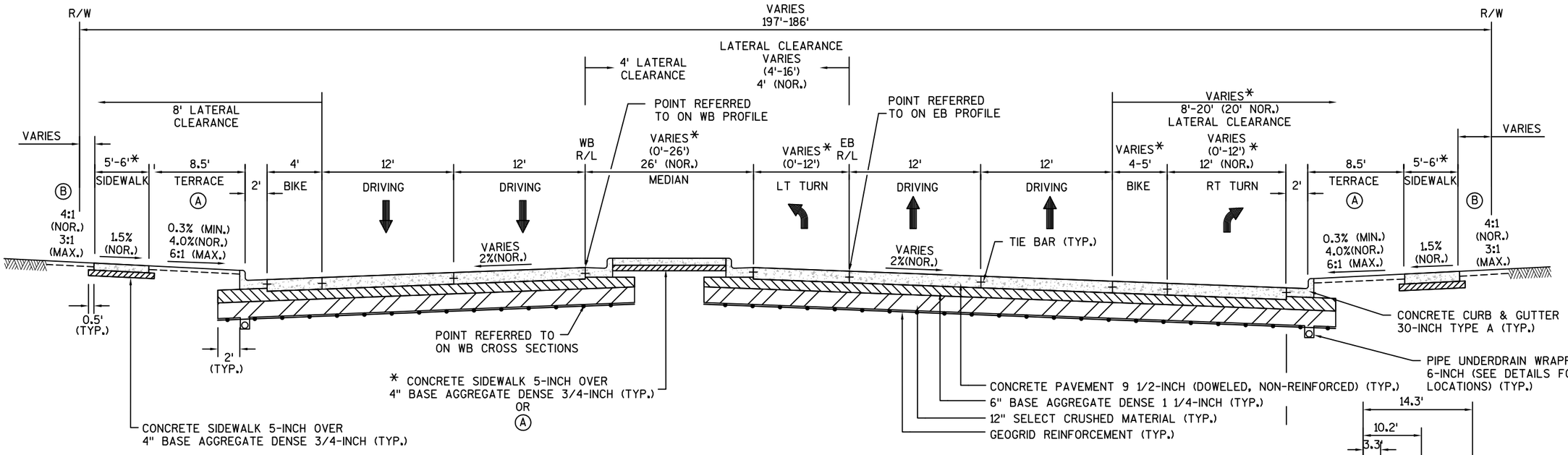
EXISTING TYPICAL SECTION, SIDEROADS

STREET	'A'	'B'	'C'
MEISTER	15.5'	VARIES	60'



PROPOSED TYPICAL SECTION, STH 16

NB USH 151 RAMPS - INDUSTRIAL DR./DIX ST.
STA. 126+40 WB - STA. 127+00 WB

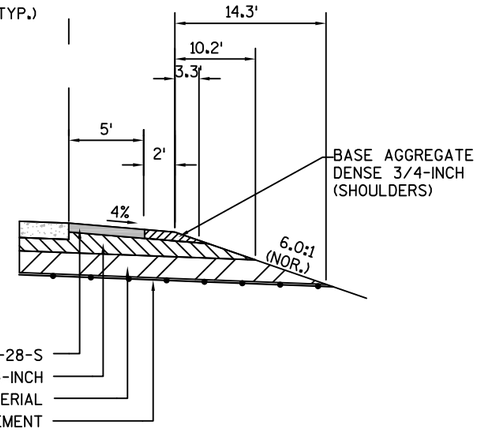


PROPOSED TYPICAL SECTION, STH 16

NB USH 151 RAMPS - INDUSTRIAL DR./DIX ST.
STA. 127+00 WB - STA. 130+80 WB

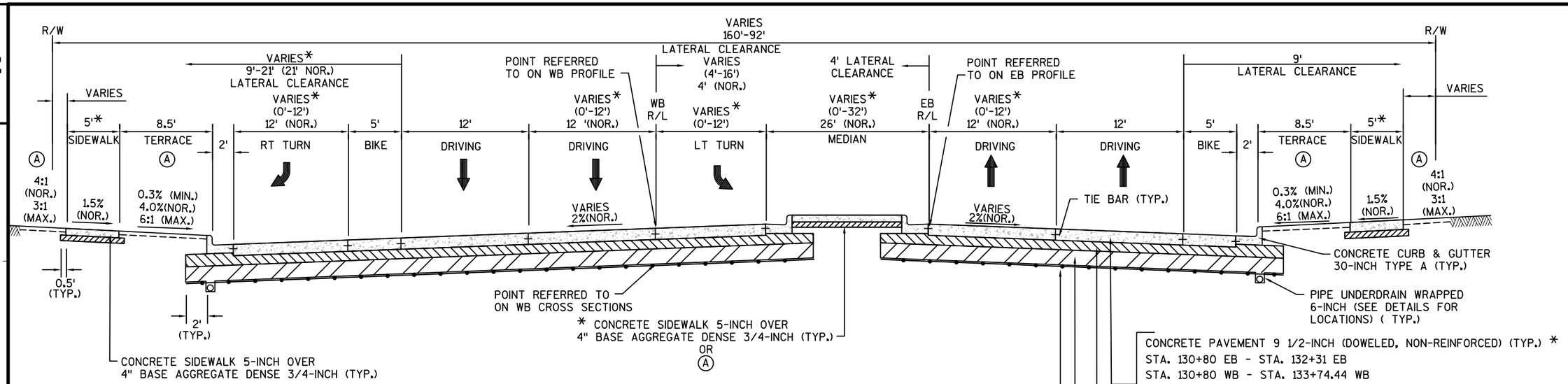
LEGEND

- (A) TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD
- (B) TOPSOIL, FERTILIZER TYPE B, SEEDING, AND MULCH
- (C) FERTILIZER TYPE B AND SEEDING
- (D) TOPSOIL AND MULCH
- * SEE PLAN DETAILS



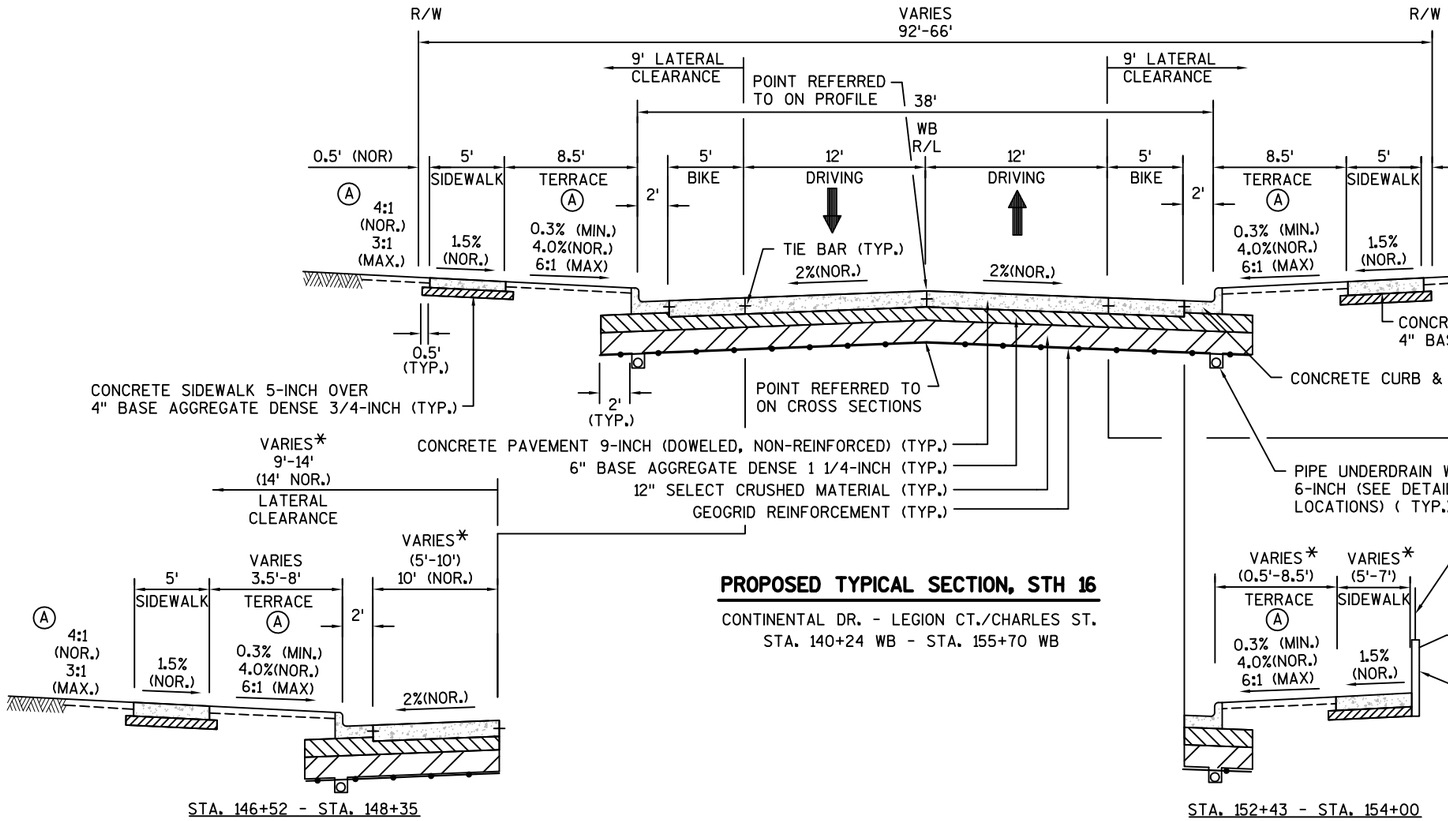
STA. 127+00 - STA. 128+16

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 10	E



PROPOSED TYPICAL SECTION, STH 16

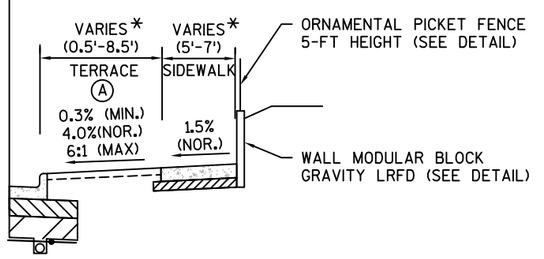
INDUSTRIAL/DIX - HURELLE ST.
STA. 130+80 WB - STA. 140+24 WB



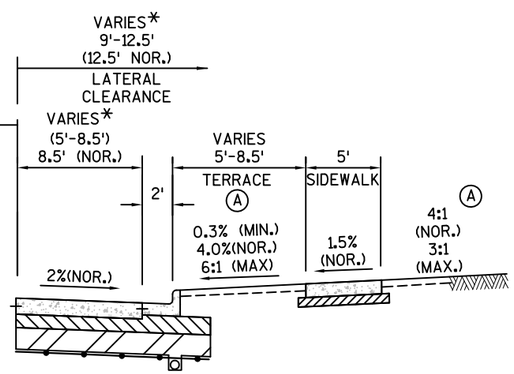
PROPOSED TYPICAL SECTION, STH 16

CONTINENTAL DR. - LEGION CT./CHARLES ST.
STA. 140+24 WB - STA. 155+70 WB

STA. 146+52 - STA. 148+35



STA. 152+43 - STA. 154+00



STA. 147+43 - STA. 148+33

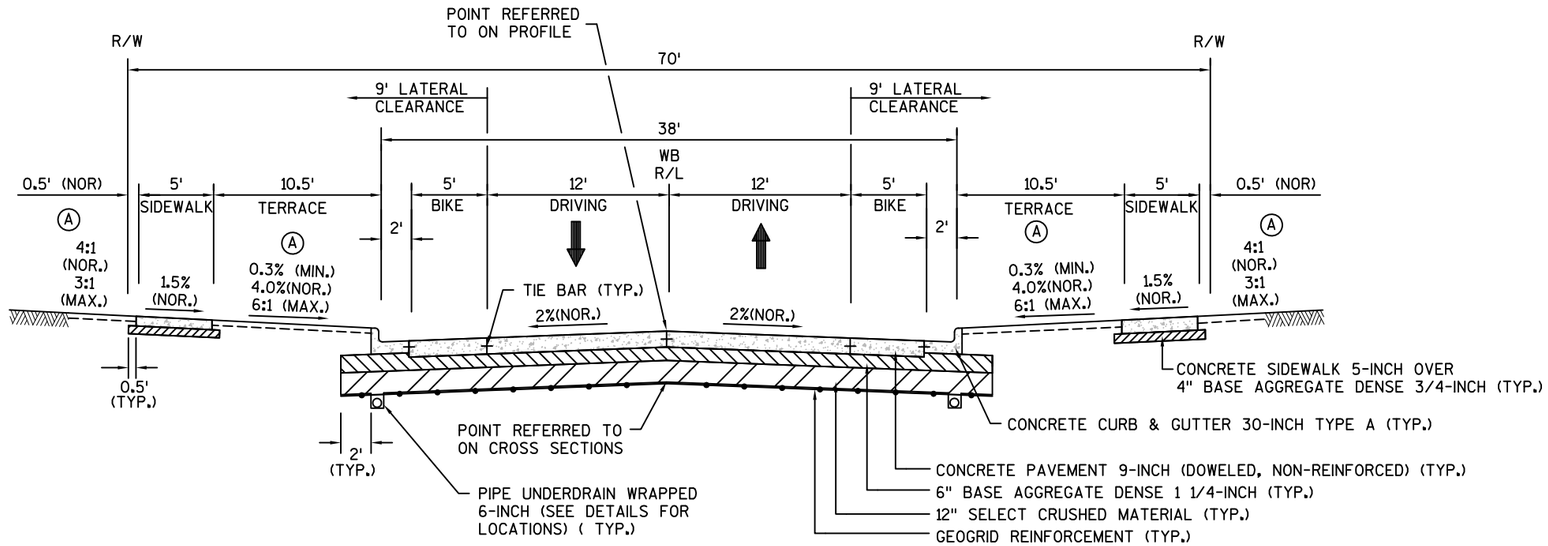
LEGEND

(A) TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD

(B) TOPSOIL, FERTILIZER TYPE B, SEEDING, AND MULCH

* SEE PLAN DETAILS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 11	E



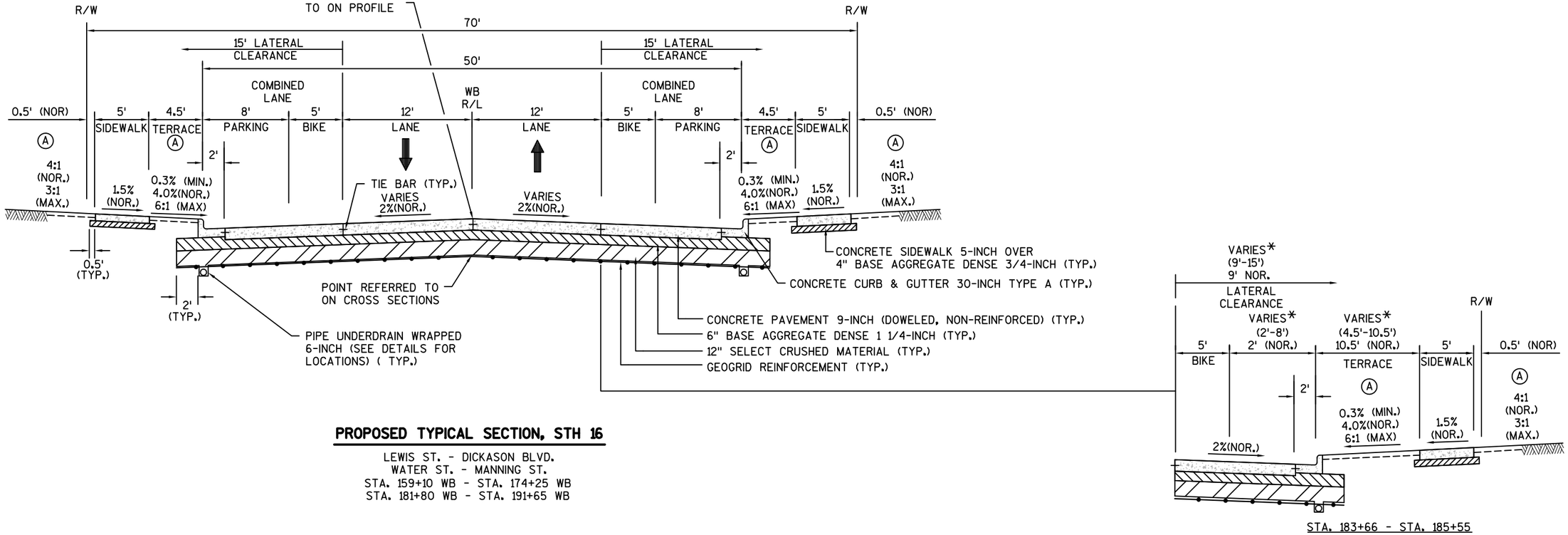
LEGEND

(A) TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD

* SEE PLAN DETAILS

PROPOSED TYPICAL SECTION, STH 16

LEGION CT./CHARLES ST. - LEWIS ST.
STA. 155+70 WB - STA. 159+10 WB

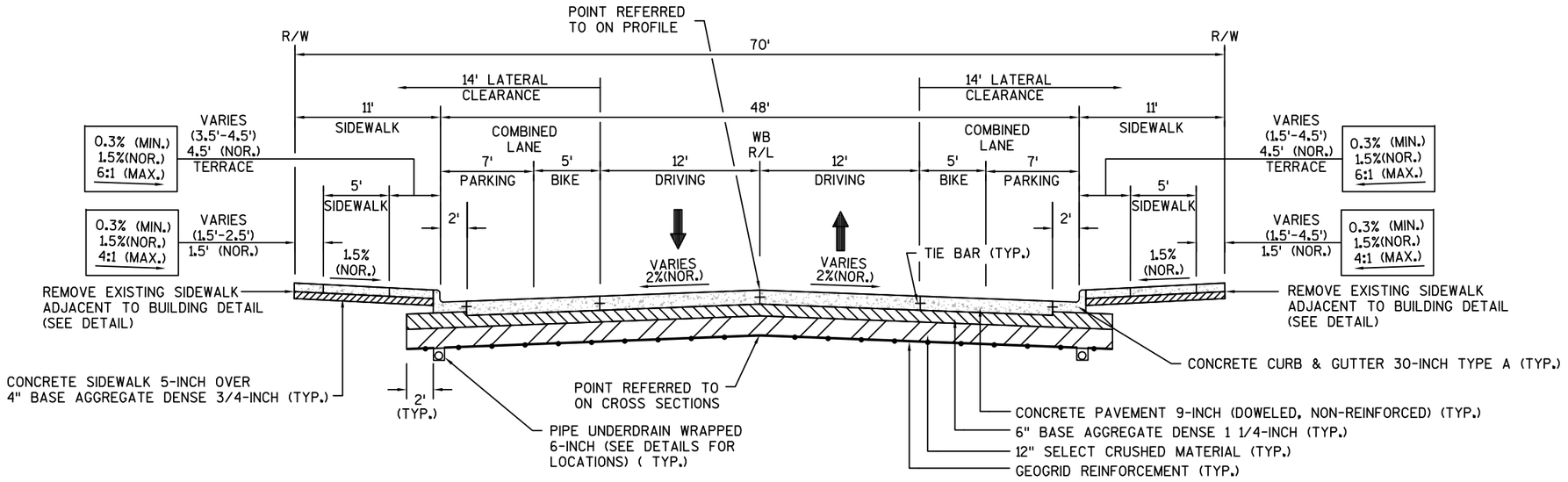


PROPOSED TYPICAL SECTION, STH 16

LEWIS ST. - DICKASON BLVD.
WATER ST. - MANNING ST.
STA. 159+10 WB - STA. 174+25 WB
STA. 181+80 WB - STA. 191+65 WB

STA. 183+66 - STA. 185+55

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 12	E



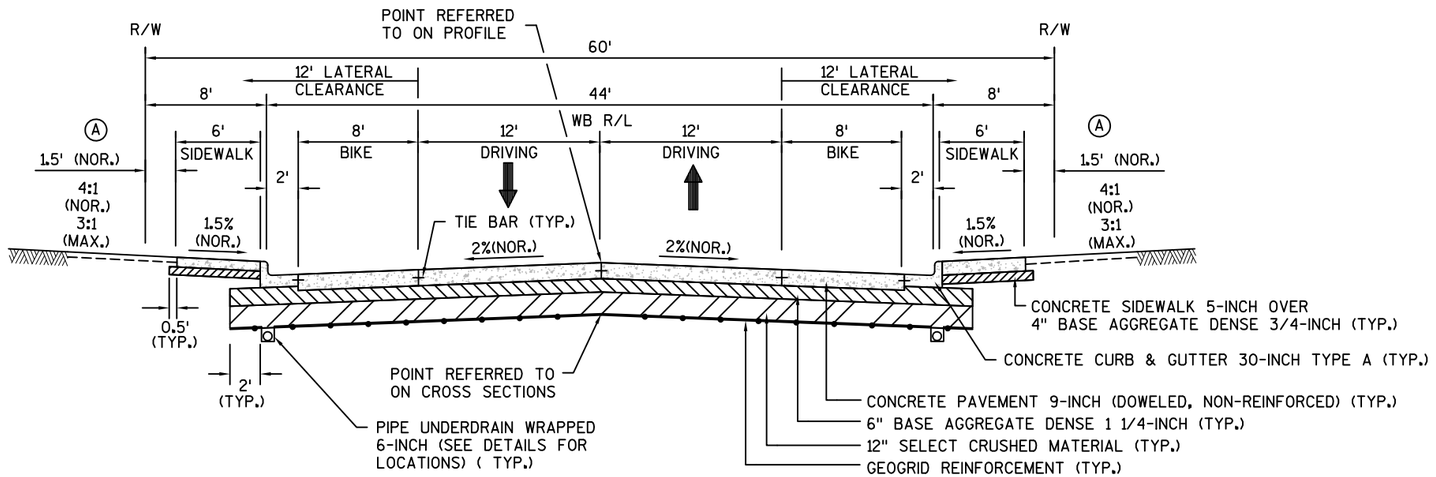
PROPOSED TYPICAL SECTION, STH 16

DICKASON BLVD. - WATER ST.
STA. 174+25 WB - STA. 181+80 WB

LEGEND

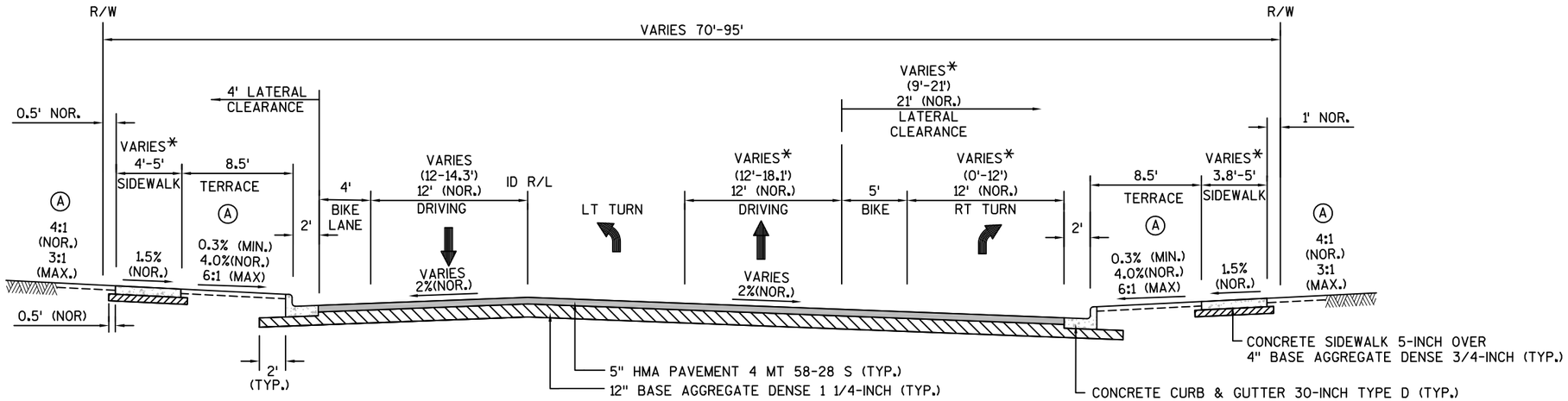
Ⓐ TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD

* SEE PLAN DETAILS



PROPOSED TYPICAL SECTION, STH 16

MANNING ST. - RIVER RD.
STA. 191+65 WB - STA. 194+60 WB



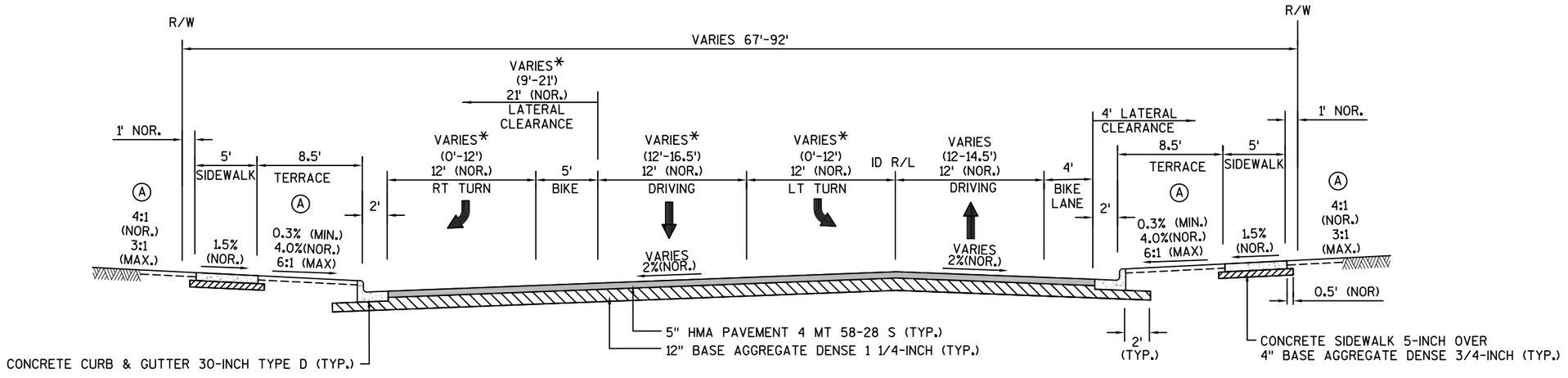
PROPOSED TYPICAL SECTION, DIX STREET

STA. 10+00 ID - STA. 12+79 ID

LEGEND

Ⓐ TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD

* SEE PLAN DETAILS



PROPOSED TYPICAL SECTION, INDUSTRIAL DRIVE

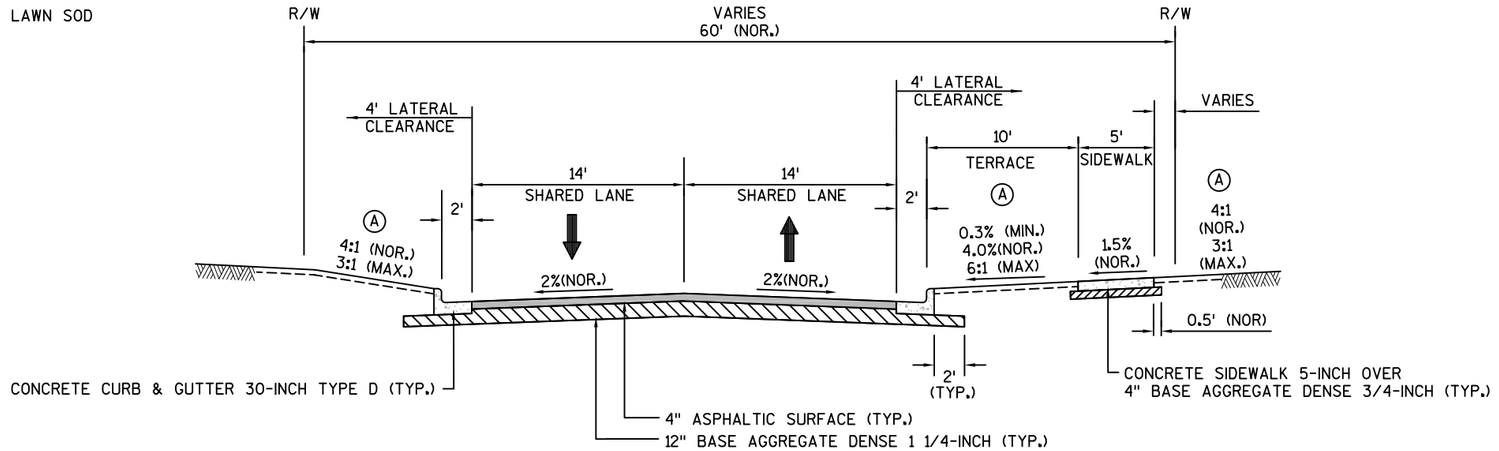
STA. 15+79 ID - STA. 17+78 ID

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 14	E

2

LEGEND

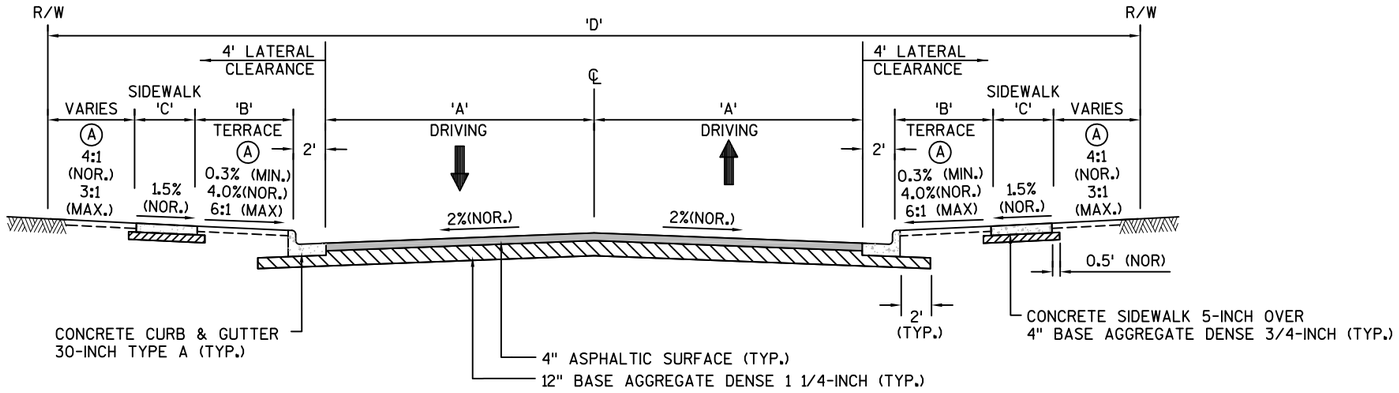
Ⓐ TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD



PROPOSED TYPICAL SECTION, MANNING STREET

STA. 10+45 MS - STA. 11+26 MS

STREET	'A'	'B'	'C'	'D'	NOTES
CONTINENTAL	21'	N/A	N/A	60'	NO CURB LT
HURELLE	13'	N/A	N/A	50'	NO CURB LT
APC WAY	36'	0.5' LT - N/A RT	4' LT - N/A RT	60'	
MAPLE AVE	20'	3'	5' LT - 4' RT	60'	
BLACKHAWK	16'	N/A	N/A	60'	
LEGION	10'	N/A LT - 0.5' RT	N/A LT - 6' RT	40'	NO CURB LT
CHARLES	13'	N/A	N/A	30'	
N. LEWIS	12'	11'	5'	60'	
S. LEWIS	12'	11'	5'	60'	
N. BIRDSEY	12'	10.5' LT - 11.5' RT	5'	60'	
S. BIRDSEY	12'	9.5' LT - 11' RT	5'	60'	
N. MAIN	12'	11' LT - 10.5' RT	5'	60'	
S. MAIN	12'	10' LT - 11' RT	5'	60'	
N. SPRING	12'	15.5'	5'	70'	
S. SPRING	12'	16' LT - 15' RT	5'	70'	
N. DICKASON	28'	11' LT - 7.5' RT	7.5' LT - 6.5' RT	99'	CONC. TERRACE LT
N. LUDINGTON	22'	3.5'	VARIES	70'	CONC. TERRACE/BEHIND SW
S. LUDINGTON	22'	3.5'	VARIES	70'	CONC. TERRACE/BEHIND SW
N. WATER	13'	11' LT - 14' RT	5'	66'	
S. WATER	12'	11' LT - 17' RT	5.5' LT - 4.5' RT	70'	
WATERLOO	13.5'	10'	5'	66'	
UDEY	11'	1.5' LT - N/A RT	5' LT - N/A RT	VARIES	NO CURB
RIVER	17'	4.5' LT - N/A RT	5' LT - N/A RT	60'	

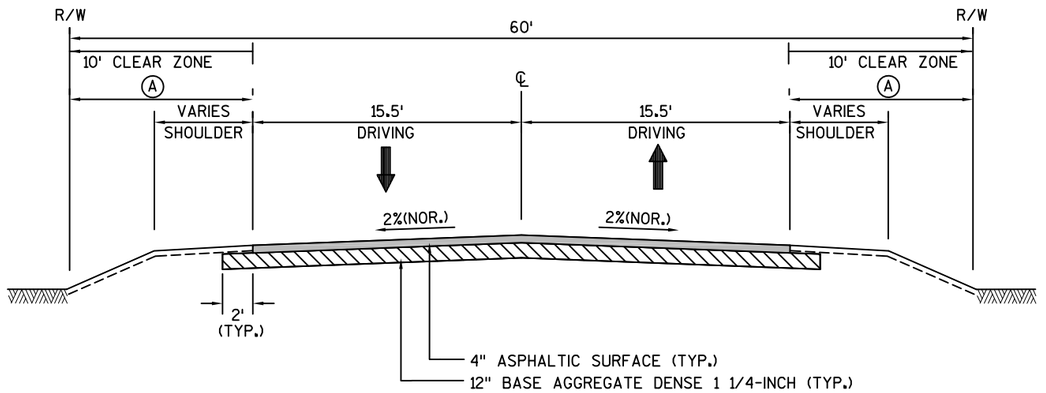


PROPOSED TYPICAL SECTION, SIDEROADS

LEGEND

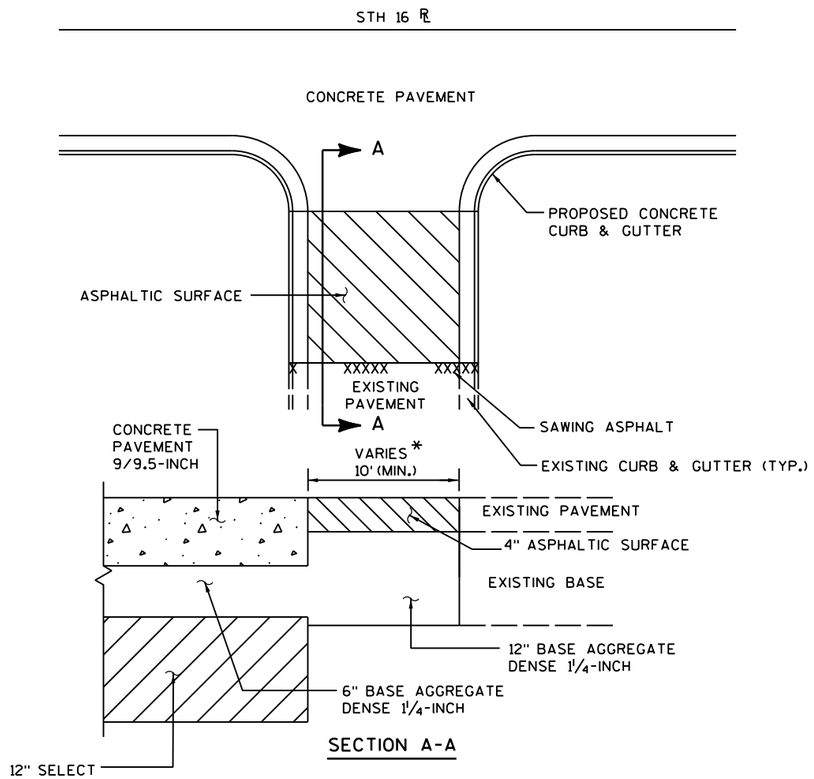
Ⓐ TOPSOIL, FERTILIZER TYPE B, AND LAWN SOD

* SEE PLAN DETAILS



PROPOSED TYPICAL SECTION, MEISTER DRIVE

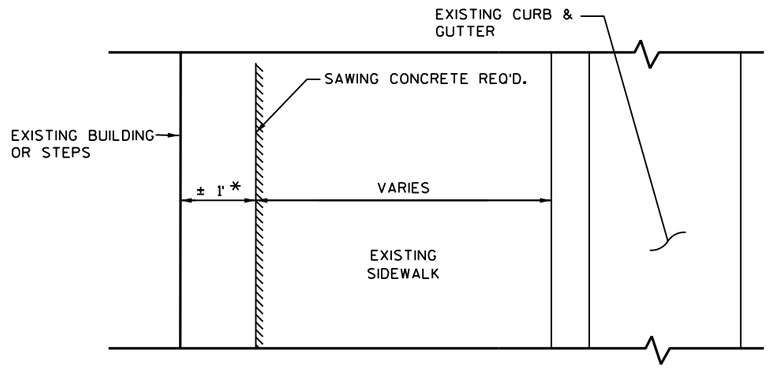
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 16	E



SECTION A-A

SIDE ROAD TRANSITION DETAIL

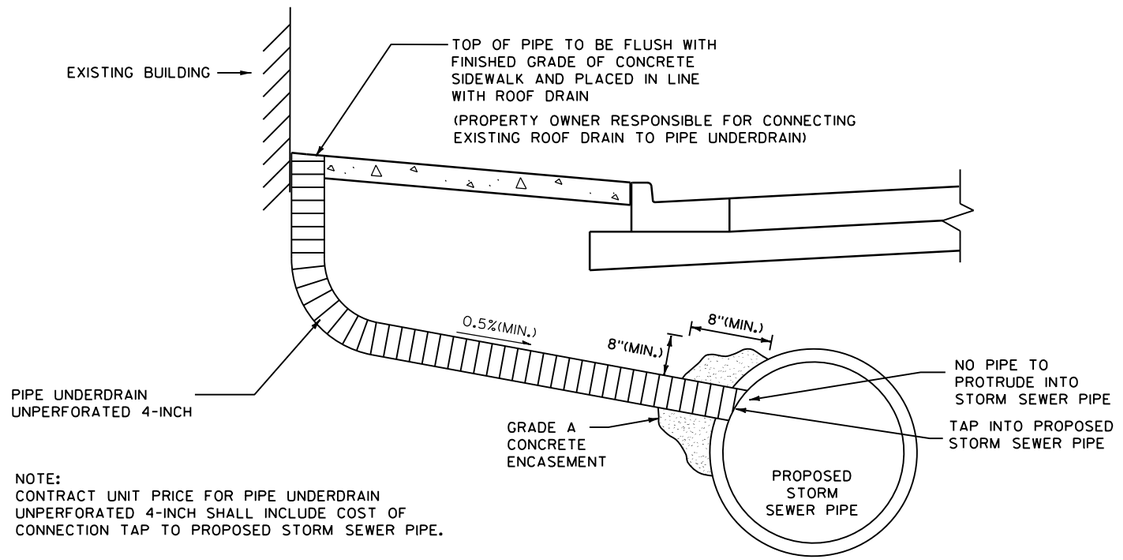
* SEE PLAN DETAILS



* 3' NEXT TO FARMERS & MERCHANTS BANK

NOTE: REMOVE SIDEWALK TO THE FACE OF BUILDING OR STEPS, WITHOUT DAMAGING EXISTING BUILDING, USING METHODS APPROVED BY ENGINEER.

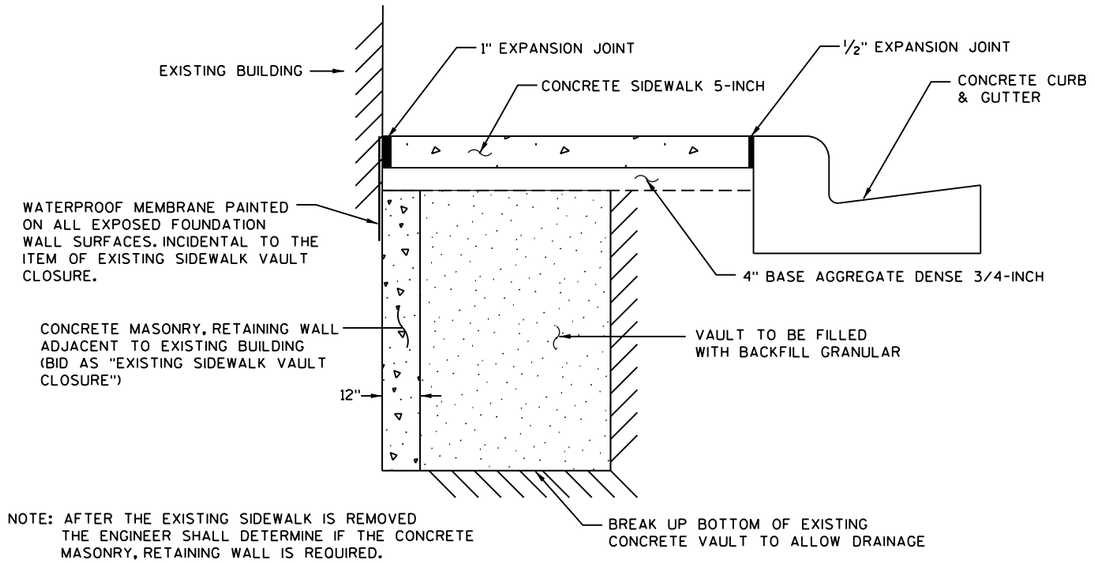
REMOVING EXISTING SIDEWALK ADJACENT TO BUILDING DETAIL



NOTE:
CONTRACT UNIT PRICE FOR PIPE UNDERDRAIN UNPERFORATED 4-INCH SHALL INCLUDE COST OF CONNECTION TAP TO PROPOSED STORM SEWER PIPE.

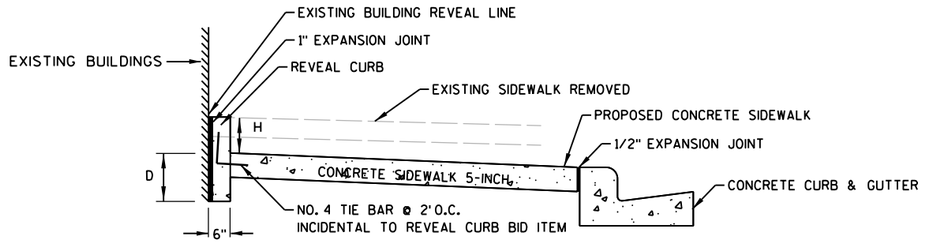
ROOF DRAIN TAP DETAIL

(SEE STORM SEWER PLANS FOR LOCATIONS)



NOTE: AFTER THE EXISTING SIDEWALK IS REMOVED THE ENGINEER SHALL DETERMINE IF THE CONCRETE MASONRY, RETAINING WALL IS REQUIRED.

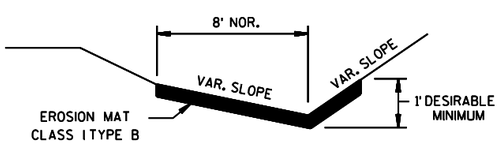
EXISTING SIDEWALK VAULT CLOSURE DETAIL



H = HEIGHT OF CURB, VARIES, 0"-10"
D = DEPTH OF CURB BASE = 2 X H, 6" MIN

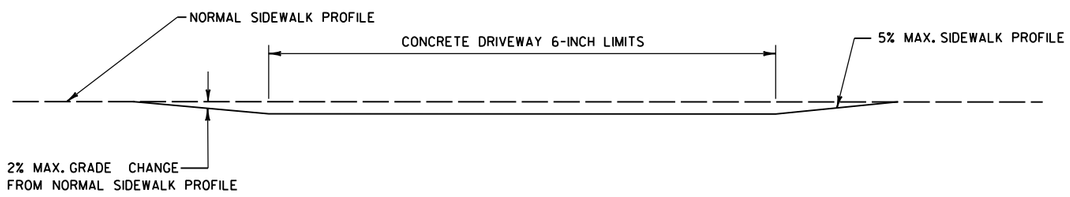
REVEAL CURB DETAIL

(SEE PLAN DETAILS FOR LOCATIONS)



EROSION MAT FOR DITCHES DETAIL

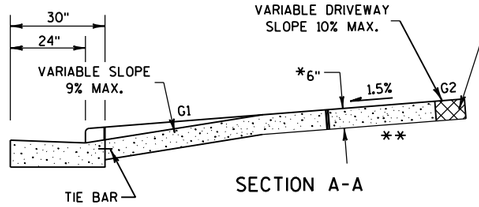
SEE EROSION CONTROL PLAN FOR LOCATIONS
(REQ'D. IN ALL DITCHES)



DEPRESSED SIDEWALK PROFILE DETAIL

DEPRESS SIDEWALK PROFILE IF DRIVEWAY
APRON EXCEEDS MAX. SLOPE

THIS AREA TO BE REPLACED IN KIND
AS NOTED ON PLANS:
CONCRETE = CONCRETE DRIVEWAY 6-INCH OVER 6" BASE AGGREGATE DENSE 1¼"
ASPHALT = 3½" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
OVER 8" BASE AGGREGATE DENSE 1¼
GRAVEL = 6" BASE AGGREGATE DENSE ¾"



SECTION A-A

NOTE:
DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

DRIVEWAY CONSTRUCTION NOTES:

——— HEAVY LINE INDICATES ½" EXPANSION JOINT MATERIAL.

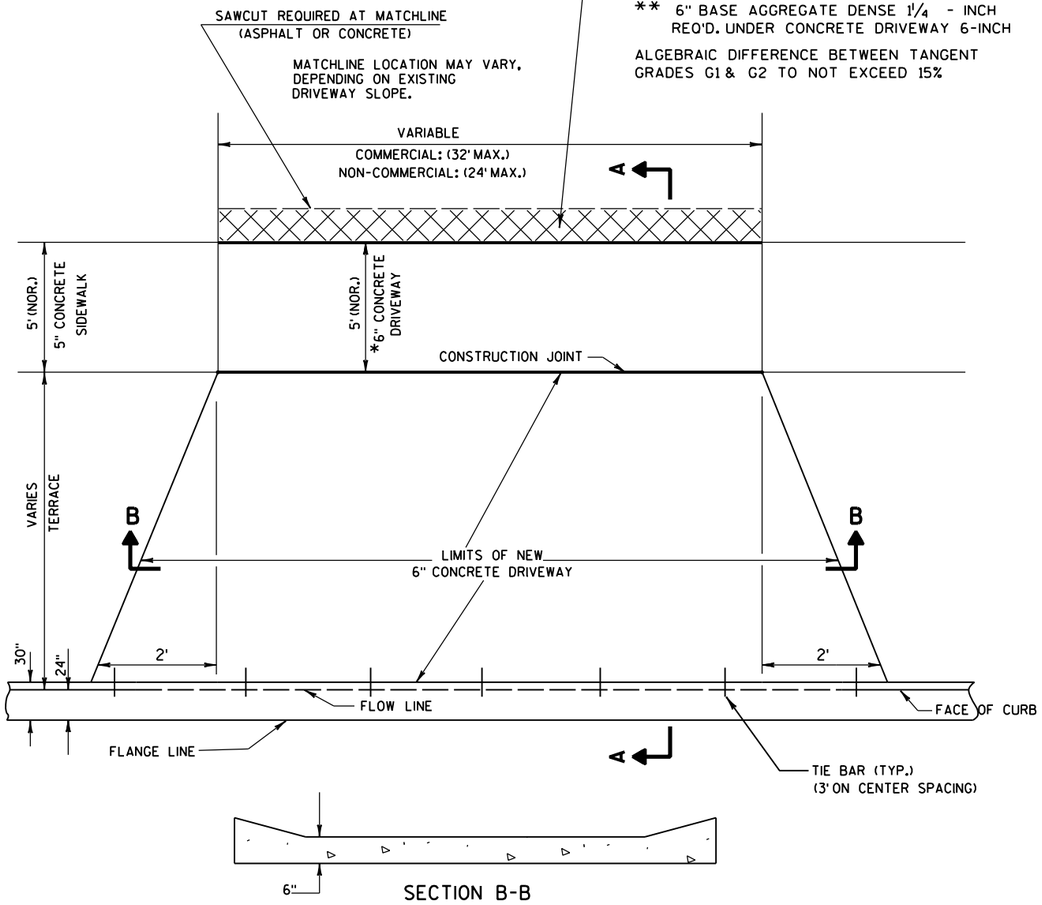
WHEN MATCHING EXISTING CONCRETE DRIVEWAY INSTALL ½" EXPANSION JOINT MATERIAL BETWEEN NEW AND OLD DRIVEWAY.

* UNLESS OTHERWISE NOTED ON PLAN

PROVIDE CONTRACTION JOINT FOR CONCRETE DRIVEWAYS WIDER THAN 14 FEET

** 6" BASE AGGREGATE DENSE 1¼ - INCH REQ'D. UNDER CONCRETE DRIVEWAY 6-INCH

ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

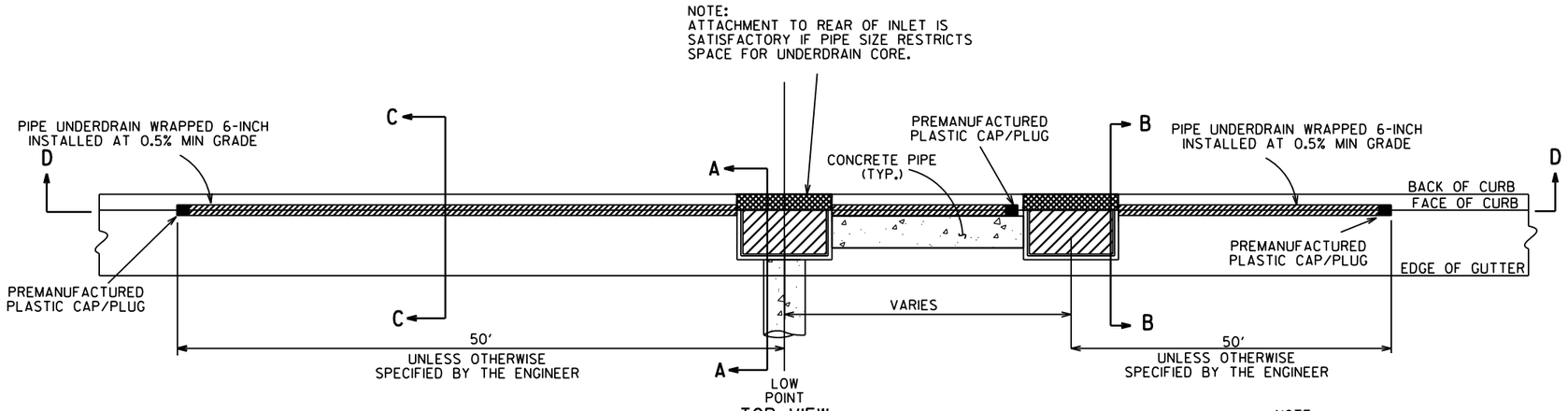


SECTION B-B

CONCRETE DRIVEWAY DETAIL

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET 18	E

2



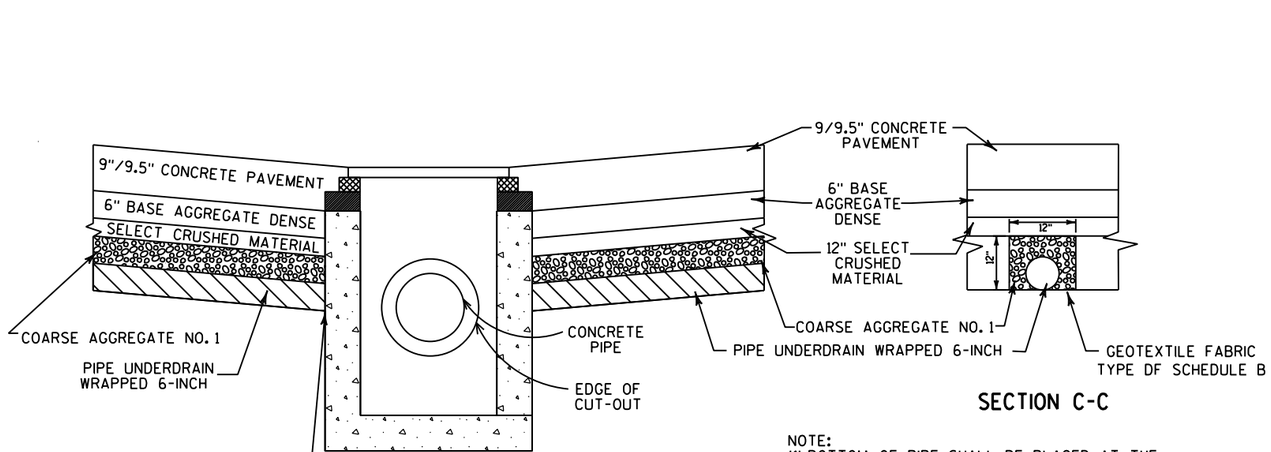
LOW POINT INLET

TOP VIEW
SPLIT DETAIL

INLET CONFIGURATION
WITH UNDERDRAIN AT LOW POINTS

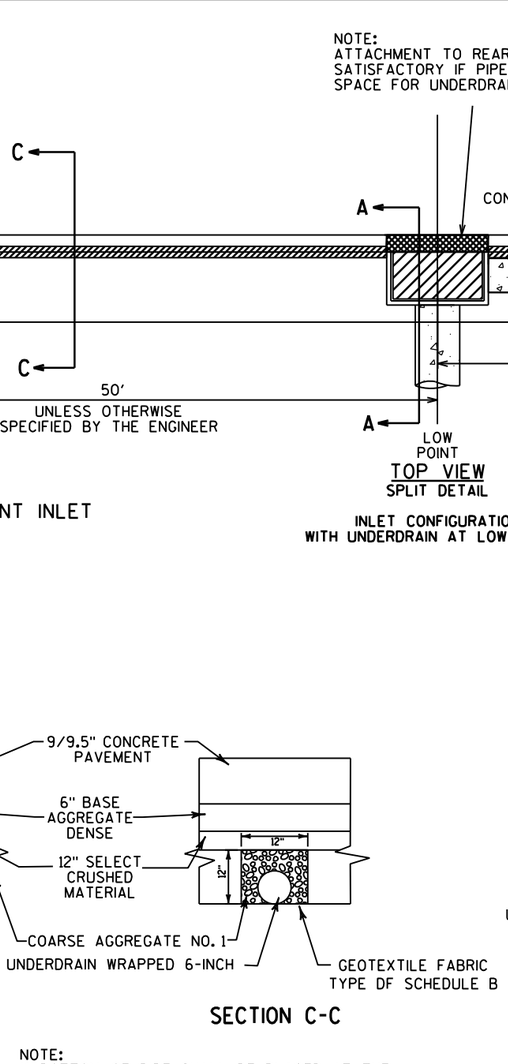
LOW POINT INLET WITH FLANKING INLETS

NOTE:
WHERE MULTIPLE INLETS ARE USED AT LOW POINTS, PIPE UNDERDRAIN WRAPPED 6-INCH SHALL BE INSTALLED 50 FEET TO EITHER DIRECTION FROM THE LOW POINT AT A MINIMUM POSITIVE GRADE OF 0.5%. THE SECTION OF UNDERDRAIN BETWEEN THE CENTER AND OUTER INLETS SHALL BE PLACED TIGHT TO THE OUTER INLET, CAPPED WITH A PREMANUFACTURED PLASTIC CAP OR PLUG, AND LAID AS SPECIFIED ABOVE TO THE CENTER INLET.



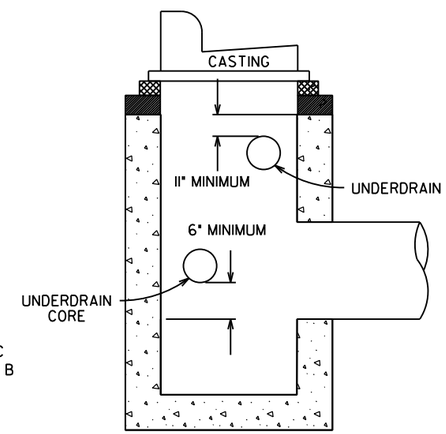
SECTION D-D

TYPICAL INLET CONFIGURATION WITH UNDERDRAIN CORED INTO WALL WITH NO PIPE FOUND AT LOW POINTS WITHOUT FLANKING INLETS



SECTION C-C

NOTE:
(1) BOTTOM OF PIPE SHALL BE PLACED AT THE BOTTOM OF COARSE AGGREGATE NO. 1 MATERIAL.
(2) BOTTOM OF COARSE AGGREGATE NO. 1 MATERIAL IS NOT NECESSARILY THE BOTTOM OF THE SELECT CRUSHED MATERIAL.

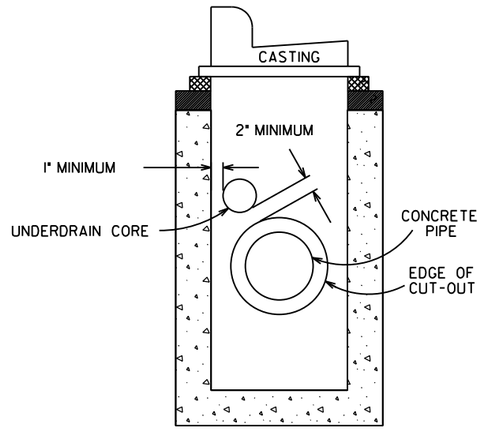


SECTION A-A

NOTE:
(1) BOTTOM OF CORE PLACED A MINIMUM OF 6" ABOVE THE INVERT OF THE CROSS PIPE.
(2) TOP OF CORE HOLES WILL BE A MINIMUM OF 11" BELOW THE TOP OF THE INLET STRUCTURES (BOTTOM OF ADJUSTING RINGS)
(3) DRAIN TILES SHALL NOT BE ALLOWED IN THE ADJUSTING RINGS OF THE STRUCTURE OF INLETS OR MANHOLES

CROSS-SECTION VIEW
TYPICAL INLET CONFIGURATION WITH UNDERDRAIN CORED INTO WALL WITH CROSSPIPE ONLY

FOUND AT LOW POINTS WITHOUT FLANKING INLETS



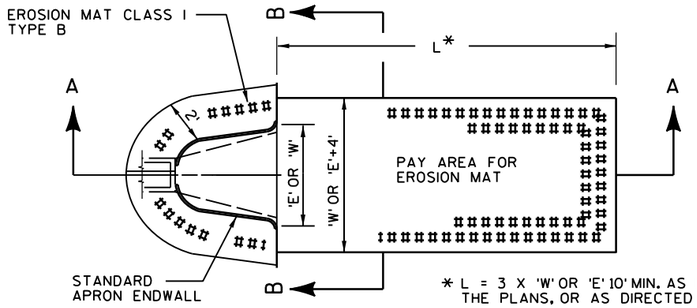
SECTION B-B

NOTE:
(1) CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.
(2) CORE HOLES SHALL HAVE 1" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.

CROSS-SECTION VIEW
TYPICAL INLET IN SUMP CONDITION WITH UNDERDRAIN CORED INTO WALL WITH PIPE FOUND AT FLANKING INLETS NEAR LOWPOINTS

PIPE UNDERDRAIN 6-INCH WITH GEOTEXTILE FABRIC & AGGREGATE

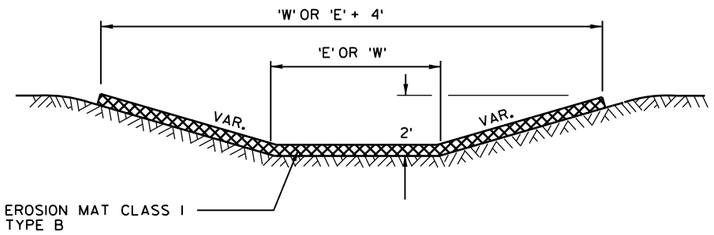
(SEE STORM SEWER PLANS FOR LOCATIONS)



* L = 3 X 'W' OR 'E' 10' MIN. AS INDICATED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER

SECTION A-A

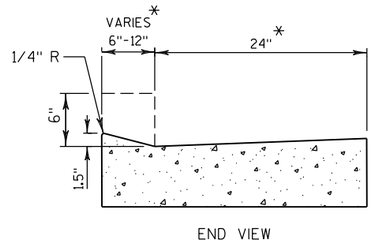
NOTES: REFER TO S.D.D. FOR 'E' OR 'W' DIMENSIONS



SECTION B-B

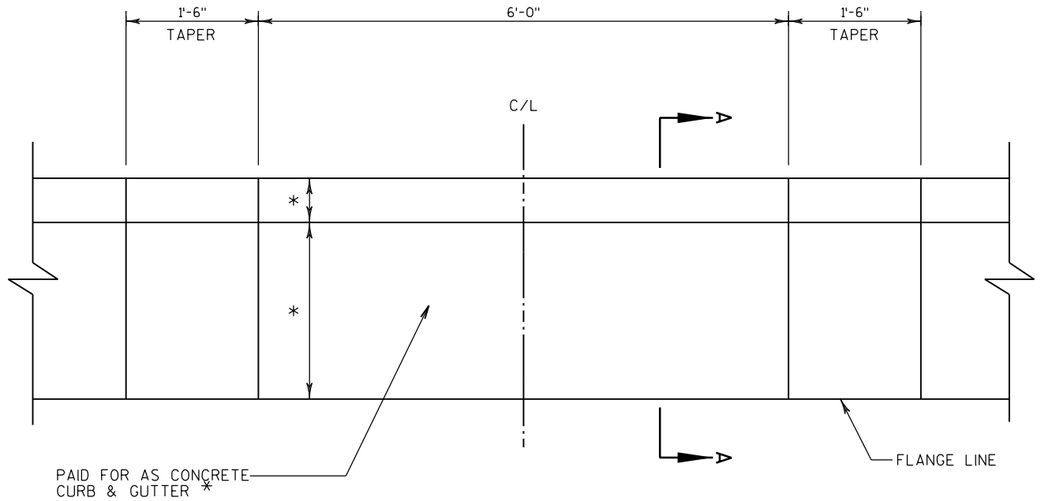
EROSION MAT TREATMENT AT PIPE ENDWALL DETAIL

SEE EROSION CONTROL PLAN FOR LOCATIONS



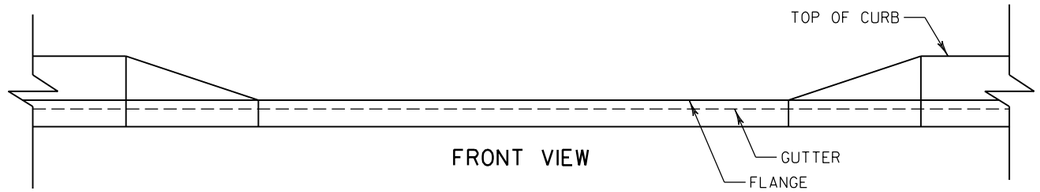
END VIEW

SECTION A-A



* TYPE AND DIMENSIONS TO MATCH ADJACENT CURB AND GUTTER.

PLAN VIEW



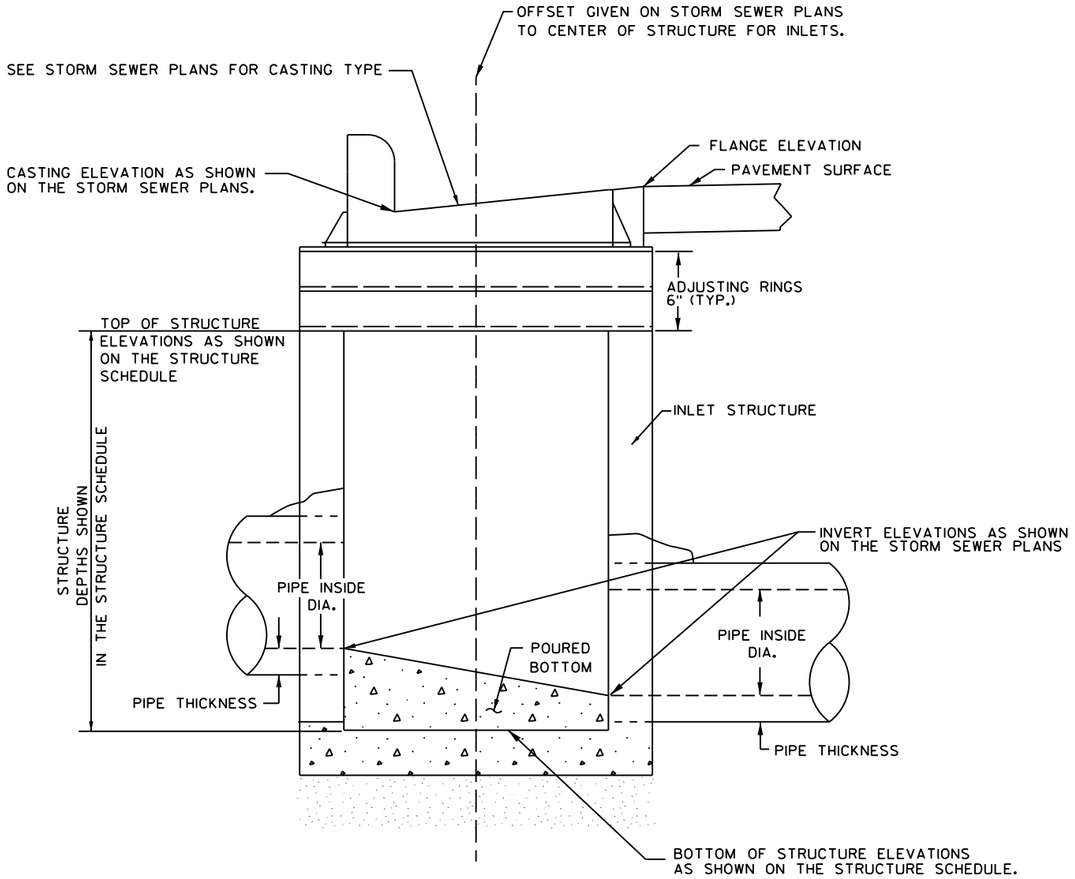
FRONT VIEW

MAINTENANCE ACCESS DETAIL

LOCATIONS SHOWN ON PLAN DETAILS

GENERAL NOTES:

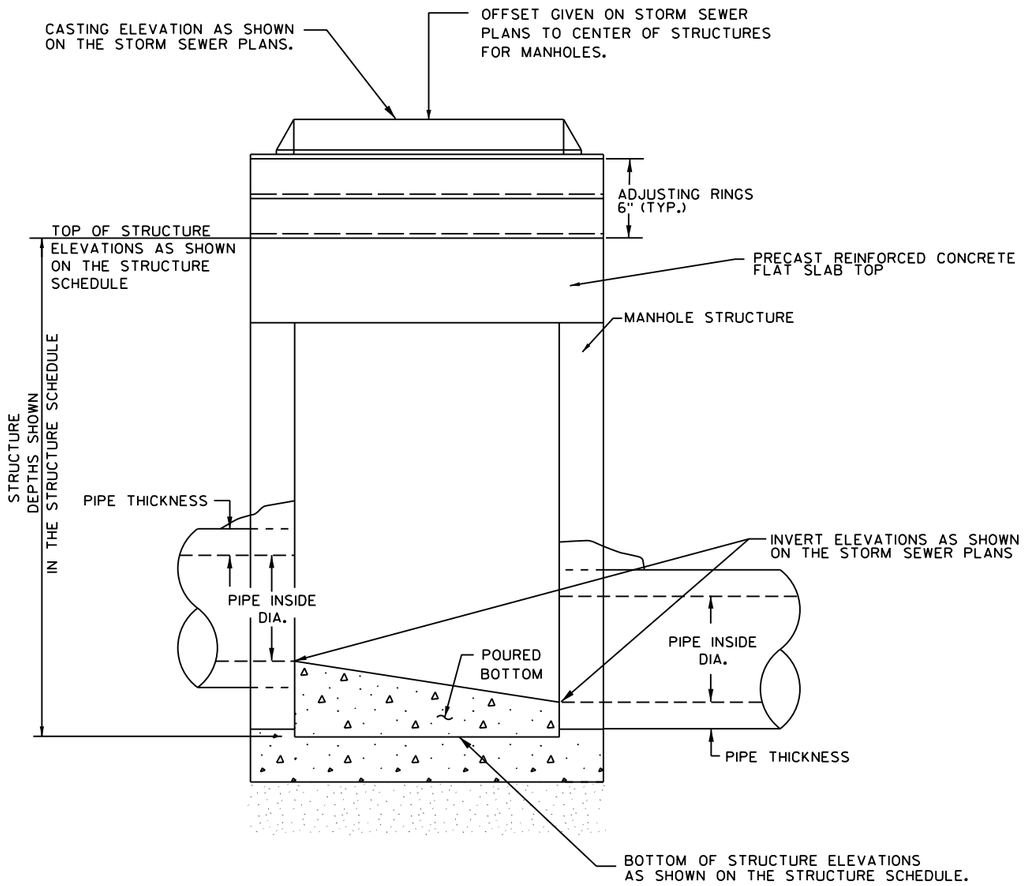
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS.



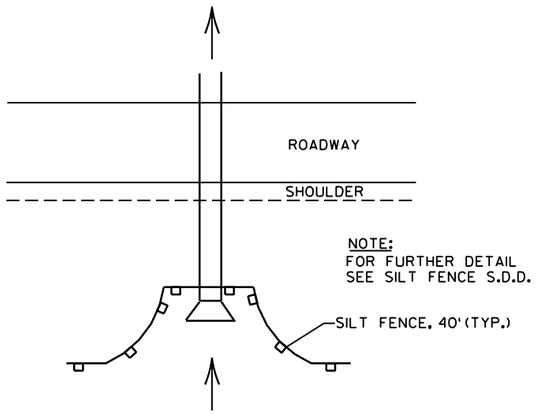
INLET W/CASTING DETAIL

GENERAL NOTES:

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

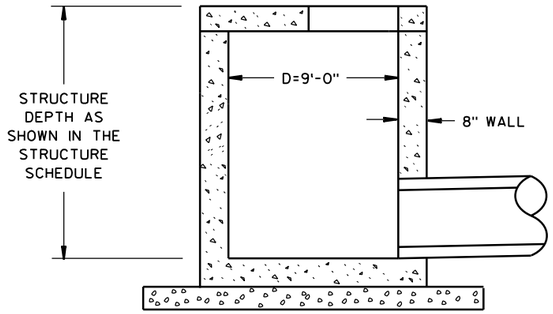


MANHOLE W/CASTING DETAIL



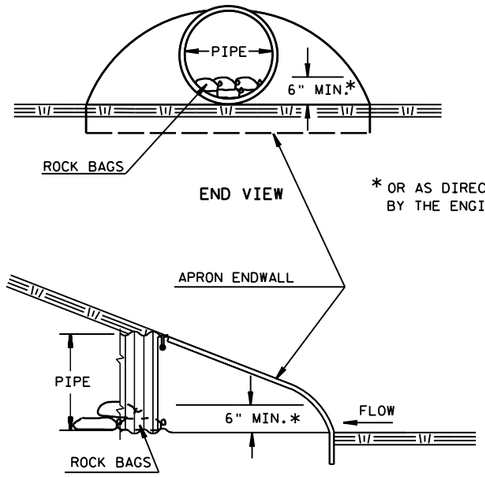
SILT FENCE AT PIPE INLET

SEE EROSION CONTROL PLAN FOR LOCATIONS



SEE S.D.D. "MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT & 8-FT DIAMETER" FOR ADDITIONAL INFORMATION

MANHOLES, TYPE 9, SPECIAL



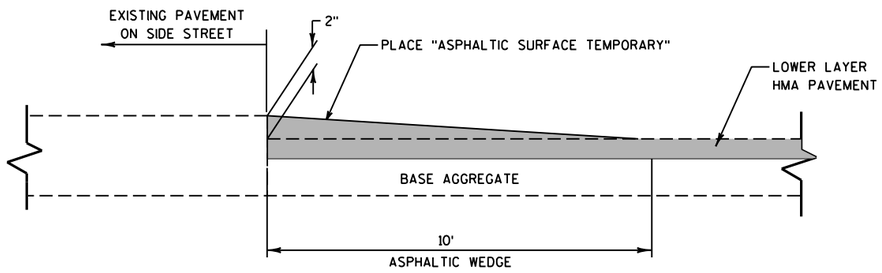
SIDE VIEW

ESTIMATED BAG SIZE = 24" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
12"	1
15"	2
18"	2
24"	3
30"	5
36'	7
42"	7
48"	10
54"	10
60"	13
72"	16
30"X19"	5
38"X24"	7
53"X34"	10
60"X38"	13
76"X48"	18

NOTE:
TO BE PLACED AT INLET END OF CULVERT PIPE.

CULVERT PIPE CHECK

SEE EROSION CONTROL PLAN FOR LOCATIONS



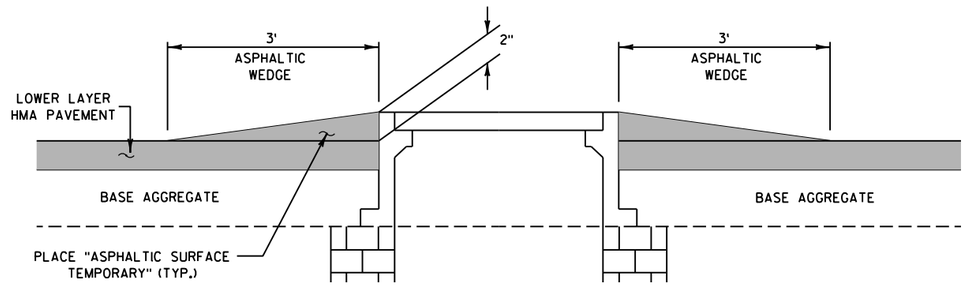
NOTE:

REMOVAL OF ASPHALTIC WEDGES WILL BE PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINT".

TEMPORARY WEDGES DETAIL (MATCH POINTS)

(MATCH POINTS)

NOTE: PROVIDE ASPHALTIC WEDGE PRIOR TO OPENING LANE TO TRAFFIC.

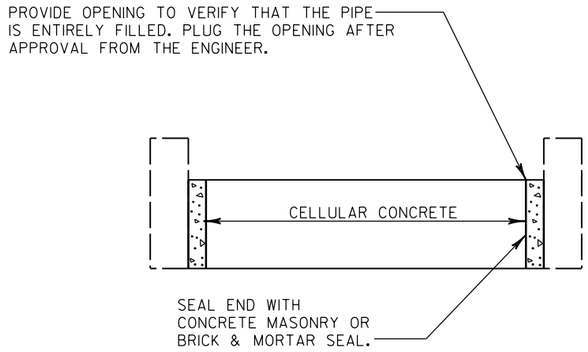


NOTE:

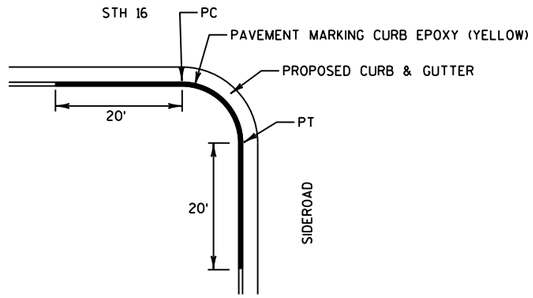
REMOVAL OF ASPHALTIC WEDGES WILL BE PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS."

TEMPORARY WEDGES DETAIL (MANHOLES)

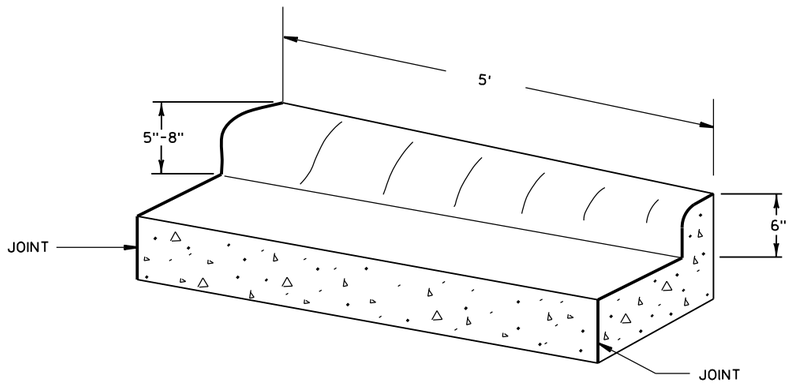
NOTE: PROVIDE ASPHALTIC WEDGES PRIOR TO OPENING LANE TO TRAFFIC



ABANDONING STORM SEWER DETAIL

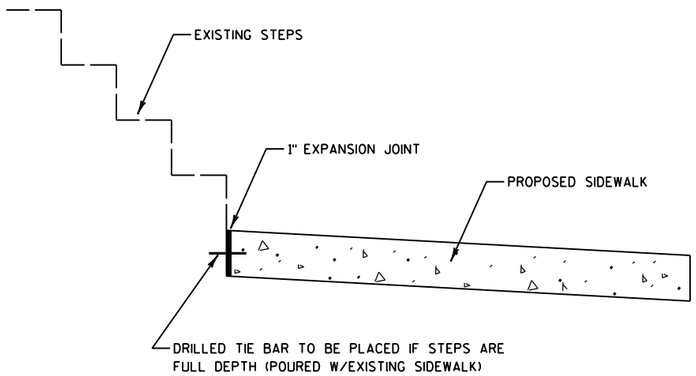


CURB PAVEMENT MARKING DETAILS



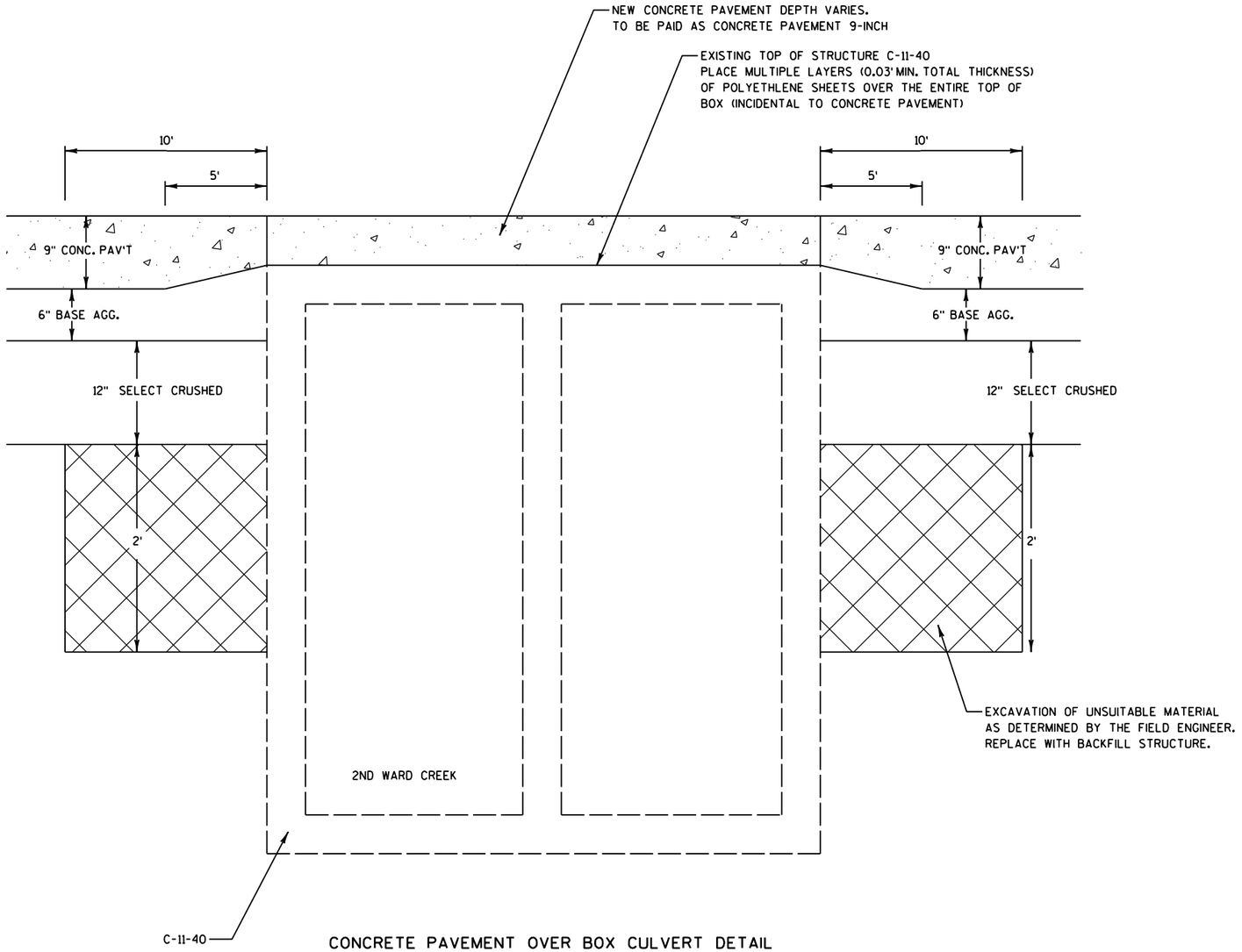
30" TYPE A CURB & GUTTER TRANSITION DETAILS

PAID FOR AS CONCRETE CURB & GUTTER
30-INCH TYPE A)



FULL DEPTH STEPS AND TIE BAR DETAIL

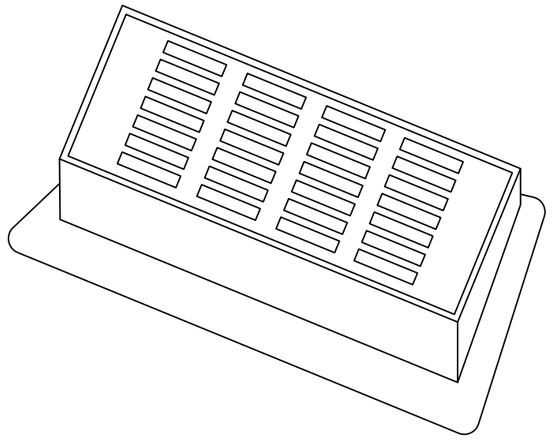
2



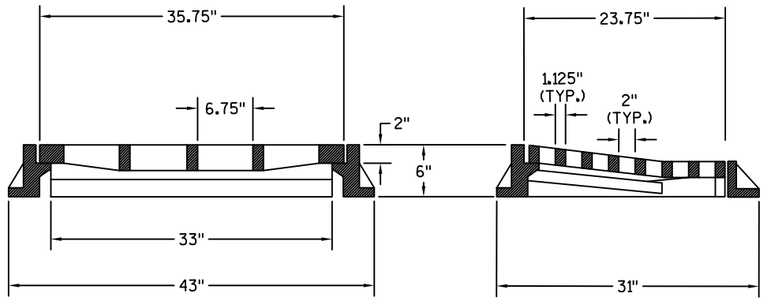
CONCRETE PAVEMENT OVER BOX CULVERT DETAIL

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET 24	E

2



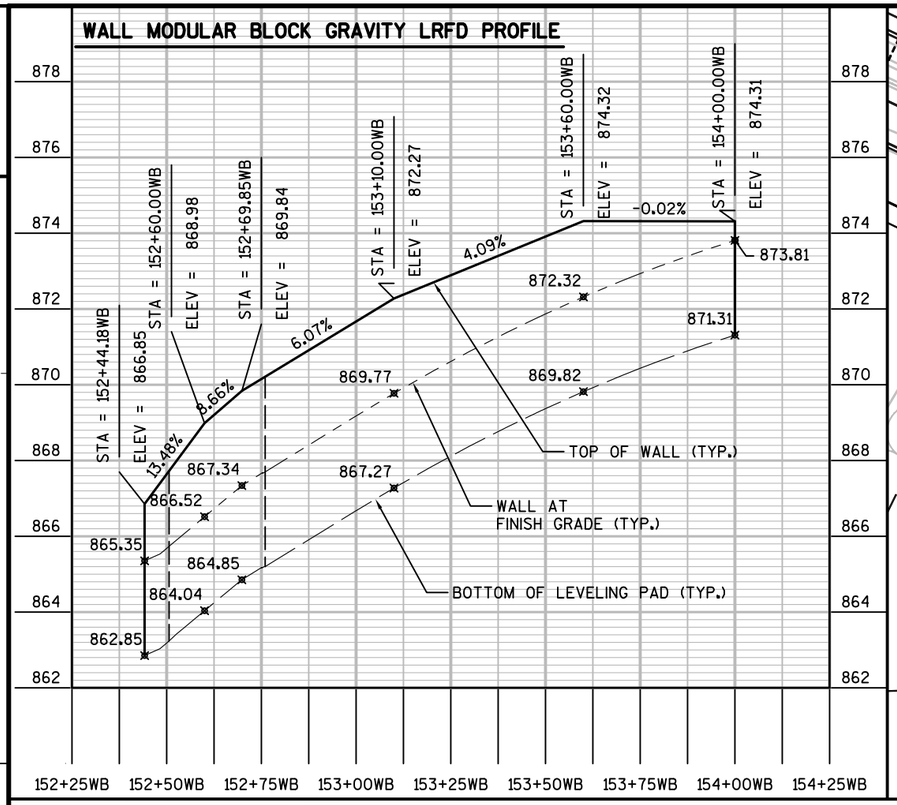
PLAN VIEW

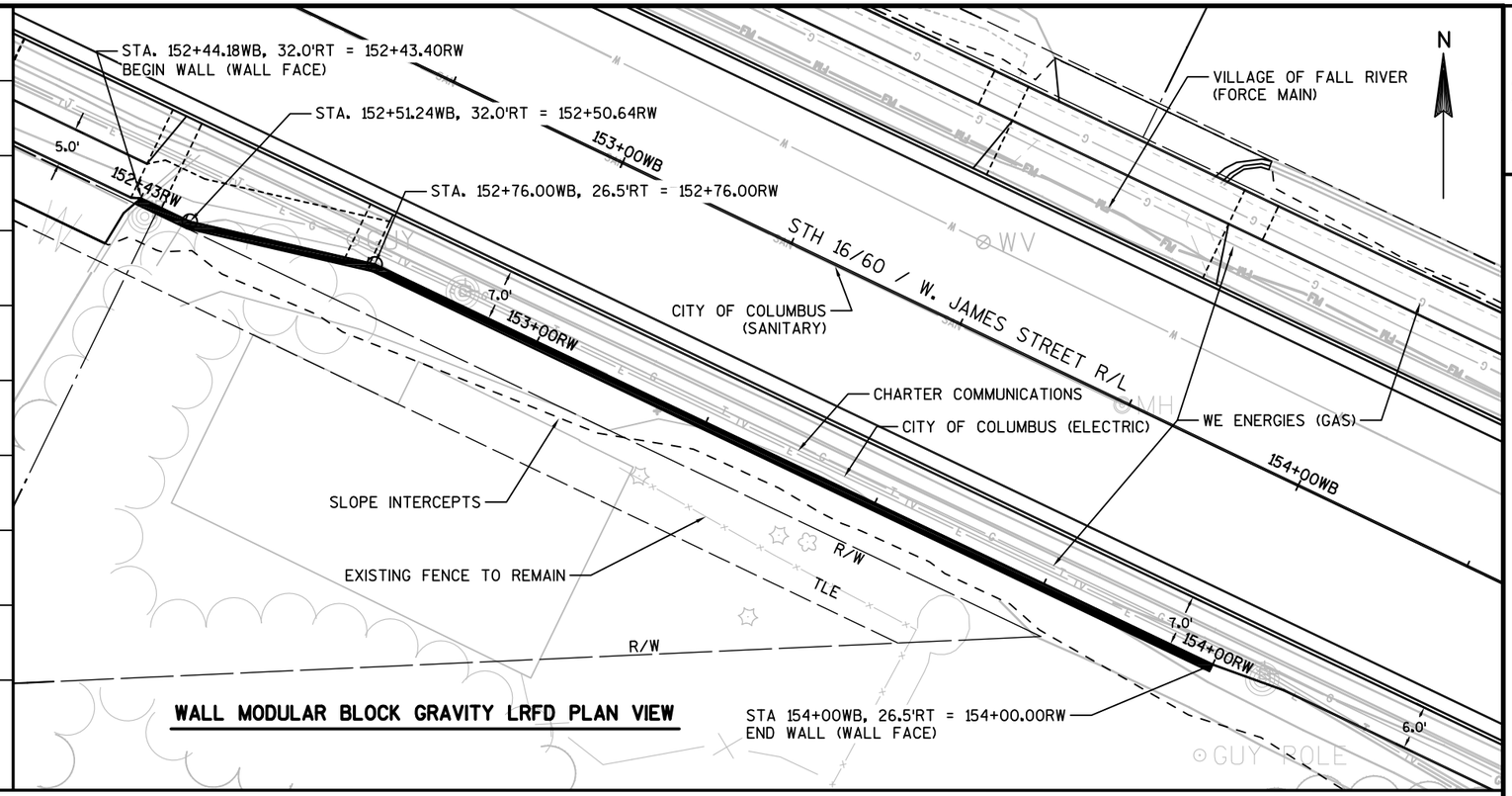


SIDE VIEW

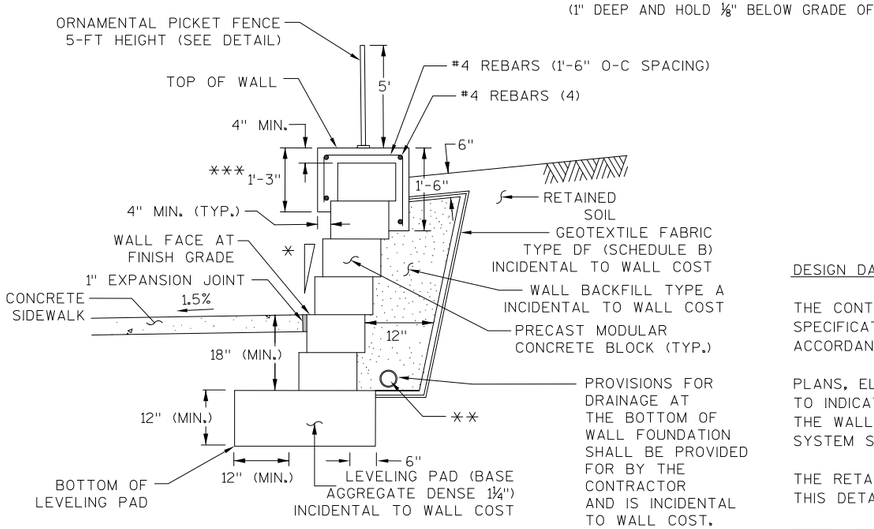
INLET COVER DRIVEWAY SPECIAL DETAILS

WALL MODULAR BLOCK GRAVITY LRFD PROFILE





WALL MODULAR BLOCK GRAVITY LRFD PLAN VIEW



WALL MODULAR BLOCK GRAVITY LRFD TYPICAL SECTION

NTS

STA. 152+44 RT - STA 154+00 RT

(STH 16, JAMES STREET)

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STANING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW GRADE OF CONC.)

*BATTER VARIES BY MANUFACTURER

**PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

***THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF THE BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INHES.

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
GRANULAR FILL	125	30°	0

DESIGN DATA

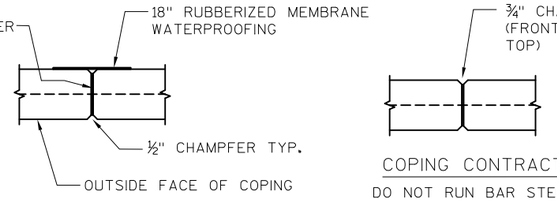
THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

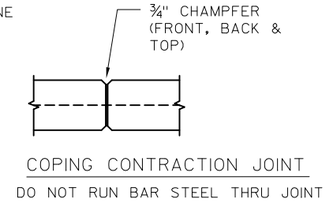
WALL TO HAVE SPLIT BLOCK APPEARANCE AND BE TAN OR GRAY IN COLORATION. (TO BE APPROVED BY THE CITY OF COLUMBUS)



COPING EXPANSION JOINT

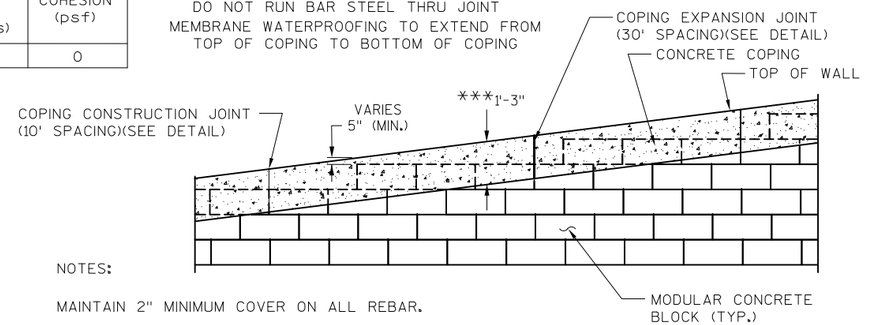
DO NOT RUN BAR STEEL THRU JOINT

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT



NOTES:

MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL PI POINTS AND BEND POINTS.

RETAINING WALL FACE & CONCRETE COPING DETAIL

2

GENERAL NOTES

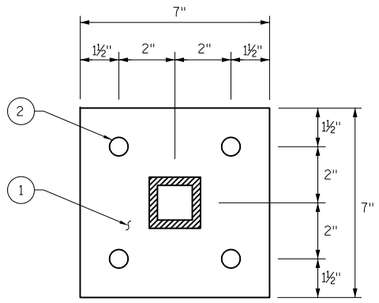
BID ITEM SHALL BE ORNAMENTAL PICKET FENCE 5-FT HEIGHT WHICH INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES NO. 1 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

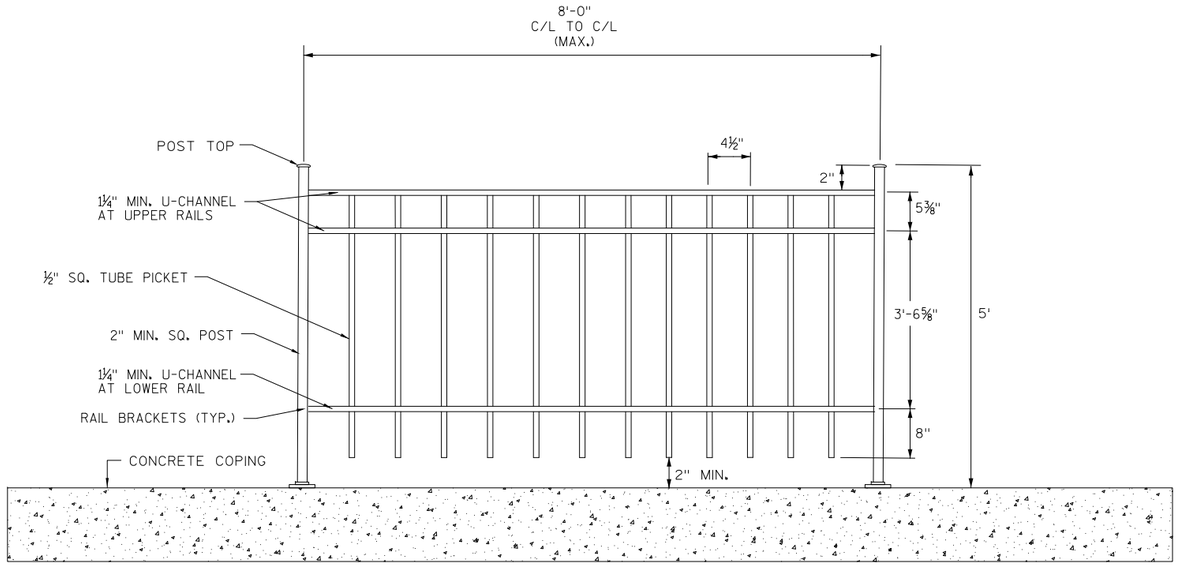
ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 2 SHALL BE GALVANIZED AFTER FABRICATION.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.



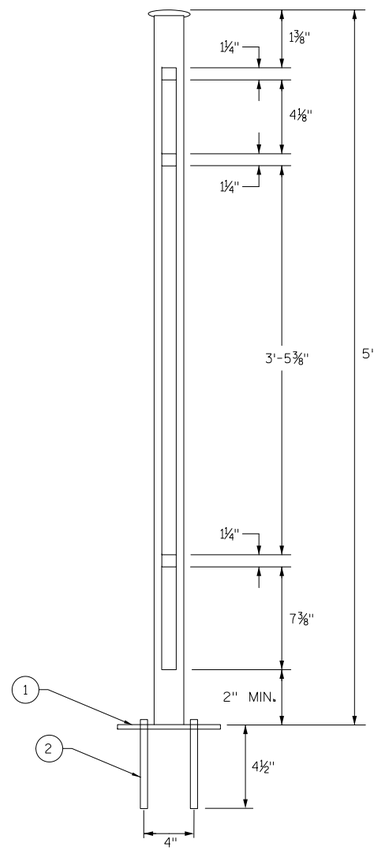
RAILING BASE PLATE



ORNAMENTAL PICKET FENCE 5-FT HEIGHT DETAIL

STA152+44.18WB - STA. 154+00.00WB

NOT TO SCALE

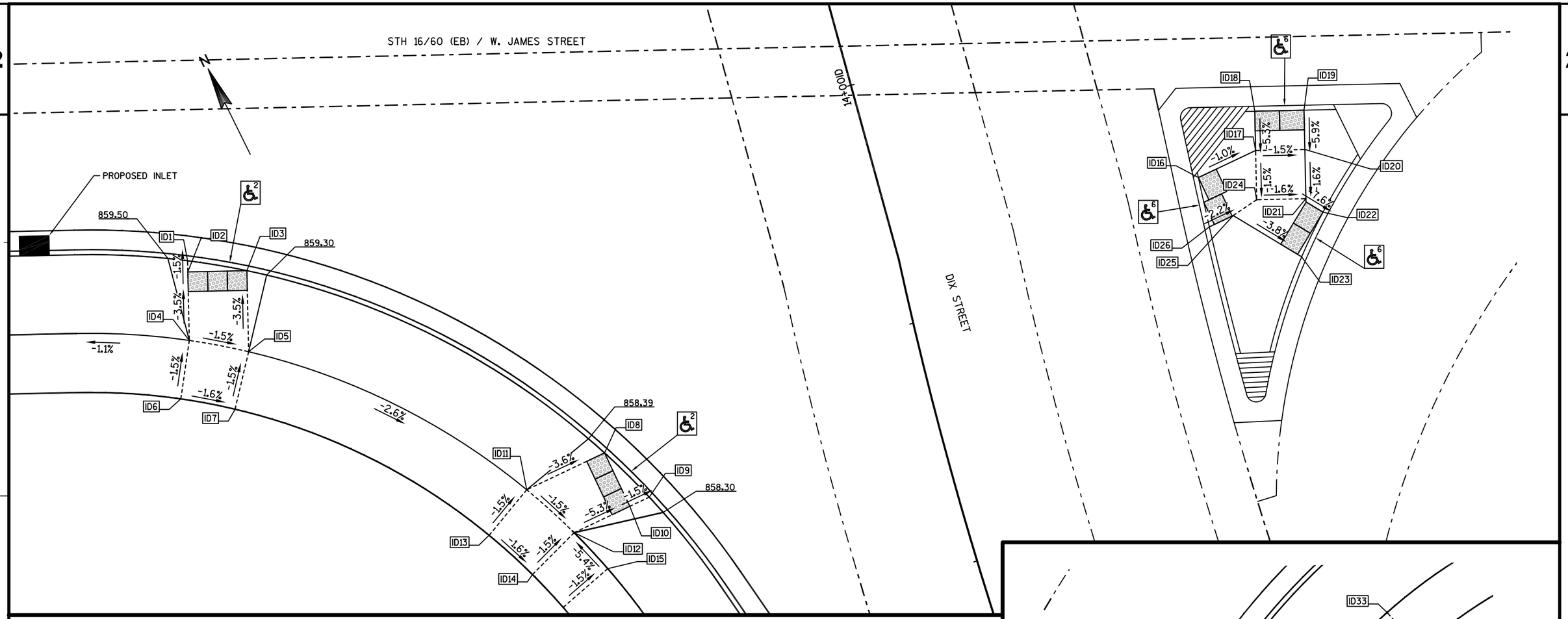


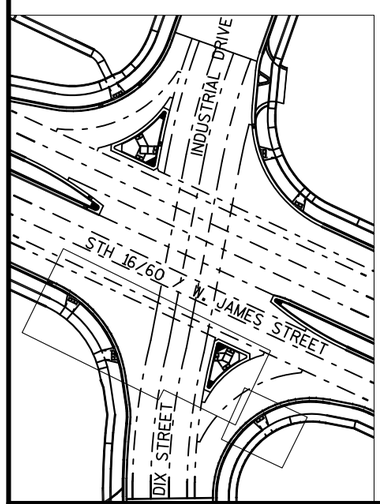
SECTION THRU FENCE

LEGEND

(1) BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 9/16" HOLES FOR HEX BOLTS NO. 6 WELD TO NO. 2 AS SHOWN.

(2) CONCRETE MASONRY ANCHORS, TYPE S. ⅝". PULLOUT STRENGTH SHALL BE 3.6 KIPS.





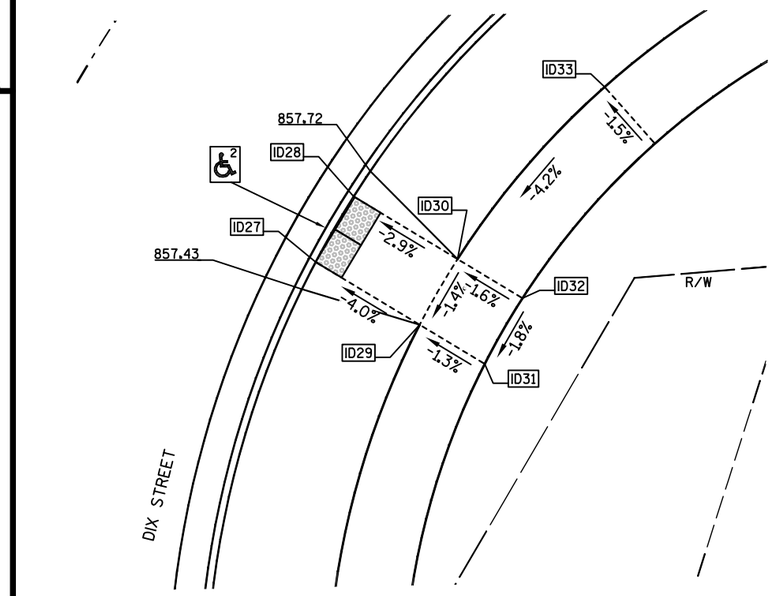
CURB RAMP DETAIL

JAMES STREET/DIX STREET

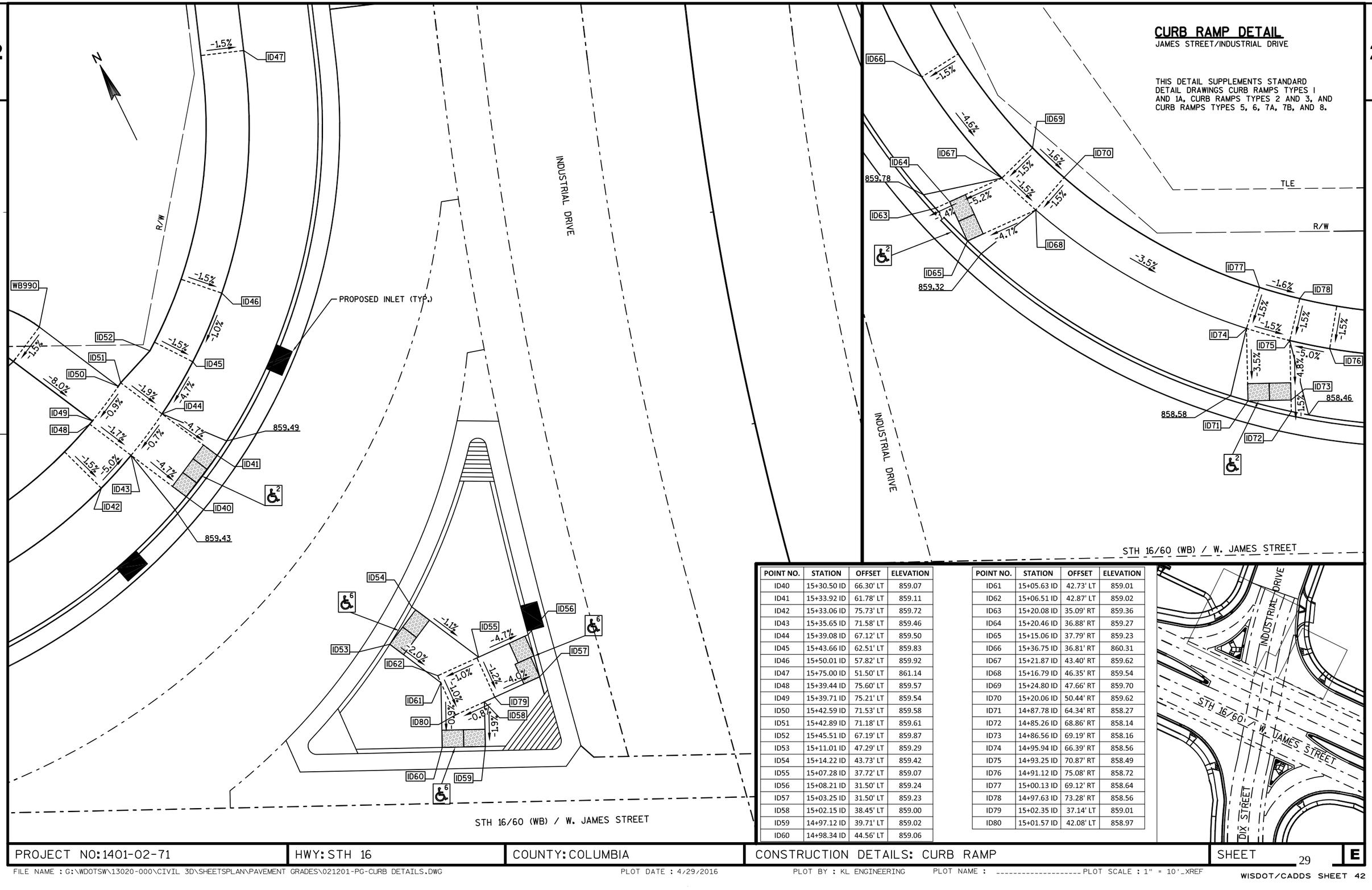
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
ID1	14+00.67 ID	69.68' LT	859.09
ID2	13+99.57 ID	69.96' LT	859.10
ID3	13+98.10 ID	64.14' LT	858.97
ID4	13+92.82 ID	71.66' LT	859.35
ID5	13+90.12 ID	66.15' LT	859.26
ID6	13+87.32 ID	74.06' LT	859.44
ID7	13+84.85 ID	69.03' LT	859.35
ID8	13+69.80 ID	41.81' LT	858.12
ID9	13+64.73 ID	36.75' LT	857.97
ID10	13+64.36 ID	41.48' LT	858.01
ID11	13+68.25 ID	52.93' LT	858.43
ID12	13+63.31 ID	46.87' LT	858.34
ID13	13+65.07 ID	56.76' LT	858.52
ID14	13+60.59 ID	51.27' LT	858.43
ID15	13+59.27 ID	43.43' LT	858.61
ID16	13+81.64 ID	31.54' RT	858.23
ID17	13+82.71 ID	37.62' RT	858.16

POINT NO.	STATION	OFFSET	ELEVATION
ID18	13+86.59 ID	38.85' RT	858.41
ID19	13+85.37 ID	43.70' RT	858.37
ID20	13+81.64 ID	42.72' RT	858.09
ID21	13+78.55 ID	41.69' RT	858.01
ID22	13+76.62 ID	43.09' RT	857.82
ID23	13+72.26 ID	39.93' RT	857.72
ID24	13+79.60 ID	36.79' RT	858.09
ID25	13+78.50 ID	34.42' RT	858.02
ID26	13+77.87 ID	31.50' RT	858.08
ID27	13+39.99 ID	66.08' RT	857.12
ID28	13+44.01 ID	69.81' RT	857.28
ID29	13+32.61 ID	71.26' RT	857.44
ID30	13+36.62 ID	75.03' RT	857.51
ID31	13+27.88 ID	74.43' RT	857.51
ID32	13+31.88 ID	78.24' RT	857.59
ID33	13+46.39 ID	87.78' RT	858.14



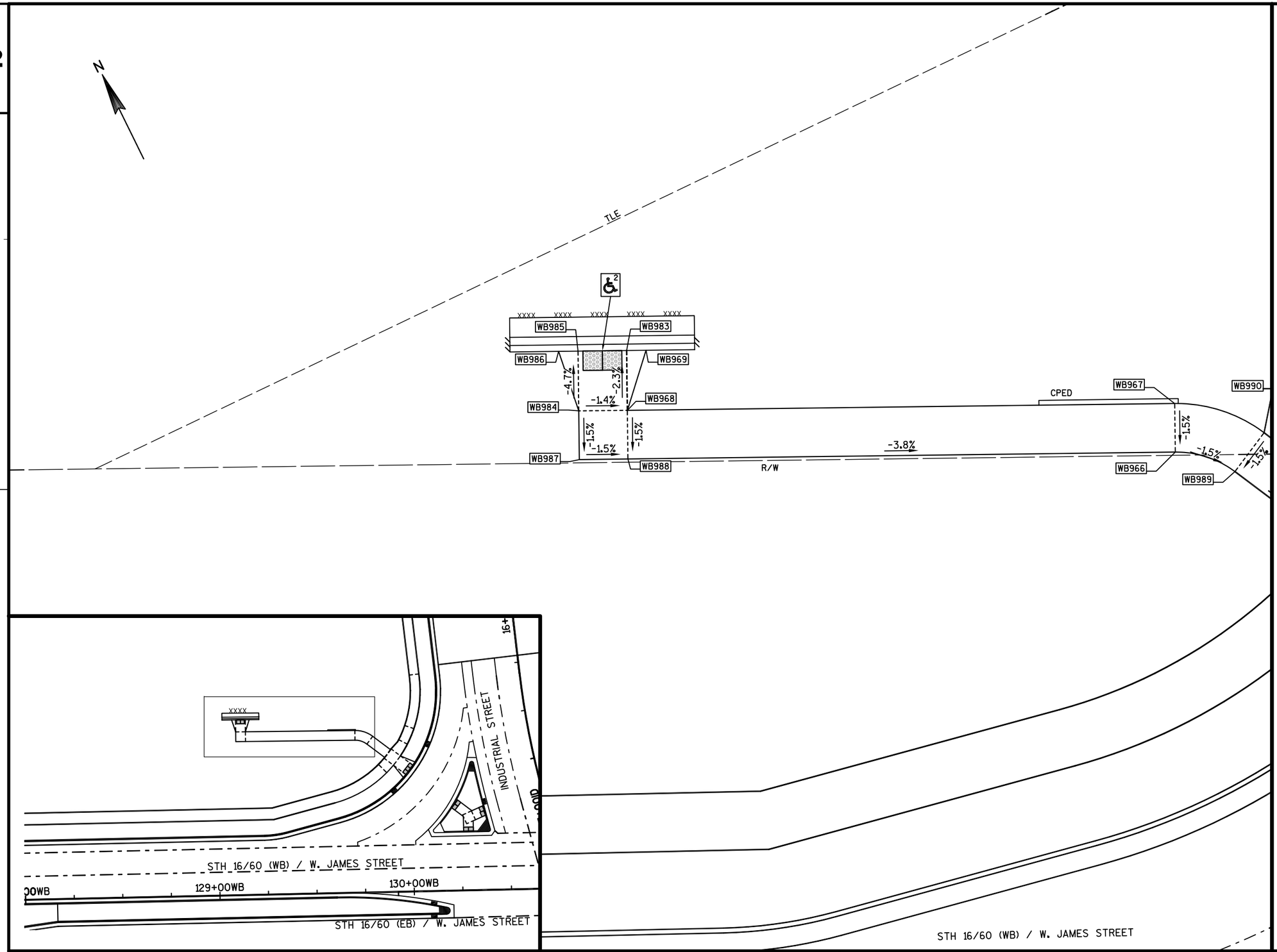
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 28	E



POINT NO.	STATION	OFFSET	ELEVATION
ID40	15+30.50 ID	66.30' LT	859.07
ID41	15+33.92 ID	61.78' LT	859.11
ID42	15+33.06 ID	75.73' LT	859.72
ID43	15+35.65 ID	71.58' LT	859.46
ID44	15+39.08 ID	67.12' LT	859.50
ID45	15+43.66 ID	62.51' LT	859.83
ID46	15+50.01 ID	57.82' LT	859.92
ID47	15+75.00 ID	51.50' LT	861.14
ID48	15+39.44 ID	75.60' LT	859.57
ID49	15+39.71 ID	75.21' LT	859.54
ID50	15+42.59 ID	71.53' LT	859.58
ID51	15+42.89 ID	71.18' LT	859.61
ID52	15+45.51 ID	67.19' LT	859.87
ID53	15+11.01 ID	47.29' LT	859.29
ID54	15+14.22 ID	43.73' LT	859.42
ID55	15+07.28 ID	37.72' LT	859.07
ID56	15+08.21 ID	31.50' LT	859.24
ID57	15+03.25 ID	31.50' LT	859.23
ID58	15+02.15 ID	38.45' LT	859.00
ID59	14+97.12 ID	39.71' LT	859.02
ID60	14+98.34 ID	44.56' LT	859.06

POINT NO.	STATION	OFFSET	ELEVATION
ID61	15+05.63 ID	42.73' LT	859.01
ID62	15+06.51 ID	42.87' LT	859.02
ID63	15+20.08 ID	35.09' RT	859.36
ID64	15+20.46 ID	36.88' RT	859.27
ID65	15+15.06 ID	37.79' RT	859.23
ID66	15+36.75 ID	36.81' RT	860.31
ID67	15+21.87 ID	43.40' RT	859.62
ID68	15+16.79 ID	46.35' RT	859.54
ID69	15+24.80 ID	47.66' RT	859.70
ID70	15+20.06 ID	50.44' RT	859.62
ID71	14+87.78 ID	64.34' RT	858.27
ID72	14+85.26 ID	68.86' RT	858.14
ID73	14+86.56 ID	69.19' RT	858.16
ID74	14+95.94 ID	66.39' RT	858.56
ID75	14+93.25 ID	70.87' RT	858.49
ID76	14+91.12 ID	75.08' RT	858.72
ID77	15+00.13 ID	69.12' RT	858.64
ID78	14+97.63 ID	73.28' RT	858.56
ID79	15+02.35 ID	37.14' LT	859.01
ID80	15+01.57 ID	42.08' LT	858.97

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 29 E



CURB RAMP DETAIL

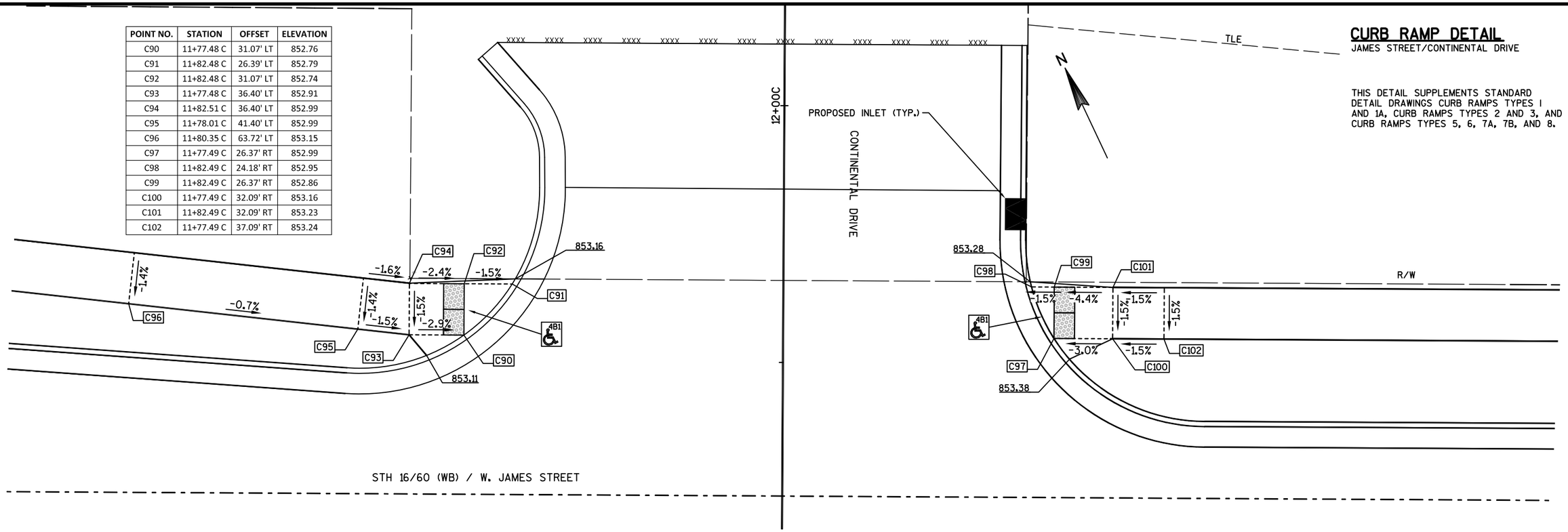
WALGREENS PARKING LOT

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
WB966	129+71.15 WB	78.48' LT	860.53
WB967	129+71.19 WB	83.48' LT	860.60
WB968	129+14.88 WB	83.99' LT	862.79
WB969	129+16.94 WB	90.13' LT	---
WB983	129+14.94 WB	90.14' LT	862.62
WB984	129+09.88 WB	84.04' LT	862.84
WB985	129+09.94 WB	90.19' LT	862.55
WB986	129+07.94 WB	90.22' LT	---
WB987	129+09.84 WB	79.03' LT	862.76
WB988	129+14.83 WB	78.99' LT	862.69
WB989	129+77.24 WB	76.34' LT	860.46
WB990	129+80.32 WB	80.28' LT	860.54

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 30	E

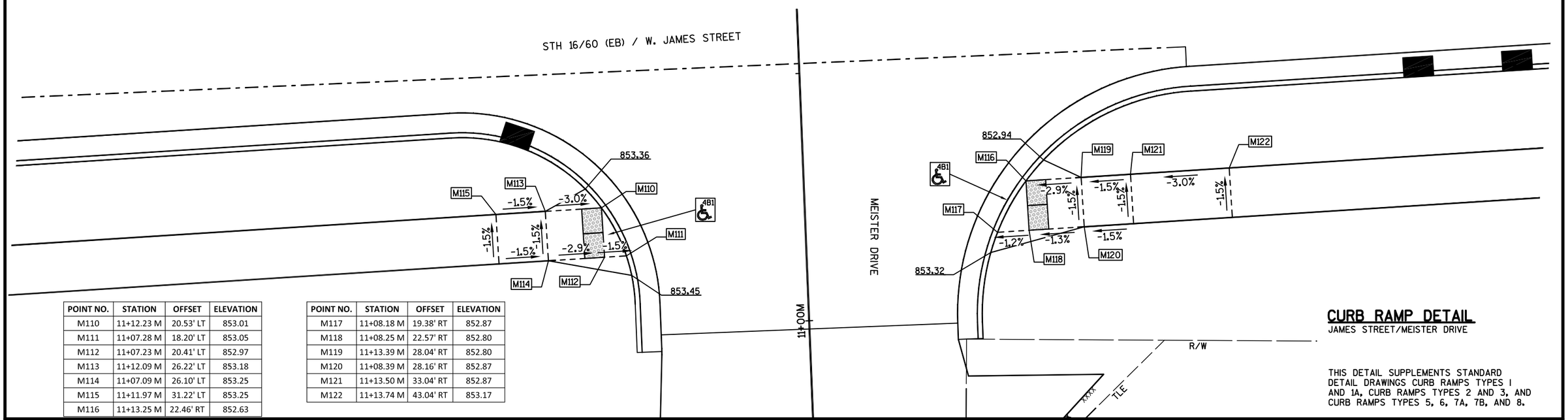
POINT NO.	STATION	OFFSET	ELEVATION
C90	11+77.48 C	31.07' LT	852.76
C91	11+82.48 C	26.39' LT	852.79
C92	11+82.48 C	31.07' LT	852.74
C93	11+77.48 C	36.40' LT	852.91
C94	11+82.51 C	36.40' LT	852.99
C95	11+78.01 C	41.40' LT	852.99
C96	11+80.35 C	63.72' LT	853.15
C97	11+77.49 C	26.37' RT	852.99
C98	11+82.49 C	24.18' RT	852.95
C99	11+82.49 C	26.37' RT	852.86
C100	11+77.49 C	32.09' RT	853.16
C101	11+82.49 C	32.09' RT	853.23
C102	11+77.49 C	37.09' RT	853.24



CURB RAMP DETAIL
JAMES STREET/CONTINENTAL DRIVE

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

2



POINT NO.	STATION	OFFSET	ELEVATION
M110	11+12.23 M	20.53' LT	853.01
M111	11+07.28 M	18.20' LT	853.05
M112	11+07.23 M	20.41' LT	852.97
M113	11+12.09 M	26.22' LT	853.18
M114	11+07.09 M	26.10' LT	853.25
M115	11+11.97 M	31.22' LT	853.25
M116	11+13.25 M	22.46' RT	852.63

POINT NO.	STATION	OFFSET	ELEVATION
M117	11+08.18 M	19.38' RT	852.87
M118	11+08.25 M	22.57' RT	852.80
M119	11+13.39 M	28.04' RT	852.80
M120	11+08.39 M	28.16' RT	852.87
M121	11+13.50 M	33.04' RT	852.87
M122	11+13.74 M	43.04' RT	853.17

CURB RAMP DETAIL
JAMES STREET/MEISTER DRIVE

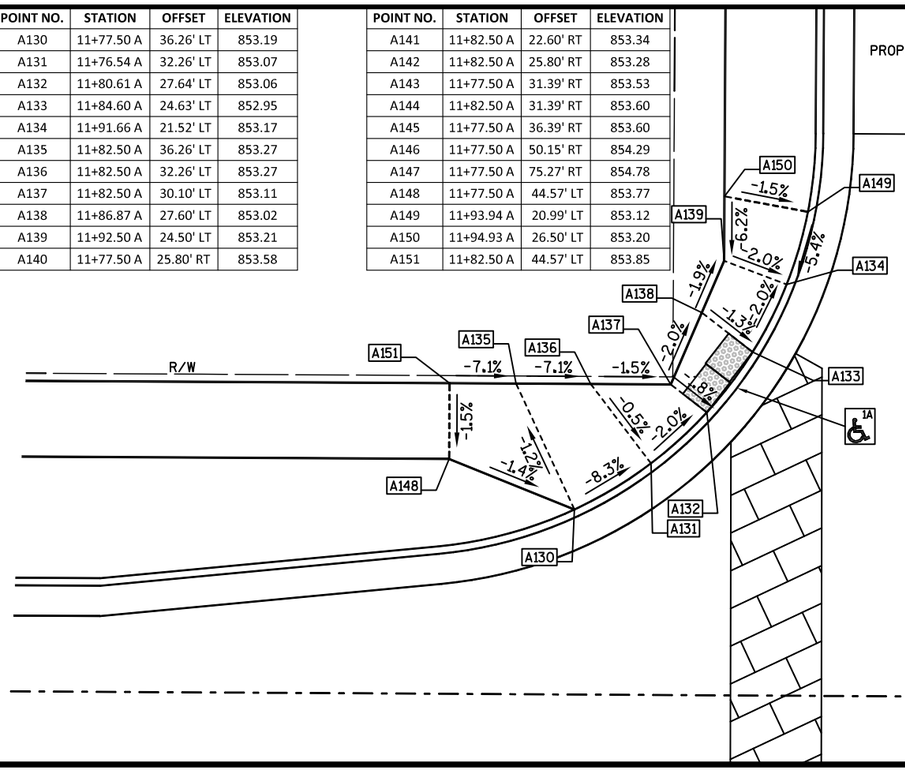
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

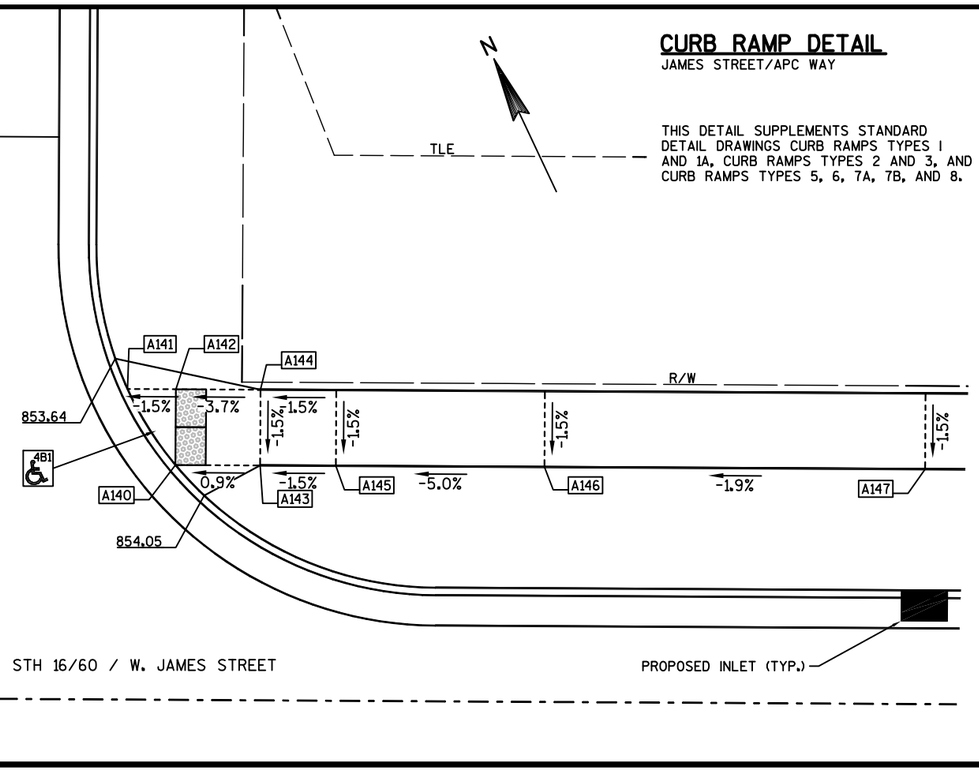
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 31	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201-PG-CURB DETAILS.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- 1" = 10'_XREF
WISDOT/CADDS SHEET 42

POINT NO.	STATION	OFFSET	ELEVATION
A130	11+77.50 A	36.26' LT	853.19
A131	11+76.54 A	32.26' LT	853.07
A132	11+80.61 A	27.64' LT	853.06
A133	11+84.60 A	24.63' LT	852.95
A134	11+91.66 A	21.52' LT	853.17
A135	11+82.50 A	36.26' LT	853.27
A136	11+82.50 A	32.26' LT	853.27
A137	11+82.50 A	30.10' LT	853.11
A138	11+86.87 A	27.60' LT	853.02
A139	11+92.50 A	24.50' LT	853.21
A140	11+77.50 A	25.80' RT	853.58

POINT NO.	STATION	OFFSET	ELEVATION
A141	11+82.50 A	22.60' RT	853.34
A142	11+82.50 A	25.80' RT	853.28
A143	11+77.50 A	31.39' RT	853.53
A144	11+82.50 A	31.39' RT	853.60
A145	11+77.50 A	36.39' RT	853.60
A146	11+77.50 A	50.15' RT	854.29
A147	11+77.50 A	75.27' RT	854.78
A148	11+77.50 A	44.57' LT	853.77
A149	11+93.94 A	20.99' LT	853.12
A150	11+94.93 A	26.50' LT	853.20
A151	11+82.50 A	44.57' LT	853.85

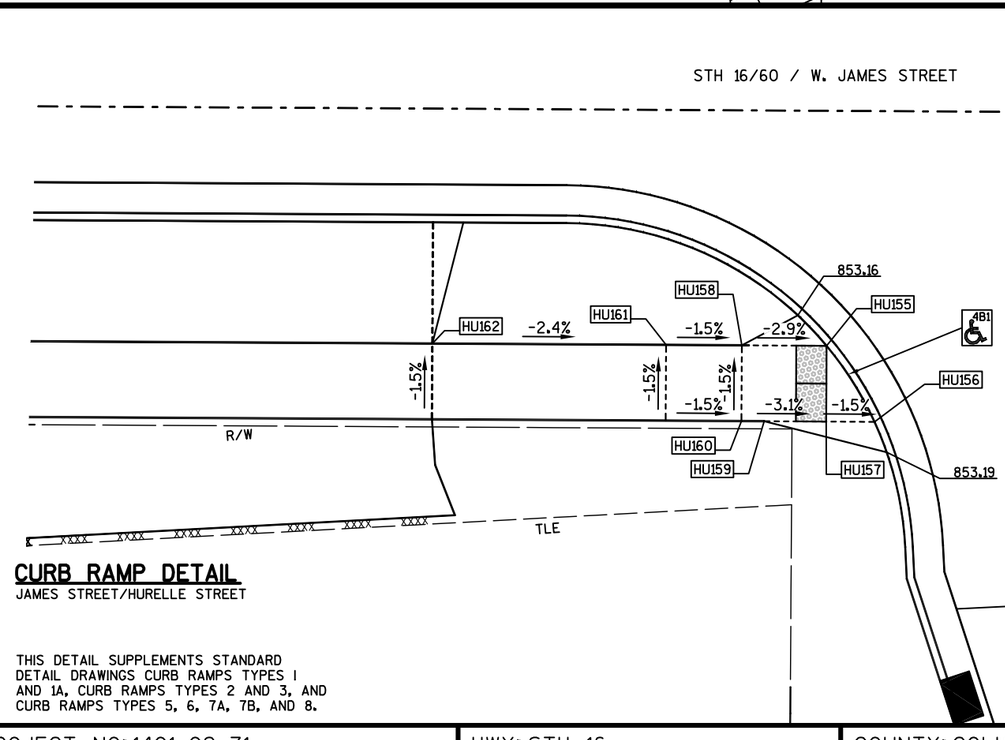


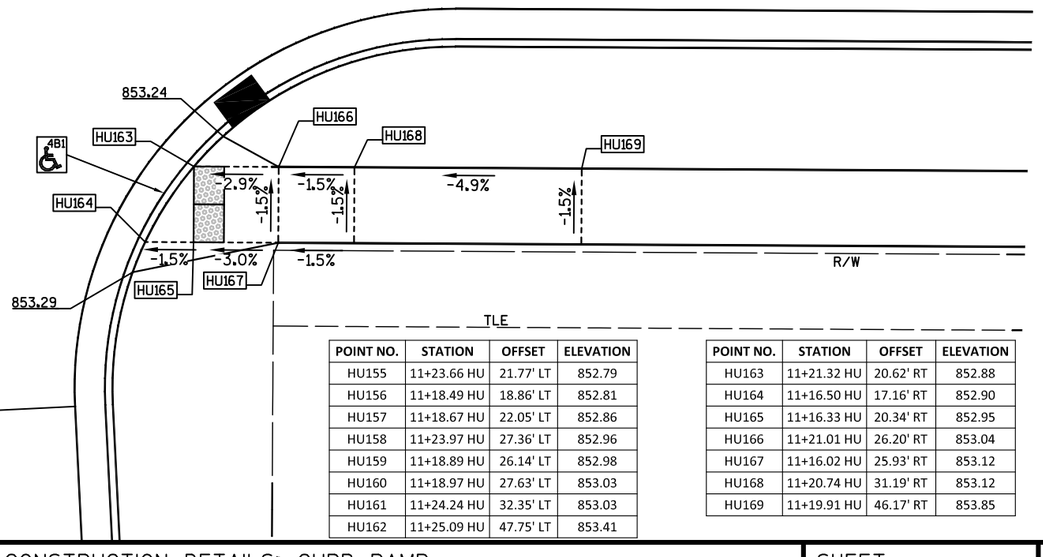


CURB RAMP DETAIL

JAMES STREET/APC WAY

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.





CURB RAMP DETAIL

JAMES STREET/HURELLE STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

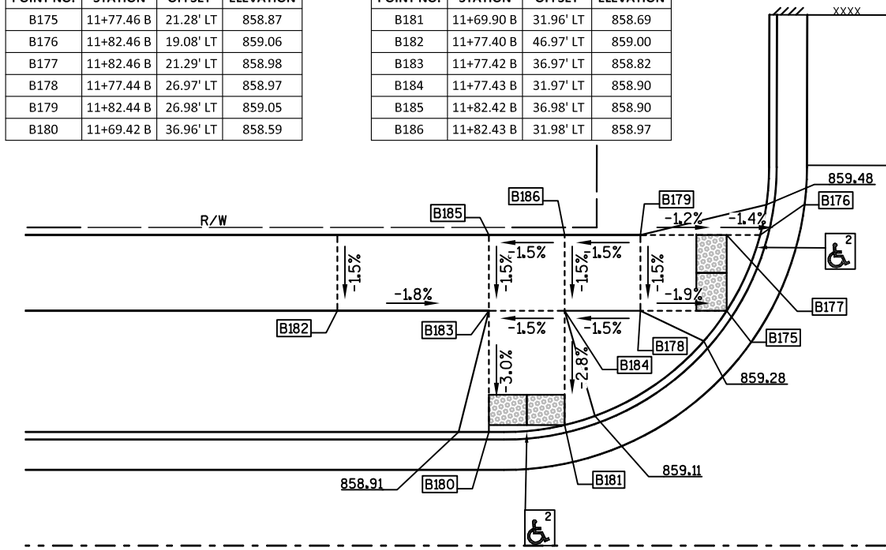
POINT NO.	STATION	OFFSET	ELEVATION
HU155	11+23.66 HU	21.77' LT	852.79
HU156	11+18.49 HU	18.86' LT	852.81
HU157	11+18.67 HU	22.05' LT	852.86
HU158	11+23.97 HU	27.36' LT	852.96
HU159	11+18.89 HU	26.14' LT	852.98
HU160	11+18.97 HU	27.63' LT	853.03
HU161	11+24.24 HU	32.35' LT	853.03
HU162	11+25.09 HU	47.75' LT	853.41

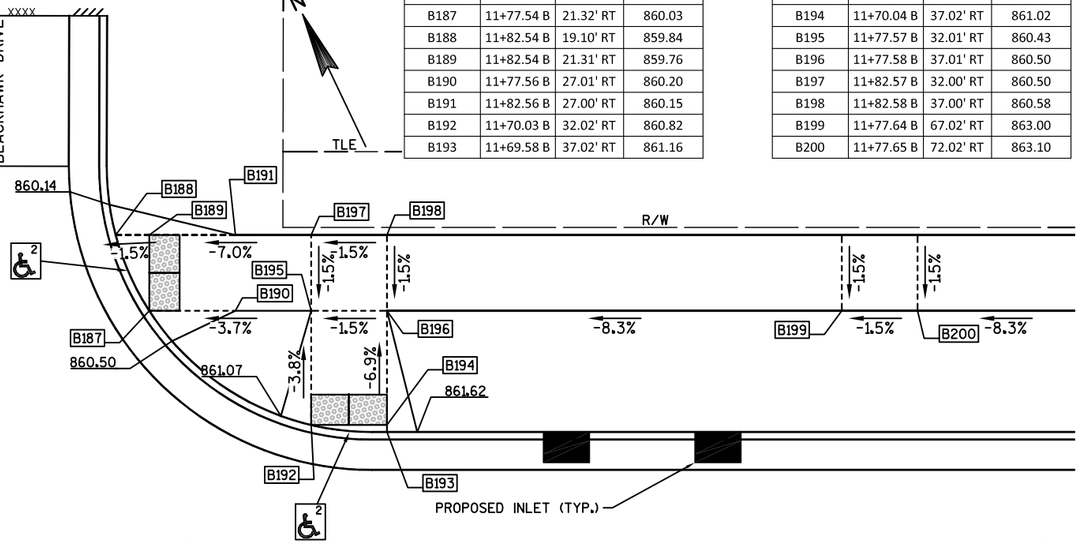
POINT NO.	STATION	OFFSET	ELEVATION
HU163	11+21.32 HU	20.62' RT	852.88
HU164	11+16.50 HU	17.16' RT	852.90
HU165	11+16.33 HU	20.34' RT	852.95
HU166	11+21.01 HU	26.20' RT	853.04
HU167	11+16.02 HU	25.93' RT	853.12
HU168	11+20.74 HU	31.19' RT	853.12
HU169	11+19.91 HU	46.17' RT	853.85

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 32 E

POINT NO.	STATION	OFFSET	ELEVATION
B175	11+77.46 B	21.28' LT	858.87
B176	11+82.46 B	19.08' LT	859.06
B177	11+82.46 B	21.29' LT	858.98
B178	11+77.44 B	26.97' LT	858.97
B179	11+82.44 B	26.98' LT	859.05
B180	11+69.42 B	36.96' LT	858.59

POINT NO.	STATION	OFFSET	ELEVATION
B181	11+69.90 B	31.96' LT	858.69
B182	11+77.40 B	46.97' LT	859.00
B183	11+77.42 B	36.97' LT	858.82
B184	11+77.43 B	31.97' LT	858.90
B185	11+82.42 B	36.98' LT	858.90
B186	11+82.43 B	31.98' LT	858.97





POINT NO.	STATION	OFFSET	ELEVATION
B187	11+77.54 B	21.32' RT	860.03
B188	11+82.54 B	19.10' RT	859.84
B189	11+82.54 B	21.31' RT	859.76
B190	11+77.56 B	27.01' RT	860.20
B191	11+82.56 B	27.00' RT	860.15
B192	11+70.03 B	32.02' RT	860.82
B193	11+69.58 B	37.02' RT	861.16

POINT NO.	STATION	OFFSET	ELEVATION
B194	11+70.04 B	37.02' RT	861.02
B195	11+77.57 B	32.01' RT	860.43
B196	11+77.58 B	37.01' RT	860.50
B197	11+82.57 B	32.00' RT	860.50
B198	11+82.58 B	37.00' RT	860.58
B199	11+77.64 B	67.02' RT	863.00
B200	11+77.65 B	72.02' RT	863.10

151+00WB

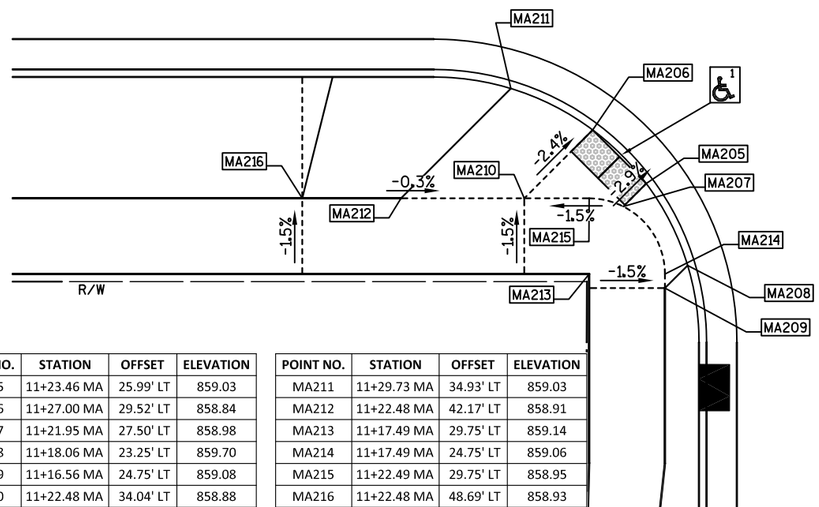
11+50NB

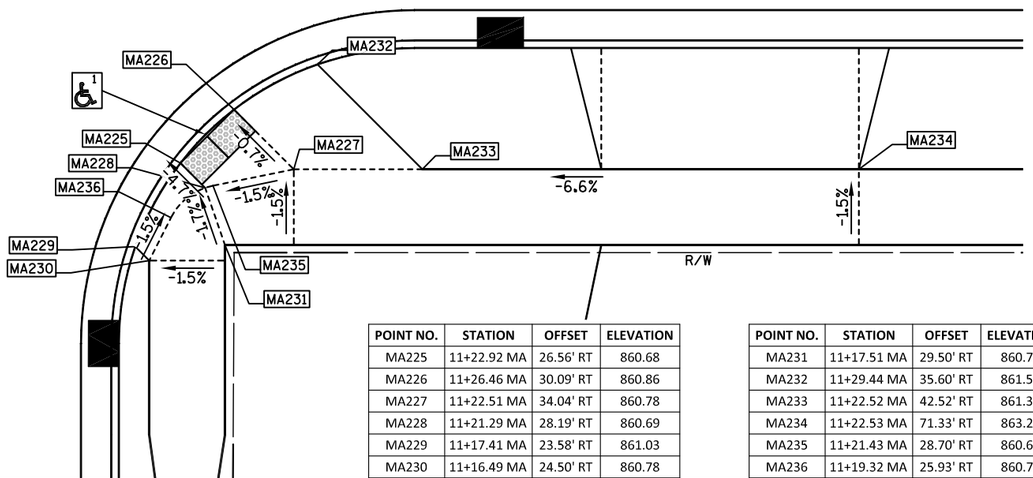
152+00WB

STH 16/60 / W. JAMES STREET

MAPLE AVENUE

PROPOSED MANHOLE





POINT NO.	STATION	OFFSET	ELEVATION
MA205	11+23.46 MA	25.99' LT	859.03
MA206	11+27.00 MA	29.52' LT	858.84
MA207	11+21.95 MA	27.50' LT	858.98
MA208	11+18.06 MA	23.25' LT	859.70
MA209	11+16.56 MA	24.75' LT	859.08
MA210	11+22.48 MA	34.04' LT	858.88

POINT NO.	STATION	OFFSET	ELEVATION
MA211	11+29.73 MA	34.93' LT	859.03
MA212	11+22.48 MA	42.17' LT	858.91
MA213	11+17.49 MA	29.75' LT	859.14
MA214	11+17.49 MA	24.75' LT	859.06
MA215	11+22.49 MA	29.75' LT	858.95
MA216	11+22.48 MA	48.69' LT	858.93

CURB RAMP DETAIL

JAMES STREET/BLACKHAWK DRIVE/MAPLE AVENUE

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
MA225	11+22.92 MA	26.56' RT	860.68
MA226	11+26.46 MA	30.09' RT	860.86
MA227	11+22.51 MA	34.04' RT	860.78
MA228	11+21.29 MA	28.19' RT	860.69
MA229	11+17.41 MA	23.58' RT	861.03
MA230	11+16.49 MA	24.50' RT	860.78

POINT NO.	STATION	OFFSET	ELEVATION
MA231	11+17.51 MA	29.50' RT	860.75
MA232	11+29.44 MA	35.60' RT	861.50
MA233	11+22.52 MA	42.52' RT	861.34
MA234	11+22.53 MA	71.33' RT	863.23
MA235	11+21.43 MA	28.70' RT	860.69
MA236	11+19.32 MA	25.93' RT	860.73

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 33 E

CURB RAMP DETAIL

JAMES STREET/LEGION COURT/CHARLES STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
L240	11+76.04 L	15.91' LT	875.09
L241	11+81.35 L	13.49' LT	875.47
L242	11+81.00 L	16.50' LT	875.29
L243	11+75.34 L	21.40' LT	875.04
L244	11+80.30 L	22.06' LT	875.11
L245	11+65.76 L	31.29' LT	874.85

POINT NO.	STATION	OFFSET	ELEVATION
L246	11+67.11 L	26.51' LT	874.82
L248	11+72.06 L	41.45' LT	875.60
L249	11+73.66 L	32.52' LT	875.15
L250	11+74.45 L	27.58' LT	875.07
L251	11+78.61 L	33.24' LT	875.23
L252	11+79.40 L	28.30' LT	875.15

POINT NO.	STATION	OFFSET	ELEVATION
L253	11+80.49 L	18.83' RT	874.88
L254	11+85.43 L	16.35' RT	875.23
L255	11+85.49 L	16.96' RT	875.15
L256	11+85.54 L	20.96' RT	875.01
L257	11+80.58 L	25.37' RT	874.86
L258	11+85.58 L	25.35' RT	874.93
L259	11+70.44 L	43.48' RT	873.59

POINT NO.	STATION	OFFSET	ELEVATION
L260	11+70.40 L	48.48' RT	873.43
L261	11+80.44 L	43.57' RT	873.98
L262	11+80.40 L	48.57' RT	873.91
L263	11+80.18 L	72.01' RT	873.52
L264	11+85.44 L	43.61' RT	874.06
L265	11+85.40 L	48.61' RT	873.98

POINT NO.	STATION	OFFSET	ELEVATION
CH270	11+24.03 CH	47.20' LT	875.27
CH271	11+24.98 CH	41.29' LT	874.86
CH272	11+24.75 CH	36.31' LT	874.82
CH273	11+18.98 CH	41.62' LT	875.05
CH274	11+18.71 CH	36.63' LT	875.01
CH275	11+22.99 CH	30.59' LT	875.20
CH276	11+21.21 CH	27.43' LT	875.37
CH277	11+17.25 CH	22.96' LT	875.28

POINT NO.	STATION	OFFSET	ELEVATION
CH278	11+13.12 CH	20.14' LT	875.53
CH279	11+13.82 CH	27.95' LT	875.47
CH280	11+09.71 CH	25.13' LT	875.55
CH292	11+07.51 CH	18.05' LT	876.17
CH293	11+05.91 CH	23.85' LT	876.30
CH294	11+02.43 CH	17.50' LT	876.44
CH295	11+01.07 CH	23.43' LT	876.72

POINT NO.	STATION	OFFSET	ELEVATION
CH281	11+21.08 CH	20.58' RT	873.95
CH282	11+16.04 CH	17.46' RT	874.57
CH283	11+16.08 CH	20.66' RT	874.39
CH284	11+26.70 CH	27.42' RT	873.56
CH285	11+28.63 CH	32.39' RT	873.37
CH286	11+26.77 CH	32.42' RT	873.40
CH287	11+21.19 CH	27.50' RT	873.84
CH288	11+21.26 CH	32.50' RT	873.76
CH289	11+21.34 CH	37.50' RT	873.83
CH290	11+16.19 CH	27.58' RT	873.91
CH291	11+16.26 CH	32.58' RT	873.84

STH 16/60 / W. JAMES STREET

LEGION COURT

CHARLES STREET

PROPOSED MANHOLE

PROPOSED INLET (TYP.)

ADJUST CURB PAN TO NOT EXCEED 11% ROLLOVER

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 34 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201-PG-CURB DETAILS.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1" = 10'-XREF

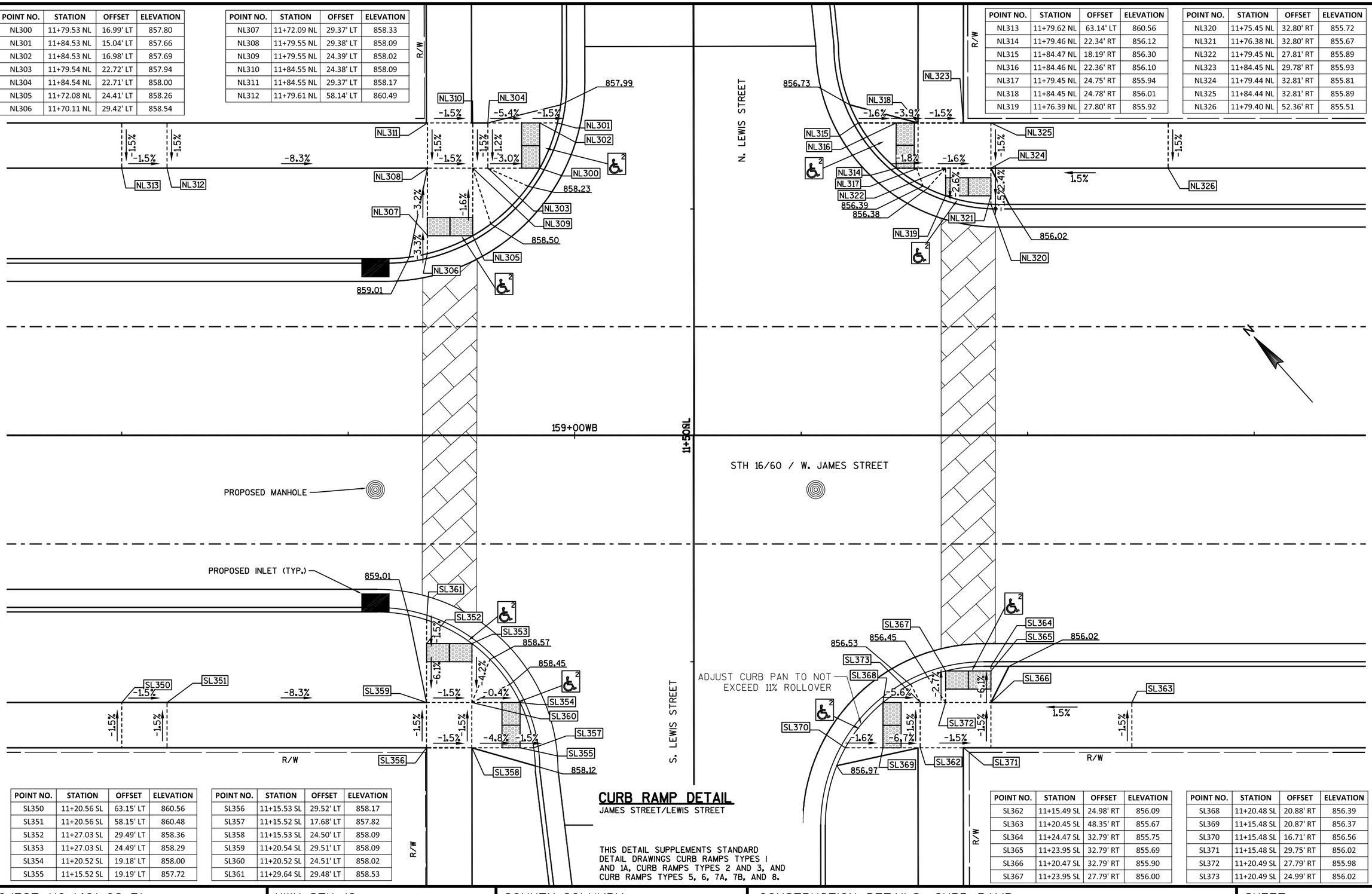
WISDOT/CADDS SHEET 42

POINT NO.	STATION	OFFSET	ELEVATION
NL300	11+79.53 NL	16.99' LT	857.80
NL301	11+84.53 NL	15.04' LT	857.66
NL302	11+84.53 NL	16.98' LT	857.69
NL303	11+79.54 NL	22.72' LT	857.94
NL304	11+84.54 NL	22.71' LT	858.00
NL305	11+72.08 NL	24.41' LT	858.26
NL306	11+70.11 NL	29.42' LT	858.54

POINT NO.	STATION	OFFSET	ELEVATION
NL307	11+72.09 NL	29.37' LT	858.33
NL308	11+79.55 NL	29.38' LT	858.09
NL309	11+79.55 NL	24.39' LT	858.02
NL310	11+84.55 NL	24.38' LT	858.09
NL311	11+84.55 NL	29.37' LT	858.17
NL312	11+79.61 NL	58.14' LT	860.49

POINT NO.	STATION	OFFSET	ELEVATION
NL313	11+79.62 NL	63.14' LT	860.56
NL314	11+79.46 NL	22.34' RT	856.12
NL315	11+84.47 NL	18.19' RT	856.30
NL316	11+84.46 NL	22.36' RT	856.10
NL317	11+79.45 NL	24.75' RT	855.94
NL318	11+84.45 NL	24.78' RT	856.01
NL319	11+76.39 NL	27.80' RT	855.92

POINT NO.	STATION	OFFSET	ELEVATION
NL320	11+75.45 NL	32.80' RT	855.72
NL321	11+76.38 NL	32.80' RT	855.67
NL322	11+79.45 NL	27.81' RT	855.89
NL323	11+84.45 NL	29.78' RT	855.93
NL324	11+79.44 NL	32.81' RT	855.81
NL325	11+84.44 NL	32.81' RT	855.89
NL326	11+79.40 NL	52.36' RT	855.51



POINT NO.	STATION	OFFSET	ELEVATION
SL350	11+20.56 SL	63.15' LT	860.56
SL351	11+20.56 SL	58.15' LT	860.48
SL352	11+27.03 SL	29.49' LT	858.36
SL353	11+27.03 SL	24.49' LT	858.29
SL354	11+20.52 SL	19.18' LT	858.00
SL355	11+15.52 SL	19.19' LT	857.72

POINT NO.	STATION	OFFSET	ELEVATION
SL356	11+15.53 SL	29.52' LT	858.17
SL357	11+15.52 SL	17.68' LT	857.82
SL358	11+15.53 SL	24.50' LT	858.09
SL359	11+20.54 SL	29.51' LT	858.09
SL360	11+20.52 SL	24.51' LT	858.02
SL361	11+29.64 SL	29.48' LT	858.53

POINT NO.	STATION	OFFSET	ELEVATION
SL362	11+15.49 SL	24.98' RT	856.09
SL363	11+20.45 SL	48.35' RT	855.67
SL364	11+24.47 SL	32.79' RT	855.75
SL365	11+23.95 SL	32.79' RT	855.69
SL366	11+20.47 SL	32.79' RT	855.90
SL367	11+23.95 SL	27.79' RT	856.00

POINT NO.	STATION	OFFSET	ELEVATION
SL368	11+20.48 SL	20.88' RT	856.39
SL369	11+15.48 SL	20.87' RT	856.37
SL370	11+15.48 SL	16.71' RT	856.56
SL371	11+15.48 SL	29.75' RT	856.02
SL372	11+20.49 SL	27.79' RT	855.98
SL373	11+20.49 SL	24.99' RT	856.02

CURB RAMP DETAIL

JAMES STREET/LEWIS STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES I AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
NB425	11+79.48 NB	59.90' LT	846.46
NB426	11+79.49 NB	29.00' LT	845.00
NB427	11+73.63 NB	29.00' LT	845.09
NB428	11+70.96 NB	29.00' LT	845.26
NB429	11+73.63 NB	24.00' LT	845.13
NB430	11+79.49 NB	18.30' LT	844.95

POINT NO.	STATION	OFFSET	ELEVATION
NB431	11+79.49 NB	24.00' LT	844.93
NB432	11+84.49 NB	29.00' LT	845.08
NB433	11+84.49 NB	24.00' LT	845.00
NB434	11+84.49 NB	18.30' LT	844.75
NB435	11+84.49 NB	15.79' LT	844.83
NB436	11+84.51 NB	17.28' RT	844.28

POINT NO.	STATION	OFFSET	ELEVATION
NB437	11+84.51 NB	19.77' RT	844.21
NB438	11+79.51 NB	19.77' RT	844.20
NB439	11+79.51 NB	25.52' RT	844.27
NB440	11+73.63 NB	25.52' RT	844.09
NB441	11+70.98 NB	30.52' RT	844.02
NB442	11+73.63 NB	30.52' RT	843.94

POINT NO.	STATION	OFFSET	ELEVATION
NB443	11+79.51 NB	30.52' RT	844.35
NB444	11+84.51 NB	30.51' RT	844.42
NB445	11+84.51 NB	30.19' RT	844.42
NB446	11+84.51 NB	25.19' RT	844.34
NB447	11+79.52 NB	64.75' RT	843.64
NB448	11+79.53 NB	69.76' RT	843.55

POINT NO.	STATION	OFFSET	ELEVATION
SB401	11+20.60 SB	60.00' LT	846.46
SB402	11+20.60 SB	28.50' LT	845.15
SB403	11+23.95 SB	28.49' LT	845.12
SB404	11+27.69 SB	28.49' LT	845.18
SB405	11+23.88 SB	23.49' LT	845.01
SB406	11+20.54 SB	20.77' LT	845.06

POINT NO.	STATION	OFFSET	ELEVATION
SB407	11+15.53 SB	18.28' LT	845.11
SB408	11+15.54 SB	20.78' LT	845.03
SB409	11+20.54 SB	23.50' LT	845.07
SB410	11+15.56 SB	23.50' LT	845.15
SB411	11+15.56 SB	28.49' LT	845.22

POINT NO.	STATION	OFFSET	ELEVATION
SB412	11+15.45 SB	24.75' RT	844.40
SB413	11+15.47 SB	29.75' RT	844.32
SB414	11+20.45 SB	29.76' RT	844.25
SB415	11+20.46 SB	24.76' RT	844.32
SB416	11+15.49 SB	18.30' RT	844.38
SB417	11+20.47 SB	18.31' RT	844.38

POINT NO.	STATION	OFFSET	ELEVATION
SB418	11+15.49 SB	15.81' RT	844.50
SB419	11+29.25 SB	29.78' RT	844.08
SB420	11+26.81 SB	29.77' RT	844.00
SB421	11+26.83 SB	24.77' RT	844.20
SB422	11+20.40 SB	60.50' RT	843.89

CURB RAMP DETAIL
JAMES STREET/BIRDSEY STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

PROJECT NO: 1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | CONSTRUCTION DETAILS: CURB RAMP | SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201-PG-CURB DETAILS.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 42

CURB RAMP DETAIL

JAMES STREET/MAIN STREET

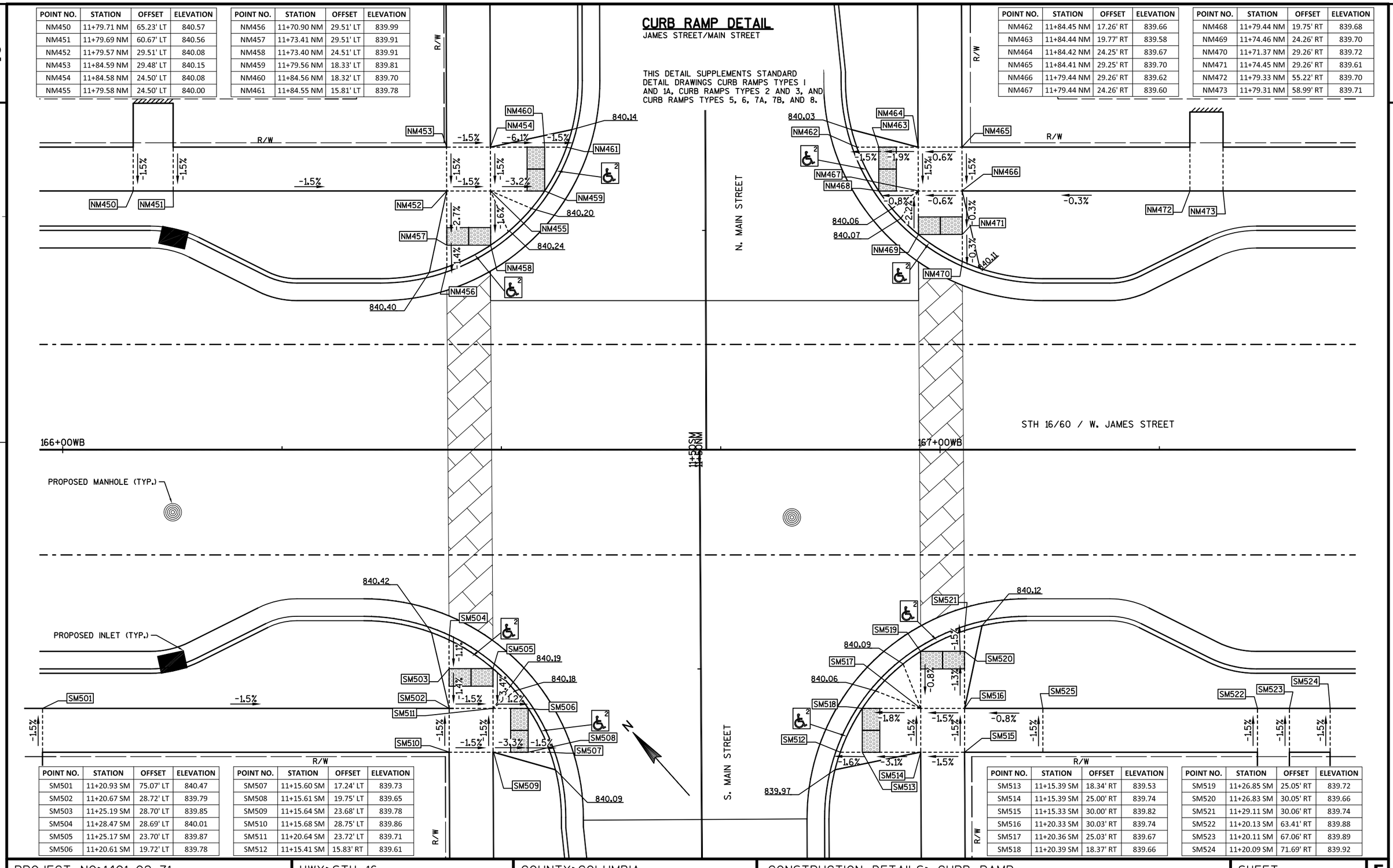
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
NM450	11+79.71 NM	65.23' LT	840.57
NM451	11+79.69 NM	60.67' LT	840.56
NM452	11+79.57 NM	29.51' LT	840.08
NM453	11+84.59 NM	29.48' LT	840.15
NM454	11+84.58 NM	24.50' LT	840.08
NM455	11+79.58 NM	24.50' LT	840.00

POINT NO.	STATION	OFFSET	ELEVATION
NM456	11+70.90 NM	29.51' LT	839.99
NM457	11+73.41 NM	29.51' LT	839.91
NM458	11+73.40 NM	24.51' LT	839.91
NM459	11+79.56 NM	18.33' LT	839.81
NM460	11+84.56 NM	18.32' LT	839.70
NM461	11+84.55 NM	15.81' LT	839.78

POINT NO.	STATION	OFFSET	ELEVATION
NM462	11+84.45 NM	17.26' RT	839.66
NM463	11+84.44 NM	19.77' RT	839.58
NM464	11+84.42 NM	24.25' RT	839.67
NM465	11+84.41 NM	29.25' RT	839.70
NM466	11+79.44 NM	29.26' RT	839.62
NM467	11+79.44 NM	24.26' RT	839.60

POINT NO.	STATION	OFFSET	ELEVATION
NM468	11+79.44 NM	19.75' RT	839.68
NM469	11+74.46 NM	24.26' RT	839.70
NM470	11+71.37 NM	29.26' RT	839.72
NM471	11+74.45 NM	29.26' RT	839.61
NM472	11+79.33 NM	55.22' RT	839.70
NM473	11+79.31 NM	58.99' RT	839.71



POINT NO.	STATION	OFFSET	ELEVATION
SM501	11+20.93 SM	75.07' LT	840.47
SM502	11+20.67 SM	28.72' LT	839.79
SM503	11+25.19 SM	28.70' LT	839.85
SM504	11+28.47 SM	28.69' LT	840.01
SM505	11+25.17 SM	23.70' LT	839.87
SM506	11+20.61 SM	19.72' LT	839.78

POINT NO.	STATION	OFFSET	ELEVATION
SM507	11+15.60 SM	17.24' LT	839.73
SM508	11+15.61 SM	19.75' LT	839.65
SM509	11+15.64 SM	23.68' LT	839.78
SM510	11+15.68 SM	28.75' LT	839.86
SM511	11+20.64 SM	23.72' LT	839.71
SM512	11+15.41 SM	15.83' RT	839.61

POINT NO.	STATION	OFFSET	ELEVATION
SM513	11+15.39 SM	18.34' RT	839.53
SM514	11+15.39 SM	25.00' RT	839.74
SM515	11+15.33 SM	30.00' RT	839.82
SM516	11+20.33 SM	30.03' RT	839.74
SM517	11+20.36 SM	25.03' RT	839.67
SM518	11+20.39 SM	18.37' RT	839.66

POINT NO.	STATION	OFFSET	ELEVATION
SM519	11+26.85 SM	25.05' RT	839.72
SM520	11+26.83 SM	30.05' RT	839.66
SM521	11+29.11 SM	30.06' RT	839.74
SM522	11+20.13 SM	63.41' RT	839.88
SM523	11+20.11 SM	67.06' RT	839.89
SM524	11+20.09 SM	71.69' RT	839.92

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 37 E

POINT NO.	STATION	OFFSET	ELEVATION
NS550	11+79.48 NS	60.54' LT	841.75
NS551	11+79.49 NS	34.41' LT	841.92
NS552	11+84.49 NS	34.46' LT	842.00
NS553	11+84.50 NS	29.47' LT	841.92
NS554	11+75.67 NS	34.43' LT	841.66
NS555	11+75.49 NS	34.44' LT	841.77

POINT NO.	STATION	OFFSET	ELEVATION
NS556	11+75.68 NS	29.43' LT	841.87
NS557	11+79.49 NS	20.86' LT	842.05
NS558	11+84.49 NS	20.86' LT	841.98
NS559	11+84.49 NS	16.70' LT	842.17
NS560	11+84.49 NS	26.28' LT	841.94
NS561	11+79.49 NS	26.28' LT	841.88

POINT NO.	STATION	OFFSET	ELEVATION
NS562	11+79.49 NS	29.44' LT	841.85
NS563	11+84.51 NS	18.21' RT	843.07
NS564	11+84.51 NS	22.37' RT	843.01
NS565	11+84.51 NS	27.79' RT	843.26
NS566	11+84.51 NS	29.25' RT	843.33
NS567	11+84.51 NS	34.25' RT	843.41
NS568	11+79.51 NS	34.17' RT	843.33

POINT NO.	STATION	OFFSET	ELEVATION
NS569	11+79.52 NS	29.17' RT	843.25
NS570	11+79.51 NS	27.79' RT	843.20
NS571	11+79.51 NS	22.37' RT	843.10
NS572	11+76.06 NS	29.16' RT	843.11
NS573	11+75.51 NS	34.16' RT	843.31
NS574	11+76.04 NS	34.16' RT	843.21

CURB RAMP DETAIL

JAMES STREET/SPRING STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

N. SPRING STREET

S. SPRING STREET

170+00WB

171+00WB

11+85.00NS

STH 16/60 / W. JAMES STREET

PROPOSED MANHOLE

PROPOSED INLET (TYP.)

ADJUST CURB PAN TO NOT EXCEED 11% ROLLOVER

R/W

POINT NO.	STATION	OFFSET	ELEVATION
SS589	11+15.47 SS	34.70' LT	841.99
SS590	11+15.47 SS	29.50' LT	841.91
SS591	11+15.52 SS	16.69' RT	842.92
SS592	11+15.53 SS	20.85' RT	842.87
SS593	11+15.54 SS	26.25' RT	843.21
SS594	11+15.54 SS	28.57' RT	843.36
SS595	11+15.57 SS	33.57' RT	843.43
SS596	11+20.53 SS	20.84' RT	843.05

POINT NO.	STATION	OFFSET	ELEVATION
SS597	11+20.54 SS	26.24' RT	843.18
SS598	11+20.54 SS	28.58' RT	843.28
SS599	11+24.21 SS	28.59' RT	843.21
SS600	11+24.55 SS	33.59' RT	843.31
SS601	11+24.20 SS	33.59' RT	843.20
SS602	11+20.55 SS	33.58' RT	843.36
SS603	11+20.59 SS	58.07' RT	844.90

POINT NO.	STATION	OFFSET	ELEVATION
SS589	11+15.47 SS	34.70' LT	841.99
SS590	11+15.47 SS	29.50' LT	841.91
SS591	11+15.52 SS	16.69' RT	842.92
SS592	11+15.53 SS	20.85' RT	842.87
SS593	11+15.54 SS	26.25' RT	843.21
SS594	11+15.54 SS	28.57' RT	843.36
SS595	11+15.57 SS	33.57' RT	843.43
SS596	11+20.53 SS	20.84' RT	843.05

POINT NO.	STATION	OFFSET	ELEVATION
SS597	11+20.54 SS	26.24' RT	843.18
SS598	11+20.54 SS	28.58' RT	843.28
SS599	11+24.21 SS	28.59' RT	843.21
SS600	11+24.55 SS	33.59' RT	843.31
SS601	11+24.20 SS	33.59' RT	843.20
SS602	11+20.55 SS	33.58' RT	843.36
SS603	11+20.59 SS	58.07' RT	844.90

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 38 E

POINT NO.	STATION	OFFSET	ELEVATION
DNB625	11+79.35 DNB	88.63' LT	849.61
DNB626	11+71.50 DNB	55.57' LT	848.72
DNB627	11+69.87 DNB	60.56' LT	848.75
DNB628	11+71.48 DNB	60.57' LT	848.65
DNB629	11+79.48 DNB	46.25' LT	848.77
DNB630	11+84.49 DNB	43.76' LT	848.90
DNB631	11+84.48 DNB	46.27' LT	848.82

POINT NO.	STATION	OFFSET	ELEVATION
DNB632	11+84.47 DNB	51.51' LT	848.99
DNB633	11+84.47 DNB	53.00' LT	849.03
DNB634	11+84.46 DNB	60.50' LT	849.13
DNB635	11+79.47 DNB	51.49' LT	848.91
DNB636	11+79.42 DNB	55.59' LT	848.97
DNB637	11+79.44 DNB	60.59' LT	849.05

POINT NO.	STATION	OFFSET	ELEVATION
DNB638	11+84.73 DNB	32.25' RT	849.07
DNB639	11+84.69 DNB	19.75' RT	848.86
DNB640	11+84.70 DNB	22.19' RT	848.78
DNB641	11+84.70 DNB	25.50' RT	848.97
DNB642	11+79.70 DNB	22.21' RT	848.84
DNB643	11+79.71 DNB	25.50' RT	848.90
DNB644	11+82.56 DNB	34.83' RT	849.12
DNB645	11+77.54 DNB	29.87' RT	848.97
DNB646	11+77.57 DNB	39.84' RT	849.30
DNB647	11+77.53 DNB	34.87' RT	849.05
DNB648	11+72.54 DNB	34.92' RT	849.00
DNB649	11+70.41 DNB	34.94' RT	849.11
DNB650	11+72.49 DNB	29.92' RT	848.97
DNB651	11+84.73 DNB	30.50' RT	849.05

POINT NO.	STATION	OFFSET	ELEVATION
NBD654	11+20.31 NBD	61.11' LT	849.06
NBD655	11+27.98 NBD	61.15' LT	848.69
NBD656	11+29.74 NBD	61.16' LT	848.77
NBD657	11+28.00 NBD	56.15' LT	848.79
NBD658	11+20.33 NBD	56.11' LT	848.99
NBD659	11+20.33 NBD	53.75' LT	848.95
NBD660	11+20.36 NBD	47.35' LT	848.74
NBD661	11+15.36 NBD	44.82' LT	848.66
NBD662	11+15.36 NBD	47.34' LT	848.58
NBD663	11+15.33 NBD	53.75' LT	849.02
NBD664	11+15.33 NBD	59.75' LT	849.11
NBD665	11+15.58 NBD	19.77' RT	848.76

POINT NO.	STATION	OFFSET	ELEVATION
NBD666	11+15.59 NBD	22.29' RT	848.70
NBD667	11+22.58 NBD	29.15' RT	849.04
NBD668	11+20.59 NBD	22.26' RT	848.85
NBD669	11+20.61 NBD	29.16' RT	849.07
NBD670	11+27.25 NBD	29.12' RT	848.99
NBD671	11+27.31 NBD	34.12' RT	848.96
NBD672	11+29.55 NBD	34.07' RT	849.08
NBD673	11+22.61 NBD	34.15' RT	849.12
NBD674	11+22.64 NBD	39.15' RT	849.48
NBD675	11+17.61 NBD	34.18' RT	849.19
NBD676	11+15.63 NBD	34.19' RT	849.22
NBD677	11+15.60 NBD	29.19' RT	849.15

CURB RAMP DETAIL

JAMES STREET/DICKASON BLVD

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

N. DICKASON BOULEVARD

STH 16/60 / W. JAMES STREET

S. DICKASON BOULEVARD (SB)

S. DICKASON BOULEVARD (NB)

PROPOSED INLET (TYP.)

PROPOSED MANHOLE

R/W

174+00WB

175+

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 39 E

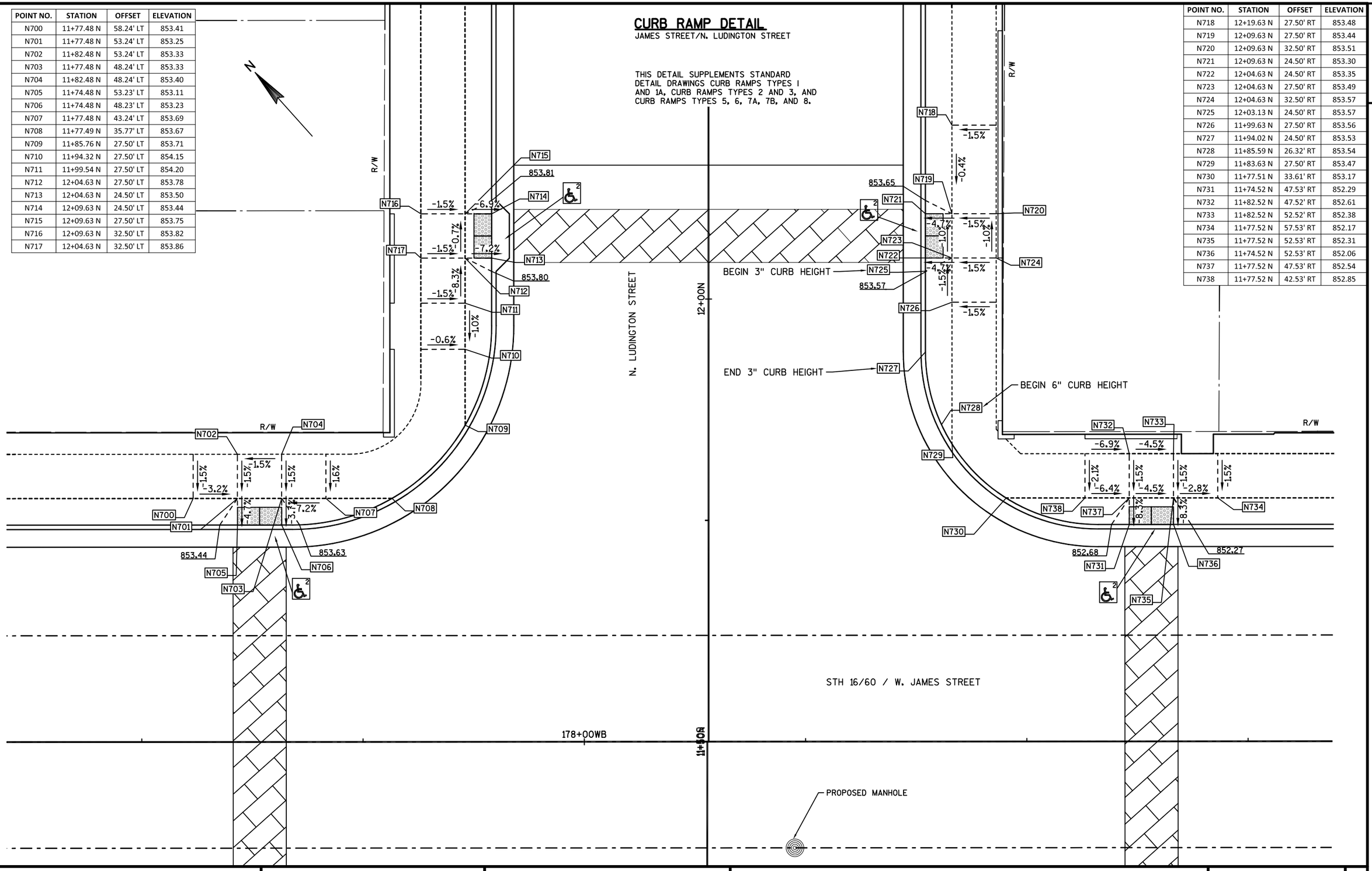
CURB RAMP DETAIL

JAMES STREET/N. LUDINGTON STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
N700	11+77.48 N	58.24' LT	853.41
N701	11+77.48 N	53.24' LT	853.25
N702	11+82.48 N	53.24' LT	853.33
N703	11+77.48 N	48.24' LT	853.33
N704	11+82.48 N	48.24' LT	853.40
N705	11+74.48 N	53.23' LT	853.11
N706	11+74.48 N	48.23' LT	853.23
N707	11+77.48 N	43.24' LT	853.69
N708	11+77.49 N	35.77' LT	853.67
N709	11+85.76 N	27.50' LT	853.71
N710	11+94.32 N	27.50' LT	854.15
N711	11+99.54 N	27.50' LT	854.20
N712	12+04.63 N	27.50' LT	853.78
N713	12+04.63 N	24.50' LT	853.50
N714	12+09.63 N	24.50' LT	853.44
N715	12+09.63 N	27.50' LT	853.75
N716	12+09.63 N	32.50' LT	853.82
N717	12+04.63 N	32.50' LT	853.86

POINT NO.	STATION	OFFSET	ELEVATION
N718	12+19.63 N	27.50' RT	853.48
N719	12+09.63 N	27.50' RT	853.44
N720	12+09.63 N	32.50' RT	853.51
N721	12+09.63 N	24.50' RT	853.30
N722	12+04.63 N	24.50' RT	853.35
N723	12+04.63 N	27.50' RT	853.49
N724	12+04.63 N	32.50' RT	853.57
N725	12+03.13 N	24.50' RT	853.57
N726	11+99.63 N	27.50' RT	853.56
N727	11+94.02 N	24.50' RT	853.53
N728	11+85.59 N	26.32' RT	853.54
N729	11+83.63 N	27.50' RT	853.47
N730	11+77.51 N	33.61' RT	853.17
N731	11+74.52 N	47.53' RT	852.29
N732	11+82.52 N	47.52' RT	852.61
N733	11+82.52 N	52.52' RT	852.38
N734	11+77.52 N	57.53' RT	852.17
N735	11+77.52 N	52.53' RT	852.31
N736	11+74.52 N	52.53' RT	852.06
N737	11+77.52 N	47.53' RT	852.54
N738	11+77.52 N	42.53' RT	852.85

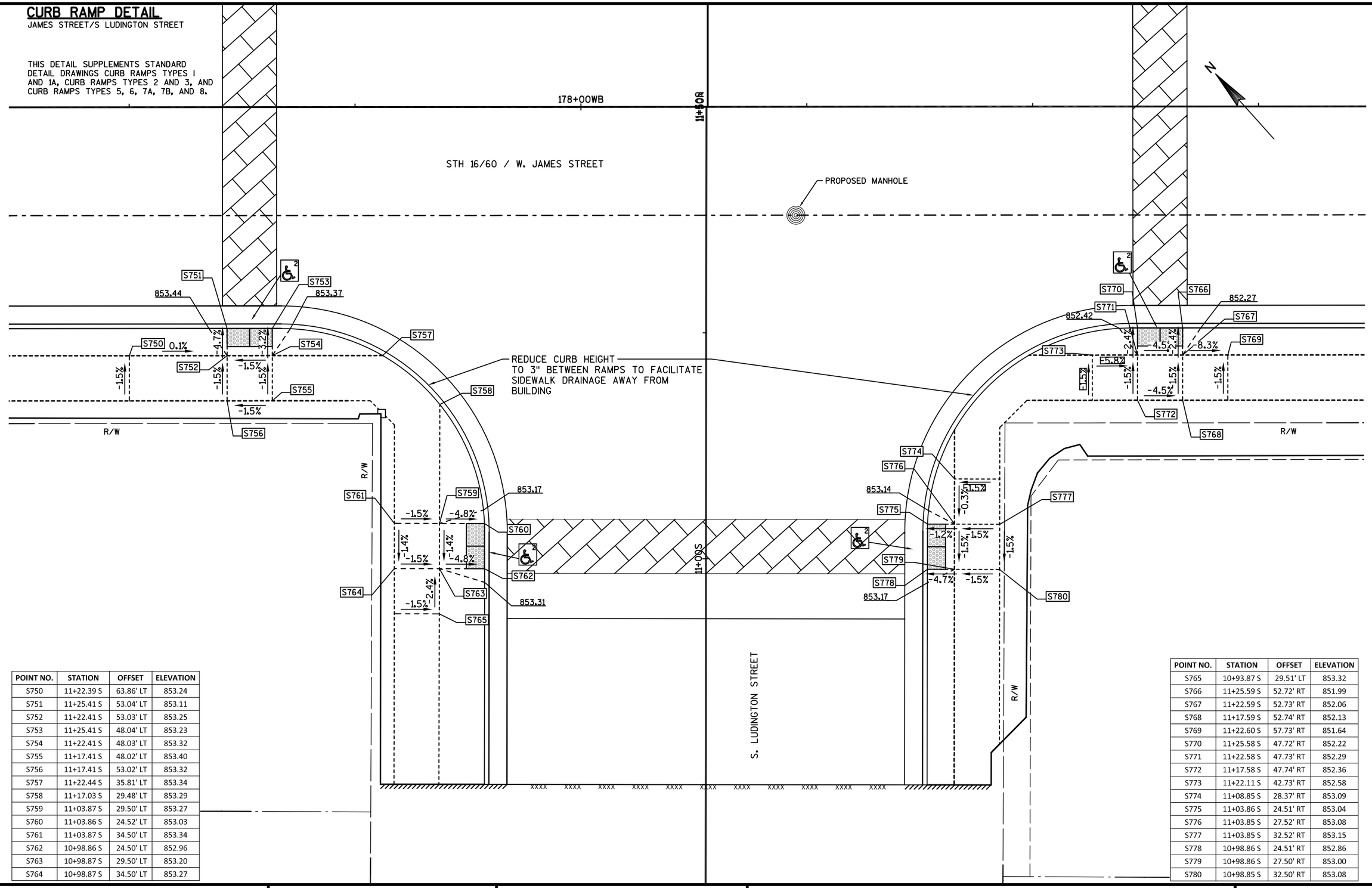


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 40	E

CURB RAMP DETAIL

JAMES STREET/S LUDINGTON STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.



POINT NO.	STATION	OFFSET	ELEVATION
S750	11+22.39 S	63.86' LT	853.24
S751	11+25.41 S	53.04' LT	853.11
S752	11+22.41 S	53.03' LT	853.25
S753	11+25.41 S	48.04' LT	853.23
S754	11+22.41 S	48.03' LT	853.32
S755	11+17.41 S	48.02' LT	853.40
S756	11+17.41 S	53.02' LT	853.32
S757	11+22.44 S	35.81' LT	853.34
S758	11+17.03 S	29.48' LT	853.29
S759	11+03.87 S	29.50' LT	853.27
S760	11+03.86 S	24.52' LT	853.03
S761	11+03.87 S	34.50' LT	853.34
S762	10+98.86 S	24.50' LT	852.96
S763	10+98.87 S	29.50' LT	853.20
S764	10+98.87 S	34.50' LT	853.27

POINT NO.	STATION	OFFSET	ELEVATION
S765	10+93.87 S	29.51' LT	853.32
S766	11+25.59 S	52.72' RT	851.99
S767	11+22.59 S	52.73' RT	852.06
S768	11+17.59 S	52.74' RT	852.13
S769	11+22.60 S	57.73' RT	851.64
S770	11+25.58 S	47.72' RT	852.22
S771	11+22.58 S	47.73' RT	852.29
S772	11+17.58 S	47.74' RT	852.36
S773	11+22.11 S	42.73' RT	852.58
S774	11+08.85 S	28.37' RT	853.09
S775	11+03.86 S	24.51' RT	853.04
S776	11+03.85 S	27.52' RT	853.08
S777	11+03.85 S	32.52' RT	853.15
S778	10+98.86 S	24.51' RT	852.86
S779	10+98.86 S	27.50' RT	853.00
S780	10+98.85 S	32.50' RT	853.08

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 41 E

CURB RAMP DETAIL

JAMES STREET/WATER STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.

POINT NO.	STATION	OFFSET	ELEVATION
NW832	11+77.61 NW	45.30' LT	838.80
NW833	11+77.88 NW	31.15' LT	837.89
NW834	11+75.88 NW	31.14' LT	837.86
NW835	11+74.74 NW	31.14' LT	837.94
NW836	11+76.04 NW	26.14' LT	837.66
NW837	11+79.13 NW	26.14' LT	837.81
NW838	11+79.38 NW	25.11' LT	837.79

POINT NO.	STATION	OFFSET	ELEVATION
NW839	11+79.36 NW	21.05' LT	837.81
NW840	11+84.36 NW	21.01' LT	837.53
NW841	11+84.34 NW	17.34' LT	837.59
NW842	11+84.38 NW	25.03' LT	837.86
NW843	11+83.05 NW	31.14' LT	837.97
NW844	11+84.42 NW	30.11' LT	837.94

POINT NO.	STATION	OFFSET	ELEVATION
NW845	11+95.63 NW	26.25' LT	838.24
NW846	11+84.34 NW	17.69' RT	836.03
NW847	11+84.34 NW	21.86' RT	835.87
NW848	11+84.34 NW	27.28' RT	835.82
NW849	11+84.34 NW	29.50' RT	835.81
NW850	11+79.34 NW	21.84' RT	835.86
NW851	11+79.34 NW	27.28' RT	835.76
NW852	11+79.35 NW	29.60' RT	835.73

POINT NO.	STATION	OFFSET	ELEVATION
NW853	11+79.35 NW	34.60' RT	835.66
NW854	11+84.35 NW	34.50' RT	835.73
NW855	11+90.08 NW	29.50' RT	836.05
NW856	11+75.65 NW	29.60' RT	835.57
NW857	11+75.32 NW	34.60' RT	835.50
NW858	11+75.65 NW	34.60' RT	835.40
NW859	11+79.33 NW	39.60' RT	835.88

POINT NO.	STATION	OFFSET	ELEVATION
SW803	11+08.50 SW	25.00' LT	838.72
SW804	11+22.64 SW	39.41' LT	839.20
SW805	11+25.65 SW	34.78' LT	838.73
SW806	11+20.49 SW	30.00' LT	838.37
SW807	11+15.49 SW	30.00' LT	838.45
SW808	11+15.50 SW	25.00' LT	838.37

POINT NO.	STATION	OFFSET	ELEVATION
SW809	11+15.50 SW	21.60' LT	837.94
SW810	11+15.51 SW	18.13' LT	837.55
SW811	11+20.50 SW	21.61' LT	837.90
SW812	11+20.50 SW	25.00' LT	838.30
SW813	11+23.16 SW	25.00' LT	837.98
SW814	11+23.15 SW	30.00' LT	838.21

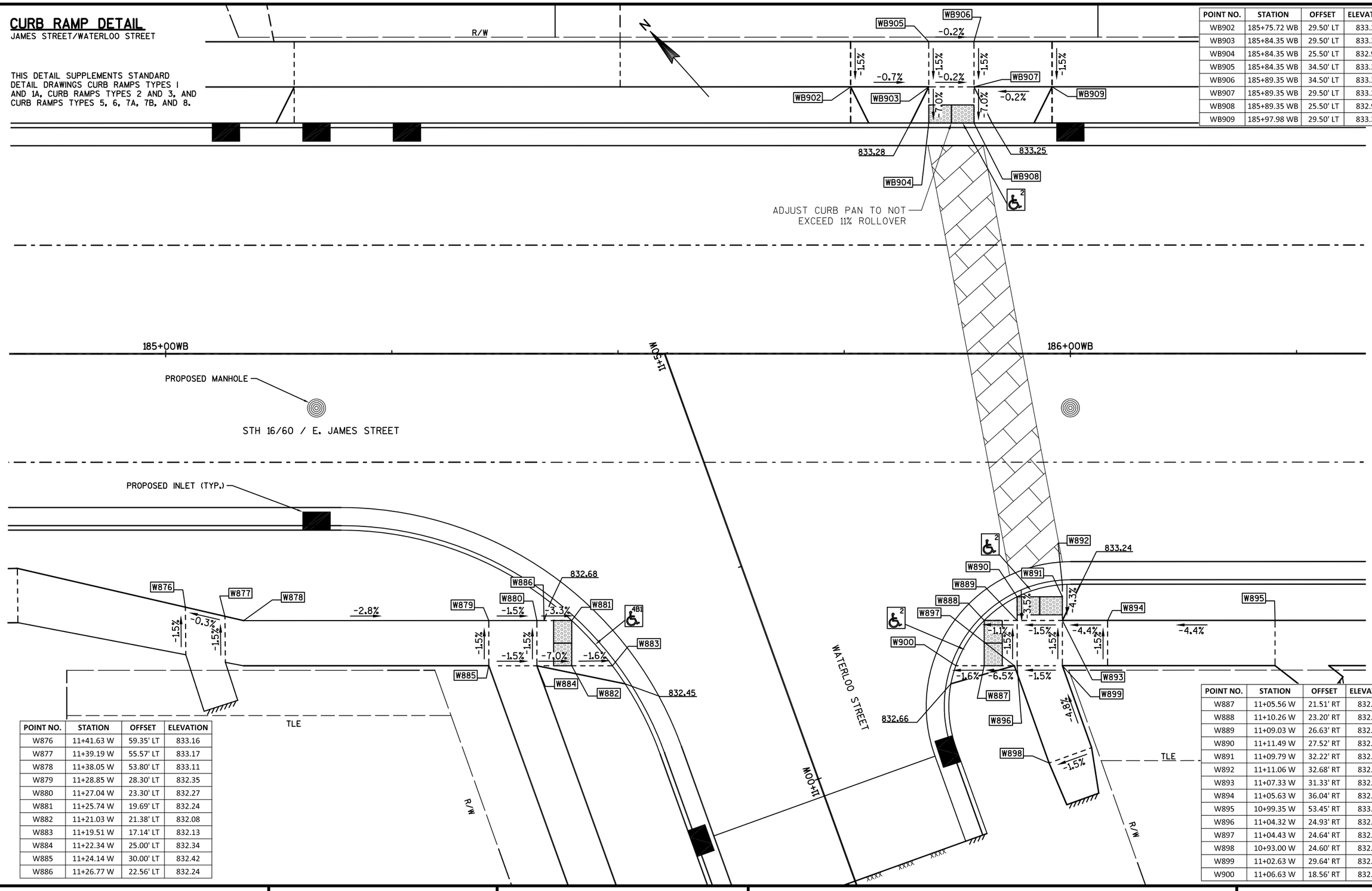
POINT NO.	STATION	OFFSET	ELEVATION
SW815	11+25.10 SW	30.00' LT	838.18
SW816	11+20.48 SW	34.67' LT	838.76
SW817	11+15.42 SW	16.77' RT	836.27
SW818	11+15.40 SW	20.96' RT	836.08
SW819	11+15.37 SW	26.38' RT	835.93
SW820	11+15.35 SW	29.50' RT	835.84
SW821	11+15.33 SW	34.50' RT	835.77
SW822	11+20.31 SW	39.64' RT	835.92
SW823	11+20.33 SW	34.64' RT	835.69
SW824	11+24.13 SW	34.64' RT	835.42
SW825	11+24.13 SW	29.64' RT	835.70
SW826	11+20.35 SW	29.64' RT	835.76
SW827	11+20.37 SW	26.40' RT	835.82
SW828	11+20.40 SW	20.99' RT	836.04

PROJECT NO: 1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | CONSTRUCTION DETAILS: CURB RAMP | SHEET 42 E

CURB RAMP DETAIL

JAMES STREET/WATERLOO STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.



POINT NO.	STATION	OFFSET	ELEVATION
WB902	185+75.72 WB	29.50' LT	833.28
WB903	185+84.35 WB	29.50' LT	833.22
WB904	185+84.35 WB	25.50' LT	832.94
WB905	185+84.35 WB	34.50' LT	833.30
WB906	185+89.35 WB	34.50' LT	833.28
WB907	185+89.35 WB	29.50' LT	833.21
WB908	185+89.35 WB	25.50' LT	832.93
WB909	185+97.98 WB	29.50' LT	833.22

POINT NO.	STATION	OFFSET	ELEVATION
W876	11+41.63 W	59.35' LT	833.16
W877	11+39.19 W	55.57' LT	833.17
W878	11+38.05 W	53.80' LT	833.11
W879	11+28.85 W	28.30' LT	832.35
W880	11+27.04 W	23.30' LT	832.27
W881	11+25.74 W	19.69' LT	832.24
W882	11+21.03 W	21.38' LT	832.08
W883	11+19.51 W	17.14' LT	832.13
W884	11+22.34 W	25.00' LT	832.34
W885	11+24.14 W	30.00' LT	832.42
W886	11+26.77 W	22.56' LT	832.24

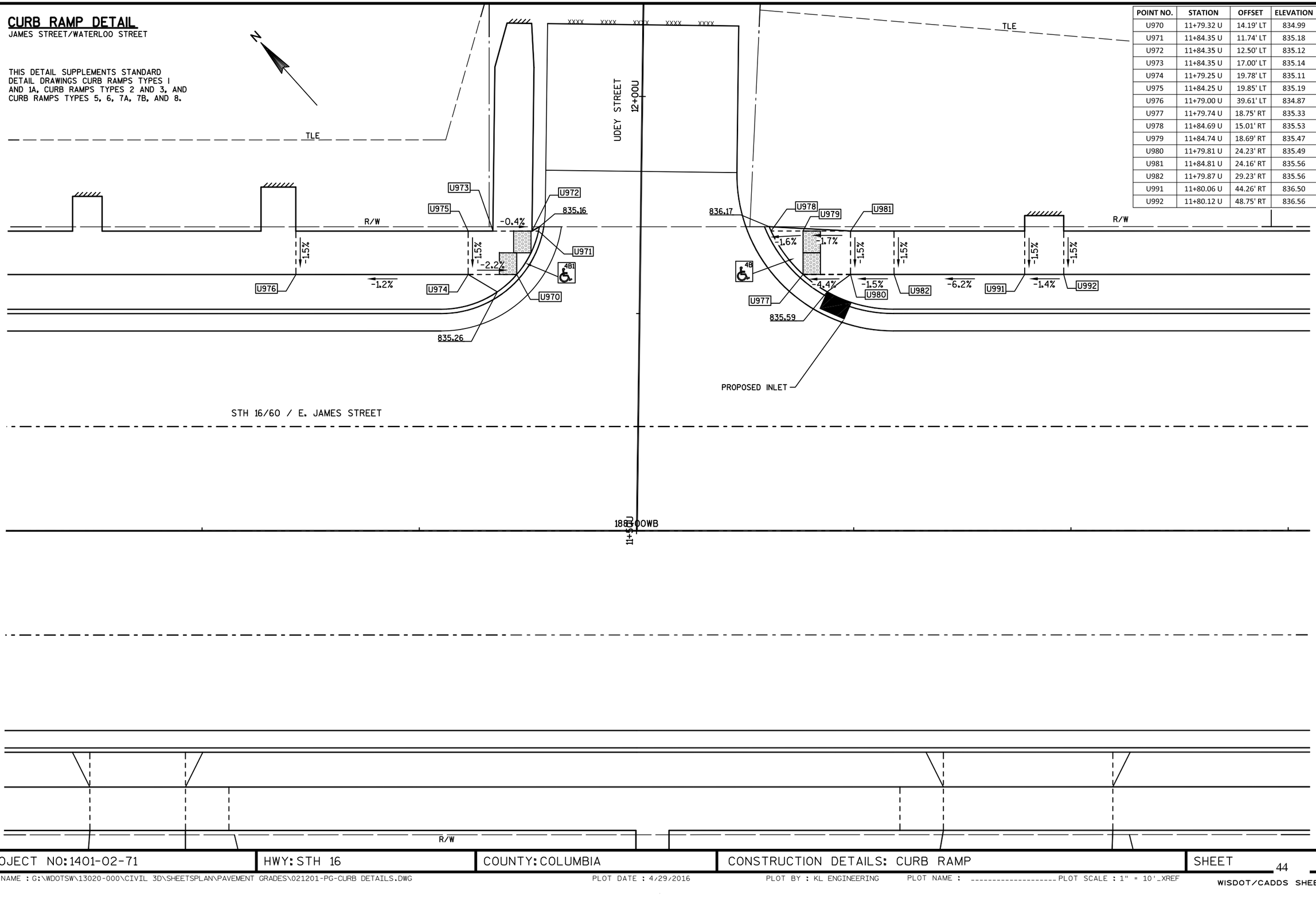
POINT NO.	STATION	OFFSET	ELEVATION
W887	11+05.56 W	21.51' RT	832.28
W888	11+10.26 W	23.20' RT	832.53
W889	11+09.03 W	26.63' RT	832.44
W890	11+11.49 W	27.52' RT	832.67
W891	11+09.79 W	32.22' RT	832.63
W892	11+11.06 W	32.68' RT	832.83
W893	11+07.33 W	31.33' RT	832.51
W894	11+05.63 W	36.04' RT	832.73
W895	10+99.35 W	53.45' RT	833.55
W896	11+04.32 W	24.93' RT	832.51
W897	11+04.43 W	24.64' RT	832.51
W898	10+93.00 W	24.60' RT	832.97
W899	11+02.63 W	29.64' RT	832.59
W900	11+06.63 W	18.56' RT	832.35

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 43	E

CURB RAMP DETAIL

JAMES STREET/WATERLOO STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.



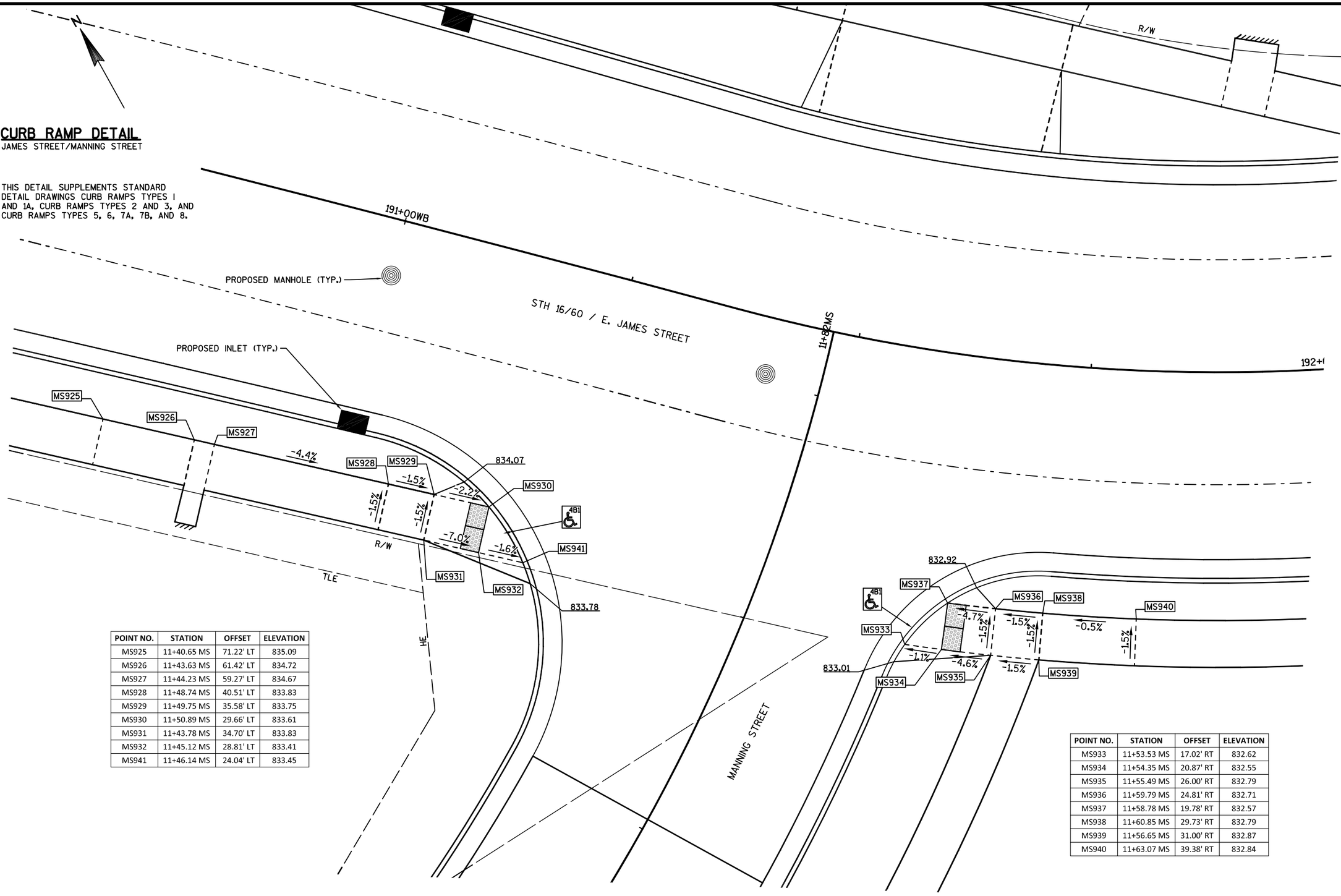
POINT NO.	STATION	OFFSET	ELEVATION
U970	11+79.32 U	14.19' LT	834.99
U971	11+84.35 U	11.74' LT	835.18
U972	11+84.35 U	12.50' LT	835.12
U973	11+84.35 U	17.00' LT	835.14
U974	11+79.25 U	19.78' LT	835.11
U975	11+84.25 U	19.85' LT	835.19
U976	11+79.00 U	39.61' LT	834.87
U977	11+79.74 U	18.75' RT	835.33
U978	11+84.69 U	15.01' RT	835.53
U979	11+84.74 U	18.69' RT	835.47
U980	11+79.81 U	24.23' RT	835.49
U981	11+84.81 U	24.16' RT	835.56
U982	11+79.87 U	29.23' RT	835.56
U991	11+80.06 U	44.26' RT	836.50
U992	11+80.12 U	48.75' RT	836.56

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS: CURB RAMP	SHEET 44 E

CURB RAMP DETAIL

JAMES STREET/MANNING STREET

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.



POINT NO.	STATION	OFFSET	ELEVATION
MS925	11+40.65 MS	71.22' LT	835.09
MS926	11+43.63 MS	61.42' LT	834.72
MS927	11+44.23 MS	59.27' LT	834.67
MS928	11+48.74 MS	40.51' LT	833.83
MS929	11+49.75 MS	35.58' LT	833.75
MS930	11+50.89 MS	29.66' LT	833.61
MS931	11+43.78 MS	34.70' LT	833.83
MS932	11+45.12 MS	28.81' LT	833.41
MS941	11+46.14 MS	24.04' LT	833.45

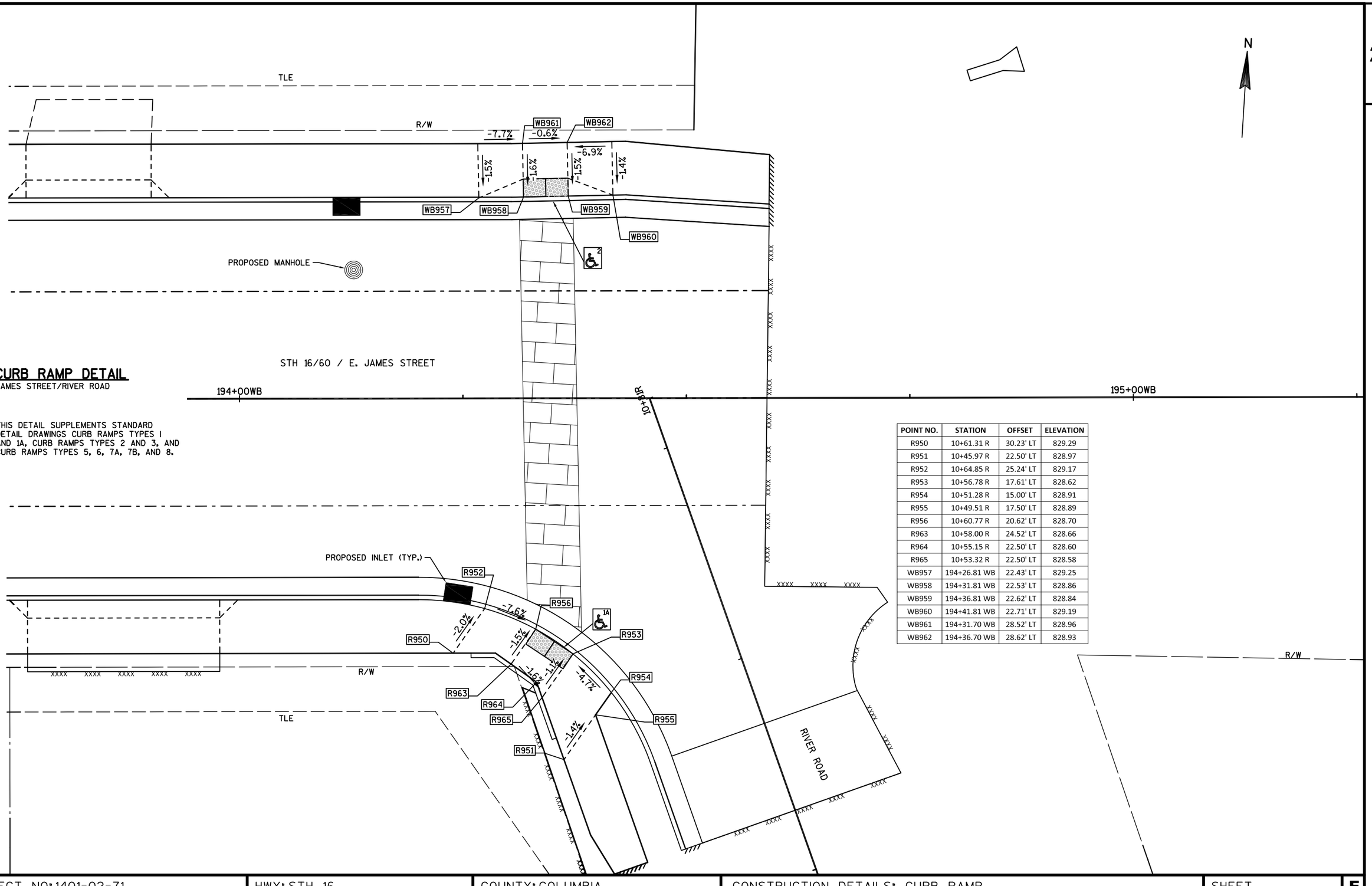
POINT NO.	STATION	OFFSET	ELEVATION
MS933	11+53.53 MS	17.02' RT	832.62
MS934	11+54.35 MS	20.87' RT	832.55
MS935	11+55.49 MS	26.00' RT	832.79
MS936	11+59.79 MS	24.81' RT	832.71
MS937	11+58.78 MS	19.78' RT	832.57
MS938	11+60.85 MS	29.73' RT	832.79
MS939	11+56.65 MS	31.00' RT	832.87
MS940	11+63.07 MS	39.38' RT	832.84

2

CURB RAMP DETAIL

JAMES STREET/RIVER ROAD

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1A, CURB RAMPS TYPES 2 AND 3, AND CURB RAMPS TYPES 5, 6, 7A, 7B, AND 8.



POINT NO.	STATION	OFFSET	ELEVATION
R950	10+61.31 R	30.23' LT	829.29
R951	10+45.97 R	22.50' LT	828.97
R952	10+64.85 R	25.24' LT	829.17
R953	10+56.78 R	17.61' LT	828.62
R954	10+51.28 R	15.00' LT	828.91
R955	10+49.51 R	17.50' LT	828.89
R956	10+60.77 R	20.62' LT	828.70
R963	10+58.00 R	24.52' LT	828.66
R964	10+55.15 R	22.50' LT	828.60
R965	10+53.32 R	22.50' LT	828.58
WB957	194+26.81 WB	22.43' LT	829.25
WB958	194+31.81 WB	22.53' LT	828.86
WB959	194+36.81 WB	22.62' LT	828.84
WB960	194+41.81 WB	22.71' LT	829.19
WB961	194+31.70 WB	28.52' LT	828.96
WB962	194+36.70 WB	28.62' LT	828.93

2

PLAN DETAILS LEGEND

→	TRAFFIC FLOW
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
X	CURB RAMP, TYPE X
	PROPOSED INLET
	PROPOSED MANHOLE
- - - -	SLOPE INTERCEPT
	COLORED CONCRETE PAVEMENT
CS-5	CONCRETE SIDEWALK 5-INCH
xxxx	SAWING ASPHALT
//////	SAWING CONCRETE
R-WAL	RETAINING WALL
XX	LAYOUT POINT NUMBER
SN-1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
-------	SIDEWALK JOINT BREAK LINE
	HES CONCRETE PAVEMENT
	PROPOSED ENDWALL

CD-6	CONCRETE DRIVEWAY 6-INCH
ASPH	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
	ANTICIPATED CONCRETE JOINTING
	REVERSE SLOPE GUTTER
	ASPHALTIC SURFACE
BN	CONCRETE MEDIAN BLUNT NOSE
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG-18D	CONCRETE CURB & GUTTER 18-INCH TYPE D
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
C-PED	CONCRETE CURB PEDESTRIAN
XXX	DRIVEWAY REMOVAL
M-A	MAINTENANCE ACCESS, SEE CONSTRUCTION DETAIL
C-REV	REVEAL CURB

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

STA. 126+40.00WB
BEGIN CONSTRUCTION 1401-02-71
MATCH EXISTING
SAWCUT REQUIRED

GRADE DITCH TO DRAIN

ASPHALTIC FLUME
(SEE S.D.D.)

STH 16/60 (WB) / W. JAMES STREET

122+00WB 123+00WB CG-30A 124+00WB 125+00WB 126+00WB 127+00WB

CS-5 6.0' SIDEWALK
8.5' TERRACE
WB1
CG-30A 4.0' 12.0' 12.0' 128+

CG-30D CG-30A MAINTENANCE ACCESS (SEE DETAIL) M-A

MATCH LINE STA. 128+00WB

122+00EB CG-30A 123+00EB 124+00EB 125+00EB CG-30A 126+00EB CG-30D 127+00EB CG-30A 128+

EB3 12.0'
EB4 12.0'
5.0'
EB2 5.0' 2.0'

STH 16/60 (EB) / W. JAMES STREET

GRADE DITCH TO DRAIN

STA. 127+00.00WB
BEGIN PROJECT 1401-02-71

R/W

SLOPE INTERCEPTS (TYP.)

POINT	STATION		OFFSET		COMMENT
WB1	127+00	WB	28.00'	LT	BEGIN CURB AND GUTTER PAVEMENT STRUCTURE TRANSITION
EB2	127+12	EB	28.00'	RT	BEGIN 8.75:1 TAPER
EB3	127+20	EB	0.00'	RT	BEGIN 8:1 TAPER
EB4	126+99	EB	0.00'	RT	PAVEMENT STRUCTURE TRANSITION

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN DETAILS\021201_PD.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF_XREF_XREF
WISDOT/CADDS SHEET 42

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

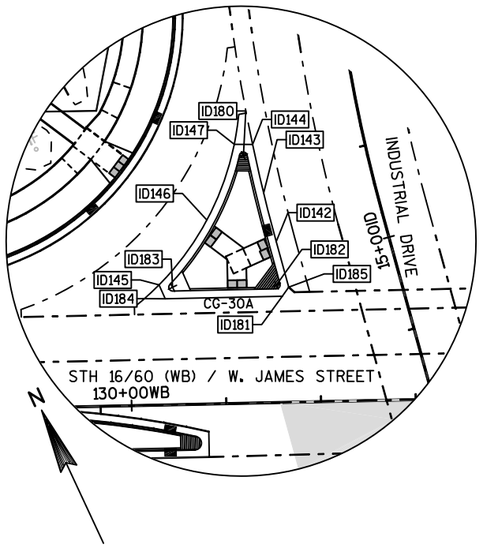
POINT	STATION		OFFSET		COMMENT
WB100	129+60	WB	0.00'	RT	BEGIN 250' RADIUS
WB101	129+90	WB	1.83'	RT	CENTER OF CURVE (250' RADIUS)
WB102	130+20	WB	7.29'	RT	END 250' RADIUS/CURB
WB103	129+24	WB	28.00'	LT	BEGIN 50' RADIUS
WB104	129+30	WB	29.38'	LT	CENTER OF CURVE (50' RADIUS)
WB105	129+36	WB	29.49'	LT	END 50' RADIUS
WB113	129+03	WB	93.76'	LT	DRIVEWAY SAWCUT
WB114	129+22	WB	93.58'	LT	DRIVEWAY SAWCUT
ID148	15+17	ID	104.76'	LT	BEGIN 70' RADIUS
ID149	15+73	ID	111.00'	LT	70' RADIUS
ID150	15+73	ID	41.00'	LT	END 70' RADIUS
ID151	15+43	ID	71.78'	LT	BEGIN 6'-5' SIDEWALK TRANSITION BACK OF SIDEWALK
ID152	15+46	ID	67.18'	LT	END 6'-5' SIDEWALK TRANSITION BACK OF SIDEWALK
WB168	130+16	WB	10.25'	RT	1.75' RADIUS (FACE OF CURB)
WB169	130+20	WB	14.00'	RT	END OF CURB

POINT	STATION		OFFSET		COMMENT
WB106	131+47	WB	13.36'	RT	END OF CURB/BEGIN 48' RADIUS
WB107	131+53	WB	12.34'	RT	CENTER OF CURVE (50' RADIUS)
WB108	131+59	WB	12.00'	RT	END 50' RADIUS
WB170	131+50	WB	15.79'	RT	1' RADIUS
WB109	132+78	WB	12.00'	RT	END 8:1 TAPER
WB110	132+78	WB	53.00'	LT	END 8:1 TAPER
WB111	133+74	WB	0.00'	LT	BEGIN 8:1 TAPER
WB112	133+75	WB	29.00'	LT	BEGIN 8:1 TAPER
ID153	14+77	ID	84.78'	RT	BEGIN 80' RADIUS
ID154	15+02	ID	43.61'	RT	CENTER OF CURVE (80' RADIUS)
ID155	15+49	ID	22.65'	RT	END 80' RADIUS
ID156	15+79	ID	16.38'	RT	PAVEMENT STRUCTURE TRANSITION CENTER OF CURVE (50' RADIUS)
WB170	131+50	WB	12.34'	RT	1' RADIUS (FACE OF CURB)
ID171	15+73	ID	17.49'	RT	BEGIN 50' RADIUS
ID172	15+85	ID	16.00'	RT	END 50' RADIUS

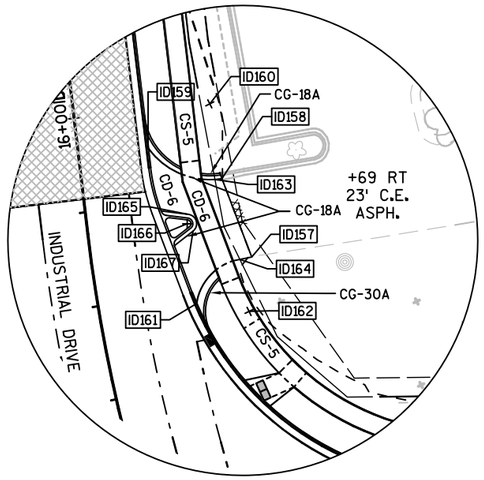
POINT	STATION		OFFSET		COMMENT
EB115	128+16	EB	12.00'	LT	END 8:1 TAPER
EB116	128+16	EB	40.97'	RT	END 8.75:1 TAPER BEGIN CURB AND GUTTER
ID127	12+74	ID	37.26'	LT	DRIVEWAY SAWCUT
ID131	13+27	ID	16.00'	LT	END 419' RADIUS/BEGIN 50' RADIUS
ID132	13+33	ID	16.44'	LT	CENTER OF CURVE (50' RADIUS)
ID133	13+38	ID	17.74'	LT	END 50' RADIUS
ID134	13+47	ID	36.50'	LT	BEGIN 5'-6' SIDEWALK TRANSITION BACK OF SIDEWALK
ID135	13+51	ID	39.02'	LT	END 5'-6' SIDEWALK TRANSITION BACK OF SIDEWALK
ID136	13+56	ID	23.34'	LT	BEGIN 80' RADIUS
ID137	13+88	ID	45.42'	LT	CENTER OF CURVE (80' RADIUS)
ID138	14+07	ID	79.95'	LT	END 80' RADIUS

POINT	STATION		OFFSET		COMMENT
EB120	131+46	EB	7.91'	LT	END OF CURB/BEGIN 220' RADIUS
EB121	131+75	EB	1.99'	LT	CENTER OF CURVE (220' RADIUS)
EB122	132+05	EB	0.00'	LT	END 220' RADIUS
EB123	132+22	EB	30.49'	RT	BEGIN 50' RADIUS
EB124	132+30	EB	29.38'	RT	CENTER OF CURVE (50' RADIUS)
EB125	132+36	EB	29.00'	RT	END 50' RADIUS
EB126	132+30	EB	0.00'	LT	END 9.5"/BEGIN 9" PAVEMENT
ID128	12+79	ID	43.00'	RT	PAVEMENT STRUCTURE TRANSITION BEGIN 65' RADIUS
ID129	13+38	ID	61.20'	RT	CENTER OF CURVE (65' RADIUS)
ID130	13+68	ID	112.11'	RT	END 65' RADIUS

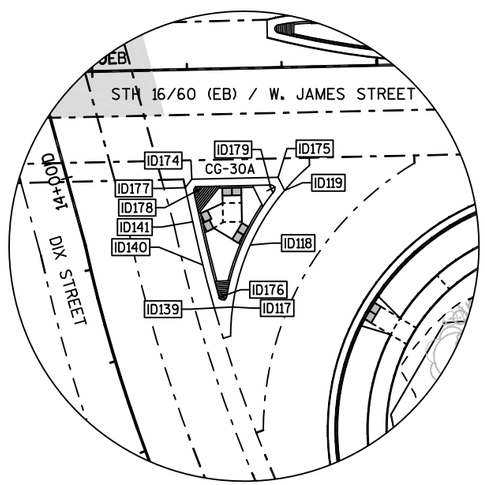
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET 49	E



POINT	STATION		OFFSET		COMMENT
ID142	15+07	ID	29.00'	LT	BEGIN 444' RADIUS
ID143	15+19	ID	29.00'	LT	CENTER OF CURVE (444' RADIUS)
ID144	15+31	ID	29.00'	LT	END 444' RADIUS
ID145	15+04	ID	61.84'	LT	BEGIN 74' RADIUS
ID146	15+16	ID	45.25'	LT	CENTER OF CURVE (74' RADIUS)
ID147	15+32	ID	33.71'	LT	END 74' RADIUS
ID180	15+29	ID	32.00'	LT	1' RADIUS (FACE OF CURB)
ID181	14+93	ID	31.27'	LT	END OF CURB
ID182	14+96	ID	32.00'	LT	1' RADIUS (FACE OF CURB)
ID183	15+02	ID	58.57'	LT	1' RADIUS (FACE OF CURB)
ID184	15+00	ID	61.23'	LT	END OF CURB
ID185	14+94	ID	29.00'	LT	END OF CURB



POINT	STATION		OFFSET		COMMENT
ID157	15+57	ID	42.07'	RT	DRIVEWAY SAWCUT
ID158	15+80	ID	36.88'	RT	DRIVEWAY SAWCUT
ID159	15+90	ID	18.50'	RT	BEGIN 20' RADIUS
ID160	16+00	ID	36.00'	RT	20' RADIUS
ID161	15+46	ID	39.02'	RT	BEGIN 14' RADIUS
ID162	15+41	ID	25.77'	RT	14' RADIUS
ID163	15+80	ID	35.03'	RT	END 20' RADIUS
ID164	15+57	ID	38.90'	RT	END 14' RADIUS
ID165	15+71	ID	26.97'	RT	BEGIN 2.5' RADIUS
ID166	15+69	ID	26.29'	RT	2.5' RADIUS
ID167	15+67	ID	27.65'	RT	END 2.5' RADIUS

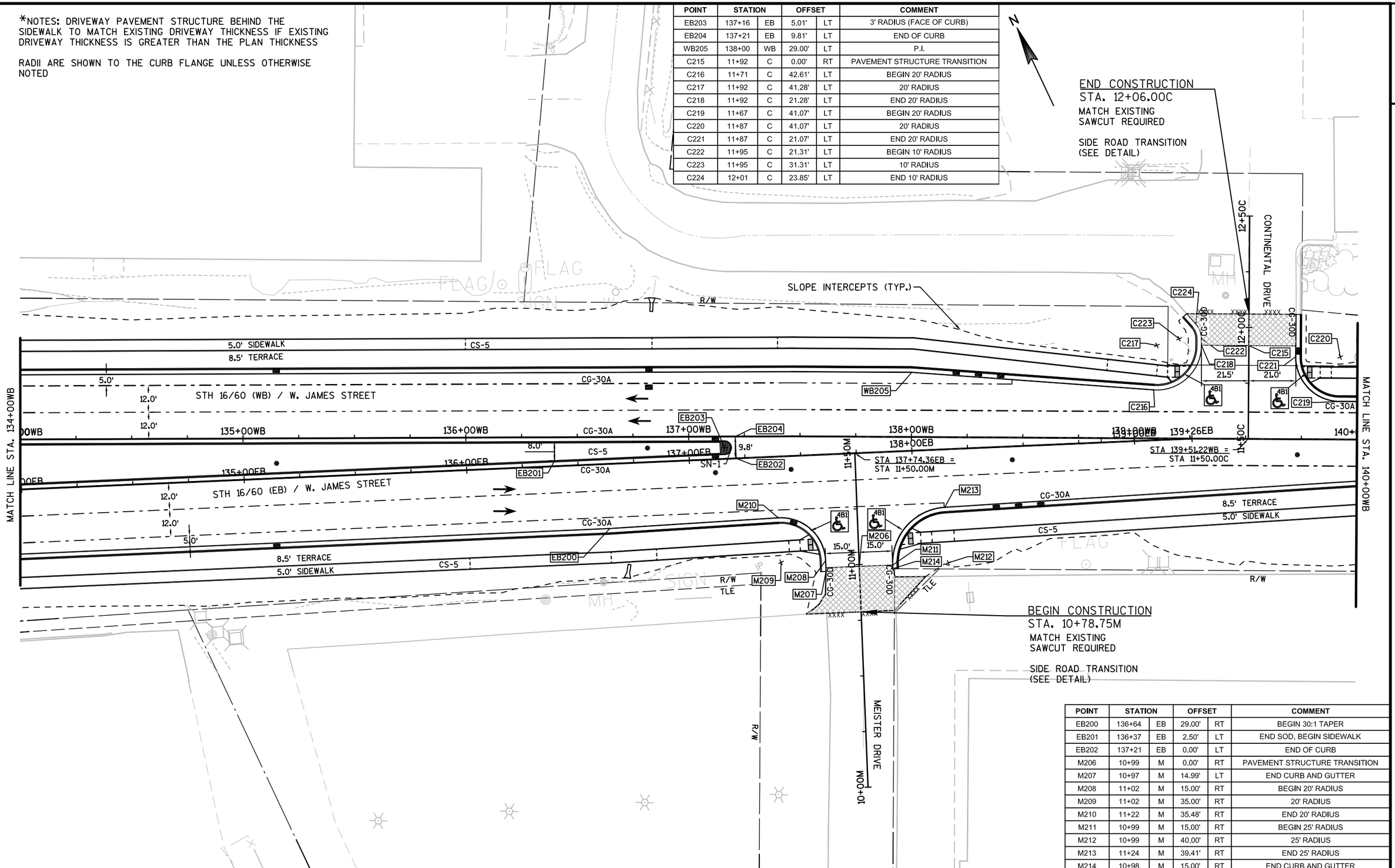


POINT	STATION		OFFSET		COMMENT
ID117	13+55	ID	33.71'	RT	BEGIN 60' RADIUS
ID118	13+71	ID	42.42'	RT	CENTER OF CURVE (60' RADIUS)
ID119	13+82	ID	54.54'	RT	END 60' RADIUS
ID139	13+56	ID	29.00'	RT	BEGIN 374' RADIUS
ID140	13+69	ID	29.00'	RT	CENTER OF CURVE (374' RADIUS)
ID141	13+82	ID	29.03'	RT	END 374' RADIUS
ID174	13+91	ID	31.73'	RT	END OF CURB
ID175	13+85	ID	53.81'	RT	END OF CURB
ID176	13+59	ID	32.00'	RT	1' RADIUS (FACE OF CURB)
ID177	13+89	ID	29.45'	RT	END OF CURB
ID178	13+88	ID	32.37'	RT	1' RADIUS (FACE OF CURB)
ID179	13+83	ID	51.23'	RT	1' RADIUS (FACE OF CURB)

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
EB203	137+16	EB	5.01'	LT	3' RADIUS (FACE OF CURB)
EB204	137+21	EB	9.81'	LT	END OF CURB
WB205	138+00	WB	29.00'	LT	P.I.
C215	11+92	C	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
C216	11+71	C	42.61'	LT	BEGIN 20' RADIUS
C217	11+92	C	41.28'	LT	20' RADIUS
C218	11+92	C	21.28'	LT	END 20' RADIUS
C219	11+67	C	41.07'	LT	BEGIN 20' RADIUS
C220	11+87	C	41.07'	LT	20' RADIUS
C221	11+87	C	21.07'	LT	END 20' RADIUS
C222	11+95	C	21.31'	LT	BEGIN 10' RADIUS
C223	11+95	C	31.31'	LT	10' RADIUS
C224	12+01	C	23.85'	LT	END 10' RADIUS



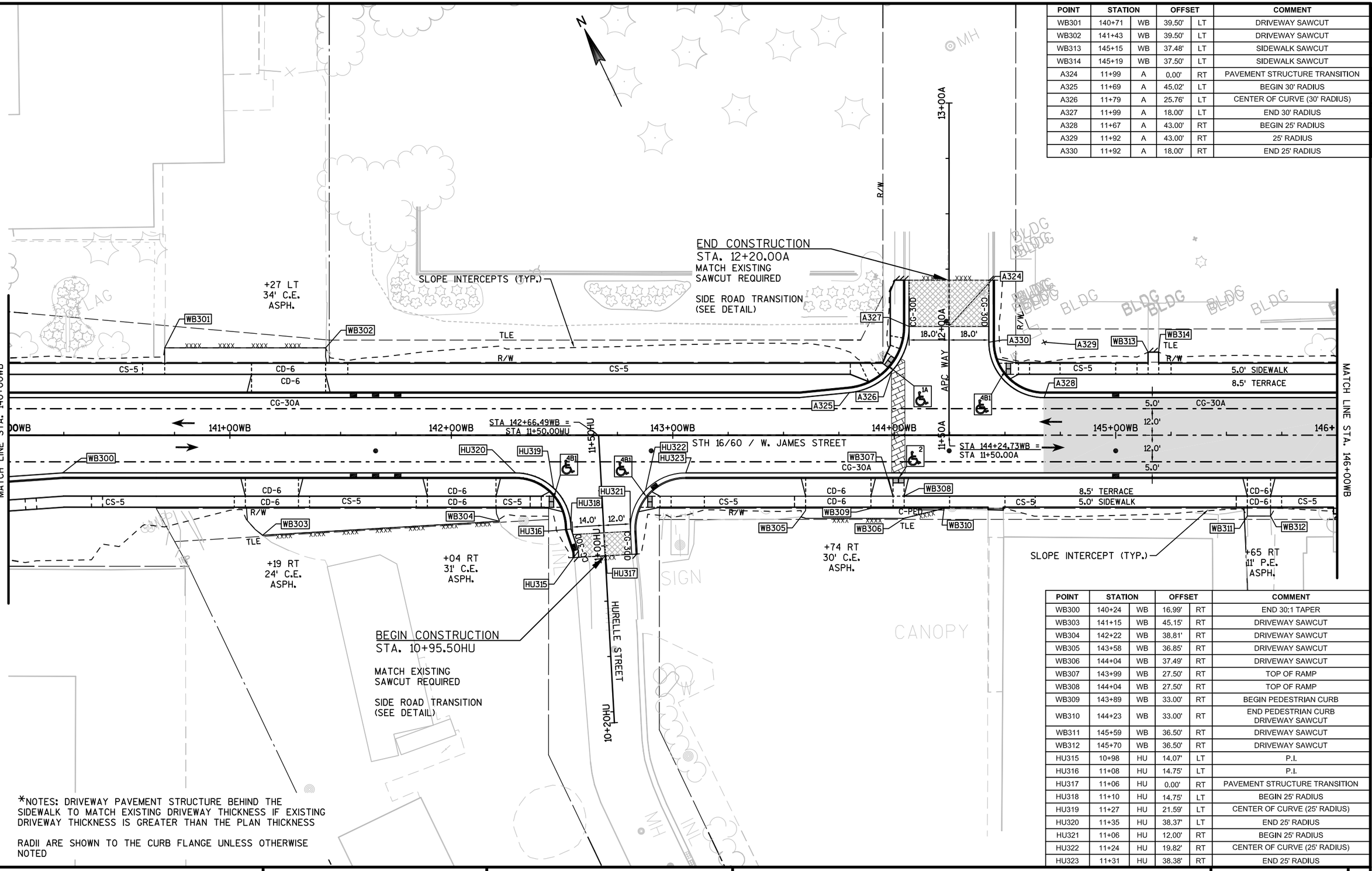
POINT	STATION		OFFSET		COMMENT
EB200	136+64	EB	29.00'	RT	BEGIN 30:1 TAPER
EB201	136+37	EB	2.50'	LT	END SOD, BEGIN SIDEWALK
EB202	137+21	EB	0.00'	LT	END OF CURB
M206	10+99	M	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
M207	10+97	M	14.99'	LT	END CURB AND GUTTER
M208	11+02	M	15.00'	RT	BEGIN 20' RADIUS
M209	11+02	M	35.00'	RT	20' RADIUS
M210	11+22	M	35.48'	RT	END 20' RADIUS
M211	10+99	M	15.00'	RT	BEGIN 25' RADIUS
M212	10+99	M	40.00'	RT	25' RADIUS
M213	11+24	M	39.41'	RT	END 25' RADIUS
M214	10+98	M	15.00'	RT	END CURB AND GUTTER

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN DETAILS\021201_PD.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF XREF XREF XREF

2

POINT	STATION		OFFSET		COMMENT
WB301	140+71	WB	39.50'	LT	DRIVEWAY SAWCUT
WB302	141+43	WB	39.50'	LT	DRIVEWAY SAWCUT
WB313	145+15	WB	37.48'	LT	SIDEWALK SAWCUT
WB314	145+19	WB	37.50'	LT	SIDEWALK SAWCUT
A324	11+99	A	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
A325	11+69	A	45.02'	LT	BEGIN 30' RADIUS
A326	11+79	A	25.76'	LT	CENTER OF CURVE (30' RADIUS)
A327	11+99	A	18.00'	LT	END 30' RADIUS
A328	11+67	A	43.00'	RT	BEGIN 25' RADIUS
A329	11+92	A	43.00'	RT	25' RADIUS
A330	11+92	A	18.00'	RT	END 25' RADIUS



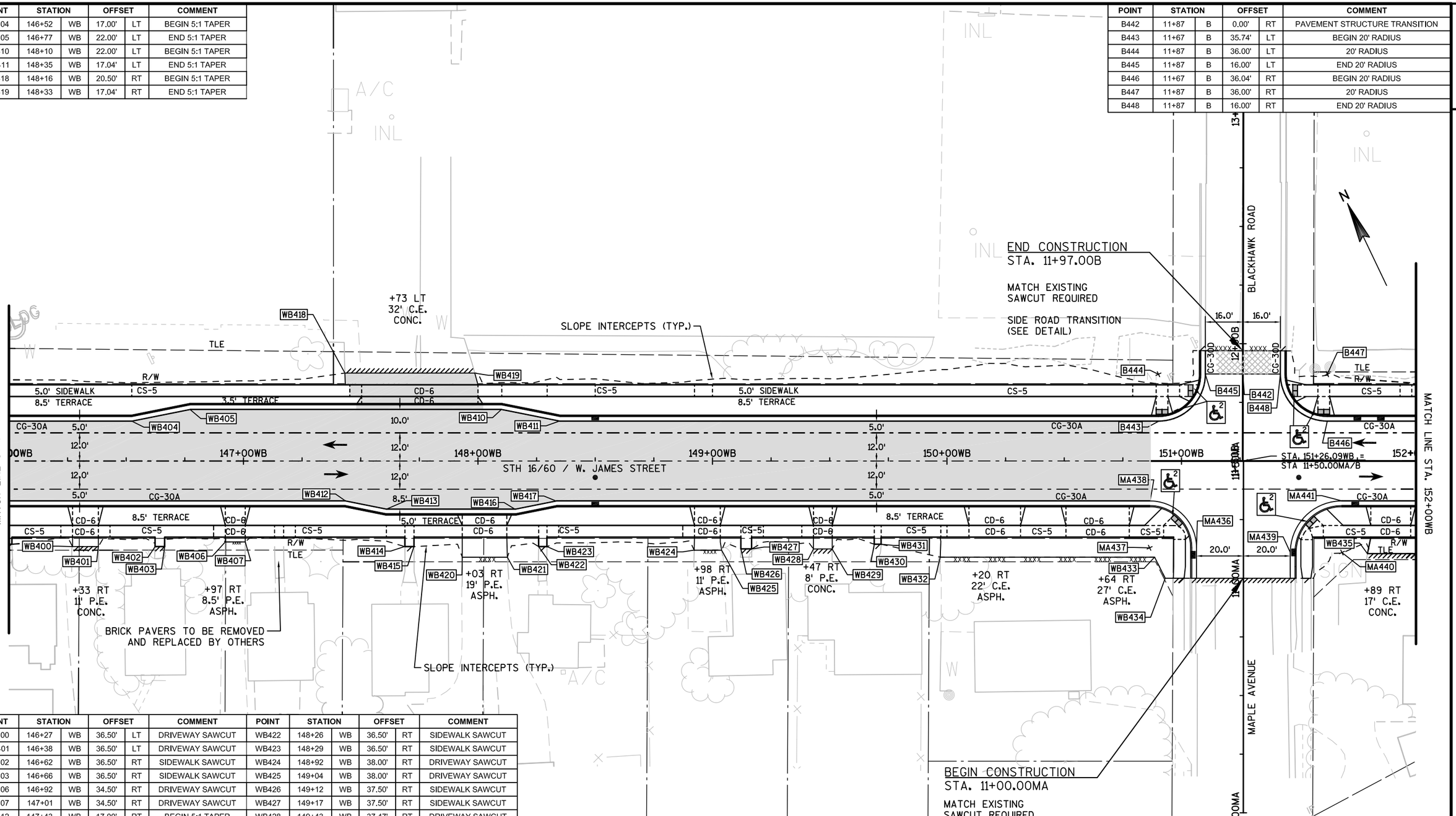
POINT	STATION		OFFSET		COMMENT
WB300	140+24	WB	16.99'	RT	END 30:1 TAPER
WB303	141+15	WB	45.15'	RT	DRIVEWAY SAWCUT
WB304	142+22	WB	38.81'	RT	DRIVEWAY SAWCUT
WB305	143+58	WB	36.85'	RT	DRIVEWAY SAWCUT
WB306	144+04	WB	37.49'	RT	DRIVEWAY SAWCUT
WB307	143+99	WB	27.50'	RT	TOP OF RAMP
WB308	144+04	WB	27.50'	RT	TOP OF RAMP
WB309	143+89	WB	33.00'	RT	BEGIN PEDESTRIAN CURB
WB310	144+23	WB	33.00'	RT	END PEDESTRIAN CURB DRIVEWAY SAWCUT
WB311	145+59	WB	36.50'	RT	DRIVEWAY SAWCUT
WB312	145+70	WB	36.50'	RT	DRIVEWAY SAWCUT
HU315	10+98	HU	14.07'	LT	P.I.
HU316	11+08	HU	14.75'	LT	P.I.
HU317	11+06	HU	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
HU318	11+10	HU	14.75'	LT	BEGIN 25' RADIUS
HU319	11+27	HU	21.59'	LT	CENTER OF CURVE (25' RADIUS)
HU320	11+35	HU	38.37'	LT	END 25' RADIUS
HU321	11+06	HU	12.00'	RT	BEGIN 25' RADIUS
HU322	11+24	HU	19.82'	RT	CENTER OF CURVE (25' RADIUS)
HU323	11+31	HU	38.38'	RT	END 25' RADIUS

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
WB404	146+52	WB	17.00'	LT	BEGIN 5:1 TAPER
WB405	146+77	WB	22.00'	LT	END 5:1 TAPER
WB410	148+10	WB	22.00'	LT	BEGIN 5:1 TAPER
WB411	148+35	WB	17.04'	LT	END 5:1 TAPER
WB418	148+16	WB	20.50'	RT	BEGIN 5:1 TAPER
WB419	148+33	WB	17.04'	RT	END 5:1 TAPER

POINT	STATION		OFFSET		COMMENT
B442	11+87	B	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
B443	11+67	B	35.74'	LT	BEGIN 20' RADIUS
B444	11+87	B	36.00'	LT	20' RADIUS
B445	11+87	B	16.00'	LT	END 20' RADIUS
B446	11+67	B	36.04'	RT	BEGIN 20' RADIUS
B447	11+87	B	36.00'	RT	20' RADIUS
B448	11+87	B	16.00'	RT	END 20' RADIUS



POINT	STATION		OFFSET		COMMENT	POINT	STATION		OFFSET		COMMENT
WB400	146+27	WB	36.50'	LT	DRIVEWAY SAWCUT	WB422	148+26	WB	36.50'	RT	SIDEWALK SAWCUT
WB401	146+38	WB	36.50'	LT	DRIVEWAY SAWCUT	WB423	148+29	WB	36.50'	RT	SIDEWALK SAWCUT
WB402	146+62	WB	36.50'	RT	SIDEWALK SAWCUT	WB424	148+92	WB	38.00'	RT	DRIVEWAY SAWCUT
WB403	146+66	WB	36.50'	RT	SIDEWALK SAWCUT	WB425	149+04	WB	38.00'	RT	DRIVEWAY SAWCUT
WB406	146+92	WB	34.50'	RT	DRIVEWAY SAWCUT	WB426	149+12	WB	37.50'	RT	SIDEWALK SAWCUT
WB407	147+01	WB	34.50'	RT	DRIVEWAY SAWCUT	WB427	149+17	WB	37.50'	RT	SIDEWALK SAWCUT
WB412	147+43	WB	17.00'	RT	BEGIN 5:1 TAPER	WB428	149+43	WB	37.47'	RT	DRIVEWAY SAWCUT
WB413	147+61	WB	20.41'	RT	END 5:1 TAPER	WB429	149+51	WB	37.46'	RT	DRIVEWAY SAWCUT
WB414	147+69	WB	36.41'	RT	SIDEWALK SAWCUT	WB430	149+69	WB	35.50'	RT	SIDEWALK SAWCUT
WB415	174+73	WB	36.40'	RT	SIDEWALK SAWCUT	WB431	149+72	WB	35.48'	RT	SIDEWALK SAWCUT
WB416	147+43	WB	37.50'	LT	DRIVEWAY SAWCUT	WB432	149+97	WB	41.00'	RT	DRIVEWAY SAWCUT
WB417	147+98	WB	37.50'	LT	DRIVEWAY SAWCUT	WB433	150+89	WB	41.00'	RT	DRIVEWAY SAWCUT
WB420	174+93	WB	41.00'	RT	DRIVEWAY SAWCUT	WB434	150+93	WB	49.98'	RT	DRIVEWAY SAWCUT
WB421	148+13	WB	40.96'	RT	DRIVEWAY SAWCUT	WB435	151+79	WB	39.50'	RT	DRIVEWAY SAWCUT

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
MA436	11+13	MA	20.00'	LT	BEGIN 20' RADIUS
MA437	11+13	MA	40.00'	LT	20' RADIUS
MA438	11+33	MA	39.79'	LT	END 20' RADIUS
MA439	11+11	MA	20.00'	RT	BEGIN 22' RADIUS
MA440	11+11	MA	42.00'	RT	22' RADIUS
MA441	11+33	MA	41.99'	RT	END 22' RADIUS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN DETAILS\021201_PD.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF XREF XREF XREF
WISDOT/CADDS SHEET 42

POINT	STATION		OFFSET		COMMENT
WB500	152+33	WB	34.00'	LT	DRIVEWAY SAWCUT
WB501	152+53	WB	34.00'	LT	DRIVEWAY SAWCUT
WB505	153+46	WB	37.50'	LT	DRIVEWAY SAWCUT
WB506	153+78	WB	37.50'	LT	DRIVEWAY SAWCUT
WB507	155+94	WB	17.00'	LT	BEGIN 350' RADIUS
WB508	155+13	WB	17.00'	LT	CENTER OF CURVE (350' RADIUS)
WB509	155+31	WB	17.00'	LT	END 350' RADIUS BEGIN 25' RADIUS
WB516	156+31	WB	38.50'	LT	DRIVEWAY SAWCUT
WB517	156+51	WB	38.50'	LT	DRIVEWAY SAWCUT
WB518	157+20	WB	39.50'	LT	SIDEWALK SAWCUT
WB519	157+25	WB	39.50'	LT	SIDEWALK SAWCUT

POINT	STATION		OFFSET		COMMENT
L529	11+86	L	10.04'	LT	END CURB AND GUTTER
L530	11+98	L	0.00'	RT	P.I. PAVEMENT STRUCTURE TRANSITION
L534	11+68	L	37.31'	RT	BEGIN 25' RADIUS
L535	11+93	L	37.54'	RT	25' RADIUS
L536	11+93	L	12.54'	RT	END 25' RADIUS
L532	11+72	L	15.92'	LT	CENTER OF CURVE (25' RADIUS)
L533	11+88	L	10.00'	LT	END 25' RADIUS

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

END CONSTRUCTION
STA. 12+35.00L

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

BEGIN CONSTRUCTION
STA. 10+82.50CH

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

WALL MODULAR BLOCK GRAVITY LRFD
(SEE DETAILS)

PLACE SAFETY FENCE DURING
CONSTRUCTION OF WALL

SLOPE INTERCEPTS (TYP.)

SLOPE INTERCEPTS (TYP.)

+43 LT
20' C.E.
ASPH.

+61 LT
32' C.E.
ASPH.

+32 RT
22' C.E.
CONC.

+41 LT
20' P.E.
B.A.D./ASPH.

+09 LT
9.5' P.E.
CONC. APRON

STH 16/60 / W. JAMES STREET

LEGION COURT

CHARLES STREET

MATCH LINE STA. 152+00WB

MATCH LINE STA. 158+00WB

STA 155+59.10WB =
STA 11+50.00L

STA 155+75.36WB =
STA 11+50.00CH

POINT	STATION		OFFSET		COMMENT
WB502	152+42	WB	39.50'	RT	DRIVEWAY SAWCUT
WB503	154+00	WB	26.50'	RT	BEGIN 5'-6.5' SIDEWALK TRANSITION BACK OF SIDEWALK
WB504	154+10	WB	25.50'	RT	END 5'-6.5' SIDEWALK TRANSITION BACK OF SIDEWALK
WB510	154+94	WB	17.00'	RT	BEGIN 316' RADIUS
WB511	155+10	WB	17.00'	RT	CENTER OF CURVE (316' RADIUS)
WB512	155+27	WB	17.00'	RT	END 316' RADIUS BEGIN 25' RADIUS
WB513	156+30	WB	17.25'	RT	BEGIN 50' RADIUS
WB514	156+33	WB	17.06'	RT	CENTER OF CURVE(50' RADIUS)
WB515	156+35	WB	17.00'	RT	END 50' RADIUS

POINT	STATION		OFFSET		COMMENT
CH524	11+07	CH	13.00'	RT	BEGIN 25' RADIUS
CH525	11+23	CH	19.34'	RT	CENTER OF CURVE (25' RADIUS)
CH526	11+32	CH	31.15'	RT	END 25' RADIUS
CH527	10+96	CH	34.29'	LT	SIDEWALK SAWCUT
CH528	11+00	CH	32.23'	LT	SIDEWALK SAWCUT
CH522	11+03	CH	40.00'	LT	25' RADIUS
CH520	11+03	CH	0.00'	RT	END 25' RADIUS PAVEMENT STRUCTURE TRANSITION

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET 54 E

POINT	STATION		OFFSET		COMMENT
NL601	11+67	NL	34.04'	LT	BEGIN 22' RADIUS
NL602	11+89	NL	33.89'	LT	22' RADIUS
NL603	11+89	NL	12.00'	LT	END 22' RADIUS
NL604	11+73	NL	33.29'	RT	BEGIN 20' RADIUS
NL605	11+93	NL	33.50'	RT	20' RADIUS
NL600	11+93	NL	0.00'	RT	END 20' RADIUS PAVEMENT STRUCTURE TRANSITION

POINT	STATION		OFFSET		COMMENT	POINT	STATION		OFFSET		COMMENT
WB619	160+65	WB	39.50'	RT	DRIVEWAY SAWCUT	WB638	162+23	WB	18.06'	LT	BEGIN 10' RADIUS
WB620	160+75	WB	39.50'	LT	DRIVEWAY SAWCUT	WB639	162+28	WB	27.00'	LT	10' RADIUS
WB621	160+85	WB	38.50'	LT	SIDEWALK SAWCUT	WB640	162+28	WB	17.00'	LT	END 10' RADIUS
WB622	160+90	WB	38.50'	LT	SIDEWALK SAWCUT	WB655	163+21	WB	17.00'	LT	BEGIN 10' RADIUS
WB629	161+24	WB	39.50'	RT	DRIVEWAY SAWCUT	WB656	163+21	WB	27.00'	LT	10' RADIUS
WB630	161+35	WB	39.50'	RT	DRIVEWAY SAWCUT	WB657	163+26	WB	18.06'	LT	END 10' RADIUS
WB631	161+52	WB	39.50'	RT	SIDEWALK SAWCUT	WB658	163+33	WB	21.94'	LT	BEGIN 10' RADIUS
WB632	161+57	WB	40.00'	LT	SIDEWALK SAWCUT	WB659	163+38	WB	13.00'	LT	10' RADIUS
WB633	162+05	WB	37.50'	LT	SIDEWALK SAWCUT	WB660	163+38	WB	23.00'	LT	END 10' RADIUS
WB634	162+08	WB	37.50'	LT	SIDEWALK SAWCUT	WB661	163+40	WB	38.50'	RT	SIDEWALK SAWCUT
WB635	162+11	WB	23.00'	LT	BEGIN 10' RADIUS	WB662	163+45	WB	38.50'	RT	SIDEWALK SAWCUT
WB636	162+11	WB	13.00'	LT	10' RADIUS	WB663	163+77	WB	36.00'	RT	DRIVEWAY SAWCUT
WB637	162+16	WB	21.94'	LT	END 10' RADIUS	WB664	163+88	WB	36.00'	LT	DRIVEWAY SAWCUT

POINT	STATION		OFFSET		COMMENT
NB673	11+67	NB	37.02'	LT	BEGIN 25' RADIUS
NB674	11+92	NB	37.01'	LT	25' RADIUS
NB675	11+92	NB	12.00'	LT	END 25' RADIUS
NB676	11+67	NB	38.50'	RT	BEGIN 25' RADIUS
NB677	11+92	NB	38.49'	RT	25' RADIUS
NB678	11+92	NB	13.49'	RT	END 25' RADIUS
NB679	11+93	NB	13.49'	RT	P.I.

END CONSTRUCTION
STA. 12+08.00NL

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

BRICK PAVERS TO BE REMOVED
AND REPLACED BY OTHERS

SLOPE INTERCEPTS (TYP.)

+70 LT
10.5' P.E.
CONC.

+30 LT
11.5' P.E.
CONC.

END CONSTRUCTION
STA. 12+08.00NB

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

+83 LT
12' P.E.
ASPH.

BEGIN CONSTRUCTION
STA. 10+80.00SL

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

SLOPE INTERCEPTS (TYP.)

+90 RT
9.5' P.E.
ASPH.

BEGIN CONSTRUCTION
STA. 10+82.00SB

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

STA 159+13.18WB =
STA 11+50.00NL/SL

STA 162+74.99WB =
STA 11+50.00NB/SB

STH 16/60 / W. JAMES STREET

N. LEWIS STREET

S. LEWIS STREET

N. BIRDSEY STREET

S. BIRDSEY STREET

MATCH LINE STA. 158+00WB

MATCH LINE STA. 164+00WB

*NOTES: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
SL607	10+88	SL	12.00'	LT	P.I.
SL608	11+07	SL	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
SL609	11+13	SL	15.00'	LT	BEGIN 20' RADIUS
SL610	11+13	SL	35.00'	LT	20' RADIUS
SL611	11+33	SL	34.98'	LT	END 20' RADIUS
SL612	11+07	SL	12.00'	RT	BEGIN 20' RADIUS
SL613	11+07	SL	32.00'	RT	20' RADIUS
SL614	11+27	SL	33.30'	RT	END 20' RADIUS

POINT	STATION		OFFSET		COMMENT	POINT	STATION		OFFSET		COMMENT
WB615	159+95	WB	39.48'	LT	SIDEWALK SAWCUT	WB644	162+23	WB	18.06'	RT	BEGIN 10' RADIUS
WB616	160+00	WB	39.39'	LT	SIDEWALK SAWCUT	WB645	162+28	WB	27.00'	RT	10' RADIUS
WB623	160+55	WB	38.48'	RT	SIDEWALK SAWCUT	WB646	162+28	WB	17.00'	RT	END 10' RADIUS
WB624	160+59	WB	38.48'	RT	SIDEWALK SAWCUT	WB647	163+21	WB	17.00'	RT	BEGIN 10' RADIUS
WB625	160+86	WB	39.49'	RT	DRIVEWAY SAWCUT	WB648	163+21	WB	27.00'	RT	10' RADIUS
WB626	160+95	WB	39.49'	LT	DRIVEWAY SAWCUT	WB649	163+26	WB	18.06'	RT	END 10' RADIUS
WB627	161+40	WB	43.50'	LT	SIDEWALK SAWCUT	WB650	163+33	WB	21.94'	RT	BEGIN 10' RADIUS
WB628	161+44	WB	43.67'	LT	SIDEWALK SAWCUT	WB651	163+38	WB	13.00'	RT	10' RADIUS
WB641	162+11	WB	23.00'	RT	BEGIN 10' RADIUS	WB652	163+38	WB	23.00'	RT	END 10' RADIUS
WB642	162+11	WB	13.00'	RT	10' RADIUS	WB653	163+44	WB	37.50'	LT	SIDEWALK SAWCUT
WB643	162+16	WB	21.94'	RT	END 10' RADIUS	WB654	163+47	WB	37.77'	LT	SIDEWALK SAWCUT

POINT	STATION		OFFSET		COMMENT
SB665	11+07	SB	14.50'	LT	P.I.
SB666	11+08	SB	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
SB667	11+08	SB	14.50'	LT	BEGIN 25' RADIUS
SB668	11+08	SB	39.50'	LT	25' RADIUS
SB669	11+33	SB	39.46'	LT	END 25' RADIUS
SB670	11+08	SB	12.00'	RT	BEGIN 25' RADIUS
SB671	11+08	SB	37.00'	RT	25' RADIUS
SB672	11+33	SB	37.04'	RT	END 25' RADIUS

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POINT	STATION		OFFSET		COMMENT
WB700	164+29	WB	39.50'	LT	SIDEWALK SAWCUT
WB701	164+33	WB	39.50'	LT	SIDEWALK SAWCUT
WB706	164+96	WB	38.50'	LT	SIDEWALK SAWCUT
WB707	164+99	WB	38.50'	LT	SIDEWALK SAWCUT
WB708	165+48	WB	38.50'	LT	SIDEWALK SAWCUT
WB709	165+52	WB	38.50'	LT	SIDEWALK SAWCUT
WB710	166+08	WB	39.50'	LT	SIDEWALK SAWCUT
WB711	166+13	WB	39.50'	LT	SIDEWALK SAWCUT
WB724	166+10	WB	23.00'	LT	BEGIN 10' RADIUS
WB725	166+10	WB	13.00'	LT	10' RADIUS
WB726	166+14	WB	21.94'	LT	END 10' RADIUS
WB727	166+22	WB	18.06'	LT	BEGIN 10' RADIUS
WB728	166+27	WB	27.00'	LT	10' RADIUS
WB729	166+27	WB	17.00'	LT	END 10' RADIUS

POINT	STATION		OFFSET		COMMENT
NM783	11+67	NM	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
NM784	11+67	NM	37.08'	LT	BEGIN 25' RADIUS
NM785	11+92	NM	37.00'	LT	25' RADIUS
NM786	11+92	NM	12.00'	LT	END 25' RADIUS
NM787	11+67	NM	38.42'	RT	BEGIN 25' RADIUS
NM788	11+92	NM	38.50'	RT	25' RADIUS
NM789	11+92	NM	13.50'	RT	END 25' RADIUS
NM790	11+93	NM	13.50'	RT	P.I.
NM791	12+08	NM	12.00'	RT	P.I.

POINT	STATION		OFFSET		COMMENT	POINT	STATION		OFFSET		COMMENT
WB730	167+19	WB	17.00'	LT	BEGIN 10' RADIUS	WB756	168+30	WB	39.50'	LT	DRIVEWAY SAWCUT
WB731	167+19	WB	27.00'	LT	10' RADIUS	WB757	168+41	WB	39.76'	LT	DRIVEWAY SAWCUT
WB732	167+24	WB	18.06'	LT	END 10' RADIUS	WB760	168+50	WB	39.61'	LT	SIDEWALK SAWCUT
WB733	167+32	WB	21.94'	LT	BEGIN 10' RADIUS	WB761	168+55	WB	39.50'	LT	SIDEWALK SAWCUT
WB734	167+36	WB	13.00'	LT	10' RADIUS	WB764	168+79	WB	36.93'	LT	SIDEWALK SAWCUT
WB735	167+36	WB	23.00'	LT	END 10' RADIUS	WB765	168+81	WB	37.00'	LT	SIDEWALK SAWCUT
WB736	167+28	WB	38.50'	LT	SIDEWALK SAWCUT	WB768	169+26	WB	39.50'	LT	SIDEWALK SAWCUT
WB737	167+32	WB	38.50'	LT	SIDEWALK SAWCUT	WB769	169+31	WB	39.50'	LT	SIDEWALK SAWCUT
WB750	167+88	WB	39.16'	LT	SIDEWALK SAWCUT	WB770	169+41	WB	39.66'	LT	DRIVEWAY SAWCUT
WB751	167+93	WB	39.30'	LT	SIDEWALK SAWCUT	WB771	169+50	WB	39.50'	LT	DRIVEWAY SAWCUT
WB752	168+14	WB	36.50'	LT	DRIVEWAY SAWCUT	WB772	169+66	WB	38.50'	LT	SIDEWALK SAWCUT
WB753	168+23	WB	36.54'	LT	DRIVEWAY SAWCUT	WB773	169+70	WB	38.50'	LT	SIDEWALK SAWCUT

POINT	STATION		OFFSET		COMMENT
WB702	164+13	WB	44.14'	RT	DRIVEWAY SAWCUT
WB703	164+38	WB	44.14'	RT	DRIVEWAY SAWCUT
WB704	164+93	WB	42.00'	RT	SIDEWALK SAWCUT
WB705	165+03	WB	42.00'	RT	SIDEWALK SAWCUT
WB712	164+61	WB	38.48'	RT	DRIVEWAY SAWCUT
WB713	164+65	WB	38.57'	RT	DRIVEWAY SAWCUT
WB714	165+19	WB	42.48'	RT	SIDEWALK SAWCUT
WB715	165+24	WB	42.48'	RT	SIDEWALK SAWCUT
WB716	165+94	WB	43.47'	RT	SIDEWALK SAWCUT
WB717	165+98	WB	43.47'	RT	SIDEWALK SAWCUT
WB718	166+10	WB	23.00'	RT	BEGIN 10' RADIUS
WB719	166+10	WB	13.00'	RT	10' RADIUS
WB720	166+14	WB	21.94'	RT	END 10' RADIUS
WB721	166+22	WB	18.06'	RT	BEGIN 10' RADIUS
WB722	166+27	WB	27.00'	RT	10' RADIUS
WB723	166+27	WB	17.00'	RT	END 10' RADIUS

POINT	STATION		OFFSET		COMMENT
SM776	11+08	SM	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
SM777	11+08	SM	12.00'	RT	BEGIN 25' RADIUS
SM778	11+08	SM	37.00'	RT	25' RADIUS
SM779	11+33	SM	37.15'	RT	END 25' RADIUS
SM780	11+33	SM	38.35'	LT	BEGIN 25' RADIUS
SM781	11+08	SM	38.50'	LT	25' RADIUS
SM782	11+08	SM	13.50'	LT	END 25' RADIUS

POINT	STATION		OFFSET		COMMENT
WB738	167+19	WB	17.00'	LT	BEGIN 10' RADIUS
WB739	167+19	WB	27.00'	RT	10' RADIUS
WB740	167+24	WB	18.06'	RT	END 10' RADIUS
WB741	167+32	WB	21.94'	RT	BEGIN 10' RADIUS
WB742	167+36	WB	13.00'	RT	10' RADIUS
WB743	167+36	WB	23.00'	RT	END 10' RADIUS
WB744	167+36	WB	38.48'	RT	SIDEWALK SAWCUT
WB745	167+40	WB	38.39'	RT	SIDEWALK SAWCUT
WB746	167+44	WB	38.48'	RT	SIDEWALK SAWCUT
WB747	167+48	WB	38.48'	RT	SIDEWALK SAWCUT
WB748	167+68	WB	39.50'	RT	DRIVEWAY SAWCUT
WB749	167+78	WB	39.50'	RT	DRIVEWAY SAWCUT
WB754	168+14	WB	39.48'	RT	SIDEWALK SAWCUT
WB755	168+18	WB	39.48'	RT	SIDEWALK SAWCUT
WB758	168+35	WB	39.50'	RT	DRIVEWAY SAWCUT
WB759	168+45	WB	39.50'	RT	DRIVEWAY SAWCUT
WB762	168+56	WB	36.48'	RT	DRIVEWAY SAWCUT
WB763	168+68	WB	36.52'	RT	DRIVEWAY SAWCUT
WB774	169+75	WB	38.48'	RT	SIDEWALK SAWCUT
WB775	169+80	WB	39.48'	RT	SIDEWALK SAWCUT

END CONSTRUCTION
STA. 12+23.00NM

MATCH EXISTING SAWCUT REQUIRED

SIDE ROAD TRANSITION (SEE DETAIL)

BEGIN CONSTRUCTION
STA. 10+92.00SM

MATCH EXISTING SAWCUT REQUIRED

SIDE ROAD TRANSITION (SEE DETAIL)

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

SLOPE INTERCEPTS (TYP.)
BRICK PAVERS TO BE REMOVED AND REPLACED BY OTHERS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16

SHEET 56 E

POINT	STATION		OFFSET		COMMENT
NS807	11+93	NS	0.00'	RT	END 20' RADIUS PAVEMENT STRUCTURE TRANSITION
NS808	11+73	NS	31.99'	LT	BEGIN 20' RADIUS
NS809	11+93	NS	32.00'	LT	20' RADIUS
NS810	11+93	NS	12.00'	LT	END 20' RADIUS
NS811	11+73	NS	33.16'	RT	BEGIN 20' RADIUS
NS812	11+93	NS	33.50'	RT	20' RADIUS

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
WB814	171+16	WB	38.50'	LT	SIDEWALK SAWCUT
WB815	171+19	WB	38.50'	LT	SIDEWALK SAWCUT
WB820	171+55	WB	39.50'	LT	DRIVEWAY SAWCUT
WB821	171+77	WB	39.50'	LT	DRIVEWAY SAWCUT
WB822	172+58	WB	39.31'	LT	SIDEWALK SAWCUT
WB823	172+63	WB	39.57'	LT	SIDEWALK SAWCUT
WB828	172+73	WB	45.50'	LT	SIDEWALK SAWCUT
WB829	172+80	WB	45.50'	LT	SIDEWALK SAWCUT
WB830	173+49	WB	23.00'	LT	BEGIN 10' RADIUS
WB831	173+49	WB	13.00'	LT	10' RADIUS
WB832	173+53	WB	21.94'	LT	END 10' RADIUS
WB836	173+61	WB	18.06'	LT	BEGIN 10' RADIUS
WB837	173+65	WB	27.00'	LT	10' RADIUS
WB838	173+65	WB	17.00'	LT	END 10' RADIUS
WB842	174+15	WB	49.10'	LT	BEGIN 12' RADIUS
WB843	174+27	WB	49.10'	LT	12' RADIUS
WB844	174+39	WB	49.10'	LT	END 12' RADIUS
WB851	174+88	WB	17.00'	LT	BEGIN 10' RADIUS
WB852	174+88	WB	27.00'	LT	10' RADIUS
WB853	174+92	WB	18.06'	LT	END 10' RADIUS
WB857	174+98	WB	20.94'	LT	BEGIN 10' RADIUS
WB858	175+02	WB	12.00'	LT	10' RADIUS
WB859	175+02	WB	22.00'	LT	END 10' RADIUS

END CONSTRUCTION
STA. 12+08.00NS
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

END CONSTRUCTION
STA. 12+43.70DSB
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

END CONSTRUCTION
STA. 12+27.76DNB
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

+63 LT
17.5' C.E.
ASPH.

SLOPE INTERCEPTS (TYP.)

STH 16/60 / W. JAMES STREET

N. SPRING STREET

N. DICKASON BOULEVARD

MATCH LINE STA. 170+00WB

MATCH LINE STA. 176+00WB

POINT	STATION		OFFSET		COMMENT
SS800	11+07	SS	13.50'	LT	BEGIN 20' RADIUS
SS802	11+07	SS	33.46'	LT	20' RADIUS
SS803	11+27	SS	35.24'	LT	END 20' RADIUS
SS804	11+07	SS	12.00'	RT	BEGIN 20' RADIUS
SS805	11+07	SS	32.00'	RT	20' RADIUS
SS806	11+27	SS	34.09'	RT	END 20' RADIUS

BEGIN CONSTRUCTION
STA. 10+91.50SS
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

S. SPRING STREET

POINT	STATION		OFFSET		COMMENT
WB816	170+99	WB	39.48'	RT	SIDEWALK SAWCUT
WB817	171+02	WB	38.48'	RT	SIDEWALK SAWCUT
WB818	171+18	WB	39.48'	RT	SIDEWALK SAWCUT
WB819	171+23	WB	39.48'	RT	SIDEWALK SAWCUT
WB824	171+90	WB	40.50'	RT	DRIVEWAY SAWCUT
WB825	172+14	WB	40.50'	RT	DRIVEWAY SAWCUT
WB833	173+49	WB	23.00'	RT	BEGIN 10' RADIUS
WB834	173+49	WB	13.00'	RT	10' RADIUS
WB835	173+53	WB	21.94'	RT	END 10' RADIUS
WB839	173+61	WB	18.06'	RT	BEGIN 10' RADIUS
WB840	173+65	WB	27.00'	RT	10' RADIUS
WB841	173+65	WB	17.00'	RT	END 10' RADIUS
WB845	174+14	WB	49.17'	RT	BEGIN 12.50' RADIUS
WB846	174+27	WB	49.49'	RT	12.50' RADIUS
WB847	174+39	WB	49.53'	RT	END 12.50' RADIUS
WB848	174+88	WB	17.00'	RT	BEGIN 10' RADIUS
WB849	174+88	WB	27.00'	RT	10' RADIUS
WB850	174+92	WB	18.06'	RT	END 10' RADIUS
WB854	174+98	WB	20.94'	RT	BEGIN 10' RADIUS
WB855	175+02	WB	12.00'	RT	10' RADIUS
WB856	175+02	WB	22.00'	RT	END 10' RADIUS

STAMPED CONCRETE TO BE REPLACED BY OTHERS

BEGIN CONSTRUCTION
STA. 10+81.00SBD
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

S. DICKASON BOULEVARD (SB)

S. DICKASON BOULEVARD (NB)

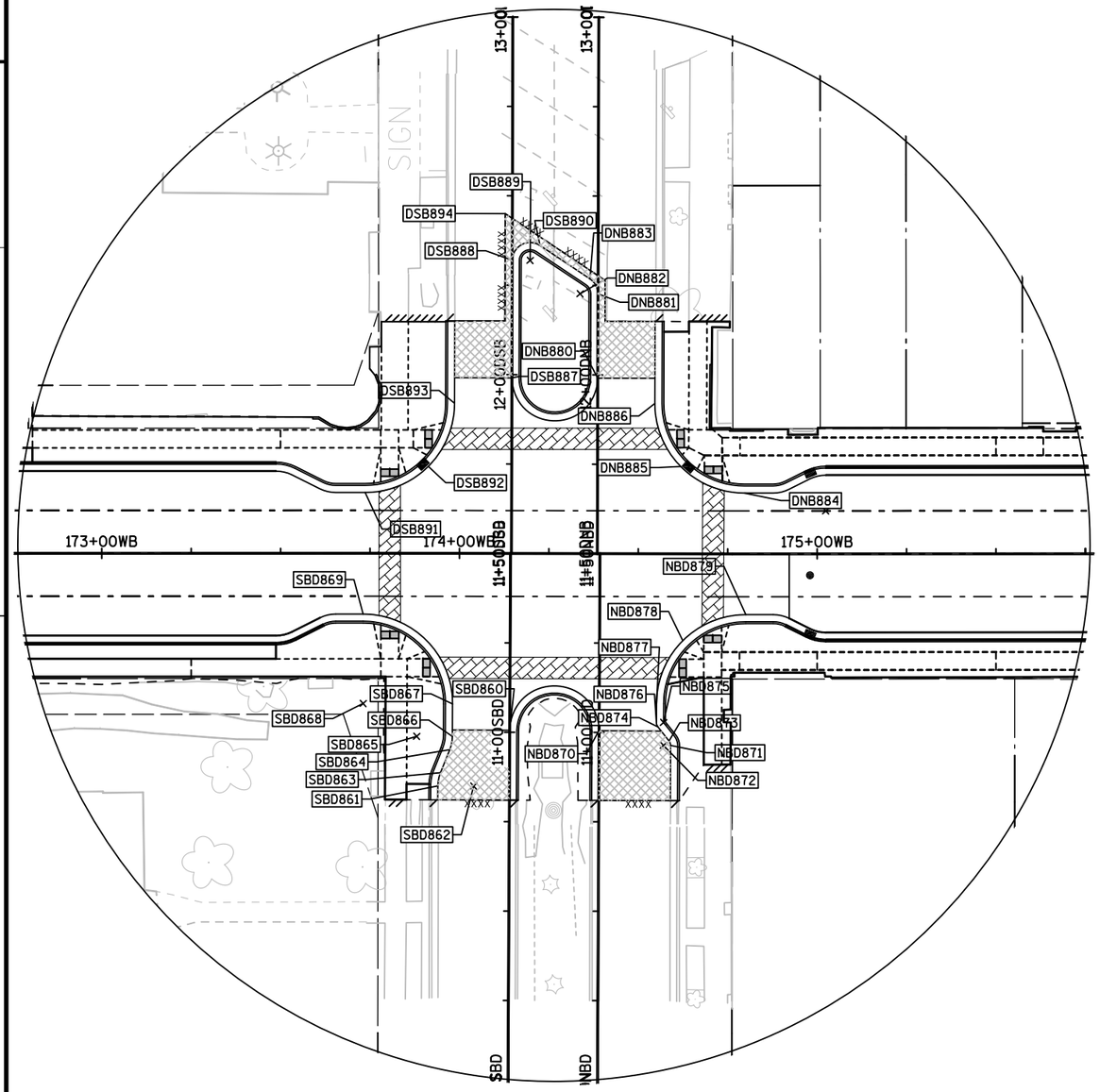
MAINTENANCE ACCESS
(SEE DETAIL)

MAINTAIN 3-FOOT BOUNDARY AROUND THE FARMERS AND MERCHANTS BANK BUILDING WITH TEMPORARY PROTECTION PLACED IN FRONT OF THE BUILDING WALLS DURING CONCRETE SAWING AND SIDEWALK REMOVAL

BEGIN CONSTRUCTION
STA. 10+81.00NBD

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)



POINT	STATION		OFFSET		COMMENT
SBD860	11+01	SBD	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
SBD861	10+85	SBD	20.00'	LT	BEGIN 10' RADIUS
SBD862	10+85	SBD	10.00'	LT	10' RADIUS
SBD863	10+89	SBD	19.28'	LT	END 10' RADIUS
SBD864	10+94	SBD	16.72'	LT	BEGIN 10' RADIUS
SBD865	10+99	SBD	26.00'	LT	10' RADIUS
SBD866	10+99	SBD	16.00'	LT	END 10' RADIUS
SBD867	11+08	SBD	16.00'	LT	BEGIN 25' RADIUS
SBD868	11+08	SBD	41.00'	LT	25' RADIUS
SBD869	11+33	SBD	41.13'	LT	END 25' RADIUS
NBD870	11+00	NBD	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
NBD871	10+96	NBD	20.00'	RT	BEGIN 2' RADIUS
NBD872	10+96	NBD	18.00'	RT	2' RADIUS
NBD873	10+98	NBD	19.56'	RT	END 2' RADIUS
NBD874	11+02	NBD	16.44'	RT	BEGIN 2' RADIUS
NBD875	11+03	NBD	18.00'	RT	2' RADIUS
NBD876	11+03	NBD	16.00'	RT	END 2' RADIUS
NBD877	11+08	NBD	16.00'	RT	BEGIN 25' RADIUS
NBD878	11+26	NBD	23.28'	RT	CENTER OF CURVE (25' RADIUS)
NBD879	11+33	NBD	40.87'	RT	END 25' RADIUS
DNB880	11+99	DNB	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
DNB881	12+23	DNB	0.00'	LT	BEGIN 5' RADIUS
DNB882	12+23	DNB	5.00'	LT	5' RADIUS
DNB883	12+27	DNB	2.24'	LT	END 5' RADIUS
DNB884	11+67	DNB	41.08'	RT	BEGIN 25' RADIUS
DNB885	11+74	DNB	23.26'	RT	CENTER OF CURVE (25' RADIUS)
DNB886	11+92	DNB	16.00'	RT	END 25' RADIUS
DSB887	11+99	DSB	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
DSB888	12+32	DSB	0.00'	LT	BEGIN 5' RADIUS
DSB889	12+32	DSB	5.00'	RT	5' RADIUS
DSB890	12+36	DSB	7.76'	RT	END 5' RADIUS
DSB891	11+67	DSB	40.92'	LT	BEGIN 25' RADIUS
DSB892	11+74	DSB	23.29'	LT	CENTER OF CURVE (25' RADIUS)
DSB893	11+92	DSB	16.00'	LT	END 25' RADIUS
DSB894	12+45	DSB	2.00'	LT	SAWCUT LOCATION

POINT	STATION		OFFSET		COMMENT
N907	12+12	N	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
N908	11+72	N	46.99'	LT	BEGIN 25' RADIUS
N909	11+79	N	29.32'	LT	CENTER OF CURVE (25' RADIUS)
N910	11+97	N	22.00'	LT	END 25' RADIUS
N911	11+72	N	44.01'	RT	BEGIN 22' RADIUS
N912	11+78	N	28.42'	RT	CENTER OF CURVE (22' RADIUS)
N913	11+94	N	22.00'	RT	END 22' RADIUS

POINT	STATION		OFFSET		COMMENT
WB914	179+45	WB	24.00'	LT	BEGIN 6" CURB HEIGHT
WB915	179+50	WB	24.00'	LT	BEGIN 8" CURB HEIGHT
WB916	179+88	WB	24.00'	LT	END 8" CURB HEIGHT
WB917	179+93	WB	24.00'	LT	END 6" CURB HEIGHT
WB918	180+19	WB	38.00'	LT	DRIVEWAY SAWCUT
WB919	180+30	WB	38.06'	LT	DRIVEWAY SAWCUT
WB920	181+04	WB	35.86'	LT	DRIVEWAY SAWCUT
WB921	181+36	WB	35.87'	LT	DRIVEWAY SAWCUT

POINT	STATION		OFFSET		COMMENT
NW936	11+93	NW	31.01'	LT	DRIVEWAY SAWCUT
NW937	12+12	NW	31.11'	LT	DRIVEWAY SAWCUT
NW938	11+98	NW	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
NW939	11+72	NW	31.63'	LT	BEGIN 20' RADIUS
NW940	11+92	NW	33.00'	LT	20' RADIUS
NW941	11+92	NW	13.00'	LT	END 20' RADIUS
NW942	11+93	NW	13.00'	RT	END 20' RADIUS

END CONSTRUCTION
STA. 12+35.00N
MATCH EXISTING SAWCUT REQUIRED
SIDE ROAD TRANSITION (SEE DETAIL)

END CONSTRUCTION
STA. 12+16.50NW
MATCH EXISTING SAWCUT REQUIRED
SIDE ROAD TRANSITION (SEE DETAIL)

BEGIN CONSTRUCTION
STA. 10+75.00S
MATCH EXISTING SAWCUT REQUIRED
SIDE ROAD TRANSITION (SEE DETAIL)

BEGIN CONSTRUCTION
STA. 10+75.50SW
MATCH EXISTING SAWCUT REQUIRED
SIDE ROAD TRANSITION (SEE DETAIL)

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
S900	10+93	S	0.00'	LT	PAVEMENT STRUCTURE TRANSITION
S901	11+04	S	22.04'	LT	BEGIN 25' RADIUS
S902	11+21	S	29.34'	LT	CENTER OF CURVE (25' RADIUS)
S903	11+28	S	47.04'	LT	END 25' RADIUS
S904	11+04	S	22.04'	RT	BEGIN 25' RADIUS
S905	11+21	S	29.31'	RT	CENTER OF CURVE (25' RADIUS)
S906	11+28	S	46.96'	RT	END 25' RADIUS

POINT	STATION		OFFSET		COMMENT
WB922	179+45	WB	24.00'	RT	BEGIN 6" CURB HEIGHT
WB923	179+50	WB	24.00'	RT	BEGIN 5" CURB HEIGHT
WB924	179+65	WB	24.00'	RT	END 5" CURB HEIGHT
WB925	179+70	WB	24.00'	RT	END 6" CURB HEIGHT
WB926	180+05	WB	24.00'	RT	BEGIN 6" CURB HEIGHT
WB927	180+10	WB	24.00'	RT	BEGIN 5" CURB HEIGHT
WB928	180+25	WB	24.00'	RT	END 5" CURB HEIGHT
WB929	180+30	WB	24.00'	RT	END 6" CURB HEIGHT

POINT	STATION		OFFSET		COMMENT
SW930	10+88	SW	12.00'	LT	P.I.
SW931	11+07	SW	12.00'	LT	PAVEMENT STRUCTURE TRANSITION BEGIN 20' RADIUS
SW932	11+21	SW	17.85'	RT	CENTER OF CURVE (20' RADIUS)
SW933	11+08	SW	14.00'	LT	BEGIN 20' RADIUS
SW934	11+22	SW	19.87'	LT	CENTER OF CURVE (20' RADIUS)
SW935	11+28	SW	34.04'	LT	END 20' RADIUS

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POINT	STATION		OFFSET		COMMENT
NW1000	12+17	NW	36.99'	RT	DRIVEWAY SAWCUT
NW1001	11+73	NW	34.04'	RT	BEGIN 20' RADIUS
NW1002	11+93	NW	33.00'	RT	20' RADIUS
WB1005	182+59	WB	44.00'	LT	DRIVEWAY SAWCUT
WB1006	182+58	WB	37.51'	LT	DRIVEWAY SAWCUT
WB1007	183+55	WB	43.99'	LT	DRIVEWAY SAWCUT
WB1016	184+14	WB	34.87'	LT	DRIVEWAY SAWCUT
WB1017	184+57	WB	34.86'	LT	DRIVEWAY SAWCUT
WB1018	185+10	WB	44.79'	LT	DRIVEWAY SAWCUT
WB1019	186+60	WB	42.58'	LT	DRIVEWAY SAWCUT
WB1020	186+69	WB	39.50'	LT	DRIVEWAY SAWCUT
WB1021	186+82	WB	39.50'	LT	DRIVEWAY SAWCUT
WB1022	187+35	WB	38.50'	LT	SIDEWALK SAWCUT
WB1023	187+39	WB	38.50'	LT	SIDEWALK SAWCUT
WB1024	187+57	WB	39.54'	LT	SIDEWALK SAWCUT
WB1025	187+61	WB	39.57'	LT	SIDEWALK SAWCUT
U1043	11+73	U	22.82'	LT	BEGIN 14' RADIUS
U1044	11+87	U	23.00'	LT	14' RADIUS
U1045	11+85	U	9.12'	LT	END 14' RADIUS END CURB AND GUTTER

NOTE:
COMPACTION NEEDED AROUND STRUCTURE APPROACH TO ADDRESS SETTLING

SEE CONCRETE PAVEMENT OVER BOX CULVERT DETAIL

C-11-40
EXISTING TO REMAIN
RAILING TO REMAIN ON NORTH SIDE & SOUTH SIDE

+03 NM
26.5' C.E.
ASPH.

+97 LT
75' C.E.
CONC./ASPH./B.A.D.

+48 LT
15' C.E.
B.A.D.

+35 LT
43' C.E.
CONC.

+45 LT
61.5' C.E.
B.A.D./CONC.

+13 LT
30' C.E.
ASPH.

+75 LT
13' P.E.
CONC.

SLOPE INTERCEPTS (TYP.)

UDEY STREET

MATCH LINE STA. 182+00WB

MATCH LINE STA. 188+00WB

STH 16/60 / E. JAMES STREET

STA 185+55.01WB =
STA 11+50.00W

CG-30A

CG-30A

5.0' SIDEWALK
4.5' TERRACE

4.5' TERRACE
5.0' SIDEWALK

+05 RT
14.5' P.E.
B.A.D.

+07 RT
24' P.E.
CONC.

+43 RT
11' C.E.
CONC.

SLOPE INTERCEPTS (TYP.)

2ND WARD CREEK

WATERLOO STREET

BEGIN CONSTRUCTION
STA. 10+88.00W

MATCH EXISTING SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

POINT	STATION		OFFSET		COMMENT
SW1003	11+07	SW	32.00'	RT	20' RADIUS
SW1004	11+27	SW	33.58'	RT	END 20' RADIUS
WB1008	183+75	WB	37.48'	RT	SIDEWALK SAWCUT
WB1009	183+81	WB	37.41'	RT	SIDEWALK SAWCUT
WB1010	183+66	WB	23.00'	RT	P.I.
WB1011	183+90	WB	17.00'	RT	P.I.
WB1012	184+37	WB	34.50'	RT	BEGIN 5:1 SIDEWALK TAPER
WB1013	184+62	WB	29.92'	RT	END 5:1 SIDEWALK TAPER
WB1014	184+84	WB	29.72'	RT	BEGIN 5:1 SIDEWALK TAPER
WB1015	185+09	WB	34.50'	RT	END 5:1 SIDEWALK TAPER
WB1026	186+28	WB	38.43'	RT	SIDEWALK SAWCUT
WB1027	186+30	WB	35.74'	RT	SIDEWALK SAWCUT
WB1028	186+84	WB	44.50'	RT	DRIVEWAY SAWCUT
WB1029	187+21	WB	44.54'	RT	DRIVEWAY SAWCUT
WB1030	187+36	WB	44.50'	RT	DRIVEWAY SAWCUT
WB1031	187+49	WB	44.46'	RT	DRIVEWAY SAWCUT
WB1032	184+25	WB	35.96'	RT	SIDEWALK SAWCUT
WB1033	184+31	WB	35.96'	RT	SIDEWALK SAWCUT
WB1034	185+04	WB	39.56'	RT	SIDEWALK SAWCUT
WB1035	185+07	WB	38.32'	RT	SIDEWALK SAWCUT

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
W1036	10+98	W	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
W1037	11+09	W	13.00'	RT	BEGIN 40' RADIUS
W1038	11+32	W	20.31'	RT	CENTER OF CURVE (40' RADIUS)
W1039	11+46	W	39.42'	RT	END 40' RADIUS
W1040	11+98	W	13.00'	LT	BEGIN 16' RADIUS
W1041	10+98	W	29.00'	LT	16' RADIUS
W1042	11+13	W	34.43'	LT	END 16' RADIUS

POINT	STATION		OFFSET		COMMENT
U1100	11+91	U	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
U1101	11+73	U	29.23'	RT	BEGIN 18' RADIUS
U1102	11+91	U	29.00'	RT	18' RADIUS
U1103	11+85	U	12.10'	RT	END 18' RADIUS END CURB AND GUTTER

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

END CONSTRUCTION
STA. 12+08.25U
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

SLOPE INTERCEPTS (TYP.)

BRICK PAVERS TO BE REMOVED AND REPLACED BY OTHERS

BEGIN CONSTRUCTION
STA. 10+45.25MS
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

SLOPE INTERCEPTS (TYP.)

MATCH LINE STA. 188+00WB

MATCH LINE STA. 192+50WB

STH 16/60 / E. JAMES STREET

UDET STREET

MANNING STREET

+87 LT 12' P.E. ASPH.

+69 LT 11.5' P.E. CONC.

+14 LT 19' P.E. B.A.D.

+67 LT 9' P.E. CONC.

+54 LT 24' P.E. B.A.D.

+45 RT 19' P.E. ASPH.

+92 LT 24' P.E. CONC. APRON

+10 RT 10' P.E. ASPH.

+79 RT 10' P.E. ASPH.

POINT	STATION		OFFSET		COMMENT
WB1104	188+45	WB	36.45'	LT	SIDEWALK SAWCUT
WB1110	188+82	WB	54.50'	LT	DRIVEWAY SAWCUT
WB1111	188+93	WB	54.50'	LT	DRIVEWAY SAWCUT
WB1112	189+10	WB	37.11'	LT	SIDEWALK SAWCUT
WB1113	189+15	WB	37.35'	LT	SIDEWALK SAWCUT
WB1120	189+64	WB	49.23'	LT	DRIVEWAY SAWCUT
WB1121	189+75	WB	49.50'	LT	DRIVEWAY SAWCUT
WB1122	189+89	WB	40.51'	LT	SIDEWALK SAWCUT
WB1123	189+95	WB	40.52'	LT	SIDEWALK SAWCUT
WB1124	189+03	WB	23.00'	LT	P.I./BEGIN 4021.50' RADIUS
WB1125	190+59	WB	21.50'	LT	CENTER OF CURVE (4021.50' RADIUS)
WB1126	191+37	WB	20.00'	LT	END 4021.50' RADIUS BEGIN 178' RADIUS
WB1127	192+19	WB	20.00'	LT	CENTER OF CURVE (178' RADIUS)
WB1133	190+06	WB	41.07'	LT	DRIVEWAY SAWCUT
WB1134	190+24	WB	41.22'	LT	DRIVEWAY SAWCUT
WB1135	190+48	WB	37.48'	LT	SIDEWALK SAWCUT
WB1136	190+57	WB	37.62'	LT	SIDEWALK SAWCUT
WB1137	190+62	WB	36.31'	LT	DRIVEWAY SAWCUT
WB1138	190+71	WB	36.69'	LT	DRIVEWAY SAWCUT
WB1143	191+11	WB	37.60'	LT	SIDEWALK SAWCUT
WB1144	191+19	WB	37.86'	LT	SIDEWALK SAWCUT
WB1145	190+91	WB	35.64'	LT	SIDEWALK SAWCUT
WB1146	190+96	WB	34.73'	LT	SIDEWALK SAWCUT
WB1147	192+17	WB	31.94'	LT	SIDEWALK SAWCUT
WB1148	192+20	WB	31.42'	LT	SIDEWALK SAWCUT
WB1149	191+40	WB	42.60'	LT	DRIVEWAY SAWCUT
WB1150	191+53	WB	41.03'	LT	DRIVEWAY SAWCUT
WB1152	192+05	WB	24.50'	LT	SIDEWALK TRANSITION
WB1153	192+10	WB	28.50'	LT	SIDEWALK TRANSITION

POINT	STATION		OFFSET		COMMENT
WB1106	188+32	WB	44.50'	RT	DRIVEWAY SAWCUT
WB1107	188+54	WB	44.50'	RT	DRIVEWAY SAWCUT
WB1108	188+00	WB	37.70'	RT	SIDEWALK SAWCUT
WB1109	188+04	WB	37.70'	RT	SIDEWALK SAWCUT
WB1114	188+91	WB	38.50'	RT	SIDEWALK SAWCUT
WB1115	188+95	WB	38.50'	RT	SIDEWALK SAWCUT
WB1116	189+40	WB	35.00'	RT	SIDEWALK SAWCUT
WB1117	189+42	WB	35.00'	RT	SIDEWALK SAWCUT
WB1118	189+61	WB	35.38'	RT	SIDEWALK SAWCUT
WB1119	189+64	WB	35.61'	RT	SIDEWALK SAWCUT
WB1128	189+84	WB	38.70'	RT	SIDEWALK SAWCUT
WB1129	189+86	WB	38.49'	RT	SIDEWALK SAWCUT
WB1130	189+82	WB	23.00'	RT	LANE TRANSITION FROM 11' TO 8.5'
WB1131	190+06	WB	38.43'	RT	SIDEWALK SAWCUT
WB1132	190+10	WB	38.40'	RT	SIDEWALK SAWCUT
WB1139	190+59	WB	37.95'	RT	SIDEWALK SAWCUT
WB1140	190+64	WB	37.68'	RT	SIDEWALK SAWCUT
WB1141	190+84	WB	37.21'	RT	SIDEWALK SAWCUT
WB1142	190+86	WB	37.15'	RT	SIDEWALK SAWCUT
WB1154	192+13	WB	54.28'	RT	DRIVEWAY SAWCUT
WB1155	192+20	WB	49.74'	RT	DRIVEWAY SAWCUT
WB1156	192+32	WB	44.02'	RT	SIDEWALK SAWCUT
WB1157	192+36	WB	42.47'	RT	SIDEWALK SAWCUT
WB1167	191+73	WB	20.00'	RT	END 20' RADIUS BEGIN 218' RADIUS
WB1168	192+37	WB	20.00'	RT	CENTER OF CURVE (218' RADIUS)

POINT	STATION		OFFSET		COMMENT
MS1158	10+72	MS	14.00'	LT	BEGIN 186' RADIUS
MS1159	10+99	MS	14.00'	LT	CENTER OF CURVE (186' RADIUS)
MS1160	11+26	MS	14.00'	LT	END 186' RADIUS PAVEMENT STRUCTURE TRANSITION BEGIN 25' RADIUS
MS1161	11+44	MS	19.43'	LT	CENTER OF CURVE (25' RADIUS)
MS1162	11+57	MS	43.79'	LT	END 25' RADIUS
MS1163	10+45	MS	14.00'	RT	BEGIN 214' RADIUS
MS1164	10+98	MS	14.00'	RT	CENTER OF CURVE (214' RADIUS)
MS1165	11+50	MS	14.00'	RT	END 214' RADIUS/BEGIN 20' RADIUS
MS1166	11+50	MS	34.00'	RT	20' RADIUS
MS1169	10+51	MS	21.61'	LT	SIDEWALK SAWCUT
MS1170	10+54	MS	21.14'	LT	SIDEWALK SAWCUT
MS1171	10+75	MS	36.67'	RT	DRIVEWAY SAWCUT
MS1172	10+83	MS	38.19'	RT	DRIVEWAY SAWCUT
MS1173	11+01	MS	45.24'	RT	SIDEWALK SAWCUT
MS1174	11+97	MS	43.63'	RT	SIDEWALK SAWCUT
MS1175	11+19	MS	55.81'	RT	SIDEWALK SAWCUT
MS1176	11+16	MS	53.35'	RT	SIDEWALK SAWCUT

POINT	STATION		OFFSET		COMMENT
R1218	10+42	R	0.00'	RT	PAVEMENT STRUCTURE TRANSITION
R1219	10+53	R	13.00'	LT	BEGIN 30' RADIUS
R1220	10+60	R	16.52'	LT	CENTER OF CURVE (30' RADIUS)
R1221	10+71	R	31.05'	LT	END 30' RADIUS
R1222	10+43	R	11.02'	RT	BEGIN 8.5' RADIUS
R1223	10+42	R	19.44'	RT	8.5' RADIUS
R1224	10+51	R	17.47'	RT	END 8.5' RADIUS
R1225	10+32	R	24.43'	LT	DRIVEWAY SAWCUT
R1226	10+55	R	24.20'	LT	DRIVEWAY SAWCUT
R1227	10+49	R	23.00'	LT	BEGIN PEDESTRIAN CURB
R1228	10+61	R	28.34'	LT	END PEDESTRIAN CURB

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
WB1200	192+86	WB	31.50'	LT	DRIVEWAY SAWCUT
WB1201	193+04	WB	31.50'	LT	DRIVEWAY SAWCUT
WB1202	193+41	WB	29.92'	LT	SIDEWALK SAWCUT
WB1203	193+47	WB	30.00'	LT	SIDEWALK SAWCUT
WB1204	193+77	WB	33.05'	LT	DRIVEWAY SAWCUT
WB1205	193+90	WB	33.50'	LT	DRIVEWAY SAWCUT
WB1206	194+43	WB	20.24'	LT	P.I.
WB1207	192+70	WB	32.40'	RT	SIDEWALK SAWCUT
WB1208	192+73	WB	32.15'	RT	SIDEWALK SAWCUT
WB1209	192+75	WB	24.48'	RT	SIDEWALK TRANSITION
WB1210	192+86	WB	30.72'	RT	SIDEWALK SAWCUT
WB1211	192+91	WB	30.32'	RT	SIDEWALK SAWCUT
WB1212	193+01	WB	20.00'	RT	END 218' RADIUS
WB1213	193+01	WB	20.00'	LT	END 178' RADIUS
WB1214	193+36	WB	30.00'	RT	SIDEWALK SAWCUT
WB1215	193+41	WB	30.00'	RT	SIDEWALK SAWCUT
WB1216	193+76	WB	30.50'	RT	DRIVEWAY SAWCUT
WB1217	193+98	WB	30.50'	RT	DRIVEWAY SAWCUT

N

SLOPE INTERCEPTS (TYP.)

+94 LT
16' P.E.
CONC.

+83 LT
14' P.E.
B.A.D.

+87 RT
19.5' C.E.
ASPH.

CRAWFISH RIVER

B-11-135

MATCH LINE STA. 192+50WB

STH 16/60 / E. JAMES STREET

CS-5 6.0' SIDEWALK CD-6 CS-5

CD-6 8.0' CG-30A CD-6

12.0' 12.0'

193+00WB 194+00WB 195+00WB 196+00WB 197+00WB 198+00

STA 194+45.81WB =
STA 10+81.00R

10+81R 10+00R

CG-30D

RIVER ROAD

R/W

INL

END PROJECT 1401-02-71
STA 194+59.01
MATCH EXISTING
SAWCUT REQUIRED

BEGIN CONSTRUCTION
STA. 10+38.00R
MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN DETAILS-STH 16	SHEET 62	E

2

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

N

POINT	STATION		OFFSET		COMMENT
ID1300	8+91	ID	15.57'	RT	SAWCUT LOCATION
ID1301	10+07	ID	35.30'	RT	DRIVEWAY SAWCUT
ID1302	10+61	ID	38.52'	RT	DRIVEWAY SAWCUT
ID1303	10+12	ID	18.23'	LT	BEGIN 400' RADIUS
ID1304	10+59	ID	17.18'	LT	CENTER OF CURVE (400' RADIUS)
ID1305	11+06	ID	16.00'	LT	END 400' RADIUS BEGIN 419' RADIUS
ID1306	12+16	ID	16.00'	LT	CENTER OF CURVE (419' RADIUS)
ID1307	10+48	ID	39.96'	LT	DRIVEWAY SAWCUT
ID1308	10+88	ID	37.82'	LT	DRIVEWAY SAWCUT
ID1309	10+37	ID	23.21'	RT	BEGIN 216' RADIUS
ID1310	10+74	ID	28.52'	RT	CENTER OF CURVE (216' RADIUS)
ID1311	11+14	ID	29.64'	RT	END 216' RADIUS BEGIN 50' RADIUS
ID1312	11+24	ID	29.67'	RT	CENTER OF CURVE (50' RADIUS)
ID1313	11+33	ID	31.03'	RT	END 50' RADIUS BEGIN 7.25:1 TAPER
ID1314	12+29	ID	41.00'	RT	END 7.25:1 TAPER
ID1315	11+22	ID	47.69'	RT	DRIVEWAY SAWCUT
ID1316	11+74	ID	56.62'	RT	DRIVEWAY SAWCUT
ID1317	11+76	ID	53.78'	RT	BEGIN 10' RADIUS
ID1318	11+88	ID	52.64'	RT	10' RADIUS
ID1319	11+81	ID	60.83'	RT	END 10' RADIUS
ID1320	12+08	ID	78.38'	RT	DRIVEWAY SAWCUT
ID1321	12+20	ID	61.96'	RT	DRIVEWAY SAWCUT
ID1322	12+23	ID	34.64'	LT	DRIVEWAY SAWCUT

BEGIN CONSTRUCTION
STA 10+00.00 ID

MATCH EXISTING
SAWCUT REQUIRED

SIDE ROAD TRANSITION
(SEE DETAIL)

+66 LT
33.5' C.E.
ASPH.

+54 LT
58' C.E.
ASPH.

+18 RT
26' C.E.
ASPH.

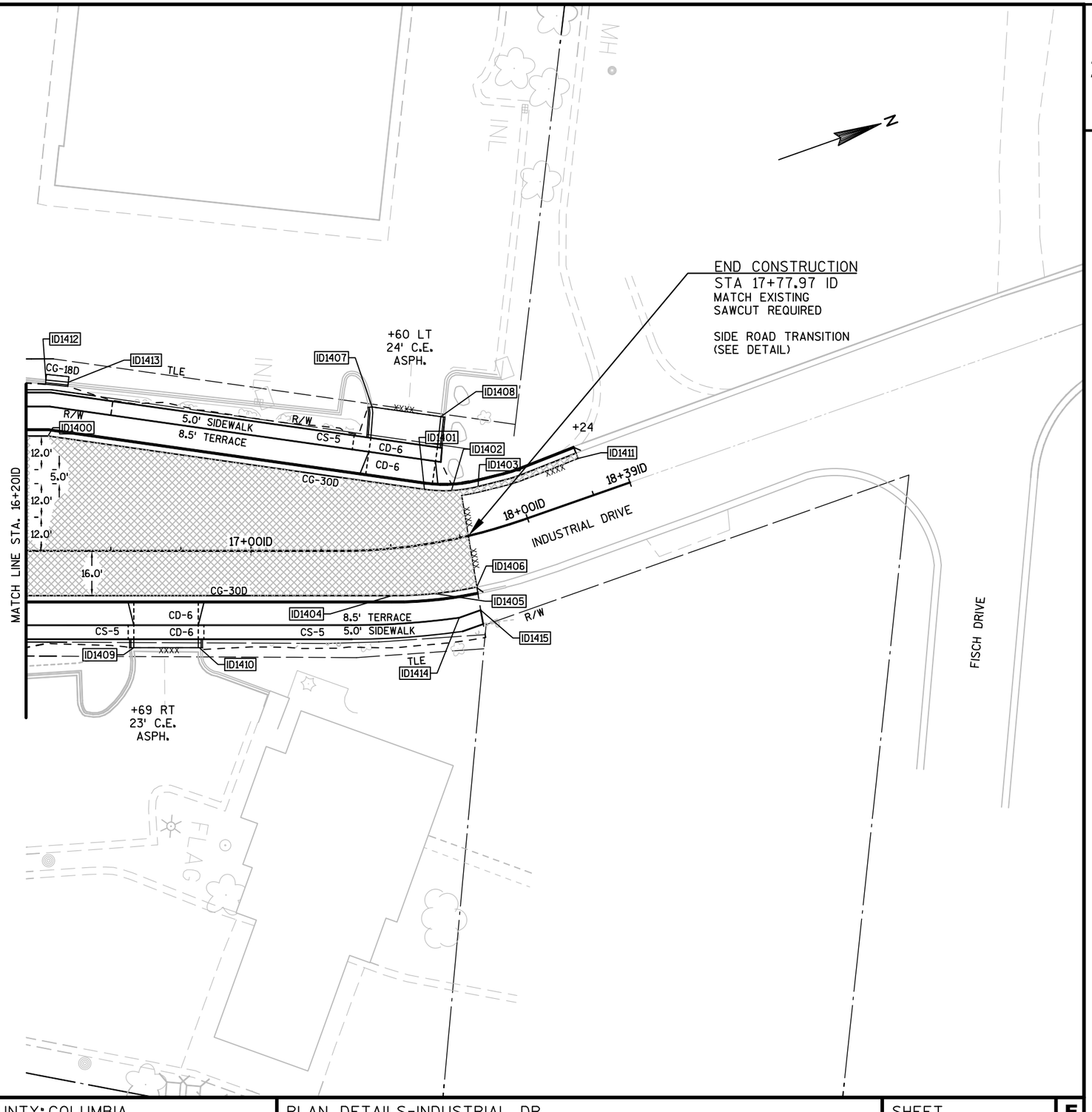
+54 RT
48' C.E.
ASPH.

NOTE:
PARKING LOT PAVEMENT MARKING
REVISIONS BY OTHERS

*NOTE: DRIVEWAY PAVEMENT STRUCTURE BEHIND THE SIDEWALK TO MATCH EXISTING DRIVEWAY THICKNESS IF EXISTING DRIVEWAY THICKNESS IS GREATER THAN THE PLAN THICKNESS

RADII ARE SHOWN TO THE CURB FLANGE UNLESS OTHERWISE NOTED

POINT	STATION		OFFSET		COMMENT
ID1400	16+28	ID	41.00'	LT	END 11.25:1 TAPER
ID1401	17+65	ID	19.39'	LT	BEGIN 11.25:1 TAPER BEGIN 50' RADIUS
ID1402	17+88	ID	66.11'	LT	CENTER OF CURVE (50' RADIUS)
ID1403	17+86	ID	16.18'	LT	END 50' RADIUS
ID1404	17+49	ID	16.79'	RT	BEGIN 150' RADIUS
ID1405	17+63	ID	17.88'	RT	150' RADIUS
ID1406	17+77	ID	18.52'	RT	END 50' RADIUS
ID1407	17+47	ID	50.92'	LT	DRIVEWAY SAWCUT
ID1408	17+78	ID	43.97'	LT	DRIVEWAY SAWCUT
ID1409	16+58	ID	34.50'	RT	DRIVEWAY SAWCUT
ID1410	16+81	ID	34.50'	RT	DRIVEWAY SAWCUT
ID1411	18+24	ID	14.20'	LT	SAWCUT LOCATION
ID1412	16+27	ID	60.98'	LT	BEGIN CURB
ID1413	16+35	ID	60.17'	LT	END CURB
ID1414	17+69	ID	27.88'	RT	P.I.
ID1415	17+76	ID	26.81'	RT	FRONT OF SIDEWALK



2

2

N

STA. 126+46.00WB
BEGIN CONSTRUCTION 1401-02-71

MATCH EXISTING
SAWCUT REQUIRED

STA. 127+00.00WB
BEGIN PROJECT 1401-02-71

STH 16/60 (WB) / W. JAMES STREET

STH 16/60 (EB) / W. JAMES STREET

MATCH LINE STA. 129+00WB

126+00WB 127+00WB 128+00WB 129+0

126+00EB 127+00EB 128+00EB 129+0

858.22 858.20 858.42 858.40 858.81 858.69 858.97 858.96 858.93 858.91 859.04 859.17

858.75 859.46 859.61 859.76 859.90 860.00 860.06 860.09 860.08
858.76 858.91 859.06 859.20 859.30 859.37 859.40 859.39
858.84 858.99 859.14 859.28 859.38 859.45 859.48 859.47
859.08 859.23 859.38 859.52 859.62 859.69 859.72 859.71
859.32 859.47 859.62 859.76 859.86 859.93 859.96 859.95

860.48 +16EB 860.51 860.56 860.57
860.20 860.39 860.02

859.33 859.51 859.69 859.79 +20EB 859.83 859.91 +36EB 859.94 860.07 860.19 860.27 860.32 860.33
859.42 859.44 859.45 859.58 859.70 859.83 859.95 860.03 860.08 860.09

858.88 858.87 858.32 858.27 858.99 +09EB 859.13 859.19 +12EB 859.21 859.34 859.46 859.59 859.71 859.79 859.84 859.85
859.24 859.36 859.49 859.61 859.69 859.74 859.75
859.22 859.29 859.35 859.41 859.45 859.50 859.51

858.48 858.53 858.57
858.47 +16EB

IP IP

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 65 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050117

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2

N

SEE CONSTRUCTION DETAIL
JAMES STREET/INDUSTRIAL DRIVE
FOR CURB RAMP INFORMATION.

MATCH LINE STA. 15+35ID

INDUSTRIAL DRIVE

15+00ID

R/W

TLE

SEE CONSTRUCTION DETAIL
JAMES STREET/INDUSTRIAL DRIVE
FOR CURB RAMP INFORMATION.

859.65 859.97 +29ID 859.50 859.54 859.59 859.47 +24ID

858.38 +57WB 857.69 +57WB 857.99 857.98 +77WB 858.05

860.32 860.09 859.99 +25ID 859.62 859.66 859.58 859.46 859.42 859.30 +17ID 859.07 +21ID

859.11 +33ID 859.35 +32ID 859.23 +31ID 859.18 859.39 859.18 +21ID 858.99 +19ID 858.86 858.87 +07ID L.P.=859.00 +24ID 859.30 +16ID 859.19 +11ID 859.25 +04ID 859.30 859.19 +00ID 859.11 858.90 858.94 +92ID 858.98 858.92 858.92 +94ID

859.04 859.00 858.68 858.47 858.26 857.54 857.33 857.99 857.30 857.09 858.70 858.49 858.29 858.05 857.64 857.43

STH 16/60 (WB) / E. JAMES STREET

859.78 859.70 859.58 859.42 859.23 859.02 858.82 858.61 858.41 858.19 857.88 857.67

859.90 859.82 859.77 +60WB

130+00WB 131+00WB 132+

MATCH LINE STA. 129+00WB

859.52 859.47 +20WB 859.62 +90WB 859.54 +20WB 859.88 859.95

860.54 860.36 860.26 860.13 859.50 859.29 859.07 858.86 858.65 858.47 +47WB 858.52 +47WB 858.10 857.78

MATCH LINE STA. 132+00WB

00EB 130+00EB 131+00EB 132+

860.30 860.24 860.14 860.01 859.83 859.63 859.41 859.20 858.99 858.77 858.56 858.35

860.07 860.12 860.02 859.89 859.71 859.51 859.29 859.08 858.87 858.65 858.44 858.11

STH 16/60 (EB) / E. JAMES STREET

858.75 858.53 858.32 857.87

859.83 860.00 859.90 859.77 859.59 859.39 859.17 858.96 14+00ID 858.48 +91ID 858.28 +85ID 857.74 +85EB

859.73 859.95 859.85 859.72 859.54 859.34 859.12 858.91 858.44 +89ID 858.70 858.09 +82ID 857.81 +68EB

859.49 859.82 859.73 859.60 859.42 859.35 859.31 +14EB 858.93 +00ID 858.00 +75ID 857.73 +71ID 857.45 +84EB

858.61 858.65 858.70 858.75 859.06 858.55 +88ID 858.19 858.37 858.06 857.46 +55EB

859.23 +14EB 858.15 +72ID DIX STREET 857.38 +55ID

858.27 857.51 +56ID 857.65 857.43

857.71 +56ID 857.89

858.40 857.70

SEE CONSTRUCTION DETAIL
JAMES STREET/DIX STREET
FOR CURB RAMP INFORMATION.

MATCH LINE STA. 13+50ID

SEE CONSTRUCTION DETAIL
JAMES STREET/DIX STREET
FOR CURB RAMP INFORMATION.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050118

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2

TLE

R/W

N

858.14
+31WB

858.14 | 857.38 +50WB | 857.17 | 857.14 +79WB | 857.03 | 856.88 | 856.74 | 856.60 | 856.39 | 856.19 | 855.98 | 855.78 | 855.57

856.89 | 856.68 | 856.48 | 856.45 +78WB | 856.33 | 856.19 | 856.04 | 855.90 | 855.70 | 855.49 | 855.29 | 855.08 | 854.88

857.13 | 856.92 | 856.72 | 856.51 | 856.31 | 856.11 | 855.90 | 855.70 | 855.49 | 855.29 | 855.08 | 854.88

857.23 | 857.02 | 856.82 | 856.61 | 856.41 | 856.21 | 856.00 | 855.80 | 855.59 | 855.39 | 855.18 | 854.98

STH 16/60 (WB) / E. JAMES STREET

857.47 | 857.26 | 857.06 | 856.85 | 856.65 | 856.45 | 856.24 | 856.04 | 855.83 | 855.63 | 855.42 | 855.22

856.48 | 856.07 | 855.87 | 855.66

856.62

856.77

856.28 | 855.46

857.47 | 857.26 | 857.06 | 857.03 +78WB | 856.91

MATCH LINE STA. 132+00WB

00WB | 133+00WB | 134+00WB | 135+

MATCH LINE STA. 135+00WB

00EB | 133+00EB | 134+00EB | 135+

858.09
+05EB

857.92 | 857.70 | 857.49 | 857.28 | 857.21 +09WB | 857.06 | 856.85 | 856.64 | 856.42 | 856.21 | 856.00 | 855.78

857.68 | 857.46 | 857.25 | 857.04 | 856.96 | 856.82 | 856.61 | 856.40 | 856.18 | 855.97 | 855.76 | 855.54

857.89

857.65 | 857.44 | 857.22 | 857.01 | 856.80 | 856.72 | 856.58 | 856.37 | 856.16 | 855.94 | 855.73 | 855.52 | 855.30

857.12 | 856.91 | 856.70 | 856.62 | 856.48 | 856.27 | 856.06 | 855.84 | 855.63 | 855.42 | 855.20

857.36
+09EB

858.01

858.05
+12EB

857.82 | 857.61 | 857.39 | 857.32 +09WB | 857.18 | 856.97 | 856.75 | 856.53 | 856.32 | 856.11 | 855.89

858.00
+30EB

STH 16/60 (EB) / E. JAMES STREET

R/W

TLE

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 67 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050119

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

R/W

R/W

853.79
+84WB

853.60
+40WB

855.37 855.16 854.96 854.75
+00WB
854.46 854.17 853.89 853.75 853.69 853.52 853.33 853.19

854.75 854.67 854.47 854.26 854.06 853.85 853.65 853.44 853.38 853.24 853.03 852.83 852.63 852.49

854.77 854.57 854.36 854.16 853.95 853.75 853.54 853.34 853.13 852.93 852.73 852.59

STH 16/60 (WB) / E. JAMES STREET

855.01 854.81 854.60 854.40 854.19 853.99 853.78 853.58 853.37 853.17 852.97 852.83

855.25 855.05 854.84 854.43 854.23 854.02 853.72 853.64
+21WB
853.41 853.21

MATCH LINE STA. 135+00WB

136+00WB

137+00WB

138+

854.64 853.82 853.07

853.68
+21WB

137+00EB

136+00EB

11+50M

853.23

853.86 853.76 853.65 853.43

855.57 855.36 855.14 854.93 854.72 854.50 854.29 854.07 853.83 853.62 853.40 853.19

852.99

855.33 855.12 854.90 854.69 854.48 854.26 854.05

STH 16/60 (EB) / E. JAMES STREET

853.81 853.59 853.38 853.16 852.94

852.74

852.73

855.09 854.88 854.66 854.45 854.24 854.02

852.97
+22M
852.91

852.98
+17M

852.57
+17M

854.99 854.87 854.78 854.56 854.35 854.14 853.92 853.71 853.50 853.30 853.08

855.68 855.47 855.26 855.04 854.83
+00EB
853.97 853.13 852.65 852.80 853.04

852.69
+63EB
852.62
+83EB

853.09
+02M

11+00M

853.15

853.13
+99M

853.23
+99M

MIESTER DRIVE

MATCH LINE STA. 138+00WB

R/W

TLE

SEE CONSTRUCTION DETAIL
JAMES STREET/MEISTER DRIVE
FOR CURB RAMP INFORMATION.

R/W

XXXX

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 68 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050120

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2

SEE CONSTRUCTION DETAIL
JAMES STREET/CONTINENTAL DRIVE
FOR CURB RAMP INFORMATION.

CONTINENTAL DRIVE

12+00C

11+50C

R/W

TLE

MATCH LINE STA. 138+00WB

MATCH LINE STA. 141+00WB

139+00WB

139+26EB

140+00WB

STH 16/60 / E. JAMES STREET

L.P.=852.44 +30WB

L.P.=852.46 +47EB

852.86 853.06 853.16 852.93 +92C 852.90 852.83 +92C 852.91 +87C 852.77 +77C 853.01 853.02 +73C 853.13 +67C 853.64 +61WB 853.18 +71WB

853.10 853.08 853.11 852.45 852.44 852.45 852.45 852.52 852.65 852.71 +72C 852.98 853.11 852.51

853.82 853.79 853.70 853.17 853.06 853.10 853.00 852.87 852.74 853.20 853.23 853.20 853.10 852.97 852.84 853.44 853.44 853.34 853.21 853.47 853.08

852.75 852.73 852.76 852.86 852.99 852.97 853.00 853.10 853.22 853.35 853.01 853.10

853.08 853.00 852.97 852.84 852.76 852.73 852.77 852.86 852.99 853.11 853.20 853.23 853.20 853.10 852.97 852.84

852.50 +13EB 852.48 852.60 852.47 852.47 852.48 852.51 852.62 852.76 852.91 853.03 853.10 853.10 853.00 852.87 852.74

853.18 853.16 853.21 853.32 853.45 853.60 853.73 853.80 853.80 +08WB 853.72 +13WB 853.67 +38WB 853.73 +43WB 853.70 853.70 853.57 853.44

SEE CONSTRUCTION DETAIL
JAMES STREET/MEISTER DRIVE
FOR CURB RAMP INFORMATION.

R/W

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 69	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050121

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

TLE

R/W

MATCH LINE STA. 141+00WB

MATCH LINE STA. 143+75WB

852.96 853.02 +10WB 852.89 +43WB 853.25 +53WB 853.13 853.24 853.29 853.40 853.53 853.65 853.78 853.90 854.03 853.84

852.55

852.62 852.55 L.P.=852.54 +66WB 852.55 852.60 852.71 852.83 852.96 853.08 853.21 853.33 853.32

852.72 852.65 852.65 852.70 852.81 852.93 853.06 853.18 853.31 853.43 853.56

852.96 852.89 852.89 853.05 853.17 853.30 853.55 853.67 853.80

0WB 142+00WB STH 16/60 / E. JAMES STREET 11+50HU 143+00WB

852.65 852.94 853.42

852.72 852.65 852.70 852.81 852.93 853.31 853.43 853.56

853.43 +03WB 852.62 852.55 L.P.=852.53 +66WB 852.55 852.60 852.73 +29WB 853.06 853.18 853.11 +06WB 853.21 853.33 853.46

852.55 852.86

853.35 +08WB 853.24 +31WB 852.78 +27HU 852.87 +24HU 854.03

853.27 853.25 853.24 853.32 852.97 853.90 854.10

853.28 +36WB 853.33 +84WB 853.29 +89WB 853.41 +20WB HURELLE STREET 854.05 +55WB 854.02 +60WB

R/W R/W

852.84 +10HU 852.95 +06HU

852.84 +06HU

TLE TLE

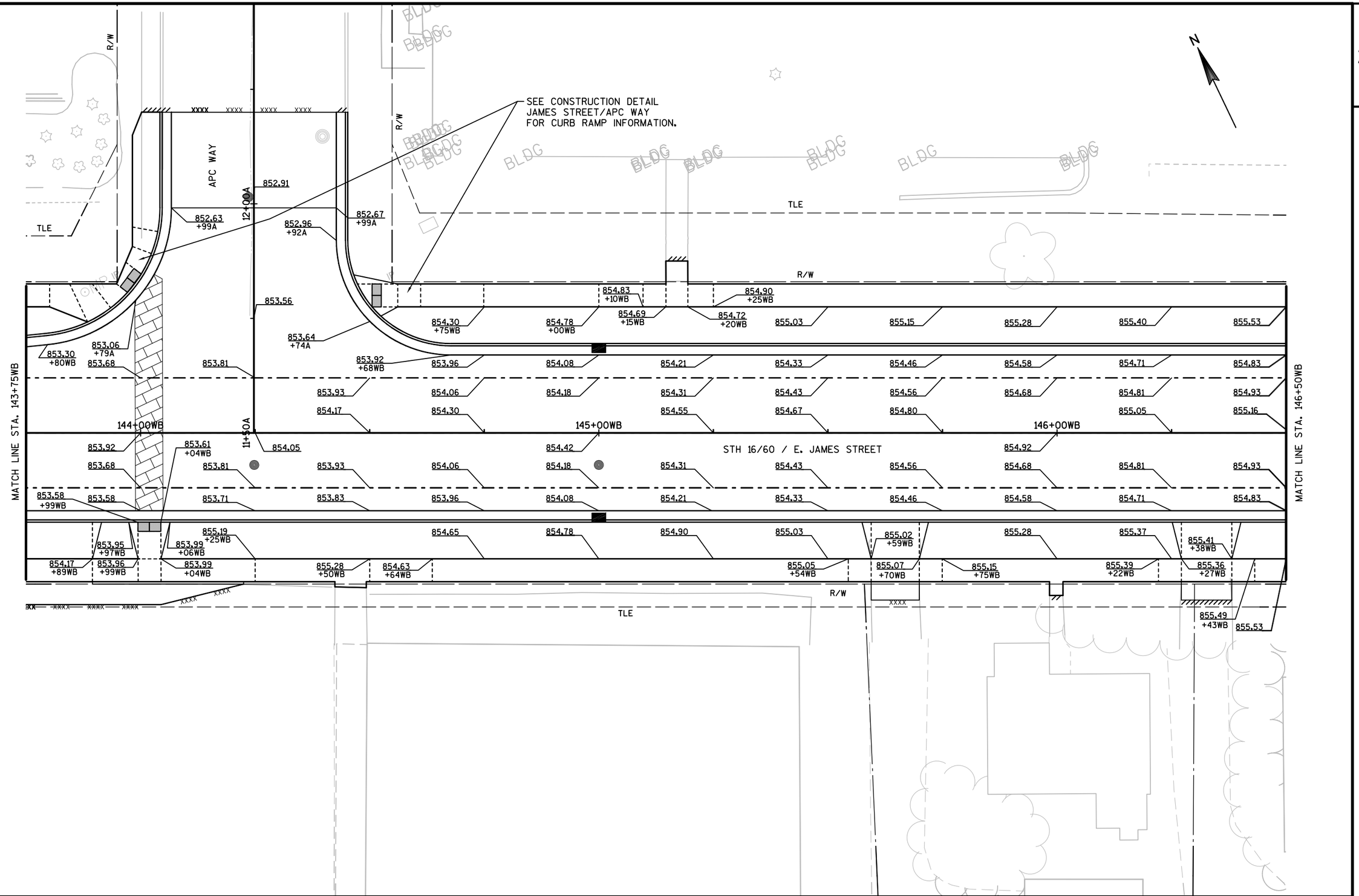
852.86 853.07 11+00HU

SEE CONSTRUCTION DETAIL JAMES STREET/INDUSTRIAL DRIVE FOR CURB RAMP INFORMATION.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 70 E

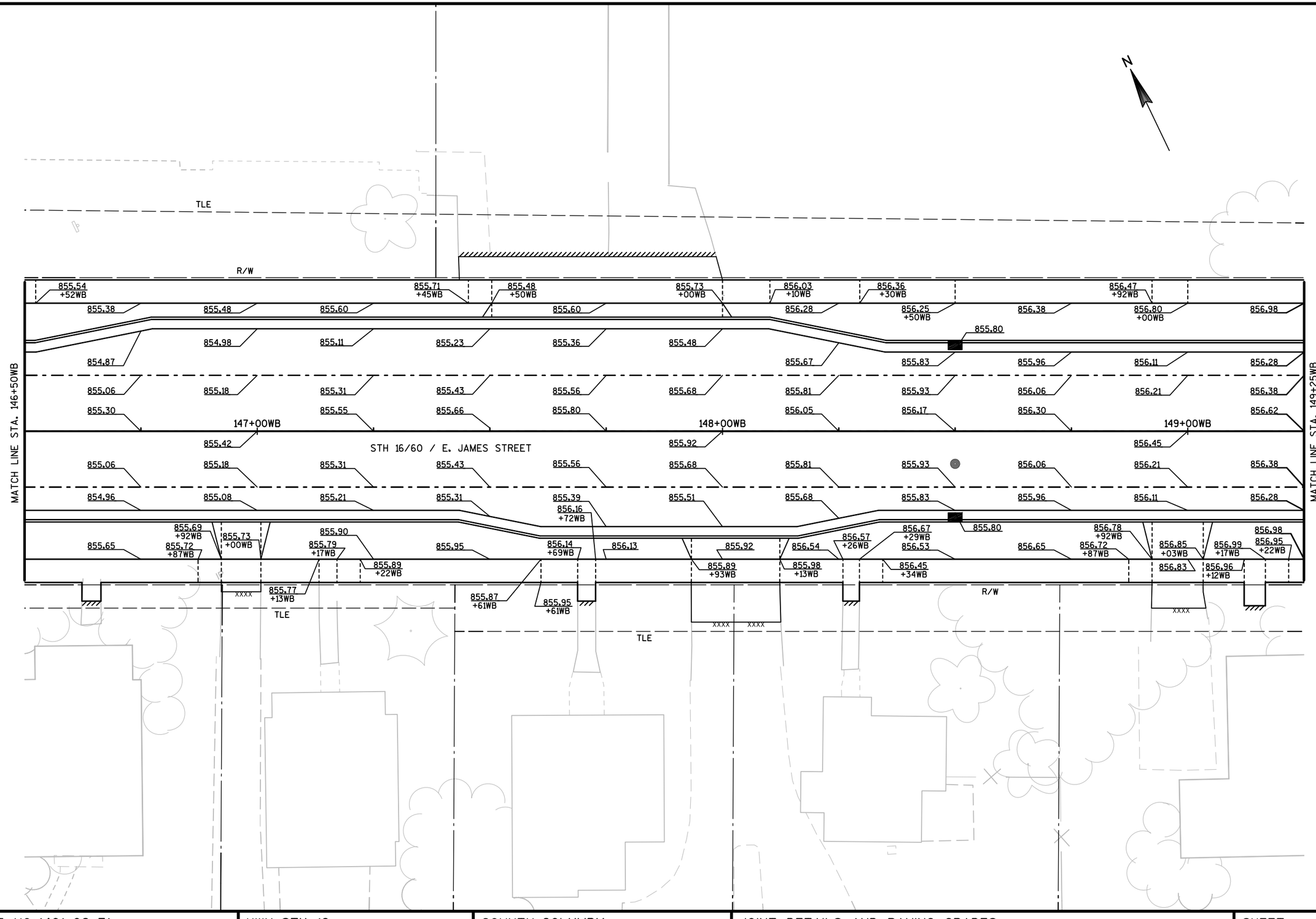
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050122

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 71 E

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 72 E

2

SEE CONSTRUCTION DETAIL
JAMES STREET/BLACKHAWK
DRIVE/MAPLE AVENUE
FOR CURB RAMP INFORMATION.

N

BLACKHAWK DRIVE

12+00B

TLE

R/W

857.18 857.42 857.67 857.96 858.37 858.91 859.15 +87B 859.68

858.88 +73B

858.61 +90WB

856.49 856.73 856.97 857.26 857.68 858.22

856.59 856.83 857.07 857.36 857.78 858.32 858.99 859.79

856.83 857.07 857.60 858.02 858.56

150+00WB

151+00WB

857.31 STH 16/60 / E. JAMES STREET 859.23

MATCH LINE STA. 149+25WB

MATCH LINE

856.59 856.83 857.07 857.36 857.78 858.32 858.99 859.79

856.49 856.73 856.97 857.26 857.68 858.22

858.51 +86WB

858.91 +27MA

857.07 +43WB

857.08 +38WB

857.14 +51WB

857.31 +72WB

857.37

857.80 +97WB

857.83 +00WB

857.90

857.28 +69WB

857.69 +09WB

857.99 +31WB

858.33 +51WB

858.86

859.86

859.58 +13MA

859.66

R/W

TLE

11+00MA

859.68 +87B

860.16 +73B

861.12 +62WB

861.49 863.23 864.78

861.68 862.14 862.87 864.18

860.72 861.78 862.97 864.28

860.03 860.96 862.02 864.52

11+50MA

152+00WB

863.21

MATCH LINE STA. 152+25WB

MATCH LINE

860.72 861.78 862.97 864.28

861.39 +68WB

861.64

860.76 +27MA

862.11 +81WB

863.33

864.25 +21WB

861.74

863.23 +98WB

864.44

L.P.=860.63 +11MA

R/W

TLE

MAPLE AVENUE

SEE CONSTRUCTION DETAIL
JAMES STREET/BLACKHAWK
DRIVE/MAPLE AVENUE
FOR CURB RAMP INFORMATION.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 73 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050125

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2

N

TLE

R/W

XXXX XXXX

XXXX XXXX XXXX XXXX

865.08 +33WB
866.26 +53WB
866.82 +58WB
871.59 +40WB
871.84 +45WB
873.23 +77WB
873.40 +82WB
875.60 +23WB

866.07 867.86 869.39 870.83 872.07 873.17 874.03 874.71 875.22 875.53 875.65 875.47

864.93 +28WB
865.63 867.16 868.70 870.14 871.39 872.45 873.33 874.02 874.52 874.83 874.96 874.89

865.73 867.26 868.80 870.24 871.49 872.55 873.43 874.12 874.62 874.93 875.06 874.99

865.97 867.50 153+00WB 870.48 871.73 872.79 154+00WB 874.36 874.86 875.17 155+00WB

869.04 873.67 875.30 875.23

865.73 867.26 868.80 870.24 871.49 872.55 873.43 874.12 874.62 874.93 875.06 874.99

865.63 867.16 868.70 870.14 871.39 872.45 873.33 874.02 874.52 874.83 874.96

STH 16/60 / E. JAMES STREET

MATCH LINE STA. 155+25WB

MATCH LINE STA. 155+25WB

865.30 +47WB
867.42 +72WB
865.59 +51WB
865.22 +43WB

R/W

TLE

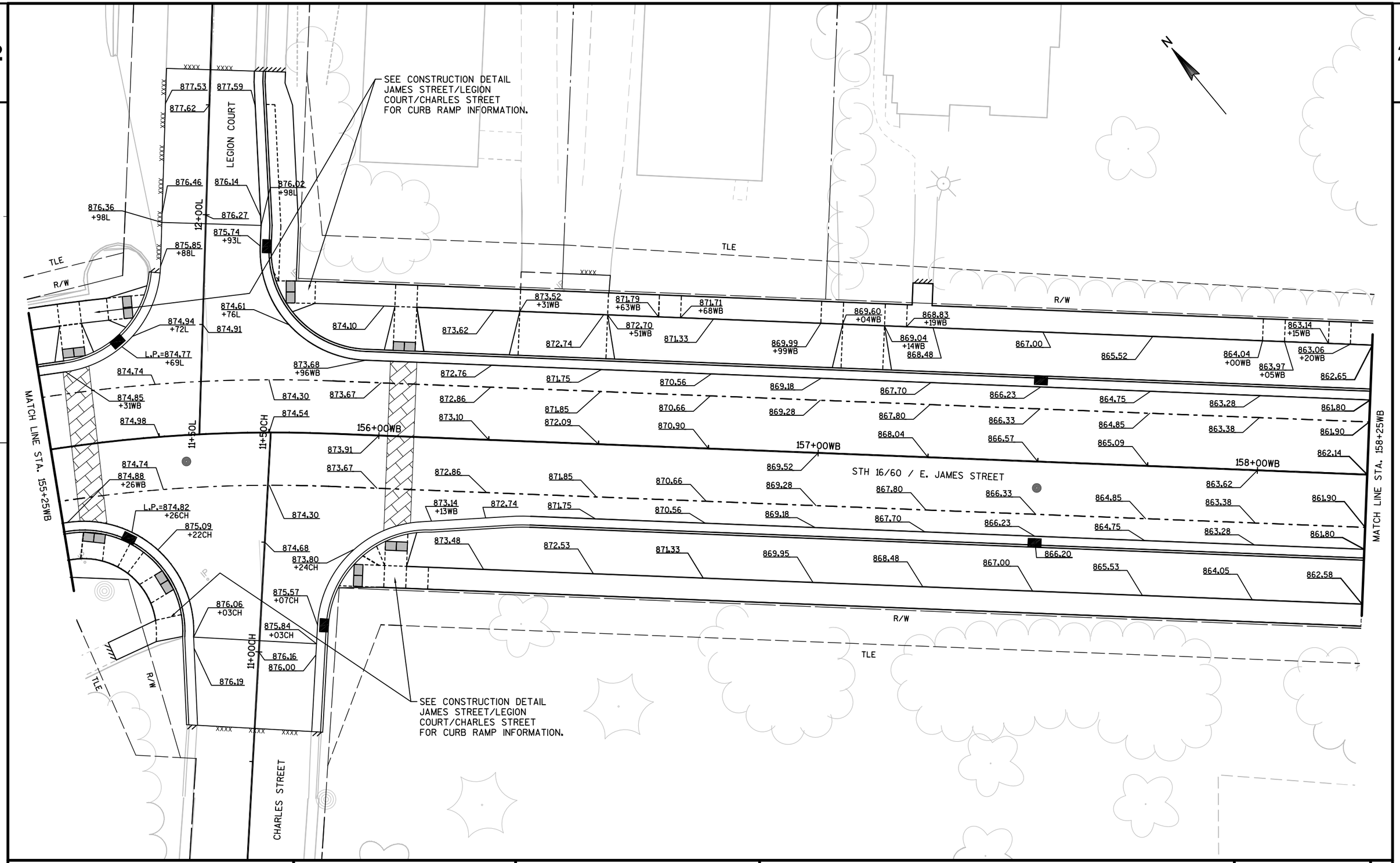
R/W

R/W

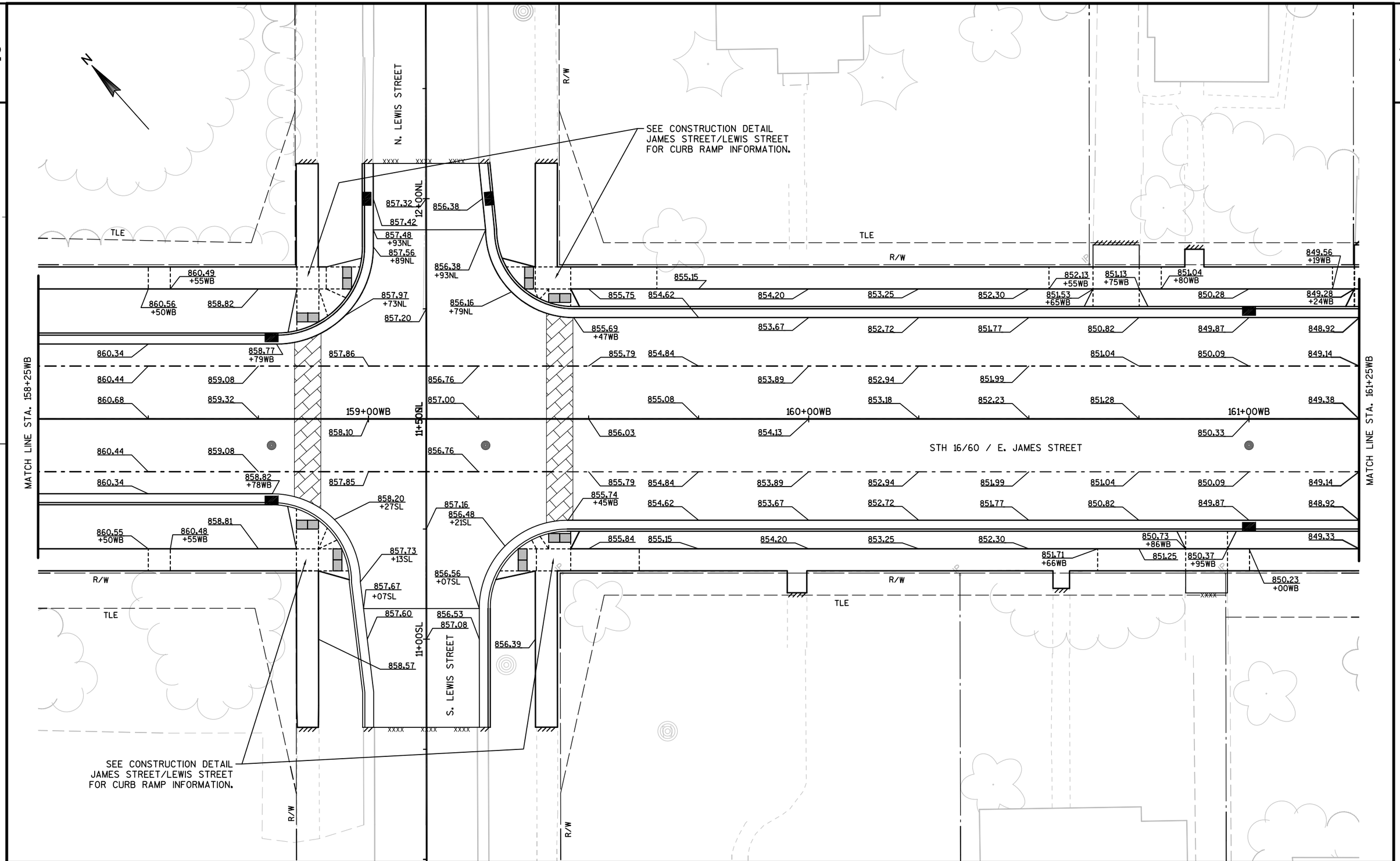
TLE

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 74	E

2

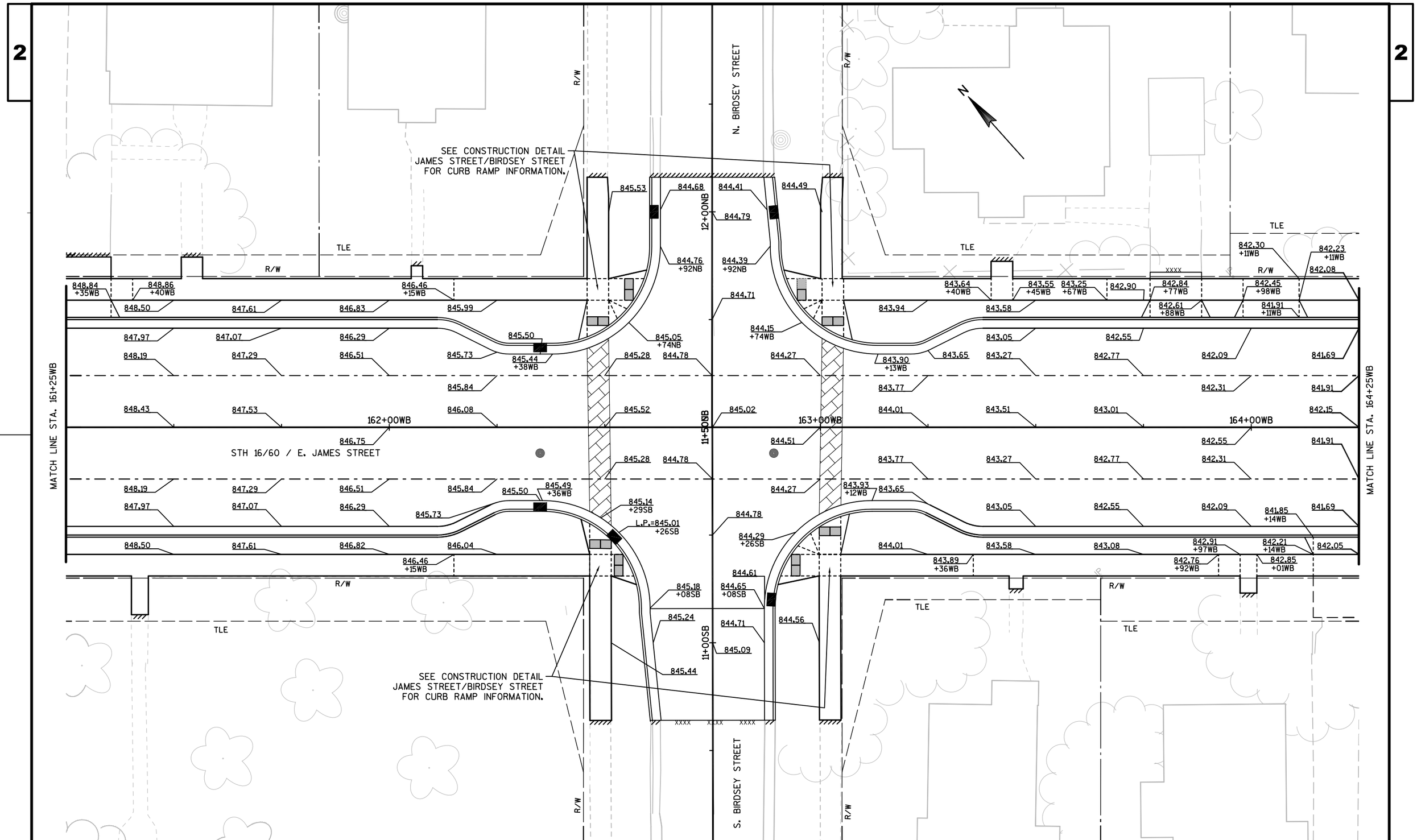


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 75 E



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 76 E

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 77 E

2

N

SEE CONSTRUCTION DETAIL
JAMES STREET/MAIN STREET
FOR CURB RAMP INFORMATION.

R/W

TLE

841.97 +33WB
842.03 +38WB
842.03 +29WB
841.88
841.58
841.20 +96WB
+91WB
841.40 +91WB
841.16 +99WB
841.04
840.92 +48WB
840.90 +52WB
840.48
840.76
840.34
840.61
840.20
840.37
L.P.=840.13 +12WB
840.18
840.12 +36WB
840.28
839.96
839.66
839.80
12+00NM
839.74 +92NM
839.60
839.64 +92NM
N. MAIN STREET
839.73
839.88
839.84 +74NM
839.70 +74NM
839.69
840.04 +67NM
839.81 +67NM
839.76 +12WB
839.67
840.00
839.90
839.80
840.14
840.38
840.24
11+50NM

MATCH LINE STA. 164+25WB

841.80
841.51
165+00WB
841.08
840.94
840.80
166+00WB
841.22
840.66
840.52
STH 16/60 / E. JAMES STREET
841.56
841.27
840.98
840.84
840.70
840.56
840.42
840.28
840.14
841.34
841.05
840.76
840.62
840.48
840.34
840.20
841.12
840.18
840.13 +34WB
L.P.=840.13 +12WB
841.50 +38WB
841.86 +38WB
841.88
841.58
841.44 +88WB
841.20 +93WB
841.10 +03WB
841.15
841.25 +08WB
841.01
840.87
840.82 +84WB
840.49 +94WB
840.43
840.47 +98WB
840.07
841.97 +43WB
839.83 +26SM
839.67 +08SM
839.87
839.70 +26SM
839.54 +08SM
839.85
839.74
839.57
839.42
11+00SM
840.01
840.00
839.90
839.80
839.76 +10WB
839.67
839.85
R/W
TLE

SEE CONSTRUCTION DETAIL
JAMES STREET/MAIN STREET
FOR CURB RAMP INFORMATION.

L.P.=839.53 +96SM
L.P.=839.35 +96SM
S. MAIN STREET

MATCH LINE STA. 167+25WB

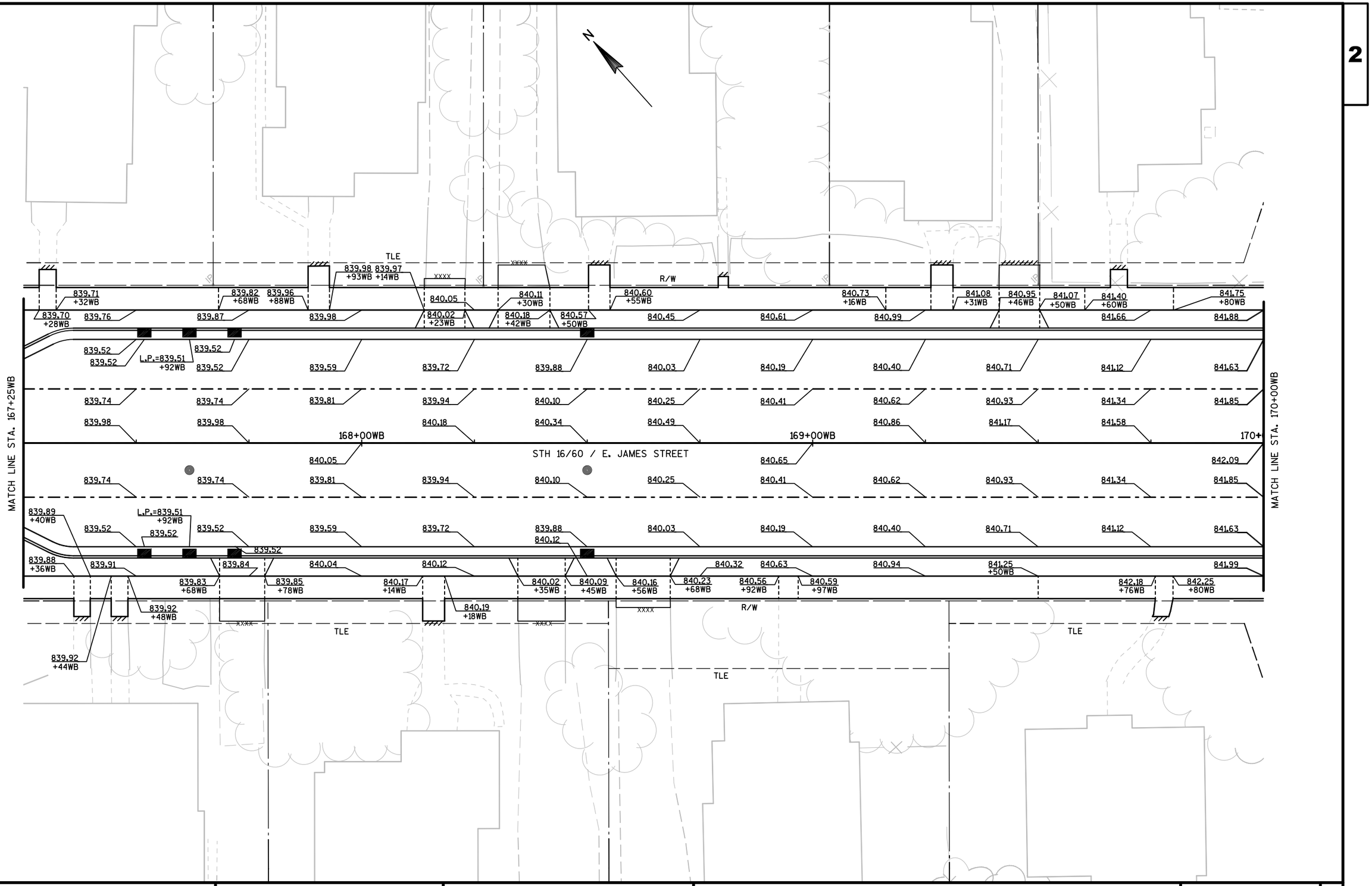
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 78 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050130

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 79 E

2

2

N

R/W

N. SPRING STREET

R/W

SEE CONSTRUCTION DETAIL
JAMES STREET/SPRING STREET
FOR CURB RAMP INFORMATION.

842.51 842.36 843.08 843.70

12+00NS

842.94

TLE

R/W

842.34 +93NS

L.P.=843.02 +93NS

842.57

842.08 +79NS

843.09 +79NS

841.82 +09WB

843.30 +74WB

845.43 +55WB 845.92 847.34 +30WB 848.41 +58WB 848.51 +63WB 848.90 +81WB

844.42 844.98 845.53 +50WB 845.82 +72WB 846.67 847.23 848.10 848.77 +73WB 848.80 849.19

843.43 843.88 844.44 845.01 845.57 846.13 846.69 847.26 847.76 848.14

842.41 842.98 843.54 844.10 844.66 845.23 845.79 846.35 846.91 847.48 847.98 848.36

MATCH LINE STA. 170+00WB

842.65 843.22 843.78 844.90 845.47 846.03 847.15 847.72 848.22

171+00WB 172+00WB 173+

11+00NS

844.34 846.59 848.60

STH 16/60 / E. JAMES STREET

MATCH LINE STA. 173+00WB

842.41 842.98 843.54 844.10 844.66 845.23 845.79 846.35 846.91 847.48 847.98 848.36

841.80 +07WB 843.27 +73WB 843.43 843.88 844.44 845.01 845.57 846.13 846.69 847.26 +48WB 847.55 +46WB 847.26 847.60 +53WB 847.75 +55WB 847.76 848.14

842.57

842.12 +21SS 843.01 +21SS 844.92 845.47 845.78 846.09 846.49 847.04 847.54 +48WB 848.21 +65WB 848.34 +71WB 848.68

845.44 +23WB 846.28 +90WB 846.82 +14WB 847.65 +53WB 848.31 +76WB

842.17 +07SS 842.75 +07SS

842.18 842.73

R/W

TLE

11+00SS

842.73

847.61 +48WB 848.07 +43WB

842.30 843.68

SEE CONSTRUCTION DETAIL
JAMES STREET/SPRING STREET
FOR CURB RAMP INFORMATION.

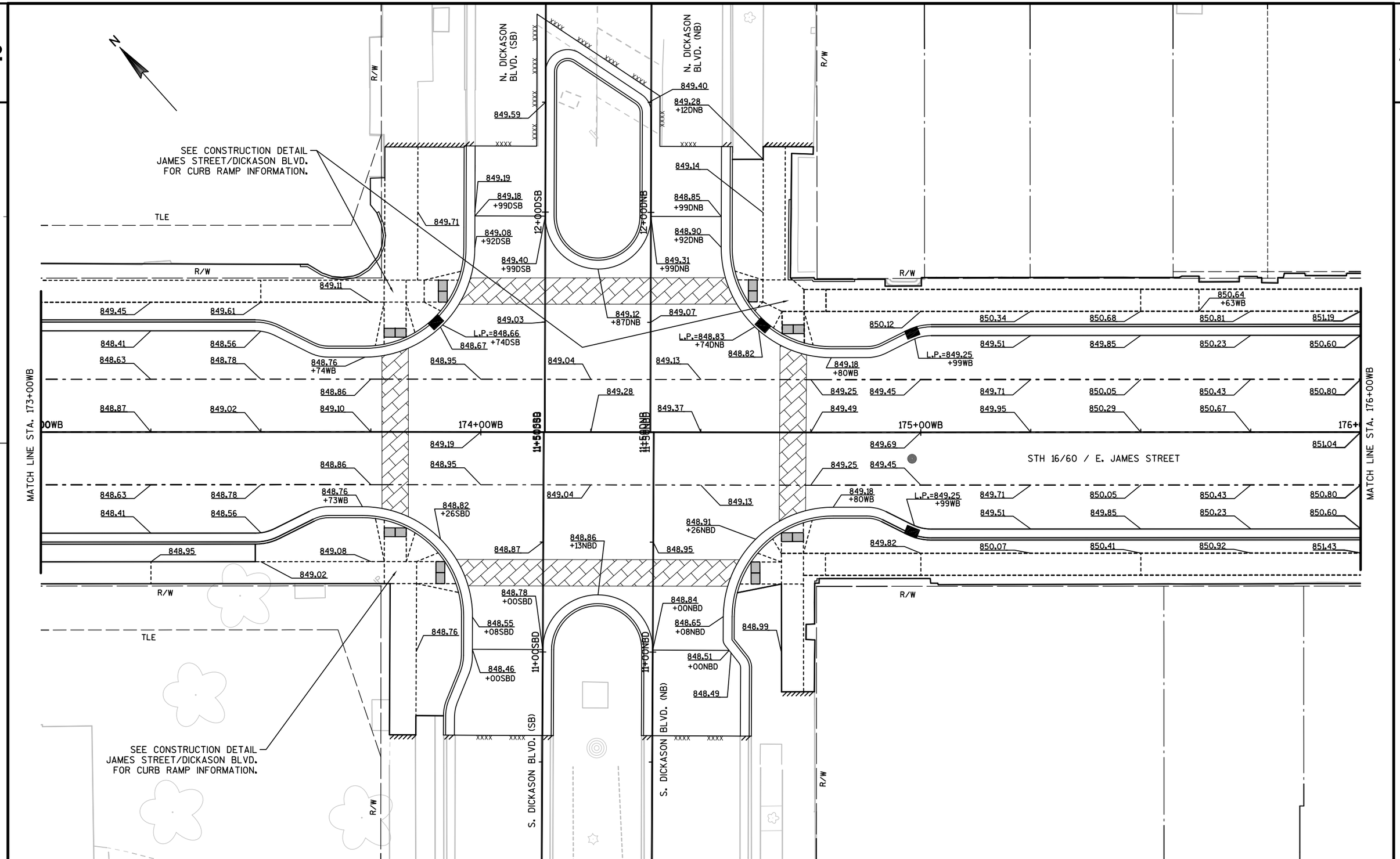
R/W

S. SPRING STREET

R/W

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 80 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050132
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 81 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050133
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

R/W

N. LUDINGTON STREET

SEE CONSTRUCTION DETAIL JAMES STREET/N. LUDINGTON STREET FOR CURB RAMP INFORMATION.

853.84 853.71 853.40 853.43 +15N 853.47 853.09 853.23 +15N

853.42 854.17 853.41 +96N 853.39 853.65 853.56 853.41 +94N

12+00N

851.45 851.77 852.15 852.52 852.90 853.27 853.32 +79N 852.97 +79N 853.44 852.05 851.18

850.98 851.35 851.73 852.10 852.40 852.48 852.85 853.26 +67WB 852.37 +58WB 851.58 850.41

851.18 851.55 851.93 852.30 852.68 853.05 853.52 853.60 853.36 852.79 851.78 850.61

851.42 851.79 852.17 852.92 853.29 853.64 852.91 852.02

MATCH LINE STA. 176+00WB

177+00WB

178+00WB

179+

MATCH LINE STA. 179+00WB

STH 16/60 / E. JAMES STREET

852.54 853.72 853.48 850.85

851.18 851.55 851.93 852.30 852.68 853.05 853.52 853.60 853.36 852.79 851.78 850.49

850.98 851.35 851.73 852.10 852.48 852.85 853.25 +67WB 852.24 +61WB 851.58 850.09

852.18 852.39 852.60 852.92 853.24 853.20 +21S 853.39 852.72 +21S 851.51 850.50

R/W

TLE

853.03 +04S 853.05 +03S 853.22

11+00S

852.98 852.91

852.87 +93S 852.60 +93S

SEE CONSTRUCTION DETAIL JAMES STREET/S. LUDINGTON STREET FOR CURB RAMP INFORMATION.

S. LUDINGTON STREET

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 82	E

2

N

SEE CONSTRUCTION DETAIL
JAMES STREET/WATER STREET
FOR CURB RAMP INFORMATION.

R/W

N. WATER STREET

xxxx xxxx xxxx

838.08 +14NW
836.98
835.92
838.20
12+00NW
836.42
837.00 +98NW
835.95 +98NW
837.07 +92NW
835.99 +92NW
836.65
836.01 +79NW
837.54 +78NW

xxxx

R/W

849.99 +25WB
849.53 +37WB
847.29 +88WB
846.86 +93WB
846.41 +02WB
845.14 +19WB
844.52 +30WB
843.83 +50WB
842.89 +67WB
842.28 +77WB
841.55 +82WB
840.46 +01WB
839.74 +15WB
838.80 +34WB

849.23
849.08
847.89
846.49
842.41
839.25

848.04
846.85
845.64
845.18 +17WB
844.38
844.36 +33WB
844.86
843.06
841.70
840.71 +96WB
840.31
840.77 +99WB
839.00
838.15
838.00 +46WB
838.04

849.43
848.24
847.05
845.84
844.58
843.26
841.90
840.51
839.20
837.03
836.16

849.67
848.48
847.29
844.82
843.50
842.14

MATCH LINE STA. 179+00WB

180+00WB

181+00WB

182+

11+50SW

MATCH LINE STA. 182+00WB

846.08
840.75
839.44
838.28
837.27
836.40

STH 16/60 / E. JAMES STREET

849.31
848.12
846.93
845.84
844.58
843.26
841.90
840.51
839.32
838.16
837.15
836.16

MATCH LINE

848.91
848.39 +45WB
847.72
847.60 +59WB
846.53
845.44
844.38
843.06
841.70
840.31
839.22
838.32 +44WB
838.37
836.87
836.10 +21SW
837.83 +22SW

849.49
850.00 +14WB
848.05 +50WB
847.07
847.19 +73WB
845.86 +00WB
844.71
843.48
842.12
841.88 +80WB
840.90
841.76 +85WB
840.70 +04WB
839.90
840.35 +17WB

+45WB
848.75 +40WB

840.58 +12WB
839.50 +32WB
839.20 +39WB

837.05 +08SW
836.47 +07SW
837.03 +07SW
836.96
836.41
11+00SW
836.65

838.62

SEE CONSTRUCTION DETAIL
JAMES STREET/WATER STREET
FOR CURB RAMP INFORMATION.

R/W

S. WATER STREET

838.37 +81SW

xxxx xxxx xxxx

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 83 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050135
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

SEE CONSTRUCTION DETAIL
JAMES STREET/WATER STREET
FOR CURB RAMP INFORMATION.

N

R/W

TLE

835.97

834.88 +54WB | 834.55 +59WB | 834.23 | 833.61 +34WB | 833.58 +40WB | 833.50 +55WB | 833.86 +65WB | 833.47 +14WB | 833.12 +57WB

835.69 | 834.99 | 833.86 | 833.65 | 833.53 | 833.78 | 833.58 | 833.38 | 833.18 | 833.05 | 832.96

835.56 +12WB

835.16 | 834.45 | 833.91 | 833.54 | 833.33 | 833.21 | L.P.=833.08 | 833.19 | 833.06 | 832.94 | 832.81 | 832.72

835.38 | 834.67 | 834.13 | 833.76 | 833.55 | 833.43 | 833.30 | 833.30 | 833.17 | 833.05 | 832.92 | 832.83

MATCH LINE STA. 182+00WB

835.62 | 834.91 | 834.37 | 183+00WB | 833.79 | 833.67 | 833.54 | 184+00WB | 833.29 | 833.17 | 833.04 | 185+

834.00

STH 16/60 / E. JAMES STREET

833.42 | 832.95

833.18 | 833.05 | 832.93 | 832.80 | 832.71

835.38 | 834.67 | 834.13 | 833.76 | 833.55 | 833.43 | 833.30 | 833.08 | 832.95 | 832.83 | 832.70 | 832.61

835.62 +10WB

835.16 | 834.45 | 833.91 | 833.54 | 833.33 | 833.21 | L.P.=833.13 +66WB

833.19 +62WB | 833.08 +83WB | 833.15

833.42 +12WB | 833.31

835.70 | 834.87 | 834.45 | 834.07 | 833.87 | 833.74 | 833.13 | 833.48 | 833.12

835.32 +38WB | 835.06 +43WB | 834.42 +70WB | 833.81 +81WB | 833.49 +98WB | 833.53 +25WB | 833.50 +31WB

R/W

TLE

835.97

SEE CONSTRUCTION DETAIL
JAMES STREET/WATER STREET
FOR CURB RAMP INFORMATION.

R/W

MATCH LINE STA. 185+00WB

2

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 84	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050136

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2

2

N

TLE

R/W

833.78
+82WB

833.97
+87WB

833.62
+33WB

833.84
+64WB

833.67
+69WB

834.87
+61WB

832.91
+14WB

832.98

833.13
+50WB

833.27
+75WB

833.22

833.39

833.74

833.73

834.10

834.40

834.72

835.04

832.71

832.68

832.71

832.77

832.91

832.86

833.03

833.21

833.40

833.65

833.93

834.26

834.62

L.P.=832.71
+17WB

832.82

832.88

833.02

833.08

833.25

833.43

833.62

833.87

834.15

834.48

834.84

MATCH LINE STA. 185+00WB

MATCH LINE STA. 187+75WB

832.94

833.00

833.14

186+00WB

833.49

833.67

833.86

187+00WB

834.39

834.72

835.08

833.32

834.11

STH 16/60 / E. JAMES STREET

832.70

832.76

832.90

833.08

833.25

833.43

833.68

833.99

834.27

834.60

834.90

832.60

832.60
+19WB

832.35
+32W

833.16
+02WB

832.65

833.17
+07WB

831.92
+09W

832.52

832.46
+11W

L.P.=832.17
+02W

833.03

833.21

833.52

833.88

834.16

834.49

834.73

833.57

833.74

834.06

834.24

834.51

835.27

833.55
+23WB

834.27
+90WB

834.16
+95WB

834.45
+19WB

834.64
+37WB

835.06
+53WB

832.91
+16WB

R/W

R/W

832.69

834.79
+48WB

832.06
+98W

831.77
+00W

L=400

832.12

TLE

SEE CONSTRUCTION DETAIL
JAMES STREET/WATERLOO STREET
FOR CURB RAMP INFORMATION.

832.65

L.P.=831.74
+98W

WATERLOO STREET

R/W

R/W

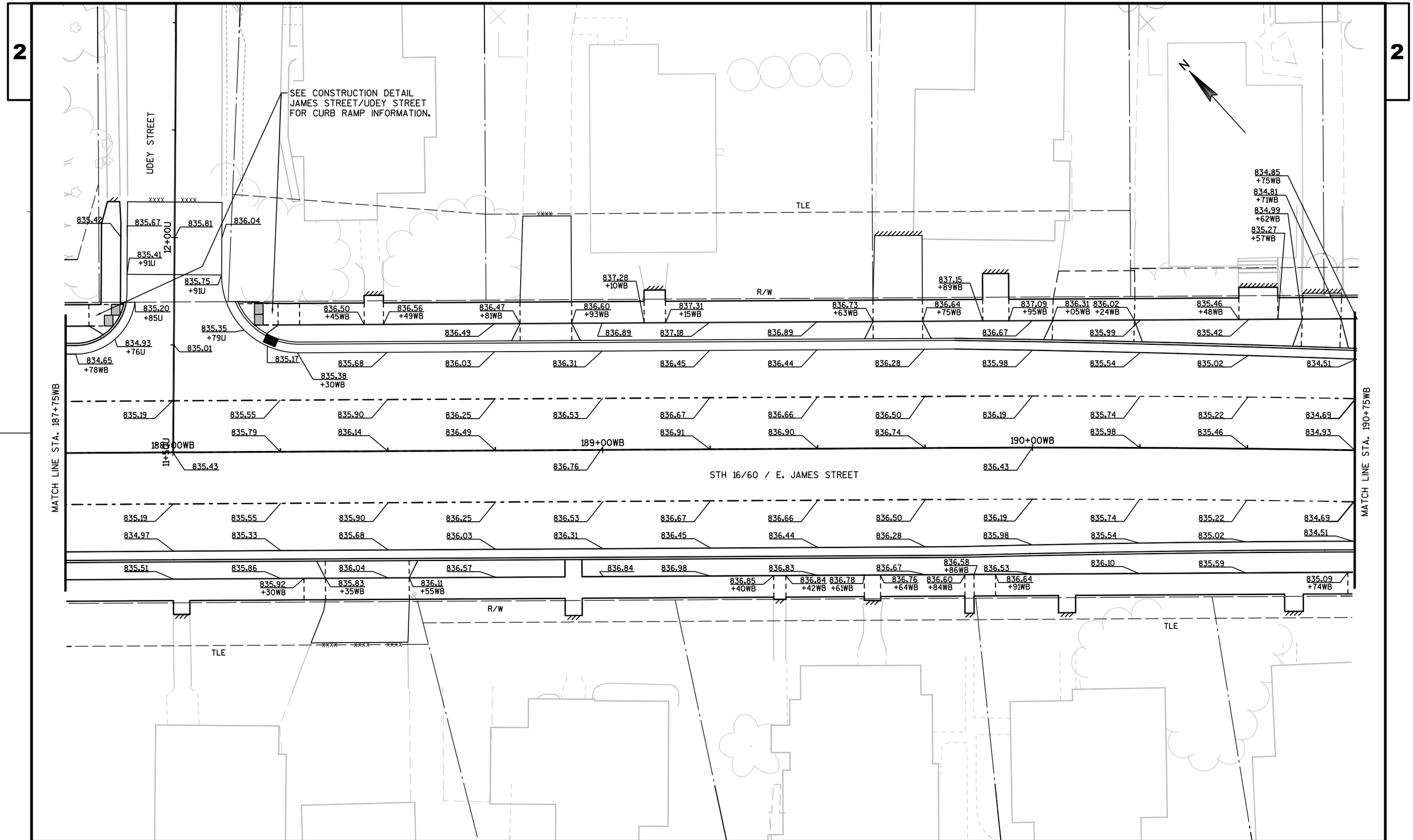
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050137

PLOT DATE : 4/29/2016

PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

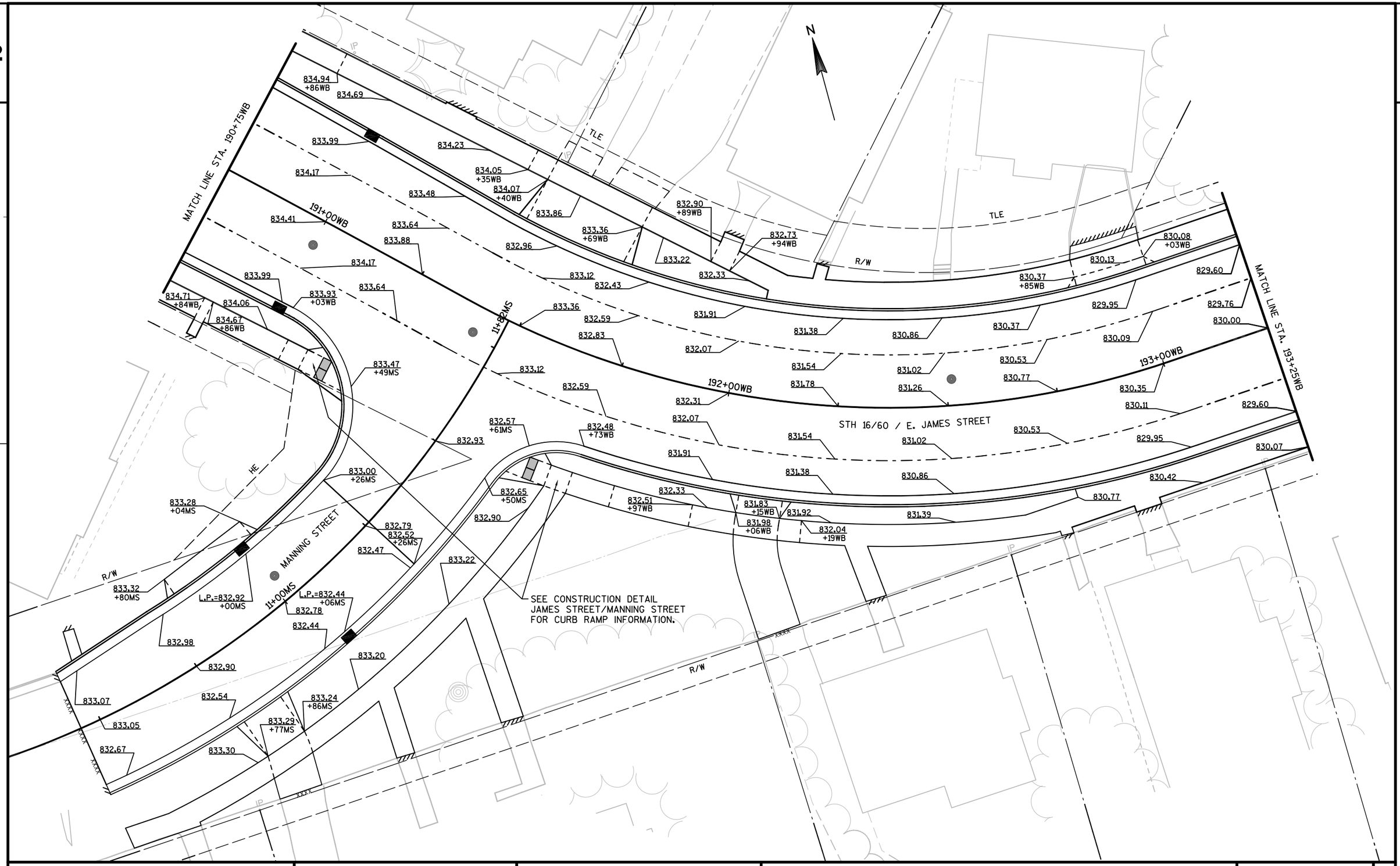
WISDOT/CADDS SHEET 42



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050138
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:20 FT

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 87	E

SEE CONSTRUCTION DETAIL
JAMES STREET/RIVER ROAD
FOR CURB RAMP INFORMATION.

END PROJECT 1401-02-71
STA 194+59.01
MATCH EXISTING
SAWCUT REQUIRED

N

TLE
R/W
829.29 +76WB
829.21 +90WB
829.33
829.12
828.99
828.94
828.89
828.79
829.49
829.28
829.15
829.05
828.95
829.73
829.52
194+00WB
829.29
829.19
195+00WB
196+00WB
10+50R
829.08
829.39
829.49
829.28
829.15
829.05
829.33
829.12
828.99
828.91 +20WB
828.95
828.65 +60R
828.85 +48R
828.84
829.28 +76WB
829.17 +98WB
828.61
828.76 +43R
828.40 +42R
R/W
TLE
RIVER ROAD
10+00R
R/W
R/W

MATCH LINE STA. 193+25WB

STH 16/60 / E. JAMES STREET

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES	SHEET 88	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT GRADES\021201_PG.DWG
LAYOUT NAME - 050140

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:20 FT

2

SEE CONSTRUCTION DETAIL
JAMES STREET/INDUSTRIAL DRIVE
FOR CURB RAMP INFORMATION.

N

TLE

R/W

860.56 +49ID
860.46 +47ID
860.63 +53ID
860.54 +50ID
861.04 +73ID
861.14
861.29
861.43
861.64
861.09
861.02
861.35 +38ID
861.22 +44ID
861.25 +72ID
861.19
861.27 +37ID
860.32
860.49
860.65
860.81
859.19
859.29 +36ID
859.26 +51ID
859.42 +73ID
859.45 +56ID
859.43
859.56
859.72
859.93
859.97
859.46 +78ID
859.67
859.53
859.77
859.76
860.01

MATCH LINE STA. 15+35ID

INDUSTRIAL DRIVE

16+00ID
17+00ID
18+00ID

859.99
860.25
860.38
860.45
860.53
860.60
860.68
860.75
860.83
860.90
859.95
860.31
860.31 +74ID
860.40 +78ID
860.70
860.74
860.78
860.82
860.86
860.90
860.95
861.00
859.90 +49ID
861.08 +82ID
861.16 +85ID
861.39
861.43
861.47
861.46
861.47 +81ID
861.56
861.60
861.63
861.67
861.23 +85ID
861.48 +56ID
861.43 +58ID
861.53 +83ID
860.56 +50ID
861.09 +80ID

XXXX

R/W

TLE

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES: INDUSTRIAL DRIVE	SHEET 89	E

2

2

N

TLE

R/W

DIX STREET

MATCH LINE STA. 11+00ID

MATCH LINE STA. 13+50ID

12+00ID

13+00ID

849.85
850.00
+39ID
850.22
850.87
851.06
+81ID
851.86
852.86
+23ID
852.95
854.14
855.24
+75ID

849.70
850.12
850.77
851.65
852.92
854.10
855.20
+75ID
856.58
857.34
+13ID
857.27
+13ID

850.18
850.60
851.25
852.13
853.23
854.41
855.52
855.20
855.35
+79ID
856.15
856.23
857.63

856.47
856.94
857.02

856.23
856.03
857.26
855.94
857.02
856.78
856.67

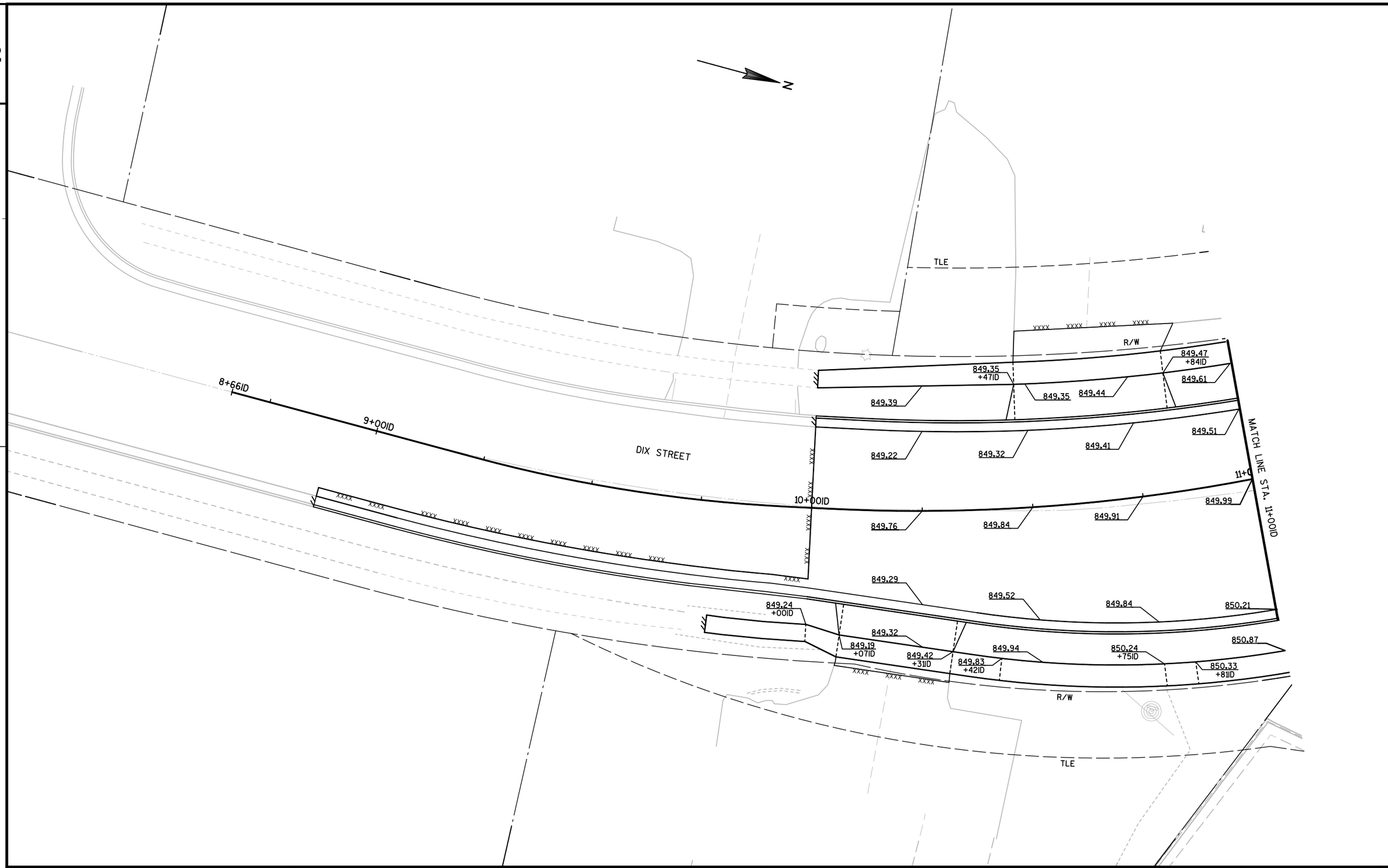
850.67
+92ID
851.55
852.38
852.94
853.65
854.42
855.12

851.34
+23ID
851.43
852.20
853.05
+76ID
853.63
854.35
855.12
855.22
+79ID
855.91
+79ID
856.48
+19ID
856.10
+11ID
856.63
+06ID
856.98
+39ID
857.34
+69ID
856.98
+38ID

SEE CONSTRUCTION DETAIL
JAMES STREET/DIX STREET
FOR CURB RAMP INFORMATION.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES: DIX STREET	SHEET 90 E

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	JOINT DETAILS AND PAVING GRADES: DIX STREET	SHEET 91 E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

R/W

ASPHALTIC FLUME

STH 16/60 (WB) / W. JAMES STREET

122+00WB 123+00WB 124+00WB 125+00WB 126+00WB 127+00WB 128+00WB

MATCHLINE STA. 128+00

122+00EB 123+00EB 124+00EB 125+00EB 126+00EB 127+00EB 128+

STH 16/60 (EB) / W. JAMES STREET

R/W

TEMPORARY DITCH CHECK (TYP.)

EROSION MAT URBAN CLASS I, TYPE B

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 92 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- D — INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

MATCHLINE STA. 16+00WB

15+00ID

INDUSTRIAL DRIVE

TLE

SILT FENCE (TYP.)

R/W

MATCHLINE STA. 134+00WB

STH 16/60 (WB) / W. JAMES STREET

MATCHLINE STA. 128+00WB

128+00WB 129+00WB 130+00WB 131+00WB 132+00WB 133+00WB 134+00WB

128+00EB 129+00EB 130+00EB 131+00EB 132+00EB 133+00EB

STH 16/60 (EB) / W. JAMES STREET

TEMPORARY DITCH CHECK

14+00ID

DIX STREET

MATCHLINE STA. 13+00WB

ASPHALTIC FLUME

EROSION MAT URBAN CLASS I, TYPE B (TYP.)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 93	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:04 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

SILT FENCE (TYP.)

TEMPORARY DITCH CHECK

TEMPORARY DITCH CHECK

R/W

STH 16/60 (WB) / W. JAMES STREET

STH 16/60 (EB) / W. JAMES STREET

CONTINENTAL DRIVE

MEISTER DRIVE

MATCHLINE STA. 134+00WB

MATCHLINE STA. 140+40WB

135+00WB

136+00WB

137+00WB

138+00WB

139+00WB

139+26EB

138+00EB

139+00EB

135+00EB

136+00EB

137+00EB

12+50C

11+50M

12+00C

11+00M

10+00M

TLE

R/W

CULVERT PIPE CHECK

EROSION MAT URBAN CLASS I, TYPE B (TYP.)

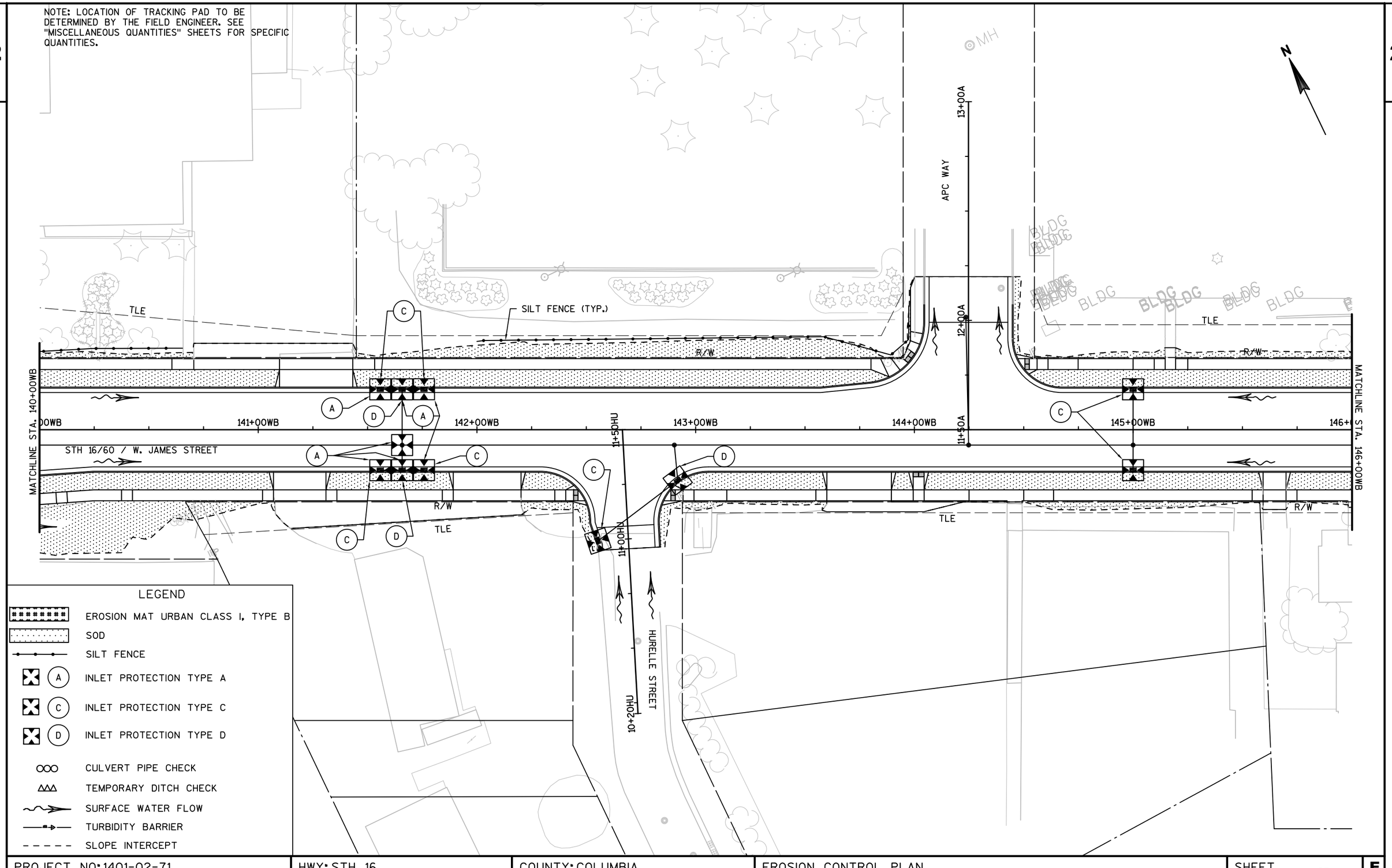
LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:04 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

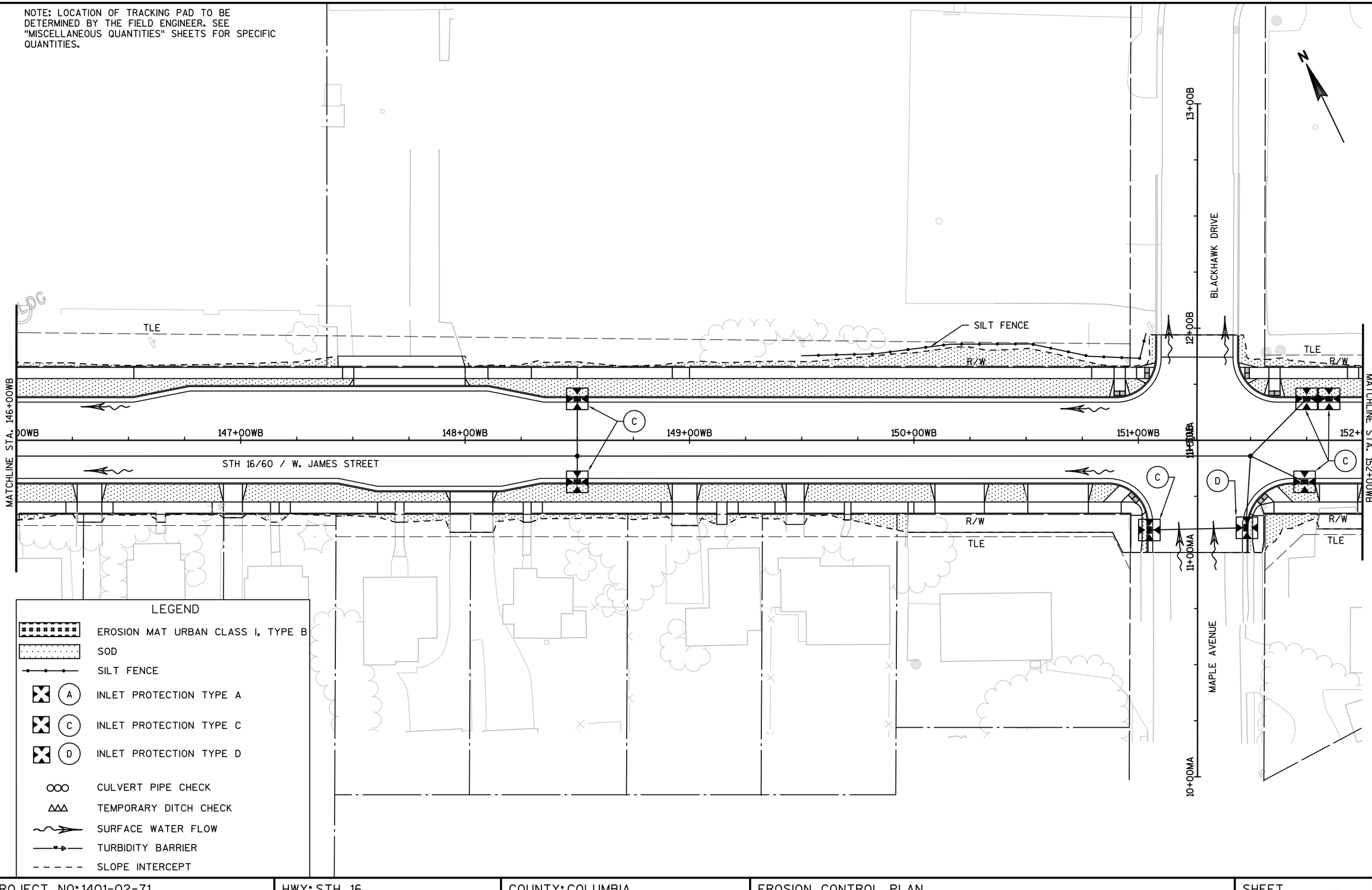


LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

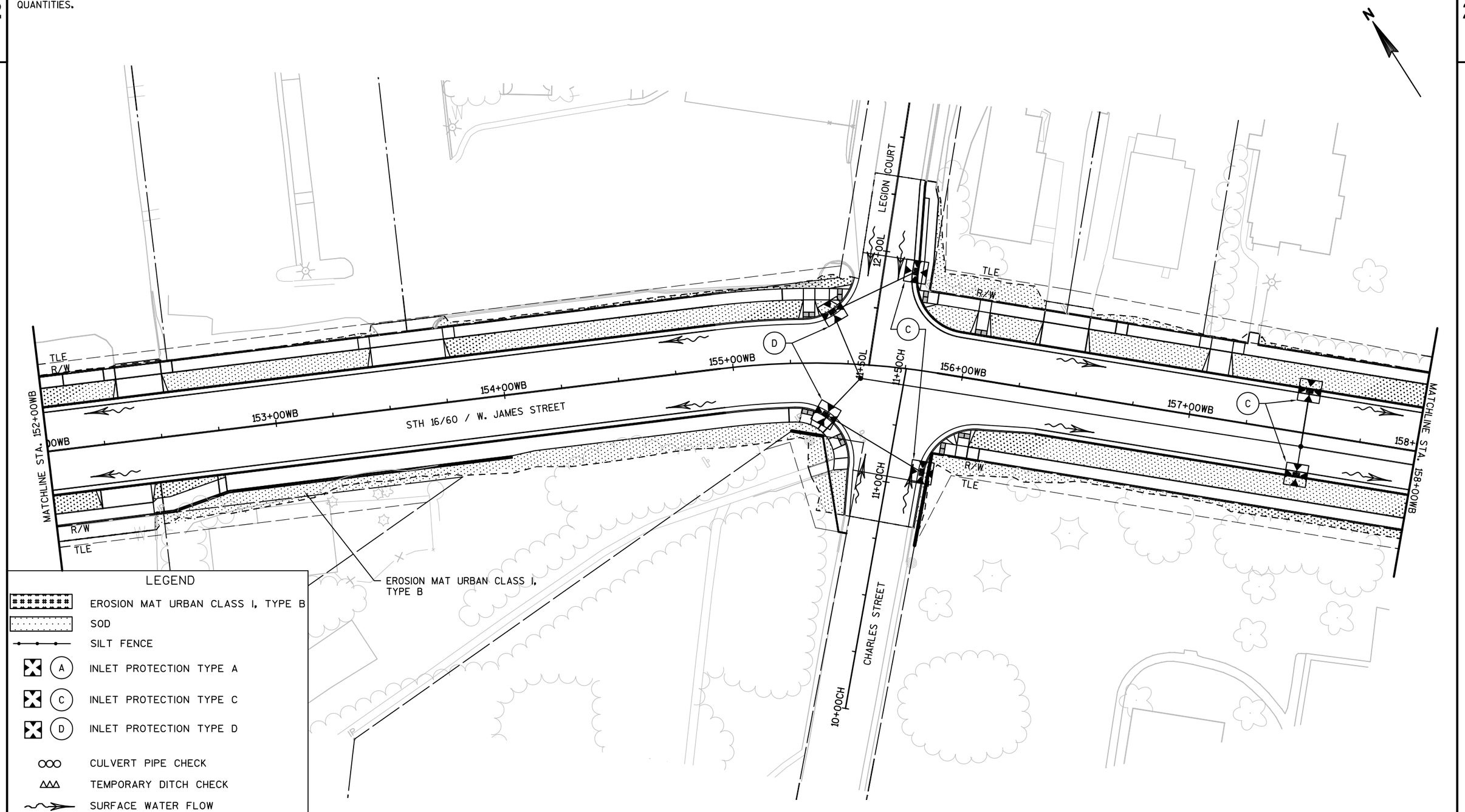
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 95 E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 96	E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 97	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:04 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

13+00NL
12+00NL
11+50NL
11+00SL
10+00SL
N. LEWIS STREET
S. LEWIS STREET
13+00NB
12+00NB
11+50NB
11+00SB
10+00SB
N. BIRDSEY STREET
S. BIRDSEY STREET
STH 16/60 / W. JAMES STREET
MATCHLINE STA. 158+00WB
MATCHLINE STA. 164+00WB
159+00WB
160+00WB
161+00WB
162+00WB
163+00WB
TLE
R/W
C
D

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- D — INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 98 E

2

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

13+00NM

N. MAIN STREET

12+00NM

11+50NM

11+00SM

S. MAIN STREET

10+00SM

MATCHLINE STA. 164+00WB

MATCHLINE STA. 170+00WB

164+00WB

165+00WB

166+00WB

167+00WB

168+00WB

169+00WB

170+

STH 16/60 / W. JAMES STREET

STH 16/60 / W. JAMES STREET

TLE

R/W

TLE

R/W

R/W

TLE

A

C

D

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 99	E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

N. SPRING STREET

N. DICKASON BOULEVARD

STH 16/60 / W. JAMES STREET

S. SPRING STREET

S. DICKASON BOULEVARD (SB)

S. DICKASON BOULEVARD (NB)

TLE

R/W

MATCHLINE STA. 170+00WB

MATCHLINE STA. 176+00WB

13+00NS

12+00NS

11+50SS

11+00SS

10+00SS

13+00D

12+00D

11+50SBD

11+00SBD

10+00SBD

11+50NBD

11+00NBD

10+00NBD

00WB

171+00WB

172+00WB

173+00WB

174+00WB

175+00WB

176+

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 100 E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

N. LUDINGTON STREET

13+00N

12+00N

11+50S

11+00S

10+00S

S. LUDINGTON STREET

N. WATER STREET

13+00NW

12+00NW

11+50SW

11+00SW

10+00SW

S. WATER STREET

MATCHLINE STA. 176+00WB

MATCHLINE STA. 182+00WB

176+00WB

177+00WB

178+00WB

179+00WB

180+00WB

181+00WB

182+00WB

STH 16/60 / W. JAMES STREET

STH 16/60 / E. JAMES STREET

R/W

C

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- D — INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

N

TURBIDITY BARRIER (SEE S.D.D.)

UDEY STREET

13+00U

12+00U

11+50U

MATCHLINE STA. 182+00WB

MATCHLINE STA. 188+00WB

182+00WB

183+00WB

184+00WB

185+00WB

186+00WB

187+00WB

188+00WB

STH 16/60 / E. JAMES STREET

TLE

R/W

MOO+IT

10+00W

2ND WARD CREEK

WATERLOO STREET

D

C

A

LEGEND

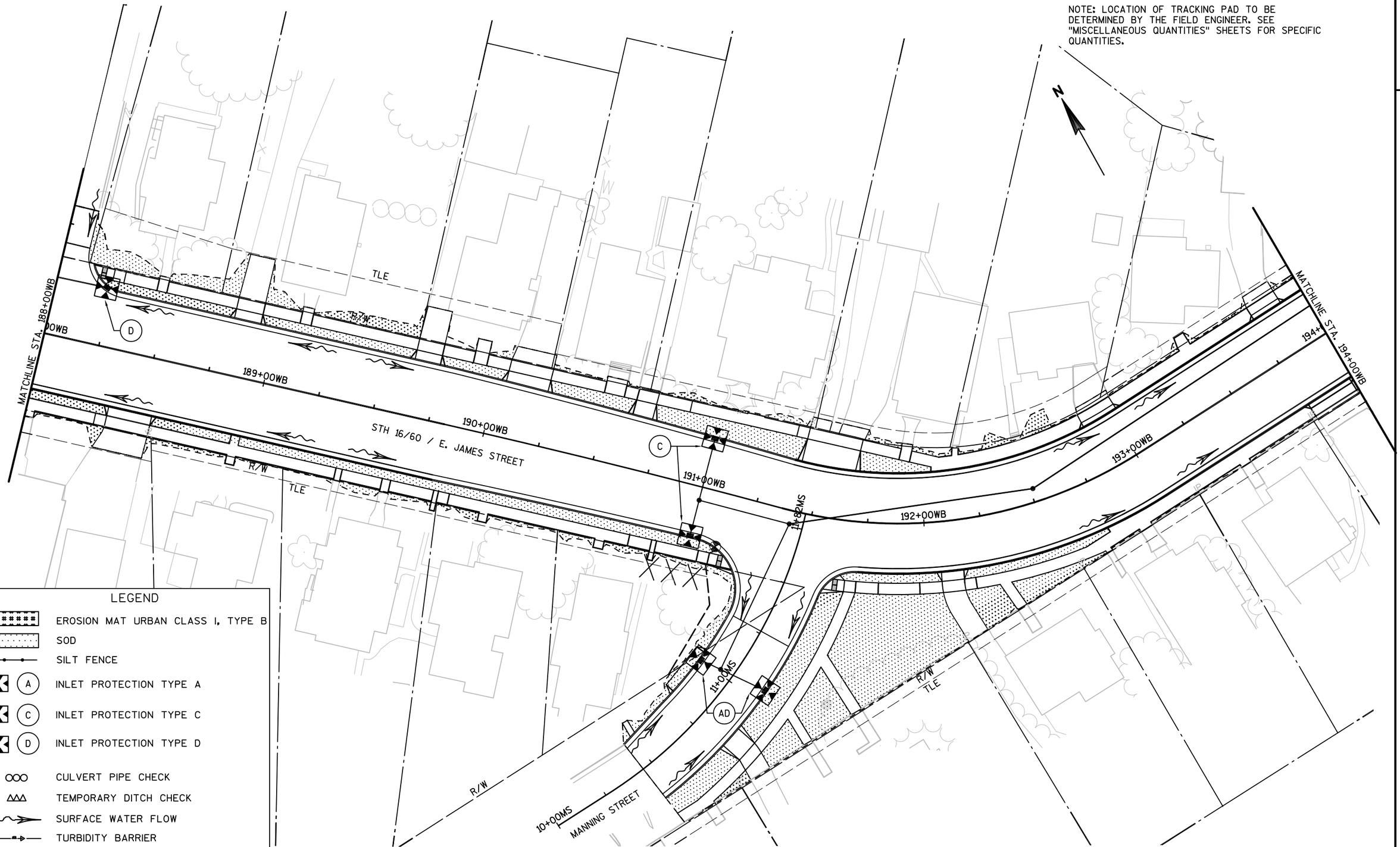
- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- A — INLET PROTECTION TYPE A
- C — INLET PROTECTION TYPE C
- D — INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 102 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

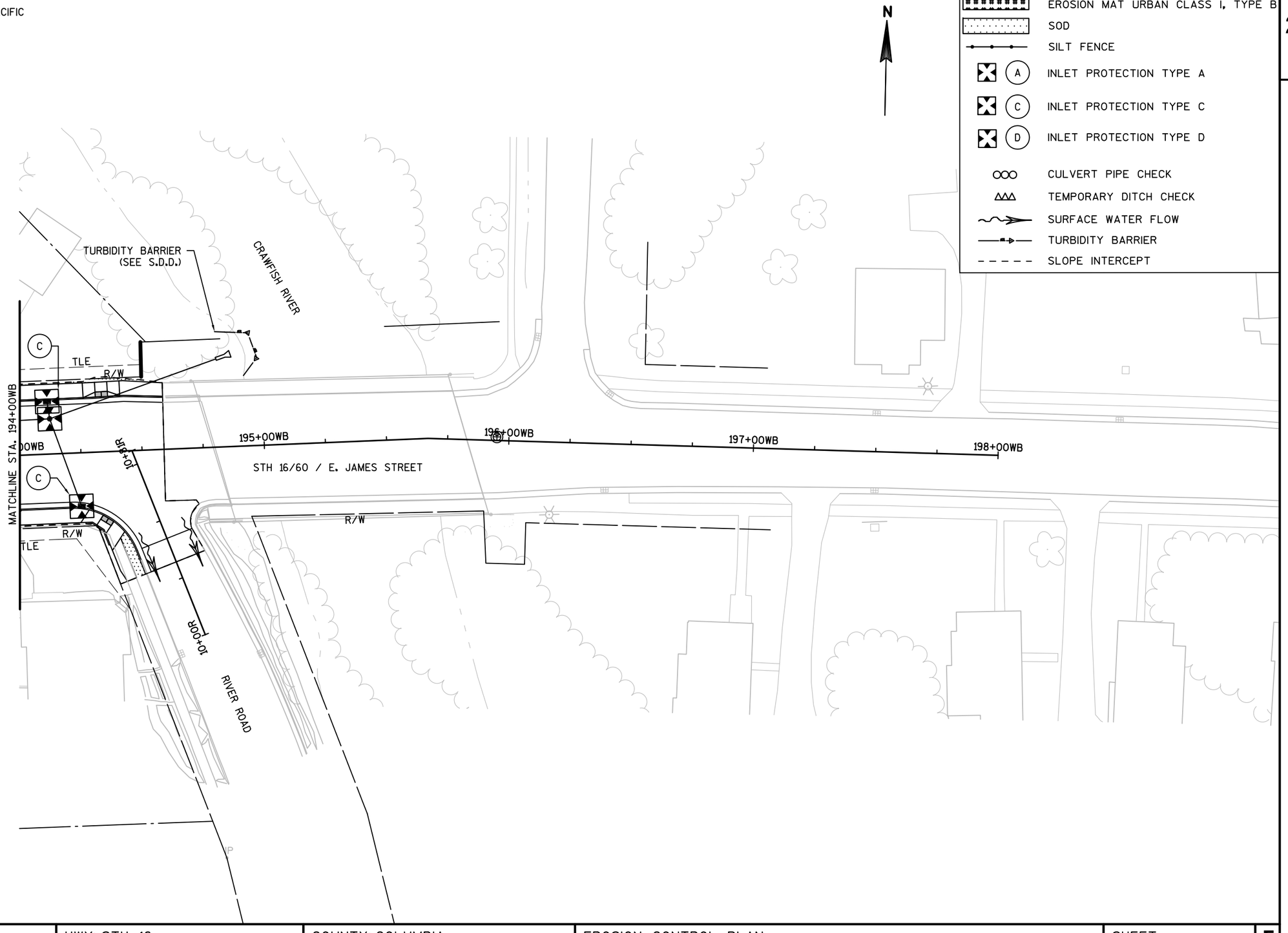


LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 103 E

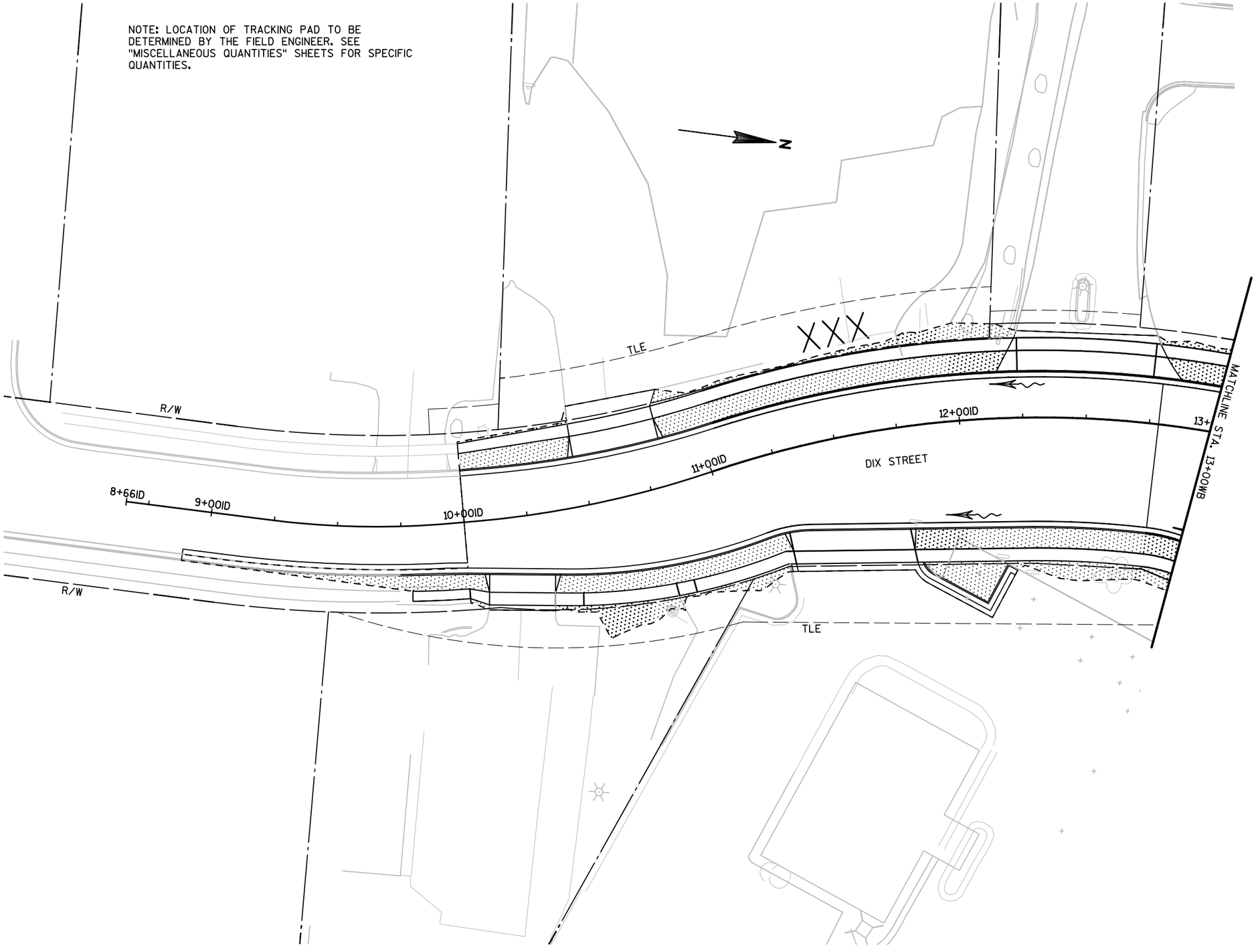
NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 104 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\EROSION CONTROL\022001_EC.DWG PLOT DATE : 4/29/2016 6:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.

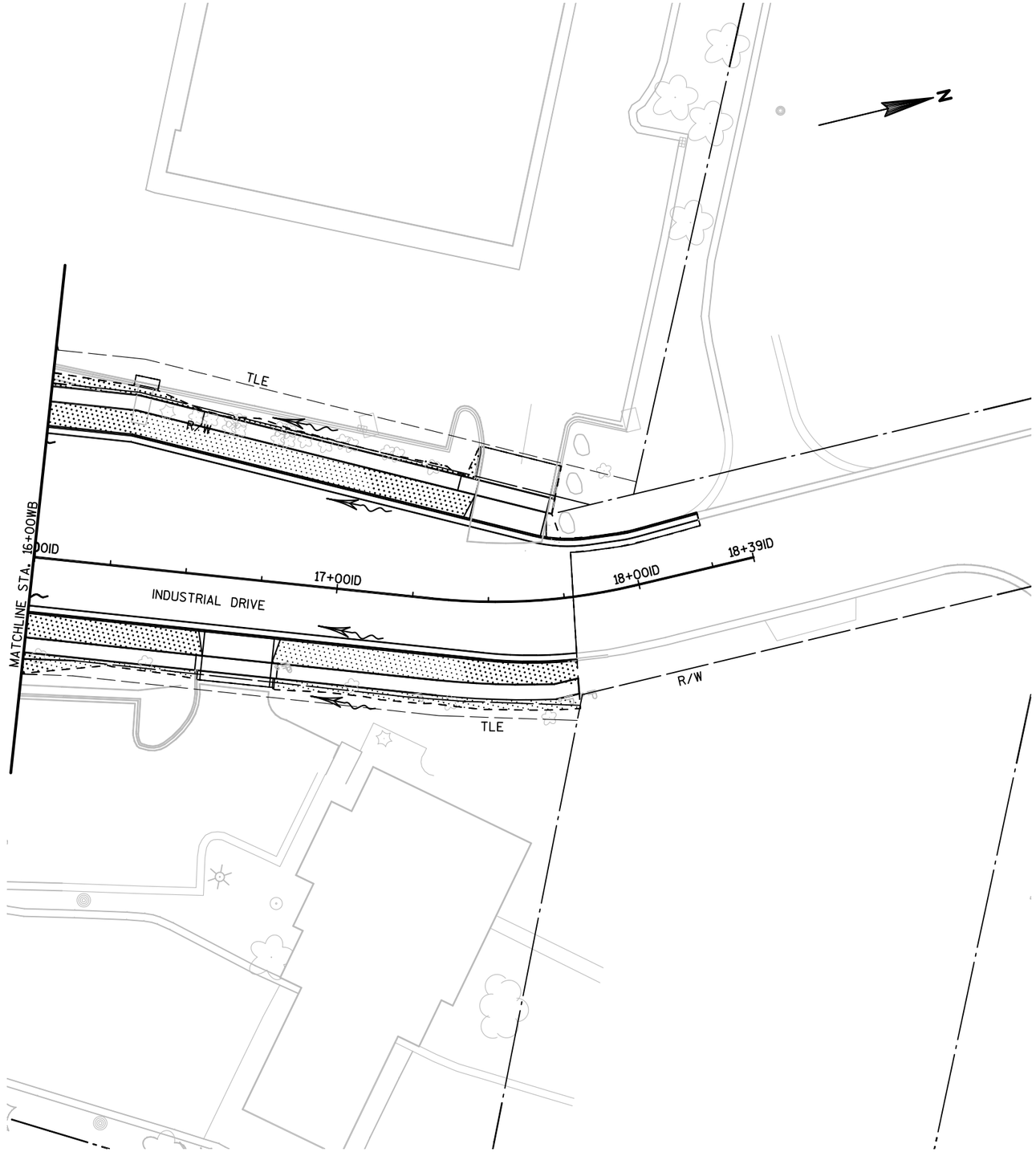


LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 105 E

NOTE: LOCATION OF TRACKING PAD TO BE DETERMINED BY THE FIELD ENGINEER. SEE "MISCELLANEOUS QUANTITIES" SHEETS FOR SPECIFIC QUANTITIES.



LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SOD
- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- SLOPE INTERCEPT

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 106 E

2

2

STA 130+08.1WB, 75.8' LT
INLETS 4-FT DIAMETER-H
8.0

STA 129+90.5WB, 52.3' LT
INLETS 4-FT DIAMETER-H-S
7.0

TLE

R/W

INDUSTRIAL DRIVE R/L

16+00ID

15+00ID

14+00ID

13+00ID

6.0 STA 130+88.4WB, 82.5' LT
INLETS 4-FT DIAMETER-H

TLE
R/W

5.0 STA 130+36.8WB, 45.5' LT
INLETS 4-FT DIAMETER-H-S

PROPOSED WATER MAIN

STH 16/60 (WB) / W. JAMES STREET R/L

127+00WB

128+00WB

129+00WB

130+00WB

131+00WB

132+00WB

133+

REMOVING INLETS (TYP.)

REMOVING STORM SEWER (TYP.)

STA 130+10.0WB, 6.5'RT (CASTING)
MANHOLES 5-FT DIAMETER-H (ECCENTRIC TOP)
STA 130+10.1WB, 5.7' RT (STRUCTURE)
4.0

(18")

STA 130+10.0WB, 12.5' RT
INLETS 2x3-FT-H
3.0

2.0 STA 130+10.0WB, 68.5' RT
INLETS 4-FT DIAMETER-H

STH 16/60 (EB) / W. JAMES STREET

PROPOSED SANITARY SEWER

1.0 STA 129+80.0WB, 95.9' RT
18-INCH APRON ENDWALL

R/W

DIX STREET R/L

R/W
TLE

MATCH LINE STA 133+00 WB

SIGN

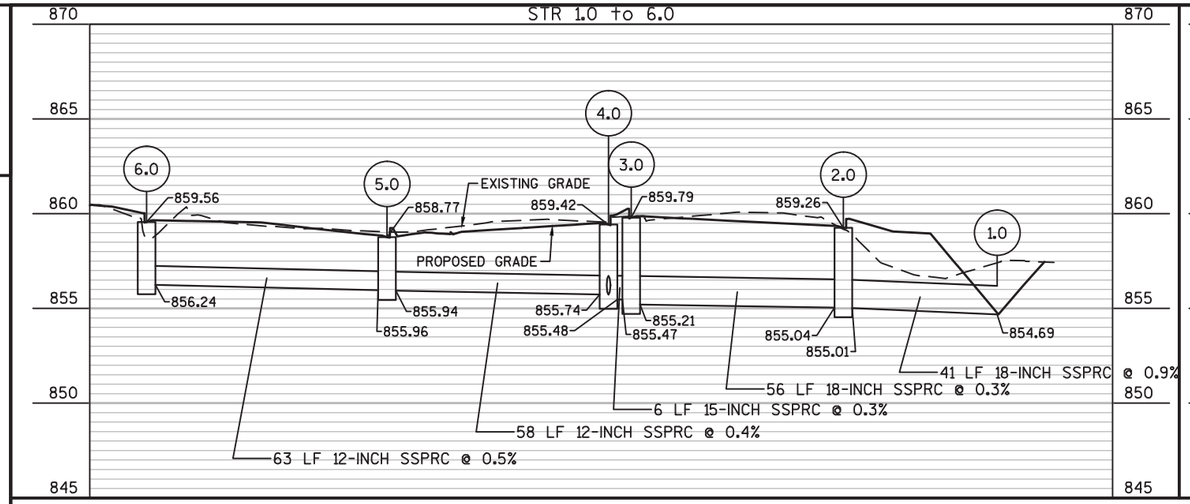
FILLER CAP

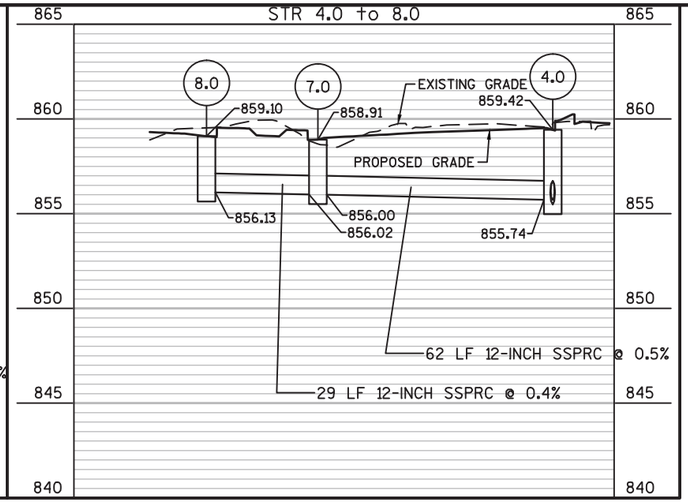
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FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\022501_SS (1A).DWG
LAYOUT NAME - ****

PLOT DATE : 5/2/2016 1:15 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42





PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 108	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\022501_SS (1A).DWG
LAYOUT NAME - ****
PLOT DATE : 5/2/2016 1:16 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTE: STRUCTURES 9.0, 10.0, 10.5, AND 11.0 WILL BE BUILT IN STAGE 1. STRUCTURES 10.5 AND 11.0 MUST TIE INTO THE EXISTING STORM SEWER SYSTEM IN STAGE 1 UNTIL THE EXISTING STORM SEWER IS REMOVED AND REPLACED IN STAGE 3 AND STAGE 2, RESPECTIVELY. STRUCTURE 10.5 WILL BE SEALED AND RECONSTRUCTED WITH A J-S INLET COVER IN STAGE 3. STRUCTURE 11.0 WILL BE SEALED IN STAGE 2 AND RECONSTRUCTED IN STAGE 4.

N

MATCH LINE STA 133+00 WB

MATCH LINE STA 139+00 WB

STH 16/60 (WB) / W. JAMES STREET R/L

STH 16/60 (EB) / W. JAMES STREET

CONTINENTAL DRIVE

MEISTER DRIVE R/L

R/W

R/W TLE

PROPOSED WATER MAIN

PROPOSED SANITARY SEWER

REMOVING INLETS (TYP.)

REMOVING STORM SEWER (TYP.)

PIPE UNDERDRAIN 6-INCH (SEE PIPE UNDERDRAIN WRAPPED 6-INCH DETAIL)

STA 136+83.7WB, 62.4' LT
24-INCH APRON ENDWALL (9.0)

STA 136+82.3WB, 22.3' LT
MANHOLES 4-FT DIAMETER - TEMPORARY INLET COVER
RECONSTRUCT WITH J-S IN STAGE 3 (10.5)

STA 138+20.0WB, 29.2' LT
INLETS 2x3-FT-H (13.3)

STA 135+15.0WB, 30.5' LT
INLETS 2x3-FT-H (18.1)

STA 136+82.3WB, 30.5' LT
INLETS 4-FT DIAMETER-H (10.0)

STA 137+12.0WB, 1.5' RT
INLETS 2x3-FT-H (12.2)

STA 138+30.0WB, 28.5' LT
INLETS 2x3-FT-H-S (13.2)

STA 138+39.9WB, 27.8' LT
INLETS 2x3-FT-H (13.1)

STA 135+15.0WB, 11.2' RT
MANHOLES 4-FT DIAMETER-J-S (18.0)

STA 136+81.5WB, 5.0' RT
MANHOLES 5-FT DIAMETER-J-S
RECONSTRUCT IN STAGE 4 (11.0)

STA 137+12.0WB, 8.6' RT
INLETS 2x3-FT-H (12.1)

STA 137+12.0WB, 16.2' RT
MANHOLES 5-FT DIAMETER-J-S (12.0)

STA 135+15.0WB, 48.4' RT
INLETS 2x3-FT-H (18.2)

STA 136+72.3WB, 63.2' RT
24-INCH APRON ENDWALL (19.0)

STA 138+45.3WB, 10.0' RT
MANHOLES 5-FT DIAMETER-J-S (13.0)

STA 138+38.3WB, 31.4' RT
INLETS 2x3-FT-H (13.5)

STA 138+48.3WB, 30.7' RT
INLETS 2x3-FT-H-S (13.4)

STA 138+58.3WB, 30.0' RT
INLETS 2x3-FT-H (13.6)

STA 137+45.9WB, 14.8' RT
MANHOLES 5-FT DIAMETER-J-S (14.0)

STA 137+47.3WB, 38.9' RT
INLETS 4-FT DIAMETER-H-S (14.1)

(18")

(30")

134+00WB

135+00WB

136+00WB

137+00WB

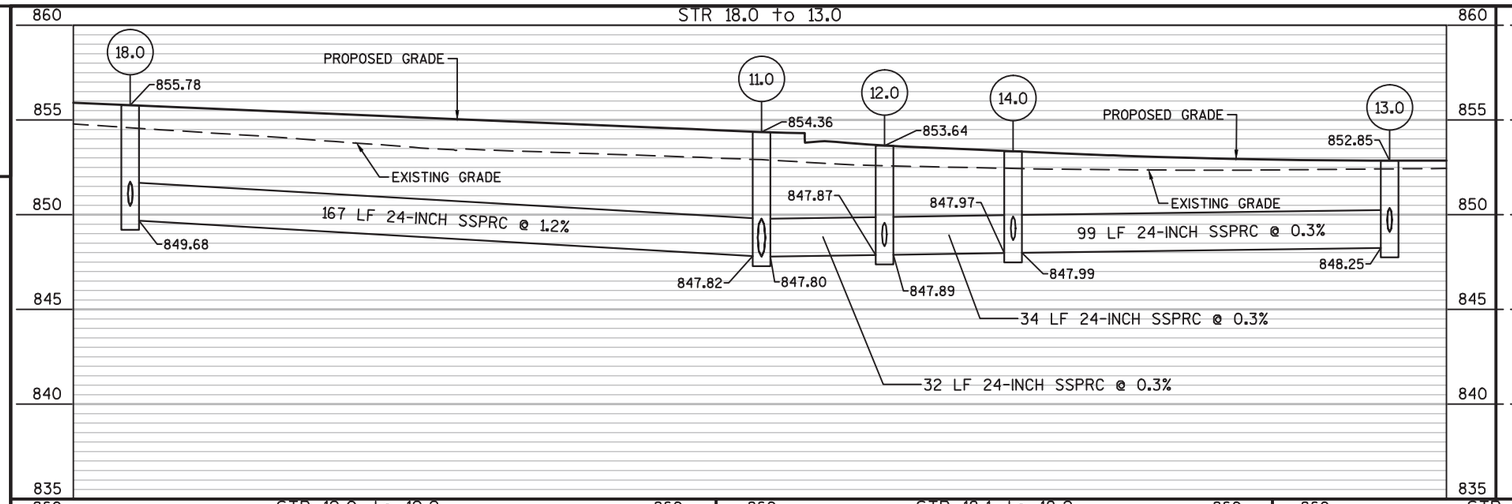
138+00WB

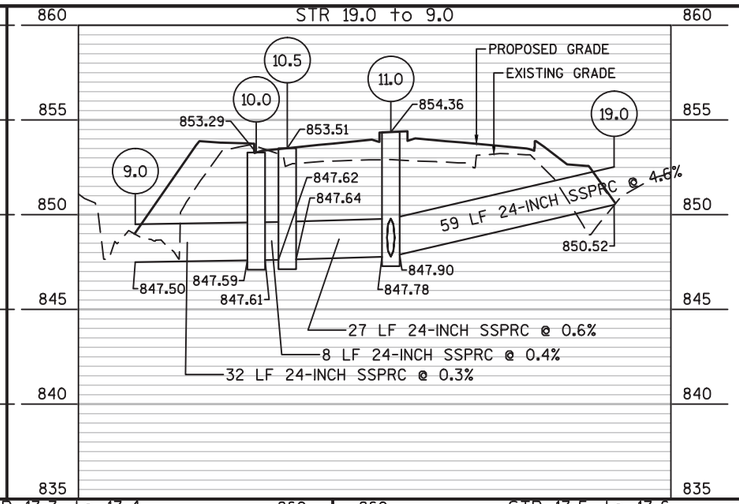
10+00M

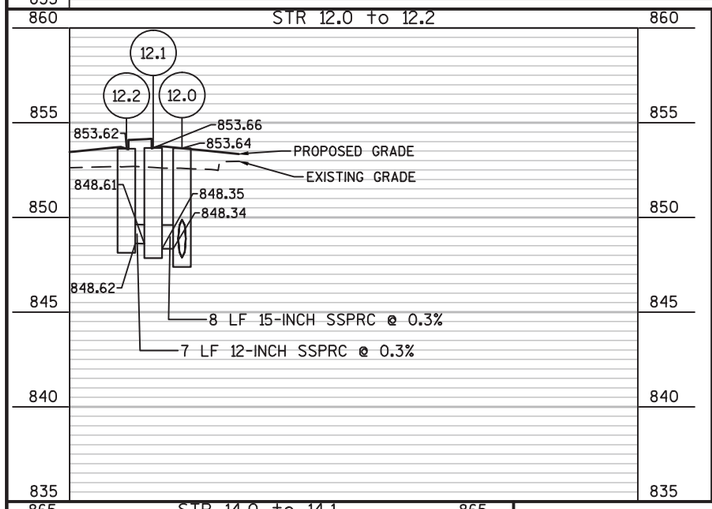
11+00M

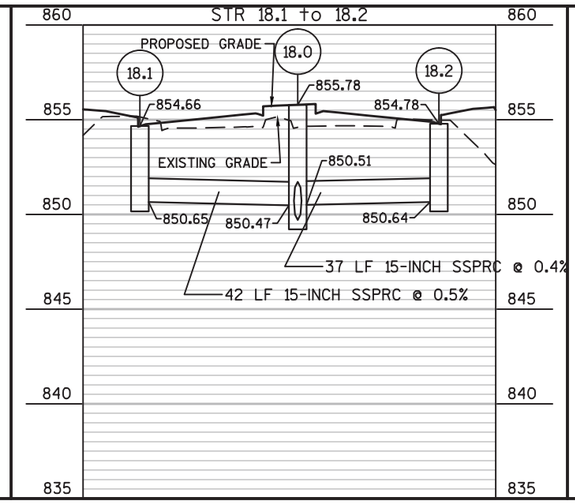
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 109	E

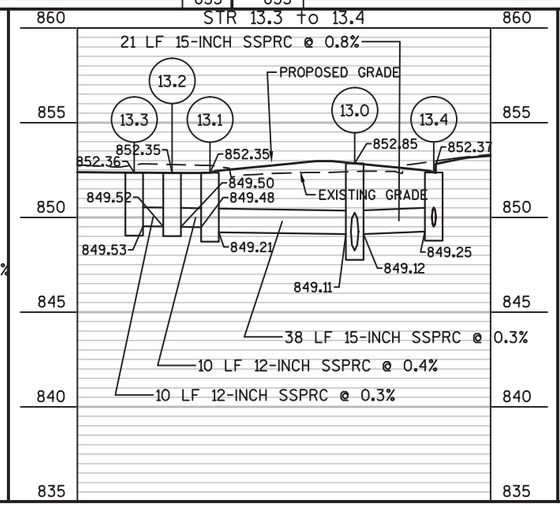
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LAYOUT NAME - ****
PLOT DATE : 5/2/2016 1:17 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

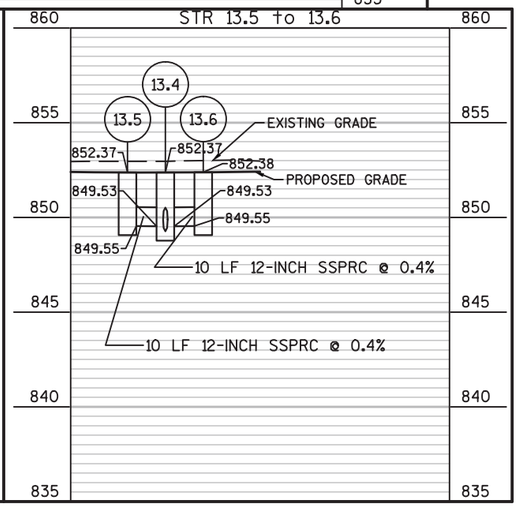

STR 18.0 to 13.0
18.0
855.78
PROPOSED GRADE
EXISTING GRADE
167 LF 24-INCH SSPRC @ 1.2%
849.68
11.0
854.36
12.0
853.64
14.0
847.87
847.97
PROPOSED GRADE
EXISTING GRADE
13.0
852.85
99 LF 24-INCH SSPRC @ 0.3%
847.82
847.80
847.89
847.99
848.25
34 LF 24-INCH SSPRC @ 0.3%
32 LF 24-INCH SSPRC @ 0.3%

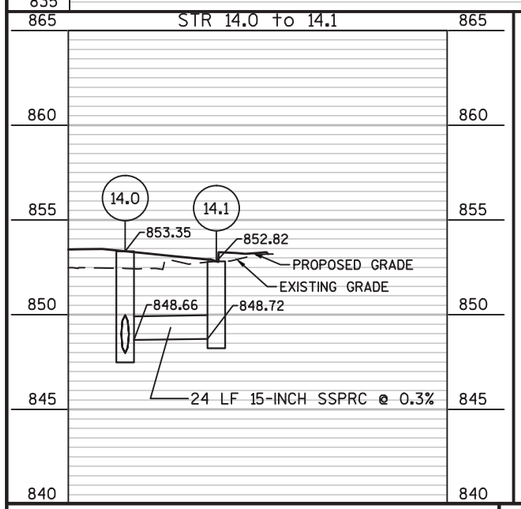

STR 19.0 to 9.0
10.5
PROPOSED GRADE
EXISTING GRADE
10.0
11.0
854.36
853.29
853.51
19.0
9.0
847.62
847.64
59 LF 24-INCH SSPRC @ 4.6%
850.52
847.50
847.59
847.61
847.90
847.78
27 LF 24-INCH SSPRC @ 0.6%
8 LF 24-INCH SSPRC @ 0.4%
32 LF 24-INCH SSPRC @ 0.3%


STR 12.0 to 12.2
12.1
12.2
12.0
853.62
853.66
853.64
PROPOSED GRADE
EXISTING GRADE
848.61
848.35
848.34
848.62
8 LF 15-INCH SSPRC @ 0.3%
7 LF 12-INCH SSPRC @ 0.3%


STR 18.1 to 18.2
PROPOSED GRADE
18.1
18.0
855.78
18.2
854.66
854.78
EXISTING GRADE
850.51
850.65
850.47
850.64
37 LF 15-INCH SSPRC @ 0.4%
42 LF 15-INCH SSPRC @ 0.5%


STR 13.3 to 13.4
21 LF 15-INCH SSPRC @ 0.8%
13.2
PROPOSED GRADE
13.3
13.1
13.0
13.4
852.35
852.35
852.85
852.37
852.36
849.50
849.52
849.48
EXISTING GRADE
849.53
849.21
849.25
849.12
849.11
38 LF 15-INCH SSPRC @ 0.3%
10 LF 12-INCH SSPRC @ 0.4%
10 LF 12-INCH SSPRC @ 0.3%


STR 13.5 to 13.6
13.4
13.5
13.6
EXISTING GRADE
852.37
852.37
852.38
PROPOSED GRADE
849.53
849.53
849.55
849.55
10 LF 12-INCH SSPRC @ 0.4%
10 LF 12-INCH SSPRC @ 0.4%


STR 14.0 to 14.1
14.0
14.1
853.35
852.82
PROPOSED GRADE
EXISTING GRADE
848.66
848.72
24 LF 15-INCH SSPRC @ 0.3%

2

CONTINENTAL DRIVE R/L

12+50C

12+00C

11+50C

MATCH LINE STA 139+00WB

24.1 STA 139+81.9WB, 21.7' LT
INLETS 4-FT DIAMETER-H-S

STA 141+65.8WB, 7.0' RT
MANHOLES 4-FT DIAMETER-J-S 23.0

23.2 STA 141+55.8WB, 18.5' LT
INLETS 2x3-FT-H

23.1 STA 141+65.8WB, 18.5' LT
INLETS 2x3-FT-H-S

23.3 STA 141+75.8WB, 18.5' LT
INLETS 2x3-FT-H

STA 144+23.6WB, 51.5' LT
MANHOLES 5-FT DIAMETER-J-S 20.0

22.0 STA 142+90.3WB, 7.0' RT
MANHOLES 4-FT DIAMETER-J-S

ABANDONING SEWER

REMOVING MANHOLES

TLE

R/W

PROPOSED WATER MAIN

PROPOSED SANITARY SEWER

STH 16/60 / W. JAMES STREET R/L

140+00WB

141+00WB

142+00WB

143+00WB

144+00WB

PIPE UNDERDRAIN 6-INCH (SEE PIPE UNDERDRAIN WRAPPED 6-INCH DETAIL)

RECONNECT EXISTING PIPE

13+00A

12+00A

11+50A

APC WAY R/L

(15")

MATCH LINE STA 144+75WB

24.0 STA 139+81.8WB, 7.0' RT
MANHOLES 4-FT DIAMETER-J-S

PIPE UNDERDRAIN 6-INCH (SEE PIPE UNDERDRAIN WRAPPED 6-INCH DETAIL)

23.4 STA 141+65.8WB, 18.5' RT
INLETS 2x3-FT-H-S

23.5 STA 141+55.8WB, 18.5' RT
INLETS 2x3-FT-H

23.6 STA 141+75.8WB, 18.5' RT
INLETS 2x3-FT-H

11+00HN

10+20HU

HURELLE STREET R/L

22.1 STA 142+91.8WB, 23.2' RT
INLETS 4-FT DIAMETER-H-S

22.2 STA 142+55.3WB, 50.9' RT
INLETS 4-FT DIAMETER-H

STA 144+24.8WB, 7.0' RT
MANHOLES 5-FT DIAMETER-J-S 21.0

SIGN

CANOPY

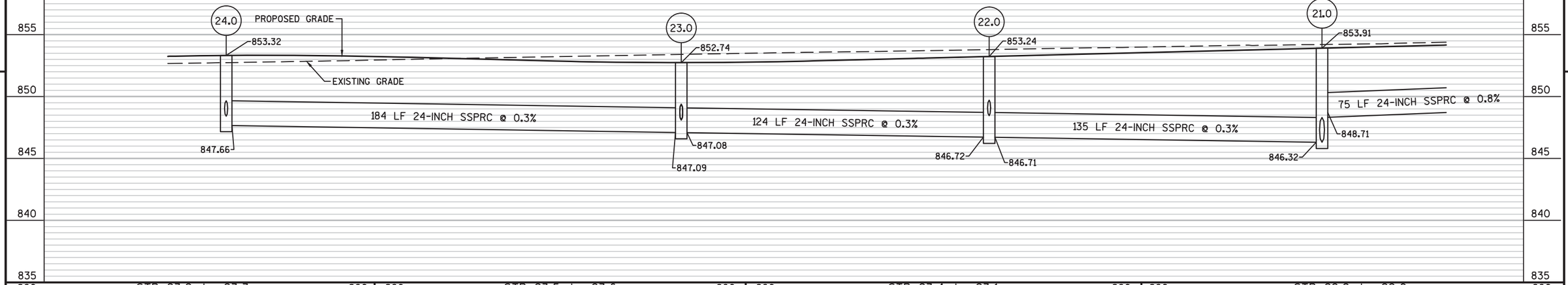
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 111	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\022501_SS (1C).DWG
LAYOUT NAME - 05011

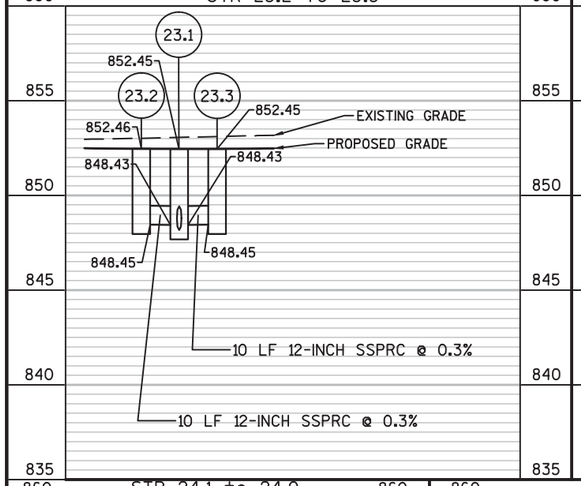
PLOT DATE : 8/3/2016 4:58 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

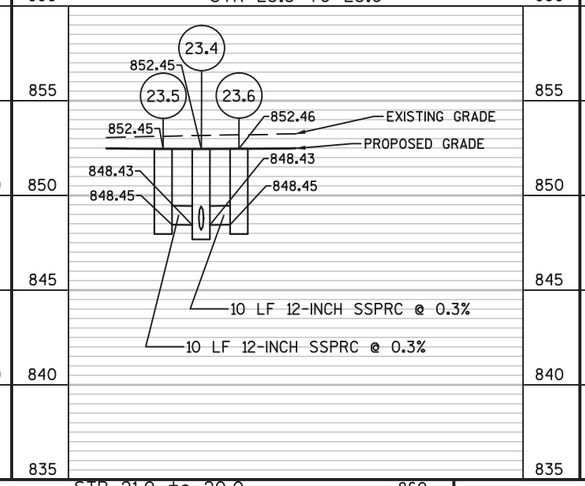
STR 24.0 to 25.0



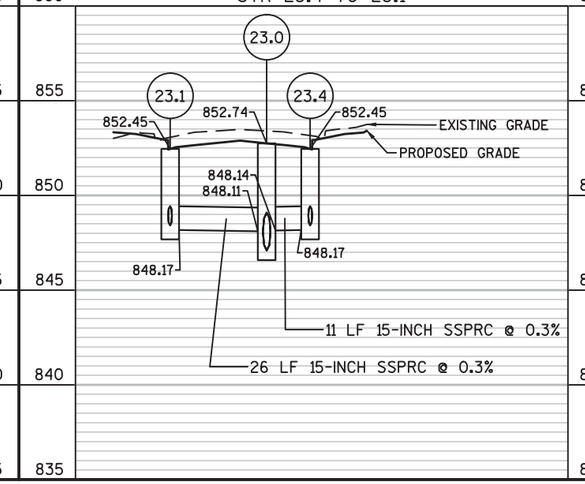
STR 23.2 to 23.3



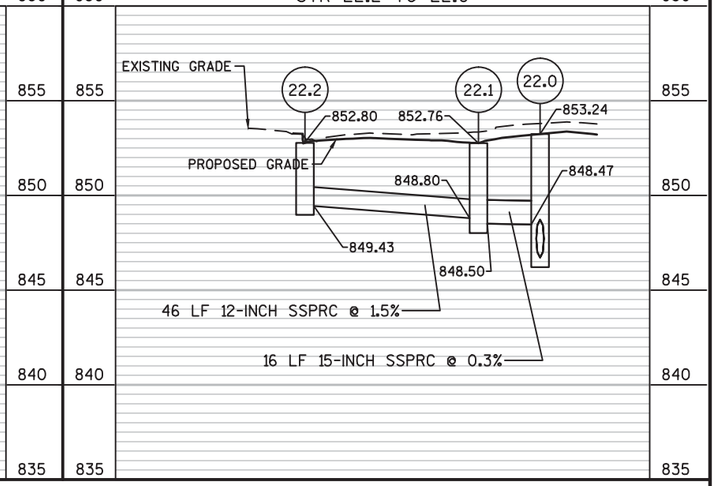
STR 23.5 to 23.6



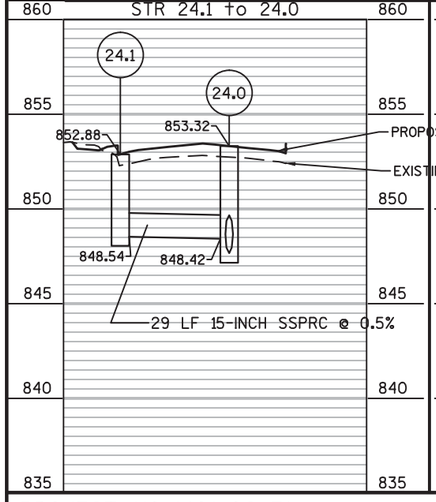
STR 23.4 to 23.1



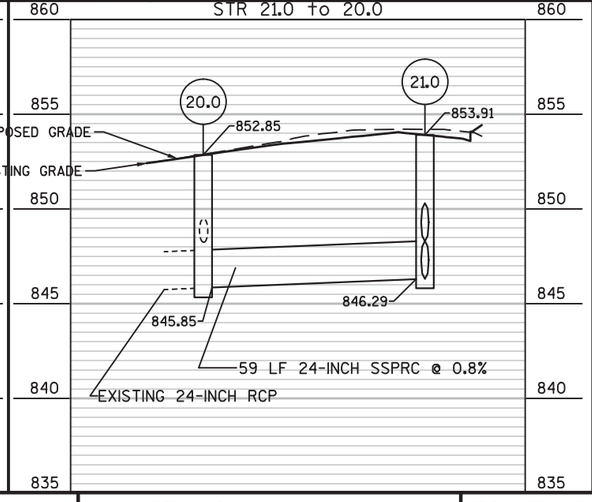
STR 22.2 to 22.0



STR 24.1 to 24.0

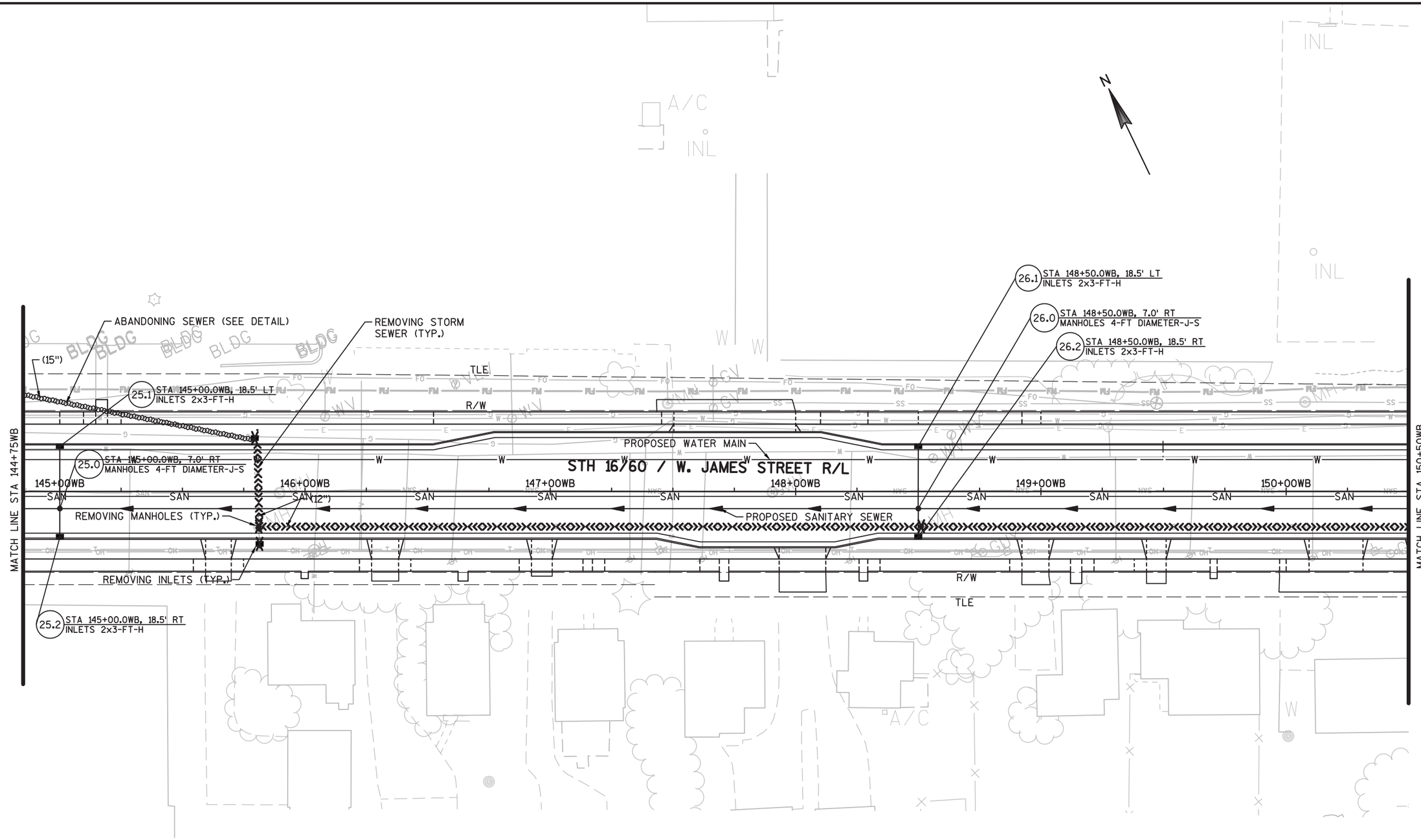


STR 21.0 to 20.0

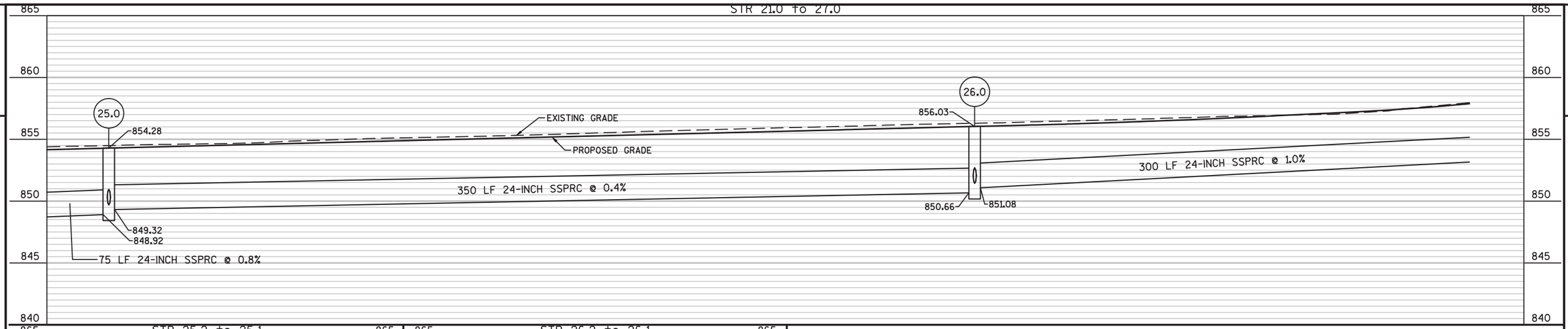


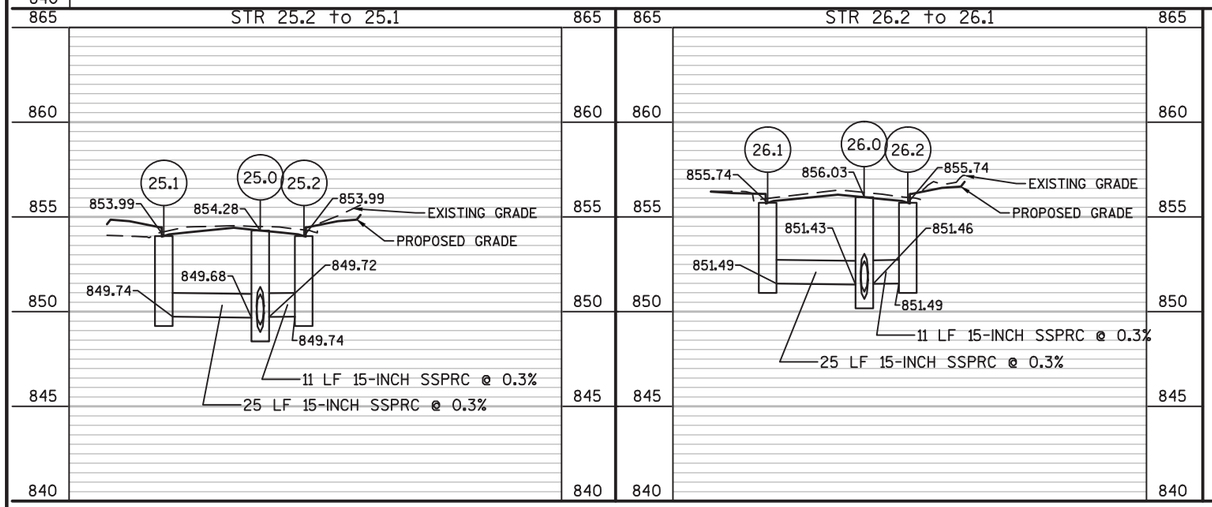
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 112	E

2



PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 113	E





2

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 114	E

2

2

PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)

27.0 STA 151+50.0WB, 7.0' RT
MANHOLES 4-FT DIAMETER-J-S

27.1 STA 151+75.0WB, 18.5' LT
INLETS 4-FT DIAMETER-H

27.2 STA 151+85.0WB, 18.5' LT
INLETS 2x3-FT-H

REMOVING STORM
SEWER (TYP.)

27.5 STA 151+74.1WB, 18.5' RT
INLETS 4-FT DIAMETER-H

27.3 STA 151+47.9WB, 39.0' RT
INLETS 2x3-FT-H-S

27.4 STA 151+04.9WB, 40.0' RT
INLETS 2x3-FT-H

REMOVING INLETS (TYP.)

REMOVING MANHOLES (TYP.)

PROPOSED SANITARY SEWER

PROPOSED WATER MAIN

43.2 STA 155+74.6WB, 42.4' LT
INLETS 4-FT DIAMETER-H

43.1 STA 155+42.7WB, 22.4' LT
INLETS 4-FT DIAMETER-H-S

43.0 STA 155+55.8WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

43.3 STA 155+40.7WB, 22.3' RT
INLETS 4-FT DIAMETER-H-S

43.4 STA 155+89.2WB, 43.6' RT
INLETS 4-FT DIAMETER-H

BLACKHAWK DRIVE R/L

MAPLE AVENUE R/L

LEGION COURT R/L

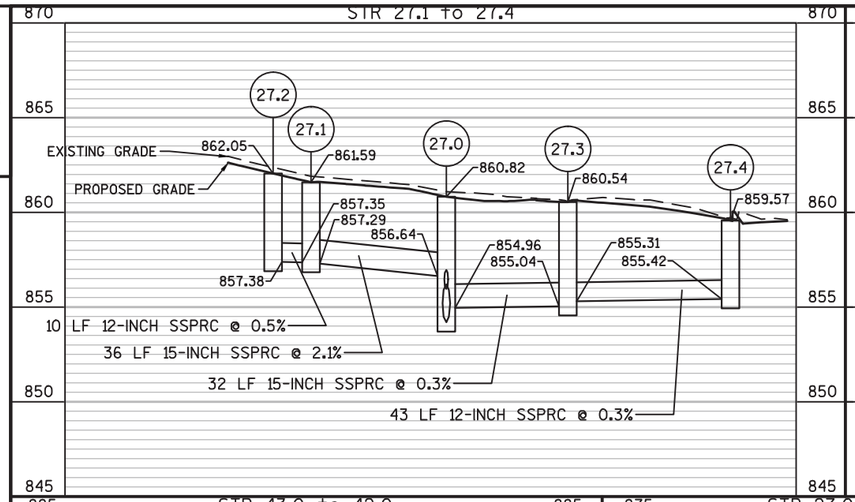
CHARLES STREET R/L

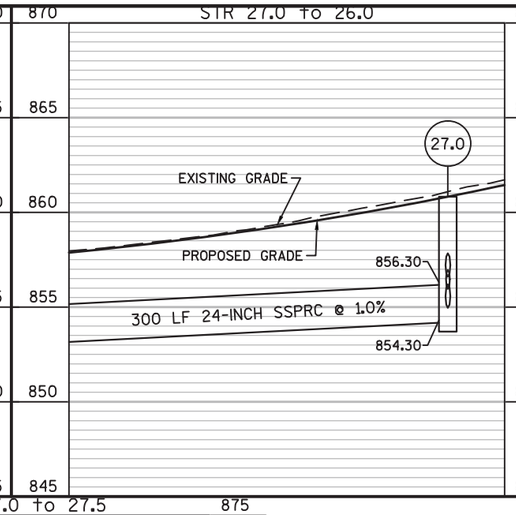
STH 16/60 / W. JAMES STREET W R/L

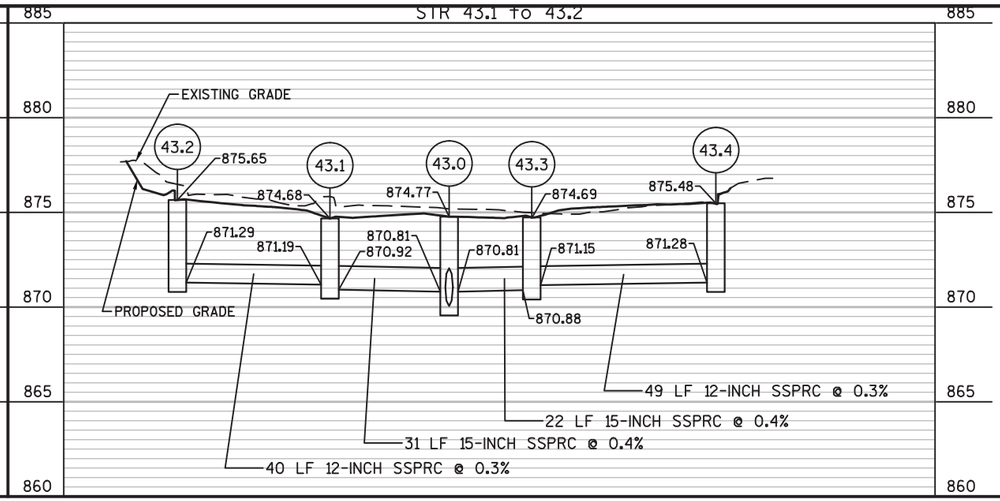
MATCH LINE STA 150+50WB

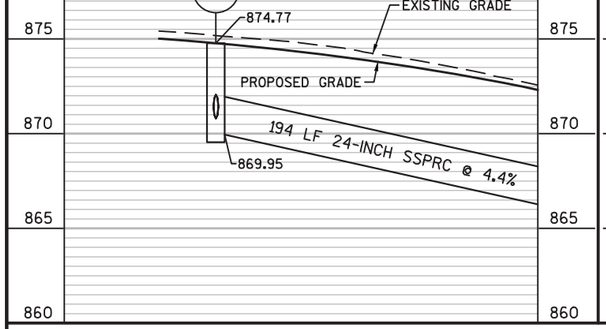
MATCH LINE STA 156+50WB

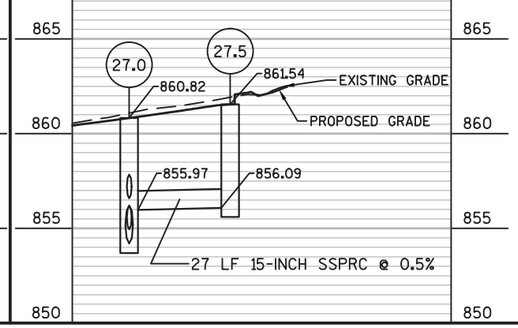
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 115	E


STR 27.1 to 27.4
27.2
27.1
27.0
27.3
27.4
EXISTING GRADE
PROPOSED GRADE
862.05
861.59
860.82
860.54
859.57
857.35
857.29
856.64
854.96
855.04
855.31
855.42
857.38
10 LF 12-INCH SSPRC @ 0.5%
36 LF 15-INCH SSPRC @ 2.1%
32 LF 15-INCH SSPRC @ 0.3%
43 LF 12-INCH SSPRC @ 0.3%


STR 27.0 to 26.0
27.0
EXISTING GRADE
PROPOSED GRADE
856.30
300 LF 24-INCH SSPRC @ 1.0%
854.30


STR 43.1 to 43.2
EXISTING GRADE
43.2
43.1
43.0
43.3
43.4
875.65
874.68
874.77
874.69
875.48
871.29
871.19
870.81
870.92
870.81
871.15
871.28
870.88
PROPOSED GRADE
49 LF 12-INCH SSPRC @ 0.3%
22 LF 15-INCH SSPRC @ 0.4%
31 LF 15-INCH SSPRC @ 0.4%
40 LF 12-INCH SSPRC @ 0.3%


STR 43.0 to 42.0
43.0
874.77
EXISTING GRADE
PROPOSED GRADE
194 LF 24-INCH SSPRC @ 4.4%
869.95


STR 27.0 to 27.5
27.0
27.5
860.82
861.54
EXISTING GRADE
PROPOSED GRADE
855.97
856.09
27 LF 15-INCH SSPRC @ 0.5%

2

N

13+00NL

N LEWIS STREET R/L

12+00NL

11+00SL

10+00SL

S LEWIS STREET R/L

MATCH LINE STA 156+50WB

MATCH LINE STA 162+50WB

42.1 STA 157+50.0WB, 18.5' LT
INLETS 2x3-FT-H

42.0 STA 157+50.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

42.2 STA 157+50.0WB, 18.5' RT
INLETS 2x3-FT-H

41.4 STA 158+99.6WB, 50.0' LT
INLETS 4-FT DIAMETER-H

41.3 STA 159+27.4WB, 50.0' LT
INLETS 2x3-FT-H

41.0 STA 159+26.6WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

STA 162+35.0WB, 18.5' LT 39.2
INLETS 2x3-FT-H

STA 162+35.0WB, 6.0' RT 39.1
MANHOLES 4-FT DIAMETER-J-S

STA 162+35.0WB, 18.5' RT 39.3
INLETS 4-FT DIAMETER-H

40.1 STA 161+00.0WB, 24.5' LT
INLETS 2x3-FT-H

40.0 STA 161+00.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

40.2 STA 161+00.0WB, 24.5' RT
INLETS 2x3-FT-H

41.5 STA 158+78.0WB, 18.5' LT
INLETS 4-FT DIAMETER-H

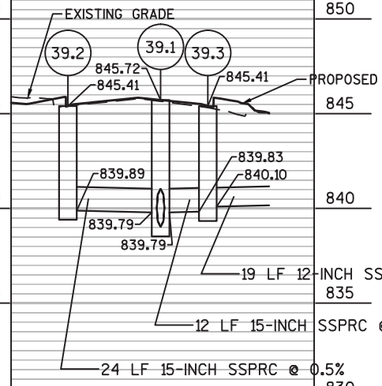
41.1 STA 158+78.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

41.2 STA 158+78.0WB, 18.5' RT
INLETS 2x3-FT-H

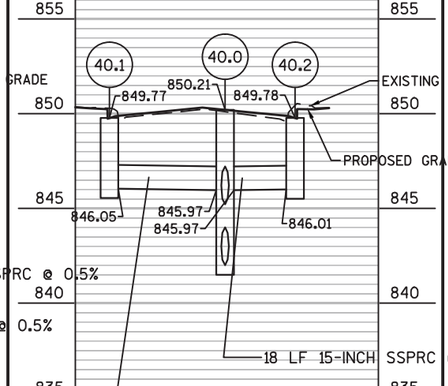
TLE
R/W
REMOVING INLETS (TYP.)
PROPOSED WATER MAIN
STH 16/60 / W. JAMES STREET R/L
(12")
(15")
REMOVING MANHOLES (TYP.)
PROPOSED SANITARY SEWER
REMOVING STORM SEWER (TYP.)
PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)
157+00WB
158+00WB
159+00WB
160+00WB
161+00WB
162+00WB
SAN
W
OHP
G
M
A/C
SIGN

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 117	E

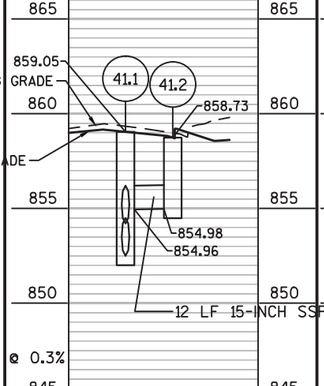
STR 39.2 to 39.4



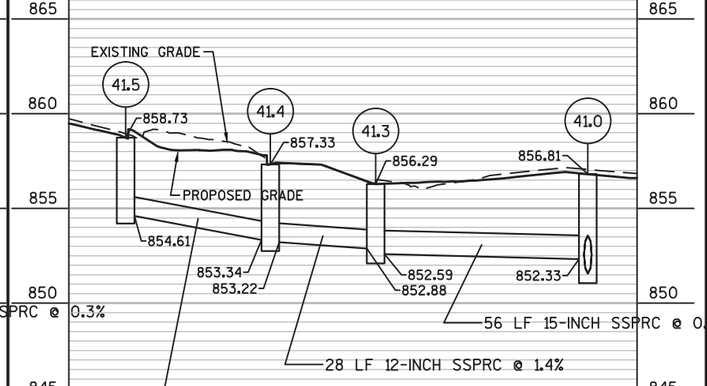
STR 40.2 to 40.1



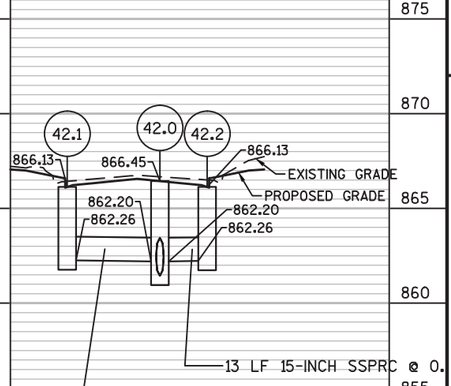
STR 41.1 to 41.2



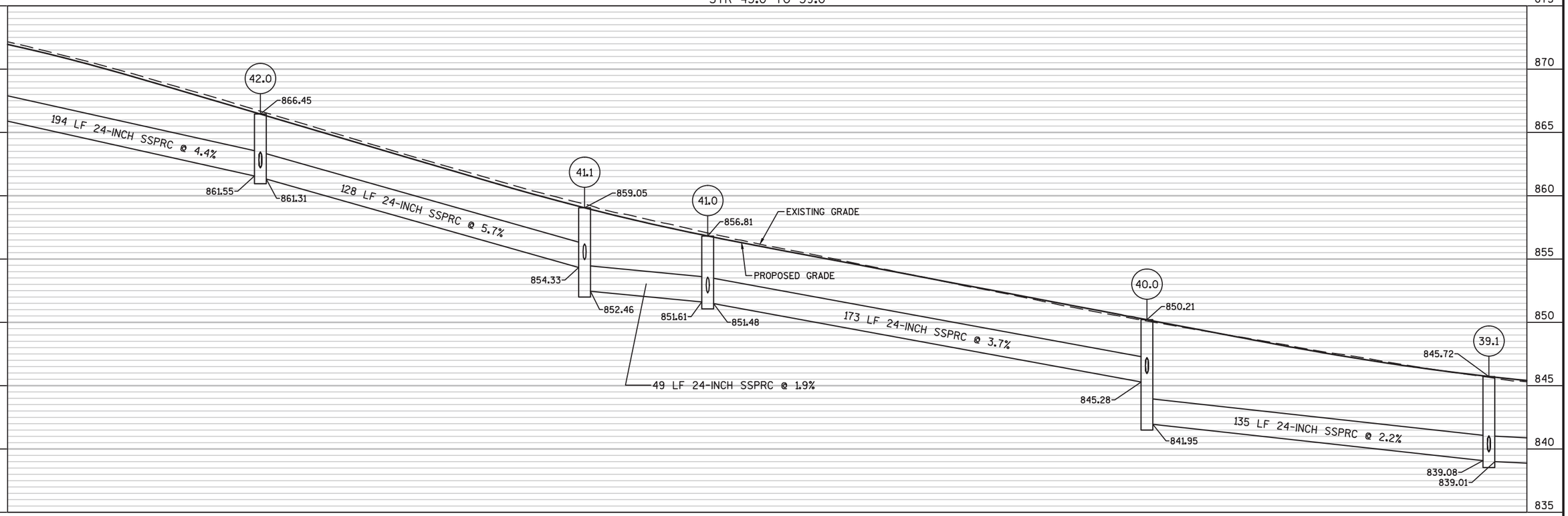
STR 41.4 to 41.0



STR 42.2 to 42.1



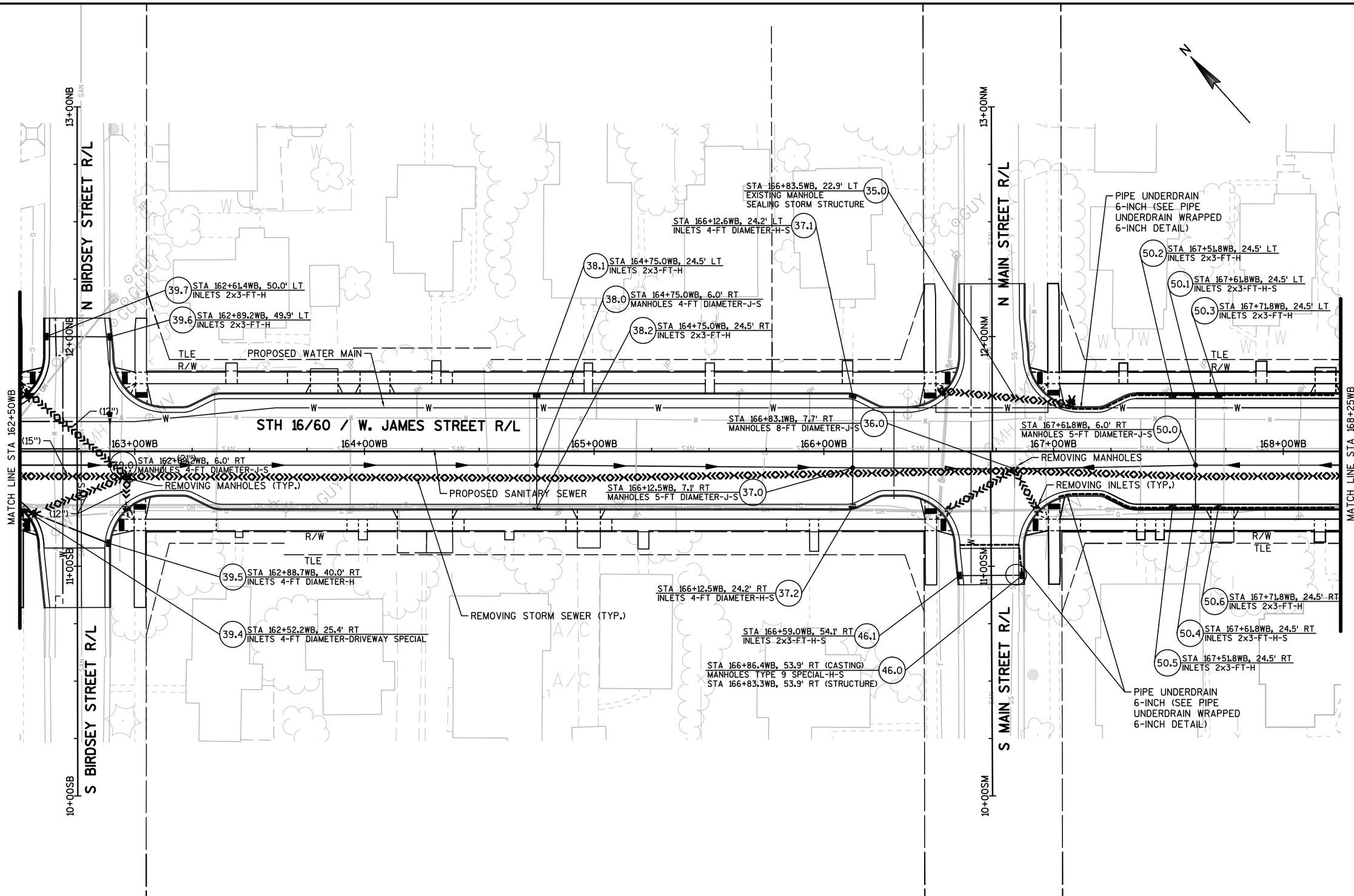
STR 43.0 to 39.0



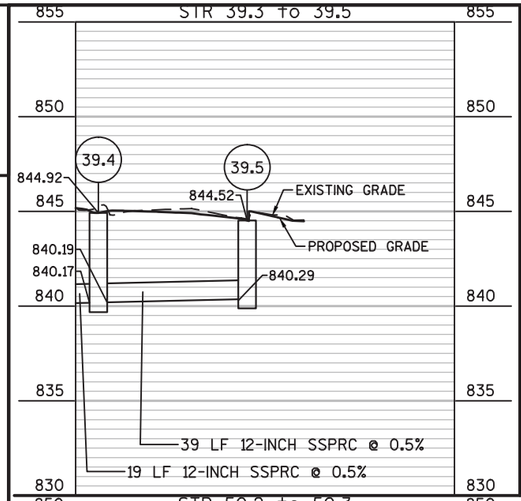
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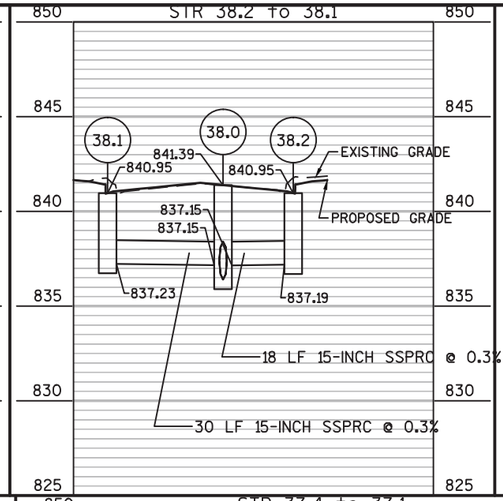
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 118	E

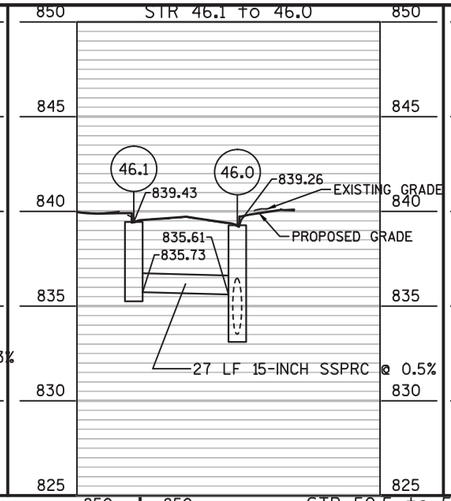
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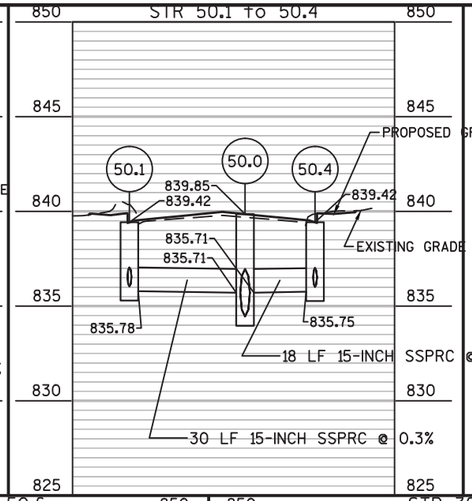


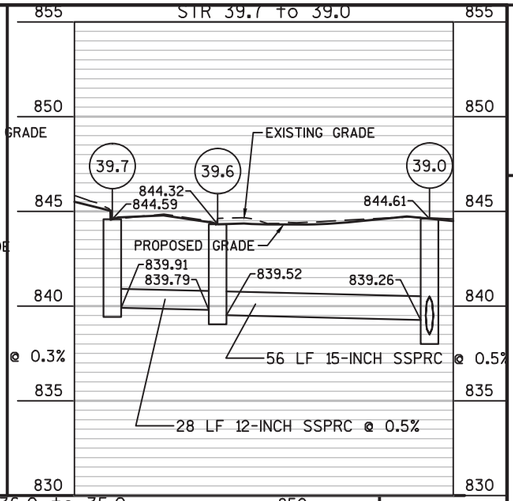
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 119 E

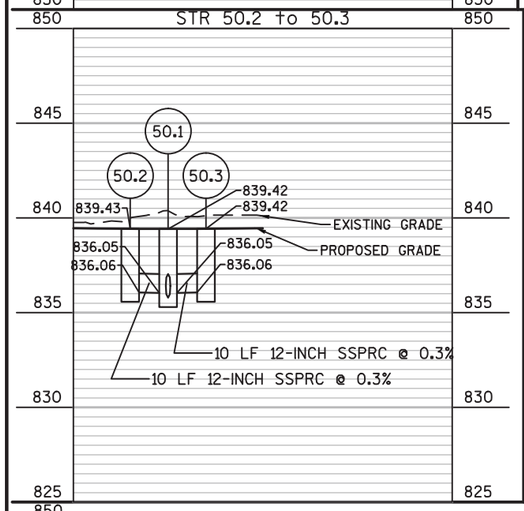


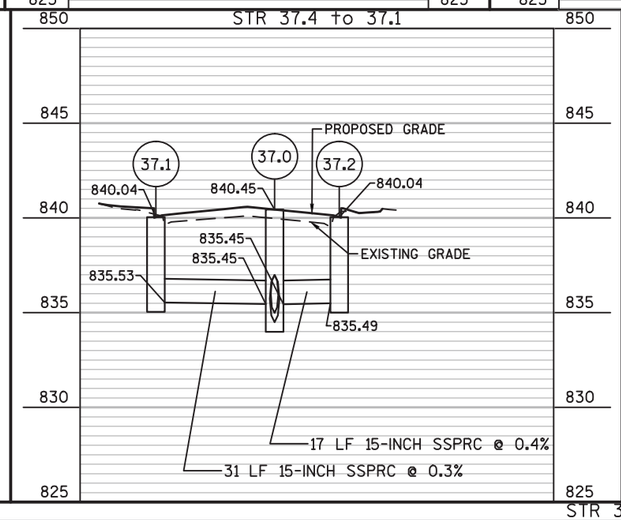


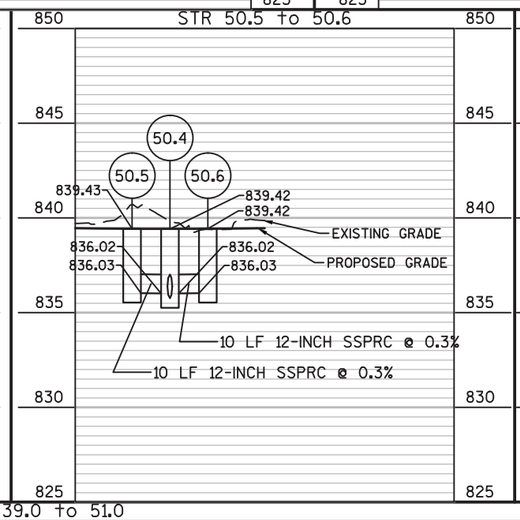


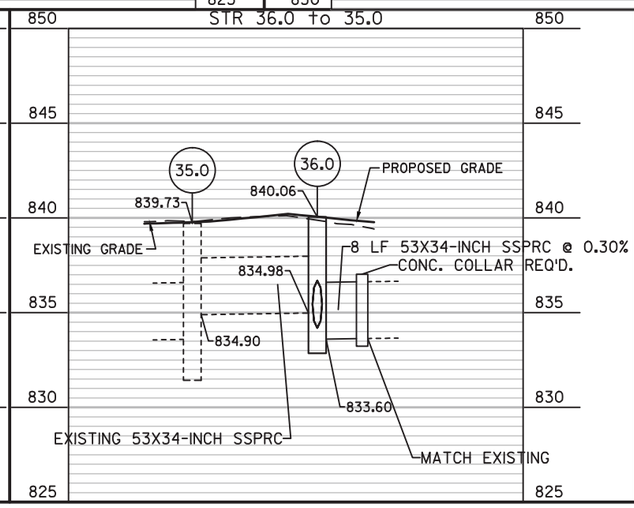


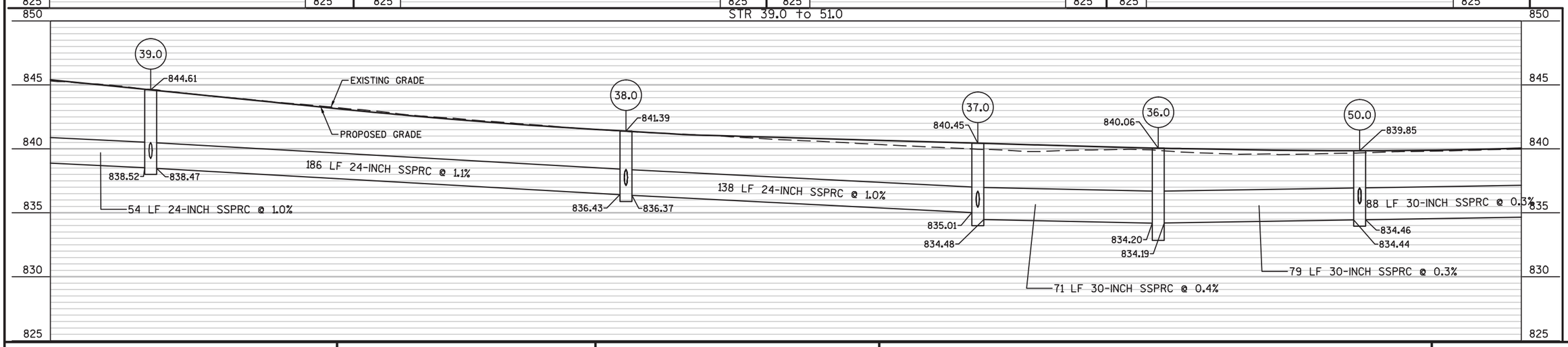






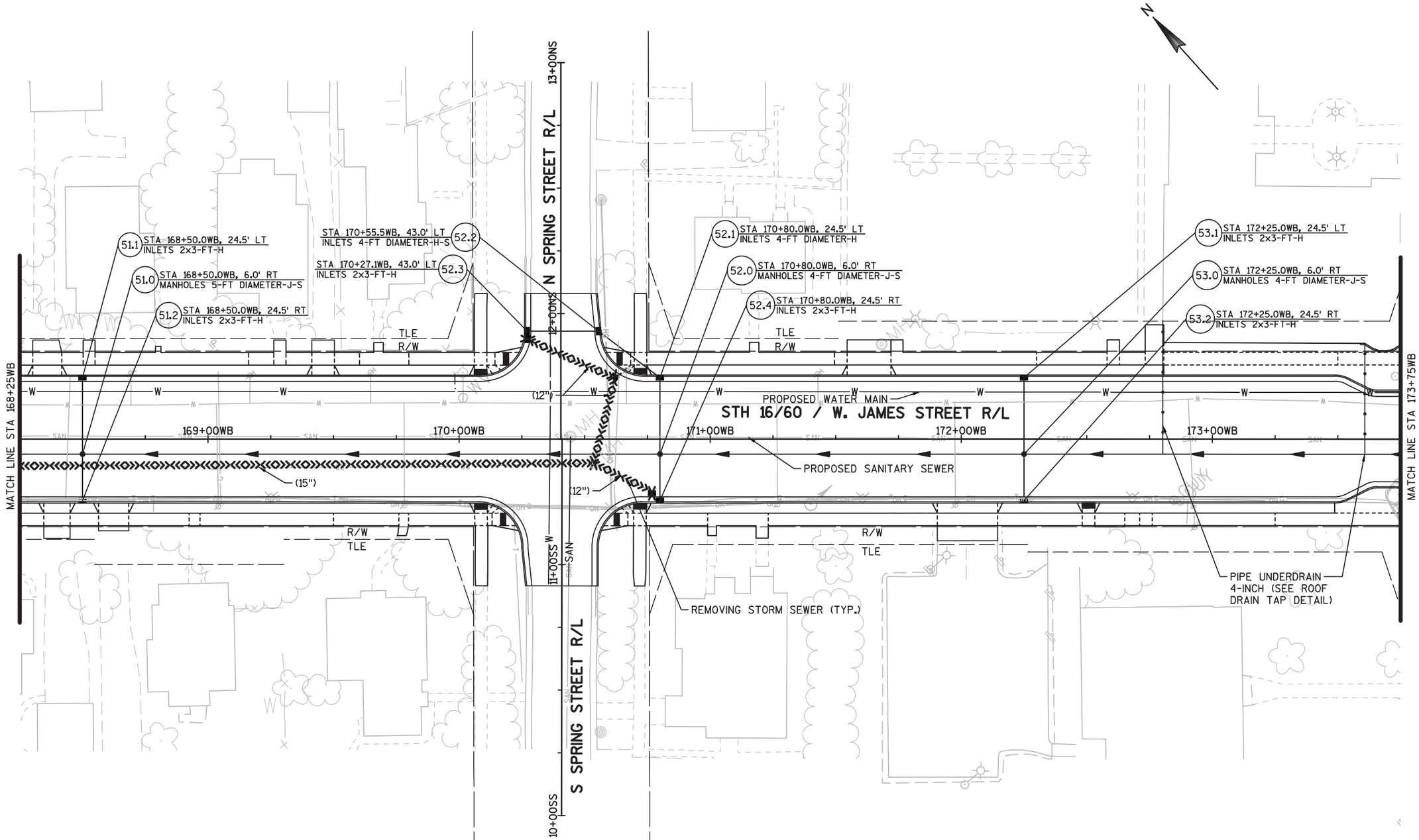




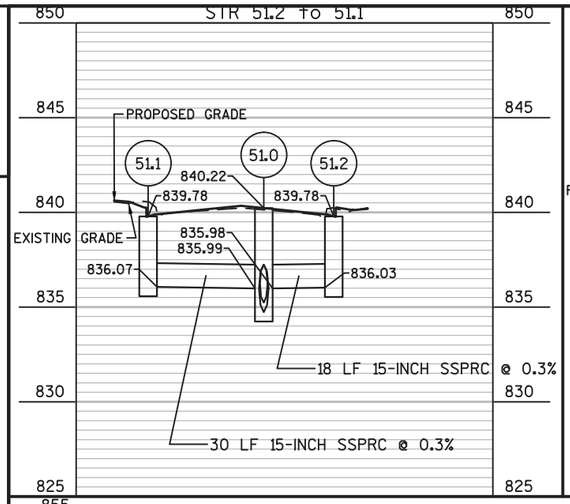


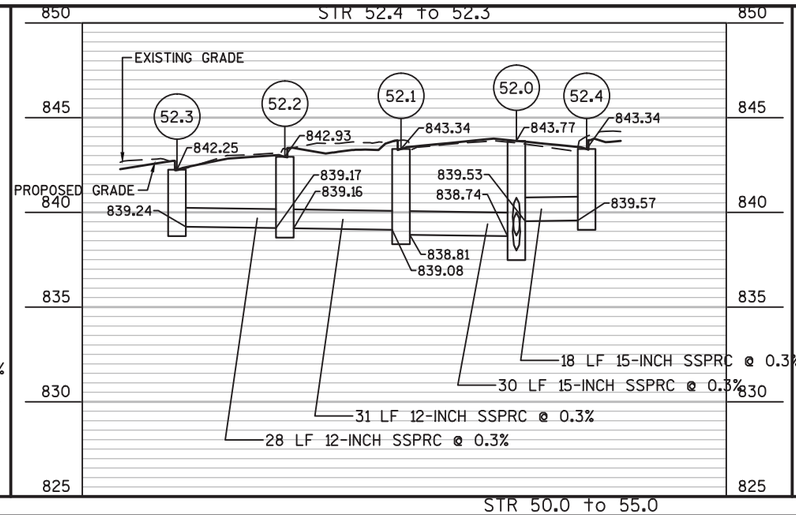
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 120	E

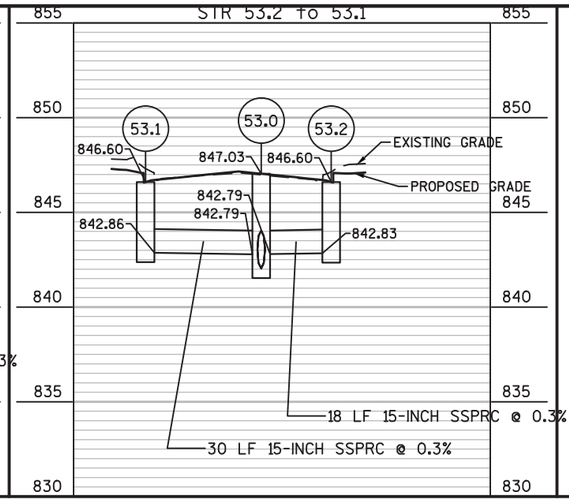
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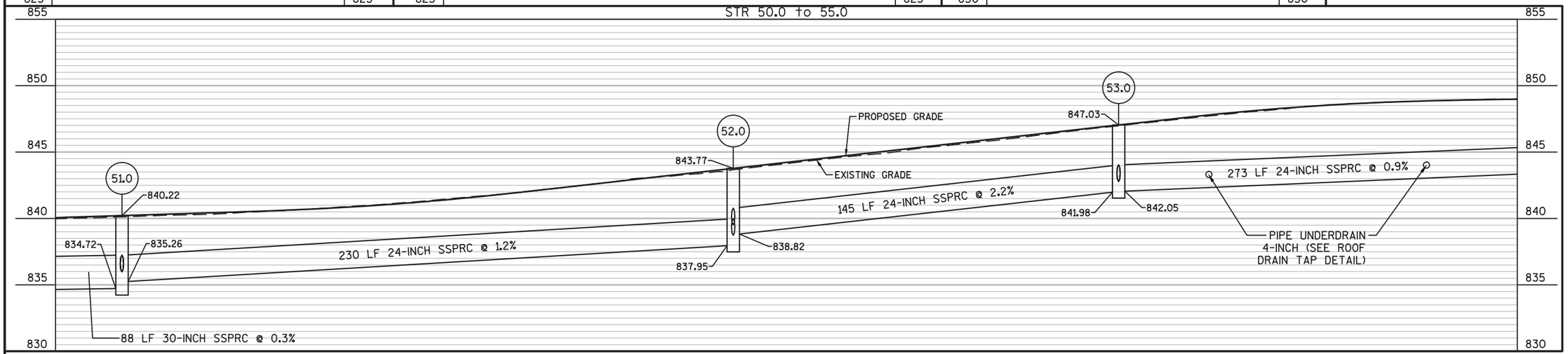


PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 121	E


STR 51.2 to 51.1
850
845
840
835
830
825
PROPOSED GRADE
EXISTING GRADE
51.1
51.0
51.2
840.22
839.78
839.78
835.98
835.99
836.07
836.03
18 LF 15-INCH SSPRC @ 0.3%
30 LF 15-INCH SSPRC @ 0.3%


STR 52.4 to 52.3
850
845
840
835
830
825
EXISTING GRADE
PROPOSED GRADE
52.3
52.2
52.1
52.0
52.4
842.25
842.93
843.34
843.77
843.34
839.24
839.17
839.16
839.53
838.74
839.57
838.81
839.08
18 LF 15-INCH SSPRC @ 0.3%
30 LF 15-INCH SSPRC @ 0.3%
31 LF 12-INCH SSPRC @ 0.3%
28 LF 12-INCH SSPRC @ 0.3%


STR 53.2 to 53.1
855
850
845
840
835
830
53.1
53.0
53.2
846.60
847.03
846.60
EXISTING GRADE
PROPOSED GRADE
842.79
842.79
842.86
842.83
18 LF 15-INCH SSPRC @ 0.3%
30 LF 15-INCH SSPRC @ 0.3%


STR 50.0 to 55.0
855
850
845
840
835
830
51.0
840.22
834.72
835.26
88 LF 30-INCH SSPRC @ 0.3%
52.0
843.77
PROPOSED GRADE
EXISTING GRADE
230 LF 24-INCH SSPRC @ 1.2%
145 LF 24-INCH SSPRC @ 2.2%
837.95
838.82
53.0
847.03
841.98
842.05
273 LF 24-INCH SSPRC @ 0.9%
PIPE UNDERDRAIN
4-INCH (SEE ROOF
DRAIN TAP DETAIL)

2

DICKASON BLVD. R/L

13+00D

12+00D

11+50SBD

11+50D

11+50NBD

11+00SBD

11+00NBD

10+00SBD

10+00NBD

S. DICKASON BLVD. R/L

N. DICKASON BLVD. R/L

MATCH LINE STA 173+75WB

54.3 STA 173+89.8WB, 24.9' LT
INLETS 4-FT DIAMETER-H-S

54.2 STA 174+64.1WB, 24.3' LT
INLETS 4-FT DIAMETER-H-S

54.1 STA 174+98.1WB, 22.6' LT
INLETS 4-FT DIAMETER-H-S

54.0 STA 174+98.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

55.1 STA 176+25.0WB, 23.5' LT
INLETS 2x3-FT-H

55.0 STA 176+25.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

55.2 STA 176+25.0WB, 23.5' RT
INLETS 2x3-FT-H

55.3 STA 177+20.0WB, 23.5' LT
INLETS 2x3-FT-H
PLACE CAP ON END OF 8" SSPC
(INCIDENTAL TO CONSTRUCTION)

STH 16/60 / W. JAMES STREET R/L

174+00WB

175+00WB

176+00WB

177+00WB

178+00WB

179+00WB

PROPOSED WATER MAIN

PROPOSED SANITARY SEWER

(12")

(18")

(15")

R/W

54.4 STA 174+98.0WB, 22.6' RT
INLETS 4-FT DIAMETER-H-S

REMOVING STORM SEWER (TYP.)

STA 178+23.8WB, 12.0' RT
MANHOLES 5-FT DIAMETER-J-S 70.0

PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)

PIPE UNDERDRAIN
4-INCH (SEE ROOF
DRAIN TAP DETAIL)

PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)

STH 73/N. LUNDINGTON STREET R/L

13+00N

12+00N

11+00S

10+00S

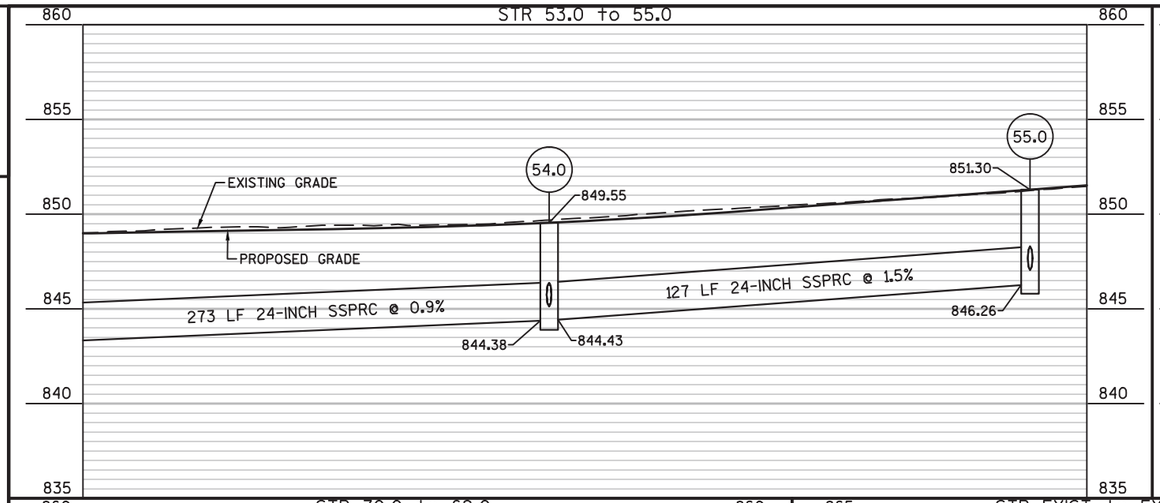
STH 73/S. LUNDINGTON STREET R/L

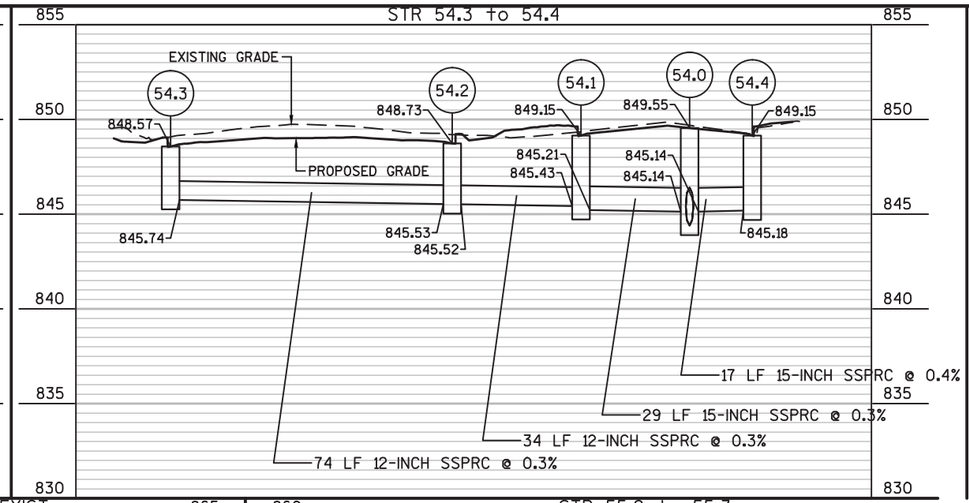
MATCH LINE STA 179+75WB

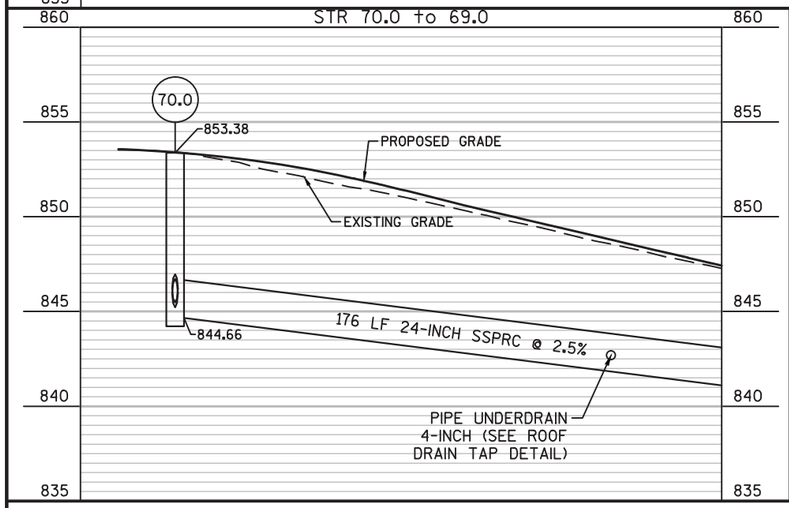
R/W TLE

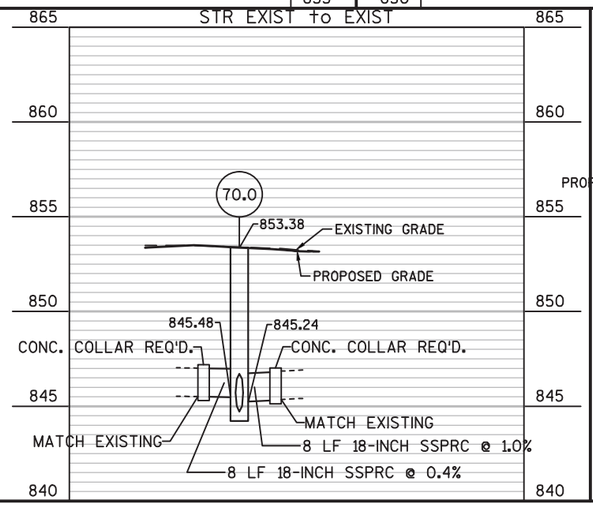
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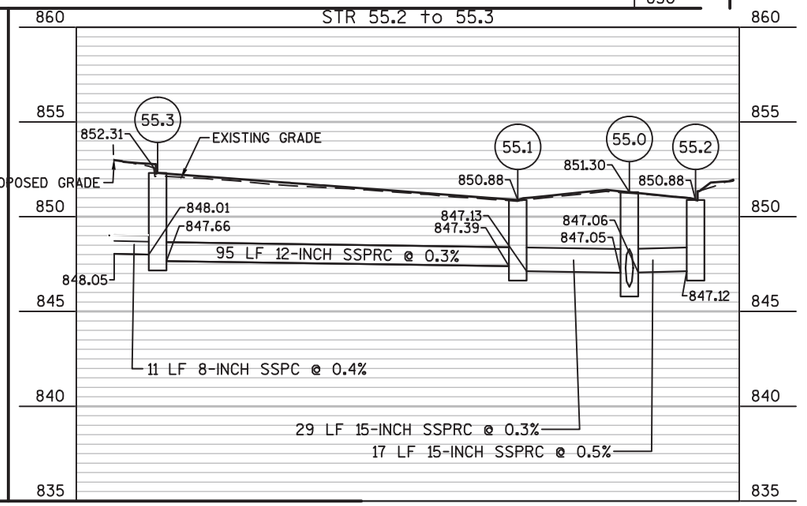
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 123	E







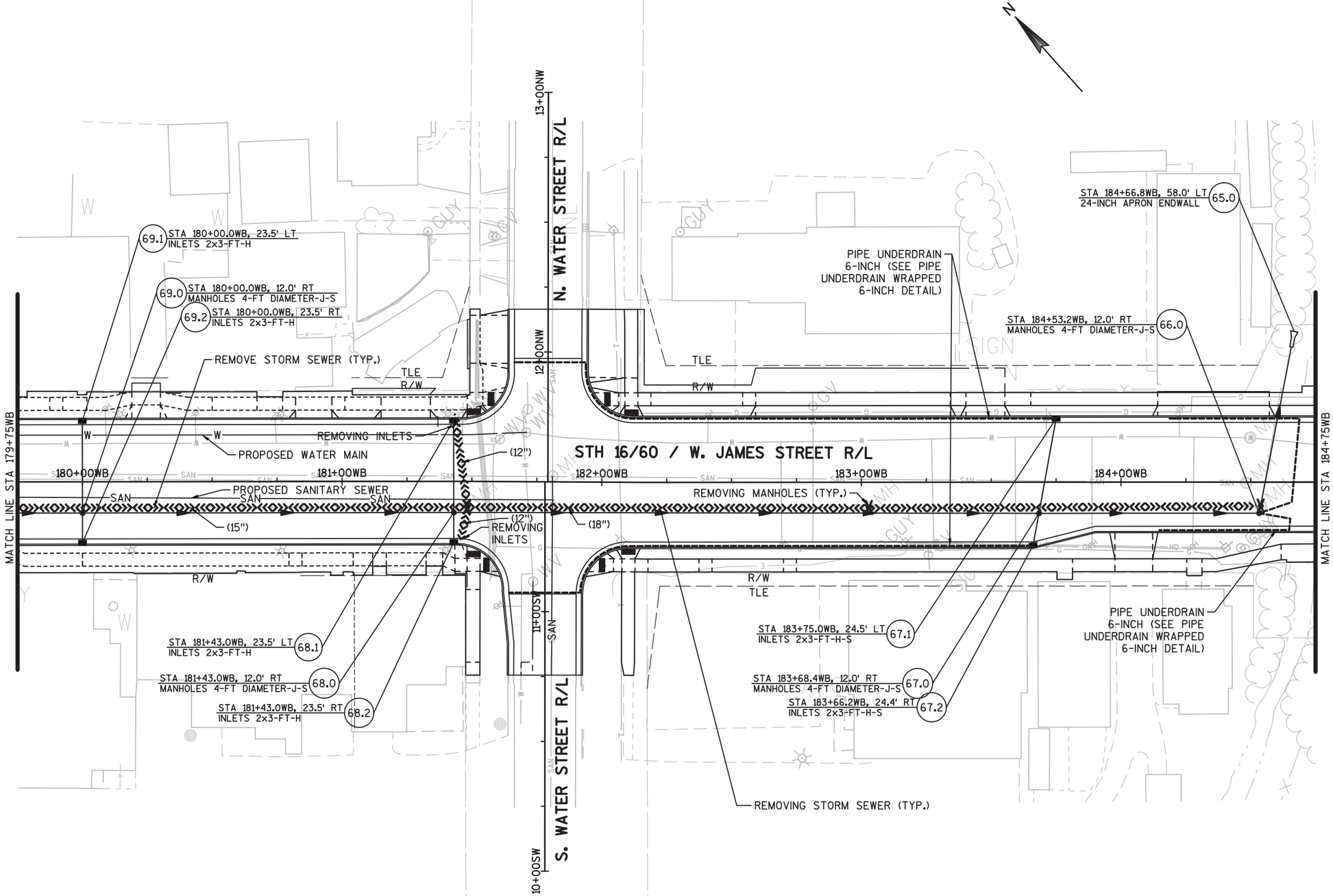




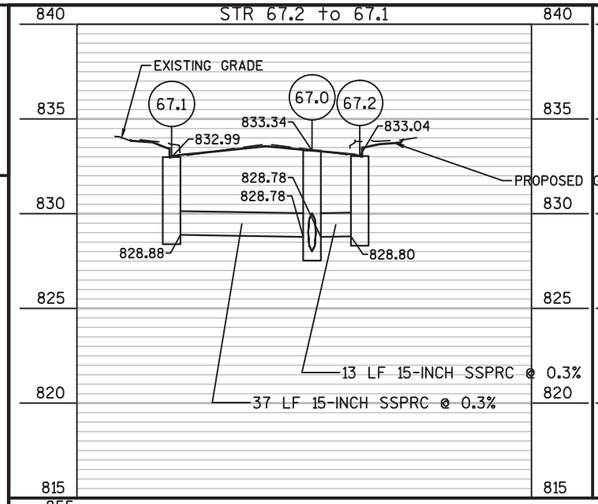
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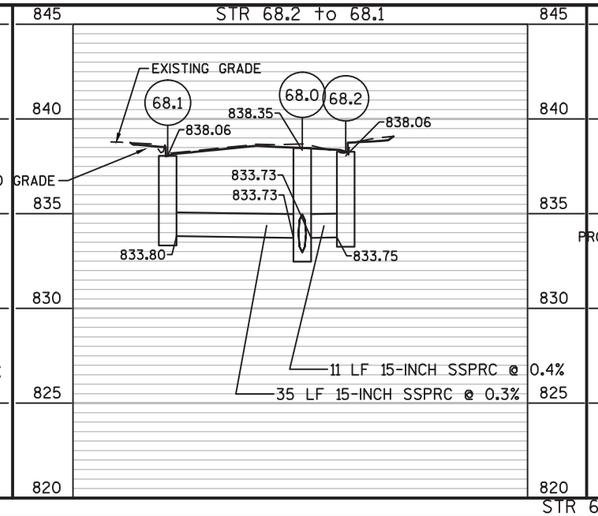
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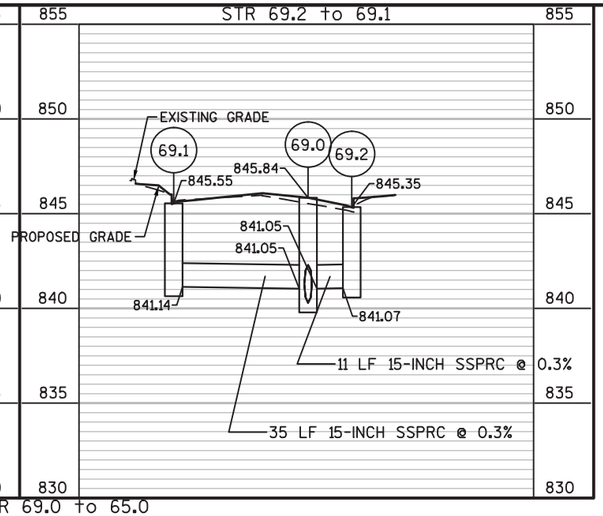
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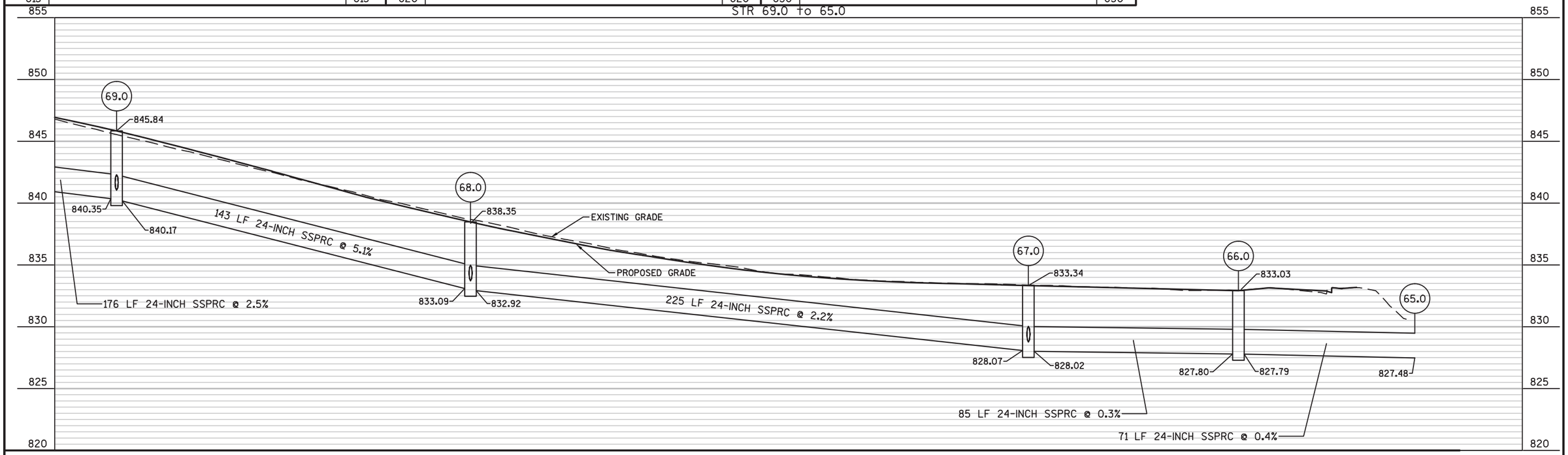


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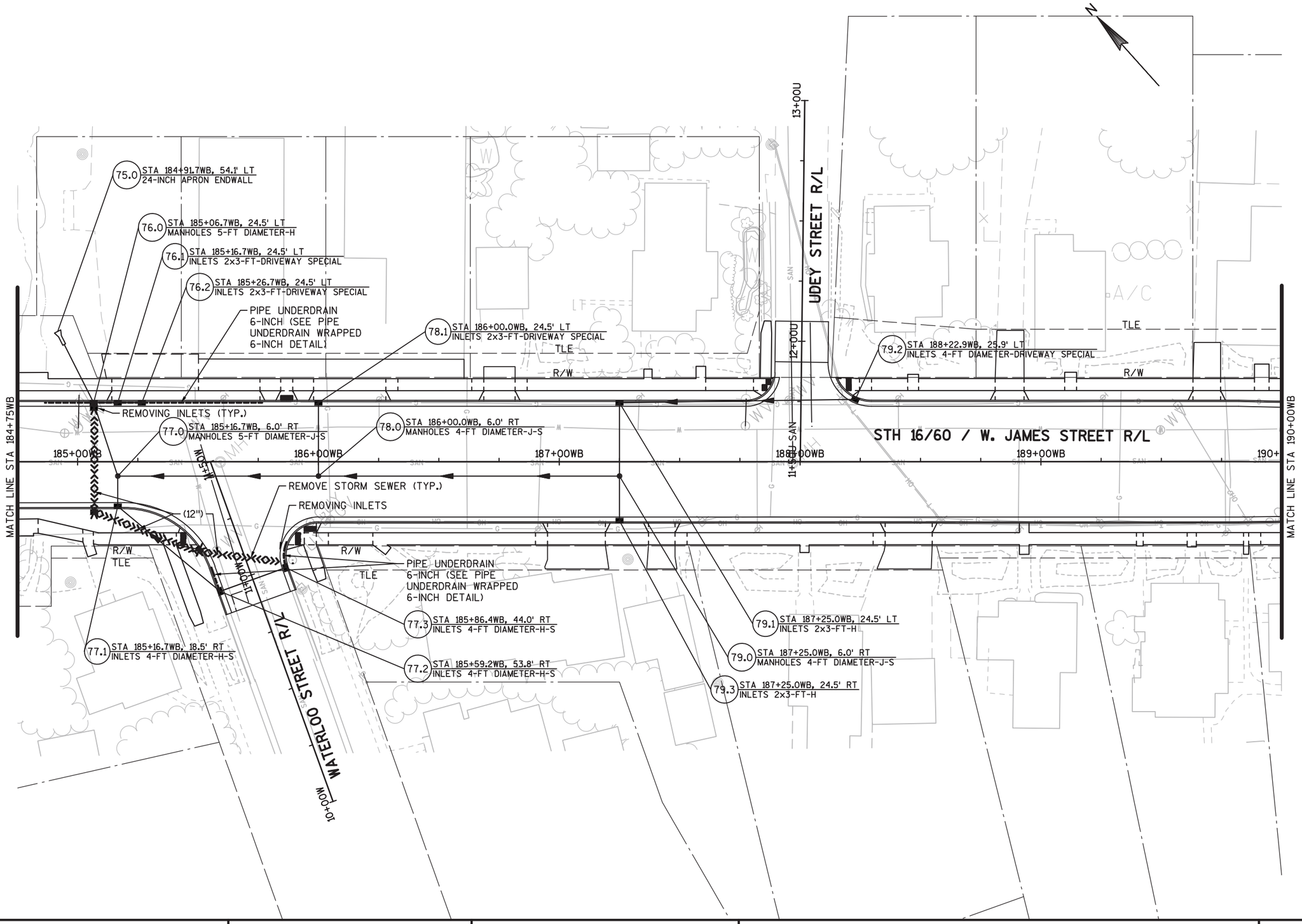






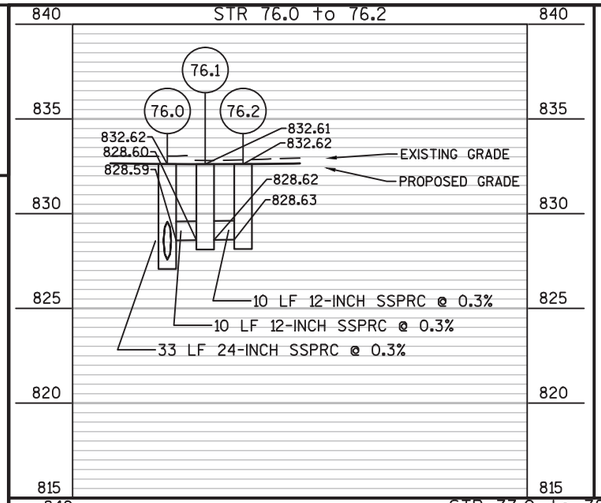
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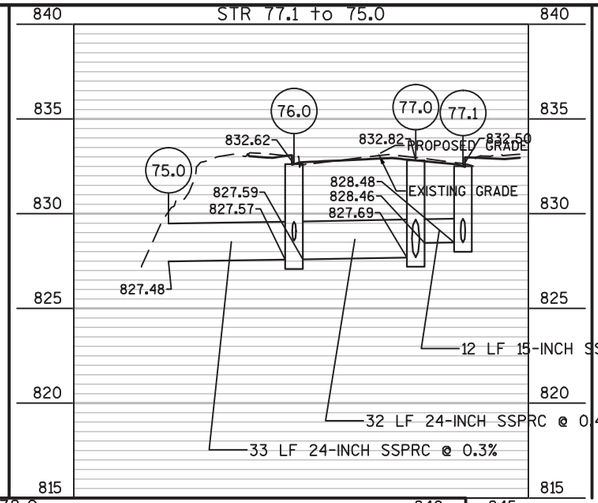
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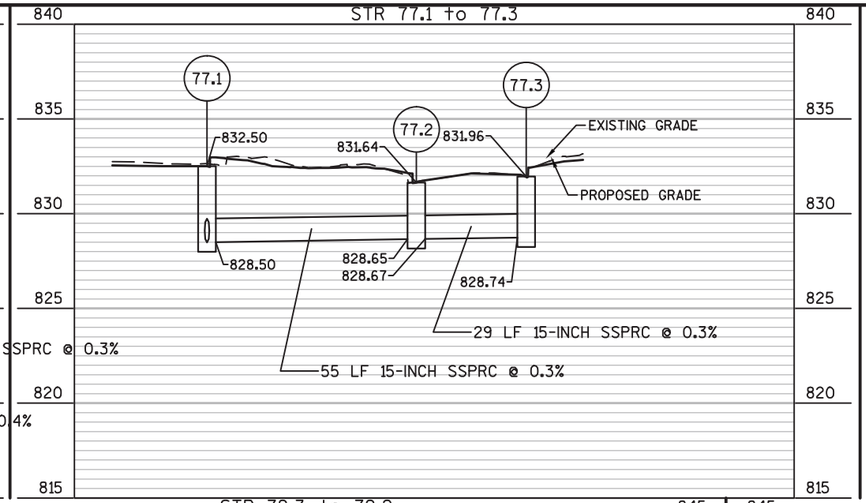


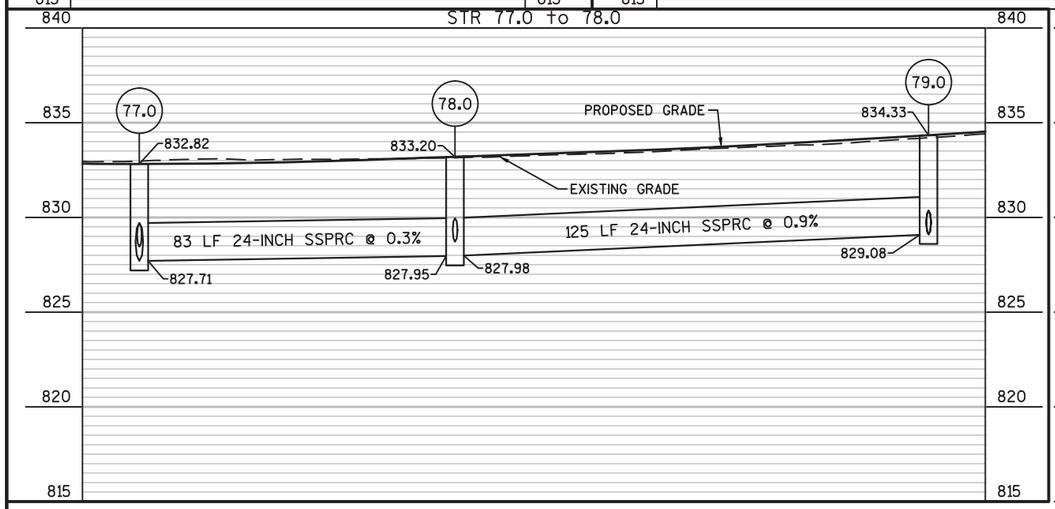
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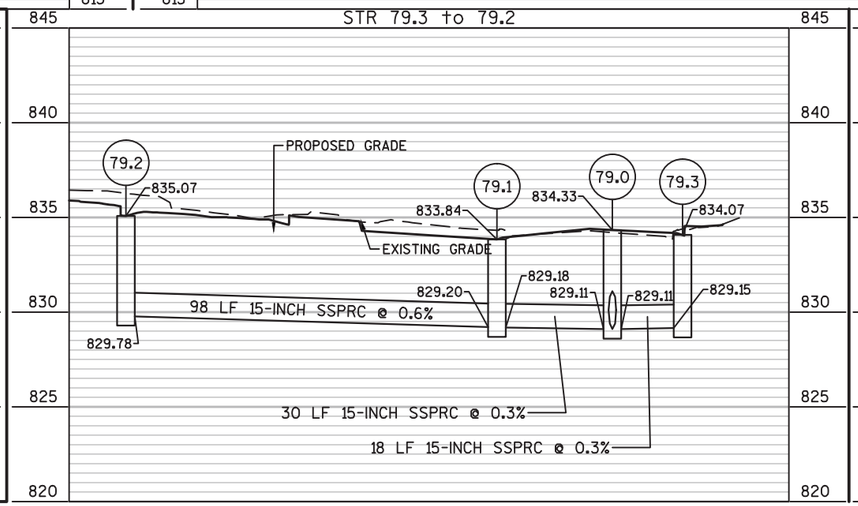
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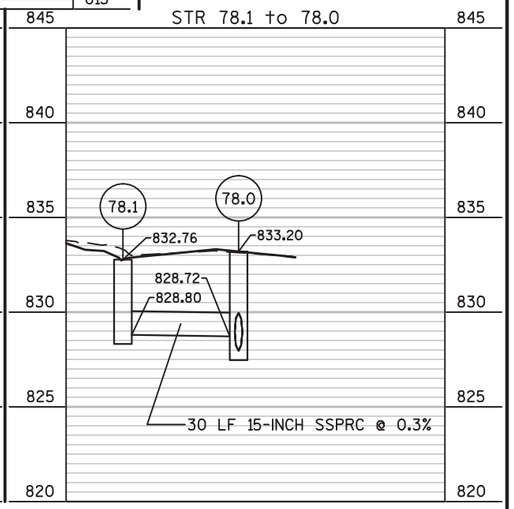












2

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	STORM SEWER PLAN	SHEET 128	E

2

2

N

190+00WB

191+00WB

192+00WB

193+00WB

194+00WB

195+00WB

196+00WB

11+00MS

10+80MS

10+40MS

10+00MS

89.1 STA 191+00.0WB, 22.2' LT
INLETS 2X3-FT-H

89.0 STA 191+00.0WB, 6.0' RT
MANHOLES 4-FT DIAMETER-J-S

88.0 STA 191+41.2WB, 6.0' RT
MANHOLES 5-FT DIAMETER-J-S

87.0 STA 192+51.2WB, 6.0' LT
MANHOLES 4-FT DIAMETER-J-S

STA 191+00.0WB, 22.2' RT 89.2
INLETS 2X3-FT-H

STA 191+18.9WB, 74.4' RT 90.1
INLETS 4-FT DIAMETER-H-S

90.2 STA 191+46.3WB, 80.4' RT
INLETS 4-FT DIAMETER-H-S

90.0 STA 191+28.6WB, 76.1' RT
MANHOLES 5-FT DIAMETER-J-S

86.1 STA 194+12.0WB, 21.5' LT
INLETS 2X3-FT-H

85.0 STA 194+87.4WB, 37.9' LT
24-INCH APRON ENDWALL

STA 194+12.8WB, 14.4' LT 86.0
MANHOLES 6-FT DIAMETER-J-S

STA 194+24.4WB, 21.8' RT 86.2
INLETS 2X3-FT-H

(12")

REMOVING MANHOLES (TYP.)
REMOVING INLETS (TYP.)

REMOVING STORM SEWER (TYP.)

REMOVING INLETS
REMOVING MANHOLES

PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)

PIPE UNDERDRAIN
6-INCH (SEE PIPE
UNDERDRAIN WRAPPED
6-INCH DETAIL)

PROPOSED SANITARY SEWER

MANNING STREET R/L

STH 16 WB R/L

RIVER ROAD R/L

TLE
R/W

R/W
TLE

R/W

SAN

GUY

A/C

INL

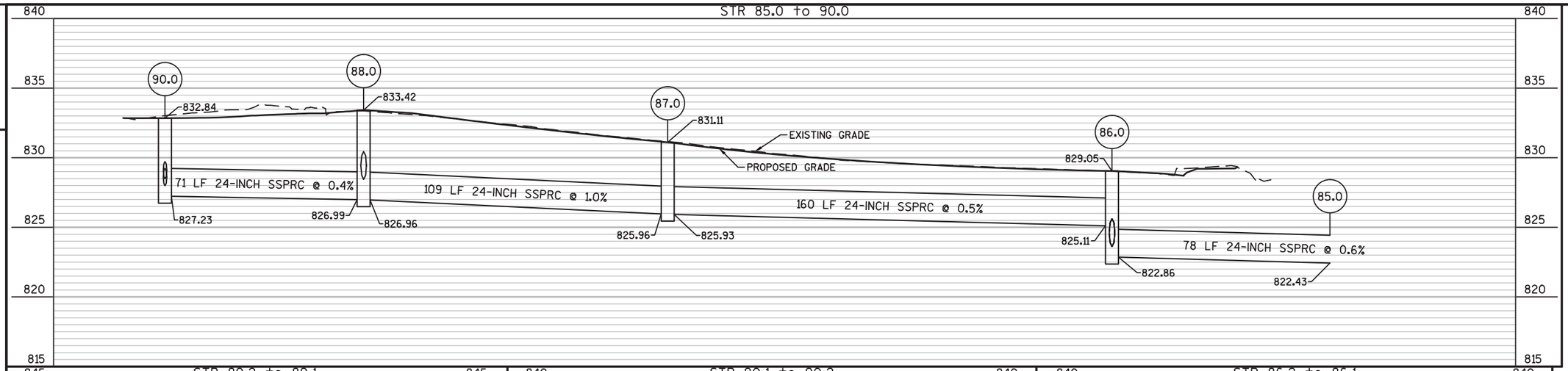
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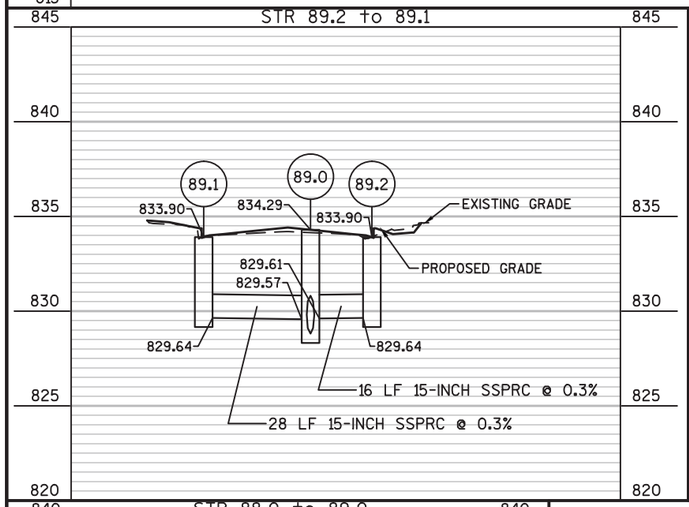
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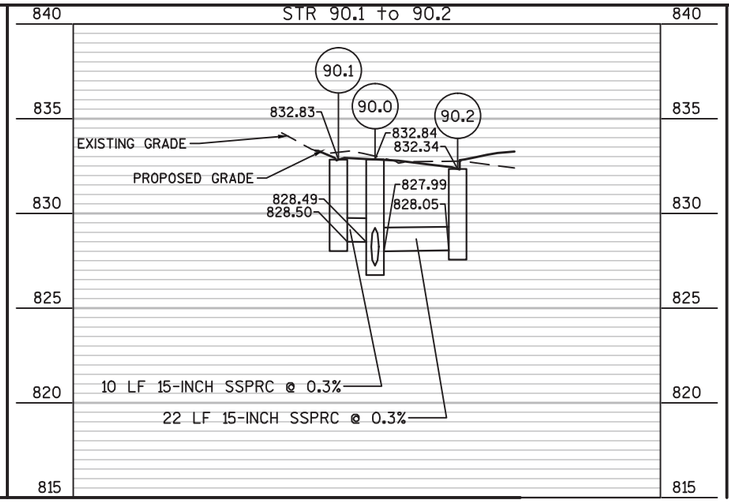
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LAYOUT NAME - ****

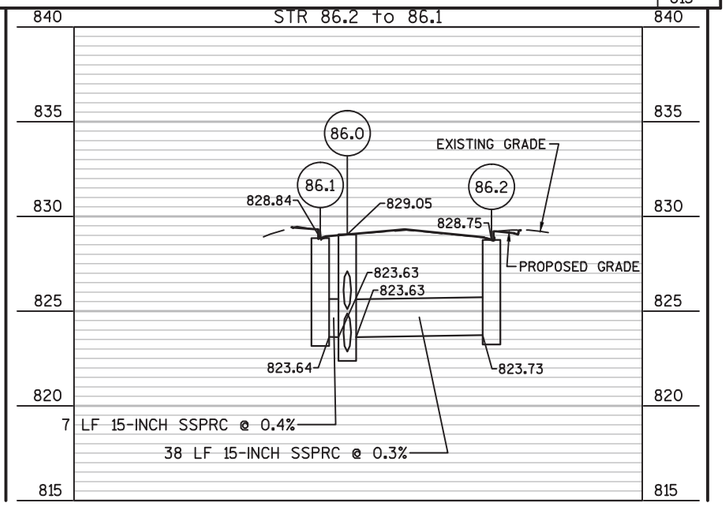
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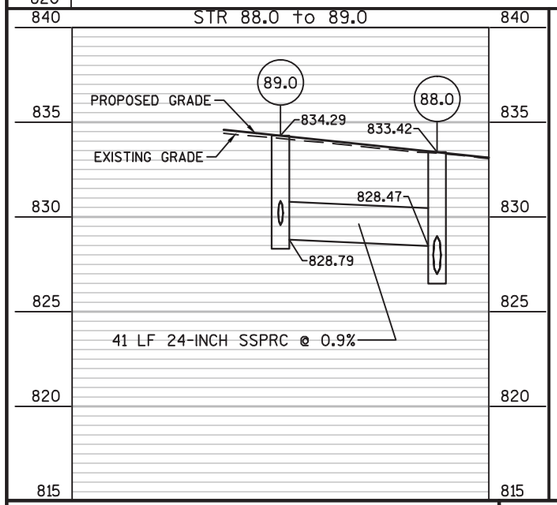
WISDOT/CADDS SHEET 42


STR 85.0 to 90.0
840
835
830
825
820
815
90.0
832.84
88.0
833.42
87.0
831.11
EXISTING GRADE
PROPOSED GRADE
86.0
829.05
85.0
71 LF 24-INCH SSPRC @ 0.4%
827.23
826.99
826.96
109 LF 24-INCH SSPRC @ 1.0%
825.96
825.93
160 LF 24-INCH SSPRC @ 0.5%
825.11
78 LF 24-INCH SSPRC @ 0.6%
822.86
822.43


STR 89.2 to 89.1
845
840
835
830
825
820
89.1
89.0
89.2
833.90
834.29
833.90
EXISTING GRADE
PROPOSED GRADE
829.61
829.57
829.64
829.64
16 LF 15-INCH SSPRC @ 0.3%
28 LF 15-INCH SSPRC @ 0.3%


STR 90.1 to 90.2
840
835
830
825
820
815
90.1
90.0
90.2
832.83
EXISTING GRADE
PROPOSED GRADE
832.84
832.34
828.49
828.50
827.99
828.05
10 LF 15-INCH SSPRC @ 0.3%
22 LF 15-INCH SSPRC @ 0.3%


STR 86.2 to 86.1
840
835
830
825
820
815
86.0
EXISTING GRADE
86.1
86.2
828.84
829.05
828.75
PROPOSED GRADE
823.63
823.63
823.64
823.73
7 LF 15-INCH SSPRC @ 0.4%
38 LF 15-INCH SSPRC @ 0.3%


STR 88.0 to 89.0
840
835
830
825
820
815
89.0
88.0
PROPOSED GRADE
834.29
833.42
EXISTING GRADE
828.47
828.79
41 LF 24-INCH SSPRC @ 0.9%

GENERAL WATER MAIN AND SANITARY SEWER CONSTRUCTION SEQUENCE:

1. INSTALL TRAFFIC CONTROL MEASURES.
2. INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO ANY LAND DISTURBING ACTIVITIES, AS SHOWN ON DRAWINGS AND DIRECTED BY ENGINEER.
3. STAGE WORK CONSTRUCTION BY WORK LOCATION AND CONSTRUCTION STAGE.
4. BEGIN CONSTRUCTION ACTIVITIES AS SHOWN ON DRAWINGS AND SPECIFICATIONS.
5. COMPLETE SANITARY SEWER WORK.
6. COMPLETE WATER MAIN WORK.
7. INSTALL OR ADJUST EROSION CONTROL MEASURES IN NEW FACILITIES. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY.
8. STABILIZE NEWLY GRADED AREAS WITHIN 7 DAYS OF BEING INACTIVE.
9. COMPLETE FINAL RESTORATION INCLUDING BUT NOT LIMITED TO: TOPSOIL, SEED, FERTILIZER AND MULCH.
10. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER 80% OF VEGETATION HAS BEEN ESTABLISHED IN ALL RESTORED AREAS. RESTORE DISTURBED AREAS AROUND REMOVED DEVICES, CLEAN OUT STORM WATER STRUCTURES, AND CLEAN SITE.

EROSION CONTROL NOTES:

1. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE DONE ONCE PER WEEK AND AFTER EVERY PRECIPITATION EVENT OF 1/2–INCH OR GREATER.
2. CONTRACTOR SHALL REPAIR DEFICIENT EROSION AND SEDIMENT CONTROL MEASURES WITHIN 24–HOURS AFTER INSPECTION. ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES NOT SHOWN ON THIS PLAN MAY BE NECESSARY AS A RESULT OF CONSTRUCTION PRACTICES OR AS DIRECTED BY CITY AND/OR ENGINEER.
3. ADDITIONAL EROSION AND/OR SEDIMENT CONTROL MEASURES MAY BE NECESSARY AS A RESULT OF THE CONTRACTOR'S METHODS OR AS DIRECTED BY CITY AND/OR ENGINEER.
4. CONTRACTOR SHALL NOTIFY AND OBTAIN WRITTEN ACCEPTANCE FROM ENGINEER OF PROPOSED CHANGES TO THE EROSION CONTROL PLAN AND/OR SEQUENCE PRIOR TO IMPLEMENTING THE CHANGE.
5. ENGINEER IS UNDER NO OBLIGATION TO ALTER THE CONSTRUCTION SEQUENCE AND/OR EROSION CONTROL PLAN.
6. EXCESS MATERIAL THAT IS HAULED OFF SITE SHALL BE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL OBTAIN PROPER PERMIT APPROVALS FOR EACH FILL SITE. EROSION AND SEDIMENT CONTROL MEASURES, RESTORATION AND STABILIZATION AT FILL SITE IS CONTRACTOR'S RESPONSIBILITY. CONTRACTOR TO NOTIFY OWNER OF ALL FILL AND BORROW SITES.
7. CONTRACTOR SHALL SWEEP STREETS ADJACENT TO PROJECT AT THE END OF EACH DAY.
8. ALL INSTALLATION, MAINTENANCE AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE WISCONSIN DNR TECHNICAL STANDARDS AND THE TEMPORARY EROSION AND SEDIMENT CONTROL SPECIFICATION SECTION 015713.
9. IF TRENCH DEWATERING IS NECESSARY, CONTRACTOR SHALL PROVIDE PROPER DEWATERING SEDIMENT CONTROL DEVICE. DISCHARGE OF SEDIMENT LADEN WATER TO THE STORM SEWER OR SURFACE WATER IS PROHIBITED.

GENERAL WATER MAIN CONSTRUCTION NOTES:

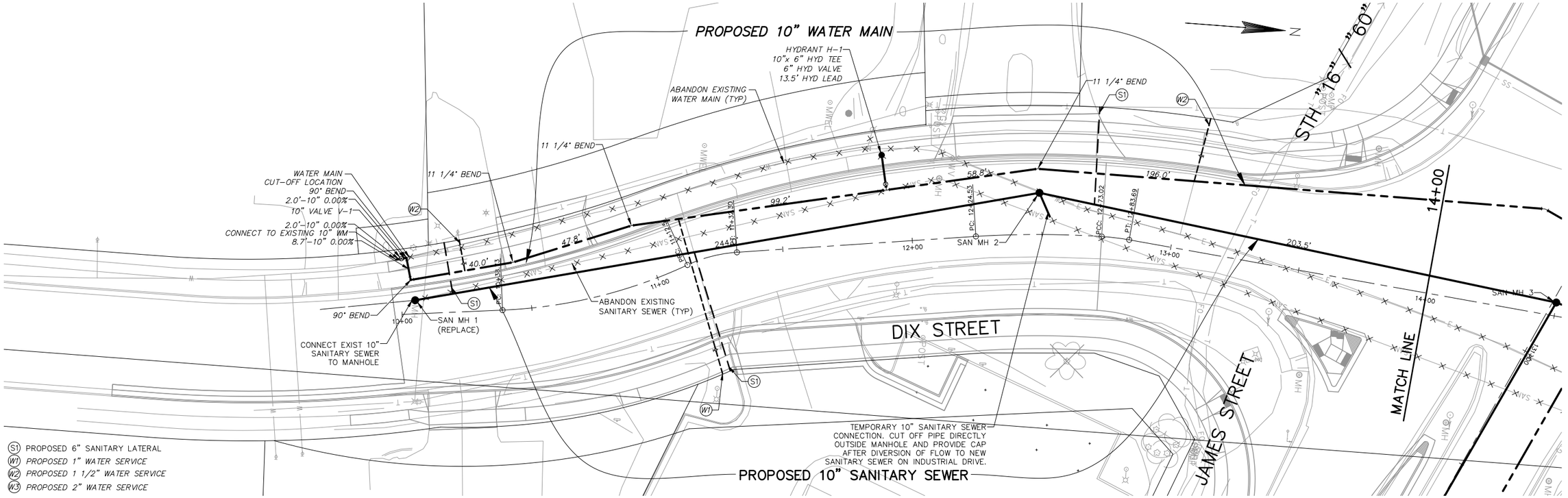
1. ALL WATER MAIN RELATED CONSTRUCTION SHALL COMPLY WITH TECHNICAL STANDARDS FOR SEWER AND WATER CONSTRUCTION, CITY OF COLUMBUS, FIRST EDITION, JANUARY 2016 AND THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION, DECEMBER 2003, INCLUDING AGENDA.
2. PRIOR TO CONSTRUCTION, VERIFY LOCATION AND ELEVATION OF CONNECTION POINTS INCLUDING SERVICES. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. WATER MAIN BURY DEPTH TO TOP OF PIPE SHALL BE 6.5' MINIMUM.
4. ALL WATER MAIN AND STORM SEWER CROSSING SHALL BE INSULATED WITH A 2"x4'x8' SHEET OF POLYSTYRENE INSULATION.
5. ALL WATER SERVICE AND STORM SEWER CROSSING SHALL BE INSULATED WITH A 2"x2'x8' SHEET OF POLYSTYRENE INSULATION.
6. COLUMBUS WATER AND LIGHT (CWL) PERSONNEL WILL OPERATE ALL WATER MAIN VALVES IN CONJUNCTION WITH THIS PROJECT. CONTRACTOR SHALL NOTIFY CWL A MINIMUM OF 24 HOURS PRIOR TO ANY VALVES BEING OPERATED.
7. CURB STOPS SHALL BE CENTERED WITHIN THE TERRACE UNLESS OTHERWISE SHOWN OR AS DIRECTED BY CWL.
8. CURB STOP LOCATIONS SHALL BE SCRIBED OR STAMPED INTO THE CURB HEAD WHEN CURB AND GUTTER IS BEING POURED BY PLACING A 'W' INTO THE TOP OF THE CURB HEAD IN LINE WITH THE CURB STOP AND WATER SERVICE.
9. FINAL GRADE ON ALL VALVE BOXES SHALL BE 0.25" BELOW FINISH GRADE.
10. WATER SERVICE CURB STOPS LOCATED WITHIN CONCRETE SHALL BE INSTALLED WITH FROST SLEEVE. FROST SLEEVE SHALL BE FURNISHED BY CWL.
11. WATER SERVICE CURB STOPS LOCATED IN ASPHALTIC PAVEMENT, INCLUDING PARKING AREAS, SHALL BE INSTALLED INSIDE VALVE BOXES.
12. PROPOSED WATER MAIN VALVES THAT ARE ON DEAD ENDS OR HAVE PLUG AND BUTTRESS SHALL HAVE 4" PVC PIPE WITH CAP, CUT TO FIT, INSERTED INSERTED INTO VALVE BOX TO PREVENT ACCIDENTAL OPENING.
13. HYDRANT VALVES SHALL BE LOCATED 2' FROM FLAG OF CURB AND HYDRANT SHALL BE SET BACK FROM BACK OF CURB 2' UNLESS OTHERWISE SHOWN OR AS DIRECTED BY CWL. MEASUREMENT IS TO NEAREST PORTION OF VALVE BOX OR HYDRANT.

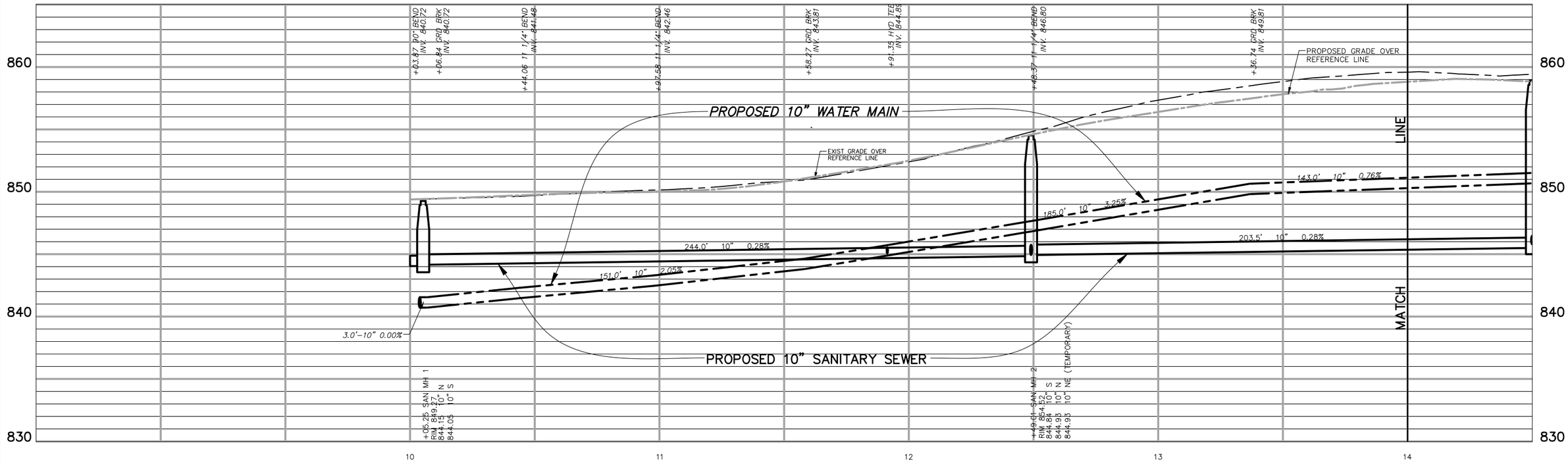
GENERAL SANITARY SEWER CONSTRUCTION NOTES:

1. ALL SANITARY SEWER RELATED CONSTRUCTION SHALL COMPLY WITH TECHNICAL STANDARDS FOR SEWER AND WATER CONSTRUCTION, CITY OF COLUMBUS, FIRST EDITION, JANUARY 2016 AND THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION, DECEMBER 2003, INCLUDING AGENDA.
2. PRIOR TO CONSTRUCTION, VERIFY LOCATION AND ELEVATION OF CONNECTION POINTS INCLUDING LATERALS. NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL ALSO DETERMINE IF LATERALS ARE ACTIVE OR INACTIVE AND REPLACE ALL ACTIVE LATERALS.
3. PROPOSED SANITARY SEWER LATERALS SHALL MAINTAIN MINIMUM OF 6" CLEARANCE ABOVE OR 18" BELOW EXISTING OR PROPOSED WATER MAIN.
4. LOCATOR BOXES FOR SEWER LATERALS SHALL BE LOCATED AT PROPERTY LINE UNLESS OTHERWISE SHOWN OR DIRECTED BY ENGINEER. IF BOX IS NOT LOCATED AT PROPERTY LINE, DETECTOR WIRE SHALL BE PLACED WITH NEW LATERAL TO PROPERTY LINE AND LOOP BACK TO LOCATOR BOX.
5. NEW 6" LATERALS SHALL BE CONNECTED TO EXISTING 4" LATERALS, IF PRESENT, AT PROPERTY LINE WITH FACTORY FITTING.

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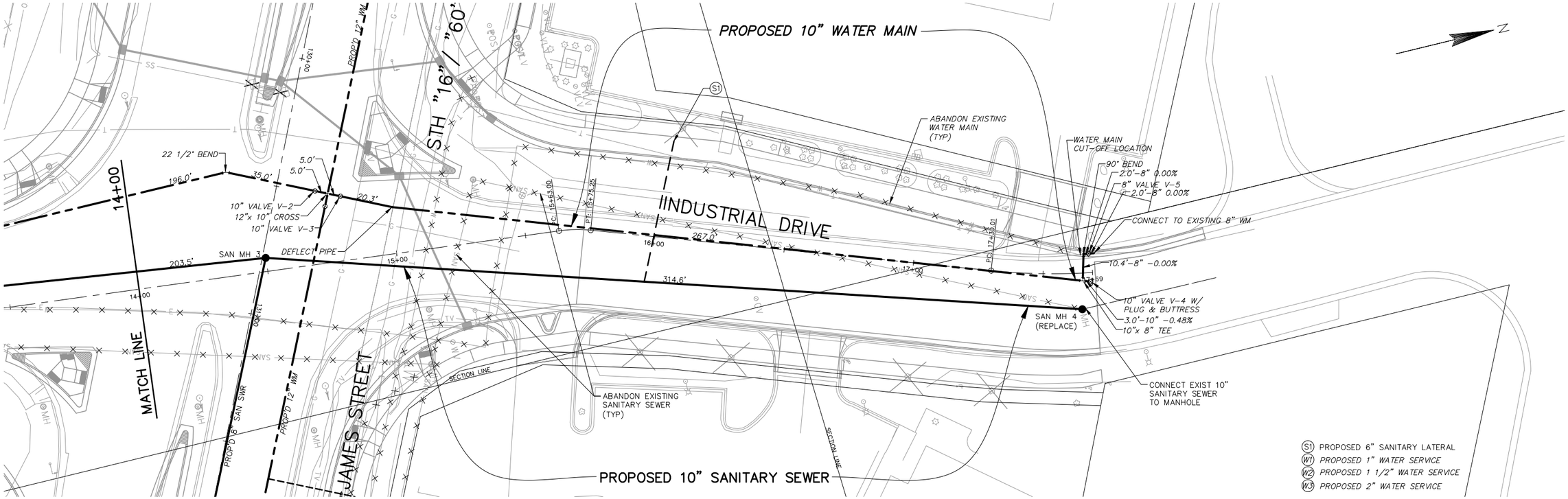
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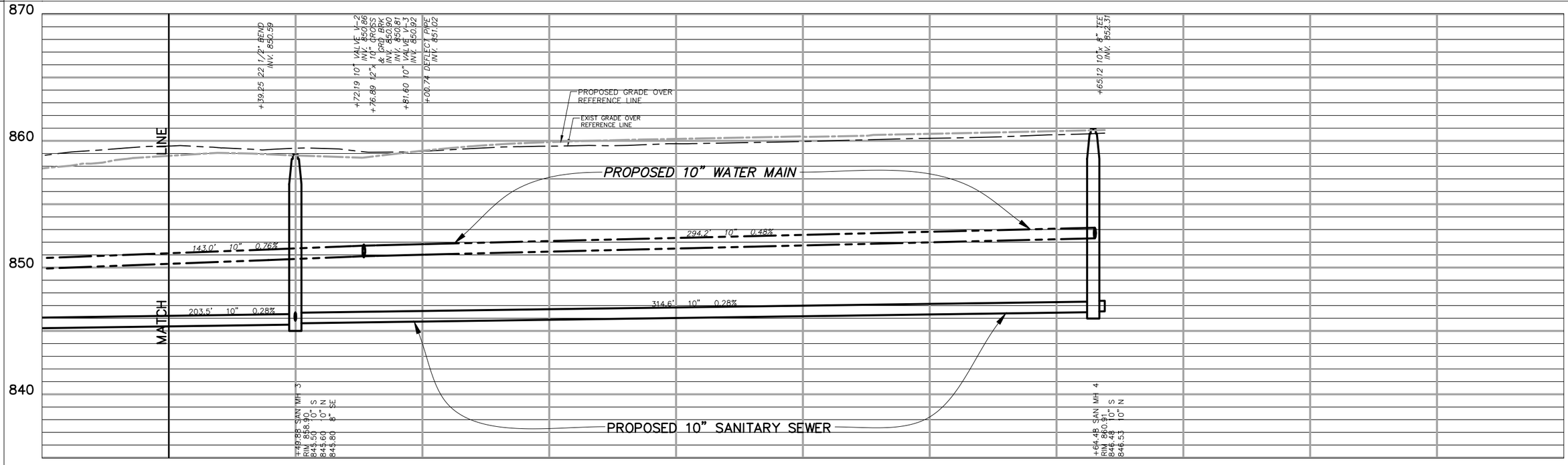




PROJECT NO:1401-02-73	HWY:STH 16	COUNTY:COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 2	E

FILE NAME = C:\C3D\8117 COLUMBUS\10025\DWG\7-002-CPP-DIX STREET-01.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = PLOT STYLE TABLE = XREFS: XREF XREF XREF XREF XREF XREF XREF XREF

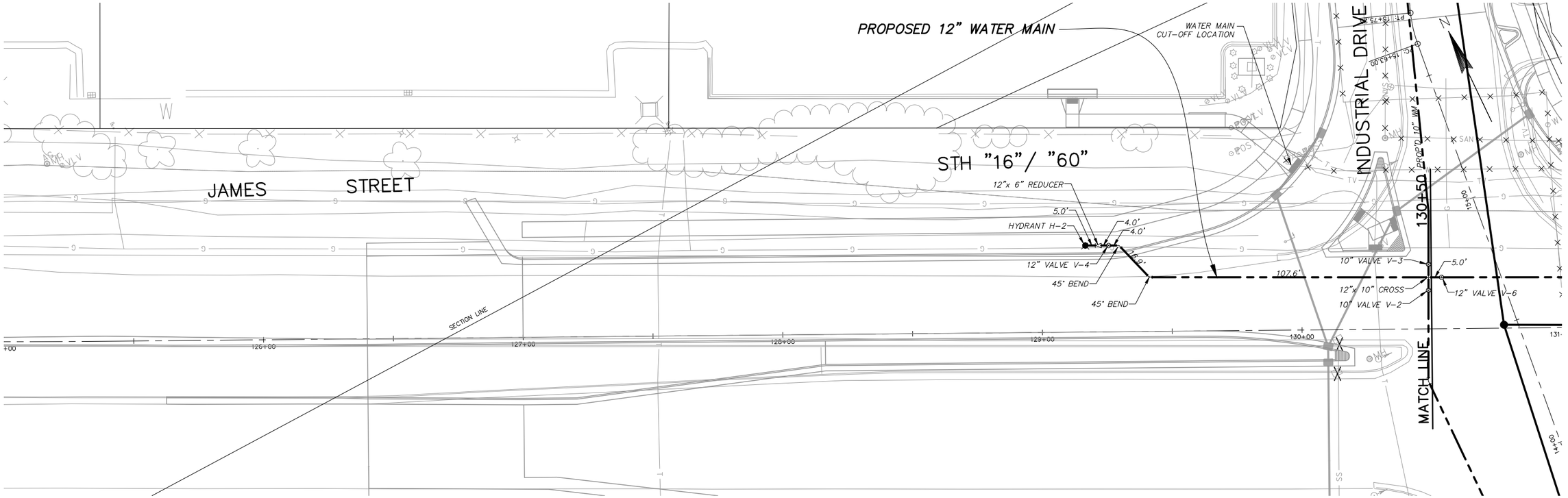


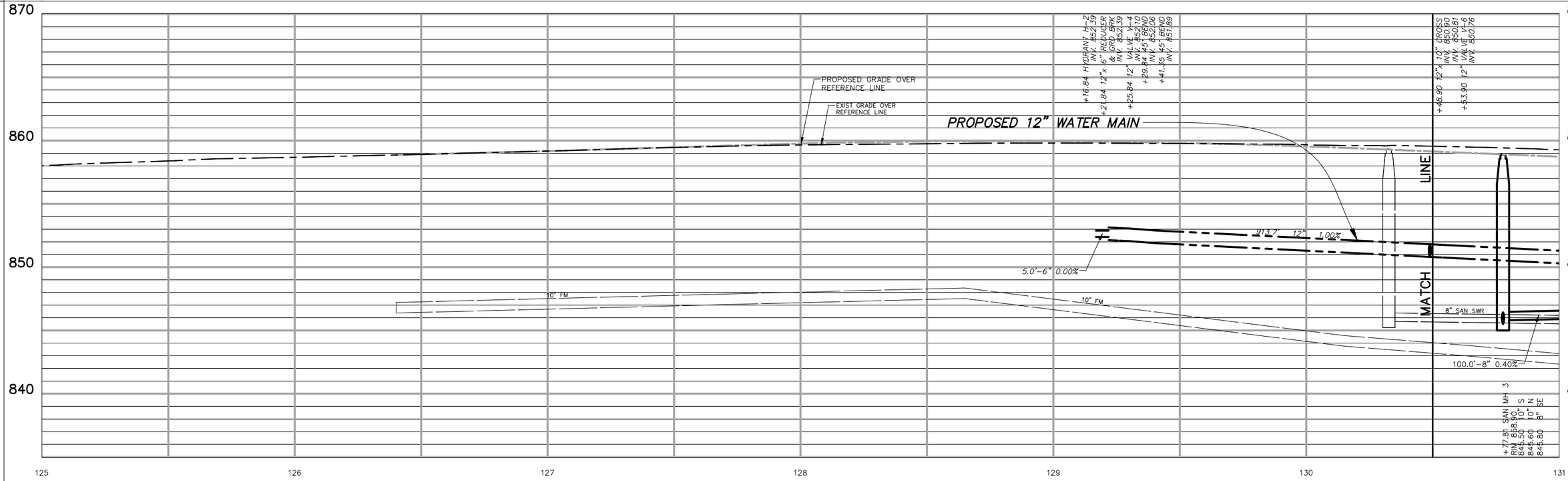


PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 3

E

FILE NAME: C:\C3D\8117 COLUMBUS\10025\DWG\3-003-CPP-DTX_STREET-02.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XREF XREF XREF XREF XREF XREF XREF





PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 4	E

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\3-004-CPP-JAMES_STREET-01.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XPRESS

2

(S1) PROPOSED 6" SANITARY LATERAL
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE

N

INDUSTRIAL DRIVE

PROP'D 10" SAN SWR

PROP'D 10" WM

FORCE MAIN CUT-OFF LOCATION

JAMES STREET

PROPOSED 12" WATER MAIN

HYDRANT H-3
12"x 6" HYD TEE
6" HYD VALVE
26.8' HYD LEAD

REMOVE EXISTING MANHOLE AND CONNECT PROPOSED LATERAL TO EXISTING LATERAL

STH "16" / "60"

ABANDON EXISTING SANITARY SEWER (TYP)

ABANDON EXISTING WATER MAIN (TYP)

ABANDON EXISTING FORCE MAIN (TYP)

130+50

135+50

MATCH LINE

12" VALVE V-6

107.6'

5.0'

12"x 10" CROSS

212.4'

87.9'

12" VALVE V-7

350.0'

353.1'

SAN MH 3

100.0'

SAN MH 5

SAN MH 6

131+00

132+00

133+00

134+00

135+00

PROP'D 10" SAN SWR

144.00

SECTION LINE

PROPOSED 8" SANITARY SEWER

MATCH LINE

860
850
840
830

+48.90
12" VALVE V-6
INV. 850.96

+66.10 HYD TEE
INV. 846.64

+54.15
12" VALVE V-7
INV. 847.76

PROPOSED GRADE OVER REFERENCE LINE

EXIST GRADE OVER REFERENCE LINE

PROPOSED 12" WATER MAIN

913.7' 12" 1.00%

100.0' 8" 0.40%

353.1' 8" 1.00%

8" SAN SWR

10" FM

PROPOSED 8" SANITARY SEWER

+77.81 SAN MH 3
RIM 858.90
8" 845.60 S
10" 845.60 N
8" 845.80 SE

+77.80 SAN MH 5
RIM 858.09
8" 846.20 NW

+114.54 SAN MH 6
RIM 886.69
8" 846.06 SE

130 131 132 133 134 135 136

PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 5	E

FILE NAME = C:\C3D\8117 COLUMBUS\10025\DWG\3-005-CPP- JAMES STREET-02.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = 1.0000 PLOT STYLE TABLE = XREF XREF XREF XREF XREF XREF XREF XREF

(S1) PROPOSED 6" SANITARY LATERAL
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE

CONNECT TO EXIST 6" WM
3.0'-6" 0.00%
90° BEND
INV. 844.44
WATER MAIN
CUT-OFF LOCATION
8.0'-6" 0.00%
30.0'-8" 0.00%
90° BEND
& GRD BRK
INV. 844.36
8" VALVE V-11 W/
PLUG & BUTTRESS
3.0'-8" -0.01%
8"x 6" TEE
18.0'-8" -22.55%
45° BEND
& GRD BRK
INV. 840.30
PROPOSED 6" SANITARY LATERAL
WITH TWO LONG RADIUS TEE
CLEANOUTS AND THREADED CAPS
JAMES STREET
CONNECT TO EXIST 6" SANITARY
LATERAL TO MANHOLE
SAN MH 9 (REPLACE)
RIM 851.36
836.11 8" SW
836.60 6" N (LATERAL)
846.60 6" NW (LATERAL)
836.60 6" NW (LATERAL OUTSIDE DROP)
PROPOSED 12" WATER MAIN
ABANDON EXISTING
WATER MAIN
(TYP)
ABANDON EXISTING
SANITARY SEWER
(TYP)
WET WELL
RIM 852.80
10" SW 834.48
ABANDON EXISTING
FORCE MAIN
(TYP)
45° BEND
INV. 841.76
FORCE MAIN
CUT-OFF LOCATION
REFER TO HUGHES LIFT STATION
DRAWINGS FOR MORE INFORMATION
CONTINENTAL
DRIVE
70.0'-8" 0.00%
45° BEND & GRD BRK
INV. 840.30
29.0'-8"
12.00%
45° BEND
60.1'-8" 0.40%
(RELAY)
5.0'-8"
12.00%
8" VALVE V-10
INV. 843.78
12"x 8" TEE
5.0'
12" VALVE V-9
12" VALVE V-8
HYDRANT H-4
12"x 6" HYD TEE
6" HYD VALVE
24.4' HYD LEAD
65.9'-10" 0.30%
12"x 8" TEE
5.0'
12" VALVE V-12
122.0'
5.0'-8" -0.00%
8" VALVE V-13
12"x6" TEE
STH "16" / "60"
135+50
140+50
350.0'
55.0'
121.1'
22.2'
340.8'
353.1'
59.0'
SAN MH 8
SAN MH 10
SAN MH 12
45° BEND
INV. 842.23
1504.0'
291.3'
5.0'-6" 0.00%
6" VALVE V-76
66.6'-8" 0.00%
67.1'-6" 0.00%
PROPOSED 8"
SANITARY SEWER
71.5'-8" 0.80%
SAN MH 11 (REPLACE)
RIM 853.18
844.10 8" NE
844.20 8" SW
CONNECT EXIST 8"
SANITARY SEWER
TO MANHOLE
8" PLUG &
BUTTRESS
MEISTER
DRIVE
6" PLUG &
BUTTRESS
PROPOSED 6"
FORCE MAIN
PROPOSED 10" SANITARY
SEWER RELAY
MATCH LINE
MATCH LINE

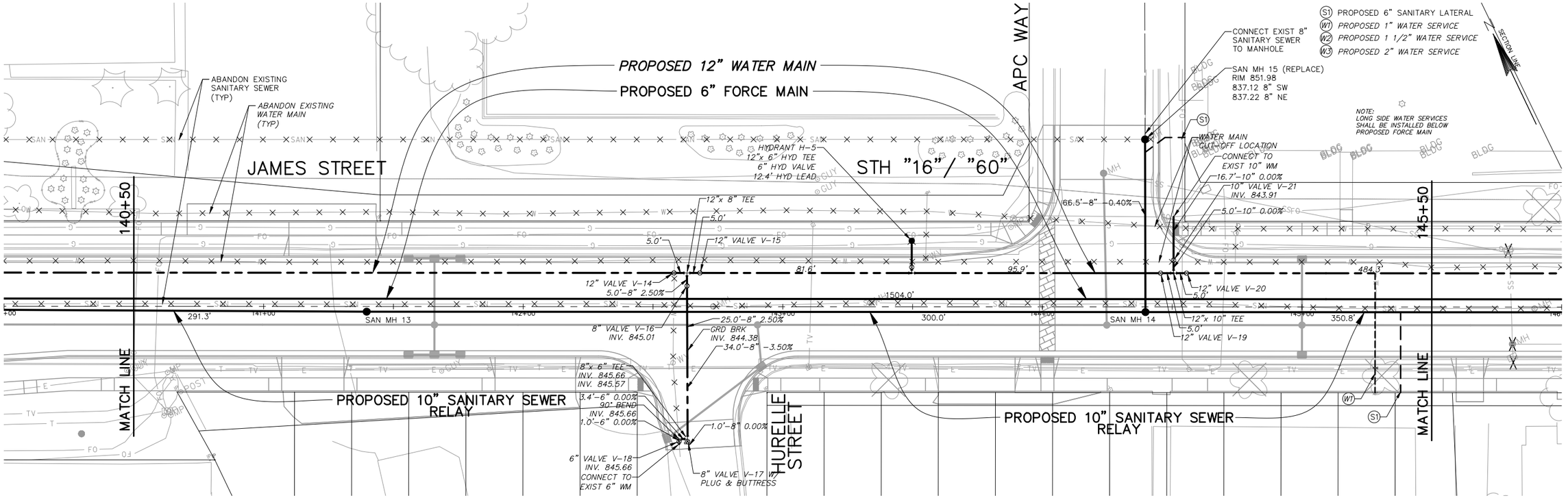
PROPOSED GRADE OVER
REFERENCE LINE
EXIST GRADE OVER
REFERENCE LINE
PROPOSED 12" WATER MAIN
PROPOSED 8"
SANITARY SEWER
PROPOSED 6" FORCE MAIN
PROPOSED 10" SANITARY
SEWER RELAY
913.7' 12" 1.00%
353.1'-8" 1.00%
8" SAN SWR
10" FM
59.0'-8" 0.40%
40.0' 12" 0.00%
122.0' 8" 0.40%
479.7' 12" 0.50%
457.3' 6" 0.50%
291.3' 10" 0.32%
MATCH LINE
MATCH LINE
850
840
830
135
136
137
138
139
140
141

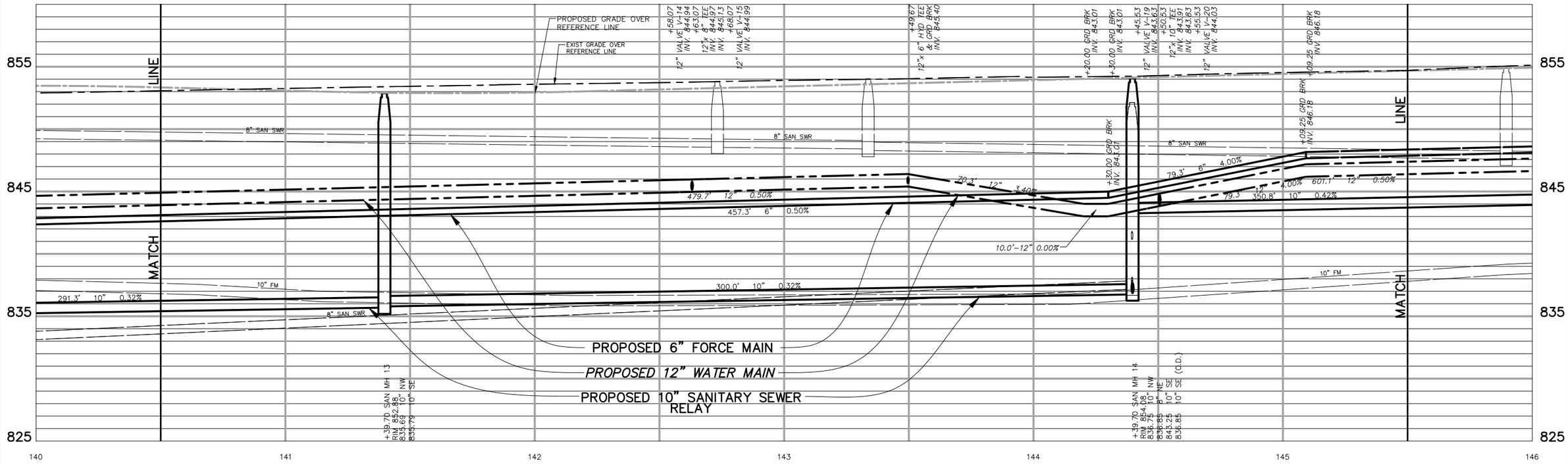
+04.13
12" VALVE V-8
INV. 844.26
+09.13
12"x 8" TEE
INV. 844.21
INV. 844.38
+14.13
12" VALVE V-9
INV. 844.16
+69.00 12" x 8" TEE
INV. 843.61
INV. 843.78
+74.00
12" VALVE V-12
INV. 843.56
+30.00 GRD BRK
INV. 843.00
+70.00 GRD BRK
INV. 843.00
+93.11
12"x 6" HYD TEE
INV. 843.13
+17.29 12"x6" TEE
INV. 843.24
INV. 843.49
+67.62 SAN MH 8
RIM 853.98
842.55 8" NW
8" NE
8" SE
835.87 8" NW (O.D.)
+26.60 SAN MH 10
RIM 853.30
835.53 8" NW
8" SE
835.43 8" SW
843.53 8" SW (O.D.)
835.53 8"
+48.42 SAN MH 12
RIM 852.97
834.94 8" NW
834.67 10" NE
834.77 10" SE

PROJECT NO:1401-02-73	HWY:STH 16	COUNTY:COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 6	E

FILE NAME = C:\C3D\8117_COLUMBUS\10025\DWG\7-006-CPP-_JAMES_STREET-03.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = PLOT STYLE TABLE = XREFS: XREFS XREFS XREFS XREFS XREFS XREFS XREFS

2





PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 7

E

FILE NAME: C:\C3D\8117 COLUMBUS\10025\DWG\7-007-CPP- JAMES STREET-04.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT SCALE=1"=40' WHEN PLOTTED

2

(S1) PROPOSED 6" SANITARY LATERAL
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE

NOTE:
LONG SIDE WATER SERVICES SHALL BE INSTALLED BELOW PROPOSED FORCE MAIN

SECTION LINE

PROPOSED 12" WATER MAIN

PROPOSED 4" WATER SERVICE
PROPOSED 4" VALVE

ABANDON EXISTING WATER MAIN (TYP)
ABANDON EXISTING SANITARY SEWER (TYP)

HYDRANT H-6
12"x 6" HYD TEE
6" HYD VALVE
9.0' HYD LEAD

145+50

150+50

JAMES STREET

STH "16" / "60"

484.3'
1504.0'
350.8'
10.0'
160.4'
349.3'

12" VALVE V-22

145+00
SAN MH 16
(REPLACE)

MATCH LINE

PROPOSED 6" FORCE MAIN

PROPOSED 10" SANITARY SEWER RELAY

PROPOSED GRADE OVER REFERENCE LINE
EXIST GRADE OVER REFERENCE LINE

+39.86 12" VALVE V-22
INV. 848.35

+49.86 12"x 6" HYD TEE
INV. 848.40

595.7' 6" 0.50%
430.6' 12" 0.50%
350.8' 10" 0.42%
349.3' 10" 0.42%

8" SAN SWR
10" FM

+90.48 SAN MH 16
RIM 855.84
844.72 10" NW
844.82 10" SE

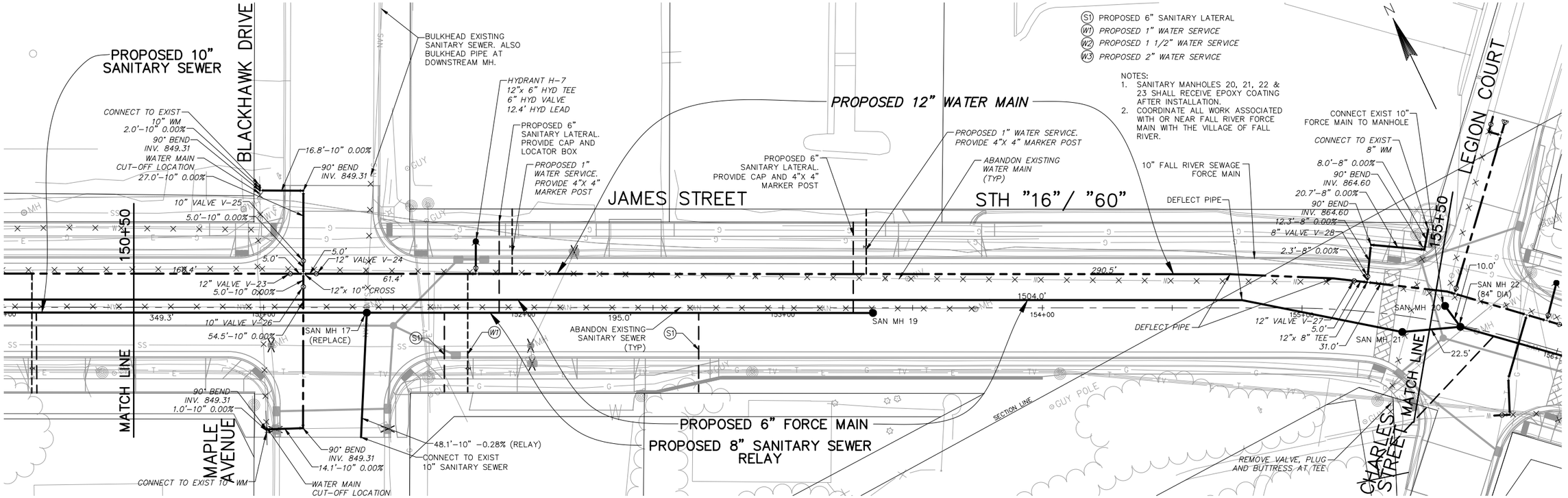
860
850
840
830

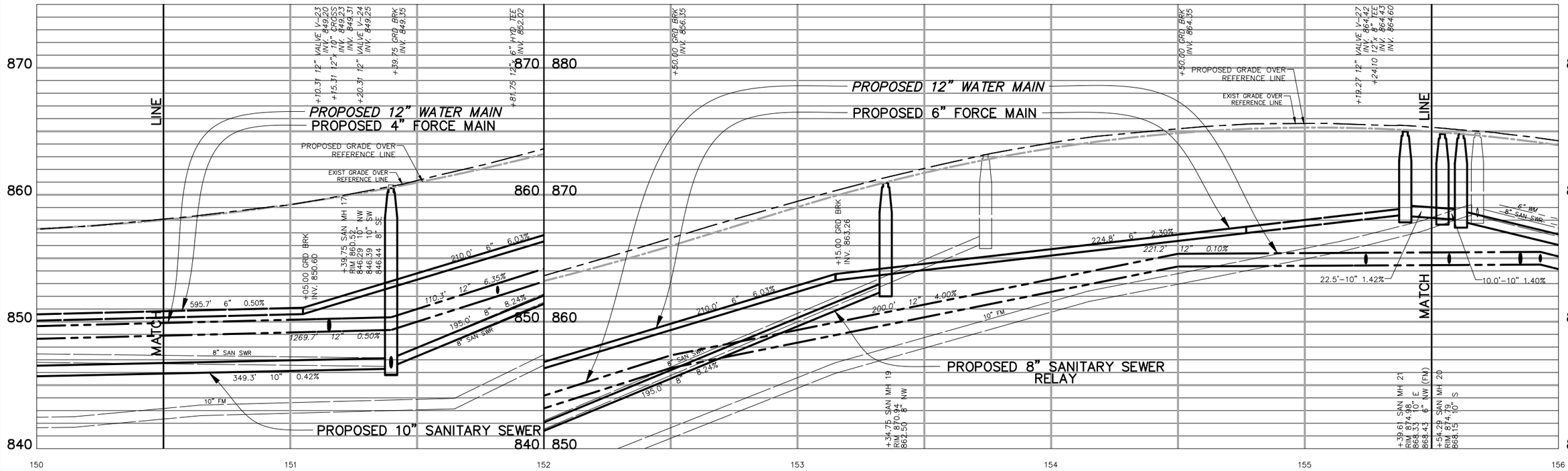
145 146 147 148 149 150 151

PROJECT NO:1401-02-73	HWY:STH 16	COUNTY:COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 8	E

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\7-008-CPP-JAMES_STREET-05.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XREFS: XREFS XREFS XREFS XREFS

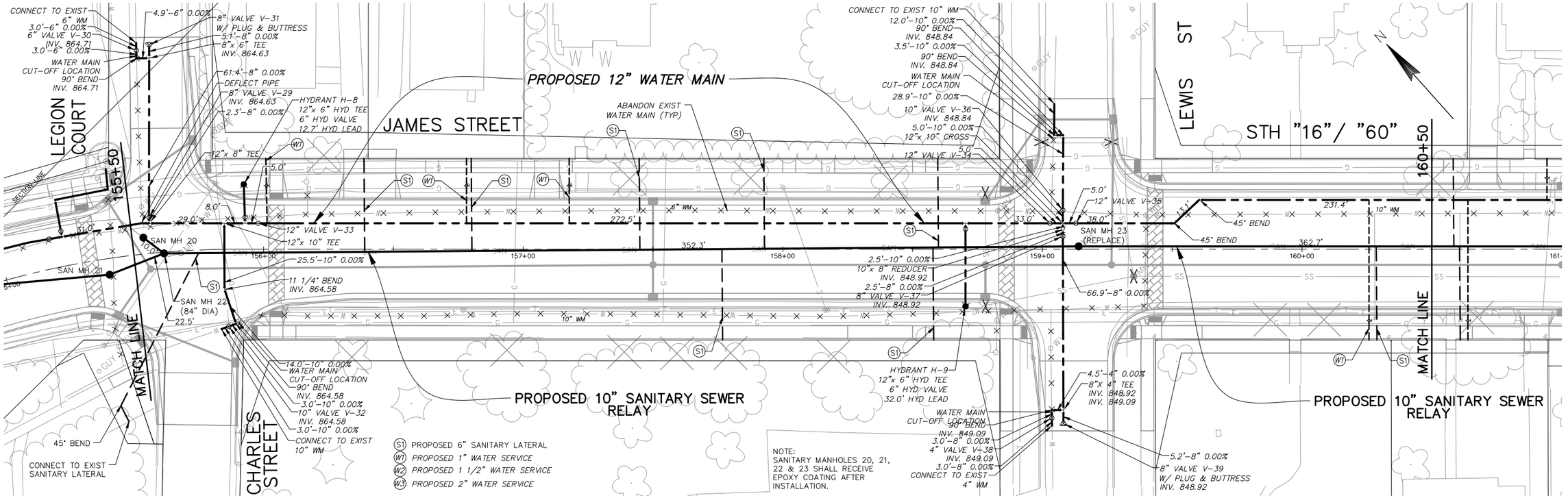
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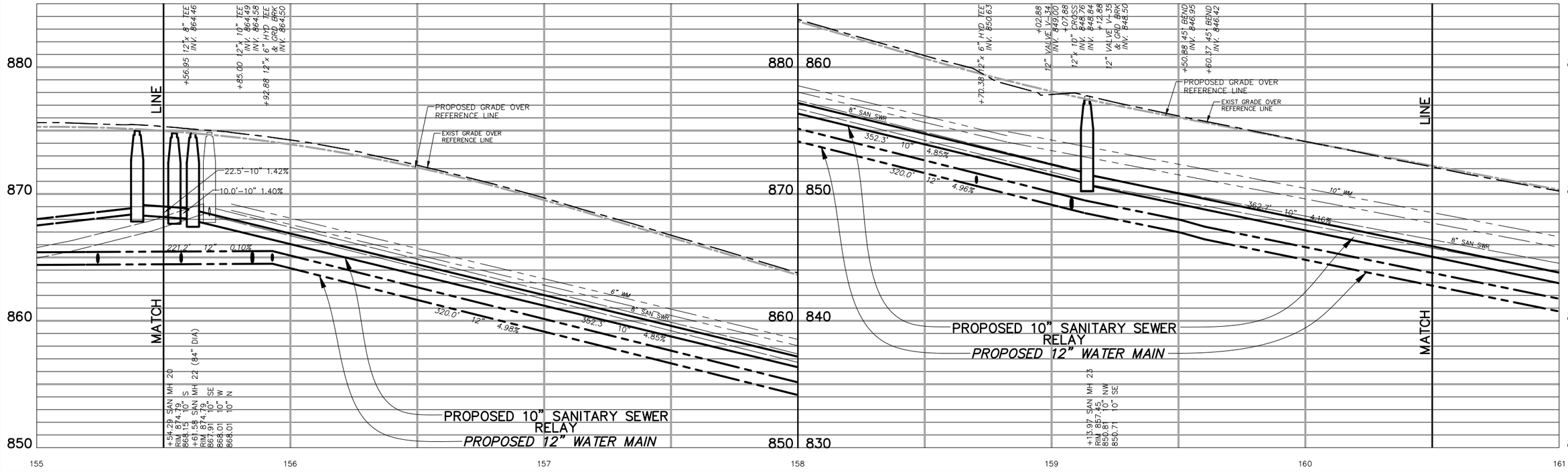




PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 9	E

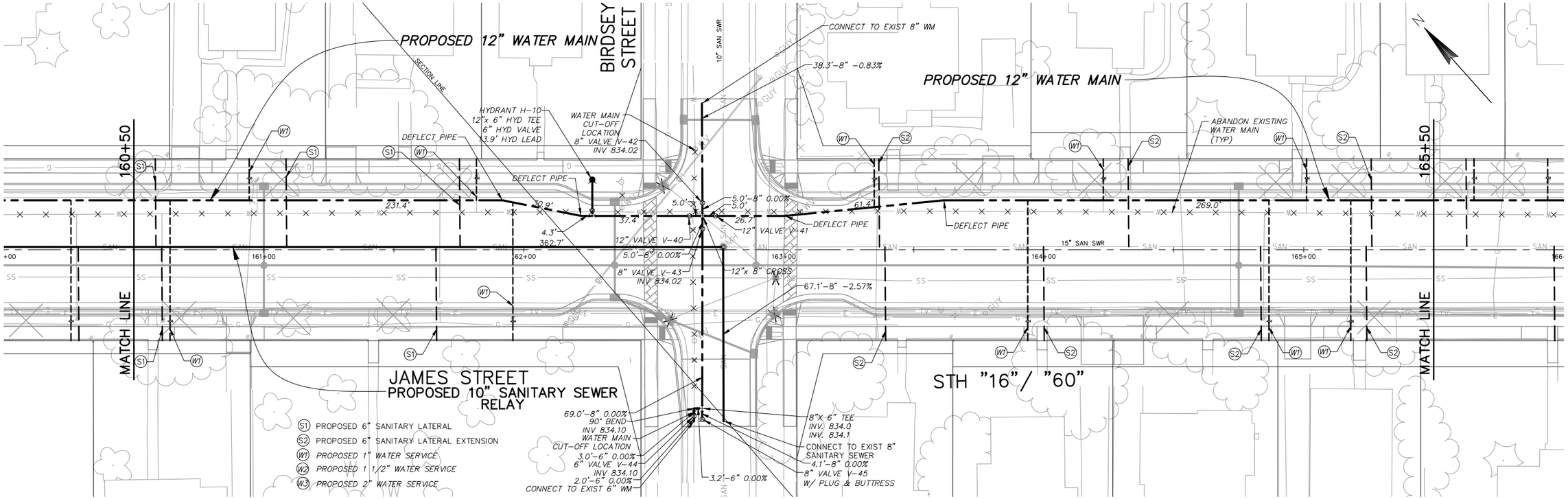
FILE NAME: C:\C3D\8117 COLUMBUS\10025\DWG\7-009-CPP- JAMES STREET-06.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XREF XREF XREF XREF XREF XREF XREF

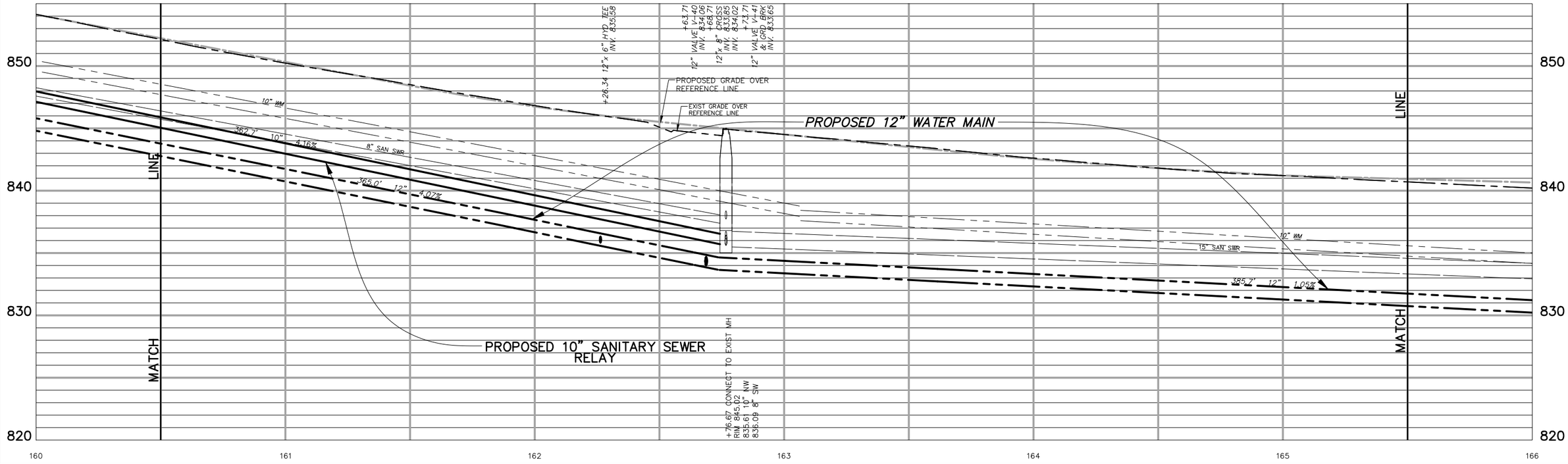




PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 10	140	E

2

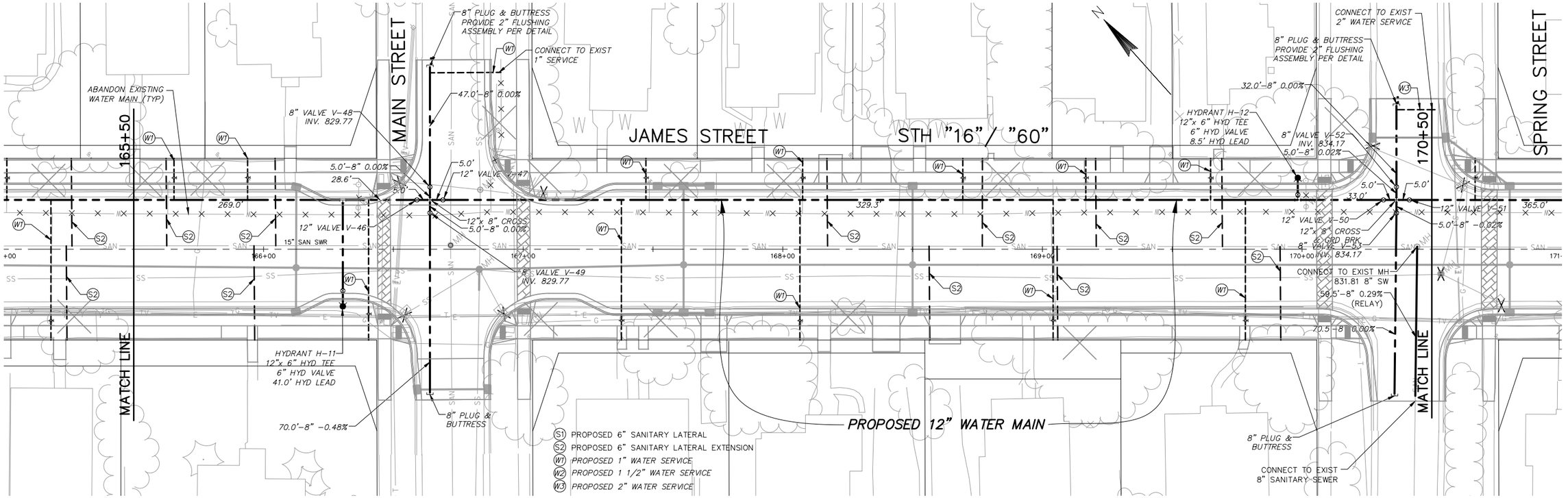


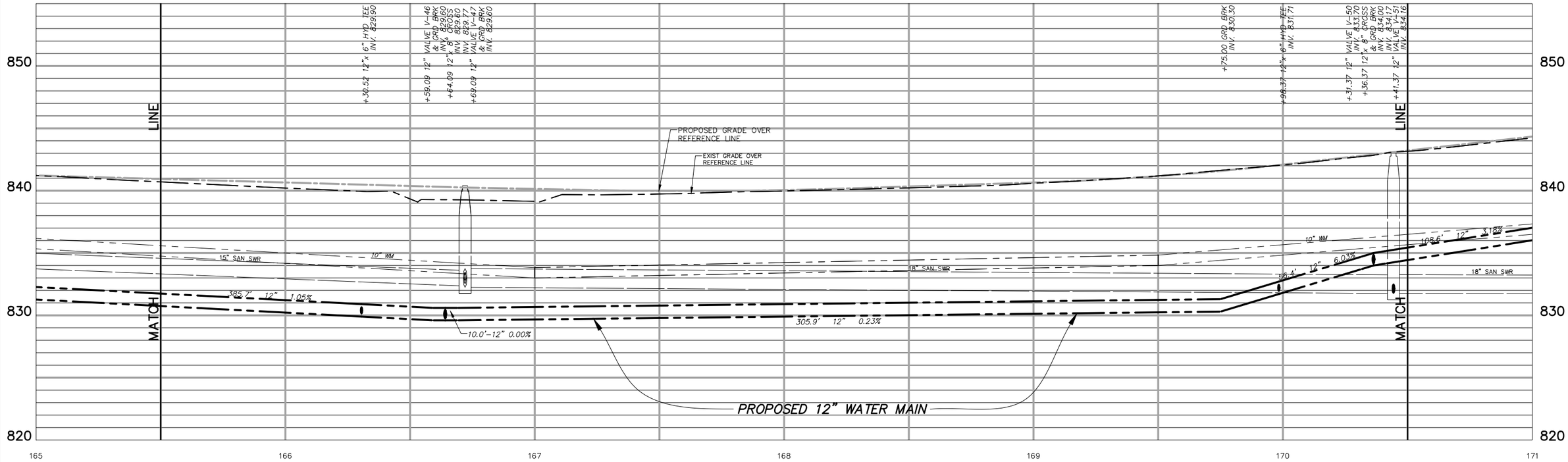


PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 11	E

FILE NAME = C:\C3D\8117 COLUMBUS\10025\DWG\7-011-CPP- JAMES STREET-08.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = PLOT STYLE TABLE = XREFS XREFS XREFS XREFS XREFS XREFS

2





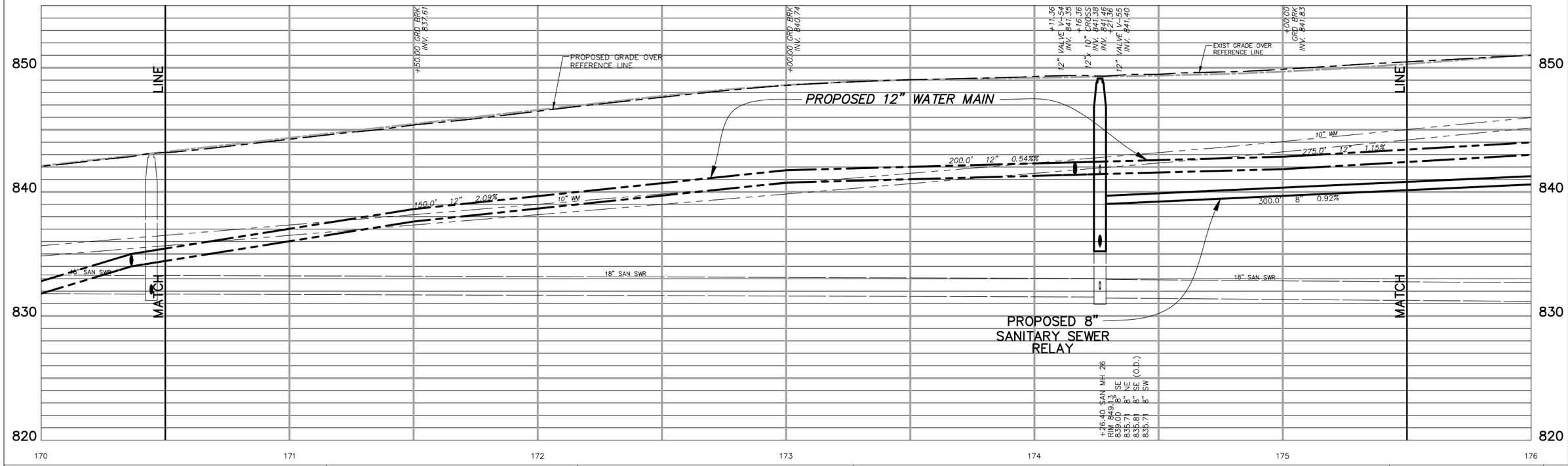
PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 12	E

FILE NAME: C:\C3D\8117 COLUMBUS\10025\DWG\3-012-CPP- JAMES STREET-09.DWG PLOT DATE: 8/3/2009 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XREFS: XREFS XREFS XREFS XREFS XREFS

NOTES:
1. ALL SANITARY SEWER LATERALS BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING LATERAL 2 FEET BEHIND BACK OF CURB. EXISTING LATERAL THAT REMAINS SHALL BE LINED WITH CIPP.
2. ALL WATER SERVICES BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING SERVICE 2 FEET BEHIND BACK OF CURB.
3. REPLACE SANITARY LATERAL SADDLE CONNECTIONS BETWEEN SPRING STREET AND DICKASON BOULEVARD.
4. PROVIDE NEW SANITARY TEE CONNECTION (INSERTA TEE) AT MAIN

SPRING STREET
JAMES STREET
DICKASON BLVD
STH "16"/ "60"
PROPOSED 12" WATER MAIN
170+50
MATCH LINE
175+50
MATCH LINE
SECTION LINE
ABANDON EXIST WATER MAIN (TYP)
SEE NOTE 4
PROPOSED 1"WATER SERVICE FOR FUTURE CONNECTION. PROVIDE 4"X 4" MARKER POST.
PROPOSED 6" SANITARY LATERAL FOR FUTURE CONNECTION. PROVIDE CAP AND 4"X 4"MARKER POST.
370.0'
378.6'
300.0'
CONNECT TO EXIST 6" WM
4.0'-6" 0.00%
8" VALVE V-58 W/ PLUG & BUTTRESS INV. 841.46
3.0'-6" 0.00%
6" VALVE V-57 INV. 841.54
4.1'-8" 0.00%
8"x 6" TEE INV. 841.46
WATER MAIN CUT-OFF LOCATION
2.0'-6" 0.00%
90° BEND INV. 841.54
CONNECT TO EXIST 8" SANITARY SEWER
CONNECT TO EXISTING WATER SERVICE
(SEE NOTE 2)
(SEE NOTE 1)
HYDRANT H-13
8"x 6" HYD TEE
6" HYD VALVE
47.6' HYD LEAD
15.0'-8" 0.00%
9.6'-8" 0.00%
45° BEND INV. 841.46
5.0'-8" 0.00%
8" VALVE V-56 INV. 841.46
57.4'-8" 0.32% (RELAY)
7.0'-8" 0.00%
45° BEND INV. 841.46
2.5'-8" 0.00%
10"x 8" REDUCER INV. 841.46
2.5'-10" 0.00%
5.0'
12" VALVE V-54
12"x 10" CROSS
5.0'-10" 0.00%
10" VALVE V-59 & GRD BRK INV. 841.46
30.0'-10" -2.70%
5.0'-12" VALVE V-55
SAN MH 26
8.0'-8" 0.38%
CONNECT TO EXIST MH
8" NE 835.68
8" SW 835.54
GRD BRK INV. 840.65
35.5'-8" -0.37% (RELAY)
45.5'-10" 1.78%
WATER MAIN CUT-OFF LOCATION
90° BEND INV. 841.46
3.0'-6" 0.00%
6" VALVE V-60 INV. 841.46
2.0'-6" 0.00%
CONNECT TO EXIST 6" WM
10"x 6" TEE INV. 841.46
5.0'-10" 0.00%
CONNECT TO EXIST 10" WM
7.8'-6" 0.00%
CONNECT TO EXIST 8" SANITARY SEWER
CAUTION
(S1) (TYP THIS SEWER SEGMENT)
PROPOSED 8" SANITARY SEWER RELAY

(S1) PROPOSED 6" SANITARY LATERAL
(S2) PROPOSED 6" SANITARY LATERAL EXTENSION
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE



PROJECT NO:1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 13	E

FILE NAME = C:\C3D\8117 COLUMBUS\10025\DWG\7-013-CPP- JAMES STREET-10.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = 1.0000 PLOT STYLE TABLE = XPRESS.XPRESS.XPRESS.XPRESS.XPRESS.XPRESS.XPRESS.XPRESS

NOTES:
1. ALL SANITARY SEWER LATERALS BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING LATERAL 2 FEET BEHIND BACK OF CURB. EXISTING LATERAL THAT REMAINS SHALL BE LINED WITH CIPP.
2. ALL WATER SERVICES BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING SERVICE 2 FEET BEHIND BACK OF CURB.

(S1) PROPOSED 6" SANITARY LATERAL
(S2) PROPOSED 6" SANITARY LATERAL EXTENSION
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE

PROPOSED 12" WATER MAIN
JAMES STREET
175+50
MATCH LINE
(W1)
(S1) (TYP THIS SEWER SEGMENT)
PROPOSED 6" SANITARY LATERAL (TYP) (SEE NOTE 1)
PROPOSED 8" SANITARY SEWER RELAY
378.5'
300.0'
SAN MH 27
76+00
177+00
5.0'-10" 0.00%
90° BEND
INV. 845.25
CONNECT TO EXIST 10" WATER MAIN
WATER MAIN CUT-OFF LOCATION
90° BEND
INV. 845.08
5.0'-10" 0.00%
32.2'-10" 0.00%
HYDRANT H-15
10"x 6" HYD TEE
6" HYD VALVE
17.6' HYD LEAD
22.8'-10" 0.00%
10" VALVE V-63
INV. 845.08
5.0'-10" 0.00%
5.0'
12" VALVE V-61
12"x 10" CROSS
10" VALVE V-64
INV. 845.08
71.5'-10" 0.00%
WATER MAIN CUT-OFF LOCATION
10"x 6" CROSS
INV. 845.08
INV. 845.25
7.0'-6" 0.00%
90° BEND
INV. 845.25
11.5'-10" 0.00%
10.7'-6" 0.00%
6" VALVE V-65
INV. 845.25
2.0'-6" 0.00%
CONNECT TO EXIST 6" WM
10" VALVE V-68
W/ 10" PLUG & BUTTRESS
SECTION LINE
PROPOSED 12" WATER MAIN
CONNECT TO EXIST 10" SANITARY SEWER
80.9'-10" -0.39% (RELAY)
5.0'
12" VALVE V-62
5.0'-10" 0.00%
CONNECT TO EXIST MH
839.12 10" NE
840.20 10" SW
75.1'-10" -0.42% (RELAY)
HYDRANT H-14
6" HYD VALVE
35.2' HYD LEAD
PROPOSED 1" WATER SERVICE FOR FUTURE CONNECTION (SEE NOTE 2)
LUDINGTON STREET STH "73"
PROPOSED 8" SANITARY SEWER
CONNECT TO EXIST 10" SANITARY SEWER
STH "16" / "60"
327.1'
ABANDON EXIST WATER MAIN (TYP)
SAN MH 28
179+00
180+00
300.0'
ABANDON EXIST SANITARY SEWER (TYP)
(S1) (TYP THIS SEWER SEGMENT)
180+50
MATCH LINE

860
850
840
830
MATCH LINE
PROPOSED 12" WATER MAIN
+75.00 GRD. BRK
INV. 845.00
+99.89
12" VALVE V-61
INV. 845.00
+04.89
12" 10" CROSS
INV. 845.00
INV. 845.08
+09.89
12" VALVE V-62
INV. 845.00
+17.00 GRD. BRK
INV. 845.00
+75.00 GRD. BRK
INV. 844.00
PROPOSED GRADE OVER REFERENCE LINE
EXIST GRADE OVER REFERENCE LINE
10" WM
275.0' 12" 1.15%
42.0'-12" 0.00%
58.0' 12" 1.72%
300.0' 8" 0.92%
275.0' 12" 4.73%
300.0' 8" 4.64%
PROPOSED 8" SANITARY SEWER RELAY
PROPOSED 8" SANITARY SEWER
18" SAN SWR
+26.39 SAN MH 27
RIM 852.80
841.76 8" NW
+81.06 SAN MH 28
RIM 851.60
841.23 8" SE
175
176
177
178
179
180
181

PROJECT NO:1401-02-73 | HWY:STH 16 | COUNTY:COLUMBIA | WATER MAIN AND SANITARY SEWER PLAN AND PROFILE | SHEET 14

E

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\3-014-CPP-JAMES STREET-11.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT SCALED 1" = 40' WIDE

NOTES:
1. ALL SANITARY SEWER LATERALS BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING LATERAL 2 FEET BEHIND BACK OF CURB. EXISTING LATERAL THAT REMAINS SHALL BE LINED WITH CIPP.
2. ALL WATER SERVICES BETWEEN DICKASON BOULEVARD AND WATER STREET SHALL BE REPLACED FROM MAIN AND RECONNECTED TO EXISTING SERVICE 2 FEET BEHIND BACK OF CURB.
3. REPLACE TAP SADDLE TEE FITTING AND EXTEND NEW 6" SANITARY LATERAL.

PROPOSED 12" WATER MAIN
(SEE NOTE 2)
ABANDON EXIST WATER MAIN (TYP)
HYDRANT H-16
12"x 6" HYD TEE
6" HYD VALVE
8.5' HYD LEAD
180+50
MATCH LINE
GRD BRK & DEFLECT PIPE
10.7'
12" VALVE V-67
10.4'
13.1'
327.1'
CONNECT TO EXIST 12" CROSS
WATER MAIN CUT-OFF LOCATION
ABANDON EXIST SANITARY SEWER (TYP)
300.0'
SAN MH 29
CONNECT TO EXIST MANHOLE
827.23 10" SW
9.0'-10" 0.42%
PROPOSED 8" SANITARY SEWER
29.1'-12" 0.00%
4.4'-4" 0.00%
90° BEND
INV. 829.91
3.0'-4" 0.00%
4" VALVE V-68
INV. 829.91
2.0'-4" 0.00%
CONNECT TO EXIST 4" WATER MAIN
65.5'-10" 0.42%
12"x 4" TEE
INV. 829.58
4.1'-12" 0.00%
12" VALVE V-71 W/ 12" PLUG & BUTTRESS
CONNECT TO EXIST 10" SANITARY SEWER
PROPOSED 6" SANITARY SEWER LATERAL (TYP) (SEE NOTE 1)
(S1) (TYP THIS SEWER SEGMENT)
WATER STREET
JAMES STREET
STH "16" / "60"
SEE NOTE 3
ADJUST EXIST CURB STOP BOX (TYP)
ADJUST EXIST VALVE BOX (TYP)
ADJUST EXIST MANHOLE (TYP)
RELOCATE EXIST HYDRANT TO 2' BEHIND PROPOSED FACE OF CURB. PROVIDE NEW LEAD FROM VALVE TO HYDRANT
12"x 8" TAPPING SLEEVE & 8" VALVE V-54
INV. 825.75
185+50
2.0'-8" 0.00%
8" VALVE V-70
INV. 825.75
11 1/4° BEND
INV. 825.75
3.0'-8" 0.00%
300.0'-8"-2.0%
MATCH LINE
WATERLOO STREET

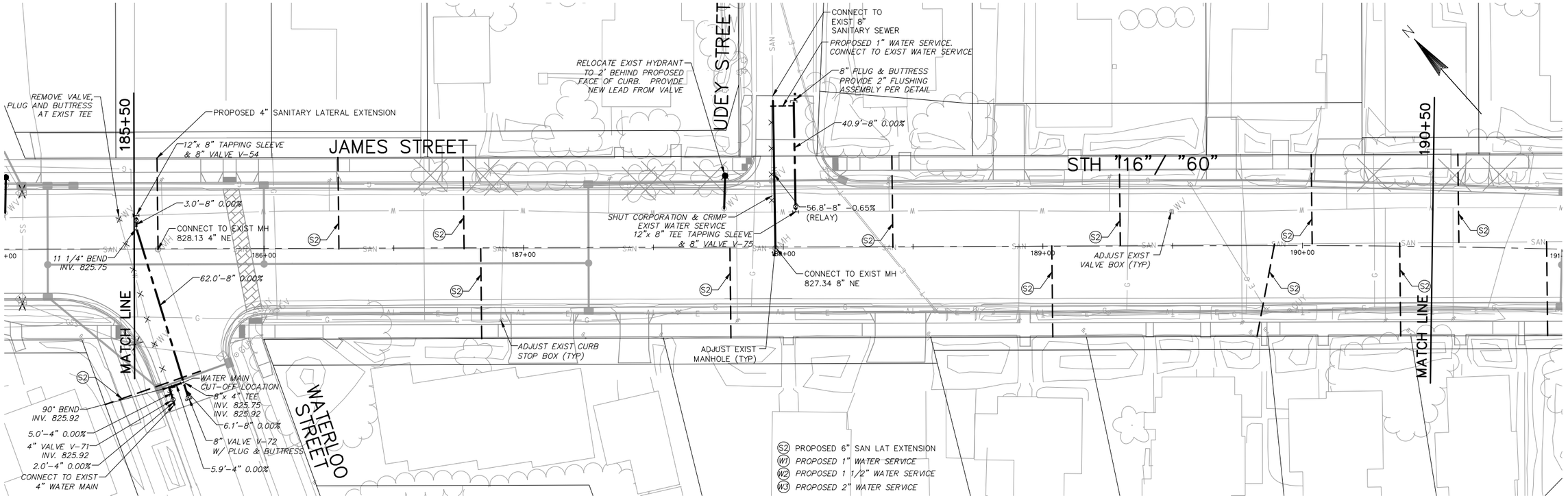
(S1) PROPOSED 6" SANITARY LATERAL
(S2) PROPOSED 6" SANITARY LATERAL EXTENSION
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE

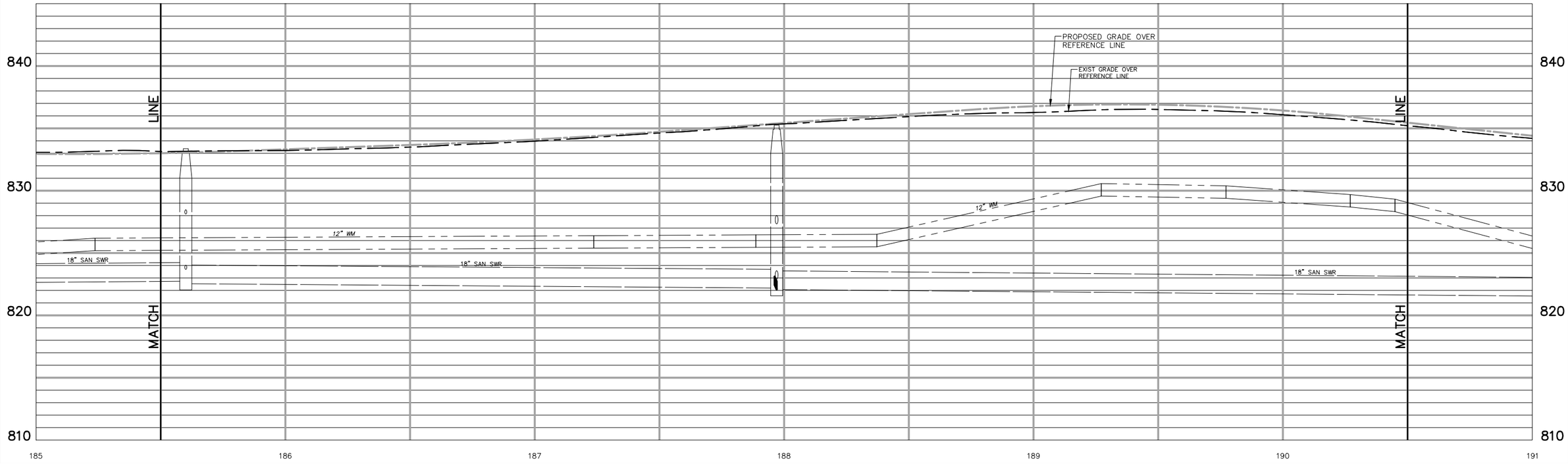
+36.96 12"x 6" HYD TEE INV. 831.62
+49.88 GRD BRK & DEFLECT PIPE INV. 831.00
+60.61 12" VALVE V-67 INV. 831.00
+69.62 CONNECT TO EXIST 12" CROSS INV. 831.08
PROPOSED 12" WATER MAIN
PROPOSED 8" SANITARY SEWER
275.0' 12" 4.73%
300.0' 8" 4.64%
19.7'-12" 0.00%
18" SAN SWR
12" WM
21" SAN SWR
PROPOSED GRADE OVER REFERENCE LINE
EXIST GRADE OVER REFERENCE LINE
+81.10 SAN MH 29
RIM 836.31
827.37 10" NW
827.37 10" SW
827.27 10" NE
840
830
820
180
181
182
183
184
185
186

PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 15

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\7-015-CPP-JAMES STREET-12.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT SCALED 1:40 REF

2





PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 16

E

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\3-016-CPP-JAMES_STREET-13.DWG PLOT DATE: 8/3/2008 8:36 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE: PLOT STYLE TABLE: XREFS: XREFS XREFS XREFS XREFS

NOTE:
1. PROVIDE NEW SANITARY TEE CONNECTION (INSERTA TEE) AT MAIN.

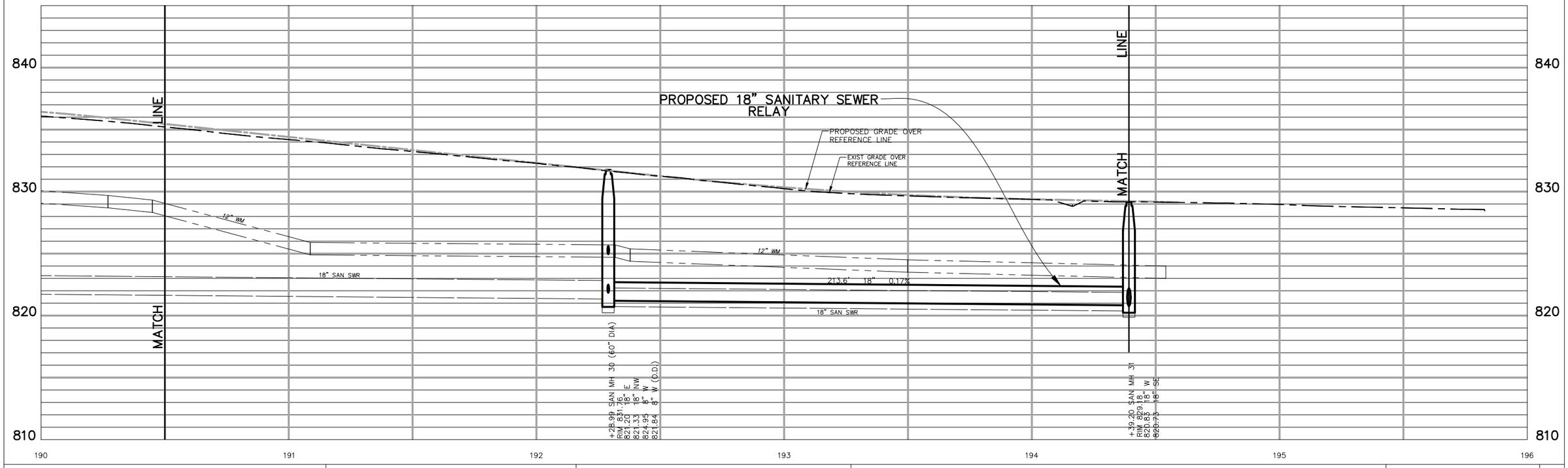
MATCH LINE 190+50

PROPOSED 18" SANITARY SEWER RELAY
SEE NOTE 1

MANNING STREET

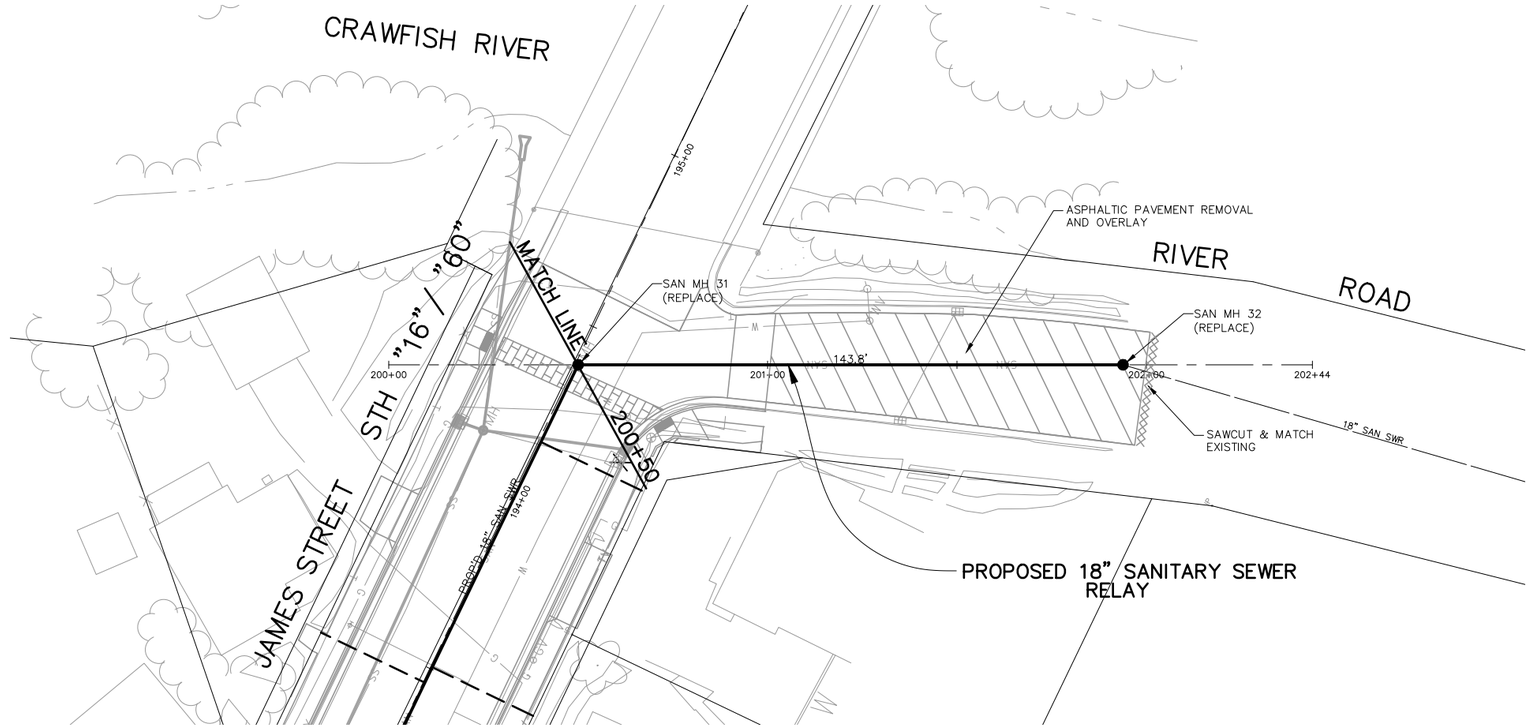
HYDRANT H-19 & 6" HYD VALVE
2.9'-6" 0.00%
13.8'-6" 0.00%
45° BEND
13.0'-6" 0.00%
12" x 6" TAPPING SLEEVE & 6" VALVE V-74
50.0'-8" -0.84%
CONNECT TO EXIST 8" SANITARY SEWER
ABANDON HYDRANT AND HYDRANT VALVE BOX. CLOSE VALVE AND PLUG & BUTTRESS
ADJUST EXIST VALVE BOX (TYP)
SAN MH 30 (60" DIA) (REPLACE)
213.6' 18" 0.17%
ADJUST EXIST CURB STOP BOX (TYP)
SAN MH 31 (REPLACE)
MATCH LINE 200+50
CRAWFISH RIVER
SECTION LINE
JAMES STREET STH "16" / "60" RIVER ROAD
SECTION LINE

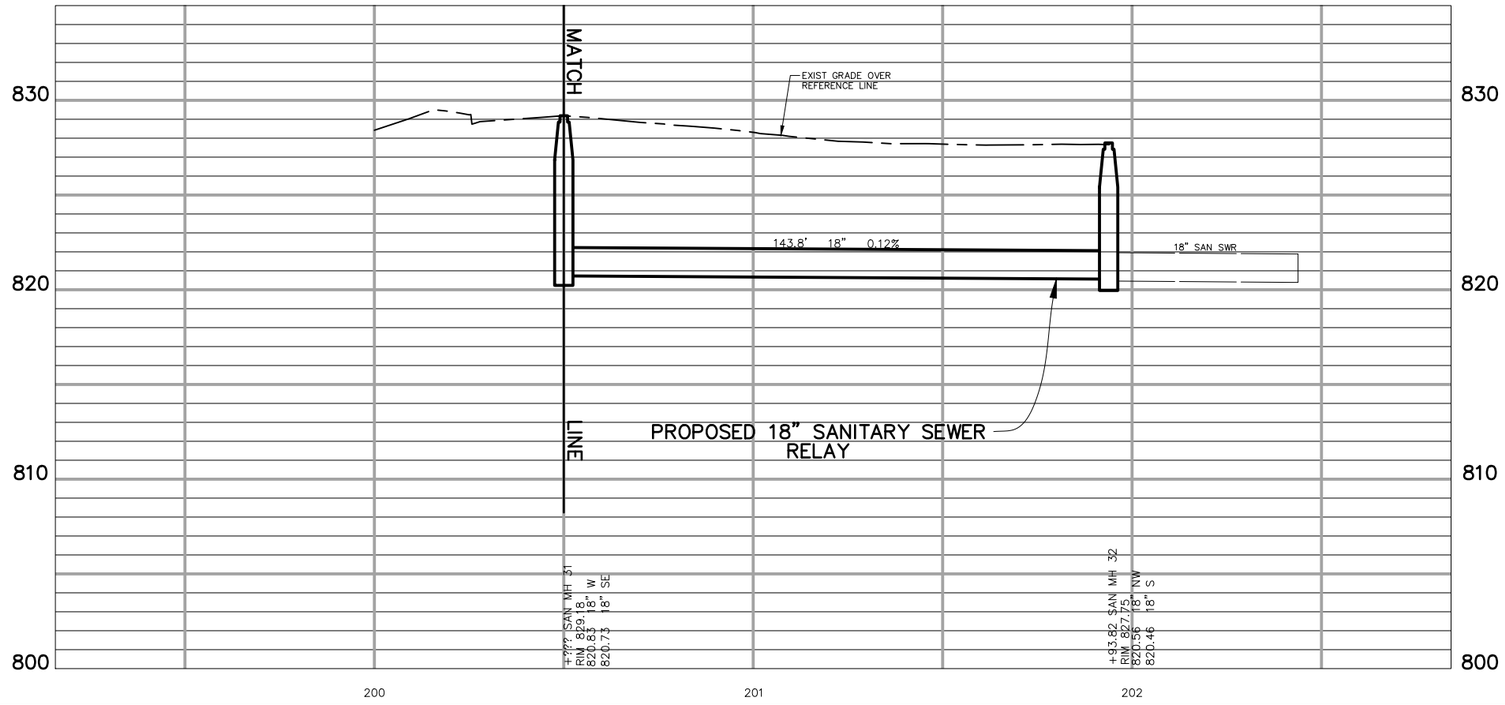
(S1) PROPOSED 6" SANITARY LATERAL
(S2) PROPOSED 6" SAN LAT EXTENSION
(W1) PROPOSED 1" WATER SERVICE
(W2) PROPOSED 1 1/2" WATER SERVICE
(W3) PROPOSED 2" WATER SERVICE



PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 17	E

FILE NAME = C:\C3D\8117_COLUMBUS\10025\DWG\7-017-CPP-_JAMES_STREET-14.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = 1.0000 PLOT STYLE TABLE: XREF XREF XREF XREF XREF





PROJECT NO:1401-02-73	HWY:STH 16	COUNTY:COLUMBIA	WATER MAIN AND SANITARY SEWER PLAN AND PROFILE	SHEET 18	E

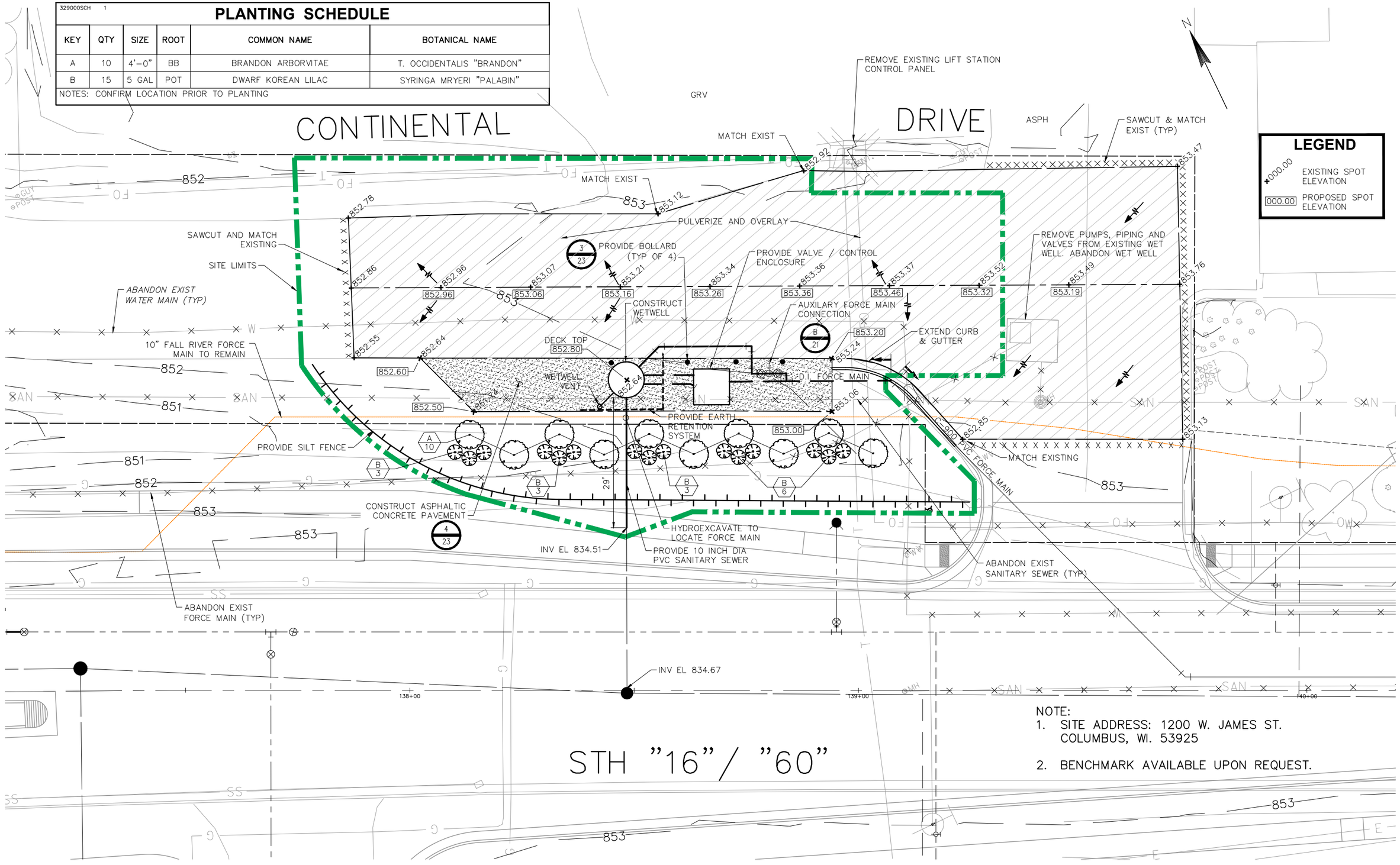
FILE NAME = C:\C3D\8117_COLUMBUS\10025\DWG\3-018-CRR-RIVER_ROAD-1.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE = PLOT STYLE TABLE = XREFS: XREF XREF XREF XREF XREF XREF XREF XREF

329000SCH 1

PLANTING SCHEDULE

KEY	QTY	SIZE	ROOT	COMMON NAME	BOTANICAL NAME
A	10	4'-0"	BB	BRANDON ARBORVITAE	T. OCCIDENTALIS "BRANDON"
B	15	5 GAL	POT	DWARF KOREAN LILAC	SYRINGA MRYERI "PALABIN"

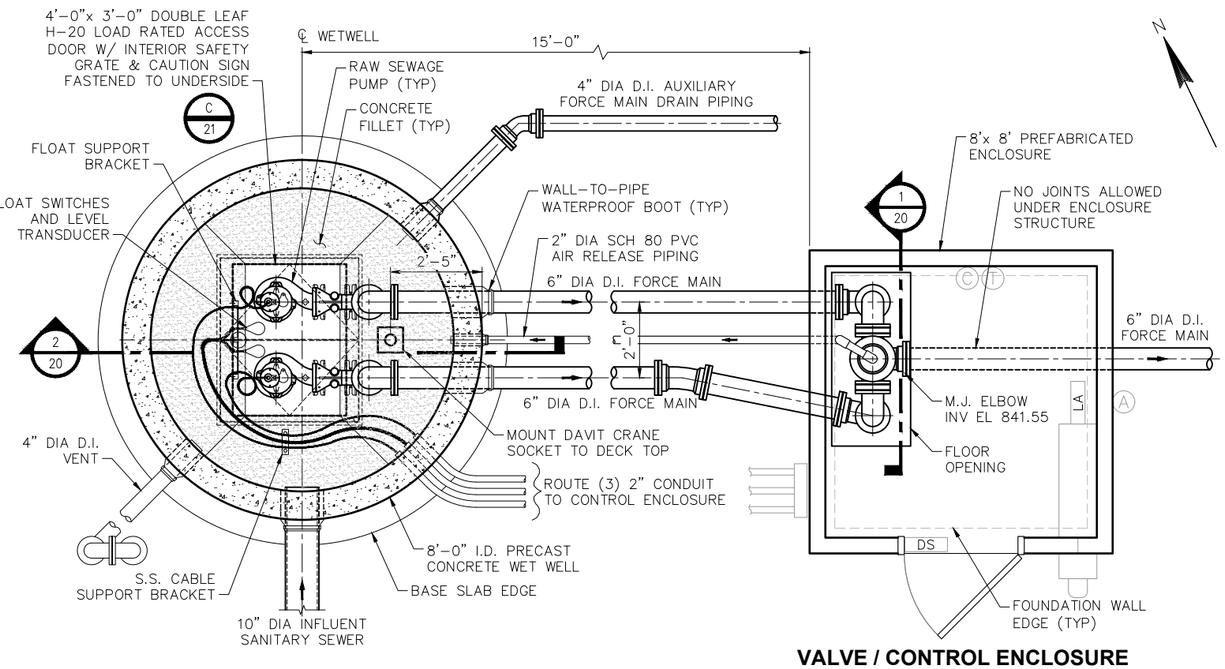
NOTES: CONFIRM LOCATION PRIOR TO PLANTING



NOTE:
1. SITE ADDRESS: 1200 W. JAMES ST. COLUMBUS, WI. 53925
2. BENCHMARK AVAILABLE UPON REQUEST.

PROJECT NO: 1401-02-73	HWY: STH 16	COUNTY: COLUMBIA	HUGHES LIFT STATION SITE PLAN	SHEET 19

FILE NAME = C:\C3D\8117 COLUMBUS\10025\DWG\7-018-CPL-LIFT STATION-01.DWG PLOT DATE = 1/28/2016 PLOT BY = RUEKERT-MIELKE, INC. PLOT NAME = PLOT SCALE = 0.30000000 = 1'-0" XREF

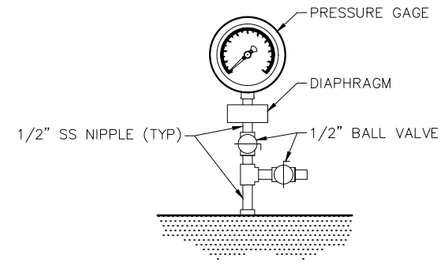


WETWELL PLAN

VALVE / CONTROL ENCLOSURE

WET WELL AND VALVE / CONTROL ENCLOSURE PLAN

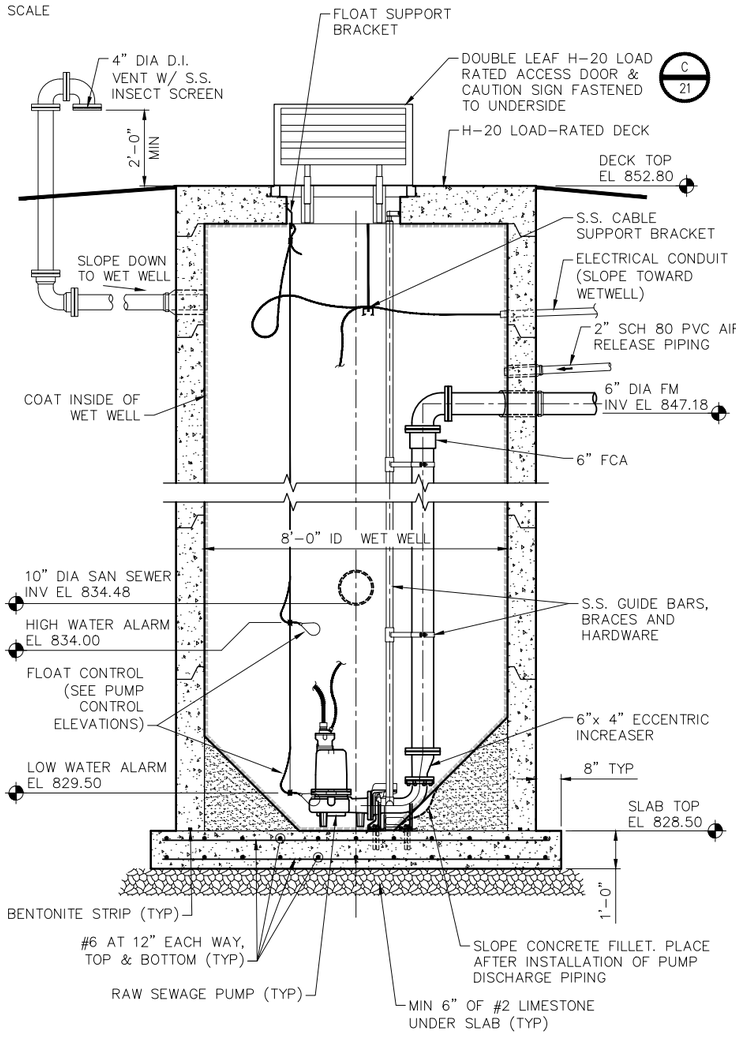
SPL–WETWELL 24 0 1 2 3 FT



A 20 PRESSURE GAGE W/ DIAPHRAGM SEAL

NO SCALE

409119DIS 1



2 20 WET WELL SECTION

SSX–WETWELL 24 0 1 2 3 FT

LIFT STATION NOTES

MENTPS01 1

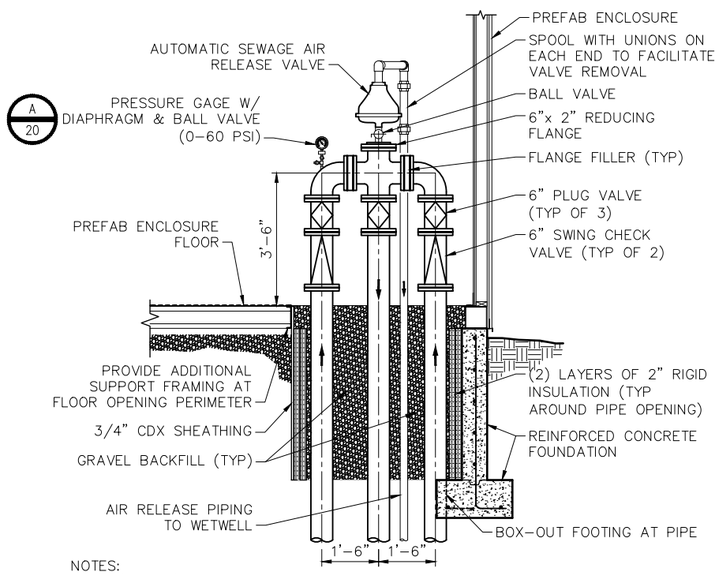
1. SOME PIPING AND EQUIPMENT HAS BEEN ROTATED OUT OF POSITION FOR CLARITY. SEE PLAN FOR ACTUAL POSITION.
2. BACKFILL WITH MECHANICALLY COMPACTED GRAVEL BACKFILL PER SPECIFICATIONS.
3. PRECAST WALL AND INTEGRAL BASE IS ACCEPTABLE PROVIDED EQUIVALENT PROTECTION FROM HYDROSTATIC UPLIFT IS PROVIDED.
4. ALL HARDWARE IN WET WELL TO BE STAINLESS STEEL.
5. PLACE WET WELL ON UNDISTURBED SOIL.
6. DO NOT PLACE WET WELL RISER JOINTS AT WALL PENETRATIONS.

FLOAT SWITCH ELEVATIONS

HIGH WATER ALARM	EL 834.00
LOW WATER ALARM	EL 829.50

PUMP CONTROL ELEVATIONS

LEAD PUMP OFF	EL 830.00
LAG PUMP OFF	EL 830.50
LEAD PUMP ON	EL 833.00
LAG PUMP ON	EL 833.50

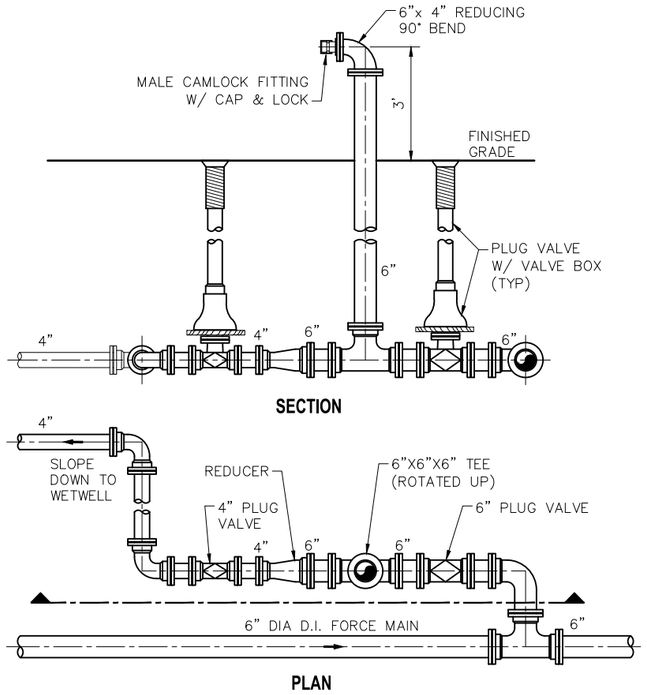


NOTES:
1. COORDINATE MECHANICAL PIPING DIMENSIONS WITH PREFABRICATED ENCLOSURE MANUFACTURER PRIOR TO ASSEMBLY.
2. ASSEMBLE MECHANICAL PIPING AT JOB SITE PRIOR TO CONCRETE FOUNDATION POUR
3. PROVIDE CHECK VALVE ORIENTATED FOR DISASSEMBLY FROM THE FRONT
4. PIPING TO PRESSURE GAGE AND AIR RELEASE VALVE TO BE BRASS OR COPPER.
5. PROVIDE TRACER WIRE ON PIPING IN VALVE/CONTROL ENCLOSURE.

1 20 SECTION

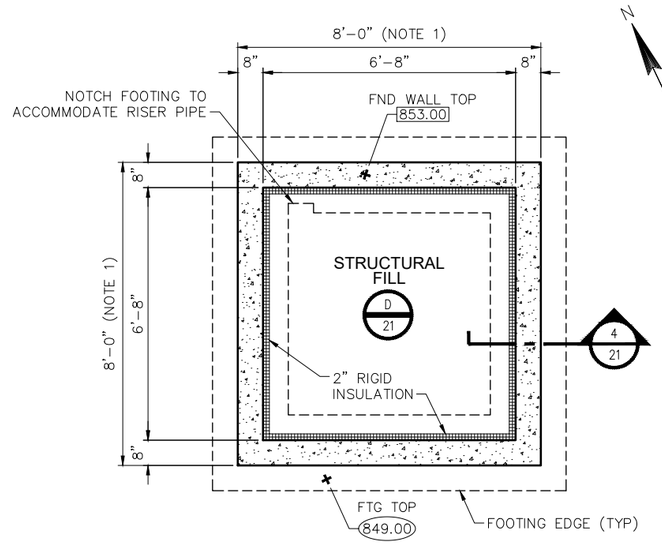
MSX0001 24 0 1 2 3 FT

FILE NAME • C:\C3D\8117_COLUMBUS\10025\DWG\7-020-CDT-LIFT STATION-02.DWG PLOT DATE • 1/28/2016 PLOT BY • RUEKERT-MIELKE, INC. PLOT NAME • PLOT SCALE • 0.30000000 • 1'-0" XREF



B/21 **AUXILARY FORCE MAIN CONNECTION** NO SCALE

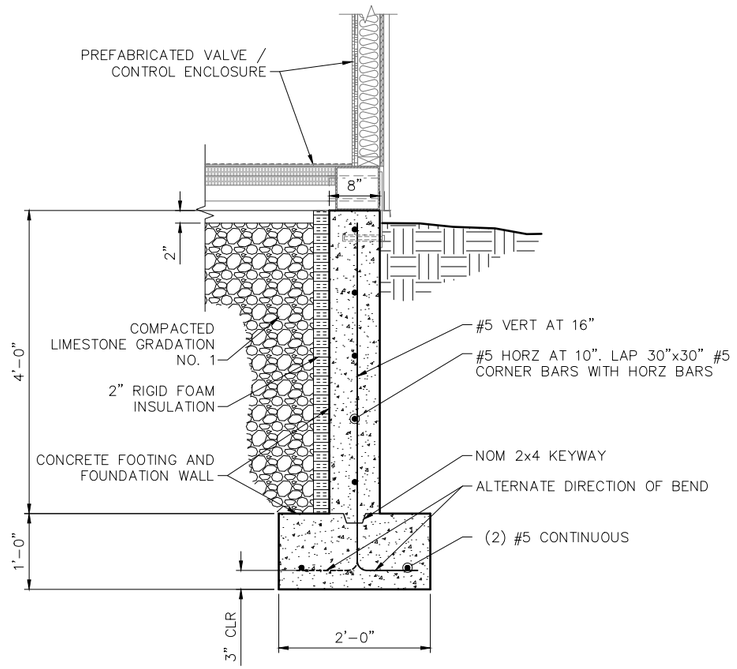
MPL-AUXILARY CONNECTION



NOTE:
1. COORDINATE FOUNDATION DIMENSIONS WITH PREFABRICATED ENCLOSURE SUPPLIER PRIOR TO CONSTRUCTION.

3/21 **FOUNDATION PLAN** 0 1 2 3 FT

SPL-FOUNDATION 24



4/21 **FOUNDATION WALL AND FOOTING REINFORCEMENT** 0 1/2 1 FT

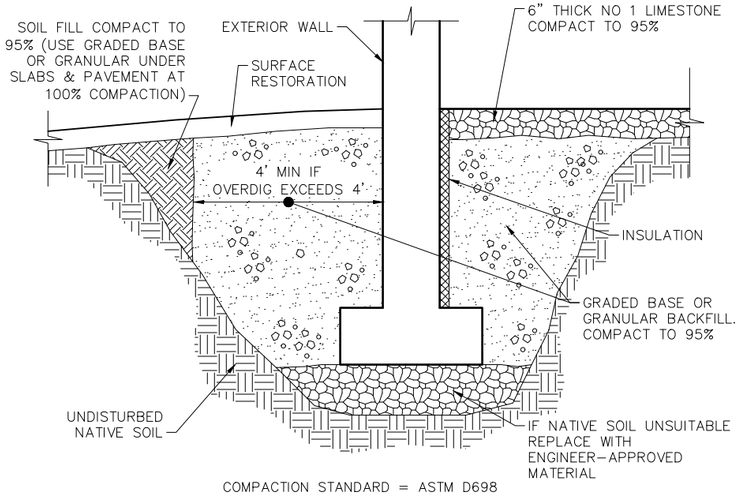
SSX-WALL01 12

2



C/21 **CONFINED SPACE CAUTION SIGN** NO SCALE

101400CAU2 1

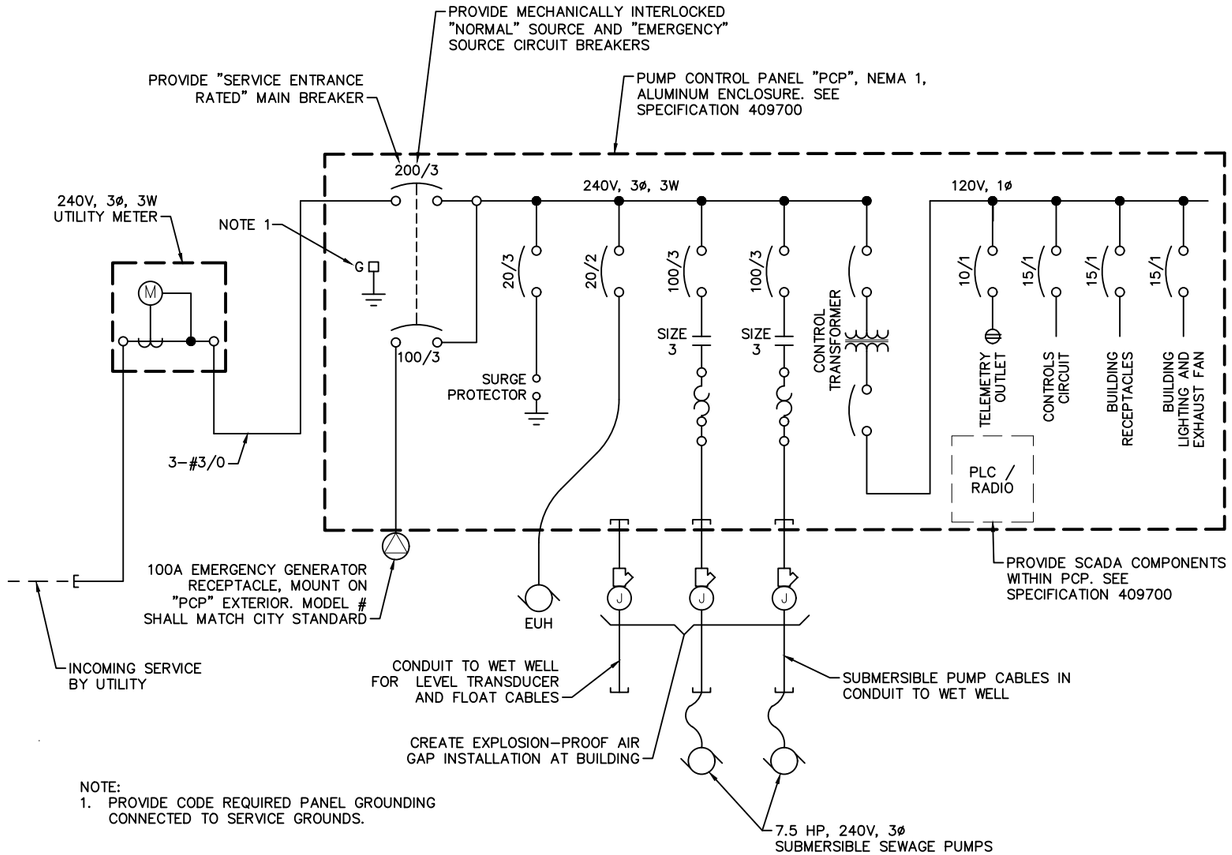


COMPACTION STANDARD = ASTM D698

D/21 **STRUCTURE BACKFILL** NO SCALE

312300BFL 1

FILE NAME = C:\C3D\8117 COLUMBUS\10035\DWG\Z-021-CDT-LIFT STATION-03.DWG PLOT DATE = 1/28/2016 PLOT BY = RUEKERT-MIELKE, INC PLOT NAME = PLOT SCALE = 0.30000000 = 1'-0" XREF

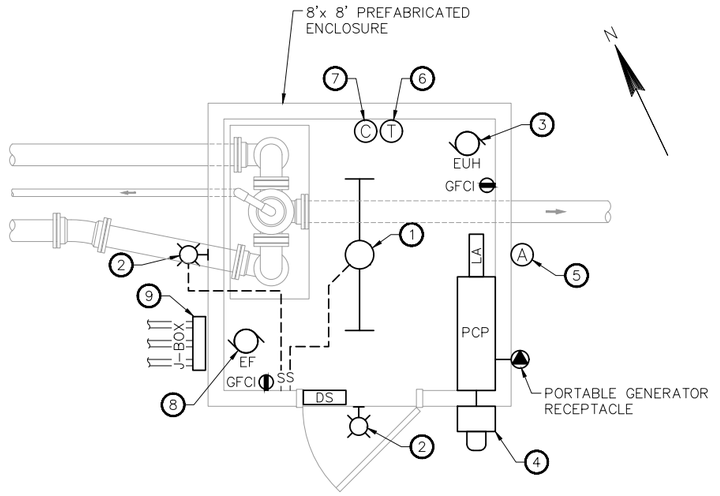


NOTE:
1. PROVIDE CODE REQUIRED PANEL GROUNDING CONNECTED TO SERVICE GROUNDS.

ONE LINE DIAGRAM NO SCALE
EDI-ONELINE-COMMERCIAL 1

ABBREVIATIONS
ELABBREV 24

DS	DOOR SWITCH
EF	ELECTRIC FAN
EUH	ELECTRIC UNIT HEATER
LA	LIGHTNING ARRESTOR
PCP	PUMP CONTROL PANEL



VALVE / CONTROL ENCLOSURE ELECTRICAL PLAN
EPL-ENCLOSURE 24
0 1 2 3 FT

ENCLOSURE FLOOR PLAN KEY
13120SCH 1

NO.	DESCRIPTION
1	4' FLUORESCENT ENCLOSED & GASKETED HIGH OUTPUT FIXTURE, LITHONIA CAT. NO. DMW232MVOLTGEB10IS. CEILING MOUNT. PROVIDE TWO F48T8/CW/HO LAMPS.
2	HID EXTERIOR WALL BRACKET, RAB CAT. NO. WPLED13/PC.
3	ELECTRIC UNIT HEATER "EUH"
4	UTILITY APPROVED METER WITH CONDUIT STUBBED OUT PER UTILITY REQUIREMENTS. PROVIDE WATERTIGHT CAP
5	SCADA ANTENNA. MOUNT AT 20 FEET ABOVE GRADE USING A WALL MOUNTED MAST. PROVIDE ANTENNA CABLE TO SCADA RADIO INSIDE PCP.
6	ELECTRIC UNIT HEATER THERMOSTAT, PROVIDE ENGRAVED NAMEPLATE "UNIT HEATER"
7	EXHAUST FAN COOLING THERMOSTAT. PROVIDE ENGRAVED NAMEPLATE "EXHAUST FAN"
8	EXHAUST FAN & EXHAUST LOUVER.
9	UNDERGROUND CONDUITS TO WET WELL FOR PUMP CABLES AND LEVEL TRANSDUCER & FLOAT SWITCH CABLES. PROVIDE STAINLESS STEEL INTERNALLY DIVIDED JUNCTION BOX WITH 18" VENTED SKIRT ON BUILDING EXTERIOR. SILICONE SEAL AROUND CABLES ENTERING FROM THE WET WELL

CONTROL DEVICE SCHEDULE
262726SCH 1

TAG	WIRE TO	CABLE TYPE	COMMENTS
DSL	PCP	2-#14	DOOR SWITCH - ENCLOSURE
FLT1	PCP	2-#14	HIGH WATER ALARM
FLT2	PCP	2-#14	LOW WATER ALARM
LTL	PCP	MFR CABLE	WET WELL TRANSDUCER

NOTES:
1. FURNISH AND INSTALL ALL WIRING FROM CONTROL DEVICES TO CONTROL PANELS IN CONDUIT.

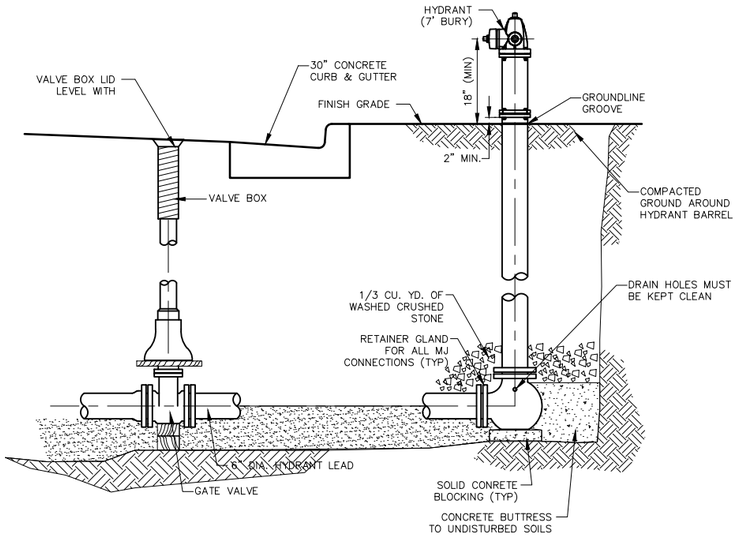
260583SCH 1

MOTOR & SPECIAL OUTLET SCHEDULE

MARK	TAG	DESCRIPTION	HP	KW	VOLT /ø	CKT FROM SEE ONE-LINE OR PANEL LEGEND	LOCATION	NOTES
1	–	RAW SEWAGE PUMP #1	7.5		240/ 3	PCP	WET WELL	FUTURE 20 HP
2	–	RAW SEWAGE PUMP #2	7.5		240/ 3	PCP	WET WELL	FUTURE 20 HP
3	EUH1	ELECTRIC UNIT HEATER #1		3	240/ 1	PCP	ENCLOSURE	
4	EF	EXHAUST FAN	1/12		120/ 1	PCP	ENCLOSURE	

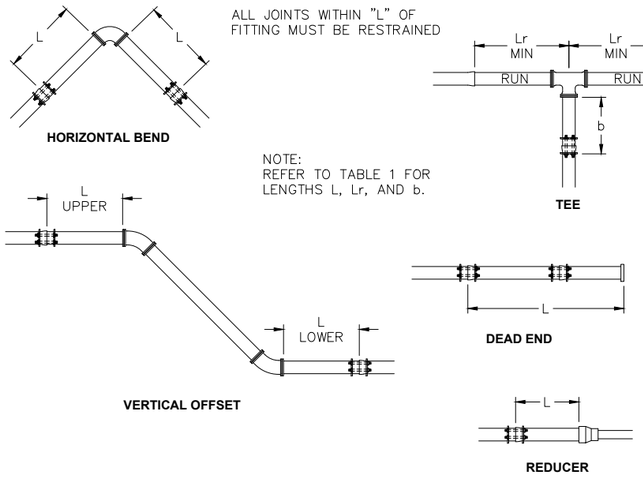
NOTES:

FILE NAME = C:\C3D\8117_COLUMBUS\10025\DWG\7-022-CDT-ENCLOSURE ELECTRICAL.DWG PLOT DATE = 1/28/2016 PLOT BY = RUEKERT-MIELKE, INC. PLOT NAME = PLOT SCALE = 0.30000000 ' = 1'-0" XREF



NOTE :
REFER TO FILE NO. 38 OF THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" FOR FURTHER INFORMATION

1 / 23 **HYDRANT SETTING DETAIL** NO SCALE
WT-HYD-04 16



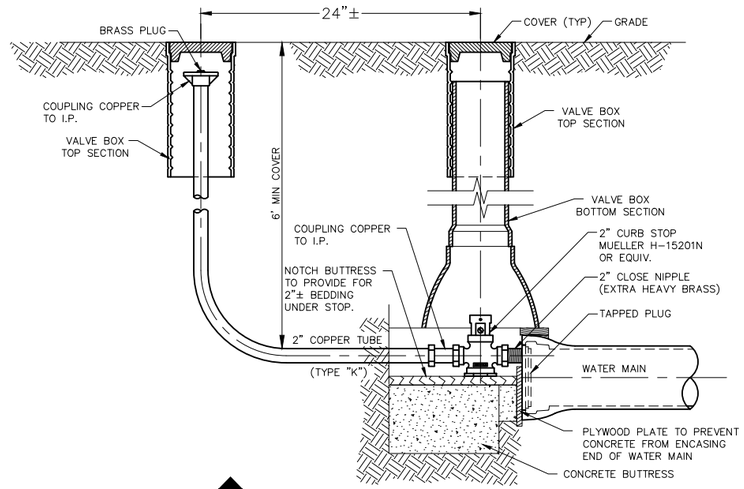
2 / 23 **JOINT RESTRAINT DETAIL** NO SCALE
WT-BR-03 4

TABLE 1
Retaining Gland Restraint - Minimum Distances

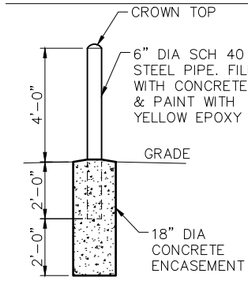
Refer to File No. 47A Standard Specifications for Sewer & Water Construction in Wisconsin

Horizontal Bends			**Joint Restraint Length (L) in Feet**	
Material	**Size**	**Angle (degrees)**	**Length (for each side)**	
DIP	12"	11-1/4	2	
DIP	12"	22-1/2	4	
DIP	12"	45	8	
DIP	10"	11-1/4	2	
DIP	10"	22-1/2	3	
DIP	10"	45	7	
DIP	8"	11-1/4	2	
DIP	8"	22-1/2	3	
DIP	8"	45	6	
DIP	6"	11-1/4	1	
DIP	6"	22-1/2	2	
DIP	6"	45	4	
DIP	12"	90	18	
DIP	10"	90	15	
DIP	8"	90	13	
DIP	6"	90	10	
Dead End			**Joint Restraint Length (L) in Feet**	
Material	**Size**		**Length**	
DIP	12"		32	
DIP	10"		27	
DIP	8"		22	
DIP	6"		17	
Tees & Crosses			**Joint Restraint Length (L) in Feet**	
Material	**Size**	**Main (Lr)**	**Branch (b)**	
DIP	12" x 12"	5	20	
DIP	12" x 10"	5	13	
DIP	12" x 8"	5	5	
DIP	12" x 6"	5	1	
DIP	10" x 10"	5	25	
DIP	10" x 8"	5	8	
DIP	10" x 6"	5	1	
DIP	8" x 8"	5	11	
DIP	8" x 6"	5	2	
DIP	6" x 6"	5	5	
Reducer			**Joint Restraint Length (L) in Feet**	
Material	**Size**		**Length**	
DIP	12" x 10"		10	
DIP	12" x 8"		17	
DIP	12" x 6"		23	
DIP	10" x 8"		9	
DIP	10" x 6"		17	
DIP	8" x 6"		10	
Vertical Offset			**Joint Restraint Length (L) in Feet**	
Material	**Size**	**Angle (degrees)**	**Upper**	**Lower**
DIP	12"	11-1/4	4	3
DIP	12"	22-1/2	7	6
DIP	12"	45	13	13
DIP	10"	11-1/4	3	3
DIP	10"	22-1/2	6	5
DIP	10"	45	11	11
DIP	8"	11-1/4	3	3
DIP	8"	22-1/2	5	5
DIP	8"	45	10	9
DIP	6"	11-1/4	2	2
DIP	6"	22-1/2	4	4
DIP	6"	45	7	7

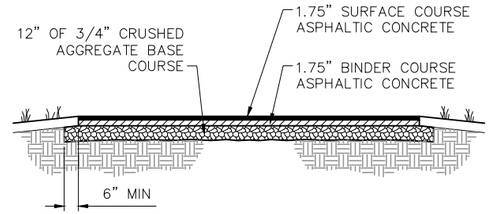
Notes:
1) All joints within Length "L" of fitting must be restrained.
2) Restraint lengths calculating using EBBA iron restrained length calculator, Version 7.1.2.
3) Assumes: CL soils (Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays) backfilled width granular material
4) Assumes: Trench Type 3
5) Assumes: Depth of Bury to be 7 feet of cover.
6) Assumes: Test Pressure of 150.



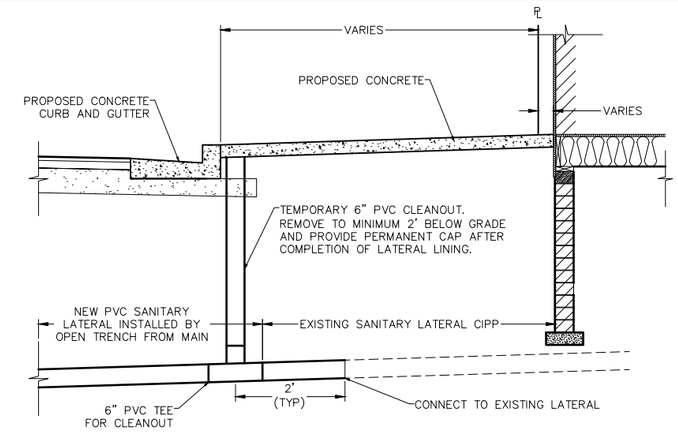
3 / 23 **2" DEAD END FLUSHING ASSEMBLY** NO SCALE



4 / 23 **BOLLARD** NO SCALE
055000BOL 1 (32)

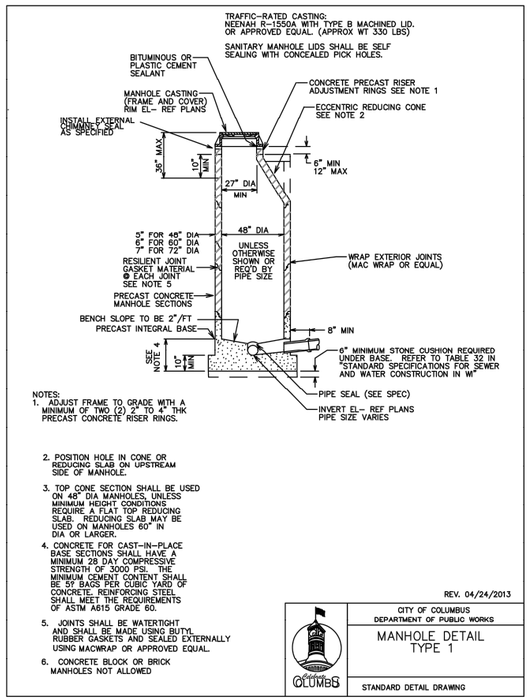


5 / 23 **ASPHALTIC CONCRETE PAVEMENT CONTINENTAL DRIVE & RIVER ROAD** NO SCALE
347100AC1 1 (32)



6 / 23 **SANITARY LATERAL CIPP - DOWNTOWN AREA**
CGDT-LATERAL TRENCH 1

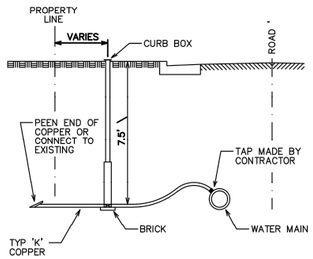
2



NOTES:
1. ADJUST FRAME TO GRADE WITH A MINIMUM OF TWO (2) 2" TO 4" THK PRECAST CONCRETE RISER RINGS.
2. POSITION HOLE IN CONE OR REDUCING SLAB ON UPSTREAM SIDE OF MANHOLE.
3. TOP CONE SECTION SHALL BE USED ON 48" DIA MANHOLES, UNLESS MINIMUM HEIGHT CONDITIONS REQUIRE A FLAT TOP REDUCING SLAB. REDUCING SLAB MAY BE USED ON MANHOLES 60" IN DIA OR LARGER.
4. CONCRETE FOR CAST-IN-PLACE BASE SECTIONS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. THE MINIMUM CEMENT CONTENT SHALL BE 5? BAGS PER CUBIC YARD OF CONCRETE. REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ASTM A615 GRADE 60.
5. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING BUTYL RUBBER GASKETS AND SEALED EXTERNALLY USING MACWRAP OR APPROVED EQUAL.
6. CONCRETE BLOCK OR BRICK MANHOLES NOT ALLOWED

REV. 04/24/2013

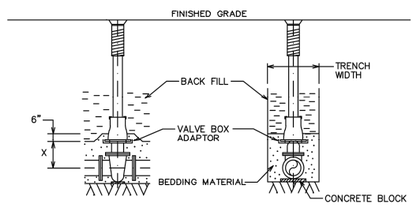
COLUMBUS	CITY OF COLUMBUS DEPARTMENT OF PUBLIC WORKS
	MANHOLE DETAIL TYPE 1
	STANDARD DETAIL DRAWING



NOTE: TAP WATER MAIN ON 45^ WITH PIPE. MINIMUM SEPARATION BETWEEN SERVICES SHALL BE 12" VERTICAL AND 18" HORIZONTAL.

WATER MAIN SERVICE INSTALLATION

NOT TO SCALE



SIDE VIEW

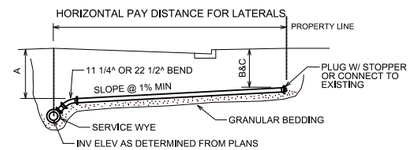
PIPE DIA (INCHES)	X=SETTING (INCHES)
2	6
3	7
4	8
6	12
8	13

FRONT VIEW

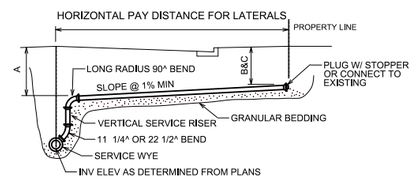
PIPE DIA (INCHES)	X=SETTING (INCHES)
10	17
12	21
14	25
16	30

STANDARD VALVE BOX SETTING

NOT TO SCALE



STANDARD INSTALLATION WITHOUT RISER



STANDARD INSTALLATION WITH RISER

NOTES:

A) MIN DEPTH OF COVER UNDER ROADWAY TO BE 7'-0"

B) MIN DEPTH OF COVER UNDER ANY PORTION OF GRASS AREAS TO 5'-0"

C) MIN DEPTH OF COVER AT PROPERTY LINE TO 9'-0" OR AS REQUIRED TO SERVE EXISTING DEVELOPMENT.

REVISED 04/21/11	CITY OF COLUMBUS STANDARD DETAILS	FIGURE 1 SANITARY SEWER LATERAL

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- (XR-XX) DENOTES SIGN TO BE REMOVED
- (XM-XX) DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- (X-XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- * SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS



J2-4
96"X57"

1R-01

1-01

STH 16/60 (WB) / W. JAMES STREET

122+00WB 123+00WB 124+00WB 125+00WB 126+00WB 127+00WB 128+

122+00EB 123+00EB 124+00EB 125+00EB 126+00EB 127+00EB 128+

STH 16/60 (EB) / W. JAMES STREET

MATCH LINE STA. 128+00WB

STA. 127+00.00WB
BEGIN PROJECT 1401-02-71

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 155 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

MATCH LINE STA. 16+20ID

MATCH LINE STA. 12+70ID

MATCH LINE STA. 128+00WB

MATCH LINE STA. 134+00WB

STH 16/60 (WB) / W. JAMES STREET

STH 16/60 (EB) / W. JAMES STREET

KING

INDUSTRIAL DRIVE

DIX STREET

128+00WB 129+00WB 130+00WB 131+00WB 132+00WB 133+00WB 134+00WB

129+00EB 130+00EB 131+00EB 132+00EB 133+00EB

15+00ID 14+00ID 13+00ID

30' 25' 25' 30'

2-01 R2-1 24"X30" SPEED LIMIT 35
2-02 R6-2-L 24"X30" ONE WAY
2-03 R1-1 36"X36" STOP
2-04 R1-1F 36"X36" STOP
2-05 R6-3 30"X24" DIVIDED HIGHWAY
2-06 W12-1D 24"X24"
2-07 R10-9 24"X30" NO THRU TRAFFIC
2-08 R1-1F 36"X36" STOP
2-09 R5-1 30"X30" DO NOT ENTER
2-10 R5-1A 36"X24" WRONG WAY
2-11 R5-1A 36"X24" WRONG WAY
2-12 R2-1 24"X30" SPEED LIMIT 25
2-13 R1-1F 36"X36" STOP
2-14 R4-7 24"X30"
2-15 R1-1F 36"X36" STOP
2-16 R5-1 30"X30" DO NOT ENTER
2-17 W12-1D 24"X24"
2-18 R6-2-L 24"X30" ONE WAY
2-19 R4-7 24"X30"
2-20 R1-1F 36"X36" STOP
2-21 R1-1F 36"X36" STOP
2-22 R6-3 30"X24" DIVIDED HIGHWAY
2-23 R1-1 36"X36" STOP
2-24 W4-2L 36"X36"
2-25 W4-2L 36"X36"
2-26 R5-1A 42"X30" WRONG WAY
2-27 JI-1 24"X39" JCT 151

2R-01 SPEED LIMIT 35
2R-02 STOP
2R-03 STOP
2R-04
2R-05 NO THRU TRAFFIC
2R-06 STOP
2R-07 DO NOT ENTER
2R-08 WRONG WAY
2R-09 JCT 151
2R-10 WRONG WAY
2R-11 SPEED LIMIT 25
2R-12 DO NOT ENTER
2R-13 STOP
2R-14
2R-15 STOP
2R-16
2R-17 STOP
2R-18
2R-19 WRONG WAY
2R-20
2R-21 NO TURN ON RED 7:00 AM 7:00 PM
2R-22

W JAMES ST
INDUSTRIAL DR
DIX ST
W JAMES ST

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (2)

PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

N

CONTINENTAL DRIVE

MEISTER DRIVE

MATCH LINE STA. 134+00WB

MATCH LINE STA. 140+00WB

STH 16/60 (WB) / W. JAMES STREET

STH 16/60 (EB) / W. JAMES STREET

134+00WB
135+00WB
136+00WB
137+00WB
138+00WB
139+00WB
135+00EB
136+00EB
137+00EB
138+00EB
139+00EB

3R-01
3-01 W3-3 36"X36"
3R-02
3-04 SPEED LIMIT 25 R2-1 24"X30"
3-02 W6-1 36"X36"
3-03 R4-7 24"X30"
3-05 STOP R1-1 30"X30"
3R-04
STOP
W JAMES ST *
CONTINENTAL DR *

3-10 W6-2 36"X36"
3R-03
3R-05 DO NOT ENTER
3-07 SPEED LIMIT 25 R2-1 24"X30"
3-06 DO NOT ENTER R5-1 36"X36"
3R-06 SPEED LIMIT 25
3-08 STOP R1-1 30"X30"
3R-07
STOP
W JAMES ST *
MEISTER DR *
3-09 W6-3 36"X36"

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 157 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (3)

PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCH LINE STA. 140+00WB

MATCH LINE STA. 146+00WB

140+00WB

141+00WB

142+00WB

143+00WB

144+00WB

145+00WB

APC WAY

STH 16/60 / W. JAMES STREET

HURELLE STREET

W JAMES ST

HURELLE ST

APC WAY

NO PARKING BETWEEN SIGNS

LOADING AND UNLOADING ZONE

BLDG

MH

SPEED LIMIT 25

R2-1
24"X30"

STOP

R1-1
30"X30"

4R-01

4-01

4R-02

4-02

4R-03

4-03

4R-04

4-04

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 158 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (4)

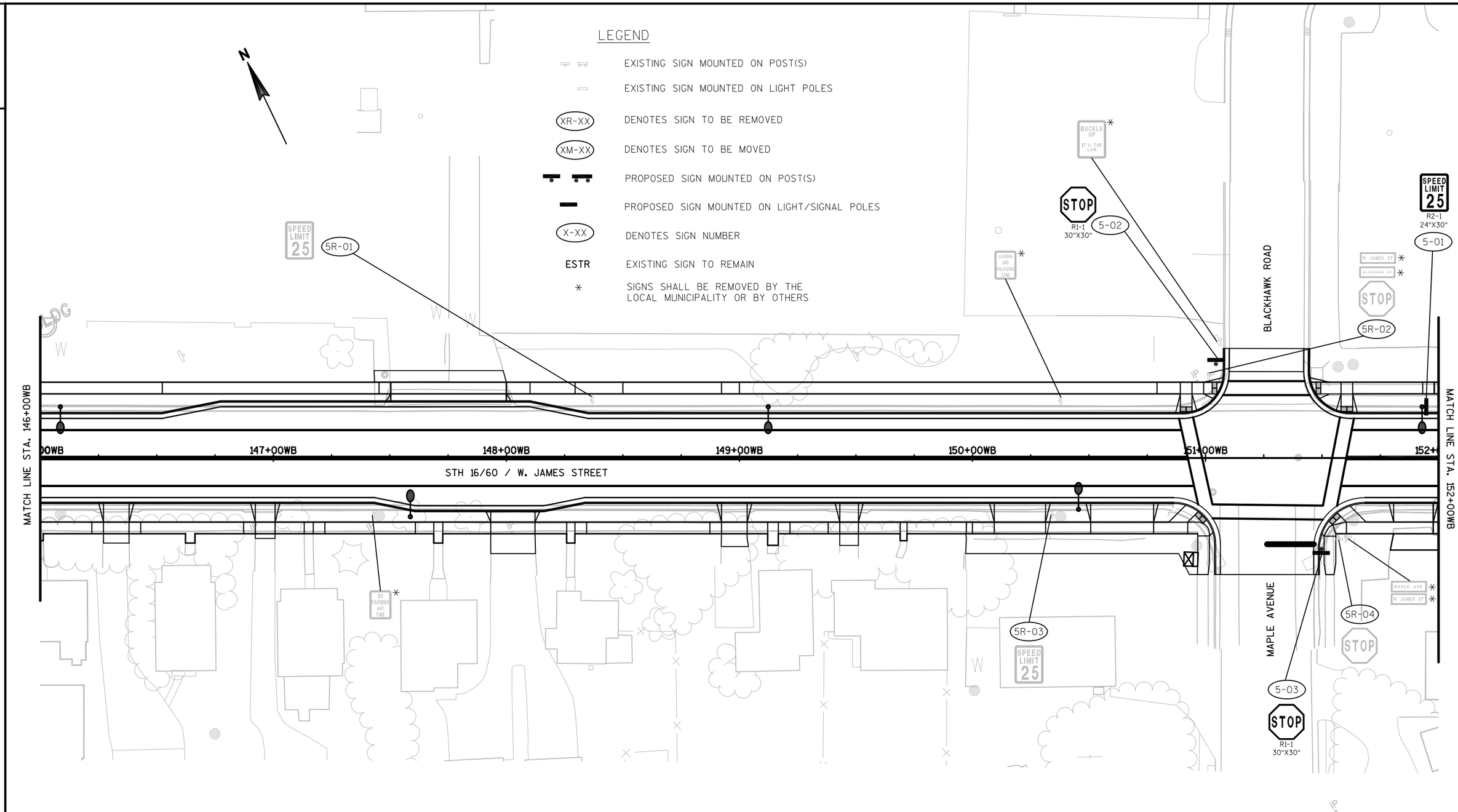
PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

	EXISTING SIGN MOUNTED ON POST(S)
	EXISTING SIGN MOUNTED ON LIGHT POLES
XR-XX	DENOTES SIGN TO BE REMOVED
XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
X-XX	DENOTES SIGN NUMBER
ESTR	EXISTING SIGN TO REMAIN
*	SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 159	E

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

N

MATCH LINE STA. 152+00WB

153+00WB

154+00WB

155+00WB

156+00WB

157+00WB

158+

MATCH LINE STA. 158+00WB

STH 16/60 / W. JAMES STREET

LEGION COURT

CHARLES STREET

NO PARKING

NO PARKING BETWEEN SIGNS

LEGION CT
W JAMES ST

E CHARLES ST
W JAMES ST

6-01
SPEED LIMIT 25
R2-1
24"X30"

6R-01
STOP
R1-1
30"X30"

6-02

6R-02
H

6-03
H
JH-13-1
24"X45"

DISCOVER COLUMBUS
CEMETERY
HISTORIC DISTRICT
POLICE STATION
LIBRARY
SENIOR CENTER

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 160	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (6)

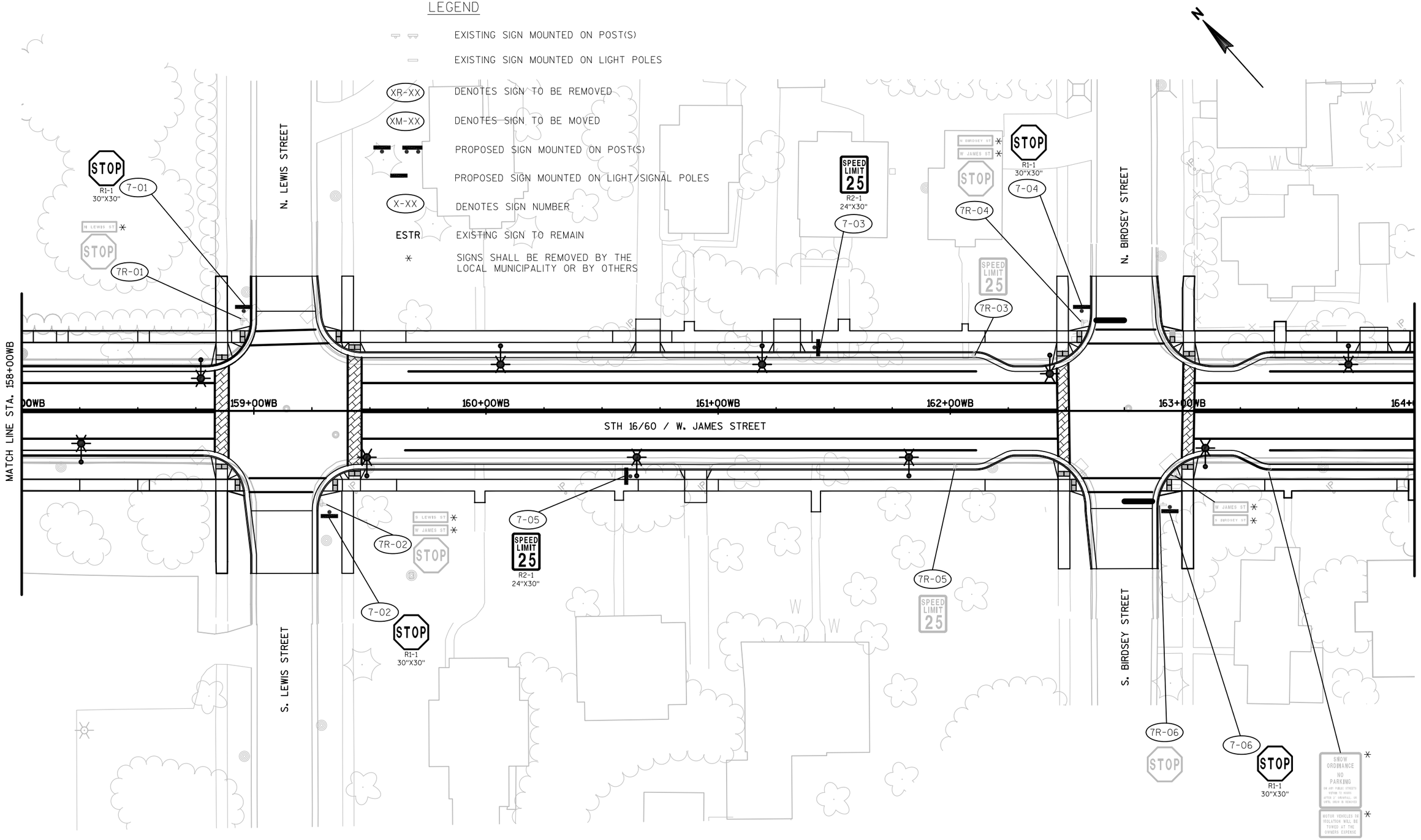
PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

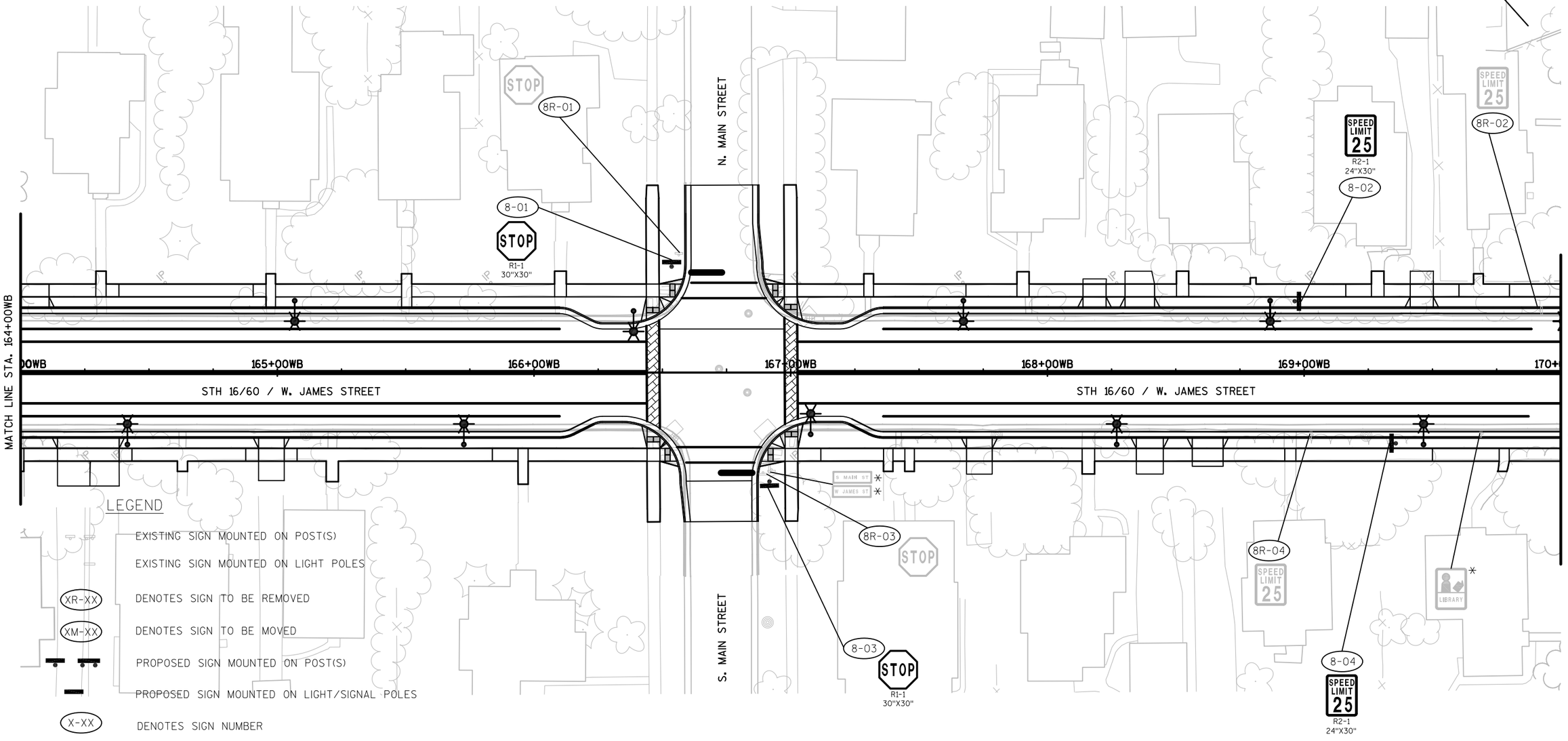


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 161 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (7)

PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- (XR-XX) DENOTES SIGN TO BE REMOVED
- (XM-XX) DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- (X-XX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- * SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 162	E

2

MATCH LINE STA. 170+00WB

171+00WB

172+00WB

173+00WB

174+00WB

175+00WB

176+

MATCH LINE STA. 176+00WB

N. SPRING STREET

S. SPRING STREET

STH 16/60 / W. JAMES STREET

S. DICKASON BOULEVARD

S. DICKASON BOULEVARD (SB)

S. DICKASON BOULEVARD (NB)

ZION EVANGELICAL LUTHERAN CHURCH 1 BLOCK

WEST 16 WEST 60

9R-02

9-01

STOP R1-1 30"X30"

9R-01

9R-03

9-02

STOP R1-1 30"X30"

PUBLIC PARKING

SNOW ORDINANCE NO PARKING ON ANY PUBLIC STREET WITHIN 72 HOURS AFTER 2" SNOWFALL OR UNTIL SNOW IS REMOVED

MOTOR VEHICLES IN VIOLATION WILL BE TOWED AT THE OWNERS EXPENSE

STOP R1-1 30"X30"

9R-04

9-03

SNOW ORDINANCE NO PARKING ON THIS BLOCK 12AM TO 6AM AFTER 2" SNOWFALL

2 HOUR PARKING 8AM-5PM

SPEED LIMIT 25 R2-1 24"X30"

9-04

9-06 J1-1 24"X39" JCT 73

PUBLIC PARKING

SCHOOL 15 MPH WHEN FLASHING

9R-06

JCT 73

9-05

9R-05

STOP

STOP R1-1 30"X30"

COLUMBUS ELEMENTARY & MIDDLE SCHOOL

S. SPRING ST

W. JAMES ST

OLIVET CONGREGATIONAL U.C.C.

NO PARKING BETWEEN SIGNS

NO PARKING LOADING ZONE

9-07 NORTH 73 SOUTH 73 SECOND LEFT SECOND RIGHT J2-2 48"X57"

9R-07 NORTH 73 SOUTH 73 SECOND LEFT SECOND RIGHT

LIBRARY PATRON PARKING ONLY DURING LIBRARY HOURS

S. DICKASON ST

W. JAMES ST

STOP 9R-08

SNOW ORDINANCE NO PARKING ON THIS BLOCK 12AM TO 6AM AFTER 2" SNOWFALL

9-08

STOP R1-1 30"X30"

LEGEND

	EXISTING SIGN MOUNTED ON POST(S)
	EXISTING SIGN MOUNTED ON LIGHT POLES
XR-XX	DENOTES SIGN TO BE REMOVED
XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
X-XX	DENOTES SIGN NUMBER
ESTR	EXISTING SIGN TO REMAIN
*	SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 163	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (9)
PLOT DATE : 5/2/2016 9:14 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

STOP R1-1F 36"X36" 10-02

16 60 J12-2 48"X45" 10-03

73 H J12-2 48"X45" 10-05

STOP R1-1 30"X30" 10-07

WEST 16 60 JV4-2 24"X60" 10-01

W JAMES ST STOP 10R-03

16 60 10R-04

STOP R1-1F 36"X36" 10-04

TO 16 89 60 10R-07

H 10R-08

N WATER ST / E JAMES ST STOP 10R-10

WEST 16 60 JV3-1 24"X81" 10-06

73 10R-02

N. LUDINGTON STREET

N. WATER STREET

SNOW ORDINANCE NO PARKING ON THIS BLOCK 12AM TO 6AM AFTER 2" SNOWFALL

2 HOUR PARKING 7:00AM-5:00PM

POLICE

15'

MATCH LINE STA. 176+00WB

177+00WB

178+00WB

179+00WB

180+00WB

181+00WB

182+

MATCH LINE STA. 182+00WB

STH 16/60 / W. JAMES STREET

STH 16/60 / E. JAMES STREET

10-08 EAST 16 60 JV3-1 24"X81"

10R-13 16 TO 60 89

10R-15 H

10-10 STOP R1-1F 36"X36"

10R-16 STOP

10R-17 16 60

16 60 J12-2 48"X45"

10-11

10-09 73 H J12-2 48"X45"

S. LUDINGTON STREET

10R-19 73

10R-18 E JAMES ST STOP

10-12 STOP R1-1F 36"X36"

10-13 EAST 16 60 JV4-2 24"X60"

10-14 SPEED LIMIT 25 R2-1 24"X30"

S. WATER STREET

10R-22 S WATER ST STOP

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 164	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (10)

PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

N

MATCH LINE STA. 182+00WB

183+00WB

184+00WB

185+00WB

186+00WB

187+00WB

MATCH LINE STA. 188+00WB

STH 16/60 / E. JAMES STREET

UDEY STREET

WATERLOO STREET

11-01 J2-2 48"X57" NORTH 73 SOUTH 73 SECOND LEFT SECOND RIGHT

11-02 R2-1 24"X30" SPEED LIMIT 25

11-03 J1-1 24"X39" JCT 73

11R-01 NORTH 73 SOUTH 73 SECOND LEFT SECOND RIGHT

11R-02 JCT 73

CHRISTOPHER COLUMBUS MUSEUM

DISCOVER COLUMBUS — POLICE STATION, AMTRAK STATION, PUBLIC WORKS, HIGH SCHOOL, AQUATIC CENTER

NO OUTLET

11R-04 STOP

11-04 R1-1 30"X30" STOP

E JAMES ST

UDEY ST

11R-05 EAST 16 EAST 60

11-05 R1-1 30"X30" STOP

11R-06 SPEED LIMIT 25

11-06 R2-1 24"X30" SPEED LIMIT 25

11-07 R1-1 30"X30" STOP

11R-07 E JAMES ST, WATERLOO ST, STOP

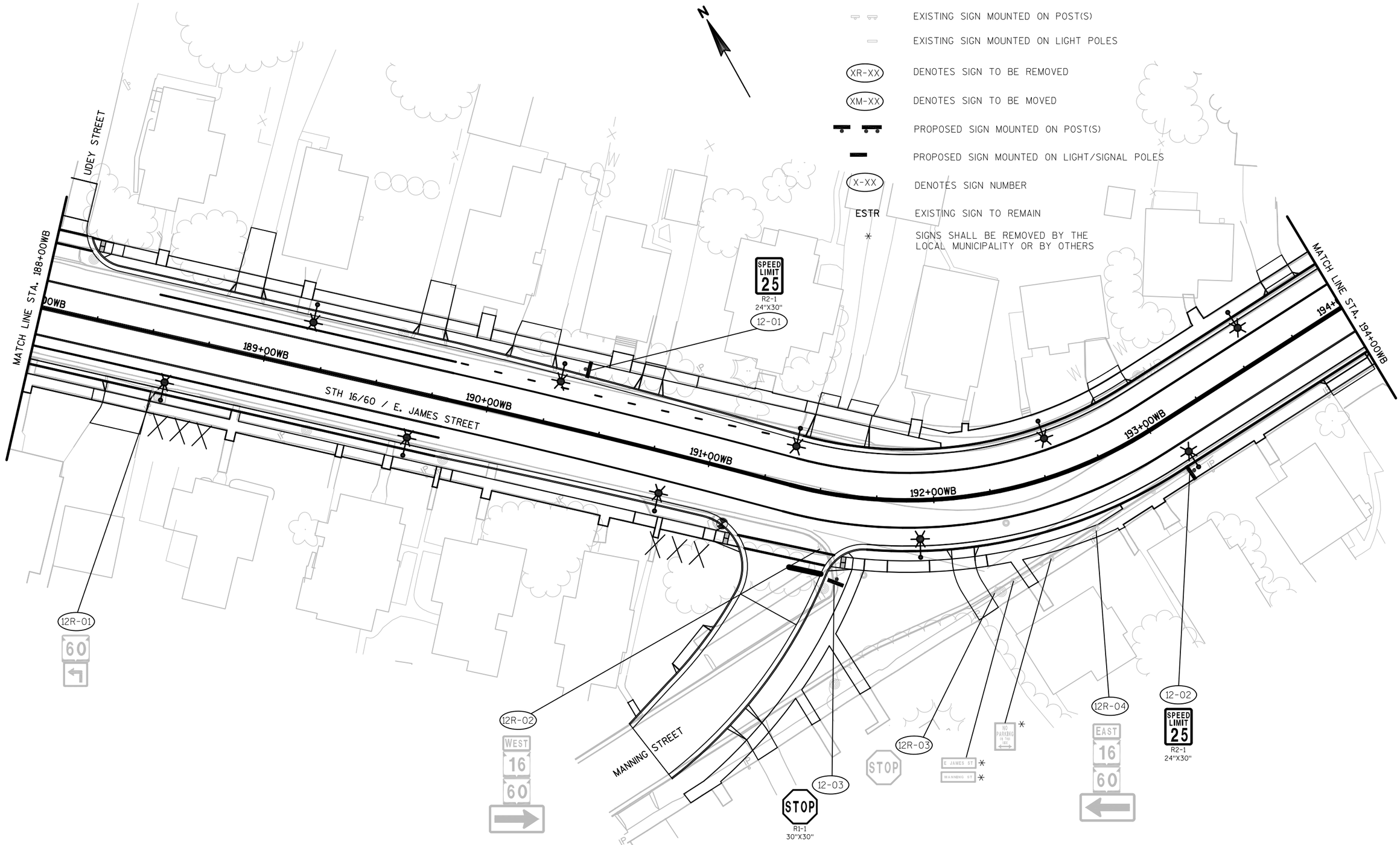
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 165 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (11)
PLOT DATE : 5/2/2016 9:14 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET E

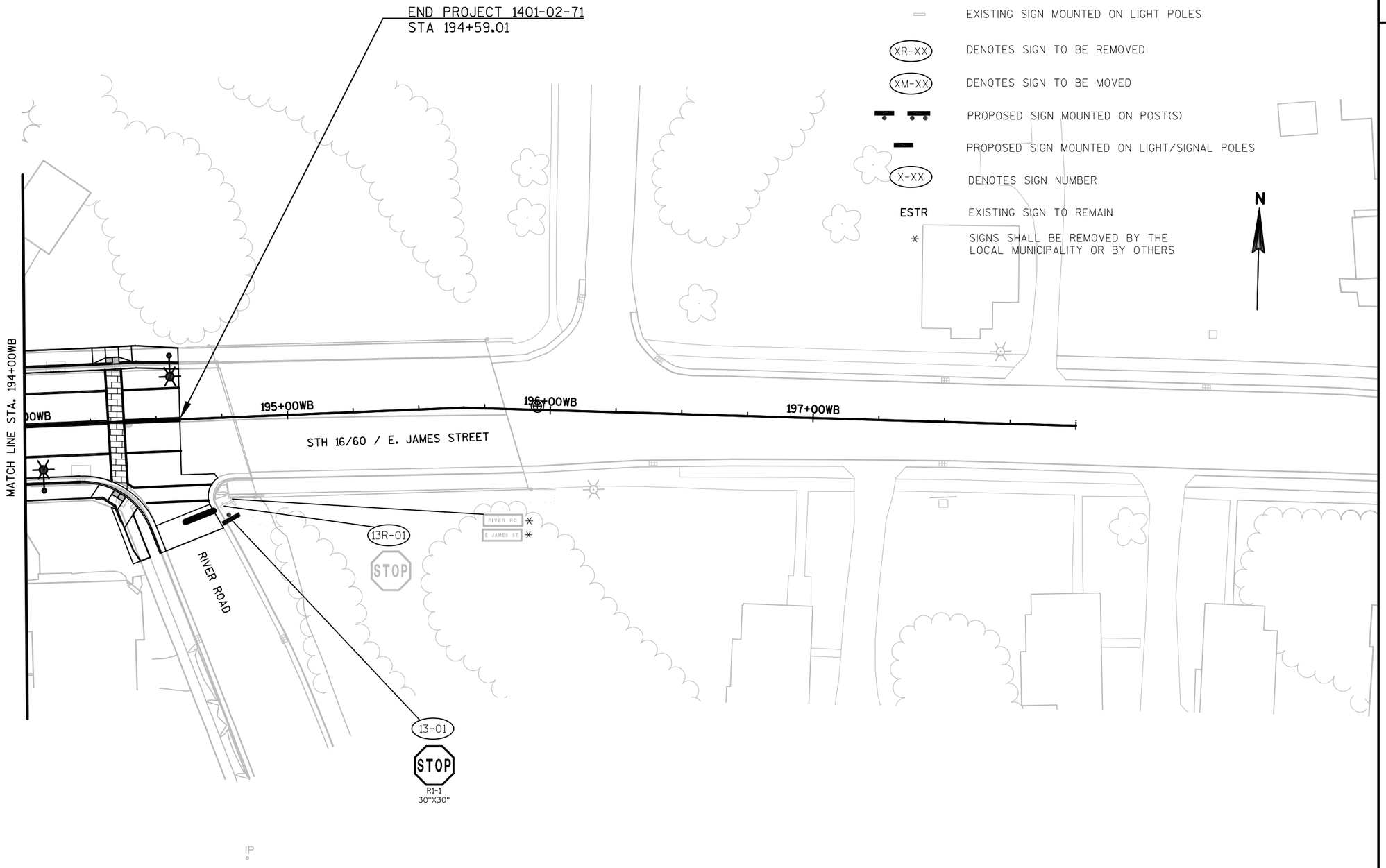
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\SIGNING\023201_PS.DWG
LAYOUT NAME - SHEET - (12)

PLOT DATE : 5/2/2016 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 167 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLES
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
- X-XX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- * — SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

N

STOP
R1-1
30"X30"
14-02

STOP
14R-01

XXX

9+00ID
10+00ID
11+00ID
12+00ID

DIX STREET

MATCH LINE STA. 12+70ID

ONLY ONLY ONLY
R3-8-W
54"X30"
14-01

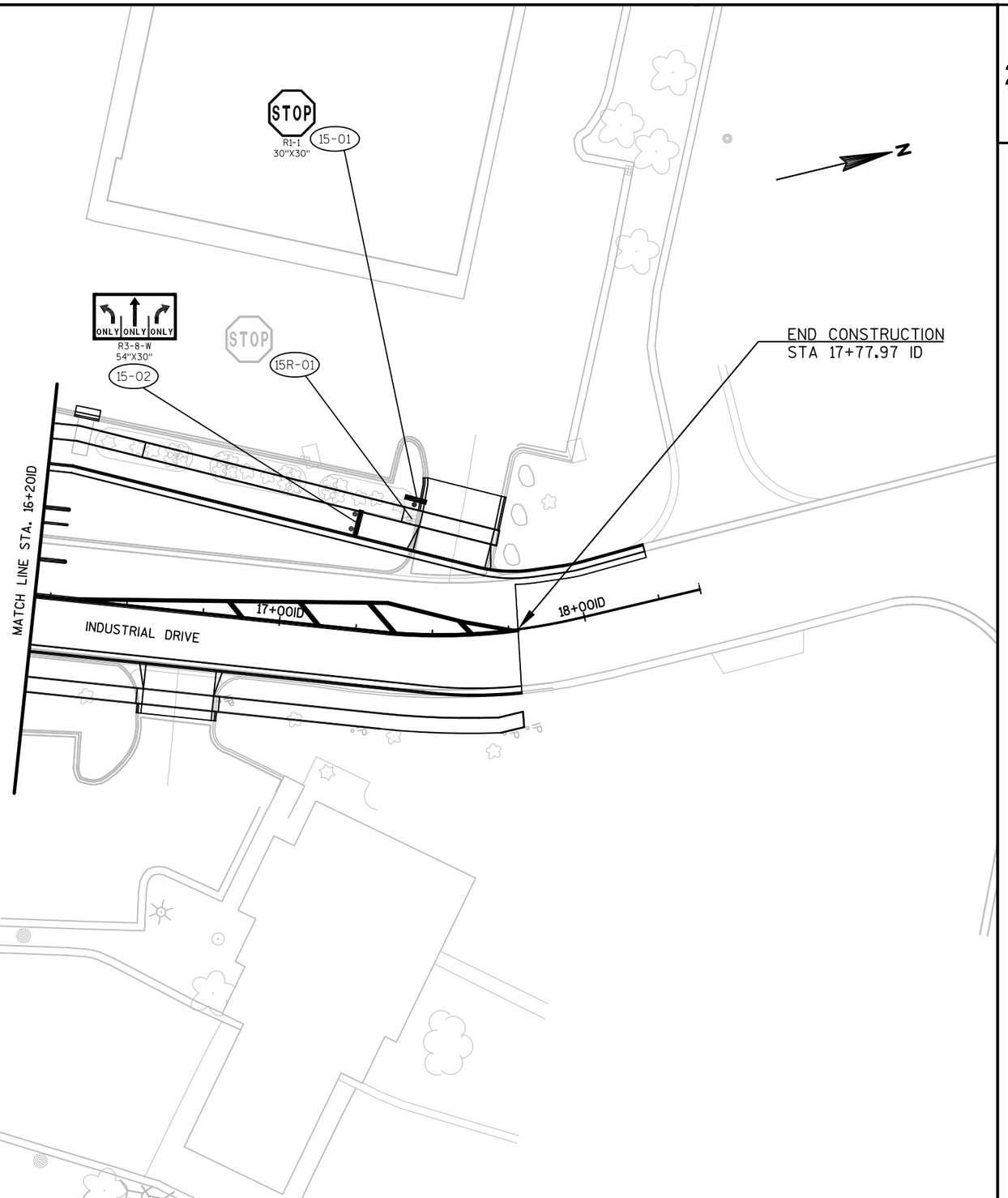
BEGIN CONSTRUCTION
STA 10+00.00 ID

14R-02
14-03

STOP
R1-1
30"X30"

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET 168	E

2



LEGEND

	EXISTING SIGN MOUNTED ON POST(S)
	EXISTING SIGN MOUNTED ON LIGHT POLES
XR-XX	DENOTES SIGN TO BE REMOVED
XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON LIGHT/SIGNAL POLES
X-XX	DENOTES SIGN NUMBER
ESTR	EXISTING SIGN TO REMAIN
*	SIGNS SHALL BE REMOVED BY THE LOCAL MUNICIPALITY OR BY OTHERS

LIGHTING PLANS PREPARED BY:

WISCONSIN
PATRICK M. TADDY
D-1425-E
WAUNAKEE, WI
DESIGNER

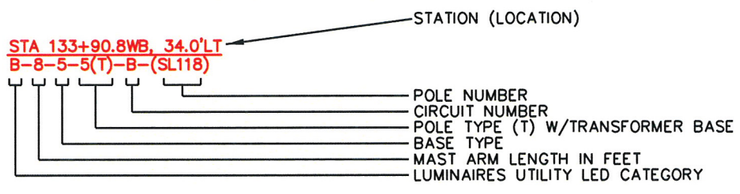
7-28-2016
DATE

Patrick M Taddy
SIGNATURE

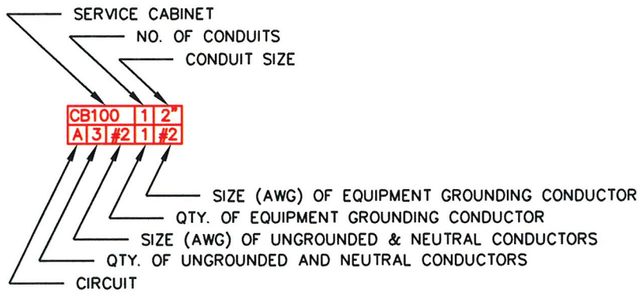
LEGEND:

- SINGLE ARM LIGHTING UNIT – TYPE 5 (WIS DOT TYPE POLE & FIXTURE)
- T1 SINGLE ARM LIGHTING UNIT – TYPE 1 (DECORATIVE LIGHT POLE ON TRANSFORMER BASE, NO GFI RECEPTACLE)
- T2 SINGLE ARM LIGHTING UNIT – TYPE 2 (DECORATIVE LIGHT POLE WITH CLAMSHELL BASE AND GFI RECEPTACLE)
- LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS NOTED)
- CONCRETE CONTROL CABINET BASE/ELECTRICAL SERVICE
- PB PULL BOX (24"X42" STEEL)
- P POWER PEDESTAL

LIGHTING UNIT LEGEND



CONDUIT/CONDUCTOR LEGEND



ABBREVIATIONS:

PWO = PULL WIRE ONLY

NOTES:

1) WISCONSIN DOT ELECTRICAL UNIT SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES AND PULLBOXES IN THE FIELD PRIOR TO INSTALLATION. CONTACT THEM 3 DAYS IN ADVANCE AT (XXX) XXX-XXX.
2) PITCH ALL CONDUIT TOWARD PULLBOXES. A 2" DRAIN DUCT TO DITCH OR STORM SEWER REQUIRED FOR ALL PULLBOXES IN LOW POINTS. REFER TO THE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF DRAIN DUCT.
3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4) ALL POLES SHALL BE PLACED A MINIMUM OF 2-3 FEET FROM THE BACK OF CURB.
5) CABINET BASES AND THE PULLBOXES AND CONDUIT WITHIN THE AREA OF CABINET BASES SHALL BE INSTALLED PER FIELD CONDITIONS (WITH ENGINEER APPROVAL). VERIFY THE LOCATION OF ALL ELECTRICAL FACILITIES WITH THE ENGINEER PRIOR TO INSTALLING.
6) ALL LIGHT CIRCUITS TO BE 120/240 SINGLE PHASE. STREET LIGHTS AND POLE RECEPTACLES (WHEN PRESENT) TO OPERATE AT 120 VOLTS, CONNECTED TO DIFFERENT PHASES IN EACH POLE AND THEN ALTERNATING FROM POLE TO POLE. CONTRACTOR TO BALANCE ELECTRICAL LOADS ON EACH FEEDER. PHOTOCONTROL ON LIGHTING CABINET CB100, LOCATED AT DIX STREET AND WITH JAMES STREET.
7) LIGHT FIXTURES AND MASTARMS MOUNTED ON TRAFFIC CONTROL POLES ARE TO BE INSTALLED BY THE TRAFFIC CONTROL POLE INSTALLER ALONG WITH ALL RELATED WIRING AND CONDUIT BACK TO THE RELATED TRAFFIC CONTROL CABINET WITH LIGHT CONTROLS. REFER TO TRAFFIC CONTROL DRAWINGS FOR MORE DETAILS.
8) NO SPLICES ALLOWED IN PULLBOXES.

Sheet 1 of 20

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 5

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – GENERAL NOTES	SHEET E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-G01.DWG PLOT DATE : 7/28/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:1 WISDOT/CADDS SHEET 42

2

2

N

STA. 126+46.00WB
BEGIN CONSTRUCTION 1401-02-71
MATCH EXISTING
SAWCUT REQUIRED

EXTEND CONDUIT TO PROJECT BOUNDARY AND CAP BELOW GRADE FOR FUTURE EXTENSION BY OTHERS.

R/W

CB100 | 1 | 2"

CB100 | 1 | 2"
B | 3 | #2 | 1 | #2

FUTURE
CB100 | 1 | 2"
B | 3 | #2 | 1 | #2

STA 127+03.0WB, 33.0'LT
B-8-5-5(T)-B-(SL109)

FUTURE ROADWAY TYPICAL

FUTURE STREET LIGHT TYPICAL

PWO

STH 16/60 (WB) / W. JAMES STREET

MATCH LINE STA. 122+00WB

MATCH LINE STA. 128+00WB

122+00WB
123+00WB
124+00WB
125+00WB
126+00WB
127+00WB
128+

122+00EB
123+00EB
124+00EB
125+00EB
126+00EB
127+00EB
128+

STH 16/60 (EB) / W. JAMES STREET

FUTURE STREET LIGHT TYPICAL

FUTURE STREET LIGHT TYPICAL

FUTURE STREET LIGHT TYPICAL

FUTURE
CB100 | 1 | 2"
A | 3 | #2 | 1 | #2

R/W

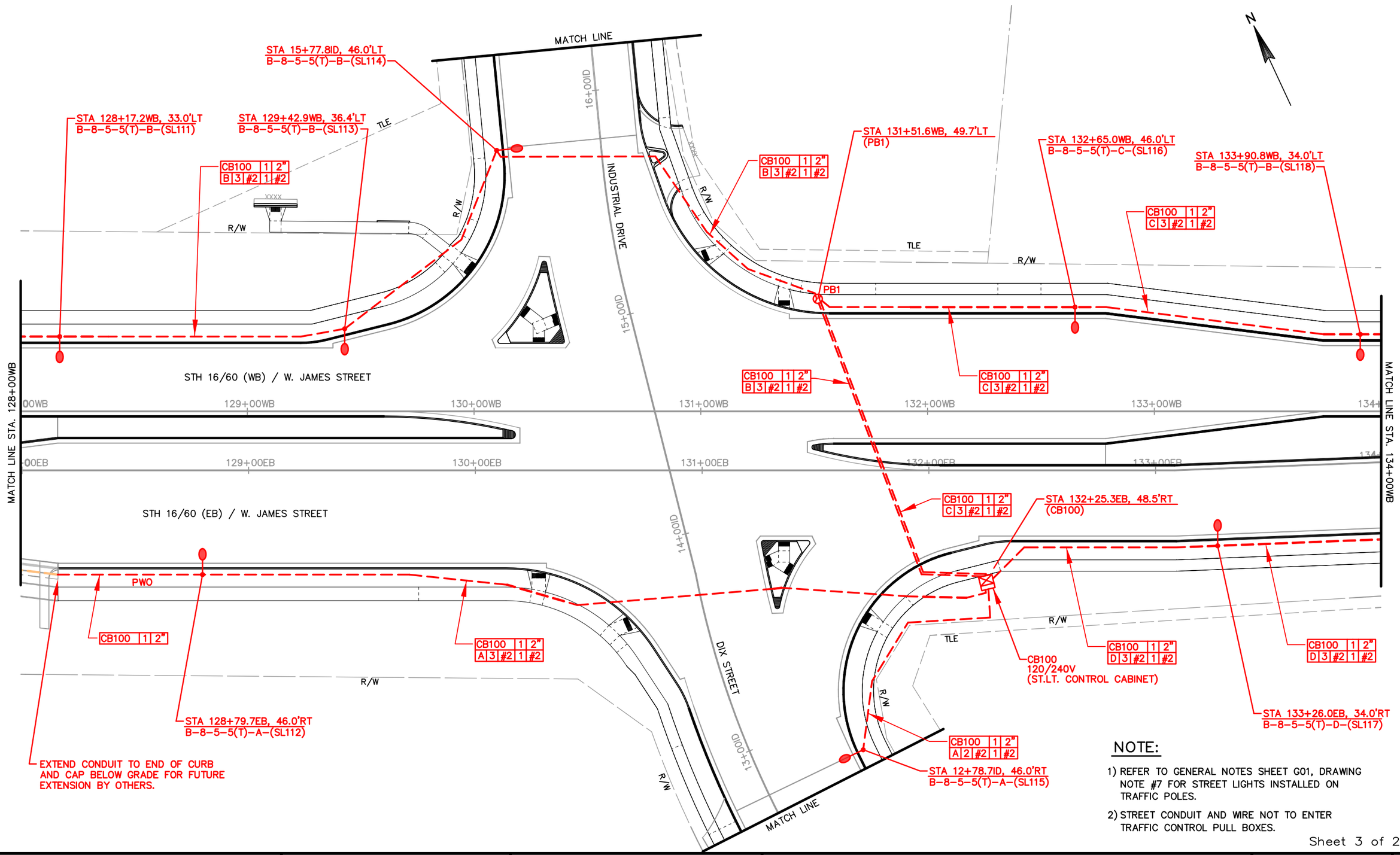
STA. 127+00.00WB
BEGIN PROJECT 1401-02-71

Sheet 2 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 171	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

2



NOTE:

1) REFER TO GENERAL NOTES SHEET G01, DRAWING NOTE #7 FOR STREET LIGHTS INSTALLED ON TRAFFIC POLES.

2) STREET CONDUIT AND WIRE NOT TO ENTER TRAFFIC CONTROL PULL BOXES.

2

2

N

CB100 | 1 | 2"
C | 3 | #2 | 1 | #2

STA 135+16.5WB, 34.0'LT
B-8-5-5(T)-C-(SL120)

CB100 | 1 | 2"
C | 3 | #2 | 1 | #2

STA 136+42.1WB, 34.0'LT
B-8-5-5(T)-C-(SL122)

CB100 | 1 | 2"
C | 3 | #2 | 1 | #2

STA 137+67.6WB, 33.8'LT
B-8-5-5(T)-C-(SL124)

CB100 | 1 | 2"
C | 2 | #2 | 1 | #2

STUB OUT CONDUIT 6 INCHES BEYOND BASE FOR FUTURE USE AND CAP BOTH ENDS.

STA 138+91.2WB, 27.9'LT
B-8-5-5(T)-C-(SL126)

END OF CIRCUIT

R/W

STH 16/60 (WB) / W. JAMES STREET

MATCH LINE STA. 134+00WB

134+00WB
135+00WB
136+00WB
137+00WB
138+00WB
139+00WB
139+26EB
140+

135+00EB
136+00EB
137+00EB
138+00EB

12+50C
12+00C
11+50C
11+50M
11+00M
10+00M

CONTINENTAL DRIVE

MATCH LINE STA. 140+00WB

STH 16/60 (EB) / W. JAMES STREET

CB100 | 1 | 2"
D | 3 | #2 | 1 | #2

STA 134+51.9EB, 34.0'RT
B-8-5-5(T)-D-(SL119)

CB100 | 1 | 2"
D | 3 | #2 | 1 | #2

STA 135+77.6EB, 34.0'RT
B-8-5-5(T)-D-(SL121)

CB100 | 1 | 2"
D | 3 | #2 | 1 | #2

STA 137+03.3EB, 33.2'RT
B-8-5-5(T)-D-(SL123)

CB100 | 1 | 2"
D | 3 | #2 | 1 | #2

STA 138+29.1EB, 30.7'RT
B-8-5-5(T)-D-(SL125)

CB100 | 1 | 2"
D | 2 | #2 | 1 | #2

STA 139+56.2WB, 26.7'RT
B-8-5-5(T)-D-(SL127)

END OF CIRCUIT

R/W
TLE
R/W
TLE
R/W
R/W

MEISTER DRIVE

Sheet 4 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 173	E

2

2

N

STA 140+17.9WB, 22.0'LT
B-8-5-5(T)-B-(SL128)

STUB OUT CONDUIT 6 INCHES BEYOND BASE FOR FUTURE USE AND CAP BOTH ENDS

CB200 | 1 | 2"
B | 2 | #2 | 1 | #2

STA 143+10.5WB, 22.0'LT
B-8-5-5(T)-B-(SL130)

CB200 | 1 | 2"
B | 3 | #2 | 1 | #2

TLE

R/W

END OF CIRCUIT

MATCH LINE STA. 140+00WB

140+00WB

141+00WB

142+00WB

11+50HU

143+00WB

144+00WB

11+50T

12+00T

13+00T

APC WAY

145+00WB

146+

MATCH LINE STA. 146+00WB

STH 16/60 / W. JAMES STREET

END OF CIRCUIT

PB10

R/W

TLE

STA 140+44.5WB, 24.5'RT
(PB10) FIBER OPTIC

EXTEND (1) 2 INCH CONDUIT TO LOT LINE FOR FUTURE EXTENSION BY OTHERS.

STA 141+59.4WB, 22.0'RT
B-8-5-5(T)-A-(SL129)

11+00HU

HURELLE STREET

10+20HU

CB200 | 1 | 2"
A | 2 | #2 | 1 | #2

FIBER OPTIC | 1 | 2"

STA 144+60.6WB, 22.0'RT
B-8-5-5(T)-A-(SL131)

NOTE: START OF UNDERGROUND FIBER OPTIC DUCT SYSTEM FOR FUTURE FIBER OPTIC CABLE, MADE UP OF 2 INCH PVC CONDUIT AND NON-CONDUCTIVE PULL BOXES. FIBER OPTIC DUCT SYSTEM TO UTILIZE COMMON TRENCH WITH STREET LIGHTING DUCT SYSTEM WHEN AVAILABLE. OTHER THAN A SHARED TRENCH, THESE TWO SYSTEMS ARE TO REMAIN INDEPENDENT OF ONE ANOTHER.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 174	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

STA 146+08.7WB, 22.0'LT
B-8-5-5(T)-B-(SL132)

CB200 | 1 | 2"
B | 3 | #2 | 1 | #2

STA 149+12.4WB, 22.0'LT
B-8-5-5(T)-B-(SL134)

CB200 | 1 | 2"
B | 3 | #2 | 1 | #2

STA 151+92.9WB, 22.0'LT
B-8-5-5(T)-C-(SL136)

CB200 | 1 | 2"
C | 3 | #2 | 1 | #2

BLACKHAWK ROAD

13+00B

12+00B

TLE

R/W

MATCH LINE STA. 146+00WB

00WB

147+00WB

148+00WB

149+00WB

150+00WB

151+00WB

152+

11+50B

11+50H

STH 16/60 / W. JAMES STREET

MATCH LINE STA. 152+00WB

PB11

R/W

TLE

CB200 | 1 | 2"
A | 3 | #2 | 1 | #2

STA 146+77.3WB, 24.5'RT
(PB11) FIBER OPTIC

STA 147+58.8WB, 25.2'RT
B-8-5-5(T)-A-(SL133)

FIBER OPTIC | 1 | 2"

CB200 | 1 | 2"
A | 3 | #2 | 1 | #2

STA 150+45.5WB, 22.0'RT
B-8-5-5(T)-A-(SL135)

CB200 | 1 | 2"
A | 3 | #2 | 1 | #2

CB200
120/240V

STA 150+92.7WB, 43.4'RT
(CB200)

11+00H

MAPLE AVENUE

10+00H

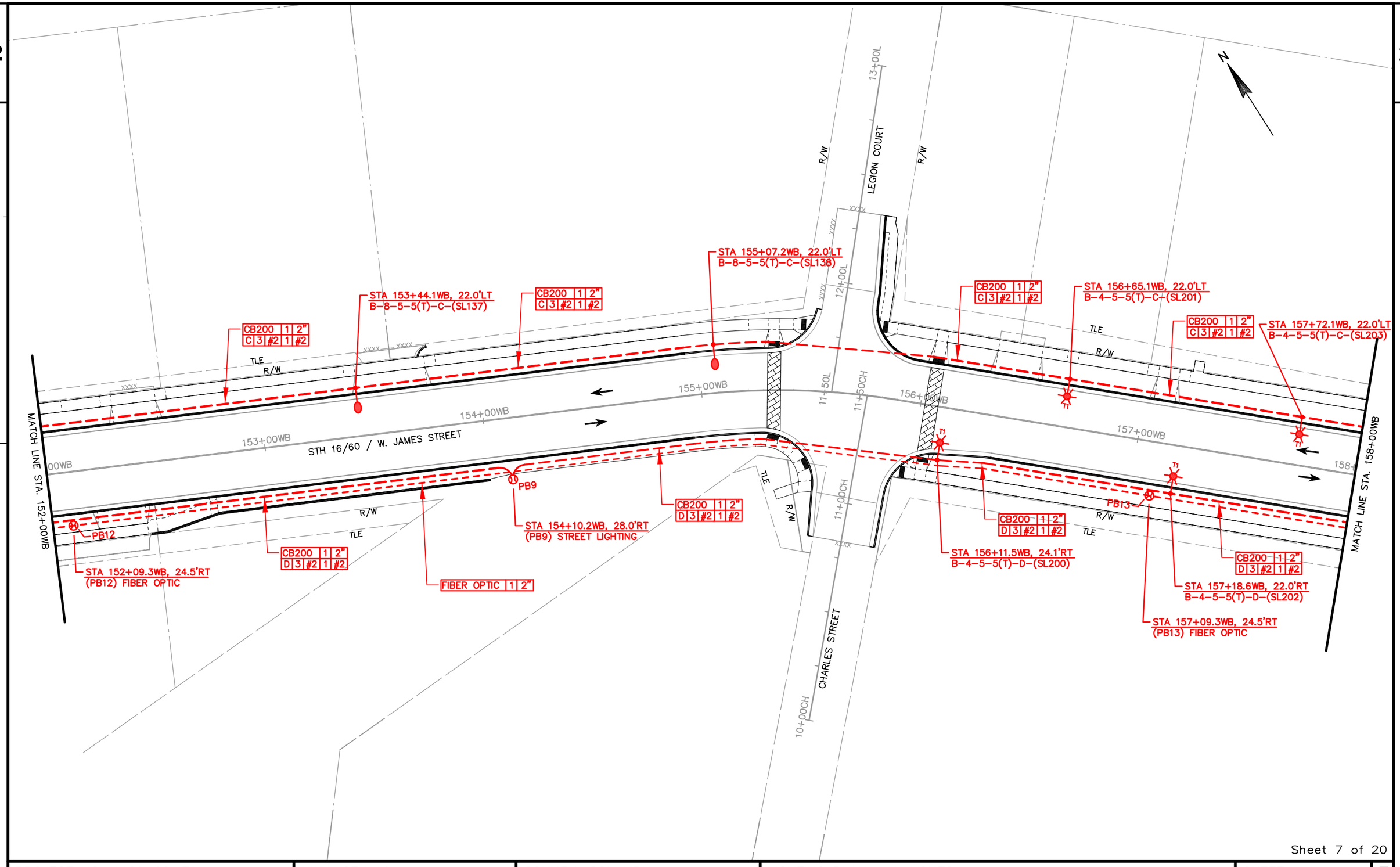
Sheet 6 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 175	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

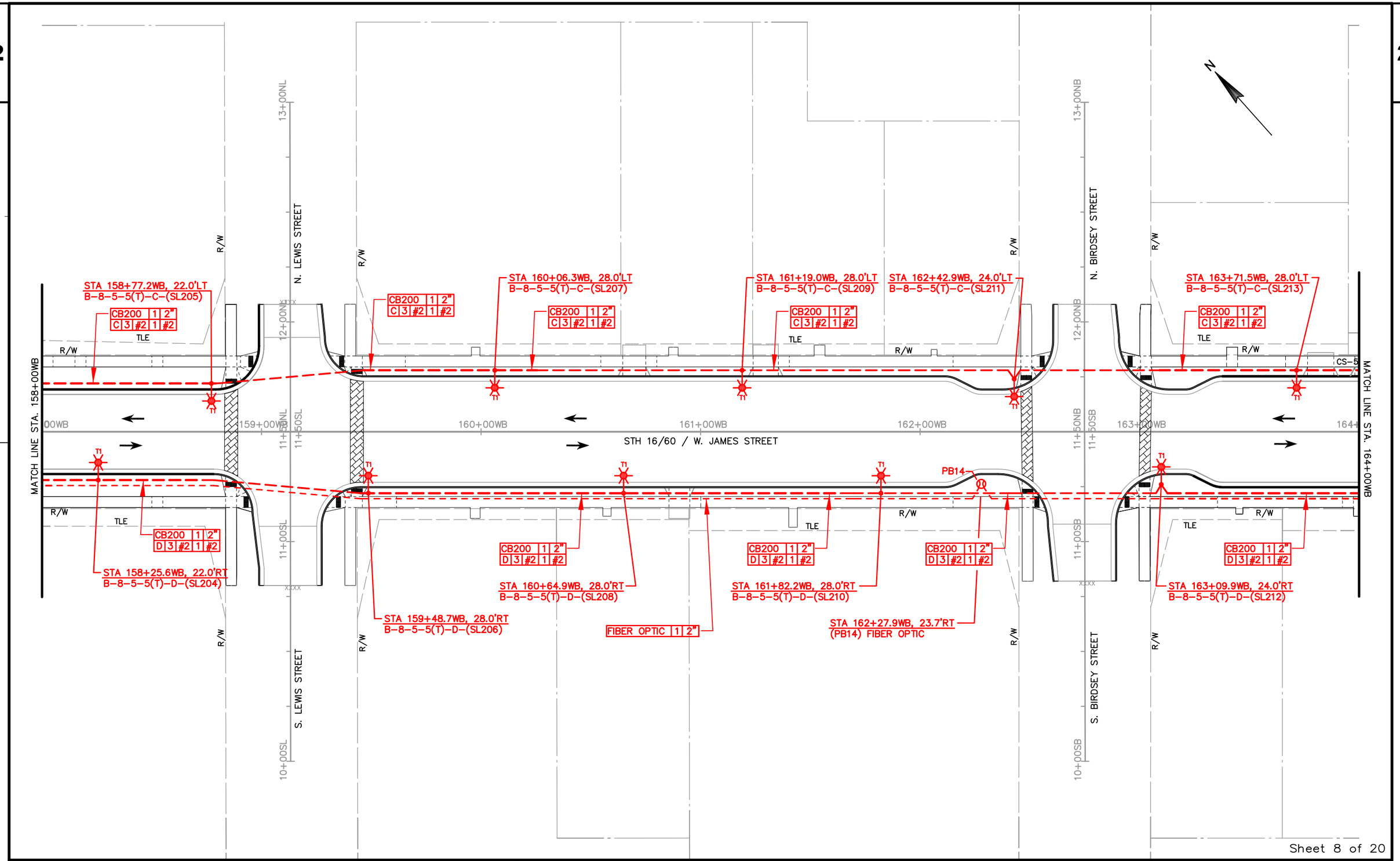
WISDOT/CADDS SHEET 42

2



Sheet 7 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 176	E



Sheet 8 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – LAYOUTS	SHEET 177	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 164+00WB

MATCH LINE STA. 170+00WB

13+00NM

12+00NM

11+50SM

11+50NM

11+00SM

10+00SM

N. MAIN STREET

S. MAIN STREET

R/W

TLE

00WB

165+00WB

166+00WB

167+00WB

168+00WB

169+00WB

170+

STH 16/60 / W. JAMES STREET

STA 166+38.8WB, 24.0'LT
B-8-5-5(T)-C-(SL217)

STA 165+06.8WB, 28.0'LT
B-8-5-5(T)-C-(SL215)

STA 167+67.3WB, 28.0'LT
B-8-5-5(T)-C-(SL219)

STA 168+86.8WB, 28.0'LT
B-8-5-5(T)-C-(SL221)

CB200 | 1 | 2"
C | 3 | #2 | 1 | #2

CB200 | 1 | 2"
C | 2 | #2 | 1 | #2

STUB OUT CONDUIT 6 INCHES BEYOND BASE FOR FUTURE USE AND CAP BOTH ENDS.

T1

PB15

PB16

END OF CIRCUIT

CB200 | 1 | 2"
D | 3 | #2 | 1 | #2

CB200 | 1 | 2"
D | 2 | #2 | 1 | #2

STA 164+41.6WB, 28.0'RT
B-8-5-5(T)-D-(SL214)

STA 165+72.7WB, 28.0'RT
B-8-5-5(T)-D-(SL216)

STA 167+07.8WB, 24.0'RT
B-8-5-5(T)-D-(SL218)

STA 168+27.0WB, 28.0'RT
B-8-5-5(T)-D-(SL220)

STA 169+46.5WB, 28.0'RT
B-8-5-5(T)-D-(SL222)

FIBER OPTIC | 1 | 2"

STA 166+26.7WB, 23.7'RT
(PB15) FIBER OPTIC

STA 169+93.9WB, 30.5'RT
(PB16) FIBER OPTIC

Sheet 9 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 178	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

CONTRACTOR TO INSTALL CONDUIT & WIRE TO POWER PEDESTAL LOCATION. STUB CONDUIT 4 INCH ABOVE GRADE AND COIL 5ft OF WIRE OUT OF THE GROUND. OWNER TO PROVIDE & INSTALL POWER PEDESTAL. CONTRACTOR TO COORDINATE INSTALLATION WITH OWNER.

STA 170+01.1WB, 28.0'LT
B-8-5-5(T)-C-(SL223)

STUB OUT CONDUIT 6 INCHES BEYOND BASE FOR FUTURE USE AND CAP BOTH ENDS.

END OF CIRCUIT

STA 171+35.2WB, 28.0'LT
B-8-5-5-E-(SL225)
F-(RECEPTACLE)

END OF CIRCUIT

STA 172+54.7WB, 28.0'LT
B-8-5-5-E-(SL227)
F-(RECEPTACLE)

CB300 | 1 | 2"
E | 2 | #2 | 1 | #2
F | 2 | #2 | – | –

STA 173+90.0WB, 62.8'LT
(PB18) FIBER OPTIC

FIBER OPTIC | 1 | 2"

EXTEND (1) 2 INCH CONDUIT TO LOT LINE FOR FUTURE EXTENSION BY OTHERS.

STA 173+74.8WB, 24.0'LT
(PB2)

STA 173+70.1WB, 24.0'LT
B-8-5-5-E-(SL229)
F-(RECEPTACLE)

CB300 | 1 | 2"
E | 3 | #2 | 1 | #2
F | 3 | #2 | – | –

PB18

CB300 | 1 | 2"
G | 3 | #1 | 1 | #1

STA 11+99.1N
(PP1)

PP1

STA 174+78.5WB, 27.0'LT
B-8-5-5-B-(SL231)
D-(RECEPTACLE)

STA 175+36.1WB, 27.0'LT
B-8-5-5-B-(SL233)
D-(RECEPTACLE)

CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

CB300 | 1 | 2"
E | 3 | #2 | 1 | #2
F | 3 | #2 | – | –

PB2

PB17

CB300 | 1 | 2"
E | 3 | #2 | 1 | #2
F | 3 | #2 | – | –

CB300 | 1 | 2"
G | 3 | #1 | 1 | #1

CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

STA 10+00.0SBD
(CB300)

CB300
120/240V

STA 170+79.5WB, 28.0'RT
B-8-5-5-E-(SL224)
F-(RECEPTACLE)

STUB OUT CONDUIT 6 INCHES BEYOND BASE FOR FUTURE USE AND CAP BOTH ENDS.

FIBER OPTIC | 1 | 2"

CB300 | 1 | 2"
E | 2 | #2 | 1 | #2
F | 2 | #2 | – | –

STA 171+85.5WB, 28.0'RT
B-8-5-5-E-(SL226)
F-(RECEPTACLE)

CB300 | 1 | 2"
E | 3 | #2 | 1 | #2
F | 3 | #2 | – | –

STA 173+13.7WB, 28.0'RT
B-8-5-5-E-(SL228)
F-(RECEPTACLE)

STA 173+68.5WB, 23.6'RT
(PB17) FIBER OPTIC

STA 173+73.1WB, 24.0'RT
B-8-5-5-E-(SL230)
F-(RECEPTACLE)

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

STA 174+78.8WB, 23.6'RT
B-8-5-5-A-(SL232)
C-(RECEPTACLE)

STA 175+98.0WB, 27.0'RT
B-8-5-5-A-(SL234)
C-(RECEPTACLE)

N. SPRING STREET
S. SPRING STREET
N. DICKASON BOULEVARD
S. DICKASON BOULEVARD (SB)
S. DICKASON BOULEVARD (NB)
STH 16/60 / W. JAMES STREET
R/W
TLE
MATCH LINE STA. 170+00WB
MATCH LINE STA. 176+00WB
13+00NS
12+00NS
11+50NS
11+50SS
11+00SS
10+00SS
13+00D
12+00D
11+50D
11+50SBD
11+00SBD
10+00SBD
11+50NBD
10+00NBD
170+00WB
171+00WB
172+00WB
173+00WB
174+00WB
175+00WB
176+00WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – LAYOUTS	SHEET 179	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

2

FUTURE
CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

FUTURE
STREET LIGHT

FUTURE
CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

FUTURE
STREET LIGHT

R/W

13+00N

N. LUDINGTON STREET

R/W

EXTEND (1) – 2" CONDUIT TO PROJECT BOUNDARY FOR FUTURE EXTENSION BY OTHERS. CAP BELOW GRADE. TYPICAL, BOTH SIDES OF THE ROAD. LIGHT CIRCUITS TO BE EXTENDED DOWN LUDINGTON ST. BY OTHERS. PROVIDE NECESSARY WIRE LUGS TO EXTEND FUTURE CIRCUITS. DISCONNECT EXISTING STREETLIGHT CIRCUIT AT THE NEXT POLE TO THE NORTH. CUT CONDUIT AND WIRE AT THE PROJECT BOUNDARY LINE AND ABANDON CIRCUIT BELOW GRADE. NOTE: EXISTING STREETLIGHT CONTROL CABINET FOR EXISTING LIGHTS ON LUDINGTON STREET IS LOCATED AT MILLS & N. LUDINGTON STREETS.

MATCH LINE – N. LUDINGTON ST. (NORTH)

N

13+00NW

N. WATER STREET

NOTE: (1) – 2" INCH DUCT IS A SPARE TO THE NORTHERN PROJECT BOUNDARY

CB300 | 2 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

CB300 | 1 | 2"

STA 176+54.8WB, 27.0'LT
B–8–5–5–B–(SL235)
D–(RECEPTACLE)

STA 177+44.4WB, 27.0'LT
(PB3)

PWO

PB3

R/W

12+00N

PWO

CB300 | 1 | 2"

STA 178+74.7WB, 27.0'LT
(PB4)

PB4

R/W

NOTE: (1) – 2" INCH DUCT IS A SPARE TO THE NORTHERN PROJECT BOUNDARY

CB300 | 2 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

PWO

STA 179+71.8WB, 27.0'LT
B–8–5–5–B–(SL238)
D–(RECEPTACLE)

CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

R/W

STA 180+76.6WB, 27.0'LT
B–8–5–5–B–(SL240)
D–(RECEPTACLE)

CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

R/W

12+00NW

MATCH LINE STA. 176+00WB

00WB

177+00WB

178+00WB

179+00WB

180+00WB

181+00WB

182+

STH 16/60 / W. JAMES STREET

STH 16/60 / E. JAMES STREET

MATCH LINE STA. 182+00WB

STA 177+50.2WB, 27.0'RT
(PB5)

CB300 | 1 | 2"
B | 3 | #2 | 1 | #2
D | 3 | #2 | – | –

11+00S

11+50S

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

STA 178+77.1WB, 26.8'RT
(PB6)

11+50SW

11+00SW

PB5

R/W

PB6

R/W

STA 177+15.9WB, 27.0'RT
B–8–5–5–A–(SL236)
C–(RECEPTACLE)

STA 177+84.8WB, 64.9'RT
(PB7)

CB300 | 2 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

PB7

PB8

STA 178+40.8WB, 65.0'RT
(PB8)

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

STA 179+19.2WB, 27.0'RT
B–8–5–5–A–(SL237)
C–(RECEPTACLE)

CB300 | 2 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

STA 180+29.0WB, 27.0'RT
B–8–5–5–A–(SL239)
C–(RECEPTACLE)

STA 181+40.1WB, 27.0'RT
B–8–5–5–A–(SL241)
C–(RECEPTACLE)

CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

R/W

11+00SW

MATCH LINE – S. LUDINGTON ST. (SOUTH)

INSTALL PULL BOXES HERE. CAPTURE EXISTING STREETLIGHT CIRCUITS TO THE SOUTH AND INSTALL UG RATED SPLICES WITHIN PULL BOXES TO MAINTAIN STREETLIGHT SERVICE TO THE SOUTH. EXISTING CIRCUITS CONDUCTORS: (2)–#8 AWG CU – 240V STREETLIGHT CIRCUIT. (2)–#10 AWG CU – 120V RECEPTACLE CIRCUIT. (1)–#10 AWG CU – SHARED GROUND ALL IN (1) 1–INCH CONDUIT. NOTE: EXISTING CIRCUITS AND LIGHTS WILL BE REPLACED BY OTHERS IN THE FUTURE, AS SHOWN.

FUTURE
CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

FUTURE
STREET LIGHT

R/W

10+00S

S. LUDINGTON STREET

R/W

FUTURE
STREET LIGHT

FUTURE
CB300 | 1 | 2"
A | 3 | #2 | 1 | #2
C | 3 | #2 | – | –

10+00SW

S. WATER STREET

NOTE:

1) REFER TO GENERAL NOTES SHEET G01, DRAWING NOTE #7 FOR STREET LIGHTS INSTALLED ON TRAFFIC POLES.

2) STREET CONDUIT AND WIRE NOT TO ENTER TRAFFIC CONTROL PULL BOXES.

PROJECT NO: 1401–02–71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – LAYOUTS	SHEET 180	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9–14A DRAFTING\C09–14A–KL–1401–02–71–E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

STA 182+19.0WB, 28.0'LT
B-8-5-5-B-(SL242)
D-(RECEPTACLE)

CB300	1	2"
B	3 #2	1 #2
D	3 #2	– –

STA 183+37.3WB, 28.0'LT
B-8-5-5-B-(SL244)
D-(RECEPTACLE)

CB300	1	2"
B	2 #2	1 #2
D	2 #2	– –

STA 184+63.7WB, 28.0'LT
B-8-5-5-B-(SL246)
D-(RECEPTACLE)

STA 185+80.7WB, 28.0'LT
B-8-5-5(T)-A-(SL248)

STA 186+86.7WB, 28.0'LT
B-4-5-5(T)-A-(SL250)

CB300	1	2"
A	3 #2	1 #2

STA 187+79.5WB, 28.0'LT
B-4-5-5(T)-A-(SL252)

CB300	1	2"
A	3 #2	1 #2

TLE
R/W
END OF CIRCUIT
T2
T1

CB300	1	2"
A	3 #2	1 #2

MATCH LINE STA. 182+00WB

182+00WB
183+00WB
184+00WB
185+00WB
186+00WB
187+00WB
188+00WB

STH 16/60 / E. JAMES STREET

13+00U
12+00U
11+00U
11+00M
10+00M

UDEY, STREET

MATCH LINE STA. 188+00WB

CB300	1	2"
A	3 #2	1 #2
C	3 #2	– –

STA 182+75.8WB, 28.0'RT
B-8-5-5-A-(SL243)
C-(RECEPTACLE)

CB300	1	2"
A	2 #2	1 #2
C	2 #2	– –

STA 183+90.4WB, 22.0'RT
B-8-5-5-A-(SL245)
C-(RECEPTACLE)

STA 185+14.4WB, 22.0'RT
B-8-5-5(T)-B-(SL247)

CB400	1	2"
B	2 #2	1 #2

WATERLOO STREET

CB400
120/
240V

STA 185+95.4WB, 43.9'RT
(CB400)

CB400	1	2"
B	3 #2	1 #2

STA 186+22.5WB, 28.0'RT
B-4-5-5(T)-B-(SL249)

CB400	1	2"
B	3 #2	1 #2

STA 187+32.1WB, 28.0'RT
B-4-5-5(T)-B-(SL251)

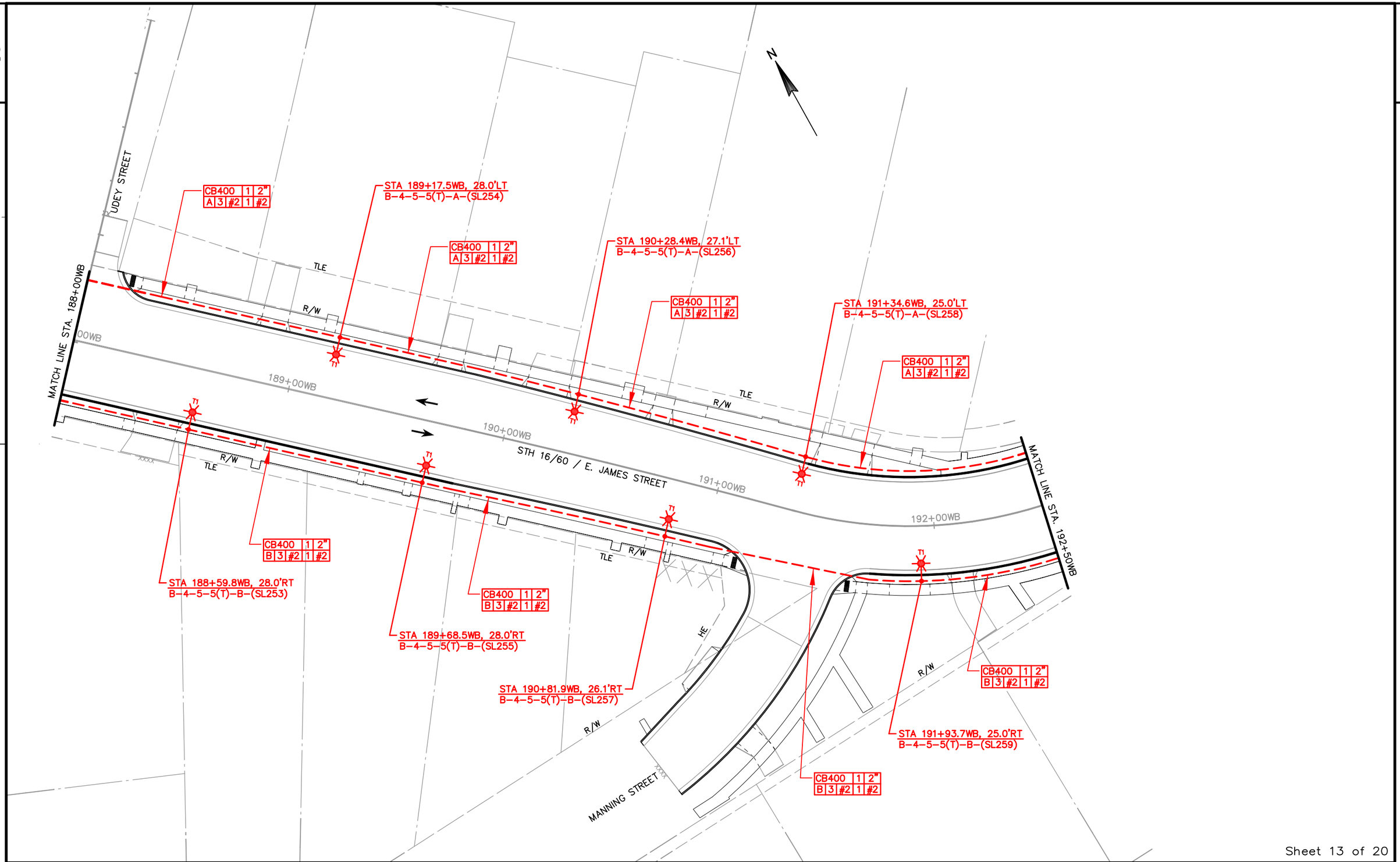
Sheet 12 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – LAYOUTS	SHEET 181	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



Sheet 13 of 20

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 182	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

STA 192+55.1WB, 25.0'LT
B-4-5-5(T)-A-(SL260)

STA 193+56.9WB, 25.0'LT
B-4-5-5(T)-A-(SL262)

STA 194+55.9WB, 24.4'LT
B-4-5-5(T)-A-(SL264)

CB400	1	2"
A	3	#2
	1	#2

CB400	1	2"
A	3	#2
	1	#2

EXTEND CONDUIT TO THE PROJECT BOUNDARY AND CAP BELOW GRADE FOR FUTURE EXTENSION BY OTHERS.

TLE

R/W

PWO

MATCH LINE STA. 192+50WB

193+00WB

194+00WB

195+00WB

196+00WB

197+00WB

198+00

STH 16/60 / E. JAMES STREET

TLE

R/W

PWO

R/W

RIVER ROAD

R/W

R/W

CB400	1	2"
B	3	#2
	1	#2

CB400	1	2"
B	3	#2
	1	#2

CB400	1	2"

STA 193+09.7WB, 25.0'RT
B-4-5-5(T)-B-(SL261)

STA 194+06.4WB, 25.0'RT
B-4-5-5(T)-B-(SL263)

END PROJECT 1401-02-71
STA 194+59.01
MATCH EXISTING
SAWCUT REQUIRED

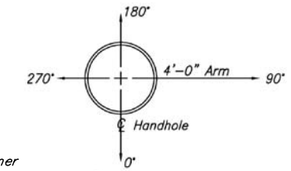
Sheet 14 of 20

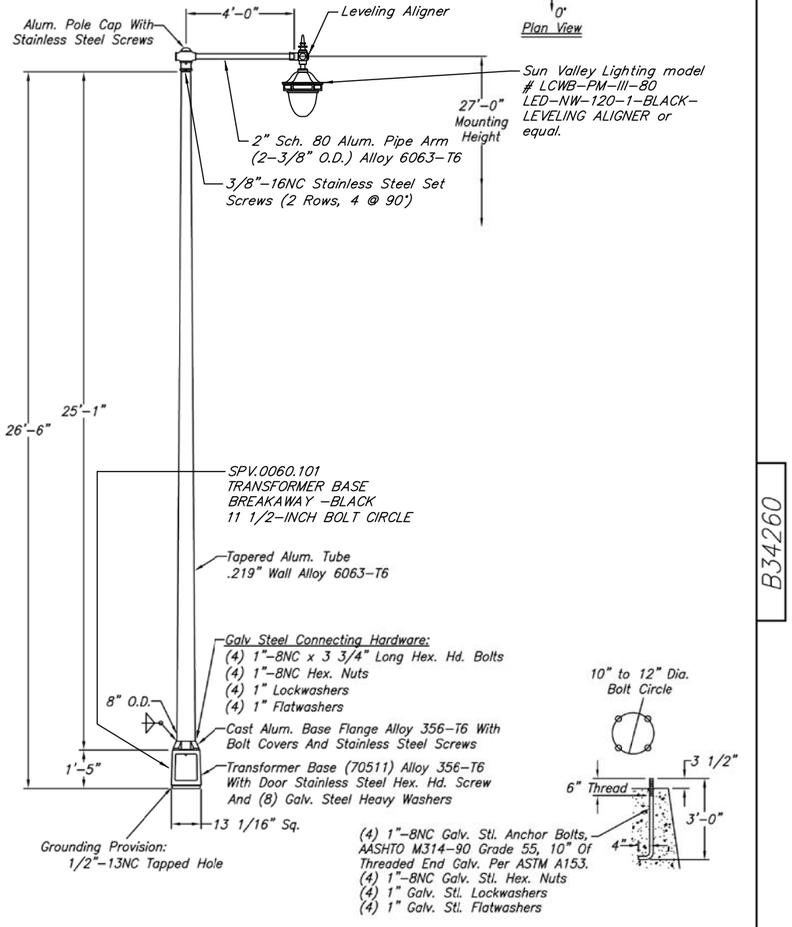
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - LAYOUTS	SHEET 183	E

FILE NAME : D:\ABAUTZ CURRENT WORK\C9 COLUMBUS\C9-14A DRAFTING\C09-14A-KL-1401-02-71-E01.DWG PLOT DATE : 7/29/2016 PLOT BY : FORSTER ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

Notes:
1) Pole Designed To Meet AASHTO, 2001 Edition (Excluding Breakaway) For A 90 mph Wind Velocity When Supporting A Maximum Luminaire Size Of 1.1 ft² EPA And 50 lbs.
2) Pole Assembly And Accessories Shall Be Powder Coated Textured Black





B34260

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

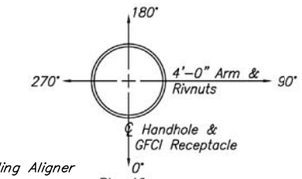
NO.	REVISIONS	DATE

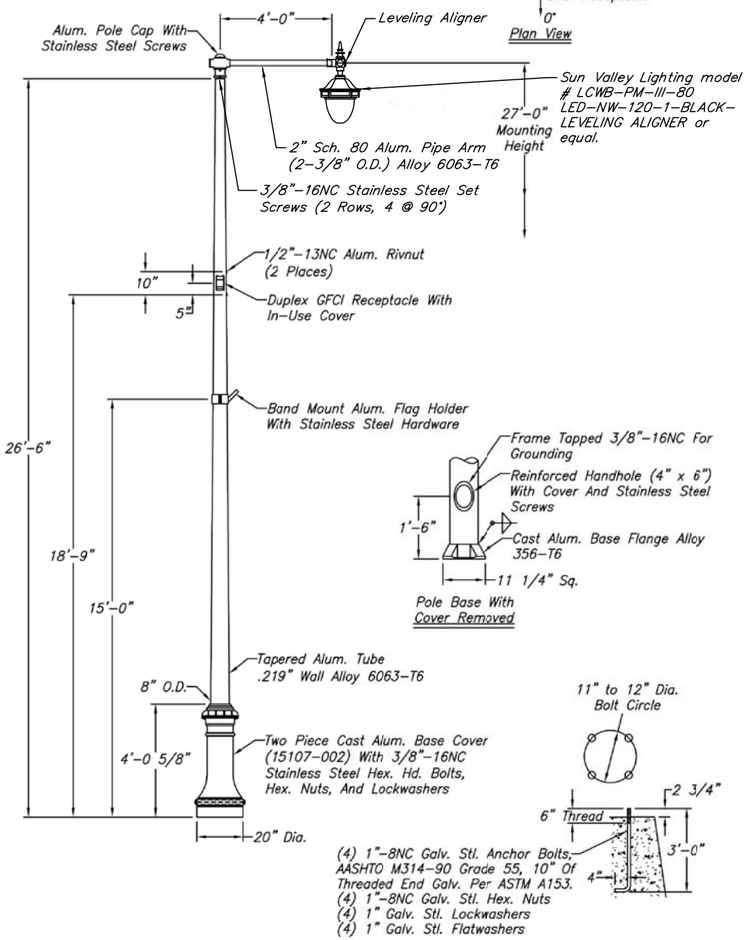
hapco
Abingdon, Va.

TITLE	DECORATIVE POLE TYPE 1
CUSTOMER	James Street Project
SCALE	32
DATE	08/21/2015
BY	TNB
CHK'D	
DWG. NO.	B34260

SPV.0060.105
DECORATIVE POLE
ASSEMBLY
TYPE 1

Notes:
1) Pole Designed To Meet AASHTO, 2001 Edition (Excluding Breakaway) For A 90 mph Wind Velocity When Supporting A Maximum Luminaire Size Of 1.1 ft² EPA And 50 lbs.
2) Pole Assembly And Accessories Shall Be Powder Coated Textured Black





B33541

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE
1	Revised Accessory Locations (tnb)	8/15

hapco
Abingdon, Va.

TITLE	DECORATIVE POLE TYPE 2
CUSTOMER	James Street Project
SCALE	32
DATE	03/23/2015
BY	TNB
CHK'D	
DWG. NO.	B33541

SPV.0060.106
DECORATIVE POLE
ASSEMBLY
TYPE 2

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 0

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN - DETAILS - DECORATIVE POLE	SHEET 184 E

2

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.

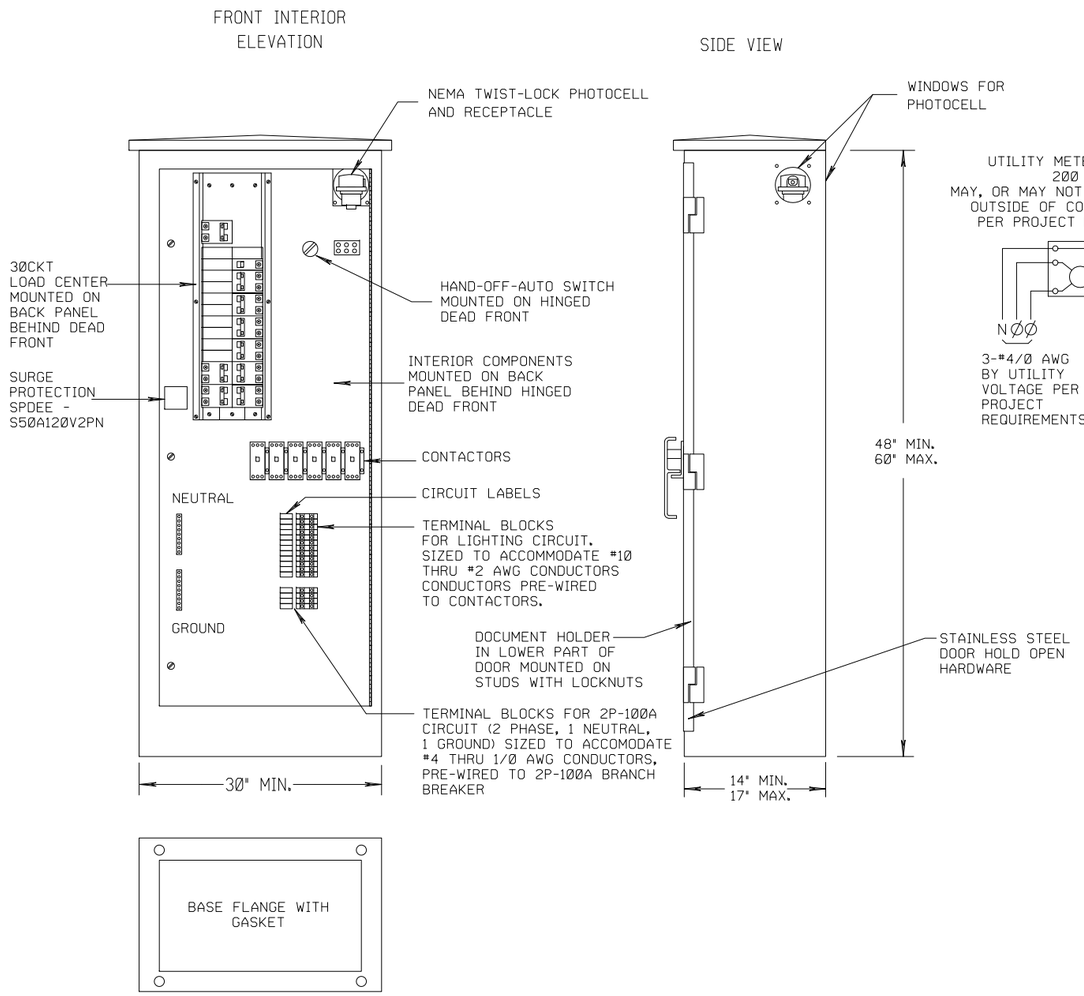
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

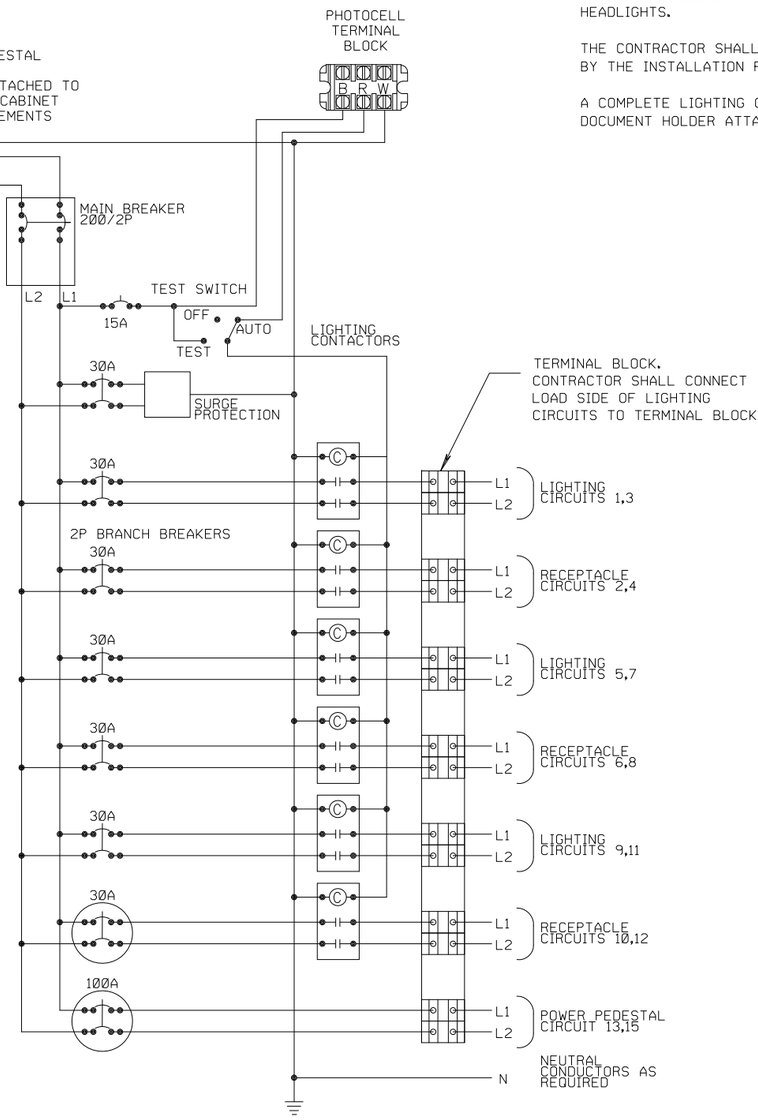
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET CB300



CONTROL CABINET SCHEMATIC

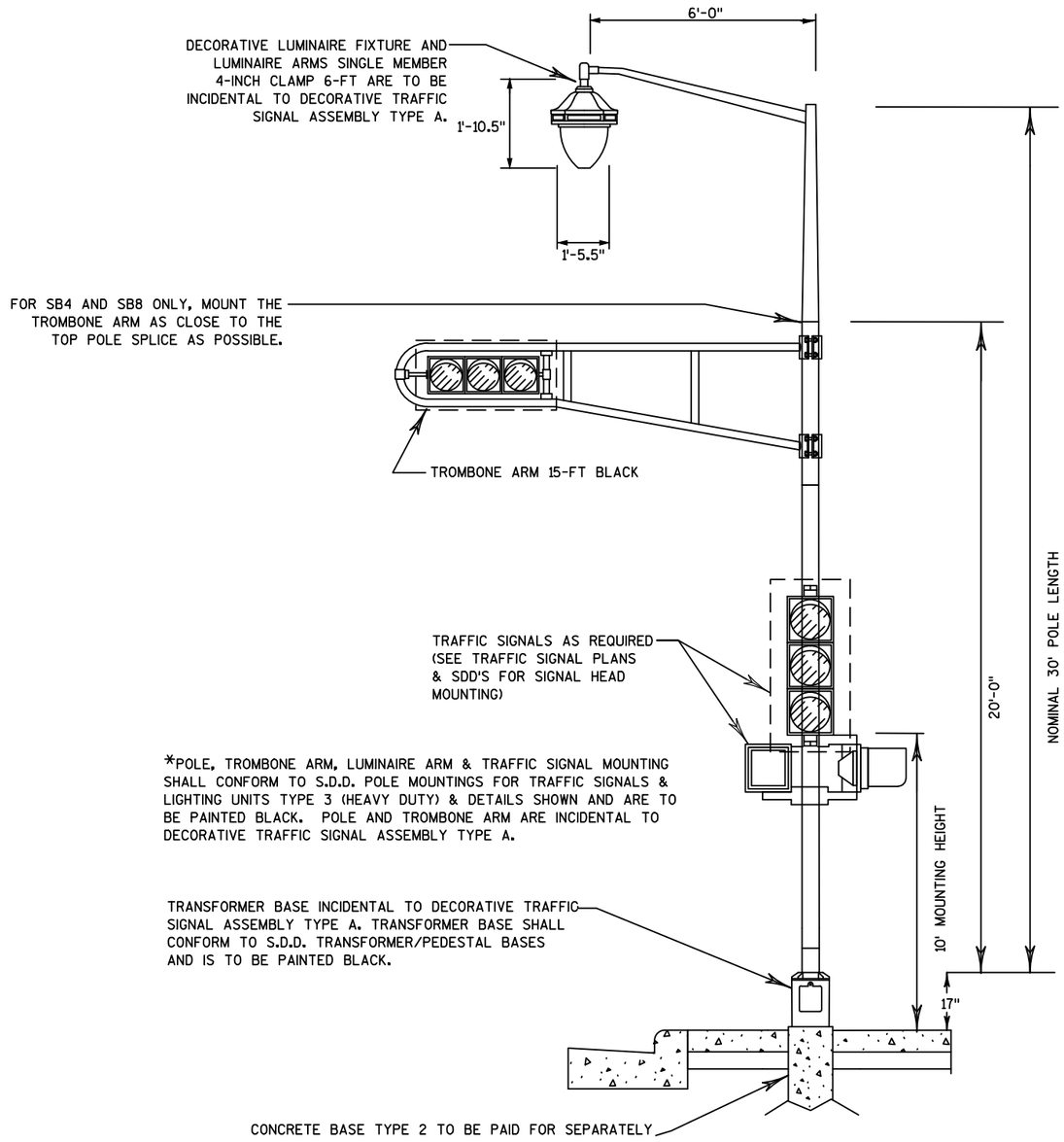
HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 0

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	LIGHTING PLAN – DETAILS – CONTROL CABINET CB300 SPECIAL	SHEET 185	E

2



DECORATIVE TRAFFIC SIGNAL ASSEMBLY TYPE A

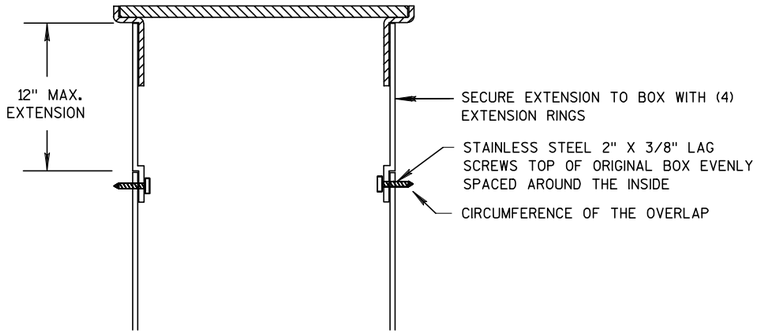
NO SCALE

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

NON-CONDUCTIVE PULL BOX DIMENSION (INCHES)			
BOX DIAMETER ** (INSIDE)	A	24	24
BOX DIAMETER ** (OUTSIDE)	B	25	25
BOX LENGTH	C	36	42
COVER	D	25 1/2	25 1/2
FRAME	E	27	27
FRAME	F	25 3/4	25 3/4
FRAME	G	22 1/2	22 1/2
WEIGHT (POUNDS) *			
COVER		50	50

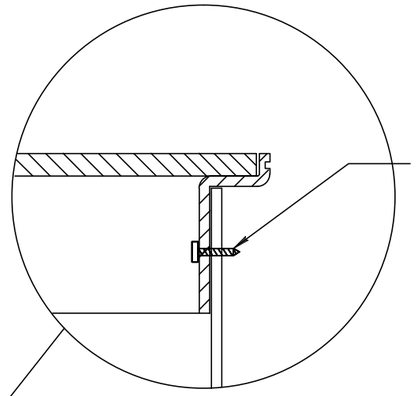
* THE ACTUAL WEIGHT OF THE COVER MAY VARY NOT TO EXCEED 100 LBS.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

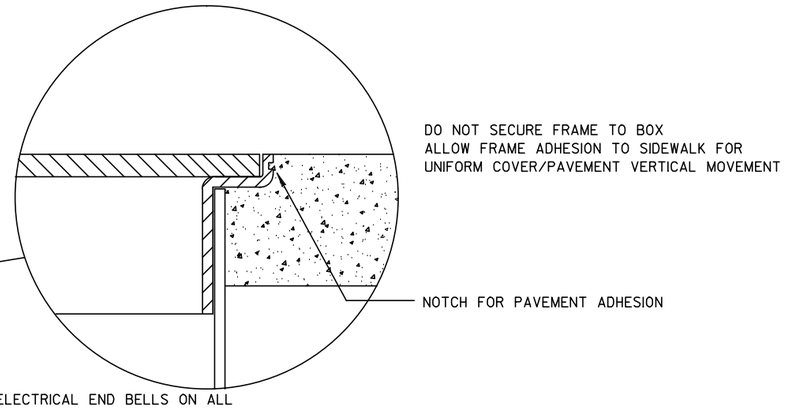


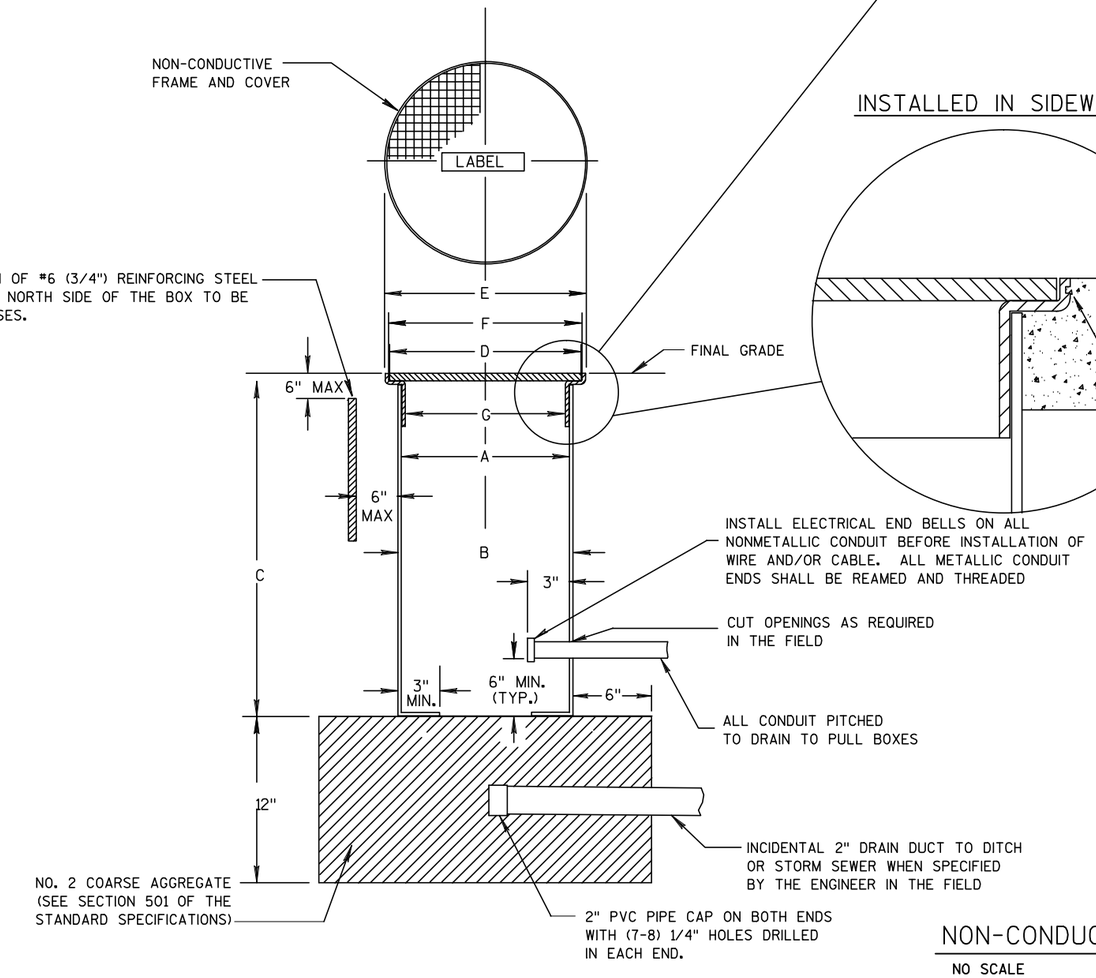
BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK





NON-CONDUCTIVE PULL BOX

NO SCALE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DISCONTINUITIES LESS THAN 1/4".

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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.

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL OR LIGHTING SYSTEMS, "CITY COMMUNICATIONS" FOR COMMUNICATIONS SYSTEMS.

CONSTRUCTION NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

2) THE LOCATION OF SIGNAL EQUIPMENT IS BASED ON A COMBINATION OF FIELD SURVEY AND AS-BUILT DRAWINGS.

LEGEND

- CONTROL CABINET AND CONCRETE BASE
- ABANDON EXISTING CONDUIT AND WIRING
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR TO BE ABANDONED
- PULL BOX, 24" X 36"
- TRAFFIC SIGNAL HEAD

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR ABANDONED

TRAFFIC SIGNAL REMOVAL MAJOR ITEMS SUMMARY	
6	PEDESTAL BASES
4	TRANSFORMER BASES
10	TRAFFIC SIGNAL/LIGHTING POLES
12	TRAFFIC SIGNAL HEADS
1	TRAFFIC SIGNAL CABINET

TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------

PAGE 1 OF 1

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 188	E

CONSTRUCTION NOTES:

1) FINAL LOCATION OF WOOD POLES, SIGNAL CABINET, AND SIGNAL HEADS SHALL BE AS DIRECTED BY THE ENGINEER. USE CAUTION WHEN LOCATING WOOD POLES WITH THE STAKING INFORMATION SHOWN.

2) GUYING OF POLES IS THE RESPONSIBILITY OF THE CONTRACTOR. MULTIPLE GUYING MODIFICATIONS ARE TO BE EXPECTED AND WILL BE CONSIDERED INCIDENTAL.

3) THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

4) WP2 TO BE REMOVED OR REPLACED WITH WP6 FOLLOWING STAGE 2A CONSTRUCTION ACTIVITIES AND PRIOR TO SWITCHING TO STAGE 2B TRAFFIC PATTERNS.

5) TSB1 IS NOT USED IN STAGE 4

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- CONTROL CABINET & TEMPORARY BASE
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW
- TEMPORARY SIGNAL BASE
- DETECTION ZONE
- TRAFFIC SIGNAL HEAD (1 R Y G)

NOTE: ALL LENSES ARE 12-INCH.

TEMPORARY SIGNAL MAJOR ITEMS SUMMARY	
6	TYPE 4 WOOD POLES
880	SPAN WIRE DISTANCE (TOTAL FT) ANCHORS AND GUYS AS NEEDED
6	TEMPORARY LUMINAIRES, LED
13	TEMPORARY SIGNAL HEADS 12"
4	TEMPORARY SIGNAL BASES
1	DETECTION SYSTEM
1	CONTROL CABINET TEMPORARY AND BASE

ITEM - STATION - OFFSET
CB1 - 132+10'EB' - 52.4'RT
WP1 - 132+01'EB' - 59.4'RT
WP2 - 131+51'EB' - 54.8'RT
WP3 - 129+86'EB' - 49.0'RT
WP4 - 129+74'EB' - 69.7'LT
WP5 - 131+19'EB' - 76.4'LT
WP6 - 131+32'EB' - 54.1'RT

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 1 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 189	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024101-ST- STG 1.DWG
PLOT DATE : 4/6/2016 3:14 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- CONTROL CABINET & TEMPORARY BASE
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW
- TEMPORARY SIGNAL BASE
- DETECTION ZONE
- TRAFFIC SIGNAL HEAD (1, R, Y, G)

NOTE: ALL LENSES ARE 12-INCH.

N

INDUSTRIAL DRIVE

SPEED LIMIT 25

SPEED LIMIT 35

SPEED LIMIT 25

STH 16 WB

STH 16 EB

310 FT TO STOP BAR

220 FT TO STOP BAR

128+00WB

129+00WB

130+00WB

131+00WB

132+00WB

133+00WB

134+00WB

128+00EB

129+00EB

130+00EB

131+00EB

132+00EB

133+00EB

134+00EB

TSB1

TSB2

TSB3

TSB4

WP1

WP2

WP3

WP4

WP5

CB1

OH

TLE

R/W

RW

SIGN

FILLER CAP

DIX STREET

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: _____

PAGE 2 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 190	E

2

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- TEMPORARY SIGNAL BASE
- CONTROL CABINET & TEMPORARY BASE
- DETECTION ZONE
- TEMPORARY SIGNAL BASE
- TRAFFIC SIGNAL HEAD (1 R Y G)
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW

NOTE: ALL LENSES ARE 12-INCH.

N

INDUSTRIAL DRIVE

DIX STREET

SPEED LIMIT 25

SPEED LIMIT 35

SPEED LIMIT 25

STH 16 WB

STH 16 EB

310 FT TO STOP BAR

220 FT TO STOP BAR

128+00WB

129+00WB

130+00WB

131+00WB

132+00WB

133+00WB

134+00WB

128+00EB

129+00EB

130+00EB

131+00EB

132+00EB

133+00EB

134+00EB

16+00ID

15+00ID

14+00ID

15+00ID

WP1

WP3

WP4

WP5

WP6

TSB1

TSB2

TSB3

TSB4

CB1

OH

TLE

R/W

SIGN

FILLER CAP

ITEM - STATION - OFFSET
WP6 - 131+32'EB' - 54.1'RT

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------

PAGE 3 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 191 E

2

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- CONTROL CABINET & TEMPORARY BASE
- TEMPORARY SIGNAL BASE
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW
- DETECTION ZONE
- TRAFFIC SIGNAL HEAD (1 R Y G)

NOTE: ALL LENSES ARE 12-INCH.

INDUSTRIAL DRIVE

DIX STREET

SPEED LIMIT 25

SPEED LIMIT 35

WP1 WP2 WP3 WP4 WP5 WP6

TSB1 TSB2 TSB3 TSB4

CB1

14+00OLD

15+00OLD

13+00OLD

128+00WB 129+00WB 130+00WB 131+00WB 132+00WB 133+00WB 134+00WB

128+00EB 129+00EB 130+00EB 131+00EB 132+00EB 133+00EB 134+00EB

STH 16 WB

STH 16 EB

310 FT TO STOP BAR

220 FT TO STOP BAR

TLE

R/W

OH

FO

SIGN

FILLER CAP

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------

PAGE 4 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024101-ST- STG 3A.DWG PLOT DATE : 4/6/2016 3:50 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- CONTROL CABINET & TEMPORARY BASE
- TEMPORARY SIGNAL BASE
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW
- DETECTION ZONE
- TRAFFIC SIGNAL HEAD (1 R Y G)

NOTE: ALL LENSES ARE 12-INCH.

N

SPEED LIMIT 25

SPEED LIMIT 35

INDUSTRIAL DRIVE

DIX STREET

STH 16 WB

STH 16 EB

310 FT TO STOP BAR

220 FT TO STOP BAR

128+00WB 129+00WB 130+00WB 131+00WB 132+00WB 133+00WB 134+00WB

128+00EB 129+00EB 130+00EB 131+00EB 132+00EB 133+00EB 134+00EB

15+00LD 16+00LD 14+00LD 13+00LD

WP1 WP2 WP3 WP4 WP5 WP6

TSB1 TSB2 TSB3 TSB4

CB1

OH TLE RW R/W FO SIGN FILLER CAP

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 5 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024101-ST- STG 3B.DWG PLOT DATE : 4/6/2016 3:35 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

CONSTRUCTION NOTES:

1) TSB1 IS NOT USED FOR STAGE 4.

TRAFFIC SIGNAL LEGEND

- NONMETALLIC CONDUIT SCHEDULE 40 3-INCH
- OH — OVERHEAD SIGNAL CABLE
- LED LUMINAIRE OF EQUIVALANT LUMEN OUTPUT TO 250W HPS, MOUNT ON WOOD POLE
- CONTROL CABINET & TEMPORARY BASE
- TEMPORARY SIGNAL BASE
- TYPE 4 WOOD POLE
- SIGNAL HEAD, OVERHEAD MOUNT
- LANE USE ARROW
- DETECTION ZONE
- TRAFFIC SIGNAL HEAD (1 R Y G)

NOTE: ALL LENSES ARE 12-INCH.

N

SPEED LIMIT 25

SPEED LIMIT 35

INDUSTRIAL DRIVE

DIX STREET

STH 16 WB

STH 16 EB

220 FT TO STOP BAR

310 FT TO STOP BAR

128+00WB 129+00WB 130+00WB 131+00WB 132+00WB 133+00WB 134+00WB

128+00EB 129+00EB 130+00EB 131+00EB 132+00EB 133+00EB 134+00EB

WP1 WP3 WP4 WP5 WP6

TSB2 TSB3 TSB4

CB1

15+00ID 14+00ID 13+00ID

TLE R/W OH SAN TV FO SIGN FILLER CAP

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: _____

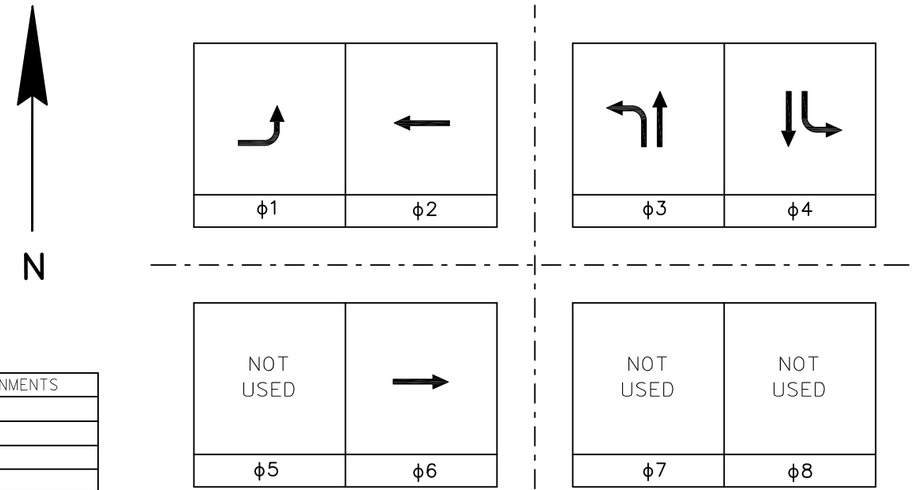
PAGE 6 OF 7

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024101-ST- STG 4.DWG
PLOT DATE : 4/6/2016 3:39 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	2,3	-
Ø2	5-7	R
Ø3	8-10	R
Ø4	11-13	R
Ø5		
Ø6	1-4	R
Ø7		
Ø8		
Ø2 PED		
Ø4 PED		
Ø6 PED		
Ø8 PED		

O.L. ASSIGNMENTS
OLA
OLB
OLC
OLD
OLE
OLF
OLG
OLH



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / ϕ	PHASE RECALL	PHASE ACTIVE
1				X
2	X	6	MIN.	X
3				X
4				X
5				
6	X	2	MIN.	X
7				
8				

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

PREEMPTION ASSIGNMENTS

PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	PHASE(S) CALLED	PREEMPTED APPROACH
1	RESERVED			
2	RESERVED			
3	EVP			
4	EVP			
5	EVP			
6	EVP			
7	NOT USED			
8	NOT USED			

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	
DETECTOR #(S)	11	21	22	31	32	41	42	61	
PHASE CALLED	1	2	2	3	3	4	4	6	
PHASE EXTENDED	1	2	2	3	3	4	4	6	
DISCONNECT TIME									
CALLING DELAY					2.0				
EXTENSION STRETCH									
LOOP FUNCTION									

19	17	23	21	27	25	31	29	DETECTOR INPUT	
								DETECTOR #(S)	
								PHASE CALLED	
								PHASE EXTENDED	
								DISCONNECT TIME	
								CALLING DELAY	
								EXTENSION STRETCH	
								LOOP FUNCTION	

DETECTOR INPUT	4	2	8	6	12	10	16	14	
DETECTOR #(S)									
PHASE CALLED									
PHASE EXTENDED									
DISCONNECT TIME									
CALLING DELAY									
EXTENSION STRETCH									
LOOP FUNCTION									

20	18	24	22	28	26	32	30	DETECTOR INPUT	
								DETECTOR #(S)	
								PHASE CALLED	
								PHASE EXTENDED	
								DISCONNECT TIME	
								CALLING DELAY	
								EXTENSION STRETCH	
								LOOP FUNCTION	

ZONE 22 TO BE ACTIVE FOR STAGES 3A & 3B ONLY.
ZONES 32 & 42 TO BE ACTIVE FOR STAGE 4 ONLY.

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

CENTRAL SYSTEM
LOCATION OF MASTER CONTROLLER NO:
SIGNAL SYSTEM #:

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PROJECT NO:1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | TEMPORARY SEQUENCE OF OPERATIONS | SHEET 195 | E

FILE NAME :G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024001-SEQ.DWG PLOT DATE : 4/1/2016 10:48 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ********* WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1) THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 3 DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.

2) THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

3) LIGHTING SHOWN IN GRAYSHADE FOR PLAN CLARITY.

LEGEND

- CONTROL CABINET
- PULL BOX NON-CONDUCTIVE 24" X 42"
- PULL BOX NON-CONDUCTIVE 24" X 36"
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- EVP DETECTOR HEAD
- EVP DESIGNATOR
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- MONOTUBE BASE, POLE, 15'-30' ARM
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH, UNLESS NOTED OTHERWISE
- PEDESTRIAN COUNTDOWN TIMER 16-INCH
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- STOP SIGN WITH POST

PEDESTRIAN CROSSING SIGN SUMMARY		
BASE	SIGN CODE	SIGN TO FACE
SB1	R10-3EL	EAST
SB2	R10-3ER	NORTH
SB3	R10-3EL	NORTH
SB4	R10-3EL	EAST
SB7	R10-3EL	WEST
SB8	R10-3ER	SOUTH
SB9	R10-3EL	SOUTH
SB10	R10-3EL	WEST

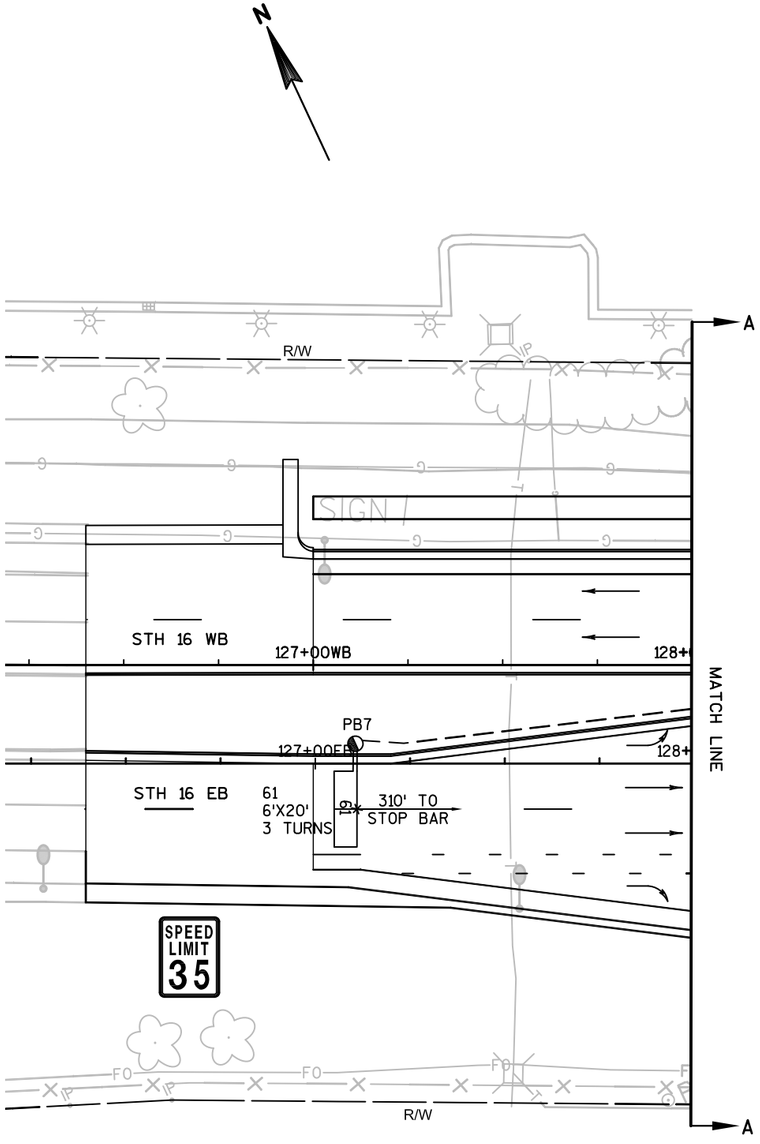
TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

REGION CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: _____

PAGE 1 OF 4

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC SIGNAL PLAN	SHEET 196 E

2



LEGEND

- PULL BOX NON-CONDUCTIVE 24" X 36"
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

REGION CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------

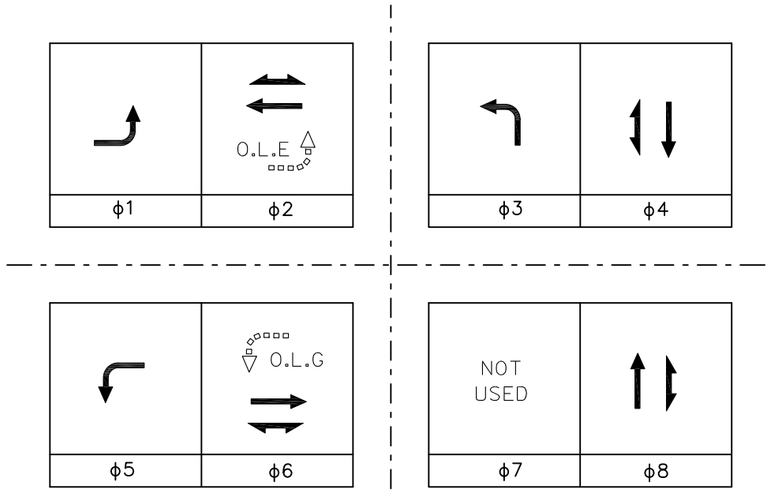
PAGE 2 OF 4

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC SIGNAL PLAN	SHEET 197	E

	HEAD NUMBERS	FLASH
Ø1	4-6	R
Ø2	7-9	R
Ø3	14,15	R
Ø4	16-18	R
Ø5	10-12	R
Ø6	1-3	R
Ø7		
Ø8	13-15	R
Ø2 PED	2A,2B	
Ø4 PED	4A,4B	
Ø6 PED	6A,6B	
Ø8 PED	8A,8B	

O.L.	HEAD NUMBERS	FLASH	O.L. ASSIGNMENTS
OLA			
OLB			
OLC			
OLD			
OLE	4-6	R	1 + 2
OLF			
OLG	10-12	R	5 + 6
OLH			

N



LEGEND



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / ϕ	PHASE RECALL	PHASE ACTIVE
1				X
2	X	6	MIN.	X
3				X
4				X
5				X
6	X	2	MIN.	X
7				
8				X

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

CENTRAL SYSTEM
LOCATION OF MASTER CONTROLLER NO:
SIGNAL SYSTEM #:

PREEMPTION ASSIGNMENTS

PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	PHASE(S) CALLED	PREEMPTED APPROACH
1	RESERVED			
2	RESERVED			
3	EVP	A	1&6	EB
4	EVP	B	2&5	WB
5	EVP	C	3&8	NB
6	EVP	D	4	SB
7	NOT USED			
8	NOT USED			

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	21	31	33	41	43	45	51
PHASE CALLED	1	2	3	3	4	4	4	5
PHASE EXTENDED	1,2	2	3	3,8	4	4	4	5,6
DISCONNECT TIME								
CALLING DELAY						2.0		
EXTENSION STRETCH			2.2					
LOOP FUNCTION								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)	61	81						
PHASE CALLED	6	8						
PHASE EXTENDED	6	8						
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	12		32	34	42	44		52
PHASE CALLED	1		3	3	4	4		5
PHASE EXTENDED	1,2		3,8	3,8	4	4		5,6
DISCONNECT TIME								
CALLING DELAY				2.0				
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)		82						
PHASE CALLED		8						
PHASE EXTENDED		8						
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PROJECT NO: 1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | SEQUENCE OF OPERATIONS | SHEET 198 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024001-SEQ.DWG
PLOT DATE : 4/6/2016 11:05 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : *********
WISDOT/CADDS SHEET 42

STH 16 & INDUSTRIAL DRIVE / DIX STREET NO. 14 CABLE					
CABLE RUN	CABLE	HEAD NUMBER	MOVEMENT	LENS	CONDUCTOR COLOR
CABINET TO SB1	7/C	2	EB	R	RED
				Y	ORG
				G	GRN
		3	EB	R	RED
				Y	ORG
				G	GRN
		6B	EB PED	W	BLU
				DW	BLK
		--	NB PED	BUTTON	WHT/BLK
CABINET TO SB2	12/C	13	NB	R	RED
				Y	ORG
				G	GRN
		17	SB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		8A	NB PED	W	BLU
				DW	BLK
		--	EB PED	BUTTON	WHT/BLK
CABINET TO SB3	7/C	18	SB	R	RED
				Y	ORG
				G	GRN
		--	EB PED	R	WHT/BLK
CABINET TO SB4	7/C	6A	EB PED	W	RED
				DW	ORG
		4A	SB PED	W	BLU
				DW	BLK
		--	SB PED	BUTTON	WHT/BLK
CABINET TO SB5	12/C	1	EB	R	RED
				Y	ORG
				G	GRN
		11	WB LT	◂R	RED/BLK
				◂Y	ORG/BLK
				◂FY	BLU/BLK
				◂G	GRN/BLK
CABINET TO SB6	12/C	4	EB LT	◂R	RED
				◂Y	ORG
				◂FY	BLU
				◂G	GRN
		12	WB LT	◂R	RED/BLK
				◂Y	ORG/BLK
				◂FY	BLU/BLK
				◂G	GRN/BLK
CABINET TO SB7	7/C	8	WB	R	RED
				Y	ORG
				G	GRN
		9	WB	R	RED
				Y	ORG
				G	GRN
		2A	WB PED	W	BLU
				DW	BLK
		--	SB PED	BUTTON	WHT/BLK

STH 16 & INDUSTRIAL DRIVE / DIX STREET NO. 14 CABLE					
CABLE RUN	CABLE	HEAD NUMBER	MOVEMENT	LENS	CONDUCTOR COLOR
CABINET TO SB8	12/C	14	WB	R	RED
				Y	ORG
				G	GRN
				◂Y	BLK/WHT
				◂G	BLU/BLK
		16	WB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		4B	SB PED	W	BLU
				DW	BLK
		--	WB PED	BUTTON	WHT/BLK
CABINET TO SB9	7/C	15	NB	R	RED
				Y	ORG
				◂Y	BLU
				◂G	BLK
				G	GRN
		--	WB PED	R	WHT/BLK
CABINET TO SB10	7/C	2B	WB PED	W	RED
				DW	ORG
		8B	NB PED	W	BLU
				DW	BLK
		--	NB PED	BUTTON	WHT/BLK
CABINET TO SB11	12/C	7	WB	R	RED
				Y	ORG
				G	GRN
		5	EB LT	◂R	RED/BLK
				◂Y	ORG/BLK
				◂FY	BLU/BLK
				◂G	GRN/BLK
CABINET TO SB12	12/C	6	EB LT	◂R	RED
				◂Y	ORG
				◂FY	BLU
				◂G	GRN
		10	WB LT	◂R	RED/BLK
				◂Y	ORG/BLK
				◂FY	BLU/BLK
				◂G	GRN/BLK

STH 16 & INDUSTRIAL DRIVE / DIX STREET LIGHTING CABLING CHART TYPE UF 12-2 AWG GROUNDED		
CABLE	CABLE RUN	LUMINAIRE LOCATION
2/C WITH GROUND	CABINET TO SB3	SW QUADRANT
	SB3 TO SB6	EAST MEDIAN
	CABINET TO SB12	WEST MEDIAN
	SB12 TO SB9	NE QUADRANT

STH 16 & INDUSTRIAL DRIVE / DIX STREET EMERGENCY VEHICLE PREEMPT CABLE, CONFIRMATION LIGHT 14-2 AWG CABLE	
FROM	TO
CABINET	SB1 ("A")
CABINET	SB7 ("B")
CABINET	SB9 ("C")
CABINET	SB3 ("D")

COLOR LEGEND

RED = RED
ORANGE = ORG
GREEN = GRN
BLACK = BLK
BLUE = BLU
WHITE = WHT

TRAFFIC CONTROL SIGNAL
STH 16 & INDUSTRIAL DR. / DIX ST.
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING INC
REVISED BY: --------

CONSTRUCTION NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

2) THE LOCATION OF SIGNAL EQUIPMENT IS BASED ON FIELD SURVEY. NO TRAFFIC SIGNAL PLAN AS-BUILT DRAWINGS WERE LOCATED.

LEGEND

- CONTROL CABINET AND CONCRETE BASE
- ABANDON EXISTING CONDUIT AND WIRING
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- PULL BOX, 24" X 36"
- TRAFFIC SIGNAL HEAD

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR ABANDONED

TRAFFIC SIGNAL REMOVAL MAJOR ITEMS SUMMARY	
3	PEDESTAL BASES
-	TRANSFORMER BASES
8	TRAFFIC SIGNAL/LIGHTING POLES
10	TRAFFIC SIGNAL HEADS
1	TRAFFIC SIGNAL CABINET

TRAFFIC CONTROL SIGNAL
STH 16 & STH 73
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PAGE 1 of 1

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 200	E

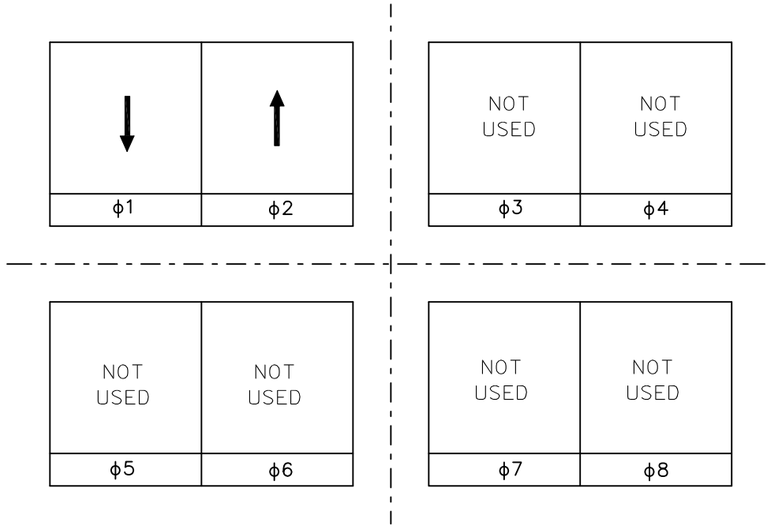
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024001-SR.DWG PLOT DATE : 4/5/2016 1:48 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	TRAILER	R
Ø2	TRAILER	R
Ø3		
Ø4		
Ø5		
Ø6		
Ø7		
Ø8		
Ø2 PED		
Ø4 PED		
Ø6 PED		
Ø8 PED		

O.L.	ASSIGNMENTS
OLA	
OLB	
OLC	
OLD	
OLE	
OLF	
OLG	
OLH	





LEGEND



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / ϕ	PHASE RECALL	PHASE ACTIVE
1	X		X	X
2	X		X	X
3				
4				
5				
6				
7				
8				

*SIGNAL TO OPERATE IN REST IN RED MODE.

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE DOT LIGHTING CABINET	

TRAFIC SIGNAL TIMING PLAN

PHASE	DURATION (SEC)					RECALL
	MIN GREEN	MAX GREEN	PASSAGE	Y	R	
1	20	35	2.5	3.0	20.0	*
2	20	35	2.5	3.0	20.0	

* SIGNAL TO OPERATE IN REST IN RED MODE. SPECIFIED ALL RED INTERVALS SHALL STILL TIME FOR THEIR FULL DURATION BEFORE ANOTHER PHASE MAY TIME.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	21						
PHASE CALLED	1	2						
PHASE EXTENDED	1	2						
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								DETECTOR #(S)
								PHASE CALLED
								PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								DETECTOR #(S)
								PHASE CALLED
								PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM
LOCATION OF MASTER CONTROLLER NO:
SIGNAL SYSTEM #:

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 16 & STH 73
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------

PROJECT NO: 1401-02-71	STH 73	COUNTY: COLUMBIA	TEMPORARY SEQUENCE OF OPERATIONS	SHEET 201	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024001-SEQ.DWG
PLOT DATE : 4/1/2016 10:48 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : **********
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1) THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 3 DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.

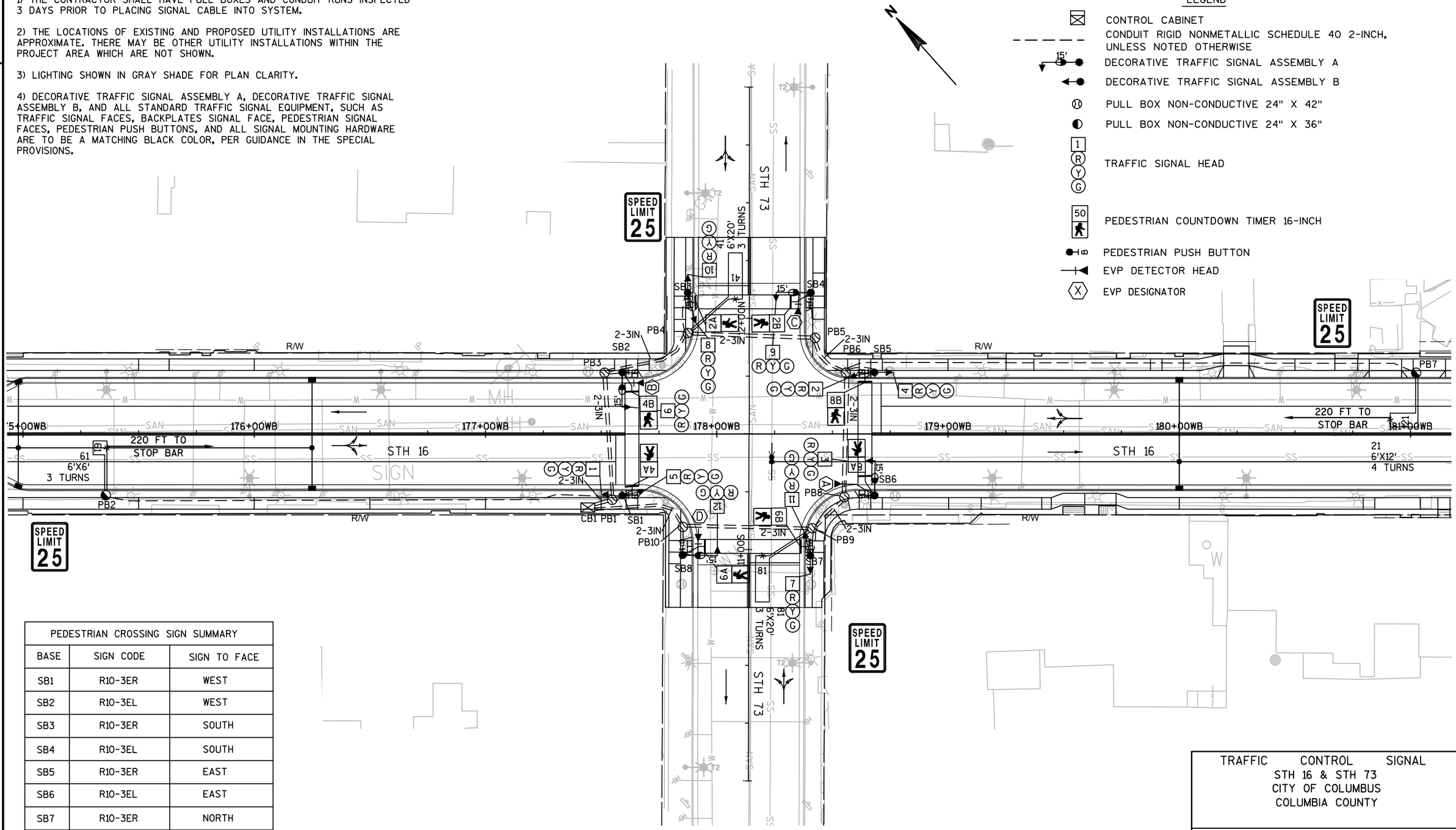
2) THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

3) LIGHTING SHOWN IN GRAY SHADE FOR PLAN CLARITY.

4) DECORATIVE TRAFFIC SIGNAL ASSEMBLY A, DECORATIVE TRAFFIC SIGNAL ASSEMBLY B, AND ALL STANDARD TRAFFIC SIGNAL EQUIPMENT, SUCH AS TRAFFIC SIGNAL FACES, BACKPLATES SIGNAL FACE, PEDESTRIAN SIGNAL FACES, PEDESTRIAN PUSH BUTTONS, AND ALL SIGNAL MOUNTING HARDWARE ARE TO BE A MATCHING BLACK COLOR, PER GUIDANCE IN THE SPECIAL PROVISIONS.

LEGEND

- CONTROL CABINET
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH, UNLESS NOTED OTHERWISE
- DECORATIVE TRAFFIC SIGNAL ASSEMBLY A
- DECORATIVE TRAFFIC SIGNAL ASSEMBLY B
- PULL BOX NON-CONDUCTIVE 24" X 42"
- PULL BOX NON-CONDUCTIVE 24" X 36"
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN COUNTDOWN TIMER 16-INCH
- PEDESTRIAN PUSH BUTTON
- EVP DETECTOR HEAD
- EVP DESIGNATOR



PEDESTRIAN CROSSING SIGN SUMMARY		
BASE	SIGN CODE	SIGN TO FACE
SB1	R10-3ER	WEST
SB2	R10-3EL	WEST
SB3	R10-3ER	SOUTH
SB4	R10-3EL	SOUTH
SB5	R10-3ER	EAST
SB6	R10-3EL	EAST
SB7	R10-3ER	NORTH
SB8	R10-3EL	NORTH

TRAFFIC CONTROL SIGNAL
STH 16 & STH 73
CITY OF COLUMBUS
COLUMBIA COUNTY

REGION CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY: --------
PAGE 1 OF 3

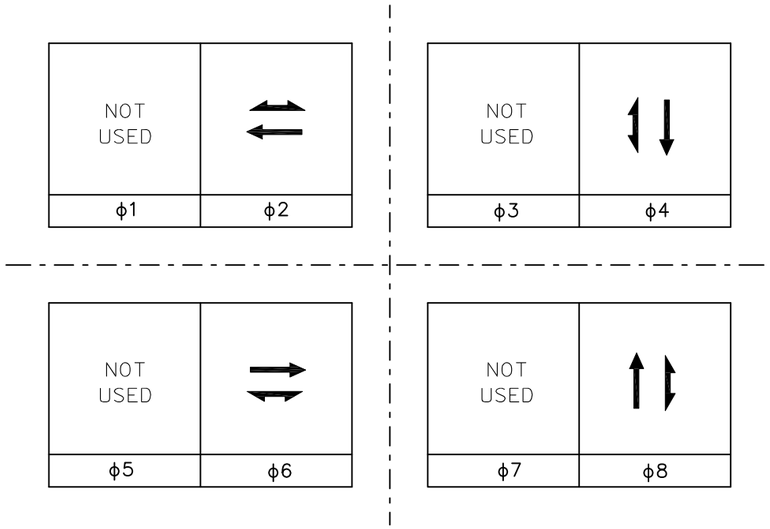
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC SIGNAL PLAN	SHEET 202 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024201-SP.DWG PLOT DATE : 4/6/2016 11:08 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4-6	R
Ø3		
Ø4	10-12	R
Ø5		
Ø6	1-3	R
Ø7		
Ø8	7-9	R
Ø2 PED	2A,2B	
Ø4 PED	4A,4B	
Ø6 PED	6A,6B	
Ø8 PED	8A,8B	

O.L. ASSIGNMENTS
OLA
OLB
OLC
OLD
OLE
OLF
OLG
OLH

N



LEGEND



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / ϕ	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN.	X
3				
4		8		X
5				
6	X	2	MIN.	X
7				
8		4		X

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

CENTRAL SYSTEM
LOCATION OF MASTER CONTROLLER NO:
SIGNAL SYSTEM #:

PREEMPTION ASSIGNMENTS

PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	PHASE(S) CALLED	PREEMPTED APPROACH
1	RESERVED			
2	RESERVED			
3	EVP	A	6	EB
4	EVP	B	2	WB
5	EVP	C	8	NB
6	EVP	D	4	SB
7	NOT USED			
8	NOT USED			

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	21	41	61	81				
PHASE CALLED	2	4	6	8				
PHASE EXTENDED	2	4	6	8				
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								DETECTOR #(S)
								PHASE CALLED
								PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								DETECTOR #(S)
								PHASE CALLED
								PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TRAFFIC CONTROL SIGNAL
STH 16 & STH 73
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING
REVISED BY:

PROJECT NO: 1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | SEQUENCE OF OPERATIONS | SHEET 203 | E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNALS\024001-SEQ.DWG PLOT DATE : 4/6/2016 11:05 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ********* WISDOT/CADDS SHEET 42

2

STH 16 & STH 73 NO. 14 CABLE					
CABLE RUN	CABLE	HEAD NUMBER	MOVEMENT	LENS	CONDUCTOR COLOR
CABINET TO SB1	12/C	1	EB	R	RED
				Y	ORG
				G	GRN
		5	WB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		4A	SB PED	W	BLU
				DW	BLK
		--	SB PED	BUTTON	WHT/BLK
CABINET TO SB2	7/C	6	NB	R	RED
				Y	ORG
				G	GRN
		4B	SB PED	W	BLU
				DW	BLK
		--	SB PED	BUTTON	WHT/BLK
CABINET TO SB3	12/C	8	NB	R	RED
				Y	ORG
				G	GRN
		10	SB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		2A	WB PED	W	BLU
				DW	BLK
		--	WB PED	BUTTON	WHT/BLK
CABINET TO SB4	7/C	9	NB	R	RED
				Y	ORG
				G	GRN
		2B	WB PED	W	BLU
				DW	BLK
		--	WB PED	BUTTON	WHT/BLK
CABINET TO SB5	12/C	2	EB	R	RED
				Y	ORG
				G	GRN
		4	WB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		8B	NB PED	W	BLU
				DW	BLK
		--	NB PED	BUTTON	WHT/BLK

STH 16 & STH 73 NO. 14 CABLE					
CABLE RUN	CABLE	HEAD NUMBER	MOVEMENT	LENS	CONDUCTOR COLOR
CABINET TO SB6	7/C	3	EB	R	RED
				Y	ORG
				G	GRN
		8A	NB PED	W	BLU
				DW	BLK
		--	NB PED	BUTTON	WHT/BLK
CABINET TO SB7	12/C	7	NB	R	RED
				Y	ORG
				G	GRN
		11	SB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		6B	EB PED	W	BLU
				DW	BLK
		--	EB PED	BUTTON	WHT/BLK
CABINET TO SB8	7/C	12	SB	R	RED
				Y	ORG
				G	GRN
		6A	EB PED	W	BLU
				DW	BLK
		--	EB PED	BUTTON	WHT/BLK

COLOR LEGEND
RED = RED
ORANGE = ORG
GREEN = GRN
BLACK = BLK
BLUE = BLU
WHITE = WHT

STH 16 & STH 73 LIGHTING CABLING CHART TYPE UF 12-2 AWG GROUNDED		
CABLE	CABLE RUN	LUMINAIRE LOCATION
2/C WITH GROUND	CABINET TO SB8	SW QUADRANT
	SB8 TO SB6	SE QUADRANT
	CABINET TO SB2	NW QUADRANT
	SB2 TO SB4	NE QUADRANT

STH 16 & STH 73 EMERGENCY VEHICLE PREEMPT CABLE, CONFIRMATION LIGHT 14-2 AWG CABLE	
FROM	TO
CABINET	SB6 ("A")
CABINET	SB2 ("B")
CABINET	SB4 ("C")
CABINET	SB8 ("D")

TRAFFIC CONTROL SIGNAL
STH 16 & STH 73
CITY OF COLUMBUS
COLUMBIA COUNTY

MUNICIPAL CONTACT: JASON LIETHA
DESIGNED BY: KL ENGINEERING INC
REVISED BY: --------

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CABLE ROUTING PLAN	SHEET 204 E

FILE NAME: G:\ ORIGINATOR: KL ENGINEERING, INC. ORIG. DATE: REV. DATE: PRINT DATE: April 6, 2016

2

2

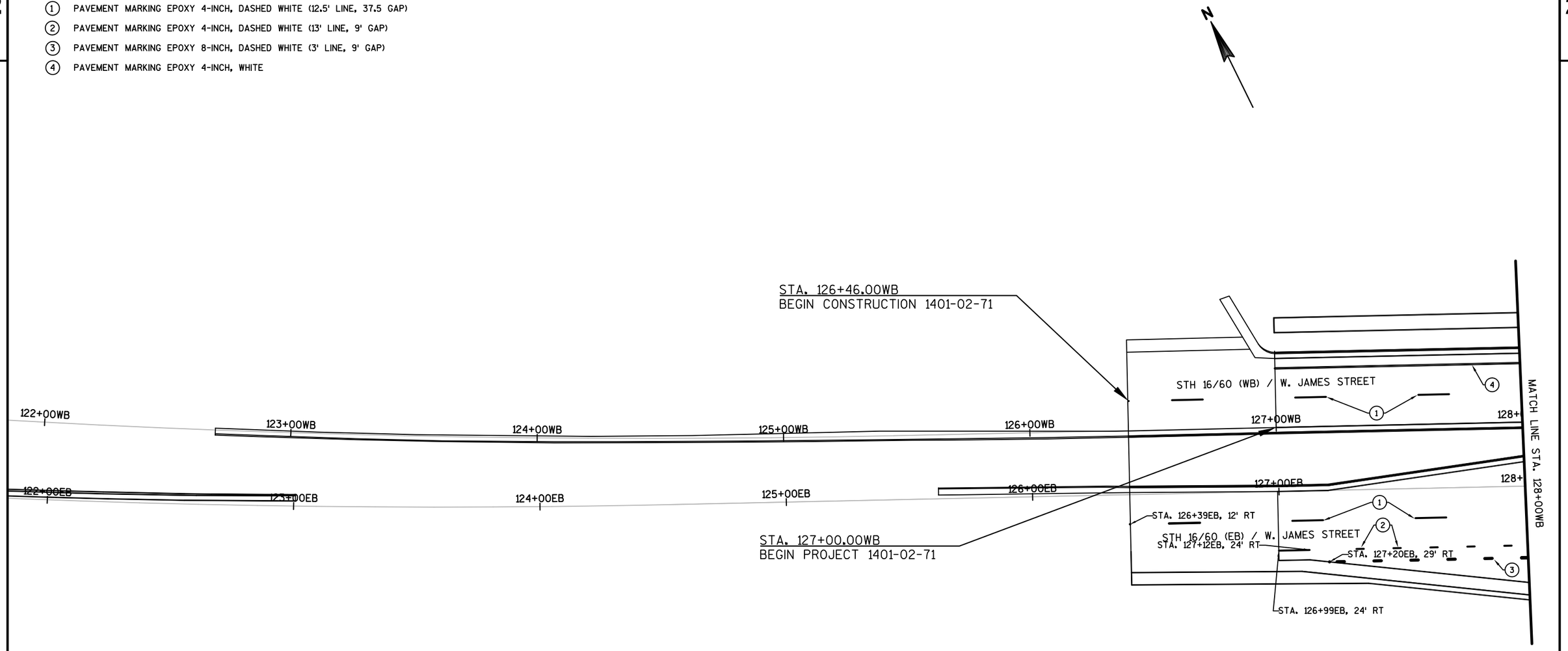
PAVEMENT MARKING LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (12.5' LINE, 37.5 GAP)

(2) PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (13' LINE, 9' GAP)

(3) PAVEMENT MARKING EPOXY 8-INCH, DASHED WHITE (3' LINE, 9' GAP)

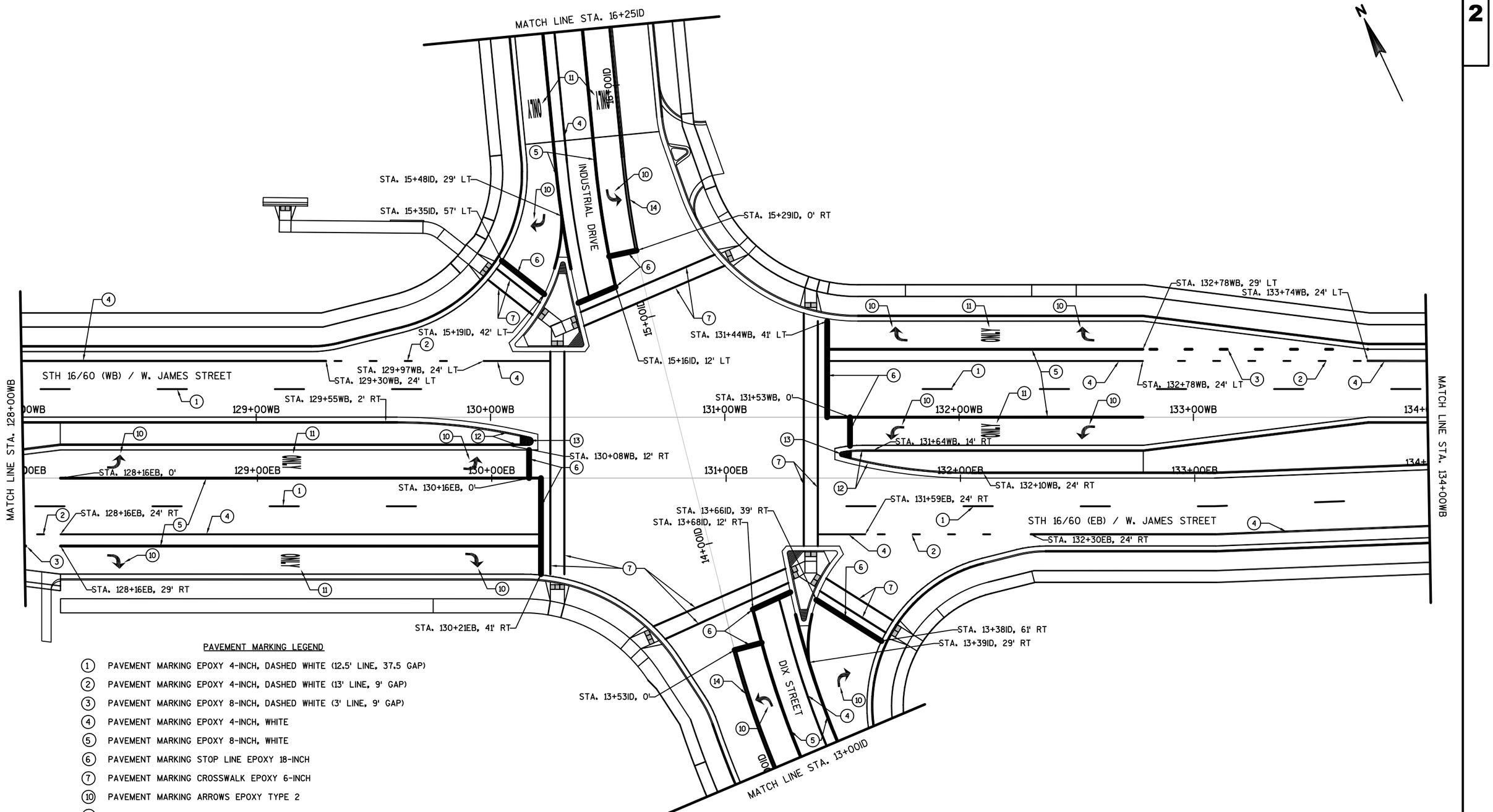
(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE



NOTE: REMARK ANY MARKING THAT IS REMOVED AS PART OF THE TRAFFIC CONTROL STAGING OUTSIDE OF PROJECT LIMITS.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 205	E

2



PAVEMENT MARKING LEGEND

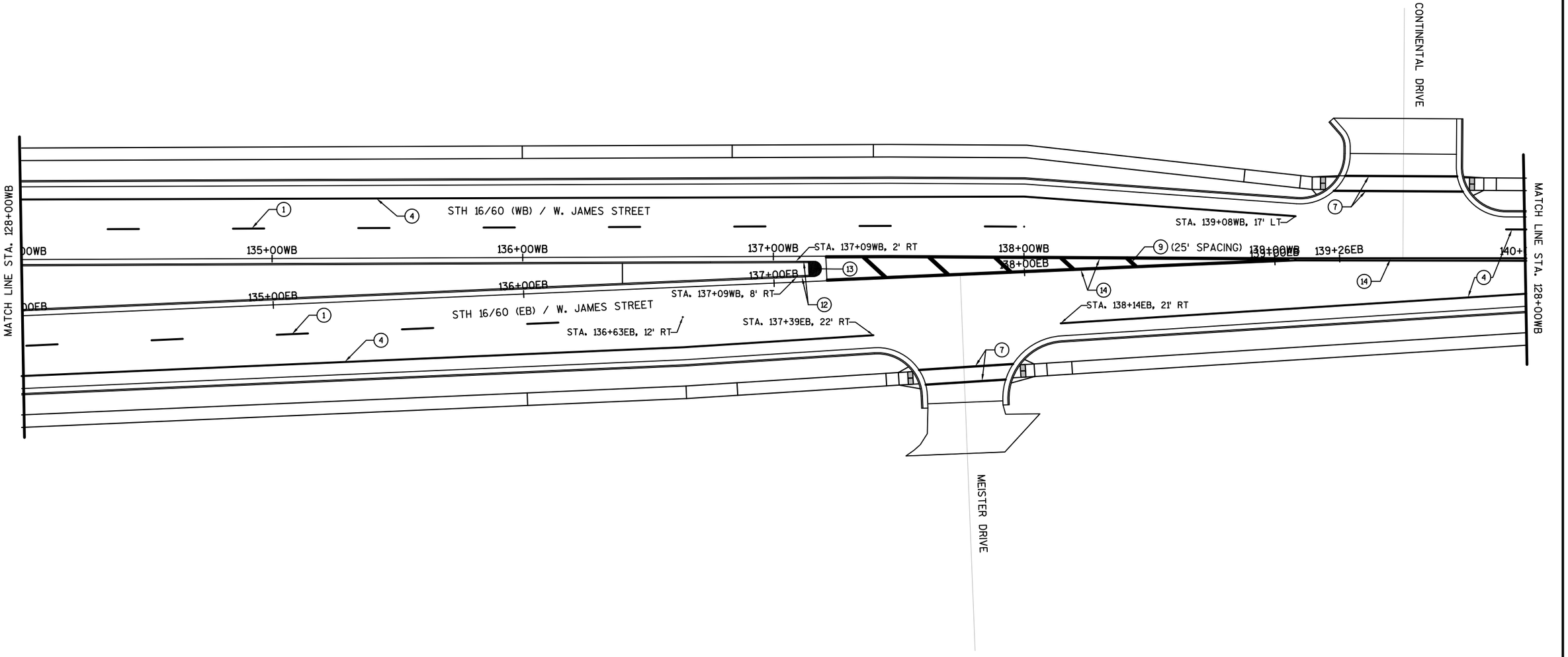
1. PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (12.5' LINE, 37.5 GAP)
2. PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (13' LINE, 9' GAP)
3. PAVEMENT MARKING EPOXY 8-INCH, DASHED WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE
5. PAVEMENT MARKING EPOXY 8-INCH, WHITE
6. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
7. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
10. PAVEMENT MARKING ARROWS EPOXY TYPE 2
11. PAVEMENT MARKING WORDS EPOXY
12. PAVEMENT MARKING CURB EPOXY YELLOW
13. PAVEMENT MARKING ISLAND NOSE EPOXY

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 206	E

2

PAVEMENT MARKING LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (12.5' LINE, 37.5 GAP)
(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(9) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH
(12) PAVEMENT MARKING CURB EPOXY YELLOW
(13) PAVEMENT MARKING ISLAND NOSE EPOXY
(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 207	E

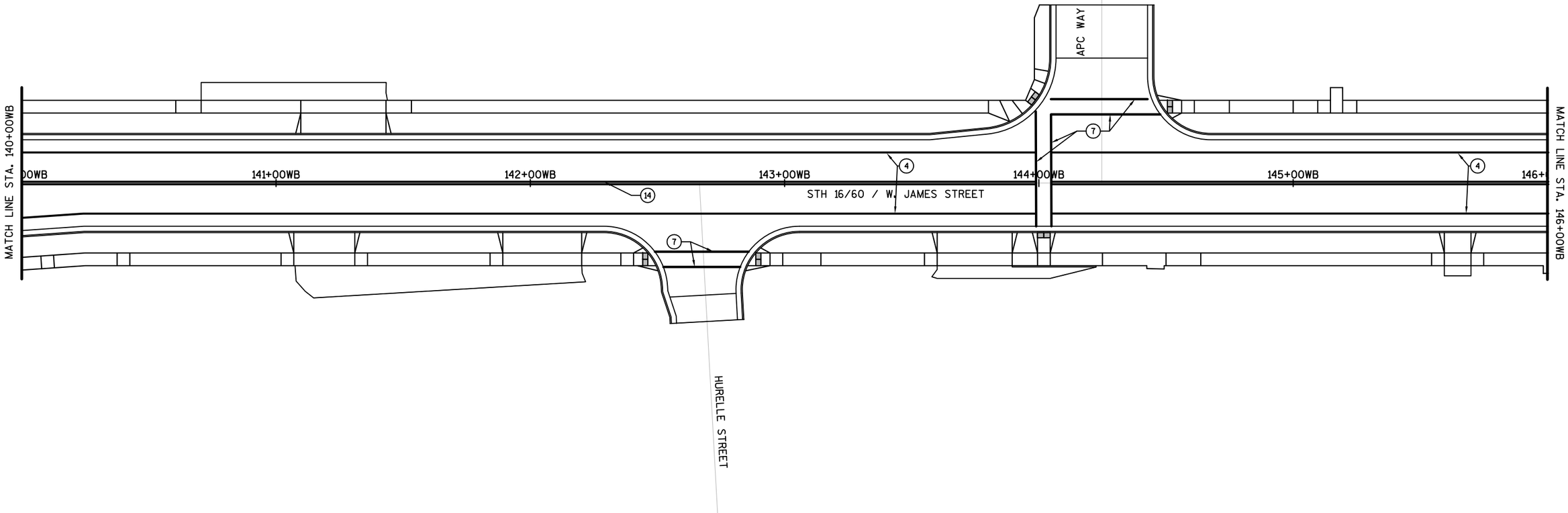
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT MARKING\024501_PM.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 5/2/2016 9:26 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 208	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT MARKING\024501_PM.DWG
LAYOUT NAME - SHEET - (4)

PLOT DATE : 5/2/2016 9:26 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

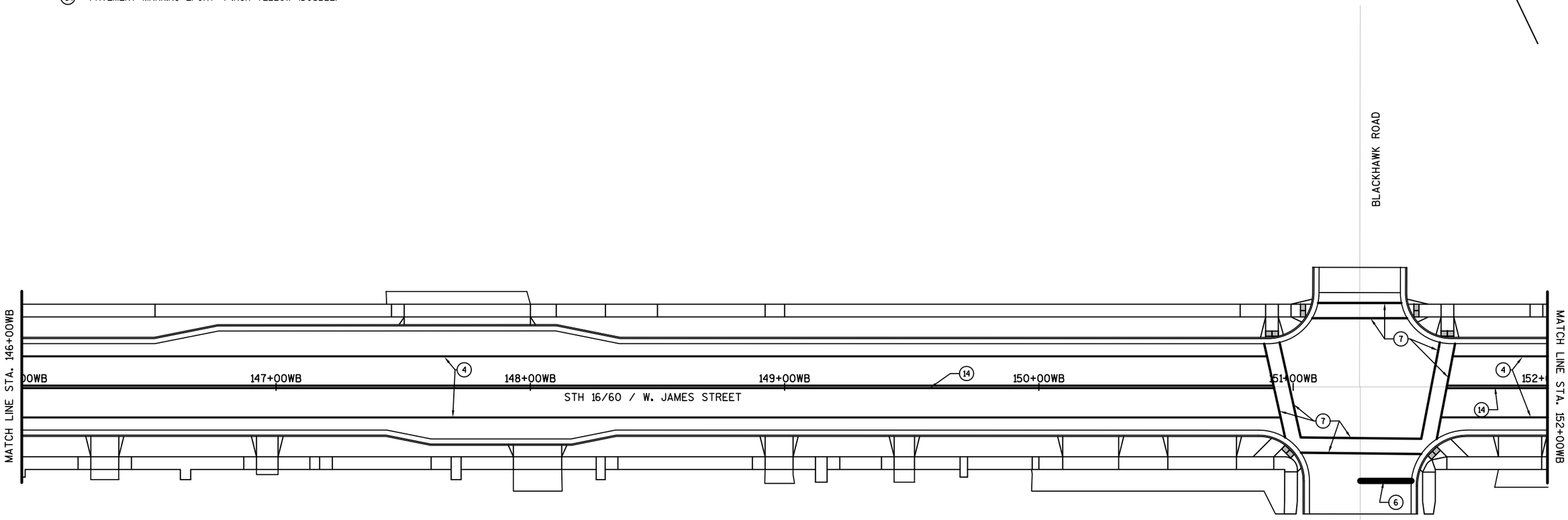
PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH

(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 209	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT MARKING\024501_PM.DWG
LAYOUT NAME - SHEET - (5)

PLOT DATE : 5/2/2016 9:26 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

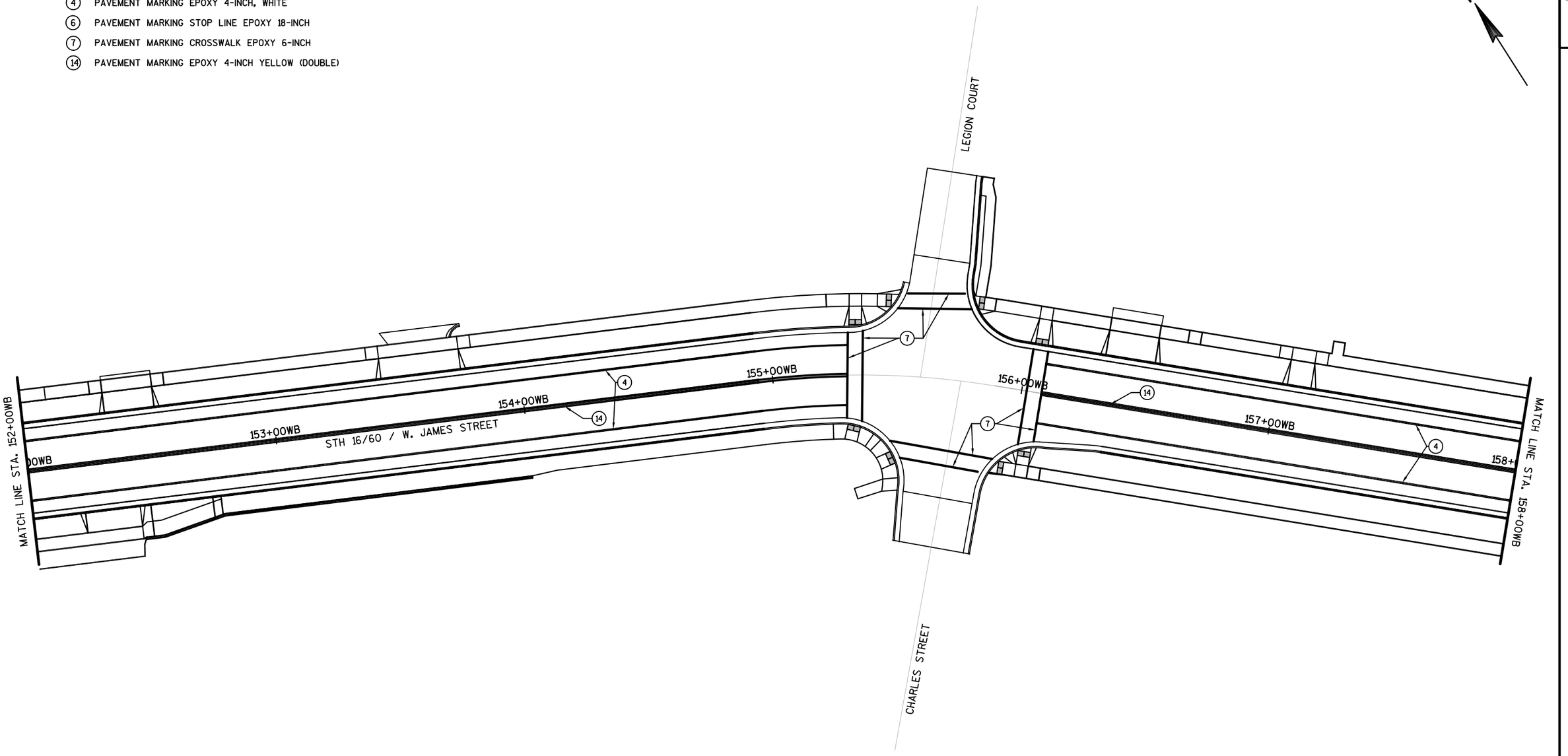
PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH

(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



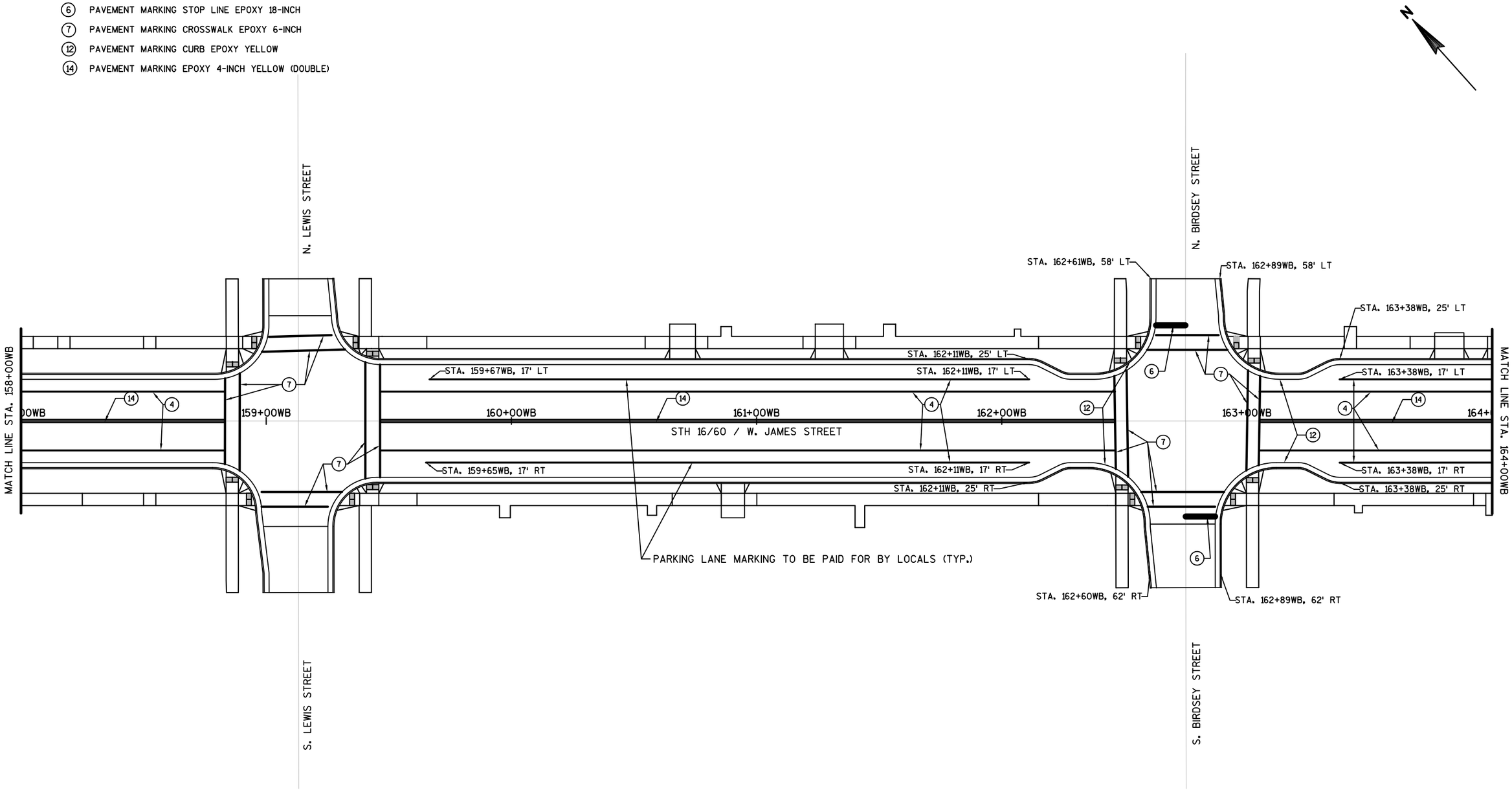
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 210	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT MARKING\024501_PM.DWG
LAYOUT NAME - SHEET - (6)
PLOT DATE : 5/2/2016 9:26 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(12) PAVEMENT MARKING CURB EPOXY YELLOW
(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

NOTE: CURB MARKING TO BE PAID FOR BY LOCALS



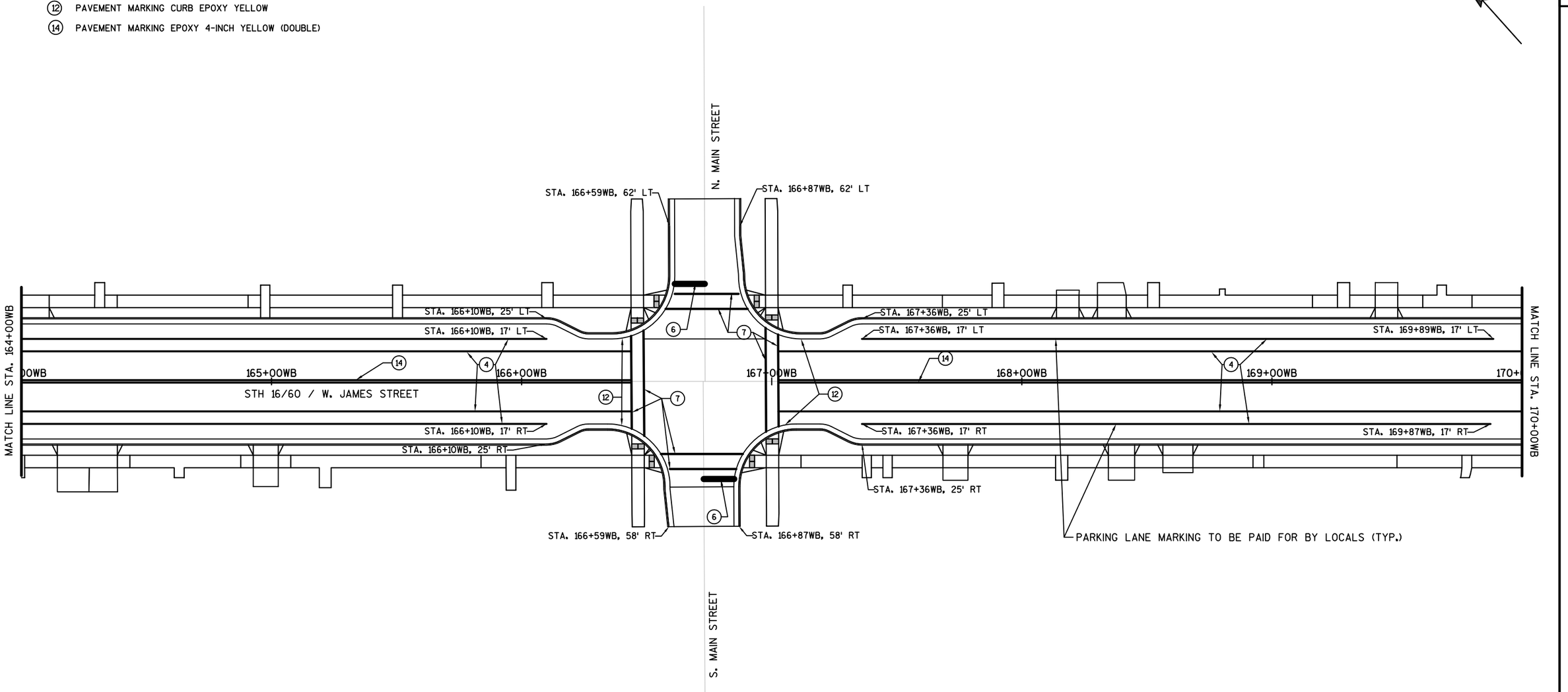
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 211	E

2

PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(12) PAVEMENT MARKING CURB EPOXY YELLOW
(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

NOTE: CURB MARKING TO BE PAID FOR BY LOCALS

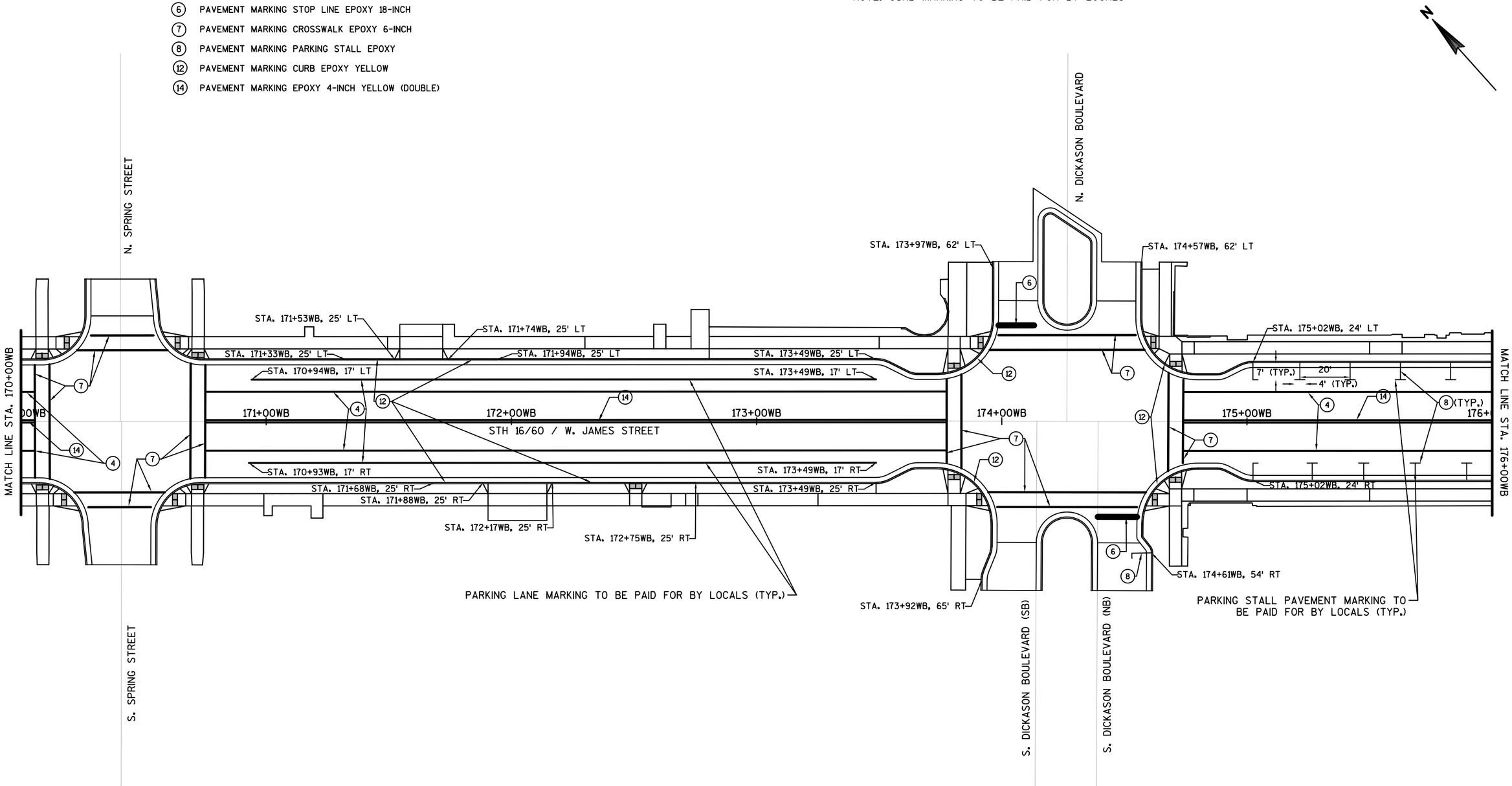


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 212	E

PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(8) PAVEMENT MARKING PARKING STALL EPOXY
(12) PAVEMENT MARKING CURB EPOXY YELLOW
(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

NOTE: CURB MARKING TO BE PAID FOR BY LOCALS

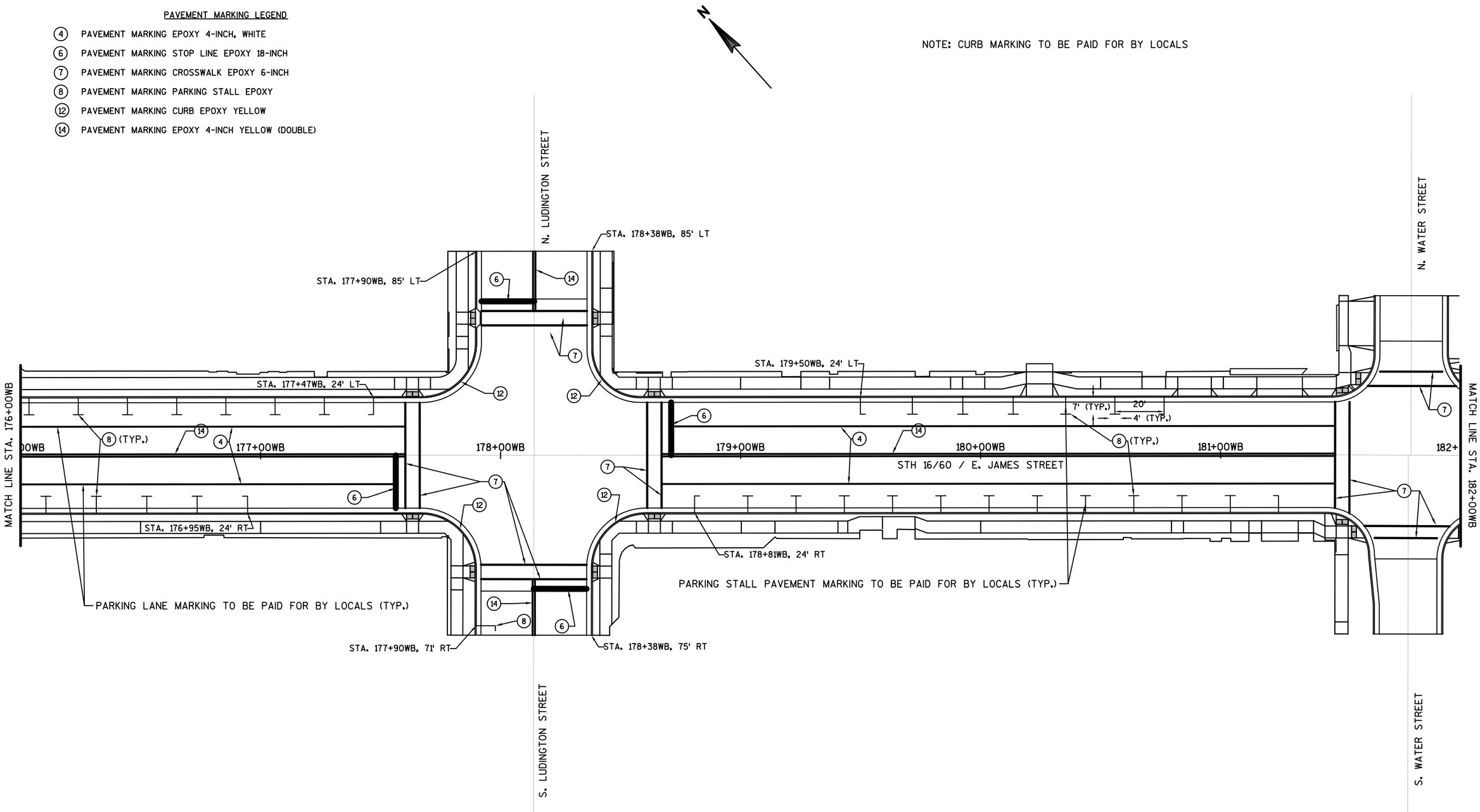


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 213 E

PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(8) PAVEMENT MARKING PARKING STALL EPOXY
(12) PAVEMENT MARKING CURB EPOXY YELLOW
(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

NOTE: CURB MARKING TO BE PAID FOR BY LOCALS



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 214 E

2

PAVEMENT MARKING LEGEND

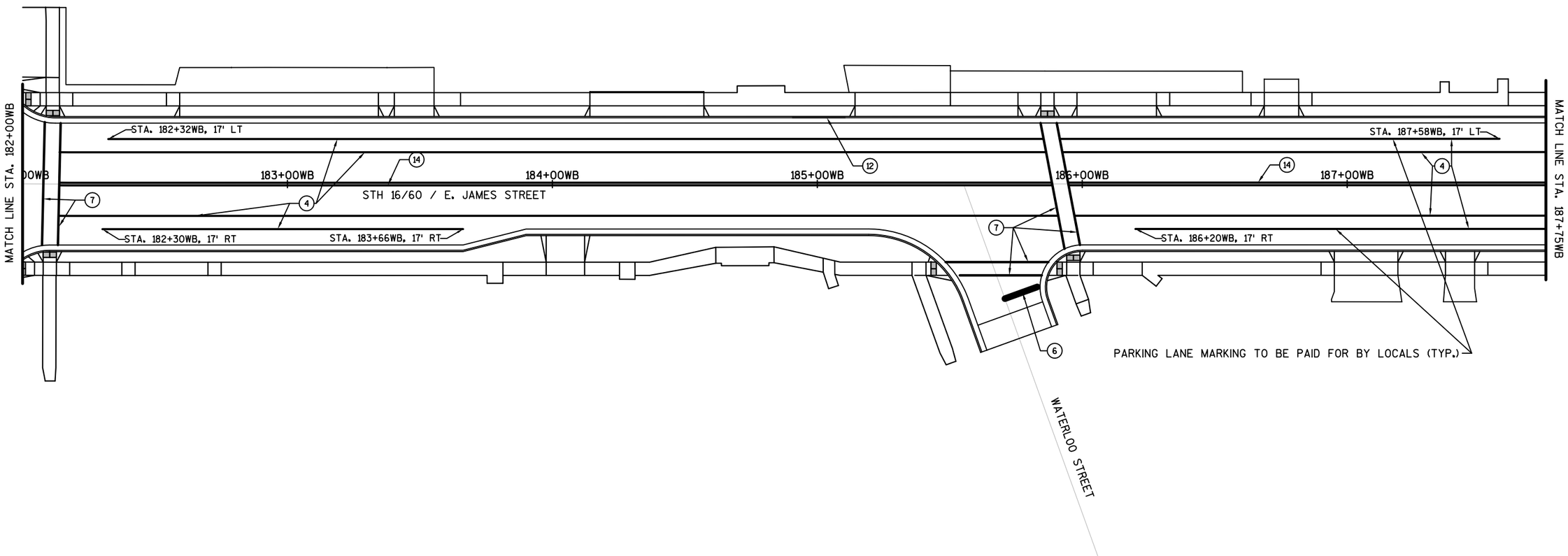
(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH

(7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH

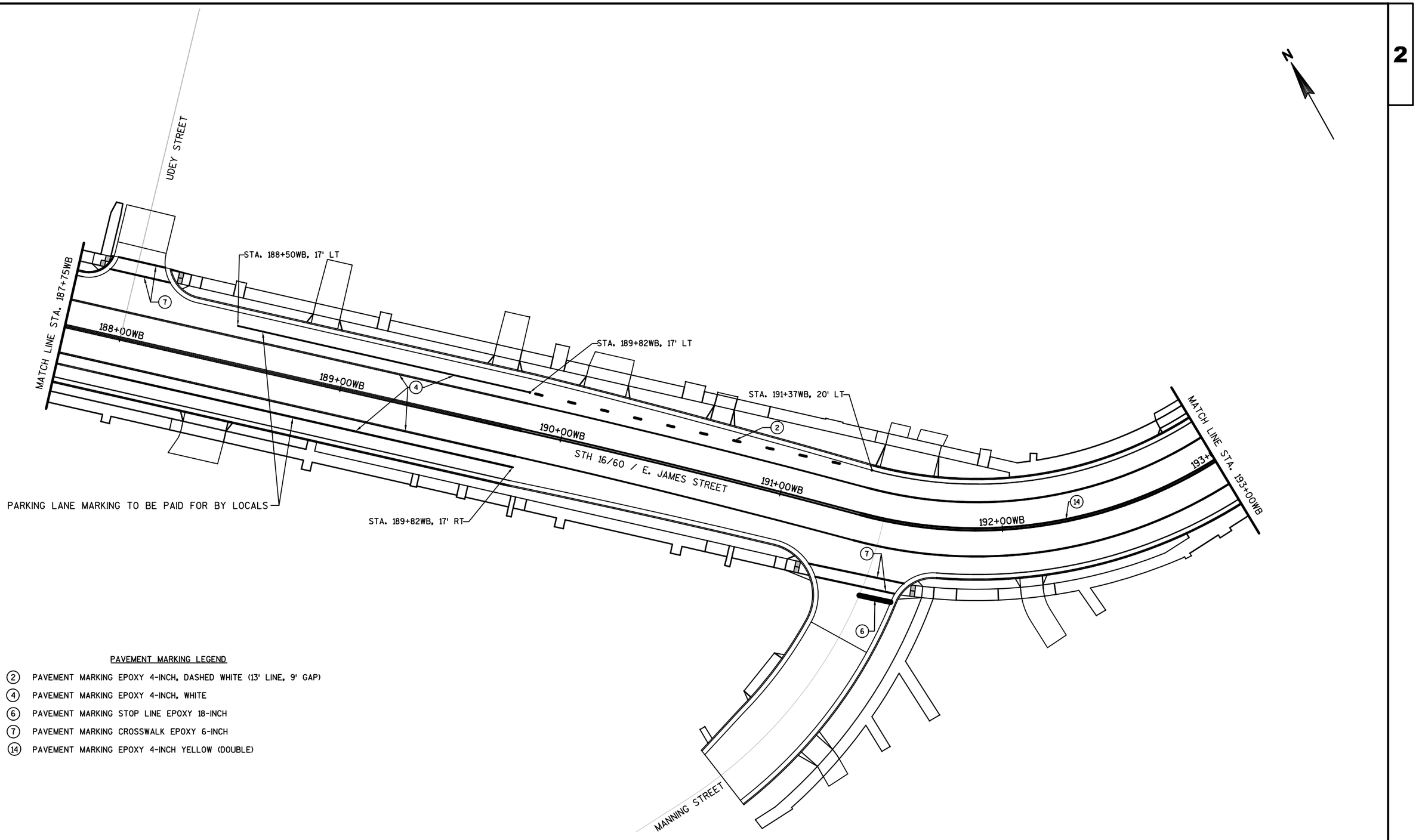
(12) PAVEMENT MARKING CURB EPOXY YELLOW

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 215	E

2



PAVEMENT MARKING LEGEND

- (2) PAVEMENT MARKING EPOXY 4-INCH, DASHED WHITE (13' LINE, 9' GAP)
- (4) PAVEMENT MARKING EPOXY 4-INCH, WHITE
- (6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
- (7) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
- (14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 216	E

PAVEMENT MARKING LEGEND

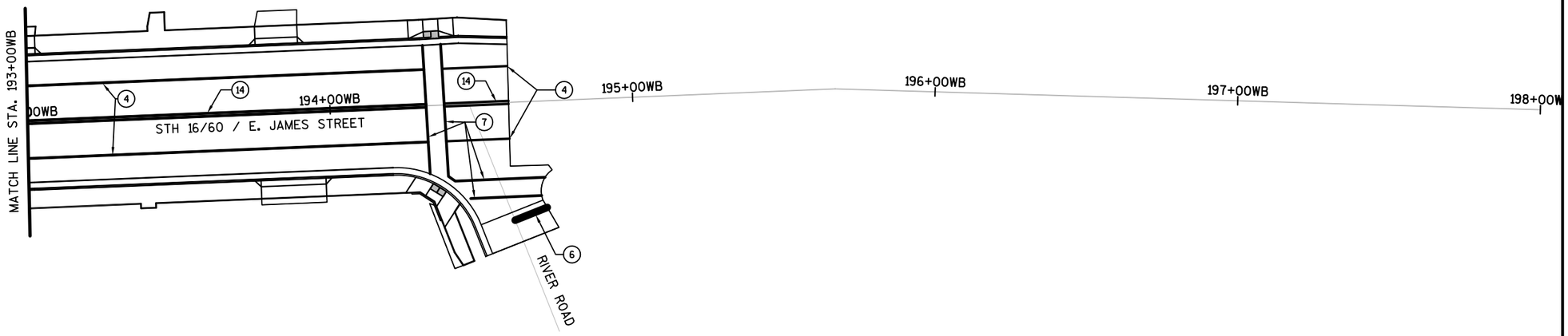
(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(6) PAVEMENT MARKING STOP LINE EPOXY 18-INCH

(7) PAVEMENT MARKING CROSS EPOXY 6-INCH

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

N

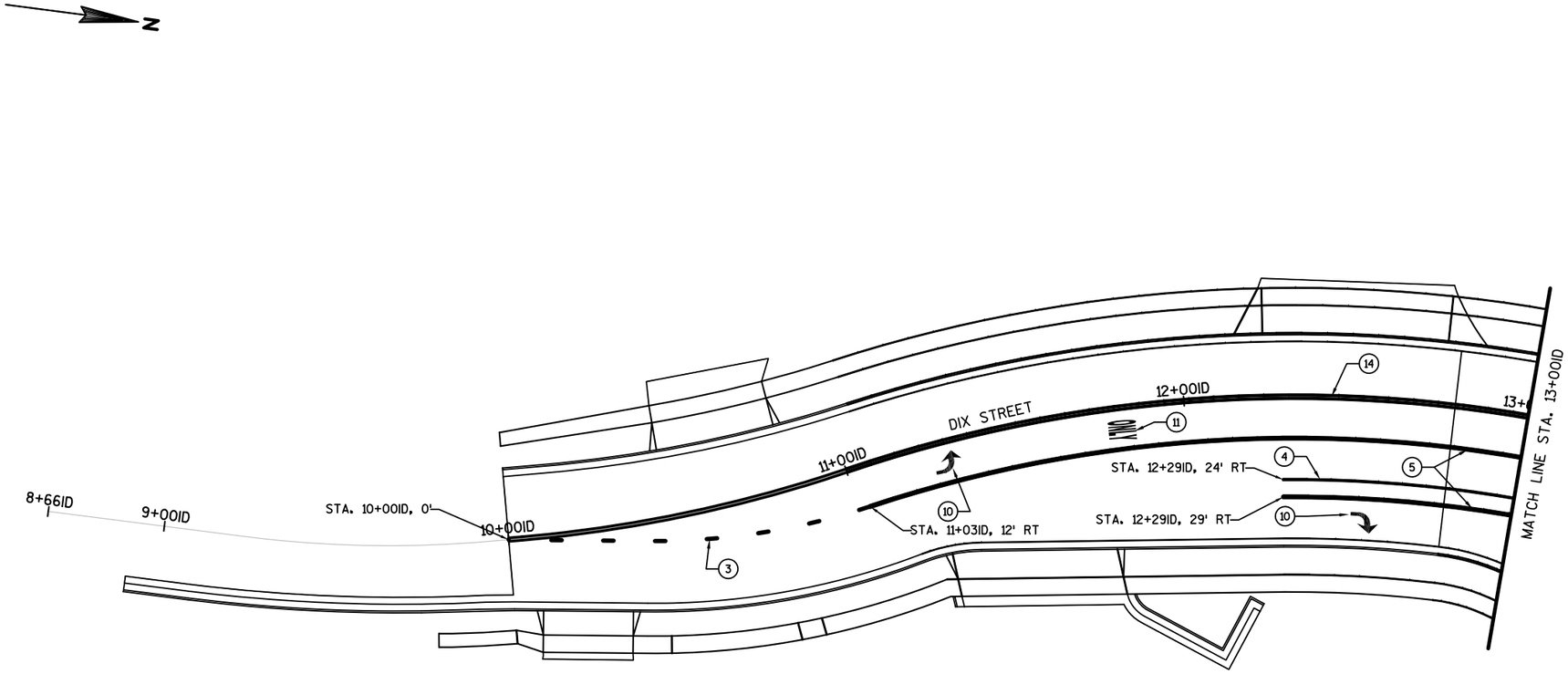


2

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING - STH 16	SHEET 217	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PAVEMENT MARKING\024501_PM.DWG
LAYOUT NAME - SHEET - (13)
PLOT DATE : 5/2/2016 9:26 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

(3) PAVEMENT MARKING EPOXY 8-INCH, DASHED WHITE (3' LINE, 9' GAP)

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(5) PAVEMENT MARKING EPOXY 8-INCH, WHITE

(10) PAVEMENT MARKING ARROWS EPOXY TYPE 2

(11) PAVEMENT MARKING WORDS EPOXY

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING-DIX STREET	SHEET 218	E

2

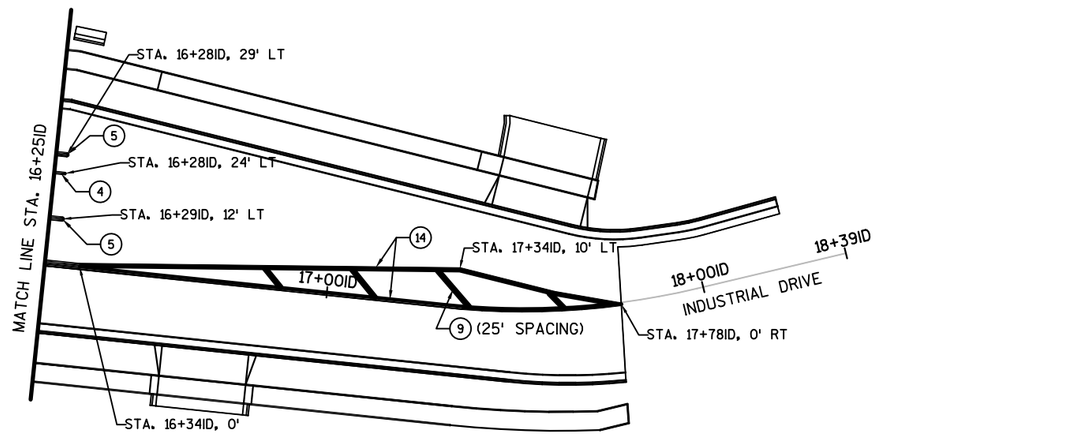
PAVEMENT MARKING LEGEND

(4) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(5) PAVEMENT MARKING EPOXY 8-INCH, WHITE

(9) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH

(14) PAVEMENT MARKING EPOXY 4-INCH YELLOW (DOUBLE)



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKING-INDUSTRIAL DRIVE	SHEET 219	E

GENERAL NOTES FOR TRAFFIC CONTROL

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

2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.

3) ALL SIGNS ARE 48" X 48" UNLESS NOTED.

4) "WO" IS THE "W" EXCEPT THE BACKGROUND IS ORANGE.

5) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

7) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS. SEE PLAN DETAIL SHEETS FOR ADDITIONAL INFORMATION.

8) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT.

9) EXISTING AND ADVANCE WARNING TRAFFIC SIGNS MAY REQUIRE RELOCATION DURING CONSTRUCTION STAGING, INCIDENTAL TO THE CONTRACT.

10) MAINTAIN LOCAL ACCESS AT ALL TIMES UNLESS OTHERWISE NOTED IN THE TRAFFIC CONTROL PLANS.

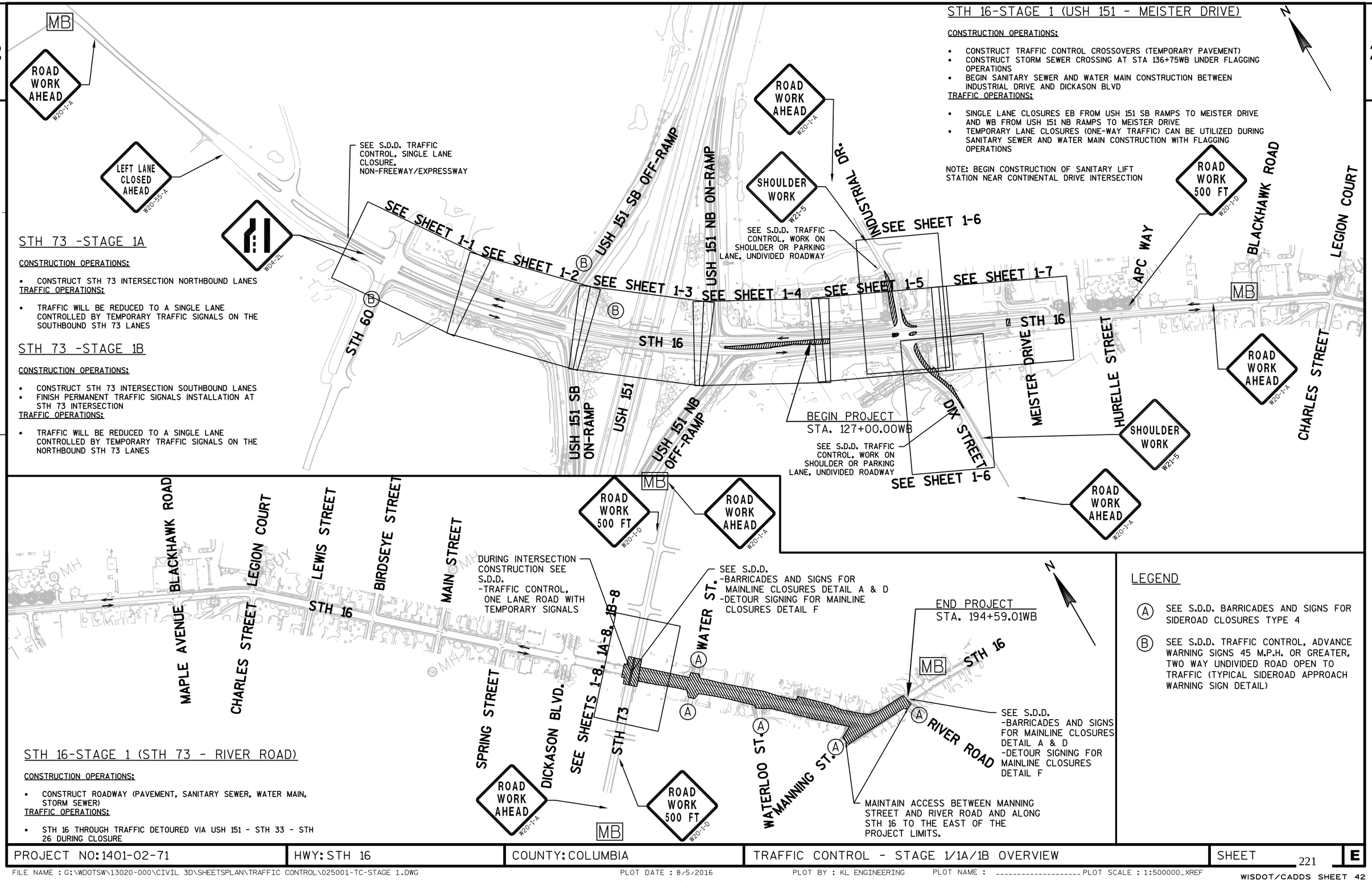
TEMPORARY PAVEMENT MARKING LEGEND

T4W	TEMPORARY PAVEMENT MARKING PAINT, 4-INCH, WHITE
T4Y	TEMPORARY PAVEMENT MARKING PAINT, 4-INCH, YELLOW
T4DY	TEMPORARY PAVEMENT MARKING PAINT, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING PAINT, 8-INCH, WHITE
T18SW	TEMPORARY PAVEMENT MARKING PAINT, 18-INCH, WHITE
T24SW	TEMPORARY PAVEMENT MARKING PAINT, 24-INCH, WHITE
TR4W	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 4-INCH, WHITE
TR4Y	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 4-INCH, YELLOW
TR4DY	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 4-INCH, DOUBLE YELLOW
TR8W	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 8-INCH, WHITE
TR6W	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 6-INCH, WHITE
TR18SW	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 18-INCH, WHITE
TR24SW	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE, 24-INCH, WHITE

TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE WITH TYPE A LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON EXISTING SUPPORT
- FLEXIBLE TUBULAR MARKER
- SIGN ON TEMPORARY SUPPORT
- MB TRAFFIC CONTROL SIGNS PCMS

- TEMPORARY PAVEMENT
- TEMPORARY PAVEMENT CONSTRUCTED IN STAGE
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGNALIZED INTERSECTION
- TEMPORARY CROSSWALK/SIDEWALK



STH 73 -STAGE 1A

CONSTRUCTION OPERATIONS:

- CONSTRUCT STH 73 INTERSECTION NORTHBOUND LANES

TRAFFIC OPERATIONS:

- TRAFFIC WILL BE REDUCED TO A SINGLE LANE CONTROLLED BY TEMPORARY TRAFFIC SIGNALS ON THE SOUTHBOUND STH 73 LANES

STH 73 -STAGE 1B

CONSTRUCTION OPERATIONS:

- CONSTRUCT STH 73 INTERSECTION SOUTHBOUND LANES
- FINISH PERMANENT TRAFFIC SIGNALS INSTALLATION AT STH 73 INTERSECTION

TRAFFIC OPERATIONS:

- TRAFFIC WILL BE REDUCED TO A SINGLE LANE CONTROLLED BY TEMPORARY TRAFFIC SIGNALS ON THE NORTHBOUND STH 73 LANES

STH 16-STAGE 1 (USH 151 - MEISTER DRIVE)

CONSTRUCTION OPERATIONS:

- CONSTRUCT TRAFFIC CONTROL CROSSOVERS (TEMPORARY PAVEMENT)
- CONSTRUCT STORM SEWER CROSSING AT STA 136+75WB UNDER FLAGGING OPERATIONS
- BEGIN SANITARY SEWER AND WATER MAIN CONSTRUCTION BETWEEN INDUSTRIAL DRIVE AND DICKASON BLVD

TRAFFIC OPERATIONS:

- SINGLE LANE CLOSURES EB FROM USH 151 SB RAMPS TO MEISTER DRIVE AND WB FROM USH 151 NB RAMPS TO MEISTER DRIVE
- TEMPORARY LANE CLOSURES (ONE-WAY TRAFFIC) CAN BE UTILIZED DURING SANITARY SEWER AND WATER MAIN CONSTRUCTION WITH FLAGGING OPERATIONS

NOTE: BEGIN CONSTRUCTION OF SANITARY LIFT STATION NEAR CONTINENTAL DRIVE INTERSECTION

STH 16-STAGE 1 (STH 73 - RIVER ROAD)

CONSTRUCTION OPERATIONS:

- CONSTRUCT ROADWAY (PAVEMENT, SANITARY SEWER, WATER MAIN, STORM SEWER)

TRAFFIC OPERATIONS:

- STH 16 THROUGH TRAFFIC DETOURED VIA USH 151 - STH 33 - STH 26 DURING CLOSURE

DURING INTERSECTION CONSTRUCTION SEE S.D.D. -TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

SEE S.D.D. -BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL A & D -DETOUR SIGNING FOR MAINLINE CLOSURES DETAIL F

SEE S.D.D. -BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL A & D -DETOUR SIGNING FOR MAINLINE CLOSURES DETAIL F

MAINTAIN ACCESS BETWEEN MANNING STREET AND RIVER ROAD AND ALONG STH 16 TO THE EAST OF THE PROJECT LIMITS.

LEGEND

(A) SEE S.D.D. BARRICADES AND SIGNS FOR SIDEROAD CLOSURES TYPE 4

(B) SEE S.D.D. TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1/1A/1B OVERVIEW	SHEET 221 E

2

N

STH 16 WB

98WB

100WB

102WB

104WB

MATCH LINE STA. 105+00WB

98EB

100EB

102EB

104EB

50'

STH 16 EB

W04-2L

STH 60

11'

11'

11'

11'

TRAFFIC CONTROL DRUMS

STAGE 1 TYPICAL SECTION
STH 16 EB/WB
STA. 106+04WB - 122+24WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-1)	SHEET 222 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG
LAYOUT NAME - 05017

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

N

USH 151 SB OFF-RAMP

MATCH LINE STA. 105+00WB

106WB

STH 16 WB

108WB

110WB

112

MATCH LINE STA. 112+00WB

TR4Y

495' MERGE TAPER
(35 MPH)

106EB

STA. 106+01'EB', 0'

STH 16 EB

108EB

TR4Y

50'

110EB

STA. 110+96'EB', 13' R

STA. 111+57'EB', 12' R

W01-6
48"X24"

USH 151 SB ON-RAMP

STATUE

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-2)	SHEET 223	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG
LAYOUT NAME - 05018

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

N

USH 151 SB

USH 151 NB

OMP

MATCH LINE STA. 112+00WB

112WB

114WB

116WB

118WB STH 16 WB

MATCH LINE STA. 119+00WB

SIGN II

SIGN II

112EB

114EB

116EB

118EB

18' LEFT TURN TAPER

STA. 117+13'EB', 11' L

STA. 117+15'EB', 0' R

50'

TR4Y

STA. 115+33'EB', 12' R

STA. 116+14'EB', 12' R

TR8W

STH 16 EB

LANE CLOSED
R11-2-L
48"X30"

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

LANE CLOSED
R11-2-L
48"X30"

USH 151 SB

USH 151 NB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-3)	SHEET 224	E

2

N

USH 151 NB ON-RAMP

END ROAD WORK
G20-2A
48"X24"

STA. 122+24'WB', 12' L

TR4Y

STH 16 WB

MATCH LINE STA. 119+00WB

120WB

122WB

124WB

MATCH LINE STA. 126+00WB

INL

U/C

SIGN

W

P

120EB

122EB

124EB

WORK ZONE

50'

STA. 120+15'EB', 13' R

STA. 119+35'EB', 13' R

TR8W

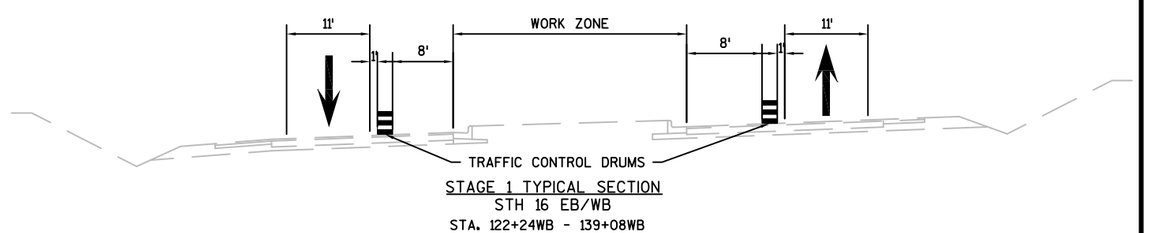
TR4Y

STH 16 EB

R4-7
24"X30"

LANE CLOSED
R11-2-L
48"X30"

USH 151 NB OFF-RAMP

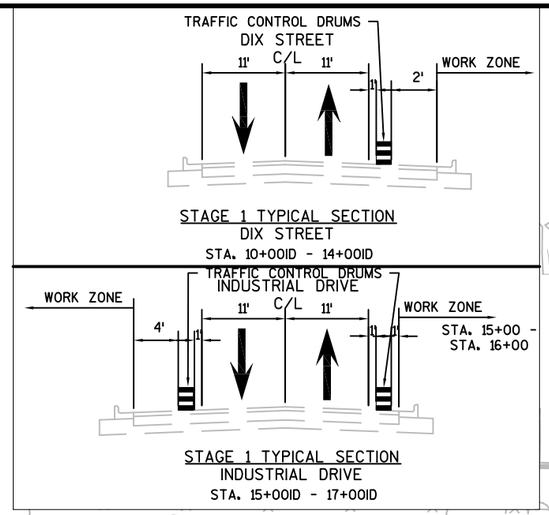


STAGE 1 TYPICAL SECTION
STH 16 EB/WB
STA. 122+24WB - 139+08WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-4)	SHEET 225 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG
LAYOUT NAME - 050110

PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT



STAGE 1 TYPICAL SECTION
DIX STREET
STA. 10+00ID - 14+00ID

STAGE 1 TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+00ID - 17+00ID

MATCH LINE STA. 17+00ID

INDUSTRIAL DRIVE

STA. 15+98'ID', 15' R

MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES

TEMPORARY TRAFFIC SIGNAL REQUIRED (SEE DETAIL)

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

STA. 126+50'WB', 11' L

TR4Y

T4Y

88' LEFT TURN TAPER

WORK ZONE

STH 16 WB

50'

STA. 130+34'WB', 12' L

STA. 131+53'WB', 25' L

T8W

T18SW

T4Y

STH 16 WB

STA. 131+17'WB', 4' L

STA. 131+48'WB', 10' R

MATCH LINE STA. 126+00WB

128WB

130WB

132WB

MATCH LINE STA. 133+00WB

128EB

STA. 127+61'EB', 1' R

130EB

STA. 130+27'EB', 2' R

132EB

STA. 131+20'EB', 14' R

TR4Y

STA. 127+61'EB', 12' R

STA. 126+74'EB', 11' R

T8W

STH 16 EB

T18SW

STH 16 EB

T4Y

14ID

STA. 13+75'ID', 41' R

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

REPLACE INLET CASTING WITH "TEMPORARY INLET COVER"

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

T4Y

DIX STREET

MATCH LINE STA. 12+00ID

SIGN

FILLER CAP

INL

CANOPY

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-5)	SHEET 226 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG
LAYOUT NAME - 050111

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE STA. 12+00ID

STA. 11+77'ID', 59' R

STA. 11+20'ID', 49' R

MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES

STA. 10+32'ID', 41' R

STA. 10+04'ID', 37' R

DIX STREET

10'

50'

WORK ZONE

STA. 8+89'ID', 22' R

8'

COMMERCIAL DRIVE

SHOULDER WORK

W21-5

TRAFFIC CONTROL DRUMS

DIX STREET

11' C/L 11'

11' 2'

WORK ZONE

STAGE 1 TYPICAL SECTION

DIX STREET

STA. 10+00ID - 14+00ID

N

SHOULDER WORK

W21-5

INDUSTRIAL DRIVE

18'

18'

STA. 17+82'ID', 45' L

MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES

STA. 17+44'ID', 53' L

MATCH LINE STA. 17+00ID

TRAFFIC CONTROL DRUMS

INDUSTRIAL DRIVE

WORK ZONE 4' 11' C/L 11' WORK ZONE

11' 11'

STA. 15+00 - STA. 16+00

STAGE 1 TYPICAL SECTION

INDUSTRIAL DRIVE

STA. 15+00ID - 17+00ID

N

2

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-6)	SHEET 227	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG
LAYOUT NAME - 050111

PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

230' SHIFTING LANE TAPER
(35 MPH)

REPLACE INLET CASTING WITH
TEMPORARY INLET COVER

LANE
CLOSED
R11-2-L
48"X30"

WORK ZONE

88' LEFT TURN TAPER

T8W

STA. 133+32'WB', 14' L

STA. 134+19'WB', 13' L

STH 16 WB

134WB

STA. 133+32'WB', 3' L

134EB

STH 16 EB

85' SHIFTING LANE TAPER
(35 MPH)

136WB

136EB

50'

138WB

138EB

T4Y

STA. 139+05'WB', 0' L

139EB

140WB

MATCH LINE STA. 133+00WB

BEGIN
LEFT
TURN
LANE
R3-20-L
24"X36"

CONSTRUCT STORM SEWER
UNDER FLAGGING OPERATIONS

W01-6
48"X24"

END
ROAD WORK
G20-2A
48"X24"

CONTINENTAL DRIVE

MEISTER DRIVE

FLAG

SIGN

MH

INL

OMP

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-7)	SHEET 228	E

2

*SEE "TRAFFIC CONTROL - DETOUR ROUTE" FOR STH 16 DETOUR SIGNING

W HARRISON STREET

STH 16

W MILL STREET

STH 73

10S

12N

13N

178WB

180WB

ROAD CLOSED
R11-2
48"X30"

WORK ZONE

SIGN

CANOPY

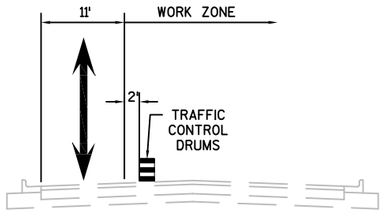
MH

W

2

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (SHEET 1-8)	SHEET 229	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 1.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 50'_XREF



STAGE 1 TYPICAL SECTION
STH 73
STA. 10+00S - 13+00N

*SEE "TRAFFIC CONTROL - DETOUR ROUTE" FOR STH 16 DETOUR SIGNING

W HARRISON ST

STH 16

STH 73

W MILL ST

ROAD CLOSED
R11-2
48"X30"

TEMPORARY TRAFFIC SIGNAL REQUIRED

W01-4R

W03-3

END ROAD WORK
G20-2A
48"X24"

T4W

T24SW

10S

12N

13N

178WB

11'

25'

300'

300'

300'

300'

STOP HERE ON RED
R10-6
24"X36"

W01-4L

WORK ZONE

180WB

ROAD WORK AHEAD
W20-1-A

MAX. 11' WIDTH
W12-52
48"X48"

ONE LANE ROAD AHEAD
W20-4-A

W03-3

STOP HERE ON RED
R10-6
24"X36"

DETECTION ZONE (TYPICAL)
PAID BY - TEMPORARY VEHICLE DETECTION (STH 73)

T24SW

300'

300'

300'

300'

ONE LANE ROAD AHEAD
W20-4-A

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

W03-3

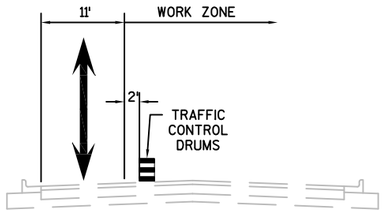
END ROAD WORK
G20-2A
48"X24"

W03-3

NOTE:
BARREL OFF FIRST 2 PARKING SPACES ON EITHER SIDE OF WORK ZONE

NOTE:
SEE S.D.D. TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1A (SHEET 1A-8)	SHEET 230	E



STAGE 1 TYPICAL SECTION
STH 73
STA. 10+00S - 13+00N

*SEE "TRAFFIC CONTROL - DETOUR ROUTE" FOR STH 16 DETOUR SIGNING

W HARRISON ST

STH 16

STH 73

W MILL ST

SWB

178WB

180WB

W03-3

END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED
R11-2
48"X30"

TEMPORARY TRAFFIC SIGNAL REQUIRED

W01-4L

STOP HERE ON RED
R10-6
24"X36"

T4W

T24SW

10S

12S

12N

13N

25'

11'

300'

WORK ZONE

DETECTION ZONE (TYPICAL)
PAID BY - TEMPORARY VEHICLE DETECTION (STH 73)

ROAD WORK AHEAD
W20-1-A

MAX. 11' WIDTH
W12-52
48"X48"

ONE LANE ROAD AHEAD
W20-4-A

W03-3

W01-4R

CANOPY

NOTE:
BARREL OFF FIRST 2 PARKING SPACES ON EITHER SIDE OF WORK ZONE

NOTE:
SEE S.D.D. TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1B (SHEET 1B-8)	SHEET 231	E

DIX STREET-STAGE 2A/B

CONSTRUCTION OPERATIONS:

- CONSTRUCT DIX STREET PAVEMENT

TRAFFIC OPERATIONS:

- 1 LANE IN EACH DIRECTION OPEN AT ALL TIMES
- FLAGGING OPERATIONS DURING CONSTRUCTION OF OVERLAP PAVEMENT

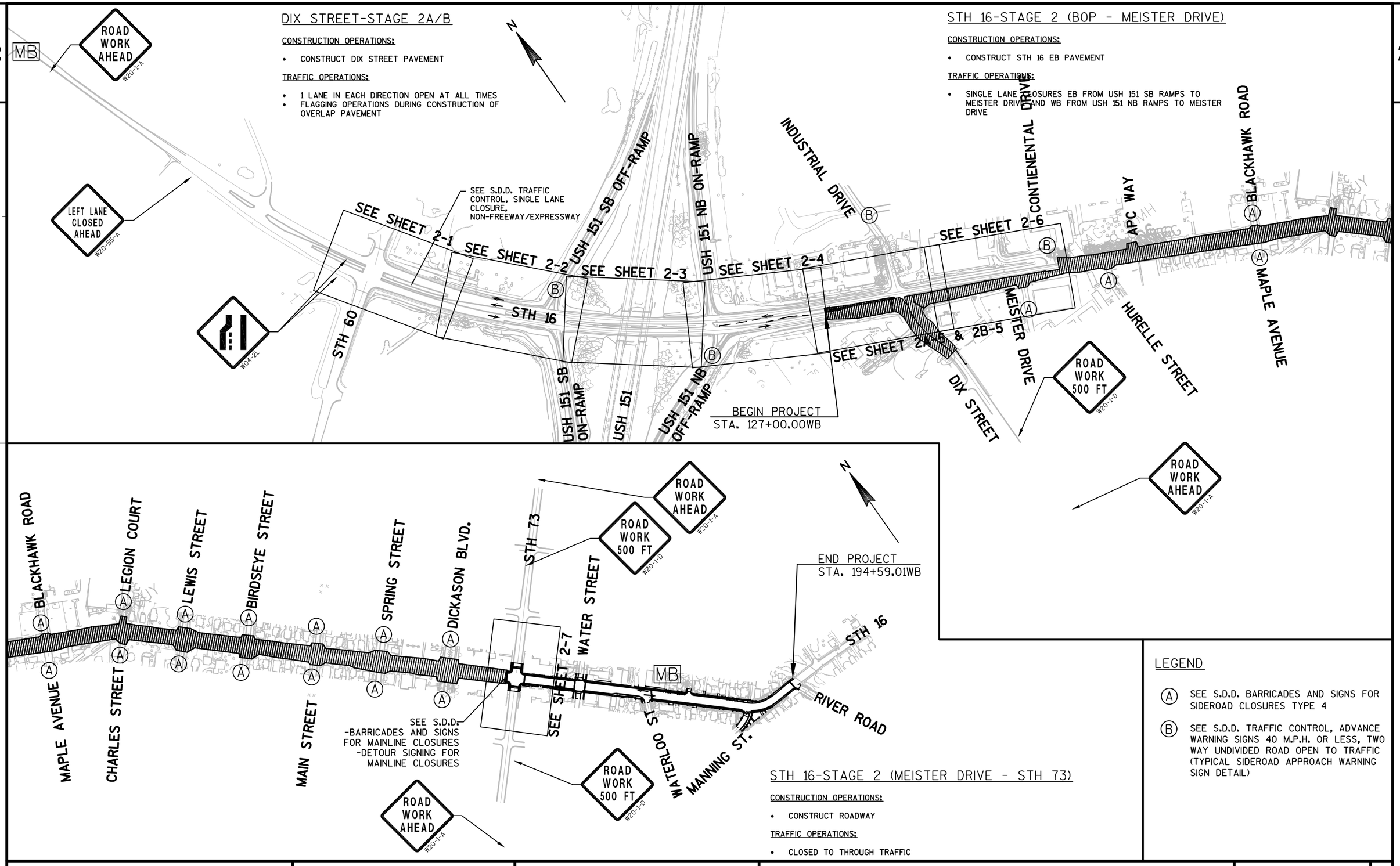
STH 16-STAGE 2 (BOP - MEISTER DRIVE)

CONSTRUCTION OPERATIONS:

- CONSTRUCT STH 16 EB PAVEMENT

TRAFFIC OPERATIONS:

- SINGLE LANE CLOSURES EB FROM USH 151 SB RAMPS TO MEISTER DRIVE AND WB FROM USH 151 NB RAMPS TO MEISTER DRIVE



STH 16-STAGE 2 (MEISTER DRIVE - STH 73)

CONSTRUCTION OPERATIONS:

- CONSTRUCT ROADWAY

TRAFFIC OPERATIONS:

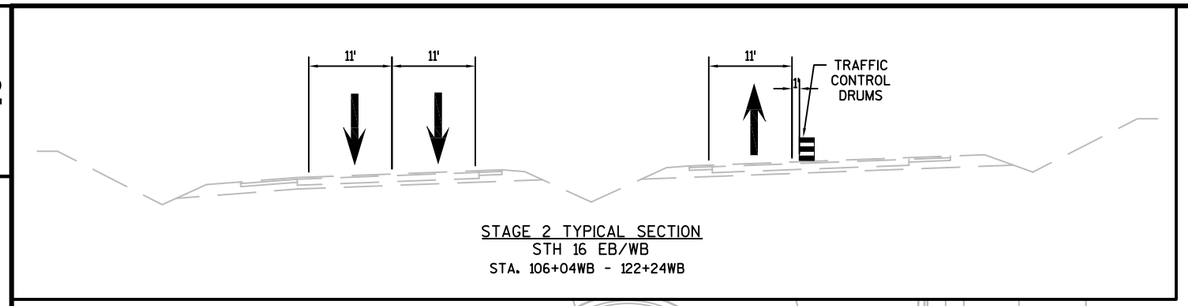
- CLOSED TO THROUGH TRAFFIC

LEGEND

(A) SEE S.D.D. BARRICADES AND SIGNS FOR SIDEROAD CLOSURES TYPE 4

(B) SEE S.D.D. TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2/2A/2B OVERVIEW	SHEET 232 E



STAGE 2 TYPICAL SECTION
STH 16 EB/WB
STA. 106+04WB - 122+24WB

2

98WB
100WB
102WB
104WB
STH 16 WB
MATCH LINE STA. 105+00WB
98EB
100EB
102EB
104EB
50'
STH 16 EB
STH 60
W04-2L

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-1)	SHEET 233 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG
LAYOUT NAME - 05012
PLOT DATE : 8/5/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ----------
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

USH 151 SB OFF-RAMP

MATCH LINE STA. 105+00WB

106WB

108WB

STH 16 WB

110WB

MATCH LINE STA. 112+00WB

112

TR4Y

495' MERGE TAPER
(35 MPH)

106EB

50'

108EB

110EB

STA. 105+97'EB', 1' L

TR4Y

STA. 111+57'EB', 12' R

STA. 110+96'EB', 12' R

STH 16 EB

W01-6
48"X24"

STATUE

USH 151 SB ON-RAMP

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-2)	SHEET 234	E

2

N

USH 151 SB

USH 151 NB

MP

MATCH LINE STA. 112+00WB

MATCH LINE STA. 119+00WB

112WB

114WB

116WB

STH 16 WB

118WB

122' LANE SHIFT TAPER
(35 MPH)

112' LEFT TURN TAPER
(35 MPH)

BEGIN LEFT TURN LANE

R3-20-L
24"X36"

112EB

114EB

116EB

STH 16 EB

118EB

STA. 112+01'EB', 24' R

STA. 113+23'EB', 0'

STA. 113+23'EB', 12' R

STA. 116+01'EB', 0' L

STA. 117+13'EB', 11' L

T4Y

50'

11'

12'

LANE CLOSED

R11-2-L
48"X30"

USH 151 SB

USH 151 NB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-3)	SHEET 235 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG
LAYOUT NAME - 05014

PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

USH 151 NB ON-RAMP

680' SHIFTING TAPER
(35 MPH)

END ROAD WORK
G20-2A
48"X24"

MATCH LINE STA. 119+00WB

120WB

STH 16 WB

122WB

STA. 120+57'WB', 26' R
STA. 120+16'EB', 5' L

120TC2

120EB

STA. 120+11'EB', 10' R

STA. 119+87'EB', 12' R

STOP
R1-1
36"X36"

DIVIDED HIGHWAY
R6-3
30"X24"

STA. 119+99'EB', 40' R

STA. 120+14'EB', 35' R

W01-6
48"X24"

STA. 120+64'EB', 34' R

USH 151 NB OFF-RAMP

STA. 120+88'EB', 5' R

T4Y

122TC2

STH 16 EB

122EB

T4W

STA. 121+63'EB', 0'

MB

STOP
R1-1
36"X36"

STA. 120+66'EB', 57' R

STA. 122+69'WB', 7' R

50'

15'

T4W

124TC2

124WB

124EB

T4DY

STA. 125+06'TC2', 15' L

25'

13'

11'

STA. 124+34'WB', 7' R

STA. 125+42'EB', 10' L

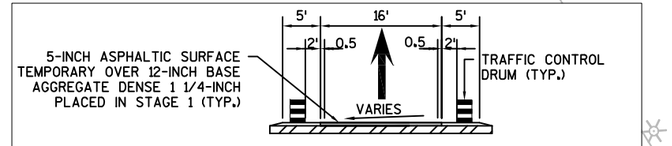
MATCH LINE STA. 126+00WB

LANE CLOSED
R11-2-L
48"X30"

ROAD CLOSED
0.3MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

ACCESS TO LOCAL BUSINESSES
R10-71
72"X36"

INL
U/C
SIGN
W
P.



STAGE 2 CROSSOVER TYPICAL SECTION
STH 16 EB/WB
STA. 120+36WB - 124+94WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-4)	SHEET 236 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG
LAYOUT NAME - 05015
PLOT DATE : 8/5/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

STA. 11+74'ID', 57' R
MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES
STA. 10+30'ID', 39' R
STA. 11+22'ID', 48' R
STA. 10+00'ID', 32' R
STA. 10+07'ID', 35' R
115' SHIFTING TAPER
(25 MPH)
STA. 10+00'_2A', 11' R
25'
50'
11'
11'
T4W
TR4W
STA. 9+98'ID', 18' R
10_2A
8ID
10ID
DIX ST.
MATCH LINE STA. 12+00ID
WORK ZONE
W1-2L
30"X30"
STA. 10+00'_2A', 12' L
W1-2R
30"X30"

STAGE 2A TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+81ID - 17+00ID

2A
R/L
12' - 17'
0 - 11'
14' - 17'
1'

STAGE 2A TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+00ID - 15+81ID

2A
R/L
12'
11'
14'
1'
1'

INDUSTRIAL DRIVE
16ID
11_2A
T4DY
11'
12'
STA. 16+80'_2A', 11' L
STA. 16+45'_2A', 0' L
STA. 16+37'_2A', 13' R
T8W
STA. 16+25'_2A', 12' L
T18SW
14_2A
25'
TEMPORARY TRAFFIC SIGNAL REQUIRED
T4W
STA. 132+24'TC2', 0'
STA. 132+96'TC2', 9' R
T4W
T18SW
11'
132TC2
T8W
10'
T4DY
132WB
STH 16 WB
STH 16 EB
STA. 131+44'TC2', 10' R
T18SW
11'
132EB
MATCH LINE STA. 133+00WB

680' SHIFTING TAPER
(35 MPH)
113' SHIFTING TAPER
(35 MPH)
65' LEFT TURN TAPER
STA. 128+90'TC2', 0'
T4DY
STA. 130+22'TC2', 0'
T4W
T8W
STA. 127+13'TC2', 0' R
25'
TC2
STH 16 WB
STH 16 EB
128TC2
130TC2
11'
10'
128WB
T8W
130WB
T18SW
STA. 128+26'TC2', 11' R
STA. 128+91'TC2', 10' R
STA. 130+10'WB', 14' R
STA. 126+68'WB', 8' R
STA. 127+12'TC2', 11' R
STA. 128+16'EB', 12' L
STA. 127+96'EB', 12' L
2.5'
128EB
130EB
STA. 127+20'EB', 0'
STA. 130+09'EB', 7' L
MATCH LINE STA. 126+00WB
PLACE IN STAGE 1
PLACE IN STAGE 2 AFTER PROPOSED PAVEMENT
BEGIN LEFT TURN LANE
R3-20-L
24"X36"
WORK ZONE
ROAD CLOSED
R11-2
48"X30"
MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES
DIX ST.
14_2A
11'
11'
T4DY
T4W
50'
STA. 13+71'ID', 40' R
WORK ZONE
ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
MATCH LINE STA. 12+00ID

11'
0'-10'
FLEXIBLE TUBULAR MARKER
0'-10'
11'
TRAFFIC CONTROL DRUM (TYP.)
WORK AREA
5-INCH ASPHALTIC SURFACE TEMPORARY OVER 12-INCH BASE AGGREGATE DENSE 1 1/4-INCH PLACED IN STAGE 1 (TYP.)

STAGE 2 TYPICAL SECTION
STH 16 EB/WB
STA. 126+72WB - 139+00WB

2A
R/L
WORK AREA
1'
11'
11'

STAGE 2A TYPICAL SECTION
DIX STREET
STA. 10+00ID - 14+00ID

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2A (SHEET 2A-5)	SHEET 237	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG
LAYOUT NAME - 05016
PLOT DATE : 8/5/2016
PLOT BY : KL ENGINEERING
PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

STA. 11+74'ID', 57' R
STA. 10+00'ID', 32' R
STA. 10+07'ID', 35' R
122' SHIFTING TAPER
(25 MPH)
WORK ZONE
STA. 10+30'ID', 39' R
STA. 11+22'ID', 48' R
MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES
25'
50'
11'
11'
10ID
10-2B
8ID
MATCH LINE STA. 12+00ID
12-2B
DIX ST.
STA. 10+75'_2B', 12' L
100'
W1-2L
30"X30"

N

INDUSTRIAL DRIVE
17-2B
16ID
17'
17'
STA. 16+55'_2B', 11' L
T8W
T4DY
12'
11'
STA. 16+16'_2B', 21' R
25'
STA. 15+88'_2B', 11' L
T18SW
TEMPORARY TRAFFIC SIGNAL REQUIRED
T4W
T4W
T4DY
STA. 132+24'TC2', 0'
STA. 132+96'TC2', 9' R
T8W
11'
132TC2
10'
11'
T18SW
STA. 131+44'TC2', 10' R
132WB
STH 16 WB
STH 16 EB
132EB
MATCH LINE STA. 133+00WB

2B
R/L
12' - 17' 0 - 11' 14' - 17'
1'
STAGE 2B TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+81ID - 17+00ID

2B
R/L
12' 11' 14'
1' 1'
STAGE 2B TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+00ID - 15+81ID

BEGIN LEFT TURN LANE
R3-20-L
24"X36"
680' SHIFTING TAPER
(35 MPH)
113' SHIFTING TAPER
(35 MPH)
65' LEFT TURN TAPER
STA. 128+90'TC2', 0'
T4DY
T4W
STA. 130+22'TC2', 0'
STA. 127+13'TC2', 0' R
25'
128TC2
T8W
130TC2
11'
10'
11'
130WB
T18SW
STH 16 WB
STH 16 EB
128WB
STA. 128+26'TC2', 11' R
STA. 128+91'TC2', 10' R
STA. 130+10'WB', 14' R
STA. 126+68'WB', 8' R
STA. 127+12'TC2', 11' R
STA. 128+16'EB', 12' L
STA. 127+96'EB', 12' L
128EB
130EB
T18SW
STA. 127+20'EB', 0'
STA. 130+09'EB', 7' L
MATCH LINE STA. 126+00WB
PLACE IN STAGE 1
PLACE IN STAGE 2 AFTER PROPOSED PAVEMENT
WORK ZONE
TR4W
TR4DY
14-2B
11'
11'
50'
DIX STREET
MAINTAIN ACCESS TO BUSINESSES AT ALL TIMES
ROAD CLOSED
R11-2
48"X30"
ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
STA. 13+71'ID', 40' R
WORK ZONE
MATCH LINE STA. 12+00ID

11'
0'-10'
FLEXIBLE TUBULAR MARKER
0'-10'
11'
TRAFFIC CONTROL DRUM (TYP.)
WORK AREA
5-INCH ASPHALTIC SURFACE TEMPORARY OVER 12-INCH BASE AGGREGATE DENSE 1 1/4-INCH PLACED IN STAGE 1 (TYP.)
STAGE 2 TYPICAL SECTION
STH 16 EB/WB
STA. 126+72WB - 139+00WB

2B
R/L
11' 11'
WORK AREA
STAGE 2B TYPICAL SECTION
DIX STREET
STA. 10+00ID - 14+00ID

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2B (SHEET 2B-5)	SHEET 238	E

2

53' LEFT TURN TAPER

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

ROAD CLOSED
R11-2
48"X30"

CONTINENTAL DRIVE

MATCH LINE STA. 133+00WB

STA. 133+49'TC2', 0'

STA. 135+64'TC2', 0'

STA. 139+81'TC2', 22' R

134TC2

134WB

134EB

136TC2

STH 16 WB

136WB

STH 16 EB

136EB

50'

T4W

11'

11'

T4DY

138TC2

25'

138WB

138EB

139TC2

139EB

140WB

WORK ZONE

FLAG

SIGN

MH

INL

OHP

', 57' R

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-6)	SHEET 239	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG
LAYOUT NAME - 05017

PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

*SEE "TRAFFIC CONTROL - DETOUR ROUTE" FOR STH 16 DETOUR SIGNING

N

HARRISON STREET

MILL STREET

STH 73

STH 16

16WB

178WB

180WB

ROAD CLOSED
R11-2
48"X30"

WORK ZONE

PERMANENT TRAFFIC SIGNAL REQUIRED
INSTALLED DURING STAGE 1

10+00S

11+00S

11+50S

12+00N

13+00N

SIGN

MH

CANOPY

W

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (SHEET 2-7)	SHEET 240	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 2.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

TC Stage 2
PI STA = 122+12.78 S2
Y = 323,915.7208
X = 651,357.0115
Δ = 6°00'53"
D = 1°32'30.29"
T = 195.24
L = 390.13
R = 3716.29
PC STA = 120+17.54 S2
Y = 324,004.3400
X = 651,183.0400
PT STA = 124+07.67 S2
Y = 323,845.8190
X = 651,539.3111
SE = N/A

TC Stage 2
PI STA = 125+41.39 S2
Y = 323,797.9417
X = 651,664.1722
Δ = 3°58'44"
D = 1°31'53.63"
T = 129.94
L = 259.79
R = 3741.00
PC STA = 124+11.45 S2
Y = 323,844.4654
X = 651,542.8413
PT STA = 126+71.23 S2
Y = 323,743.1114
X = 651,781.9825
SE = N/A

ID Stage 2A
PI STA = 11+13.71 _2A
Y = 323,119.2653
X = 652,210.9184
Δ = 13°24'26"
D = 160°49'13.02"
T = 4.19
L = 8.34
R = 35.63
PC STA = 11+09.52 _2A
Y = 323,115.0785
X = 652,210.8395
PT STA = 11+17.86 _2A
Y = 323,123.3563
X = 652,210.0244
SE = N/A

ID Stage 2A
PI STA = 11+68.47 _2A
Y = 323,172.8058
X = 652,199.2178
Δ = 11°35'10"
D = 13°06'40.18"
T = 44.34
L = 88.37
R = 437.00
PC STA = 11+24.14 _2A
Y = 323,129.4928
X = 652,208.6834
PT STA = 12+12.51 _2A
Y = 323,213.3353
X = 652,181.2462
SE = N/A

ID Stage 2A
PI STA = 13+78.62 _2A
Y = 323,372.7615
X = 652,134.5898
Δ = 28°39'33"
D = 15°13'12.09"
T = 96.16
L = 188.30
R = 376.45
PC STA = 12+82.46 _2A
Y = 323,280.4689
X = 652,161.5986
PT STA = 14+70.76 _2A
Y = 323,466.7005
X = 652,155.1535
SE = N/A

ID Stage 2A
PI STA = 15+21.94 _2A
Y = 323,516.7054
X = 652,166.0998
Δ = 9°44'02"
D = 9°32'57.47"
T = 51.09
L = 101.93
R = 600.00
PC STA = 14+70.86 _2A
Y = 323,466.7982
X = 652,155.1749
PT STA = 15+72.79 _2A
Y = 323,567.7412
X = 652,168.4296
SE = N/A

ID Stage 2A
PI STA = 16+79.74 _2A
Y = 323,674.5861
X = 652,173.3072
Δ = 17°30'03"
D = 13°10'17.20"
T = 66.96
L = 132.87
R = 435.00
PC STA = 16+12.79 _2A
Y = 323,607.6996
X = 652,170.2538
PT STA = 17+45.66 _2A
Y = 323,737.4584
X = 652,196.3333
SE = N/A



TRAFFIC CONTROL TC Stage 2
PI STA = 120+17.54 S2
Y = 324,004.34
X = 651,183.04

TRAFFIC CONTROL ID Stage 2B
PI STA = 10+00.00 _2B
Y = 323,039.58
X = 652,201.45

TRAFFIC CONTROL ID Stage 2B
PI STA = 17+21.70 _2B
Y = 323,737.53
X = 652,196.15

TRAFFIC CONTROL ID Stage 2A
PI STA = 16+42.43 _2A
Y = 323,714.63
X = 651,495.21

TRAFFIC CONTROL ID Stage 2A
PI STA = 16+26.13 _2A
Y = 323,674.27
X = 651,474.29

ID Stage 2B
PI STA = 11+32.97 _2B
Y = 323,169.5453
X = 652,173.3168
Δ = 12°57'34"
D = 13°56'26.08"
T = 46.68
L = 92.96
R = 411.00
PC STA = 10+86.29 _2B
Y = 323,123.9418
X = 652,183.2828
PT STA = 11+79.26 _2B
Y = 323,211.7523
X = 652,153.3775
SE = N/A

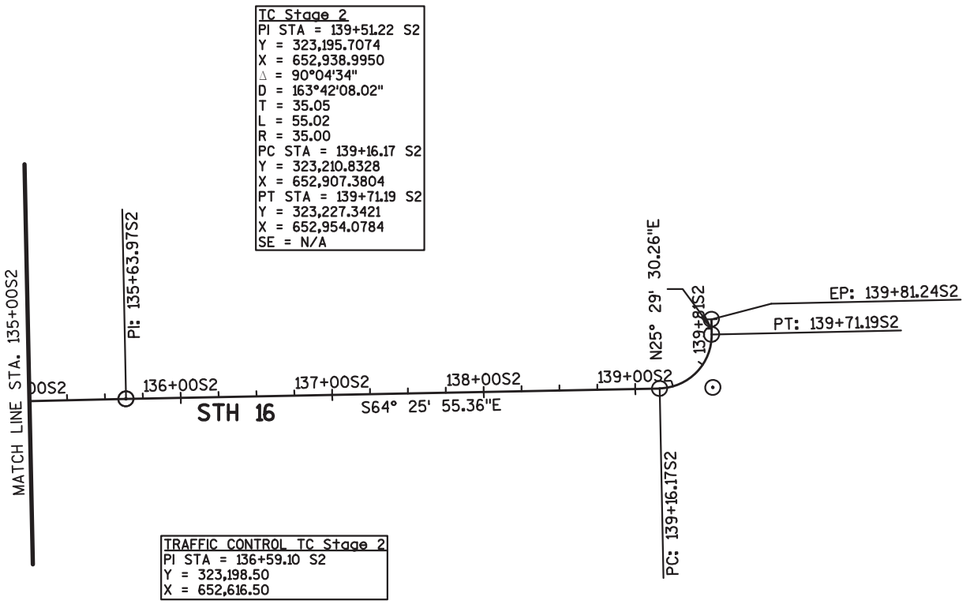
ID Stage 2B
PI STA = 13+24.33 _2B
Y = 323,342.9278
X = 652,091.4081
Δ = 39°08'55"
D = 14°02'35.10"
T = 145.08
L = 278.78
R = 408.00
PC STA = 11+79.26 _2B
Y = 323,211.7523
X = 652,153.3775
PT STA = 14+58.03 _2B
Y = 323,483.7792
X = 652,126.1660
SE = N/A

ID Stage 2B
PI STA = 13+24.33 _2B
Y = 323,342.9278
X = 652,091.4081
Δ = 39°08'55"
D = 14°02'35.10"
T = 145.08
L = 278.78
R = 408.00
PC STA = 11+79.26 _2B
Y = 323,211.7523
X = 652,153.3775
PT STA = 14+58.03 _2B
Y = 323,483.7792
X = 652,126.1660
SE = N/A

ID Stage 2B
PI STA = 16+91.17 _2B
Y = 323,708.6679
X = 652,185.9564
Δ = 7°09'45"
D = 11°43'00.94"
T = 30.61
L = 61.13
R = 489.00
PC STA = 16+60.57 _2B
Y = 323,678.7642
X = 652,179.4421
PT STA = 17+21.70 _2B
Y = 323,737.5261
X = 652,196.1484
SE = N/A

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 ALIGNMENT DIAGRAM	SHEET 241	E

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 ALIGNMENT DIAGRAM	SHEET 242	E

STH 16-STAGE 3 (BOP - MEISTER DRIVE)

CONSTRUCTION OPERATIONS:

- CONSTRUCT STH 16 WB PAVEMENT

TRAFFIC OPERATIONS:

- SINGLE LANE CLOSURES EB FROM USH 151 SB RAMPS TO MEISTER DRIVE AND WB FROM USH 151 NB RAMPS TO MEISTER DRIVE

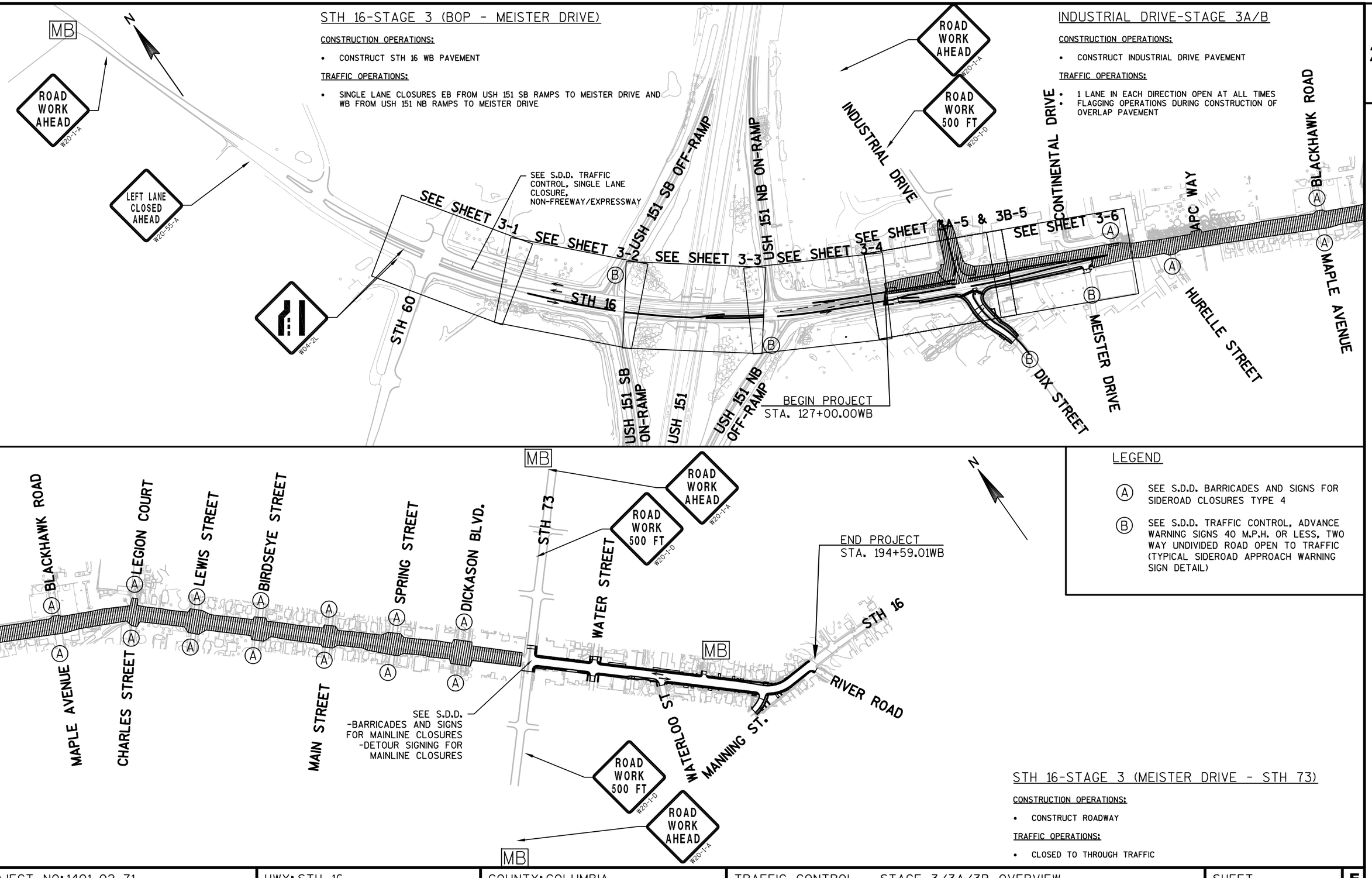
INDUSTRIAL DRIVE-STAGE 3A/B

CONSTRUCTION OPERATIONS:

- CONSTRUCT INDUSTRIAL DRIVE PAVEMENT

TRAFFIC OPERATIONS:

- 1 LANE IN EACH DIRECTION OPEN AT ALL TIMES
- FLAGGING OPERATIONS DURING CONSTRUCTION OF OVERLAP PAVEMENT



LEGEND

- (A) SEE S.D.D. BARRICADES AND SIGNS FOR SIDEROAD CLOSURES TYPE 4
- (B) SEE S.D.D. TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL)

STH 16-STAGE 3 (MEISTER DRIVE - STH 73)

CONSTRUCTION OPERATIONS:

- CONSTRUCT ROADWAY

TRAFFIC OPERATIONS:

- CLOSED TO THROUGH TRAFFIC

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3/3A/3B OVERVIEW	SHEET 243	E

2

2

N

98WB

100WB

102WB

STH 16 WB

104WB

MATCH LINE STA. 105+00WB

98EB

100EB

102EB

STH 16 EB

104EB

50'

T4Y

W04-2L

STH 60

11'

11'

TRAFFIC CONTROL DRUMS

11'

11'

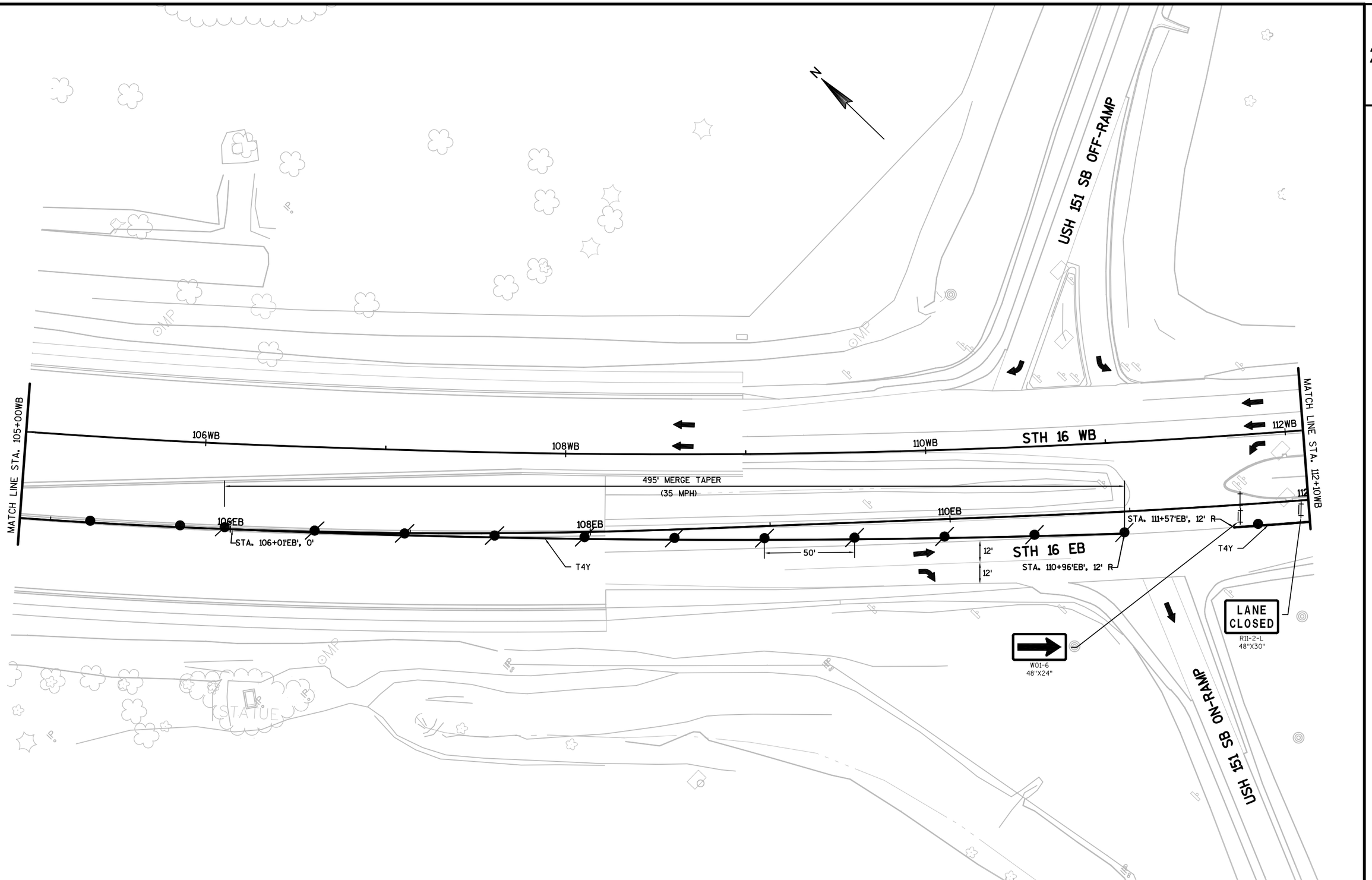
STAGE 3 TYPICAL SECTION
STH 16 EB/WB
STA. 106+04WB - 122+24WB

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (SHEET 3-1)	SHEET 244 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 3.DWG
LAYOUT NAME - 05014

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

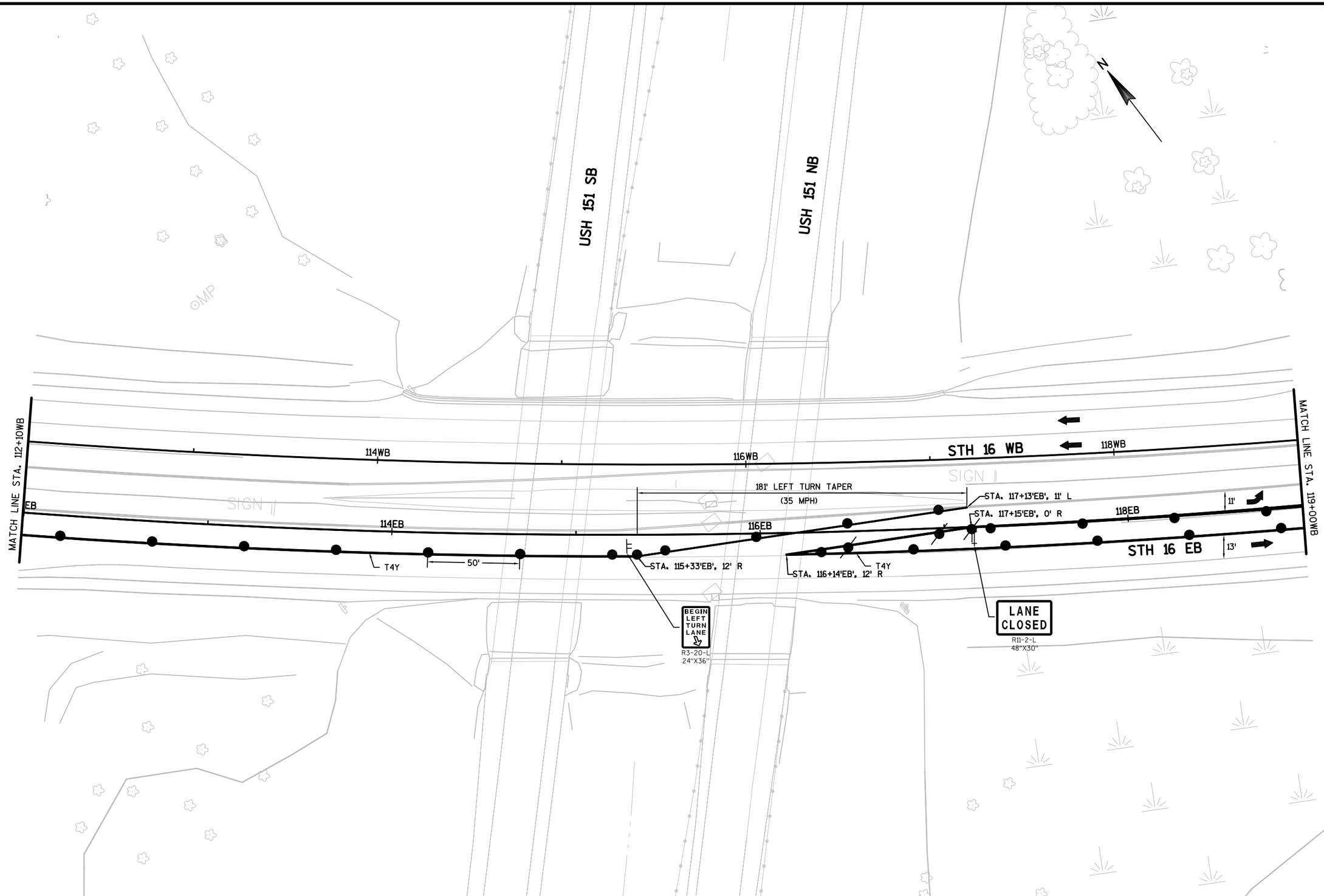


PROJECT NO:1401-02-71	HWY:STH 16	COUNTY:COLUMBIA	TRAFFIC CONTROL - STAGE 3 (SHEET 3-2)	SHEET 245 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 3.DWG
LAYOUT NAME - 05015

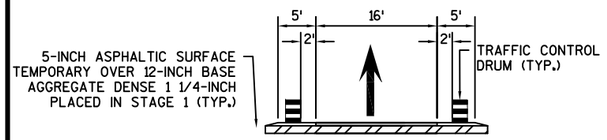
PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

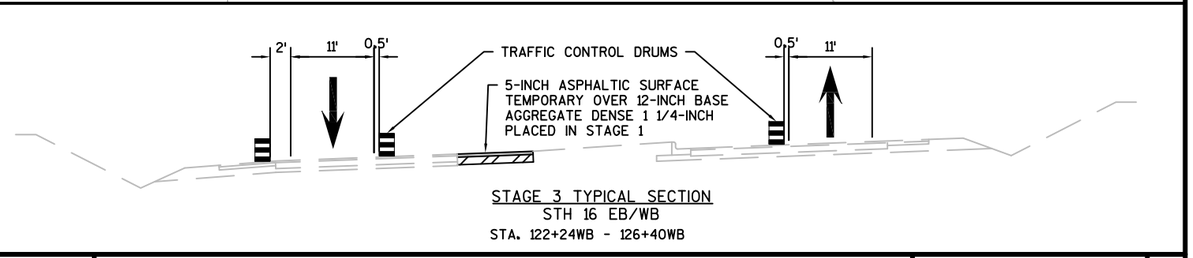


PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (SHEET 3-3)	SHEET 246	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 3.DWG
LAYOUT NAME - 05016
PLOT DATE : 5/2/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

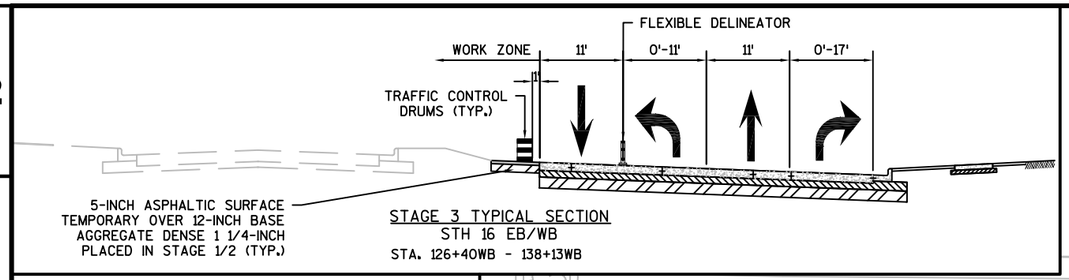


STAGE 3 CROSSOVER TYPICAL SECTION
STH 16 EB/WB
STA. 124+34WB - 128+33WB

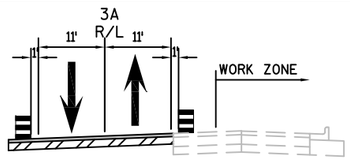


STAGE 3 TYPICAL SECTION
STH 16 EB/WB
STA. 122+24WB - 126+40WB

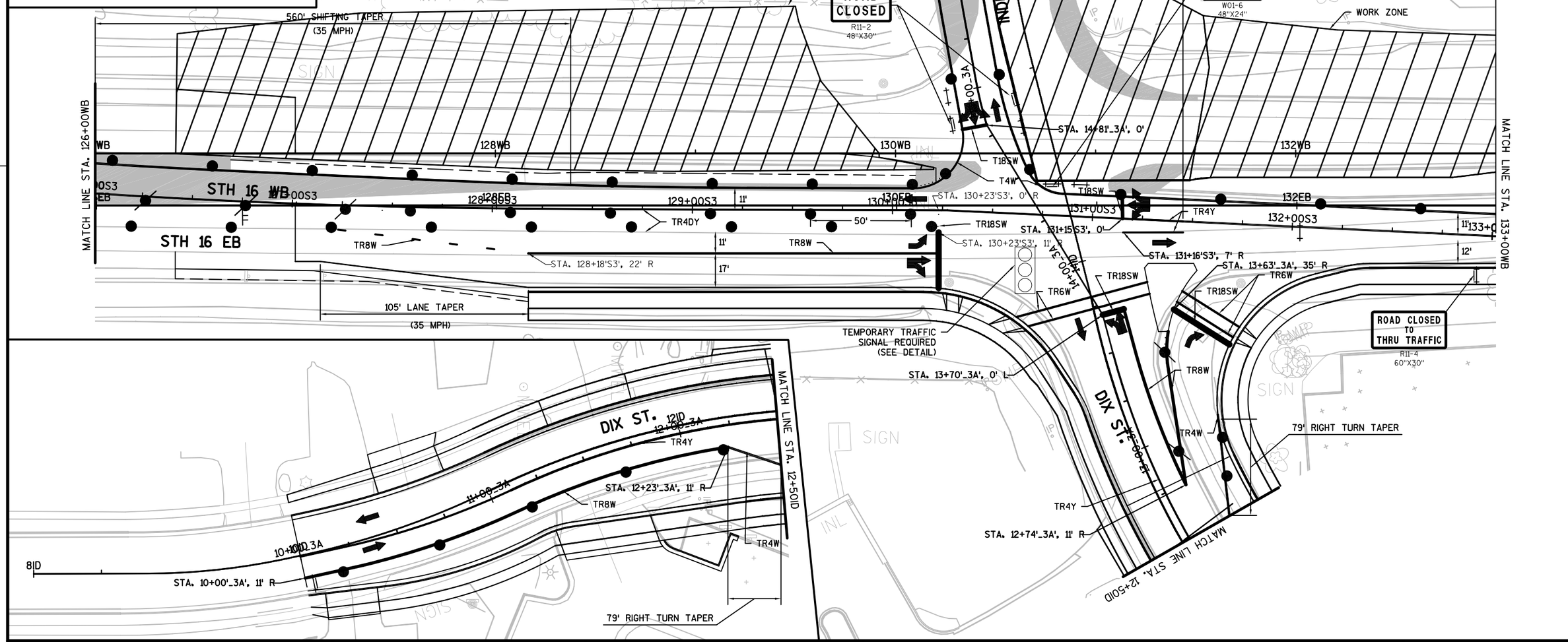
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (SHEET 3-4)	SHEET 247	E



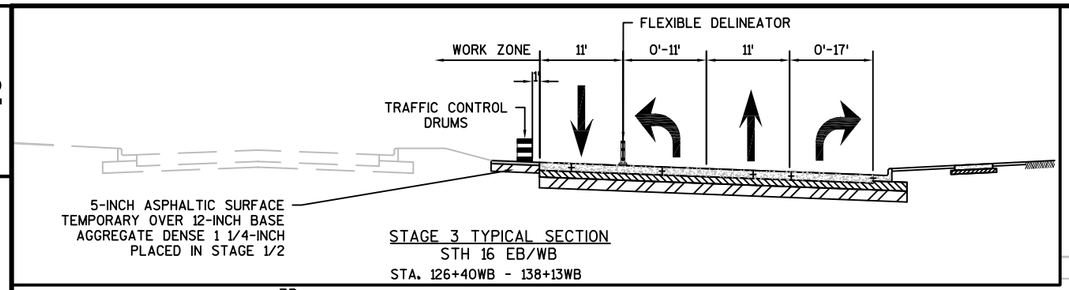
STAGE 3 TYPICAL SECTION
STH 16 EB/WB
STA. 126+40WB - 138+13WB



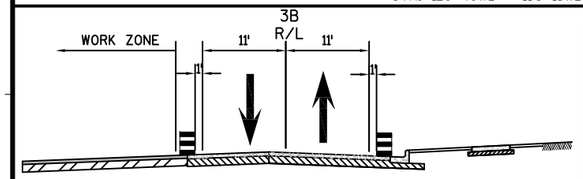
STAGE 3A TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+00ID - 18+00ID



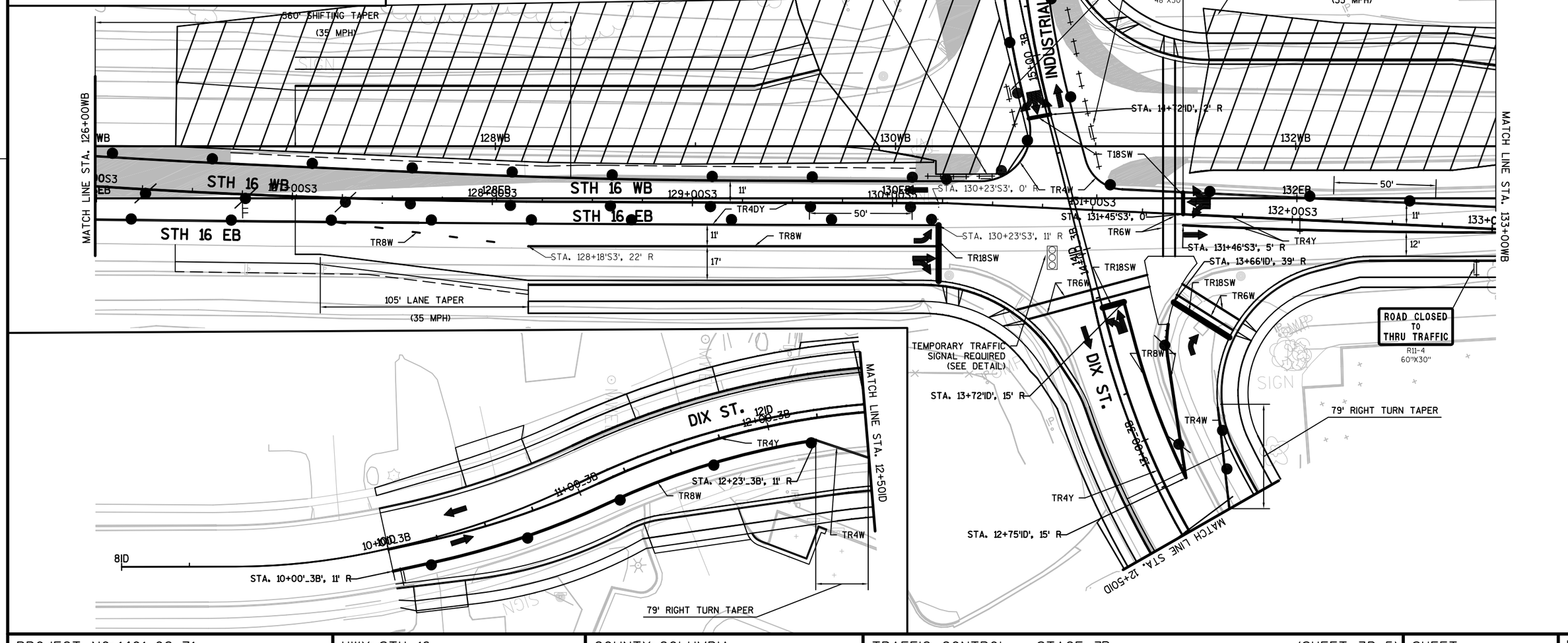
PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3A (SHEET 3A-5)	SHEET 248 E



STAGE 3 TYPICAL SECTION
STH 16 EB/WB
STA. 126+40WB - 138+13WB



STAGE 3B TYPICAL SECTION
INDUSTRIAL DRIVE
STA. 15+00ID - 18+00ID



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3B (SHEET 3B-5)	SHEET 249	E

2

N

CONTINENTAL DRIVE

MAINTAIN ACCESS FOR APC DELIVERIES

WORK ZONE

MATCH LINE STA. 133+00WB

134WB

136WB

136EB

134EB

138WB

138EB

139EB

140WB

135+00S3

134+00S3

136+00S3

137+00S3

TR4W

TR4DY

11'

11'

W1-2R
30"X30"

W01-6
48"X24"

W01-6
48"X24"

ROAD
CLOSED

R11-2
48"X30"

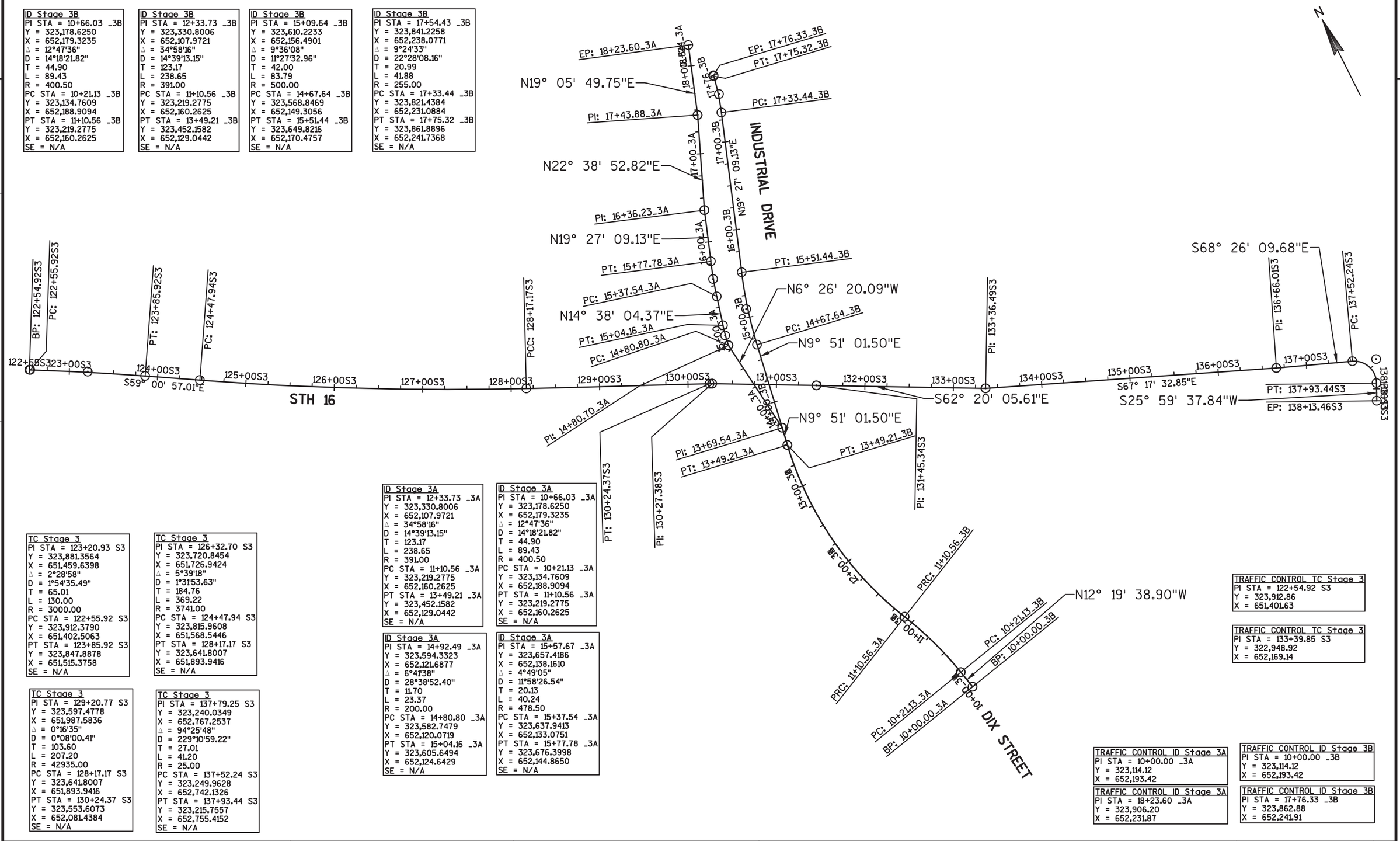
MEISTER DRIVE

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (SHEET 3-6)	SHEET 250	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 3.DWG
LAYOUT NAME - 05019

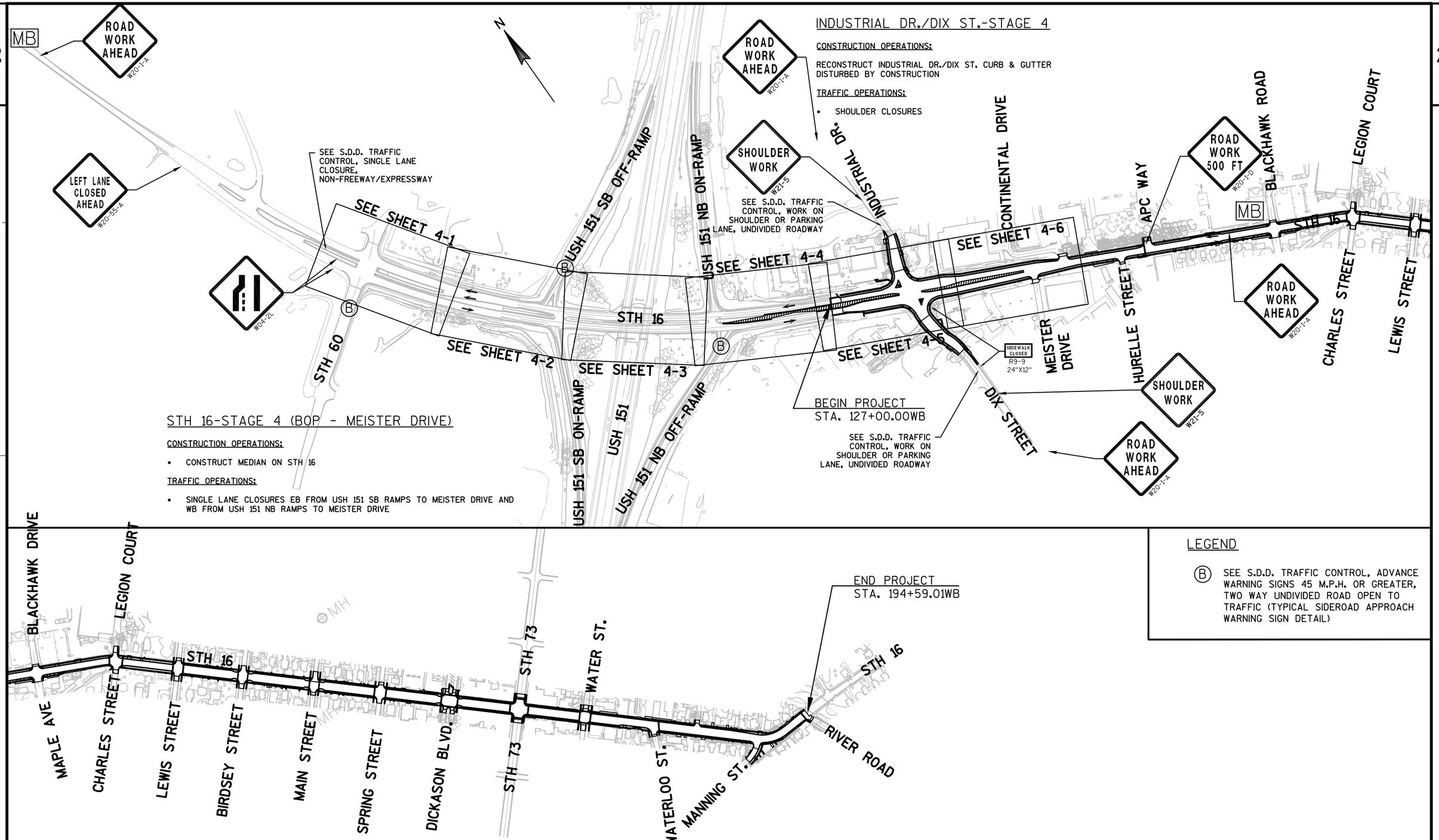
PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - ALIGNMENT DIAGRAM STAGE 3	SHEET 251	E

FILE NAME : \\KL1NAS\DATA1\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD_TC 3.DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:100 FT



INDUSTRIAL DR./DIX ST.-STAGE 4

CONSTRUCTION OPERATIONS:

RECONSTRUCT INDUSTRIAL DR./DIX ST. CURB & GUTTER DISTURBED BY CONSTRUCTION

TRAFFIC OPERATIONS:

- SHOULDER CLOSURES

STH 16-STAGE 4 (BOP - MEISTER DRIVE)

CONSTRUCTION OPERATIONS:

- CONSTRUCT MEDIAN ON STH 16

TRAFFIC OPERATIONS:

- SINGLE LANE CLOSURES EB FROM USH 151 SB RAMPS TO MEISTER DRIVE AND WB FROM USH 151 NB RAMPS TO MEISTER DRIVE

LEGEND

(B) SEE S.D.D. TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL)

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 OVERVIEW	SHEET 252 E

2

N

98WB

100WB

102WB

STH 16 WB

104WB

98EB

100EB

102EB

STH 16 EB

104EB

50'

MATCH LINE STA. 105+00WB

W04-2L

STH 60

11'

11'

11'

11'

TRAFFIC CONTROL DRUMS

STAGE 4 TYPICAL SECTION
STH 16 EB/WB
STA. 106+04WB - 122+24WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (SHEET 4-1)	SHEET 253 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 4.DWG
LAYOUT NAME - 05011

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

N

USH 151 SB OFF-RAMP

MATCH LINE STA. 105+00WB

106WB

108WB

STH 16 WB

110WB

112WB

MATCH LINE STA. 112+10WB

495' MERGE TAPER
(35 MPH)

106EB

STA. 106+01'EB', 0' L

108EB

T4Y

STH 16 EB

50'

110EB

STA. 110+96'EB', 12' R

STA. 111+57'EB', 12' R

T4Y

W01-6
48"X24"

LANE
CLOSED
R11-2-L
48"X30"

USH 151 SB ON-RAMP

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (SHEET 4-2)	SHEET 254	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 4.DWG
LAYOUT NAME - 05012

PLOT DATE : 8/5/2016

PLOT BY : KL ENGINEERING

PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

N

USH 151 SB

USH 151 NB

OMP

MATCH LINE STA. 112+10WB

MATCH LINE STA. 119+00WB

114WB

116WB

STH 16 WB

118WB

SIGN II

181' LEFT TURN TAPER

STA. 117+13'EB', 11' L

STA. 117+15'EB', 0' R

118EB

114EB

116EB

STH 16 EB

T4Y

50'

STA. 115+33'EB', 12' R

STA. 116+14'EB', 12' R

T4Y

BEGIN LEFT TURN LANE

R3-20-L
24"X36"

LANE CLOSED

R11-2-L
48"X30"

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (SHEET 4-3)	SHEET 255	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 4.DWG
LAYOUT NAME - 05013

PLOT DATE : 5/2/2016

PLOT BY : KL ENGINEERING

PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

2

USH 151 NB ON-RAMP

END ROAD WORK
G20-2A
48"X24"

MATCH LINE STA. 119+00WB

STA. 119+35'EB', 1' R

STA. 119+35'EB', 13' R

120WB

120EB

STA. 120+15'EB', 13' R

R4-7
24"X30"

LANE CLOSED
R11-2-L
48"X30"

STA. 122+24'WB', 12' L

122WB

122EB

T4Y

T4Y

124WB

124EB

50'

STH 16 WB

STH 16 EB

MATCH LINE STA. 126+00WB

R3-8-W
54"X30"

USH 151 NB OFF-RAMP

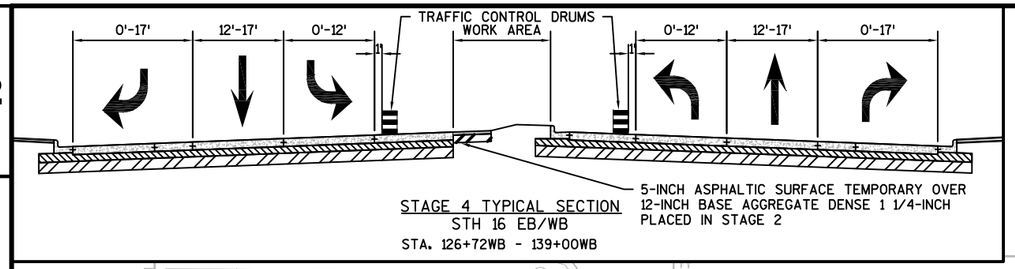
11'
11'
TRAFFIC CONTROL DRUMS
WORK ZONE
11'
11'
5-INCH ASPHALTIC SURFACE TEMPORARY OVER
12-INCH BASE AGGREGATE DENSE 1 1/4-INCH
PLACED IN STAGE 1

STAGE 4 TYPICAL SECTION
STH 16 EB/WB
STA. 122+24WB - 126+41WB

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (SHEET 4-4)	SHEET 256 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001-TC-STAGE 4.DWG
LAYOUT NAME - 05014

PLOT DATE : 8/5/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT



STAGE 4 TYPICAL SECTION
STH 16 EB/WB
STA. 126+72WB - 139+00WB

2

*NOTE: SEE "PAVEMENT MARKING" PLAN FOR PROPOSED PERMANENT PAVMENT MARKING

MATCH LINE STA. 16+75ID

INDUSTRIAL DRIVE

TR4Y
T8W
16ID
TR4DY
TR6W
TR18SW

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

97' RIGHT TURN TAPER

TEMPORARY TRAFFIC SIGNAL REQUIRED
(SEE DETAIL)

WORK ZONE

97' LEFT TURN TAPER

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

98' LEFT TURN TAPER

MATCH LINE STA. 126+00WB

STH 16 WB

T4Y
TR4Y
126WB
128WB
130WB
132WB
STA. 130+20'WB', 12' L
STA. 131+53'WB', 0'
STA. 132+78'WB', 0'

STH 16 EB

126EB
128EB
130EB
132EB
STA. 126+74'EB', 11' R
STA. 127+72'EB', 0'
STA. 131+47'WB', 38' R

105' RIGHT TURN TAPER
TR8W

MATCH LINE STA. 133+00WB

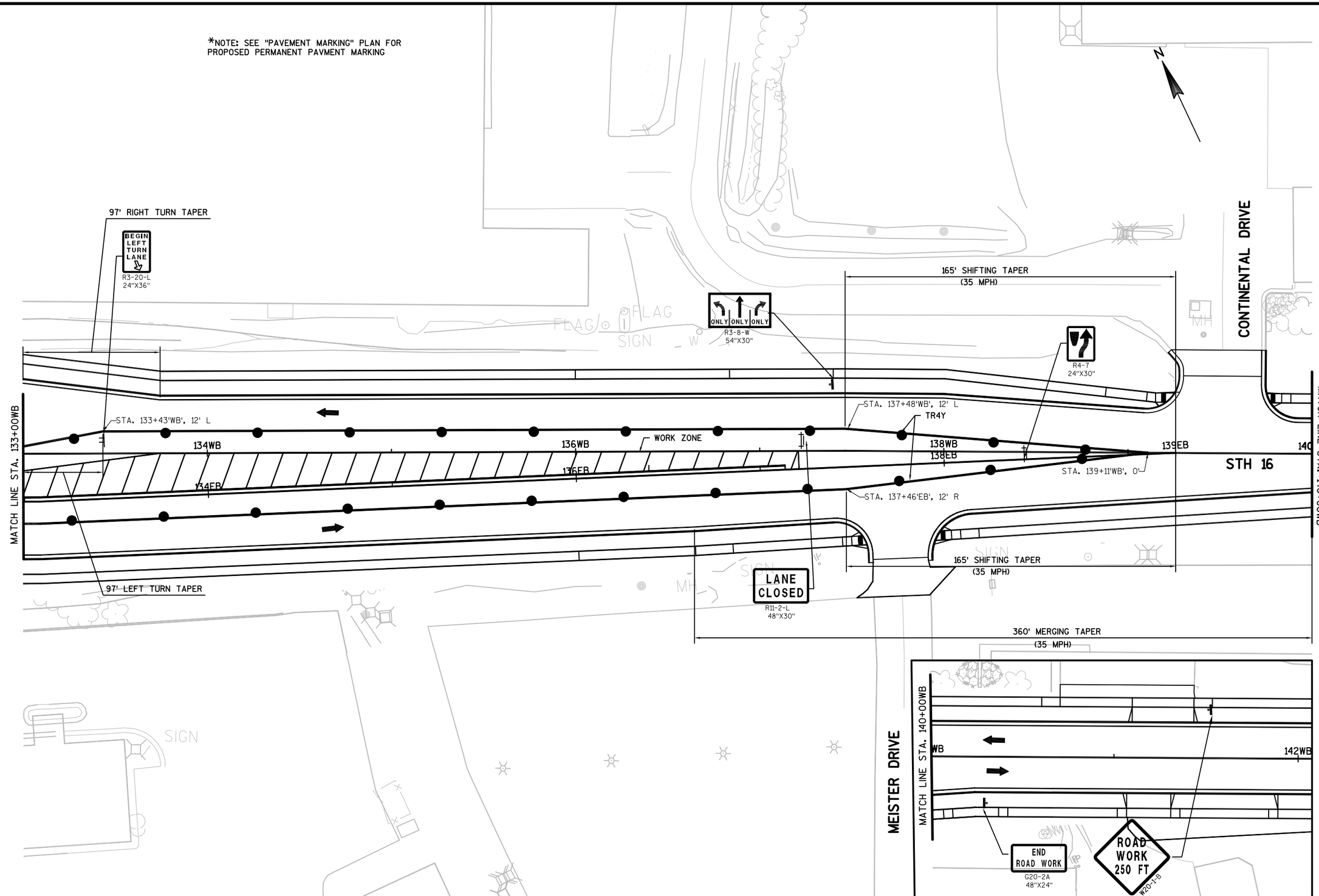
14ID

DIX ST.

MATCH LINE STA. 12+50ID

12ID
10ID
8ID
50'

*NOTE: SEE "PAVEMENT MARKING" PLAN FOR PROPOSED PERMANENT PAVMENT MARKING

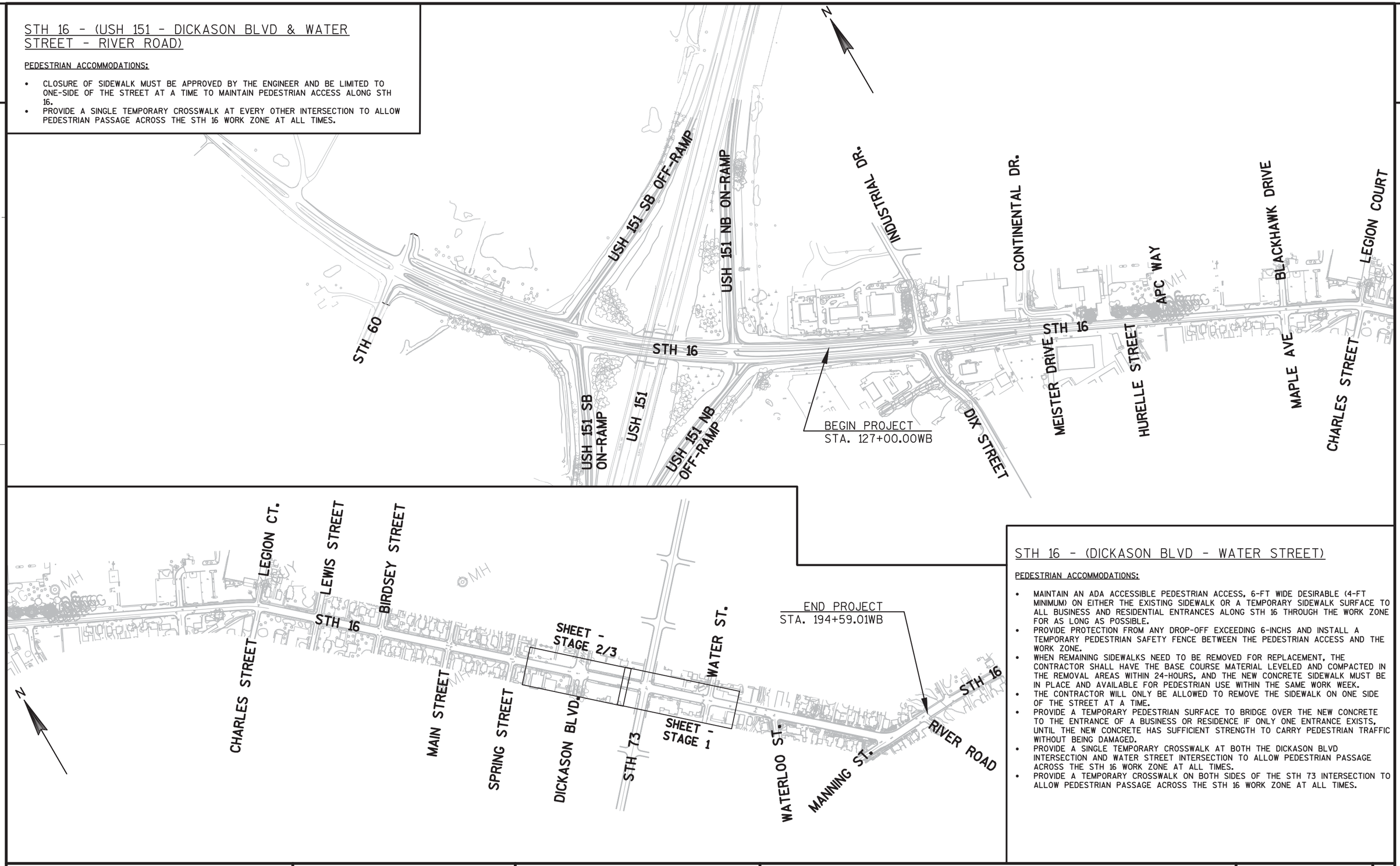


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (SHEET 4-6)	SHEET 258 E

STH 16 - (USH 151 - DICKASON BLVD & WATER STREET - RIVER ROAD)

PEDESTRIAN ACCOMMODATIONS:

- CLOSURE OF SIDEWALK MUST BE APPROVED BY THE ENGINEER AND BE LIMITED TO ONE-SIDE OF THE STREET AT A TIME TO MAINTAIN PEDESTRIAN ACCESS ALONG STH 16.
- PROVIDE A SINGLE TEMPORARY CROSSWALK AT EVERY OTHER INTERSECTION TO ALLOW PEDESTRIAN PASSAGE ACROSS THE STH 16 WORK ZONE AT ALL TIMES.

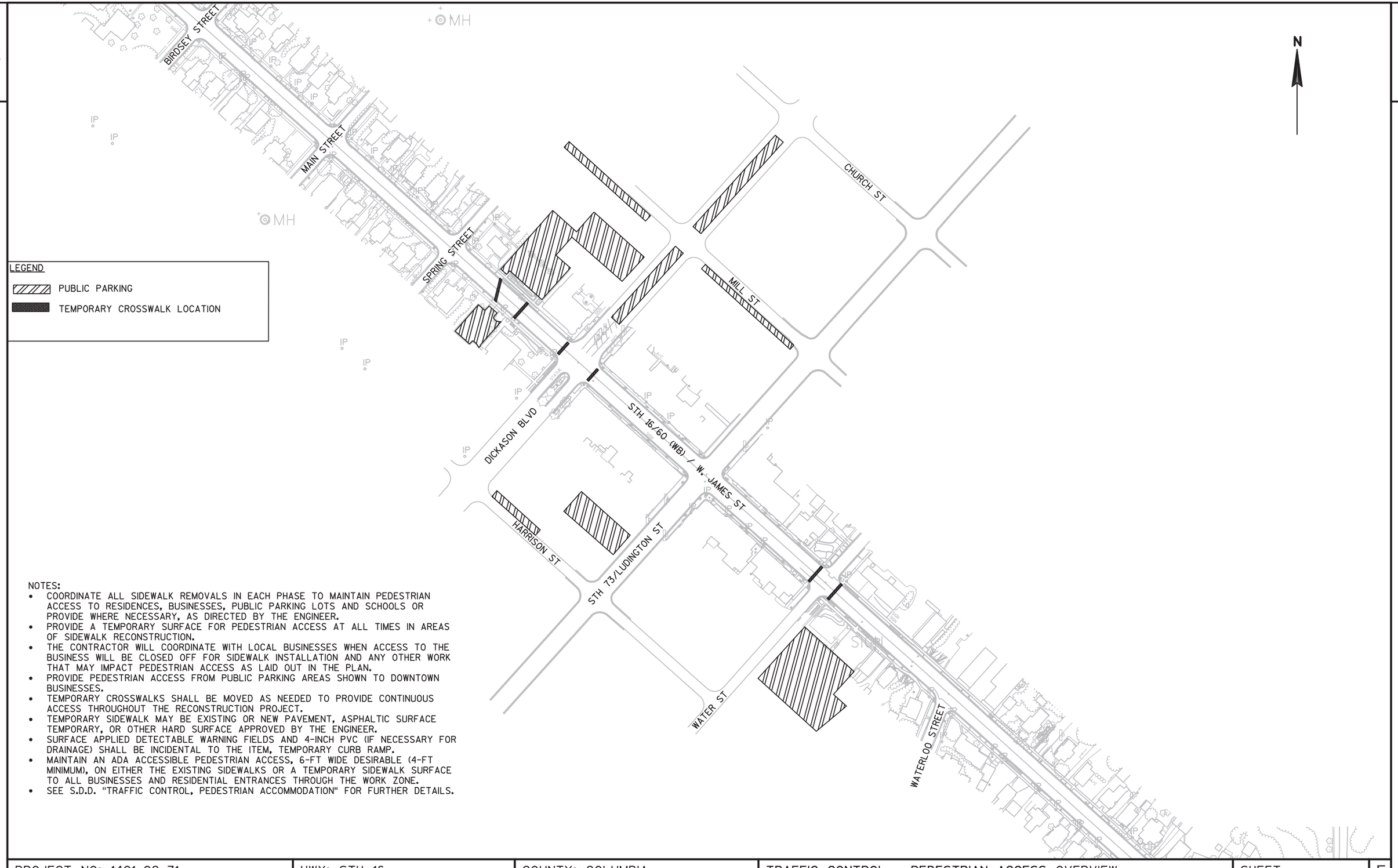


STH 16 - (DICKASON BLVD - WATER STREET)

PEDESTRIAN ACCOMMODATIONS:

- MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SIDEWALK SURFACE TO ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 16 THROUGH THE WORK ZONE FOR AS LONG AS POSSIBLE.
- PROVIDE PROTECTION FROM ANY DROP-OFF EXCEEDING 6-INCHS AND INSTALL A TEMPORARY PEDESTRIAN SAFETY FENCE BETWEEN THE PEDESTRIAN ACCESS AND THE WORK ZONE.
- WHEN REMAINING SIDEWALKS NEED TO BE REMOVED FOR REPLACEMENT, THE CONTRACTOR SHALL HAVE THE BASE COURSE MATERIAL LEVELED AND COMPACTED IN THE REMOVAL AREAS WITHIN 24-HOURS, AND THE NEW CONCRETE SIDEWALK MUST BE IN PLACE AND AVAILABLE FOR PEDESTRIAN USE WITHIN THE SAME WORK WEEK.
- THE CONTRACTOR WILL ONLY BE ALLOWED TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME.
- PROVIDE A TEMPORARY PEDESTRIAN SURFACE TO BRIDGE OVER THE NEW CONCRETE TO THE ENTRANCE OF A BUSINESS OR RESIDENCE IF ONLY ONE ENTRANCE EXISTS, UNTIL THE NEW CONCRETE HAS SUFFICIENT STRENGTH TO CARRY PEDESTRIAN TRAFFIC WITHOUT BEING DAMAGED.
- PROVIDE A SINGLE TEMPORARY CROSSWALK AT BOTH THE DICKASON BLVD INTERSECTION AND WATER STREET INTERSECTION TO ALLOW PEDESTRIAN PASSAGE ACROSS THE STH 16 WORK ZONE AT ALL TIMES.
- PROVIDE A TEMPORARY CROSSWALK ON BOTH SIDES OF THE STH 73 INTERSECTION TO ALLOW PEDESTRIAN PASSAGE ACROSS THE STH 16 WORK ZONE AT ALL TIMES.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - PEDESTRIAN ACCESS OVERVIEW	SHEET 259	E



NOTES:

- COORDINATE ALL SIDEWALK REMOVALS IN EACH PHASE TO MAINTAIN PEDESTRIAN ACCESS TO RESIDENCES, BUSINESSES, PUBLIC PARKING LOTS AND SCHOOLS OR PROVIDE WHERE NECESSARY, AS DIRECTED BY THE ENGINEER.
- PROVIDE A TEMPORARY SURFACE FOR PEDESTRIAN ACCESS AT ALL TIMES IN AREAS OF SIDEWALK RECONSTRUCTION.
- THE CONTRACTOR WILL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT PEDESTRIAN ACCESS AS LAID OUT IN THE PLAN.
- PROVIDE PEDESTRIAN ACCESS FROM PUBLIC PARKING AREAS SHOWN TO DOWNTOWN BUSINESSES.
- TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS ACCESS THROUGHOUT THE RECONSTRUCTION PROJECT.
- TEMPORARY SIDEWALK MAY BE EXISTING OR NEW PAVEMENT, ASPHALTIC SURFACE TEMPORARY, OR OTHER HARD SURFACE APPROVED BY THE ENGINEER.
- SURFACE APPLIED DETECTABLE WARNING FIELDS AND 4-INCH PVC (IF NECESSARY FOR DRAINAGE) SHALL BE INCIDENTAL TO THE ITEM, TEMPORARY CURB RAMP.
- MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM), ON EITHER THE EXISTING SIDEWALKS OR A TEMPORARY SIDEWALK SURFACE TO ALL BUSINESSES AND RESIDENTIAL ENTRANCES THROUGH THE WORK ZONE.
- SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR FURTHER DETAILS.

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - PEDESTRIAN ACCESS OVERVIEW	SHEET 260	E

2

LEGEND

- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN
- TEMPORARY PEDESTRIAN BARRIER
- TEMPORARY CROSSWALK LOCATION
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE PLATE

N. LUDINGTON STREET

N. WATER STREET

S. LUDINGTON STREET

S. WATER STREET

STH 16/60 (WB) / W. JAMES STREET

13+00NW

12+00NW

11+50SW

11+00SW

10+00SW

13+00N

12+00N

11+50S

11+00S

10+00S

178+00WB

179+00WB

180+00WB

181+00WB

182+00WB

183+00WB

TEMPORARY CURB RAMP

ROAD CLOSED
R11-2
48"X30"

CLOSE CROSSINGS DURING CONSTRUCTION OF LUDINGTON STREET. DETOUR PEDESTRIAN TRAFFIC TO CROSS AT MILL STREET AND HARRISON STREET.

PLACE TEMPORARY PEDESTRIAN SURFACE PLATES TO ALLOW ACCESS DURING SIDEWALK CONSTRUCTION (TYP.)

MAINTAIN TEMPORARY PEDESTRIAN BARRIER AT EDGE OF EXISTING SIDEWALK FOR TEMPORARY PEDESTRIAN AREA AT ALL TIMES DURING ROADWAY WORK. REMOVE AS NECESSARY TO COMPLETE NEW SIDEWALK PLACEMENT. COORDINATE WITH FIELD ENGINEER, CITY OF COLUMBUS, AND BUSINESS OWNERS TO MINIMIZE IMPACTS TO PEDESTRIAN TRAFFIC TO FRONT ENTRANCES.

MAINTAIN ONE CROSSING PER INTERSECTION TO ALLOW PEDESTRIANS TO CROSS JAMES STREET

ROAD CLOSED
R11-2
48"X30"

TEMPORARY CURB RAMP

SIGN

A/C

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - PEDESTRIAN ACCESS (STAGE 1)	SHEET 261	E

2

LEGEND

- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN
- TEMPORARY PEDESTRIAN BARRIER
- TEMPORARY CROSSWALK LOCATION
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE PLATE

N. DICKASON BOULEVARD (SB)

N. DICKASON BOULEVARD (NB)

13+00DSB

13+00DNB

12+00DSB

12+00DNB

11+50DSB

11+50DNB

11+00DSB

11+00DNB

10+00DSB

10+00DNB

TEMPORARY CURB RAMP

ROAD CLOSED
R11-2
48"X30"

MAINTAIN ONE CROSSING TO ALLOW PEDESTRIANS TO CROSS JAMES STREET

MAINTAIN ONE CROSSING TO ALLOW PEDESTRIANS TO CROSS JAMES STREET

PLACE TEMPORARY PEDESTRIAN SURFACE PLATES TO ALLOW ACCESS DURING SIDEWALK CONSTRUCTION (TYP.)

172+00WB

173+00WB

174+00WB

175+00WB

176+00WB

177+00WB

STH 16/60 (WB) / W. JAMES STREET

MAINTAIN TEMPORARY PEDESTRIAN BARRIER AT EDGE OF EXISTING SIDEWALK FOR TEMPORARY PEDESTRIAN AREA AT ALL TIMES DURING ROADWAY WORK. REMOVE AS NECESSARY TO COMPLETE NEW SIDEWALK PLACEMENT. COORDINATE WITH FIELD ENGINEER, CITY OF COLUMBUS, AND BUSINESS OWNERS TO MINIMIZE IMPACTS TO PEDESTRIAN TRAFFIC TO FRONT ENTRANCES.

TEMPORARY CURB RAMP

TEMPORARY CURB RAMP

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

S. DICKASON BOULEVARD (SB)

S. DICKASON BOULEVARD (NB)

SIGN

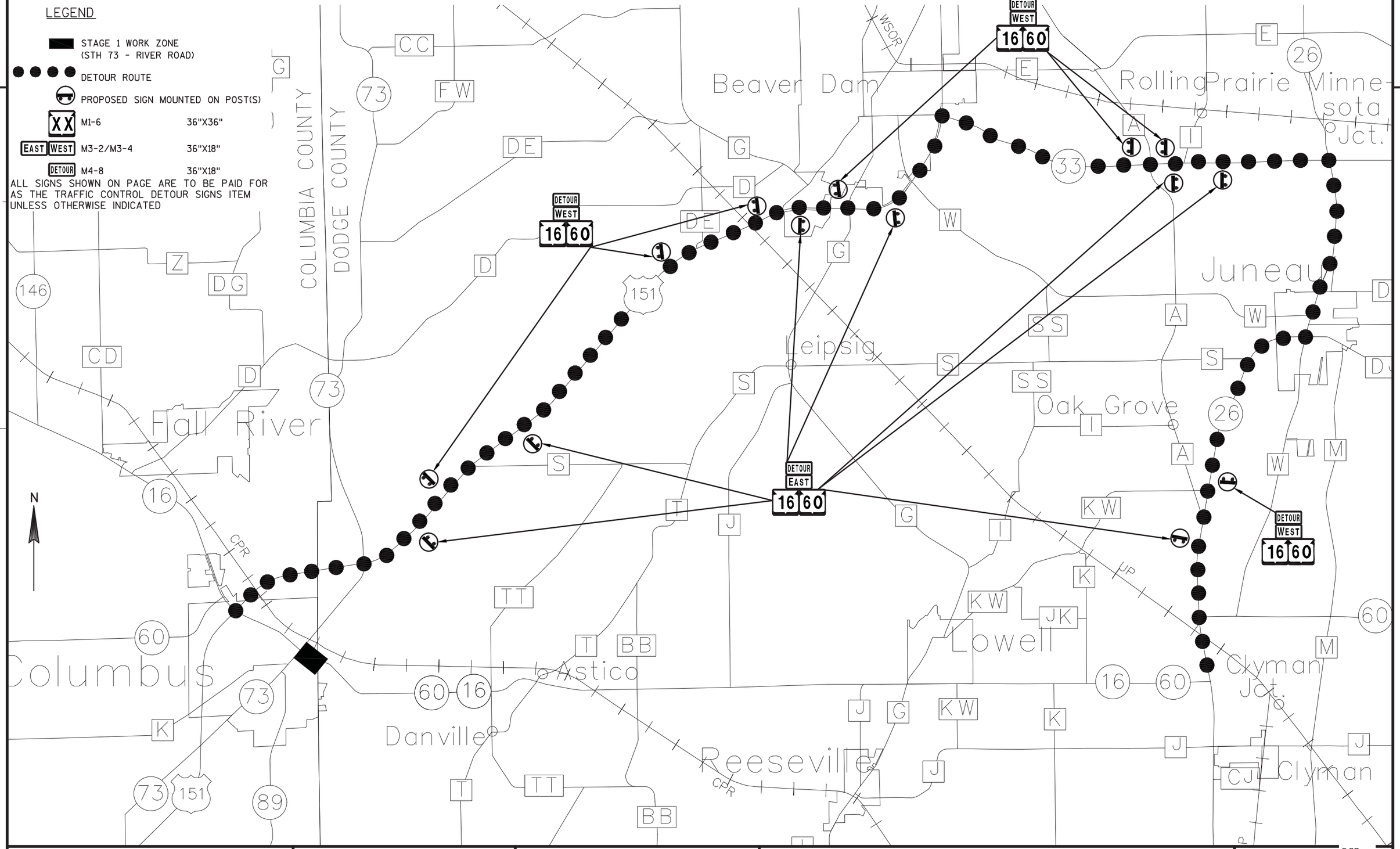
A/C

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - PEDESTRIAN ACCESS (STAGE 2/3)	SHEET 262	E

LEGEND

- STAGE 1 WORK ZONE (STH 73 - RIVER ROAD)
- DETOUR ROUTE
- PROPOSED SIGN MOUNTED ON POST(S)
- XX M1-6 36"X36"
- EAST WEST M3-2/M3-4 36"X18"
- DETOUR M4-8 36"X18"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED



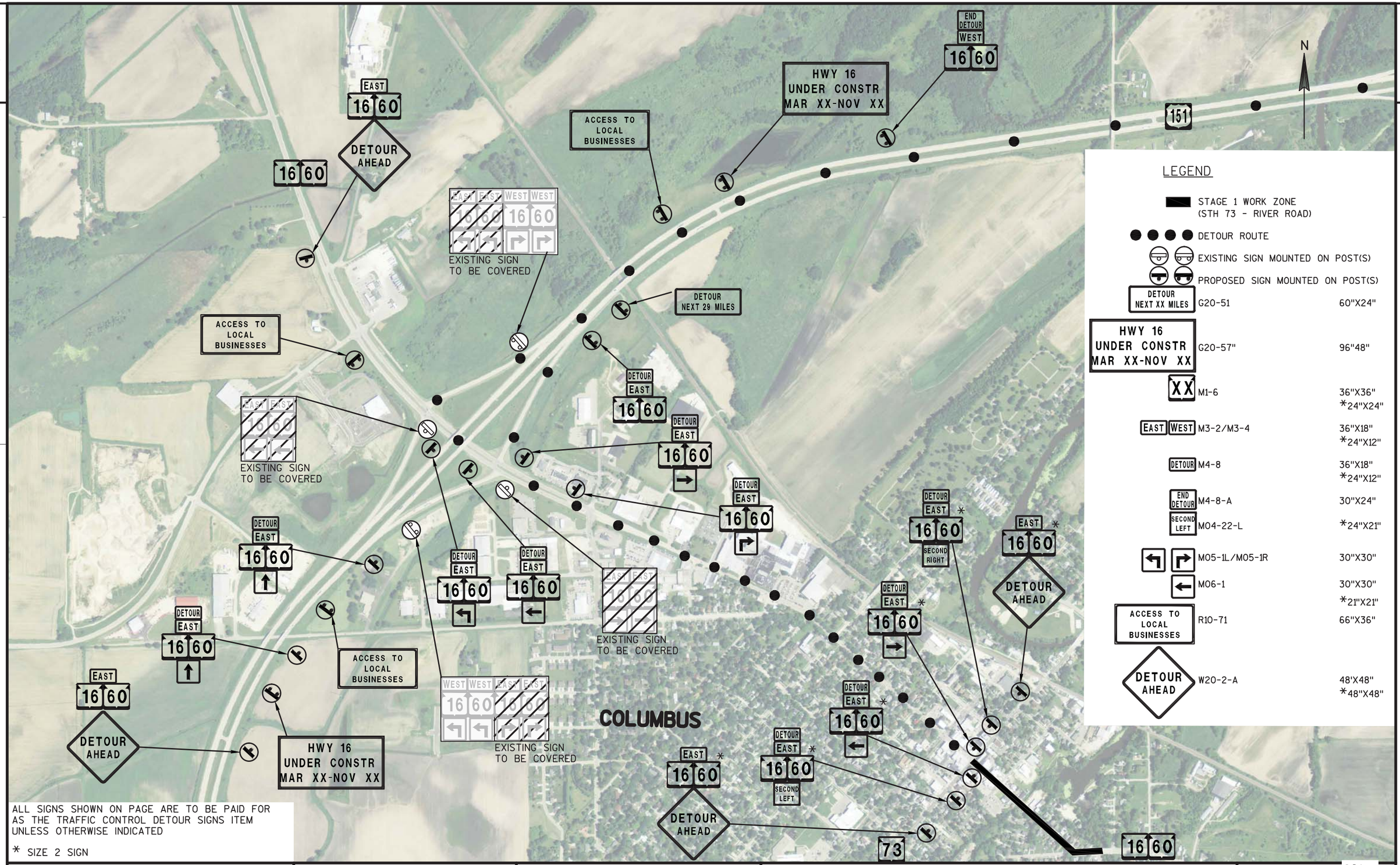
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1)	SHEET 263 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : Custom

WISDOT/CADDS SHEET 42

2



LEGEND

	STAGE 1 WORK ZONE (STH 73 - RIVER ROAD)	
	DETOUR ROUTE	
	EXISTING SIGN MOUNTED ON POST(S)	
	PROPOSED SIGN MOUNTED ON POST(S)	
DETOUR NEXT XX MILES	G20-51	60"X24"
HWY 16 UNDER CONSTR MAR XX-NOV XX	G20-57"	96"48"
XX	M1-6	36"X36" *24"X24"
EAST WEST	M3-2/M3-4	36"X18" *24"X12"
DETOUR	M4-8	36"X18" *24"X12"
END DETOUR	M4-8-A	30"X24"
SECOND LEFT	M04-22-L	*24"X21"
	M05-1L/M05-1R	30"X30"
	M06-1	30"X30" *21"X21"
ACCESS TO LOCAL BUSINESSES	R10-71	66"X36"
DETOUR AHEAD	W20-2-A	48'X48" *48"X48"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED

* SIZE 2 SIGN

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 1-5)	SHEET 264 E

2

LEGEND

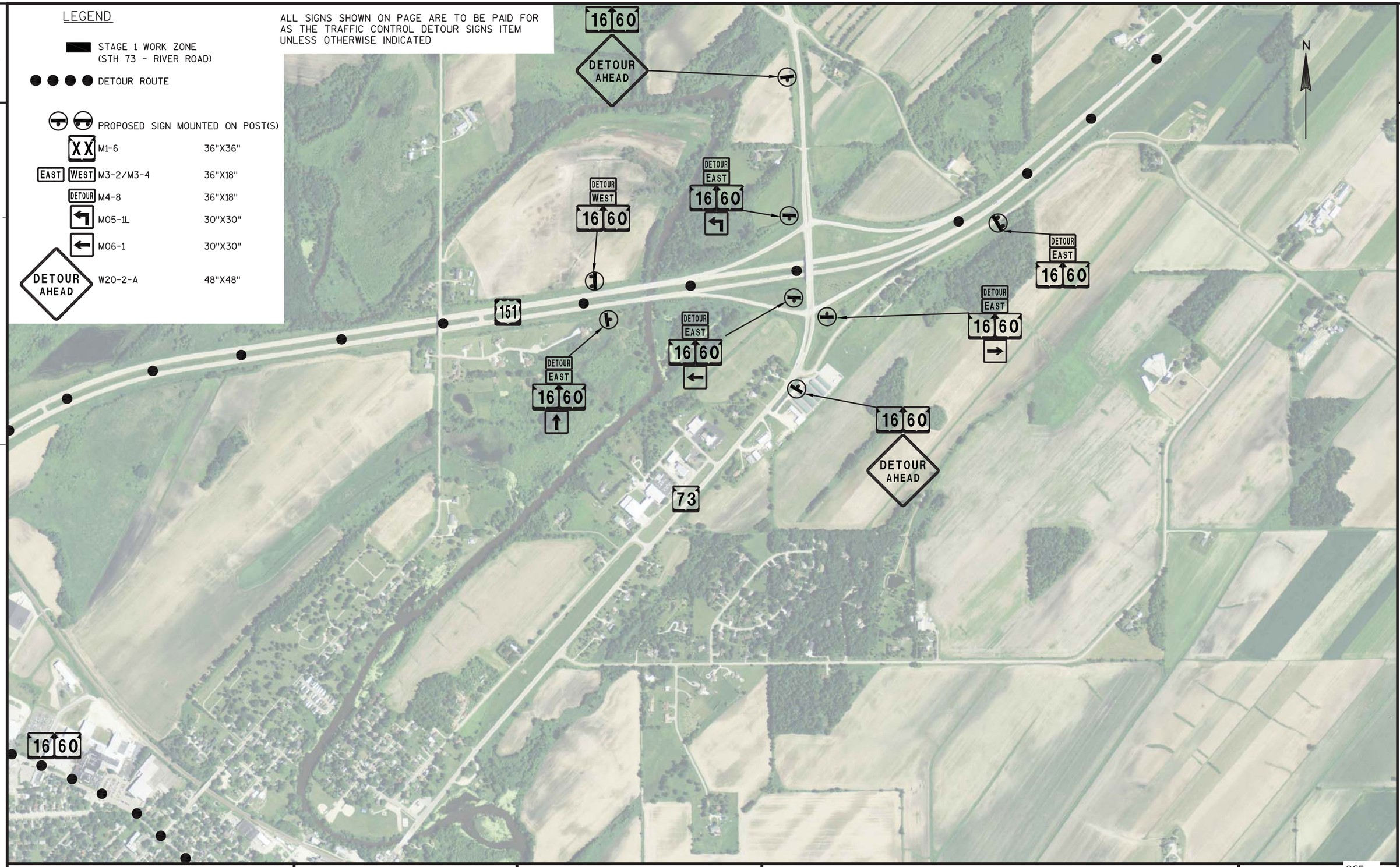
STAGE 1 WORK ZONE
(STH 73 - RIVER ROAD)

DETOUR ROUTE

PROPOSED SIGN MOUNTED ON POST(S)

XX	M1-6	36"X36"
EAST WEST	M3-2/M3-4	36"X18"
DETOUR	M4-8	36"X18"
	M05-1L	30"X30"
	M06-1	30"X30"
DETOUR AHEAD	W20-2-A	48"X48"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED



2

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 2-5)	SHEET 265 E

LEGEND

STAGE 1 WORK ZONE
(STH 73 - RIVER ROAD)

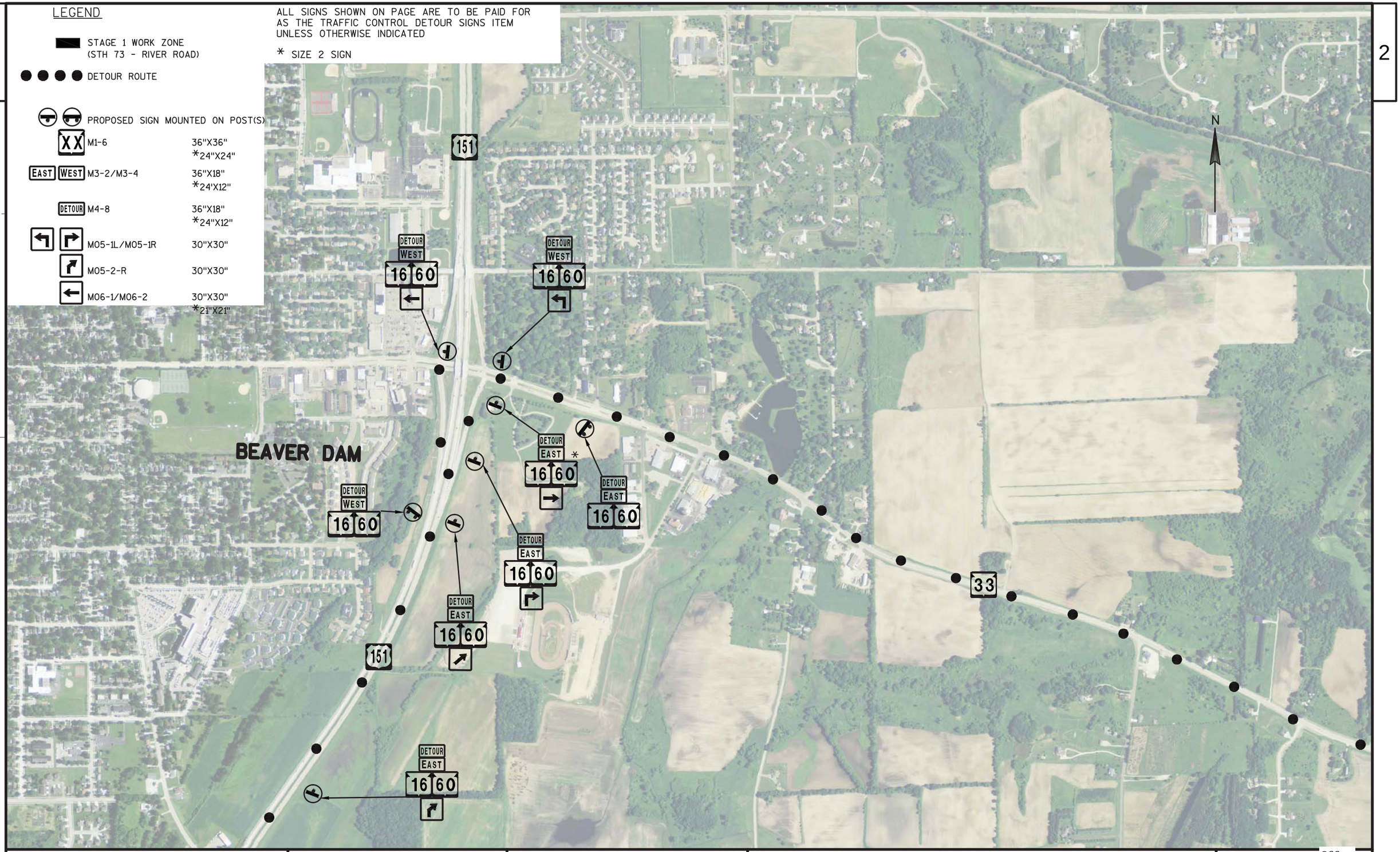
DETOUR ROUTE

PROPOSED SIGN MOUNTED ON POST(S)

XX	M1-6	36"X36" *24"X24"
EAST WEST	M3-2/M3-4	36"X18" *24'X12"
DETOUR	M4-8	36"X18" *24"X12"
	M05-1L/M05-1R	30"X30"
	M05-2-R	30"X30"
	M06-1/M06-2	30"X30" *21"X21"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED

* SIZE 2 SIGN



PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 3-5)	SHEET 266 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

LEGEND

STAGE 1 WORK ZONE
(STH 73 - RIVER ROAD)

DETOUR ROUTE

SIGN ON TEMPORARY SUPPORT

XX	M1-6	36"X36"
EAST WEST	M3-2/M3-4	36"X18"
DETOUR	M4-8	36"X18"
	M05-1L/M05-1R	30"X30"
	M06-1	30"X30"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED

MINNESOTA JUNCTION

33

DETOUR WEST 16 60

DETOUR EAST 16 60

DETOUR EAST 16 60

DETOUR EAST 16 60

DETOUR WEST 16 60

DETOUR WEST 16 60

26

N

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 4-5)	SHEET 267 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

LEGEND

STAGE 1 WORK ZONE
(STH 73 - RIVER ROAD)

DETOUR ROUTE

PROPOSED SIGN MOUNTED ON POST(S)		
XX	M1-6	36"X36"
EAST WEST	M3-2/M3-4	36"X18"
DETOUR	M4-8	36"X18"
	M05-1L/M05-1R	30"X30"
	M06-1	30"X30"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED



PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 5-5)	SHEET 268 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113

PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

LEGEND

STAGE 1 WORK ZONE
(STH 73 - RIVER ROAD)

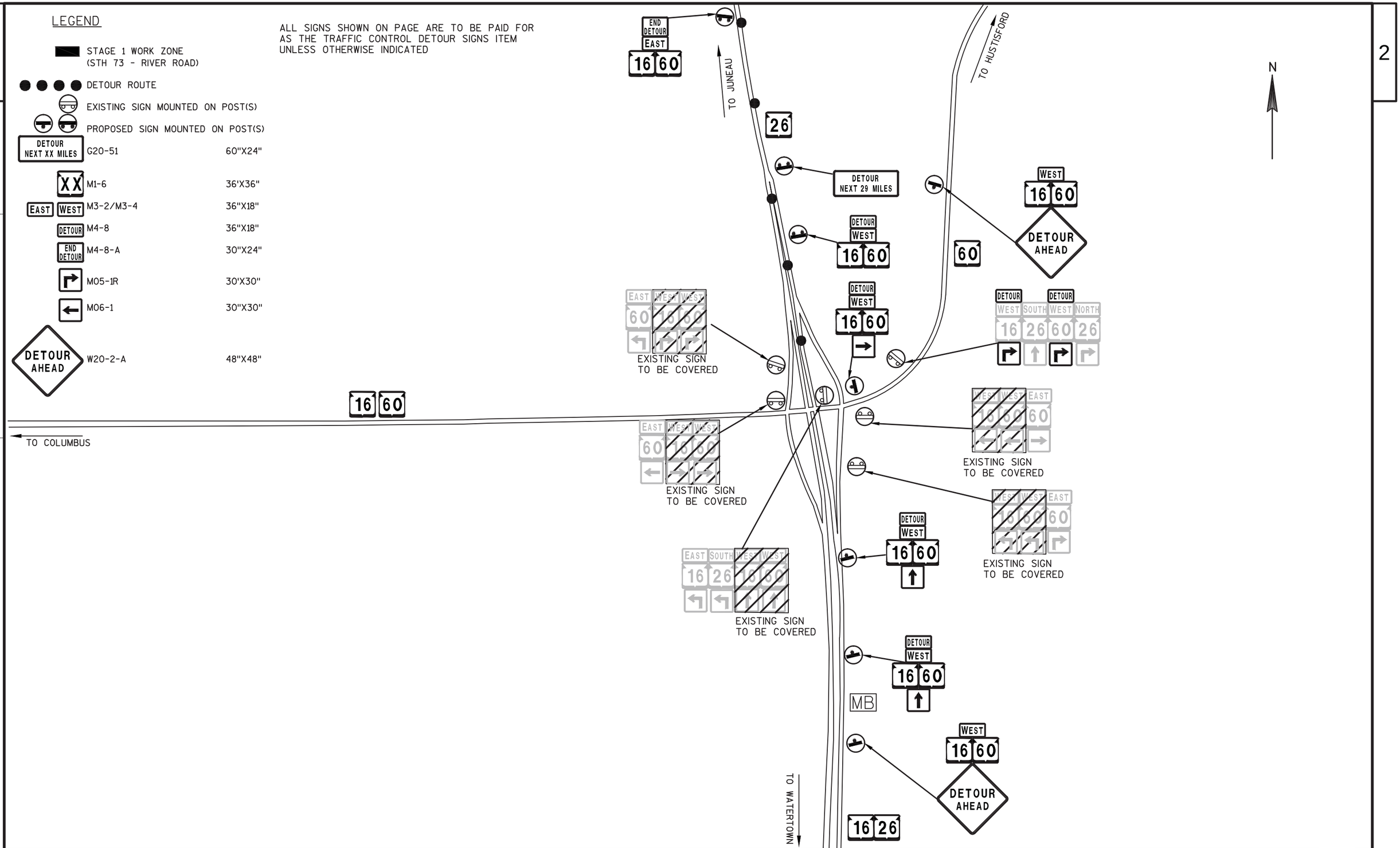
DETOUR ROUTE

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

DETOUR NEXT XX MILES	G20-51	60"X24"
XX	M1-6	36'X36"
EAST WEST	M3-2/M3-4	36"X18"
DETOUR	M4-8	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-1R	30'X30"
	M06-1	30"X30"
DETOUR AHEAD	W20-2-A	48"X48"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED



PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 1) (SHEET 6-5)	SHEET 269 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

LEGEND

STAGE 2 WORK ZONE (INDUSTRIAL - STH 73)

DETOUR ROUTE

Fall River

Columbus

Leipsig

Oak Grove

Lowell

Astico

Danville

Reeseville

COLUMB

DODGE

CPR

UP

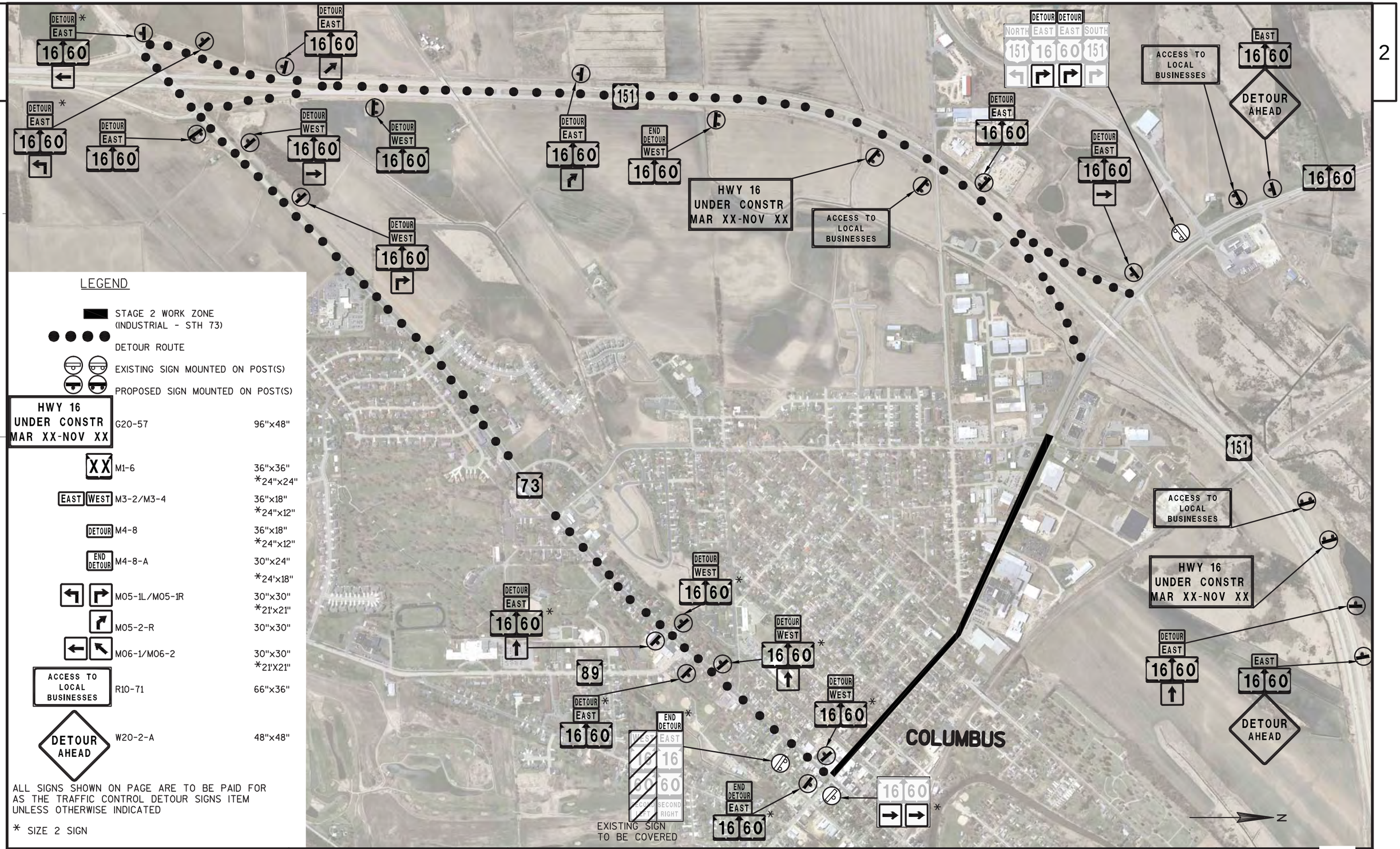
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 2)	SHEET 270 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113

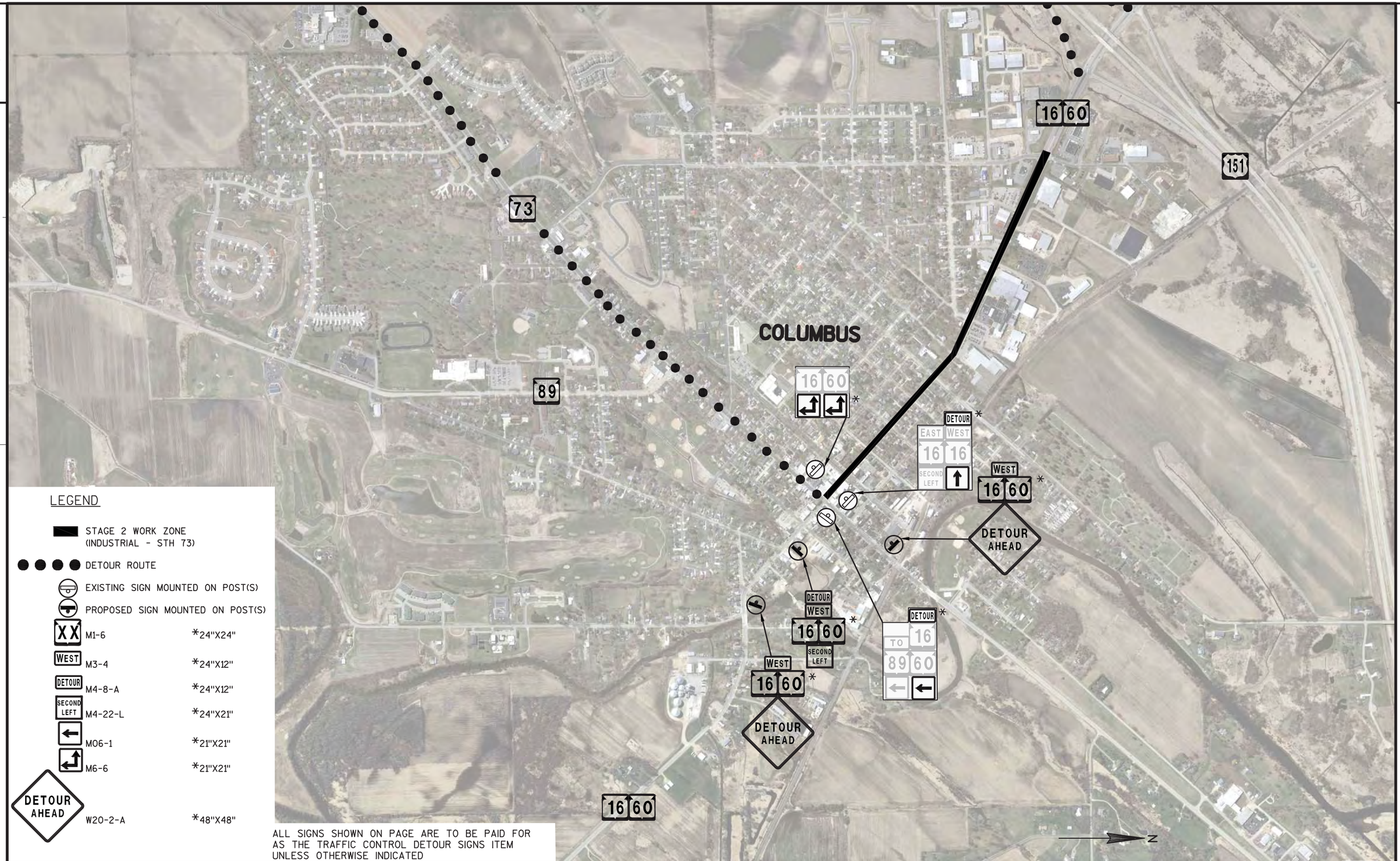
PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : Custom

WISDOT/CADDS SHEET 42



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 2) (SHEET 1-2)	SHEET 271 E

2



LEGEND

- STAGE 2 WORK ZONE (INDUSTRIAL - STH 73)
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)

XX	M1-6	*24"X24"
WEST	M3-4	*24"X12"
DETOUR	M4-8-A	*24"X12"
SECOND LEFT	M4-22-L	*24"X21"
←	M06-1	*21"X21"
↵	M6-6	*21"X21"
DETOUR AHEAD	W20-2-A	*48"X48"

ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETOUR ROUTE (STAGE 2) (SHEET 2-2)	SHEET 272 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\027001_DT.DWG
LAYOUT NAME - 050113
PLOT DATE : 4/29/2016
PLOT BY : KL ENGINEERING
PLOT NAME : ---------- PLOT SCALE : Custom

2

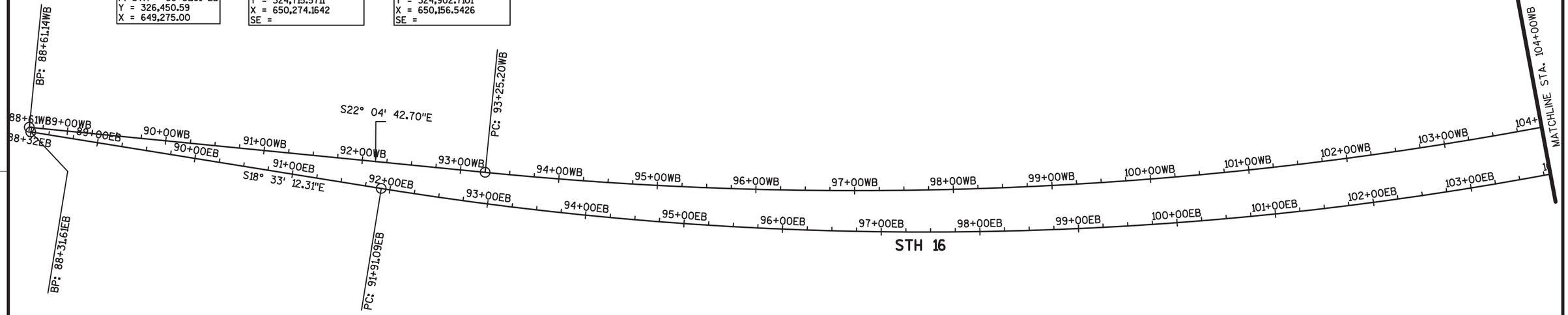
N

STH 16 WB
PI STA = 88+61.14 WB
Y = 326,454.07
X = 649,278.43

STH 16 EB
PI STA = 88+31.61 EB
Y = 326,450.59
X = 649,275.00

STH 16 EB
PI STA = 100+41.44 EB
Y = 325,303.6433
X = 649,659.9491
Δ = 27°41'32"
D = 1°39'38.69"
T = 850.35
L = 1667.46
R = 3450.00
PC STA = 91+91.09 EB
Y = 326,109.7951
X = 649,389.3785
PT STA = 108+58.55 EB
Y = 324,715.5711
X = 650,274.1642
SE =

STH 16 WB
PI STA = 99+97.40 WB
Y = 325,401.1390
X = 649,705.5191
Δ = 20°03'47"
D = 1°30'28.02"
T = 672.20
L = 1330.64
R = 3800.00
PC STA = 93+25.20 WB
Y = 326,024.0468
X = 649,452.8544
PT STA = 106+55.83 WB
Y = 324,902.7101
X = 650,156.5426
SE =

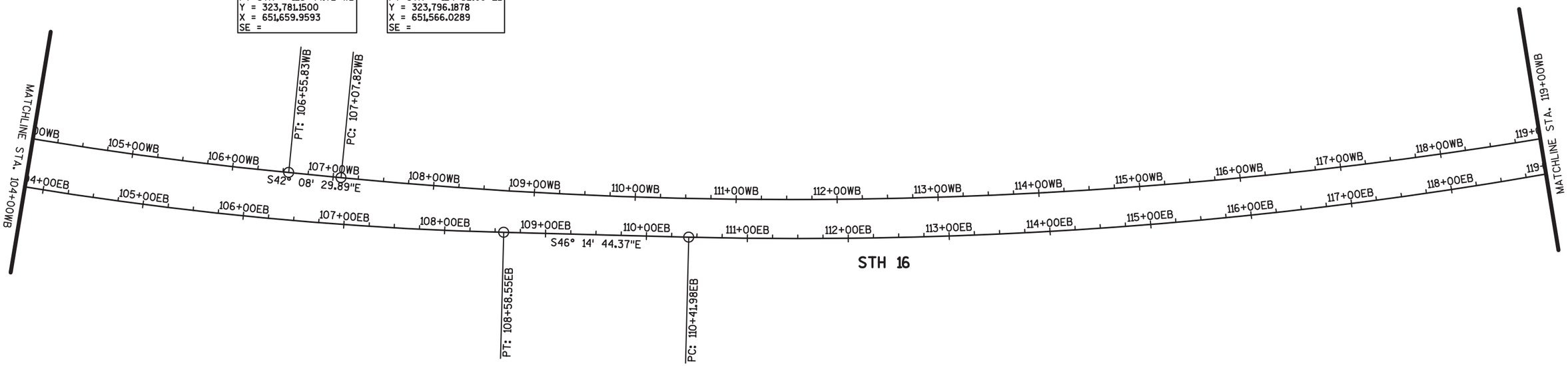


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 273	E

2

STH 16 WB
PI STA = 116+38.70 WB
Y = 324,173.9292
X = 650,816.0092
Δ = 22°54'03"
D = 1°14'48.16"
T = 930.87
L = 1836.90
R = 4595.75
PC STA = 107+07.82 WB
Y = 324,864.1620
X = 650,191.4244
PT STA = 125+44.72 WB
Y = 323,781.1500
X = 651,659.9593
SE =

STH 16 EB
PI STA = 117+53.71 EB
Y = 324,096.5028
X = 650,920.7534
Δ = 18°47'48"
D = 1°19'56.86"
T = 711.74
L = 1410.68
R = 4300.00
PC STA = 110+41.98 EB
Y = 324,588.7171
X = 650,406.6575
PT STA = 124+52.66 EB
Y = 323,796.1878
X = 651,566.0289
SE =



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 274	E

2

INDUSTRIAL-DIX
PI STA = 18+38.70 ID
Y = 323,924.77
X = 652,236.38

INDUSTRIAL-DIX
PI STA = 8+66.13 ID
Y = 322,980.83
X = 652,202.00

INDUSTRIAL-DIX
PI STA = 17+65.36 ID
Y = 323,850.8009
X = 652,236.1561
Δ = 19°16'31"
D = 28°56'14.14"
T = 33.62
L = 66.61
R = 198.00
PC STA = 17+31.74 ID
Y = 323,819.0971
X = 652,224.9588
PT STA = 17+98.35 ID
Y = 323,884.4238
X = 652,236.2601
SE =

INDUSTRIAL-DIX
PI STA = 15+38.07 ID
Y = 323,636.3729
X = 652,160.4231
Δ = 8°37'55"
D = 13°48'22.36"
T = 31.32
L = 62.52
R = 415.00
PC STA = 15+06.75 ID
Y = 323,605.6099
X = 652,154.5432
PT STA = 15+69.28 ID
Y = 323,665.9050
X = 652,170.8534
SE =

INDUSTRIAL-DIX
PI STA = 10+52.33 ID
Y = 323,165.1342
X = 652,181.7599
Δ = 13°47'47"
D = 14°19'26.20"
T = 48.39
L = 96.32
R = 400.00
PC STA = 10+03.93 ID
Y = 323,117.8577
X = 652,192.0916
PT STA = 11+00.25 ID
Y = 323,208.5830
X = 652,160.4522
SE =

INDUSTRIAL-DIX
PI STA = 9+58.81 ID
Y = 323,073.5151
X = 652,201.7821
Δ = 12°11'34"
D = 17°12'21.38"
T = 35.57
L = 70.86
R = 333.00
PC STA = 9+23.25 ID
Y = 323,037.9486
X = 652,201.8656
PT STA = 9+94.11 ID
Y = 323,108.2616
X = 652,194.1887
SE =

INDUSTRIAL-DIX
PI STA = 12+46.95 ID
Y = 323,340.2954
X = 652,095.8589
Δ = 40°00'16"
D = 14°13'02.33"
T = 146.70
L = 281.38
R = 403.00
PC STA = 11+00.25 ID
Y = 323,208.5832
X = 652,160.4520
PT STA = 13+81.63 ID
Y = 323,482.7097
X = 652,131.0521
SE =

MATCHLINE STA. 119+00WB

MATCHLINE STA. 134+00WB

STH 16

INDUSTRIAL DRIVE

DIX STREET

PT: 125+44.72WB

PT: 124+52.66EB

PC: 17+31.74ID

PT: 17+98.35ID

EP: 18+38.70ID

PT: 15+69.28ID

PC: 15+06.75ID

PI: 13+81.64ID

PT: 13+81.63ID

PC: 11+00.25ID

PC: 10+03.93ID

PT: 9+94.11ID

PC: 9+23.25ID

PI: 133+08.45EB

BP: 8+66.13ID

S65° 02' 32.85"E

S65° 02' 32.85"E

N00° 10' 37.93"E

N19° 27' 08.13"E

N00° 49' 14.91"E

N12° 19' 38.91"W

N00° 08' 04.47"W

2

2

N

MEISTER
PI STA = 11+50.00 M
Y = 323,255.24
X = 652,771.70

MEISTER
PI STA = 10+00.00 M
Y = 323,117.09
X = 652,713.27

CONTINENTAL
PI STA = 12+50.00 C
Y = 323,276.12
X = 652,977.36

CONTINENTAL
PI STA = 11+50.00 C
Y = 323,185.88
X = 652,934.27

APC WAY
PI STA = 13+00.00 A
Y = 323,117.24
X = 653,426.20

APC WAY
PI STA = 11+91.94 A
Y = 323,022.39
X = 653,374.06

CONTINENTAL DRIVE

APC WAY

MATCHLINE STA. 134+00WB

135+00WB 136+00WB 137+00WB 138+00WB 139+00WB 140+00WB 141+00WB 142+00WB 143+00WB 144+00WB 145+00WB 146+00WB 147+00WB 148+00WB 149+

135+00EB 136+00EB 137+00EB 138+00EB

PI: 137+46.38WB

S64° 28' 50.20"E

N25° 31' 22.75"E

12+50C

EP: 12+50.00C

BP: 11+50.00C

EP: 11+50.00M

S67° 17' 32.85"E

11+00M

N22° 55' 40.90"E

EP: 139+25.86EB

BP: 10+00.00M

10+00M

MEISTER DRIVE

STH 16 EB
PI STA = 139+25.86 EB
Y = 323,196.75
X = 652,911.46

EP: 13+00.00A

N25° 31' 09.80"E

13+00A

12+00A

BP: 11+50.00A

EP: 11+50.00HU

11+50HU

N22° 21' 50.99"E

11+00HU

BP: 10+20.00HU

10+20HU

HURELLE STREET

STH 16

MATCHLINE STA. 149+00WB

HURELLE
PI STA = 11+50.00 HU
Y = 323,050.04
X = 653,218.78

HURELLE
PI STA = 10+20.00 HU
Y = 322,929.82
X = 653,169.32

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 276	E

2

BLACKHAWK
PI STA = 13+00.00 B
Y = 322,814.94
X = 654,059.42

BLACKHAWK
PI STA = 11+50.00 B
Y = 322,679.71
X = 653,994.51

LEGION
PI STA = 13+00.00 L
Y = 322,600.36
X = 654,481.22

LEGION
PI STA = 11+50.00 L
Y = 322,487.65
X = 654,382.24

N LEWIS
PI STA = 13+00.00 NL
Y = 322,364.59
X = 654,746.78

N LEWIS
PI STA = 11+50.00 NL
Y = 322,252.61
X = 654,646.97

N BIRDSEY
PI STA = 13+00.00 NB
Y = 322,123.21
X = 655,016.60

N BIRDSEY
PI STA = 11+50.00 NB
Y = 322,011.45
X = 654,916.54

STH 16 WB
PI STA = 155+42.02 WB
Y = 322,500.5238
X = 654,369.8629
Δ = 16°17'49"
D = 17°12'21.38"
T = 47.68
L = 94.72
R = 333.00
PC STA = 154+94.34 WB
Y = 322,521.0654
X = 654,326.8340
PT STA = 155+89.05 WB
Y = 322,468.7329
X = 654,405.3985
SE =

MAPLE
PI STA = 11+49.99 MA
Y = 322,679.56
X = 653,994.80

MAPLE
PI STA = 10+00.00 MA
Y = 322,544.24
X = 653,930.13

CHARLES
PI STA = 11+50.00 CH
Y = 322,477.63
X = 654,395.03

CHARLES
PI STA = 10+00.00 CH
Y = 322,367.34
X = 654,293.36

S LEWIS
PI STA = 11+50.00 SL
Y = 322,252.66
X = 654,646.92

S LEWIS
PI STA = 10+00.00 SL
Y = 322,140.77
X = 654,547.02

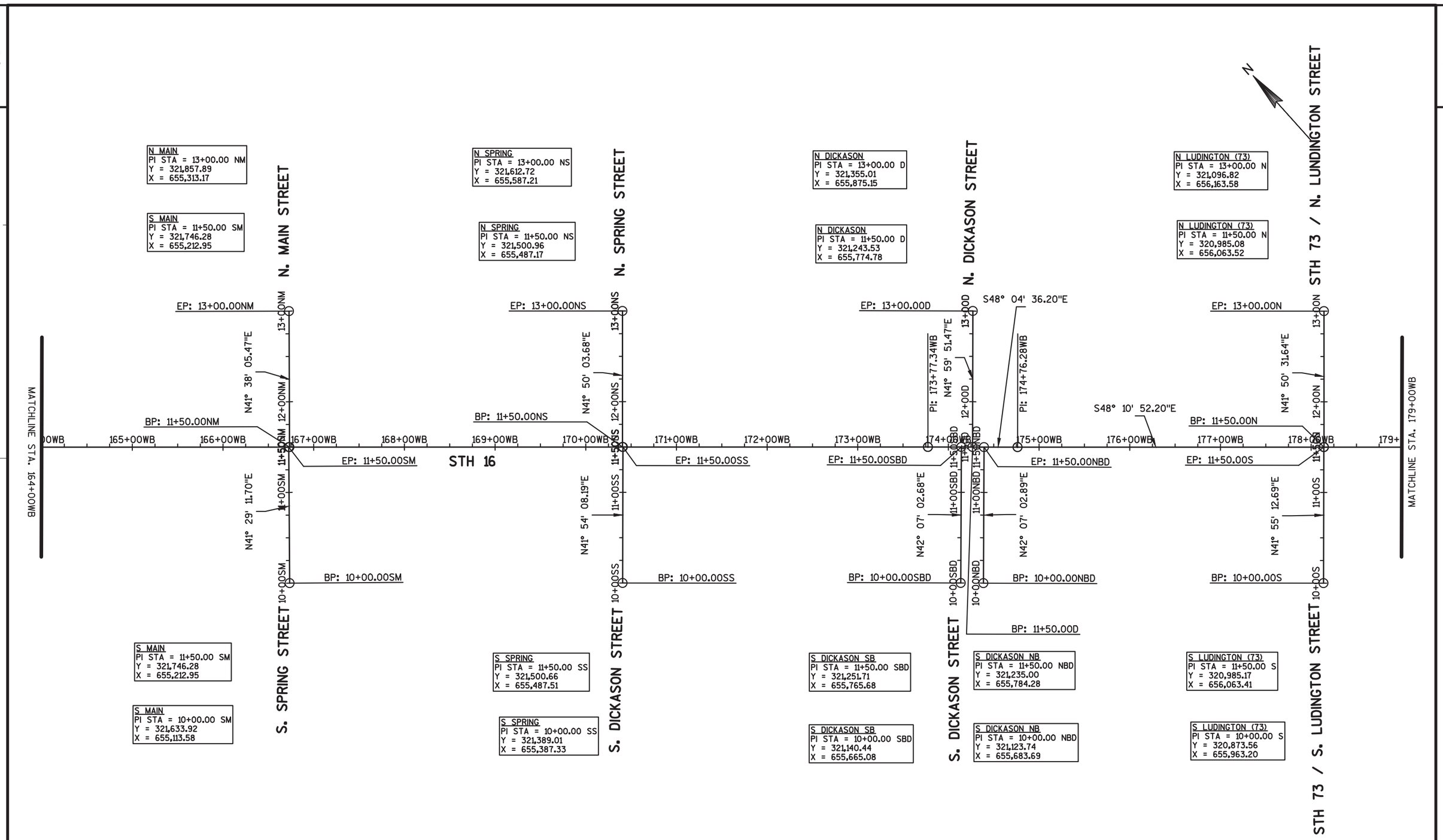
S BIRDSEY
PI STA = 11+50.00 SB
Y = 322,011.42
X = 654,916.58

S BIRDSEY
PI STA = 10+00.00 SB
Y = 321,899.45
X = 654,816.76

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 277	E

FILE NAME : \\KL1NAS\DATA1\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD.DWG PLOT DATE : 4/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 278	E

FILE NAME : \\KL1NAS\DATA1\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD.DWG PLOT DATE : 4/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1 IN:100 FT

2

N

N. WATER STREET

N WATER
PI STA = 13+00.00 NW
Y = 320,852.88
X = 656,435.90

N WATER
PI STA = 11+50.00 NW
Y = 320,741.36
X = 656,335.59

UDEY
PI STA = 13+00.00 U
Y = 320,437.38
X = 656,899.22

UDEY
PI STA = 11+50.00 U
Y = 320,326.94
X = 656,797.72

UDEY STREET

MATCHLINE STA. 179+00WB

MATCHLINE STA. 194+00WB

EP: 13+00.00NW

EP: 13+00.00U

PI: 181+47.38WB

N41° 58' 19.13"E

N42° 35' 01.05"E

BP: 11+50.00NW

S48° 08' 17.01"E

BP: 11+50.00U

EP: 11+50.00SW

EP: 11+50.00W

PC: 189+82.05WB

PRC: 191+36.63WB

PT: 193+01.45WB

STH 16

EP: 11+82.04MS

N41° 56' 28.66"E

PI: 182+17.41WB

N22° 10' 19.94"E

PC: 10+26.59MS

BP: 10+00.00SW

BP: 10+00.00W

BP: 10+00.00MS

S47° 46' 21.78"E

N86° 26' 51.50"E

S. WATER STREET

WATERLOO STREET

MANNING STREET

S WATER
PI STA = 11+50.00 SW
Y = 320,742.11
X = 656,334.75

S WATER
PI STA = 10+00.00 SW
Y = 320,630.54
X = 656,234.50

WATERLOO
PI STA = 11+50.00 W
Y = 320,490.36
X = 656,615.33

WATERLOO
PI STA = 10+00.00 W
Y = 320,351.31
X = 656,559.09

STH 16 WB
PI STA = 190+59.35 WB
Y = 320,153.8954
X = 656,990.8348
Δ = 2°12'51"
D = 1°25'56.62"
T = 77.30
L = 154.58
R = 4000.00
PC STA = 189+82.05 WB
Y = 320,205.4794
X = 656,933.2665
PT STA = 191+36.63 WB
Y = 320,100.1257
X = 657,046.3671
SE =

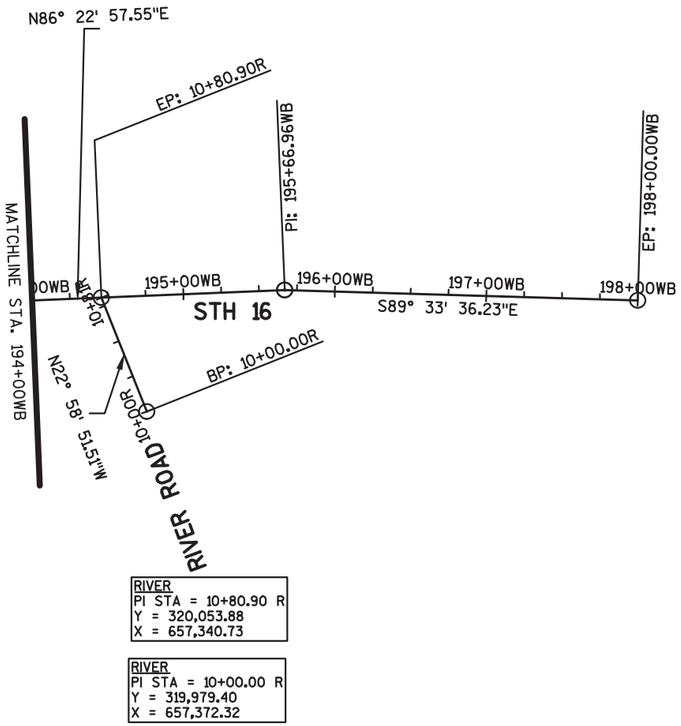
MANNING
PI STA = 11+08.48 MS
Y = 320,032.0154
X = 656,999.4804
Δ = 44°31'58"
D = 28°38'52.40"
T = 81.89
L = 155.45
R = 200.00
PC STA = 10+26.59 MS
Y = 320,026.9415
X = 656,917.7487
PT STA = 11+82.04 MS
Y = 320,092.9523
X = 657,054.1844
SE =

MANNING
PI STA = 11+82.04 MS
Y = 320,092.95
X = 657,054.18

MANNING
PI STA = 10+00.00 MS
Y = 320,025.29
X = 656,891.21

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 279	E

2



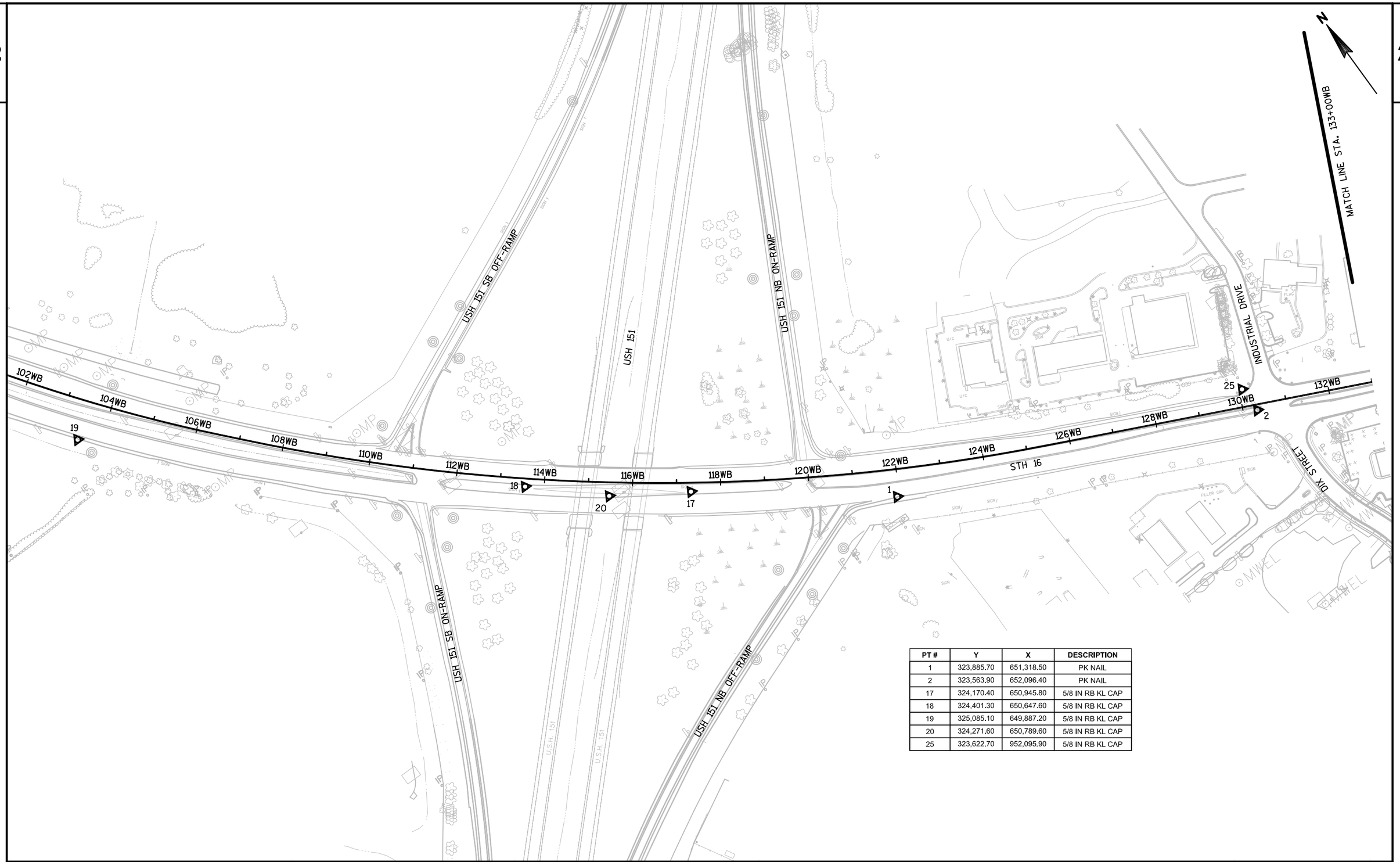
STH 16 WB
PI STA = 198+00.00 WB
Y = 320,059.73
X = 657,694.61

RIVER
PI STA = 10+80.90 R
Y = 320,053.88
X = 657,340.73

RIVER
PI STA = 10+00.00 R
Y = 319,979.40
X = 657,372.32

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 280	E

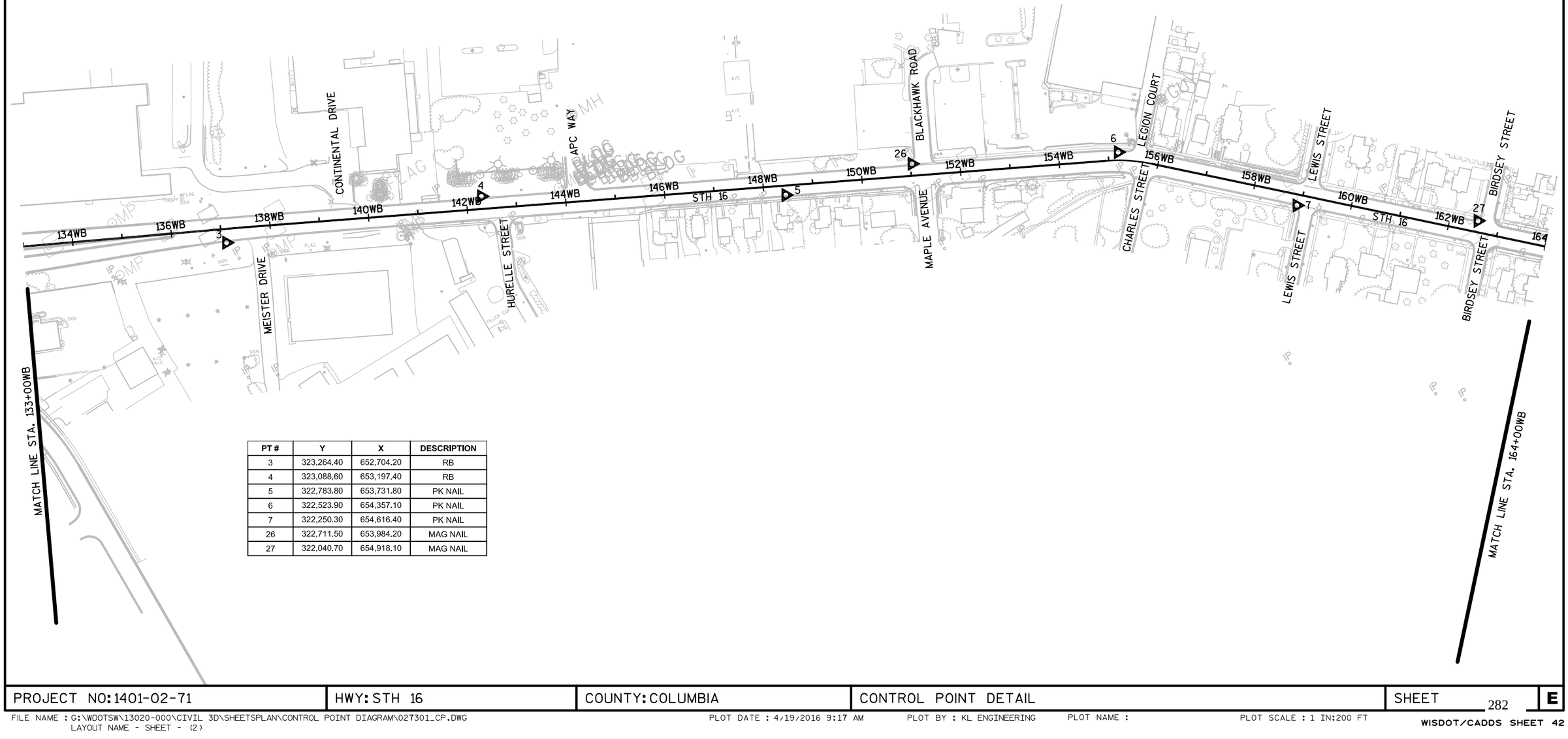
2



PT #	Y	X	DESCRIPTION
1	323,885.70	651,318.50	PK NAIL
2	323,563.90	652,096.40	PK NAIL
17	324,170.40	650,945.80	5/8 IN RB KL CAP
18	324,401.30	650,647.60	5/8 IN RB KL CAP
19	325,085.10	649,887.20	5/8 IN RB KL CAP
20	324,271.60	650,789.60	5/8 IN RB KL CAP
25	323,622.70	952,095.90	5/8 IN RB KL CAP

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONTROL POINT DETAIL	SHEET 281	E

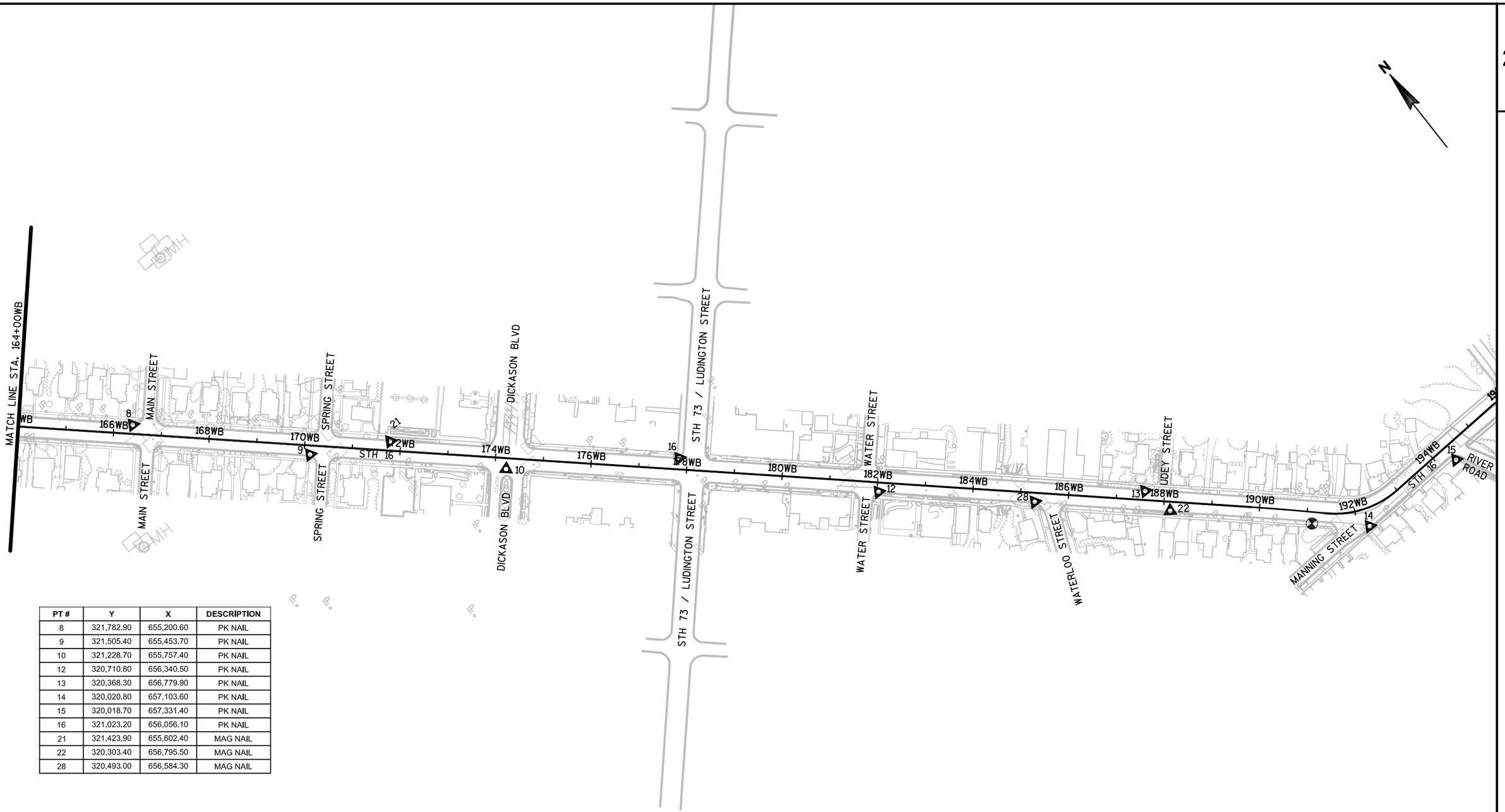
2



PT #	Y	X	DESCRIPTION
3	323,264.40	652,704.20	RB
4	323,088.60	653,197.40	RB
5	322,783.80	653,731.80	PK NAIL
6	322,523.90	654,357.10	PK NAIL
7	322,250.30	654,616.40	PK NAIL
26	322,711.50	653,984.20	MAG NAIL
27	322,040.70	654,918.10	MAG NAIL

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONTROL POINT DETAIL	SHEET 282	E

2



PT #	Y	X	DESCRIPTION
8	321,782.90	655,200.60	PK NAIL
9	321,505.40	655,453.70	PK NAIL
10	321,228.70	655,757.40	PK NAIL
12	320,710.80	656,340.50	PK NAIL
13	320,368.30	656,779.90	PK NAIL
14	320,020.80	657,103.60	PK NAIL
15	320,018.70	657,331.40	PK NAIL
16	321,023.20	656,056.10	PK NAIL
21	321,423.90	655,602.40	MAG NAIL
22	320,303.40	656,795.50	MAG NAIL
28	320,493.00	656,584.30	MAG NAIL

PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CONTROL POINT DETAIL	SHEET 283	E

LEGEND

SAN — PROPOSED SANITARY SEWER

W — PROPOSED WATER MAIN

PROPOSED STORM SEWER

SOIL CONTAMINATION

N

CITY OF COLUMBUS (WATER)

N. WATER STREET

TLE

R/W

AT&T WISCONSIN

STH 16/60 / E. JAMES STREET

179+00WB

180+00WB

181+00WB

182+00WB

183+00WB

184+00WB

185+00WB

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (STORM)

CITY OF COLUMBUS (ELECTRIC)

WE ENERGIES (GAS)

S. WATER STREET

CITY OF COLUMBUS (WATER)

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (STORM)

WE ENERGIES (GAS)

TLE

R/W

C-11-40

CITY OF COLUMBUS (ELECTRIC)

SLOPE INTERCEPTS (TYP.)

CITY OF COLUMBUS (ELECTRIC)

WE ENERGIES (GAS)

R/W

TLE

CHARTER COMMUNICATIONS

2ND WARD CREEK

2

842

840

838

836

834

832

830

828

826

PROPOSED R/L PROFILE (WB)

EXISTING R/L PROFILE (WB)

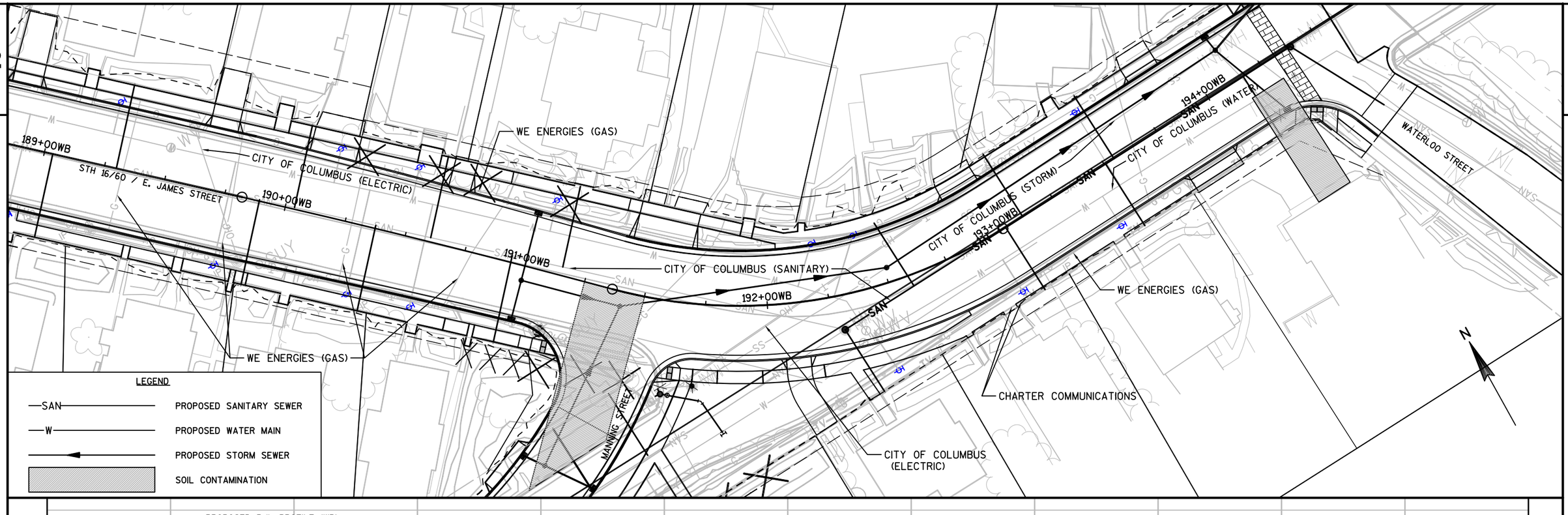
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	HAZARDOUS MATERIALS	SHEET 284	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\KL_1401_HZ.DWG
LAYOUT NAME - SHEET - (10)

PLOT DATE : 4/19/2016 9:25 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	HAZARDOUS MATERIALS	SHEET 285 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\KL_1401_HZ.DWG
LAYOUT NAME - SHEET - (12)

PLOT DATE : 4/19/2016 9:25 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

DATE 08SEP16 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
0010	201.0120	Clearing	ID	1,720.000	1,720.000	
0020	201.0220	Grubbing	ID	1,720.000	1,720.000	
0030	204.0100	Removing Pavement	SY	43,100.000	43,100.000	
0040	204.0150	Removing Curb & Gutter	LF	3,200.000	3,200.000	
0050	204.0155	Removing Concrete Sidewalk	SY	6,850.000	6,850.000	
0060	204.0165	Removing Guardrail	LF	75.000	75.000	
0070	204.0170	Removing Fence	LF	1,500.000	1,500.000	
0080	204.0195	Removing Concrete Bases	EACH	20.000	20.000	
0090	204.0210	Removing Manholes	EACH	18.000	18.000	
0100	204.0220	Removing Inlets	EACH	42.000	42.000	
0110	204.0245	Removing Storm Sewer (size) 012. 12-INCH	LF	1,650.000	1,650.000	
0120	204.0245	Removing Storm Sewer (size) 015. 15-INCH	LF	1,100.000	1,100.000	
0130	204.0245	Removing Storm Sewer (size) 018. 18-INCH	LF	1,350.000	1,350.000	
0140	204.0245	Removing Storm Sewer (size) 021. 21-INCH	LF	390.000	390.000	
0150	204.0245	Removing Storm Sewer (size) 030. 30-INCH	LF	80.000	80.000	
0160	204.0291.S	Abandoning Sewer	CY	5.000	5.000	
0170	204.9090.S	Removing (item description) 001. Concrete Barrier	LF	20.000	20.000	
0180	205.0100	Excavation Common	CY	48,530.000	48,530.000	
0190	209.0100	Backfill Granular	CY	25.000	25.000	
0200	210.0100	Backfill Structure	CY	35.000	35.000	
0210	213.0100	Finishing Roadway (project) 001. 1401-02-71	EACH	1.000	1.000	
0220	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,800.000	2,800.000	
0230	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	34,990.000	34,990.000	
0240	312.0110	Select Crushed Material	TON	29,520.000	29,520.000	
0250	415.0090	Concrete Pavement 9-Inch	SY	27,950.000	27,950.000	
0260	415.0095	Concrete Pavement 9 1/2-Inch	SY	7,480.000	7,480.000	
0270	415.0210	Concrete Pavement Gaps	EACH	34.000	34.000	
0280	415.1090	Concrete Pavement HES 9-Inch	SY	4,625.000	4,625.000	
0290	416.0160	Concrete Driveway 6-Inch	SY	2,320.000	2,320.000	
0300	416.0190	Concrete Driveway 9-Inch	SY	100.000	100.000	
0310	416.0260	Concrete Driveway HES 6-Inch	SY	230.000	230.000	
0320	416.0610	Drilled Tie Bars	EACH	23.000	23.000	
0330	416.0620	Drilled Dowel Bars	EACH	86.000	86.000	
0340	440.4410	Incentive IRI Ride	DOL	5,200.000	5,200.000	
0350	455.0605	Tack Coat	GAL	6.000	6.000	
0360	460.2000	Incentive Density HMA Pavement	DOL	315.000	315.000	
0370	460.4000	HMA Cold Weather Paving	TON	300.000	300.000	
0380	460.6224	HMA Pavement 4 MT 58-28 S	TON	375.000	375.000	
0390	465.0105	Asphaltic Surface	TON	580.000	580.000	
0400	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	215.000	215.000	
0410	465.0125	Asphaltic Surface Temporary	TON	1,085.000	1,085.000	
0420	465.0315	Asphaltic Flumes	SY	60.000	60.000	
0430	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000	
0440	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	5.000	5.000	
0450	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	40.000	40.000	
0460	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	60.000	60.000	
0470	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	16,700.000	16,700.000	
0480	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	2,340.000	2,340.000	
0490	601.0600	Concrete Curb Pedestrian	LF	200.000	200.000	
0500	602.0410	Concrete Sidewalk 5-Inch	SF	84,050.000	84,050.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
0510	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	1,020.000	1,020.000	
0520	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	934.000	934.000	
0530	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	1,702.000	1,702.000	
0540	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	113.000	113.000	
0550	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	5,009.000	5,009.000	
0560	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	308.000	308.000	
0570	608.6008	Storm Sewer Pipe Composite 8-Inch	LF	11.000	11.000	
0580	611.0420	Reconstructing Manholes	EACH	2.000	2.000	
0590	611.0535	Manhole Covers Type J-Special	EACH	43.000	43.000	
0600	611.0624	Inlet Covers Type H	EACH	69.000	69.000	
0610	611.0639	Inlet Covers Type H-S	EACH	30.000	30.000	
0620	611.2004	Manholes 4-FT Diameter	EACH	28.000	28.000	
0630	611.2005	Manholes 5-FT Diameter	EACH	15.000	15.000	
0640	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000	
0650	611.2008	Manholes 8-FT Diameter	EACH	1.000	1.000	
0660	611.3003	Inlets 3-FT Diameter	EACH	4.000	4.000	
0670	611.3004	Inlets 4-FT Diameter	EACH	35.000	35.000	
0680	611.3230	Inlets 2x3-FT	EACH	66.000	66.000	
0690	612.0104	Pipe Underdrain 4-Inch	LF	130.000	130.000	
0700	616.0700.S	Fence Safety	LF	1,500.000	1,500.000	
0710	618.0100	Maintenance And Repair of Haul Roads (project) 001. 1401-02-71	EACH	1.000	1.000	
0720	619.1000	Mobilization	EACH	1.000	0.760	0.240
0730	620.0200	Concrete Median Blunt Nose	SF	50.000	50.000	
0740	620.0300	Concrete Median Sloped Nose	SF	150.000	150.000	
0750	623.0200	Dust Control Surface Treatment	SY	54,510.000	52,000.000	2,510.000
0760	624.0100	Water	MGAL	1,235.000	1,235.000	
0770	625.0100	Topsoil	SY	15,900.000	15,900.000	
0780	627.0200	Mulching	SY	2,900.000	2,900.000	
0790	628.1104	Erosion Bales	EACH	50.000	50.000	
0800	628.1504	Silt Fence	LF	920.000	920.000	
0810	628.1520	Silt Fence Maintenance	LF	460.000	460.000	
0820	628.1905	Mobilizations Erosion Control	EACH	20.000	20.000	
0830	628.1910	Mobilizations Emergency Erosion Control	EACH	9.000	9.000	
0840	628.2008	Erosion Mat Urban Class I Type B	SY	4,250.000	4,250.000	
0850	628.6005	Turbidity Barriers	SY	280.000	280.000	
0860	628.7005	Inlet Protection Type A	EACH	27.000	27.000	
0870	628.7015	Inlet Protection Type C	EACH	90.000	90.000	
0880	628.7020	Inlet Protection Type D	EACH	40.000	40.000	
0890	628.7504	Temporary Ditch Checks	LF	250.000	250.000	
0900	628.7555	Culvert Pipe Checks	EACH	3.000	3.000	
0910	628.7560	Tracking Pads	EACH	12.000	12.000	
0920	628.7570	Rock Bags	EACH	23.000	23.000	
0930	629.0210	Fertilizer Type B	CWT	10.000	10.000	
0940	630.0140	Seeding Mixture No. 40	LB	90.000	90.000	
0950	630.0200	Seeding Temporary	LB	30.000	30.000	
0960	631.0300	Sod Water	MGAL	350.000	350.000	
0970	631.1000	Sod Lawn	SY	15,100.000	15,100.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
0980	633.5200	Markers Culvert End	EACH	3.000	3.000	
0990	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000	
1000	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000	2.000	
1010	634.0808	Posts Tubular Steel 2x2-Inch X 8-FT	EACH	2.000	2.000	
1020	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	47.000	47.000	
1030	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	7.000	7.000	
1040	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	5.000	5.000	
1050	637.2210	Signs Type II Reflective H	SF	548.100	548.100	
1060	637.2215	Signs Type II Reflective H Folding	SF	74.600	74.600	
1070	637.2230	Signs Type II Reflective F	SF	62.000	62.000	
1080	638.2602	Removing Signs Type II	EACH	86.000	86.000	
1090	638.3000	Removing Small Sign Supports	EACH	62.000	62.000	
1100	642.5001	Field Office Type B	EACH	1.000	1.000	
1110	643.0200	Traffic Control Surveillance and Maintenance (project) 001. 1401-02-71	DAY	230.000	230.000	
1120	643.0300	Traffic Control Drums	DAY	25,300.000	25,300.000	
1130	643.0420	Traffic Control Barricades Type III	DAY	6,200.000	6,200.000	
1140	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	150.000	150.000	
1150	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	150.000	150.000	
1160	643.0705	Traffic Control Warning Lights Type A	DAY	155.000	155.000	
1170	643.0715	Traffic Control Warning Lights Type C	DAY	2,350.000	2,350.000	
1180	643.0800	Traffic Control Arrow Boards	DAY	250.000	250.000	
1190	643.0900	Traffic Control Signs	DAY	7,500.000	7,500.000	
1200	643.0920	Traffic Control Covering Signs Type II	EACH	70.000	70.000	
1210	643.1050	Traffic Control Signs PCMS	DAY	980.000	980.000	
1220	643.2000	Traffic Control Detour (project) 001. 1401-02-71	EACH	1.000	1.000	
1230	643.3000	Traffic Control Detour Signs	DAY	6,500.000	6,500.000	
1240	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	1,000.000	1,000.000	
1250	644.1420.S	Temporary Pedestrian Surface Plywood	SF	500.000	500.000	
1260	644.1430.S	Temporary Pedestrian Surface Plate	SF	2,500.000	2,500.000	
1270	644.1601.S	Temporary Curb Ramp	EACH	15.000	15.000	
1280	644.1616.S	Temporary Pedestrian Safety Fence	LF	1,300.000	1,300.000	
1290	646.0106	Pavement Marking Epoxy 4-Inch	LF	31,365.000	31,365.000	
1300	646.0126	Pavement Marking Epoxy 8-Inch	LF	1,180.000	1,180.000	
1310	646.0600	Removing Pavement Markings	LF	1,000.000	1,000.000	
1320	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	14.000	14.000	
1330	647.0356	Pavement Marking Words Epoxy	EACH	9.000	9.000	
1340	647.0456	Pavement Marking Curb Epoxy	LF	1,720.000	1,720.000	
1350	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	450.000	450.000	
1360	647.0606	Pavement Marking Island Nose Epoxy	EACH	3.000	3.000	
1370	647.0656	Pavement Marking Parking Stall Epoxy	LF	465.000	465.000	
1380	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	75.000	75.000	
1390	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	4,440.000	4,440.000	
1400	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	7,450.000	7,450.000	
1410	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	22,800.000	22,800.000	
1420	649.0600	Temporary Pavement Marking Removable Tape 6-Inch	LF	1,170.000	1,170.000	
1430	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	2,075.000	2,075.000	
1440	649.0802	Temporary Pavement Marking Paint 8-Inch	LF	810.000	810.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
1450	649.1100	Temporary Pavement Marking Stop Line 18-Inch	LF	235.000	235.000	
1460	649.1200	Temporary Pavement Marking Stop Line Removable Tape 18-Inch	LF	280.000	280.000	
1470	649.1300	Temporary Pavement Marking Stop Line 24-Inch	LF	86.000	86.000	
1480	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	20,220.000	20,220.000	
1490	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,385.000	1,385.000	
1500	652.0800	Conduit Loop Detector	LF	1,972.000	1,972.000	
1510	653.0140	Pull Boxes Steel 24x42-Inch	EACH	9.000	9.000	
1520	653.0905	Removing Pull Boxes	EACH	18.000	18.000	
1530	654.0101	Concrete Bases Type 1	EACH	10.000	10.000	
1540	654.0102	Concrete Bases Type 2	EACH	8.000	8.000	
1550	654.0105	Concrete Bases Type 5	EACH	71.000	71.000	
1560	654.0110	Concrete Bases Type 10	EACH	2.000	2.000	
1570	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000	
1580	654.0230	Concrete Control Cabinet Bases Type L30	EACH	4.000	4.000	
1590	655.0230	Cable Traffic Signal 5-14 AWG	LF	893.000	893.000	
1600	655.0240	Cable Traffic Signal 7-14 AWG	LF	2,993.000	2,993.000	
1610	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,579.000	1,579.000	
1620	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,284.000	1,284.000	
1630	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,271.000	2,271.000	
1640	655.0610	Electrical Wire Lighting 12 AWG	LF	14,157.000	14,157.000	
1650	655.0635	Electrical Wire Lighting 2 AWG	LF	68,507.000	68,507.000	
1660	655.0640	Electrical Wire Lighting 1 AWG	LF	1,080.000	1,080.000	
1670	655.0700	Loop Detector Lead In Cable	LF	5,208.000	5,208.000	
1680	655.0800	Loop Detector Wire	LF	6,636.000	6,636.000	
1690	656.0200	Electrical Service Meter Breaker Pedestal (location) 001. STH 16 & Industrial / Dix St	LS	1.000	1.000	
1700	656.0200	Electrical Service Meter Breaker Pedestal (location) 002. STH 16 & STH 73	LS	1.000	1.000	
1710	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 001. Sta 123+25.3 EB	LS	1.000	1.000	
1720	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 002. Sta 150+92.7 WB	LS	1.000	1.000	
1730	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 003. Sta 10+00.0 SBD	LS	1.000	1.000	
1740	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 004. Sta 185+95.4 WB	LS	1.000	1.000	
1750	657.0100	Pedestal Bases	EACH	6.000	6.000	
1760	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000	
1770	657.0315	Poles Type 4	EACH	4.000	4.000	
1780	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000	
1790	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	6.000	6.000	
1800	657.0595	Trombone Arms 25-FT	EACH	2.000	2.000	
1810	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	6.000	6.000	
1820	657.1345	Install Poles Type 9	EACH	2.000	2.000	
1830	657.1530	Install Monotube Arms 30-FT	EACH	2.000	2.000	
1840	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	17.000	17.000	
1850	658.0115	Traffic Signal Face 4-12 Inch Vertical	EACH	6.000	6.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
1860	658.0120	Traffic Signal Face 5-12 Inch Vertical	EACH	1.000	1.000	
1870	658.0155	Traffic Signal Face 3-12 Inch Horizontal	EACH	5.000	5.000	
1880	658.0165	Traffic Signal Face 5-12 Inch Horizontal	EACH	1.000	1.000	
1890	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	22.000	22.000	
1900	658.0220	Backplates Signal Face 4 Section 12-Inch	EACH	6.000	6.000	
1910	658.0225	Backplates Signal Face 5 Section 12-Inch	EACH	2.000	2.000	
1920	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000	
1930	658.0500	Pedestrian Push Buttons	EACH	16.000	16.000	
1940	658.0600	Led Modules 12-Inch Red Ball	EACH	24.000	24.000	
1950	658.0605	Led Modules 12-Inch Yellow Ball	EACH	24.000	24.000	
1960	658.0610	Led Modules 12-Inch Green Ball	EACH	24.000	24.000	
1970	658.0615	Led Modules 12-Inch Red Arrow	EACH	6.000	6.000	
1980	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	14.000	14.000	
1990	658.0625	Led Modules 12-Inch Green Arrow	EACH	8.000	8.000	
2000	658.0635	Led Modules Pedestrian Countdown Timer 16-Inch	EACH	16.000	16.000	
2010	658.5069	Signal Mounting Hardware (location) 001. STH 16 & Industrial / Dix St	LS	1.000	1.000	
2020	658.5069	Signal Mounting Hardware (location) 002. STH 16 & STH 73	LS	1.000	1.000	
2030	659.1125	Luminaires Utility LED C	EACH	6.000	6.000	
2040	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	3.000	3.000	
2050	661.0100	Temporary Traffic Signals for Bridges (structure) 001. STH 73	LS	1.000	1.000	
2060	661.0200	Temporary Traffic Signals for Intersections (location) 001. STH 16 & Industrial / Dix St	LS	1.000	1.000	
2070	661.0300	Generators	DAY	30.000	30.000	
2080	690.0150	Sawing Asphalt	LF	2,500.000	2,500.000	
2090	690.0250	Sawing Concrete	LF	13,200.000	13,200.000	
2100	715.0415	Incentive Strength Concrete Pavement	DOL	14,910.000	14,910.000	
2110	999.1500.S	Crack and Damage Survey	LS	1.000	1.000	
2120	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,700.000	2,700.000	
2130	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,000.000	2,000.000	
2140	SPV.0035	Special 001. Sidewalk Vault Closure	CY	5.000	5.000	
2150	SPV.0035	Special 002. Coloring Concrete Dark Gray	CY	350.000	350.000	
2160	SPV.0035	Special 229. EBS Excavation and Backfill - Continental Drive	CY	167.000		167.000
2170	SPV.0060	Special 002. Low Permeable Plug	EACH	4.000	4.000	
2180	SPV.0060	Special 003. Temporary Inlet Cover	EACH	1.000	1.000	
2190	SPV.0060	Special 004. Manhole, Type 9 Special	EACH	1.000	1.000	
2200	SPV.0060	Special 005. Inlet Cover Special Driveway	EACH	5.000	5.000	
2210	SPV.0060	Special 006. Sealing Storm Structure	EACH	3.000	3.000	
2220	SPV.0060	Special 101. Transformer Bases Breakaway-Black, 11 1/2-Inch Bolt Circle	EACH	71.000	71.000	
2230	SPV.0060	Special 102. Poles Type 5 Aluminum-Black	EACH	29.000	29.000	
2240	SPV.0060	Special 103. Luminaire Arms Single Member 4 1/2- Inch Clamp 8-FT-Black	EACH	29.000	29.000	
2250	SPV.0060	Special 104. Luminaire Utility LED B-Black 139 Watt	EACH	29.000	29.000	
2260	SPV.0060	Special 105. Decorative Pole Assembly - Type 1	EACH	42.000	42.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
2270	SPV.0060	Special 106. Decorative Pole Assembly - Type 2	EACH	23.000	23.000	
2280	SPV.0060	Special 107. Modified Concrete Base - Type 5	EACH	23.000	23.000	
2290	SPV.0060	Special 108. Lighting Control Cabinet CB300- Special	EACH	1.000	1.000	
2300	SPV.0060	Special 109. Trans. Base Breakaway-Black 11 1/2-Inch Bolt Circle Spare	EACH	4.000		4.000
2310	SPV.0060	Special 110. Poles Type 5 Aluminum-Black Spare	EACH	2.000		2.000
2320	SPV.0060	Special 112. Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT-Black Spare	EACH	2.000		2.000
2330	SPV.0060	Special 113. Luminaire Utility LED B-Black 139 Watt Spare	EACH	2.000		2.000
2340	SPV.0060	Special 114. Decorative Pole Assembly Type 1 Spare	EACH	2.000		2.000
2350	SPV.0060	Special 115. Decorative Pole Assembly Type 2 Spare	EACH	14.000		14.000
2360	SPV.0060	Special 216. Replace Sanitary Lateral Saddle Tee	EACH	9.000		9.000
2370	SPV.0060	Special 217. New Sanitary Lateral Hub Connection	EACH	2.000		2.000
2380	SPV.0060	Special 218. Sanitary Lateral CIPP	EACH	37.000		37.000
2390	SPV.0060	Special 219. Sanitary Sewer Lateral Cleanout	EACH	2.000		2.000
2400	SPV.0060	Special 223. Abandon Sanitary Sewer Manhole	EACH	14.000		14.000
2410	SPV.0060	Special 224. Abandon Sewage Force Main (Cut Off)	EACH	2.000		2.000
2420	SPV.0060	Special 226. Adjust Sanitary Sewer Manhole	EACH	9.000		9.000
2430	SPV.0060	Special 227. Epoxy Coating of Sanitary Sewer Manhole	EACH	4.000		4.000
2440	SPV.0060	Special 238. 4-Inch Water Main Valve	EACH	4.000		4.000
2450	SPV.0060	Special 239. 6-Inch Water Main Valve	EACH	8.000		8.000
2460	SPV.0060	Special 240. 8-Inch Water Main Valve	EACH	23.000		23.000
2470	SPV.0060	Special 241. 10-Inch Water Main Valve	EACH	13.000		13.000
2480	SPV.0060	Special 242. 12-Inch Water Main Valve	EACH	29.000		29.000
2490	SPV.0060	Special 243. Hydrant Assembly	EACH	17.000		17.000
2500	SPV.0060	Special 244. Relocate Existing Hydrant	EACH	2.000		2.000
2510	SPV.0060	Special 247. 1-Inch Tap and Corporation Valve	EACH	81.000		81.000
2520	SPV.0060	Special 248. 1-Inch Curb Valve and Curb Box	EACH	79.000		79.000
2530	SPV.0060	Special 250. 1 1/2-Inch Tap and Corporation Valve	EACH	2.000		2.000
2540	SPV.0060	Special 251. 1 1/2-Inch Curb Valve and Curb Box	EACH	2.000		2.000
2550	SPV.0060	Special 253. 2-Inch Tap and Corporation Valve	EACH	1.000		1.000
2560	SPV.0060	Special 254. 2-Inch Curb Valve and Curb Box	EACH	1.000		1.000
2570	SPV.0060	Special 256. Abandon Water Main (Cut Off)	EACH	25.000		25.000
2580	SPV.0060	Special 257. Abandon Water Valve Box	EACH	40.000		40.000
2590	SPV.0060	Special 258. Abandon Hydrant	EACH	16.000		16.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
2600	SPV.0060	Special 259. Ductile Iron Pipe Nitrile Gasket	EACH	10.000		10.000
2610	SPV.0060	Special 260. Adjust Water Valve Box	EACH	11.000		11.000
2620	SPV.0060	Special 261. Adjust Curb Box	EACH	28.000		28.000
2630	SPV.0060	Special 262. 2-Inch Flushing Assembly	EACH	3.000		3.000
2640	SPV.0060	Special 300. Pull Box Non-Conductive 24X36-Inch	EACH	16.000	16.000	
2650	SPV.0060	Special 301. Pull Box Non-Condutive 24x42-Inch	EACH	19.000	19.000	
2660	SPV.0060	Special 302. Decorative Traffic Signal Assembly Type A	EACH	4.000	4.000	
2670	SPV.0060	Special 303. Decorative Traffic Signal Assembly Type B	EACH	4.000	4.000	
2680	SPV.0090	Special 001. Reveal Curb	LF	300.000	300.000	
2690	SPV.0090	Special 002. Ornamental Picket Fence 5-FT Height	LF	157.000	157.000	
2700	SPV.0090	Special 003. Pipe Underdrain 6-Inch with Geotextile Fabric and Aggregate	LF	2,050.000	2,050.000	
2710	SPV.0090	Special 201. 8-Inch Sanitary Sewer - Granular Backfill	LF	1,079.000		1,079.000
2720	SPV.0090	Special 202. 8-Inch Sanitary Sewer Relay - Granular Backfill	LF	906.000		906.000
2730	SPV.0090	Special 203. 8-inch Sanitary Sewer-Spoil Backfill	LF	10.000		10.000
2740	SPV.0090	Special 204. 10-Inch Sanitary Sewer-Granular Backfill	LF	882.000		882.000
2750	SPV.0090	Special 205. 10-Inch Sanitary Sewer Relay- Granular Backfill	LF	2,235.000		2,235.000
2760	SPV.0090	Special 206. 18-Inch Sanitary Sewer Relay- Granular Backfill	LF	358.000		358.000
2770	SPV.0090	Special 213. 6-Inch Sanitary Sewer Lateral	LF	2,656.500		2,656.500
2780	SPV.0090	Special 214. 4-Inch Sanitary Sewer Lateral Extension	LF	35.000		35.000
2790	SPV.0090	Special 215. 6-Inch Sanitary Sewer Lateral Extension	LF	1,496.000		1,496.000
2800	SPV.0090	Special 220. 6-Inch Sewage Force Main-Granular Backfill	LF	1,660.000		1,660.000
2810	SPV.0090	Special 221. Abandon Sanitary Sewer 8-Inch	LF	1,777.000		1,777.000
2820	SPV.0090	Special 222. Abandon Sanitary Sewer 10-Inch	LF	797.000		797.000
2830	SPV.0090	Special 233. 4-Inch Water Main-Granular Backfill	LF	70.500		70.500
2840	SPV.0090	Special 234. 6-Inch Water Main-Granular Backfill	LF	76.000		76.000
2850	SPV.0090	Special 235. 8-Inch Water Main-Granular Backfill	LF	1,031.500		1,031.500
2860	SPV.0090	Special 236. 10-Inch Water Main-Granular Backfill	LF	1,285.500		1,285.500
2870	SPV.0090	Special 237. 12-Inch Water Main-Granular Backfill	LF	5,302.500		5,302.500
2880	SPV.0090	Special 245. 6-Inch Hydrant Lead	LF	374.200		374.200
2890	SPV.0090	Special 246. 1-Inch Water Service - Open Trench With Granular Backfill	LF	2,507.500		2,507.500
2900	SPV.0090	Special 249. 1 1/2-Inch Water Service - Open Trench With Granular Backfill	LF	37.000		37.000

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DATE 08SEP16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
2910	SPV.0090	Special 252. 2-Inch Water Service - Open Trench With Granular Backfill	LF	15.000		15.000
2920	SPV.0090	Special 255. Pipe Insulation	LF	744.000		744.000
2930	SPV.0105	Special 002. Survey Project 1401-02-71	LS	1.000	1.000	
2940	SPV.0105	Special 003. Concrete Pavement Joint Layout	LS	1.000	1.000	
2950	SPV.0105	Special 005. HABS Photographic Documentation	LS	1.000	1.000	
2960	SPV.0105	Special 225. Abandon Sewage Lift Station	LS	1.000		1.000
2970	SPV.0105	Special 232. Hughes Sewage Lift Station	LS	1.000		1.000
2980	SPV.0105	Special 300. Remove Traffic Signal STH 16 and Industrial Drive/Dix Street	LS	1.000	1.000	
2990	SPV.0105	Special 301. Remove Traffic Signal STH 16 and STH 73	LS	1.000	1.000	
3000	SPV.0105	Special 302. Remove and Salvage Detection System STH 16 & Industrial Dr/Dix St	LS	1.000	1.000	
3010	SPV.0105	Special 303. Transporting Department Furnished Monotube Equipment STH 16 & Indust/Dix	LS	1.000	1.000	
3020	SPV.0105	Special 304. Furn & Inst Traffic Signal Cabinet & Controller STH 16 & Indust/Dix	LS	1.000	1.000	
3030	SPV.0105	Special 305. Furn & Inst Traffic Signal Cabinet & Controller STH 16 and STH 73	LS	1.000	1.000	
3040	SPV.0105	Special 306. Traffic Signal Systems Integrator	LS	1.000	1.000	
3050	SPV.0135	Special 001. Vibration Monitoring	MON	5.000	5.000	
3060	SPV.0165	Special 001. Wall Modular Block Gravity LRFD	SF	700.000	700.000	
3070	SPV.0170	Special 001. Pavement Cleanup Project 1401-02-71	STA	150.000	150.000	
3080	SPV.0180	Special 001. Geogrid Reinforcement	SY	47,300.000	47,300.000	
3090	SPV.0180	Special 228. Pulverizing, Removals, Shaping, and Compacting - Continental Drive	SY	900.000		900.000
3100	SPV.0180	Special 233. Asphaltic Pavement Removal - River Road	SY	310.000		310.000
3110	SPV.0195	Special 001. Excavation, Hauling and Disposal of Petroleum - Contaminated Soil	TON	500.000	500.000	
3120	SPV.0195	Special 230. 1-3/4 Inch Asphaltic Concrete Binder Course - Continental Drive	TON	102.000		102.000
3130	SPV.0195	Special 231. 1-3/4 Inch Asphaltic Concrete Surface Course - Continental Drive	TON	102.000		102.000
3140	SPV.0195	Special 234. 1-3/4 Inch Asphaltic Concrete Binder Course - River Road	TON	32.000		32.000
3150	SPV.0195	Special 235. 1-3/4 Inch Asphaltic Concrete Surface Course - River Road	TON	32.000		32.000
3160	SPV.0200	Special 207. New 48-Inch Sanitary Sewer Manhole	VF	133.000		133.000
3170	SPV.0200	Special 208. New 48-Inch Sanitary Sewer Manhole (Outside Drop)	VF	67.000		67.000
3180	SPV.0200	Special 209. New 84-Inch Sanitary Sewer Manhole	VF	7.000		7.000
3190	SPV.0200	Special 210. 48-Inch Sanitary Sewer Manhole Replacement	VF	91.000		91.000

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DATE 08SEP16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1401-02-71 QUANTITY	1401-02-73 QUANTITY
3200	SPV.0200	Special 211. 48-Inch Sanitary Sewer Manhole Replacement Outside Drop	VF	15.000		15.000
3210	SPV.0200	Special 212. 60-Inch Sanitary Sewer Manhole Replacement Outside Drop	VF	11.000		11.000

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CLEARING & GRUBBING

CATEGORY	STATION TO STATION	201.0120 CLEARING (I.D.)	201.0220 GRUBBING (I.D.)
0010	STH 16 (WESTBOUND)		
	142+66 WB - 144+25 WB	24	24
	144+25 WB - 151+26 WB	331	331
	155+59 WB - 159+13 WB	218	218
	159+13 WB - 162+75 WB	147	147
	162+75 WB - 166+73 WB	186	186
	166+73 WB - 170+41 WB	192	192
	170+41 WB - 174+39 WB	128	128
	185+72 WB - 188+00 WB	123	123
	188+00 WB - 191+50 WB	103	103
	STH 16 (EASTBOUND)		
	130+80 EB - 137+75 EB	26	26
	INDUSTRIAL DRIVE/DIX STREET		
	10+00 ID - 12+79 ID	32	32
	15+79 ID - 17+78 ID	54	54
	LEGION COURT		
	11+98 L - 12+33 L	42	42
	MAIN STREET		
	11+92 NM - 12+23 NM	22	22
	SPRING STREET		
	11+93 NS - 12+08 NS	21	21
	MANNING STEET		
	10+45 MS - 11+26 MS	71	71
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**1,720**	**1,720**

REMOVING GUARDRAIL

CATEGORY	STATION TO STATION	LOCATION	204.0165 (LF)
0010	STH 16 (WESTBOUND)		
	192+28 WB - 192+62 WB	RT	41
	192+74 WB - 193+05 WB	RT	34
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**75**

REMOVING PAVEMENT

CATEGORY	STAGE	STATION TO STATION	204.0100 REMOVING PAVEMENT (SY)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	2408
		181+79 WB - 185+72 WB	2402
		185+72 WB - 188+00 WB	1356
		188+00 WB - 191+50 WB	1860
		191+50 WB - 194+59 WB	1150
		WATER STREET	
		11+98 NW - 12+17 NW	71
		MANNING STEET	
		10+45 MS - 11+26 MS	116
	STAGE 1 TOTAL		9,363
	STAGE 2		
		STH 16 (WESTBOUND)	
		139+26 WB - 142+66 WB	972
		142+66 WB - 144+25 WB	476
		144+25 WB - 151+26 WB	1968
		151+26 WB - 155+59 WB	1200
		155+59 WB - 159+13 WB	996
		159+13 WB - 162+75 WB	1025
		162+75 WB - 166+73 WB	1084
		166+73 WB - 170+41 WB	1019
		170+41 WB - 174+39 WB	1198
		174+39 WB - 178+03 WB	1108
		STH 16 (EASTBOUND)	
		126+40 EB - 127+00 EB	247
		127+00 EB - 130+80 EB	2357
		130+80 EB - 137+75 EB	3085
		137+75 EB - 139+26 EB	416
		INDUSTRIAL DRIVE/DIX STREET	
		10+00 ID - 12+79 ID	154
	STAGE 2 TOTAL		17,303
	STAGE 3		
		STH 16 (WESTBOUND)	
		126+40 WB - 127+00 WB	181
		127+00 WB - 130+80 WB	1672
		130+80 WB - 137+75 WB	2944
		137+75 WB - 139+26 WB	415
		139+26 WB - 142+66 WB	972
		142+66 WB - 144+25 WB	476
		144+25 WB - 151+26 WB	1913
		151+26 WB - 155+59 WB	1271
		155+59 WB - 159+13 WB	996
		159+13 WB - 162+75 WB	1013
		162+75 WB - 166+73 WB	1105
		166+73 WB - 170+41 WB	1013
		170+41 WB - 174+39 WB	1198
		174+39 WB - 178+03 WB	1108
		INDUSTRIAL DRIVE/DIX STREET	
		15+79 ID - 17+78 ID	156
	STAGE 3 TOTAL		16,433
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**43,100**

REMOVING CURB AND GUTTER

CATEGORY	STAGE	STATION TO STATION	204.0150 REMOVING CURB AND GUTTER (LF)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		123+41 WB - 126+40 WB	717
		126+40 WB - 127+00 WB	26
		191+50 WB - 194+59 WB	335
		LUDINGTON STREET/STH 73	
		10+75 S - 10+93 S	18
		12+15 N - 12+35 N	23
		WATER STREET	
		10+76 SW - 11+07 SW	63
		11+98 NW - 12+17 NW	38
		WATERLOO STREET	
		10+88 W - 10+98 W	20
		MANNING STEET	
		10+45 MS - 11+26 MS	180
		RIVER ROAD	
		10+32 R - 10+42 R	21
	STAGE 1 TOTAL		1,440
	STAGE 2		
		INDUSTRIAL DRIVE/DIX STREET	
		10+00 ID - 12+79 ID	669
		APC WAY	
		12+00 A - 12+20 A	42
		BLACKHAWK DRIVE	
		11+87 B - 11+97 B	20
		LEGION COURT	
		11+98 L - 12+33 L	70
		LEWIS STREET	
		11+93 NL - 12+08 NL	30
		MAIN STREET	
		11+92 NM - 12+23 NM	104
		SPRING STREET	
		11+93 NS - 12+08 NS	30
		DICKASON BLVD	
		11+99 DNB - 12+36 DNB	16
		11+99 DSB - 12+36 DSB	16
		LUDINGTON STREET/STH 73	
		10+75 S - 10+93 S	18
		12+15 N - 12+35 N	23
	STAGE 2 TOTAL		1,038

CATEGORY	STAGE	STATION TO STATION	204.0150 REMOVING CURB AND GUTTER (LF)
0010	STAGE 3		
		INDUSTRIAL DRIVE/DIX STREET	
		15+79 ID - 17+78 ID	427
		CONTINENTAL DRIVE	
		11+96 C - 12+06 C	11
		HURELLE STREET	
		10+96 HU - 11+06 HU	21
		CHARLES STREET	
		10+83 CH - 11+03 CH	40
		LEWIS STREET	
		10+80 SL - 11+07 SL	54
		BIRDSEY STREET	
		10+82 SB - 11+08 SB	52
		MAIN STREET	
		10+92 SM - 11+08 SM	32
		DICKASON BLVD	
		10+81 NBD - 11+00 NBD	39
		10+81 SBD - 11+01 SBD	46
	STAGE 3 TOTAL		722
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**3,200**

REMOVING CONCRETE SIDEWALK

CATEGORY	STAGE	STATION TO STATION	204.0155 REMOVING CONCRETE SIDEWALK (SY)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	806
		181+79 WB - 185+72 WB	497
		185+72 WB - 188+00 WB	259
		188+00 WB - 191+50 WB	397
		191+50 WB - 194+59 WB	316
		LUDINGTON STREET/STH 73	
		10+75 S - 10+93 S	21
		12+15 N - 12+35 N	24
		WATER STREET	
		10+76 SW - 11+07 SW	32
		11+98 NW - 12+17 NW	19
		WATERLOO STREET	
		10+88 W - 10+98 W	8
		UDEY STREET	
		11+91 U - 12+08 U	6
		MANNING STEET	
		10+45 MS - 11+26 MS	137
		RIVER ROAD	
		10+32 R - 10+42 R	4
	STAGE 1 TOTAL		2,526
	STAGE 2		
		STH 16 (WESTBOUND)	
		151+26 WB - 155+59 WB	222
		155+59 WB - 159+13 WB	191
		159+13 WB - 162+75 WB	225
		162+75 WB - 166+73 WB	237
		166+73 WB - 170+41 WB	210
		170+41 WB - 174+39 WB	360
		174+39 WB - 178+03 WB	419
		INDUSTRIAL DRIVE/DIX STREET	
		10+00 ID - 12+79 ID	349
		LEGION COURT	
		11+98 L - 12+33 L	17
		LEWIS STREET	
		11+93 NL - 12+08 NL	16
		MAIN STREET	
		11+92 NM - 12+23 NM	38
		SPRING STREET	
		11+93 NS - 12+08 NS	16
	STAGE 2 SUBTOTAL		2,301

CATEGORY	STAGE	STATION TO STATION	204.0155 REMOVING CONCRETE SIDEWALK (SY)
0010	STAGE 2 SUBTOTAL		2,301
	STAGE 2 CONTINUED		
		DICKASON BLVD	
		11+99 DNB - 12+36 DNB	12
		11+99 DSB - 12+36 DSB	35
		LUDINGTON STREET/STH 73	
		10+75 S - 10+93 S	24
		12+15 N - 12+35 N	29
	STAGE 2 TOTAL		2,401
	STAGE 3		
		STH 16 (WESTBOUND)	
		139+26 WB - 142+66 WB	58
		144+25 WB - 151+26 WB	252
		155+59 WB - 159+13 WB	170
		159+13 WB - 162+75 WB	215
		162+75 WB - 166+73 WB	239
		166+73 WB - 170+41 WB	229
		170+41 WB - 174+39 WB	229
		174+39 WB - 178+03 WB	401
		MAPLE AVENUE	
		11+00 MA - 11+11 MA	6
		CHARLES STREET	
		10+83 CH - 11+03 CH	11
		LEWIS STREET	
		10+80 SL - 11+07 SL	29
		BIRDSEY STREET	
		10+82 SB - 11+08 SB	28
		MAIN STREET	
		10+92 SM - 11+08 SM	17
		DICKASON BLVD	
		10+81 NBD - 11+00 NBD	8
		10+81 SBD - 11+01 SBD	33
	STAGE 3 TOTAL		1,924
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**6,850**

REMOVING MANHOLES AND INLETS

CATEGORY	STATION	OFFSET	204.0210 REMOVING MANHOLES (EACH)	204.0220 REMOVING INLETS (EACH)
0010	STH 16 (WESTBOUND)			
	130+40 WB	5' RT	---	1
	133+65 WB	4' RT	---	1
	135+98 WB	1' LT	---	1
	136+82 WB	22' LT	---	1
	138+16 WB	22' LT	---	1
	145+79 WB	21' LT	---	1
	145+79 WB	20' RT	---	1
	145+81 WB	14' RT	1	---
	147+47 WB	36' LT	1	---
	148+51 WB	14' RT	1	---
	151+03 WB	15' RT	1	---
	152+03 WB	22' RT	---	1
	152+03 WB	15' RT	1	---
	152+19 WB	21' LT	---	1
	158+77 WB	21' LT	---	1
	158+77 WB	20' RT	---	1
	159+35 WB	10' RT	1	---
	162+53 WB	24' LT	---	1
	162+57 WB	27' RT	---	1
	162+96 WB	11' RT	1	---
	162+96 WB	24' RT	---	1
	166+52 WB	25' LT	---	1
	166+55 WB	25' RT	---	1
	166+83 WB	8' RT	1	---
	166+83 WB	23' LT	1	---
	166+92 WB	24' RT	---	1
	167+07 WB	21' LT	---	1
	170+53 WB	10' RT	1	---
	170+61 WB	24' LT	---	1
	170+76 WB	20' RT	---	1
	174+77 WB	24' LT	---	1
	174+80 WB	10' RT	1	---
	174+81 WB	23' RT	---	1
	178+23 WB	11' RT	1	---
	181+43 WB	23' LT	---	1
	181+45 WB	23' RT	---	1
	181+48 WB	10' RT	1	---
	183+02 WB	10' RT	1	---
	184+54 WB	9' RT	1	---
	185+07 WB	22' LT	---	1
	185+07 WB	21' RT	---	1
	191+61 WB	35' RT	---	1
	191+72 WB	34' RT	1	---
	194+12 WB	14' LT	1	---
	194+12 WB	20' LT	---	1
	194+20 WB	22' RT	---	1
	STH 16 (EASTBOUND)			
	130+13 EB	9' LT	---	1
	133+64 EB	5' LT	---	1
	135+98 EB	7' LT	---	1
	136+80 EB	14' RT	---	1
	138+14 EB	16' RT	---	1
	SUBTOTAL		17	34

CATEGORY	STATION	OFFSET	204.0210 REMOVING MANHOLES (EACH)	204.0220 REMOVING INLETS (EACH)
0010	SUBTOTAL		17	34
	HURELLE STREET			
	11+00 HU	14' LT	---	1
	APC WAY			
	12+01 A	1' LT	1	---
	MAPLE AVENUE			
	11+01 MA	21' LT	---	1
	11+03 MA	20' RT	---	1
	N. LEWIS STREET			
	11+90 NL	13' LT	---	1
	11+90 NL	12' RT	---	1
	N. SPRING STREET			
	11+89 NS	13' LT	---	1
	WATERLOO STREET			
	11+01 W	14' RT	---	1
	11+16 W	16' LT	---	1
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**18**	**42**

REMOVING STORM SEWER

CATEGORY	STAGE	STATION TO STATION	204.0245.012 12-INCH (LF)	204.0245.015 15-INCH (LF)	204.0245.018 18-INCH (LF)	204.0245.021 21-INCH (LF)	204.0245.030 30-INCH (LF)
0010	STAGE 1						
		STH 16 (WESTBOUND)					
		178+03 WB - 181+79 WB	51	324	40	---	---
		181+79 WB - 185+72 WB	111	---	276	---	---
		185+72 WB - 188+00 WB	20	---	---	---	---
		191+50 WB - 194+59 WB	146	---	---	---	---
	STAGE 1 TOTAL		328	324	316	---	---
	STAGE 2						
		STH 16 (WESTBOUND)					
		144+25 WB - 151+26 WB	48	---	---	---	---
		151+26 WB - 155+59 WB	49	---	---	---	---
		159+13 WB - 162+75 WB	84	---	---	---	---
		162+75 WB - 166+73 WB	56	---	---	---	---
		166+73 WB - 170+41 WB	50	---	---	---	---
		170+41 WB - 174+39 WB	58	---	---	---	---
		174+39 WB - 178+03 WB	49	---	---	---	---
		STH 16 (EASTBOUND)					
		127+00 EB - 130+80 EB	---	---	66	---	---
		130+80 EB - 137+75 EB	---	---	470	---	---
		LEWIS STREET					
		11+93 NL - 12+08 NL	25	---	---	---	---
	STAGE 2 TOTAL		419	---	537	---	---
	STAGE 3						
		STH 16 (WESTBOUND)					
		130+80 WB - 137+75 WB	---	---	134	---	80
		144+25 WB - 151+26 WB	545	---	---	---	---
		151+26 WB - 155+59 WB	80	---	---	---	---
		155+59 WB - 159+13 WB	35	---	---	---	---
		159+13 WB - 162+75 WB	42	340	---	---	---
		162+75 WB - 166+73 WB	57	22	---	376	---
		166+73 WB - 170+41 WB	31	358	---	14	---
		170+41 WB - 174+39 WB	25	57	---	---	---
		174+39 WB - 178+03 WB	---	---	363	---	---
		MAPLE AVENUE					
		11+00 MA - 11+11 MA	88	---	---	---	---
	STAGE 3 TOTAL		903	776	497	390	80
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**1650**	**1100**	**1350**	**390**	**80**

REMOVING CONCRETE BARRIER

CATEGORY	STATION TO STATION	204.9090.S REMOVING CONCRETE BARRIER (LF)
0010	STAGE 2	
	155+50 WB	10
	UNDISTRIBUTED	10
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**20**

REMOVING FENCE

CATEGORY	STATION TO STATION	LOCATION	204.0170 (LF)
0010	STH 16 (WESTBOUND)		
	123+32 WB - 129+73 WB	LT	646
	STH 16 (EASTBOUND)		
	122+01 EB - 130+50 EB	RT	854
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**1500**

ABANDONING SEWER

CATEGORY	STAGE	STATION TO STATION	204.0291.S (CY)
0010	STAGE 2		
		STH 16 (WESTBOUND)	
		144+25 WB - 151+26 WB	5
	STAGE 2 TOTAL		5
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**5**

BACKFILL STRUCTURE

CATEGORY	STAGE	STATION TO STATION	210.0100 (CY)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		181+79 WB - 185+72 WB	35
	STAGE 1 TOTAL		35
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**35**

SIDEWALK VAULT CLOSURE

CATEGORY	STATION TO STATION	209.0100 GRANULAR BACKFILL (CY)	SPV.0035.001 SIDEWALK VALUT CLOSURE (CY)
0010			
	UNDISTRIBUTED	25	5
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**25**	**5**

EARTHWORK

CATEGORY	STAGE	DIVISION	LOCATION	STATION TO STATION	205.0100 Common Excavation (1) Cut (2) (CY)	205.0100 Common Excavation (1) EBS Excavation (3) (CY)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Marsh Excavation (6) (CY)	Reduced Marsh in Fill (7) Factor 0.60	Reduced EBS in Fill (8) Factor 0.80	Expanded Marsh Backfill (9) Factor 1.50	Unexpanded Fill	Expanded Fill (10) Factor 1.25	Mass Ordinate +/- (11)	Waste	208.0100 Borrow (CY)	Comment:
	1	1	STH 16	120+00WB - 130+43WB	748	0	0	748	0	0	0	0	0	0	748	748		
				131+06WB - 131+46WB	18	0	0	18	0	0	0	0	0	0	18	18		
			DIX STREET	10+00 ID - 12+79 ID	473	0	0	473	0	0	0	0	0	0	473	473		
			INDUSTRIAL DRIVE	15+79 ID - 17+78 ID	507	0	0	507	0	0	0	0	1	1	506	506		
		Sub-total 1			1,745	0	0	765	0	0	0	0	0	0	765	765	0	
		2	STH 16	178+03WB - 194+59WB	8,895	164	0	8,895	0	0	131	0	22	-136	9,031	9,031		
			STH 73/LUDINGTON STREET	10+83 S - 10+93 S	104	1	0	104	0	0	1	0	0	-1	105	105		
				12+32 N - 12+35 N	147	2	0	147	0	0	1	0	0	-2	149	149		
			WATER STREET	10+76 SW - 11+07 SW	56	2	0	56	0	0	1	0	1	-1	57	57		
				11+98 NW - 12+17 NW	48	1	0	48	0	0	1	0	0	-1	49	49		
			WATERLOO STREET	10+88 W - 10+98 W	36	1	0	36	0	0	1	0	0	-1	36	36		
			UDEY STREET	11+91 U - 12+08 U	12	0	0	12	0	0	0	0	0	0	12	12		
			MANNING STREET	10+45 MS - 11+26 MS	127	4	0	127	0	0	3	0	2	-1	128	128		
			RIVER ROAD	10+32 R - 10+42 R	12	0	0	12	0	0	0	0	0	0	13	13		
		Sub-total 2			9,437	175	0	9,437	0	0	140	0	26	-143	9,580	9,580	0	
	Stage 1 Sub-total				11,183	175	0	10,203	0	0	140	0	26	-143	10,345	10,345	0	

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4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
6) MARSH EXCAVATION - TO BE BACKFILLED WITH BORROW MATERIAL
7) REDUCED MARSH IN FILL - EXCAVATED MARSH MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. MARSH IN FILL REDUCTION FACTOR = 0.6
8) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = 0.8
9) EXPANDED MARSH BACKFILL - THIS IS TO BE FILLED WITH BORROW MATERIAL. MARSH BACKFILL FACTOR = 1.5
10) EXPANDED FILL/SELECT FILL FACTOR = 1.25
11) 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.

EARTHWORK (CONTINUED)

CATEGORY	STAGE	DIVISION	LOCATION	STATION TO STATION	205.0100 Common Excavation (1) Cut (2) (CY)	205.0100 Common Excavation (1) EBS Excavation (3) (CY)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Marsh Excavation (6) (CY)	Reduced Marsh in Fill (7) Factor 0.60	Reduced EBS in Fill (8) Factor 0.80	Expanded Marsh Backfill (9) Factor 1.50	Unexpanded Fill	Expanded Fill (10) Factor 1.25	Mass Ordinate +/- (11)	Waste	208.0100 Borrow (CY)	Comment:
	Stage 1 Sub-total				11,183	175	0	10,203	0	0	140	0	26	-143	10,345	10,345	0	
	2	1	STH 16	123+42 EB - 130+80 EB	3,339	53	0	3,339	0	0	42	0	231	236	3,103	3,103		
				130+80 EB - 139+26 EB	4,646	66	0	4,646	0	0	53	0	404	439	4,207	4,207		
				139+26 WB - 178+03 WB	20,709	350	0	20,709	0	0	280	0	187	-117	20,826	20,826		
			DIX STREET	10+00 ID - 12+79 ID	1,112	31	0	1,112	0	0	24	0	24	0	1,112	1,112		
			MEISTER DRIVE	10+79 M - 10+99 M	53	2	0	53	0	0	1	0	0	-2	54	54		
			HURELLE STREET	10+96 HU - 11+06 HU	8	0	0	8	0	0	0	0	0	0	8	8		
			APC WAY	12+00 A - 12+09 A	47	2	0	47	0	0	1	0	0	-2	49	49		
			MAPLE AVENUE	11+00 MA - 11+11 MA	23	0	0	23	0	0	0	0	0	0	24	24		
			BLACKHAWK DRIVE	11+87 B - 11+97 B	15	1	0	15	0	0	0	0	0	0	15	15		
			CHARLES STREET	10+83 CH - 11+03 CH	38	1	0	38	0	0	1	0	0	-1	39	39		
			LEGION COURT	11+98 L - 12+33 L	58	2	0	58	0	0	1	0	0	-2	59	59		
			LEWIS STREET	10+80 SL - 11+07 SL	51	1	0	51	0	0	1	0	0	-1	52	52		
				11+93 NL - 12+08 NL	19	1	0	19	0	0	0	0	0	0	19	19		
			BIRDSEY STREET	10+82 SB - 11+08 SB	43	1	0	43	0	0	1	0	0	-1	44	44		
				11+92 NB - 12+08 NB	27	1	0	27	0	0	0	0	0	0	27	27		
			MAIN STREET	10+92 SM - 11+08 SM	17	1	0	17	0	0	0	0	0	0	18	18		
				11+92 NM - 12+23 NM	51	1	0	51	0	0	1	0	0	-1	52	52		
			SPRING STREET	10+92 SS - 11+07 SS	29	1	0	29	0	0	0	0	0	0	30	30		
				11+93 NS - 12+08 NS	19	1	0	19	0	0	0	0	0	0	20	20		
			DICKASON BOULEVARD	10+81 NBD - 11+00 NBD	59	2	0	59	0	0	1	0	0	-1	60	60		
				11+99 DNB - 12+36 DNB	55	1	0	55	0	0	1	0	4	3	52	52		
	Stage 2 Sub-total				30,418	517	0	30,418	0	0	413	0	851	548	29,870	29,870	0	

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3

EARTHWORK (CONTINUED)

CATEGORY	STAGE	DIVISION	LOCATION	STATION TO STATION	205.0100 Common Excavation (1) Cut (2) (CY)	205.0100 Common Excavation (1) EBS Excavation (3) (CY)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Marsh Excavation (6) (CY)	Reduced Marsh in Fill (7) Factor 0.60	Reduced EBS in Fill (8) Factor 0.80	Expanded Marsh Backfill (9) Factor 1.50	Unexpanded Fill	Expanded Fill (10) Factor 1.25	Mass Ordinate +/- (11)	Waste	208.0100 Borrow (CY)	Comment:
	Stage 1 Sub-total				11,183	175	0	10,203	0	0	140	0	26	-143	10,345	10,345	0	
	Stage 2 Sub-total				30,418	517	0	30,418	0	0	413	0	851	548	29,870	29,870	0	
	3	1	STH 16	125+00 WB - 130+80 WB	1,970	33	0	1,970	0	0	26	0	191	206	1,764	1,764		
				130+80 WB - 139+26 WB	3,072	66	0	3,072	0	0	53	0	252	249	2,822	2,822		
			INDUSTRIAL DRIVE	15+79 ID - 17+78 ID	767	23	0	767	0	0	18	0	17	-2	769	769		
			CONTINENTAL DRIVE	11+96 C - 12+06 C	95	213	0	95	0	0	171	0	0	-213	308	308		
	Stage 3 Sub-total				5,903	335	0	5,903	0	0	268	0	460	240	5,663	5,663	0	
	Grand Totals				47,504	1,027	0	46,524	0	0	821	0	1,337	645	45,879	45,879	0	
	Total Common Excavation				48,530													
0020	PARKING LANES (Common Excavation)				2,325													
0010	Common Excavation				46,205													

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BASE AGGREGATE DENSE

CATEGORY	STAGE	STATION TO STATION	305.0110 3/4-INCH (TONS)	305.0120 (B) 1 1/4-INCH (TONS)
0010	STAGE 1			
		STH 16 (WESTBOUND)		
		130+80 WB - 137+75 WB	---	72
		174+39 WB - 178+03 WB	---	71
		178+03 WB - 181+79 WB	192	716
		181+79 WB - 185+72 WB	158	781
		185+72 WB - 188+00 WB	73	452
		188+00 WB - 191+50 WB	109	627
		191+50 WB - 194+59 WB	114	631
		TEMPORARY DRIVEWAY BASE	---	130
		TEMPORARY RAOADWAY BASE	---	162
		STH 16 (EASTBOUND)		
		123+41 EB - 126+40 EB	---	584
		126+40 EB - 127+00 EB	---	62
		127+00 EB - 130+80 EB	---	242
		130+80 EB - 137+75 EB	---	220
		INDUSTRIAL DRIVE/DIX STREET		
		10+00 ID - 12+79 ID	---	386
		15+79 ID - 17+78 ID	---	324
		LUDINGTON STREET/STH 73		
		10+75 S - 10+93 S	5	46
		12+15 N - 12+35 N	5	50
		WATER STREET		
		10+76 SW - 11+07 SW	10	77
		11+98 NW - 12+17 NW	5	74
		WATERLOO STREET		
		10+88 W - 10+98 W	3	26
		UDEY STREET		
		11+91 U - 12+08 U	2	27
		MANNING STEET		
		10+45 MS - 11+26 MS	20	228
		RIVER ROAD		
		10+32 R - 10+42 R	1	21
	STAGE 1 TOTAL		697	6,010
	STAGE 2			
		STH 16 (WESTBOUND)		
		139+26 WB - 142+66 WB	43	343
		142+66 WB - 144+25 WB	21	150
		144+25 WB - 151+26 WB	104	623
		151+26 WB - 155+59 WB	67	395
		155+59 WB - 159+13 WB	61	339
		159+13 WB - 162+75 WB	56	334
		162+75 WB - 166+73 WB	64	350
		166+73 WB - 170+41 WB	59	331
		170+41 WB - 174+39 WB	85	391
		174+39 WB - 178+03 WB	102	352
		TEMPORARY DRIVEWAY BASE	---	80
	STAGE 2 SUBTOTAL		662	3,688

CATEGORY	STAGE	STATION TO STATION	305.0110 3/4-INCH (TONS)	305.0120 (B) 1 1/4-INCH (TONS)
0010	STAGE 2 SUBTOTAL		662	3,688
	STAGE 2 CONTINUED			
		STH 16 (EASTBOUND)		
		123+41 EB - 126+40 EB	---	55
		126+40 EB - 127+00 EB	9	161
		127+00 EB - 130+80 EB	71	960
		130+80 EB - 137+75 EB	102	1,232
		137+75 EB - 139+26 EB	3	120
		INDUSTRIAL DRIVE/DIX STREET		
		10+00 ID - 12+79 ID	99	11,031
		MEISTER DRIVE		
		10+79 M - 10+99 M	---	57
		APC WAY		
		12+00 A - 12+20 A	2	69
		BLACKHAWK DRIVE		
		11+87 B - 11+97 B	---	30
		LEGION COURT		
		11+98 L - 12+33 L	5	66
		LEWIS STREET		
		11+93 NL - 12+08 NL	4	37
		BIRDSEY STREET		
		11+92 NB - 12+08 NB	5	40
		MAIN STREET		
		11+92 NM - 12+23 NM	9	153
		SPRING STREET		
		11+93 NS - 12+08 NS	4	37
		DICKASON BLVD		
		11+99 DNB - 12+36 DNB	5	40
		11+99 DSB - 12+36 DSB	8	46
		LUDINGTON STREET/STH 73		
		10+75 S - 10+93 S	5	25
		12+15 N - 12+35 N	7	27
	STAGE 2 TOTAL		1,001	17,875
	SUBTOTAL		1,699	23,885

(B) REFER TO "TEMPORARY ASPHALT ITEMS" FOR ADDITONAL QUANTITIES

BASE AGGREGATE DENSE (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	305.0110 3/4-INCH (TONS)	305.0120 (B) 1 1/4-INCH (TONS)
0010	SUBTOTAL		1,699	23,885
	STAGE 3			
		STH 16 (WESTBOUND)		
		123+41 WB - 126+40 WB	---	59
		126+40 WB - 127+00 WB	8	147
		127+00 WB - 130+80 WB	84	722
		130+80 WB - 137+75 WB	113	1,291
		137+75 WB - 139+26 WB	39	255
		139+26 WB - 142+66 WB	55	378
		142+66 WB - 144+25 WB	24	167
		144+25 WB - 151+26 WB	115	706
		151+26 WB - 155+59 WB	76	402
		155+59 WB - 159+13 WB	49	326
		159+13 WB - 162+75 WB	55	330
		162+75 WB - 166+73 WB	69	357
		166+73 WB - 170+41 WB	60	332
		170+41 WB - 174+39 WB	70	395
		174+39 WB - 178+03 WB	93	352
		TEMPORARY DRIVEWAY BASE	---	115
		INDUSTRIAL DRIVE/DIX STREET		
		15+79 ID - 17+78 ID	62	898
		CONTINENTAL DRIVE		
		11+96 C - 12+06 C	---	55
		HURELLE STREET		
		10+96 HU - 11+06 HU	---	26
		MAPLE AVENUE		
		11+00 MA - 11+11 MA	3	40
		CHARLES STREET		
		10+83 CH - 11+03 CH	---	53
		LEWIS STREET		
		10+80 SL - 11+07 SL	8	67
		BIRDSEY STREET		
		10+82 SB - 11+08 SB	8	65
		MAIN STREET		
		10+92 SM - 11+08 SM	5	39
		SPRING STREET		
		10+92 SS - 11+07 SS	5	39
		DICKASON BLVD		
		10+81 NBD - 11+00 NBD	2	41
		10+81 SBD - 11+01 SBD	6	58
	STAGE 3 TOTAL		1,009	7,715

CATEGORY	STAGE	STATION TO STATION	305.0110 3/4-INCH (TONS)	305.0120 (B) 1 1/4-INCH (TONS)
0010	STAGE 4			
		STH 16 (WESTBOUND)		
		127+00 WB - 130+80 WB	21	---
		130+80 WB - 137+75 WB	19	---
		STH 16 (EASTBOUND)		
		127+00 EB - 130+80 EB	21	---
		130+80 EB - 137+75 EB	33	---
	STAGE 4 TOTAL		92	0
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**2,800**	**31,600**

(B) REFER TO "TEMPORARY ASPHALT ITEMS" FOR ADDITONAL QUANTITIES

BASE AGGREGATE DENSE

CATEGORY	STAGE	STATION TO STATION	305.0120 1 1/4-INCH (TONS)
0020	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	106
		181+79 WB - 185+72 WB	114
		185+72 WB - 188+00 WB	90
		188+00 WB - 191+50 WB	138
		191+50 WB - 194+59 WB	3
	STAGE 1 TOTAL		452
	STAGE 2		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	59
		162+75 WB - 166+73 WB	60
		166+73 WB - 170+41 WB	60
		170+41 WB - 174+39 WB	61
		174+39 WB - 178+03 WB	49
	STAGE 2 TOTAL		290
	STAGE 3		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	78
		162+75 WB - 166+73 WB	79
		166+73 WB - 170+41 WB	79
		170+41 WB - 174+39 WB	80
		174+39 WB - 178+03 WB	42
	STAGE 3 TOTAL		359
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			**1,100**

*NOTE: BASE AGGREGATE DENSE QUANTITIES IN CATEGORY 0020 IS FOR PARKING LANE

SELECT CRUSHED MATERIAL

CATEGORY	STAGE	STATION TO STATION	312.0110 (TON)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	1312
		181+79 WB - 185+72 WB	1227
		185+72 WB - 188+00 WB	691
		188+00 WB - 191+50 WB	1026
		191+50 WB - 194+59 WB	1058
		EBS	306
	STAGE 1 TOTAL		5,315
	STAGE 2		
		STH 16 (WESTBOUND)	
		139+26 WB - 142+66 WB	540
		142+66 WB - 144+25 WB	263
		144+25 WB - 151+26 WB	1065
		151+26 WB - 155+59 WB	654
		155+59 WB - 159+13 WB	573
		159+13 WB - 162+75 WB	572
		162+75 WB - 166+73 WB	605
		166+73 WB - 170+41 WB	562
		170+41 WB - 174+39 WB	674
		174+39 WB - 178+03 WB	619
		STH 16 (EASTBOUND)	
		123+41 EB - 126+40 EB	56
		126+40 EB - 127+00 EB	164
		127+00 EB - 130+80 EB	1671
		130+80 EB - 137+75 EB	2173
		137+75 EB - 139+26 EB	211
		EBS	965
	STAGE 2 TOTAL		11,368
	STAGE 3		
		STH 16 (WESTBOUND)	
		123+41 WB - 126+40 WB	60
		126+40 WB - 127+00 WB	157
		127+00 WB - 130+80 WB	1304
		130+80 WB - 137+75 WB	2243
		137+75 WB - 139+26 WB	362
		139+26 WB - 142+66 WB	540
		142+66 WB - 144+25 WB	263
		144+25 WB - 151+26 WB	1065
		151+26 WB - 155+59 WB	654
		155+59 WB - 159+13 WB	573
		159+13 WB - 162+75 WB	572
		162+75 WB - 166+73 WB	605
		166+73 WB - 170+41 WB	562
		170+41 WB - 174+39 WB	674
		174+39 WB - 178+03 WB	619
		STH 16 (EASTBOUND)	
		137+75 EB - 139+26 EB	126
		EBS	634
	STAGE 3 TOTAL		11,016
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**27,700**

SELECT CRUSHED MATERIAL

CATEGORY	STAGE	STATION TO STATION	312.0110 SELECT CRUSHED MATERIAL (TON)
0020	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	186
		181+79 WB - 185+72 WB	201
		185+72 WB - 188+00 WB	158
		188+00 WB - 191+50 WB	243
		191+50 WB - 194+59 WB	5
	STAGE 1 TOTAL		793
	STAGE 2		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	103
		162+75 WB - 166+73 WB	106
		166+73 WB - 170+41 WB	106
		170+41 WB - 174+39 WB	107
		174+39 WB - 178+03 WB	86
	STAGE 2 TOTAL		509
	STAGE 3		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	104
		162+75 WB - 166+73 WB	106
		166+73 WB - 170+41 WB	106
		170+41 WB - 174+39 WB	108
		174+39 WB - 178+03 WB	95
	STAGE 3 TOTAL		518
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			**1,820**

*NOTE: SELECT CRUSHED MATERIAL QUANTITIES IN CATEGORY 0020 IS FOR PARKING LANE

CONCRETE PAVEMENT

CATEGORY	STAGE	STATION TO STATION	415.0090 CONCRETE PAVEMENT 9-INCH (SY)	415.0095 CONCRETE PAVEMENT 9 1/2-INCH (SY)	415.0210 CONCRETE PAVEMENT GAPS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)	415.1090 CONCRETE PAVEMENT HES 9-INCH (SY)
0010	STAGE 1						
		STH 16 (WESTBOUND)					
		178+03 WB - 181+79 WB	1,766	---	1	---	---
		181+79 WB - 185+72 WB	1,703	---	1	---	---
		185+72 WB - 188+00 WB	957	---	---	---	---
		188+00 WB - 191+50 WB	1,413	---	---	---	---
		191+50 WB - 194+59 WB	1,490	---	1	27	1,780
	STAGE 1 TOTAL		7,329	0	3	27	1,780
	STAGE 2						
		STH 16 (WESTBOUND)					
		130+80 WB - 137+75 WB	---	---	---	---	296
		139+26 WB - 142+66 WB	757	---	1	---	---
		142+66 WB - 144+25 WB	371	---	---	---	---
		144+25 WB - 151+26 WB	---	---	---	---	1,274
		151+26 WB - 155+59 WB	914	---	1	---	---
		155+59 WB - 159+13 WB	80	---	1	---	---
		159+13 WB - 162+75 WB	808	---	---	---	---
		162+75 WB - 166+73 WB	850	---	1	---	---
		166+73 WB - 170+41 WB	793	---	---	---	---
		170+41 WB - 174+39 WB	959	---	1	---	---
		174+39 WB - 178+03 WB	918	---	---	---	---
		STH 16 (EASTBOUND)					
		127+00 EB - 130+80 EB	---	2,412	1	---	---
		130+80 EB - 137+75 EB	1,839	1,258	---	---	---
		137+75 EB - 139+26 EB	314	---	---	---	---
	STAGE 2 SUBTOTAL		8,604	3,670	6	0	1,570

CONCRETE PAVEMENT (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	415.0090 CONCRETE PAVEMENT 9-INCH (SY)	415.0095 CONCRETE PAVEMENT 9 1/2-INCH (SY)	415.0210 CONCRETE PAVEMENT GAPS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)	415.1090 CONCRETE PAVEMENT HES 9-INCH (SY)
0010	STAGE 1 TOTAL		7,329	0	3	27	1,780
	STAGE 2 SUBTOTAL		8,604	3,670	6	0	1,570
	STAGE 2 CONTINUED						
		BIRDSEY STREET					
		11+92 NB - 12+08 NB	---	---	---	16	---
	STAGE 2 TOTAL		8,604	3,670	6	16	1,570
	STAGE 3						
		STH 16 (WESTBOUND)					
		127+00 WB - 130+80 WB	---	1,838	---	---	---
		130+80 WB - 137+75 WB	1,287	1,924	---	---	---
		137+75 WB - 139+26 WB	660	---	---	---	---
		139+26 WB - 142+66 WB	757	---	---	---	---
		142+66 WB - 144+25 WB	371	---	---	---	---
		144+25 WB - 151+26 WB	---	---	---	---	1,275
		151+26 WB - 155+59 WB	914	---	---	---	---
		155+59 WB - 159+13 WB	80	---	---	---	---
		159+13 WB - 162+75 WB	808	---	---	---	---
		162+75 WB - 166+73 WB	850	---	---	---	---
		166+73 WB - 170+41 WB	793	---	---	---	---
		170+41 WB - 174+39 WB	959	---	---	---	---
		174+39 WB - 178+03 WB	918	---	---	---	---
		STH 16 (EASTBOUND)					
		137+75 EB - 139+26 EB	130	---	---	---	---
		INDUSTRIAL DRIVE/DIX STREET					
		15+79 ID - 17+78 ID	---	48	---	---	---
		CONTINENTAL DRIVE					
		11+96 C - 12+06 C	34	---	---	---	---
	STAGE 3 SUBTOTAL		8,562	3,809	0	0	1,275
	STAGE 3 CONTINUED						
		HURELLE STREET					
		10+96 HU - 11+06 HU	24	---	---	---	---
		MAPLE AVENUE					
		11+00 MA - 11+11 MA	---	---	---	27	---
		CHARLES STREET					
		10+83 CH - 11+03 CH	45	---	---	---	---
		LEWIS STREET					
		10+80 SL - 11+07 SL	60	---	---	---	---
		BIRDSEY STREET					
		10+82 SB - 11+08 SB	58	---	---	---	---
		MAIN STREET					
		10+92 SM - 11+08 SM	35	---	---	---	---
		SPRING STREET					
		10+92 SS - 11+07 SS	---	---	---	16	---
		DICKASON BLVD					
		10+81 NBD - 11+00 NBD	45	---	---	---	---
		10+81 SBD - 11+01 SBD	45	---	---	---	---
		LUDINGTON STREET/STH 73					
		10+75 S - 10+93 S	44	---	---	---	---
	STAGE 3 TOTAL		8,917	3,809	0	43	1,275
	PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**24,850**	**7,480**	**9**	**86**	**4,625**

CONCRETE PAVEMENT

CATEGORY	STAGE	STATION TO STATION	415.0090 CONCRETE PAVEMENT 9-INCH (SY)
0020	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	318
		181+79 WB - 185+72 WB	343
		185+72 WB - 188+00 WB	271
		188+00 WB - 191+50 WB	415
		191+50 WB - 194+59 WB	9
	STAGE 1 TOTAL		1,356
	STAGE 2		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	176
		162+75 WB - 166+73 WB	181
		166+73 WB - 170+41 WB	182
		170+41 WB - 174+39 WB	183
		174+39 WB - 178+03 WB	147
	STAGE 2 TOTAL		870
	STAGE 3		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	177
		162+75 WB - 166+73 WB	181
		166+73 WB - 170+41 WB	181
		170+41 WB - 174+39 WB	184
		174+39 WB - 178+03 WB	151
	STAGE 3 TOTAL		874
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			**3,100**

CONCRETE PAVEMENT

CATEGORY	STAGE	STATION TO STATION	415.0210 CONCRETE PAVEMENT GAPS (EACH)	SPV.0035.002 COLORING CONCRETE DARK GREY (CY)
0040	STAGE 1			
		STH 16 (WESTBOUND)		
		178+03 WB - 181+79 WB	2	30
		181+79 WB - 185+72 WB	1	15
		185+72 WB - 188+00 WB	1	16
		191+50 WB - 194+59 WB	1	15
		LUDINGTON STREET/STH 73		
		10+75 S - 10+93 S	1	15
		12+15 N - 12+35 N	1	15
		WATER STREET		
		10+76 SW - 11+07 SW	1	9
		11+98 NW - 12+17 NW	1	11
	STAGE 1 TOTAL		9	125
	STAGE 2			
		STH 16 (WESTBOUND)		
		142+66 WB - 144+25 WB	1	17
		151+26 WB - 155+59 WB	1	12
		155+59 WB - 159+13 WB	2	25
		159+13 WB - 162+75 WB	2	27
		162+75 WB - 166+73 WB	2	22
		166+73 WB - 170+41 WB	2	26
		170+41 WB - 174+39 WB	2	27
		174+39 WB - 178+03 WB	2	27
		DICKASON BLVD		
		11+99 DNB - 12+36 DNB	1	20
	STAGE 2 TOTAL		15	202
	STAGE 3			
		DICKASON BLVD		
		10+81 NBD - 11+00 NBD	1	23
	STAGE 3 TOTAL		1	23
PROJECT 1401-02-71 TOTAL - CATEGORY 0040			**25**	**350**

CONCRETE DRIVEWAY

CATEGORY	STAGE	STATION TO STATION	416.0160 6-INCH (SY)	416.0260 HES 6-INCH (SY)	416.0190 9-INCH (SY)
0010	STAGE 1				
		STH 16 (WESTBOUND)			
		178+03 WB - 181+79 WB	59	---	---
		181+79 WB - 185+72 WB	167	154	---
		185+72 WB - 188+00 WB	129	---	---
		188+00 WB - 191+50 WB	100	---	---
		191+50 WB - 194+59 WB	94	---	---
		WATER STREET			
		11+98 NW - 12+17 NW	92	---	---
		MANNING STEET			
		10+45 MS - 11+26 MS	29	---	---
	STAGE 1 TOTAL		670	154	---
	STAGE 2				
		STH 16 (WESTBOUND)			
		139+26 WB - 142+66 WB	107	---	---
		144+25 WB - 151+26 WB	---	77	---
		151+26 WB - 155+59 WB	74	---	---
		155+59 WB - 159+13 WB	54	---	---
		159+13 WB - 162+75 WB	36	---	---
		162+75 WB - 166+73 WB	27	---	---
		166+73 WB - 170+41 WB	37	---	---
		170+41 WB - 174+39 WB	18	---	---
		INDUSTRIAL DRIVE/DIX STREET			
		10+00 ID - 12+79 ID	277	---	---
	STAGE 2 TOTAL		630	77	---
	STAGE 3				
		STH 16 (WESTBOUND)			
		139+26 WB - 142+66 WB	202	---	---
		142+66 WB - 144+25 WB	62	---	---
		144+25 WB - 151+26 WB	316	---	---
		151+26 WB - 155+59 WB	109	---	---
		159+13 WB - 162+75 WB	16	---	---
		162+75 WB - 166+73 WB	70	---	---
		166+73 WB - 170+41 WB	49	---	---
		170+41 WB - 174+39 WB	37	---	---
		INDUSTRIAL DRIVE/DIX STREET			
		15+79 ID - 17+78 ID	161	---	---
	STAGE 3 TOTAL		1020	---	---
		UNDISTRIBUTED	---	---	100*
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**2,320**	**230**	**100**

*NOTE: UNDISTRIBUTED QUANTITY TO BE USED WHEN EXISTING DRIVEWAY EXCEEDS 6 INCHES

ASPHALTIC ITEMS

CATEGORY	STAGE	STATION TO STATION	460.6223 HMA PAVEMENT 4 MT 58-28 S (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)	460.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)
0010	STAGE 1						
		STH 16 (WESTBOUND)					
		178+03 WB - 181+79 WB	---	---	1	---	---
		181+79 WB - 185+72 WB	---	---	9	---	---
		185+72 WB - 188+00 WB	---	---	19	---	---
		188+00 WB - 191+50 WB	---	---	14	---	---
		191+50 WB - 194+59 WB	---	---	8	---	---
		LUDINGTON STREET/STH 73					
		10+75 S - 10+93 S	---	13	---	---	---
		12+15 N - 12+35 N	---	14	---	---	---
		WATER STREET					
		10+76 SW - 11+07 SW	---	24	---	---	---
		11+98 NW - 12+17 NW	---	15	1	---	---
		WATERLOO STREET					
		10+88 W - 10+98 W	---	8	---	---	---
		UDEY STREET					
		11+91 U - 12+08 U	---	12	---	---	---
		MANNING STEET					
		10+45 MS - 11+26 MS	---	70	2	---	---
		RIVER ROAD					
		10+32 R - 10+42 R	---	7	---	---	---
	STAGE 1 TOTAL		0	162	54	0	0
	STAGE 2						
		STH 16 (WESTBOUND)					
		126+40 WB - 127+00 WB	70	---	---	17	0
		139+26 WB - 142+66 WB	---	---	16	---	---
		151+26 WB - 155+59 WB	---	---	5	---	---
		155+59 WB - 159+13 WB	---	---	1	---	---
		162+75 WB - 166+73 WB	---	---	1	---	---
		166+73 WB - 170+41 WB	---	---	2	---	---
		170+41 WB - 174+39 WB	---	---	3	---	---
		STH 16 (EASTBOUND)					
		126+40 EB - 127+00 EB	---	70	---	---	0.5
		127+00 EB - 130+80 EB	---	18	---	---	0.1
		INDUSTRIAL DRIVE/DIX STREET					
		10+00 ID - 12+79 ID	421	---	28	105	3
		MEISTER DRIVE					
		10+79 M - 10+99 M	---	24	---	6	---
		APC WAY					
		12+00 A - 12+20 A	---	23	---	6	---
		BLACKHAWK DRIVE					
		11+87 B - 11+97 B	---	10	---	2	---
	STAGE 2 SUBTOTAL		491	145	55	137	4

ASPHALTIC ITEMS (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	460.6223 HMA PAVEMENT 4 MT 58-28 S (TON)	465.0120 ASPHALTIC SURFACE (TON)	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)	460.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)
0010	STAGE 1 TOTAL		0	162	54	0	0
	STAGE 2 SUBTOTAL		491	145	55	137	4
	STAGE 2 CONTINUED						
		LEGION COURT					
		11+98 L - 12+33 L	---	23	---	6	---
		LEWIS STREET					
		11+93 NL - 12+08 NL	---	12	---	3	---
		MAIN STREET					
		11+92 NM - 12+23 NM	---	51	---	13	---
		SPRING STREET					
		11+93 NS - 12+08 NS	---	12	---	3	---
		DICKASON BLVD					
		11+99 DNB - 12+36 DNB	---	10	---	2	---
		11+99 DSB - 12+36 DSB	---	11	---	3	---
		LUDINGTON STREET/STH 73					
		10+75 S - 10+93 S	---	13	---	3	---
		12+15 N - 12+35 N	---	14	---	3	---
	STAGE 2 TOTAL			289	55	173	4
	STAGE 3						
		STH 16 (WESTBOUND)					
		126+40 WB - 127+00 WB	67	---	---	17	0.4
		139+26 WB - 142+66 WB	---	---	33	---	---
		142+66 WB - 144+25 WB	---	---	5	---	---
		144+25 WB - 151+26 WB	---	---	37	---	---
		159+13 WB - 162+75 WB	---	---	1	---	---
		166+73 WB - 170+41 WB	---	---	4	---	---
		170+41 WB - 174+39 WB	---	---	4	---	---
		INDUSTRIAL DRIVE/DIX STREET					
		15+79 ID - 17+78 ID	308	---	21	76	2
		CONTINENTAL DRIVE					
		11+96 C - 12+06 C	---	19	---	5	---
		HURELLE STREET					
		10+96 HU - 11+06 HU	---	8	---	2	---
		CHARLES STREET					
		10+83 CH - 11+03 CH	---	17	---	4	---
		LEWIS STREET					
		10+80 SL - 11+07 SL	---	21	---	5	---
	STAGE 3 SUBTOTAL		375	65	106	109	2

ASPHALTIC ITEMS (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	460.6223 HMA PAVEMENT 4 MT 58-28 S (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)	460.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)
0010	STAGE 1 TOTAL		0	162	54	0	0
	STAGE 2 TOTAL		0	289	55	173	4
	STAGE 3 SUBTOTAL		375	65	106	109	2
	STAGE 3 CONTINUED						
		BIRDSEY STREET					
		10+82 SB - 11+08 SB	---	20	---	5	---
		MAIN STREET					
		10+92 SM - 11+08 SM	---	12	---	3	---
		DICKASON BLVD					
		10+81 NBD - 11+00 NBD	---	12	---	3	---
		10+81 SBD - 11+01 SBD	---	19	---	7	---
	STAGE 3 TOTAL		375	129	106	127	2
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**375**	**580**	**215**	**300**	**6**

ASPHALTIC FLUMES

CATEGORY	STAGE	STATION TO STATION	465.0315 ASPHALTIC FLUMES (SY)
0010	STAGE 2		
		STH 16 (EASTBOUND)	
		128+12 EB	15
	STAGE 2 TOTAL		15
	STAGE 3		
		STH 16 (EASTBOUND)	
		126+96 WB	15
	STAGE 3 TOTAL		45
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**60**

TEMPORARY ASPHALT ITEMS

CATEGORY	STAGE	STATION TO STATION	465.0125 ASPHALTIC SURFACE TEMPORARY (TON)	305.0120 (B) BASE AGGREGATE DENSE 1 1/4-INCH (TON)
0010	STAGE 1			
		STH 16 (WESTBOUND)		
		123+41 WB - 126+40 WB	307	295
		126+40 WB - 127+00 WB	35	31
		127+00 WB - 130+80 WB	61	122
		130+80 WB - 137+75 WB	37	148
		174+39 WB - 178+03 WB	39	93
		STH 16 (EASTBOUND)		
		123+41 EB - 126+40 EB	---	295
		126+40 EB - 127+00 EB	---	31
		127+00 EB - 130+80 EB	---	122
		130+80 EB - 137+75 EB	---	148
		INDUSTRIAL DRIVE/DIX STREET		
		10+00 ID - 12+79 ID	228	548
		15+79 ID - 17+78 ID	228	457
	STAGE 1 TOTAL		935	2290
	STAGE 2			
		INDUSTRIAL DRIVE/DIX STREET		
		10+00 ID - 12+79 ID	3	---
	STAGE 2 TOTAL		3	0
	STAGE 3			
		INDUSTRIAL DRIVE/DIX STREET		
		15+79 ID - 17+78 ID	147	---
	STAGE 3TOTAL		147	0
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**1,085**	**2,290**

(B) REFER TO "BASE AGGREGATE DENSE" TABLE FOR ADDITIONAL QUANTITIES

CONCRETE CURB & GUTTER

CATEGORY	STAGE	STATION TO STATION	601.0405 18-INCH TYPE A (LF)	601.0407 18-INCH TYPE D (LF)	601.0409 30-INCH TYPE A (LF)	601.0411 30-INCH TYPE D (LF)	601.0600 PEDESTRIAN (LF)	620.0200 CONCRETE MEDIAN BLUNT NOSE (SF)	620.0300 CONCRETE MEDIAN SLOPED NOSE (SF)	SPV.0090.001 REVEAL CURB (LF)
0010	STAGE 1									
		STH 16 (WESTBOUND)								
		178+03 WB - 181+79 WB	---	---	733	---	---	---	---	59
		181+79 WB - 185+72 WB	---	---	787	---	---	---	---	---
		185+72 WB - 188+00 WB	---	---	450	---	---	---	---	---
		188+00 WB - 191+50 WB	---	---	684	---	---	---	---	---
		191+50 WB - 194+59 WB	---	---	637	---	---	---	---	---
		LUDINGTON STREET/STH 73								
		10+75 S - 10+93 S	---	---	---	18	---	---	---	---
		12+15 N - 12+35 N	---	---	---	20	---	---	---	---
		WATER STREET								
		10+76 SW - 11+07 SW	---	---	---	63	11	---	---	---
		11+98 NW - 12+17 NW	---	---	---	38	---	---	---	---
		WATERLOO STREET								
		10+88 W - 10+98 W	---	---	---	20	---	---	---	---
		MANNING STEET								
		10+45 MS - 11+26 MS	---	---	---	162	---	---	---	---
		RIVER ROAD								
		10+32 R - 10+42 R	---	---	---	10	15	---	---	---
	STAGE 1 TOTAL		0	0	3,291	331	26	0	0	59
	STAGE 2									
		STH 16 (WESTBOUND)								
		139+26 WB - 142+66 WB	---	---	306	---	---	---	---	---
		142+66 WB - 144+25 WB	---	---	155	---	---	---	---	---
		144+25 WB - 151+26 WB	---	---	695	---	---	---	---	---
		151+26 WB - 155+59 WB	---	4	430	---	---	---	---	---
		155+59 WB - 159+13 WB	---	---	359	---	---	---	---	---
		159+13 WB - 162+75 WB	---	---	373	---	---	---	---	---
		162+75 WB - 166+73 WB	---	---	391	---	---	---	---	---
		166+73 WB - 170+41 WB	---	---	342	---	---	---	---	---
		170+41 WB - 174+39 WB	---	---	372	---	32	---	---	150
		174+39 WB - 178+03 WB	---	---	386	---	35	---	---	29
		STH 16 (EASTBOUND)								
		127+00 EB - 130+80 EB	---	---	356	---	---	---	---	---
		130+80 EB - 137+75 EB	---	---	723	---	---	18	39	---
		INDUSTRIAL DRIVE/DIX STREET								
		10+00 ID - 12+79 ID	---	3	292	717	---	---	---	---
		MEISTER DRIVE								
		10+79 M - 10+99 M	---	---	---	3	---	---	---	---
		APC WAY								
		12+00 A - 12+20 A	---	---	---	42	---	---	---	---
		BLACKHAWK DRIVE								
		11+87 B - 11+97 B	---	---	---	20	---	---	---	---
	STAGE 2 SUBTOTAL		0	7	5,180	782	67	18	39	179

CONCRETE CURB & GUTTER (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	601.0405 18-INCH TYPE A (LF)	601.0407 18-INCH TYPE D (LF)	601.0409 30-INCH TYPE A (LF)	601.0411 30-INCH TYPE D (LF)	601.0600 PEDESTRIAN (LF)	620.0200 CONCRETE MEDIAN BLUNT NOSE (SF)	620.0300 CONCRETE MEDIAN SLOPED NOSE (SF)	SPV.0090.001 REVEAL CURB (LF)
0010	STAGE 2 SUBTOTAL		0	7	5,180	782	67	18	39	179
	STAGE 2 CONTINUED									
		LEGION COURT								
		11+98 L - 12+33 L	---	---	---	35	---	---	---	---
		LEWIS STREET								
		11+93 NL - 12+08 NL	---	---	---	30	---	---	---	---
		MAIN STREET								
		11+92 NM - 12+23 NM	---	---	---	106	---	---	---	---
		SPRING STREET								
		11+93 NS - 12+08 NS	---	---	---	30	---	---	---	---
		DICKASON BLVD								
		11+99 DNB - 12+36 DNB	---	---	31	51	---	---	---	---
		11+99 DSB - 12+36 DSB	---	---	---	64	---	---	---	---
		LUDINGTON STREET/STH 73								
		10+75 S - 10+93 S	---	---	---	18	---	---	---	---
		12+15 N - 12+35 N	---	---	---	20	55	---	---	---
	STAGE 2 TOTAL		0	7	5,211	1,136	122	18	39	179
	STAGE 3									
		STH 16 (WESTBOUND)								
		127+00 WB - 130+80 WB	---	---	437	---	---	---	---	---
		130+80 WB - 137+75 WB	18	---	758	---	---	31	38	---
		137+75 WB - 139+26 WB	---	---	166	---	---	---	---	---
		139+26 WB - 142+66 WB	---	---	318	---	---	---	---	---
		142+66 WB - 144+25 WB	---	---	156	---	33	---	---	---
		144+25 WB - 151+26 WB	---	---	704	---	---	---	---	---
		151+26 WB - 155+59 WB	---	---	439	---	---	---	---	---
		155+59 WB - 159+13 WB	---	---	340	---	---	---	---	---
		159+13 WB - 162+75 WB	---	---	356	---	---	---	---	---
		162+75 WB - 166+73 WB	---	---	397	---	---	---	---	---
		166+73 WB - 170+41 WB	---	---	379	---	---	---	---	---
		170+41 WB - 174+39 WB	---	---	389	---	12	---	---	---
		174+39 WB - 178+03 WB	---	---	378	---	8	---	---	62
		STH 16 (EASTBOUND)								
		137+75 EB - 139+26 EB	---	---	171	---	---	---	---	---
		INDUSTRIAL DRIVE/DIX STREET								
		15+79 ID - 17+78 ID	22	53	266	443	---	---	---	---
		CONTINENTAL DRIVE								
		11+96 C - 12+06 C	---	---	---	29	---	---	---	---
		HURELLE STREET								
		10+96 HU - 11+06 HU	---	---	---	21	---	---	---	---
		CHARLES STREET								
		10+83 CH - 11+03 CH	---	---	---	40	---	---	---	---
	STAGE 3 SUBTOTAL		40	53	5,655	533	53	31	38	62

CONCRETE CURB & GUTTER (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	601.0405 18-INCH TYPE A (LF)	601.0407 18-INCH TYPE D (LF)	601.0409 30-INCH TYPE A (LF)	601.0411 30-INCH TYPE D (LF)	601.0600 PEDESTRIAN (LF)	620.0200 CONCRETE MEDIAN BLUNT NOSE (SF)	620.0300 CONCRETE MEDIAN SLOPED NOSE (SF)	SPV.0090.001 REVEAL CURB (LF)
0010	STAGE 3 SUBTOTAL		40	53	5,655	533	53	31	38	62
	STAGE 3 CONTINUED									
		LEWIS STREET								
		10+80 SL - 11+07 SL	—	---	---	54	---	---	—	---
		BIRDSEY STREET								
		10+82 SB - 11+08 SB	—	---	---	52	---	---	—	---
		MAIN STREET								
		10+92 SM - 11+08 SM	—	---	---	32	---	---	—	---
		DICKASON BLVD								
		10+81 NBD - 11+00 NBD	—	---	33	40	---	---	—	---
		10+81 SBD - 11+01 SBD	—	---	---	42	---	---	—	---
	STAGE 3 TOTAL		40	53	5,688	752	53	31	38	62
	STAGE 4									
		STH 16 (WESTBOUND)								
		123+41 WB - 126+40 WB	—	---	371	---	---	---	—	---
		126+40 WB - 127+00 WB	—	---	---	60	---	---	—	---
		127+00 WB - 130+80 WB	—	---	313	---	---	---	—	---
		130+80 WB - 137+75 WB	—	---	561	---	---	---	—	---
		STH 16 (EASTBOUND)								
		123+41 EB - 126+40 EB	—	---	346	---	---	---	—	---
		126+40 EB - 127+00 EB	—	---	---	60	---	---	—	---
		127+00 EB - 130+80 EB	—	---	313	---	---	---	20	---
		130+80 EB - 137+75 EB	—	---	606	---	---	---	53	---
	STAGE 4 TOTAL		0	0	2,510	120	0	0	73	0
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**40**	**60**	**16,700**	**2,340**	**200**	**50**	**150**	**300**

RECONSTRUCTING MANHOLES

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	611.0420 (EACH)
0010	10.5	136+82.3WB	22.3' LT	1
	11.0	136+81.5WB	5.0' RT	1
PROJECT 1401-02-71 TOTAL - CATEGORY 0010				**2**

SEALING STORM STRUCTURE

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	SPV.0060.006 (EACH)
0010	10.5	136+82.3WB	22.3' LT	1
	11.0	136+81.5WB	5.0' RT	1
	35.0	166+83.5WB	22.9' LT	1
PROJECT 1401-02-71 TOTAL - CATEGORY 0010				**3**

CONCRETE SIDEWALK

CATEGORY	STAGE	STATION TO STATION	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	416.0610 DRILLED TIE BARS (EACH)	
0010	STAGE 1					
		STH 16 (WESTBOUND)				
		181+79 WB - 185+72 WB	3064	20	---	
		185+72 WB - 188+00 WB	1901	20	---	
		188+00 WB - 191+50 WB	3051	---	---	
		191+50 WB - 194+59 WB	2213	10	---	
		LUDINGTON STREET/STH 73				
		10+75 S - 10+93 S	180	10	---	
		12+15 N - 12+35 N	173	10	---	
		WATER STREET				
		10+76 SW - 11+07 SW	325	20	---	
		11+98 NW - 12+17 NW	9	20	---	
		WATERLOO STREET				
		10+88 W - 10+98 W	94	20	---	
		UDEY STREET				
		11+91 U - 12+08 U	72	20	---	
		MANNING STEET				
		10+45 MS - 11+26 MS	712	20	---	
		RIVER ROAD				
		10+32 R - 10+42 R	49	10	---	
	STAGE 1 TOTAL		11842	180	---	
	STAGE 2					
		STH 16 (WESTBOUND)				
		139+26 WB - 142+66 WB	1,195	---	---	
		142+66 WB - 144+25 WB	725	---	---	
		144+25 WB - 151+26 WB	3,147	10	---	
		151+26 WB - 155+59 WB	1,956	20	---	
		155+59 WB - 159+13 WB	1,763	20	---	
		159+13 WB - 162+75 WB	1,770	20	---	
		162+75 WB - 166+73 WB	2,008	20	---	
		166+73 WB - 170+41 WB	1,806	20	---	
		170+41 WB - 174+39 WB	3,018	20	---	
		174+39 WB - 178+03 WB	3,978	20	10	*
		178+03 WB - 181+79 WB	6750	40	10	*
		STH 16 (EASTBOUND)				
		127+00 EB - 130+80 EB	2,137	12	---	
		130+80 EB - 137+75 EB	3,356	30	---	
		137+75 EB - 139+26 EB	108	---	---	
		INDUSTRIAL DRIVE/DIX STREET				
		10+00 ID - 12+79 ID	1,748	22	---	
	STAGE 2 SUBTOTAL		35,466	254	20	

* UNDISTRIBUTED ITEM - TO BE USED AS NEEDED

CATEGORY	STAGE	STATION TO STATION	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	416.0610 DRILLED TIE BARS (EACH)
0010	STAGE 2 SUBTOTAL		35,466	254	20
	STAGE 2 CONTINUED				
		MEISTER DRIVE			
		10+79 M - 10+99 M	---	20	---
		APC WAY			
		12+00 A - 12+20 A	84	20	---
		BLACKHAWK DRIVE			
		11+87 B - 11+97 B	---	20	---
		LEGION COURT			
		11+98 L - 12+33 L	204	20	---
		LEWIS STREET			
		11+93 NL - 12+08 NL	151	20	---
		BIRDSEY STREET			
		11+92 NB - 12+08 NB	159	20	---
		MAIN STREET			
		11+92 NM - 12+23 NM	304	20	---
		SPRING STREET			
		11+93 NS - 12+08 NS	149	20	---
		DICKASON BLVD			
		11+99 DNB - 12+36 DNB	201	10	---
		11+99 DSB - 12+36 DSB	307	10	---
		LUDINGTON STREET/STH 73			
		10+75 S - 10+93 S	211	10	---
		12+15 N - 12+35 N	229	10	---
	STAGE 2 TOTAL		37464	454	20
	STAGE 3				
		STH 16 (WESTBOUND)			
		127+00 WB - 130+80 WB	2669	24	---
		130+80 WB - 137+75 WB	3647	10	---
		137+75 WB - 139+26 WB	763	---	---
		139+26 WB - 142+66 WB	1300	---	---
		142+66 WB - 144+25 WB	612	10	---
		144+25 WB - 151+26 WB	3059	10	---
		151+26 WB - 155+59 WB	2614	18	---
		155+59 WB - 159+13 WB	1688	20	---
		159+13 WB - 162+75 WB	1815	20	---
		162+75 WB - 166+73 WB	1969	20	---
		166+73 WB - 170+41 WB	1829	20	---
		170+41 WB - 174+39 WB	2441	30	---
		174+39 WB - 178+03 WB	3594	20	---
		137+75 EB - 139+26 EB	690	---	---
	STAGE 3 SUBTOTAL		28,690	202	0

CATEGORY	STAGE	STATION TO STATION	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	416.0610 DRILLED TIE BARS (EACH)
0010	STAGE 3 SUBTOTAL		28,690	202	0
	STAGE 3 CONTINUED				
		INDUSTRIAL DRIVE/DIX STREET			
		10+00 ID - 12+79 ID	---	---	---
		15+79 ID - 17+78 ID	1728	30	---
		CONTINENTAL DRIVE			
		11+96 C - 12+06 C	---	20	---
		HURELLE STREET			
		10+96 HU - 11+06 HU	---	20	---
		CHARLES STREET			
		10+83 CH - 11+03 CH	---	18	---
		LEWIS STREET			
		10+80 SL - 11+07 SL	269	20	---
		BIRDSEY STREET			
		10+82 SB - 11+08 SB	259	20	---
		MAIN STREET			
		10+92 SM - 11+08 SM	157	20	---
		SPRING STREET			
		10+92 SS - 11+07 SS	153	20	---
		DICKASON BLVD			
		10+81 NBD - 11+00 NBD	70	10	---
		10+81 SBD - 11+01 SBD	245	6	---
	STAGE 3 TOTAL		31572	386	---
	STAGE 4				
		STH 16 (WESTBOUND)			
		123+41 WB - 126+40 WB	---	---	3
		127+00 WB - 130+80 WB	1669	---	---
		130+80 WB - 137+75 WB	1501	---	---
	STAGE 4 TOTAL		3171	---	3
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**84,050**	**1,020**	**23**

STRUCTURE SCHEDULE

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	522.1018 APRON ENDWALLS CULVERT PIPE RC 18-INCH (EACH)	522.1024 APRON ENDWALLS CULVERT PIPE RC 24-INCH (EACH)	611.3003 INLETS 3-FT DIAMETER (EACH)	611.3004 INLETS 4-FT DIAMETER (EACH)	611.3230 INLETS 2X3-FT (EACH)	611.2004 MANHOLES 4-FT DIAMETER (EACH)	611.2005 MANHOLES 5-FT DIAMETER (EACH)	611.2006 MANHOLES 6-FT DIAMETER (EACH)	611.2008 MANHOLES 8-FT DIAMETER (EACH)	SPV.0060.004 MANHOLES TYPE 9 SPECIAL (EACH)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	SPV.0060.005 INLET COVERS DRIVEWAY SPECIAL (EACH)	SPV.0060.003 INLET COVERS DRIVEWAY TEMPORARY (EACH)	611.0535 MANHOLE COVERS TYPE J-S (EACH)	NOTES
0010	1.0	129+80.0WB	95.9' RT	ENDWALL	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	2.0	130+10.0WB	68.5' RT	859.26	858.43	854.82	3.60	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	3.0	130+10.0WB	12.5' RT	859.79	858.96	855.01	3.95	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	4.0	130+10.1WB	5.7' RT	859.42	858.59	855.29	3.29	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	CENTER OF CASTING STA 130+10.00WB, 6.5' RT
	5.0	130+36.8WB	45.5' LT	858.77	857.94	855.78	2.16	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	6.0	130+88.4WB	82.5' LT	859.56	858.73	856.08	2.65	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	7.0	129+90.5WB	52.3' LT	858.91	858.08	855.84	2.24	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	8.0	130+08.1WB	75.8' LT	859.10	858.27	855.97	2.30	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	9.0	136+83.7WB	62.4' LT	ENDWALL	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	10.0	136+82.3WB	30.5 LT	853.29	852.46	847.35	5.11	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	10.5	136+82.3WB	22.3' LT	853.51	852.68	847.38	5.30	---	---	---	---	---	1	---	---	---	---	---	---	---	1	1	PLACE TEMPORARY INLET COVER IN STAGE 1 AND RECONSTRUCT MANHOLE WITH J-S COVER IN STAGE 3
	11.0	136+81.5WB	5.0' RT	854.36	853.11	847.54	5.57	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	RECONSTRUCT MANHOLE IN STAGE 4
	12.0	137+12.0WB	16.2' RT	853.64	852.39	847.63	4.76	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	12.1	137+12.0WB	8.6' RT	853.66	852.83	848.17	4.66	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	12.2	137+12.0WB	1.5' RT	853.62	852.79	848.46	4.33	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	13.0	138+45.3WB	10.0' RT	852.85	851.60	848.00	3.60	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	13.1	138+39.9WB	27.8' LT	852.35	851.52	849.03	2.49	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	13.2	138+30.0WB	28.5' LT	852.35	851.52	849.68	1.84	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	13.3	138+20.0WB	29.2' LT	852.36	851.53	849.37	2.16	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	13.4	138+48.3WB	30.7' RT	852.37	851.54	849.08	2.46	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	13.5	138+38.3WB	31.4' RT	852.37	851.54	849.39	2.15	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	13.6	138+58.3WB	30.0' RT	852.38	851.55	849.39	2.16	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	14.0	137+45.9WB	14.8' RT	853.35	852.10	847.73	4.37	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	14.1	137+47.3WB	38.9' RT	852.82	851.99	848.54	3.45	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	18.0	135+15.0WB	11.2' RT	855.78	854.53	849.46	5.07	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	18.1	135+15.0WB	30.5' LT	854.66	853.83	850.47	3.36	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	18.2	135+15.0WB	48.4' RT	854.78	853.95	850.47	3.48	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	19.0	136+72.3WB	63.2' RT	ENDWALL	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	20.0	144+23.6WB	51.5' LT	852.57	851.32	846.06	5.26	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	21.0	144+24.8WB	7.0' RT	853.91	852.66	846.06	6.60	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	22.0	142+90.3WB	7.0' RT	853.24	851.99	846.46	5.53	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	22.1	142+91.8WB	23.2' RT	852.76	851.93	848.32	3.61	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	22.2	142+55.3WB	50.9' RT	852.80	851.97	849.30	2.67	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	23.0	141+65.8WB	7.0' RT	852.74	851.49	846.84	4.65	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	23.1	141+65.8WB	18.5' LT	852.45	851.62	847.99	3.63	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---
	23.2	141+55.8WB	18.5' LT	852.46	851.63	848.29	3.34	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	23.3	141+75.8WB	18.5' LT	852.45	851.62	848.29	3.33	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	23.4	141+65.8WB	18.5' RT	852.45	851.62	847.98	3.63	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---
	23.5	141+55.8WB	18.5' RT	852.45	851.62	848.28	3.33	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	23.6	141+75.8WB	18.5' RT	852.46	851.63	848.29	3.34	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	24.0	139+81.9WB	7.0' RT	853.32	852.07	847.41	4.66	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	24.1	139+81.9WB	21.7' LT	852.88	852.05	848.36	3.69	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	25.0	145+00.0WB	7.0' RT	854.28	853.03	848.67	4.36	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	25.1	145+00.0WB	18.5' LT	853.99	853.16	849.56	3.60	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	25.2	145+00.0WB	18.5' RT	853.99	853.16	849.56	3.60	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	26.0	148+50.0WB	7.0' RT	856.03	854.78	850.42	4.36	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	26.1	148+50.0WB	18.5' LT	855.74	854.91	851.30	3.60	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	26.2	148+50.0WB	18.5' RT	855.74	854.91	851.30	3.60	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
				SUBTOTALS				1	2	---	10	21	7	7	---	---	---	23	9	---	1	13	

STRUCTURE SCHEDULE (CONTINUED)

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	522.1018 APRON ENDWALLS CULVERT PIPE RC 18-INCH (EACH)	522.1024 APRON ENDWALLS CULVERT PIPE RC 24-INCH (EACH)	611.3003 INLETS 3-FT DIAMETER (EACH)	611.3004 INLETS 4-FT DIAMETER (EACH)	611.3230 INLETS 2X3-FT (EACH)	611.2004 MANHOLES 4-FT DIAMETER (EACH)	611.2005 MANHOLES 5-FT DIAMETER (EACH)	611.2006 MANHOLES 6-FT DIAMETER (EACH)	611.2008 MANHOLES 8-FT DIAMETER (EACH)	SPV.0060.004 MANHOLES TYPE 9 SPECIAL (EACH)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	SPV.0060.005 INLET COVERS DRIVEWAY SPECIAL (EACH)	SPV.0060.003 INLET COVERS DRIVEWAY TEMPORARY (EACH)	611.0535 MANHOLE COVERS TYPE J-S (EACH)	NOTES
			SUBTOTALS					1	2	---	10	21	7	7	---	---	---	23	9	---	1	13	
0010	27.0	151+50.0WB	7.0' RT	860.82	859.57	853.95	5.62	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	27.1	151+75.0WB	18.5' LT	861.59	860.76	857.15	3.61	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	27.2	151+85.0WB	18.5' LT	862.05	861.22	857.22	4.00	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	27.3	151+47.9WB	39.0' RT	860.54	859.71	854.86	4.85	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---
	27.4	151+04.9WB	40.0' RT	859.57	858.74	855.26	3.48	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	27.5	151+74.1WB	18.5' RT	861.55	860.71	855.91	4.80	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	36.0	166+83.1WB	7.7' RT	840.06	838.81	834.20	4.61	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1	---
	37.0	166+12.5WB	7.1' RT	840.45	839.20	834.20	5.00	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	37.1	166+12.6WB	24.2' LT	840.04	839.21	835.35	3.86	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	37.2	166+12.5WB	24.2' RT	840.04	839.21	835.31	3.90	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	38.0	164+75.0WB	6.0' RT	841.39	840.14	836.14	4.00	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	38.1	164+75.0WB	24.5' LT	840.95	840.12	837.04	3.07	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	38.2	164+75.0WB	24.5' RT	840.95	840.12	837.00	3.11	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	39.0	162+89.2WB	6.0' RT	844.61	843.78	838.25	5.53	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	39.1	162+35.0WB	6.0' RT	845.72	844.47	838.78	5.69	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	39.2	162+35.0WB	18.5' LT	845.41	844.16	839.71	4.45	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	39.3	162+35.0WB	18.5' RT	845.41	844.58	839.65	4.93	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	39.4	162+52.2WB	25.4' RT	844.92	844.09	840.01	4.08	---	---	1	1	---	---	---	---	---	---	---	---	1	---	---	---
	39.5	162+88.7WB	40.0' RT	844.52	843.69	840.20	3.49	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	39.6	162+89.2WB	49.9' LT	844.32	843.49	839.34	4.15	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	39.7	162+61.4WB	50.0' LT	844.59	843.76	839.75	4.01	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	40.0	161+00.0WB	6.0' RT	850.21	848.96	841.75	7.21	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	40.1	161+00.0WB	24.5' LT	849.77	848.94	845.86	3.07	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	40.2	161+00.0WB	24.5' RT	849.78	848.95	845.83	3.12	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	41.0	159+26.6WB	6.0' RT	856.82	855.57	851.32	4.25	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	PIPE UNDERDRAIN
	41.1	158+78.0WB	6.0' RT	859.05	857.80	852.25	5.55	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	41.2	158+78.0WB	18.5' RT	858.73	857.90	854.45	3.45	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	41.3	159+26.9WB	55.0' LT	856.29	855.46	852.41	3.05	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	41.4	158+99.6WB	55.0' LT	857.33	856.50	853.08	3.42	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	41.5	158+78.0WB	18.5' LT	858.73	857.90	854.51	3.39	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	42.0	157+50.0WB	6.0' RT	866.45	865.20	861.20	4.00	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	42.1	157+50.0WB	18.5' LT	866.13	865.30	862.08	3.22	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	42.2	157+50.0WB	18.5' RT	866.13	865.30	862.04	3.25	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	43.0	155+55.8WB	6.0' RT	874.77	873.52	869.80	3.72	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	43.1	155+42.7WB	22.4' LT	874.68	873.85	870.74	3.10	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	43.2	155+74.6WB	42.4' LT	875.65	874.82	871.13	3.69	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	43.3	155+40.7WB	22.3' RT	874.69	873.86	870.70	3.15	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	43.4	155+89.2WB	43.6' RT	875.48	874.65	871.12	3.53	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
	46.0	166+83.3WB	53.9' RT	839.26	838.43	833.66	4.77	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---	CENTER OF CASTING STA 166+86.40WB, 53.9' RT, PIPE UNDERDRAIN
	46.1	166+59.0WB	54.1' RT	839.43	838.60	835.55	3.04	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---
	50.0	167+61.8WB	6.0' RT	839.85	838.60	834.16	4.44	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	50.1	167+61.8WB	24.5' LT	839.42	838.59	835.60	2.99	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	50.2	167+51.8WB	24.5' LT	839.43	838.60	835.90	2.70	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	50.3	167+71.8WB	24.5' LT	839.42	838.59	835.90	2.69	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	50.4	167+61.8WB	24.5' RT	839.42	838.59	835.57	3.02	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	50.5	167+51.8WB	24.5' RT	839.43	838.60	835.87	2.73	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	50.6	167+71.8WB	24.5' RT	839.42	838.59	835.87	2.72	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	51.0	168+50.0WB	6.0' RT	840.22	838.97	834.44	4.52	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	51.1	168+50.0WB	24.5' LT	839.78	838.95	835.88	3.06	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	51.2	168+50.0WB	24.5' RT	839.78	838.95	835.84	3.10	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	52.0	170+80.0WB	6.0' RT	843.77	842.52	837.73	4.79	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	52.1	170+80.0WB	24.5' LT	843.34	842.51	838.63	3.88	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---
			SUBTOTALS					1	2	1	24	44	17	10	---	1	1	51	18	1	1	27	

STRUCTURE SCHEDULE (CONTINUED)

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	522.1018 APRON ENDWALLS CULVERT PIPE RC 18-INCH (EACH)	522.1024 APRON ENDWALLS CULVERT PIPE RC 24-INCH (EACH)	611.3003 INLETS 3-FT DIAMETER (EACH)	611.3004 INLETS 4-FT DIAMETER (EACH)	611.3230 INLETS 2X3-FT (EACH)	611.2004 MANHOLES 4-FT DIAMETER (EACH)	611.2005 MANHOLES 5-FT DIAMETER (EACH)	611.2006 MANHOLES 6-FT DIAMETER (EACH)	611.2008 MANHOLES 8-FT DIAMETER (EACH)	SPV.0060.004 MANHOLES TYPE 9 SPECIAL (EACH)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	SPV.0060.005 INLET COVERS DRIVEWAY SPECIAL (EACH)	SPV.0060.003 INLET COVERS DRIVEWAY TEMPORARY (EACH)	611.0535 MANHOLE COVERS TYPE J-S (EACH)	NOTES
				SUBTOTALS				1	2	1	24	44	17	10	---	1	1	51	18	1	1	27	
0010	52.2	170+55.5WB	43.0' LT	842.93	842.10	838.99	3.10	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	52.3	170+27.1WB	43.0' LT	842.25	841.42	839.08	2.34	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	52.4	170+80.0WB	24.5' RT	843.34	842.51	839.39	3.12	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	53.0	172+25.0WB	6.0' RT	847.03	845.78	841.78	4.00	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	53.1	172+25.0WB	24.5' LT	846.60	845.77	842.68	3.09	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	53.2	172+25.0WB	24.5' RT	846.60	845.77	842.65	3.12	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	54.0	174+98.0WB	6.0' RT	849.55	848.30	844.15	4.15	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	54.1	174+98.1WB	22.6' LT	849.15	848.32	845.03	3.29	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	54.2	174+64.1WB	24.3' LT	848.73	847.90	845.35	2.54	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	54.3	173+89.8WB	24.9' LT	848.57	847.74	845.58	2.16	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	54.4	174+98.0WB	22.6' RT	849.15	848.32	845.00	3.32	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	55.0	176+25.0WB	6.0' RT	851.30	850.05	846.05	4.01	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	55.1	176+25.0WB	23.5' LT	850.88	850.05	846.94	3.10	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	55.2	176+25.0WB	23.5' RT	850.88	850.05	846.94	3.10	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	55.3	177+20.0WB	23.5' LT	852.31	851.48	847.50	3.98	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PLACE CAP ON END OF 8" SSPC (INCIDENTAL TO CONSTRUCTION)
	65.0	184+66.8WB	58.0' LT	ENDWALL	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	66.0	184+53.2WB	12.0' RT	833.03	831.78	827.55	4.23	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	PIPE UNDERDRAIN
	67.0	183+68.4WB	12.0' RT	833.34	832.09	827.77	4.32	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	67.1	183+75.0WB	24.5' LT	832.99	832.16	828.70	3.46	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	67.2	183+66.2WB	24.4' RT	833.04	832.21	828.62	3.59	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	68.0	181+43.0WB	12.0' RT	838.35	837.10	832.72	4.38	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	68.1	181+43.0WB	23.5' LT	838.06	837.23	833.64	3.59	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	68.2	181+43.0WB	23.5' RT	838.06	837.23	833.57	3.66	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	69.0	180+00.0WB	12.0' RT	845.84	844.59	840.04	4.55	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	69.1	180+00.0WB	23.5' LT	845.55	844.72	840.96	3.76	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	69.2	180+00.0WB	23.5' RT	845.35	844.52	840.89	3.63	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	70.0	178+23.8WB	12.0' RT	853.38	852.13	844.47	7.66	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	75.0	184+91.7WB	54.1' LT	ENDWALL	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	76.0	185+06.7WB	24.5' LT	832.39	831.56	827.33	4.23	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	76.1	185+16.7WB	24.5' LT	832.38	831.55	828.44	3.11	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	PIPE UNDERDRAIN
	76.2	185+26.7WB	24.5' LT	832.39	831.56	828.47	3.09	---	---	1	---	1	---	---	---	---	---	---	---	1	---	---	PIPE UNDERDRAIN
	77.0	185+16.7WB	6.0' RT	832.82	831.99	827.45	4.54	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	77.1	185+16.7WB	18.5' RT	832.50	831.67	828.30	3.37	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	77.2	185+57.8WB	50.1' RT	831.64	830.81	828.47	2.34	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	77.3	185+85.6WB	40.0' RT	831.96	831.13	828.56	2.57	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
	78.0	186+00.0WB	6.0' RT	833.20	831.95	827.71	4.24	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	78.1	186+00.0WB	24.5' LT	832.76	831.93	828.62	3.31	---	---	1	---	1	---	---	---	---	---	---	---	1	---	---	---
	79.0	187+25.0WB	6.0' RT	834.33	833.08	828.10	4.98	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	79.1	187+25.0WB	24.5' LT	833.84	833.01	829.00	4.01	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	79.2	188+22.9WB	25.9' LT	835.07	833.82	829.60	4.22	---	---	1	1	---	---	---	---	---	---	---	---	1	---	---	---
	79.3	187+25.0WB	24.5' RT	834.07	833.24	828.97	4.27	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	85.0	194+87.4WB	37.9' LT	ENDWALL	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	86.0	194+12.8WB	14.4' LT	829.05	827.80	822.62	5.18	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---
	86.1	194+12.0WB	21.5' LT	828.84	828.01	823.46	4.55	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	86.2	194+24.4WB	21.8' RT	828.75	827.92	823.55	4.37	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	PIPE UNDERDRAIN
	87.0	192+51.2WB	6.0' LT	831.11	829.86	825.69	4.17	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	88.0	191+41.2WB	6.0' RT	833.42	832.17	826.74	5.43	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	89.0	191+00.0WB	6.0' RT	834.29	833.04	828.57	4.47	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---
	89.1	191+00.0WB	22.2' LT	833.90	833.07	829.46	3.61	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	89.2	191+00.0WB	22.2' RT	833.90	833.07	829.46	3.61	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---
	90.0	191+28.6WB	76.1' RT	832.84	831.59	826.99	4.60	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---
	90.1	191+18.9WB	74.4' RT	832.83	832.00	828.32	3.68	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---
	90.2	191+46.3WB	80.4' RT	832.34	831.51	827.86	3.64	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	PIPE UNDERDRAIN
PROJECT 1401-02-71 TOTAL - CATEGORY 0010								**1**	**5**	**4**	**35**	**66**	**28**	**15**	**1**	**1**	**1**	**69**	**30**	**5**	**1**	**43**	

PIPE SCHEDULE

CATEGORY	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE (%)	608.6008 8-INCH SSPC (LF)	608.0412 12-INCH SSPRC (LF)	608.0415 15-INCH SSPRC (LF)	608.0418 CLASS IV 18-INCH SSPRC (LF)	608.0424 24-INCH SSPRC (LF)	608.0430 30-INCH SSPRC (LF)
0010	2.0	1.0	855.03	854.69	0.85%	---	---	---	41	---	---
	3.0	2.0	855.22	855.03	0.33%	---	---	---	56	---	---
	4.0	3.0	855.48	855.47	0.28%	---	---	6	---	---	---
	5.0	4.0	855.95	855.73	0.38%	---	58	---	---	---	---
	6.0	5.0	856.25	855.95	0.47%	---	63	---	---	---	---
	7.0	4.0	856.01	855.73	0.45%	---	62	---	---	---	---
	8.0	7.0	856.14	856.01	0.44%	---	29	---	---	---	---
	10.0	9.0	847.60	847.50	0.31%	---	---	---	---	32	---
	10.5	10.0	847.63	847.60	0.37%	---	---	---	---	8	---
	11.0	10.5	847.79	847.63	0.59%	---	---	---	---	27	---
	12.0	11.0	847.88	847.79	0.28%	---	---	---	---	32	---
	12.1	12.0	848.36	848.33	0.30%	---	---	8	---	---	---
	12.2	12.1	848.63	848.61	0.30%	---	7	---	---	---	---
	13.0	14.0	848.25	847.98	0.27%	---	---	---	---	99	---
	13.1	13.0	849.22	849.10	0.31%	---	---	38	---	---	---
	13.2	13.1	849.51	849.47	0.40%	---	10	---	---	---	---
	13.3	13.2	849.54	849.51	0.30%	---	10	---	---	---	---
	13.4	13.0	849.27	849.10	0.77%	---	---	21	---	---	---
	13.5	13.4	849.56	849.52	0.44%	---	10	---	---	---	---
	13.6	13.4	849.56	849.52	0.44%	---	10	---	---	---	---
	14.0	12.0	847.98	847.88	0.29%	---	---	---	---	34	---
	14.1	14.0	848.73	848.66	0.31%	---	---	24	---	---	---
	18.0	11.0	849.71	847.79	1.15%	---	---	---	---	167	---
	18.1	18.0	850.66	850.46	0.48%	---	---	42	---	---	---
	18.2	18.0	850.66	850.50	0.44%	---	---	37	---	---	---
	19.0	11.0	850.52	847.79	4.63%	---	---	---	---	59	---
	20.0	21.0	846.31	845.83	0.82%	---	---	---	---	59	---
	22.1	22.0	848.51	848.46	0.31%	---	---	16	---	---	---
	21.0	20.0	846.31	845.83	0.82%	---	---	---	---	59	---
	27.4	27.3	855.43	855.30	0.30%	---	43	---	---	---	---
	27.3	27.0	855.05	854.95	0.31%	---	---	32	---	---	---
	27.0	26.0	854.20	851.06	1.05%	---	---	---	---	300	---
	26.0	25.0	850.67	849.31	0.39%	---	---	---	---	350	---
	25.0	21.0	848.92	848.70	0.30%	---	---	---	---	75	---
	25.2	25.0	849.75	849.71	0.32%	---	---	11	---	---	---
	25.1	25.0	849.75	849.67	0.29%	---	---	25	---	---	---
	26.2	26.0	851.49	851.46	0.32%	---	---	11	---	---	---
	26.1	26.0	851.49	851.42	0.29%	---	---	25	---	---	---
	27.1	27.0	857.34	856.59	2.10%	---	---	36	---	---	---
	24.1	24.0	848.55	848.41	0.47%	---	---	29	---	---	---
	24.0	23.0	847.66	847.09	0.31%	---	---	---	---	184	---
	23.0	22.0	847.09	846.71	0.30%	---	---	---	---	124	---
	23.6	23.4	848.46	848.43	0.30%	---	10	---	---	---	---
	23.4	23.0	848.17	848.14	0.32%	---	---	11	---	---	---
	23.5	23.4	848.45	848.42	0.30%	---	10	---	---	---	---
	23.2	23.1	848.46	848.43	0.30%	---	10	---	---	---	---
	23.1	23.0	848.18	848.10	0.29%	---	---	26	---	---	---
	23.3	23.1	848.46	848.43	0.30%	---	10	---	---	---	---
	22.0	21.0	846.71	846.31	0.30%	---	---	---	---	135	---
	22.2	22.1	849.47	848.76	1.55%	---	46	---	---	---	---
	27.2	27.1	857.39	857.34	0.50%	---	10	---	---	---	---
	27.5	27.0	856.10	855.96	0.52%	---	---	27	---	---	---
	36.0	37.0	834.49	834.19	0.43%	---	---	---	---	---	71
	37.0	36.0	834.49	834.19	0.43%	---	---	---	---	---	71
	37.1	37.0	835.54	835.44	0.31%	---	---	31	---	---	---
	37.2	37.0	835.50	835.44	0.36%	---	---	17	---	---	---
	38.0	37.0	836.39	834.99	1.02%	---	---	---	---	138	---
				SUBTOTALS		0	399	475	97	1,882	141

PIPE SCHEDULE (CONTINUED)

CATEGORY	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE (%)	608.6008 8-INCH SSPC (LF)	608.0412 12-INCH SSPRC (LF)	608.0415 15-INCH SSPRC (LF)	608.0418 CLASS IV 18-INCH SSPRC (LF)	608.0424 24-INCH SSPRC (LF)	608.0430 30-INCH SSPRC (LF)
				SUBTOTALS			399	475	97	1,882	141
0010	38.1	38.0	837.23	837.14	0.30%	---	---	30	---	---	---
	38.2	38.0	837.19	837.14	0.30%	---	---	18	---	---	---
	39.0	38.0	838.50	836.39	1.14%	---	---	---	---	186	---
	39.1	39.0	839.03	838.50	0.98%	---	---	---	---	54	---
	39.2	39.1	839.90	839.78	0.49%	---	---	24	---	---	---
	39.3	39.1	839.84	839.78	0.48%	---	---	12	---	---	---
	39.4	39.3	840.18	840.09	0.49%	---	19	---	---	---	---
	39.5	39.4	840.37	840.18	0.48%	---	39	---	---	---	---
	39.6	39.0	839.53	839.25	0.50%	---	---	56	---	---	---
	40.0	39.1	842.00	839.03	2.20%	---	---	---	---	135	---
	40.1	40.0	846.05	845.96	0.30%	---	---	30	---	---	---
	40.2	40.0	846.02	845.96	0.30%	---	---	18	---	---	---
	41.0	40.0	851.57	845.21	3.66%	---	---	---	---	173	---
	41.1	41.0	852.50	851.57	1.92%	---	---	---	---	49	---
	41.2	41.1	854.64	854.60	0.30%	---	---	12	---	---	---
	41.3	41.0	852.60	852.32	0.50%	---	---	56	---	---	---
	41.4	41.3	853.25	852.85	1.44%	---	28	---	---	---	---
	41.5	41.4	854.70	853.25	3.80%	---	38	---	---	---	---
	42.0	41.1	861.45	854.20	5.66%	---	---	---	---	128	---
	42.1	42.0	862.27	862.20	0.30%	---	---	24	---	---	---
	42.2	42.0	862.23	862.20	0.30%	---	---	13	---	---	---
	43.0	42.0	870.05	861.45	4.44%	---	---	---	---	194	---
	43.1	43.0	870.93	870.80	0.42%	---	---	31	---	---	---
	43.2	43.1	871.30	871.18	0.29%	---	40	---	---	---	---
	43.3	43.0	870.89	870.80	0.43%	---	---	22	---	---	---
	43.4	43.3	871.29	871.14	0.30%	---	49	---	---	---	---
	46.0	46.1	835.74	835.60	0.52%	---	---	27	---	---	---
	46.1	46.0	835.74	835.60	0.52%	---	---	27	---	---	---
	50.0	36.0	834.45	834.19	0.33%	---	---	---	---	---	79
	50.1	50.0	835.79	835.70	0.30%	---	---	30	---	---	---
	50.2	50.1	836.07	836.04	0.30%	---	10	---	---	---	---
	50.3	50.1	836.07	836.04	0.30%	---	10	---	---	---	---
	50.4	50.0	835.76	835.70	0.32%	---	---	18	---	---	---
	50.5	50.4	836.04	836.01	0.30%	---	10	---	---	---	---
	50.6	50.4	836.04	836.01	0.30%	---	10	---	---	---	---
	51.0	50.0	834.73	834.45	0.32%	---	---	---	---	---	88
	51.1	51.0	836.07	835.98	0.30%	---	---	30	---	---	---
	51.2	51.0	836.03	835.98	0.30%	---	---	18	---	---	---
	52.0	51.0	837.98	835.23	1.20%	---	---	---	---	230	---
	52.1	52.0	838.82	838.73	0.30%	---	---	30	---	---	---
	52.2	52.1	839.16	839.07	0.30%	---	31	---	---	---	---
	52.3	52.2	839.25	839.16	0.30%	---	28	---	---	---	---
	52.4	52.0	839.58	839.52	0.30%	---	---	18	---	---	---
	53.0	52.0	842.03	838.77	2.25%	---	---	---	---	145	---
	53.1	53.0	842.87	842.78	0.30%	---	---	30	---	---	---
	53.2	53.0	842.84	842.79	0.30%	---	---	18	---	---	---
	54.0	53.0	844.40	842.03	0.87%	---	---	---	---	273	---
	54.1	54.0	845.22	845.13	0.31%	---	---	29	---	---	---
	54.2	54.1	845.52	845.42	0.30%	---	34	---	---	---	---
	54.3	54.2	845.75	845.52	0.31%	---	74	---	---	---	---
	54.4	54.0	845.19	845.13	0.36%	---	---	17	---	---	---
	55.0	54.0	846.30	844.40	1.49%	---	---	---	---	127	---
	55.1	55.0	847.13	847.05	0.30%	---	---	29	---	---	---
	55.2	55.0	847.13	847.05	0.47%	---	---	17	---	---	---
				SUBTOTALS		0	819	1,166	97	3,575	308

PIPE SCHEDULE (CONTINUED)

CATEGORY	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE (%)	608.6008 8-INCH SSPC (LF)	608.0412 12-INCH SSPRC (LF)	608.0415 15-INCH SSPRC (LF)	608.0418 CLASS IV 18-INCH SSPRC (LF)	608.0424 24-INCH SSPRC (LF)	608.0430 30-INCH SSPRC (LF)
				SUBTOTALS			819	1,166	97	3,575	308
0010	55.3	55.1	847.67	847.38	0.31%	---	95	---	---	---	---
	CAP	55.3	848.05	848.00	0.44%	11	---	---	---	---	---
	66.0	0.0	827.80	827.48	0.44%	---	---	---	---	71	---
	67.0	66.0	828.02	827.80	0.27%	---	---	---	---	85	---
	67.1	67.0	828.89	828.77	0.32%	---	---	37	---	---	---
	67.2	67.0	828.81	828.77	0.30%	---	---	13	---	---	---
	68.0	67.0	832.97	828.02	2.19%	---	---	---	---	225	---
	68.1	68.0	833.83	833.72	0.31%	---	---	35	---	---	---
	68.2	68.0	833.76	833.72	0.36%	---	---	11	---	---	---
	69.0	68.0	840.29	832.97	5.12%	---	---	---	---	143	---
	69.1	69.0	841.15	841.04	0.30%	---	---	35	---	---	---
	69.2	69.0	841.08	841.04	0.31%	---	---	11	---	---	---
	70.0	69.0	844.72	840.29	2.51%	---	---	---	---	176	---
	EXIST	70.0	845.30	845.22	1.00%	---	---	---	8	---	---
	EXIST	70.0	845.50	845.47	0.37%	---	---	---	8	---	---
	76.0	75.0	827.58	827.48	0.30%	---	---	---	---	33	---
	76.1	76.0	828.61	828.58	0.30%	---	10	---	---	---	---
	76.2	76.1	828.64	828.61	0.30%	---	10	---	---	---	---
	77.0	76.0	827.70	827.58	0.37%	---	---	---	---	32	---
	77.1	77.0	828.49	828.45	0.32%	---	---	12	---	---	---
	77.2	77.1	828.66	828.49	0.33%	---	---	52	---	---	---
	77.3	77.2	828.75	828.66	0.30%	---	---	30	---	---	---
	78.0	77.0	827.96	827.70	0.31%	---	---	---	---	83	---
	78.1	78.0	828.81	828.71	0.33%	---	---	30	---	---	---
	79.0	78.0	828.35	827.96	0.31%	---	---	---	---	125	---
	79.1	79.0	829.19	829.10	0.30%	---	---	30	---	---	---
	79.2	79.1	829.79	829.19	0.61%	---	---	98	---	---	---
	79.3	79.0	829.16	829.10	0.32%	---	---	18	---	---	---
	86.0	85.0	822.87	822.43	0.56%	---	---	---	---	78	---
	86.1	86.0	823.65	823.62	0.42%	---	---	7	---	---	---
	86.2	86.0	823.74	823.62	0.32%	---	---	38	---	---	---
	87.0	86.0	825.94	825.10	0.53%	---	---	---	---	160	---
	88.0	87.0	826.99	825.94	0.96%	---	---	---	---	109	---
	89.0	88.0	828.82	828.45	0.88%	---	---	---	---	41	---
	89.1	89.0	829.65	829.56	0.32%	---	---	28	---	---	---
	89.2	89.0	829.65	829.60	0.31%	---	---	16	---	---	---
	90.0	88.0	827.24	826.99	0.36%	---	---	---	---	71	---
	90.1	90.0	828.51	828.48	0.31%	---	---	10	---	---	---
	90.2	90.0	828.05	827.99	0.29%	---	---	22	---	---	---
	PROJECT 1401-02-71 TOTAL - CATEGORY 0010					**11**	**934**	**1,702**	**113**	**5,009**	**308**

PIPE UNDERDRAIN

CATEGORY	STAGE	STATION TO STATION	SPV.0090.003 PIP UNDERDRAIN 6-INCH WITH GEOTEXTILE FABRIC AND AGGREGATE (LF)	612.0104 PIPE UNDERDRAIN 4-INCH (LF)
0010	STAGE 1			
		STH 16 (WESTBOUND)		
		178+03 WB - 181+79 WB	89	29
		181+79 WB - 185+72 WB	615	---
		185+72 WB - 188+00 WB	112	---
		191+50 WB - 194+59 WB	183	---
	STAGE 1 TOTAL		999	29
	STAGE 2			
		STH 16 (WESTBOUND)		
		137+75 WB - 139+26 WB	98	---
		139+26 WB - 142+66 WB	120	---
		144+25 WB - 151+26 WB	108	---
		166+73 WB - 170+41 WB	121	---
		170+41 WB - 174+39 WB	---	101
	STAGE 2 TOTAL		447	101
	STAGE 3			
		STH 16 (WESTBOUND)		
		137+75 WB - 139+26 WB	120	---
		139+26 WB - 142+66 WB	120	---
		159+13 WB - 162+75 WB	63	---
		166+73 WB - 170+41 WB	160	---
		174+39 WB - 178+03 WB	142	---
	STAGE 3 TOTAL		605	---
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**2050**	**130**

LANDSCAPING ITEMS

CATEGORY	STAGE	STATION TO STATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)
0010	STAGE 1					
		STH 16 (WESTBOUND)				
		178+03 WB - 181+79 WB	2	---	0.0	---
		181+79 WB - 185+72 WB	362	---	0.2	---
		185+72 WB - 188+00 WB	209	---	0.1	---
		188+00 WB - 191+50 WB	462	---	0.3	---
		191+50 WB - 194+59 WB	430	---	0.3	---
		WATER STREET				
		10+76 SW - 11+07 SW	104	---	0.1	---
		11+98 NW - 12+17 NW	2	---	0.0	---
		WATERLOO STREET				
		10+88 W - 10+98 W	23	---	0.0	---
		UDEY STREET				
		11+91 U - 12+08 U	16	---	0.0	---
		MANNING STEET				
		10+45 MS - 11+26 MS	179	---	0.1	---
		RIVER ROAD				
		10+32 R - 10+42 R	5	---	0.0	---
	STAGE 1 TOTAL		1,793	0	1.1	0
	STAGE 2					
		STH 16 (WESTBOUND)				
		139+26 WB - 142+66 WB	326	---	0.2	---
		142+66 WB - 144+25 WB	207	---	0.1	---
		144+25 WB - 151+26 WB	669	---	0.4	---
		151+26 WB - 155+59 WB	352	---	0.2	---
		155+59 WB - 159+13 WB	379	---	0.2	---
		159+13 WB - 162+75 WB	185	---	0.1	---
		162+75 WB - 166+73 WB	225	---	0.1	---
		166+73 WB - 170+41 WB	183	---	0.1	---
		170+41 WB - 174+39 WB	108	---	0.1	---
		STH 16 (EASTBOUND)				
		123+40 EB - 126+40 EB	741	741	0.5	13
		126+40 EB - 127+00 EB	280	280	0.2	5
		127+00 EB - 130+80 EB	1,329	1,037	0.8	19
		130+80 EB - 137+75 EB	1,087	---	0.7	---
		INDUSTRIAL DRIVE/DIX STREET				
		10+00 ID - 12+79 ID	482	---	0.3	---
		MEISTER DRIVE				
		10+79 M - 10+99 M	18	---	0.0	---
		CONTINENTAL DRIVE				
		11+96 C - 12+06 C	4	---	0.0	---
		APC WAY				
		12+00 A - 12+20 A	8	---	0.0	---
	STAGE 2 SUBTOTAL		6,583	2,058	4.1	37

CATEGORY	STAGE	STATION TO STATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)
0010	STAGE 2 SUBTOTAL		6,583	2,058	4.1	37
	STAGE 2 CONTINUED					
		BLACKHAWK DRIVE				
		11+87 B - 11+97 B	6	---	0.0	---
		LEGION COURT				
		11+98 L - 12+33 L	8	---	0.0	---
		LEWIS STREET				
		11+93 NL - 12+08 NL	37	---	0.0	---
		BIRDSEY STREET				
		11+92 NB - 12+08 NB	48	---	0.0	---
		MAIN STREET				
		11+92 NM - 12+23 NM	89	---	0.1	---
		SPRING STREET				
		11+93 NS - 12+08 NS	62	---	0.0	---
		DICKASON BLVD				
		11+99 DNB - 12+36 DNB	81	---	0.1	---
		11+99 DSB - 12+36 DSB	2	---	0.0	---
	STAGE 2 TOTAL		6,917	2,058	4.4	37
	STAGE 3					
		STH 16 (WESTBOUND)				
		126+40 WB - 127+00 WB	79	79	0.0	1
		127+00 WB - 130+80 WB	951	663	0.6	12
		130+80 WB - 137+75 WB	1,364	---	0.9	---
		137+75 WB - 139+26 WB	475	---	0.3	---
		139+26 WB - 142+66 WB	389	---	0.2	---
		142+66 WB - 144+25 WB	102	---	0.1	---
		144+25 WB - 151+26 WB	541	---	0.3	---
		151+26 WB - 155+59 WB	286	---	0.2	---
		155+59 WB - 159+13 WB	418	---	0.3	---
		159+13 WB - 162+75 WB	208	---	0.1	---
		162+75 WB - 166+73 WB	239	---	0.2	---
		166+73 WB - 170+41 WB	200	---	0.1	---
		170+41 WB - 174+39 WB	155	---	0.1	---
		INDUSTRIAL DRIVE/DIX STREET				
		15+79 ID - 17+78 ID	385	---	0.2	---
		CONTINENTAL DRIVE				
		11+96 C - 12+06 C	4	---	0.0	---
		HURELLE STREET				
		10+96 HU - 11+06 HU	7	---	0.0	---
		MAPLE AVENUE				
		11+00 MA - 11+11 MA	8	---	0.0	---
		CHARLES STREET				
		10+83 CH - 11+03 CH	32	---	0.0	---
	STAGE 3 SUBTOTAL		5,843	742	3.7	13

LANDSCAPING ITEMS (CONTINUED)

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CATEGORY	STAGE	STATION TO STATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)
0010	STAGE 3 SUBTOTAL		5,843	742	4	13
	STAGE 3 CONTINUED					
		LEWIS STREET				
		10+80 SL - 11+07 SL	87	---	0.1	---
		BIRDSEY STREET				
		10+82 SB - 11+08 SB	72	---	0.0	---
		MAIN STREET				
		10+92 SM - 11+08 SM	49	---	0.0	---
		SPRING STREET				
		10+92 SS - 11+07 SS	71	---	0.0	---
		DICKASON BLVD				
		10+81 NBD - 11+00 NBD	28	---	0.0	---
		10+81 SBD - 11+01 SBD	22	---	0.0	---
	STAGE 3 TOTAL		6,172	742	3.9	13
	STAGE 4					
		STH 16 (WESTBOUND)				
		127+00 WB - 130+80 WB	172	---	0.1	---
		130+80 WB - 137+75 WB	270	---	0.2	---
		STH 16 (EASTBOUND)				
		127+00 EB - 130+80 EB	172	---	0.1	---
		130+80 EB - 137+75 EB	304	---	0.2	---
	STAGE 4 TOTAL		918	0	0.6	0
	UNDISTRIBUTED		100	100	0.1	40
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**15,900**	**2,900**	**10**	**90**

DUST CONTROL SURFACE TREATMENT

CATEGORY	LOCATION	STAGE	623.0200 (SY)
0010	PROJECT	STAGE 1	12,000
		STAGE 2	20,337
		STAGE 3	19,663
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			52,000

DUST CONTROL SURFACE TREATMENT

CATEGORY	LOCATION	STAGE	623.0200 (SY)
0020	PROJECT	STAGE 1	1,350
		STAGE 2	870
		STAGE 3	290
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			2,510

WATER

CATEGORY	LOCATION	TASK	624.0100 (MGAL)
0010	PROJECT	DUST CONTROL	600
		COMPACTION	600
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			1,200

WATER

CATEGORY	LOCATION	TASK	624.0100 (MGAL)
0020	PROJECT	DUST CONTROL	17
		COMPACTION	17
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			35

MOBILZATION EROSION CONTROL

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
0010	STAGE 1	5	3
	STAGE 2	5	2
	STAGE 3	5	2
	STAGE 4	5	2
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**20**	**9**

FENCE SAFETY

CATEGORY	STAGE	STATION TO STATION	616.0700.S (LF)
0010	STAGE 2		
		STH 16 (WESTBOUND)	
		151+26 WB - 155+59 WB	325
	STAGE 2 TOTAL		325
	UNDISTRIBUTED		1,175
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**1,500**

MARKERS CULVERT END

CATEGORY	STATION	OFFSET	633.5200 (EACH)
0010			
	STH 16 (WESTBOUND)		
	129+84.5 WB	91.8' RT	1
	136+73.3 WB	57.2' RT	1
	136+83.5 WB	56.3' LT	1
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**3**

EROSION CONTROL

CATEGORY	STAGE	STATION TO STATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.6005 TURBIDITY BARRIER (SY)	628.7555 CULVERT PIPE CHECKS (EACH)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	630.0200 SEEDING TEMPORARY (LB)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)	628.7560 TRACKING PADS (EACH)	628.1104 EROSION BALES (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7570 ROCK BAGS (EACH)
0010	STAGE 1																
		STH 16 (WESTBOUND)															
		178+03 WB - 181+79 WB	---	—	—	—	---	—	4	—	—	1	52	—	—	---	—
		181+79 WB - 185+72 WB	---	—	—	205	---	6	2	4	—	10	435	—	—	---	—
		185+72 WB - 188+00 WB	---	—	—	—	---	—	2	1	—	5	208	—	—	---	—
		188+00 WB - 191+50 WB	---	—	—	—	---	—	2	1	—	11	510	—	—	---	—
		191+50 WB - 194+59 WB	---	—	—	19	---	—	2	—	—	13	584	—	—	---	—
		WATERLOO STREET															
		10+88 W - 10+98 W	---	—	—	—	---	—	---	2	—	---	---	—	—	---	—
		MANNING STEET															
		10+45 MS - 11+26 MS	---	—	—	—	---	2	---	2	—	---	---	—	—	---	—
		UNDISTRIBUTED	---	—	—	57	---	2	3	3	10	10	447	5	50	---	—
	STAGE 1 TOTAL		0	0	0	280	0	10	15	13	10	50	2236	5	50	0	0
	STAGE 2																
		STH 16 (WESTBOUND)															
		139+26 WB - 142+66 WB	149	75	—	—	---	3	2	1	—	7	324	—	—	---	—
		142+66 WB - 144+25 WB	150	75	—	—	---	—	---	—	—	5	220	—	—	---	—
		144+25 WB - 151+26 WB	163	81	—	—	---	—	2	—	—	15	672	—	—	---	—
		151+26 WB - 155+59 WB	---	—	—	—	---	—	2	1	—	8	352	—	—	---	—
		155+59 WB - 159+13 WB	---	—	—	—	---	—	2	—	—	9	418	—	—	---	—
		159+13 WB - 162+75 WB	---	—	—	—	---	—	2	—	—	5	225	—	—	---	—
		162+75 WB - 166+73 WB	---	—	—	—	---	—	1	1	—	7	295	—	—	---	—
		166+73 WB - 170+41 WB	---	—	—	—	---	3	3	1	—	6	257	—	—	---	—
		170+41 WB - 174+39 WB	---	—	—	—	---	—	2	1	—	7	298	—	—	---	—
		174+39 WB - 178+03 WB	---	—	—	—	---	—	1	2	—	1	23	—	—	---	—
		STH 16 (EASTBOUND)															
		123+41 EB - 126+40 EB	---	—	791	—	---	—	---	—	—	---	---	—	—	32	—
		126+40 EB - 127+00 EB	---	—	280	—	---	—	---	—	—	---	---	—	—	---	—
		127+00 EB - 130+80 EB	---	—	971	—	---	—	1	—	—	8	339	—	—	48	—
		130+80 EB - 137+75 EB	---	—	345	—	3	—	1	1	—	17	741	—	—	---	3
		137+75 EB - 139+26 EB	---	—	—	—	---	—	2	1	—	5	215	—	—	---	—
		INDUSTRIAL DRIVE/DIX STREET															
		10+00 ID - 12+79 ID	---	—	—	—	---	—	---	—	—	9	390	—	—	---	—
		CONTINENTAL DRIVE															
		11+96 C - 12+06 C	---	—	—	—	---	—	---	1	—	---	---	—	—	---	—
		APC WAY															
		12+00 A - 12+09 A	---	—	—	—	---	—	---	—	—	---	---	—	—	---	—
		LEGION COURT															
		11+98 L - 12+33 L	---	—	—	—	---	—	1	—	—	---	---	—	—	---	—
	STAGE 2 SUBTOTAL		463	231	2,386	0	3	6	22	10	0	107	4,768	0	0	80	3

EROSION CONTROL (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.6005 TURBIDITY BARRIER (SY)	628.7555 CULVERT PIPE CHECKS (EACH)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	630.0200 SEEDING TEMPORARY (LB)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)	628.7560 TRACKING PADS (EACH)	628.1104 EROSION BALES (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7570 ROCK BAGS (EACH)
0010	STAGE 1 TOTAL		0	0	0	280	0	10	15	13	10	50	2236	5	50	0	0
	STAGE 2 SUBTOTAL		463	231	2386	0	3	6	22	10	0	107	4768	0	0	80	3
	STAGE 2 CONTINUED																
		LEWIS STREET															
		11+93 NL - 12+08 NL	—	—	—	—	---	---	2	—	—	—	—	—	—	---	—
		BIRDSEY STREET															
		11+92 NB - 12+08 NB	—	—	—	—	---	---	2	—	—	—	—	—	—	---	—
		SPRING STREET															
		11+93 NS - 12+08 NS	—	—	—	—	---	---	1	1	—	—	—	—	—	---	—
		DICKASON BLVD															
		11+99 DNB - 12+36 DNB	—	—	—	—	---	---	---	—	—	2	81	—	—	---	—
		UNDISTRIBUTED	116	58	597	—	---	2	7	3	10	27	1,212	5	0	0	10
	STAGE 2 TOTAL		578	289	2983	0	3	8	34	14	10	136	6061	5	0	80	13
	STAGE 3																
		STH 16 (WESTBOUND)															
		123+41 WB - 126+40 WB	—	—	150	—	---	---	---	—	—	—	—	—	—	32	—
		126+40 WB - 127+00 WB	—	—	179	—	---	---	---	—	—	—	—	—	—	---	—
		127+00 WB - 130+80 WB	—	—	600	—	---	---	1	2	—	8	348	—	—	---	—
		130+80 WB - 137+75 WB	270	134	22	—	---	---	4	—	—	30	1316	—	—	80	—
		137+75 WB - 139+26 WB	—	—	—	—	---	---	2	1	—	4	177	—	—	16	—
		139+26 WB - 142+66 WB	—	—	—	—	---	4	2	1	—	13	571	—	—	---	—
		142+66 WB - 144+25 WB	—	—	—	—	---	---	---	1	—	2	107	—	—	---	—
		144+25 WB - 151+26 WB	—	—	—	—	---	---	2	—	—	13	577	—	—	---	—
		151+26 WB - 155+59 WB	—	—	70	—	---	---	1	1	—	6	266	—	—	---	—
		155+59 WB - 159+13 WB	—	—	—	—	---	---	2	—	—	11	488	—	—	---	—
		159+13 WB - 162+75 WB	—	—	—	—	---	---	2	1	—	6	276	—	—	---	—
		162+75 WB - 166+73 WB	—	—	—	—	---	---	1	1	—	6	289	—	—	---	—
		166+73 WB - 170+41 WB	—	—	—	—	---	4	3	1	—	6	249	—	—	---	—
		170+41 WB - 174+39 WB	—	—	—	—	---	---	2	—	—	5	201	—	—	---	—
		174+39 WB - 178+03 WB	—	—	—	—	---	---	1	1	—	1	28	—	—	---	—
		INDUSTRIAL DRIVE/DIX STREET															
		15+79 ID - 17+78 ID	—	—	—	—	---	---	---	—	—	12	522	—	—	---	—
		HURELLE STREET															
		10+96 HU - 11+06 HU	—	—	—	—	---	---	1	—	—	—	—	—	—	---	—
		MAPLE AVENUE															
		11+00 MA - 11+11 MA	—	—	—	—	---	---	1	1	—	—	—	—	—	---	—
		CHARLES STREET															
		10+83 CH - 11+03 CH	—	—	—	—	---	---	1	—	—	—	—	—	—	---	—
		BIRDSEY STREET															
		10+82 SB - 11+08 SB	—	—	—	—	---	---	1	—	—	—	—	—	—	---	—
		MAIN STREET															
		11+92 NM - 12+23 NM	—	—	—	—	---	---	---	—	—	—	—	—	—	---	—
		UNDISTRIBUTED	72	37	247	0	0	1	7	3	0	42	1389	0	0	42	10
	STAGE 3 TOTAL		342	171	1267	0	0	9	34	14	0	164	6803	0	0	170	10

3

EROSION CONTROL (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.6005 TURBIDITY BARRIER (SY)	628.7555 CULVERT PIPE CHECKS (EACH)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	630.0200 SEEDING TEMPORARY (LB)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)	628.7560 TRACKING PADS (EACH)	628.1104 EROSION BALES (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7570 ROCK BAGS (EACH)
0010	STAGE 1 TOTAL		0	0	0	280	0	10	15	13	10	50	2236	5	50	0	0
	STAGE 2 TOTAL		578	289	2983	0	3	8	34	14	10	136	6061	5	0	80	13
	STAGE 3 TOTAL		342	171	1267	—	--	9	34	14	--	164	6803	—	—	170	10
	STAGE 4																
		STH 16 (EASTBOUND)															
		127+00 EB - 130+80 EB	—	—	—	—	--	--	2	--	--	—	—	—	—	--	—
		130+80 EB - 137+75 EB	—	—	—	—	--	--	2	--	--	—	—	—	—	--	—
		UNDISTRIBUTED	—	—	—	—	--	--	3	--	10	—	—	2	—	--	—
	STAGE 4 TOTAL		0	0	0	0	0	0	7	0	10	0	0	2	0	0	0
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**920**	**460**	**4250**	**280**	**3**	**27**	**90**	**40**	**30**	**350**	**15100**	**12**	**50**	**250**	**23**

PERMANENT SIGNING TYPE II

						637.2210	637.2215	637.2230	634.0616	634.0620	634.0808	634.0811	634.0812	634.0814		
			SIGN SIZE			SIGNS TYPE II REFLECTIVE	SIGNS TYPE II REFLECTIVE	SIGNS TYPE II REFLECTIVE	POSTS WOOD 4X6-INCH		POSTS TUBULAR STEEL 2X2-INCH				SIGN MOUNTED	
CATEGORY	SIGN #	SIGN CODE	W (IN)	X	H (IN)	H (SF)	H-FOLDING (SF)	F (SF)	16 FT (EACH)	20 FT (EACH)	8 FT (EACH)	11 FT (EACH)	12 FT (EACH)	14 FT (EACH)	ON SAME POST AS	REMARKS
0010	1-01	J2-4	96	X	57	38	---	---	---	2	---	---	---	---	---	ROUTE TURN ASSEMBLY
	2-01	R2-1	24	X	30	5	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	2-02	R6-2L	24	X	30	5	---	---	---	---	---	---	---	---	SP	ONE WAY LEFT ARROW
	2-03	R1-1	36	X	36	7.46	---	---	---	---	---	---	1	---	---	STOP SIGN
	2-04	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP, 2-05	STOP SIGN (FOLDING)
	2-05	R6-3	30	X	24	5	---	---	---	---	---	---	---	---	SP, 2-04	DIVIDED HIGHWAY SIGN CROSSROAD
	2-06	W12-10	24	X	24	---	---	4	---	---	1	---	---	---	---	DOUBLE DOWN ARROWS
	2-07	R10-9	24	X	30	5	---	---	---	---	---	1	---	---	---	NO THRU TRAFFIC
	2-08	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP	STOP SIGN (FOLDING)
	2-09	R5-1	30	X	30	6.25	---	---	---	---	---	---	---	---	SP	DO NOT ENTER
	2-10	R5-1A	36	X	24	6	---	---	---	---	---	---	---	---	LP	WRONG WAY
	2-11	R5-1A	36	X	24	6	---	---	1	---	---	---	---	---	---	WRONG WAY
	2-12	R2-1	24	X	30	5	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	2-13	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP, 2-14	STOP SIGN (FOLDING)
	2-14	R4-7	24	X	30	5	---	---	---	---	---	---	---	---	SP, 2-13	KEEP RIGHT
	2-15	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP, 2-16	STOP SIGN (FOLDING)
	2-16	R5-1	30	X	30	6.25	---	---	---	---	---	---	---	---	SP, 2-15	DO NOT ENTER
	2-17	W12-10	24	X	24	---	---	4	---	---	1	---	---	---	---	DOUBLE DOWN ARROWS
	2-18	R6-2L	24	X	30	5	---	---	---	---	---	---	---	---	SP	ONE WAY LEFT ARROW
	2-19	R4-7	24	X	30	5	---	---	---	---	---	---	---	---	SP, 2-20	KEEP RIGHT
	2-20	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP, 2-19	STOP SIGN (FOLDING)
	2-21	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP, 2-22	STOP SIGN (FOLDING)
	2-22	R6-3	30	X	24	5	---	---	---	---	---	---	---	---	SP, 2-21	DIVIDED HIGHWAY SIGN CROSSROAD
	2-23	R1-1	36	X	36	7.46	---	---	---	---	---	---	1	---	---	STOP SIGN
	2-24	W4-2L	36	X	36	---	---	9	---	---	---	---	---	1	---	LANE REDUCTION TRANSITION SYMBOL (LEFT)
	2-25	W4-2L	36	X	36	---	---	9	---	---	---	---	---	1	---	LANE REDUCTION TRANSITION SYMBOL (LEFT)
	2-26	R5-1A	42	X	30	8.75	---	---	---	---	---	---	---	---	LP	WRONG WAY
	2-27	J1-1	24	X	39	6.5	---	---	---	---	---	---	1	---	---	JUNCTION OR END ASSEMBLY
	3-01	W3-3	36	X	36	---	---	9	---	---	---	---	---	---	LP	SIGNAL AHEAD
	3-02	W6-1	36	X	36	---	--	9	---	---	---	---	---	---	LP	DIVIDED HIGHWAY AHEAD SYMBOL
	3-03	R4-7	24	X	30	5	---	---	---	---	---	1	---	---	---	KEEP RIGHT
	3-04	R2-1	24	X	30	---	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	3-05	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	3-06	R5-1	36	X	36	9	---	---	---	---	---	---	1	---	---	DO NOT ENTER
	3-07	R2-1	24	X	30	5	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	3-08	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	3-09	W6-3	36	X	36	---	---	9	---	---	---	---	---	---	LP	TWO WAY TRAFFIC
	3-10	W6-2	36	X	36	---	---	9	---	---	---	---	---	---	LP	DIVIDED HIGHWAY ENDS SYMBOL
	4-01	R2-1	24	X	30	5	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	4-02	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	4-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	4-04	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	5-01	R2-1	24	X	30	5	---	---	---	---	---	---	---	---	LP	SPEED LIMIT 25 MPH
	5-02	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	5-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	6-01	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	6-02	R1-1	30	X	30	6.25	---	---	---	---	---	1	---	---	---	STOP SIGN
	6-03	JH-13-1	24	X	45	7.5	---	---	---	---	---	---	1	---	---	HOSPITAL DIRECTION
	7-01	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	7-02	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	7-03	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	7-04	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	7-05	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	7-06	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	8-01	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
SUBTOTAL						257.40	44.76	62.00	1	2	2	18	5	2		

PERMANENT SIGNING TYPE II (CONTINUED)

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE W IN	X	SIGN SIZE H IN	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	637.2215 SIGNS TYPE II REFLECTIVE H - FOLDING (SF)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	634.0616 POSTS WOOD 4X6-INCH 16 FT (EACH)	634.0620 POSTS WOOD 4X6-INCH 20 FT (EACH)	634.0808 POSTS TUBULAR STEEL 2X2-INCH 8 FT (EACH)	634.0811 POSTS TUBULAR STEEL 2X2-INCH 11 FT (EACH)	634.0812 POSTS TUBULAR STEEL 2X2-INCH 12 FT (EACH)	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14 FT (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	SUBTOTAL					257.40	44.76	62.00	1	2	2	18	5	2		
	8-02	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	8-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	8-04	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	9-01	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	9-02	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	9-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	9-04	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	9-05	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	9-06	J1-1	24	X	39	6.5	---	---	---	---	---	1	---	---	---	JUNCTION OR END ASSEMBLY
	9-07	J2-2	48	X	57	19	---	---	---	---	---	---	---	1	---	ROUTE TURN ASSEMBLY
	9-08	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	10-01	JV4-2	24	X	60	10	---	---	---	---	---	---	---	1	---	VERTICAL REASSURANCE ASSEMBLY
	10-02	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP	STOP SIGN (FOLDING)
	10-03	J12-2	48	X	45	15	---	---	---	---	---	---	---	---	SP	ROUTE TURN WITHOUT CARDINAL
	10-04	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP	STOP SIGN (FOLDING)
	10-05	J12-2	48	X	45	15	---	---	---	---	---	---	1	---	---	ROUTE TURN WITHOUT CARDINAL
	10-06	JV3-1	24	X	81	13.5	---	---	---	---	---	---	---	---	---	VERTICAL DIRECTIONAL TURN ASSEMBLY
	10-07	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	10-08	JV3-1	24	X	81	13.5	---	---	---	---	---	---	---	---	---	VERTICAL DIRECTIONAL TURN ASSEMBLY
	10-09	J12-2	48	X	45	15	---	---	---	---	---	---	1	---	---	ROUTE TURN WITHOUT CARDINAL
	10-10	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP	STOP SIGN (FOLDING)
	10-11	J12-1	24	X	45	7.5	---	---	---	---	---	---	---	---	SP	ROUTE TURN WITHOUT CARDINAL
	10-12	R1-1F	36	X	36	---	7.46	---	---	---	---	---	---	---	SP	STOP SIGN (FOLDING)
	10-13	JV4-2	24	X	60	10	---	---	---	---	---	---	---	---	SP	VERTICAL REASSURANCE ASSEMBLY
	10-14	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	11-01	J2-2	48	X	57	19	---	---	---	---	---	---	---	1	---	ROUTE TURN ASSEMBLY
	11-02	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	11-03	J1-1	24	X	39	6.5	---	---	---	---	---	1	---	---	---	JUNCTION OR END ASSEMBLY
	11-04	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	11-05	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	11-06	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	11-07	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	12-01	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	12-02	R2-1	24	X	30	5	---	---	---	---	---	1	---	---	---	SPEED LIMIT 25 MPH
	12-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	13-01	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	14-01	R3-8W	54	X	30	11.25	---	---	---	---	---	2	---	---	---	LEFT ONLY / AHEAD ONLY / RIGHT ONLY
	14-02	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	14-03	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	15-01	R1-1	30	X	30	5.18	---	---	---	---	---	1	---	---	---	STOP SIGN
	15-02	R3-8W	54	X	30	11.25	---	---	---	---	---	2	---	---	---	LEFT ONLY / AHEAD ONLY / RIGHT ONLY
PROJECT 1401-02-71 TOTAL - CATEGORY 0010						**548.10**	**74.60**	**62.00**	**1**	**2**	**2**	**47**	**7**	**5**		

REMOVING SIGNS

CATEGORY	SIGN #	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	1R-01	J2-4	1	2	---	ROUTE TURN ASSEMBLY
	2R-01	R2-1	1	1	---	SPEED LIMIT 35 MPH
	2R-02	R1-1F	1	---	SP	STOP SIGN (FOLDING)
	2R-03	R1-1F	1	---	PP	STOP SIGN (FOLDING)
	2R-04	R4-7	1	1	---	KEEP RIGHT
	2R-05	R10-9	1	---	SP	NO THRU TRAFFIC
	2R-06	R1-1F	1	---	PP	STOP SIGN (FOLDING)
	2R-07	R5-1	1	1	---	DO NOT ENTER
	2R-08	R5-1A	1	1	2R-09	WRONG WAY
	2R-09	J1-1	1	---	2R-08	JUNCTION OR END ASSEMBLY
	2R-10	R5-1A	1	1	LOCAL SIGN	WRONG WAY
	2R-11	R2-1	1	1	---	SPEED LIMIT 25 MPH
	2R-12	R5-1	1	1	---	DO NOT ENTER
	2R-13	R1-1F	1	---	2R-22, PP	STOP SIGN (FOLDING)
	2R-14	R4-7	1	1	---	KEEP RIGHT
	2R-15	R1-1F	1	---	PP	STOP SIGN (FOLDING)
	2R-16	W4-2L	1	1	---	LANE REDUCTION TRANSITION SYMBOL (LEFT)
	2R-17	R1-1F	1	---	SP	STOP SIGN (FOLDING)
	2R-18	W4-2L	1	1	2R-19	LANE REDUCTION TRANSITION SYMBOL (LEFT)
	2R-19	R5-1A	1	---	2R-18	WRONG WAY
	2R-20	M1-85	1	1	---	WISCONSIN HERITAGE TRAIL SIGN
	2R-21	R10-11T	1	---	PP	NO TURN ON RED - TIMES TO TIMES
	2R-22	R10-11T	1	---	2R-13, PP	NO TURN ON RED - TIMES TO TIMES
	3R-01	W3-3	1	1	---	SIGNAL AHEAD
	3R-02	W6-1	1	1	---	DIVIDED HIGHWAY AHEAD SYMBOL
	3R-03	R4-7	1	1	---	KEEP RIGHT
	3R-04	R1-1	1	1	---	STOP SIGN
	3R-05	R5-1	1	1	---	DO NOT ENTER
	3R-06	R2-1	1	1	---	SPEED LIMIT 25 MPH
	3R-07	R1-1	1	1	ST. SIGN	STOP SIGN
	4R-01	R2-1	1	1	---	SPEED LIMIT 25 MPH
	4R-02	R1-1	1	1	ST. SIGN	STOP SIGN
	4R-03	R1-1	1	1	---	STOP SIGN
	4R-04	R2-1	1	1	---	SPEED LIMIT 25 MPH
	5R-01	R2-1	1	1	---	SPEED LIMIT 25 MPH
	5R-02	R1-1	1	1	ST. SIGNS	STOP SIGN
	5R-03	R2-1	1	1	---	SPEED LIMIT 25 MPH
	5R-04	R1-1	1	1	---	STOP SIGN
	6R-01	R1-1	1	1	---	STOP SIGN
	6R-02	D9-2	1	1	ARROW	HOSPITAL
	7R-01	R1-1	1	1	ST. SIGNS	STOP SIGN
	7R-02	R1-1	1	1	ST. SIGNS	STOP SIGN
	7R-03	R2-1	1	1	---	SPEED LIMIT 25 MPH
	7R-04	R1-1	1	1	ST. SIGNS	STOP SIGN
	7R-05	R2-1	1	1	---	SPEED LIMIT 25 MPH
SUBTOTAL			45	35		

CATEGORY	SIGN #	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	SUBTOTAL		45	35		
	7R-06	R1-1	1	1	---	STOP SIGN
	8R-01	R1-1	1	1	---	STOP SIGN
	8R-02	R2-1	1	1	---	SPEED LIMIT 25 MPH
	8R-03	R1-1	1	1	---	STOP SIGN
	8R-04	R2-1	1	1	---	SPEED LIMIT 25 MPH
	9R-01	R1-1	1	1	---	STOP SIGN
	9R-02	J4-2	1	1	---	REASSURANCE ASSEMBLY
	9R-03	R1-1	1	1	---	STOP SIGN
	9R-04	R1-1	1	1	---	STOP SIGN
	9R-05	R1-1	1	1	---	STOP SIGN
	9R-06	J1-1	1	1	---	JUNCTION OR END ASSEMBLY
	9R-07	J2-2	1	1	---	ROUTE TURN ASSEMBLY
	9R-08	R1-1	1	---	ST. SIGNS	STOP SIGN
	10R-01	J12-1	1	---	SP	ROUTE TURN WITHOUT CARDINAL
	10R-02	R1-1F	1	---	ST. SIGN, SP	STOP SIGN (FOLDING)
	10R-03	J12-2	1	---	SP	ROUTE TURN WITHOUT CARDINAL
	10R-04	R1-1F	1	---	ST. SIGN, SP	STOP SIGN (FOLDING)
	10R-05	J23-2	1	---	10R-06	TRAILBLAZER (DIRECTIONAL)
	10R-06	D9-2	1	---	ARROW, LP	HOSPITAL
	10R-07	R1-1	1	1	ST. SIGN	STOP SIGN
	10R-08	J23-2	1	2	10M-04, 10R-14	TRAILBLAZER (DIRECTIONAL)
	10R-09	D9-2	1	---	ARROW, LP	HOSPITAL
	10R-10	R1-1F	1	---	SP	STOP SIGN (FOLDING)
	10R-11	J12-2	1	---	SP	ROUTE TURN WITHOUT CARDINAL
	10R-12	R1-1F	1	---	ST. SIGN, SP	STOP SIGN (FOLDING)
	10R-13	J12-1	1	---	SP	ROUTE TURN WITHOUT CARDINAL
	10R-14	R1-1	1	1	ST. SIGN	STOP SIGN
	11R-01	J2-2	1	1	---	ROUTE TURN ASSEMBLY
	11R-02	J1-1	1	1	---	JUNCTION OR END ASSEMBLY
	11R-03	R1-1	1	---	LOCAL SIGN	STOP SIGN
	11R-04	J4-2	1	1	---	REASSURANCE ASSEMBLY
	11R-05	R2-1	1	1	---	SPEED LIMIT 25 MPH
	11R-06	R1-1	1	1	ST. SIGN	STOP SIGN
	12R-01	J2-1	1	---	PP	ROUTE TURN ASSEMBLY
	12R-02	J23-1	1	1	ARROW	TRAILBLAZER (DIRECTIONAL)
	12R-03	R1-1	1	---	PP	STOP SIGN
	12R-04	J23-1	1	1	ARROW	TRAILBLAZER (DIRECTIONAL)
	13R-01	R1-1	1	1	ST. SIGN	STOP SIGN
	14R-01	R1-1	1	1	---	STOP SIGN
	14R-02	R1-1	1	1	---	STOP SIGN
	15R-01	R1-1	1	1	---	STOP SIGN
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**86**	**62**		

TRAFFIC CONTROL

CATEGORY	LOCATION	643.0200 SURVENILLANCE AND MAINTENANCE ID 1401-02-71 (DAY)	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III (DAY)	643.0500 FLEXIBLE TUBULAR MARKER POSTS (EACH)	643.0600 FLEXIBLE TUBULAR MARKER BASES (EACH)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0715 WARNING LIGHTS TYPE C (DAY)	643.0800 ARROW BOARD (DAY)	643.0900 SIGNS (DAY)	643.1050 SIGNS PCMS (DAY)	643.2000 DETOUR PROJECT (EACH)	643.3000 DETOUR SIGNS (DAY)	646.0600 REMOVING PAVEMENT MARKINGS (LF)
0010	STAGE 1	69	10,438	1,035	---	---	26	690	69	2,484	345	---	4,368	---
	STAGE 2	71	1,562	2,272	73	73	46	564	71	1,917	284	0.5	2,132	---
	STAGE 3	71	8,945	2,059	10	10	43	710	71	1,988	213	0.5	---	---
	STAGE 4	19	2,000	255	---	---	26	170	17	391	34	---	---	---
	UNDISTRIBUTED	---	2,355	577	66	66	14	215	22	720	88	---	---	1,000
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**230**	**25,300**	**6,200**	**150**	**150**	**155**	**2,350**	**250**	**7,500**	**980**	**1**	**6,500**	**1,000**

COVERING SIGNS TYPE II

CATEGORY	LOCATION	643.0920 (EACH)	NUMBER OF CYCLES	NUMBER OF SIGNS
0010	STAGE 1	54	1	54
	STAGE 2	4	1	4
	STAGE 3	---	---	---
	STAGE 4	---	---	---
	UNDISTRIBUTED	12	---	---
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**70**		

TEMPORARY PEDESTRIAN ACCESS

CATEGORY	STAGE	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT (SF)	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD (SF)	644.1430.S TEMPORARY PEDESTRIAN SURFACE PLATE (SF)	644.1601.S TEMPORARY CURB RAMP (EACH)	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE (LF)
0010	STAGE 1	230	---	1,200	4	516
	STAGE 2	162	---	1,160	6	574
	UNDISTRIBUTED	608	500	140	5	210
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**1,000**	**500**	**2,500**	**15**	**1,300**

PAVEMENT MARKING

CATEGORY	STATION TO STATION	646.0106 EPOXY 4-INCH YELLOW (LF)	646.0106 EPOXY 4-INCH WHITE SOLID (LF)	646.0106 EPOXY 4-INCH WHITE 12.5 SEG, 37.5 GAP (LF)	646.0106 EPOXY 4-INCH WHITE 3' SEG, 9' GAP (LF)	646.0126 EPOXY 8-INCH WHITE SOLID (LF)	646.0126 EPOXY 8-INCH WHITE 3' SEG, 9' GAP (LF)	647.0166 ARROWS EPOXY TYPE 2 (EACH)	647.0356 WORDS EPOXY (EACH)	647.0566 STOP LINE EPOXY 18-INCH (LF)	647.0606 ISLAND NOSE EPOXY WHITE (EACH)	647.0726 DIAGONAL EPOXY 12-INCH (LF)	647.0766 CROSSWALK EPOXY 6-INCH (LF)
0010	STH 16 (WESTBOUND)												
	126+40 WB - 127+00 WB	---	---	60	---	---	---	---	---	---	---	---	---
	127+00 WB - 130+80 WB	---	258	326	67	---	---	---	---	---	---	---	96
	130+80 WB - 137+75 WB	107	534	656	97	135	95	4	2	55	---	---	99
	137+75 WB - 139+26 WB	266	272	---	---	---	---	---	---	---	---	22	---
	139+26 WB - 142+66 WB	473	551	---	---	---	---	---	---	---	---	19	---
	142+66 WB - 144+25 WB	186	226	---	---	---	---	---	---	---	---	---	89
	144+25 WB - 151+26 WB	1231	1231	---	---	---	---	---	---	---	---	---	76
	151+26 WB - 155+59 WB	739	739	---	---	---	---	---	---	---	---	---	147
	155+59 WB - 159+13 WB	550	550	---	---	---	---	---	---	---	---	---	150
	159+13 WB - 162+75 WB	599	1090	---	---	---	---	---	---	---	---	---	175
	162+75 WB - 166+73 WB	678	1222	---	---	---	---	---	---	---	---	---	157
	166+73 WB - 170+41 WB	595	1110	---	---	---	---	---	---	---	---	---	171
	170+41 WB - 174+39 WB	605	1115	---	---	---	---	---	---	---	---	---	166
	174+39 WB - 178+03 WB	572	568	---	---	---	---	---	---	22	---	---	163
	178+03 WB - 181+79 WB	561	557	---	---	---	---	---	---	22	---	---	180
	181+79 WB - 185+72 WB	611	1167	---	---	---	---	---	---	---	---	---	93
	185+72 WB - 188+00 WB	360	735	---	---	---	---	---	---	---	---	---	95
	188+00 WB - 191+50 WB	547	933	155	---	---	---	---	---	---	---	---	---
	191+50 WB - 194+59 WB	561	563	---	---	---	---	---	---	---	---	---	86
	STH 16 (EASTBOUND)												
	126+40 EB - 127+00 EB	---	---	60	---	---	---	---	---	---	---	---	---
	127+00 EB - 130+80 EB	---	205	322	104	205	96	4	2	53	1	---	96
	130+80 EB - 137+75 EB	107	530	524	71	---	---	---	---	---	2	---	99
	137+75 EB - 139+26 EB	265	---	---	---	---	---	---	---	---	---	---	---
	INDUSTRIAL DRIVE/DIX STREET												
	10+00 ID - 12+79 ID	707	135	---	106	405	---	4	3	62	---	---	185
	15+79 ID - 17+78 ID	779	119	---	---	244	---	2	2	52	---	35	185
	SUBTOTAL	11,099	14,413	2,103	445	989	191	14	9	267	3	75	2,507

PAVEMENT MARKING (CONTINUED)

CATEGORY	STATION TO STATION	646.0106 EPOXY 4-INCH YELLOW (LF)	646.0106 EPOXY 4-INCH WHITE SOLID (LF)	646.0106 EPOXY 4-INCH WHITE 12.5 SEG, 37.5 GAP (LF)	646.0106 EPOXY 4-INCH WHITE 3' SEG, 9' GAP (LF)	646.0126 EPOXY 8-INCH WHITE SOLID (LF)	646.0126 EPOXY 8-INCH WHITE 3' SEG, 9' GAP (LF)	647.0166 ARROWS EPOXY TYPE 2 (EACH)	647.0356 WORDS EPOXY (EACH)	647.0566 STOP LINE EPOXY 18-INCH (LF)	647.0606 ISLAND NOSE EPOXY WHITE (EACH)	647.0726 DIAGONAL EPOXY 12-INCH (LF)	647.0766 CROSSWALK EPOXY 6-INCH (LF)
0010	SUBTOTAL	11,099	14,413	2,103	445	989	191	14	9	267	3	75	2,507
	MEISTER DRIVE												
	10+79 M - 10+99 M	---	---	---	---	---	---	---	---	---	---	---	70
	CONTINENTAL DRIVE												
	11+96 C - 12+06 C	---	---	---	---	---	---	---	---	---	---	---	96
	HURELLE STREET												
	10+96 HU - 11+06 HU	---	---	---	---	---	---	---	---	---	---	---	67
	APC WAY												
	12+00 A - 12+20 A	---	---	---	---	---	---	---	---	---	---	---	86
	MAPLE AVENUE												
	11+00 MA - 11+11 MA	---	---	---	---	---	---	---	---	20	---	---	95
	BLACKHAWK DRIVE												
	11+87 B - 11+97 B	---	---	---	---	---	---	---	---	---	---	---	70
	CHARLES STREET												
	10+83 CH - 11+03 CH	---	---	---	---	---	---	---	---	---	---	---	75
	LEGION COURT												
	11+98 L - 12+33 L	---	---	---	---	---	---	---	---	---	---	---	54
	LEWIS STREET												
	10+80 SL - 11+07 SL	---	---	---	---	---	---	---	---	---	---	---	63
	11+93 NL - 12+08 NL	---	---	---	---	---	---	---	---	---	---	---	62
	BIRDSEY STREET												
	10+82 SB - 11+08 SB	---	---	---	---	---	---	---	---	12	---	---	62
	11+92 NB - 12+08 NB	---	---	---	---	---	---	---	---	12	---	---	64
	MAIN STREET												
	10+92 SM - 11+08 SM	---	---	---	---	---	---	---	---	12	---	---	60
	11+92 NM - 12+23 NM	---	---	---	---	---	---	---	---	12	---	---	60
	SPRING STREET												
	10+92 SS - 11+07 SS	---	---	---	---	---	---	---	---	---	---	---	66
	11+93 NS - 12+08 NS	---	---	---	---	---	---	---	---	---	---	---	66
	DICKASON BLVD												
	10+81 NBD - 11+00 NBD	---	---	---	---	---	---	---	---	16	---	---	62
	11+99 DNB - 12+36 DNB	---	---	---	---	---	---	---	---	---	---	---	61
	10+81 SBD - 11+01 SBD	---	---	---	---	---	---	---	---	---	---	---	62
	11+99 DSB - 12+36 DSB	---	---	---	---	---	---	---	---	15	---	---	61
	LUDINGTON STREET/STH 73												
	10+75 S - 10+93 S	51	---	---	---	---	---	---	---	22	---	---	88
	12+15 N - 12+35 N	55	---	---	---	---	---	---	---	22	---	---	88
	SUBTOTAL	11,205	14,413	2,103	445	989	191	14	9	410	3	75	4,043

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PAVEMENT MARKING (CONTINUED)

		646.0106	646.0106			646.0126		647.0166	647.0356	647.0566	647.0606	647.0726	647.0766
		EPOXY 4-INCH YELLOW	EPOXY 4-INCH WHITE			EPOXY 8-INCH WHITE		ARROWS EPOXY TYPE 2	WORDS EPOXY	STOP LINE EPOXY 18-INCH	ISLAND NOSE EPOXY WHITE	DIAGONAL EPOXY 12-INCH	CROSSWALK EPOXY 6-INCH
CATEGORY	STATION TO STATION	(LF)	SOLID (LF)	12.5 SEG, 37.5 GAP (LF)	3' SEG, 9' GAP (LF)	SOLID (LF)	3' SEG, 9' GAP (LF)	(EACH)	(EACH)	(LF)	(EACH)	(LF)	(LF)
0010	SUBTOTAL	11,205	14,413	2,103	445	989	191	14	9	410	3	75	4,043
	WATER STREET												
	10+76 SW - 11+07 SW	---	---	---	---	---	---	---	---	---	---	---	65
	11+98 NW - 12+17 NW	---	---	---	---	---	---	---	---	---	---	---	76
	WATERLOO STREET												
	10+88 W - 10+98 W	---	---	---	---	---	---	---	---	14	---	---	71
	UDEY STREET												
	11+91 U - 12+08 U	---	---	---	---	---	---	---	---	---	---	---	48
	MANNING STEET												
	10+45 MS - 11+26 MS	---	---	---	---	---	---	---	---	14	---	---	79
	RIVER ROAD												
	10+32 R - 10+42 R	---	---	---	---	---	---	---	---	11	---	---	58
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**11,205**	**14,413**	**2,103**	**445**	**989**	**191**	**14**	**9**	**450**	**3**	**75**	**4,440**
				16,960			**1,180**						

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PAVEMENT MARKING

CATEGORY	STATION TO STATION	646.0106 EPOXY 4-INCH WHITE (LF)	647.0456 CURB EPOXY YELLOW (LF)	647.0656 PARKING STALL EPOXY (LF)
0040	STH 16 (WESTBOUND)			
	127+00 WB - 130+80 WB	---	58	---
	130+80 WB - 137+75 WB	---	15	---
	159+13 WB - 162+75 WB	491	162	---
	162+75 WB - 166+73 WB	544	323	---
	166+73 WB - 170+41 WB	504	161	---
	170+41 WB - 174+39 WB	510	286	---
	174+39 WB - 178+03 WB	---	380	227
	178+03 WB - 181+79 WB	---	248	217
	181+79 WB - 185+72 WB	489	20	---
	185+72 WB - 188+00 WB	346	---	---
	188+00 WB - 191+50 WB	316	---	---
	STH 16 (EASTBOUND)			
	127+00 EB - 130+80 EB	---	5	---
	130+80 EB - 137+75 EB	---	63	---
	DICKASON BLVD			
	10+81 NBD - 11+00 NBD	---	---	10
	LUDINGTON STREET/STH 73			
	10+75 S - 10+93 S	---	---	11
PROJECT 1401-02-71 TOTAL - CATEGORY 0040		**3,200**	**1,720**	**465**

TEMPORARY PAVMENT MARKING

CATEGORY	STAGE	649.0402 4-INCH WHITE SOLID (LF)	649.0402 4-INCH DOUBLE YELLOW SOLID (LF)	649.0402 4-INCH YELLOW SOLID (LF)	649.0400 REMOVABLE 4-INCH WHITE SOLID (LF)	649.0400 REMOVABLE 4-INCH DOUBLE YELLOW SOLID (LF)	649.0400 REMOVABLE 4-INCH YELLOW SOLID (LF)	649.0600 REMOVABLE 6-INCH WHITE SOLID (LF)	649.0802 8-INCH WHITE SOLID (LF)	649.0801 REMOVABLE 8-INCH WHITE SOLID (LF)	649.1100 STOP LINE 18-INCH SOLID (LF)	649.1200 REMOVABLE STOP LINE 18-INCH (LF)	649.1300 STOP LINE 24-INCH (LF)
0010	STAGE 1	309	---	5101	---	---	---	---	482	---	49	---	43
	STAGE 2	7234	2483	462	---	614	---	---	328	---	133	---	43
	STAGE 3	1004	378	3086	2014	661	1128	395	---	780	53	83	---
	STAGE 4	---	---	2742	---	353	2680	775	---	1295	---	197	---
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**8547**	**2861**	**11392**	**2014**	**1629**	**3808**	**1170**	**810**	**2075**	**235**	**280**	**86**
			22800			**7450**							

SAWING

CATEGORY	STAGE	STATION TO STATION	690.0150 ASPHALT (LF)	690.0250 CONCRETE (LF)	
0010	STAGE 1				
		STH 16 (WESTBOUND)			
		178+03 WB - 181+79 WB	11	1,136	*
		181+79 WB - 185+72 WB	69	117	
		185+72 WB - 188+00 WB	74	99	
		188+00 WB - 191+50 WB	23	91	
		191+50 WB - 194+59 WB	98	46	
		SAWING FOR UTILITY WORK	---	9,274	
		LUDINGTON STREET/STH 73			
		10+75 S - 10+93 S	30	88	
		12+15 N - 12+35 N	30	95	
		WATER STREET			
		10+76 SW - 11+07 SW	24	14	
		11+98 NW - 12+17 NW	58	14	
		WATERLOO STREET			
		10+88 W - 10+98 W	26	13	
		UDEY STREET			
		11+91 U - 12+08 U	22	3	
		MANNING STEET			
		10+45 MS - 11+26 MS	36	17	
		RIVER ROAD			
		10+32 R - 10+42 R	57	6	
	STAGE 1 TOTAL		557	11,014	
	STAGE 2				
		STH 16 (WESTBOUND)			
		127+00 WB - 130+80 WB	---	41	*
		130+80 WB - 137+75 WB	---	49	*
		139+26 WB - 142+66 WB	73	---	
		144+25 WB - 151+26 WB	---	60	
		151+26 WB - 155+59 WB	52	---	
		155+59 WB - 159+13 WB	9	5	
		159+13 WB - 162+75 WB	---	34	
		162+75 WB - 166+73 WB	12	21	
		166+73 WB - 170+41 WB	19	33	
		170+41 WB - 174+39 WB	18	21	
		174+39 WB - 178+03 WB	---	1,264	*
		STH 16 (EASTBOUND)			
		126+40 EB - 127+00 EB	9	27	
		INDUSTRIAL DRIVE/DIX STREET			
		10+00 ID - 12+79 ID	369	18	
		MEISTER DRIVE			
		10+79 M - 10+99 M	60	---	
		APC WAY			
		12+00 A - 12+20 A	36	9	
	STAGE 2 SUBTOTAL		656	1,581	

* = QUANTITY INCLUDES TRAFFIC CONTOL/SIDEWALK REMOVAL SAWCUTS

SAWING (CONTINUED)

CATEGORY	STAGE	STATION TO STATION	690.0150 ASPHALT (LF)	690.0250 CONCRETE (LF)	
0010	STAGE 1 TOTAL		557	11,014	
	STAGE 2 SUBTOTAL		656	1,581	
	STAGE 2 CONTINUED				
		BLACKHAWK DRIVE			
		11+87 B - 11+97 B	32	5	
		LEGION COURT			
		11+98 L - 12+33 L	67	10	
		LEWIS STREET			
		11+93 NL - 12+08 NL	24	15	
		BIRDSEY STREET			
		11+92 NB - 12+08 NB	---	38	
		MAIN STREET			
		11+92 NM - 12+23 NM	24	14	
		SPRING STREET			
		11+93 NS - 12+08 NS	24	15	
		DICKASON BLVD			
		11+99 DNB - 12+36 DNB	80	14	
		11+99 DSB - 12+36 DSB	207	21	
		LUDINGTON STREET/STH 73			
		10+75 S - 10+93 S	14	14	
		12+15 N - 12+35 N	14	14	
	STAGE 2 TOTAL		1,142	1,741	
	STAGE 3				
		STH 16 (WESTBOUND)			
		126+40 WB - 127+00 WB	---	35	
		127+00 WB - 130+80 WB	---	---	
		130+80 WB - 137+75 WB	22	2	
		137+75 WB - 139+26 WB	---	---	
		139+26 WB - 142+66 WB	107	---	
		142+66 WB - 144+25 WB	65	---	
		144+25 WB - 151+26 WB	155	41	
		151+26 WB - 155+59 WB	---	63	
		159+13 WB - 162+75 WB	10	12	
		162+75 WB - 166+73 WB	---	41	
		166+73 WB - 170+41 WB	32	16	
		170+41 WB - 174+39 WB	24	32	
		INDUSTRIAL DRIVE/DIX STREET			
		15+79 ID - 17+78 ID	162	17	
	STAGE 3 SUBTOTAL		577	258	

* = QUANTITY INCLUDES TRAFFIC CONTOL/SIDEWALK REMOVAL SAWCUTS

CATEGORY	STAGE	STATION TO STATION	690.0150 ASPHALT (LF)	690.0250 CONCRETE (LF)
0010	STAGE 3 SUBTOTAL		577	258
	STAGE 3 CONTINUED			
		CONTINENTAL DRIVE		
		11+96 C - 12+06 C	49	---
		HURELLE STREET		
		10+96 HU - 11+06 HU	24	5
		MAPLE AVENUE		
		11+00 MA - 11+11 MA	---	53
		CHARLES STREET		
		10+83 CH - 11+03 CH	26	9
		LEWIS STREET		
		10+80 SL - 11+07 SL	24	15
		BIRDSEY STREET		
		10+82 SB - 11+08 SB	24	15
		MAIN STREET		
		10+92 SM - 11+08 SM	24	15
		SPRING STREET		
		10+92 SS - 11+07 SS	---	38
		DICKASON BLVD		
		10+81 NBD - 11+00 NBD	20	12
		10+81 SBD - 11+01 SBD	33	26
	STAGE 3 TOTAL		801	446
PROJECT 1401-02-71 TOTAL - CATEORY 0010			**2,500**	**13,200**

GEOGRID REINFORCEMENT

CATEGORY	STAGE	STATION TO STATION	SPV.0180.001 GEOGRID REINFORCEMENT (SY)
0010	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	2274
		181+79 WB - 185+72 WB	2098
		185+72 WB - 188+00 WB	1182
		188+00 WB - 191+50 WB	1754
		191+50 WB - 194+59 WB	1808
	STAGE 1 TOTAL		9116
	STAGE 2		
		STH 16 (WESTBOUND)	
		139+26 WB - 142+66 WB	924
		142+66 WB - 144+25 WB	450
		144+25 WB - 151+26 WB	1,821
		151+26 WB - 155+59 WB	1,118
		155+59 WB - 159+13 WB	980
		159+13 WB - 162+75 WB	978
		162+75 WB - 166+73 WB	1,034
		166+73 WB - 170+41 WB	961
		170+41 WB - 174+39 WB	1,153
		174+39 WB - 178+03 WB	1,035
		STH 16 (EASTBOUND)	
		126+40 EB - 127+00 EB	250
		127+00 EB - 130+80 EB	2,856
		130+80 EB - 137+75 EB	3,714
		137+75 EB - 139+26 EB	361
	STAGE 2 TOTAL		17635
	STAGE 3		
		STH 16 (WESTBOUND)	
		126+40 WB - 127+00 WB	239
		127+00 WB - 130+80 WB	2230
		130+80 WB - 137+75 WB	3835
		137+75 WB - 139+26 WB	620
		139+26 WB - 142+66 WB	924
		142+66 WB - 144+25 WB	450
		144+25 WB - 151+26 WB	1821
		151+26 WB - 155+59 WB	1118
		155+59 WB - 159+13 WB	980
		159+13 WB - 162+75 WB	978
		162+75 WB - 166+73 WB	1034
		166+73 WB - 170+41 WB	961
		170+41 WB - 174+39 WB	1153
		174+39 WB - 178+03 WB	1035
		STH 16 (EASTBOUND)	
		137+75 EB - 139+26 EB	74
	STAGE 3 TOTAL		17450
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**44200**

GEOGRID REINFORCEMENT

CATEGORY	STAGE	STATION TO STATION	SPV.0180.001 GEOGRID REINFORCEMENT (SY)
0020	STAGE 1		
		STH 16 (WESTBOUND)	
		178+03 WB - 181+79 WB	318
		181+79 WB - 185+72 WB	343
		185+72 WB - 188+00 WB	271
		188+00 WB - 191+50 WB	415
		191+50 WB - 194+59 WB	9
	STAGE 1 TOTAL		1356
	STAGE 2		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	176
		162+75 WB - 166+73 WB	181
		166+73 WB - 170+41 WB	182
		170+41 WB - 174+39 WB	183
		174+39 WB - 178+03 WB	147
	STAGE 2 TOTAL		870
	STAGE 3		
		STH 16 (WESTBOUND)	
		159+13 WB - 162+75 WB	177
		162+75 WB - 166+73 WB	181
		166+73 WB - 170+41 WB	181
		170+41 WB - 174+39 WB	184
		174+39 WB - 178+03 WB	151
	STAGE 3 TOTAL		874
PROJECT 1401-02-71 TOTAL - CATEGORY 0020			**3100**

VIBRATION MONITORING

CATEGORY	LOCATION	SPV.0135.001 (MONTHS)
0010	UNDISTRIBUTED	5
PROJECT 1401-02-71 TOTAL - CATEGORY 0010		**5**

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM-CONTMINATED SOIL

CATEGORY	LOCATION	SPV.0195.001 (TON)	SPV.0060.002 LOW PERMEABLE PLUG (EACH)
0020	UNDISTRIBUTED	500	4
PROJECT 1401-02-71 TOTAL - CATEGORY 0020		**500**	**4**

RETAINING WALL

CATEGORY	STAGE	STATION TO STATION	SPV.0165.001 WALL MODULAR BLOCK GRAVITY LRFD (SF)	SPV.0090.002 ORNAMENTAL PICKET FENCE 5-FT HEIGHT (LF)
0010	STAGE 3			
		STH 16 (WESTBOUND)		
		151+26 WB - 155+59 WB	700	---
		152+44 WB - 154+00 WB	---	157
PROJECT 1401-02-71 TOTAL - CATEGORY 0010			**700**	**157**

TRAFFIC SIGNAL REMOVALS

LOCATION / ITEM NUMBER	STATION	L/R	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
CATEGORY 0010				
STH 16 & INDUSTRIAL DR. / DIX ST.				
CB1	131+520'EB'	R	1	--
SB1	131+34'EB'	R	1	--
SB2	130+84'EB'	R	1	--
SB3	130+27'EB'	R	1	--
SB4	130+29'WB'	R	1	--
SB5	129+94'WB'	L	1	--
SB6	130+33'WB'	L	1	--
SB7	130+82'WB'	L	1	--
SB8	131+22'WB'	L	1	--
SB9	131+36'WB'	R	1	--
SB10	131+71'EB'	R	1	--
PB1	131+38'EB'	R	--	1
PB2	12+76	R	--	1
PB3	130+59'EB'	R	--	1
PB4	130+09'EB'	R	--	1
PB5	127+58'EB'	R	--	1
PB6	130+33'WB'	R	--	1
PB7	130+25'WB'	L	--	1
PB8	16+12	L	--	1
PB9	130+85'WB'	L	--	1
PB10	131+39'WB'	L	--	1
PB11	133+08'WB'	L	--	1
PB12	131+39'WB'	R	--	1
PB13	131+50'EB'	R	--	1
INTERSECTION SUBTOTAL			11	13
STH 16 & STH 73				
CB1	177+66'WB'	R	1	--
SB1	11+04'S'	L	1	--
SB2	177+73'WB'	R	1	--
SB3	177+74'WB'	L	1	--
SB4	11+96'N'	L	1	--
SB5	11+98'N'	R	1	--
SB6	178+57'WB'	L	1	--
SB7	178+65'WB'	R	1	--
SB8	11+04'S'	R	1	--
PB1	177+78'WB'	R	--	1
PB2	177+77'WB'	L	--	1
PB3	11+89'S'	R	--	1
PB4	178+52'WB'	L	--	1
PB5	178+55'WB'	R	--	1
INTERSECTION SUBTOTAL			9	5
CATEGORY 0010 TOTAL			20	18

TRAFFIC SIGNAL PULL BOXES

LOCATION / PULL BOX NUMBER	STATION	OFFSET	L/R	SPV.0060.300 PULL BOX NON-CONDUCTIVE 24X36-INCH EACH	SPV.0060.301 PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
CATEGORY 0010					
STH 16 & INDUSTRIAL DR. / DIX ST.					
PB1	131+89'EB'	53.0'	R	--	1
PB2	131+33'EB'	49.2'	R	--	1
PB3	130+46'EB'	56.9'	R	--	1
PB4	13+38'ID'	23.1'	L	1	--
PB5	129+92'EB'	47.3'	R	--	1
PB6	129+96'WB'	8.5'	R	--	1
PB7	127+11'WB'	20.7'	R	1	--
PB8	130+27'WB'	46.7'	L	--	1
PB9	131+22'WB'	58.3'	L	--	1
PB10	15+42'ID'	30.5'	R	1	--
PB11	131+83'WB'	49.5'	L	--	1
PB12	131+88'WB'	18.4'	R	--	1
PB13	133+65'WB'	6.0'	R	1	--
PB14	131+92'EB'	48.4'	R	--	1
PB15	12+67'ID'	47.5'	R	1	--
INTERSECTION SUBTOTAL				5	10
STH 16 & STH 73					
PB1	177+55'WB'	28.5'	R	--	1
PB2	179+35'WB'	26.5'	R	1	--
PB3	177+52'WB'	26.5'	L	--	1
PB4	11+94'N'	26.5'	L	--	1
PB5	11+92'N'	28.5'	R	--	1
PB6	178+56'WB'	26.5'	L	--	1
PB7	181+02'WB'	26.5'	L	1	--
PB8	178+55'WB'	27.3'	R	--	1
PB9	11+09'S'	27.5'	R	--	1
PB10	11+10'S'	28.4'	L	--	1
PB10	11+10'S'	28.4'	L	--	1
INTERSECTION SUBTOTAL				2	9
CATEGORY 0010 TOTAL				7	19

TRAFFIC SIGNAL CONDUIT

LOCATION	FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CATEGORY 0010					
STH 16 & INDUSTRIAL DR. / DIX ST.					
	CB1	-	PB1	--	84
	PB1	-	PB2	--	114
	PB2	-	SB1	16	--
	PB2	-	SB2	5	--
	PB2	-	PB3	--	176
	PB3	-	PB4	55	--
	PB3	-	SB3	26	--
	PB3	-	SB4	16	--
	PB3	-	PB5	--	110
	PB5	-	SB5	29	--
	PB5	-	PB6	--	130
	PB6	-	PB7	286	--
	PB6	-	SB6	10	--
	PB6	-	PB8	--	128
	PB8	-	SB7	12	--
	PB8	-	SB8	5	--
	PB8	-	PB9	--	192
	PB9	-	PB10	45	--
	PB9	-	SB9	24	--
	PB9	-	PB11	--	126
	PB11	-	SB10	50	--
	PB11	-	SB11	40	--
	PB11	-	PB12	--	138
	PB12	-	SB12	26	--
	PB12	-	PB13	188	--
	PB12	-	PB14	--	112
	PB14	-	CB1	--	75
	PB1	-	PB15	90	--
INTERSECTION SUBTOTAL				923	1,385
STH 16 & STH 73					
	CB1	-	PB1	22	--
	PB1	-	SB1	5	--
	PB1	-	PB2	221	--
	PB1	-	PB3	110	--
	PB3	-	SB2	8	--
	PB3	-	PB4	84	--
	PB4	-	SB3	17	--
	PB4	-	PB5	110	--
	PB5	-	SB4	20	--
	PB5	-	PB6	44	--
	PB6	-	SB5	12	--
	PB6	-	PB7	257	--
	PB6	-	PB8	108	--
	PB8	-	SB6	13	--
	PB8	-	PB9	40	--
	PB9	-	SB7	12	--
	PB9	-	PB10	112	--
	PB10	-	SB8	13	--
	PB10	-	CB1	97	--
INTERSECTION SUBTOTAL				1,305	0
CATEGORY 0010 TOTAL				2,228	1,385

MONOTUBE STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0110 CONCRETE BASES TYPE 10 EACH	657.1345 INSTALL POLES TYPE 9 EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	SPV.0105.303 TRANSPORTING DEPARTMENT FURNISHED MONOTUBE EQUIPMENT (STH 16 & INDUST/DIX) LS
CATEGORY 0010							
STH 16 & INDUSTRIAL DR. / DIX ST.							1
SB1	131+40'EB'	35.0'	R	1	1	1	--
SB7	130+25'WB'	34.8'	L	1	1	1	--
CATEGORY 0010 TOTAL				2	2	2	--

TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0315 POLES TYPE 4 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0595 TROMBONE ARMS 25-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.302 DECORATIVE TRAFFIC SIGNAL ASSEMBLY TYPE A EACH	SPV.0060.303 DECORATIVE TRAFFIC SIGNAL ASSEMBLY TYPE B EACH
CATEGORY 0010															
STH 16 & INDUSTRIAL DR. / DIX ST.															
SB2	131+33'EB'	45.2'	R	1	--	1	--	--	--	1	--	--	--	--	--
SB3	130+66'EB'	73.4'	R	--	1	--	1	1	--	--	1	1	1	--	--
SB4	130+32.5'EB'	52.6'	R	1	--	1	--	--	1	--	--	--	--	--	--
SB5	130+21'EB'	47.2'	R	1	--	1	--	--	--	1	--	--	--	--	--
SB6	130+03'WB'	8.9'	R	--	1	--	1	1	--	1	--	2	2	--	--
SB8	130+30'WB'	43.0'	L	1	--	1	--	--	--	1	--	--	--	--	--
SB9	131+03'WB'	100.3'	L	--	1	--	1	1	--	--	1	1	1	--	--
SB10	131+33'WB'	54.7'	L	1	--	1	--	--	1	--	--	--	--	--	--
SB11	131+44'WB'	48.0'	L	1	--	1	--	--	--	1	--	--	--	--	--
SB12	131+64'WB'	17.0'	R	--	1	--	1	1	--	1	--	2	2	--	--
INTERSECTION SUBTOTAL				6	4	6	4	4	2	6	2	6	6	0	0
STH 16 & STH 73															
SB1	177+59.2'WB	26.6'	R	1	--	--	--	--	--	--	--	--	--	--	1
SB2	177+59'WB'	26.6'	L	--	1	--	--	--	--	--	--	--	--	1	--
SB3	12+11'N'	26.6'	L	1	--	--	--	--	--	--	--	--	--	--	1
SB4	12+11'N'	26.6'	R	--	1	--	--	--	--	--	--	--	--	1	--
SB5	178+68'WB'	26.7'	L	1	--	--	--	--	--	--	--	--	--	--	1
SB6	178+68'WB'	26.6'	R	--	1	--	--	--	--	--	--	--	--	1	--
SB7	10+97.5'S'	26.7'	R	1	--	--	--	--	--	--	--	--	--	--	1
SB8	10+97'S'	28.5'	L	--	1	--	--	--	--	--	--	--	--	1	--
INTERSECTION SUBTOTAL				4	4	0	0	0	0	0	0	0	0	4	4
CATEGORY 0010 TOTAL				10	8	6	4	4	2	6	2	6	6	4	4

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL LOOP DETECTORS

LOCATION / LOOP NO.	STATION **	OFFSET	L/R	SIZE FT X FT	NO. OF TURNS	INSTALLATION METHOD	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010									
STH 16 & INDUSTRIAL DR. / DIX ST.									
11	129+91'EB'	6.0'	L	6 X 20	3	SDD: LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)	72	222	305
12	130+19'EB'	6.0'	L	6 X 20	3	"	72	222	305
21	133+64'WB'	12.0'	L	6 X 20	3	"	68	210	282
31	12+68'ID'	6.0'	R	6 X 6	3	SDD: LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	104	318	128
32	13+28'ID'	6.0'	R	6 X 20	3	SDD: LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)	108	330	242
33	13+57'ID'	6.0'	R	6 X 20	3	"	106	324	242
34	13+71'ID'	5.8'	R	6 X 6	4	"	100	406	242
41	15+53'ID'	6.6'	L	6 X 20	3	"	126	384	270
42	15+26'ID'	6.0'	L	6 X 20	3	"	120	366	270
43	15+10'ID'	6.0'	L	6 X 6	4	"	124	502	270
44	15+39'ID'	18.0'	L	6 X 20	4	"	120	486	322
45	15+12'ID'	17.9'	L	6 X 20	3	"	104	318	322
61	127+11'EB'	12.0'	R	6 X 20	4	"	68	278	592
51	131+78'WB'	6.1'	R	6 X 20	3	"	80	246	94
52	131+50'WB'	6.1'	R	6 X 20	3	"	94	288	94
81	13+43'ID'	17.9'	R	6 X 20	4	"	110	446	97
82	13+73'ID'	17.6'	R	6 X 20	3	"	80	246	97
INTERSECTION SUBTOTAL							1,656	5,592	4,174
STH 16 & STH 73									
21	180+91'WB'	6.0'	L	6 X 12	4	SDD: LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)	72	294	452
41	10+97'S'	10.0'	R	6 X 20	3	"	94	288	127
61	175+35'WB'	6.0'	R	6 X 6	3	"	60	186	242
81	12+08'N'	10.0'	L	6 X 20	3	"	90	276	117
INTERSECTION SUBTOTAL							316	1,044	938
CATEGORY 0010 TOTAL							1,972	6,636	5,112

* ADDITIONAL QUANTITY FOUND ELSEWHERE
** LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP & FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

PEDESTRIAN PUSH BUTTONS

LOCATION / BASE NUMBER	658.0500 PEDESTRIAN PUSH BUTTONS EACH
CATEGORY 0010	
STH 16 & INDUSTRIAL DR. / DIX ST.	
SB1	1
SB2	1
SB3	1
SB4	1
SB7	1
SB8	1
SB9	1
SB10	1
INTERSECTION SUBTOTAL	8
STH 16 & STH 73	
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
INTERSECTION SUBTOTAL	8
CATEGORY 0010 TOTAL	16

TRAFFIC SIGNAL HEADS

LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0120 TRAFFIC SIGNAL FACE 5-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0165 TRAFFIC SIGNAL FACE 5-12 INCH HORIZONTAL EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0215 BACK PLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACK PLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0225 BACK PLATES SIGNAL FACE 5 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH
CATEGORY 0010																			
STH 16 & INDUSTRIAL DR. / DIX ST.																			
	SB1	2	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		3	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		6B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB2	13	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		17	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		8A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB3	18	--	--	--	1	--	1	1	1	--	--	--	1	--	--	--	--	
	SB4	4A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
		6A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB5	1	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		11	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
	SB6	4	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
		12	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
	SB7	8	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		9	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		2A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB8	14	--	--	1	--	--	1	1	1	--	1	1	--	--	1	--	--	
		16	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		4B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB9	15	--	--	--	--	1	1	1	1	--	1	1	--	--	1	--	--	
	SB10	2B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
		8B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB11	5	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
		7	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
	SB12	6	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
		10	--	1	--	--	--	--	--	--	1	2	1	--	1	--	--	--	
INTERSECTION SUBTOTAL			9	6	1	1	1	12	12	12	6	14	8	10	6	2	8	8	
STH 16 & STH 73																			
	SB1	1	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		5	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		4A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB2	6	--	--	--	1	--	1	1	1	--	--	--	1	--	--	--	--	
		4B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB3	8	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		10	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		2A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB4	9	--	--	--	1	--	1	1	1	--	--	--	1	--	--	--	--	
		2B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB5	2	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		4	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		8B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB6	3	--	--	--	1	--	1	1	1	--	--	--	1	--	--	--	--	
		8A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB7	7	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		11	1	--	--	--	--	1	1	1	--	--	--	1	--	--	--	--	
		6B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
	SB8	12	--	--	--	1	--	1	1	1	--	--	--	1	--	--	--	--	
		6A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	
INTERSECTION SUBTOTAL			8	0	0	4	0	12	12	12	0	0	0	12	0	0	8	8	
CATEGORY 0010 TOTAL			17	6	1	5	1	24	24	24	6	14	8	22	6	2	16	16	

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

LOCATION	FROM - TO	655.0240 * CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CATEGORY 0010					
STH 16 & INDUSTRIAL DR. / DIX ST.					
	CB1 - SB1	136	--	--	--
	CB1 - SB2	--	125	--	--
	CB1 - SB3	246	--	--	--
	CB1 - SB4	236	--	--	--
	CB1 - SB5	--	316	--	--
	CB1 - SB6	--	374	--	--
	CB1 - SB7	392	--	--	--
	CB1 - SB8	--	385	--	--
	CB1 - SB9	297	--	--	--
	CB1 - SB10	247	--	--	--
	CB1 - SB11	--	237	--	--
	CB1 - SB12	--	142	--	--
	CB1 - SB1	--	--	--	79
	SB1 - SB2	--	--	--	43
	SB2 - SB3	--	--	--	140
	SB3 - SB4	--	--	--	51
	SB4 - SB5	--	--	--	67
	SB5 - SB6	--	--	--	135
	SB6 - SB7	--	--	--	120
	SB7 - SB8	--	--	--	39
	SB8 - SB9	--	--	--	148
	SB9 - SB10	--	--	--	160
	SB10 - SB11	--	--	--	112
	SB11 - SB12	--	--	--	169
	SB12 - CB1	--	--	--	142
	CB1 - SB3	--	--	231	--
	SB3 - SB6	--	--	188	--
	CB1 - SB12	--	--	142	--
	SB12 - SB9	--	--	214	--
INTERSECTION SUBTOTAL		1554	1579	775	1405
STH 16 & STH 73					
	CB1 - SB1	39	--	--	--
	CB1 - SB2	110	--	--	--
	CB1 - SB3	172	--	--	--
	CB1 - SB4	242	--	--	--
	CB1 - SB5	247	--	--	--
	CB1 - SB6	180	--	--	--
	CB1 - SB7	149	--	--	--
	CB1 - SB8	82	--	--	--
	CB1 - SB1	--	--	--	39
	SB1 - SB2	--	--	--	104
	SB2 - SB3	--	--	--	104
	SB3 - SB4	--	--	--	125
	SB4 - SB5	--	--	--	86
	SB5 - SB6	--	--	--	111
	SB6 - SB7	--	--	--	78
	SB7 - SB8	--	--	--	114
	SB8 - CB1	--	--	--	105
	CB1 - SB8	--	--	81	--
	SB8 - SB6	--	--	147	--
	CB1 - SB2	--	--	112	--
	SB2 - SB4	--	--	169	--
INTERSECTION SUBTOTAL		1221	0	509	866
CATEGORY 0010 TOTAL		2775	1579	1284	2271

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

LOCATION	FROM SIGNAL BASE - TO SIGNAL HEAD	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 * CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010					
STH 16 & INDUSTRIAL DR. / DIX ST.					
	SB1 - 2	53	--	--	--
	- 3	41	--	--	--
	- 6B	16	--	--	--
	- BUTTON	--	--	--	6
	SB2 - 13	20	--	--	--
	- 17	20	--	--	--
	- 8A	16	--	--	--
	- BUTTON	--	--	--	6
	SB3 - 18	49	--	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
	SB4 - 4A	16	--	--	--
	- 6A	16	--	--	--
	- BUTTON	--	--	--	6
	SB5 - 1	20	--	--	--
	- 11	--	20	--	--
	SB6 - 4	--	20	--	--
	- 12	--	20	--	--
	- LUMINAIRE	--	--	270	--
	SB7 - 8	53	--	--	--
	- 9	41	--	--	--
	- 2A	16	--	--	--
	- BUTTON	--	--	--	6
	SB8 - 14	--	49	--	--
	- 16	20	--	--	--
	- 4B	16	--	--	--
	- BUTTON	--	--	--	6
	SB9 - 15	--	49	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
	SB10 - 2B	16	--	--	--
	- 8B	16	--	--	--
	- BUTTON	--	--	--	6
	SB11 - 5	--	20	--	--
	- 7	20	--	--	--
	SB12 - 6	--	20	--	--
	- 10	--	20	--	--
	- LUMINAIRE	--	--	270	--
INTERSECTION SUBTOTAL		465	218	810	48
STH 16 & STH 73					
	SB1 - 1	18	--	--	--
	- 5	18	--	--	--
	- 4A	16	--	--	--
	- BUTTON	--	--	--	6
	SB2 - 6	39	--	--	--
	- 4B	16	--	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
	SB3 - 8	18	--	--	--
	- 10	18	--	--	--
	- 2A	16	--	--	--
	- BUTTON	--	--	--	6
	SB4 - 9	39	--	--	--
	- 2B	16	--	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
	SB5 - 2	18	--	--	--
	- 4	18	--	--	--
	8B	16	--	--	--
	- BUTTON	--	--	--	6
	SB6 - 3	39	--	--	--
	8A	16	--	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
	SB7 - 7	18	--	--	--
	- 11	18	--	--	--
	- 6B	16	--	--	--
	- BUTTON	--	--	--	6
	SB8 - 12	39	--	--	--
	- 6A	16	--	--	--
	- BUTTON	--	--	--	6
	- LUMINAIRE	--	--	135	--
INTERSECTION SUBTOTAL		428	0	540	48
CATEGORY 0010 TOTAL		893	218	1,350	96

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

GENERATORS

LOCATION	661.0300 GENERATORS DAY
PROJECT 1401-02-71	
CATEGORY 0010	
STH 73	30
CATEGORY 0010 TOTAL	30

REMOVE AND SALVAGE DETECTION SYSTEM

LOCATION	SPV.0105.302 REMOVE AND SALVAGE DETECTION SYSTEM LS
PROJECT 1401-02-71	
CATEGORY 0010	
STH 16 & INDUSTRIAL DRIVE/DIX STREET	1
CATEGORY 0010 TOTAL	--

TRAFFIC SIGNAL SYSTEM INTEGRATOR

LOCATION	SPV.0105.306 TRAFFIC SIGNAL SYSTEMS INTEGRATOR LS
PROJECT 1401-02-71	
CATEGORY 0010	
PROJECT	1
CATEGORY 0010 TOTAL	--

TRAFFIC SIGNAL CONTROL

LOCATION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200.001 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 16 & INDUSTRIAL DRIVE/ DIX STREET) LS	SPV.0105.304 FURNISH AND INSTALL TRAFFIC SIGNAL CABINET AND CONTROLLER (STH 16 & IND/DIX) LS
CATEGORY 0010			
STH 16 & INDUSTRIAL DR. / DIX ST.			
CB1	1	1	1
INTERSECTION TOTAL	1	--	--

TRAFFIC SIGNAL CONTROL

LOCATION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200.002 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 16 & STH 73) LS	SPV.0105.305 FURNISH AND INSTALL TRAFFIC SIGNAL CABINET AND CONTROLLER (STH 16 & STH 73) LS
CATEGORY 0010			
STH 16 & STH 73			
CB1	1	1	1
INTERSECTION TOTAL	1	--	--
CATEGORY 0010 TOTAL	2	--	--

TEMPORARY SIGNALS

LOCATION	661.0100.001 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STH 73) LS	661.0200.001 TEMP TRAFFIC SIGNALS FOR INTERSECTIONS (STH 16 & INDUSTRIAL/DIX ST) LS
PROJECT 1401-02-71		
CATEGORY 0010		
STH 73	1	--
STH 16 & INDUSTRIAL DRIVE/DIX STREET	--	1
CATEGORY 0010 TOTALS	--	--

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.001 SIGNAL MOUNTING HARDWARE (STH 16 & INDUSTRIAL DRIVE/DIX STREET) LS	658.5069.002 SIGNAL MOUNTING HARDWARE (STH 16 & STH 73) LS
PROJECT 1401-02-71		
CATEGORY 0010		
STH 16 & INDUSTRIAL DRIVE/DIX STREET	1	--
STH 16 & STH 73	--	1
CATEGORY 0010 TOTALS	--	--

TRAFFIC SIGNAL REMOVAL

LOCATION	SPV.0105.300 REMOVE TRAFFIC SIGNAL (STH 16 & INDUSTRIAL DRIVE/DIX STREET) LS	SPV.0105.301 REMOVE TRAFFIC SIGNAL (STH 16 & STH 73) LS
PROJECT 1401-02-71		
CATEGORY 0010		
STH 16 & INDUSTRIAL DRIVE/DIX STREET	1	--
STH 16 & STH 73	--	1
CATEGORY 0010 TOTALS	--	--

LIGHTING BASES, POLES, ARMS, FIXTURES AND WIRE

State Project No. 1401-02-71

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105* CONCRETE BASES TYPE 5 EACH	SPV.0060.101* TRANSFORMER BASE BREAKAWAY-BLACK 11 1/2-INCH BOLT CIRCLE EACH	SPV.0060.102 POLES TYPE 5 ALUMINUM-BLACK EACH	SPV.0060.103 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT- BLACK EACH	SPV.0060.104 LUMINAIRE UTILITY LED B-BLACK 139 WATT EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0030									
SL 109	127+03.0WB	33.0'	LT	1	1	1	1	1	123
SL 110	127+53.9EB	38.3'	RT	-	-	SL110 to be installed under State Project No.1401-02-74		-	-
SL 111	128+17.2WB	33.0'	LT	1	1	1	1	1	123
SL 112	128+79.7EB	46.0'	RT	1	1	1	1	1	123
SL 113	129+42.9WB	36.4'	LT	1	1	1	1	1	123
SL 114	15+77.8ID	46.0'	LT	1	1	1	1	1	123
SL 115	12+78.7ID	46.0'	RT	1	1	1	1	1	123
SL 116	132+65.0WB	46.0'	LT	1	1	1	1	1	123
SL 117	133+26.0EB	34.0'	RT	1	1	1	1	1	123
SL 118	133+90.8WB	34.0'	LT	1	1	1	1	1	123
SL 119	134+51.9EB	34.0'	RT	1	1	1	1	1	123
SL 120	135+16.5WB	34.0'	LT	1	1	1	1	1	123
SL 121	135+77.6EB	34.0'	RT	1	1	1	1	1	123
SL 122	136+42.1WB	34.0'	LT	1	1	1	1	1	123
SL 123	137+03.3EB	33.2'	RT	1	1	1	1	1	123
SL 124	137+67.6WB	33.8'	LT	1	1	1	1	1	123
SL 125	138+29.1EB	30.7'	RT	1	1	1	1	1	123
SL 126	138+91.2WB	27.9'	LT	1	1	1	1	1	123
SL 127	139+56.2WB	26.7'	RT	1	1	1	1	1	123
SL 128	140+17.9WB	22.0'	LT	1	1	1	1	1	123
SL 129	141+59.4WB	22.0'	RT	1	1	1	1	1	123
SL 130	143+10.5WB	22.0'	LT	1	1	1	1	1	123
SL 131	144+60.6WB	22.0'	RT	1	1	1	1	1	123
SL 132	146+08.7WB	22.0'	LT	1	1	1	1	1	123
SL 133	147+58.8WB	25.2'	RT	1	1	1	1	1	123
SL 134	149+12.4WB	22.0'	LT	1	1	1	1	1	123
SL 135	150+45.5WB	22.0'	RT	1	1	1	1	1	123
SL 136	151+92.9WB	22.0'	LT	1	1	1	1	1	123
SL 137	153+44.1WB	22.0'	LT	1	1	1	1	1	123
SL 138	155+07.2WB	22.0'	LT	1	1	1	1	1	123
SHEET TOTALS				**29**	**29**	**29**	**29**	**29**	**3567**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING BASES, DECORATIVE POLE ASSEMBLIES AND WIRE

State Project No. 1401-02-71

LIGHT NUMBER	STATION	OFFSET	R/L	SPV.0060.107 MODIFIED CONCRETE BASE - TYPE 5 EACH	SPV.0060.101* TRANSFORMER BASE BREAKAWAY-BLACK 11 1/2-INCH BOLT CIRCLE EACH	SPV.0060.105* DECORATIVE POLE ASSEMBLY TYPE 1 EACH	SPV.0060.106* DECORATIVE POLE ASSEMBLY TYPE 2 EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0030									
SL 224	170+79.5WB	28.0'	RT	1	--	--	1	210	
SL 225	171+35.2WB	28.0'	LT	1	--	--	1	210	
SL 226	171+85.5WB	28.0'	RT	1	--	--	1	210	
SL 227	172+54.7WB	28.0'	LT	1	--	--	1	210	
SL 228	173+13.7WB	28.0'	RT	1	--	--	1	210	
SL 229	173+70.1WB	24.0'	LT	1	--	--	1	210	
SL 230	173+73.1WB	24.0'	RT	1	--	--	1	210	
SL 231	174+78.5WB	27.0'	LT	1	--	--	1	210	
SL 232	174+78.8WB	23.6'	RT	1	--	--	1	210	
SL 233	175+36.1WB	27.0'	LT	1	--	--	1	210	
SL 234	175+98.0WB	27.0'	RT	1	--	--	1	210	
SL 235	176+54.8WB	27.0'	LT	1	--	--	1	210	
SL 236	177+15.9WB	27.0'	RT	1	--	--	1	210	
SL 237	179+19.2WB	27.0'	RT	1	--	--	1	210	
SL 238	179+71.8WB	27.0'	LT	1	--	--	1	210	
SL 239	180+29.0WB	27.0'	RT	1	--	--	1	210	
SL 240	180+76.6WB	27.0'	LT	1	--	--	1	210	
SL 241	181+40.1WB	27.0'	RT	1	--	--	1	210	
SL 242	182+19.0WB	28.0'	LT	1	--	--	1	210	
SL 243	182+75.8WB	28.0'	RT	1	--	--	1	210	
SL 244	183+37.3WB	28.0'	LT	1	--	--	1	210	
SL 245	183+90.4WB	22.0'	RT	1	--	--	1	210	
SL 246	184+63.7WB	28.0'	LT	1	--	--	1	210	
SHEET TOTALS				**23**	**0**	**0**	**23**	**4830**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING BASES, DECORATIVE POLE ASSEMBLIES AND WIRE

State Project No. 1401-02-71

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105* CONCRETE BASES TYPE 5 EACH	SPV.0060.101* TRANSFORMER BASE BREAKAWAY-BLACK 11 1/2-INCH BOLT CIRCLE EACH	SPV.0050.105* DECORATIVE POLE ASSEMBLY TYPE 1 EACH	SPV.0060.106* DECORATIVE POLE ASSEMBLY TYPE 2 EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0030									
SL 200	156+11.5WB	24.1'	RT	1	1	1	--	105	
SL 201	156+65.1WB	22.0'	LT	1	1	1	--	105	
SL 202	157+18.6WB	22.0'	RT	1	1	1	--	105	
SL 203	157+72.1WB	22.0'	LT	1	1	1	--	105	
SL 204	158+25.6WB	22.0'	RT	1	1	1	--	105	
SL 205	158+77.2WB	22.0'	LT	1	1	1	--	105	
SL 206	159+48.7WB	28.0'	RT	1	1	1	--	105	
SL 207	160+06.3WB	28.0'	LT	1	1	1	--	105	
SL 208	160+64.9WB	28.0'	RT	1	1	1	--	105	
SL 209	161+19.0WB	28.0'	LT	1	1	1	--	105	
SL 210	161+82.2WB	28.0'	RT	1	1	1	--	105	
SL 211	162+42.9WB	24.0'	LT	1	1	1	--	105	
SL 212	163+09.9WB	24.0'	RT	1	1	1	--	105	
SL 213	163+71.5WB	28.0'	LT	1	1	1	--	105	
SL 214	164+41.6WB	28.0'	RT	1	1	1	--	105	
SL 215	165+06.8WB	28.0'	LT	1	1	1	--	105	
SL 216	165+72.7WB	28.0'	RT	1	1	1	--	105	
SL 217	166+38.8WB	24.0'	LT	1	1	1	--	105	
SL 218	167+07.8WB	24.0'	RT	1	1	1	--	105	
SL 219	167+67.3WB	28.0'	LT	1	1	1	--	105	
SL 220	168+27.0WB	28.0'	RT	1	1	1	--	105	
SL 221	168+86.8WB	28.0'	LT	1	1	1	--	105	
SL 222	169+46.5WB	28.0'	RT	1	1	1	--	105	
SL 223	170+01.1WB	28.0'	LT	1	1	1	--	105	
SL 247	185+14.4WB	22.0'	RT	1	1	1	--	105	
SL 248	185+80.7WB	28.0'	LT	1	1	1	--	105	
SL 249	186+22.5WB	28.0'	RT	1	1	1	--	105	
SL 250	186+86.7WB	28.0'	LT	1	1	1	--	105	
SL 251	187+32.1WB	28.0'	RT	1	1	1	--	105	
SL 252	187+79.5WB	28.0'	LT	1	1	1	--	105	
SL 253	188+59.8WB	28.0'	RT	1	1	1	--	105	
SL 254	189+17.5WB	28.0'	LT	1	1	1	--	105	
SL 255	189+68.5WB	28.0'	RT	1	1	1	--	105	
SL 256	190+28.4WB	27.1'	LT	1	1	1	--	105	
SL 257	190+81.9WB	26.1'	RT	1	1	1	--	105	
SL 258	191+34.6WB	25.0'	LT	1	1	1	--	105	
SL 259	191+93.7WB	25.0'	RT	1	1	1	--	105	
SL 260	192+55.1WB	25.0'	LT	1	1	1	--	105	
SL 261	193+09.7WB	25.0'	RT	1	1	1	--	105	
SL 262	193+56.9WB	25.0'	LT	1	1	1	--	105	
SL 263	194+06.4WB	25.0'	RT	1	1	1	--	105	
SL 264	194+55.9WB	24.4'	LT	1	1	1	--	105	
SHEET TOTALS				**42**	**42**	**42**	**0**	**4410**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

Sheet 17 of 20

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 2

State Project No. 1401-02-71

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCH. 40 2-INCH LF	655.0635 * ELECTRICAL WIRE LIGHTING 2 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0030					
CB 100	-	SL 115	114	363	
CB 100	-	SL 112	353	1440	
SL 112	-	End of Curb	64	0	End conduit inline with end of curb and cap both ends
CB 100	-	PB 1	159	1360	
PB 1	-	SL 114	170	724	
SL 114	-	SL 113	107	456	
SL 113	-	SL 111	126	532	
SL 111	-	SL 109	114	484	
SL 109	-	PRJ. BOUNDARY	65	204	
PB 1	-	SL 116	115	504	
SL 116	-	SL 118	127	536	
SL 118	-	SL 120	126	532	
SL 120	-	SL 122	126	532	
SL 122	-	SL 124	126	532	
SL 124	-	SL 126	127	402	
CB 100	-	SL 117	108	460	
SL 117	-	SL 119	126	532	
SL 119	-	SL 121	126	532	
SL 121	-	SL 123	126	532	
SL 123	-	SL 125	126	532	
SL 125	-	SL 127	129	408	
CB 200	-	SL 135	66	292	Refer to plan drawings for additional installations in common trench.
SL 135	-	SL 133	287	1176	Refer to plan drawings for additional installations in common trench.
SL 133	-	SL 131	298	1220	Refer to plan drawings for additional installations in common trench.
SL 131	-	SL 129	304	933	Refer to plan drawings for additional installations in common trench.
CB 200	-	SL 134	244	1004	
SL 134	-	SL 132	305	1248	
SL 132	-	SL 130	298	1220	
SL 130	-	SL 128	296	909	
CB 200	-	PB 9	340	1404	Refer to plan drawings for additional installations in common trench.
PB 9	-	SL 200	198	836	Refer to plan drawings for additional installations in common trench.
SL 200	-	SL 202	107	456	Refer to plan drawings for additional installations in common trench.
SL 202	-	SL 204	107	456	Refer to plan drawings for additional installations in common trench.
SL 204	-	SL 206	123	520	Refer to plan drawings for additional installations in common trench.
SL 206	-	SL 208	116	492	Refer to plan drawings for additional installations in common trench.
SL 208	-	SL 210	117	496	Refer to plan drawings for additional installations in common trench.
SL 210	-	SL 212	130	548	Refer to plan drawings for additional installations in common trench.
SL 212	-	SL 214	134	564	Refer to plan drawings for additional installations in common trench.
SL 214	-	SL 216	131	552	Refer to plan drawings for additional installations in common trench.
SL 216	-	SL 218	137	576	Refer to plan drawings for additional installations in common trench.
SL 218	-	SL 220	121	512	Refer to plan drawings for additional installations in common trench.
SL 220	-	SL 222	122	387	Refer to plan drawings for additional installations in common trench.
CB 200	-	SL 136	164	684	
SL 136	-	SL 137	151	632	
SL 137	-	SL 138	164	684	
SL 138	-	SL 201	163	680	
SL 201	-	SL 203	107	456	
SL 203	-	SL 205	105	448	
SL 205	-	SL 207	129	544	
SL 207	-	SL 209	113	480	
SL 209	-	SL 211	126	532	
SL 211	-	SL 213	131	552	
SL 213	-	SL 215	135	568	
SL 215	-	SL 217	134	564	
SL 217	-	SL 219	131	552	
SL 219	-	SL 221	120	508	
SL 221	-	SL 223	118	375	
SHEET TOTALS			**8732**	**35657**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

State Project No. 1401-02-71

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCH. 40 2-INCH LF	655.0635 * ELECTRICAL WIRE LIGHTING 2 AWG LF	655.0640 ELECTRICAL WIRE LIGHTING 1 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0030						
CB 300	-	SL 230	145	1064	--	Refer to plan drawings for additional installations in common trench.
SL 230	-	SL 228	61	476	--	Refer to plan drawings for additional installations in common trench.
SL 228	-	SL 226	128	945	--	Refer to plan drawings for additional installations in common trench.
SL 226	-	SL 224	109	580	--	Refer to plan drawings for additional installations in common trench.
SL 230	-	PB 2	49	420	--	Refer to plan drawings for additional installations in common trench.
PB 2	-	SL 229	5	112	--	
SL 229	-	SL 227	116	861	--	
SL 227	-	SL 225	123	650	--	
CB 300	-	SL 232	228	1645	--	Refer to plan drawings for additional installations in common trench.
SL 232	-	SL 234	122	903	--	
SL 234	-	SL 236	118	875	--	
SL 236	-	PB 5	36	329	--	
SL 236	-	PB 5	36	329	--	
PB 5	-	PB 6	138	1043	--	Refer to plan drawings for additional installations in common trench.
PB 6	-	SL 237	43	378	--	Refer to plan drawings for additional installations in common trench.
PB 6	-	SL 237	43	378	--	Refer to plan drawings for additional installations in common trench.
SL 237	-	SL 239	110	819	--	
SL 239	-	SL 241	111	826	--	
SL 241	-	SL 243	136	1001	--	
SL 243	-	SL 245	118	625	--	
PB 5	-	PB 7	68	553	--	Refer to plan drawings for additional installations in common trench.
PB 6	-	PB 8	67	546	--	Refer to plan drawings for additional installations in common trench.
CB 300	-	PB 2	196	1449	--	Refer to plan drawings for additional installations in common trench.
PB 2	-	SL 231	104	805	--	
SL 231	-	SL 233	58	455	--	
SL 233	-	SL 235	119	882	--	
SL 235	-	PB 3	90	707	--	
PB 3	-	PB 4	143	1106	--	Refer to plan drawings for additional installations in common trench.
PB 4	-	SL 238	98	763	--	Refer to plan drawings for additional installations in common trench.
SL 238	-	SL 240	105	784	--	
SL 240	-	SL 242	142	1043	--	
SL 242	-	SL 244	118	875	--	
SL 244	-	SL 246	130	685	--	
PB 3	-	PRJ. BOUNDARY	92	0	--	Refer to plan drawings for additional installations in common trench.
PB 4	-	PRJ. BOUNDARY	85	0	--	Refer to plan drawings for additional installations in common trench.
CB 300	-	PP 1	260	0	1,080	Refer to plan drawings for additional installations in common trench.
CB 400	-	SL 247	95	306	--	
CB 400	-	SL 248	84	364	--	
SL 248	-	SL 250	107	456	--	
SL 250	-	SL 252	93	400	--	
SL 252	-	SL 254	138	580	--	
SL 254	-	SL 256	111	472	--	
SL 256	-	SL 258	107	456	--	
SL 258	-	SL 260	106	452	--	
SL 260	-	SL 262	96	412	--	
SL 262	-	SL 264	99	424	--	
SL 264	-	PRJ. BOUNDARY	4	0	--	
CB 400	-	SL 249	42	196	--	
SL 249	-	SL 251	110	468	--	
SL 251	-	SL 253	128	540	--	
SL 253	-	SL 255	109	464	--	
SL 255	-	SL 257	113	480	--	
SL 257	-	SL 259	119	504	--	
SL 259	-	SL 261	130	548	--	
SL 261	-	SL 263	97	416	--	
SL 263	-	PRJ. BOUNDARY	69	0		
SHEET TOTALS			**5807**	**32850**	**1080**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 3

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LIGHTING CONTROL

State Project No. 1401-02-71

CABINET NUMBER	STATION	OFFSET	R/L	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	659.2130 LIGHTING CONTROL CABINET 120/240 30-inch EACH	SPV.0060.108 LIGHTING CONTROL CABINET CB300-SPECIAL EACH	656.0400 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL LS
ALL ITEMS ARE CATEGORY 0030							
CB 100	132+25.3EB	48.5'	RT	1	1	--	1
CB 200	150+92.7WB	43.4'	RT	1	1	--	1
CB 300	10+00.0SBD	36.4'	LT	1	--	1	1
CB 400	185+95.4WB	43.9'	RT	1	1	--	1
SHEET TOTALS				4	3	1	4

PULL BOXES

State Project No. 1401-02-71

PULL BOX NUMBER	STATION	OFFSET	R/L	653.0140 PULL BOXES STEEL 24x42-Inch EACH
ALL ITEMS ARE CATEGORY 0030				
PB 1	131+51.6WB	49.7'	LT	1
PB 2	173+74.8WB	24.0'	LT	1
PB 3	177+44.4WB	27.0'	LT	1
PB 4	178+74.7WB	27.0'	LT	1
PB 5	177+50.2WB	27.0'	RT	1
PB 6	178+77.1WB	26.8'	RT	1
PB 7	177+84.8WB	64.9'	RT	1
PB 8	178+40.8WB	65.0'	RT	1
PB 9	154+10.2WB	28.0'	RT	1
SHEET TOTALS				9

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-07-28 REV: 0

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CITY OF COLUMBUS FIBER OPTIC DUCT SYSTEM
CONDUIT

State Project No. 1401-02-71

FROM	-	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCH. 40 2-INCH LF
ALL ITEMS ARE CATEGORY 0030			
Prop. Line	-	PB 10	9
PB 10	-	PB 11	633
PB 11	-	PB 12	533
PB 12	-	PB 13	493
PB 13		PB 14	523
PB 14	-	PB 15	406
PB 15	-	PB 16	371
PB 16	-	PB 17	378
PB 17	-	PB 18	94
PB 18	-	Prop. Line	13
SHEET TOTALS			3453

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

CITY OF COLUMBUS FIBER OPTIC DUCT SYSTEM
PULL BOXES

State Project No. 1401-02-71

PULL BOX NUMBER	STATION	OFFSET	R/L	SPV.0060.300 PULL BOXES NON-CONDUCTIVE 24x36-Inch EACH
ALL ITEMS ARE CATEGORY 0030				
PB 10	140+44.5WB	24.5'	RT	1
PB 11	146+77.3WB	24.5'	RT	1
PB 12	152+09.3WB	24.5'	RT	1
PB 13	157+09.3WB	24.5'	RT	1
PB 14	162+27.9WB	23.7'	RT	1
PB 15	166+26.7WB	23.7'	RT	1
PB 16	169+93.9WB	30.5'	RT	1
PB 17	173+68.5WB	23.6'	RT	1
PB 18	173+90.0WB	62.8'	LT	1
SHEET TOTALS				9

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-08-08 REV: 2

WATER PIPE AND FITTINGS CATEGORY 0020								
				SPV.0090.233	SPV.0090.234	SPV.0090.235	SPV.0090.236	SPV.0090.237	SPV.0060.259
				4-INCH WATER MAIN-GRANULAR BACKFILL	6-INCH WATER MAIN-GRANULAR BACKFILL	8-INCH WATER MAIN-GRANULAR BACKFILL	10-INCH WATER MAIN-GRANULAR BACKFILL	12-INCH WATER MAIN-GRANULAR BACKFILL	DUCTILE IRON PIPE NITRILE GASKET
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	EACH
10+00		14+00	DIX STREET				414.5		
14+00		18+00	INDUSTRIAL DRIVE			14.5	377		
125+50		130+50	JAMES STREET					132.5	
130+50		135+50	JAMES STREET					501.5	
135+50		140+50	JAMES STREET		11	226.5		500	
140+50		145+50	JAMES STREET		4.5	66	21.5	500.5	
145+50		150+50	JAMES STREET	20				500	
150+50		155+50	JAMES STREET			43.5	127.5	501	
155+50		160+50	JAMES STREET	10.5	11	147.5	94.5	505.5	
160+50		165+50	JAMES STREET	17.5	8	124.5		500	
165+50		170+50	JAMES STREET			248		5	
170+50		175+50	JAMES STREET		22	45	90.5	500	10
175+50		180+50	JAMES STREET		19.5		160	500	
180+50		185+50	JAMES STREET	9.5				500	
185+50		190+50	JAMES STREET	13		116		156.5	
			TOTALS=	70.5	76	1031.5	1285.5	5302.5	10

WATER MAIN OR WATER SERVICE INSULATION CATEGORY 0020				
				SPV.0090.255
				PIPE INSULATION
STATION	TO	STATION	LOCATION	LF
14+00		18+00	INDUSTRIAL DRIVE	8
125+50		130+50	JAMES STREET	16
130+50		135+50	JAMES STREET	8
135+50		140+50	JAMES STREET	32
140+50		145+50	JAMES STREET	48
145+50		150+50	JAMES STREET	72
150+50		155+50	JAMES STREET	32
155+50		160+50	JAMES STREET	56
160+50		165+50	JAMES STREET	96
165+50		170+50	JAMES STREET	136
170+50		175+50	JAMES STREET	96
175+50		180+50	JAMES STREET	120
180+50		185+50	JAMES STREET	16
185+50		190+50	JAMES STREET	8
			TOTALS =	744

WATER MAIN VALVES AND FLUSHING ASSEMBLY CATEGORY 0020								
			SPV.0060.238	SPV.0060.239	SPV.0060.240	SPV.0060.241	SPV.0060.242	SPV.0060.262
			4-INCH	6-INCH	8-INCH	10-INCH	12-INCH	2-INCH FLUSHING ASSEMBLY
STATION	LOCATION	OFFSET	EACH	EACH	EACH	EACH	EACH	EACH
10+00	DIX STREET	LT 21.5'				1		
14+72	INDUSTRIAL DRIVE	LT 28'				1		
14+81.5	INDUSTRIAL DRIVE	LT 25'				1		
17+68	INDUSTRIAL DRIVE	RT 3.5'				1		
17+68	INDUSTRIAL DRIVE	RT 7'			1			
129+26	JAMES STREET	LT 33'					1	
130+54	JAMES STREET	LT 20'					1	
133+54	JAMES STREET	LT 17'					1	
136+41	JAMES STREET	LT 127.5'			1			
137+04	JAMES STREET	LT 13.4'					1	
137+09	JAMES STREET	LT 18.5'			1			
137+14	JAMES STREET	LT 13.5'					1	
137+69	JAMES STREET	LT 8'			1			
137+74	JAMES STREET	LT 13'					1	
139+17	JAMES STREET	LT 8'		1				
142+58	JAMES STREET	LT 13'					1	
142+60	JAMES STREET	RT 52'		1				
142+63	JAMES STREET	LT 8'			1			
142+63.5	JAMES STREET	RT 52'			1			
142+68	JAMES STREET	LT 13'					1	
144+45.5	JAMES STREET	LT 13'					1	
144+50.5	JAMES STREET	LT 18'				1		
144+55.5	JAMES STREET	LT 13'					1	
146+08	JAMES STREET	LT 23.5'	1					
149+40	JAMES STREET	LT 13'					1	
151+10.5	JAMES STREET	LT 13'					1	
151+15.5	JAMES STREET	LT 8'				1		
151+15.5	JAMES STREET	LT 18'				1		
151+20.5	JAMES STREET	LT 13'					1	
155+19	JAMES STREET	LT 11.5'					1	
155+24	JAMES STREET	LT 13.5'			1			
155+57	JAMES STREET	LT 14'			1			
155+58	JAMES STREET	LT 78.5'		1				
155+62	JAMES STREET	LT 80'			1			
155+86.5	JAMES STREET	RT 30'				1		
155+98	JAMES STREET	LT 10'					1	
159+03	JAMES STREET	LT 10'					1	
159+03.5	JAMES STREET	RT 65'	1					
159+08	JAMES STREET	RT 67'			1			
159+08	JAMES STREET	LT 5'			1			
159+08	JAMES STREET	LT 15'				1		
159+13	JAMES STREET	LT 10'					1	
162+63.5	JAMES STREET	LT 13'					1	
162+65.5	JAMES STREET	RT 64'		1				
162+68.5	JAMES STREET	RT 65'			1			
162+69'	JAMES STREET	LT 8'			1			
162+69'	JAMES STREET	LT 18'			1			
162+73.5	JAMES STREET	LT 13'					1	
166+59	JAMES STREET	LT 19'					1	
166+64	JAMES STREET	LT 14'			1			
166+64	JAMES STREET	LT 24'			1			
166+64	JAMES STREET	LT 71'						1
166+69	JAMES STREET	LT 19'					1	
170+31.5	JAMES STREET	LT 19'					1	
170+36.5	JAMES STREET	LT 14'			1			
170+36.5	JAMES STREET	LT 24'			1			
170+36.5	JAMES STREET	LT 56'						1
170+41.5	JAMES STREET	LT 19'					1	
174+07.5	JAMES STREET	LT 60'		1				
174+08.5	JAMES STREET	RT 65'		1				
174+11.5	JAMES STREET	LT 18.5'					1	
174+11.5	JAMES STREET	LT 62'			1			
174+16.5	JAMES STREET	LT 13.5'				1		
174+16.5	JAMES STREET	LT 23.5'			1			
174+21.5	JAMES STREET	LT 18.5'					1	
177+97.5	JAMES STREET	RT 69'		1				
178+00	JAMES STREET	LT 18'					1	
178+04.5	JAMES STREET	RT 70'				1		
178+05	JAMES STREET	LT 13'				1		
178+05	JAMES STREET	LT 23'				1		
178+10	JAMES STREET	LT 18'					1	
181+60	JAMES STREET	LT 18.5'					1	
181+69.5	JAMES STREET	RT 70.5'	1					
181+74	JAMES STREET	RT 71.5'					1	
185+51	JAMES STREET	LT 11'			1			
185+65	JAMES STREET	RT 58'	1					
185+70.5	JAMES STREET	RT 57.5'			1			
188+04	JAMES STREET	LT 56.5'						1
188+05	JAMES STREET	LT 15.5'			1			
191+82	JAMES STREET	RT 49.5'		1				
		TOTALS =	4	8	23	13	29	3

FILE NAME • C:\C3D\8117_COLUMBUS\10025\DWG\3-025-G-MQ.DWG PLOT DATE • 8/5/2016 11:18 AM PLOT BY • KLEMM, DAVID PLOT NAME • PLOT SCALE •

WATER MAIN ABANDONMENT					
CATEGORY 0020					
			SPV.0060.256	SPV.0060.257	SPV.0060.258
			ABANDON WATER MAIN (CUT OFF)	ABANDON WATER VALVE BOX	ABANDON HYDRANT
STATION	LOCATION	OFFSET	EACH	EACH	EACH
10+04	DIX STREET	LT 22'	1		
11+87.5	DIX STREET	LT 43.5'		1	1
12+17.5	DIX STREET	LT 30.5		1	
15+16.5	INDUSTRIAL DRIVE	RT 37'		1	
17+67	INDUSTRIAL DRIVE	LT 7'	1		
129+95	JAMES STREET	LT 65.5'	1		1
130+33	JAMES STREET	LT 61.5'		1	
133+06.5	JAMES STREET	LT 63'		1	1
136+33	JAMES STREET	LY 124'	1		
136+44.5	JAMES STREET	LT 79.5		1	
139+11	JAMES STREET	LT 30'			1
139+16	JAMES STREET	LT 40'		1	
142+57.5	JAMES STREET	RT 21.5'		1	
142+59	JAMES STREET	RT 40.5'	1		
143+55	JAMES STREET	LT 18.5'		1	
144+44	JAMES STREET	LT 31'	1		
144+45	JAMES STREET	LT 17'	1		
144+58.5	JAMES STREET	LT 29.5'		1	
144+74.5	JAMES STREET	LT 28.5'			1
146+08	JAMES STREET	LT 30.5		1	
146+84.5	JAMES STREET	LT 30'		1	
148+56	JAMES STREET	LT 13.5		1	
148+64	JAMES STREET	LT 23.5		1	
149+24.5	JAMES STREET	LT 26'			1
150+98.5	JAMES STREET	LT 44.5'	1		
150+99	JAMES STREET	LT 34'		1	
151+01	JAMES STREET	RT 45'	1		
153+48	JAMES STREET	LT 11.5'		1	
155+39	JAMES STREET	RT 34.5'		1	
155+39.5	JAMES STREET	RT 39'	1		
155+43.5	JAMES STREET	LT 24.5'		1	
155+55	JAMES STREET	LT 18'	1		
155+58	JAMES STREET	LT 75.5'	1		
155+76.5	JAMES STREET	LT 11.5'		1	
155+90.5	JAMES STREET	RT 28.5'	1		
156+16.5	JAMES STREET	LT 26'			1
158+82	JAMES STREET	RT 39.5'			1
158+83	JAMES STREET	RT 27.5'		1	
158+83	JAMES STREET	LT 14.5'		1	
159+03.5	JAMES STREET	RT 38.5'		1	
159+03.5	JAMES STREET	RT 61'	1		
162+37.5	JAMES STREET	LT 26'			1
162+38	JAMES STREET	LT 15'		1	
162+65.5	JAMES STREET	RT 63'	1		
162+66	JAMES STREET	RT 35'		1	
162+66	JAMES STREET	LT 39'	1		
163+6.5	JAMES STREET	LT 15'		1	
166+36.5	JAMES STREET	LT 25'			1
1666+36.5	JAMES STREET	LT 15.5		1	
170+02	JAMES STREET	LT 16'		1	
170+02	JAMES STREET	LT 26.5'			1
174+09	JAMES STREET	RT 61'	1		
174+08	JAMES STREET	RT 35.5'		1	
174+08	JAMES STREET	LT 35'		1	
174+08	JAMES STREET	LT 59'	1		
174+76	JAMES STREET	LT 15'		1	
174+85.5	JAMES STREET	LT 26'			1
174+84	JAMES STREET	LT 16.5		1	
177+97	JAMES STREET	RT 52.5'	1		
177+97	JAMES STREET	RT 35'		1	
177+87.5	JAMES STREET	LT 41'		1	1
177+88	JAMES STREET	LT 82'	1		
177+99	JAMES STREET	RT 59.5'		1	
178+40.5	JAMES STREET	RT 60'			1
181+47	JAMES STREET	LT 25'		1	
181+47	JAMES STREET	LT 26'			1
181+69.5	JAMES STREET	RT 61'	1		
181+74	JAMES STREET	RT 35.5'	1		
181+74	JAMES STREET	RT 38.5'		1	
181+58	JAMES STREET	LT 14.5'	1		
185+44	JAMES STREET	LT 12.5'	1		
185+44.5	JAMES STREET	LT 11.5'		1	
185+44.5	JAMES STREET	LT 12.5'		1	
185+57.5	JAMES STREET	RT 37.5'		1	
185+64	JAMES STREET	RT 56.5'	1		
191+53	JAMES STREET	RT 97.5'		1	
191+53.5	JAMES STREET	RT 99'			1
		TOTALS =	25	40	16

HYDRANTS					
CATEGORY 0020					
		SPV.0060.243		SPV.0060.244	SPV.0090.245
		HYDRANT ASSEMBLY		RELOCATE EXISTING HYDRANT	6-INCH HYDRANT LEAD
STATION	LOCATION	OFFSET	EACH	EACH	LF
11+90.5	DIX STREET	LT 33.5'	1		13.5
129+16	JAMES STREET	LT 33.5'	1		5
132+66.5	JAMES STREET	LT 45'	1		27
138+95	JAMES STREET	LT 37.5'	1		24.5
143+49.5	JAMES STREET	LT 25.5'	1		12.5
149+50	JAMES STREET	LT 22'	1		9
151+82	JAMES STREET	LT 25.5'	1		12.5
155+92.5	JAMES STREET	LT 25'	1		12.5
158+70.5	JAMES STREET	RT 22'	1		32
162+26.5	JAMES STREET	LT 27'	1		14
166+30.5	JAMES STREET	RT 22'	1		41
169+98.5	JAMES STREET	LT 27.5'	1		8.5
174+59	JAMES STREET	LT 43'	1		47.5
177+87.5	JAMES STREET	LT 46'	1		17.5
178+40	JAMES STREET	RT 58.5'	1		35.2
181+37'	JAMES STREET	LT 26.5'	1		8.5
185+00.5	JAMES STREET	LT 27.5'		1	12
187+77.5	JAMES STREET	LT 27.5'		1	12
191+61.5	JAMES STREET	RT 38'	1		29.5
		TOTALS =	17	2	374.2

WATER APPURTENANCE ADJUSTMENT				
CATEGORY 0020				
			SPV.0060.260	SPV.0060.261
			ADJUST WATER VALVE BOX	ADJUST CURB BOX
STATION	LOCATION	OFFSET	EACH	EACH
181+71	JAMES STREET	LT 19'	1	
181+71.5	JAMES STREET	LT 28'	1	
181+74	JAMES STREET	RT 38.5'	1	
182+41	JAMES STREET	LT 26'		1
182+69.5	JAMES STREET	RT 24.5'		1
183+28	JAMES STREET	RT 24'		1
183+59.5	JAMES STREET	RT 25.5'		1
183.71.5	JAMES STREET	LT 24.5'		1
183.89	JAMES STREET	RT 24.5'		1
184+22.5	JAMES STREET	LT 28'		1
184+27.6	JAMES STREET	RT 25'		1
184+50	JAMES STREET	LT 17'	1	
184+94.5	JAMES STREET	LT 12'	1	
185+00.5	JAMES STREET	LT 14'	1	
185+60.5	JAMES STREET	LT 26.5'		1
186+25	JAMES STREET	LT 26'		1
186+91	JAMES STREET	RT 28'		1
187+33	JAMES STREET	LT 26.5'		1
187+77	JAMES STREET	LT 15'	1	
187+82	JAMES STREET	RT 28.5		1
188+40.5	JAMES STREET	LT 26.5'		1
188+90.5	JAMES STREET	RT 28.5'		1
189+26	JAMES STREET	LT 26.5'		1
189+50	JAMES STREET	LT 13'	1	
189+76.5	JAMES STREET	RT 29.5'		1
190+16.5	JAMES STREET	LT 28'		1
190+32	JAMES STREET	RT 29'		1
190+49	JAMES STREET	LT 28'		1
191+06	JAMES STREET	LT 29'		1
191+66.5	JAMES STREET	RT 82'		1
192+21.5	JAMES STREET	LT 22.5'		1
192+41	JAMES STREET	LT 22'		1
192+34.5	JAMES STREET	RT 21'	1	
192+36.5	JAMES STREET	RT 16'	1	
192+41.5	JAMES STREET	RT 18.5'	1	
192+44	JAMES STREET	RT 35		1
192+95.5	JAMES STREET	RT 26'		1
193+42.5	JAMES STREET	RT 25'		1
193+51	JAMES STREET	LT 24'		1
		TOTALS =	11	28

FILE NAME = C:\c3d\8117_COLUMBUS\10025\DWG\Z-026-C-MQ.DWG PLOT DATE = 8/25/2016 11:18 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE =

OTWGB:
OPEN TRENCH WITH
GRANULAR BACKFILL

WATER SERVICES											
CATEGORY 0020											
			SPV.0090.246	SPV.0060.247	SPV.0060.248	SPV.0090.249	SPV.0060.250	SPV.0060.251	SPV.0090.252	SPV.0060.253	SPV.0060.254
			1-INCH WATER SERVICE (OTWGB)	1-INCH TAP AND CORPORATION VALVE	1-INCH CURB VALVE AND CURB BOX	1 1/2-INCH WATER SERVICE (OTWGB)	1 1/2-INCH TAP AND CORPORATION VALVE	1 1/2-INCH CURB VALVE AND CURB BOX	2-INCH WATER SERVICE (OTWGB)	2-INCH TAP AND CORPORATION VALVE	2-INCH CURB VALVE AND CURB BOX
STATION	LOCATION	OFFSET	LF	EACH	EACH	LF	EACH	EACH	LF	EACH	EACH
10+25	DIX STREET	LT 15'				12	1	1			
11+16	DIX STREET	LT 17.5'	62	1	1						
13+04.5	DIX STREET	LT 26.5'				25	1	1			
131+61	JAMES STREET	LT 19'	47	1	1						
136+40	JAMES STREET	LT 114.5'	13.5	1	1						
139+93	JAMES STREET	LT 13'	20	1	1						
145+28	JAMES STREET	LT 13'	46	1	1						
146+02.5	JAMES STREET	LT 13'	46	1	1						
146+59.5	JAMES STREET	LT 13'	46	1	1						
147+32.5	JAMES STREET	LT 13'	46	1	1						
147+62	JAMES STREET	LT 13'	46	1	1						
148+18.5	JAMES STREET	LT 13'	46	1	1						
149+28.5	JAMES STREET	LT 13'	46	1	1						
149+61	JAMES STREET	LT 13'	46	1	1						
150+11	JAMES STREET	LT 13'	46	1	1						
151+79	JAMES STREET	LT 13'	46	1	1						
151+96	JAMES STREET	LT 13'	25	1	1						
153+32	JAMES STREET	LT 13'	25	1	1						
156+01.5	JAMES STREET	LT 10'	25	1	1						
156+78	JAMES STREET	LT 10'	25	1	1						
157+18	JAMES STREET	LT 10'	25	1	1						
160+26	JAMES STREET	LT 19'	54	1	1						
160+64	JAMES STREET	LT 19'	54	1	1						
160+94.5	JAMES STREET	LT 19'	16	1	1						
161+82	JAMES STREET	LT 19'	16	1	1						
161+96	JAMES STREET	LT 18'	53	1	1						
163+35	JAMES STREET	LT 16.5'	19	1	1						
163+94	JAMES STREET	LT 19'	54	1	1						
164+23	JAMES STREET	LT 19'	16	1	1						
164+86.5	JAMES STREET	LT 19'	54	1	1						
165+01	JAMES STREET	LT 19'	16	1	1						
165+18	JAMES STREET	LT 19'	54	1	1						
165+65.5	JAMES STREET	LT 19'	16	1	1						
165+94	JAMES STREET	LT 19'	16	1	1						
166+40.5	JAMES STREET	LT 19'	54	1	1						
166+64	JAMES STREET	LT 68	27	1	0						
167+38	JAMES STREET	LT 19'	54	1	1						
167+47.5	JAMES STREET	LT 19'	16	1	1						
168+06.5	JAMES STREET	LT 19'	54	1	1						
168+07.5	JAMES STREET	LT 19'	16	1	1						
168+69.5	JAMES STREET	LT 19'	16	1	1						
169+04	JAMES STREET	LT 19'	54	1	1						
169+16.5	JAMES STREET	LT 19'	16	1	1						
169+65	JAMES STREET	LT 19'	16	1	1						
169+78	JAMES STREET	LT 19'	54	1	1						
170+36.5	JAMES STREET	LT 54'							15	1	1
170+66.5	JAMES STREET	LT 19'	16	1	1						
171+27	JAMES STREET	LT 19'	54	1	1						
171+43	JAMES STREET	LT 19'	16	1	1						
171+88	JAMES STREET	LT 19'	59	1	1						
172+93	JAMES STREET	LT 18.5'	54	1	1						
174+11.5	JAMES STREET	LT 52'	38	1	1						
174+83.5	JAMES STREET	LT 18.5'	45	1	1						
174+90	JAMES STREET	LT 18'	9	1	1						
175.14.5	JAMES STREET	LT 18'	9	1	1						
175+39.5	JAMES STREET	LT 18'	45	1	1						
175+48	JAMES STREET	LT 18'	9	1	1						
175+73.5	JAMES STREET	LT 18'	45	1	1						
175+74.5	JAMES STREET	LT 18'	9	1	1						
175+85.5	JAMES STREET	LT 18'	9	1	1						
175+95.5	JAMES STREET	LT 18'	45	1	1						
176+06.5	JAMES STREET	LT 18'	9	1	1						
176+09	JAMES STREET	LT 18'	45	1	1						
176+29.5	JAMES STREET	LT 18'	45	1	1						
176+58.5	JAMES STREET	LT 18'	45	1	1						
176+70	JAMES STREET	LT 18'	9	1	1						
177+10	JAMES STREET	LT 18'	9	1	1						
177+69.5	JAMES STREET	LT 18'	9	1	1						
177+97.5	JAMES STREET	RT 67.5'	42	1	1						
178+04.5	JAMES STREET	RT 55.5'	20	1	1						
178+05	JAMES STREET	LT 69'	20	1	1						
178+59	JAMES STREET	LT 18'	9	1	1						
178+90	JAMES STREET	LT 18'	9	1	1						
179+03.5	JAMES STREET	LT 18'	9	1	1						
179+24	JAMES STREET	LT 18'	44	1	1						
179+25	JAMES STREET	LT 18'	9	1	1						
179+29	JAMES STREET	LT 18'	45	1	1						
179+57	JAMES STREET	LT 18'	45	1	1						
179+58.5	JAMES STREET	LT 18'	9	1	1						
180+09	JAMES STREET	LT 18'	9	1	1						
180+43.5	JAMES STREET	LT 18'	9	1	1						
180+74.5	JAMES STREET	LT 18'	17	1	1						
181+74	JAMES STREET	RT 48	26	1	1						
188+05	JAMES STREET	LT 54'	10	1	0						
		TOTALS =	2507.5	81	79	37	2	2	15	1	1

FILE NAME = C:\C3D\8117_COLUMBUS\10025\DWG\Z-026-G-MQ.DWG PLOT DATE = 8/5/2016 11:19 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE =

SEWER PIPE CATEGORY 0010								
				SPV.0090.201	SPV.0090.202	SPV.0090.203	SPV.0090.204	SPV.0090.205	SPV.0090.206	SPV.0090.220
				8-INCH SANITARY SEWER-GRANULAR BACKFILL	8-INCH SANITARY SEWER RELAY-GRANULAR BACKFILL	8-INCH SANITARY SEWER-SPOIL BACKFILL	10-INCH SANITARY SEWER-GRANULAR BACKFILL	10-INCH SANITARY SEWER RELAY-GRANULAR BACKFILL	18-INCH SANITARY SEWER RELAY-GRANULAR BACKFILL	6-INCH SEWAGE FORCE MAIN-GRANULAR BACKFILL
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF
10+00		14+00	DIX STREET				407			
14+00		18+00	INDUSTRIAL DRIVE				366			
125+50		130+50	JAMES STREET							
130+50		135+50	JAMES STREET	335						
135+50		140+50	JAMES STREET	359	60	10	99	140	144	170
140+50		145+50	JAMES STREET	66.5				500		500
145+50		150+50	JAMES STREET					500		500
150+50		155+50	JAMES STREET	10	195			138		490
155+50		160+50	JAMES STREET	8	12		10	498.5		
160+50		165+50	JAMES STREET		69			226		
165+50		170+50	JAMES STREET		59.5					
170+50		175+50	JAMES STREET		224					
175+50		180+50	JAMES STREET	169	177			156		
180+50		185+50	JAMES STREET	131	59			76.5		
185+50		190+50	JAMES STREET		50					
190+50		195+50	JAMES STREET							
200+00		202+00	RIVER ROAD						213.5	
TOTALS =				1079	906	10	882	2235	358	1660

SANITARY SEWER PIPE ABANDONMENT CATEGORY 0010					
				SPV.0090.221	SPV.0090.222
				ABANDON SANITARY SEWER 8-INCH	ABANDON SANITARY SEWER 10-INCH
STATION	TO	STATION	LOCATION	LF	LF
10+00		14+00	DIX STREET		400.00
14+00		18+00	INDUSTRIAL DRIVE		348.00
125+50		130+50	JAMES STREET		
130+50		135+50	JAMES STREET	517.00	
135+50		140+50	JAMES STREET	585.00	
140+50		145+50	JAMES STREET	390.00	
145+50		150+50	JAMES STREET		
150+50		155+50	JAMES STREET	40.00	49.00
155+50		160+50	JAMES STREET		
160+50		165+50	JAMES STREET		
165+50		170+50	JAMES STREET		
170+50		175+50	JAMES STREET	160.00	
175+50		180+50	JAMES STREET	85.00	
180+50		185+50	JAMES STREET		
185+50		190+50	JAMES STREET		
190+50		195+50	JAMES STREET		
200+00		202+00	RIVER ROAD		
TOTALS =				1777	797

SANITARY MANHOLES CATEGORY 0010										
				SPV.0200.207	SPV.0200.208	SPV.0200.209	SPV.0200.210	SPV.0200.211	SPV.0200.212	SPV.0060.227
				NEW 48-INCH SANITARY SEWER MANHOLE	NEW 48-INCH SANITARY SEWER MANHOLE (O.D.)	NEW 84-INCH SANITARY SEWER MANHOLE	48-INCH SANITARY SEWER MANHOLE REPLACEMENT	48-INCH SANITARY SEWER MANHOLE REPLACEMENT (O.D.)	60-INCH SANITARY SEWER MANHOLE REPLACEMENT (O.D.)	EPOXY COATING IN SANITARY SEWER MANHOLE
STATION	LOCATION	OFFSET	VF	VF	VF	VF	VF	VF	EACH
10+05	DIX STREET	LT 5'				5			
12+49	DIX STREET	LT 16'	9.7						
14+50	INDUSTRIAL DRIVE	LT 5'	13						
17+64.5	INDUSTRIAL DRIVE	RT 14'				14			
131+78	JAMES STREET	0	12						
133+14.5	JAMES STREET	LT 4.5'	11						
136+67.5	JAMES STREET	LT 5'		18					
136+67.5	JAMES STREET	LT 65'					15		
137+26.5	JAMES STREET	LT 5'		18					
137+26.5	JAMES STREET	RT 66'				9			
138+48.5	JAMES STREET	RT .5'	18						
141+40	JAMES STREET	RT 2'	17						
144+40	JAMES STREET	RT 2'		17.5					
144+39.5	JAMES STREET	LT 64.5'				15			
147+90.5	JAMES STREET	RT 2'				11			
151+40	JAMES STREET	RT 2'				14			
153+35	JAMES STREET	RT 2'	8.5						
155+39.5	JAMES STREET	RT 6'	6.5						1
155+54	JAMES STREET	LT 6.5'	6.5						1
155+61.5	JAMES STREET	RT .5'			7				1
159+14	JAMES STREET	LT 1'				7			1
174+26.5	JAMES STREET	LT 7.5'		13.5					
177+26.5	JAMES STREET	LT 7'	11						
178+81	JAMES STREET	RT 5.5'	10.5						
181+81	JAMES STREET	RT 7	9.5						
192+29	JAMES STREET	RT 14'						10.5	
200+50	RIVER ROAD	LT 20'				8.5			
201+94	RIVER ROAD	0				7.5			
TOTALS =			133	67	7	91	15	11	4

FILE NAME: C:\C3D\8117_COLUMBUS\10025\DWG\Z-025-G-MQ.DWG PLOT DATE: 8/5/2016 11:19 AM PLOT BY: KLEMM, DAVID PLOT NAME: PLOT SCALE:

HUGHES LIFT STATION								
CATEGORY 0010								
				SPV.0180.228	SPV.0035.229	SPV.0195.230	SPV.0195.231	SPV.0105.232
				PULVERIZING, REMOVALS, SHAPING, AND COMPACTING	EBS EXCAVATION AND BACKFILL	1 3/4-INCH ASPHALTIC CONCRETE BINDER COURSE	1 3/4-INCH ASPHALTIC CONCRETE SURFACE COURSE	HUGHES SEWAGE LIFT STATION
STATION	TO	STATION	LOCATION	SY	CY	TON	TON	LS
135+50		140+50	CONTINENTAL DRIVE	900	167	102	102	1
TOTALS =				900	167	102	102	1

RIVER ROAD						
CATEGORY 0010						
				SPV.0180.233	SPV.0195.234	SPV.0195.235
				ASPHALTIC PAVEMENT REMOVAL	1 3/4-INCH ASPHALTIC CONCRETE BINDER COURSE	1 3/4-INCH ASPHALTIC CONCRETE SURFACE COURSE
STATION	TO	STATION	LOCATION	SY	TON	TON
201+00		202+00	RIVER ROAD	310	32	32
			TOTALS =	310	32	32

SANITARY APPURTENANCE ABANDONMENT AND ADJUSTMENT						
CATEGORY 0010						
			SPV.0060.223	SPV.0060.224	SPV.0105.225	SPV.0060.226
			ABANDON SANITARY SEWER MANHOLE	ABANDON SEWAGE FORCE MAIN (CUT OFF)	ABANDON SEWAGE LIFT STATION	ADJUST SANITARY SEWER MANHOLE
STATION	LOCATION	OFFSET	EACH	EACH	LS	EACH
12+12	DIX STREET	LT 23.5'	1			
130+33	JAMES STREET	LT 73.5'	1			
131+05.5	JAMES STREET	LT 71.5'	1			
131+07	JAMES STREET	LT 70'		1		
133+19.5	JAMES STREET	LT 69'	1			
136+61.5	JAMES STREET	RT 65.5'	1			
139+10.5	JAMES STREET	RT .5'	1			
139+35.5	JAMES STREET	LT 77.5'		1		
139+39	JAMES STREET	LT 78'			1	
139+40.5	JAMES STREET	LT 64'	1			
142+73	JAMES STREET	0	1			
143+34	JAMES STREET	LT 1.5'	1			
145+89.5	JAMES STREET	RT .5'	1			
151+40	JAMES STREET	0	1			
154+00	JAMES STREET	RT .5'	1			
162+76.5	JAMES STREET	LT 1'				1
166+72	JAMES STREET	LT 1.5'				1
170+44.5	JAMES STREET	LT 1'				1
174+26.5	JAMES STREET	RT .5'				1
177+20	JAMES STREET	LT 5'	1			
178+15.5	JAMES STREET	LT 4'				1
178+90	JAMES STREET	LT 1.5'	1			
181+81	JAMES STREET	LT 2'				1
184+48	JAMES STREET	0				1
185+59	JAMES STREET	0				1
187+97	JAMES STREET	RT 05'				1
TOTALS =			14	2	1	9

FILE NAME = C:\C3D\9117 COLUMBUS\10025\DWG\Z-025-C-MQ.DWG PLOT DATE = 8/5/2016 11:19 AM PLOT BY = KLEMM, DAVID PLOT NAME = PLOT SCALE =

SANITARY SEWER LATERALS

CATEGORY 0010

			SPV.0090.213	SPV.0090.214	SPV.0090.215	SPV.0060.216	SPV.0060.217	SPV.0060.218	SPV.0060.219
			6-INCH SANITARY SEWER LATERAL	4-INCH SANITARY SEWER LATERAL EXTENSION	6-INCH SANITARY SEWER LATERAL EXTENSION	REPLACE SANITARY LATERAL SADDLE TEE	NEW SANITARY LATERAL HUB CONNECTION	SANITARY LATERAL CIPP	SANITARY SEWER LATERAL CLEANOUT
STATION	LOCATION	OFFSET	LF	LF	LF	EACH	EACH	EACH	EACH
10+20	DIX STREET	LT 7'	20						
11+17	DIX STREET	LT 3.5'	48						
12+69.5	DIX STREET	LT 12'	38						
15+98	INDUSTRIAL DRIVE	RT 17.5'	55						
131+73	JAMES STREET	0	71						
133+19.5	JAMES STREET	LT 4.5'	75						
136+67.5	JAMES STREET	LT 52'	32						2
136+67.5	JAMES STREET	LT 65'	47						
136+67.5	JAMES STREET	LT 65'	10						
139+14	JAMES STREET	RT 2'	58						
139+98	JAMES STREET	RT 1.5'	69						
144+39.5	JAMES STREET	LT 59.5'	17						
145+38	JAMES STREET	RT 2'	31						
146+5	JAMES STREET	RT 2'	31						
146+63	JAMES STREET	RT 2'	31						
146+87.5	JAMES STREET	RT 2'	35						
147+33.5	JAMES STREET	RT 2'	31						
147+63.5	JAMES STREET	RT 2'	31						
148+07	JAMES STREET	RT 2'	35						
148+21.5	JAMES STREET	RT 2'	31						
148+31.5	JAMES STREET	RT 2'	31						
149+634	JAMES STREET	RT 2'	31						
150+12.5	JAMES STREET	RT 2'	31						
151+69.5	JAMES STREET	RT 2'	30						
151+91	JAMES STREET	RT 2'	35						
152+67.5	JAMES STREET	RT 2'	30						
153+27	JAMES STREET	RT 2'	35						
155+75	JAMES STREET	RT 1'	73						
156+39	JAMES STREET	RT 1'	36						
156+80	JAMES STREET	RT .5'	36						
157+45	JAMES STREET	0	35						
157+77	JAMES STREET	0	35						
157+93	JAMES STREET	0	35						
158+58	JAMES STREET	LT .5'	36						
158+60	JAMES STREET	LT 1'	34						
160+28	JAMES STREET	LT 1'	36						
160+58.5	JAMES STREET	LT 1'	34						
160+60.5	JAMES STREET	LT 1'	36						
161+9	JAMES STREET	LT 1'	34						
161+66	JAMES STREET	LT 1'	36						
161+75.5	JAMES STREET	LT 1'	34						
163+37	JAMES STREET	LT 1'			34				
163+39	JAMES STREET	LT 1'			36				
164+00	JAMES STREET	LT 1'			36				
164+33	JAMES STREET	LT 1'			34				
164+83.5	JAMES STREET	LT 1'			36				
165+24	JAMES STREET	LT 1'			36				
165+26	JAMES STREET	LT 1'			34				
165+63	JAMES STREET	LT 1.5'			34				
165+96	JAMES STREET	LT 1.5'			36				
166+05	JAMES STREET	LT 1.5'			33.5				
168+17	JAMES STREET	LT 1'			34				
168+56.5	JAMES STREET	LT 1'			36				
168+77	JAMES STREET	LT 1'			34				
169+05.5	JAMES STREET	LT 1'			36				
169+21	JAMES STREET	LT 1'			34				
169+69.5	JAMES STREET	LT 1'			34				
169+91.5	JAMES STREET	LT 1'			36				
171+23	JAMES STREET	LT .5'			36	1			
171+59	JAMES STREET	LT .5'			36.5	1			
171+85	JAMES STREET	LT .5'			36		1		
173+01.5	JAMES STREET	0			35	1			
174+26	JAMES STREET	LT 55.5'	41					1	
174+93.5	JAMES STREET	LT 7.5'	20					1	
175+18	JAMES STREET	LT 7'	19					1	
175+36	JAMES STREET	LT 7'	34					1	
175+51.5	JAMES STREET	LT 7'	19					1	
175+70.5	JAMES STREET	LT 7'	34					1	
175+83	JAMES STREET	LT 7'	19					1	
175+99.5	JAMES STREET	LT 7'	19					1	
176+04.5	JAMES STREET	LT 7'	34					1	
176+27.5	JAMES STREET	LT 7'	19					1	

3

SANITARY SEWER LATERALS

CATEGORY 0010

			SPV.0090.213	SPV.0090.214	SPV.0090.215	SPV.0060.216	SPV.0060.217	SPV.0060.218	SPV.0060.219
			6-INCH SANITARY SEWER LATERAL	4-INCH SANITARY SEWER LATERAL EXTENSION	6-INCH SANITARY SEWER LATERAL EXTENSION	REPLACE SANITARY LATERAL SADDLE TEE	NEW SANITARY LATERAL HUB CONNECTION	SANITARY LATERAL CIPP	SANITARY SEWER LATERAL CLEANOUT
STATION	LOCATION	OFFSET	LF	LF	LF	EACH	EACH	EACH	EACH
176+42.5	JAMES STREET	LT 7'	34					1	
176+54	JAMES STREET	LT 7'	19					1	
176+83	JAMES STREET	LT 7'	19					1	
176+95	JAMES STREET	LT 7'	34					1	
177+24.5	JAMES STREET	LT 7'	19					1	
178+15	LUDINGTON STREET	LT 39'	24					1	
178+15	LUDINGTON STREET	LT 67'	24					1	
178+15	LUDINGTON STREET	LT 72'	30					1	
178+15	LUDINGTON STREET	RT 52'	30					1	
178+94.5	JAMES STREET	RT 5.5'	21					1	
178+95	JAMES STREET	RT 5.5'	32					1	
179+14	JAMES STREET	RT 5.5'	32					1	
179+16	JAMES STREET	RT 5.5'	21					1	
179+32.5	JAMES STREET	RT 5.5'	21					1	
179+39.5	JAMES STREET	RT 6'	32					1	
179+61	JAMES STREET	RT 6'	32					1	
179+68.5	JAMES STREET	RT 6'	21					1	
180+06	JAMES STREET	RT 6'	20					1	
180+16.5	JAMES STREET	RT 6'	33					1	
180+41	JAMES STREET	RT 6'	20					1	
180+56.5	JAMES STREET	RT 6.5'	33					1	
180+69.5	JAMES STREET	RT 6.5'	20					1	
180+81	JAMES STREET	RT 6.5'	33					1	
180+85.23	JAMES STREET	RT 6.5'	20					1	
181+10.01	JAMES STREET	RT 7'	20					1	
181+32.81	JAMES STREET	RT 7'	20					1	
181+81	WATER STREET	RT 65'	25					1	
182+38	JAMES STREET	LT 2'			33	2			
183+31	JAMES STREET	LT 1'			36	1			
184+03	JAMES STREET	0			36	1			
184+34	JAMES STREET	0			35	1			
184+39	JAMES STREET	0			35	1			
185+59	JAMES STREET	0		35					
185+75	WATERLOO STREET	RT 47'			34				
186+29	JAMES STREET	0			35				
186+77.05	JAMES STREET	0			35				
186+83.45	JAMES STREET	0			35				
187+79.45	JAMES STREET	RT 0.5'			35				
188+42.23	JAMES STREET	0			35				
189+03.43	JAMES STREET	0			35				
189+30	JAMES STREET	0			35				
189+89	JAMES STREET	LT 0.5'			36				
190+04	JAMES STREET	LT 1'			34				
190+37.5	JAMES STREET	LT 1'			36				
190+60	JAMES STREET	LT 2'			34				
190+94	JAMES STREET	LT 3'			36				
191+15	JAMES STREET	LT 3.5'			34				
191+31	JAMES STREET	RT 104'			28.5				
191+61	JAMES STREET	RT 64'			29				
191+98.5	JAMES STREET	RT 2.5'			37.5		1		
192+31.5	JAMES STREET	RT 13'	30						
193+2.5	JAMES STREET	0	30.5						
193+11	JAMES STREET	RT .5'	30.5						
193+46	JAMES STREET	RT .5'	30.5						
193+50	JAMES STREET	RT .5'	29.5						
194+16.5	JAMES STREET	RT .5'	29.5						
		TOTALS =	2656.5	35	1496	9	2	37	2

State Project No. 1401-02-73

LIGHTING BASES, POLES, ARMS, FIXTURES AND DECORATIVE POLE ASSEMBLIES

LIGHT NUMBER		SPV.0060.109 TRANS. BASE BREAKAWAY -BLACK, 11 1/2-INCH BOLT CIRCLE SPARE EACH	SPV.0060.110 POLES TYPE 5 ALUMINUM-BLACK SPARE EACH	SPV.0060.112 LUMINAIRE ARMS Single Member 4 1/2-INCH CLAMP 8-FT- BLACK SPARE EACH	SPV.0060.113 LUMINAIRE UTILITY LED B-BLACK 139 WATT SPARE EACH	SPV.0060.114 DECORATIVE POLE ASSEMBLY TYPE 1 SPARE EACH	SPV.0060.115 DECORATIVE POLE ASSEMBLY TYPE 2 SPARE EACH	REMARKS
ALL ITEMS ARE CATEGORY 0030								
SL	300	--	--	--	--	--	1	Material purchase only. Contractor to deliver materials to designated City of Columbus storage site.
SL	301	--	--	--	--	--	1	(Same as above)
SL	302	--	--	--	--	--	1	(Same as above)
SL	303	--	--	--	--	--	1	(Same as above)
SL	304	--	--	--	--	--	1	(Same as above)
SL	305	--	--	--	--	--	1	(Same as above)
SL	306	--	--	--	--	--	1	(Same as above)
SL	307	--	--	--	--	--	1	(Same as above)
SL	308	--	--	--	--	--	1	(Same as above)
SL	309	--	--	--	--	--	1	(Same as above)
SL	310	--	--	--	--	--	1	(Same as above)
SL	311	--	--	--	--	--	1	(Same as above)
SL	312	--	--	--	--	--	1	(Same as above)
SL	313	--	--	--	--	--	1	(Same as above)
SL	314	1	--	--	--	1	--	(Same as above)
SL	315	1	--	--	--	1	--	(Same as above)
SL	316	1	1	1	1	--	--	(Same as above)
SL	317	1	1	1	1	--	--	(Same as above)
SHEET TOTALS		4	2	2	2	2	14	

HIGHWAY LIGHTING
STH 16/60 (JAMES ST.)
CITY OF COLUMBUS
COLUMBIA COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2016-04-11 REV: 0

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 1401-02-21

JAMES STREET, CITY OF COLUMBUS
(INDUSTRIAL DRIVE - RIVER ROAD)

STH 16
COLUMBIA COUNTY



THE NOTES, CONVENTIONAL SYMBOLS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1401-02-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD83 (2007) ADJUSTMENT. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY ¾" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

ALL RIGHT-OF-WAY LINES DEPICTED IN NON-ACQUISITION AREAS ARE INTENDED TO REESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENT

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TEMPORARY LIMITED EASEMENTS (TLEs) EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

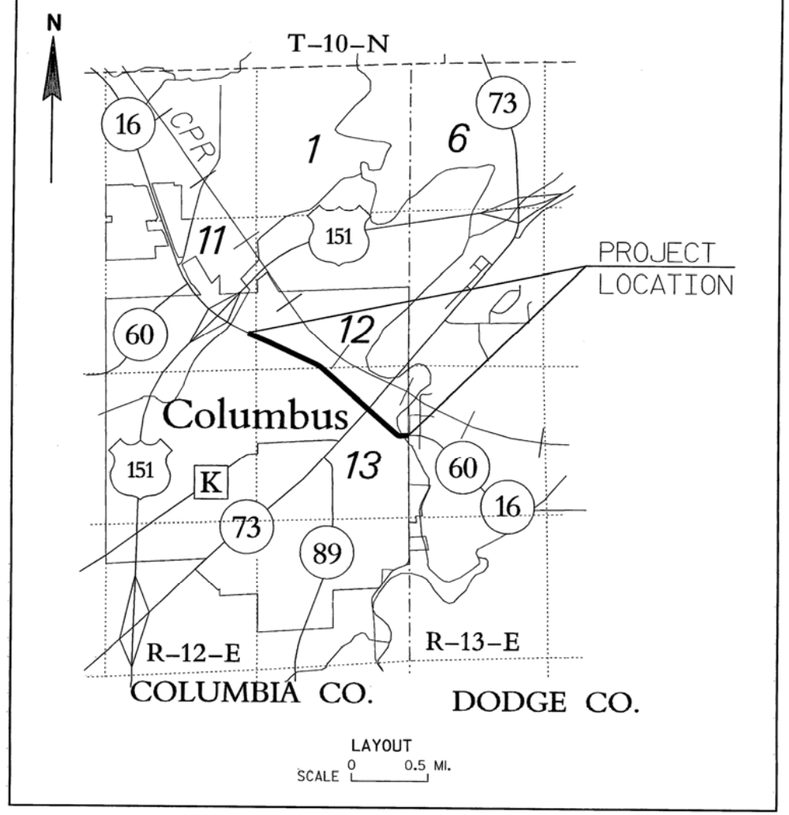
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 16 IS ESTABLISHED FROM PREVIOUS PROJECTS T-017-2(35) AND 1403-00-22.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 16 IS ALSO ESTABLISHED FROM CSM'S 310, 539, 1848, 1920, 3095, 1534, 4838 AND 331, AND FROM SUBDIVISION PLATS OF COLUMBUS CENTRE, WEST SIDE COLUMBUS ADDITION TO COLUMBUS, WILLIAMS ADDITION, LEWIS' FIRST ADDITION TO WEST COLUMBUS, BIRDSEY'S ADDITION, NEWCOMB'S ADDITION, ORIGINAL PLAT OF COLUMBUS, MANNING'S ADDITION AND THE OUTLOTS OF CITY OF COLUMBUS.

EXISTING HIGHWAY RIGHT-OF-WAY FOR DIX STREET IS ESTABLISHED FROM CSM'S 1848, 3095 AND 4611.

EXISTING HIGHWAY RIGHT-OF-WAY FOR INDUSTRIAL DRIVE IS ESTABLISHED FROM CSM 539 AND SUBDIVISION PLAT OF COLUMBUS CENTRE.

EXISTING ACCESS CONTROL IS ESTABLISHED FROM PREVIOUS PROJECTS T017-2(35) AND 1403-00-22.



LAYOUT
SCALE 0 0.5 MI.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	AHEAD TANGENT	AH TAN
ACCESS RIGHTS	AR	BACK TANGENT	BK TAN
ACRES	AC.	REFERENCE LINE	R/L
AND OTHERS	ET.AL.	REMAINING	REM.
CENTERLINE	C/L	RIGHT-OF-WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC.
CORNER	COR.	SQUARE FEET	S.F.
CONVEYANCE OF RIGHTS	CR	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
LAND CONTRACT	LC	**CURVE DATA**	
MONUMENT	MON.	LONG CHORD	LCH
PAGE	P.	LONG CHORD BEARING	LCB
PERMANENT LIMITED EASEMENT	PLE	RADIUS	R
PROPERTY LINE	PL	DEGREE OF CURVE	D
RECORDED AS	(100')	CENTRAL ANGLE OR DELTA	DELTA
HOUSE	H	LENGTH OF CURVE	L
GARAGE	G	TANGENT	TAN
SHED	S		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	⌀ (3/4" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	⚬ ⊀(SET)	PROPERTY LINE	
R/W STANDARD	△ ⊀(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	◉	CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	100	QUARTER LINE	
PARCEL NUMBER	10	SIXTEENTH LINE	
UTILITY NUMBER	102	EXISTING RIGHT-OF-WAY LINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	
FUTURE RIGHT-OF-WAY LINE		NATIONAL GEODETIC SURVEY MONUMENT	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES ELECTRIC	OH	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE	⌀	⌀
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌧	⌧
ELECTRIC TOWER	⊠	

PROJECT NUMBER 1401-02-21-4.03
SHEET 2 OF 2

FILE NAME : G:\WDOTCO\12029 (2012-2014 design work orders)\Work Order 07 (STH 16 & USH 151)\CIVIL\DGN\Sheets\P127x22\1401_02_21_title.dgn PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
APPRAISAL PLAT DATE : MARCH 18, 2015

1401-02-21-4.03

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.01

THAT PART OF LOT 3, COLUMBUS CENTRE, LOCATED IN THE NE 1/4 - SE 1/4 AND THE SE 1/4 - SE 1/4 OF SECTION 11; THAT PART OF LOT 1, CSM 3095 (RECORDED IN V. 20, P. 92, AS DOC. NO. 591114); THAT PART OF LOT 2, CSM 4611 (RECORDED IN V. 32, P. 96, AS DOC. NO. 752861); AND THAT PART OF THE SE 1/4 - SE 1/4, ALL IN THE SE 1/4 - SE 1/4, SECTION 11; THAT PART OF LOTS 1 & 2 , CSM 1848 (RECORDED IN V. 10, P. 54, AS DOC. NO. 504906), ALL LOCATED IN THE SE 1/4 - SE 1/4, SECTION 11 AND IN THE SW 1/4 - SW 1/4, SECTION 12; THAT PART OF LOT 1, CSM 539 (RECORDED IN V. 3, P. 14, AS DOC. NO. 407440), LOCATED IN THE SE 1/4 - SE 1/4, OF SECTION 11 AND IN THE NW 1/4 - SW 1/4 AND THE SW 1/4 - SW 1/4, SECTION 12; THAT PART OF PARCEL B, CSM 310 (RECORDED IN V. 2, P. 85, AS DOC. NO. 385797); THAT PART OF OUTLOTS 4, 4A & 112, OUTLOTS TO CITY OF COLUMBUS; THAT PART OF LOTS 1-7, INCLUSIVE, AND LOTS 44-55, INCLUSIVE, WEST SIDE COLUMBUS ADDITION TO COLUMBUS; THAT PART OF LOT 1, CSM 1920 (RECORDED IN V. 11, P. 16, AS DOC. NO. 510376); AND THAT PART OF THE SW 1/4 - SW 1/4, ALL IN THE SW 1/4 - SW 1/4 OF SECTION 12, ALL BEING IN T10N, R12E, CITY OF COLUMBUS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF COLUMBUS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF COLUMBUS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

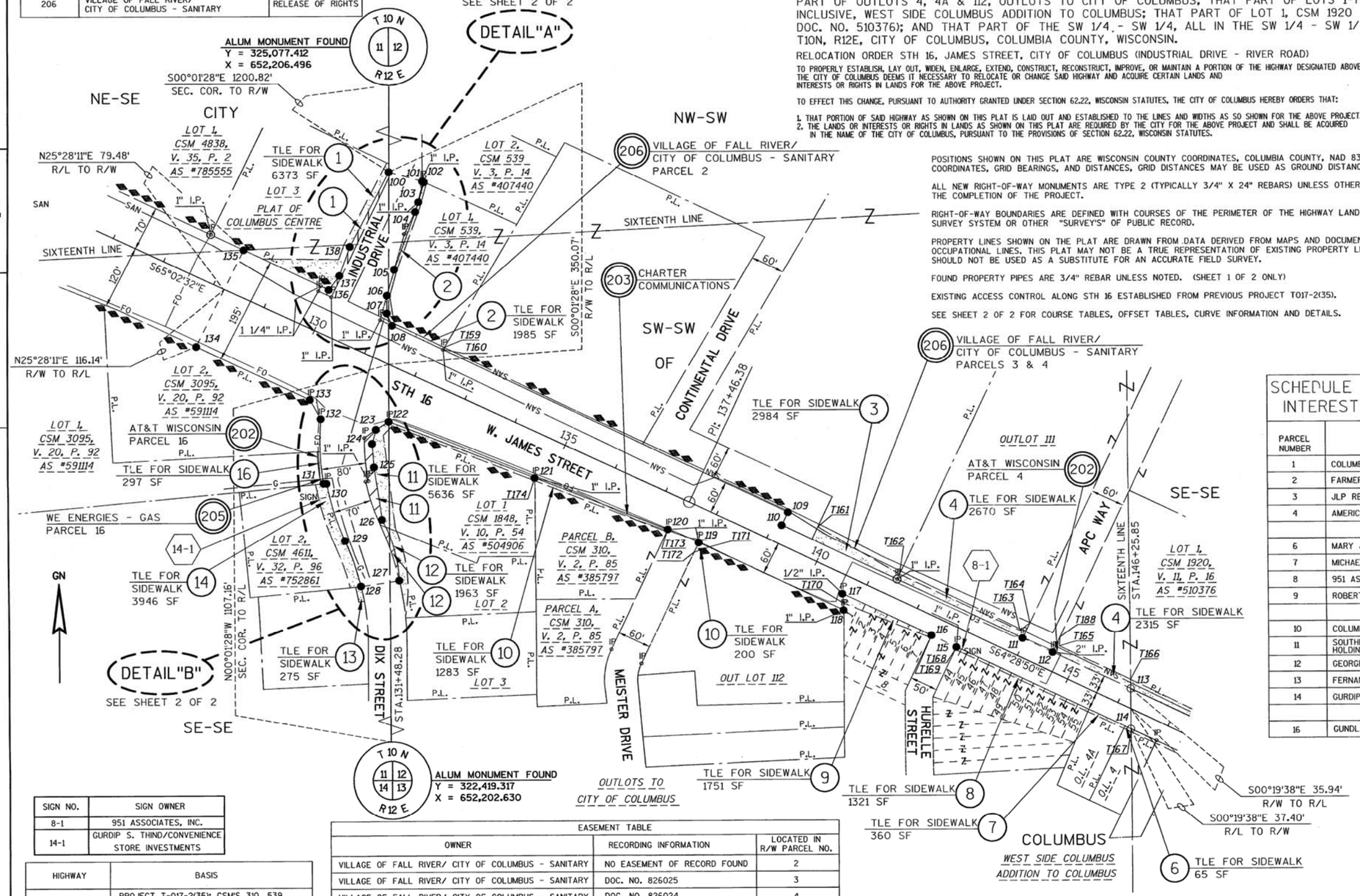
ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY, WISCONSIN AT 2:48 PM ON 6/3/2015 AS DOCUMENT # 870737 AND FILED IN Vol 1 Page 297

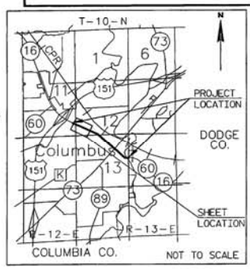
Karen A. Manske
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
SHEET 1 OF 2
PROJECT NUMBER: 1401-02-21-4.01
AMENDMENT NO:

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	AT&T WISCONSIN	RELEASE OF RIGHTS
203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
205	WE ENERGIES - GAS	RELEASE OF RIGHTS
206	VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	RELEASE OF RIGHTS





LOCATION SKETCH

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD 83 (2007) ADJUSTMENT, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOUND PROPERTY PIPES ARE 3/4" REBAR UNLESS NOTED. (SHEET 1 OF 2 ONLY)

EXISTING ACCESS CONTROL ALONG STH 16 ESTABLISHED FROM PREVIOUS PROJECT T017-2(35).

SEE SHEET 2 OF 2 FOR COURSE TABLES, OFFSET TABLES, CURVE INFORMATION AND DETAILS.

SCALE, FEET
0 100 200

P.I. 137+46.38
Y=323,274.112
X=652,749.413
DELTA=00°33'43" RT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO CITY OF COLUMBUS.
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
1	COLUMBUS PHARMACY GROUP, LLC	FEE,TLE	1922	-----	1922	6373
2	FARMERS & MERCHANTS UNION BANK	FEE,TLE	729	-----	729	1985
3	JLP REAL ESTATE HOLDINGS, LLC	TLE	-----	-----	-----	2984
4	AMERICAN PACKAGING CORPORATION	TLE	-----	-----	-----	4985
6	MARY JO RADKE	TLE	-----	-----	-----	65
7	MICHAEL R. MILLER	TLE	-----	-----	-----	360
8	951 ASSOCIATES, INC	TLE	-----	-----	-----	1321
9	ROBERT A. & CONNIE K. WEIHERT	TLE	-----	-----	-----	1751
10	COLUMBUS HOLDINGS, LLC	TLE	-----	-----	-----	1483
11	SOUTHERN WISCONSIN FOODS REAL ESTATE HOLDINGS COMPANY, LLC	FEE,TLE	2407	-----	2407	5636
12	GEORGE & PEGGY PAPAGIANIS	FEE,TLE	548	-----	548	1963
13	FERNANDO & MARIE DEJESUS DIAZ	TLE	-----	-----	-----	275
14	GURDIP S. THIND	TLE	-----	-----	-----	3946
16	GUNDLACH PROPERTIES, LLC	TLE	-----	-----	-----	297

SIGN NO.	SIGN OWNER
8-1	951 ASSOCIATES, INC.
14-1	GURDIP S. THIND/CONVENIENCE STORE INVESTMENTS

HIGHWAY	BASIS
STH 16	PROJECT T-017-2(35); CSM'S 310, 539, 1848, 1920, 3095 & 4838; SUBDIVISION PLATS OF COLUMBUS CENTRE & WEST SIDE ADDITION COLUMBUS TO COLUMBUS
DIX STREET	CSM'S 1848, 3095 & 4611
INDUSTRIAL DRIVE	CSM 539 & PLAT OF COLUMBUS CENTRE

EASEMENT TABLE

OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL NO.
VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	NO EASEMENT OF RECORD FOUND	2
VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	DOC. NO. 826025	3
VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	DOC. NO. 826024	4
AT&T WISCONSIN	NO EASEMENT OF RECORD FOUND	4
CHARTER COMMUNICATIONS	NO EASEMENT OF RECORD FOUND	10
AT&T WISCONSIN	NO EASEMENT OF RECORD FOUND	16
WE ENERGIES - GAS	DOC. NO. 142983, V.286, P.62	16

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 870459 AND FILED IN VOL. 1, P. 296A.

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1401-02-21 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

Thomas J. Hansen — MARCH 18, 2015
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF COLUMBUS.

6/12/15
DATE

FILE NAME : G:\WDOTCO\12029 (2012-2014 DESIGN WORK ORDERS)\WORK ORDER 07 (STH 16 & USH 151)\CIVIL 3D\SHEETSPLAN\RW\040101-RP.DWG PLOT DATE : 08/06/2015 PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
APPRAISAL PLAT DATE : APRIL 27, 2015

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.01

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

CURVE 126-127
L=115.89'
LC=114.90'
LCB=S15°29'36"E
R=255.43'

CURVE 128-129
L=87.52'
LC=87.38'
LCB=N18°53'41"W
R=447.49'

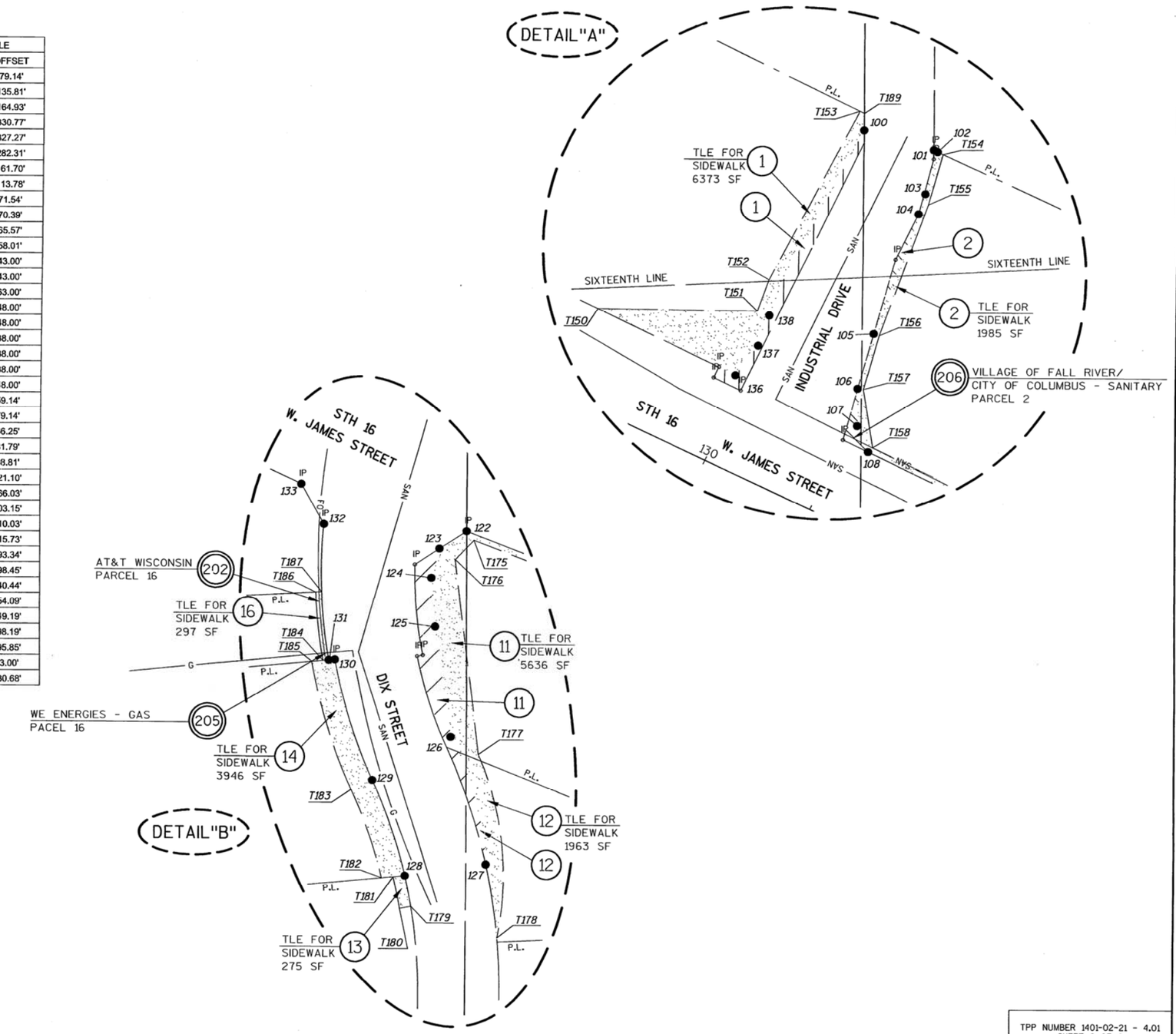
CURVE 129-130
L=110.11'
LC=109.82'
LCB=N17°18'23"W
R=435.00'

CURVE 131-132
L=118.75'
LC=118.39'
LCB=N02°13'00"W
R=440.44'

STATION OFFSET TABLE		
POINT	STATION	OFFSET
100	130+00.43	317.32'
101	130+62.10	327.23'
102	130+65.71	327.25'
103	130+71.96	289.75'
104	130+74.25	271.45'
105	130+84.37	161.06'
106	130+92.47	112.30'
107	131+05.95	82.93'
108	131+24.08	66.56'
109	139+14.91	59.25'
110	139+14.87	33.00'
111	139+74.87	32.91'
112	144+54.89	33.00'
113	146+09.87	33.00'
114	146+41.84	33.00'
115	142+93.95	33.00'
116	142+43.95	33.00'
117	140+66.73	33.00'
118	140+81.27	59.14'
119	137+92.81	59.14'
120	137+32.20	61.24'
121	134+74.97	76.80'
122	131+92.05	94.36'
123	131+77.42	118.20'
124	131+81.96	144.29'
125	132+02.90	181.65'
126	132+55.60	262.36'
127	133+30.14	349.80'
128	132+71.35	388.23'
129	132+10.82	325.22'
130	131+36.96	243.95'
131	131+32.35	246.65'
132	130+78.29	141.33'
133	130+45.83	118.05'
134	128+20.47	116.14'
135	128+22.22	79.48'
136	129+92.35	77.96'
137	129+98.94	109.27'
138	129+93.59	164.79'

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S74° 10' 20"E	62.46'
101-102	S65° 20' 04"E	3.61'
102-103	S15° 28' 53"W	38.01'
103-104	S17° 50' 20"W	18.44'
104-105	S19° 43' 16"W	110.85'
105-106	S15° 31' 04"W	49.43'
106-107	S00° 19' 05"W	32.32'
107-108	S22° 58' 21"E	24.43'
108-109	S64° 23' 37"E	791.45'
109-110	S25° 36' 23"W	26.25'
110-111	S64° 28' 50"E	480.02'
111-112	S64° 28' 50"E	60.00'
112-113	S64° 28' 50"E	154.98'
113-114	S00° 19' 38"E	73.34'
114-115	N64° 28' 50"W	347.89'
115-116	N64° 28' 50"W	50.00'
116-117	N64° 28' 50"W	177.22'
117-118	S03° 33' 17"E	29.91'
118-119	N64° 28' 50"W	288.45'
119-120	N66° 36' 27"W	60.05'
120-121	N68° 30' 20"W	257.70'
121-122	N68° 35' 35"W	283.47'
122-123	S56° 29' 30"W	27.98'
123-124	S15° 04' 57"W	26.48'
124-125	S04° 18' 44"E	42.83'
125-126	S08° 10' 53"E	96.39'
126-127	SEE CURVE NOTE	
127-128	S81° 46' 57"W	70.24'
128-129	SEE CURVE NOTE	
129-130	SEE CURVE NOTE	
130-131	S84° 35' 24"W	5.34'
131-132	SEE CURVE NOTE	
132-133	N29° 23' 22"W	39.94'
133-134	N64° 33' 22"W	225.37'
134-135	N25° 28' 11"E	195.62'
135-136	S64° 31' 49"E	170.13'
136-137	N36° 51' 09"E	32.00'
137-138	N19° 27' 09"E	55.78'
138-100	N27° 31' 30"E	152.68'

TLE STATION OFFSET TABLE		
POINT	STATION	OFFSET
T150	128+60.00	79.14'
T151	129+85.33	135.81'
T152	129+82.59	164.93'
T153	129+90.02	330.77'
T154	130+70.77	327.27'
T155	130+78.28	282.31'
T156	130+89.33	161.70'
T157	130+97.30	113.78'
T158	131+26.03	71.54'
T159	132+26.93	70.39'
T160	132+26.48	65.57'
T161	139+74.90	58.01'
T162	141+44.89	43.00'
T163	143+84.89	43.00'
T164	143+94.89	63.00'
T165	144+60.89	48.00'
T166	146+02.60	48.00'
T167	146+44.26	38.00'
T168	142+93.95	38.00'
T169	142+43.95	38.00'
T170	140+75.07	48.00'
T171	138+12.81	59.14'
T172	137+92.81	79.14'
T173	137+32.15	66.25'
T174	134+75.28	81.79'
T175	132+01.05	98.81'
T176	131+93.42	121.10'
T177	132+83.81	266.03'
T178	133+66.13	403.15'
T179	132+87.49	410.03'
T180	132+79.27	415.73'
T181	132+62.64	393.34'
T182	132+53.93	398.45'
T183	131+97.84	340.44'
T184	131+19.65	254.09'
T185	131+28.03	249.19'
T186	130+97.37	198.19'
T187	131+01.78	195.85'
T188	144+54.89	63.00'
T189	129+ 94.20	330.68'



SHEET 2 OF 2 FOR COURSE TABLES, OFFSET TABLES, CURVE INFORMATION AND DETAILS.

TPP NUMBER 1401-02-21 - 4.01
SHEET 2 OF 2

FILE NAME : G:\WDOTCO\12029 (2012-2014 DESIGN WORK ORDERS)\WORK ORDER 07 (STH 16 & USH 151)\CIVIL\DGN\SHEETS\PLAN\WO7201014BPP.DWG

PLOT BY : SCOTT DEMEUSE PLOT NAME : ----------

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.02

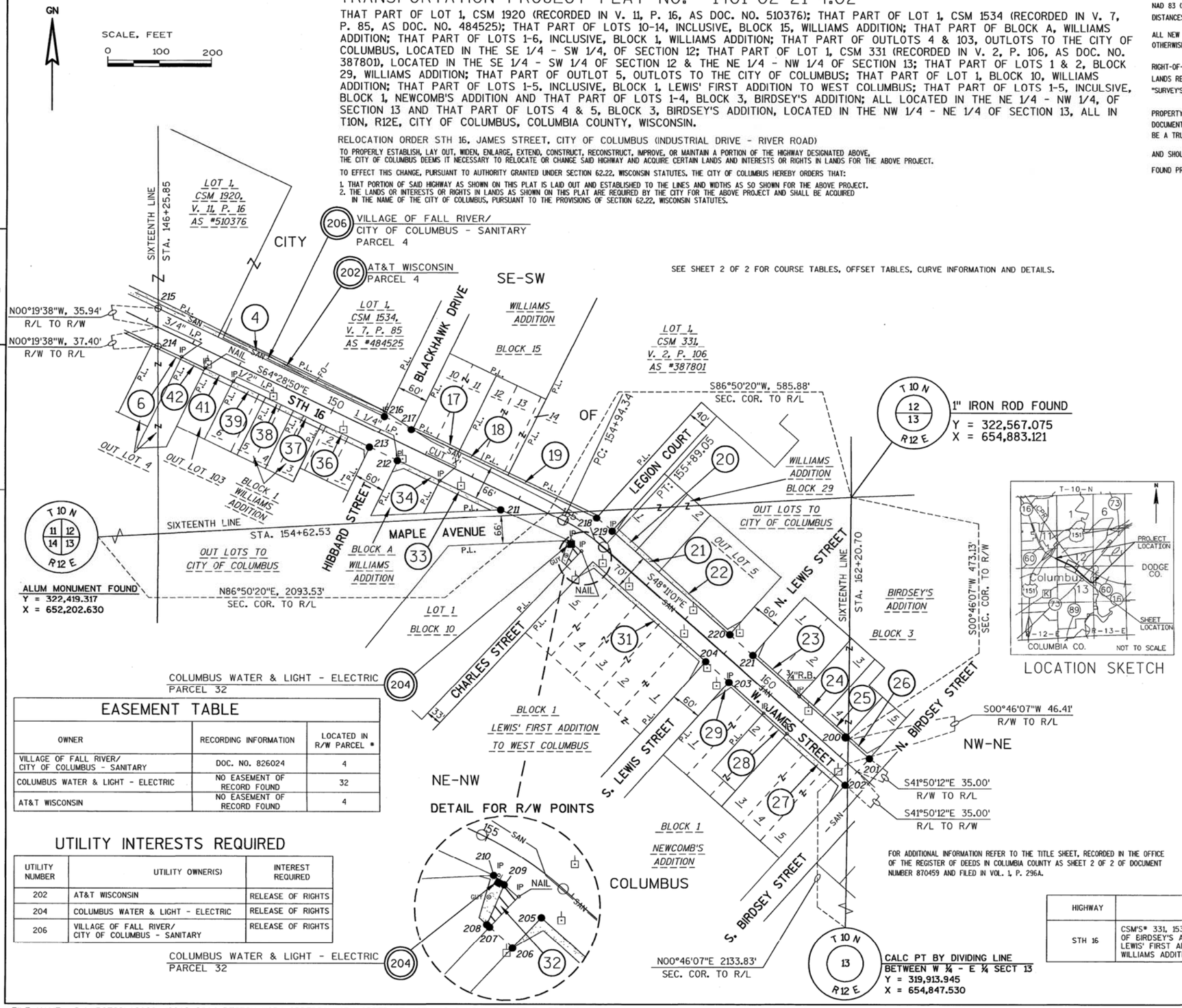
THAT PART OF LOT 1, CSM 1920 (RECORDED IN V. 11, P. 16, AS DOC. NO. 510376); THAT PART OF LOT 1, CSM 1534 (RECORDED IN V. 7, P. 85, AS DOC. NO. 484525); THAT PART OF LOTS 10-14, INCLUSIVE, BLOCK 15, WILLIAMS ADDITION; THAT PART OF BLOCK A, WILLIAMS ADDITION; THAT PART OF LOTS 1-6, INCLUSIVE, BLOCK 1, WILLIAMS ADDITION; THAT PART OF OUTLOTS 4 & 103, OUTLOTS TO THE CITY OF COLUMBUS, LOCATED IN THE SE 1/4 - SW 1/4, OF SECTION 12; THAT PART OF LOT 1, CSM 331 (RECORDED IN V. 2, P. 106, AS DOC. NO. 387801), LOCATED IN THE SE 1/4 - SW 1/4 OF SECTION 12 & THE NE 1/4 - NW 1/4 OF SECTION 13; THAT PART OF LOTS 1 & 2, BLOCK 29, WILLIAMS ADDITION; THAT PART OF OUTLOT 5, OUTLOTS TO THE CITY OF COLUMBUS; THAT PART OF LOT 1, BLOCK 10, WILLIAMS ADDITION; THAT PART OF LOTS 1-5. INCLUSIVE, BLOCK 1, LEWIS' FIRST ADDITION TO WEST COLUMBUS; THAT PART OF LOTS 1-5, INCULSIVE, BLOCK 1, NEWCOMB'S ADDITION AND THAT PART OF LOTS 1-4, BLOCK 3, BIRDSEY'S ADDITION; ALL LOCATED IN THE NE 1/4 - NW 1/4, OF SECTION 13 AND THAT PART OF LOTS 4 & 5, BLOCK 3, BIRDSEY'S ADDITION, LOCATED IN THE NW 1/4 - NE 1/4 OF SECTION 13, ALL IN T10N, R12E, CITY OF COLUMBUS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES. THE CITY OF COLUMBUS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF COLUMBUS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.



POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD 83 (2007) ADJUSTMENT, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOUND PROPERTY PIPES ARE 1" IRON PIPES UNLESS NOTED. (SHEET 1 OF 2 ONLY)

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY, WISCONSIN AT 2:42 PM ON 6/12/2015 AS DOCUMENT # 870738 AND FILED IN Vol 1 Page 297A

Karen A. Manske
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
SHEET 1 OF 2
PROJECT NUMBER: 1401-02-21-4.02
AMENDMENT NO:___

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO CITY OF COLUMBUS
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
4	AMERICAN PACKAGING CORPORATION	TLE	----	----	----	6117
6	MARY JO RADKE	TLE	----	----	----	247
17	JOHN O. & JENNIFER P. STARRITT, JULIUS TEMKIN	TLE	----	----	----	625
18	BERNARD & SHELDON GARLAND d/b/a GARLAND ENTERPRISES	TLE	----	----	----	555
19	GARLAND ENTERPRISES	TLE	----	----	----	1387
20	MELVIN J. BARGEN & MARTHA J. CERVANTES	TLE	----	----	----	692
21	TRAVIS W. & HILARY K. DEBUSSEY	TLE	----	----	----	555
22	DALE T. & KRISTINE L. SCHIRMACHER	TLE	----	----	----	1387
23	SUSAN M. REES & JOHN M. HOFFMAN	TLE	----	----	----	748
24	MARTHA J. & MICHAEL F. HUSSEY	TLE	----	----	----	300
25	TIMOTHY L. & CONNIE K. HOFFMAN	TLE	----	----	----	299
26	JONATHAN G. STAEBELL	TLE	----	----	----	456
27	NATHAN P. & ANN M. OLSON	TLE	----	----	----	1650
28	MAYTEE ASPURO	TLE	----	----	----	302
29	HENRY J. & ELIZABETH ALTSCHWAGER	TLE	----	----	----	454
31	COLUMBUS ASSOCIATES, LLC	TLE	----	----	----	2689
32	MARK A. & KATHLEEN W. GARWICK	FEE,TLE	431	----	431	544
33	ANGELA M. & MATTHEW C. TOMPACH	TLE	----	----	----	1103
34	EHLERS TRUSTED DATED MARCH 24, 1995	TLE	----	----	----	947
36	STARRITT PROPERTIES, LLC	TLE	----	----	----	1095
37	DENISE A. GILMORE	TLE	----	----	----	600
38	NICHOLAS J. & ROSELYNN M. UEBELACKER	TLE	----	----	----	600
39	ROBERT & MEGAN KULOW	TLE	----	----	----	700
41	MARY JO RADKE	TLE	----	----	----	600
42	TIFFANY CALVERT	TLE	----	----	----	250

EASEMENT TABLE

OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	DOC. NO. 826024	4
COLUMBUS WATER & LIGHT - ELECTRIC	NO EASEMENT OF RECORD FOUND	32
AT&T WISCONSIN	NO EASEMENT OF RECORD FOUND	4

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	AT&T WISCONSIN	RELEASE OF RIGHTS
204	COLUMBUS WATER & LIGHT - ELECTRIC	RELEASE OF RIGHTS
206	VILLAGE OF FALL RIVER/ CITY OF COLUMBUS - SANITARY	RELEASE OF RIGHTS

P.I. 155+42.02
Y=322,500.524
X=654,369.863
DELTA=16°17'49" RT
D=17°12'21"
T=47.68'
L=98.71'
R=333.00'
PC=154+94.34
PT155+89.05

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 870459 AND FILED IN VOL. 1, P. 296A.

HIGHWAY	BASIS
STH 16	CSM'S# 331, 1534 & 1920, SUBDIVISION PLATS OF BIRDSEY'S ADDITION, NEWCOMB'S ADDITION, LEWIS' FIRST ADDITION TO WEST COLUMBUS & WILLIAMS ADDITION

KL Engineering
(A) Better Experience

I, THOMAS J. HANSEN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1401-02-21 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

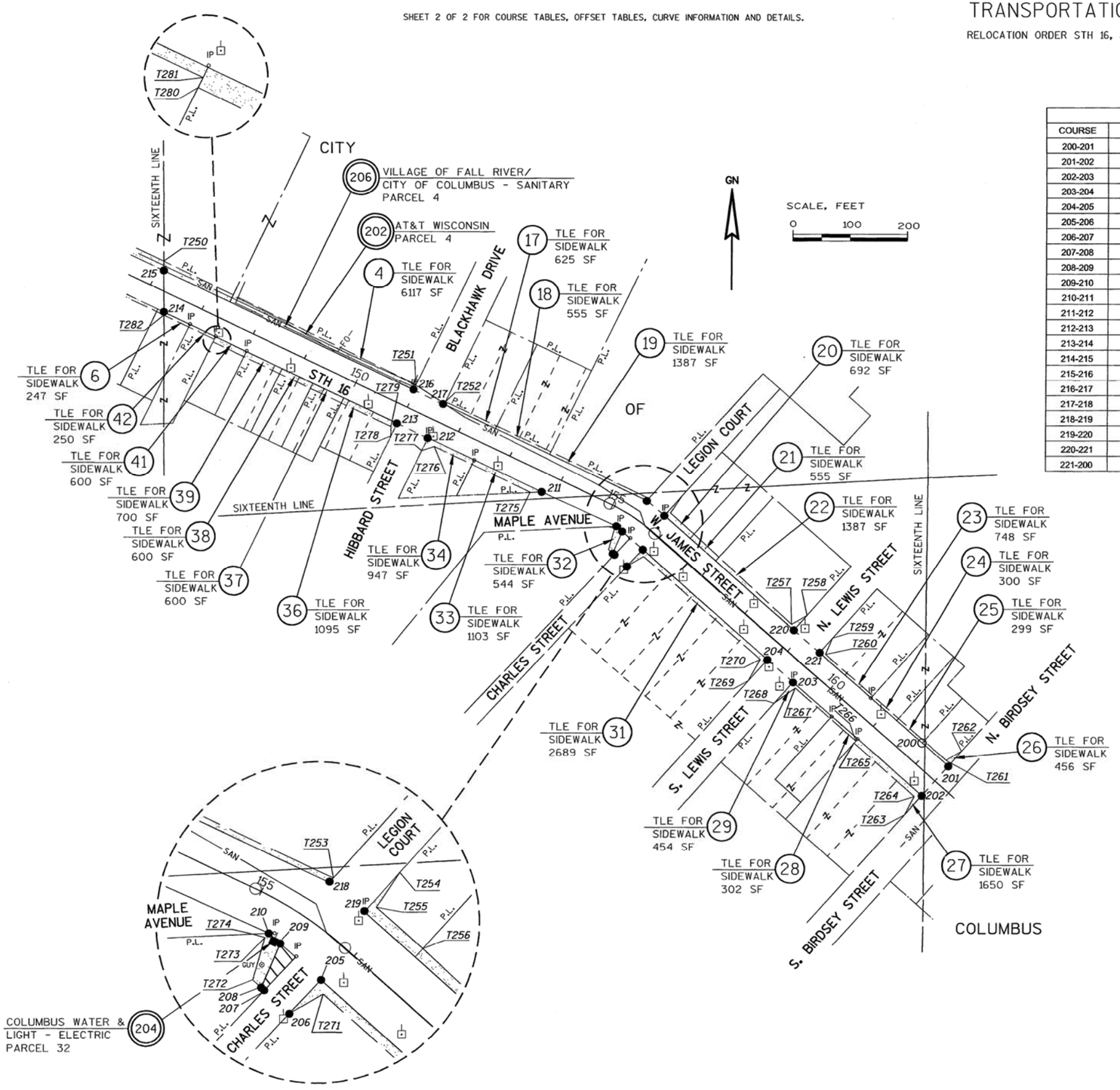
Thomas J. Hansen — MARCH 18, 2015
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF COLUMBUS.

6/12/15 — DATE

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.02

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)



COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	S48° 11' 01"E	54.88'
201-202	S41° 50' 12"W	70.00'
202-203	N48° 11' 01"W	301.53'
203-204	N48° 11' 01"W	60.00'
204-205	N48° 11' 01"W	291.21'
205-206	S43° 13' 00"W	40.54'
206-207	N47° 19' 13"W	30.00'
207-208	N47° 19' 13"W	3.54'
208-209	N23° 14' 01"E	42.23'
209-210	N48° 11' 01"W	13.66'
210-211	N65° 26' 08"W	144.29'
211-212	N64° 28' 50"W	221.17'
212-213	N64° 28' 50"W	60.00'
213-214	N64° 28' 50"W	454.66'
214-215	N00° 19' 38"W	73.34'
215-216	S64° 28' 50"E	486.42'
216-217	S64° 28' 50"E	60.00'
217-218	S64° 28' 50"E	394.27'
218-219	S49° 30' 52"E	40.01'
219-220	S48° 11' 01"E	303.10'
220-221	S48° 11' 01"E	60.00'
221-200	S48° 11' 01"E	246.81'

STATION OFFSET TABLE		
POINT	STATION	OFFSET
200	161+90.22	35.00'
201	162+45.10	35.00'
202	162+45.07	35.00'
203	159+43.55	35.00'
204	158+83.55	35.00'
205	155+92.34	35.00'
206	155+91.35	75.53'
207	155+53.42	73.59'
208	155+48.92	73.14'
209	155+39.47	31.67'
210	155+24.65	29.34'
211	153+77.67	33.00'
212	151+56.50	33.00'
213	150+96.50	33.00'
214	146+41.84	33.00'
215	146+09.87	33.00'
216	150+96.29	33.00'
217	151+56.29	33.00'
218	155+45.09	37.29'
219	155+81.14	35.10'
220	158+83.41	35.00'
221	159+42.90	35.21'

TLE STATION OFFSET TABLE		
POINT	STATION	OFFSET
T250	146+02.60	48.00'
T251	150+96.31	43.00'
T252	151+56.30	38.00'
T253	155+45.70	42.46'
T254	155+82.07	81.90'
T255	155+85.76	45.02'
T256	156+40.32	45.00'
T257	158+73.40	40.00'
T258	158+83.34	70.00'
T259	159+43.34	70.00'
T260	159+53.40	40.00'
T261	162+35.10	40.00'
T262	162+45.11	70.00'
T263	162+45.06	80.00'
T264	162+36.32	45.00'
T265	160+94.72	45.00'
T266	160+94.71	40.00'
T267	159+53.56	40.00'
T268	159+43.65	85.00'
T269	158+83.65	85.00'
T270	158+74.23	43.00'
T271	156+02.14	43.00'
T272	155+36.06	71.57'
T273	155+23.58	34.24'
T274	155+11.38	36.88'
T275	153+60.83	42.00'
T276	151+73.42	42.00'
T277	151+56.38	58.00'
T278	150+96.38	57.75'
T279	150+88.98	43.00'
T280	147+42.45	43.00'
T281	147+42.48	38.00'
T282	146+44.26	38.00'

TPP NUMBER 1401-02-21 - 4.02
SHEET 2 OF 2

FILE NAME : G:\WDOTCO\12029 (2012-2014 DESIGN WORK ORDERS)\WORK ORDER 07 (STH 16 & USH 151)\CIVIL\3D SHEETS\12W1RW20141014PP2.DWG PLOT BY : SCOTT DEMEUSE PLOT NAME : ----------

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.03

THAT PART OF LOTS 1 & 10, BLOCK 1, & LOTS 1-6, INCLUSIVE, BLOCK 2, BIRDSEY'S ADDITION; THAT PART OF LOTS 1-5, INCLUSIVE, BLOCK 2 & LOTS 1, 2, 9 & 10, BLOCK 3, NEWCOMB'S ADDITION; THAT PART OF LOTS 5 & 6, BLOCK 3 AND THAT PART OF LOTS 1, 9 & 10, BLOCK 4, ORIGINAL PLAT OF COLUMBUS, ALL LOCATED IN THE NW 1/4 - NE 1/4 OF SECTION 13; THAT PART OF LOT 6, BLOCK 2, LOT 1, BLOCK 4 & LOT 10, BLOCK 6, ORIGINAL PLAT OF COLUMBUS, AND THAT PART OF LOT 1, CSM 1516, (RECORDED IN V. 7, P. 67, DOC. NO. 483248); LOCATED IN THE SW 1/4 - NE 1/4 OF SECTION 13, AND THAT PART OF LOT 5, BLOCK 1 & LOT 1, BLOCK 6, ORIGINAL PLAT OF COLUMBUS IN THE SE 1/4 - NE 1/4 OF SECTION 13; ALL IN T10N, R12E, CITY OF COLUMBUS, COLUMBIA COUNTY, WISCONSIN.

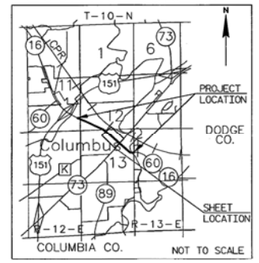
RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF COLUMBUS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF COLUMBUS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

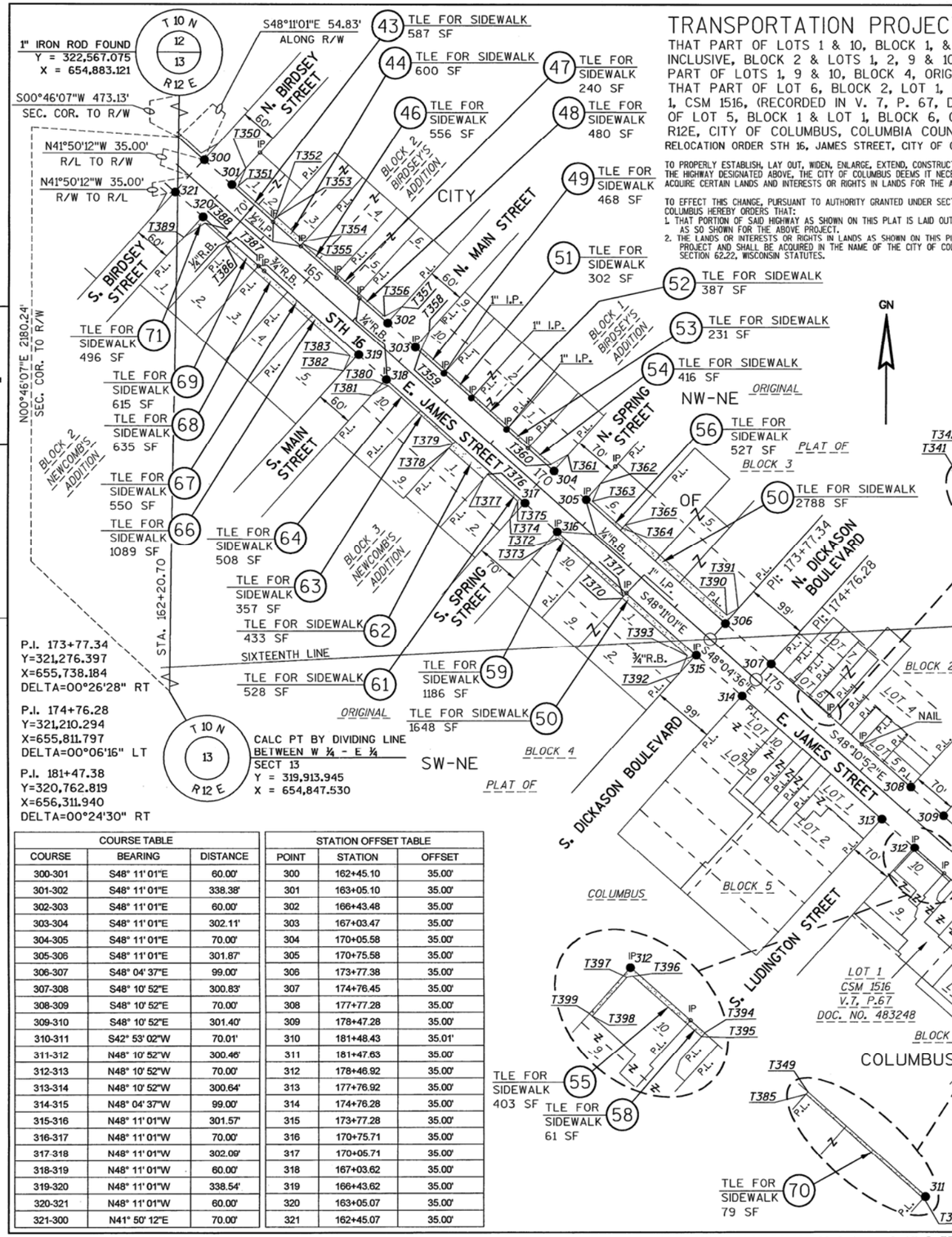
LOCATION SKETCH



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY, WISCONSIN AT 11:09 AM ON 6/4/2015 AS DOCUMENT # 870459 AND FILED IN Vol 1 Page 29bA

Karen A. Manske
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
SHEET 1 OF 2
PROJECT NUMBER: 1401-02-21-4.03
AMENDMENT NO:___



TLE STATION OFFSET TABLE		
POINT	STATION	OFFSET
T394	179+26.51	35.00'
T395	179+26.52	39.00'
T396	178+52.80	39.10'
T397	178+49.79	43.10'
T398	178+49.64	85.21'
T399	178+46.72	85.19'

TLE STATION OFFSET TABLE		
POINT	STATION	OFFSET
T341	175+57.38	35.00'
T342	175+57.38	36.50'
T343	176+01.87	36.50'
T344	176+01.87	35.00'
T345	180+19.08	35.00'
T346	180+18.99	40.00'
T347	180+32.99	40.00'
T348	180+33.08	35.00'
T349	180+83.96	35.00'
T350	163+05.11	70.00'
T351	163+15.10	40.00'
T352	163+95.10	39.97'
T353	163+95.10	45.00'
T354	164+55.10	45.00'
T355	164+55.10	40.00'
T356	166+33.47	40.00'
T357	166+43.41	70.00'
T358	167+03.41	70.00'
T359	167+13.47	40.00'
T360	169+95.57	40.00'
T361	170+05.51	70.00'
T362	170+75.51	70.00'
T363	170+85.57	40.00'
T364	171+51.05	40.00'
T365	171+51.05	47.00'
T366	181+03.68	35.00'
T367	181+03.73	39.96'
T368	181+38.74	39.99'
T369	181+48.59	75.01'
T370	172+26.47	45.00'
T371	172+26.47	42.00'
T372	170+85.05	42.00'
T373	170+75.77	70.00'
T374	170+05.77	70.00'
T375	169+95.72	40.00'
T376	169+30.22	40.00'
T377	169+30.23	50.00'
T378	168+54.73	50.00'
T379	168+54.72	40.00'
T380	167+13.63	40.00'
T381	167+03.69	70.00'
T382	166+43.69	70.00'
T383	166+35.30	45.00'
T384	181+47.64	36.25'
T385	180+83.96	36.25'
T386	163+65.07	45.00'
T387	163+65.07	40.00'
T388	163+15.07	40.00'
T389	163+05.06	80.00'
T390	173+70.55	47.00'
T391	173+77.34	67.61'
T392	173+77.22	73.88'
T393	173+67.51	45.00'

COURSE TABLE		
COURSE	BEARING	DISTANCE
300-301	S48° 11' 01"E	60.00'
301-302	S48° 11' 01"E	338.38'
302-303	S48° 11' 01"E	60.00'
303-304	S48° 11' 01"E	302.11'
304-305	S48° 11' 01"E	70.00'
305-306	S48° 11' 01"E	301.87'
306-307	S48° 04' 37"E	99.00'
307-308	S48° 10' 52"E	300.83'
308-309	S48° 10' 52"E	70.00'
309-310	S48° 10' 52"E	301.40'
310-311	S42° 53' 02"W	70.01'
311-312	N48° 10' 52"W	300.46'
312-313	N48° 10' 52"W	70.00'
313-314	N48° 10' 52"W	300.64'
314-315	N48° 04' 37"W	99.00'
315-316	N48° 11' 01"W	301.57'
316-317	N48° 11' 01"W	70.00'
317-318	N48° 11' 01"W	302.09'
318-319	N48° 11' 01"W	60.00'
319-320	N48° 11' 01"W	338.54'
320-321	N48° 11' 01"W	60.00'
321-300	N41° 50' 12"E	70.00'

STATION OFFSET TABLE		
POINT	STATION	OFFSET
300	162+45.10	35.00'
301	163+05.10	35.00'
302	166+43.48	35.00'
303	167+03.47	35.00'
304	170+05.58	35.00'
305	170+75.58	35.00'
306	173+77.38	35.00'
307	174+76.45	35.00'
308	177+77.28	35.00'
309	178+47.28	35.00'
310	181+48.43	35.01'
311	181+47.63	35.00'
312	178+46.92	35.00'
313	177+76.92	35.00'
314	174+76.28	35.00'
315	173+77.28	35.00'
316	170+75.71	35.00'
317	170+05.71	35.00'
318	167+03.62	35.00'
319	166+43.62	35.00'
320	163+05.07	35.00'
321	162+45.07	35.00'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO CITY OF COLUMBUS. ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
43	BOBBI JO GAMER	TLE	----	----	----	587
44	LINDA M. BAASKE & DENIS C. YELK	TLE	----	----	----	600
46	SUSAN PUNTILLO	TLE	----	----	----	556
47	MARY T. SCHUMANN	TLE	----	----	----	240
48	GARY D. ERICKSON	TLE	----	----	----	480
49	JAMES J. TUSCHEN	TLE	----	----	----	468
50	CITY OF COLUMBUS	TLE	----	----	----	4506
51	LANCE A. DOUMA & KRISTIN L. PETERSON	TLE	----	----	----	302
52	DON M. & LAURA M. D'AGOSTINO	TLE	----	----	----	387
53	RODNEY J. & JEAN M. CLARK	TLE	----	----	----	231
54	MATTHEW L. & SHAWN TRACKWELL	TLE	----	----	----	416
55	COLUMBUS DOWNTOWN DEVELOPMENT CORP.	TLE	----	----	----	403
56	JAMES250, LLC	TLE	----	----	----	527
57	PATRICK E. FRITZ	TLE	----	----	----	403
58	PIETRO PIPITONE	TLE	----	----	----	61
59	KENT M. BERNEY & MARILYN K. MOORE	TLE	----	----	----	1186
60	DONALD C. & CARLA J. RAHN	TLE	----	----	----	67
61	MILDRED E. HENKE	TLE	----	----	----	528
62	BRIAN F. & DAWN J. DONNER	TLE	----	----	----	433
63	DANIEL R. & CATHERINE A. WAGNER	TLE	----	----	----	357
64	WWJD HOLDINGS, LLC	TLE	----	----	----	508
66	LORI E. VISSERS	TLE	----	----	----	1089
67	JAMES L. MYERS & DIANE L. SENNHENN	TLE	----	----	----	550
68	MICHAEL R. & BRENDA J. WOOLLEN	TLE	----	----	----	635
69	BARCLAY P. & BARBARA A. HESSELBERG	TLE	----	----	----	615
70	OSPREY, INC.	TLE	----	----	----	79
71	REGGIE B. WADDELL	TLE	----	----	----	496

SCALE, FEET
0 100 200

HIGHWAY	BASIS
STH 16	SUBDIVISION PLATS OF BIRDSEY'S ADDITION, NEWCOMB'S ADDITION AND ORIGINAL PLAT OF COLUMBUS

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1401-02-21 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

APRIL 27, 2015
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF COLUMBUS.
6/3/15

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD 83 (2007) ADJUSTMENT, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOUND PROPERTY PIPES ARE CUT "X" IN CONCRETE, UNLESS NOTED.

FILE NAME : G:\WDOTCO\12029 (2012-2014 DESIGN WORK ORDERS)\WORK ORDER 07 (STH 16 & USH 151)\CIVIL 3D\SHEETSPLAN\RW\040101-RP.DWG PLOT DATE : 27/04/2015 PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
APPRAISAL PLAT DATE : APRIL 27, 2015

1401-02-21-4.03

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.04, AMENDMENT NO. 2

THIS AMENDMENT REVISES PARCEL 96 OF TRANSPORTATION PROJECT PLAT 1401-02-21-4.04, RECORDED AS DOC 870739 AND FILED IN VOLUME 1, PAGE 298 IN THE REGISTER OF DEEDS IN COLUMBIA COUNTY.

THAT PART OF OUTLOTS 33, 34, 35, 36, 41 & 42, OUTLOTS OF CITY OF COLUMBUS, THAT PART OF LOTS 1-26, INCLUSIVE, BLOCK 1, AND LOTS 1-18, INCLUSIVE, BLOCK 2 MANNING'S ADDITION, LOCATED IN THE SE 1/4 - NE 1/4; AND THAT PART OF OUTLOTS 73, 74, 75 & 76, OUTLOTS OF THE CITY OF COLUMBUS, LOCATED IN THE NE 1/4 - SE 1/4, ALL IN SECTION 13, T10N R12E, CITY OF COLUMBUS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF COLUMBUS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF COLUMBUS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY, WISCONSIN AT 3:04 PM ON 1/22/2016 AS DOCUMENT # 877630 AND FILED IN VOL. 1 PAGE 299A

Karen A. Manske
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
SHEET 1 OF 2
PROJECT NUMBER: 1401-02-21-4.04
AMENDMENT NO: 2

EASEMENT TABLE

OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
WE ENERGIES - GAS	NO EASEMENT OF RECORD FOUND	88

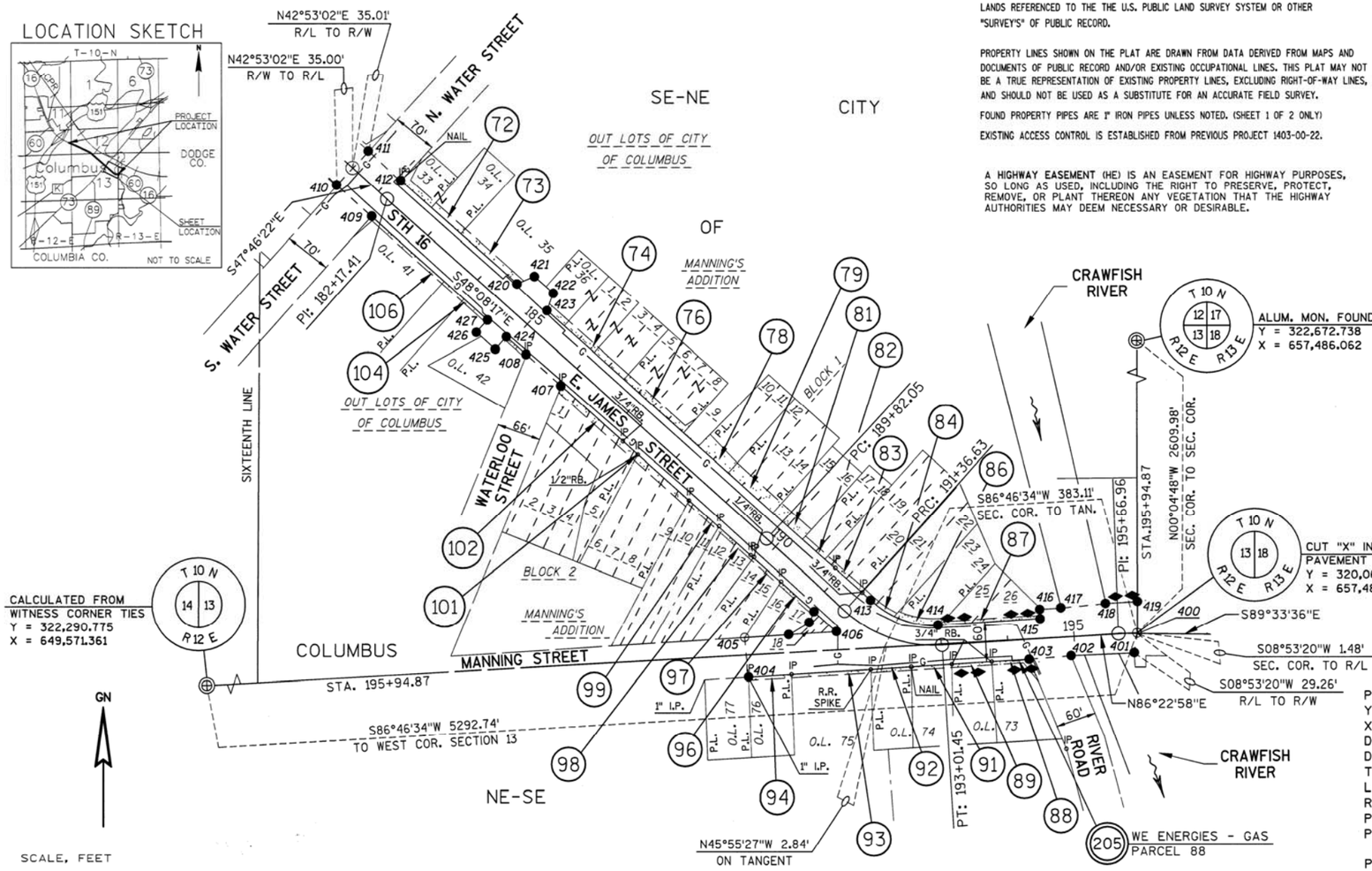
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
205	WE ENERGIES - GAS	RELEASE OF RIGHTS

HIGHWAY	BASIS
STH 16	PROJECT 1403-00-22 & SUBDIVISION PLATS OF MANNING'S ADDITION & OUT LOTS OF CITY OF COLUMBUS

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 870459 AND FILED IN VOL. 1, P. 296A.

LOCATION SKETCH



SEE SHEET 2 OF 2 FOR COURSE TABLES, OFFSET TABLES, CURVE INFORMATION AND DETAILS.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD 83 (2007) ADJUSTMENT, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOUND PROPERTY PIPES ARE 1" IRON PIPES UNLESS NOTED. (SHEET 1 OF 2 ONLY)

EXISTING ACCESS CONTROL IS ESTABLISHED FROM PREVIOUS PROJECT 1403-00-22.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, SO LONG AS USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO CITY OF COLUMBUS.
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.	HE S.F.
72	JOHN W. REED	TLE	----	----	----	1375	----
73	RICHARD R. DERR	TLE	----	----	----	1157	----
74	GEORGE D. & JANET K. ROBERTS REVOCABLE TRUST, 06/11/1999	TLE	----	----	----	1569	----
76	PATRICIA A. & JAMES A. VOELKER	TLE	----	----	----	1244	----
78	INFINITE PURSUITS INVESTMENTS, LLC	TLE	----	----	----	1337	----
79	FAYEANN KEHOE, TIMOTHY A., MICHAEL J. & BRIAN J. GEIGER, ALFRED G. & RUTH H. GEIGER, LIFE ESTATE	TLE	----	----	----	1800	----
81	THOMAS J. & RUTH A. HERMANSON	TLE	----	----	----	1200	----
82	CHRISTOPHER M. BORRESON	TLE	----	----	----	292	----
83	SALLEY EBERT	TLE	----	----	----	487	----
84	RONALD L. & KATHRYN A. KAST	TLE	----	----	----	393	----
86	LANCE C. WIERSMA	TLE	----	----	----	720	----
87	DERRICK P. MIELKE	TLE	----	----	----	742	----
88	GENE GANTA	TLE	----	----	----	444	----
89	KIMBERLY SCHULTZ	TLE	----	----	----	301	----
91	CHRIS W. & APRIL ROELKE	TLE	----	----	----	304	----
92	BILL EARLEY	TLE	----	----	----	304	----
93	RONALD G. & PAMELA K. ERICKSON	TLE	----	----	----	597	----
94	LARRY D. & JULIE A. LEONARD	TLE	----	----	----	323	----
96	PAUL B. VOELKER	HE, TLE	----	----	----	339	953
97	RLK INVESTMENTS	TLE	----	----	----	276	----
98	DANIEL D. & BETH C. BURNARD	TLE	----	----	----	348	----
99	EUGENE R. & IRENE J. SKALITZKY	TLE	----	----	----	299	----
101	BENJAMIN I. & SANDRA M. ALTHOUSE	TLE	----	----	----	1030	----
102	SYLVESTER J. & LYDIA A. BALLWEG	TLE	----	----	----	1955	----
103	GARY D. LEWELLYN	TLE	----	----	----	208	----
104	RICHARD R. DERR	TLE	----	----	----	437	----
106	JO ALLISON OEHRLEIN	TLE	----	----	----	830	----

P.I. 190+59.35
Y=320,153.895
X=656,990.835
DELTA=02°12'51" RT
D=01°25'57"
T=77.30
L=154.58
R=4000.00
PC=189+82.05
PCC=191+36.63

P.I. 192+24.15
Y=320,039.245
X=657,109.244
DELTA=47°41'36" LT
D=28°56'14" LT
T=87.52
L=164.82
R=198.00
PCC=191+36.63
PT=193+01.45

P.I. 182+17.41
Y=320,715.755
X=656,363.795
DELTA=00°21'55" LT

P.I. 195+66.96
Y=320,061.519
X=657,461.576
DELTA=04°03'26" RT

KL Engineering
(A) Better Experience

I, THOMAS J. HANSEN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1401-02-21 - 4.04, AMENDMENT NO. 2 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

JANUARY 18, 2016
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF COLUMBUS.

1-19-16

TRANSPORTATION PROJECT PLAT NO: 1401-02-21-4.04, AMENDMENT NO. 2

RELOCATION ORDER STH 16, JAMES STREET, CITY OF COLUMBUS (INDUSTRIAL DRIVE - RIVER ROAD)

SHEET 2 OF 2 FOR COURSE TABLES, OFFSET TABLES, CURVE INFORMATION AND DETAILS.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN COLUMBIA COUNTY, WISCONSIN AT ---:-- --M ON ---------- AS DOCUMENT #---------- AND FILED IN ----------

---

SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
SHEET 2 OF 2
PROJECT NUMBER: 1401-02-21-4.04
AMENDMENT NO: 2

COURSE TABLE		
COURSE	BEARING	DISTANCE
400-401	S08° 53' 20"W	30.74'
401-402	S87° 25' 44"W	94.78'
402-403	S85° 18' 05"W	63.01'
403-404	S86° 22' 28"W	422.28'
404-405	N03° 37' 02"W	60.06'
405-406	N86° 22' 58"E	135.85'
406-407	N48° 08' 17"W	554.00'
407-408	N48° 08' 17"W	70.07'
408-424	N48° 08' 17"W	40.69'
424-425	S41° 51' 54"W	25.00'
425-426	N48° 08' 06"W	38.00'
426-427	N41° 51' 54"E	25.00'
427-409	N48° 08' 17"W	233.65'
409-410	N47° 46' 21"W	70.00'
410-411	N42° 53' 02"E	70.01'
411-412	S47° 44' 58"E	66.00'
412-420	S48° 08' 17"E	233.40'
420-421	N66° 55' 30"E	28.34'
421-422	S48° 08' 06"E	38.00'
422-423	S20° 34' 21"W	27.55'
423-413	S48° 08' 17"E	653.11'
413-414	SEE CURVE NOTE	
414-415	N86° 22' 58"E	152.81'
415-416	N02° 34' 19"W	14.18'
416-417	N86° 21' 46"E	32.51'
417-418	N84° 28' 32"E	67.41'
418-419	N86° 21' 46"E	47.00'
419-400	S00° 04' 48"E	47.07'

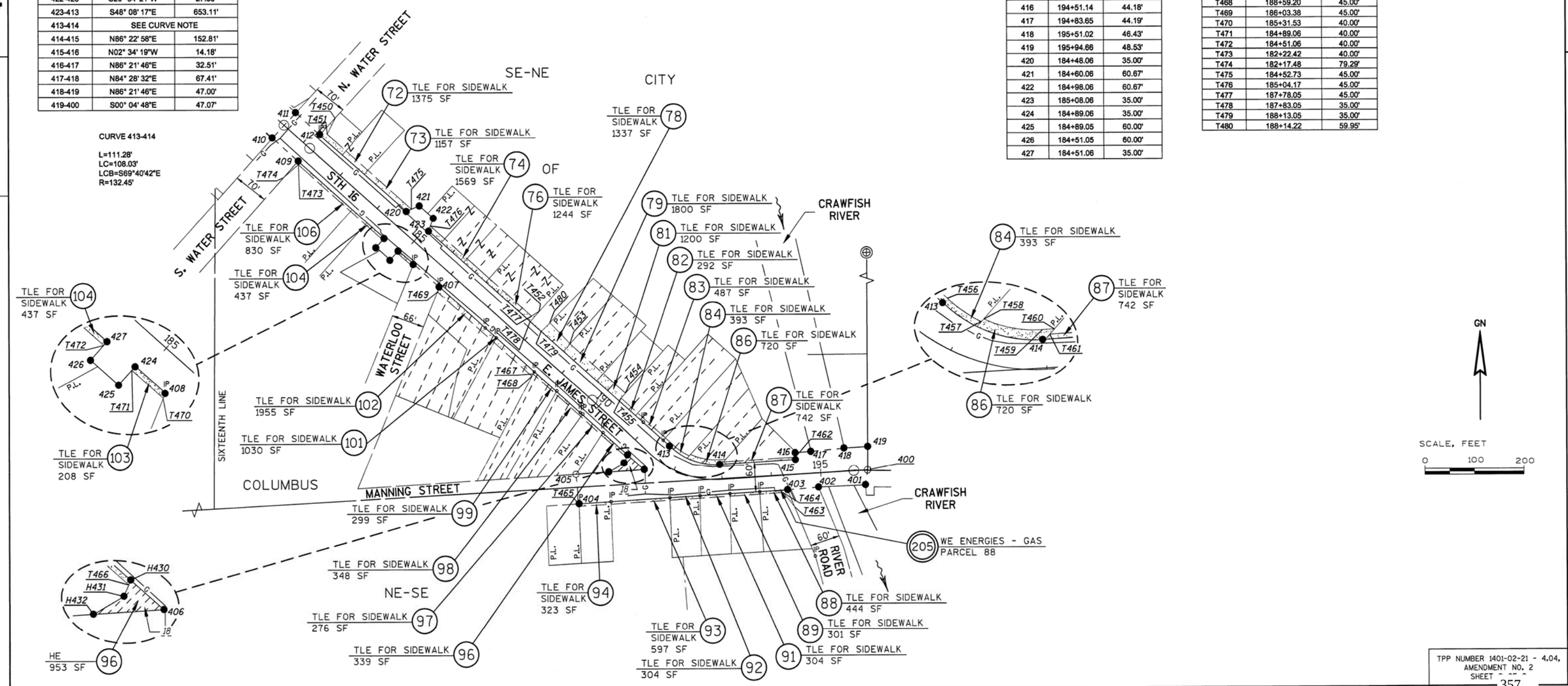
CURVE 413-414

L=111.28'
LC=108.03'
LCB=S69°40'42"E
R=132.45'

HE COURSE TABLE		
COURSE	BEARING	DISTANCE
406-H432	S86° 22' 58"W	71.42'
H432-H431	N59° 40' 23"E	35.68'
H431-H430	N23° 22' 40"E	17.87'
H430-406	S48° 08' 17"E	44.83'

STATION OFFSET TABLE		
POINT	STATION	OFFSET
400	195+95.08	1.46'
401	194+90.57	28.94'
402	194+93.70	28.81'
403	194+30.70	30.00'
404	191+06.77	172.11'
405	190+61.16	131.10'
406	191+52.52	32.07'
407	185+99.82	35.00'
408	185+29.75	35.00'
409	182+17.41	35.00'
410	181+47.63	35.00'
411	181+48.43	35.01'
412	182+14.43	34.98'
413	191+65.17	37.24'
414	192+97.47	29.97'
415	194+50.88	30.00'
416	194+51.14	44.18'
417	194+83.65	44.19'
418	195+51.02	46.43'
419	195+94.66	48.53'
420	184+48.06	35.00'
421	184+60.06	60.67'
422	184+98.06	60.67'
423	185+08.06	35.00'
424	184+89.06	35.00'
425	184+89.05	60.00'
426	184+51.05	60.00'
427	184+51.06	35.00'

HE/TLE STATION OFFSET TABLE		
POINT	STATION	OFFSET
H430	191+10.06	32.97'
H431	191+16.35	49.72'
H432	191+06.37	84.03'
T450	182+14.61	79.98'
T451	182+24.76	45.00'
T452	187+83.05	62.57'
T453	188+73.05	55.00'
T454	190+22.50	55.21'
T455	190+22.63	41.71'
T456	191+66.24	43.69'
T457	192+19.07	38.53'
T458	192+20.78	41.92'
T459	192+97.22	39.96'
T460	193+10.23	40.00'
T461	193+05.14	35.00'
T462	194+50.97	35.00'
T463	194+42.59	64.78'
T464	194+21.84	35.00'
T465	191+10.47	175.56'
T466	191+11.91	37.91'
T467	188+57.96	40.00'
T468	188+59.20	45.00'
T469	186+03.38	45.00'
T470	185+31.53	40.00'
T471	184+89.06	40.00'
T472	184+51.06	40.00'
T473	182+22.42	40.00'
T474	182+17.48	79.29'
T475	184+52.73	45.00'
T476	185+04.17	45.00'
T477	187+78.05	45.00'
T478	187+83.05	35.00'
T479	188+13.05	35.00'
T480	188+14.22	59.95'



TPP NUMBER 1401-02-21 - 4.04, AMENDMENT NO. 2 SHEET - --

FILE NAME : G:\WDOTCO\12029 (2012-2014 DESIGN WORK ORDERS)\WORK ORDER 07 (STH 16 & USH 151)\CIVIL 3D\SHEETSPLAN\RW\040101-RP - AMEND 2.DWG DATE : 20/01/2016 PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
APPRAISAL PLAT DATE : JANUARY 18, 2016

N

P.L.

P.L.

P.L.

REMOVE RIGHT-OF-WAY FENCE
(STA 123+32 WB - STA 129+73 WB)

R/W

SLOPE INTERCEPTS (TYP.)

VILLAGE OF FALL RIVER (FORCE MAIN)

WE ENERGIES (GAS)

MATCH EXISTING
SAWCUT REQUIRED

WE ENERGIES (GAS)

CAUTION

MATCH LINE STA. 128+00WB

122+00WB 123+00WB 124+00WB 125+00WB 126+00WB 127+00WB 128+

STH 16/60 (WB) / W. JAMES STREET R/L

122+00EB 123+00EB 124+00EB 125+00EB 126+00EB 127+00EB 128+

STH 16/60 (EB) / W. JAMES STREET R/L

BEGIN CONSTRUCTION
STA. 126+40.00WB

BEGIN PROJECT
STA. 127+00.00WB

AT&T WISCONSIN

5

5

TREE CLEARING AND GRUBBING

880 876 872 868 864 860 856 852

VCL = 240
K = 169
VPC STA 127+80.00
VPC EL 859.65

STA = 126+40.00
ELEV = 858.87

STA = 127+00.00
ELEV = 859.17

EXISTING WB R/L PROFILE

WB DITCH PROFILE

0.51%

0.60%

PROPOSED WB R/L PROFILE

EXISTING WB PROFILE ELEVATION

PROPOSED WB PROFILE ELEVATION

122+00WB	122+25WB	122+50WB	122+75WB	123+00WB	123+25WB	123+50WB	123+75WB	124+00WB	124+25WB	124+50WB	124+75WB	125+00WB	125+25WB	125+50WB	125+75WB	126+00WB	126+25WB	126+50WB	126+75WB	127+00WB	127+25WB	127+50WB	127+75WB	128+00WB
853.90	854.31	854.72	855.07	855.43	855.83	856.17	856.50	856.79	857.13	857.47	857.74	858.01	858.23	858.39	858.58	858.68	858.80	858.91 **858.92**	859.05 **859.05**	859.17 **859.17**	859.32 **859.32**	859.46 **859.47**	859.57 **859.62**	859.66 **859.76**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - WESTBOUND	SHEET 358 E

WE ENERGIES (GAS)

MATCH EXISTING
SAWCUT REQUIRED

WE ENERGIES (GAS)

122+00WB 123+00WB 124+00WB 125+00WB 126+00WB 127+00WB 128+0

STH 16/60 (WB) / W. JAMES STREET R/L

122+00EB 123+00EB 124+00EB 125+00EB 126+00EB 127+00EB 128+

STH 16/60 (EB) / W. JAMES STREET R/L

AT&T WISCONSIN

MATCH LINE STA. 128+00WB

N

REMOVE RIGHT-OF-WAY FENCE
(STA 122+01 EB - STA 130+50 EB)

BEGIN CONSTRUCTION
STA. 126+39.45EB

BEGIN PROJECT
STA. 126+99.45EB

AT&T WISCONSIN

R/W

P.L.

5

5

TREE CLEARING AND GRUBBING

880 876 872 868 864 860 856 852

VCL = 230
K = 170

VPC STA 127+85.00
VPC EL 860.12

STA = 126+39.45
ELEV = 859.30

STA = 127+00.00
ELEV = 859.69

EXISTING EB R/L PROFILE

0.64%

0.50%

PROPOSED EB R/L PROFILE

EB DITCH PROFILE

EXISTING EB PROFILE ELEVATION

PROPOSED EB PROFILE ELEVATION

122+00EB	122+25EB	122+50EB	122+75EB	123+00EB	123+25EB	123+50EB	123+75EB	124+00EB	124+25EB	124+50EB	124+75EB	125+00EB	125+25EB	125+50EB	125+75EB	126+00EB	126+25EB	126+50EB	126+75EB	127+00EB	127+25EB	127+50EB	127+75EB	128+00EB
854.59	854.85	855.10	855.41	855.76	856.10	856.40	856.73	857.04	857.31	857.57	857.81	858.02	858.29	858.56	858.82	859.05	859.19	859.37 **859.37**	859.55 **859.53**	859.69 **859.69**	859.79 **859.82**	859.87 **859.94**	859.96 **860.07**	860.01 **860.19**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - EASTBOUND	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF
WISDOT/CADDS SHEET 44

N

EXISTING SIGN TO REMAIN

1500 W. JAMES STREET
COLUMBUS PHARMACY GROUP, LLC.

TLE

EXISTING LIGHTS TO REMAIN

R/W

PAVEMENT MARKINGS BY OTHERS

REMOVE RIGHT-OF-WAY FENCE
(STA 123+32 WB - STA 129+73 WB)

MATCH LINE STA. 128+00WB

CHARTER COMMUNICATIONS

WE ENERGIES (GAS)

INDUSTRIAL DRIVE R/L
15+00LD

CAUTION

104 INDUSTRIAL DRIVE
FARMERS & MERCHANTS UNION
BANK OF COLUMBUS

REMOVING LANDSCAPING BY OTHERS

CITY OF COLUMBUS (ELECTRIC)

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (FORCE MAIN)

100 CONTINENTAL DRIVE
GUSTO PROPERTIES, LLC.

CITY OF COLUMBUS (WATER)

SLOPE INTERCEPTS (TYP.)

MATCH LINE STA. 134+00WB

VILLAGE OF FALL RIVER (FORCE MAIN)

CITY OF COLUMBUS (SANITARY)

CHARTER COMMUNICATIONS

129+00WB | 130+00WB | 131+00WB | 132+00WB | 133+00WB | 134+

STH 16/60 (WB) / W. JAMES STREET R/L

129+00EB | 130+00EB | 131+00EB | 132+00EB | 133+00EB | 134+

STH 16/60 (EB) / W. JAMES STREET R/L

AT&T WISCONSIN

CITY OF COLUMBUS (ELECTRIC)

CITY OF COLUMBUS (STORM)

DIX STREET R/L
14+00LD

CITY OF COLUMBUS (WATER)

CITY OF COLUMBUS (STORM)

101 DIX STREET

5

5

TREE CLEARING AND GRUBBING

876 | 872 | 868 | 864 | 860 | 856 | 852 | 848

VCL = 240

K = 169

PVI STA 129+00.00
PVI EL 860.37

VPT STA 130+20.00
VPT EL 859.39

128+81.41
859.96

INDUSTRIAL DRIVE / DIX STREET

PROPOSED WB R/L PROFILE

EXISTING WB R/L PROFILE

-0.82%

EXISTING WB PROFILE ELEVATION

PROPOSED WB PROFILE ELEVATION

859.66	**859.76**	859.71	**859.86**	859.75	**859.93**	859.80	**859.96**	859.80	**859.95**	859.79	**859.90**	859.77	**859.82**	859.74	**859.70**	859.67	**859.54**	859.61	**859.35**	859.56	**859.14**	859.44	**858.94**	859.27	**858.73**	859.06	**858.53**	858.88	**858.32**	858.73	**858.12**	858.55	**857.91**	858.33	**857.71**	858.09	**857.50**	857.86	**857.30**	857.62	**857.09**	857.34	**856.89**	857.02	**856.69**	856.68	**856.48**	856.36	**856.28**
128+00WB	128+25WB	128+50WB	128+75WB	129+00WB	129+25WB	129+50WB	129+75WB	130+00WB	130+25WB	130+50WB	130+75WB	131+00WB	131+25WB	131+50WB	131+75WB	132+00WB	132+25WB	132+50WB	132+75WB	133+00WB	133+25WB	133+50WB	133+75WB	134+00WB																								

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - WESTBOUND	SHEET 360	E

SLOPE INTERCEPTS (TYP.)
CHARTER COMMUNICATIONS
WE ENERGIES (GAS)
INDUSTRIAL DRIVE R/L
15+00LD
CAUTION
R/W
CITY OF COLUMBUS (SANITARY)
CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (ELECTRIC)
CITY OF COLUMBUS (FORCE MAIN)
WE ENERGIES (GAS)
VILLAGE OF FALL RIVER (FORCE MAIN)
CHARTER COMMUNICATIONS

MATCH LINE STA. 128+00WB
00WB | 129+00WB | 130+00WB | 131+00WB | 132+00WB | 133+00WB | 134+
STH 16/60 (WB) / W. JAMES STREET R/L
00EB | 129+00EB | 130+00EB | 131+00EB | 132+00EB | 133+00EB | 134+
STH 16/60 (EB) / W. JAMES STREET R/L
MATCH LINE STA. 134+00WB

CITY OF COLUMBUS (ELECTRIC)
AT&T WISCONSIN
CITY OF COLUMBUS (STORM)
CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (STORM)
AT&T WISCONSIN
14+00LD
DIX STREET R/L
BM101
REMOVE RIGHT-OF-WAY FENCE
(STA 122+01 EB - STA 130+50 EB)
SLOPE INTERCEPTS (TYP.)
R/W
TLE
EXISTING LIGHT POLE TO REMAIN)
101 DIX STREET
SOUTHERN WISCONSIN FOODS
REAL ESTATE HOLDINGS COMPANY, LLC.

5
5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM101	130+13.70WB 76'RT	CHIS SQ TOP RCCP	858.07

TREE CLEARING AND GRUBBING

876
872
868
864
860
856
852
848

VCL = 230
K = 170
PVI STA 129+00.00
PVI EL 860.69
VPT STA 130+15.00
VPT EL 859.71
INDUSTRIAL DRIVE / DIX STREET
PROPOSED EB R/L PROFILE
EXISTING EB R/L PROFILE
128+70.08
860.33
EB DITCH PROFILE
-0.85%
EXISTING EB PROFILE ELEVATION
PROPOSED EB PROFILE ELEVATION

128+00EB	128+25EB	128+50EB	128+75EB	129+00EB	129+25EB	129+50EB	129+75EB	130+00EB	130+25EB	130+50EB	130+75EB	131+00EB	131+25EB	131+50EB	131+75EB	132+00EB	132+25EB	132+50EB	132+75EB	133+00EB	133+25EB	133+50EB	133+75EB	134+00EB
860.01 **860.19**	859.98 **860.27**	859.97 **860.32**	860.00 **860.33**	859.98 **860.30**	860.02 **860.24**	860.01 **860.14**	859.96 **860.01**	859.84 **859.83**	859.81 **859.63**	859.71 **859.41**	859.57 **859.20**	859.43 **858.99**	859.32 **858.77**	859.15 **858.56**	858.95 **858.35**	858.76 **858.13**	858.49 **857.92**	858.21 **857.70**	857.97 **857.49**	857.72 **857.28**	857.42 **857.06**	857.11 **856.85**	856.76 **856.64**	856.38 **856.42**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - EASTBOUND	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG
PLOT DATE : 5/2/2016
PLOT BY : KL ENGINEERING
PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF
WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM102	138+38.80WB 56'RT	CHIS SQ CONC. BASE	853.51

N

100 CONTINENTAL DRIVE
GUSTO PROPERTIES, LLC.

CITY OF COLUMBUS (WATER)

P.L.

VILLAGE OF FALL RIVER (FORCE MAIN)

SLOPE INTERCEPTS (TYP.)

R/W

CITY OF COLUMBUS (FORCE MAIN)

CITY OF COLUMBUS (SANITARY)

END CONSTRUCTION
STA. 12+06.00C
MATCH EXISTING
SAWCUT REQ'D

12+50C

CONTINENTAL DRIVE R/L

12+00C

1200 CONTINENTAL DRIVE

JLP REAL ESTATE HOLIDNGS, LLC.

MATCH LINE STA. 134+00WB

WE ENERGIES (GAS)

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (STORM)

STH 16/60 (WB) / W. JAMES STREET R/L

135+00WB

136+00WB

137+00WB

138+00WB

138+00EB

139+26EB

11+50C

CAUTION

CAUTION

CITY OF COLUMBUS (WATER)

WE ENERGIES (GAS)

CITY OF COLUMBUS (ELECTRIC)

135+00EB

136+00EB

137+00EB

STH 16/60 (EB) / W. JAMES STREET R/L

CHARTER COMMUNICATIONS

CHARTER COMMUNICATIONS

MEISTER DRIVE R/L

11+00M

11+50M

AT&T WISCONSIN

R/W

TLE

SLOPE INTERCEPTS (TYP.)

BM102

R/W

TLE

BEGIN CONSTRUCTION
STA. 10+78.75M
MATCH EXISTING
SAWCUT REQ'D

AT&T WISCONSIN

MATCH LINE STA. 140+00WB

5

5

TREE CLEARING AND GRUBBING

872
868
864
860
856
852
848
844

VCL = 140
K = 106

VCL = 100
K = 98

VPC STA 137+60.00
VPC EL 853.32

PVI STA 138+30.00
PVI EL 852.75

VPT STA 139+00.00
VPT EL 853.10

VPC STA 139+50.00
VPC EL 853.35

PVI STA 140+00.00
PVI EL 853.60

PROPOSED WB R/L PROFILE

0.82%

EXISTING WB R/L PROFILE

0.50%

138+46.96
852.97

139+99.23
853.47

EXISTING WB PROFILE ELEVATION

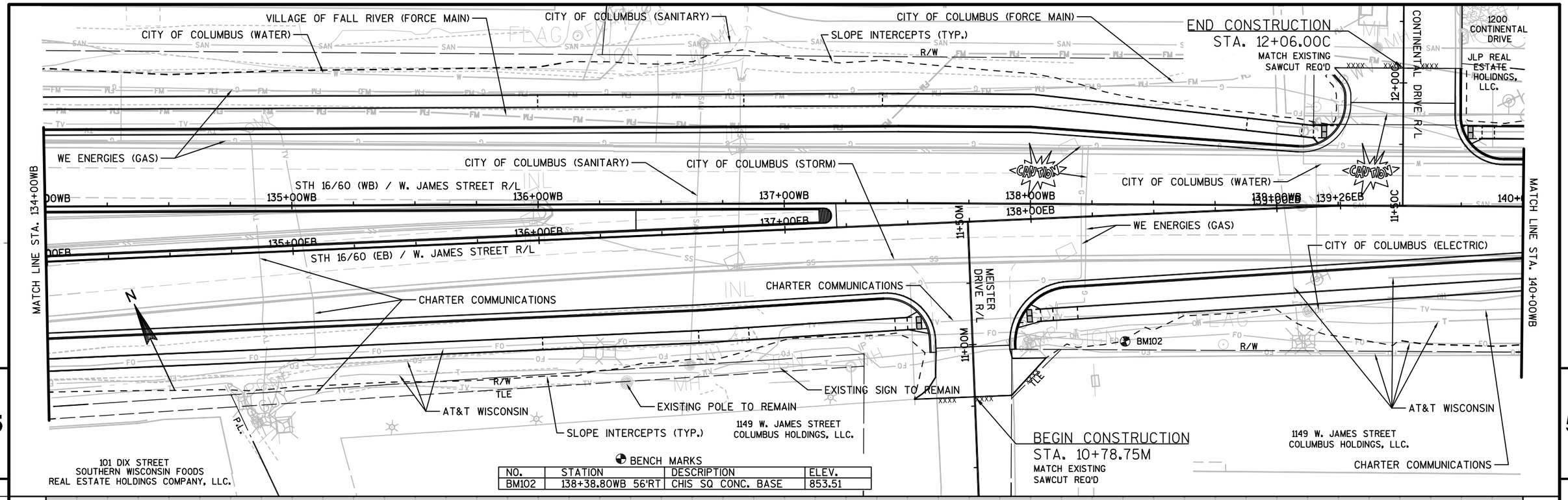
PROPOSED WB PROFILE ELEVATION

MEISTER DRIVE

CONTINENTIAL DRIVE

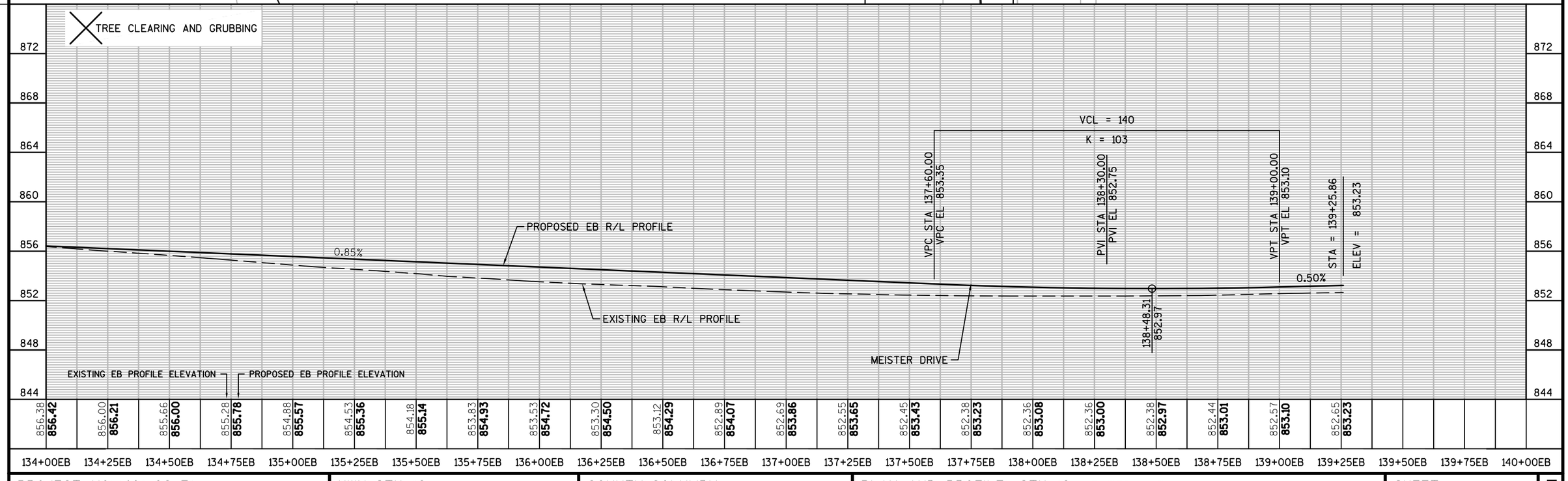
134+00WB	134+25WB	134+50WB	134+75WB	135+00WB	135+25WB	135+50WB	135+75WB	136+00WB	136+25WB	136+50WB	136+75WB	137+00WB	137+25WB	137+50WB	137+75WB	138+00WB	138+25WB	138+50WB	138+75WB	139+00WB	139+25WB	139+50WB	139+75WB	140+00WB
856.36	856.00	855.59	855.18	854.83	854.52	854.17	853.80	853.56	853.40	853.14	852.95	852.75	852.60	852.46	852.40	852.37	852.37	852.37	852.46	852.57	852.65	852.73	852.80	852.89
856.28	**856.07**	**855.87**	**855.66**	**855.46**	**855.25**	**855.05**	**854.84**	**854.64**	**854.43**	**854.23**	**854.02**	**853.82**	**853.61**	**853.41**	**853.21**	**853.07**	**852.99**	**852.97**	**853.00**	**853.10**	**853.22**	**853.35**	**853.44**	**853.47**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - WESTBOUND	SHEET 362	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM102	138+38.80WB 56'RT	CHIS SQ CONC. BASE	853.51



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16 - EASTBOUND	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF

1200 CONTINENTAL DRIVE
JLP REAL ESTATE
HOLDINGS, LLC.

1040 W. JAMES STREET
AMERICAN PACKAGING CORPORATION

850 W. JAMES STREET
AMERICAN PACKAGING CORPORATION

EXISTING SIGN TO REMAIN

EXISTING TREES TO REMAIN

CITY OF COLUMBUS (SANITARY)

VILLAGE OF FALL RIVER (FORCE MAIN)

SLOPE INTERCEPTS (TYP.)

TLE

R/W

P.L.

APC WAY R/L

12+00A

END CONSTRUCTION
STA. 12+20.00A
MATCH EXISTING
SAWCUT REQ'D

AT&T WISCONSIN

MATCH LINE STA. 140+00WB

CAUTION

AT&T WISCONSIN

WE ENERGIES (GAS)

WE GAS

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (WATER)

141+00WB

142+00WB

143+00WB

144+00WB

145+00WB

146+

11+50HU

STH 16/60 / W. JAMES STREET R/L

CITY OF COLUMBUS (SANITARY)

AT&T WISCONSIN

MATCH LINE STA. 146+00WB

CITY OF COLUMBUS (ELECTRIC)

CHARTER COMMUNICATIONS

R/W

TLE

SLOPE INTERCEPTS (TYP.)

EXISTING LIGHT POLE TO REMAIN

HURELLE STREET R/L

11+00HU

BM103

CITY OF COLUMBUS (STORM)

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (ELECTRIC)

EXISTING SIGN TO REMAIN

951 W. JAMES STREET
951 ASSOCIATES, INC.

AT&T WISCONSIN

P.L.

BEGIN CONSTRUCTION
STA. 10+95.50HU
MATCH EXISTING
SAWCUT REQ'D

CITY OF COLUMBUS (STORM)

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM103	144+86.34WB 34'RT	CHIS SQ CONC. BASE	855.83

1149 W. JAMES STREET
COLUMBUS HOLDINGS, LLC.

151 HURELLE STREET
ROBERT A. & CONNIE K. WEIRHERT

939 W. JAMES STREET
MICHAEL R. MILLER

5

5

TREE CLEARING AND GRUBBING

876
872
868
864
860
856
852
848

VCL = 100
K = 98
PVI STA 140+00.00
PVI EL 853.60
VPT STA 140+50.00
VPT EL 853.34

VCL = 105
K = 103
VPC STA 141+12.50
VPC EL 853.02
PVI STA 141+65.00
PVI EL 852.75
VPT STA 142+17.50
VPT EL 853.01

-0.52%

EXISTING R/L PROFILE

HURELLE STREET

PROPOSED R/L PROFILE

141+65.81
852.88

APC WAY

0.50%

EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

| | | |

850 W. JAMES STREET
AMERICAN PACKAGING CORPORATION

850 W. JAMES STREET
AMERICAN PACKAGING CORPORATION

720 W. JAMES STREET
JOHN O. &JENNIFER P. STARRITT, & JULIUS TEMKIN

CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (ELECTRIC)
AT&T WISCONSIN
VILLAGE OF FALL RIVER (FORCE MAIN)
CITY OF COLUMBUS (STORM)
SLOPE INTERCEPTS (TYP.)
TLE
R/W
CITY OF COLUMBUS (WATER)
CAUTION
WE ENERGIES (GAS)
CITY OF COLUMBUS (ELECTRIC)
CHARTER COMMUNICATIONS
STH 16/60 / W. JAMES STREET R/L
CITY OF COLUMBUS (STORM)
CITY OF COLUMBUS (SANITARY)
WE ENERGIES (GAS)
BRICK PAVERS TO BE REMOVED AND REPLACED BY OTHERS
SLOPE INTERCEPTS (TYP.)
BM104
CITY OF COLUMBUS (SANITARY)
CHARTER COMMUNICATIONS
CITY OF COLUMBUS (STORM)

END CONSTRUCTION
STA. 11+97.00B
MATCH EXISTING
SAWCUT REQ'D

BEGIN CONSTRUCTION
STA. 11+00.00MA
MATCH EXISTING
SAWCUT REQ'D

VILLAGE OF FALL RIVER (FORCE MAIN)
EXISTING SIGN TO REMAIN
CITY OF COLUMBUS (ELECTRIC)
EXISTING SIGN TO REMAIN
CITY OF COLUMBUS (ELECTRIC)

BLACKHAWK DRIVE R/L
MAPLE AVENUE R/L

MATCH LINE STA. 146+00WB
MATCH LINE STA. 152+00WB

146+00WB
147+00WB
148+00WB
149+00WB
150+00WB
151+00WB
11+50B
12+00B
11+00MA

939 W. JAMES STREET
MICHAEL R. MILLER

925 W. JAMES STREET
MARY JO RADKE

915 W. JAMES STREET
TIFFANY CALVERT

901 W. JAMES STREET
MARY JO RADKE

857 W. JAMES STREET
ROBERT & MEGAN KULOW

837 W. JAMES STREET
NICHOLAS J. & ROSELYNN M. UEBELACKER

825 W. JAMES STREET
DENISE A. GILMORE

805 W. JAMES STREET
STARRITT PROPERTIES, LLC.

761 W. JAMES STREET
EHLERS TRUSTED DATED MARCH 24, 1995

P.L.

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM104	150+95.04WB 39'RT	CHIS SQ CONC. BASE	859.98

5

TREE CLEARING AND GRUBBING

880
876
872
868
864
860
856
852

VCL = 100
K = 206
VPC STA 148+70.00
VPC EL 856.27
PVI STA 149+20.00
PVI EL 856.52
VPT STA 149+70.00
VPT EL 857.02

VCL = 250
K = 49
VPC STA 150+05.00
VPC EL 857.36
PVI STA 151+30.00
PVI EL 858.60

EXISTING R/L PROFILE
PROPOSED R/L PROFILE
0.50%
0.99%
BLACKHAWK ROAD / MAPLE AVE
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION

| | | |

720 W. JAMES STREET
JOHN O. &JENNIFER P. STARRITT, & JULIUS TEMKIN

BERNARD & SHELDON GARLAND
DBA GARLAND ENTERPRISES

GARLAND ENTERPRISES

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM105	156+08.78WB 24'RT	RR SPIKE PPOL #4E/81/01	874.73

END CONSTRUCTION
STA. 12+35.00L
MATCH EXISTING SAWCUT REQ'D

656 W. JAMES STREET
MELVIN J. BARGEN & MARTHA J. CERVANTES

640 W. JAMES STREET
TRAVIS W. & HILARY K. DEBUSSEY

628 W. JAMES STREET
DALE T. & KRISTINE L. SCHIRMACHER

BELLACK HOUSE
HISTORIC PROPERTY

REMOVING BARRIER REQ'D.

VILLAGE OF FALL RIVER (FORCE MAIN)

SLOPE INTERCEPTS (TYP.)

WE ENERGIES (GAS)

LEGION COURT R/L

12+00L

TLE

R/W

CAUTION

11+50L

11+50CH

155+00WB

154+00WB

153+00WB

152+00WB

MATCH LINE STA. 152+00WB

CITY OF COLUMBUS (SANITARY)

STH 16/60 / W. JAMES STREET R/L

CITY OF COLUMBUS (WATER)

156+00WB

157+00WB

158+

MATCH LINE STA. 158+00WB

BM105

CITY OF COLUMBUS (SANITARY)

WE ENERGIES (GAS)

EXISTING SIGN TO REMAIN

EXISTING LANDSCAPING TO REMAIN

EXISTING FENCE TO REMAIN

STA 152+44 - STA 154+00
WALL MODULAR BLOCK GRAVITY
LRFD WITH ORNAMENTAL PICKET
FENCE (SEE DETAILS)

PLACE SAFETY FENCE DURING CONSTRUCTION OF WALL

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (ELECTRIC)

CHARLES STREET R/L

11+00CH

CITY OF COLUMBUS (ELECTRIC)

BEGIN CONSTRUCTION
STA. 10+82.50CH
MATCH EXISTING SAWCUT REQ'D

SLOPE INTERCEPTS (TYP.)

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (ELECTRIC)

761 W. JAMES STREET
EHLERS TRUSTED DATED MARCH 24, 1995

122 MAPLE AVENUE
ANGELA M. & MATTHEW C. TOMPACH

711 W. JAMES STREET
MARK A. & KATHLEEN W. GARWICK

GOVERNOR LEWIS HOUSE HISTORIC PROPERTY

633 W. JAMES STREET
COLUMBUS ASSOCIATES, LLC.

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TREE CLEARING AND GRUBBING

EXISTING TREES TO REMAIN

EXISTING ARBORVITAE TREES TO REMAIN

VCL = 400
K = 33

VCL = 250
K = 49

VPT STA 152+55.00
VPT EL 866.27

VPC STA 153+00.00
VPC EL 869.04

PVI STA 155+00.00
PVI EL 881.32

155+04.00
875.30

VPT STA 157+00.00
VPT EL 869.52

LEGION COURT

PROPOSED R/L PROFILE

EXISTING R/L PROFILE

CHARLES STREET

6.14%

-5.90%

EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

888
884
880
876
872
868
864
860

152+00WB	152+25WB	152+50WB	152+75WB	153+00WB	153+25WB	153+50WB	153+75WB	154+00WB	154+25WB	154+50WB	154+75WB	155+00WB	155+25WB	155+50WB	155+75WB	156+00WB	156+25WB	156+50WB	156+75WB	157+00WB	157+25WB	157+50WB	157+75WB	158+00WB
existing	863.63	865.08	866.58	868.07	869.49	870.85	872.08	873.20	874.09	874.74	875.20	875.55	875.62	875.52	875.32	874.91	874.26	873.40	872.27	871.04	869.69	868.22	866.75	865.28	863.77
proposed	863.21	864.52	865.97	867.50	869.04	870.48	871.73	872.79	873.67	874.36	874.86	875.17	875.30	875.23	874.98	874.54	873.91	873.10	872.09	870.90	869.52	868.04	866.57	865.09	863.62

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF
WISDOT/CADDS SHEET 44

END CONSTRUCTION
STA. 12+08.00NL
MATCH EXISTING SAWCUT REQ'D

628 W. JAMES STREET
DALE T. & KRISTINE L. SCHIRMACHER
BELLACK HOUSE HISTORIC PROPERTY

548 W. JAMES STREET
SUSAN M. REES & JOHN M. HOFFMAN

530 W. JAMES STREET
MARTHA J. & MICHAEL F. HUSSEY

518 W. JAMES STREET
TIMOTHY L. & CONNIE K. HOFFMAN

END CONSTRUCTION
STA. 12+08.00NB
MATCH EXISTING SAWCUT REQ'D

506 W. JAMES STREET
JONATHAN G. STAEBELL

460 W. JAMES STREET
BOBBI JO GARNER

N. LEWIS STREET R/L

N. BIRDSEY STREET R/L

EXISTING TREE TO REMAIN

BRICK PAVERS TO BE REMOVED AND REPLACED BY OTHERS

SLOPE INTERCEPTS (TYP.)

EXISTING FENCE TO REMAIN

CITY OF COLUMBUS (ELECTRIC)

WE ENERGIES (GAS)

CITY OF COLUMBUS (WATER)

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (ELECTRIC)

CITY OF COLUMBUS (STORM)

CITY OF COLUMBUS (ELECTRIC)

WE ENERGIES (GAS)

CITY OF COLUMBUS (STORM)

STH 16/60 / W. JAMES STREET R/L

CHARTER COMMUNICATIONS

CHARTER COMMUNICATIONS

MATCH LINE STA. 158+00WB

MATCH LINE STA. 164+00WB

158+00WB | 159+00WB | 160+00WB | 161+00WB | 162+00WB | 163+00WB | 164+00WB

11+50NL | 11+50SL | 11+50NB | 11+50SB

CAUTION

BM1051

BM106

S. LEWIS STREET R/L

S. BIRDSEY STREET R/L

R/W

TLE

P.L.

633 W. JAMES STREET
COLUMBUS ASSOCIATES, LLC.

FARNHAM HOUSE HISTORIC PROPERTY

537 W. JAMES STREET
MAYTEE ASPURO

521 W. JAMES STREET
NATHAN P. & ANN M. OLSON

459 W. JAMES STREET
REGGIE B WADDELL

449 W. JAMES STREET
BARCLAY P. & BARBARA A. HESSELBERG

553 W. JAMES STREET
HENRY J. & ELIZABETH ALTSCHWAGER

BEGIN CONSTRUCTION
STA. 10+80.00SL
MATCH EXISTING SAWCUT REQ'D

BEGIN CONSTRUCTION
STA. 10+82.00SB
MATCH EXISTING SAWCUT REQ'D

EXISTING TREE TO REMAIN

CITY OF COLUMBUS (ELECTRIC)

WE ENERGIES (GAS)

SLOPE INTERCEPTS (TYP.)

EXISTING TREES TO REMAIN

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM1051	158+96.21WB 42'RT	60D NAIL PPOL	858.84
BM106	162+56.15WB 28'RT	CHIS SQ NEXT TO INL @TOC	853.51

5

5

868
864
860
856
852
848
844
840

VCL = 100
K = 48
VPC STA 158+40.00
VPC EL 861.26
PVI STA 158+90.00
PVI EL 858.31
VPT STA 159+40.00
VPT EL 856.41
-5.90%
LEWIS STREET
-3.80%
PROPOSED R/L PROFILE
VCL = 100
K = 56
VPC STA 161+50.00
VPC EL 848.43
PVI STA 162+00.00
PVI EL 846.53
VPT STA 162+50.00
VPT EL 845.52
EXISTING R/L PROFILE
BIRDSEY STREET
-2.01%
VCL = 100
K = 116
VPC STA 163+65.00
VPC EL 843.20

TREE CLEARING AND GRUBBING

EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION

| | | |

442/444 W. JAMES STREET
LINDA M. BAASKE &
DENNIS C. YELK

428 W. JAMES STREET
SUSAN PUNTILLO

418 W. JAMES STREET
MARY T. SCHUMANN

406 W. JAMES STREET
GARY D. ERICKSON

N. MAIN STREET R/L

354 W. JAMES STREET
JAMES J. TUSCHEN

342 W. JAMES STREET
LANCE A. DOUMA &
KRISTIN L. PETERSON

330 W. JAMES STREET
DON M. & LAURA M.
D'AGOSTINO

314 W. JAMES STREET
RODNEY J. &
JEAN M. CLARK

300 W. JAMES STREET
MATTHEW L &
SHAWN TRACKWELL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM114	166+90.49WB 46'LT	RR SPIKE PPOL	874.73

END CONSTRUCTION
STA. 12+23.00NM
MATCH EXISTING
SAWCUT REQ'D

SLOPE INTERCEPTS (TYP.)

TLE
R/W

EXISTING FENCE TO REMAIN

EXISTING STEP TO REMAIN

MATCH LINE STA. 164+00WB

MATCH LINE STA. 170+00WB

WE ENERGIES (GAS)

CAUTION

CITY OF COLUMBUS (WATER)

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (STORM)

CITY OF COLUMBUS (ELECTRIC)

CHARTER COMMUNICATIONS

R/W
TLE

EXISTING TREE TO REMAIN

EXISTING TREES TO REMAIN

BRICK PAVERS TO BE REMOVED
AND REPLACED BY OTHERS

164+00WB 165+00WB 166+00WB 167+00WB 168+00WB 169+00WB 170+00WB

STH 16/60 / W. JAMES STREET R/L

12+00NM

11+50NM

10+00SM

S. MAIN STREET R/L

BEGIN CONSTRUCTION
STA. 10+92.00SM
MATCH EXISTING
SAWCUT REQ'D

449 W. JAMES STREET
BARCLAY P. &
BARBARA A.
HESSELBERG

437 W. JAMES STREET
MICHAEL R. &
BRENDA J. WOOLLEN

425 W. JAMES STREET
JAMES L. MYERS &
DIANE L. SENNHENN

409 W. JAMES STREET
LORI E. VISSORS

351/353 W. JAMES STREET
WWJD HOLDINGS, LLC.

337 W. JAMES STREET
DANIEL R. &
CATHERINE A. WAGNER

321 W. JAMES STREET
BRIAN F. & DAWN J.
DONNER

305 W. JAMES STREET
MILDRED E. HENKE

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TREE CLEARING AND GRUBBING

860 856 852 848 844 840 836 832

VCL = 100
K = 116

PVI STA 164+15.00
PVI EL 842.20

VPT STA 164+65.00
VPT EL 841.62

-1.15%

STA = 165+00.00
ELEV = 841.22

-0.56%

STA = 166+72.00
ELEV = 840.25

-0.40%

VCL = 100
K = 97

VPC STA 167+23.00
VPC EL 840.05

PVI STA 167+73.00
PVI EL 839.85

VPT STA 168+23.00
VPT EL 840.17

0.63%

VCL = 100
K = 62

VPC STA 169+00.00
VPC EL 840.65

PVI STA 169+50.00
PVI EL 840.97

VPT STA 170+00.00
VPT EL 842.09

MAIN STREET

EXISTING R/L PROFILE

PROPOSED R/L PROFILE

167+61.80
839.97

EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

164+00WB	164+25WB	164+50WB	164+75WB	165+00WB	165+25WB	165+50WB	165+75WB	166+00WB	166+25WB	166+50WB	166+75WB	167+00WB	167+25WB	167+50WB	167+75WB	168+00WB	168+25WB	168+50WB	168+75WB	169+00WB	169+25WB	169+50WB	169+75WB	170+00WB
842.61 **842.55**	842.20 **842.15**	841.81 **841.80**	841.45 **841.51**	841.21 **841.22**	840.96 **841.08**	840.71 **840.94**	840.45 **840.80**	840.21 **840.66**	840.01 **840.52**	840.10 **840.38**	840.24 **840.24**	839.86 **840.14**	839.66 **840.04**	839.73 **839.98**	839.87 **839.98**	839.97 **840.05**	840.09 **840.18**	840.22 **840.34**	840.37 **840.49**	840.60 **840.65**	840.87 **840.86**	841.19 **841.17**	841.63 **841.58**	842.06 **842.09**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF_XREF
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM1071	170+61.17WB 28'RT	RR SPIKE PPOL #4F/22/4	844.18
BM108	173+71.90WB 25'LT	CHIS SQ CONC LPOL BASE	849.96

250/252 W. JAMES STREET
JAMES 250, LLC.

105 N. DICKASON BLVD.
CITY OF COLUMBUS

COLUMBUS CITY HALL
HISTORIC PROPERTY

156 W. JAMES ST.
EDWIN O. SCHELLIN

152 W. JAMES ST.
JAMES FREY GROUP, LLC.

146 W. JAMES ST.
COLUMBUS INVESTMENT CORPORATION

140 W. JAMES ST.

136 W. JAMES ST.
DONALD C. & CARLA J. RAHN

MATCH LINE STA. 170+00WB

N. SPRING STREET R/L

END CONSTRUCTION
STA. 12+08.00NS
MATCH EXISTING
SAWCUT REQ'D

234 W. JAMES STREET
CITY OF COLUMBUS

222 W. JAMES STREET
CITY OF COLUMBUS

END CONSTRUCTION
STA. 12+43.70DSB
MATCH EXISTING
SAWCUT REQ'D

DICKASON BLVD. R/L

END CONSTRUCTION
STA. 12+27.76DNB
MATCH EXISTING
SAWCUT REQ'D

CITY OF COLUMBUS
DOWNTOWN HISTORIC DISTRICT
(STA. 172+75 - STA. 181+65)

CITY OF COLUMBUS (ELECTRIC)
EXISTING TREE TO REMAIN
CHARTER COMMUNICATIONS
TLE
SLOPE INTERCEPTS (TYP.)
R/W
EXISTING STEPS TO REMAIN
BM108
CITY OF COLUMBUS (STORM)
WE ENERGIES (GAS)
CITY OF COLUMBUS (WATER)
AT&T WISCONSIN
CAUTION
CITY OF COLUMBUS (COMMUNICATION)
MATCH LINE STA. 176+00WB

12+00NS
11+50NS
171+00WB
172+00WB
173+00WB
174+00WB
11+50DSB
11+50DNB
175+00WB
176+

EXISTING TREE TO REMAIN
EXSTING SIGN TO REMAIN
STH 16/60 / W. JAMES STREET R/L
CITY OF COLUMBUS (ELECTRIC)
WE ENERGIES (GAS)
BM1071
TLE
SLOPE INTERCEPTS (TYP.)
CHARTER COMMUNICATIONS
CITY OF COLUMBUS (ELECTRIC)
STAMPED CONCRETE TO
BE REPLACED BY OTHERS
BENCH PAD TO REMAIN
WE ENERGIES (GAS)
BENCH PAD TO REMAIN
MAINTAIN A 3-FT BOUNDARY AROUND
THE FARMERS AND MERCHANTS BANK
BUILDING WITH TEMPORARY PROTECTION
PLACED IN FRONT OF BUILDING WALLS
DURING CONCRETE SAWING AND
SIDEWALK REMOVAL.

CITY OF COLUMBUS
DOWNTOWN HISTORIC DISTRICT
(STA. 172+75 - STA. 181+65)

137 W. JAMES ST.
MATTHEW & DAWN FAUST REV. TRUST
DATED 4-11-2008

11+00NS
11+00SS
11+00SBD
11+00NBD

S. SPRING STREET R/L

S. DICKASON BLVD. R/L

N. DICKASON BLVD. R/L

BEGIN CONSTRUCTION
STA. 10+91.50SS
MATCH EXISTING
SAWCUT REQ'D

251 W. JAMES STREET
KENT M. BERNEY &
MARILYN K. MOORE

239 W. JAMES STREET
CITY OF COLUMBUS

223 W. JAMES STREET
COLUMBUS PUBLIC LIBRARY
HISTORIC PROPERTY

BEGIN CONSTRUCTION
STA. 10+81.00SBD
MATCH EXISTING
SAWCUT REQ'D

159/147 W. JAMES STREET
FARMERS & MERCHANTS
UNION BANK OF COLUMBUS
HISTORIC PROPERTY

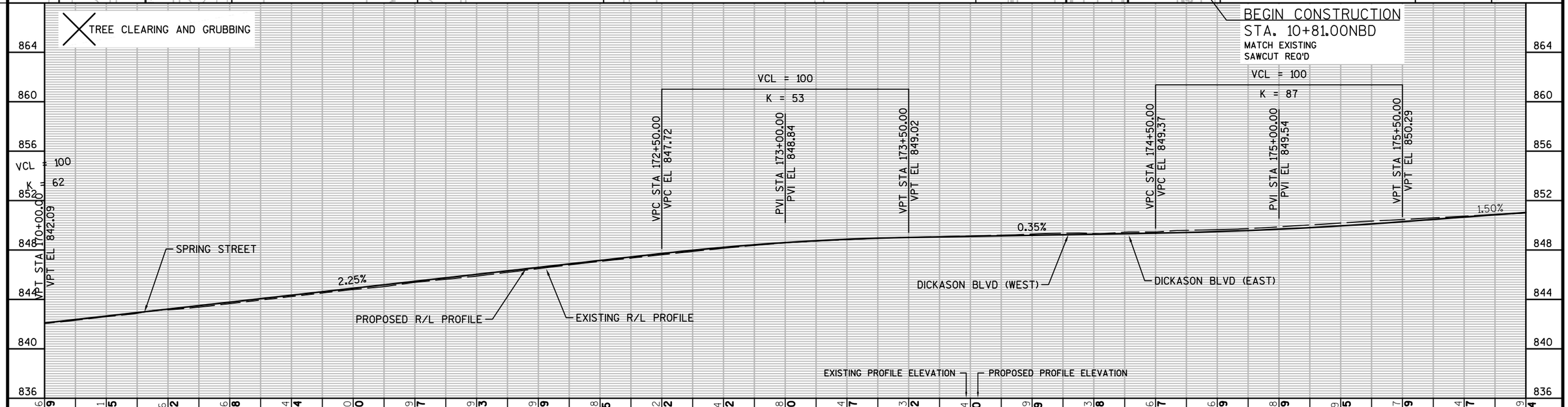
141 W. JAMES ST.
QUENTIN W. VERDIER &
JUDITH S. STOUT

BEGIN CONSTRUCTION
STA. 10+81.00NBD
MATCH EXISTING
SAWCUT REQ'D

5

5

TREE CLEARING AND GRUBBING



| | | |

PAUL E. & ELLEN SUE GORTON
132 W. JAMES ST.
COLUMBUS DOWNTOWN DEVELOPE-MENT CORP, LLC.
128 W. JAMES ST.
122/124 W. JAMES ST. DENNIS C. MIDTHUN
112/116 W. JAMES ST. FREY GROUP, LLC.
109/111 N. LUDINGTON STREET KELSEY CURKEET
107 N. LUDINGTON STREET THE TREMONT PROPERTIES OF COLUMBUS, LLC.
EXISTING STEPS TO REMAIN
103 S. LUDINGTON STREET BYRON K. DOPKINS
MATCH LINE STA. 176+00WB
CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (SANITARY)
CITY OF COLUMBUS (STORM)
BM109
EXISTING STEPS TO REMAIN
BEGIN CONSTRUCTION
STA. 10+75.00S
MATCH EXISTING SAWCUT REQ'D
100 S. LUDINGTON STREET SHARROW PROPOERTIES, LLC.
110 S. LUDINGTON STREET QUENTIN W. VERDIER & JUDITH S. STOUT
131 W. JAMES ST. GRAND LODGE OF WI
127 W. JAMES ST. LEONA T. MALONEY
125 W. JAMES ST. RINWICOL, LLC.
STH 73/N. LUDINGTON STREET R/L
12+00N
11+50N
10+00S
STH 73/S. LUDINGTON STREET R/L
177+00WB
178+00WB
179+00WB
180+00WB
181+00WB
182+
STH 16/60 / E. JAMES STREET R/L
END CONSTRUCTION
STA. 12+35.00N
MATCH EXISTING SAWCUT REQ'D
101/105 E. JAMES ST. JAMES A. REITZNER
107 E. JAMES ST. JAMES A. REITZNER
111/111½ E. JAMES ST. PA'S RENTAL, LLC.
119 E. JAMES ST. CHAD J. PURVIS
125/127 E. JAMES ST. SANDRA L. SUTTON
131 E. JAMES ST. SANDRA L. SUTTON
141 E. JAMES ST. ROBERT K. FINLAYSON
145 E. JAMES ST. ROBERT & BARBARA J. O'BRION
CITY OF COLUMBUS DOWNTOWN HISTORIC DISTRICT (STA. 172+75 - STA. 181+65)
EXISTING STEPS TO REMAIN
SLOPE INTERCEPTS (TYP.)
END CONSTRUCTION
STA. 12+16.50NW
MATCH EXISTING SAWCUT REQ'D
159 E. JAMES ST. PATRICK E. FRITZ
TLE
CAUTION
CITY OF COLUMBUS (ELECTRIC)
12+00NW
11+50NW
N. WATER STREET R/L
MATCH LINE STA. 182+00WB
SLOPE INTERCEPTS (TYP.)
EXISTING STEPS TO REMAIN
101/105 S. LUDINGTON STREET COLUMBUS DOWNTOWN DEVELOPEMENT CORP.
114 E. JAMES STREET. DANIEL R. & CHERYL A. HEGGE
CITY OF COLUMBUS DOWNTOWN HISTORIC DISTRICT (STA. 172+75 - STA. 181+65)
136 E. JAMES ST. SANDRA L. SUTTON
CAUTION
WE ENERGIES (GAS)
BEGIN CONSTRUCTION
STA. 10+75.50SW
MATCH EXISTING SAWCUT REQ'D
140 E. JAMES ST. MICHAEL L. FIRCHOW
148 E. JAMES ST. CHARLES
152/158 E. JAMES ST. A. DRUGG
111 S. LUDINGTON STREET STARK ENTERPRISES, LLC.
112 E. JAMES ST. PIETRO PIPITONE
120 E. JAMES ST. TERRENCE R. CROWLEY
126/128 E. JAMES ST. GANI GANI
11+00S
10+50S
S. WATER STREET R/L
5
5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM109	177+73.74WB 25'RT	CHIS SQ CONC TSF BASE	853.25

TREE CLEARING AND GRUBBING

EXISTING R/L PROFILE
PROPOSED R/L PROFILE
LUDINGTON STREET
WATER STREET
1.50%
-4.75%
-5.55%
VCL = 120
K = 19
VPC STA 177+65.00
VPC EL 853.52
PVI STA 178+25.00
PVI EL 854.42
VPT STA 178+85.00
VPT EL 851.57
177+93.80 CD
853.73
VCL = 100
K = 125
VPC STA 179+75.00
VPC EL 847.29
PVI STA 180+25.00
PVI EL 844.92
VPT STA 180+75.00
VPT EL 842.14
VCL = 100
K = 42
VPC STA 181+00.00
VPC EL 840.75
PVI STA 181+50.00
PVI EL 837.98
VPT STA 182+00.00
VPT EL 836.40
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION

176+00WB	176+25WB	176+50WB	176+75WB	177+00WB	177+25WB	177+50WB	177+75WB	178+00WB	178+25WB	178+50WB	178+75WB	179+00WB	179+25WB	179+50WB	179+75WB	180+00WB	180+25WB	180+50WB	180+75WB	181+00WB	181+25WB	181+50WB	181+75WB	182+00WB
850.99 **851.04**	851.33 **851.42**	851.74 **851.79**	852.10 **852.17**	852.42 **852.54**	852.69 **852.92**	852.99 **853.29**	853.26 **853.64**	853.55 **853.72**	853.47 **853.48**	852.67 **852.91**	851.70 **852.02**	850.63 **850.85**	849.51 **849.67**	848.31 **848.48**	847.17 **847.29**	845.95 **846.08**	844.73 **844.82**	843.49 **843.50**	842.17 **842.14**	840.95 **840.75**	839.57 **839.44**	838.34 **838.28**	837.26 **837.27**	836.51 **836.40**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 370 E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM110	182+13.99WB 34'RT	CHIS SQ CONC BASE	836.42
BM1140	184+87.57WB 39'LT	DISC NE COR BOX CULV C-11-40	832.82
BM111	186+02.75WB 24'RT	RR SPIKE PPOL #4F/68/80	834.10

JOHN W. REED
205 E. JAMES STREET JOHN W. REED
241 E. JAMES STREET RICHARD R. DERR
GEORGE D. & JANET K. ROBERTS REVOCABLE TRUST DATED 6-11-1999
301 E. JAMES STREET GEORGE D. & JANET K. ROBERTS REVOCABLE TRUST DATED 6-11-1999
315 E. JAMES STREET GEORGE D. & JANET K. ROBERTS REVOCABLE TRUST DATED 6-11-1999
333 E. JAMES STREET PATRICIA & JAMES A. VOELKER
200 E. JAMES STREET JOALLISON DEHRLEIN
232 E. JAMES STREET RICHARD R. DERR
242 E. JAMES STREET
110 WATERLOO STREET GARY D. LEWELLYN
300/302 E. JAMES STREET SYLVESTER J. & LYDIA BALLWEG
338 E. JAMES STREET BENJAMIN I. & SANDRA M. ALTHOUSE

MATCH LINE STA. 182+00WB
MATCH LINE STA. 188+00WB
183+00WB
184+00WB
185+00WB
186+00WB
187+00WB
12+00UX

BEGIN CONSTRUCTION
STA. 10+88.00W
MATCH EXISTING SAWCUT REQ'D

END CONSTRUCTION
STA. 12+08.25 U
MATCH EXISTING SAWCUT REQ'D

STH 16/60 / E. JAMES STREET R/L
WATERLOO STREET R/L
UDEY STREET R/L

EXISTING RAILING TO REMAIN
C-11-40 EXISTING TO REMAIN
EXISTING FENCE TO REMAIN
TLE
R/W
SLOPE INTERCEPTS (TYP.)
EXISTING TREES TO REMAIN
EXISTING SIGN TO REMAIN
EXISTING STEPS TO REMAIN
CHARTER COMMUNICATIONS
CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (SANITARY)
CITY OF COLUMBUS (STORM)
CITY OF COLUMBUS (ELECTRIC)
WE ENERGIES (GAS)
AT&T WISCONSIN
CAUTION
BM1110
BM1140
BM111
MOD-11
MOD-11

TREE CLEARING AND GRUBBING

VCL = 100
K = 42
VPT STA 182+00.00 VPT EL 836.40
VCL = 100
K = 38
VPC STA 182+25.00 VPC EL 835.62
PVI STA 182+75.00 PVI EL 834.04
VPT STA 183+25.00 VPT EL 833.79
VCL = 100
K = 83
VPC STA 184+75.00 VPC EL 833.04
PVI STA 185+25.00 PVI EL 832.79
VPT STA 185+75.00 VPT EL 833.14
VCL = 100
K = 140
VPC STA 186+50.00 VPC EL 833.67
PVI STA 187+00.00 PVI EL 834.02
VPT STA 187+50.00 VPT EL 834.72

-3.15%
-0.50%
0.70%
EXISTING R/L PROFILE
PROPOSED R/L PROFILE
185+16.67 832.94
WATERLOO STREET
UDEY STREET
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION

852 848 844 840 836 832 828 824

836.51	**836.40**	835.75	**835.62**	835.10	**834.91**	834.46	**834.37**	834.11	**834.00**	833.89	**833.79**	833.76	**833.67**	833.64	**833.54**	833.48	**833.42**	833.32	**833.29**	833.18	**833.17**	833.16	**833.04**	833.08	**832.95**
833.17	**832.94**	833.14	**833.00**	833.20	**833.14**	833.22	**833.32**	833.36	**833.49**	833.49	**833.67**	833.74	**833.86**	833.97	**834.11**	834.29	**834.39**	834.63	**834.72**	834.97	**835.08**	835.36	**835.43**	

182+00WB 182+25WB 182+50WB 182+75WB 183+00WB 183+25WB 183+50WB 183+75WB 184+00WB 184+25WB 184+50WB 184+75WB 185+00WB 185+25WB 185+50WB 185+75WB 186+00WB 186+25WB 186+50WB 186+75WB 187+00WB 187+25WB 187+50WB 187+75WB 188+00WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 371 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF_XREF_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM112	191+12.18WB 24'RT	RR SPIKE PPOL #4E/80/92	835.00

355 E. JAMES STREET
INFINITE PURSUITS INVESTMENTS, LLC.
401 E. JAMES STREET
FAYEANN KEHOE, TIMOTHY A. & MICHAEL J. & BRIAN J. GEIGER, ALFRED G. & RUTH H. GEIGER LIFE ESTATE
415/417 E. JAMES STREET
THOMAS J. & RUTH A. HERMANSON
429 E. JAMES STREET
CHRISTOPHER M. BORRESON
443 E. JAMES STREET
SALLY EBERT
457 E. JAMES STREET
RONALD. L & KATHRYN A. KAST
545 MANNING ST.
LANCE C. WEIRSMA
546 MANNING ST.
CHRIS W. & APRIL ROELKE
534 MANNING ST.
BILL EARLEY
338 E. JAMES STREET
BENJAMIN I. & SANDRA M. ALTHOUSE
356 E. JAMES STREET
EUGENE R. & IRENE J. SKALITZKY
410/412 E. JAMES STREET
DANIEL D. & BETH C. BURNARD
418 E. JAMES STREET
RLK INVESTMENTS
430 E. JAMES STREET
PAUL B. VOELKER

UDEY STREET R/L
MATCH LINE STA. 188+00WB
188+00WB
189+00WB
190+00WB
191+00WB
192+00WB
193+00WB
MATCH LINE STA. 193+00WB
MANNING STREET R/L
11+82MS
MATCH LINE STA. 11+75MS
STH 16/60 / E. JAMES STREET R/L
BM112
P.L.
TLE
R/W
CAUTION
EXISTING TREES TO REMAIN
EXISTING STEPS TO REMAIN
BRICK PAVERS TO BE REMOVED AND REPLACED BY OTHERS
SLOPE INTERCEPTS (TYP.)
EXISTING WALL TO REMAIN
LANDSCAPING TO REMAIN
CHARTER COMMUNICATIONS
EXISTING STEP TO REMAIN
EXISTING TREE TO REMAIN
WE ENERGIES (GAS)
CITY OF COLUMBUS (ELECTRIC)
CITY OF COLUMBUS (WATER)
CITY OF COLUMBUS (SANITARY)
CITY OF COLUMBUS (STORM)

5

5

TREE CLEARING AND GRUBBING

VCL = 150
K = 43
VPC STA 188+75.00
VPC EL 836.49
PVI STA 189+50.00
PVI EL 837.55
VPT STA 190+25.00
VPT EL 835.98
VCL = 150
K = 88
VPC STA 192+50.00
VPC EL 831.26
1.41%
-2.10%
189+35.41
836.92
MANNING STREET
EXISTING R/L PROFILE
PROPOSED R/L PROFILE
EXISTING PROFILE ELEVATION
PROPOSED PROFILE ELEVATION

856 852 848 844 840 836 832 828

188+00WB	188+25WB	188+50WB	188+75WB	189+00WB	189+25WB	189+50WB	189+75WB	190+00WB	190+25WB	190+50WB	190+75WB	191+00WB	191+25WB	191+50WB	191+75WB	192+00WB	192+25WB	192+50WB	192+75WB	193+00WB
835.36 **835.43**	835.64 **835.79**	835.94 **836.14**	836.17 **836.49**	836.27 **836.77**	836.47 **836.91**	836.52 **836.90**	836.39 **836.74**	836.09 **836.43**	835.71 **835.98**	835.21 **835.46**	834.67 **834.93**	834.20 **834.41**	833.72 **833.88**	833.24 **833.36**	832.75 **832.83**	832.29 **832.31**	831.76 **831.78**	831.24 **831.26**	830.75 **830.77**	830.24 **830.35**

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 372 E

545 MANNING STREET
LANCE C.
WEIRSMA

549 MANNING STREET
DERRICK P. MIELKE

THOMAS J. &
RUTH A. HERMANSON

CRAWFISH RIVER

CAMPBELL STREET

CITY OF COLUMBUS (SANITARY)

CITY OF COLUMBUS (STORM)

AT&T WISCONSIN

EXISTING WALL TO REMAIN

SLOPE INTERCEPT (TYP.)

TLE
R/W

B-11-135
EXISTING TO REMAIN

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM113	194+80.59WB 30'RT	DISC SW COR B-11-135	831.15

MATCH LINE STA. 193+00

CAUTION

WE ENERGIES (GAS)

194+00WB

195+00WB

196+00WB

197+00WB

198+00

STH 16/60 / E. JAMES STREET R/L

10+32.00R

BM113

R/W

TLE

SLOPE INTERCEPT (TYP.)

CITY OF COLUMBUS (WATER)

CHARTER COMMUNICATIONS

RIVER ROAD R/L

10+00R

BEGIN CONSTRUCTION
STA. 10+32.00R
MATCH EXISTING
SAWCUT REQ'D

END PROJECT
STA. 194+59.01WB
MATCH EXISTING
SAWCUT REQ'D

N

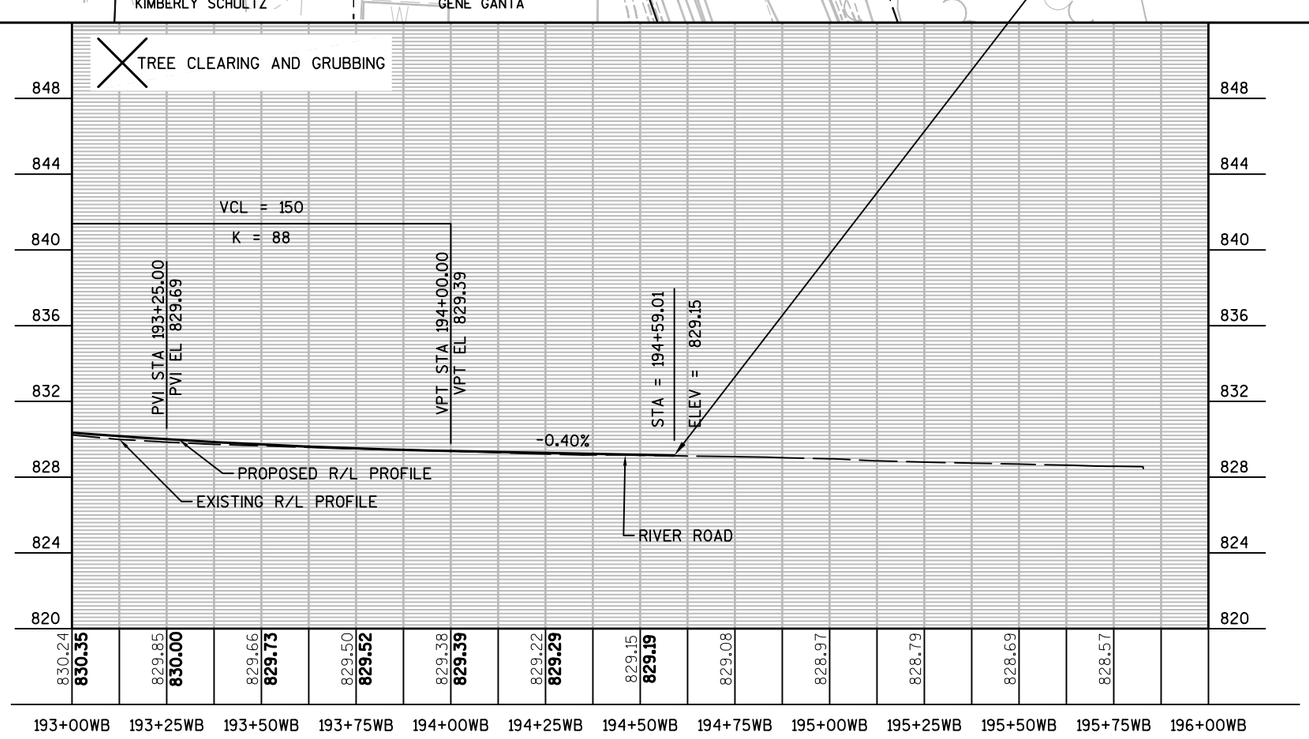
558 MANNING STREET
KIMBERLY SCHULTZ

612 MANNING STREET
GENE GANTA

P.L.

5

5



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 373 E

224 DIX STREET
FERNANDO & MARIE
DEJESUS DIAZ

220 DIX STREET
TERAN HE TERAN, LLC.

EXISTING GUARDRAIL AND
ELECTRICAL BOX TO REMAIN

204/210 DIX STREET
GUNDLACH
PROPERTIES,
LLC.

KT REAL ESTATE
HOLDINGS, LLC.

EXISTING SIGNS TO REMAIN

CITY OF COLUMBUS (ELECTRIC)

SLOPE INTERCEPTS (TYP.)

EXISTING BOULDER TO REMAIN

TLE

R/W

DIX STREET R/L

9+00ID

10+00ID

11+00ID

12+00ID

13+00ID

CITY OF COLUMBUS (SANITARY)

AT&T WISCONSIN

CITY OF COLUMBUS (STORM)

CITY OF COLUMBUS (WATER)

14+00ID

EXISTING LIGHT TO REMAIN

AT&T WISCONSIN

PRW

TLE

SLOPE INTERCEPTS (TYP.)

EXISTING SIGN TO REMAIN

REVISED PAVEMENT MARKINGS BY OTHERS

EXISTING SIGNS TO REMAIN

105/105½ DIX STREET
GEORGE & PEGGY
PAPAGIANIS

101 DIX STREET
SOUTHERN WISCONSIN
FOODS REAL ESTATE
HOLDINGS COMPANY, LLC.

STH 16/60 (EB) / W. JAMES STREET R/L

STH 16/60 (WB) / W. JAMES STREET R/L

8300+13

MATCH LINE STA. 14+50ID

TREE CLEARING AND GRUBBING

BEGIN CONSTRUCTION
STA. 10+00.00ID
MATCH EXISTING
SAWCUT REQ'D

STA = 10+00.00
ELEV = 849.69

VCL = 120
K = 40

VPC STA 12+50.00
VPC EL 854.42

VPT STA 13+70.00
VPT EL 858.28

STA = 13+95.44
ELEV = 858.71

EXISTING R/L PROFILE

PROPOSED R/L PROFILE

0.30%

4.73%

1.71%

VPC STA 11+00.00
VPC EL 849.99

VPI STA 11+60.00
VPI EL 850.168

VPT STA 12+20.00
VPT EL 853.00

VPI STA 13+10.00
VPI EL 857.257

VCL = 120
K = 27

EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

							849.69	849.72	849.75	849.93	850.09	850.35	850.71	851.30	852.21	853.32	854.62	855.93	857.16	858.03	858.71	859.13	859.61	859.55	859.36	
							849.69	**849.76**	**849.84**	**849.91**	**849.99**	**850.18**	**850.60**	**851.25**	**852.13**	**853.24**	**854.42**	**855.52**	**856.47**	**857.26**	**857.89**	**858.37**				
8+50	8+75	9+00	9+25	9+50	9+75	10+00	10+25	10+50	10+75	11+00	11+25	11+50	11+75	12+00	12+25	12+50	12+75	13+00	13+25	13+50	13+75	14+00	14+25	14+50		

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: DIX STREET

SHEET 374 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\14010204_PP - SIDEROADS.DWG PLOT DATE : 5/2/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF_XREF_XREF

WISDOT/CADDS SHEET 44

CITY OF COLUMBUS (STORM)

130+00EB

130+00WB

EXISTING SIGN TO REMAIN

REVISED PAVEMENT MARKINGS BY OTHERS

SLOPE INTERCEPTS (TYP.)

1500 W. JAMES STREET
COLUMBUS PHARMACY GROUP, LLC.

TREE CLEARING AND GRUBBING

N

TLE

PRW

AT&T WISCONSIN

CAUTION

WE ENERGIES (GAS)

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (FORCE MAIN)

CAUTION

15+00ID

16+00ID

17+00ID

18+00ID

18+39ID

CITY OF COLUMBUS (SANITARY)

INDUSTRIAL DRIVE R/L

MATCH LINE STA. 14+50ID

131+00WB

STH 16/60 (WB) / W. JAMES STREET R/L

PRW

TLE

SLOPE INTERCEPTS (TYP.)

CHARTER COMMUNICATIONS

CITY OF COLUMBUS (ELECTRIC)

104 INDUSTRIAL DRIVE
FARMERS & MERCHANTS UNION BANK OF COLUMBUS

5

5

VCL = 90

K = 44

STA = 14+84.54

ELEV = 858.68

VPC STA 15+05.00

VPC EL 859.16

VPT STA 15+95.00

VPT EL 860.36

STA = 17+78.06

ELEV = 860.91

0.30%

2.36%

PROPOSED R/L PROFILE

EXISTING R/L PROFILE

VPI STA 15+50.00

VPI EL 860.226

END CONSTRUCTION
STA. 17+78.06ID
MATCH EXISTING
SAWCUT REQ'D

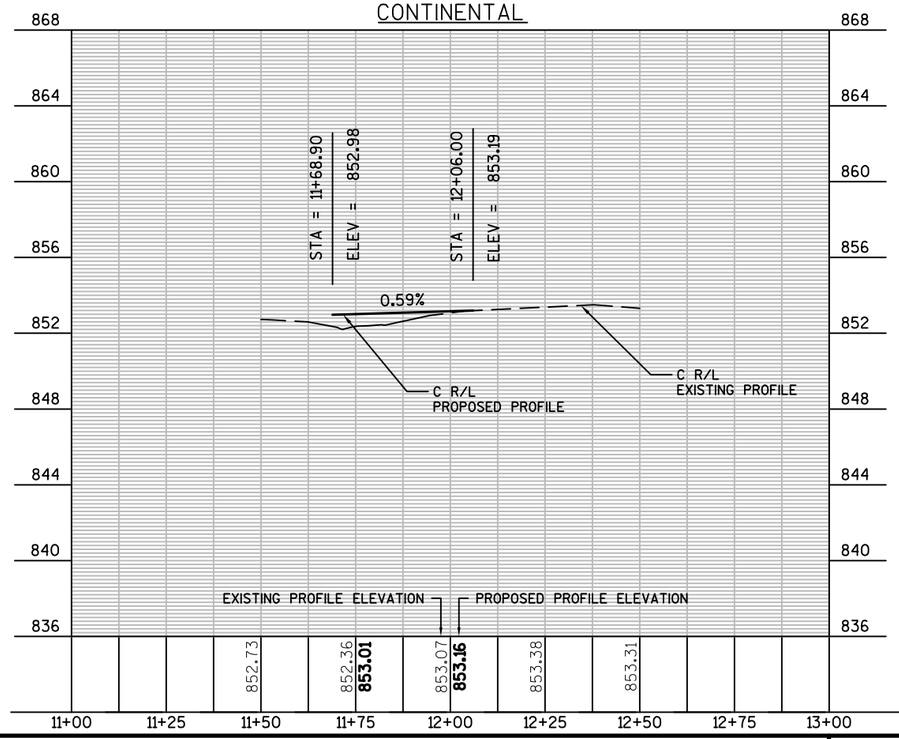
868 864 860 856 852 848 844 840

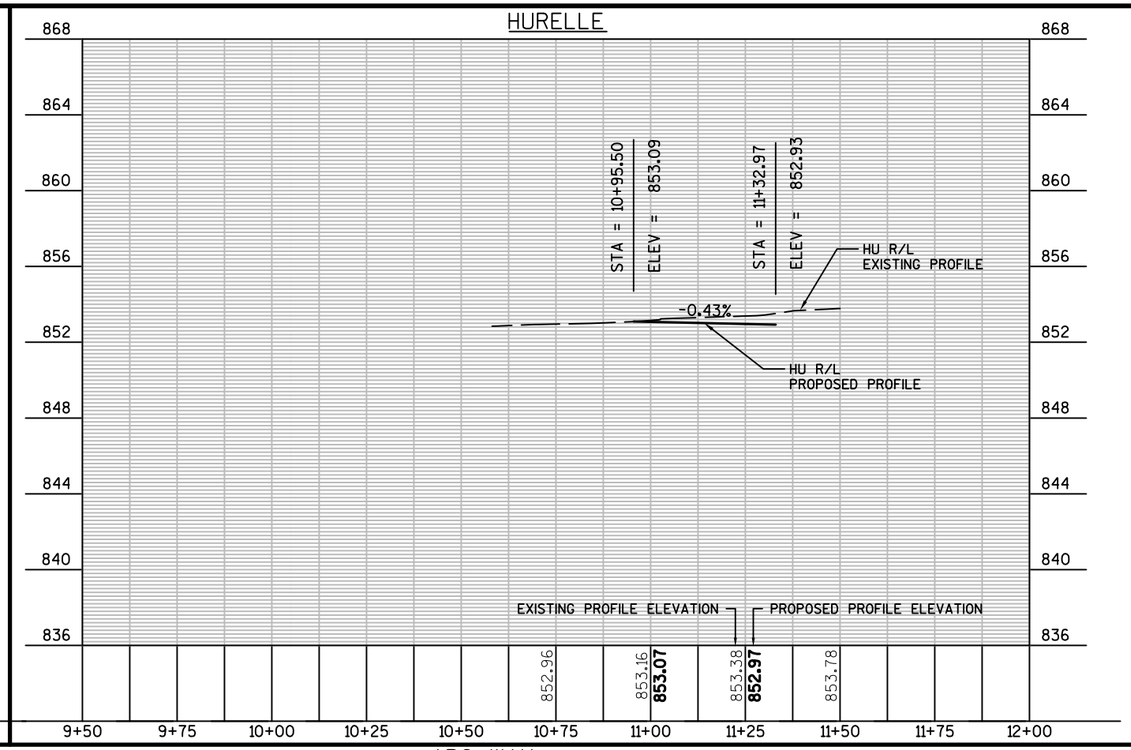
EXISTING PROFILE ELEVATION

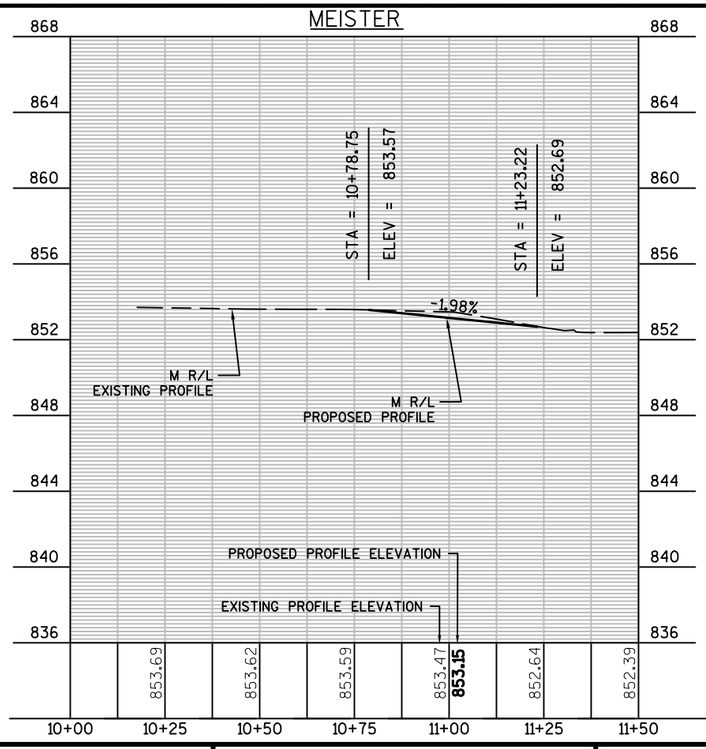
PROPOSED PROFILE ELEVATION

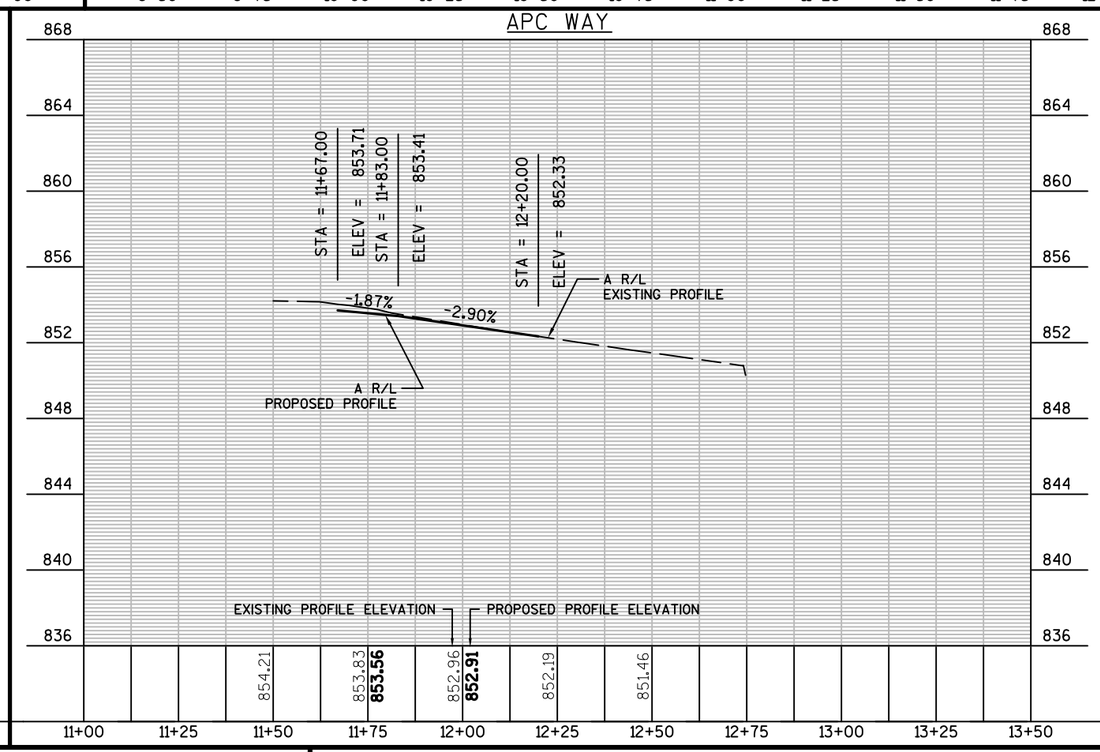
14+50	14+75	15+00	15+25	15+50	15+75	16+00	16+25	16+50	16+75	17+00	17+25	17+50	17+75	18+00	18+25	18+50	18+75	19+00	19+25	19+50	19+75	20+00	20+25	20+50
859.36	859.38	859.12 **859.04**	859.40 **859.59**	859.67 **859.99**	859.78 **860.25**	859.97 **860.38**	860.13 **860.45**	860.26 **860.53**	860.36 **860.60**	860.42 **860.68**	860.55 **860.75**	860.74 **860.83**	860.85 **860.90**											

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: INDUSTRIAL DRIVE	SHEET 375	E



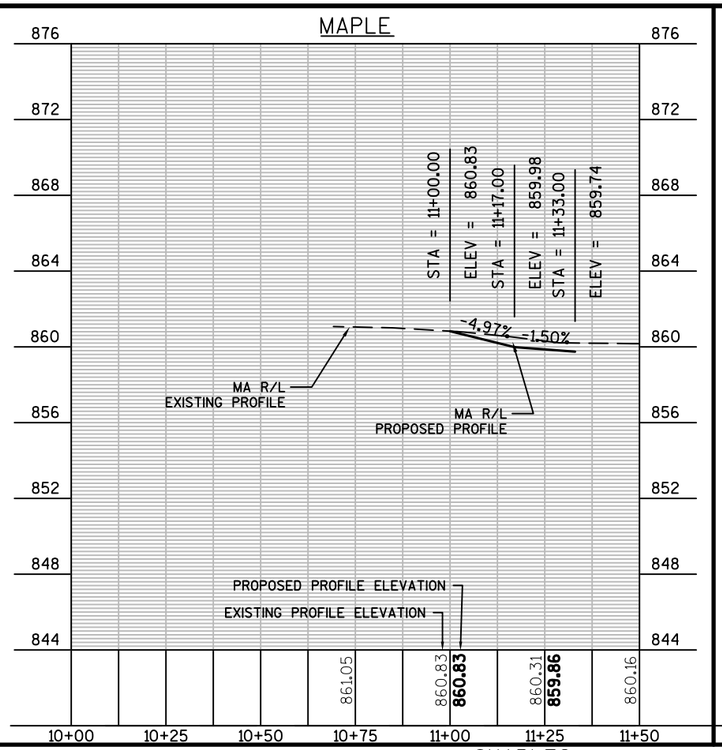


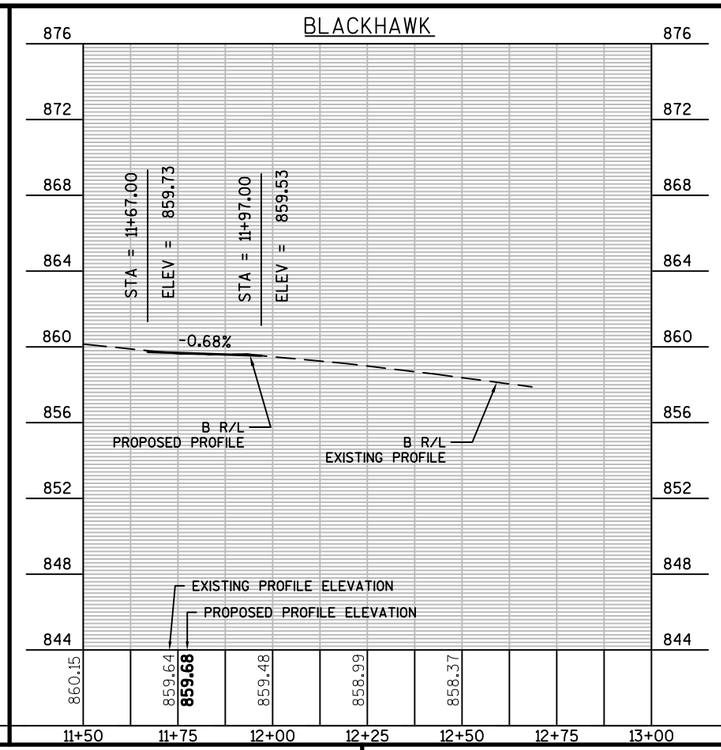


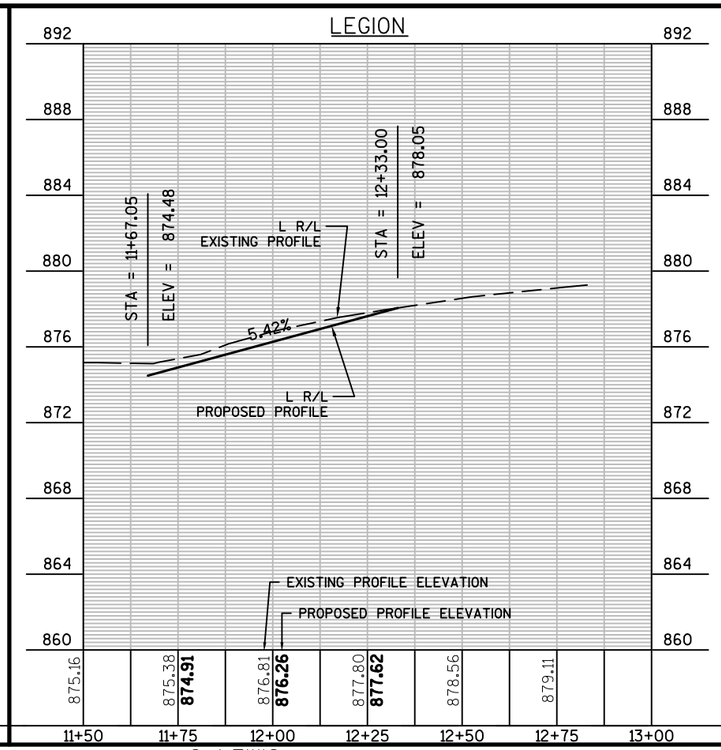


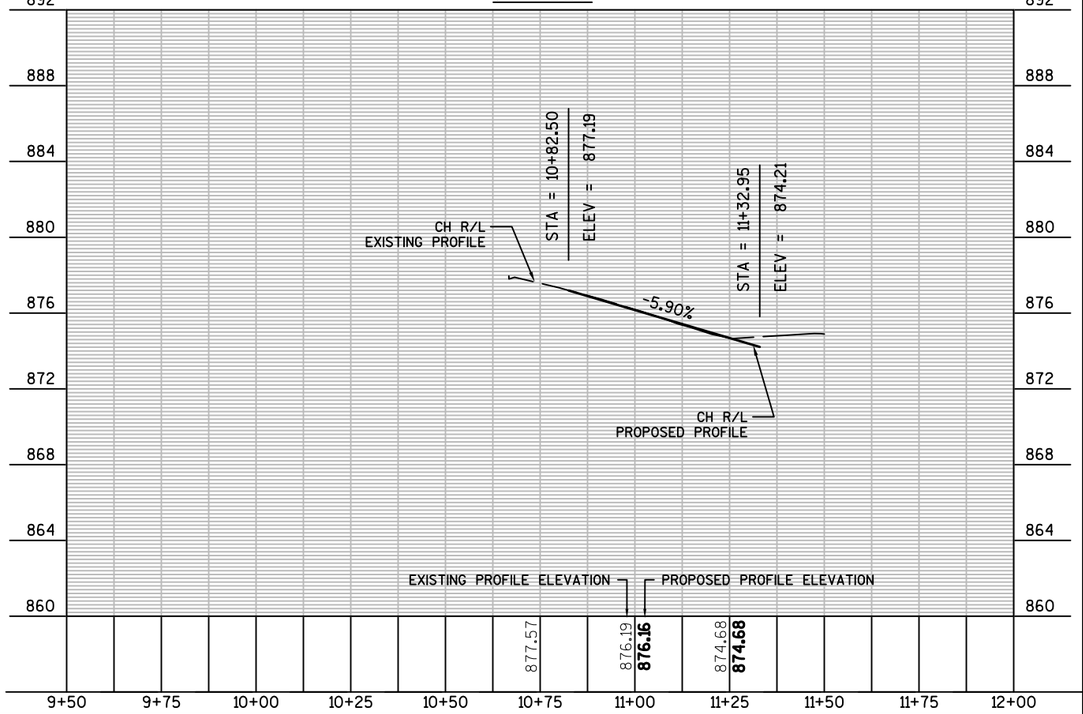
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 376 E

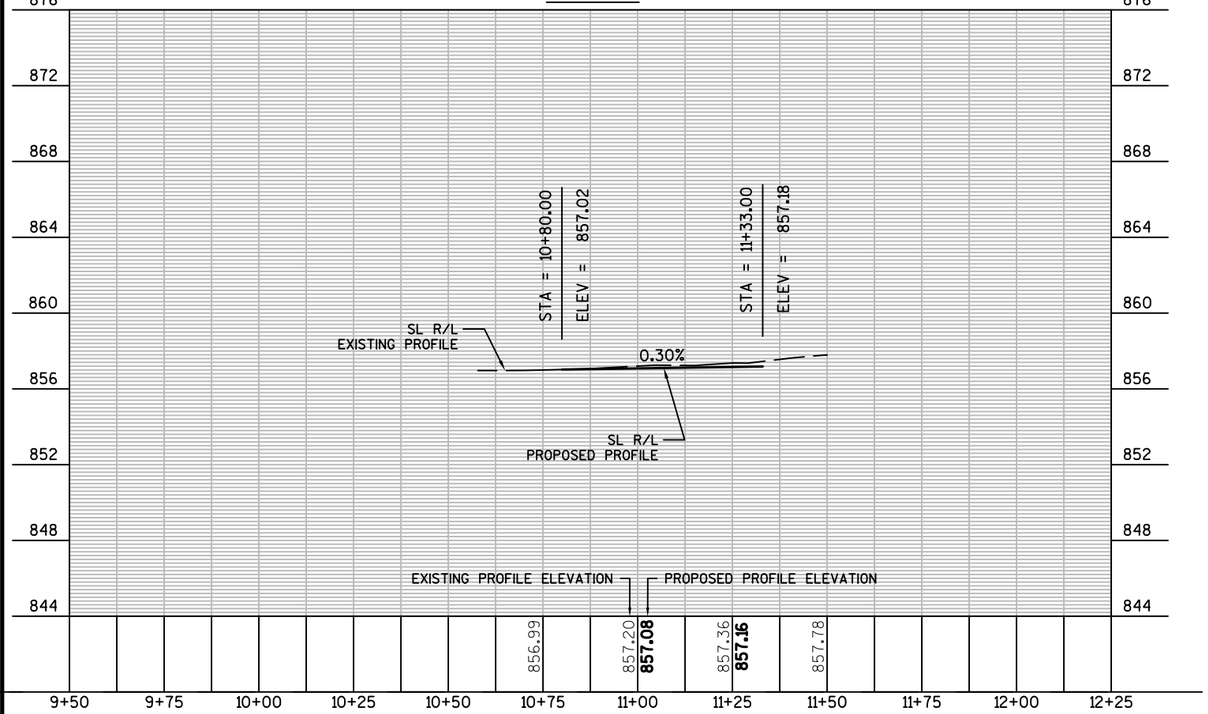
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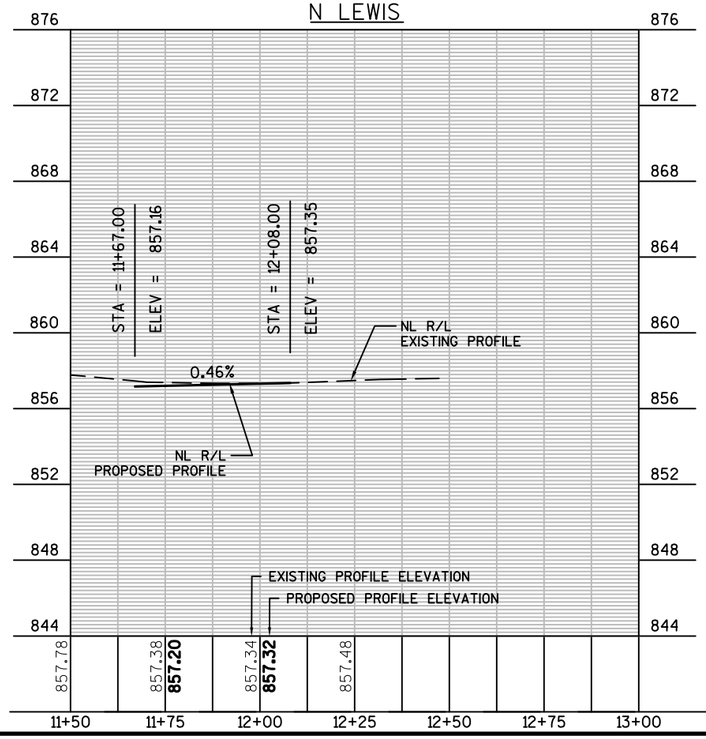




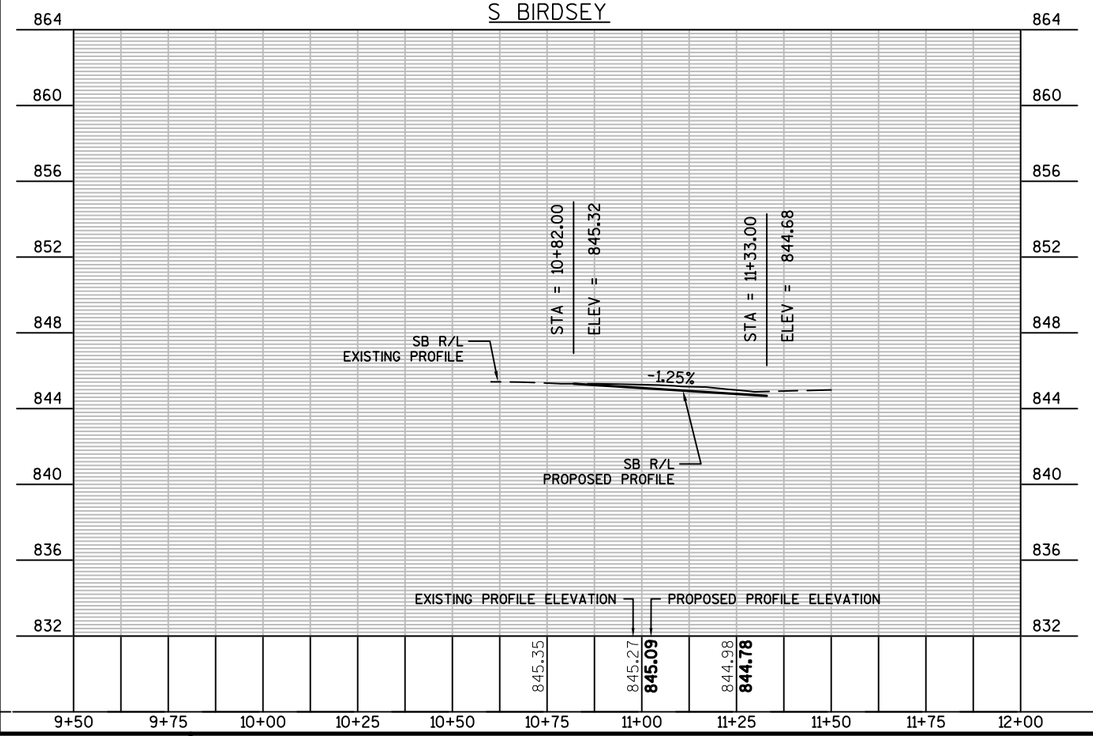


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 377 E

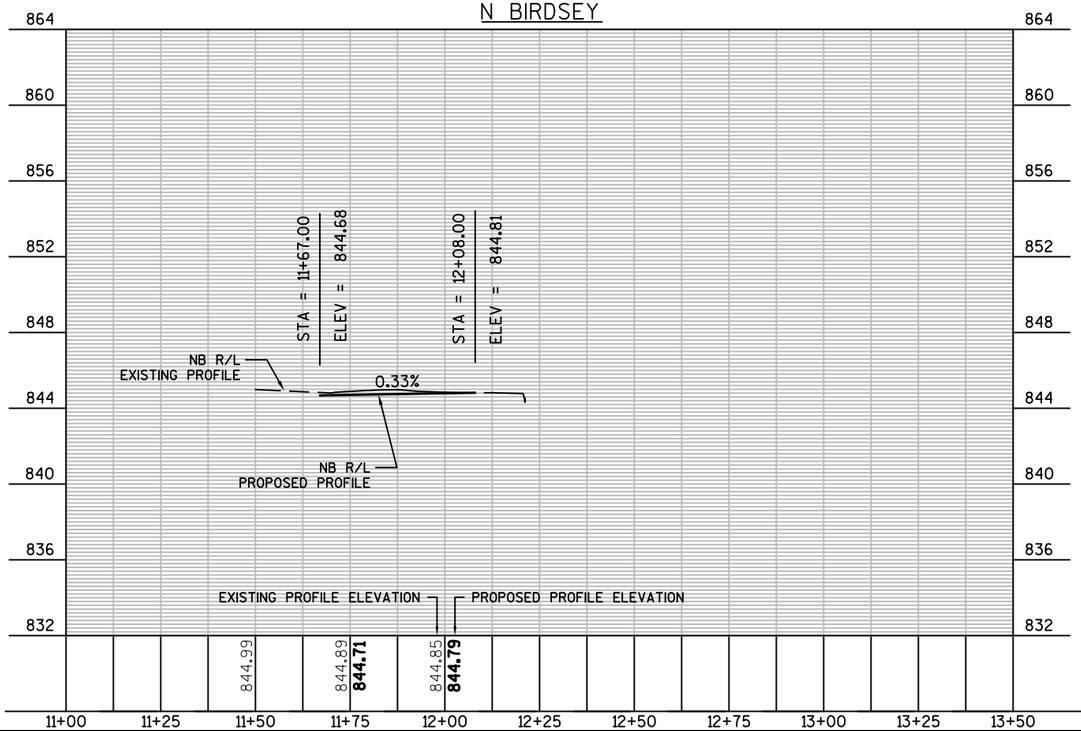
N LEWIS



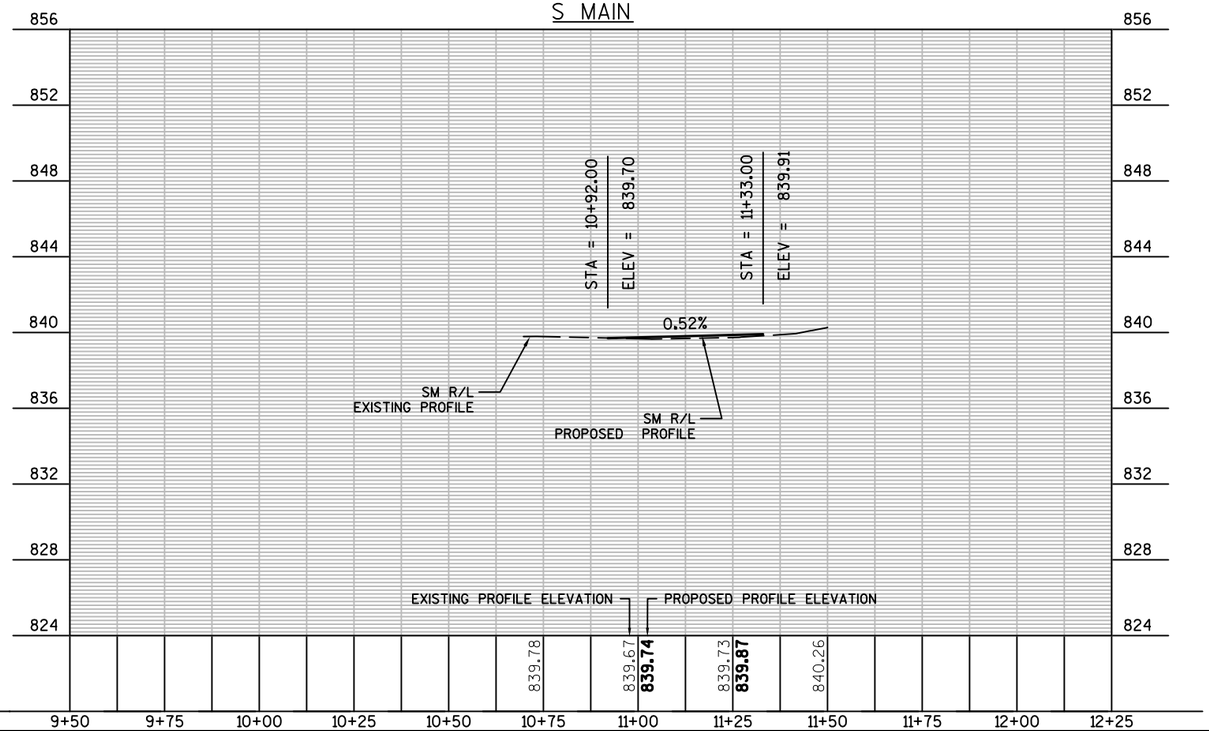
S BIRDSEY



N BIRDSEY

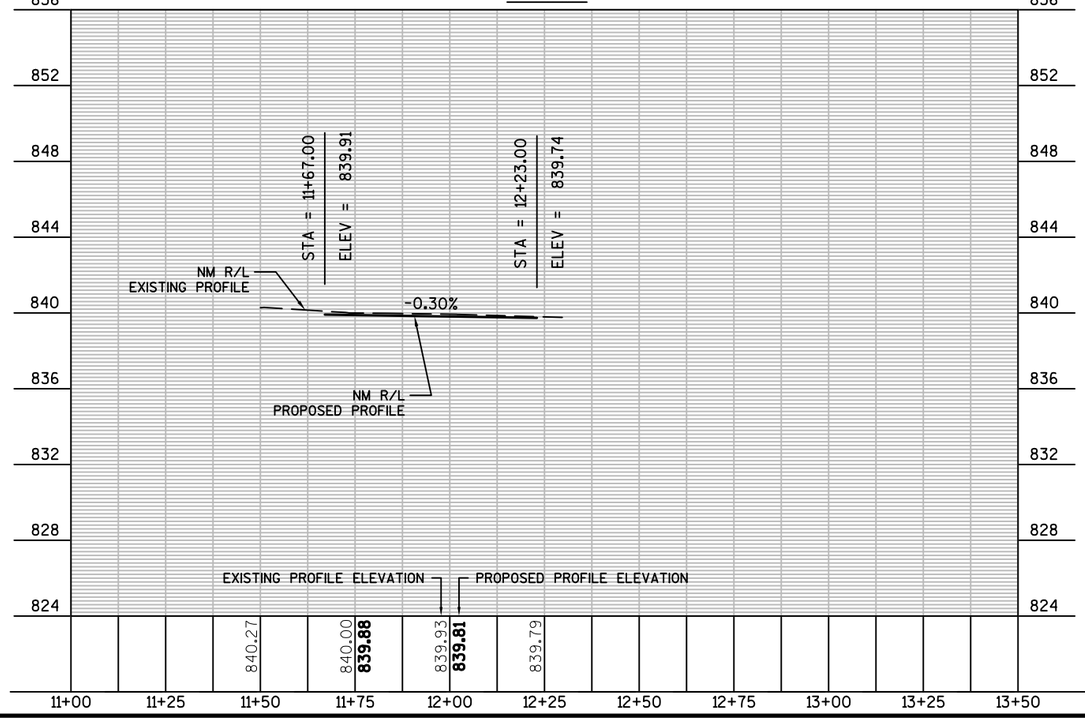


S MAIN

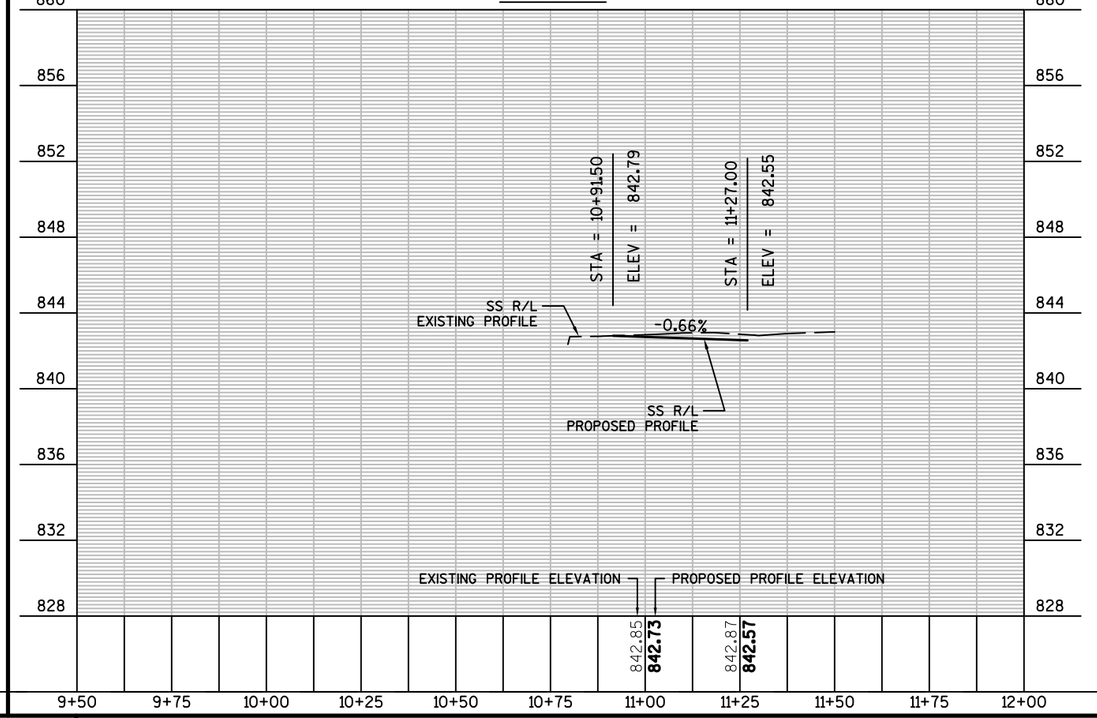


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 378 E

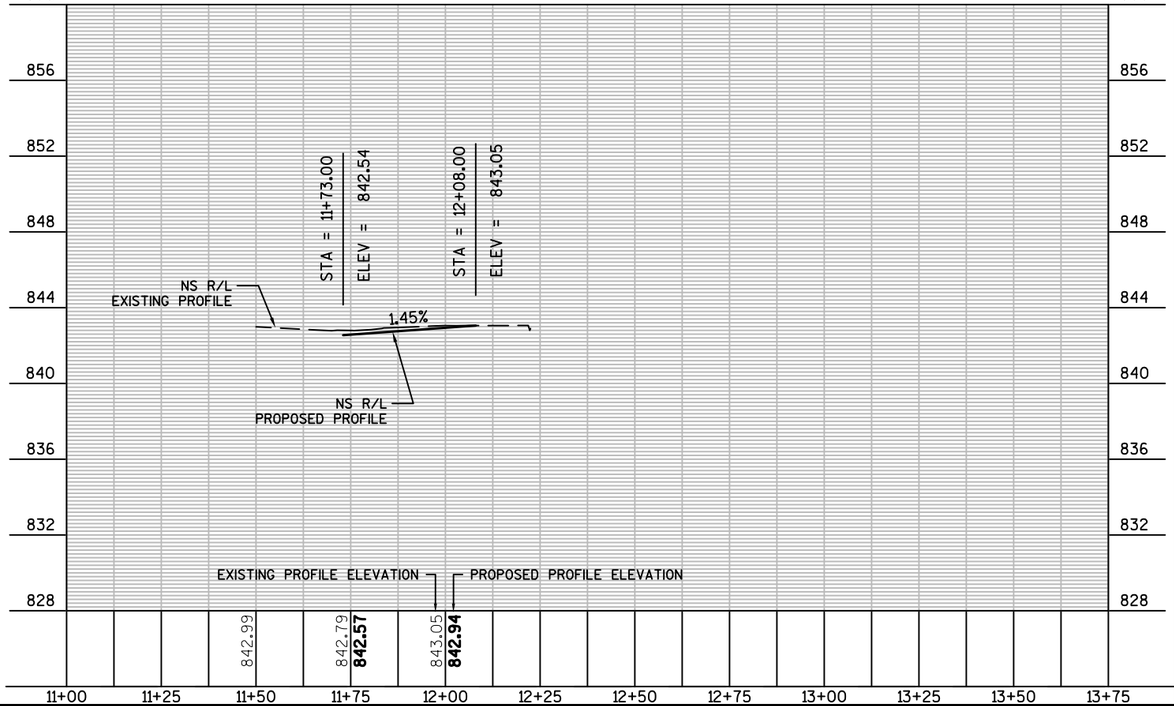
N MAIN



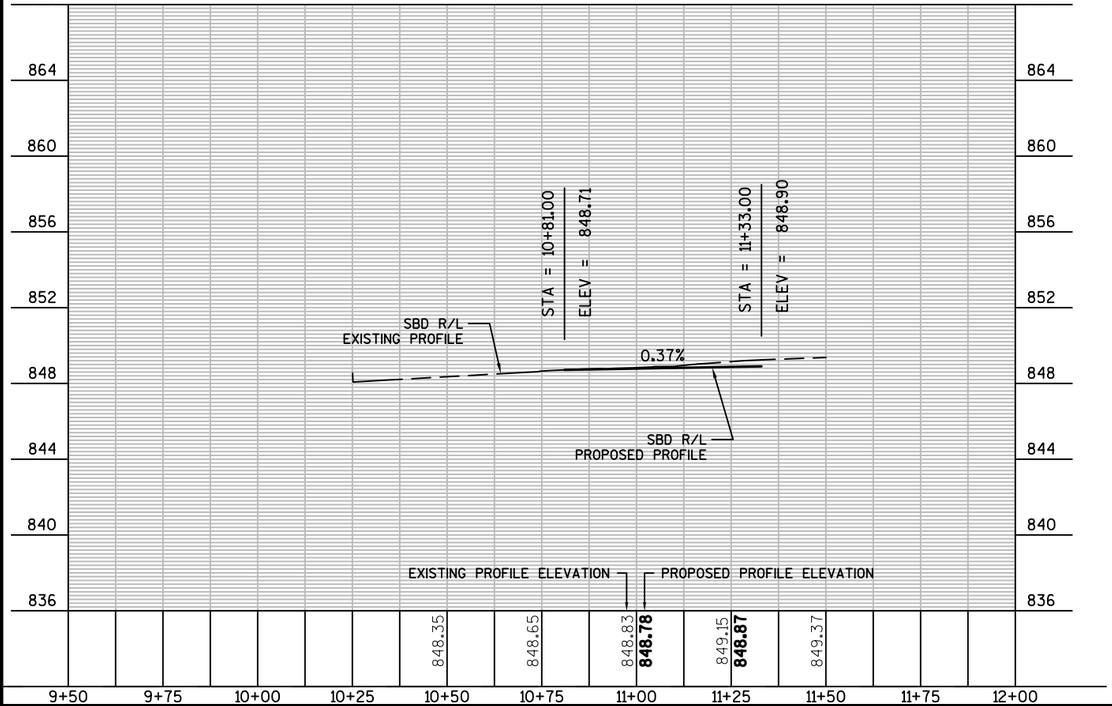
S SPRING



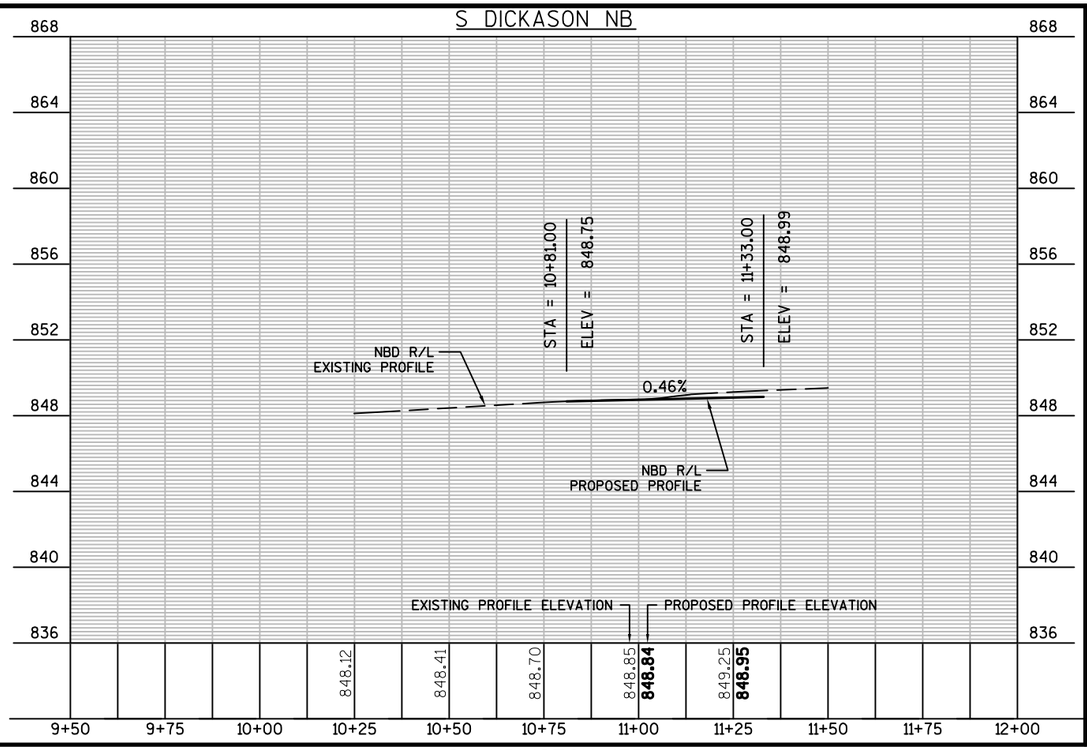
N SPRING

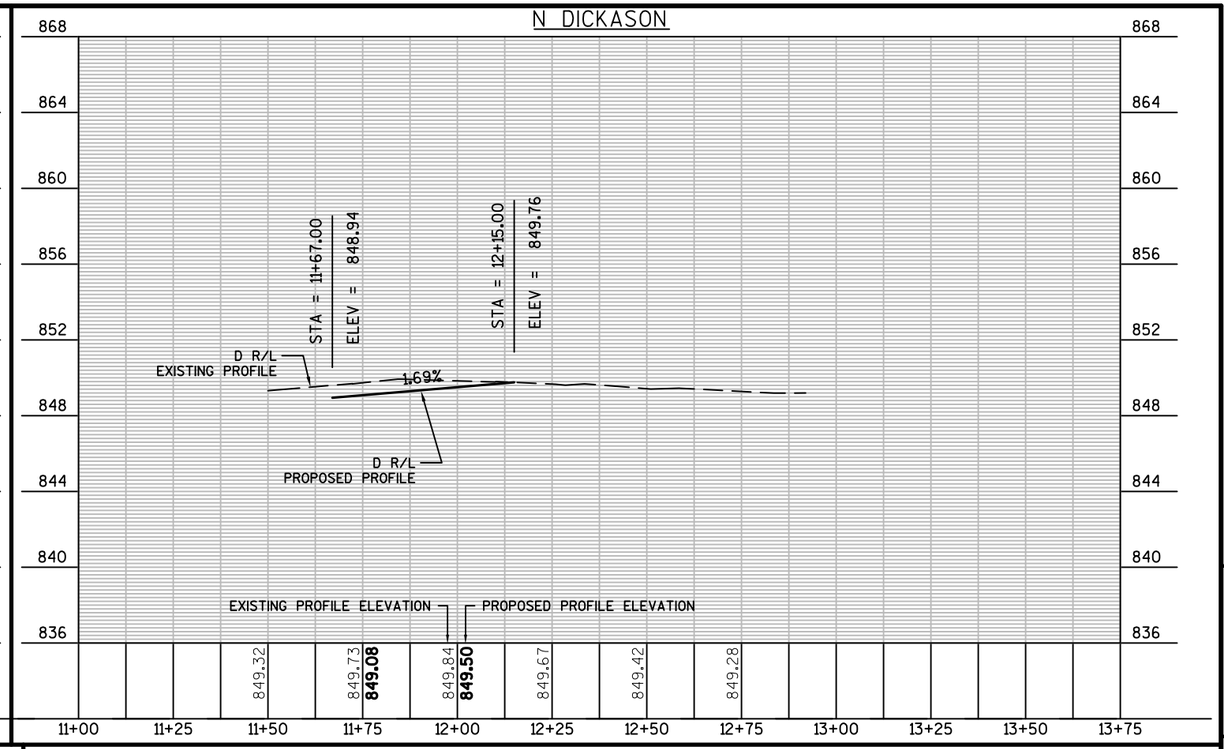


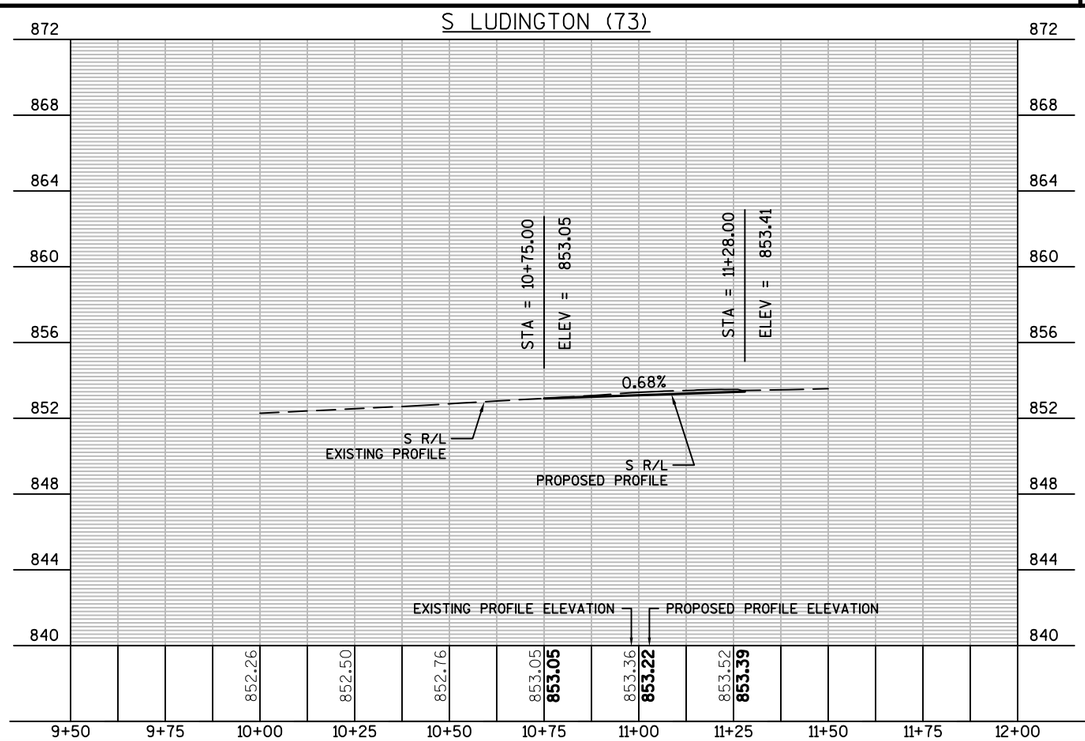
S DICKASON SB

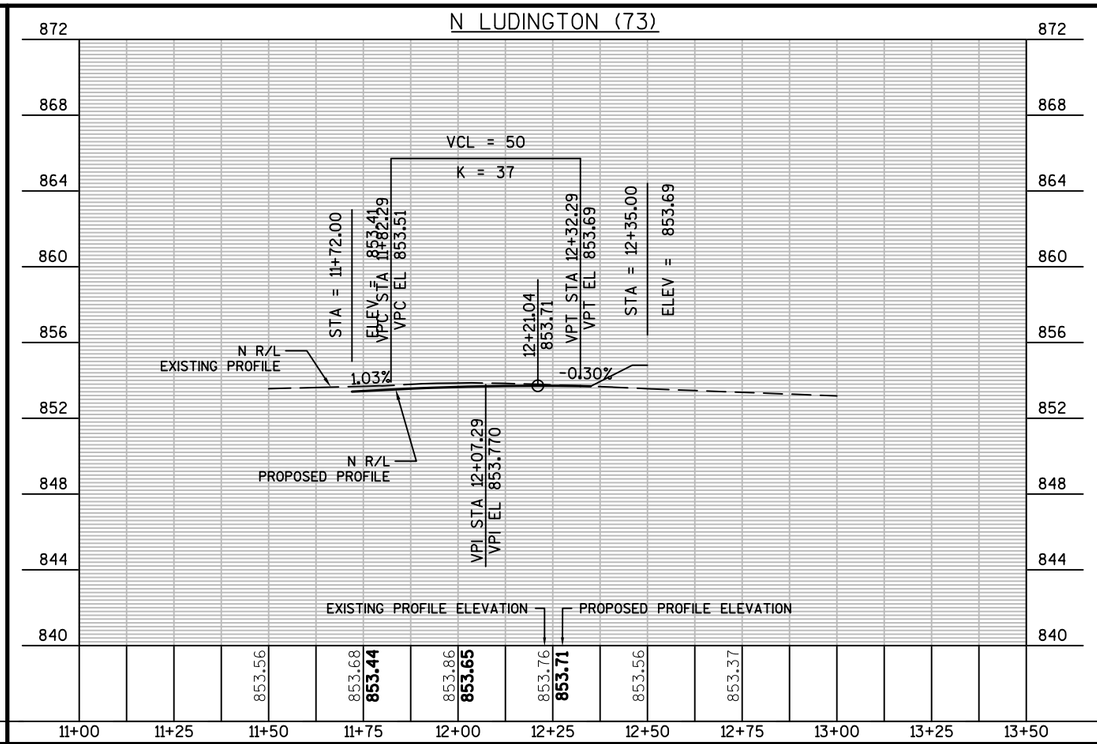


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 379 E



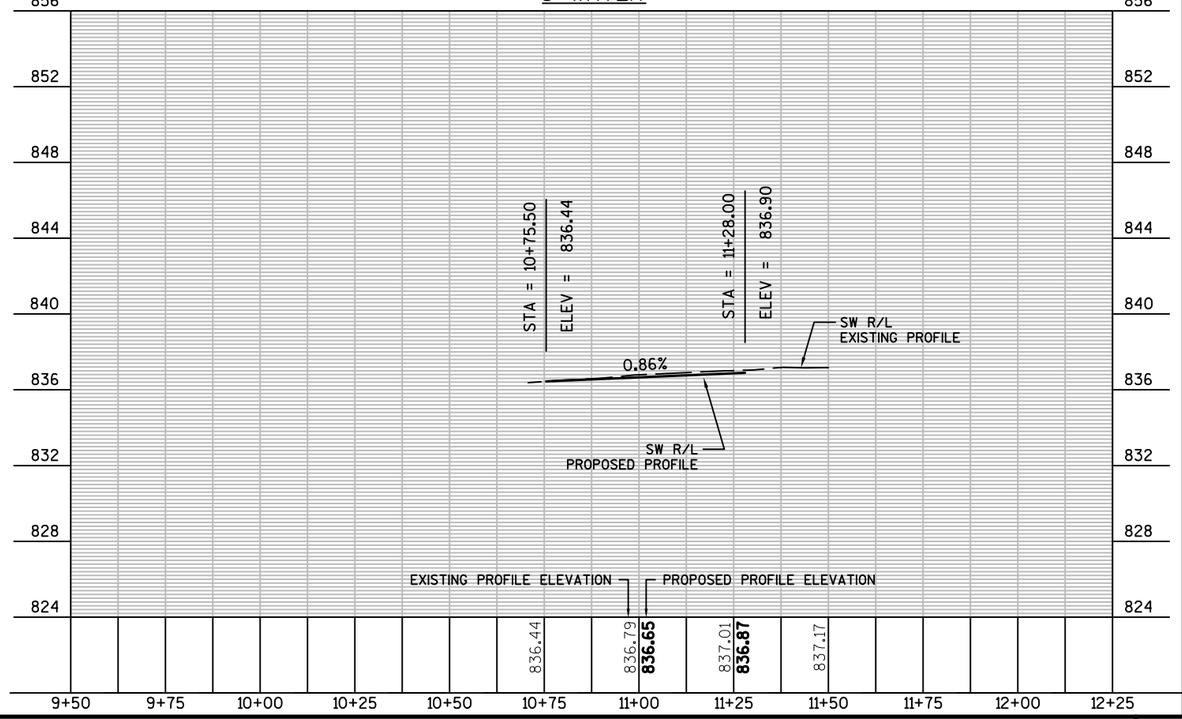




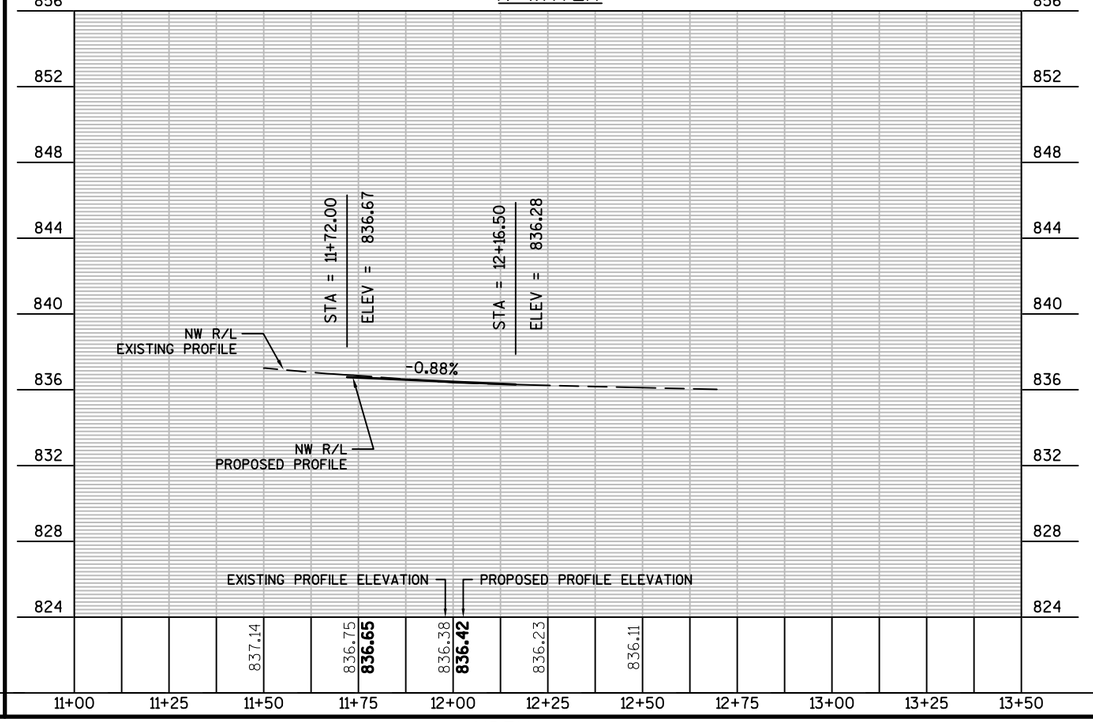


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 380 E

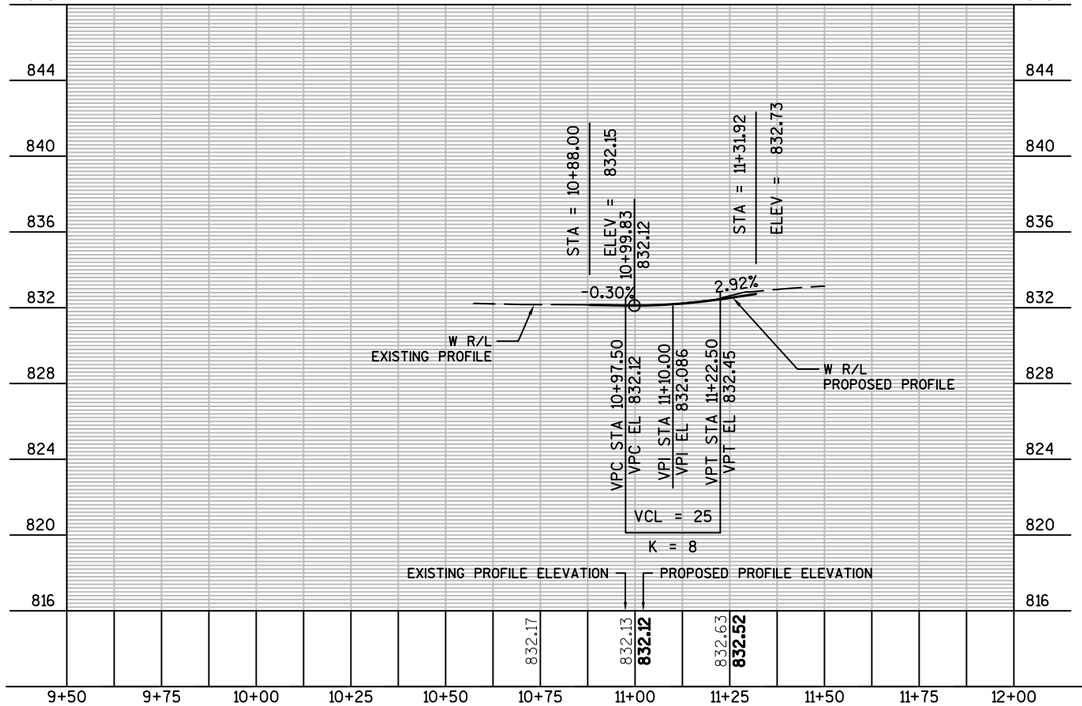
S WATER



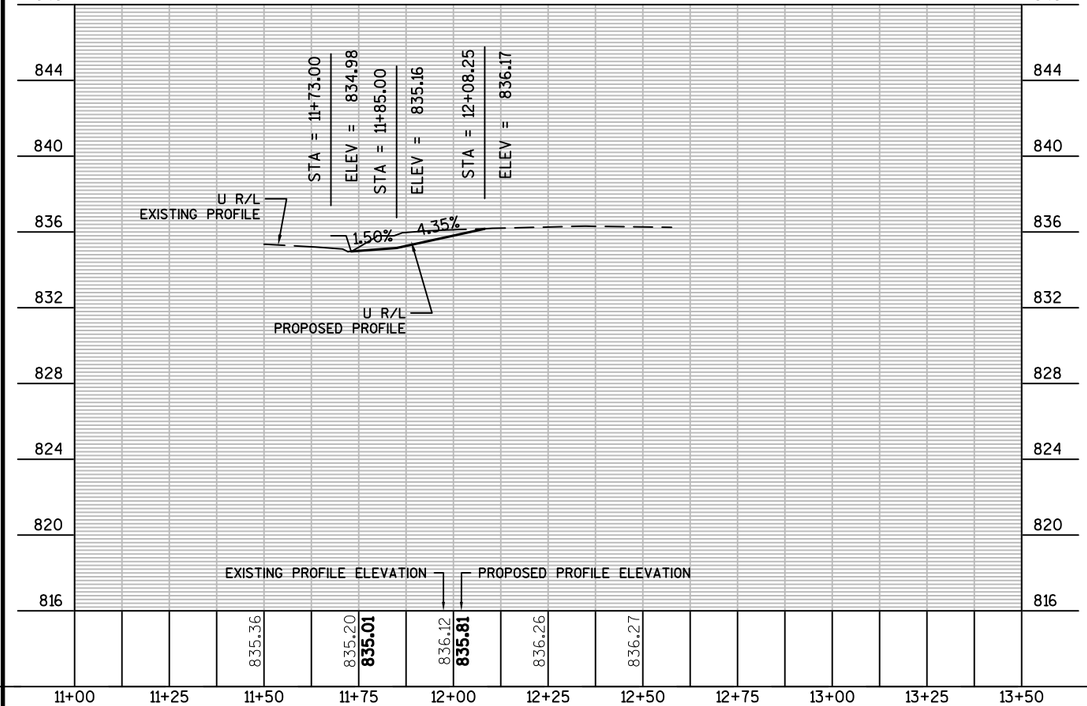
N WATER



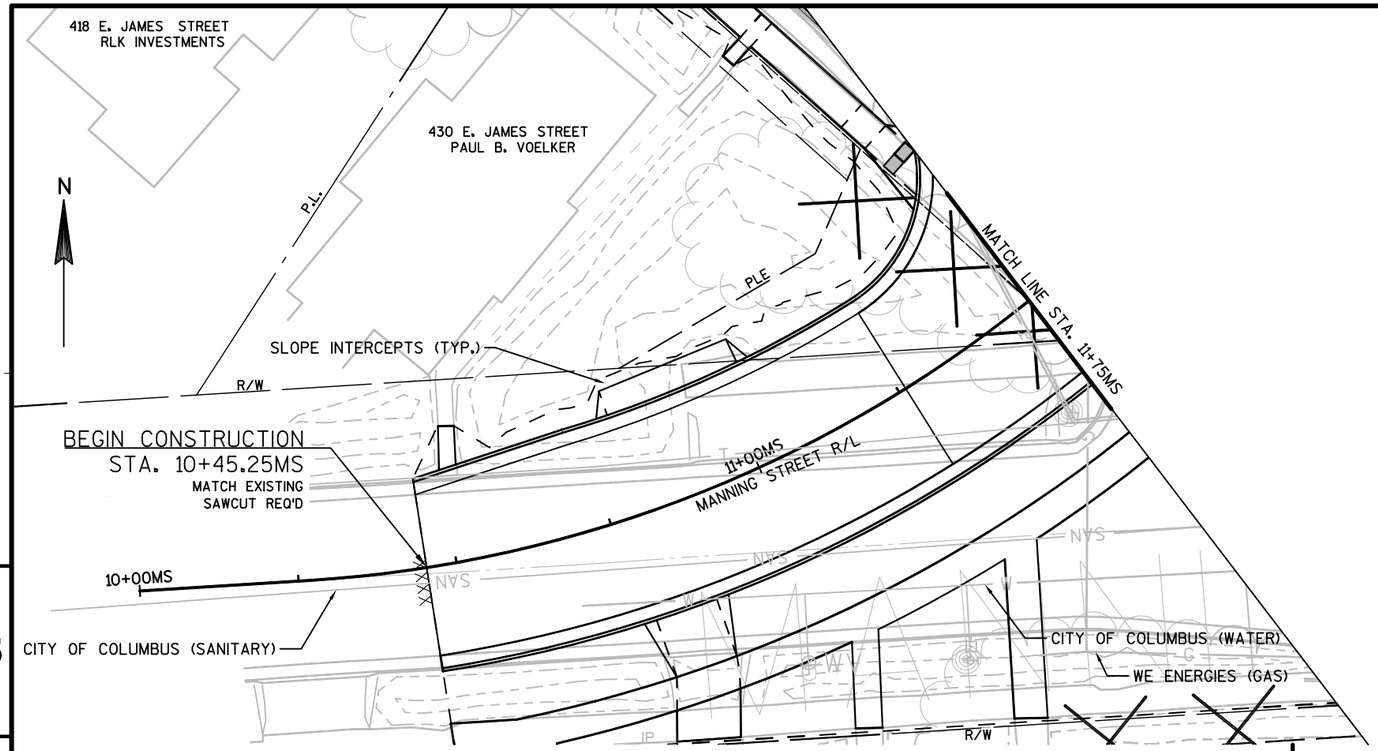
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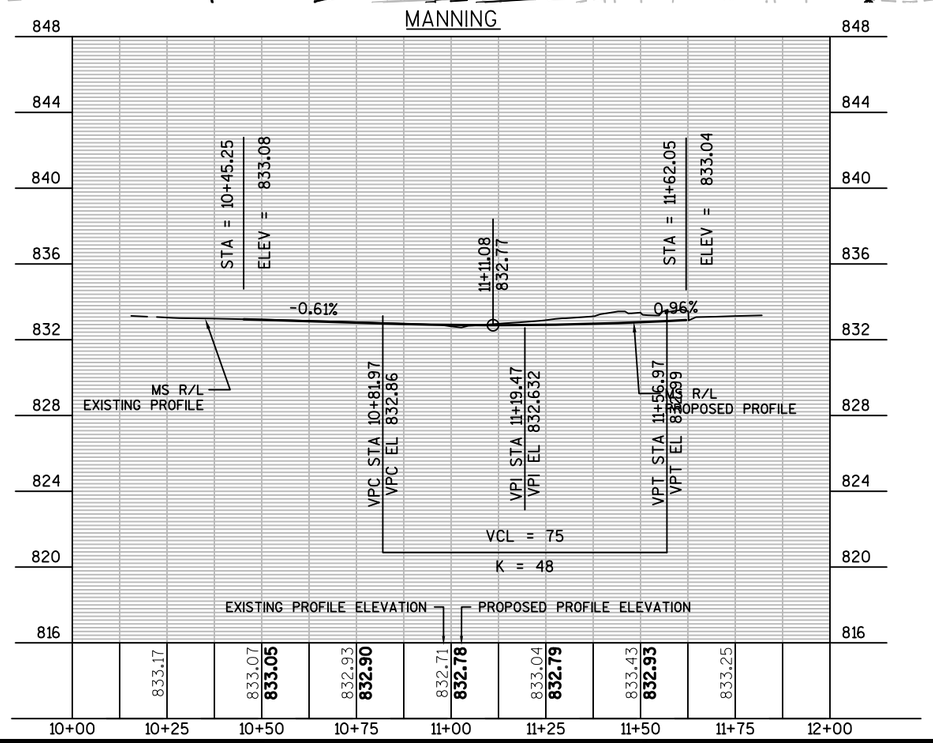


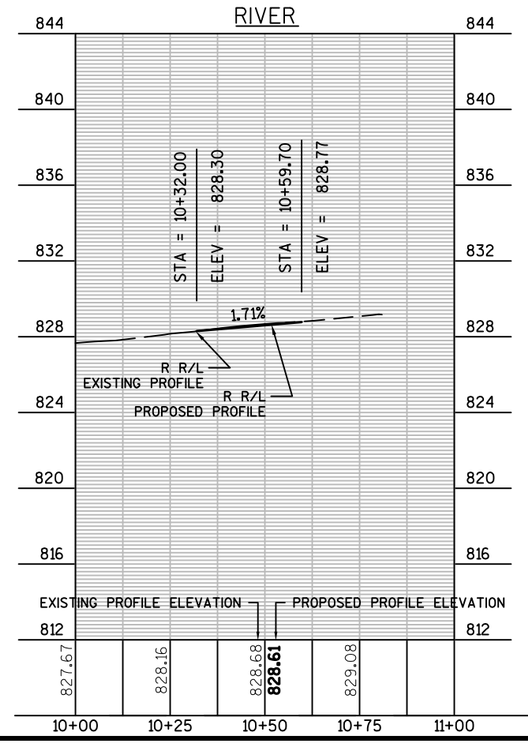
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 381 E







PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: SIDE ROADS	SHEET 382 E

Standard Detail Drawing List

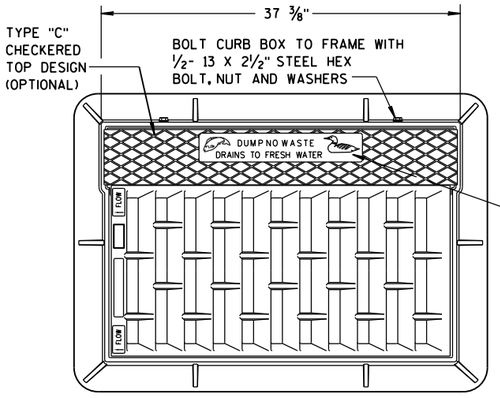
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E04-02	SOD OR MASONRY AND SOD DITCH CHECKS
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
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-08	CONCRETE BASE TYPE 10
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-07A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-07E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F08-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
09F09-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G02-03C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C16-02B	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)

6

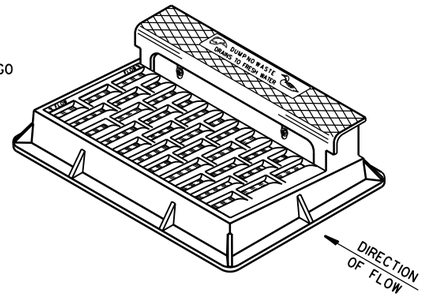
Standard Detail Drawing List

15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C11-06	FLEXIBLE TUBULAR MARKER POST
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-03C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-06	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-06	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-02A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-02B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-02C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D33-04	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

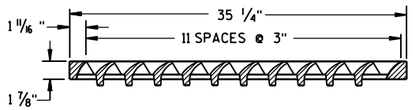
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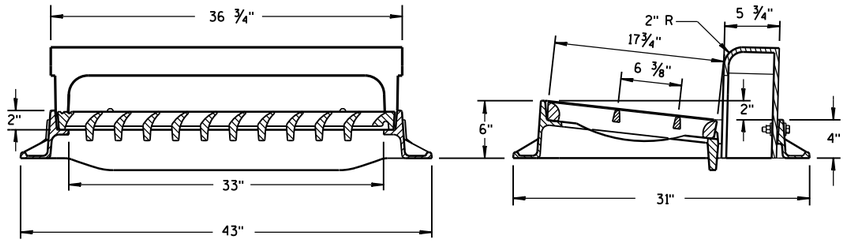


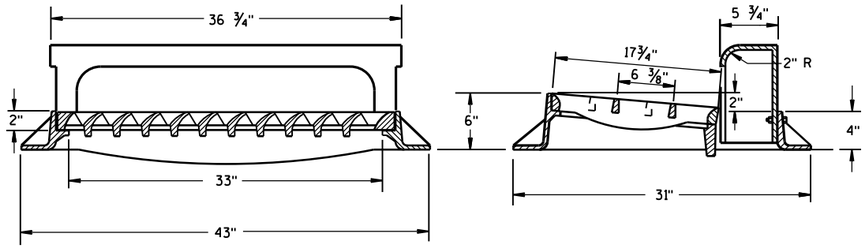
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

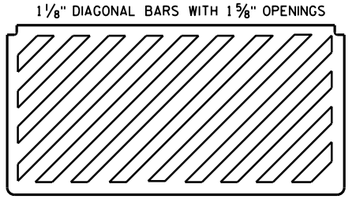






TYPE "H"

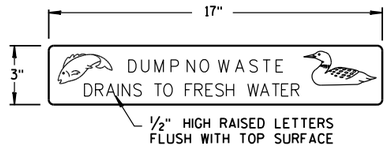
NOTE: EITHER CASTING IS ACCEPTABLE



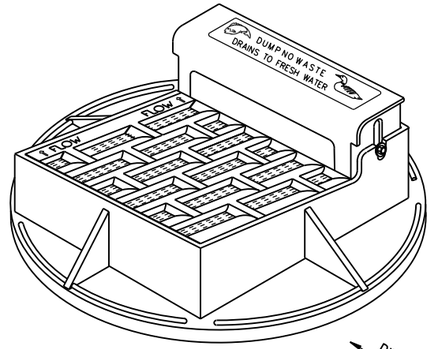
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

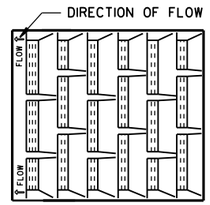
NOTE:
GRATE IS REVERSIBLE.

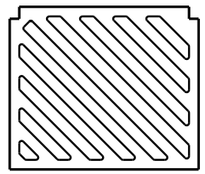
GENERAL NOTES

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

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

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

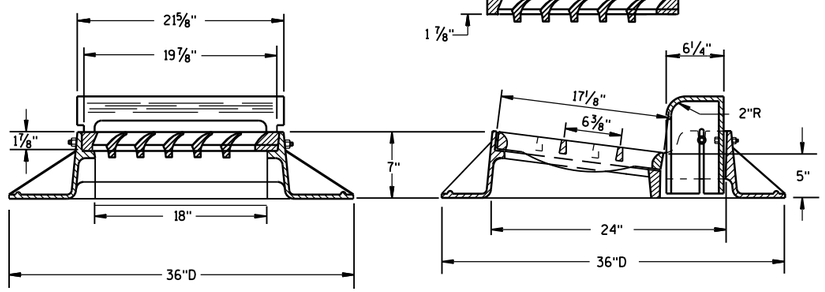




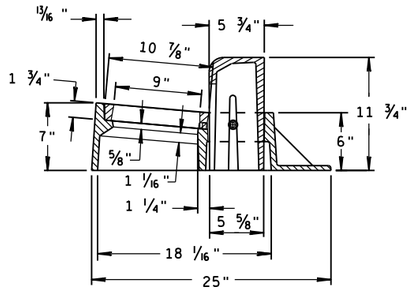
SPECIAL GRATE FOR TYPE "A" COVER

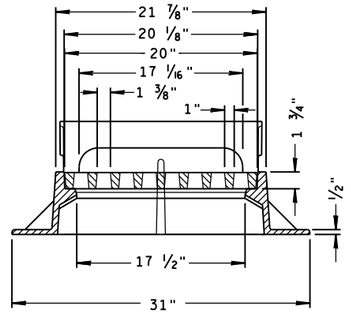
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

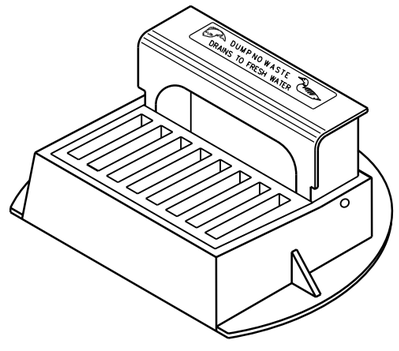


TYPE "A"





TYPE "Z"



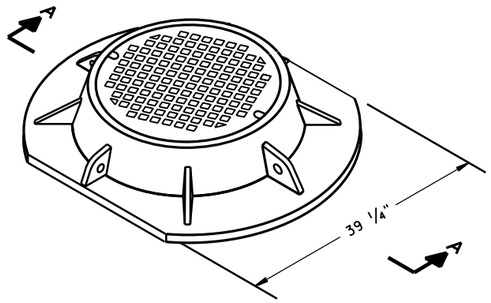
INLET COVERS
TYPE A, H, A-S, H-S & Z

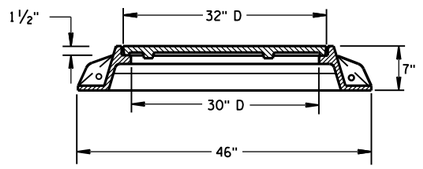
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

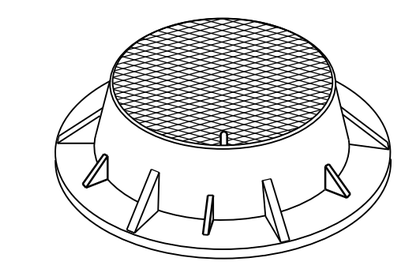
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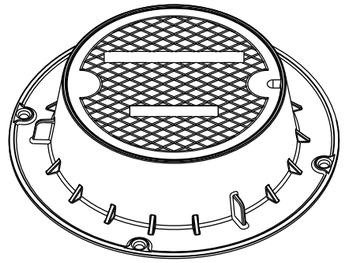
S.D.D. 8 A 5-19a

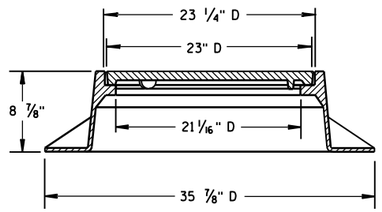


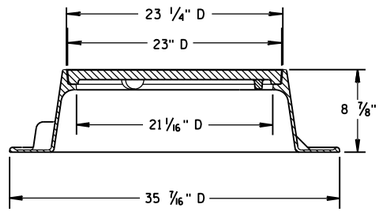


SECTION A-A
TYPE "K"









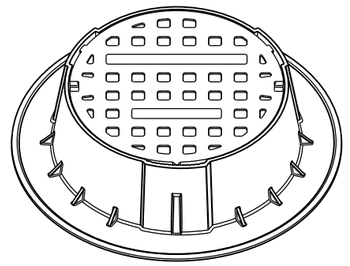
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

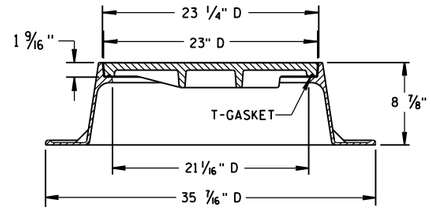
GENERAL NOTES

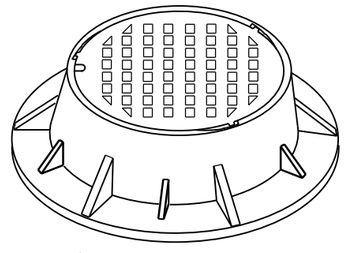
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

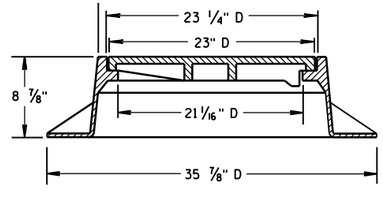
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

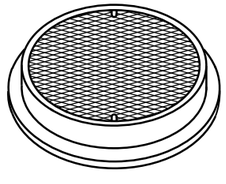


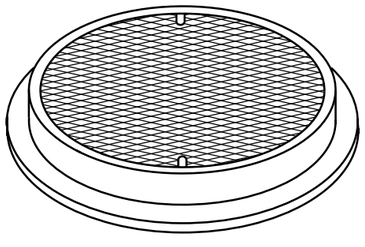


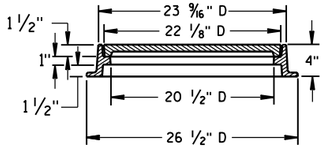




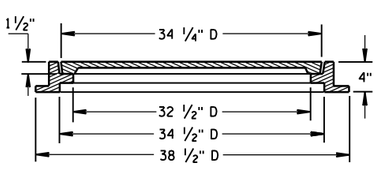
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



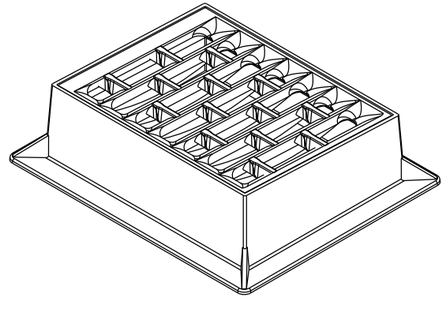


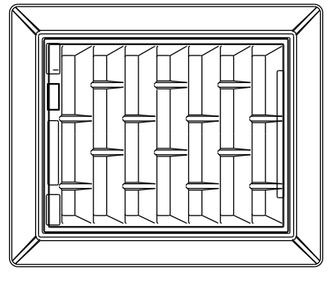


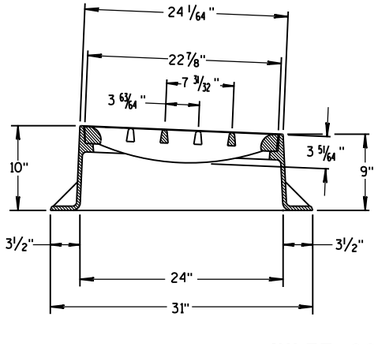
TYPE "L"

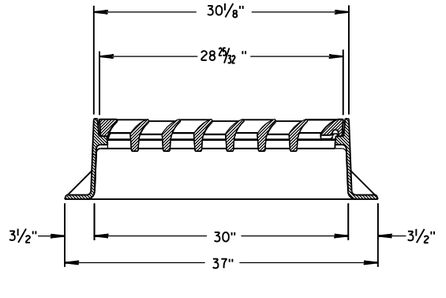


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

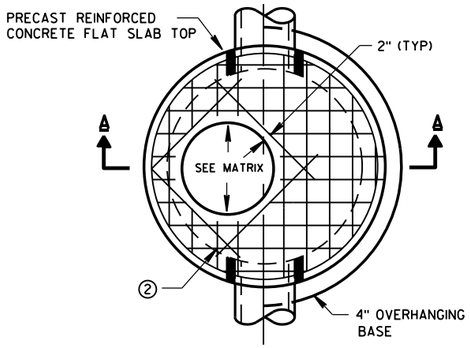
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

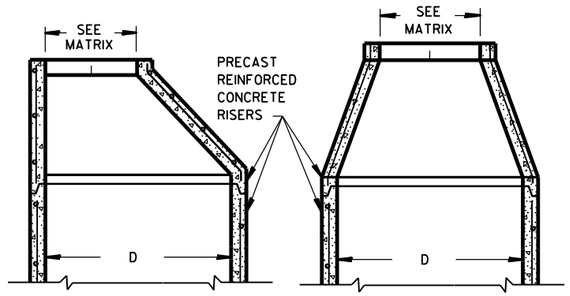
S.D.D. 8 A 5-19d

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

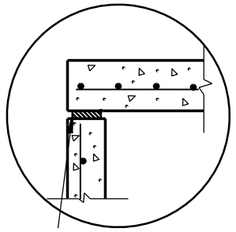


PLAN VIEW CIRCULAR OPENING

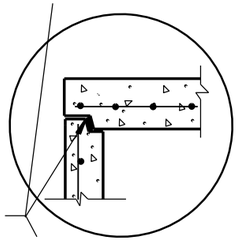


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

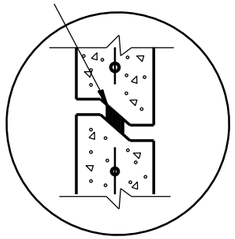


TOP WITH PLAIN END JOINT



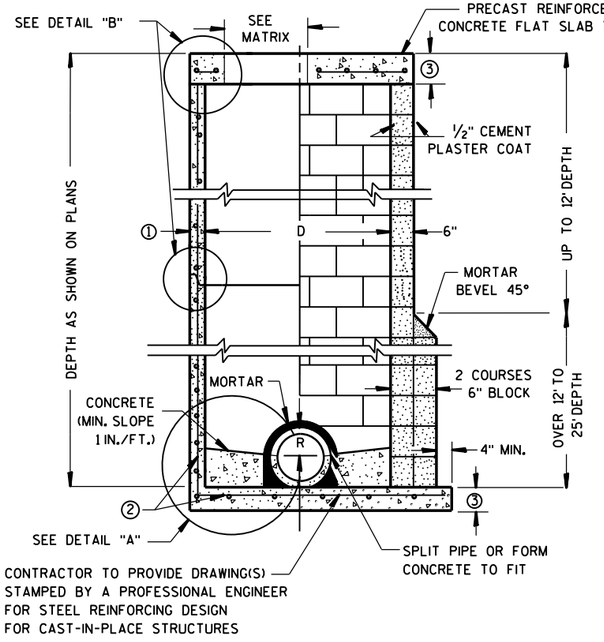
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



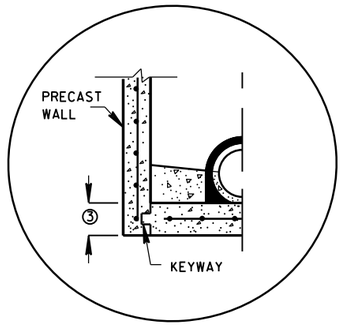
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

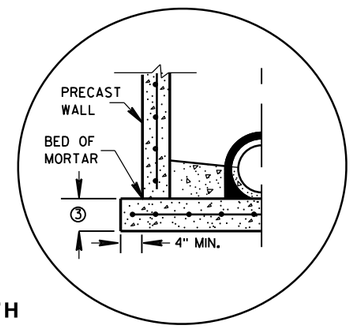


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

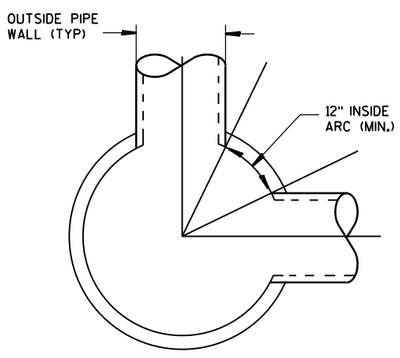


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

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

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN 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

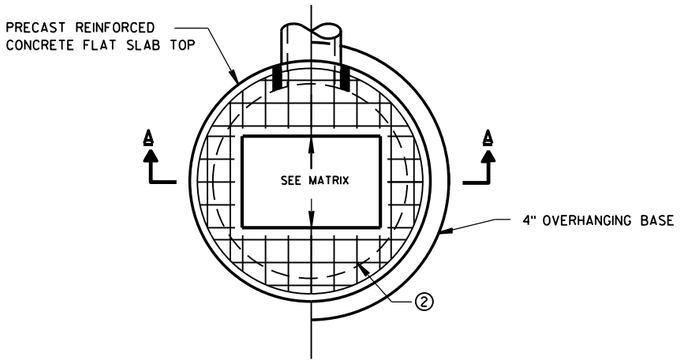
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

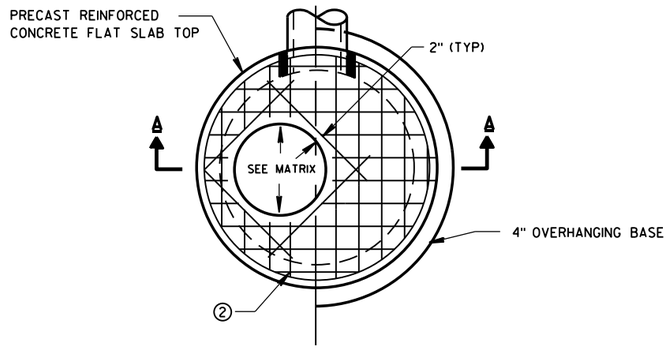
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

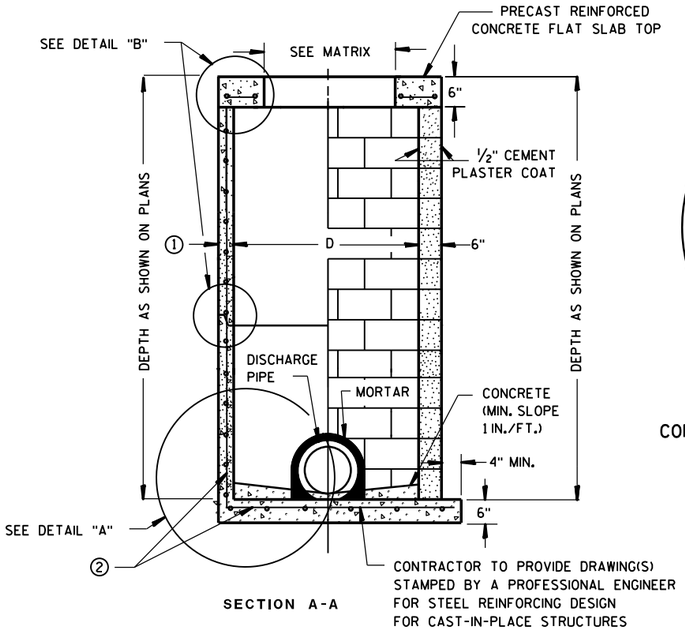
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S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

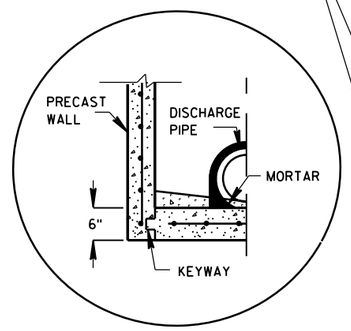


SECTION A-A

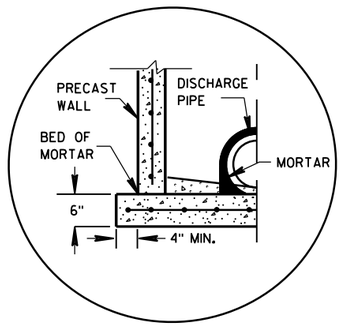
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

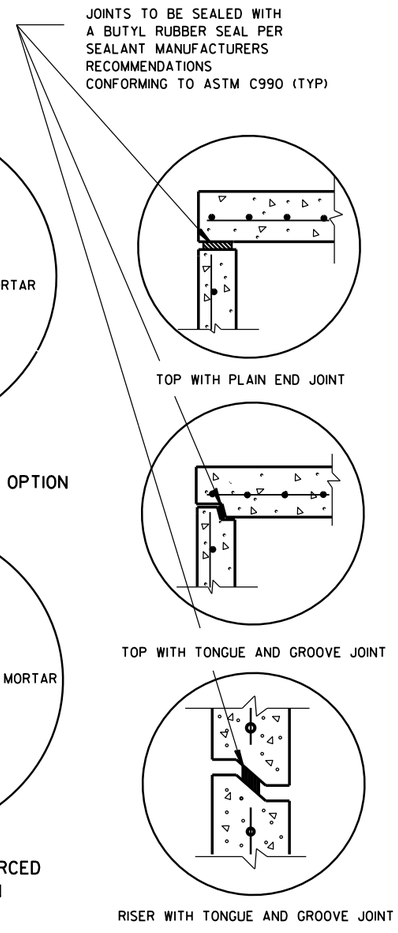


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR 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.

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.

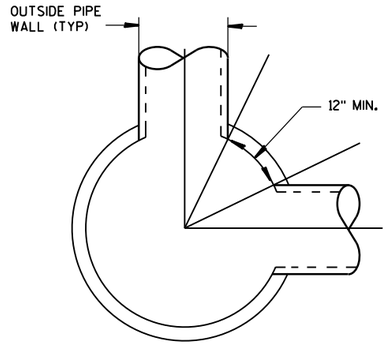
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

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

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

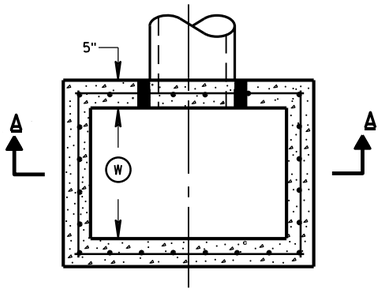
INLETS 3-FT AND 4-FT DIAMETER

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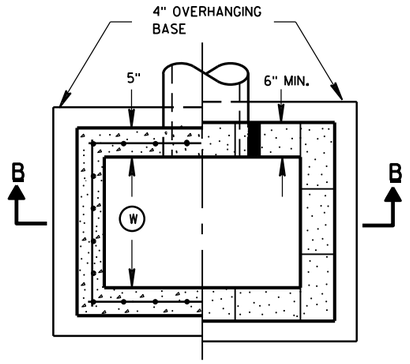
S.D.D. 8 C 6-1

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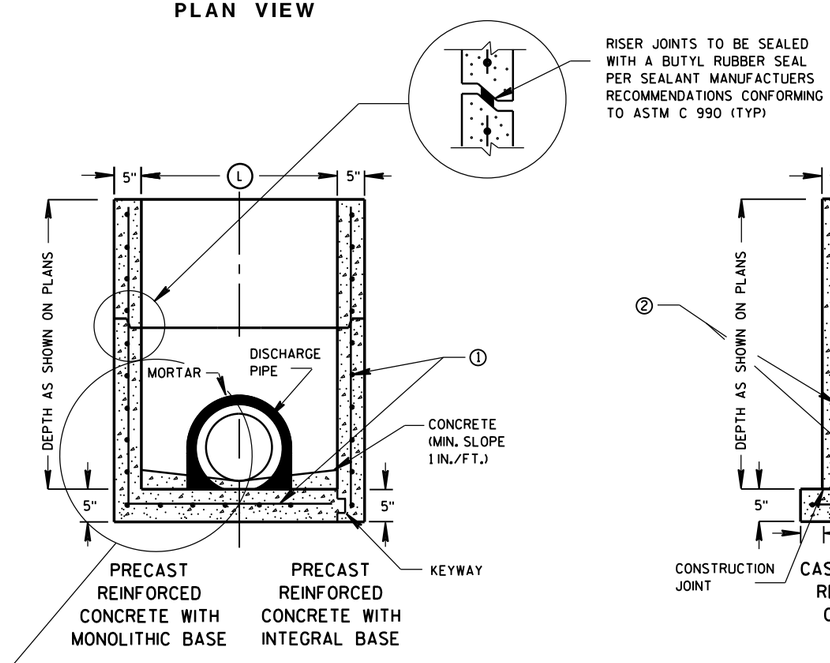
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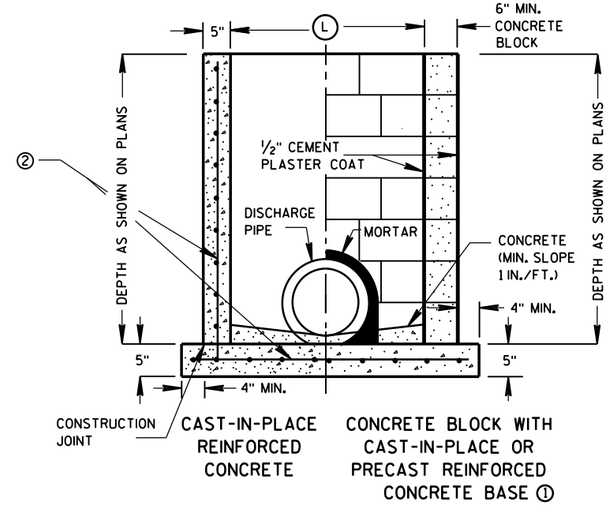
PLAN VIEW



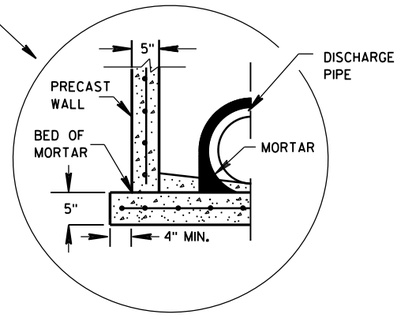
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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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.

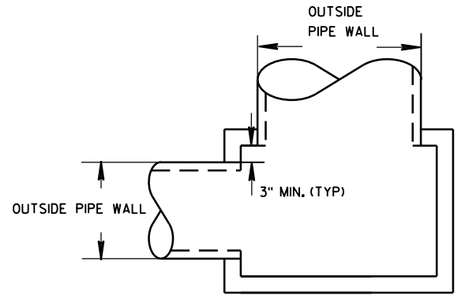
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

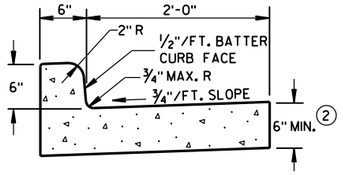
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

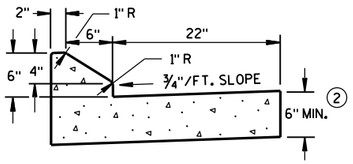
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE ENGINEER
FHWA

6

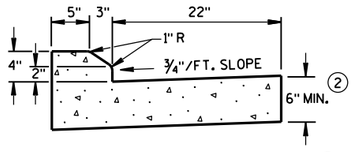
S.D.D. 8 C 7-1



TYPES A & D ①

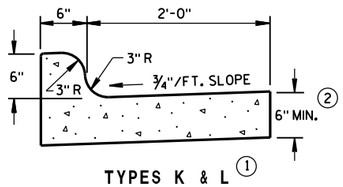


6" SLOPED CURB TYPES G & J ①

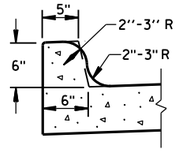


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

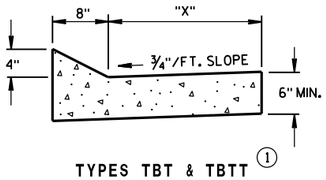


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

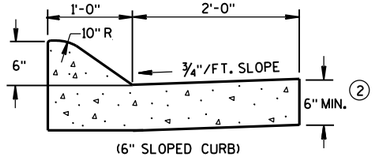
CONCRETE CURB & GUTTER 30"



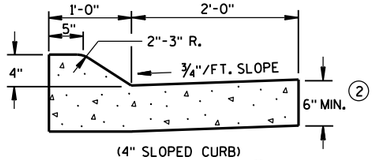
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

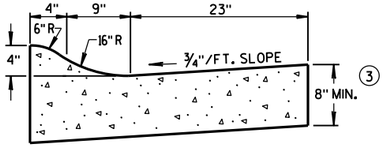


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

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

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

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

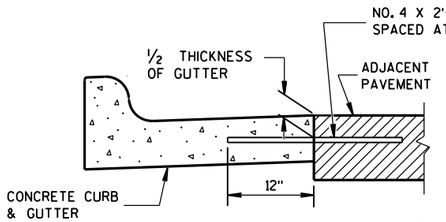
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

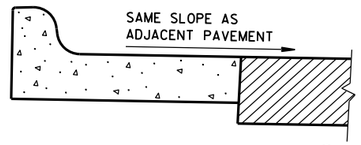
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

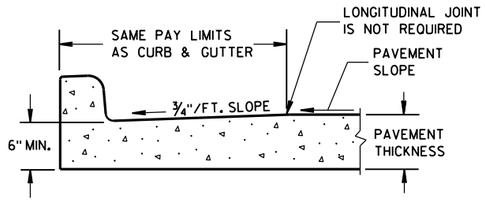
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



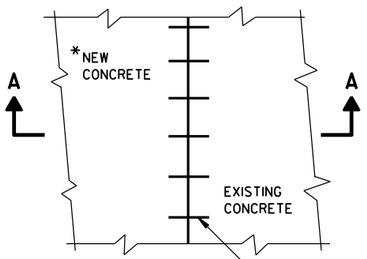
TYPICAL TIE BAR LOCATION ①



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

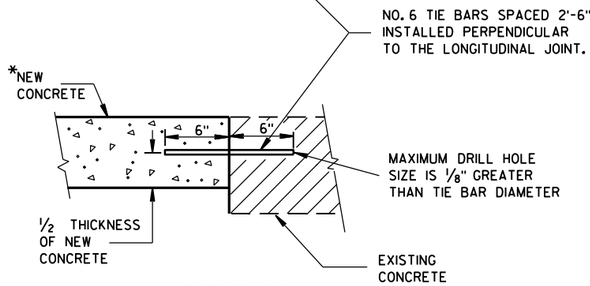


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



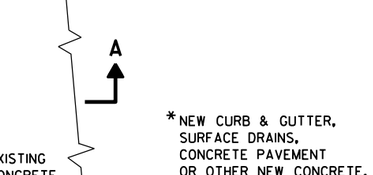
PLAN VIEW

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

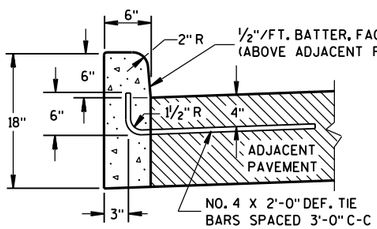


SECTION A-A

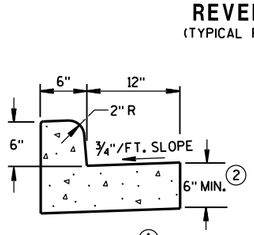
TIE BARS DRILLED
INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

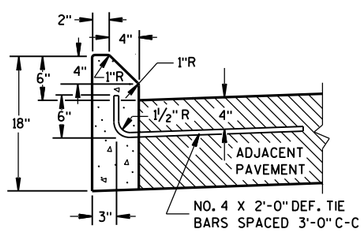


① TYPES A & D

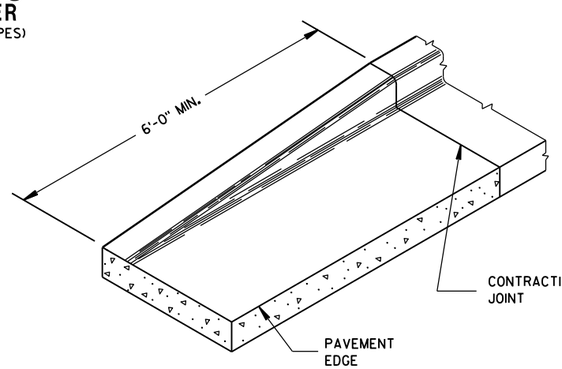


① TYPES A & D

CONCRETE CURB & GUTTER 18"



① TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

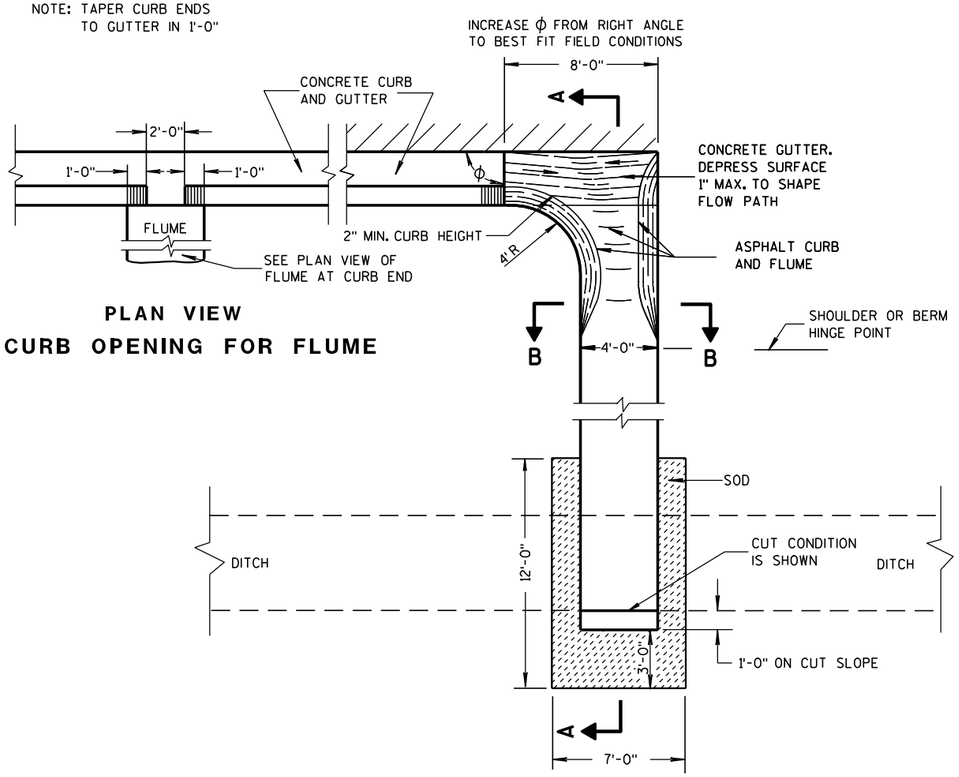
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

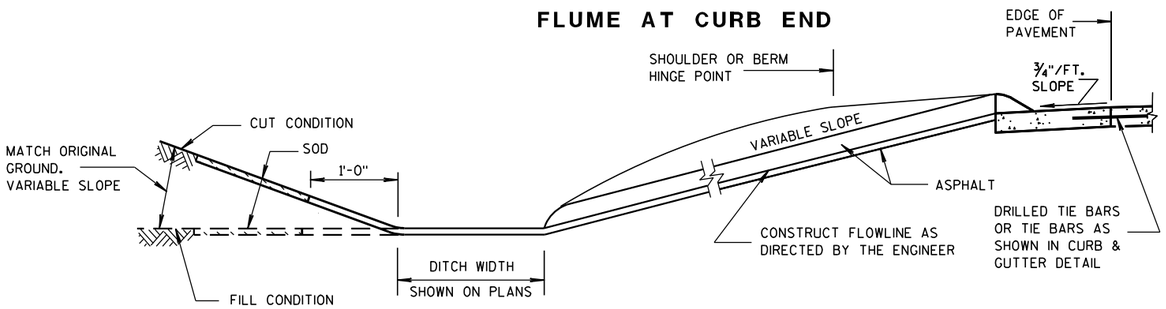
S.D.D. 8 D 1-18

ASPHALTIC FLUME

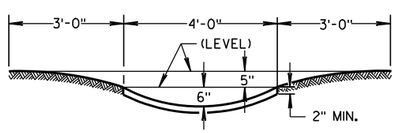


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

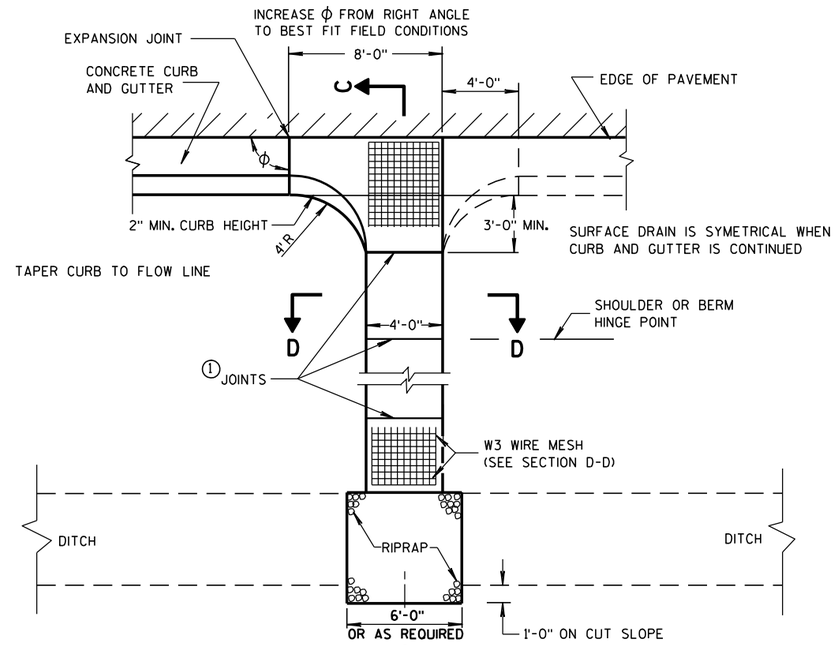
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

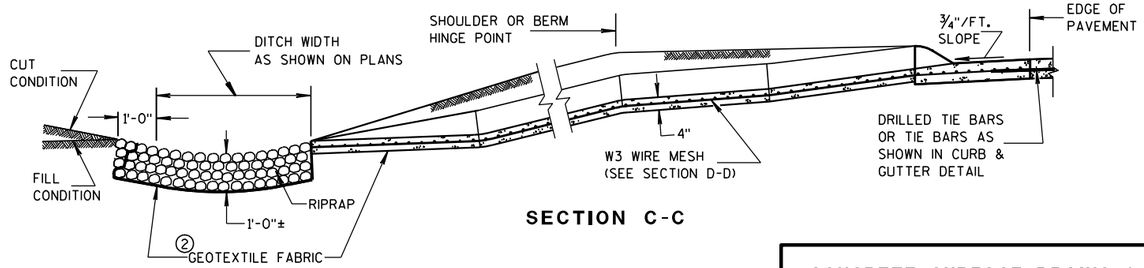
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

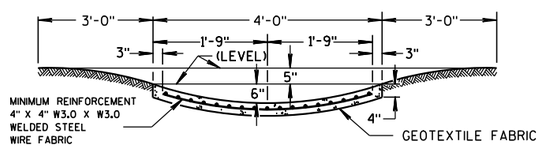
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

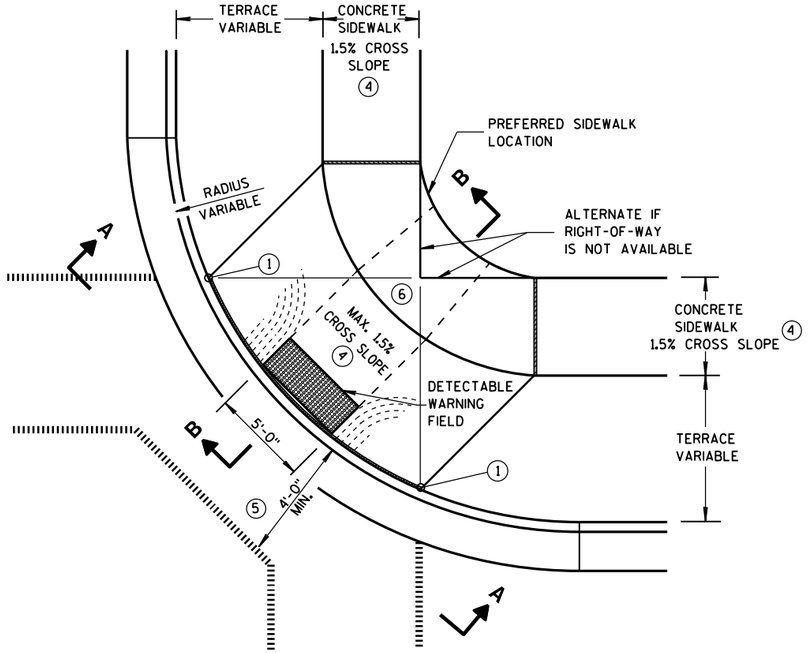
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
391
MENT
FHWA

6

S.D.D. 8 D 4-5

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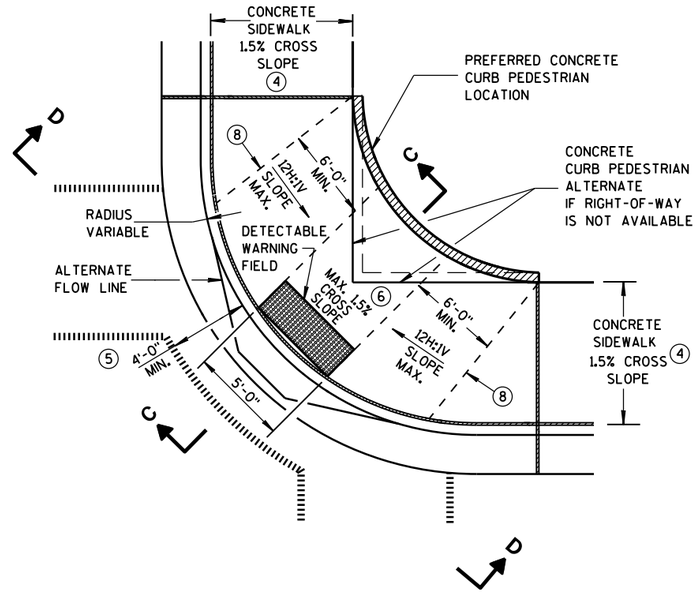
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

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%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

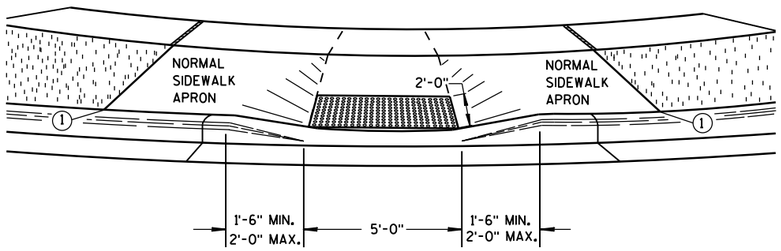
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

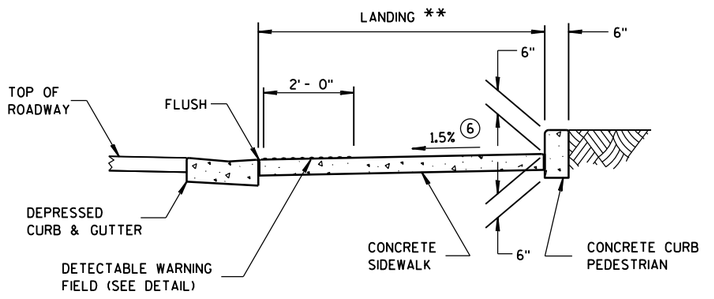
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A-A

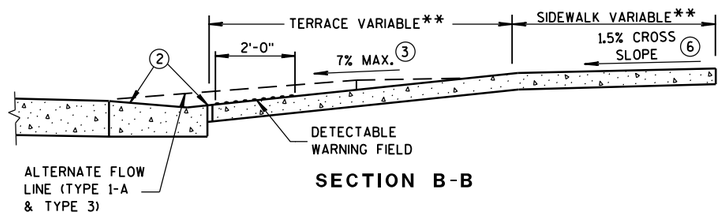
** WIDTH SHOWN ELSEWHERE IN THE PLANS



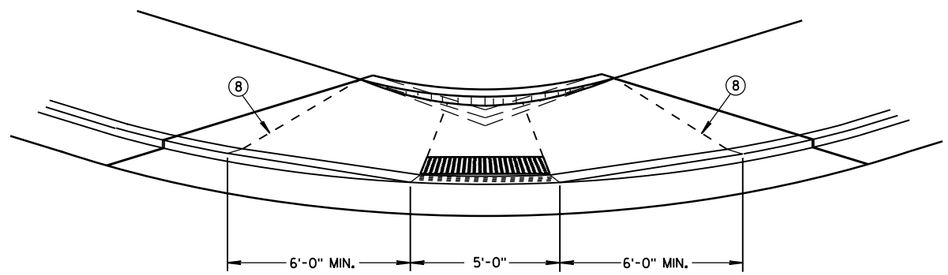
SECTION C-C

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION B-B



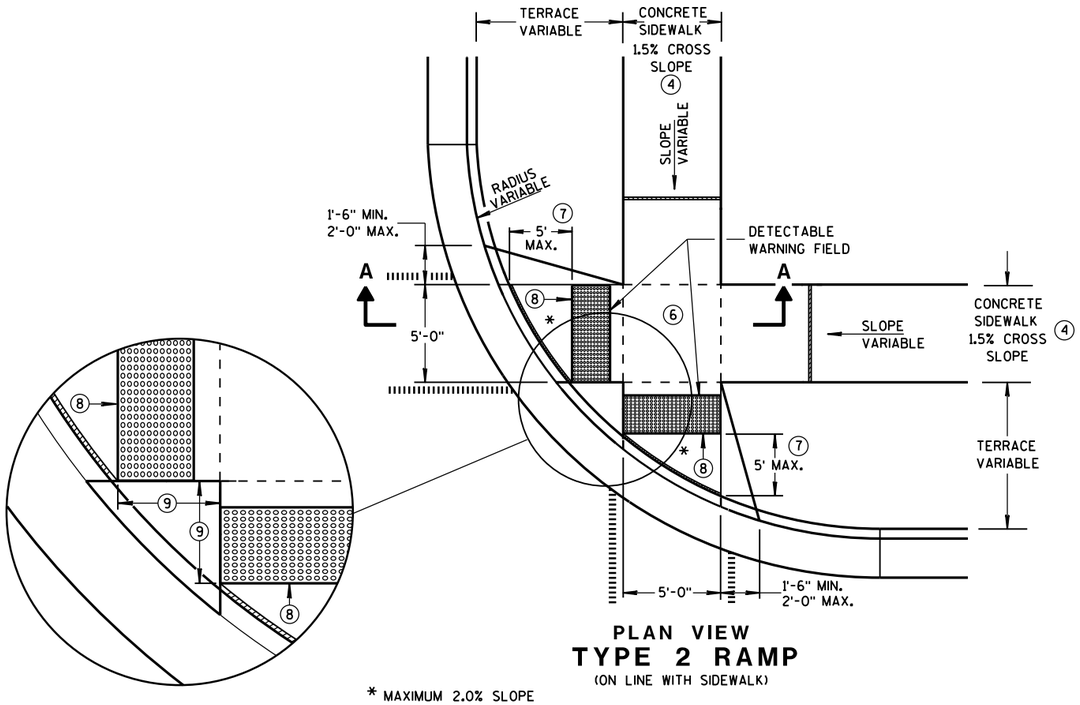
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 8 D 5-16a

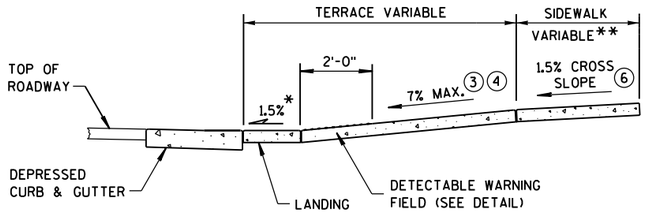


PLAN VIEW

TYPE 2 RAMP

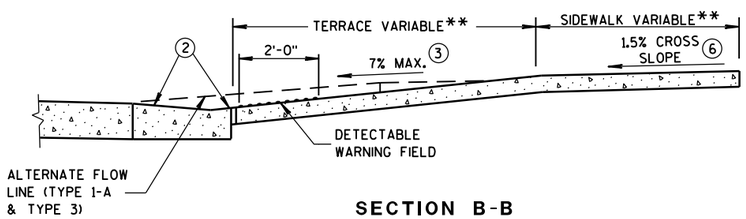
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



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.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

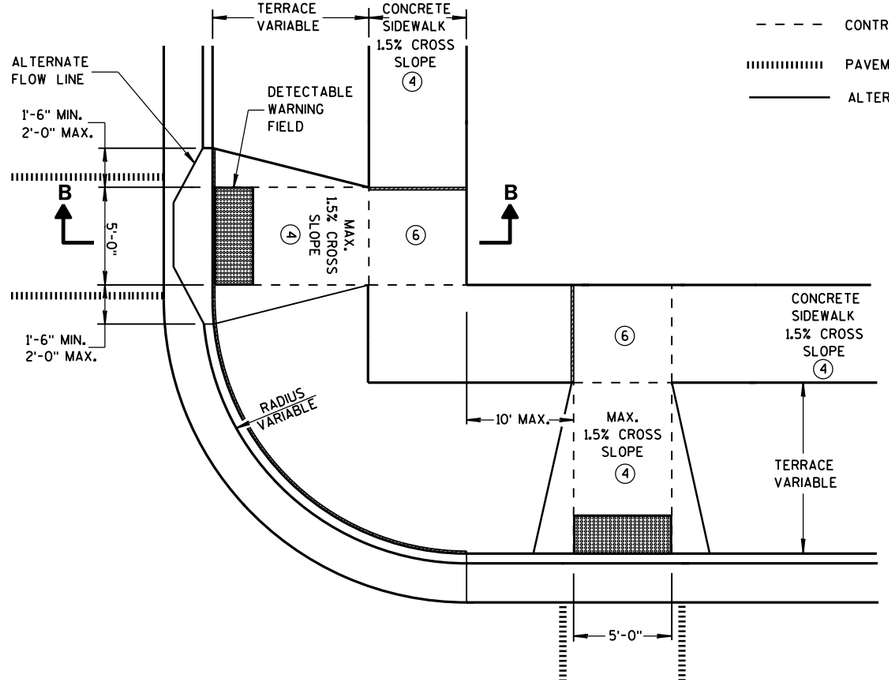
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

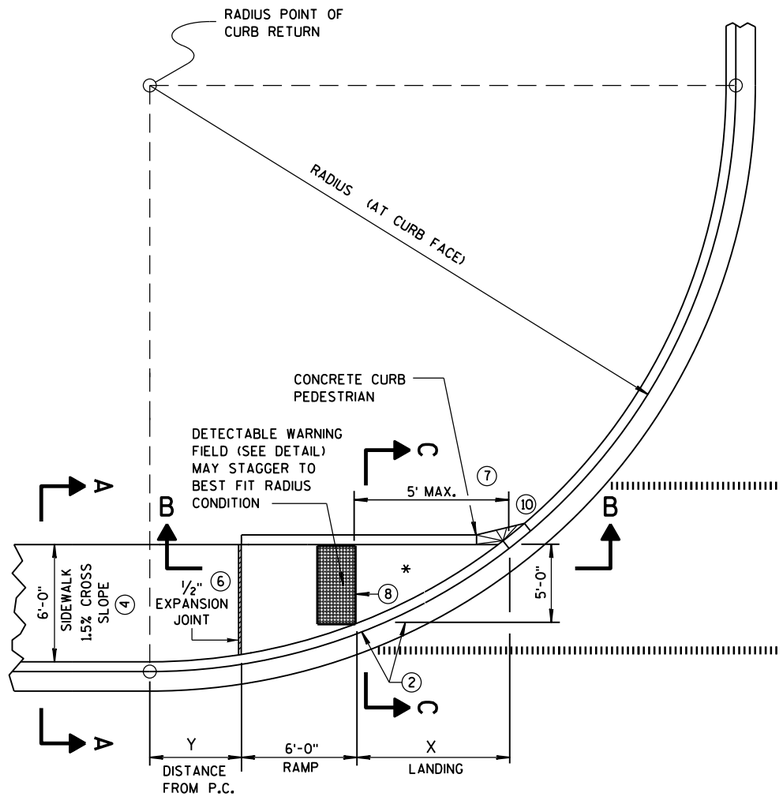
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

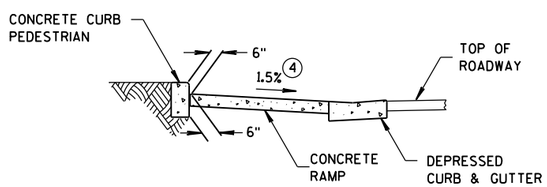
S.D.D. 8 D 5-16b



CURB RAMP TYPE 4A
PLAN VIEW

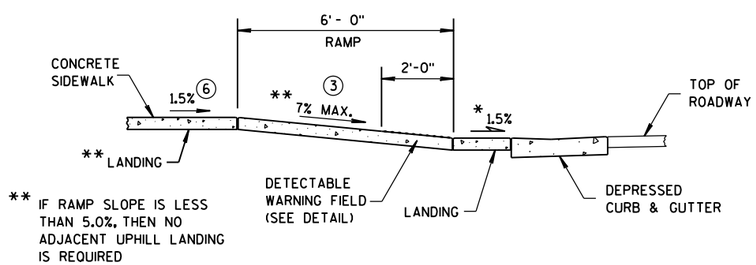
RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4A

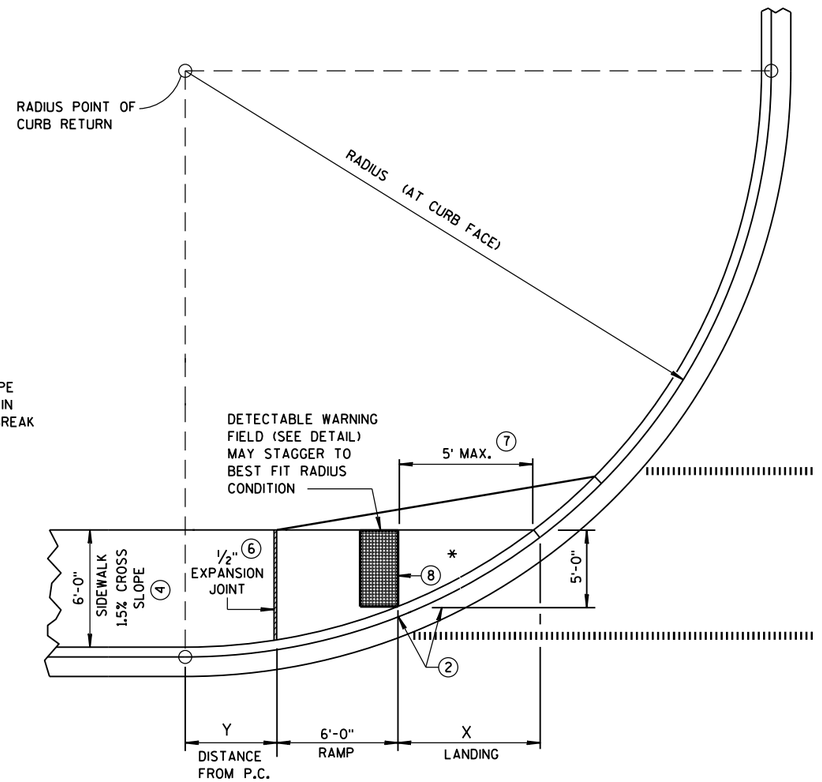
SECTION A-A FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

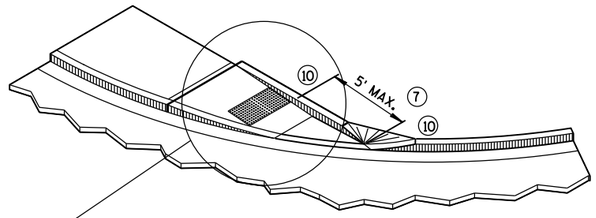
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

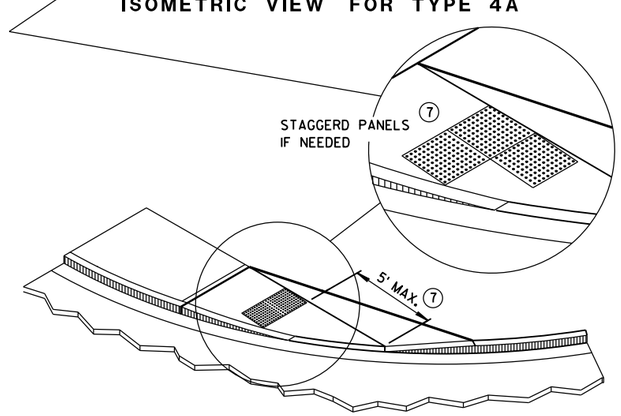
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

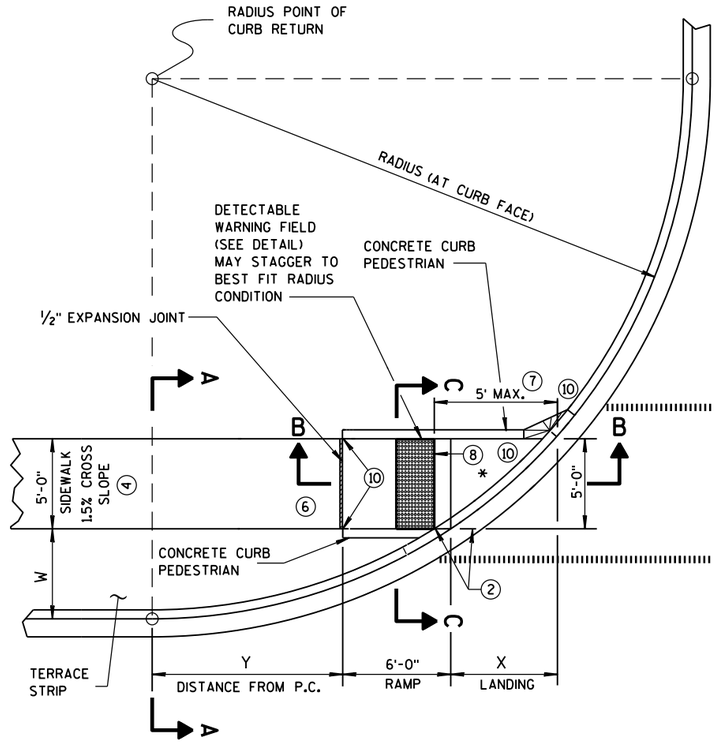
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

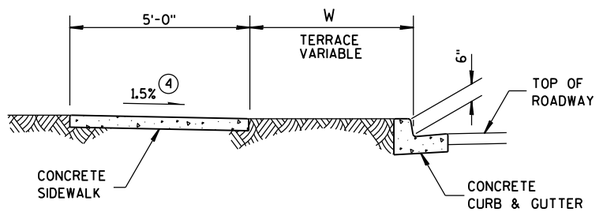
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

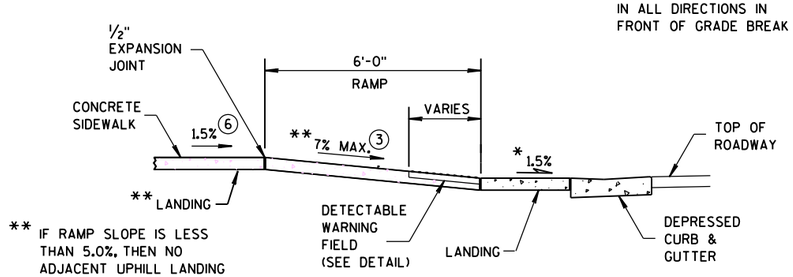
S.D.D. 8 D 5-16c



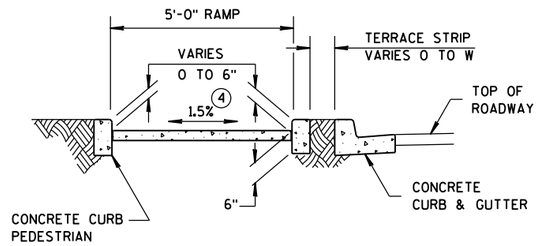
CURB RAMP TYPE 4B
PLAN VIEW



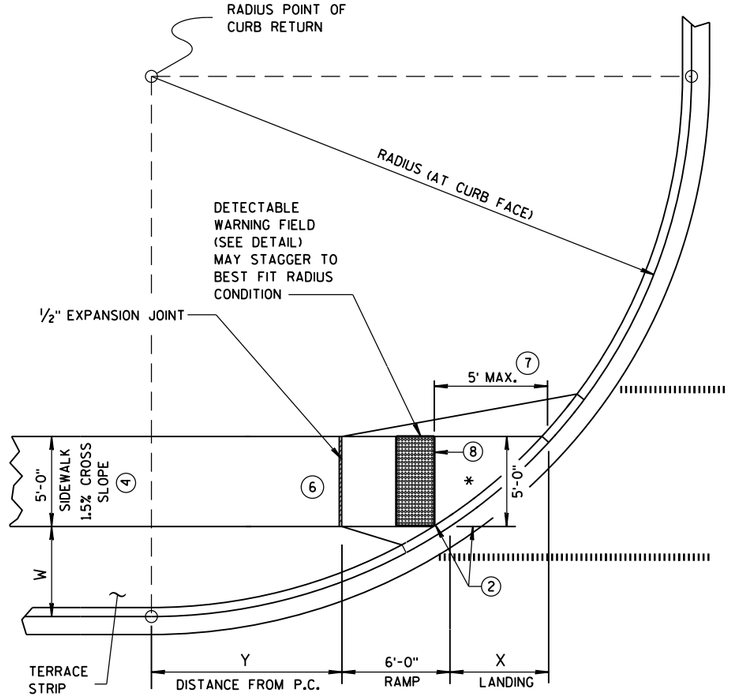
SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW

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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

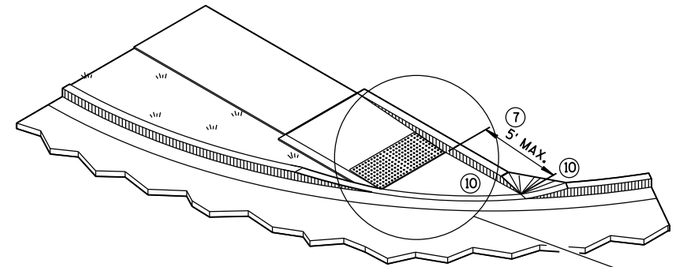
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

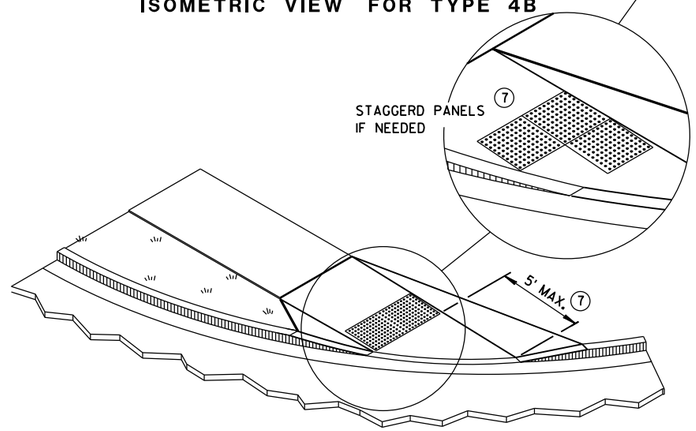
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



ISOMETRIC VIEW FOR TYPE 4B



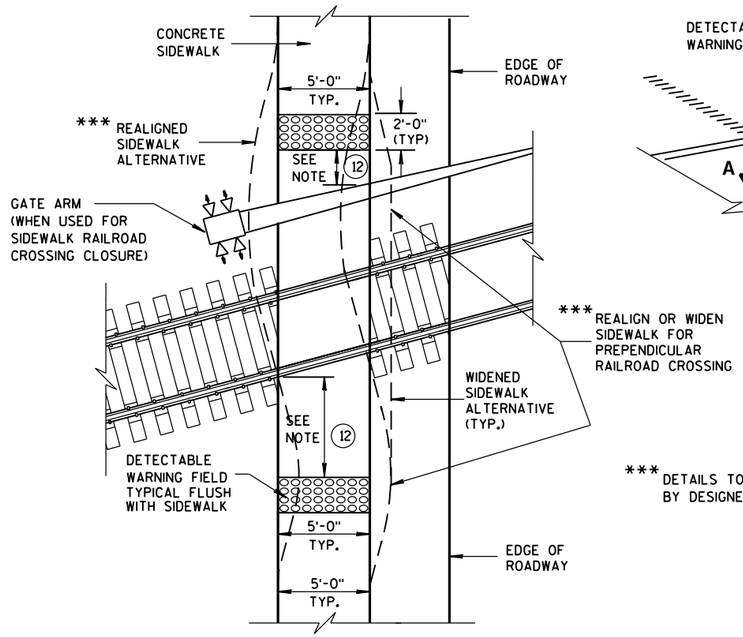
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

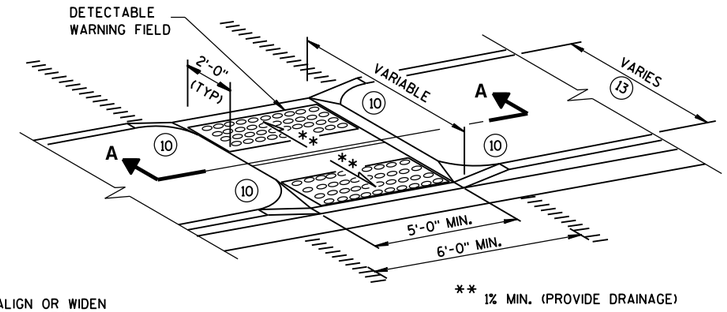
6

S.D.D. 8 D 5-16d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

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.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

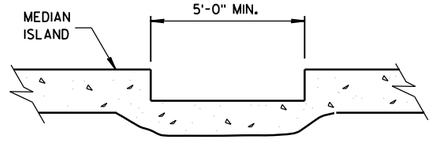
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 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.

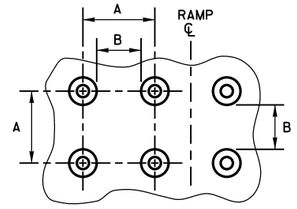
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



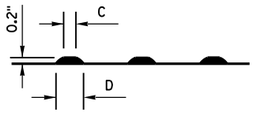
SECTION A-A

	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.

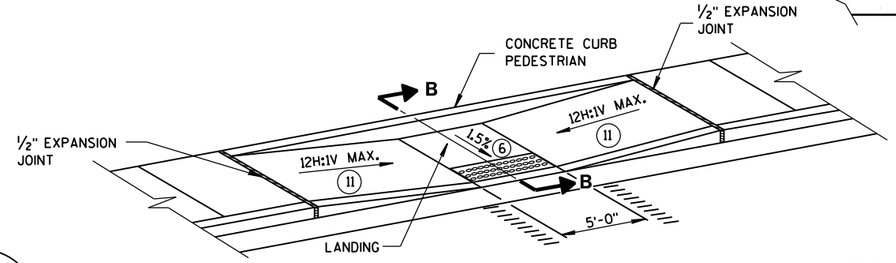


PLAN VIEW

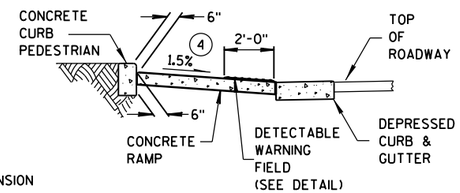


ELEVATION VIEW

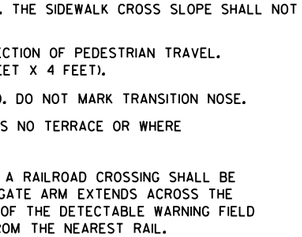
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



MID-BLOCK CROSSING
TYPE 7A



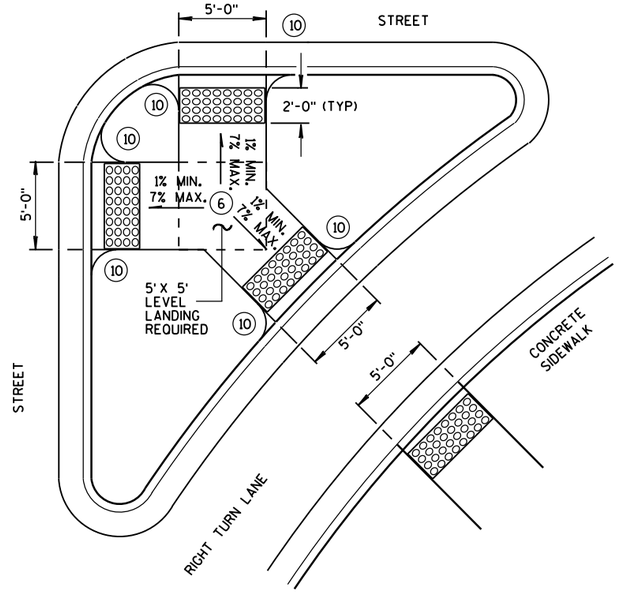
SECTION B-B



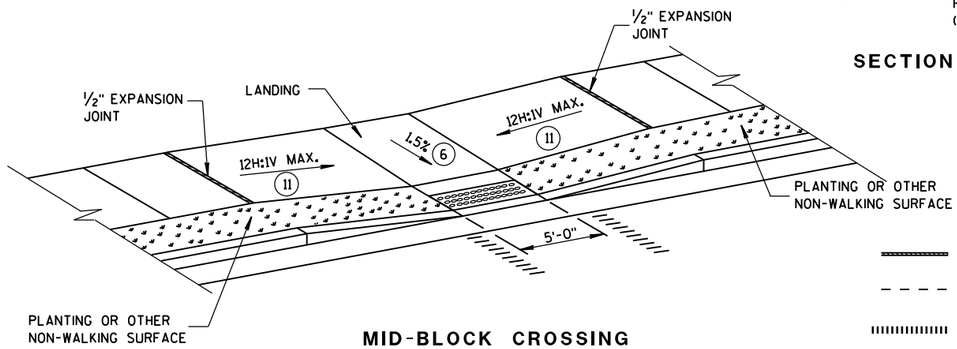
PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

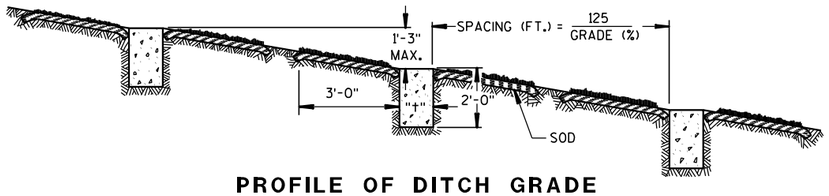
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

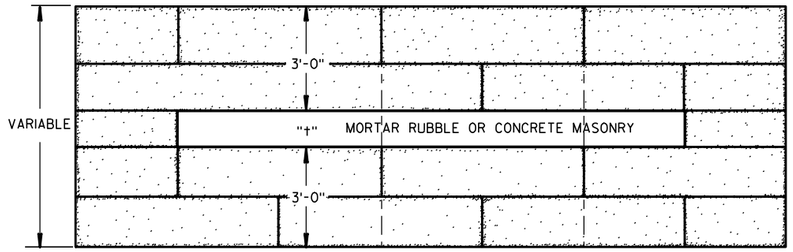
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 D 5-16e

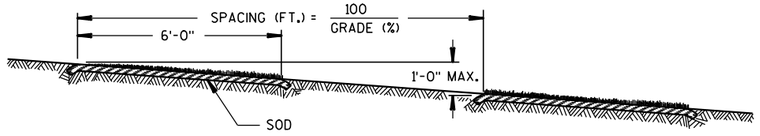


PROFILE OF DITCH GRADE

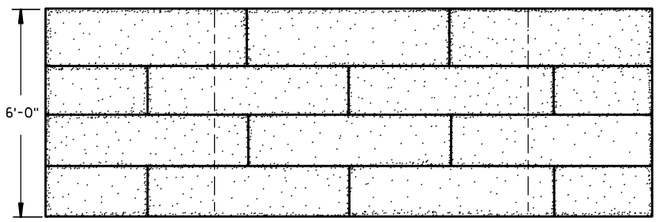


PLAN VIEW SHOWING MASONRY AND SOD

"+" - MASONRY THICKNESS SHALL BE 0'-9" FOR CONCRETE AND 1'-0" FOR MORTAR RUBBLE.



PROFILE OF DITCH GRADE



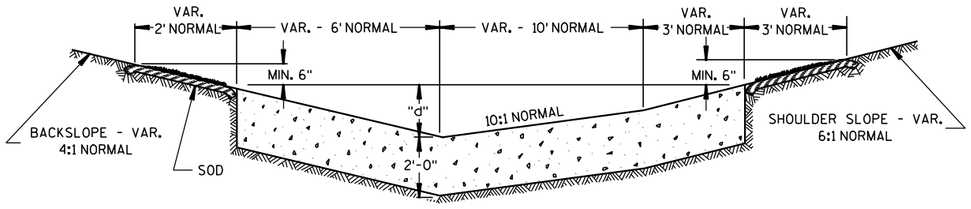
PLAN VIEW SHOWING SOD

GENERAL NOTES

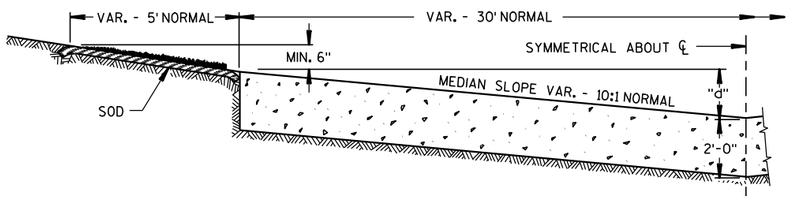
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATE DESIGNS FOR DITCH CHECKS, OF THE MATERIAL OR COMBINATION OF MATERIALS SHOWN HEREON, MAY BE USED UPON WRITTEN PERMISSION OF THE ENGINEER.

SOD STRIPS FOR DITCH CHECKS MAY BE PLACED EITHER TRANSVERSELY OR LONGITUDINALLY TO THE DIRECTION OF WATER FLOW.



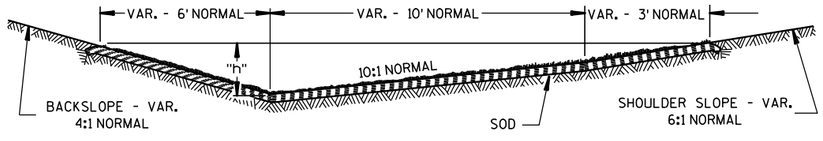
SIDE DITCH CROSS SECTION



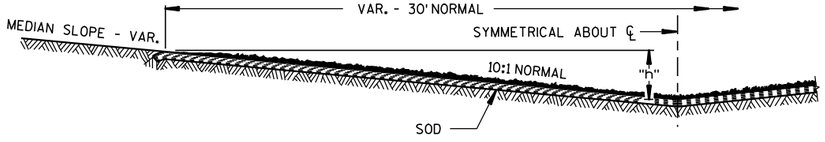
MEDIAN DITCH CROSS SECTION

"d" - THE MINIMUM DEPTH OF THE MASONRY PORTION OF THE DITCH CHECKS SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW. THE NORMAL "d" WILL BE 1'-6".

MASONRY AND SOD DITCH CHECKS



SIDE DITCH CROSS SECTION



MEDIAN DITCH CROSS SECTION

"h" - THE MINIMUM HEIGHT OF DITCH TO BE SODDED SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW PLUS 6". THE NORMAL "h" WILL BE 1'-6".

SOD DITCH CHECKS

SOD OR MASONRY AND SOD DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/7/71 — DATE

/S/ L.C. Harris — ACTING CHIEF DESIG

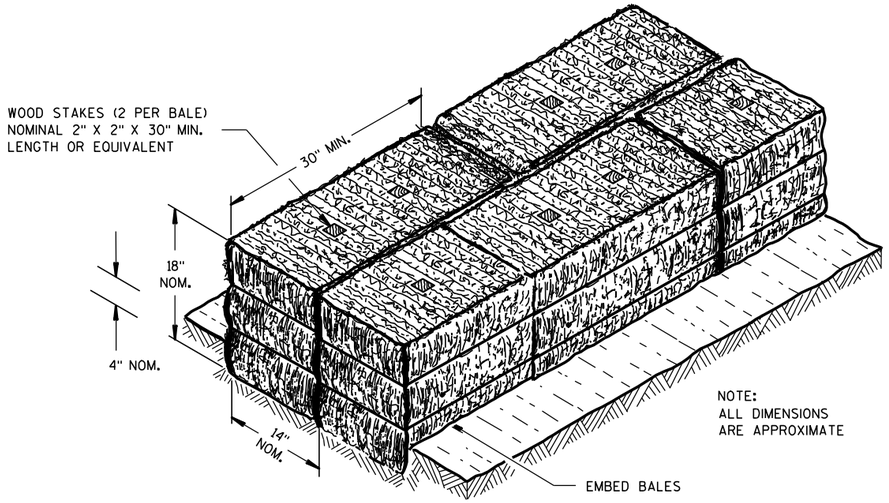
FHWA

6

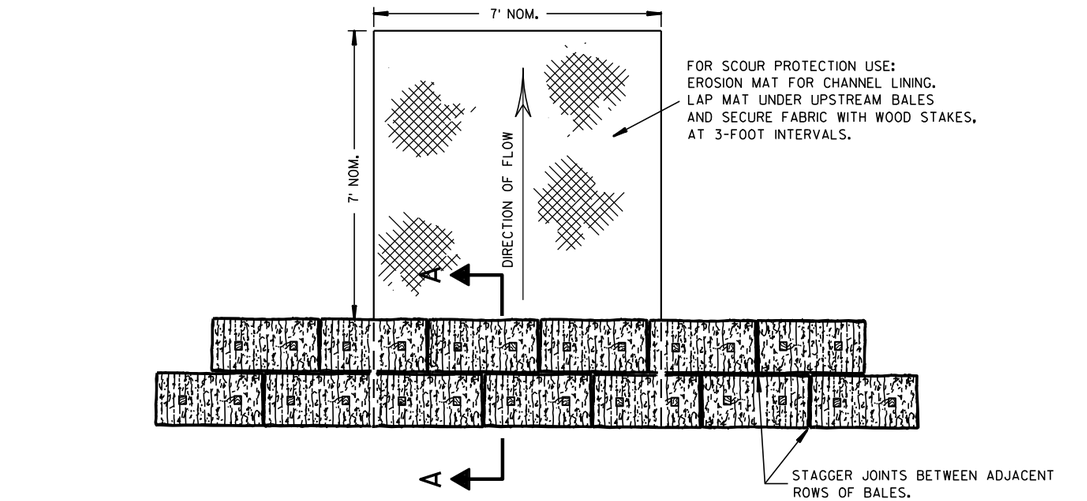
S.D.D. 8 E 4-2

6

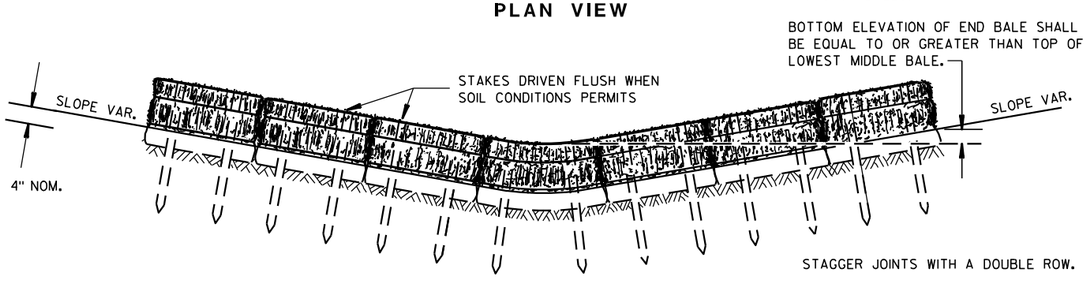
S.D.D. 8 E 4-2



SECTION A-A



PLAN VIEW



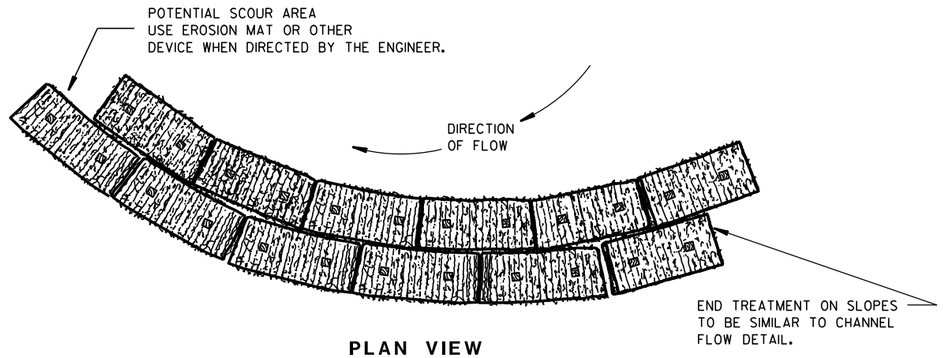
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

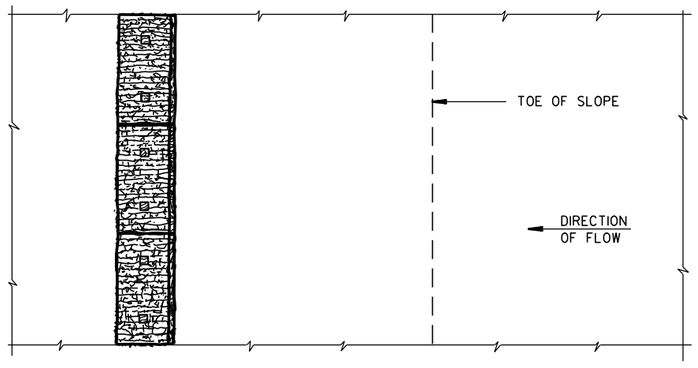
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

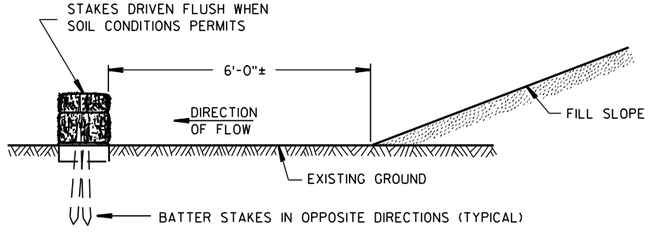


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

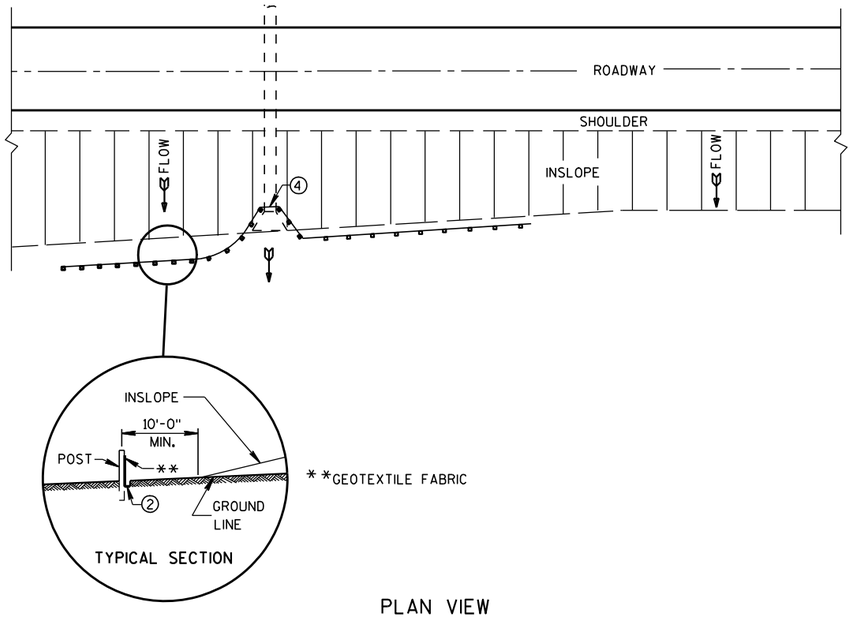
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

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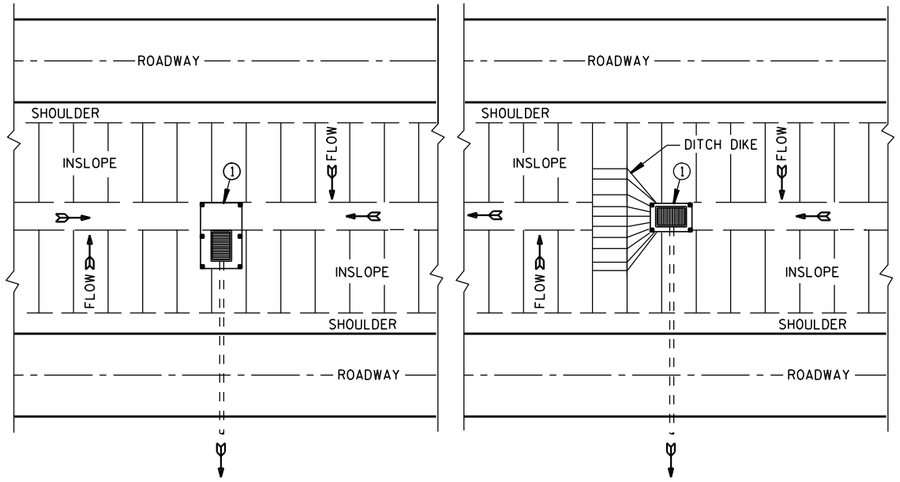
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



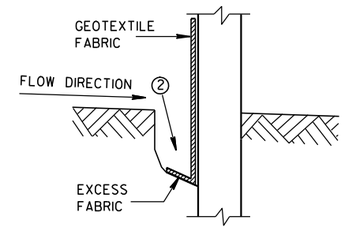
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

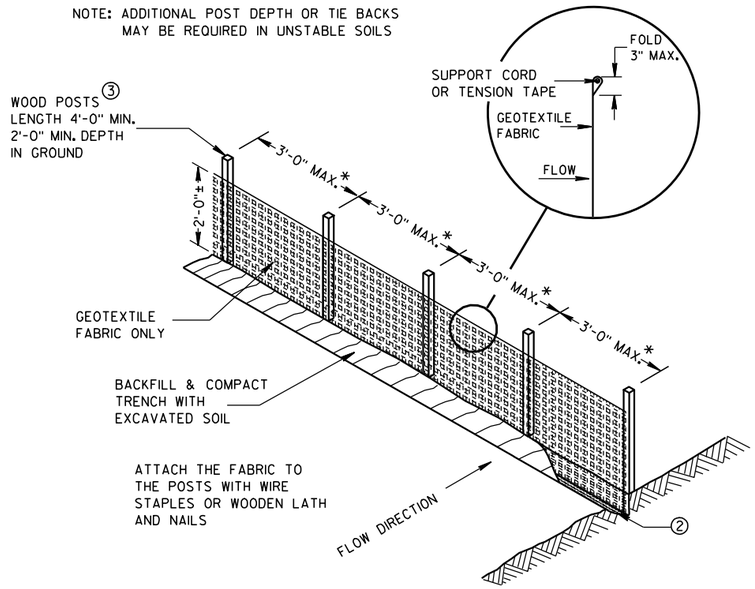
GENERAL NOTES

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

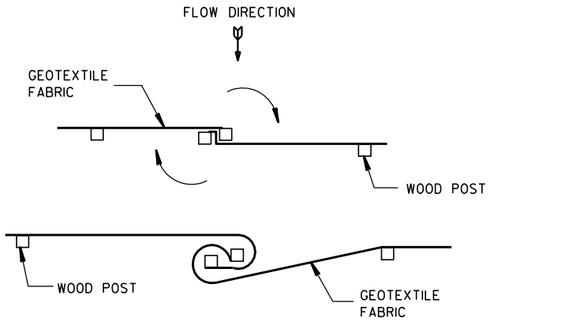
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



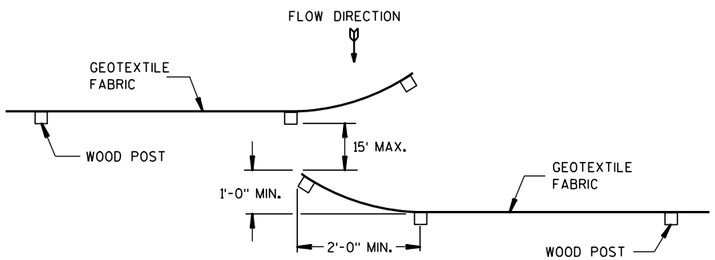
TRENCH DETAIL



SILT FENCE

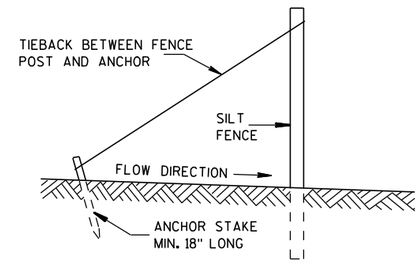


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

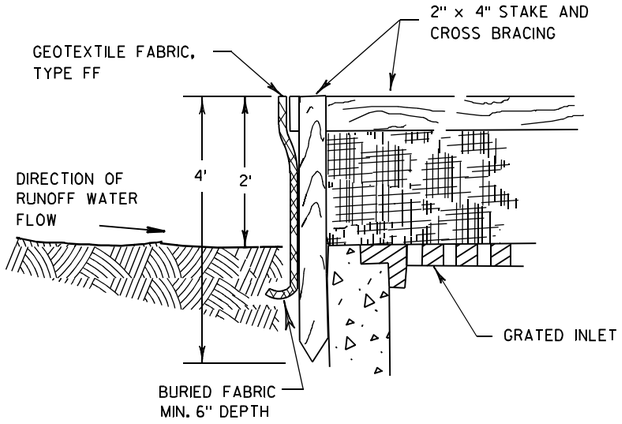
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

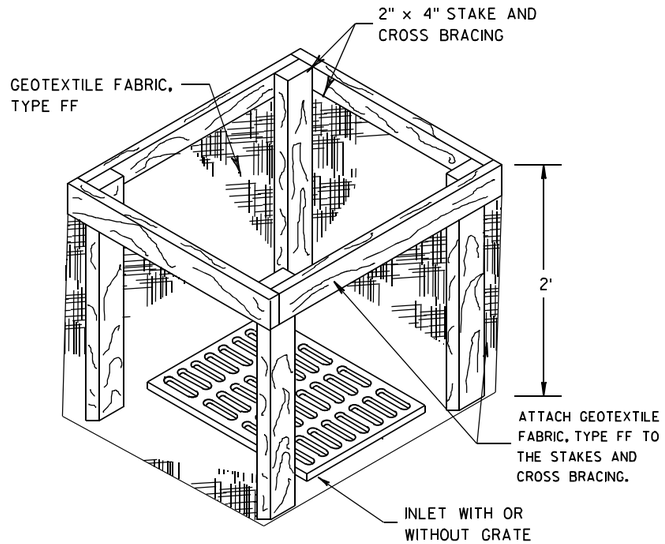
6

S.D.D. 8 E 9-6

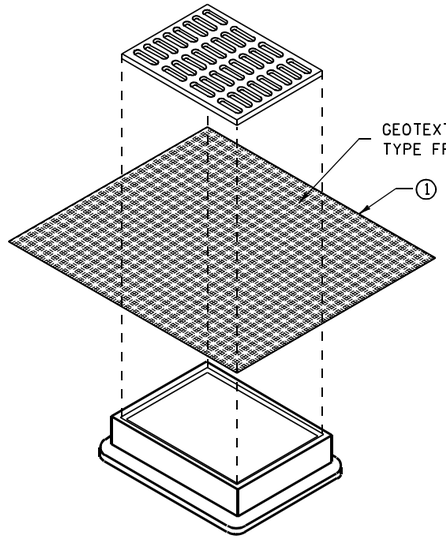
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S.D.D. 8 E 9-6



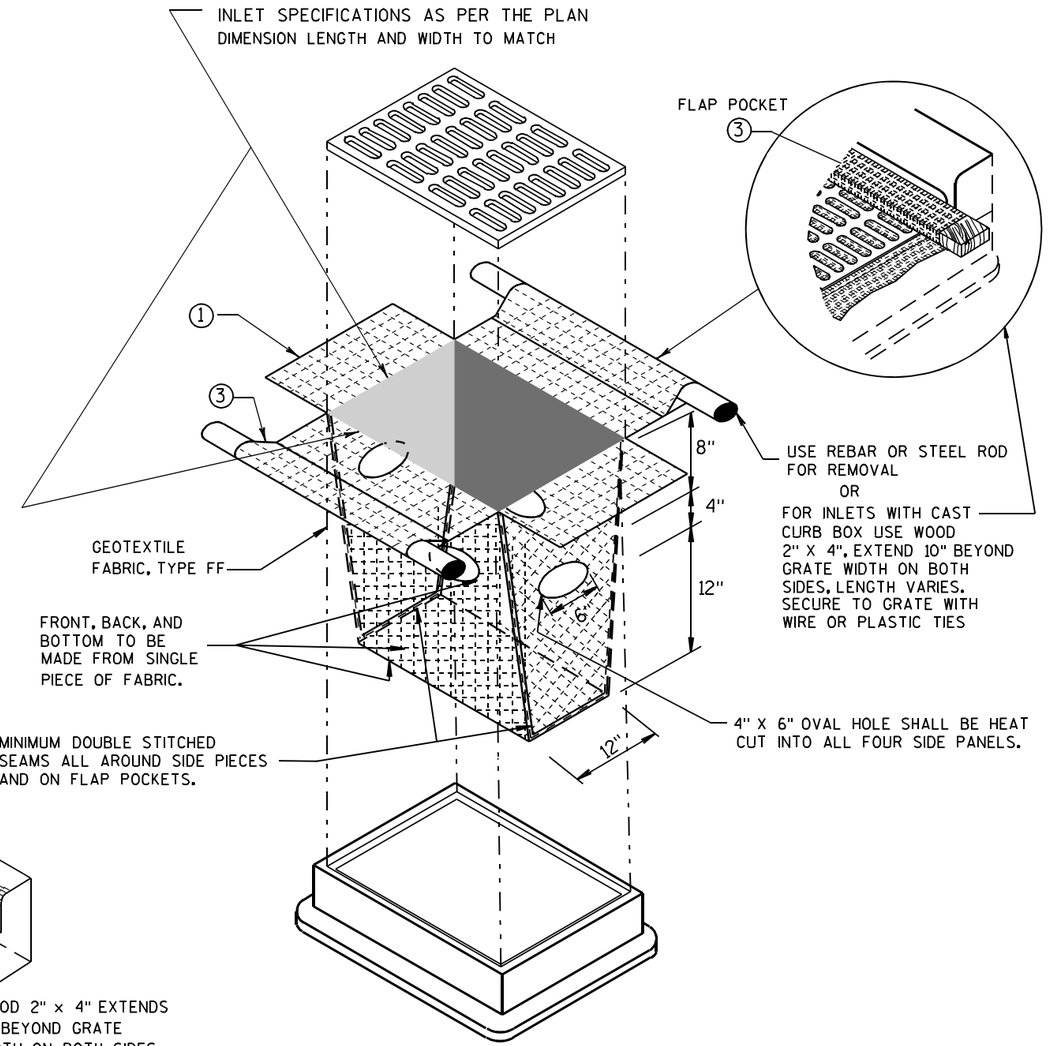


INLET PROTECTION, TYPE A



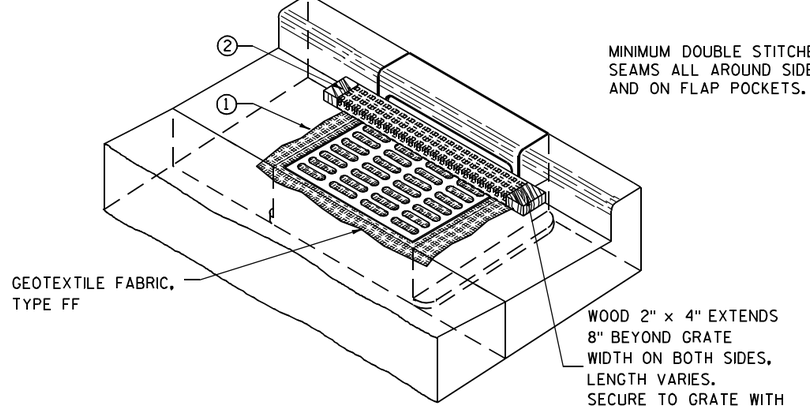
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

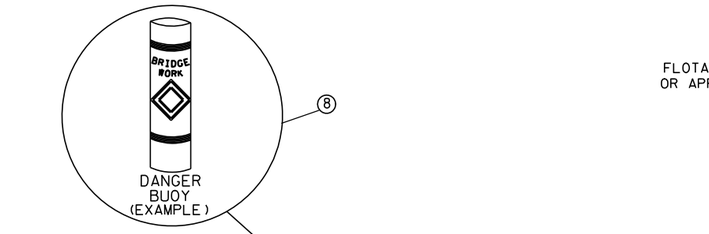
FHWA

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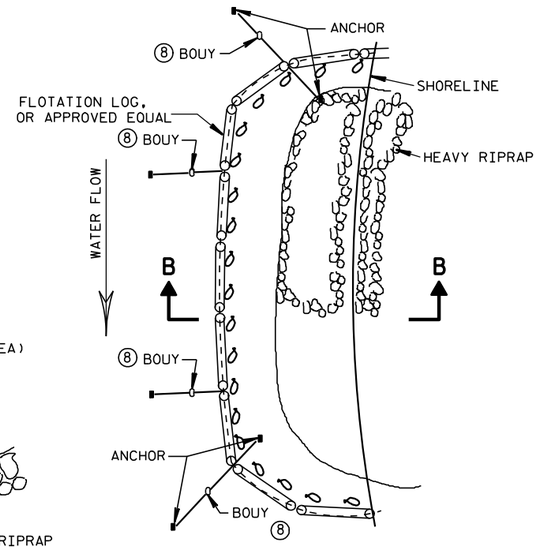
S.D.D. 8 E 10-2

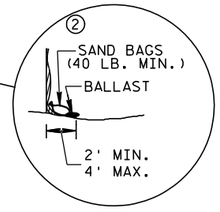
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S.D.D. 8 E 10-2

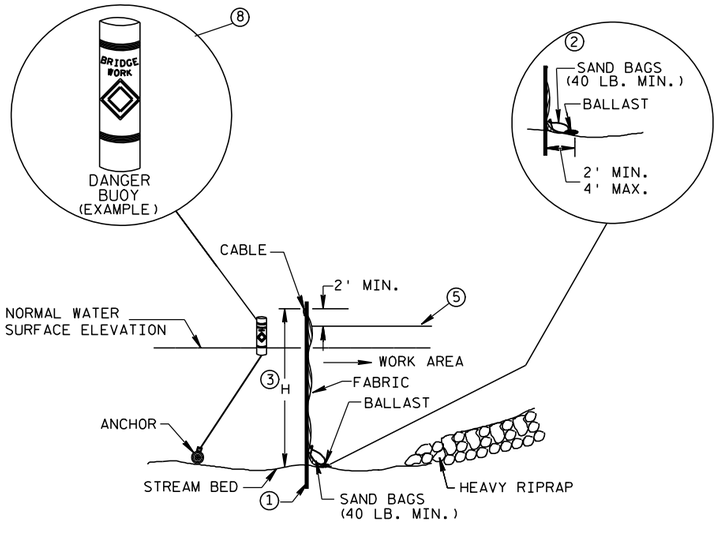


SECTION B-B

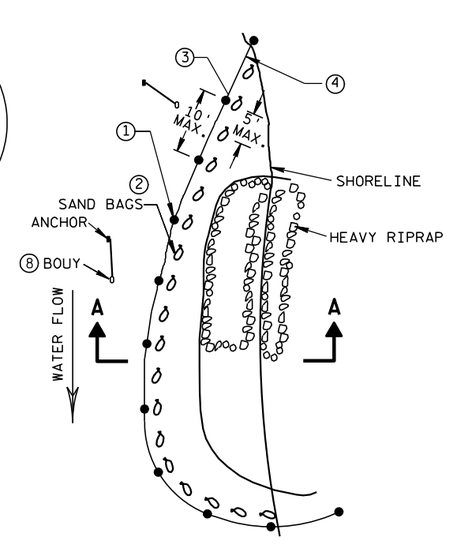




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

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.

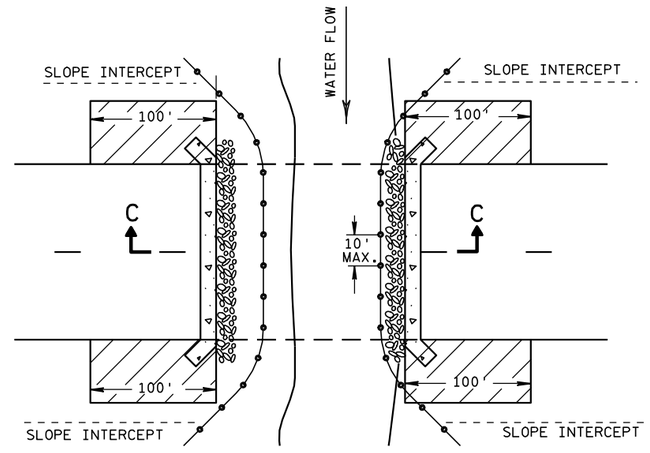
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

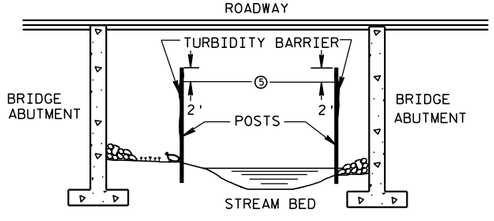
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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.



PLAN VIEW



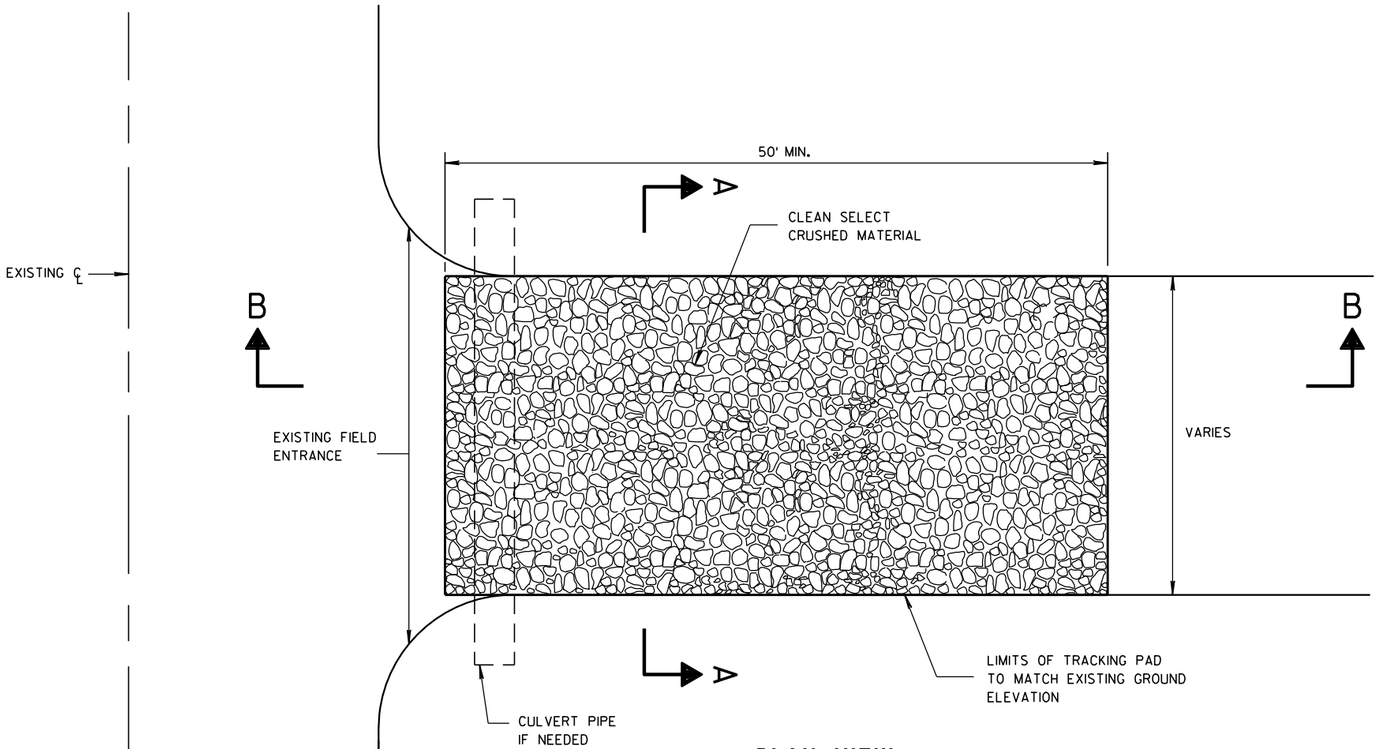
SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

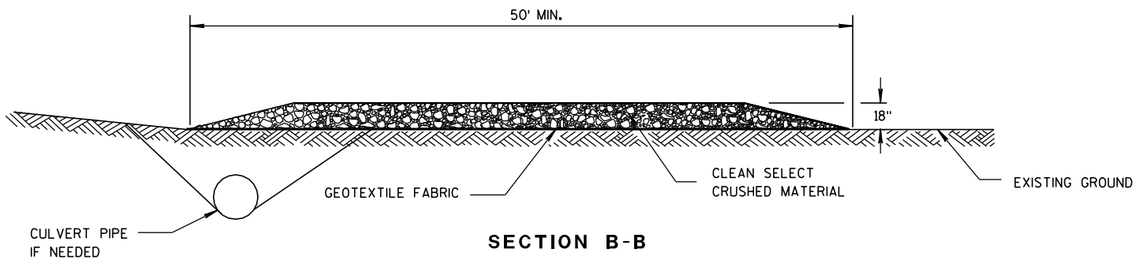
TURBIDITY BARRIER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 8 E 11-2



PLAN VIEW



SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

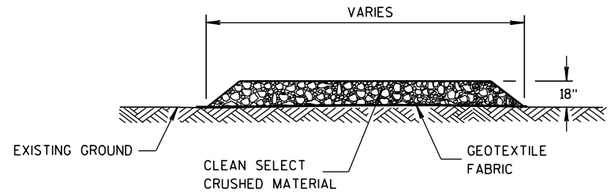
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
402
ENT
FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

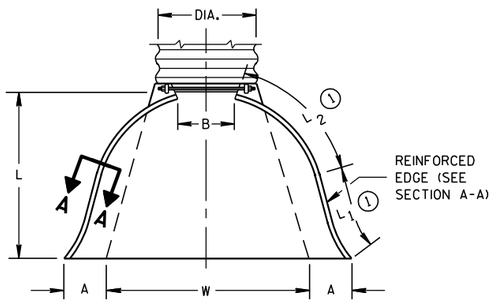
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

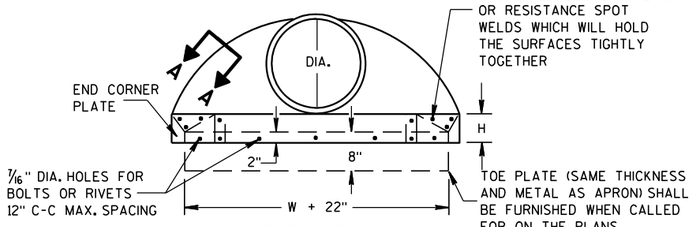
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

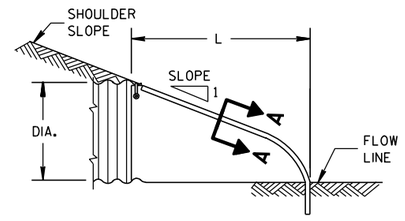
* MINIMUM
** MAXIMUM



PLAN VIEW

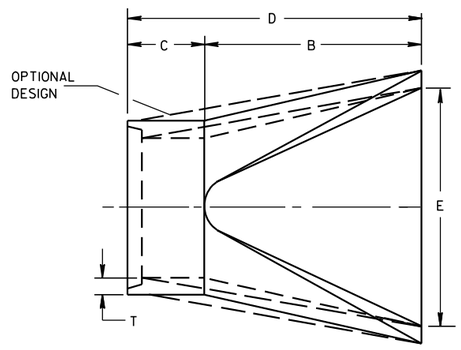


END VIEW

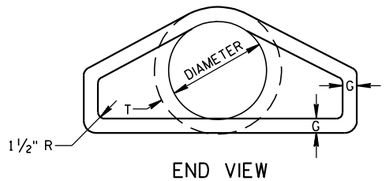


SIDE ELEVATION

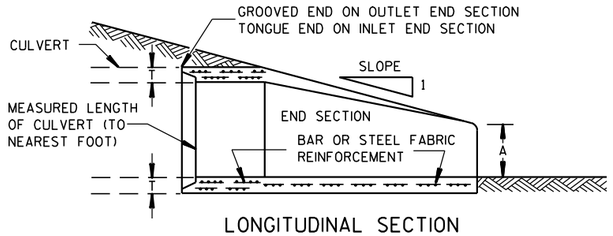
METAL ENDWALLS



PLAN

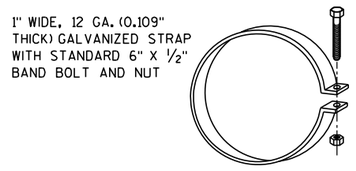


END VIEW



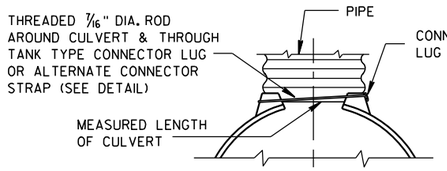
LONGITUDINAL SECTION

CONCRETE ENDWALLS

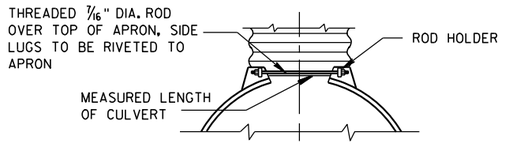


ALTERNATE FOR TYPE 1 CONNECTION

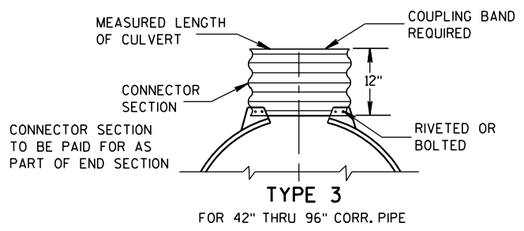
END SECTION CONNECTOR STRAP



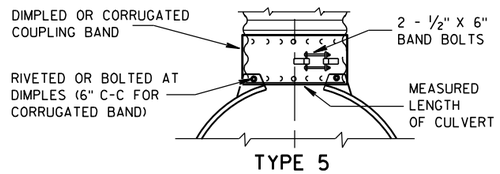
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

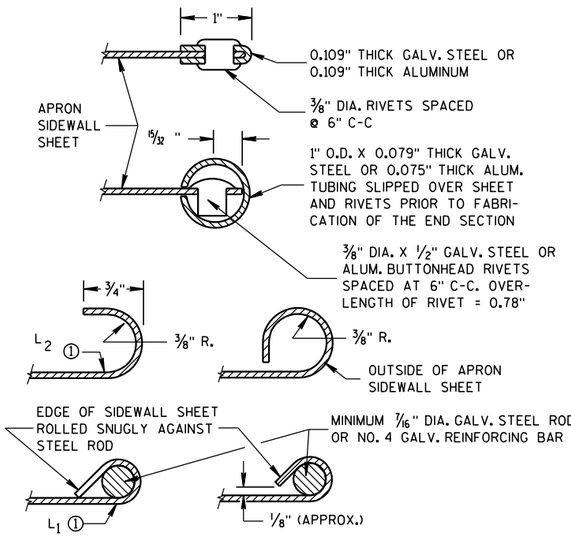
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

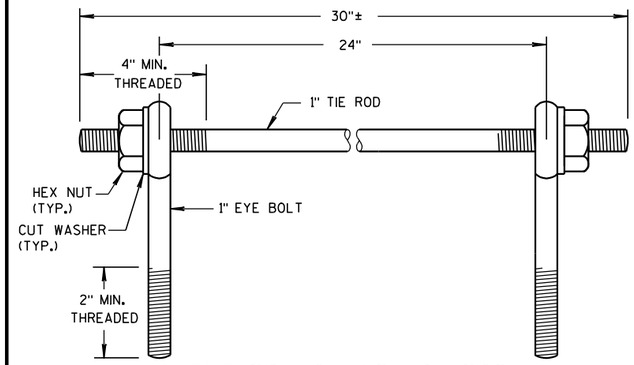
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

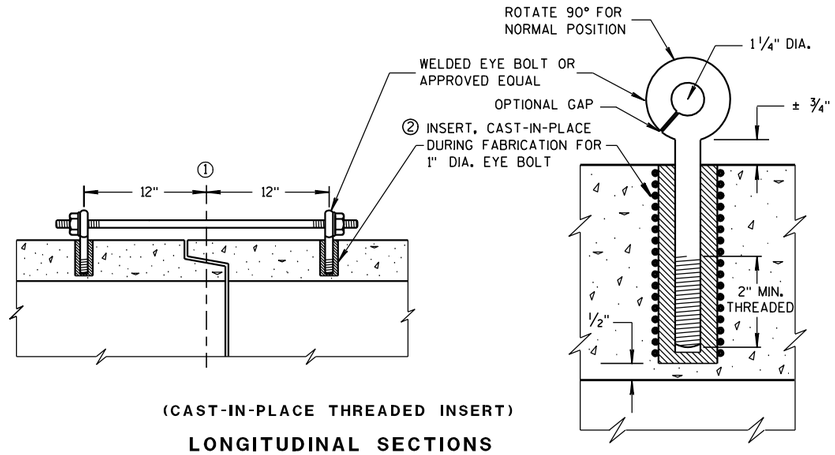
403

6

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND 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 ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

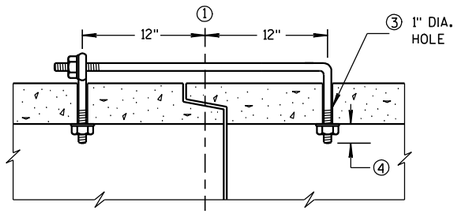
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

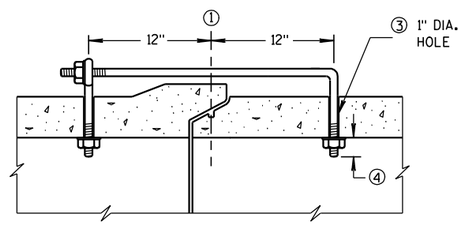
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

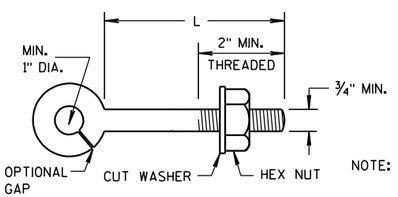


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

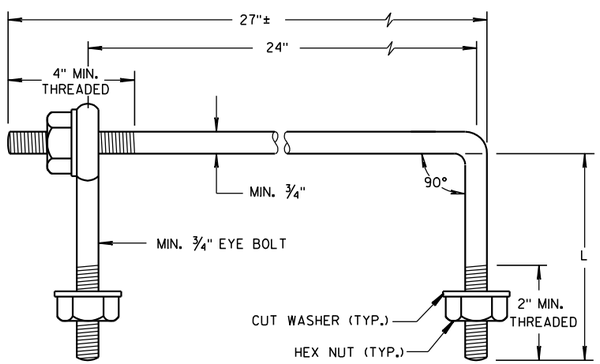
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

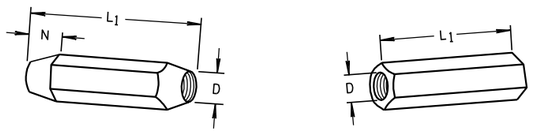
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

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

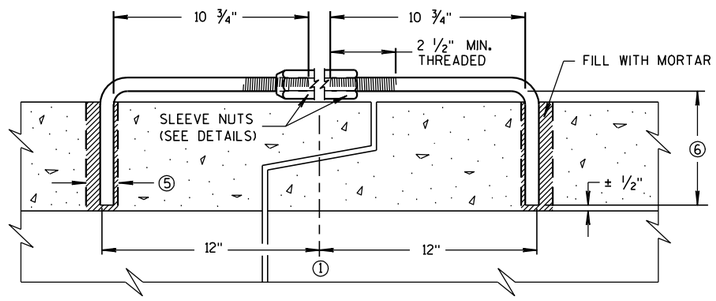
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

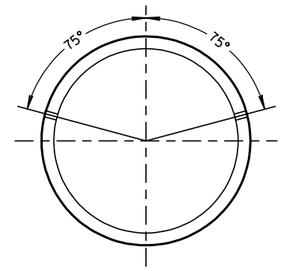
SLEEVE NUTS



LONGITUDINAL SECTION

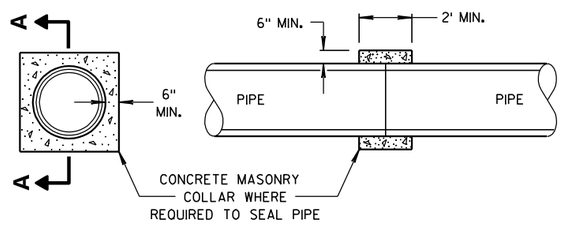
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

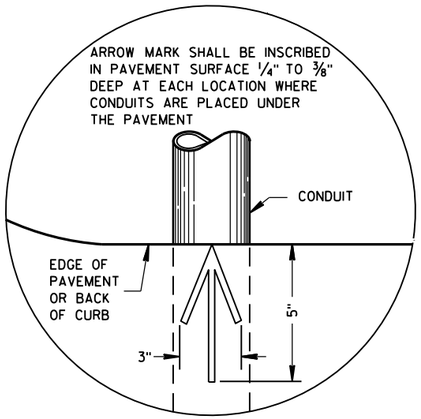
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
404
FHWA

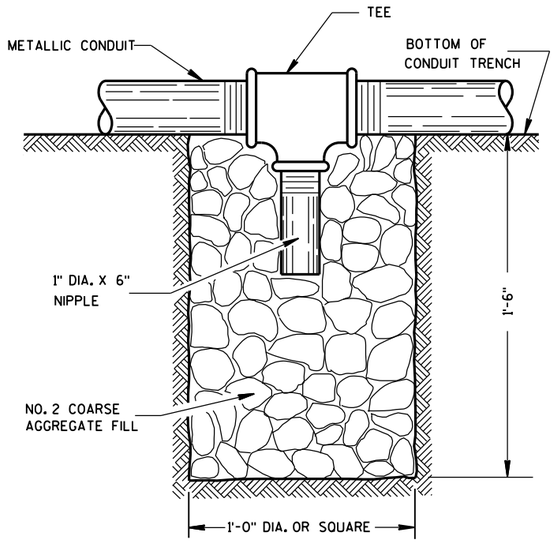
6

S.D.D. 8 F 4-7



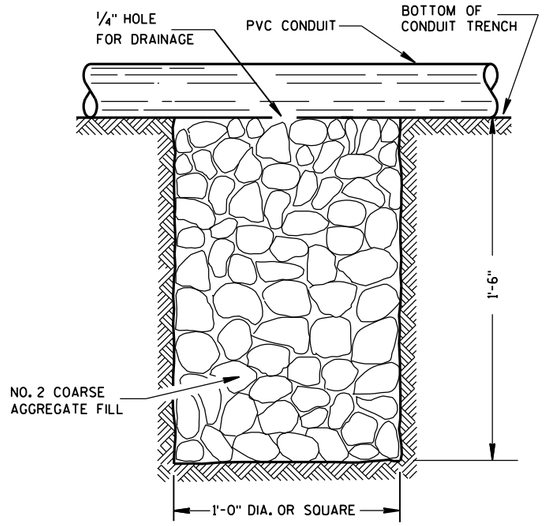
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

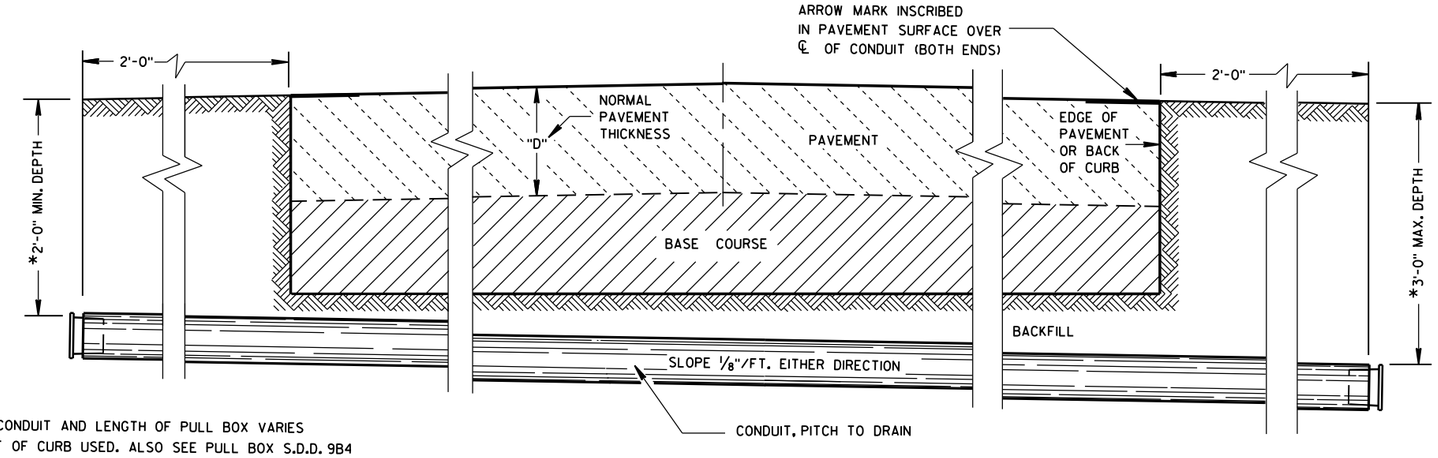
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

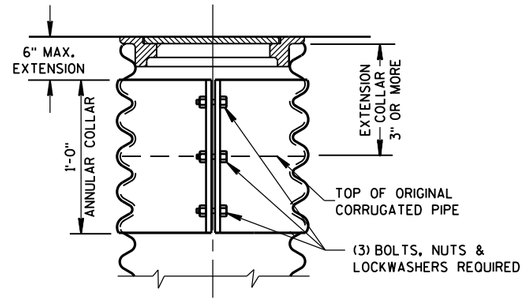
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

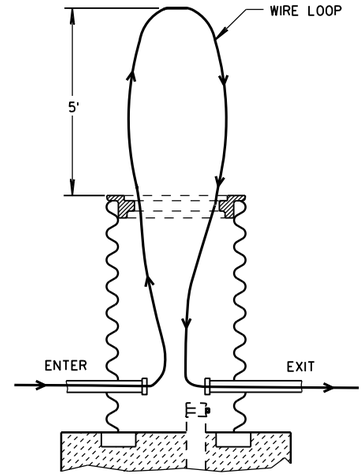
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

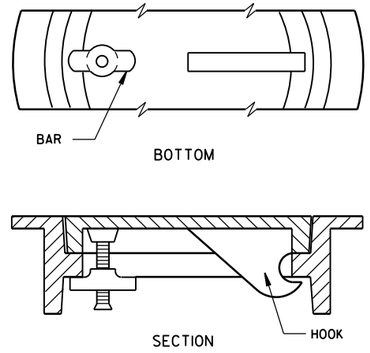
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

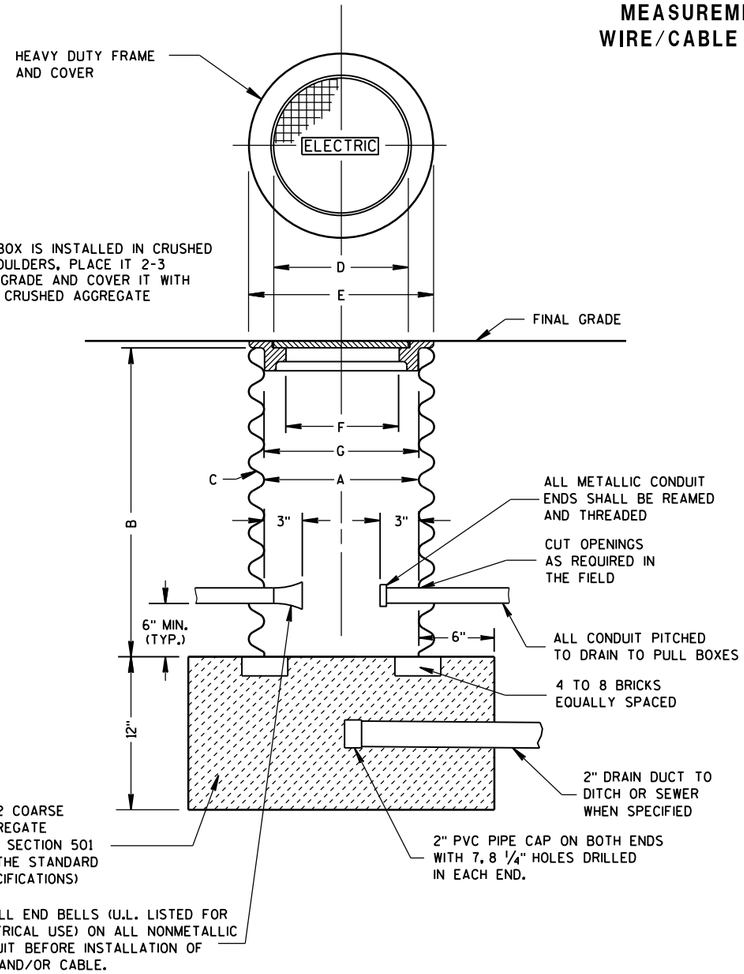


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



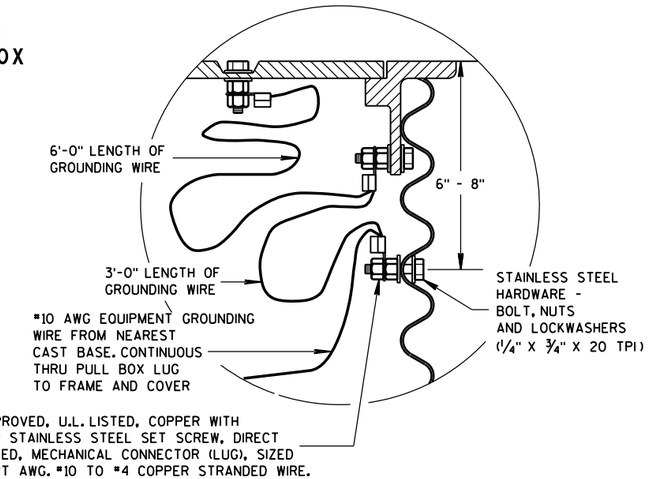
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

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.

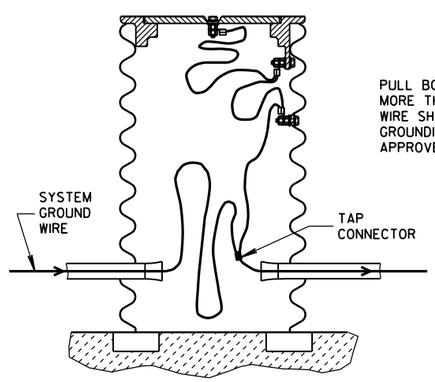
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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.

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

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 TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

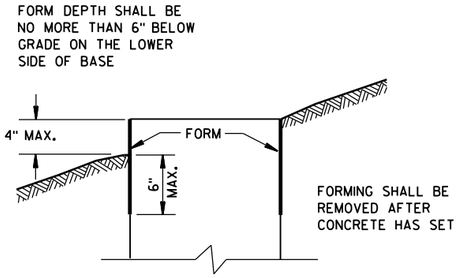
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 406
FHWA

6

S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

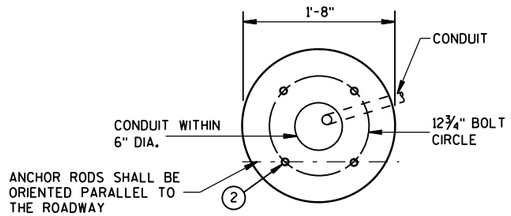
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

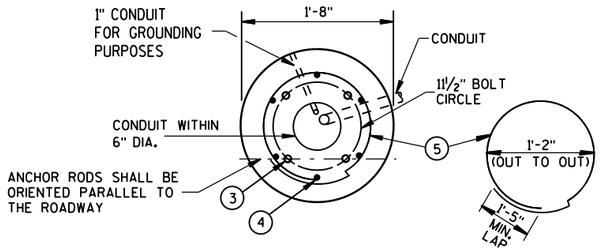
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

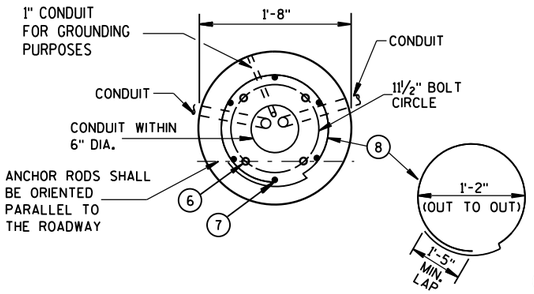
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

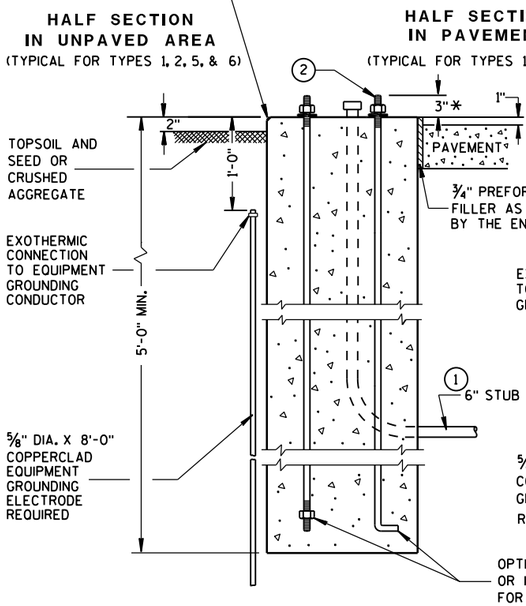
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

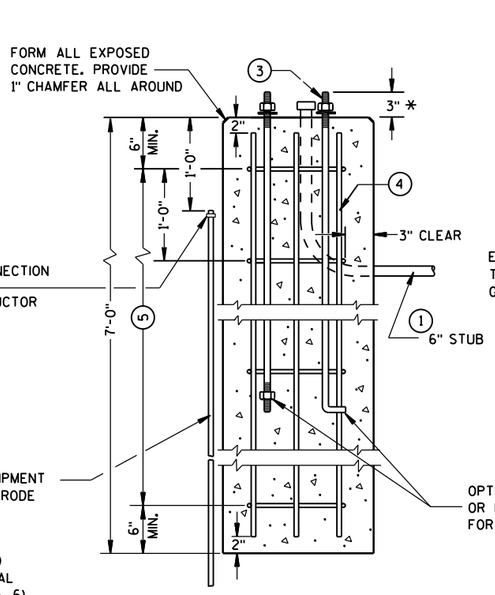
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



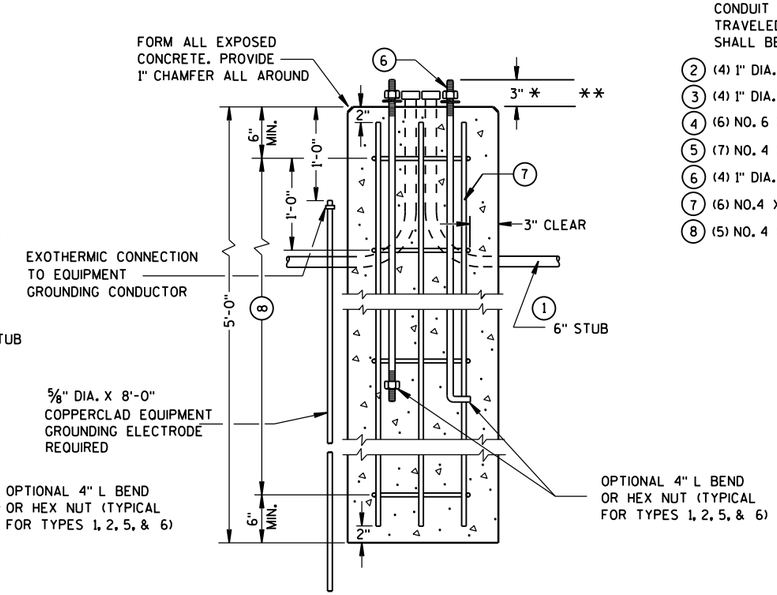








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 407
FHWA

6
S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

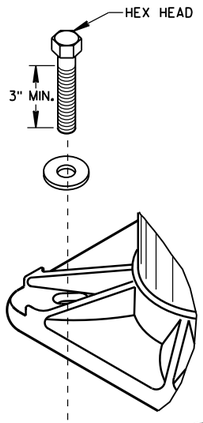
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

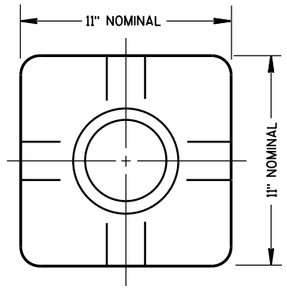
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

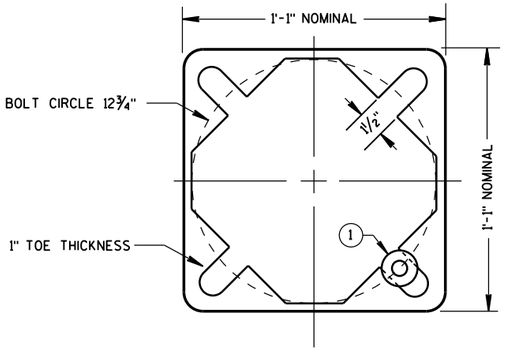
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

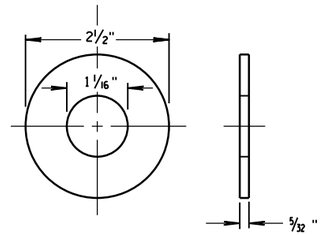




TOP VIEW
(PEDESTAL BASE)

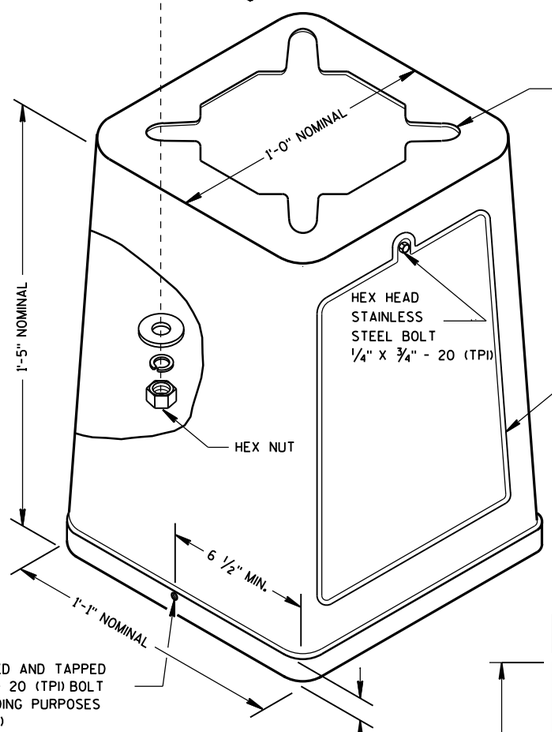


BOTTOM VIEW
(PEDESTAL BASE)

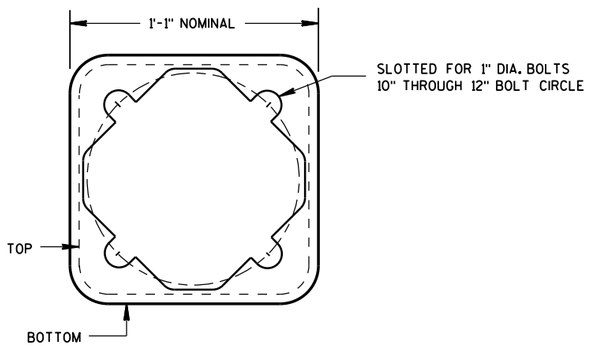


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

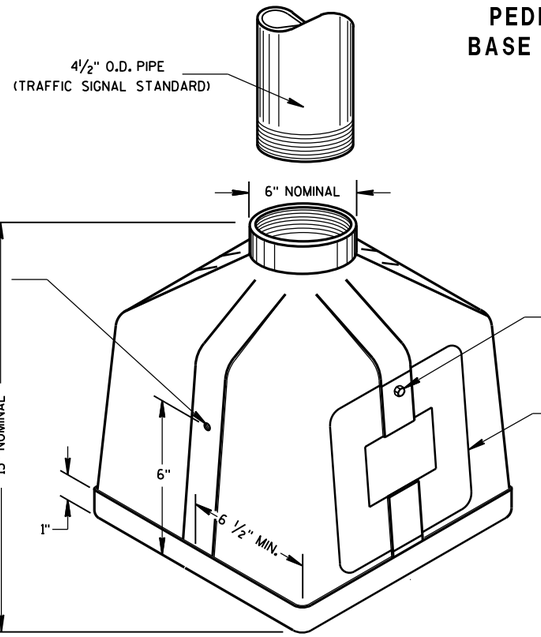
PEDESTAL BASE WASHER (1)



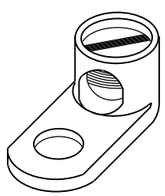
ISOMETRIC VIEW



BOTTOM VIEW
(TRANSFORMER BASE)

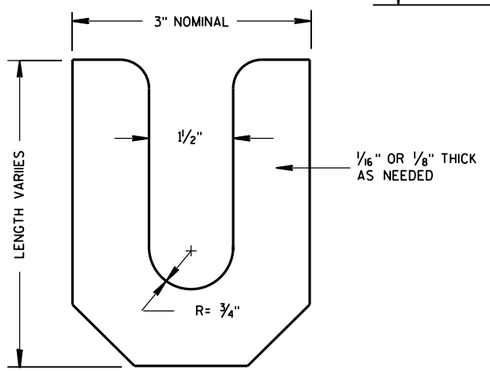


ISOMETRIC VIEW
PEDESTAL BASE



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

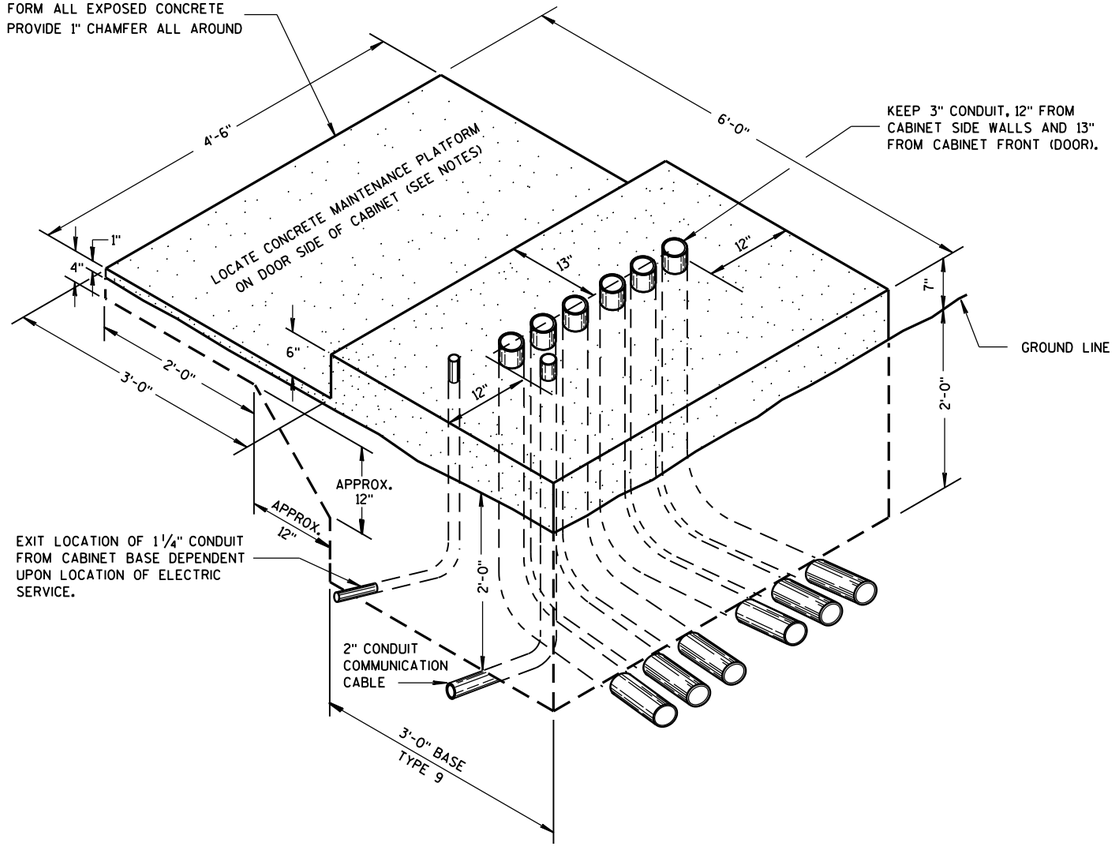
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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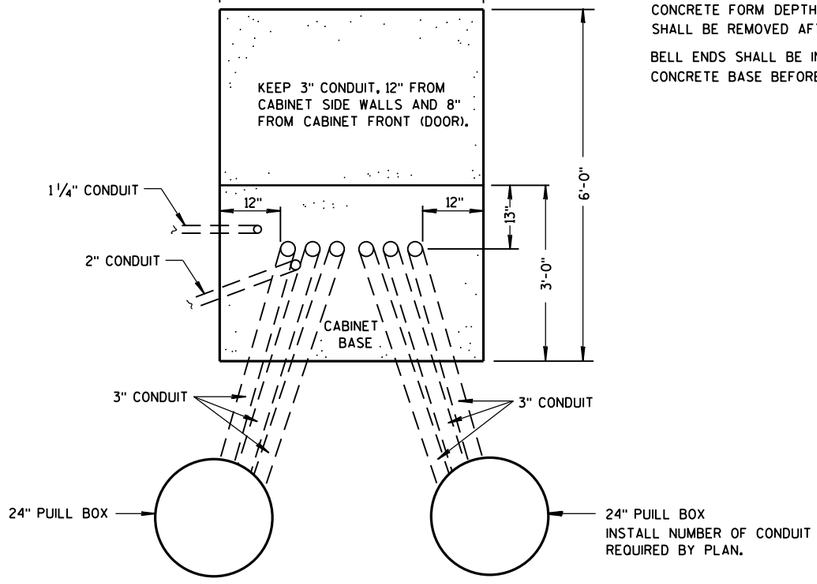
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 6-7

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

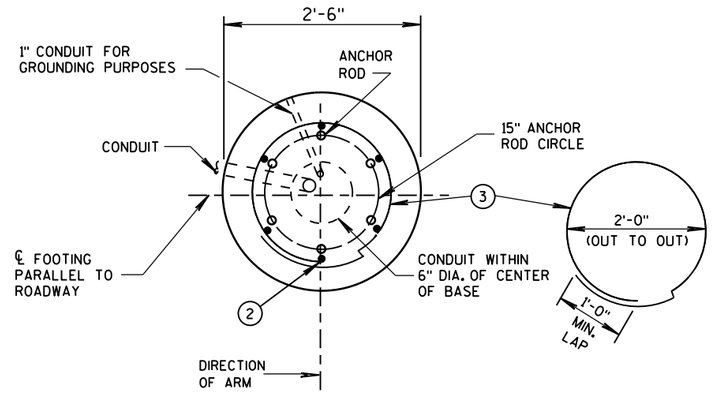
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

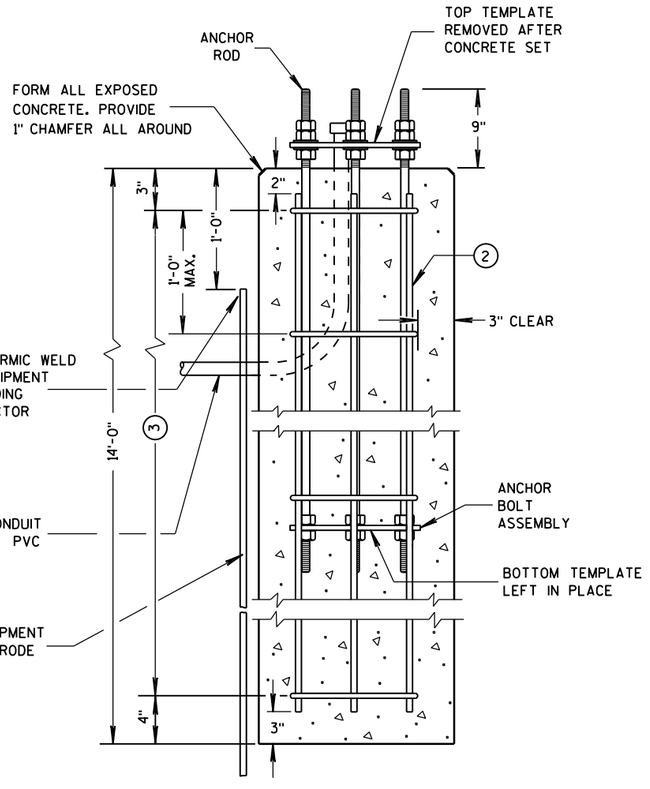
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" MAX. C-C.

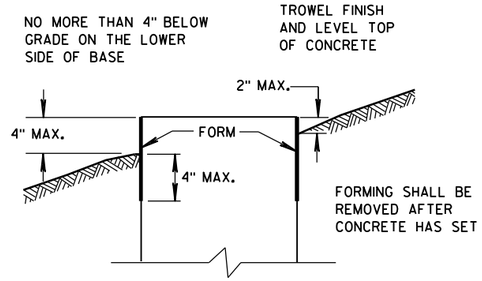
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



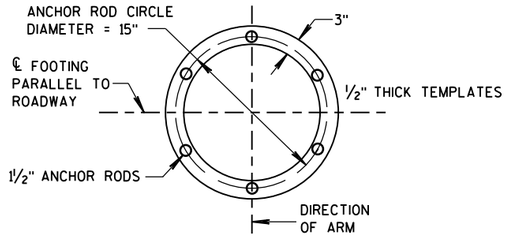


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

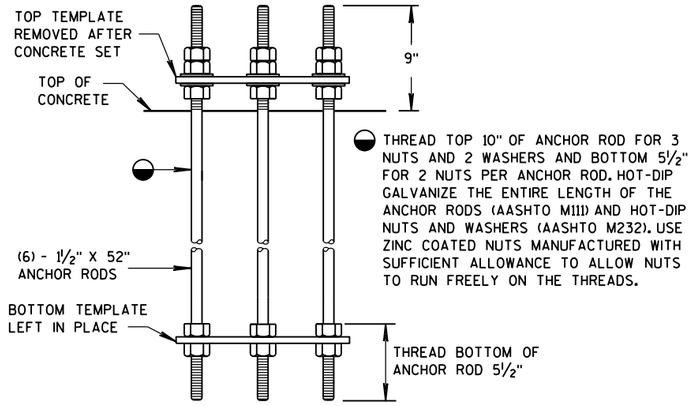
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10
ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

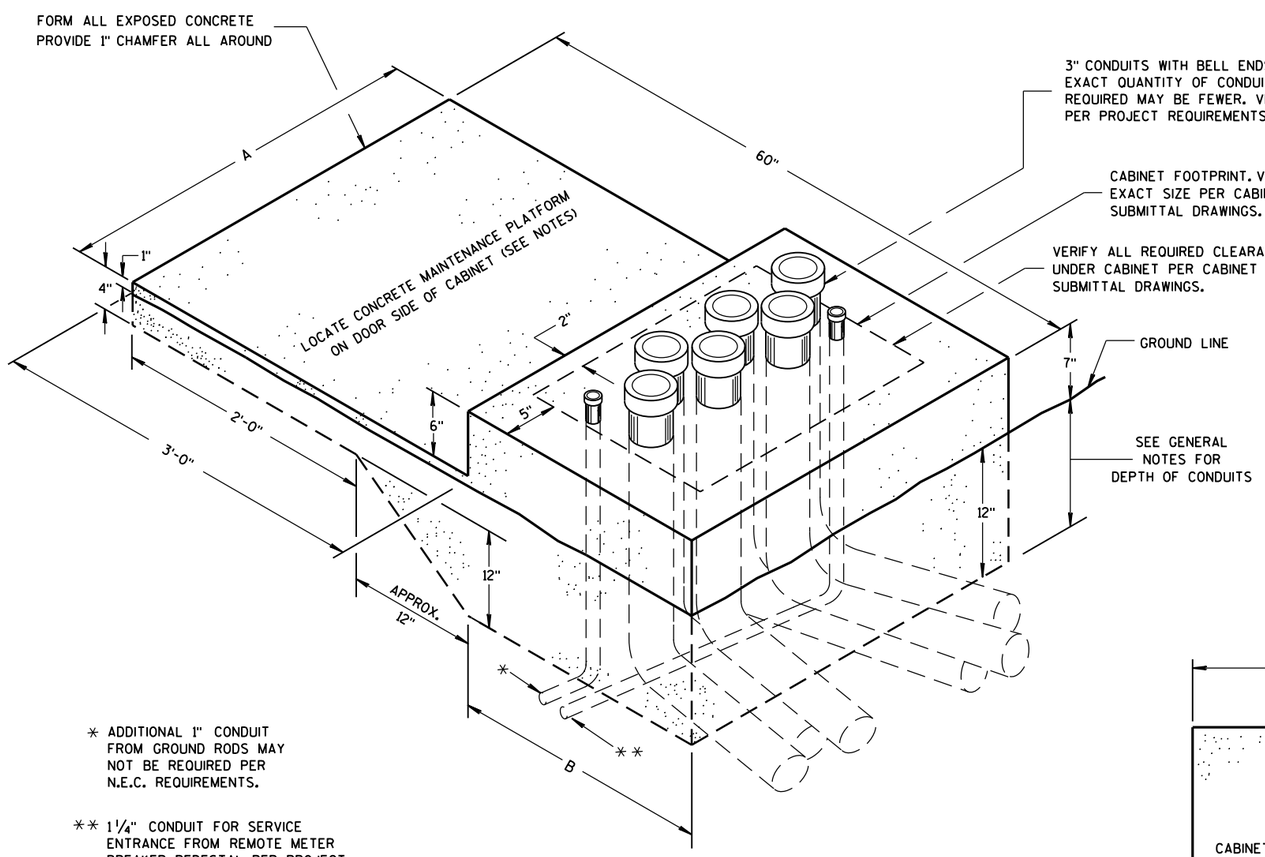
CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 11-8



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

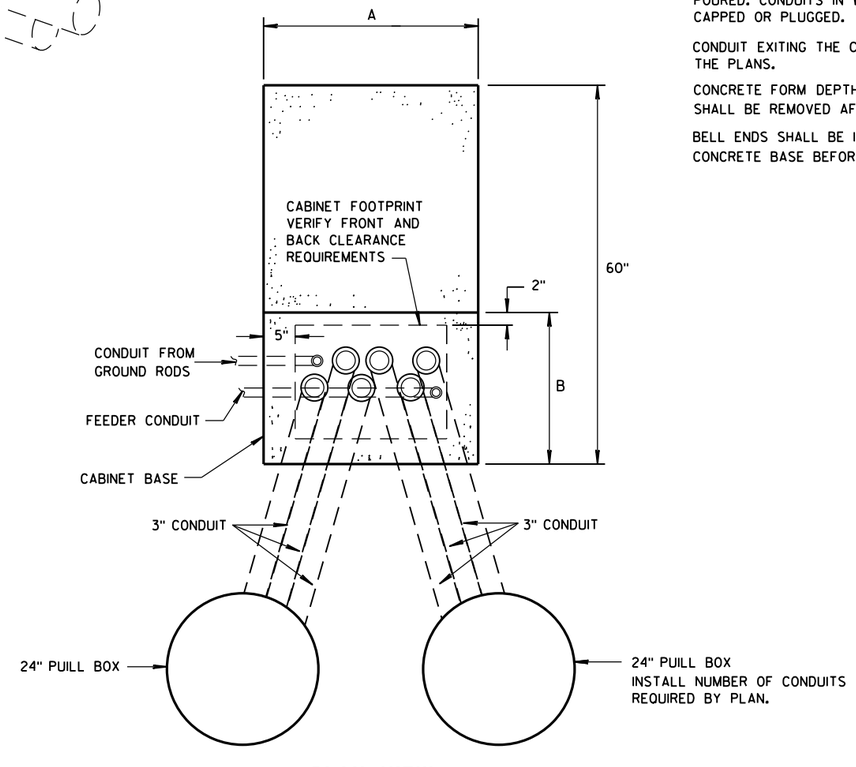
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

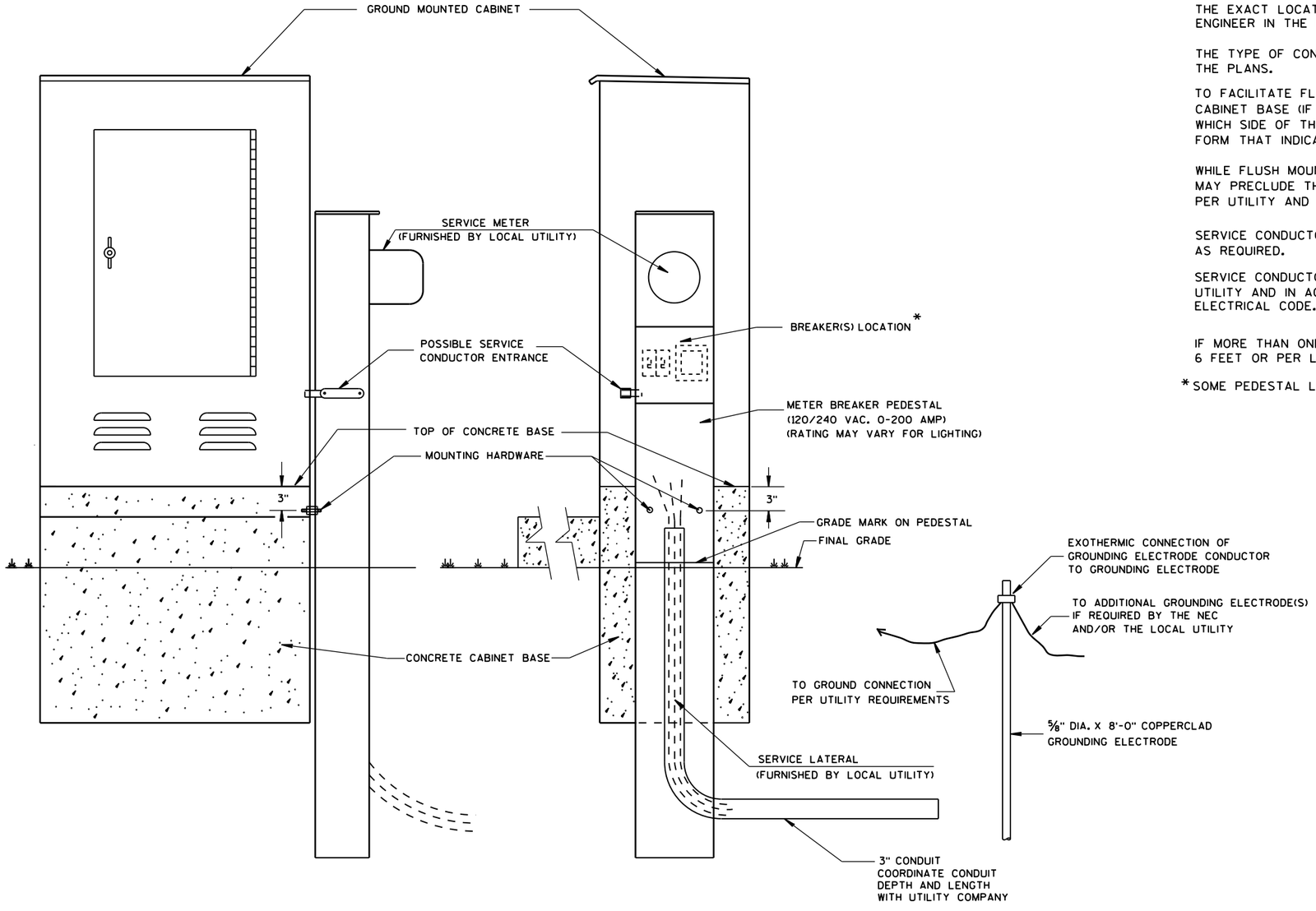
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
411
WYS
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.

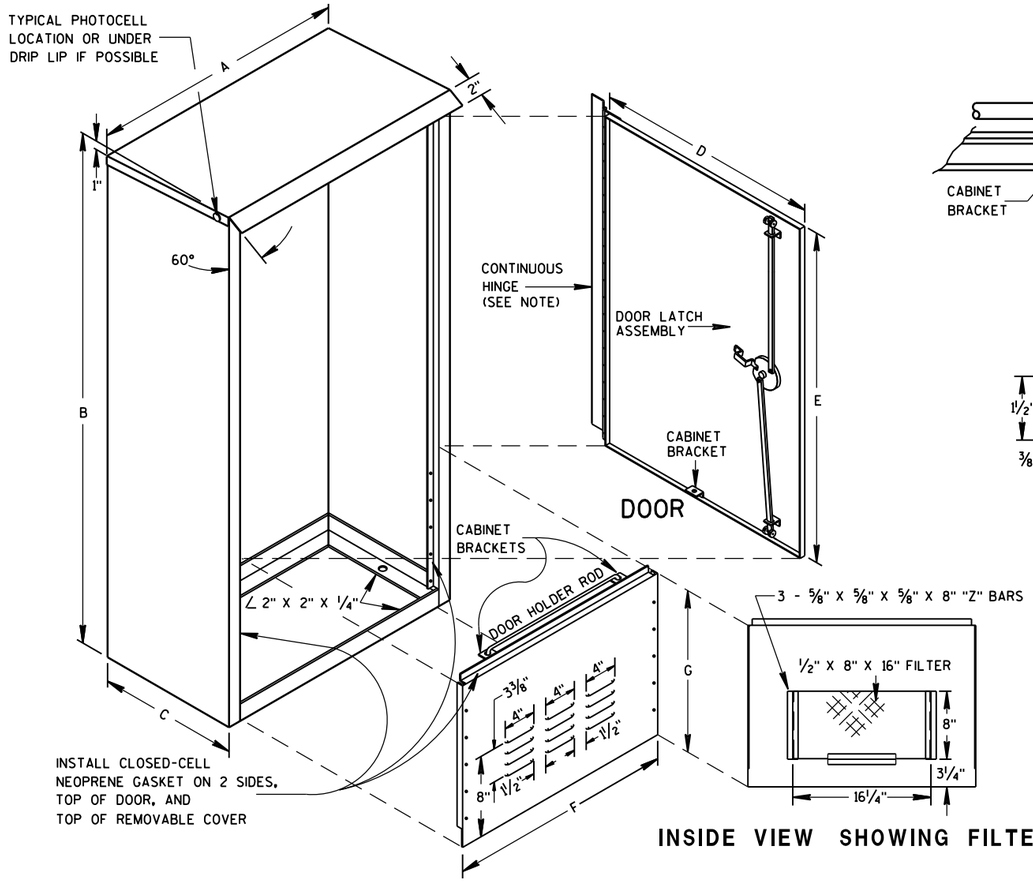
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

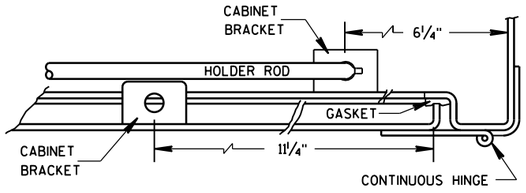
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

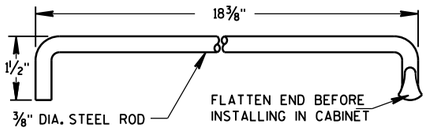


INSIDE VIEW SHOWING FILTER

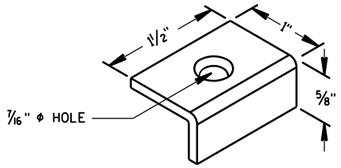
REMOVABLE COVER



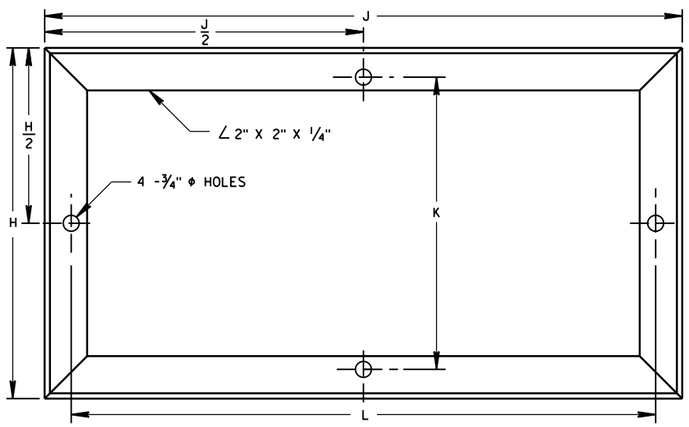
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

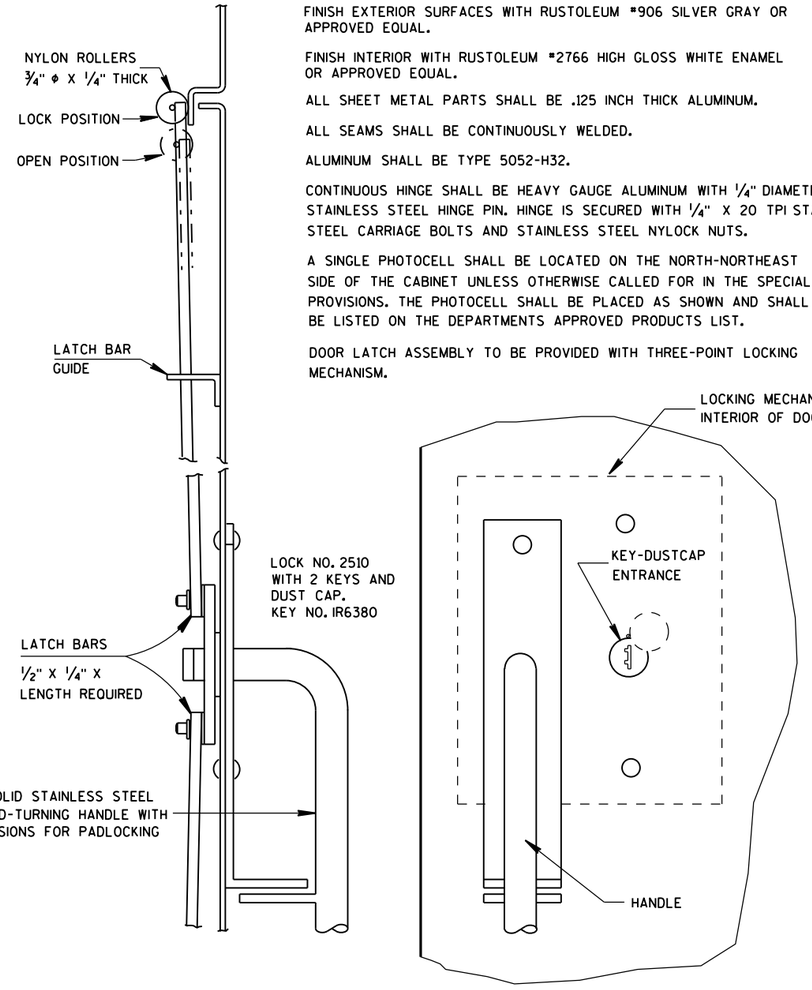
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

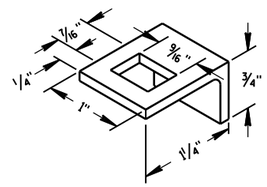
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



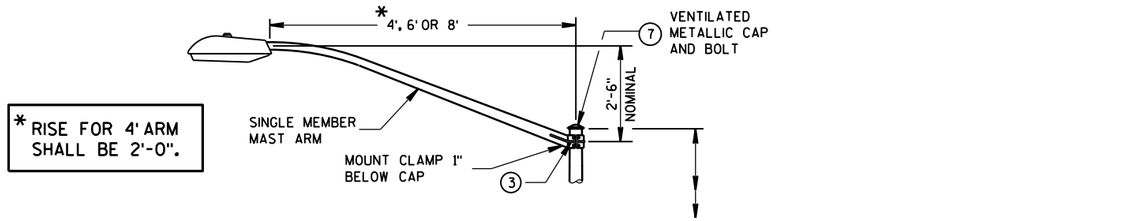
LATCH BAR GUIDE

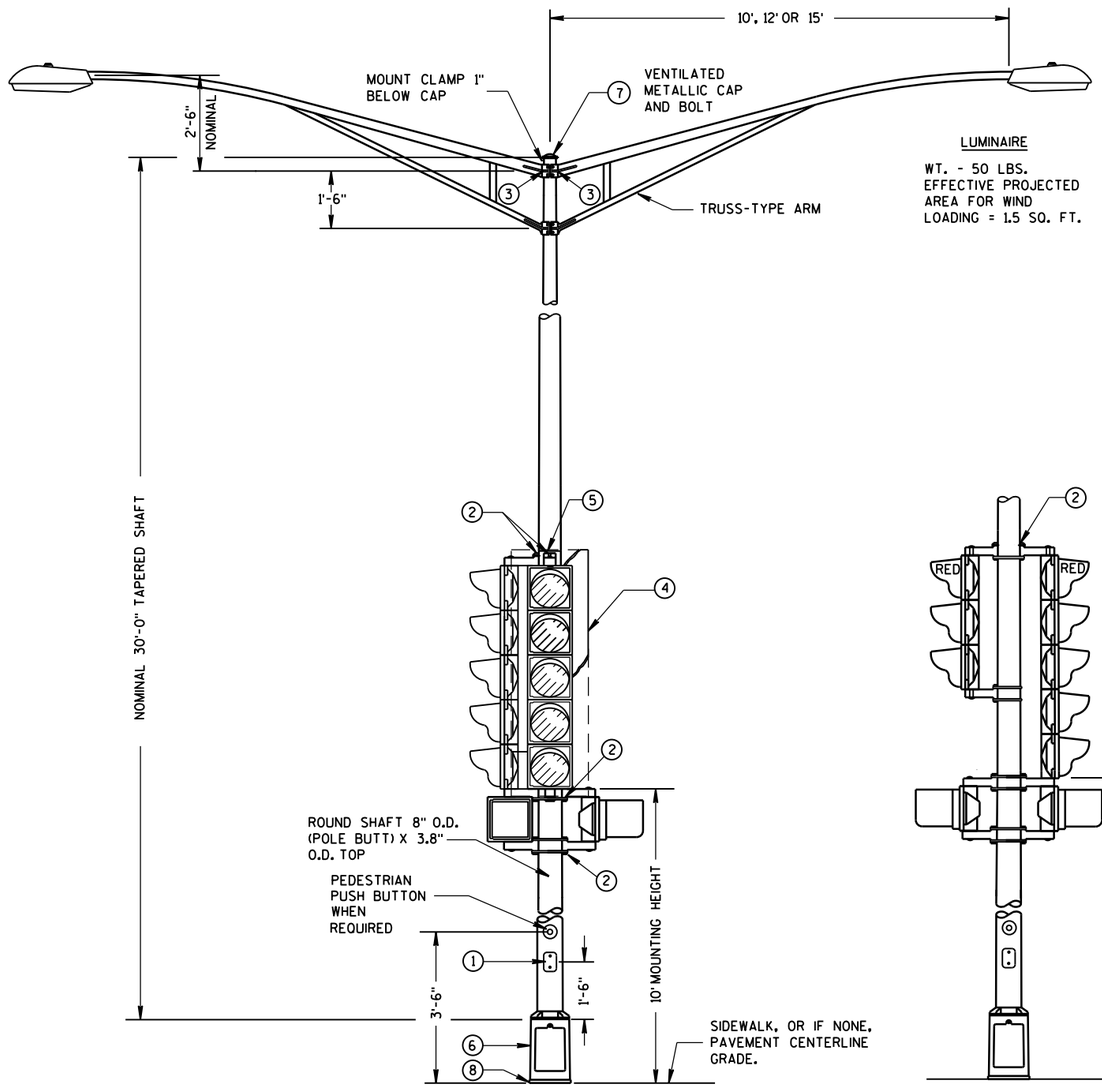
SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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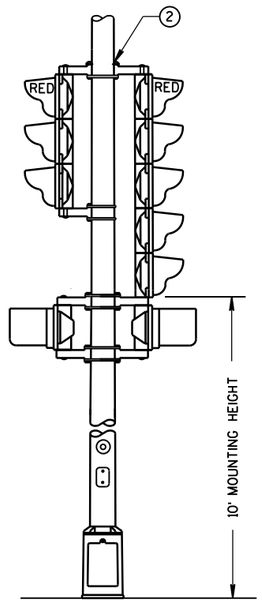




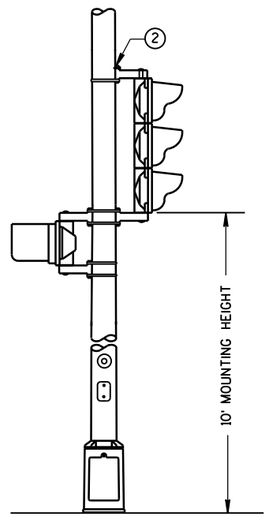
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

(MAXIMUM LOAD)

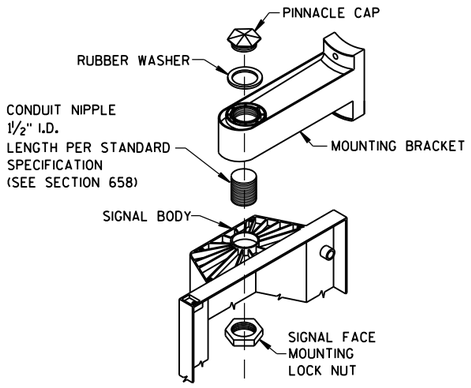


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

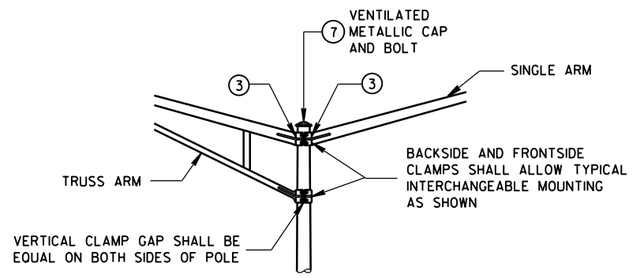
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

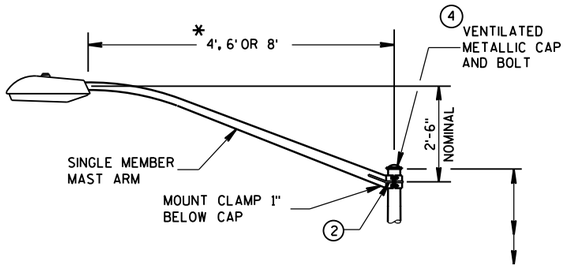
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

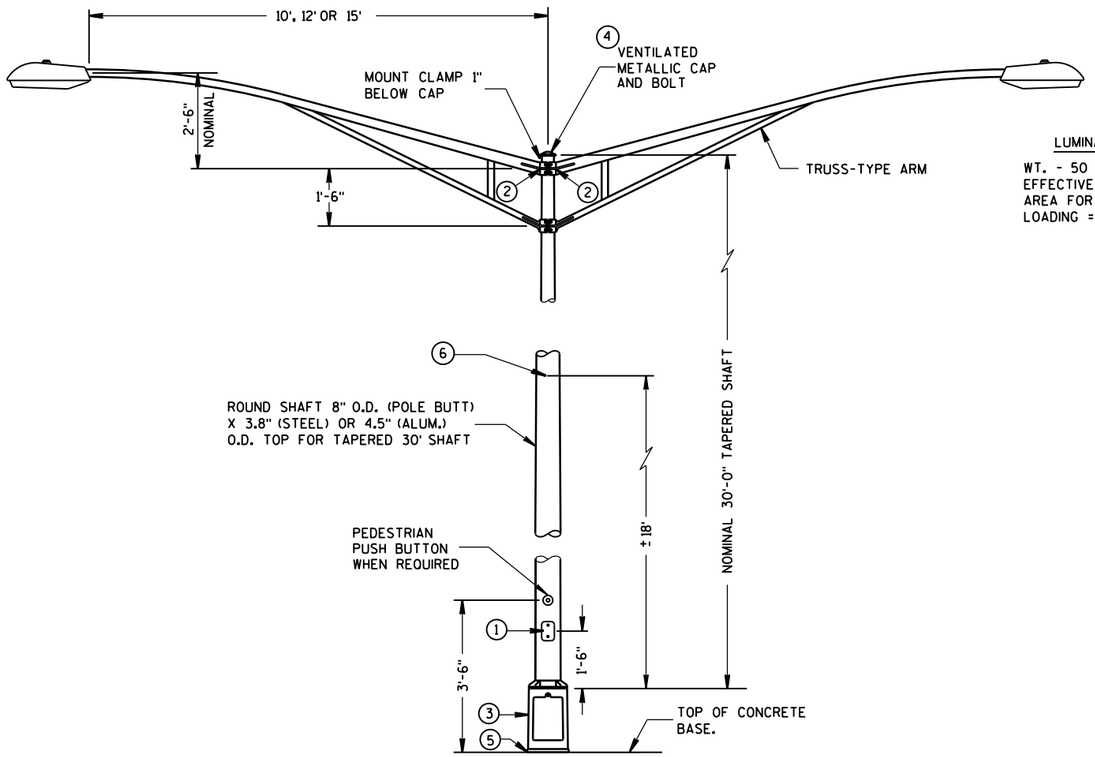
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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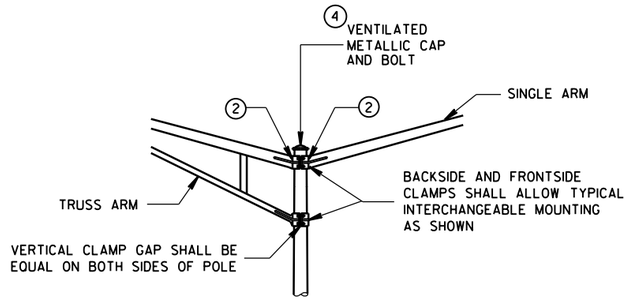
S.D.D. 9 E 1-14c
S.D.D. 9 E 1-14c

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

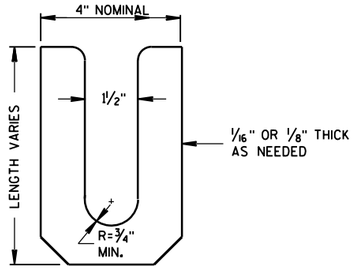
S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

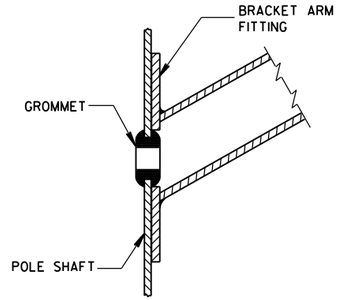
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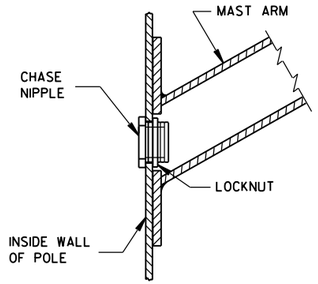


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

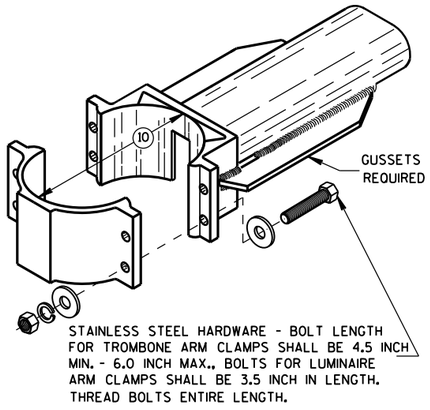
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

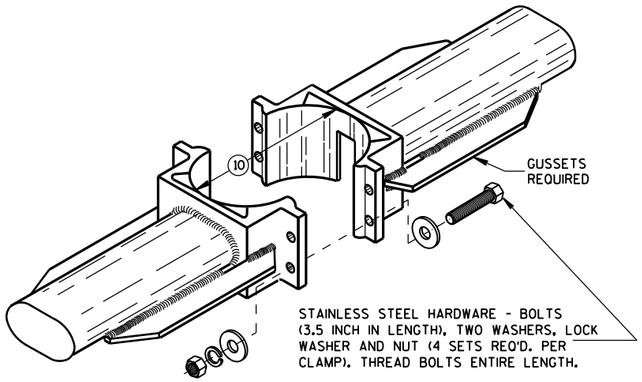
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

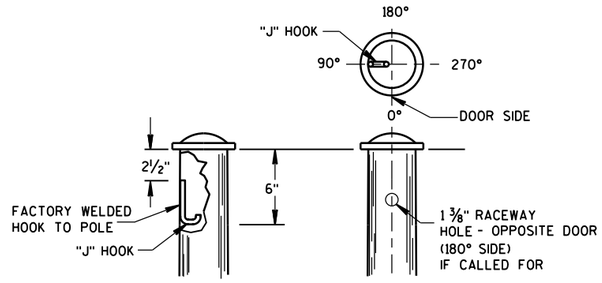
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



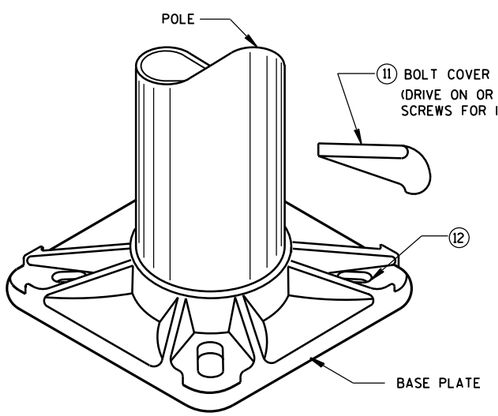
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



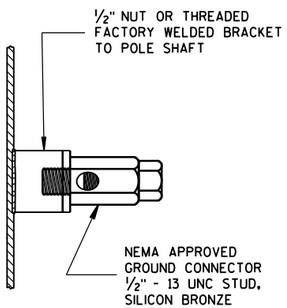
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

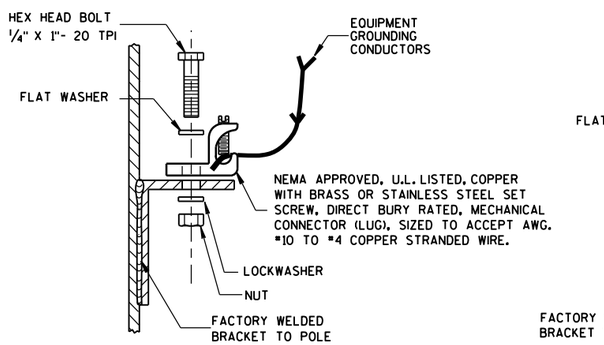


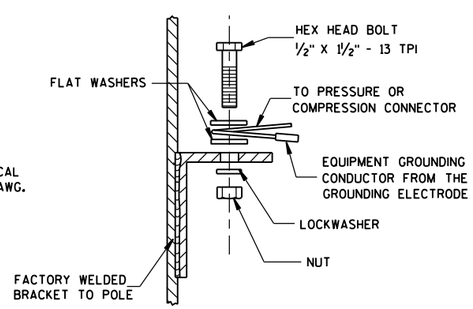
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

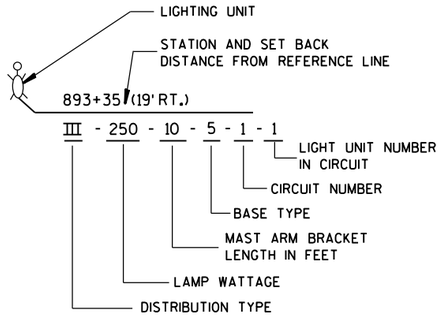
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

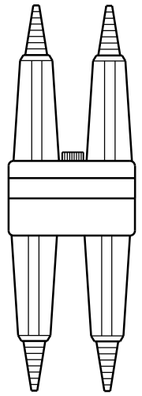
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Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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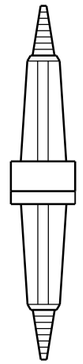
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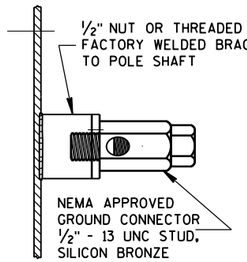
LIGHTING UNIT CODE
(TYPICAL)

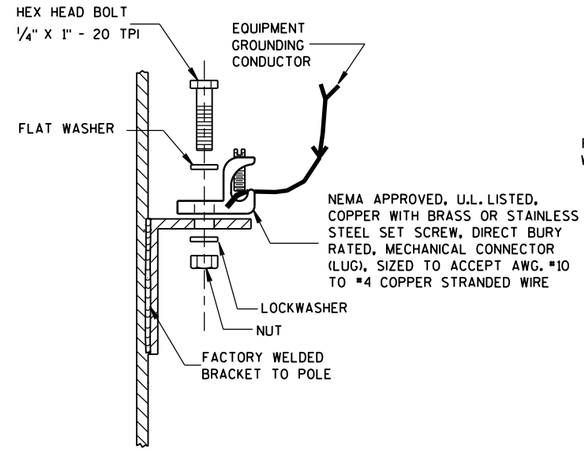


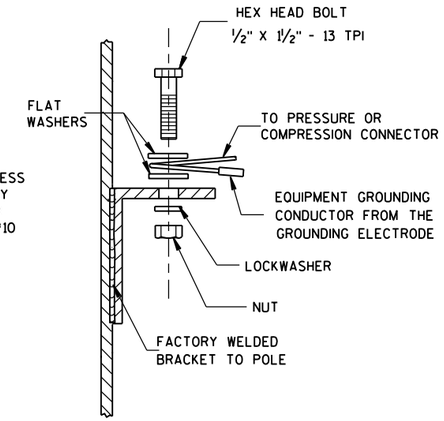
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



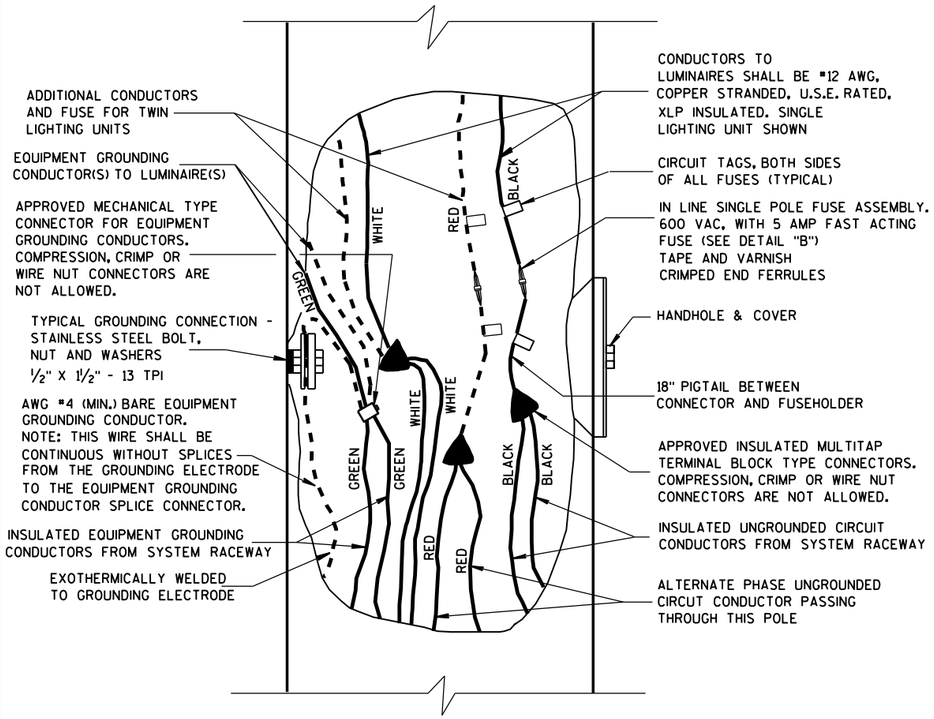
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



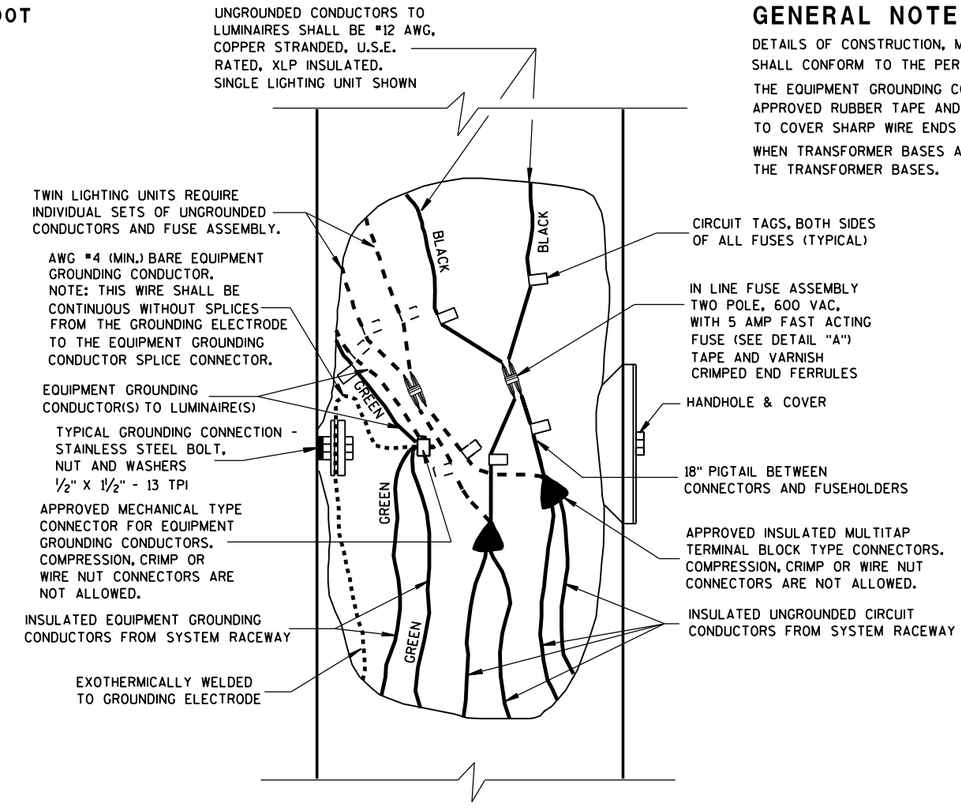




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

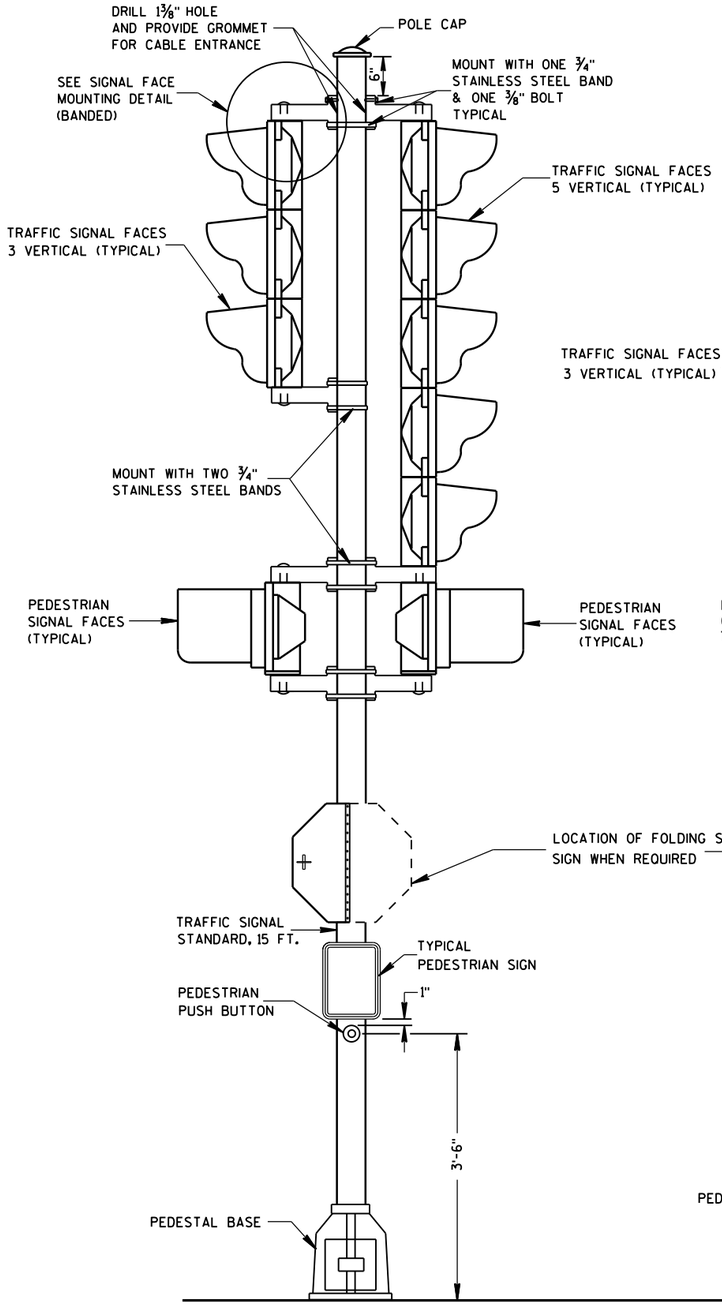
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

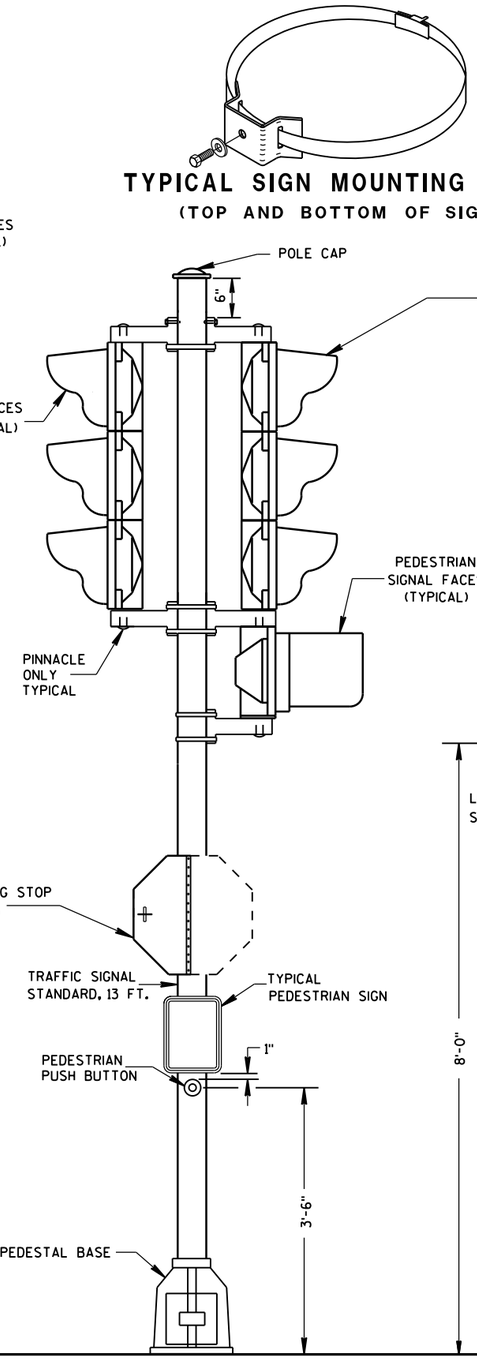
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 E 3-5

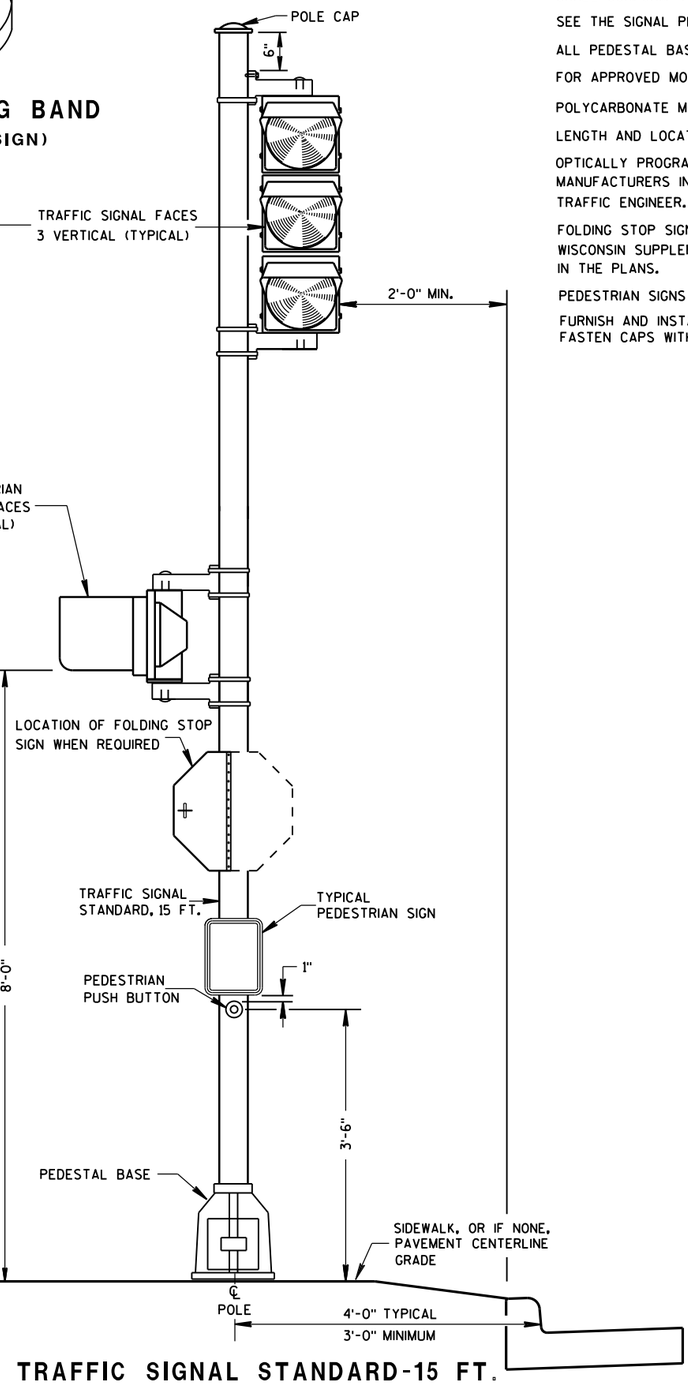


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

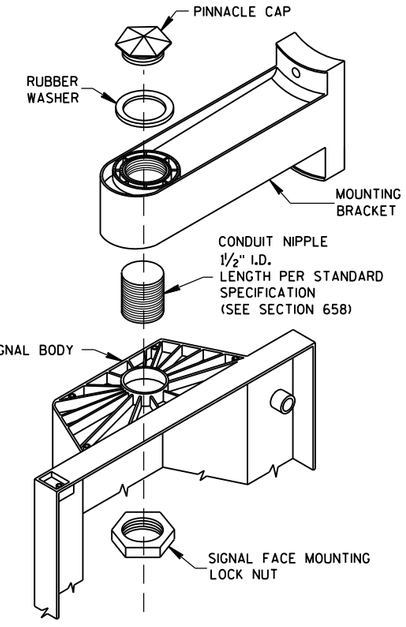
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

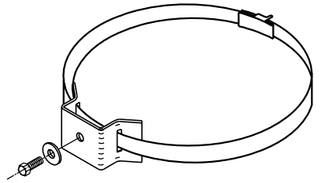
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

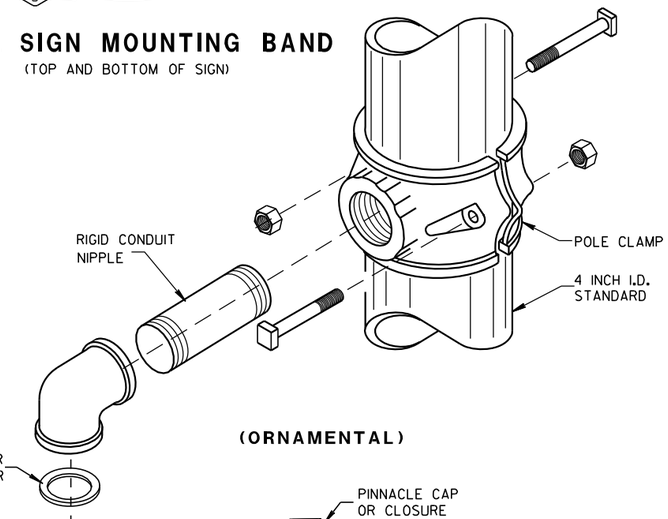
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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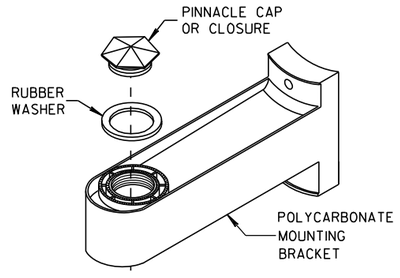
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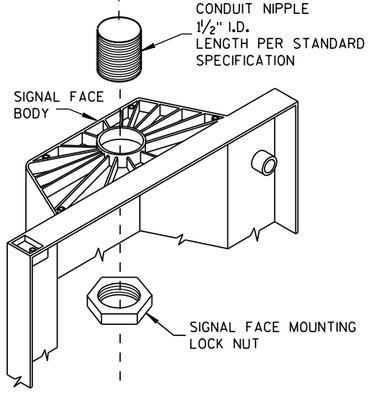
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



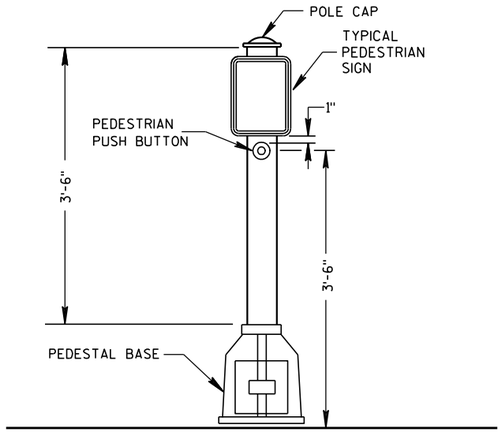
(ORNAMENTAL)



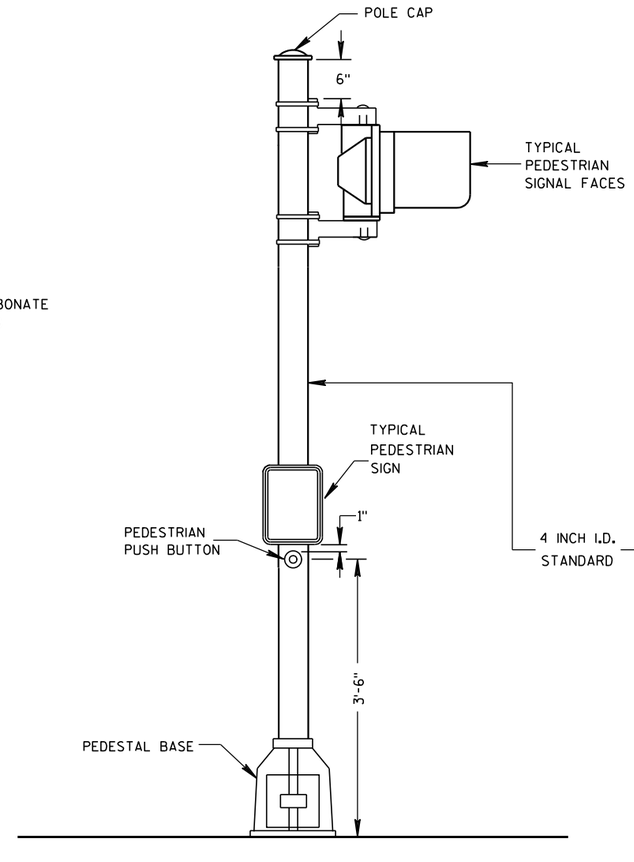
(BANDED)



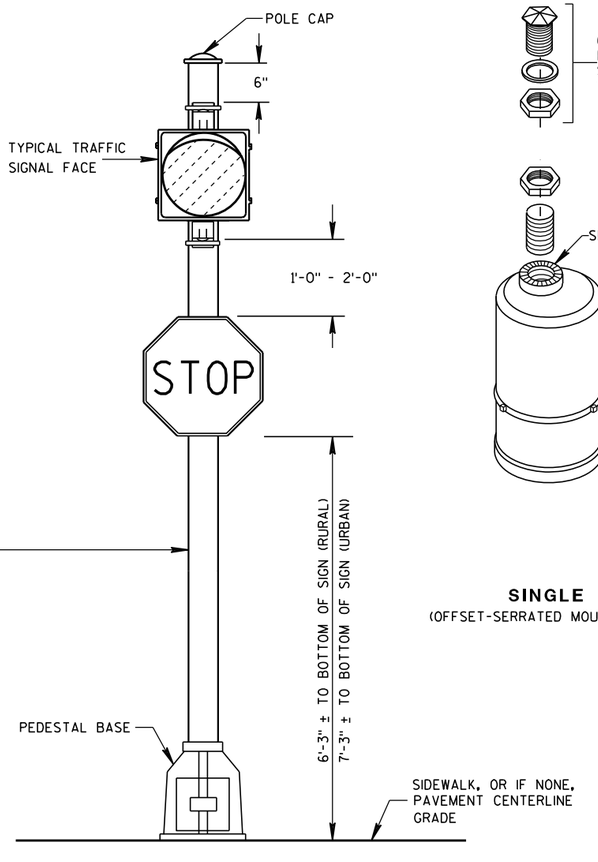
SIGNAL FACE MOUNTING DETAILS



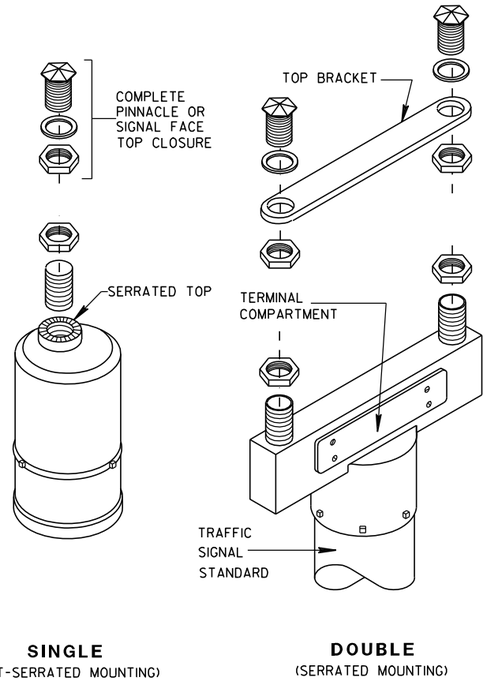
PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
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5/11/10
DATE

/S/ John Corbin
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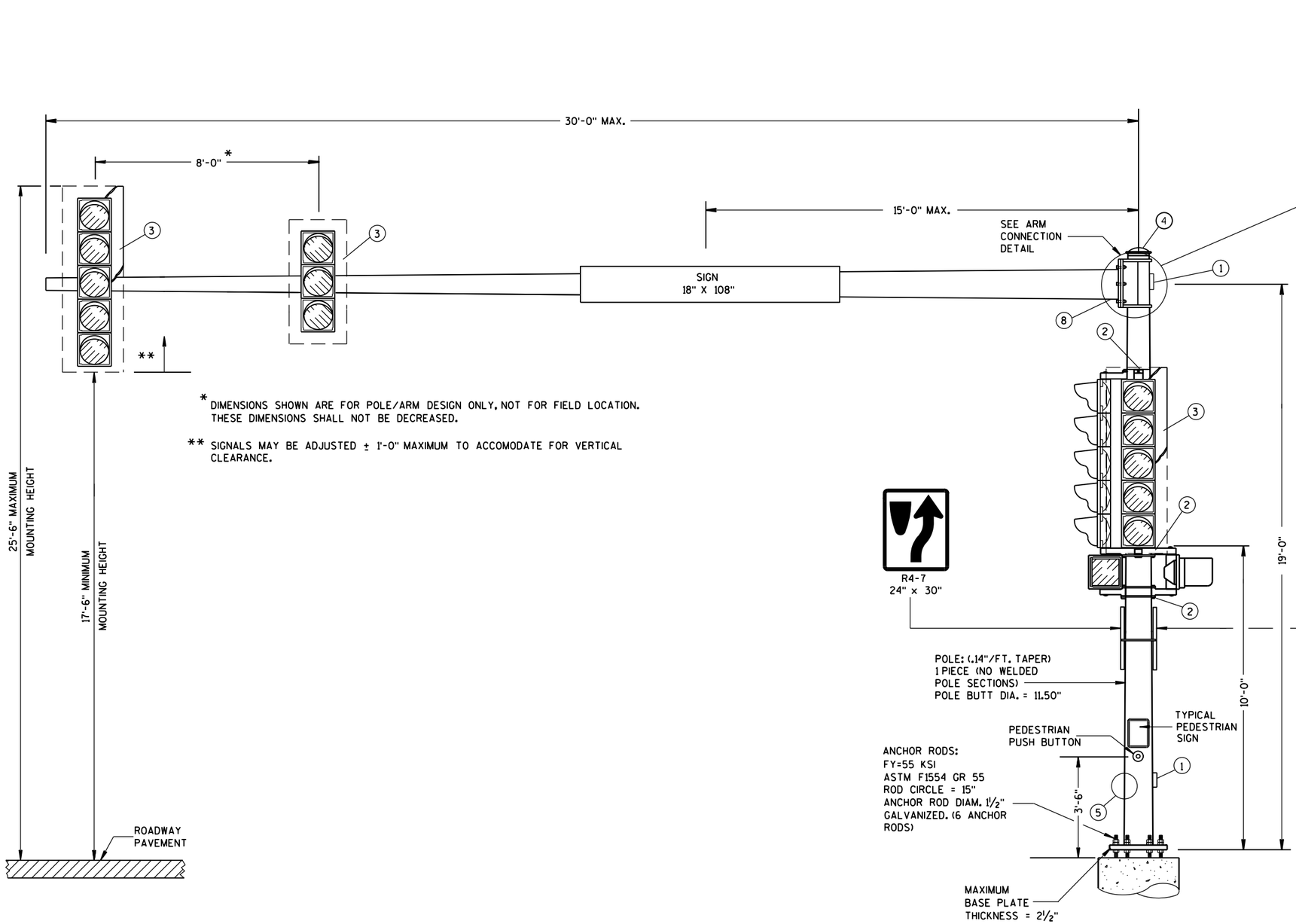
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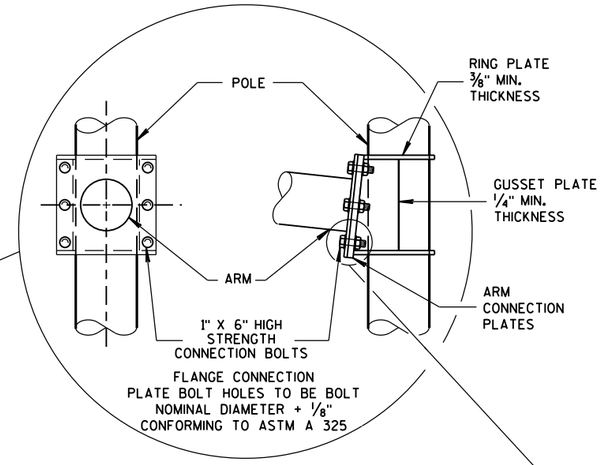
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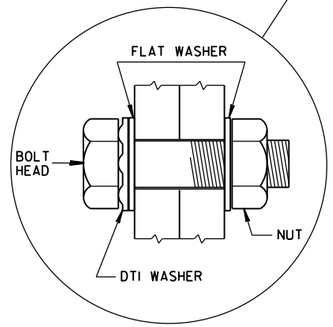


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

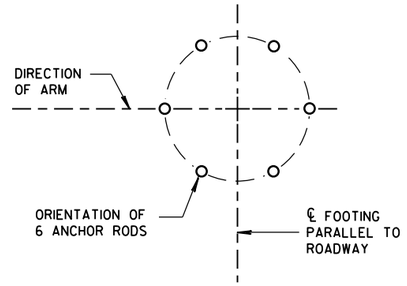
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 E 8-7a

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

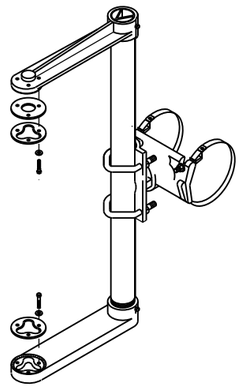
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

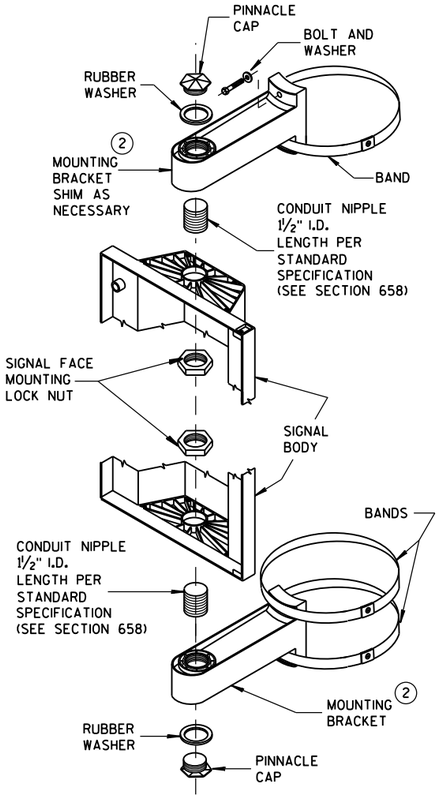
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

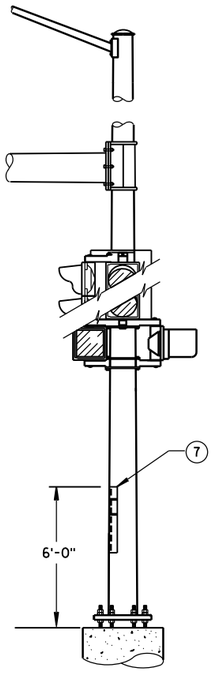


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

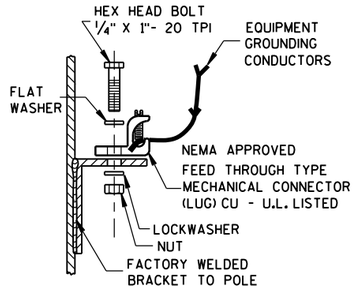
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE VERTICAL MOUNTING DETAIL

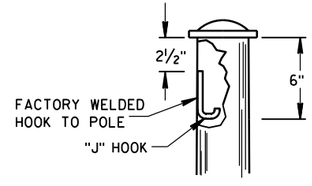


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

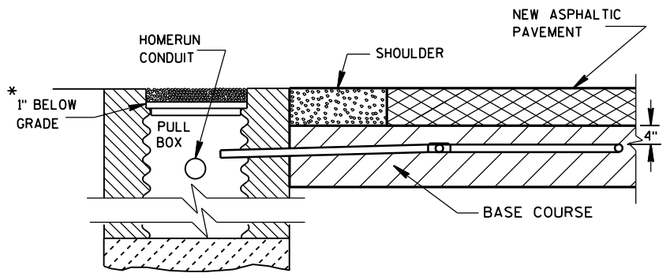
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 E 8-7e



SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

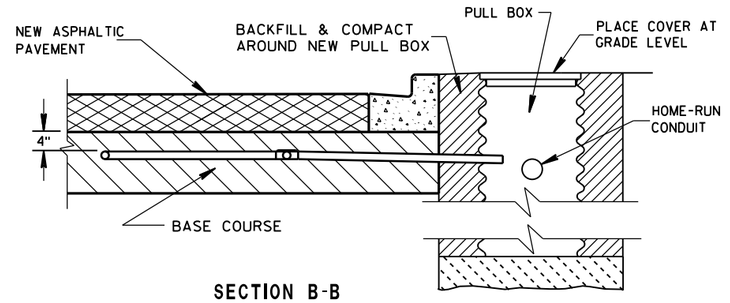
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

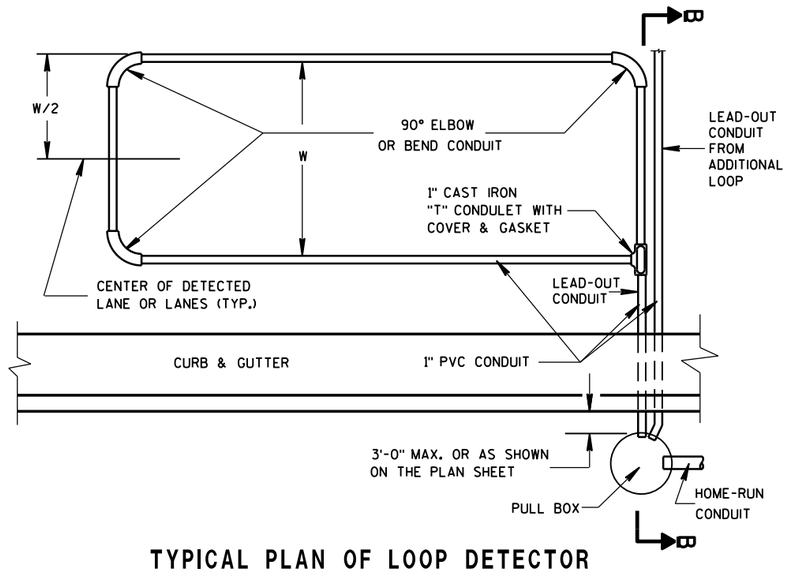
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

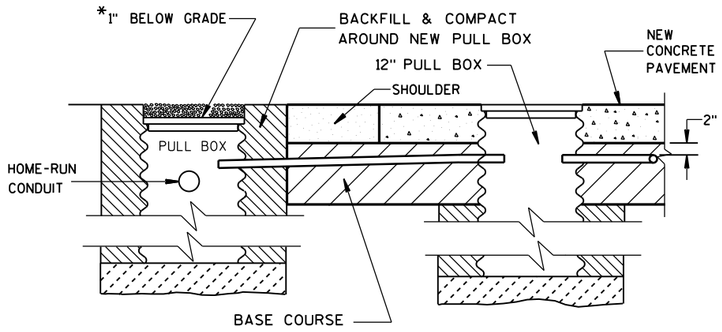
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 F 8-4



SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

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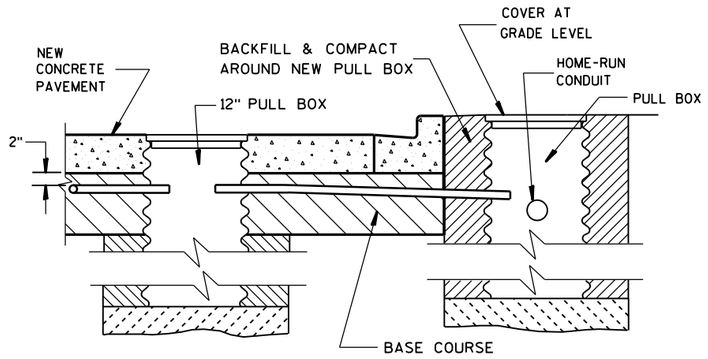
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

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PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

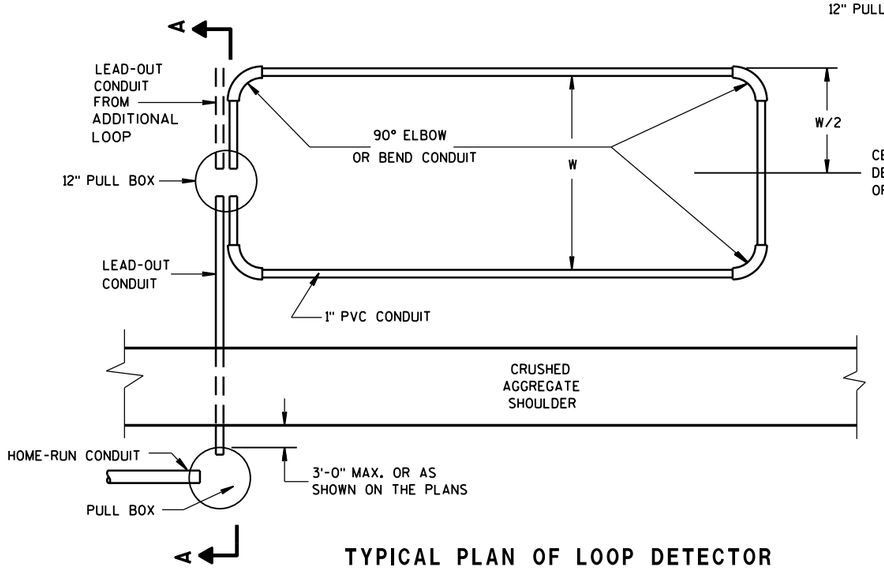
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



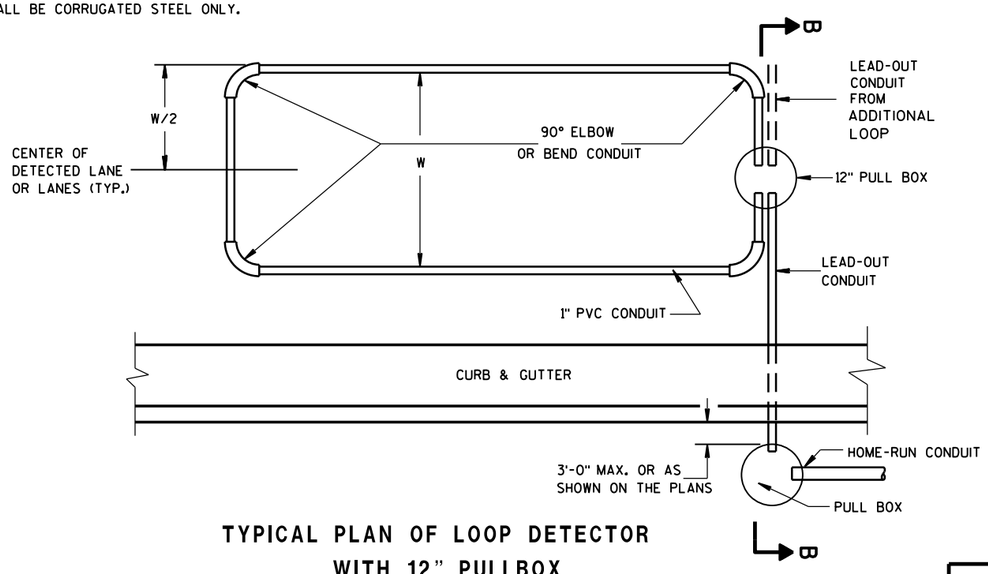
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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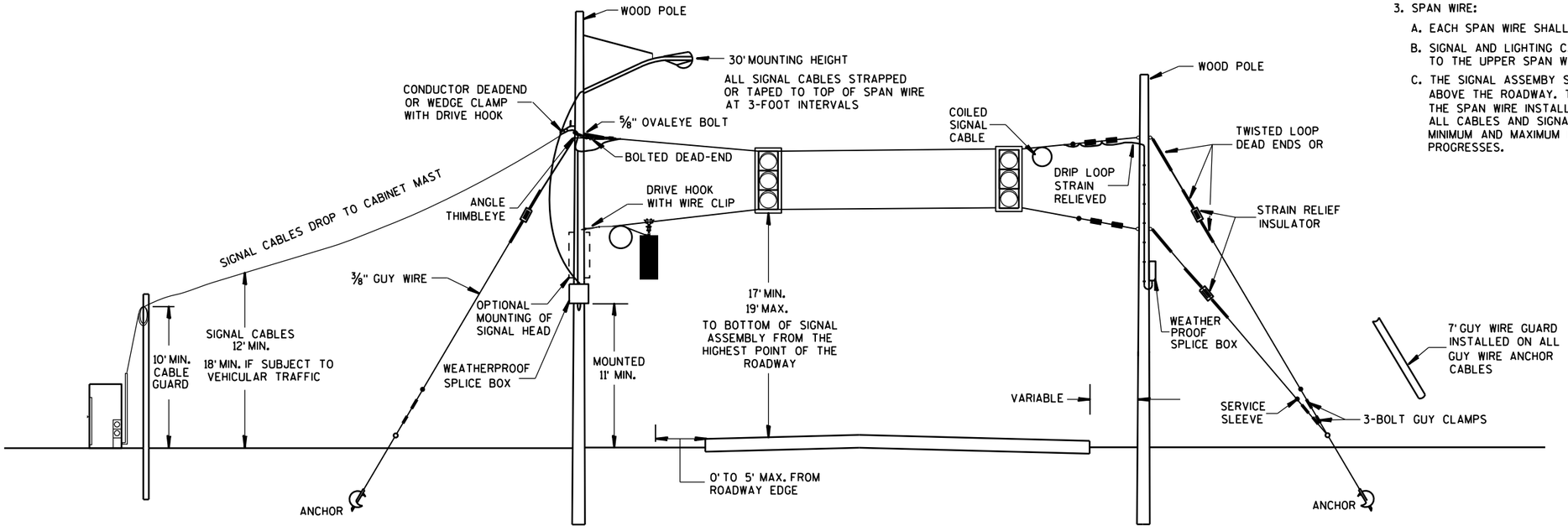
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

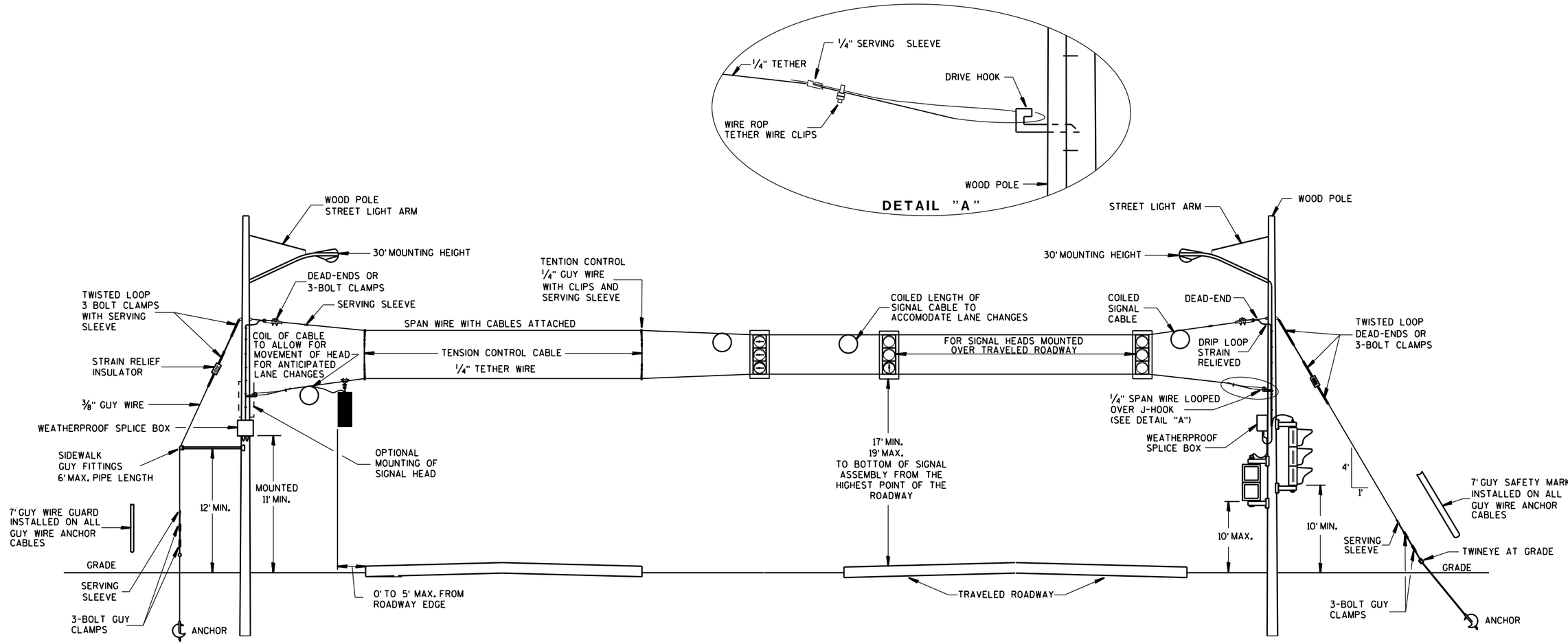
SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
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S.D.D. 9 G 1-4a



GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
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   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

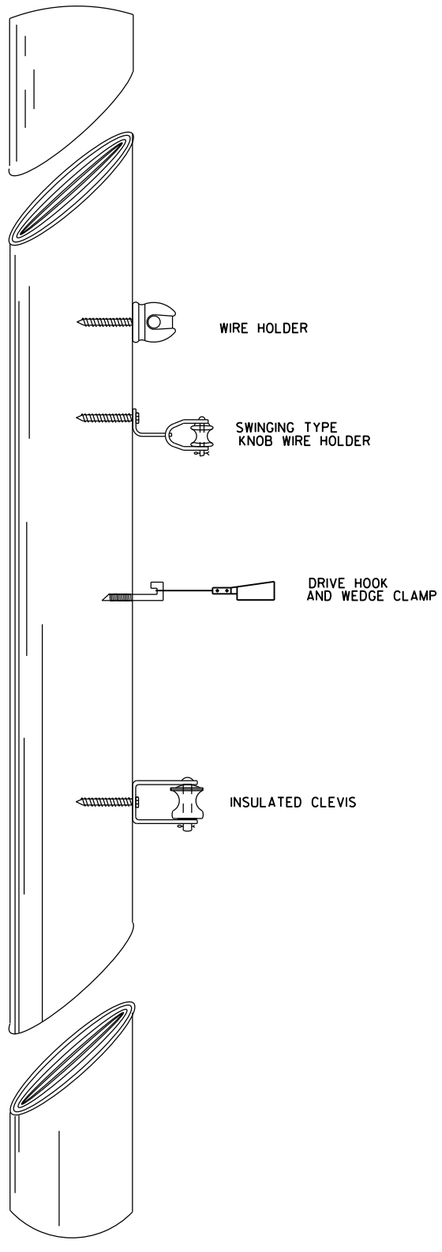
APPROVED
June, 2015 — DATE
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FHWA

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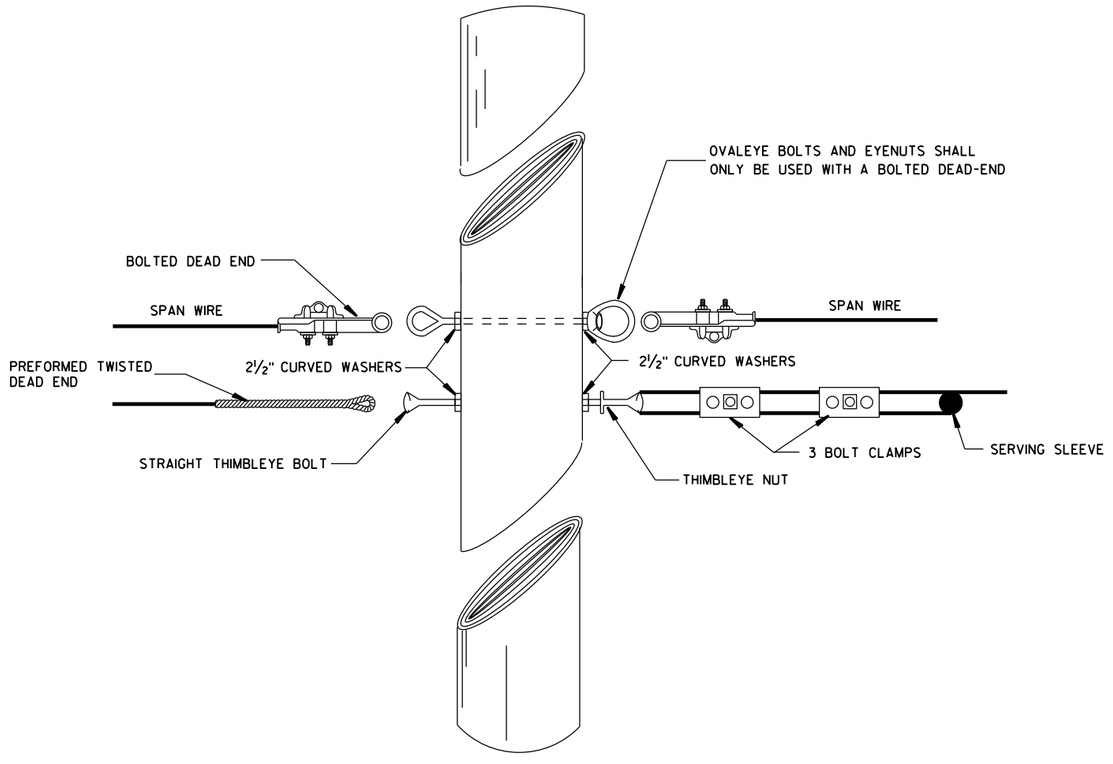
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S.D.D. 9 G 1-4b



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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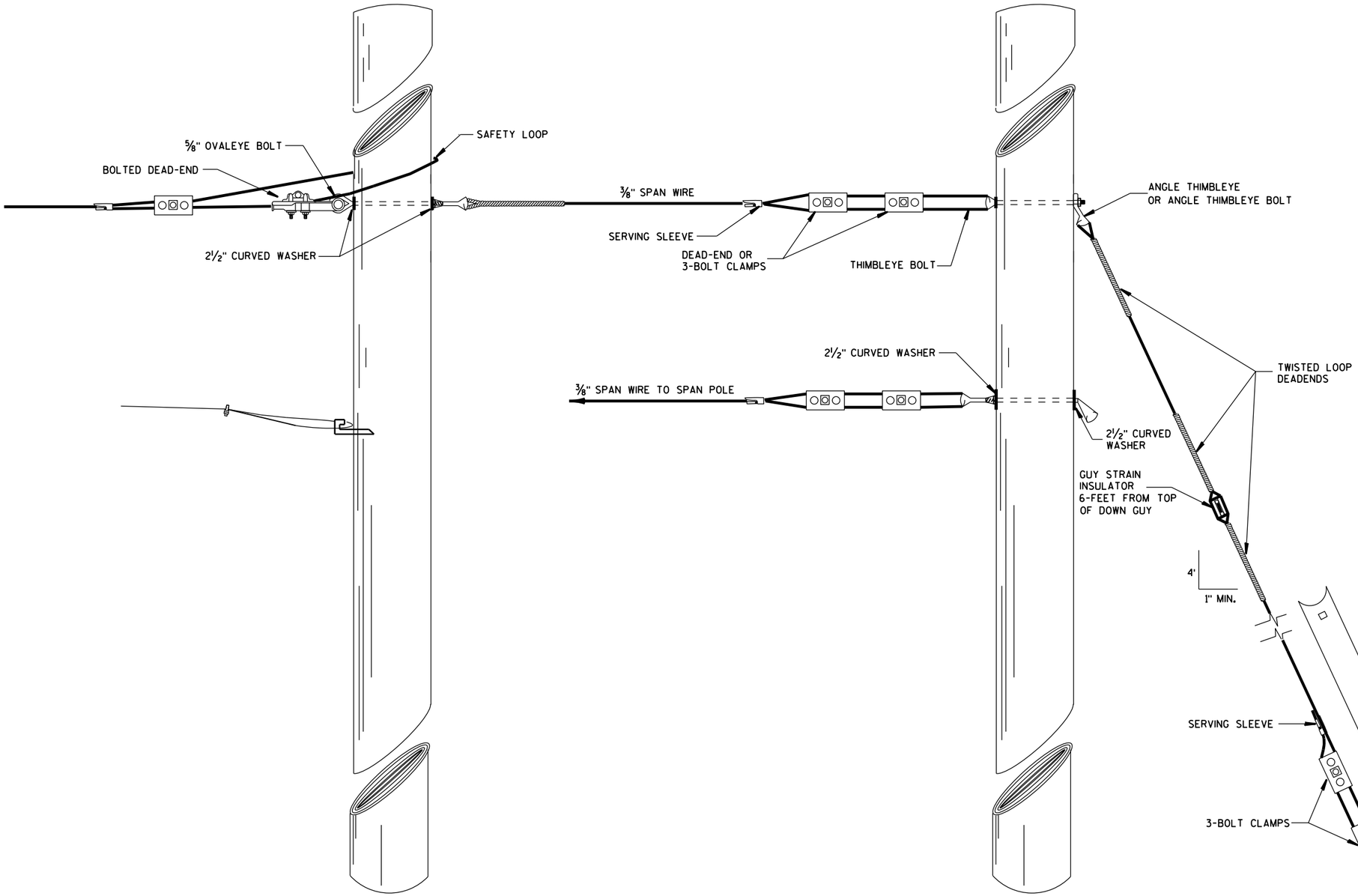
S.D.D. 9 G 1-4d

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S.D.D. 9 G 1-4d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

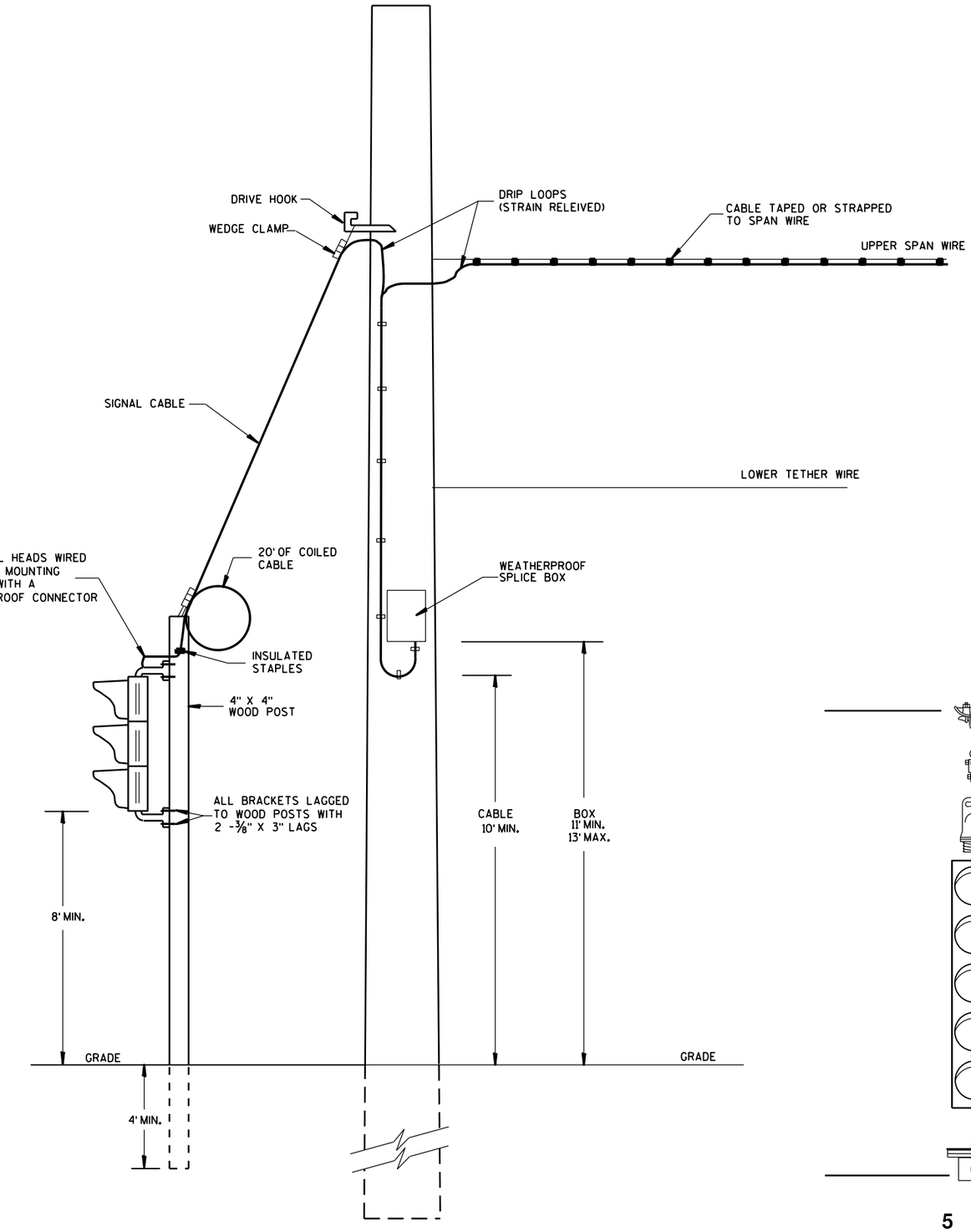
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June. 2015 — DATE
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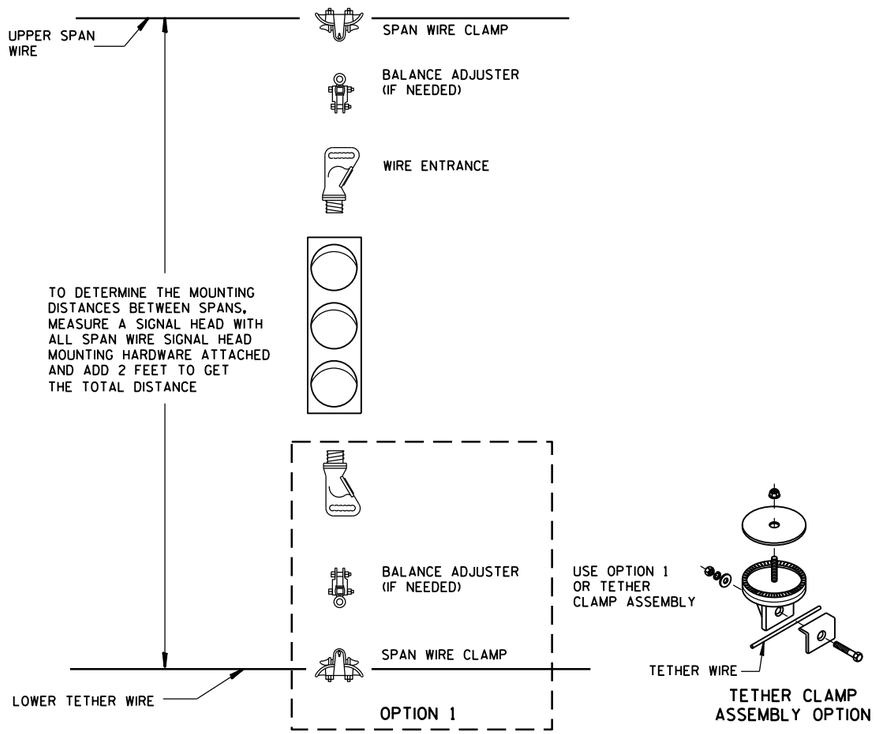
S.D.D. 9 G 1-4e

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S.D.D. 9 G 1-4e

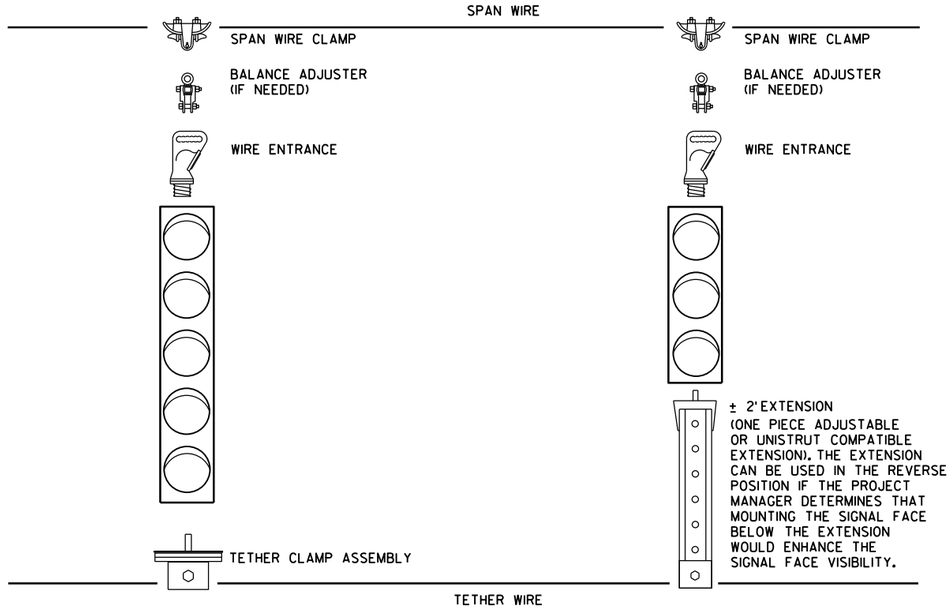


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

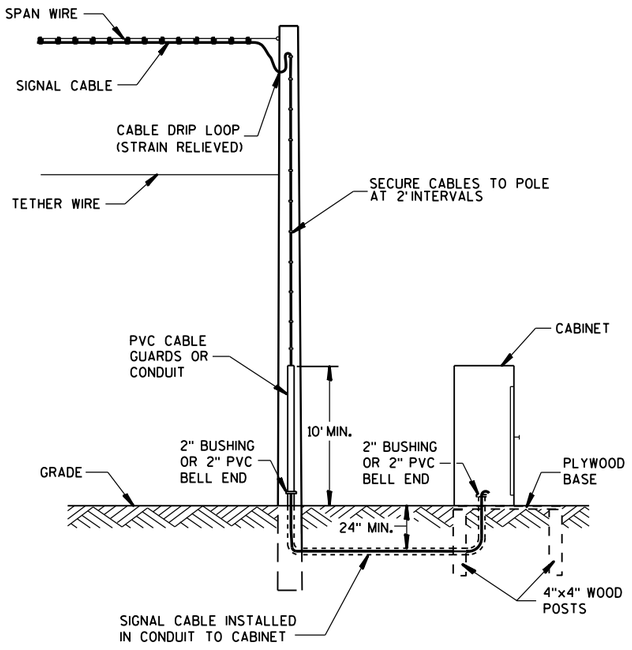
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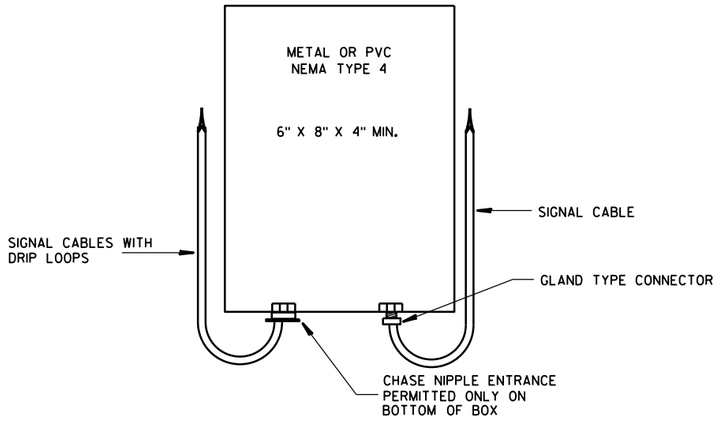
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S.D.D. 9 G 1-4f

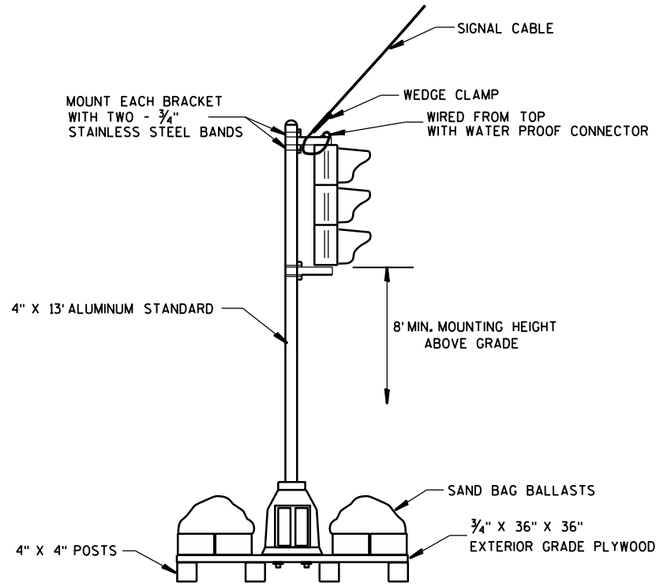
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S.D.D. 9 G 1-4f

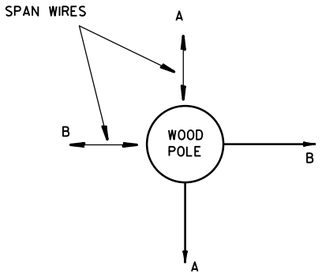




SPLICE BOX

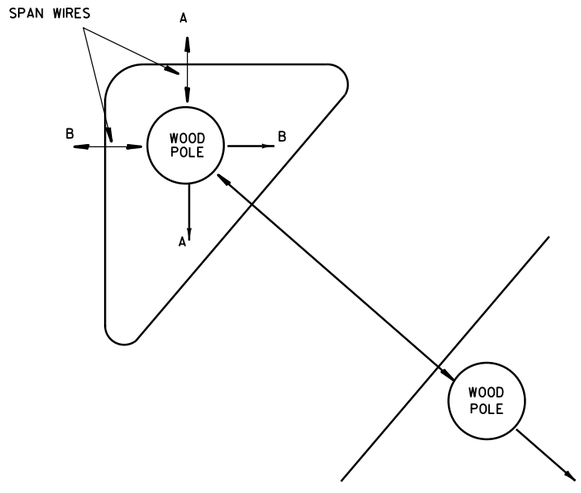


TYPICAL SKID TYPE TEMPORARY

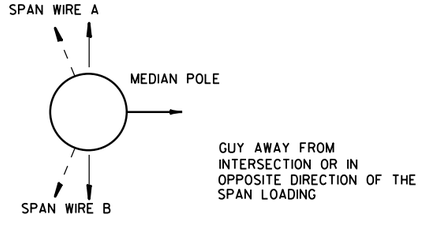


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

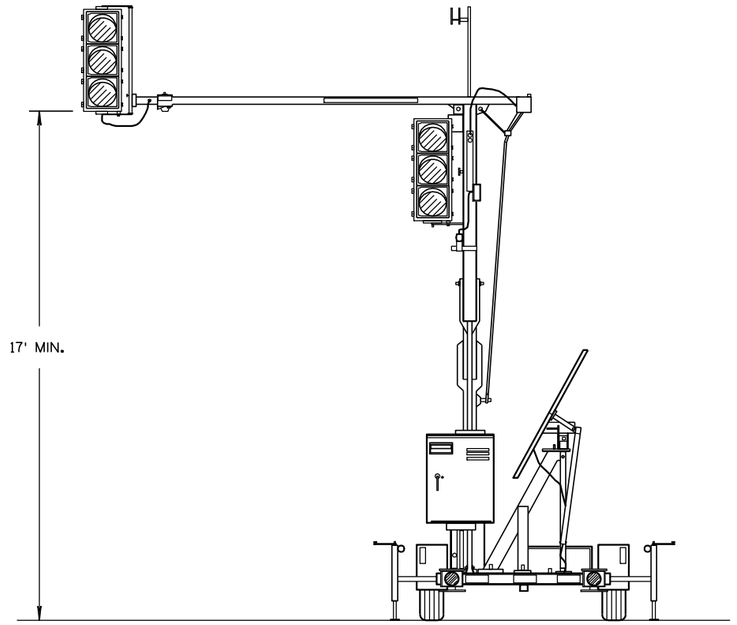
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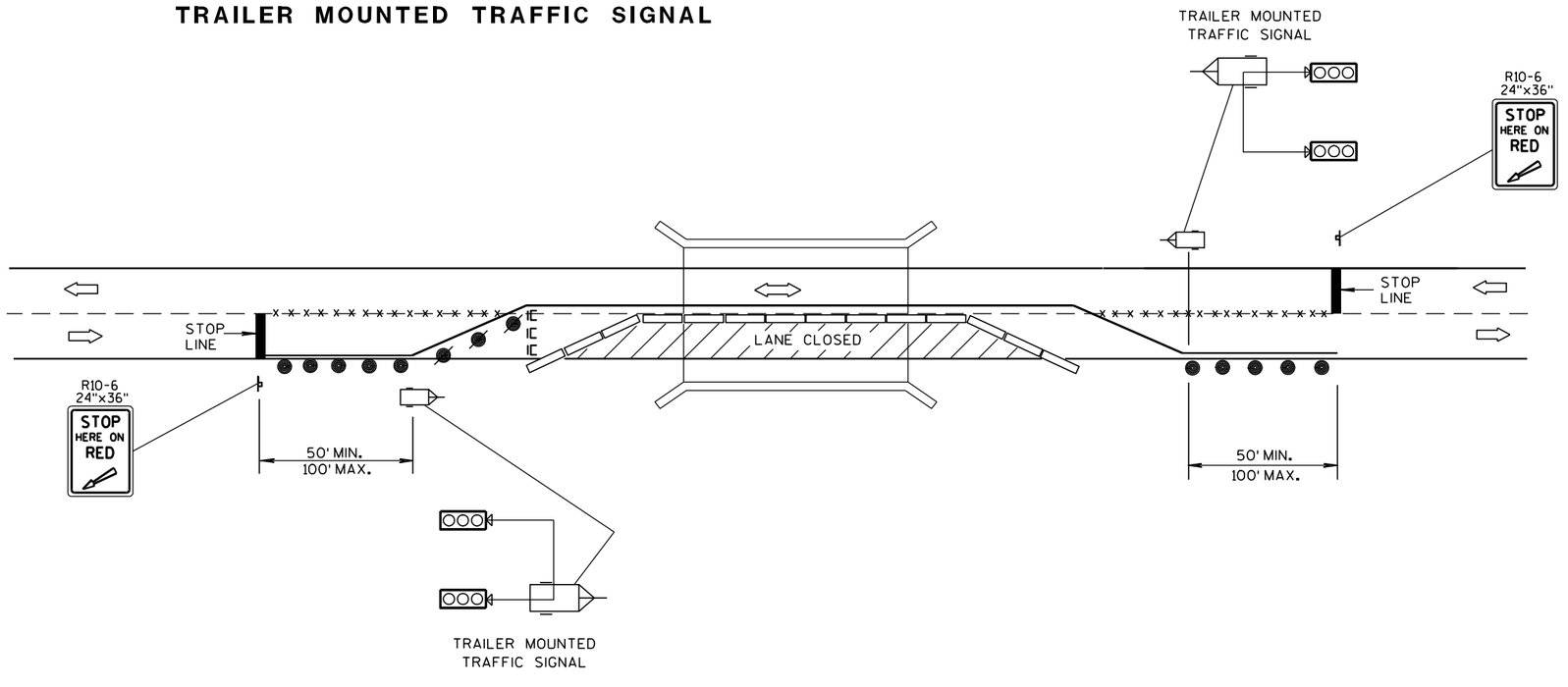


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 — DATE

/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI 430 — HWYS

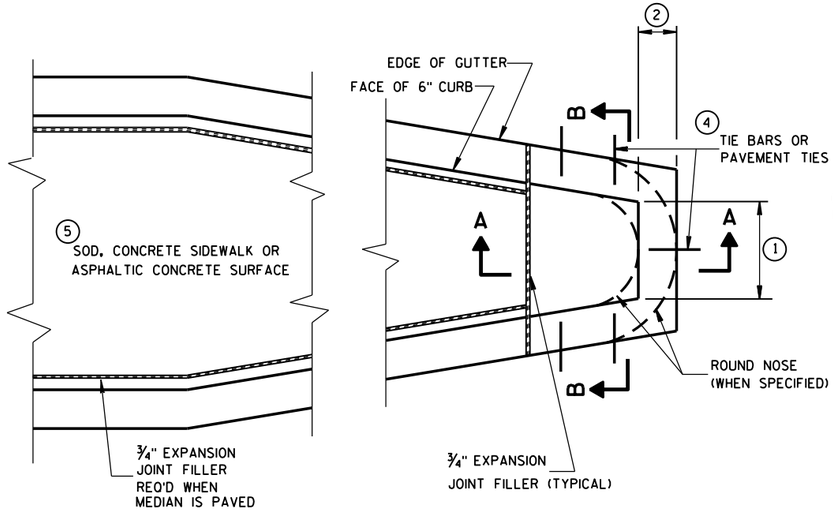
FHWA

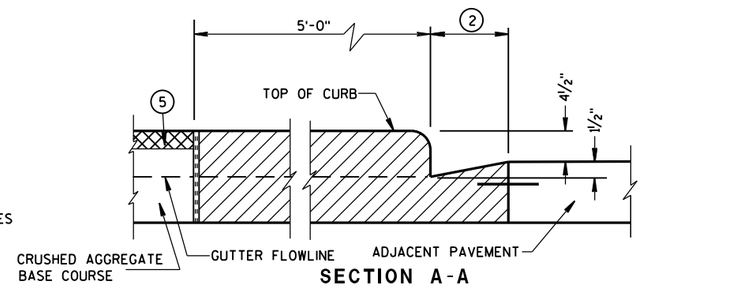
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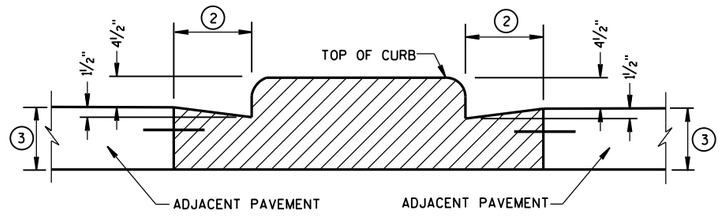
S.D.D. 9 G 2-3c

6

S.D.D. 9 G 2-3c







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

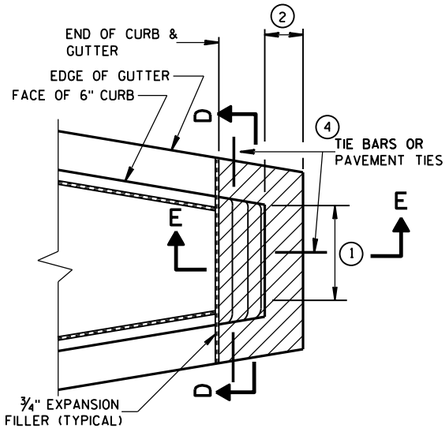
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

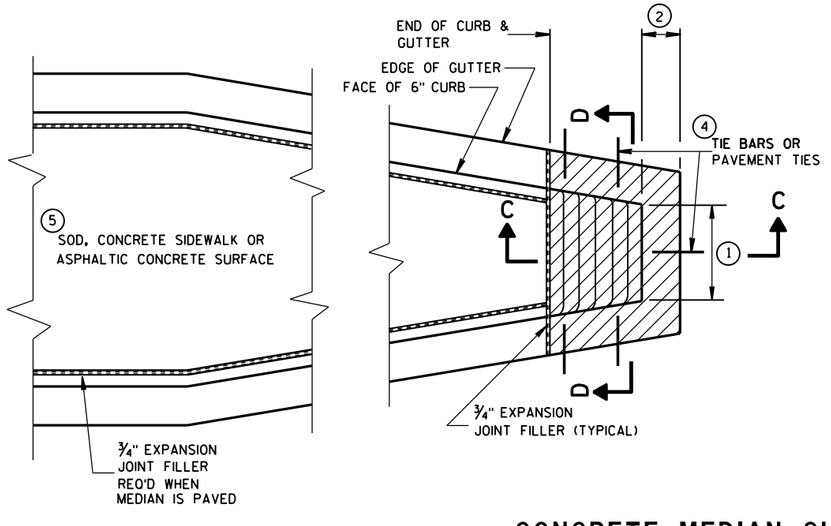
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

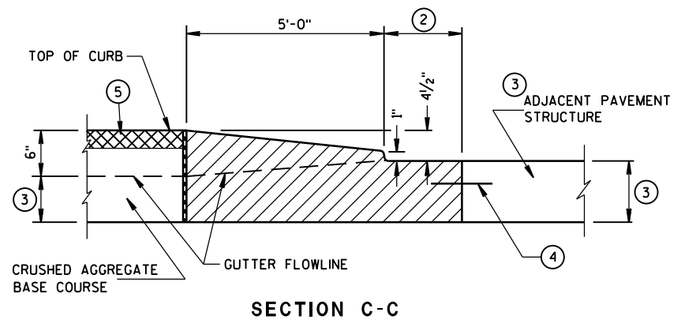
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

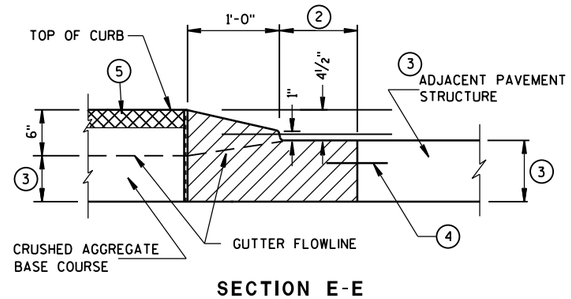
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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



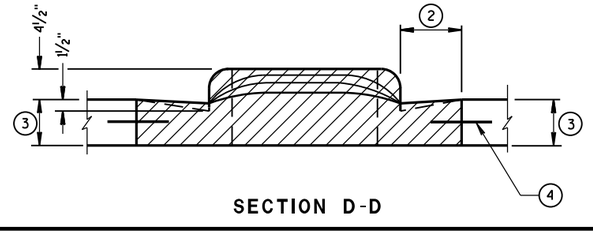






CONCRETE MEDIAN SLOPED NOSE TYPE 1

CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

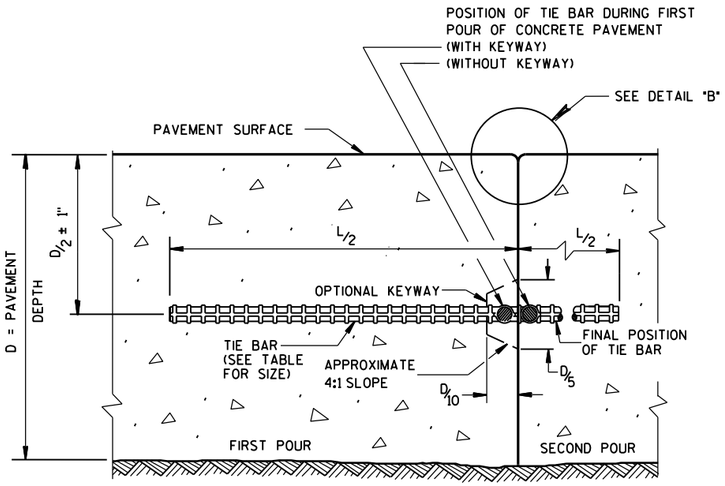
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

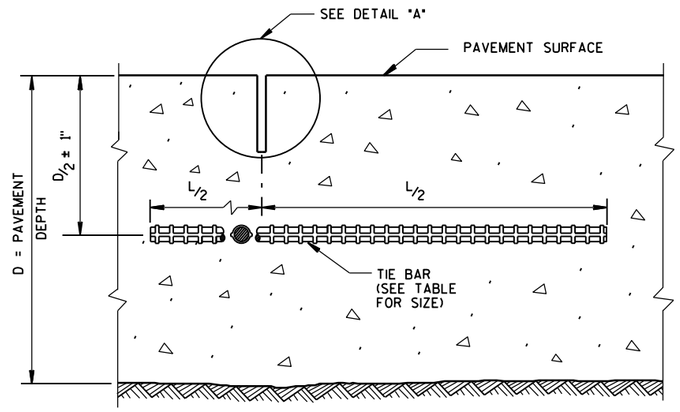
S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

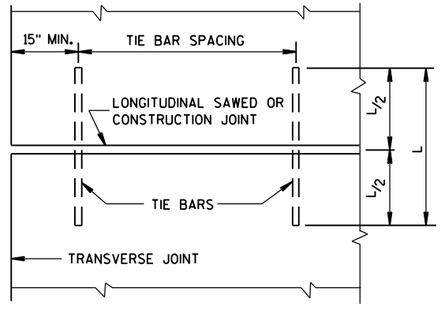
DETAIL "C"

TIE BAR TABLE

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

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

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



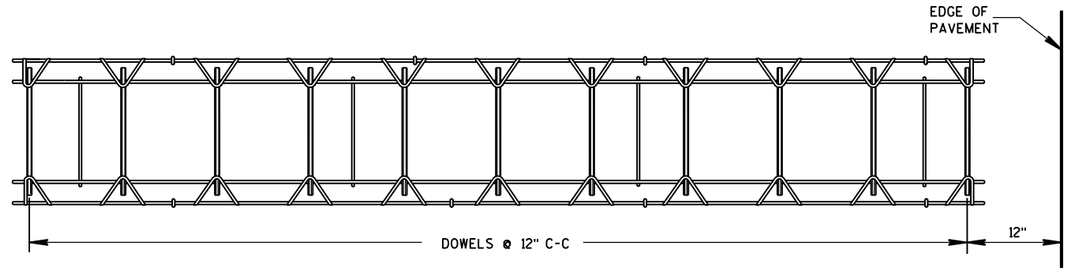
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 13 C 1-18

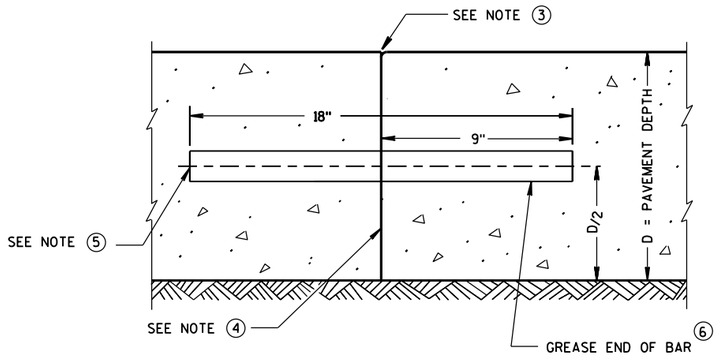


PLAN VIEW

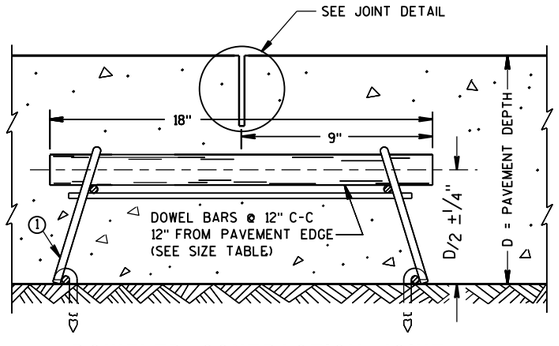


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



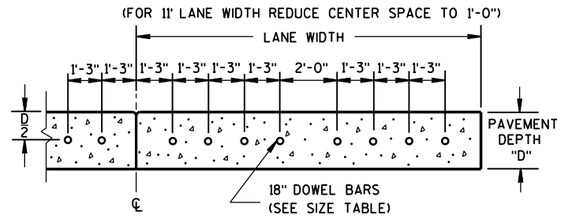
TRANSVERSE CONSTRUCTION JOINT



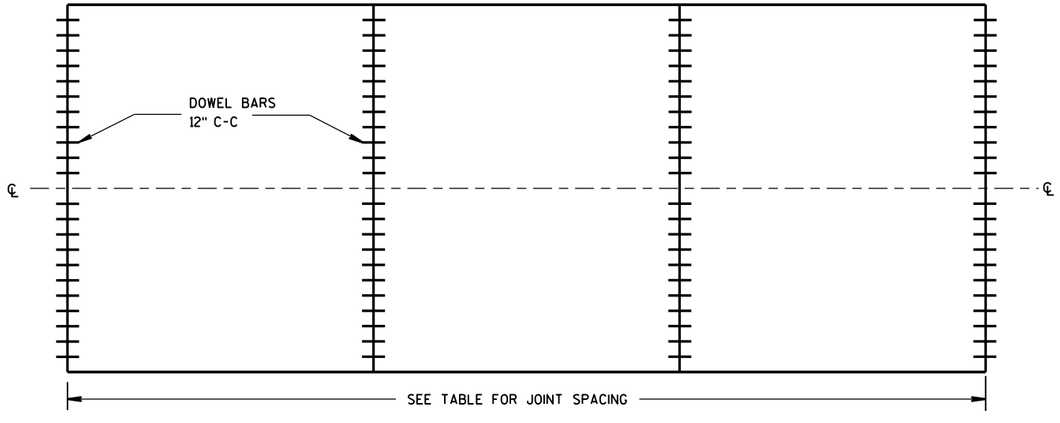
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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

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

CONSTRUCTION JOINTS

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

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

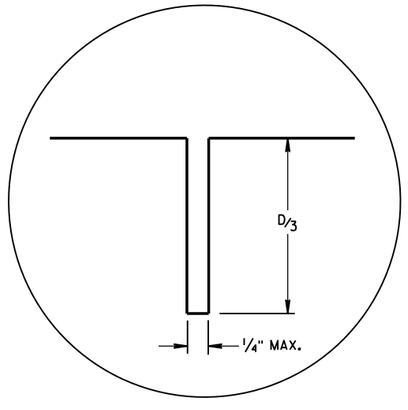
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

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

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



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 13 C 13-8

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

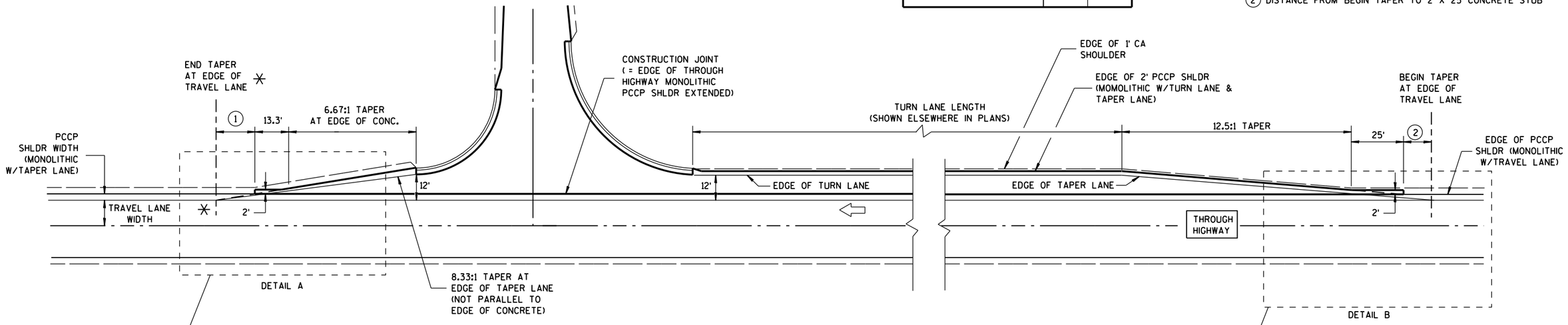
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

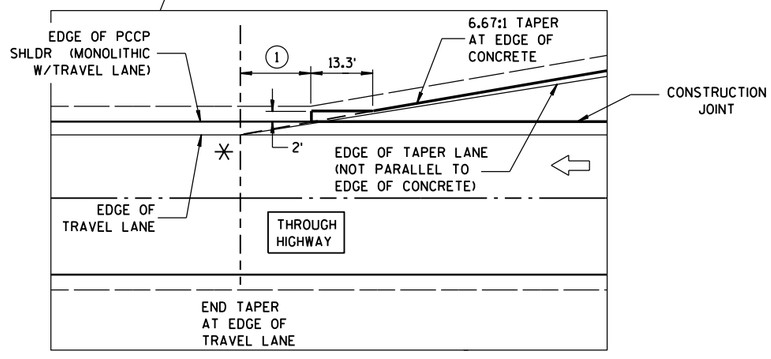
(1) DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

(2) DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB

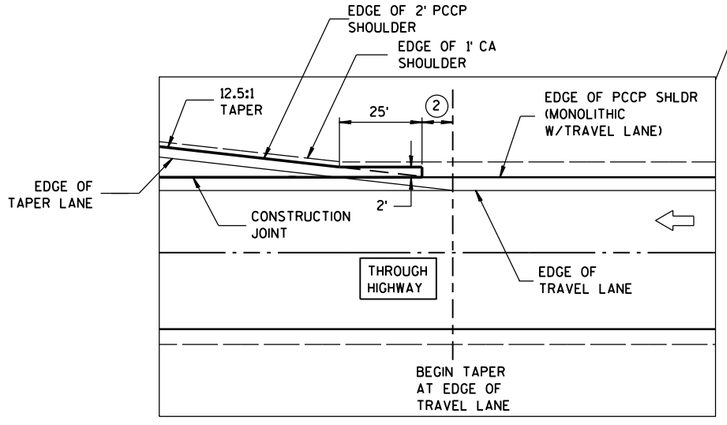
THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET)	
	(1)	(2)
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5



NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

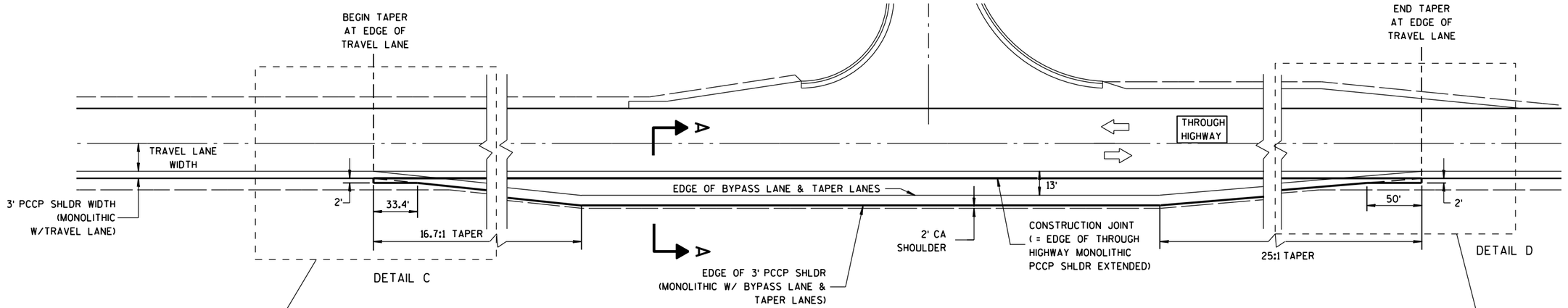
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

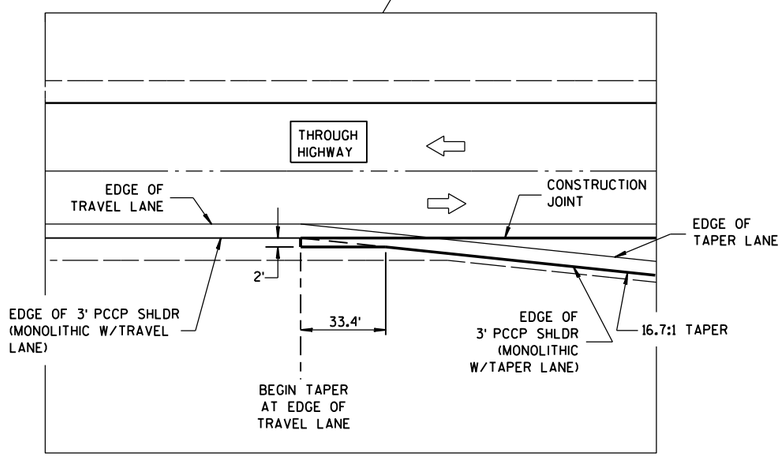
6

S.D.D. 13 C 16-2a

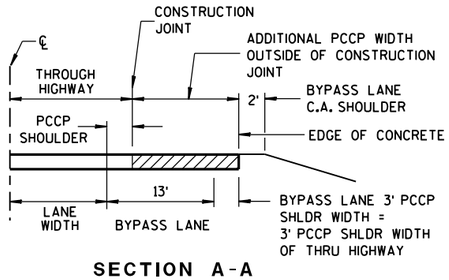
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S.D.D. 13 C 16-2a



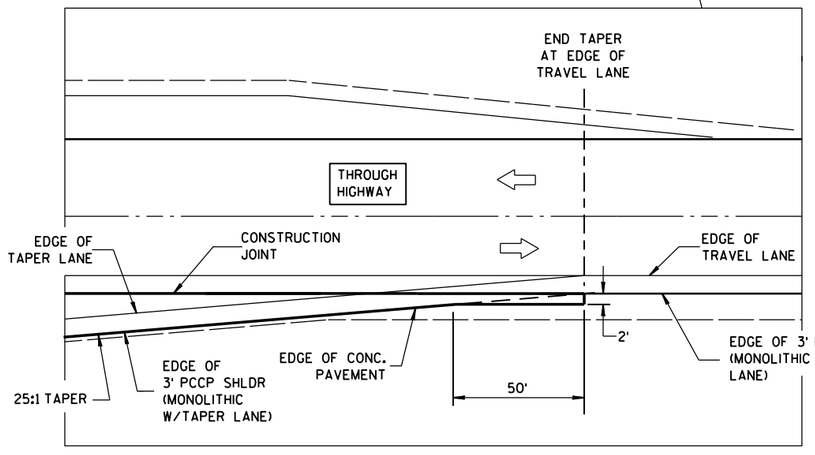


DETAIL C



SECTION A-A

(SHOWING BYPASS LANE AND SHOULDER)



DETAIL D

TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/18/12 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

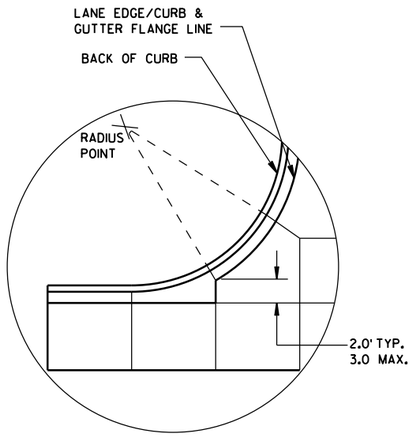
FHWA

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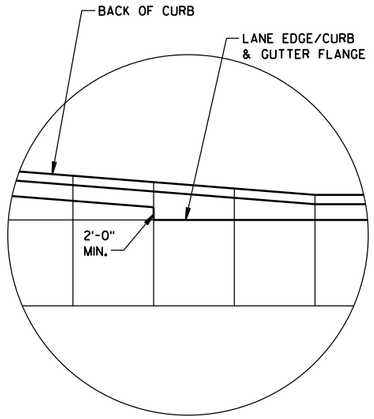
S.D.D. 13 C 16-2b

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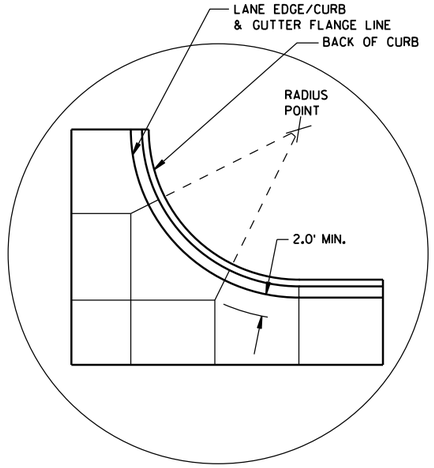
S.D.D. 13 C 16-2b



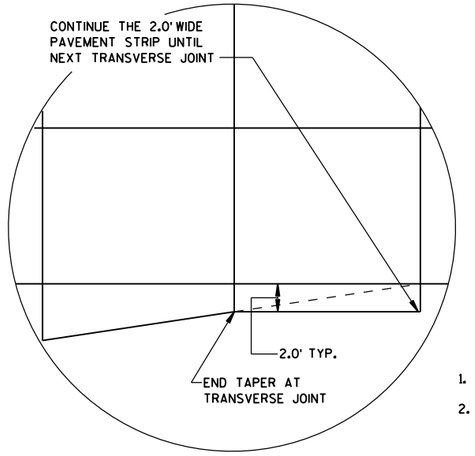
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

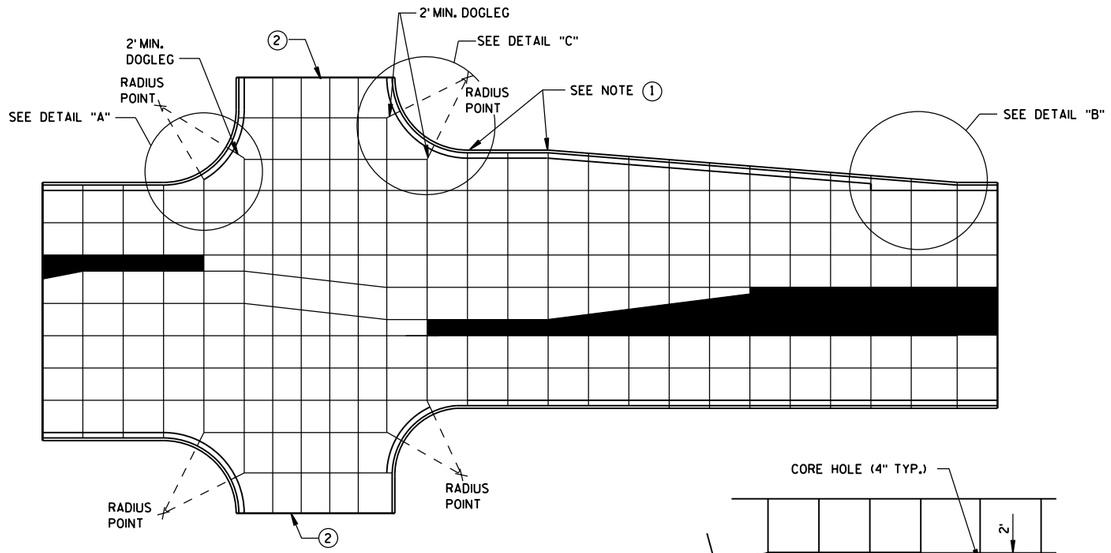
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

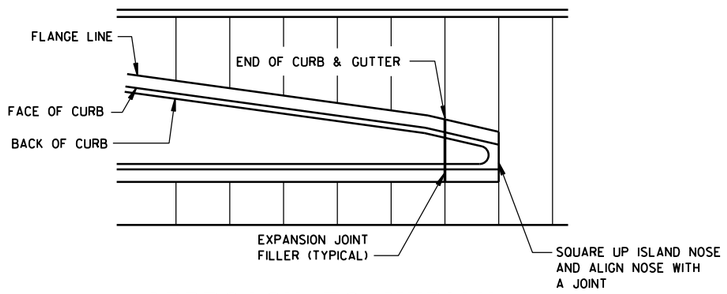
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



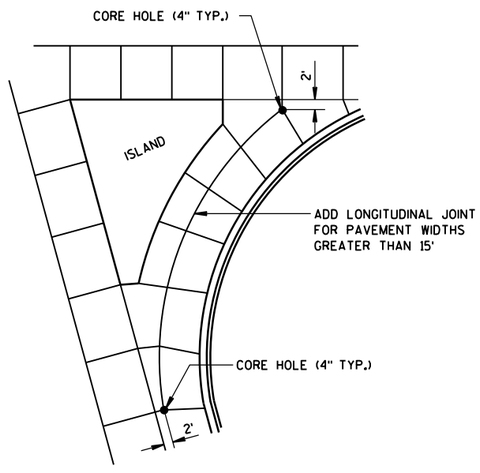
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

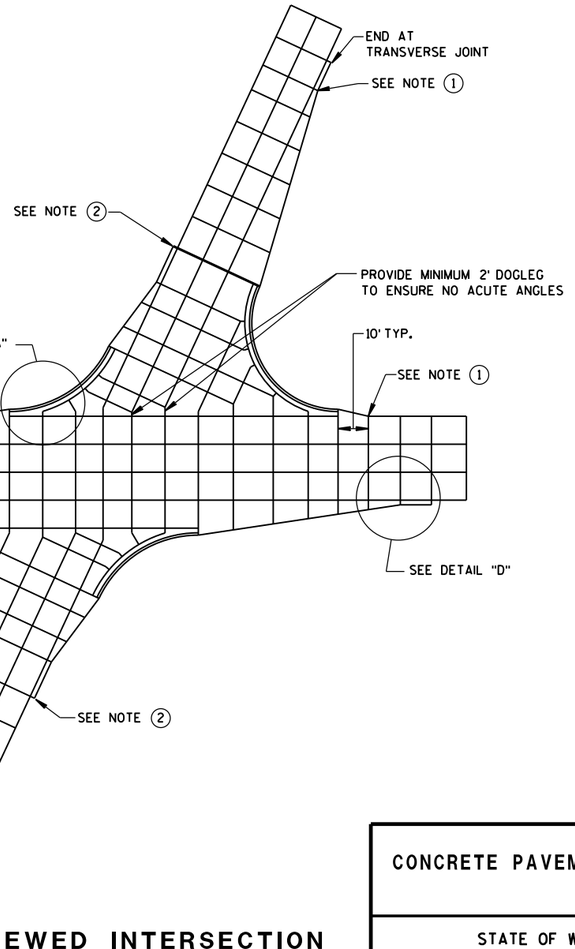
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 436

6

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

6

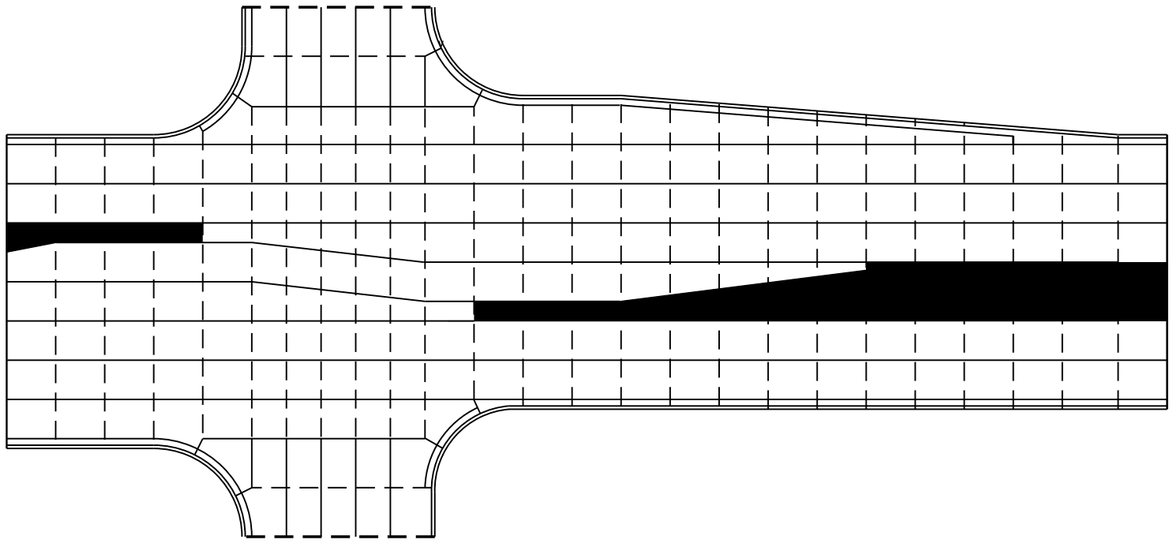
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

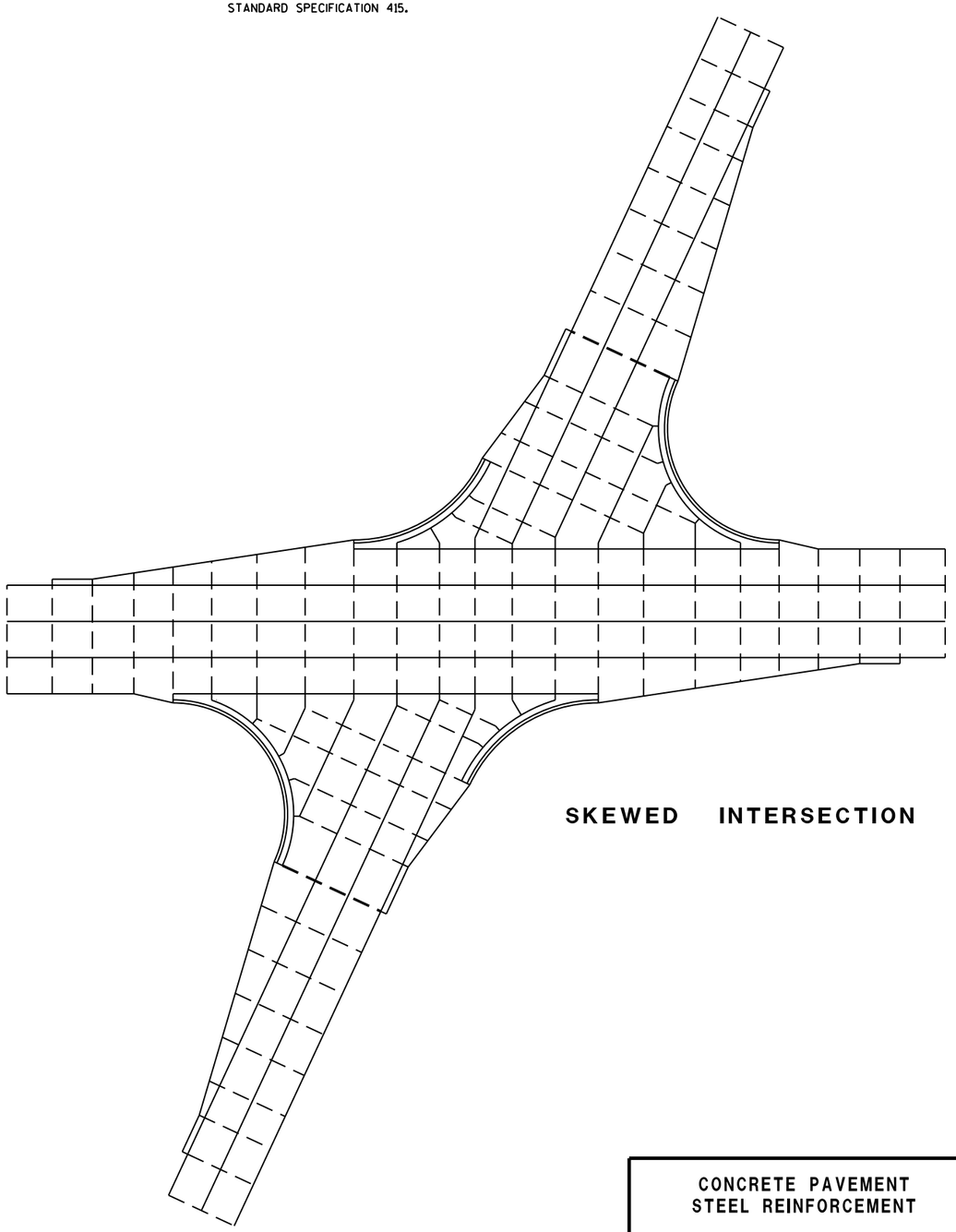
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

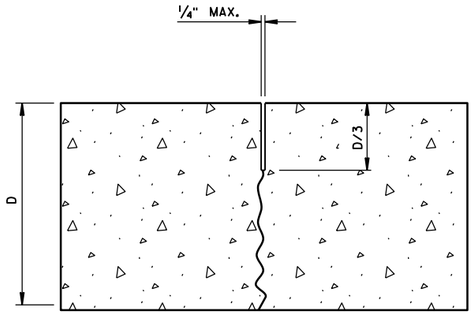
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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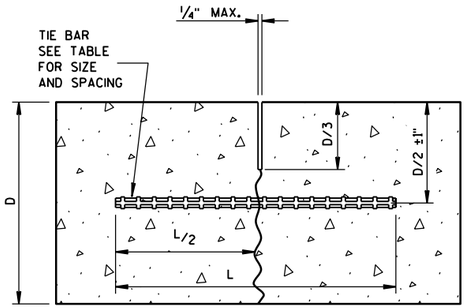
S.D.D. 13 C 18-3b

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



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

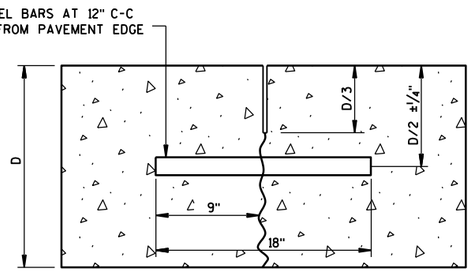
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

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

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

GENERAL NOTES

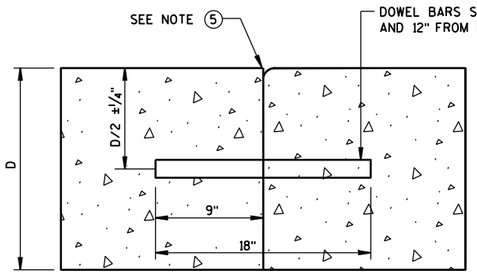
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



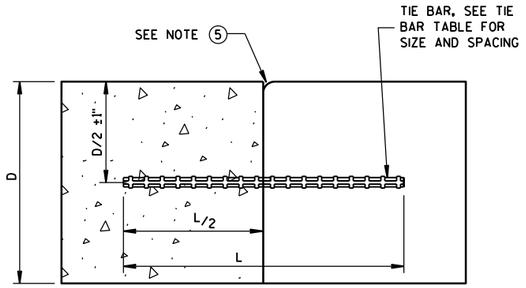
DOWELED-TRANSVERSE

CONTRACTION JOINTS

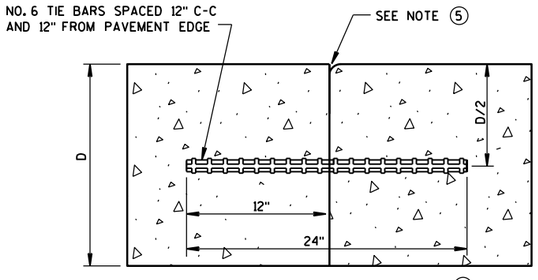
SEE NOTE (2)



DOWELED TRANSVERSE (3)

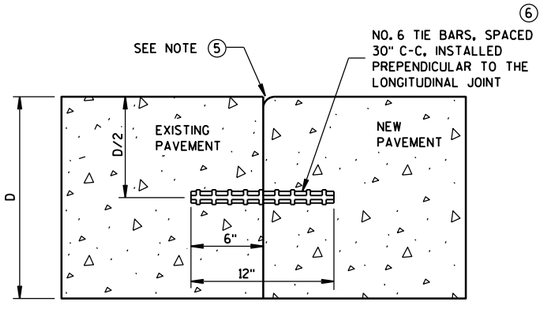


TIED LONGITUDINAL



TIED TRANSVERSE (3)

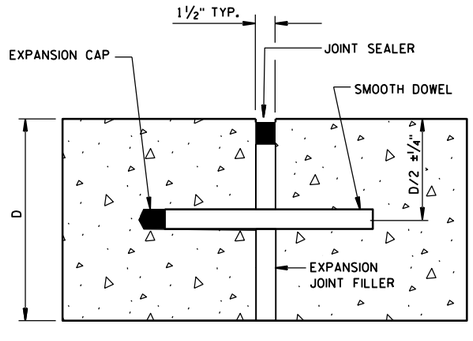
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

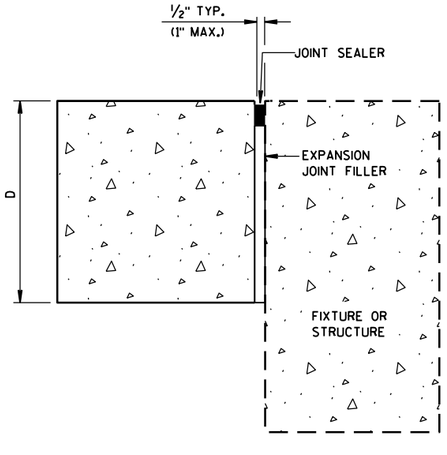
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

6

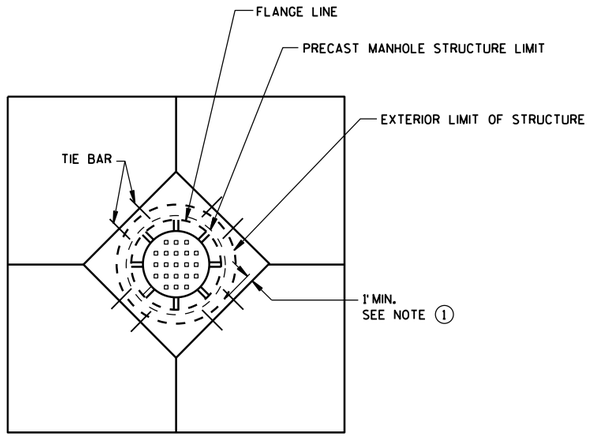
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S.D.D. 13 C 18-3c

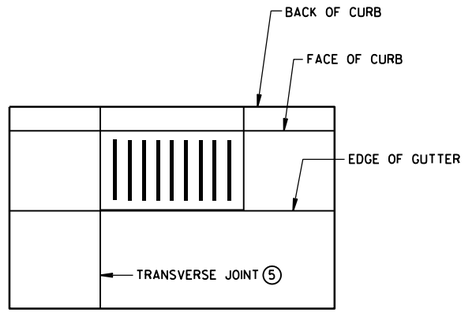
S.D.D. 13 C 18-3c

CONCRETE PAVEMENT
JOINT TYPES

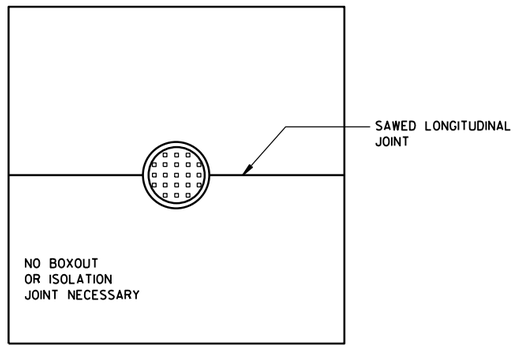
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



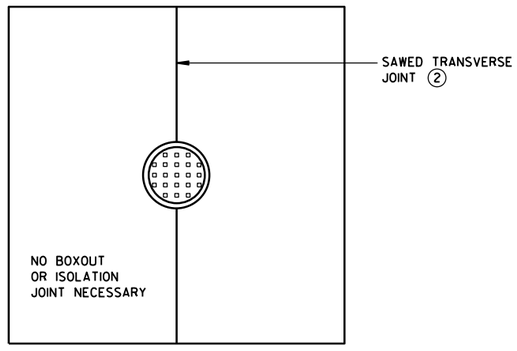
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



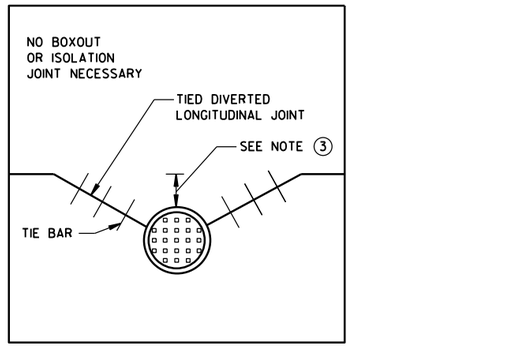
INLET WITH TRANSVERSE JOINT



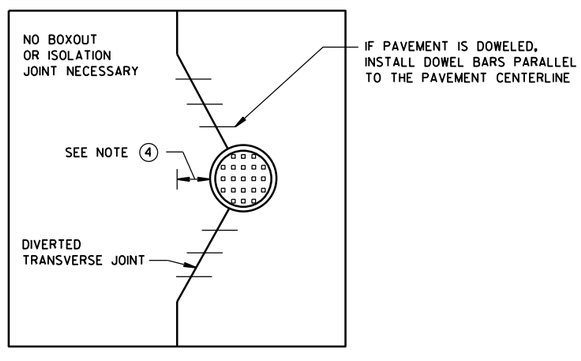
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

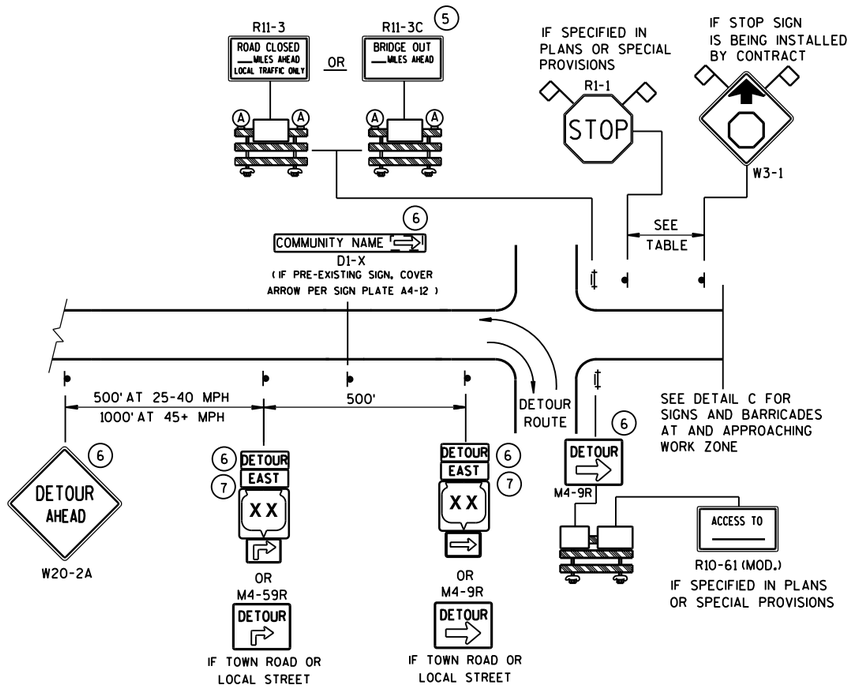
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

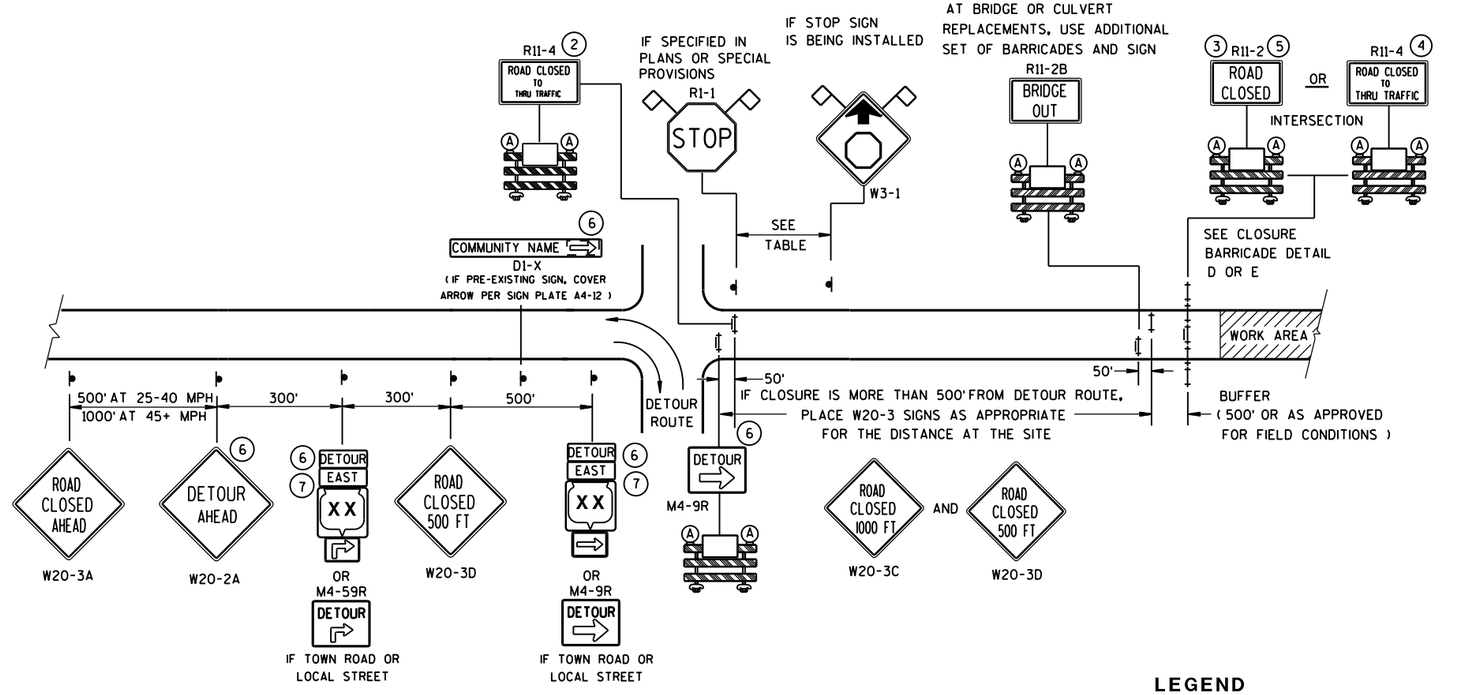
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S.D.D. 13 C 18-3d



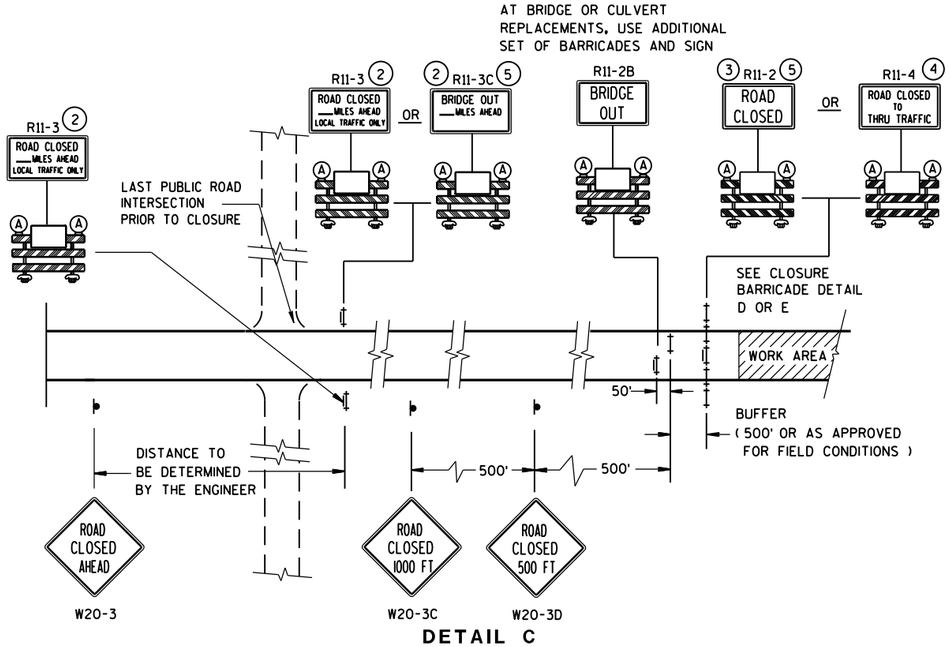
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

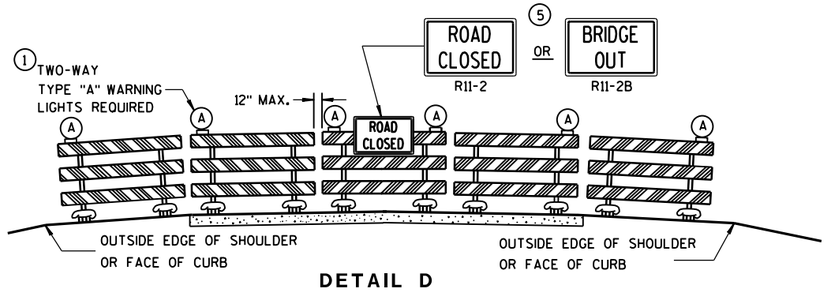
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

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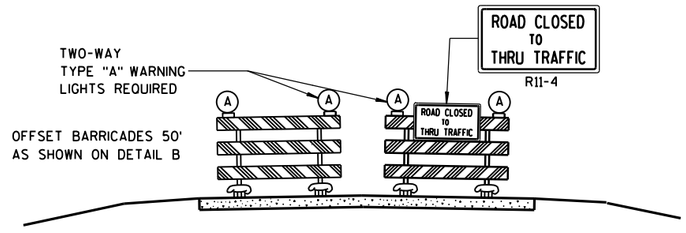
S.D.D. 15 C 2-6a



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

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

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S.D.D. 15 C 2-6b

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S.D.D. 15 C 2-6b

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

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.

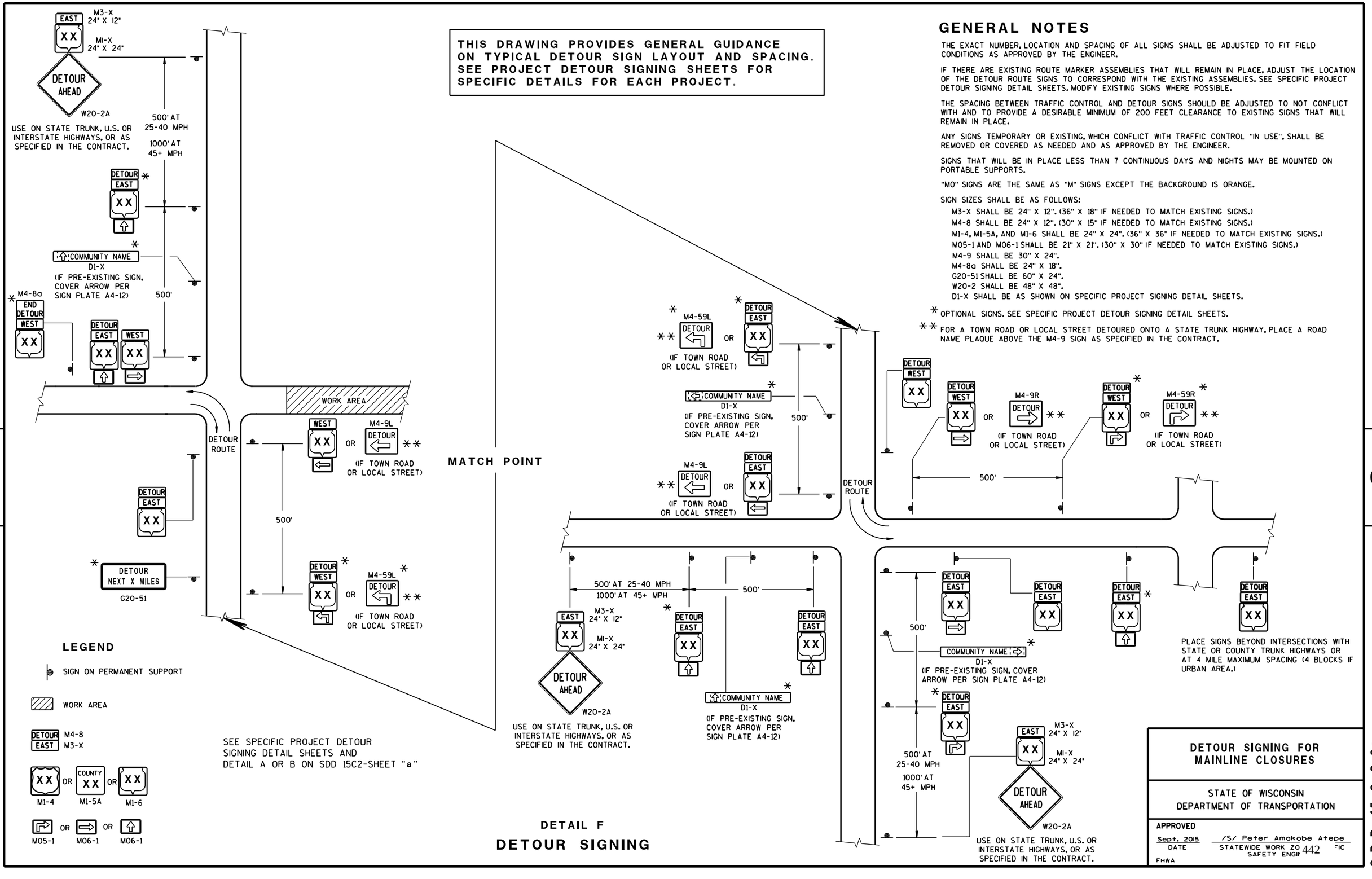
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.



DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

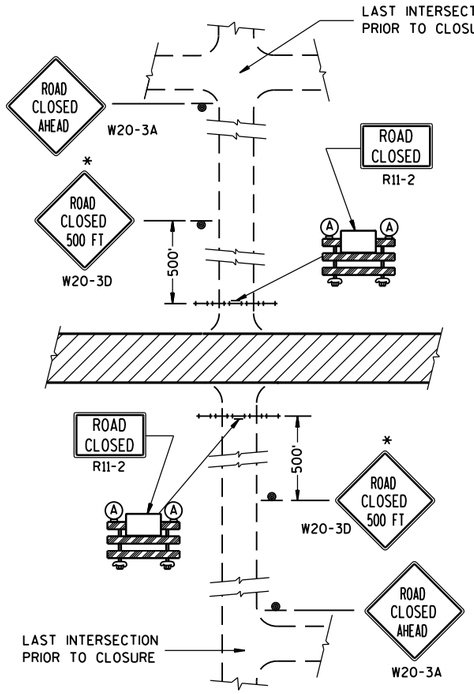
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

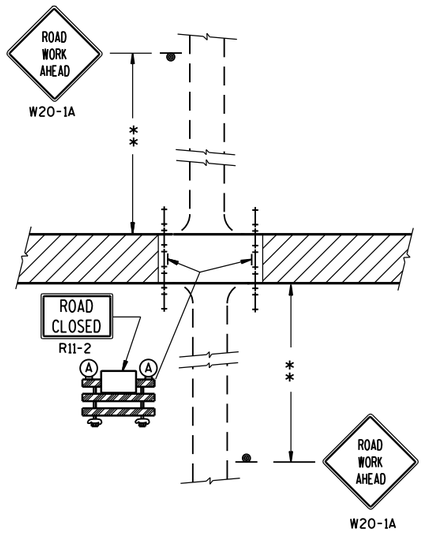
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S.D.D. 15 C 2-6c



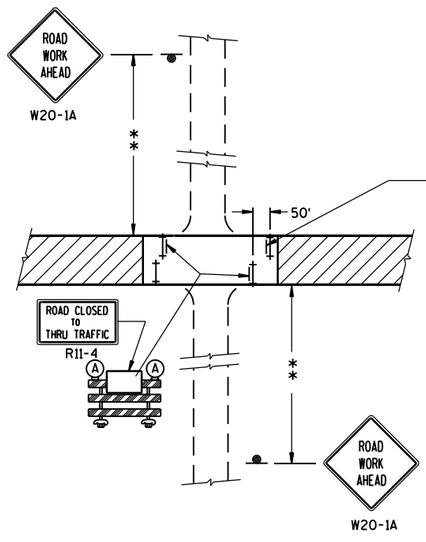
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

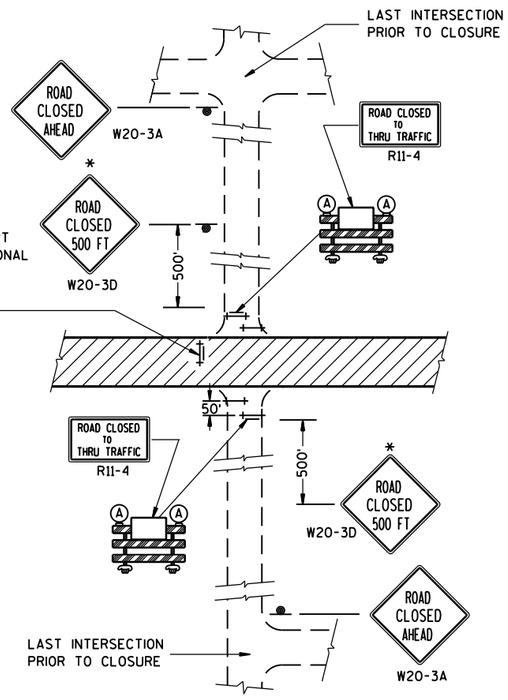
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).





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

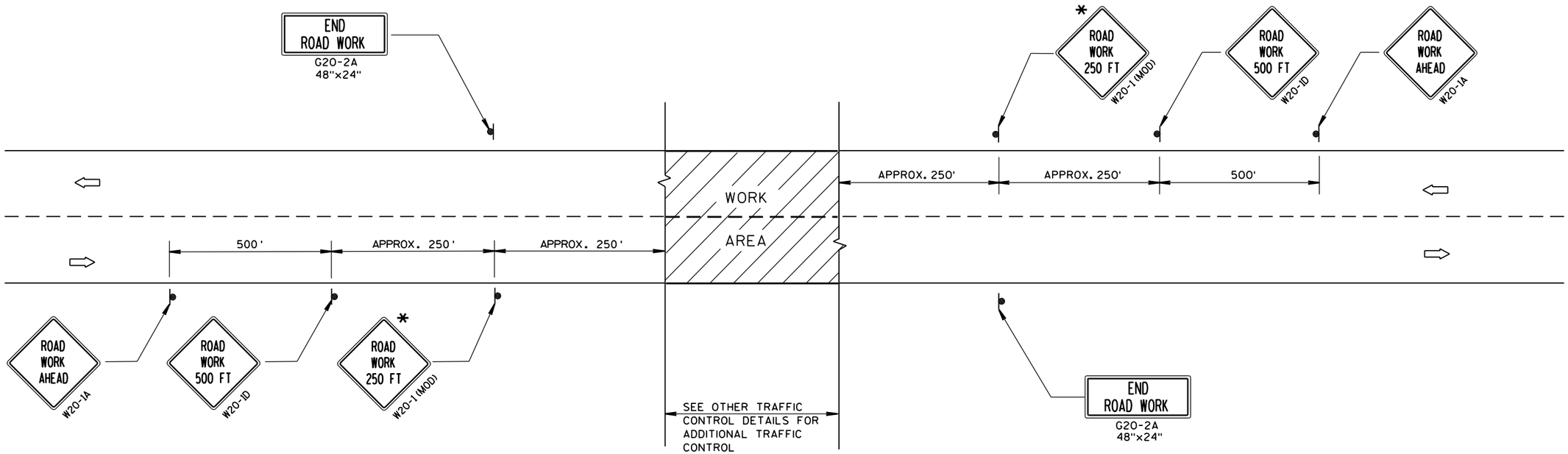
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

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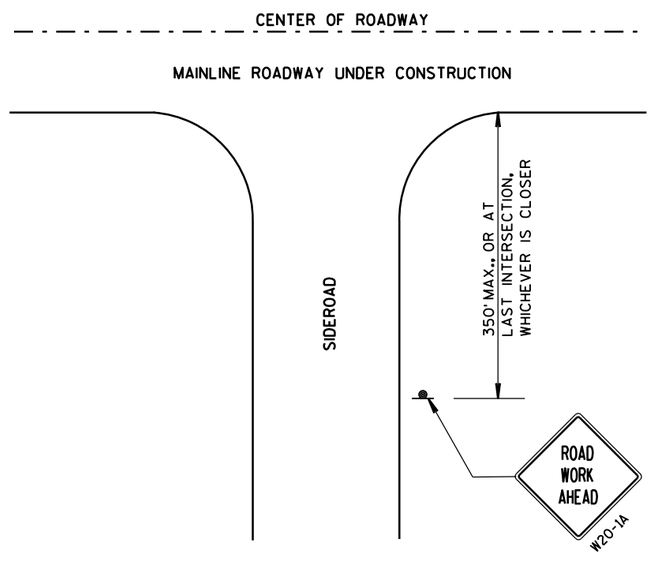
S.D.D. 15 C 3-3

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S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

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

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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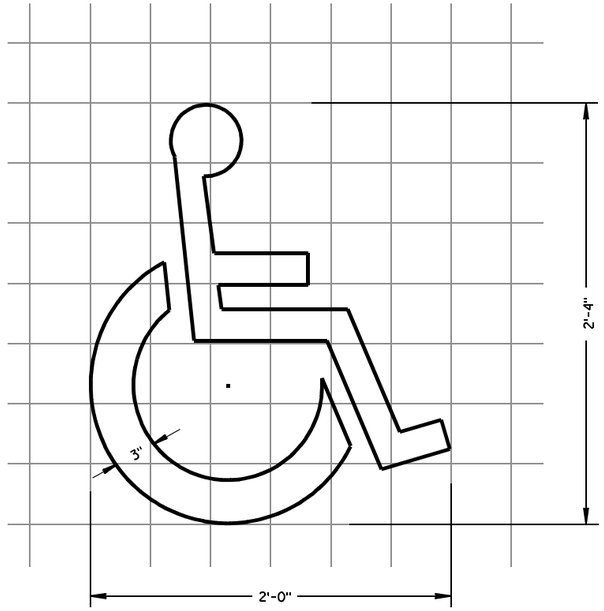
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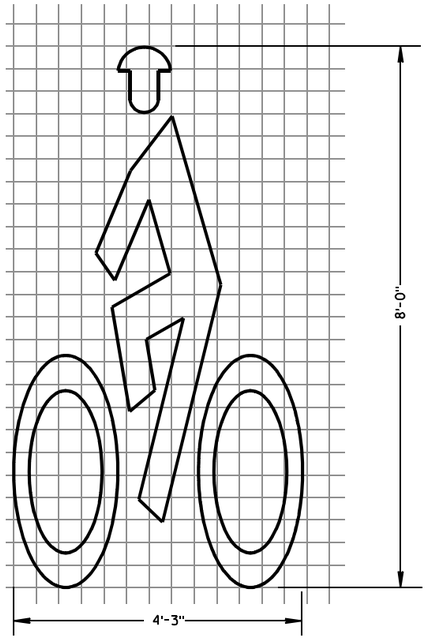
GENERAL NOTES

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.

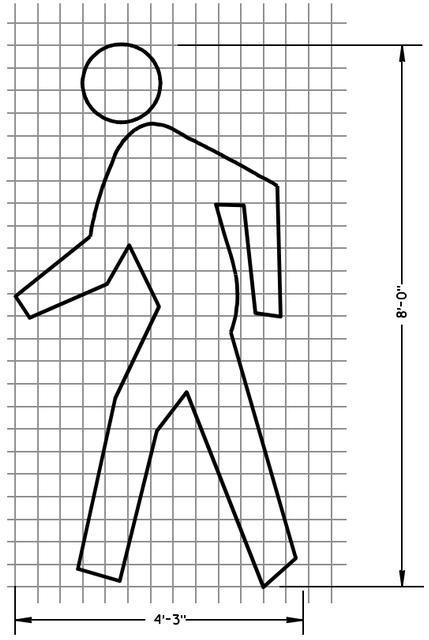
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A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

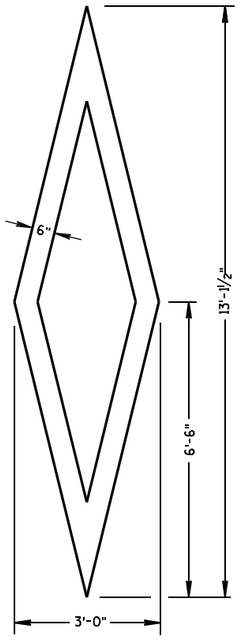




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-12a

S.D.D. 15 C 7-12a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

445

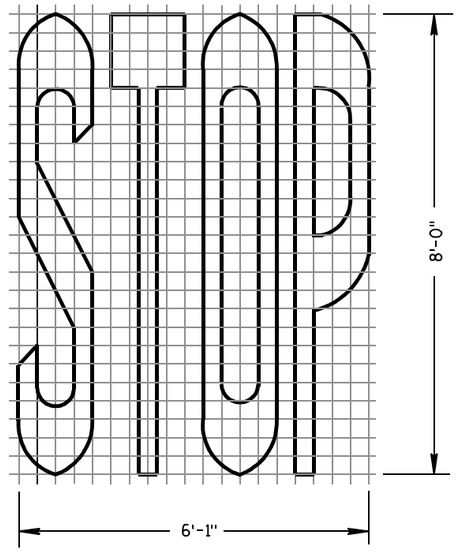
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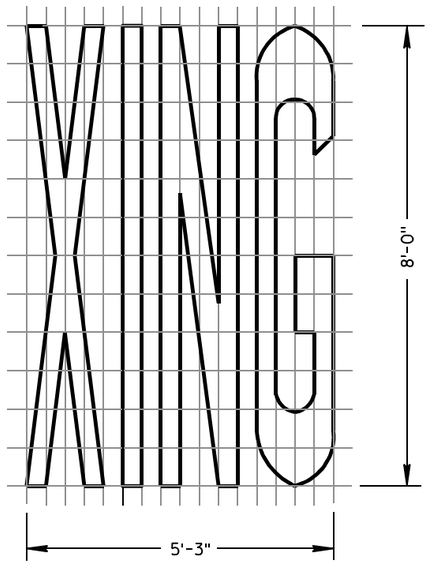
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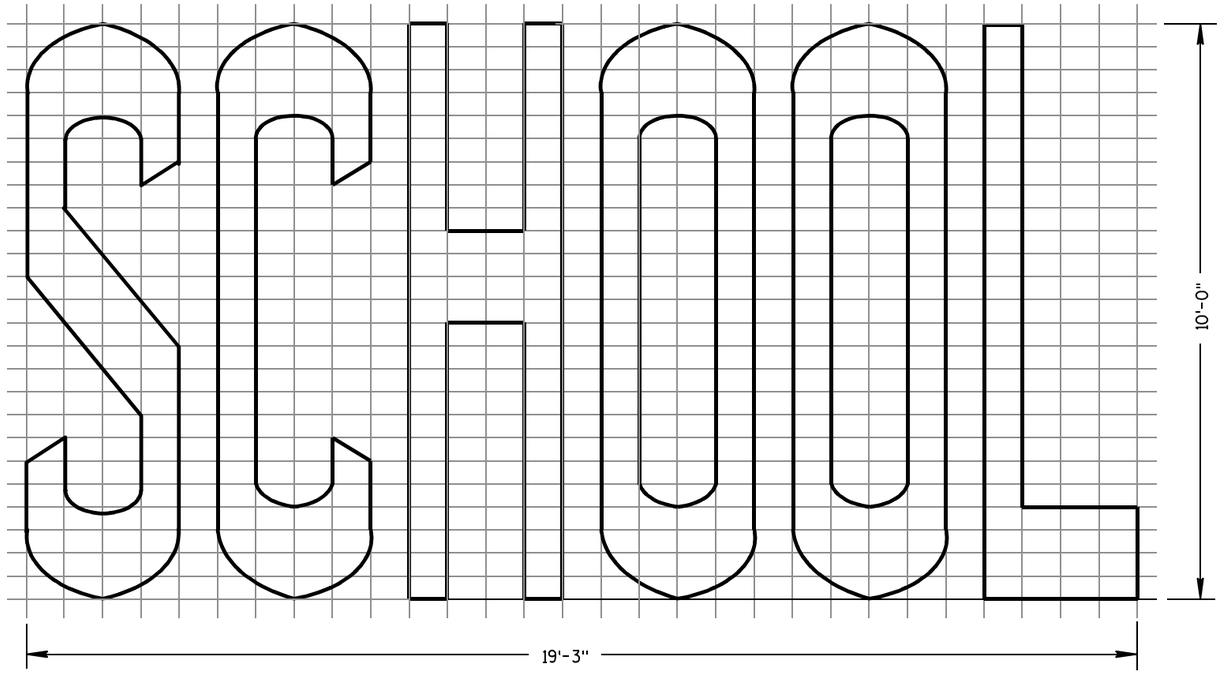
GENERAL NOTES

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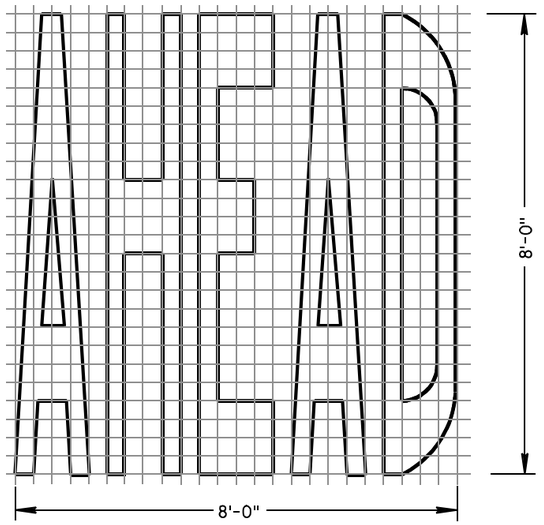
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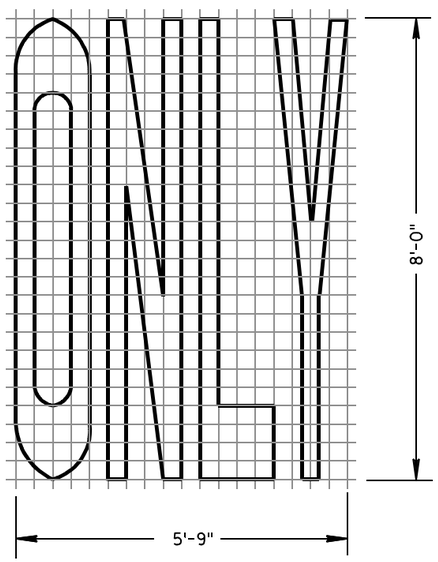


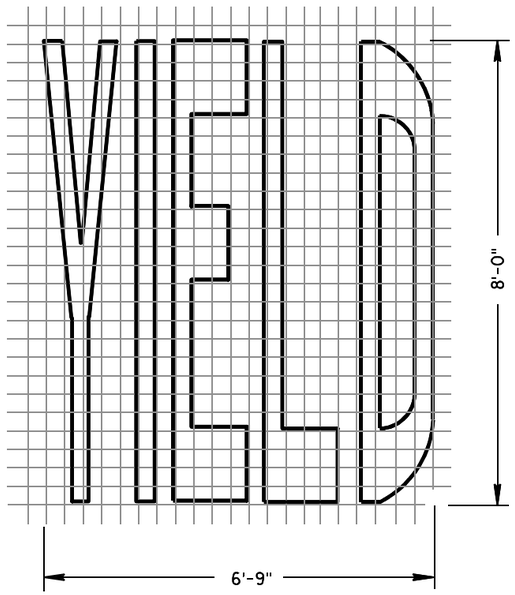


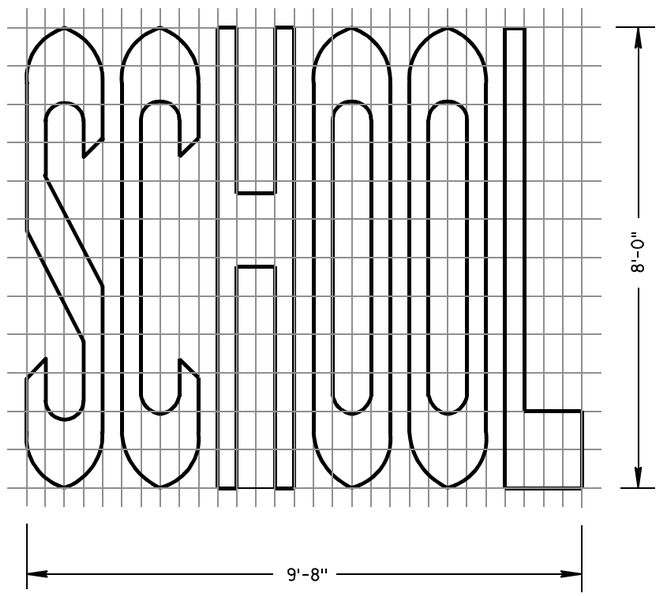


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

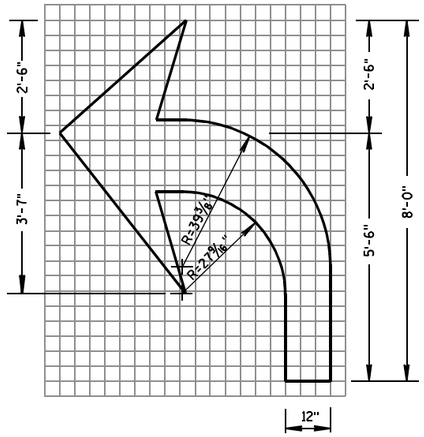
FHWA

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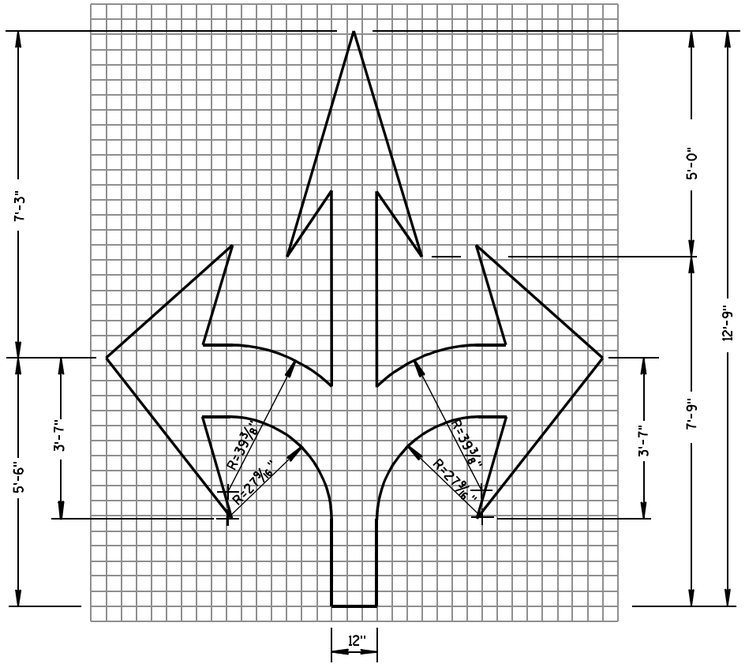
S.D.D. 15 C 7-12b

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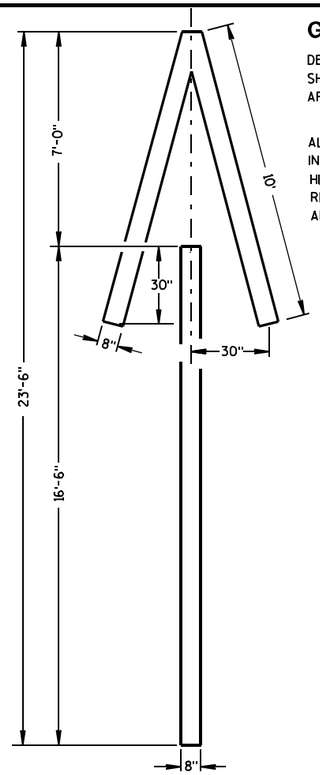
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

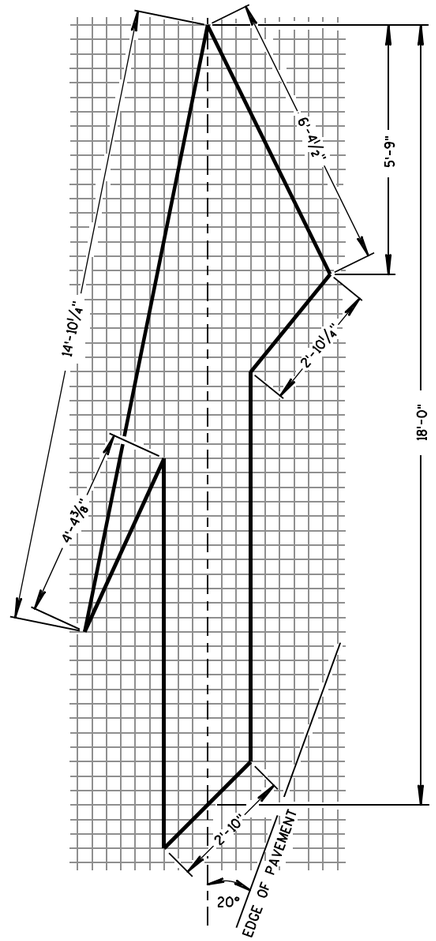


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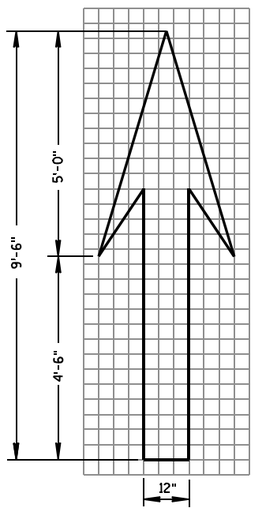
GENERAL NOTES

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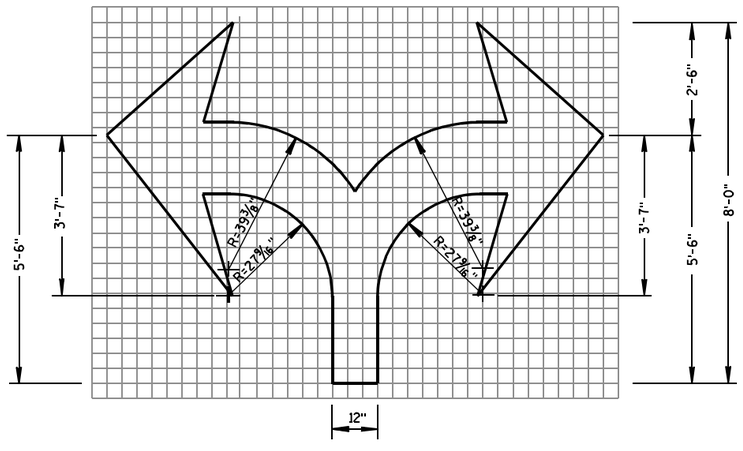
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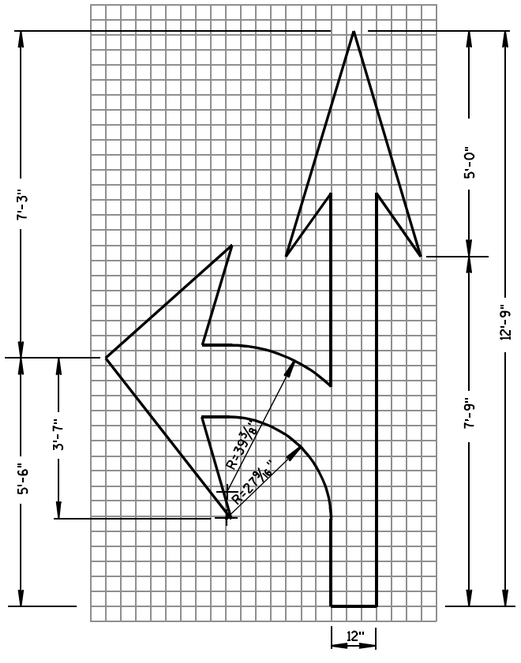
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

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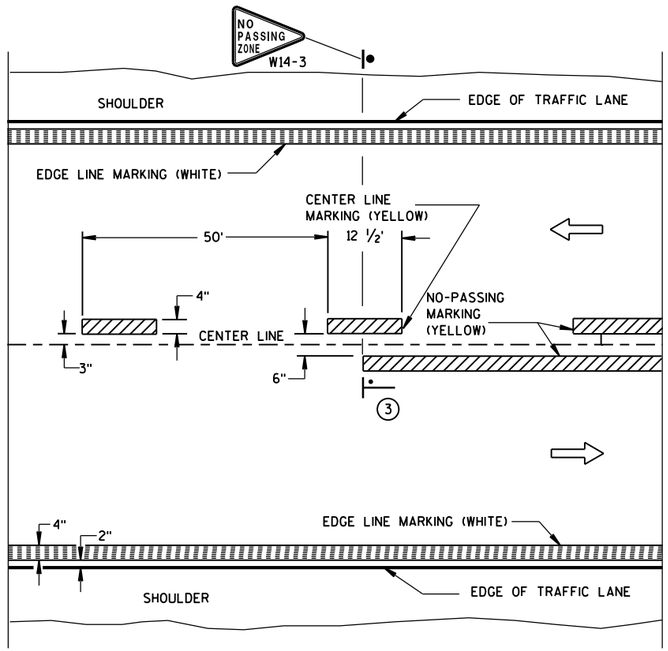
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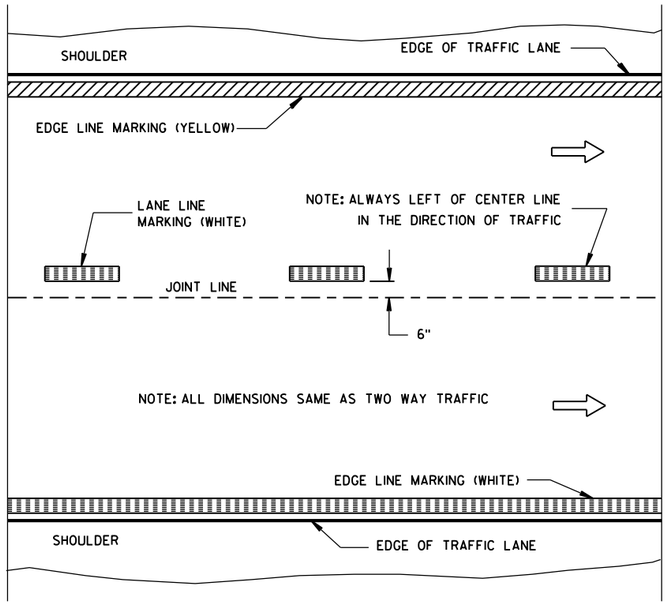
S.D.D. 15 C 7-12c

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S.D.D. 15 C 7-12c

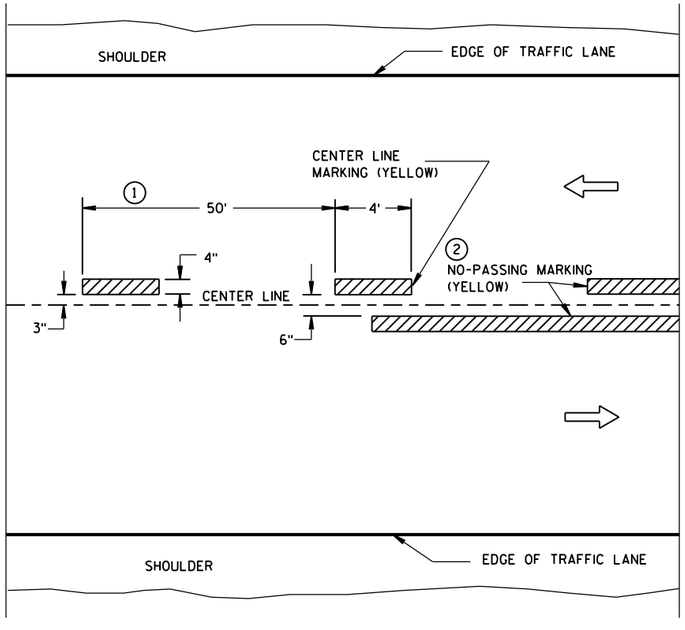


TWO WAY TRAFFIC

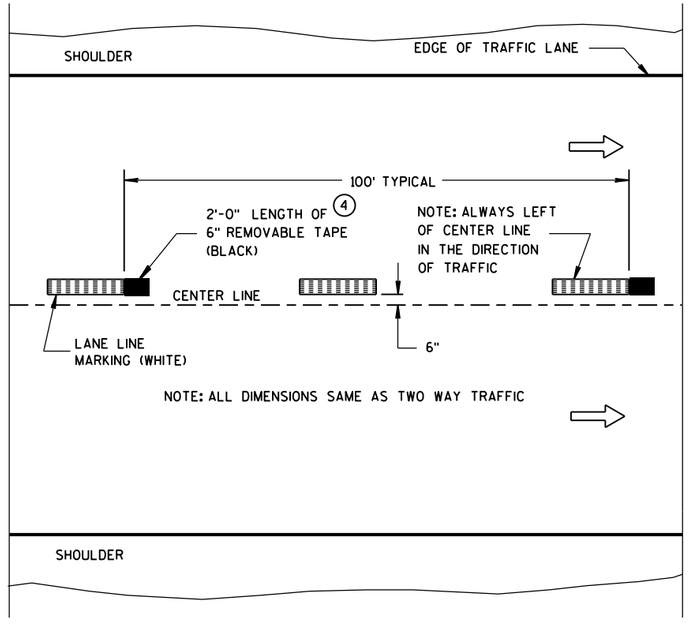


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

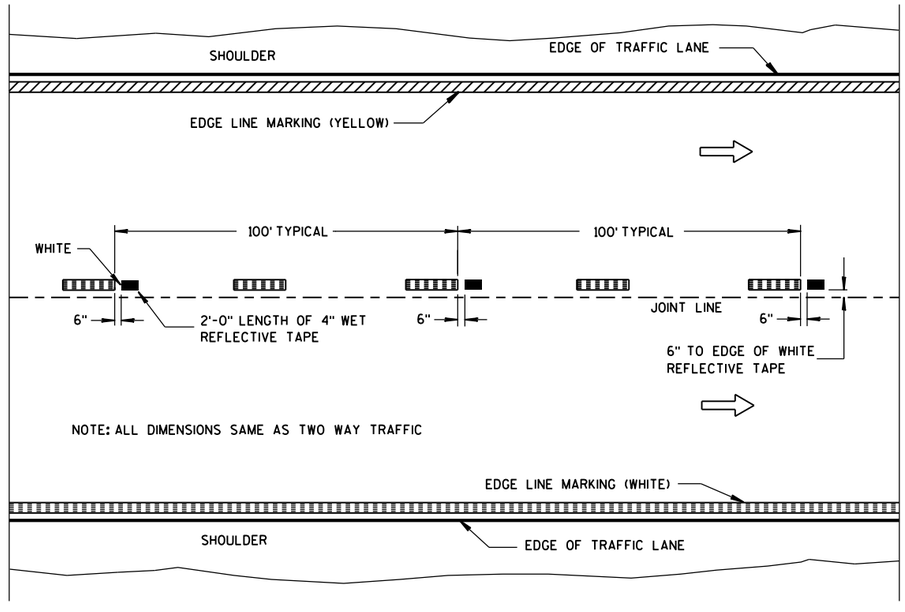
GENERAL NOTES

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

/S/ Travis Feltes
STATE TRAFFIC E

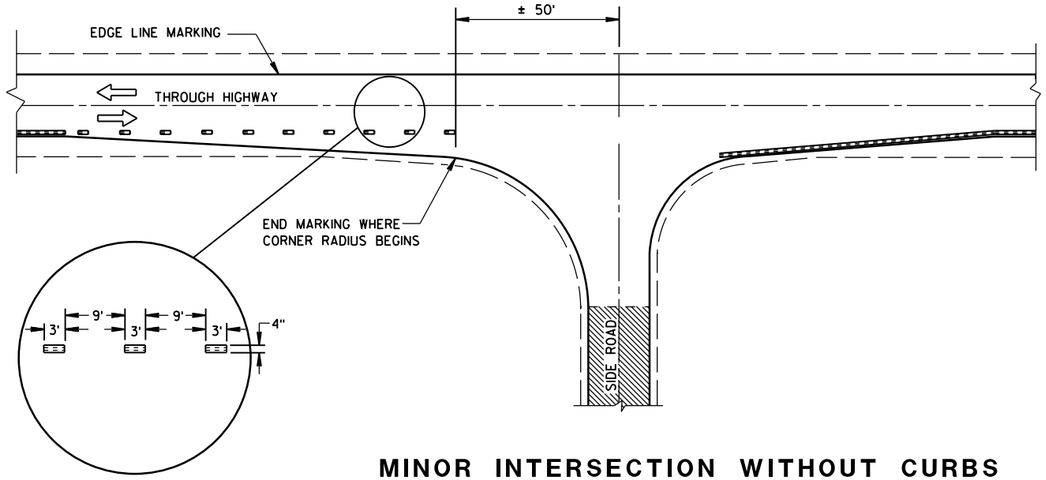
FHWA

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S.D.D. 15 C 8-16a

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S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

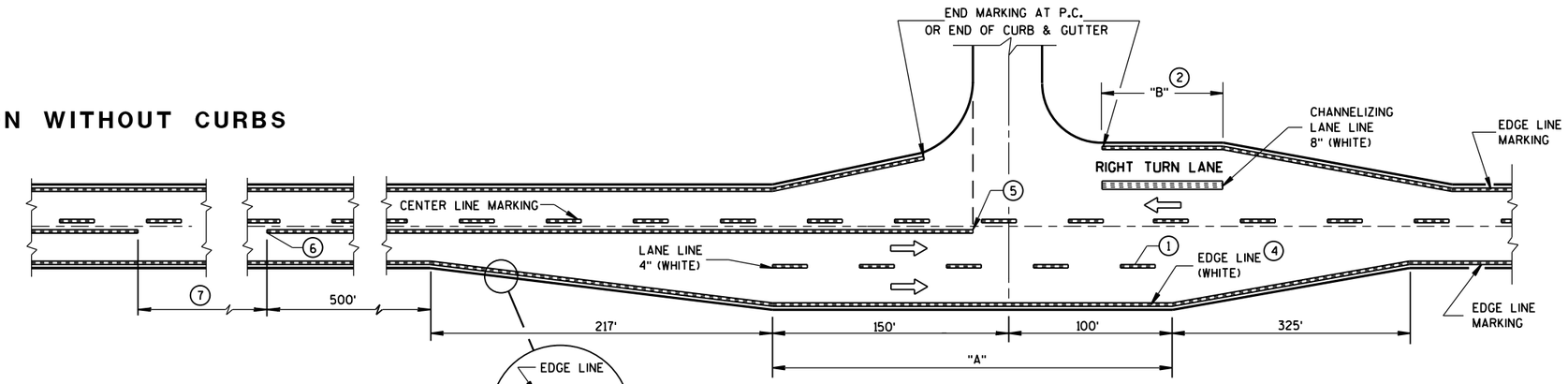
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

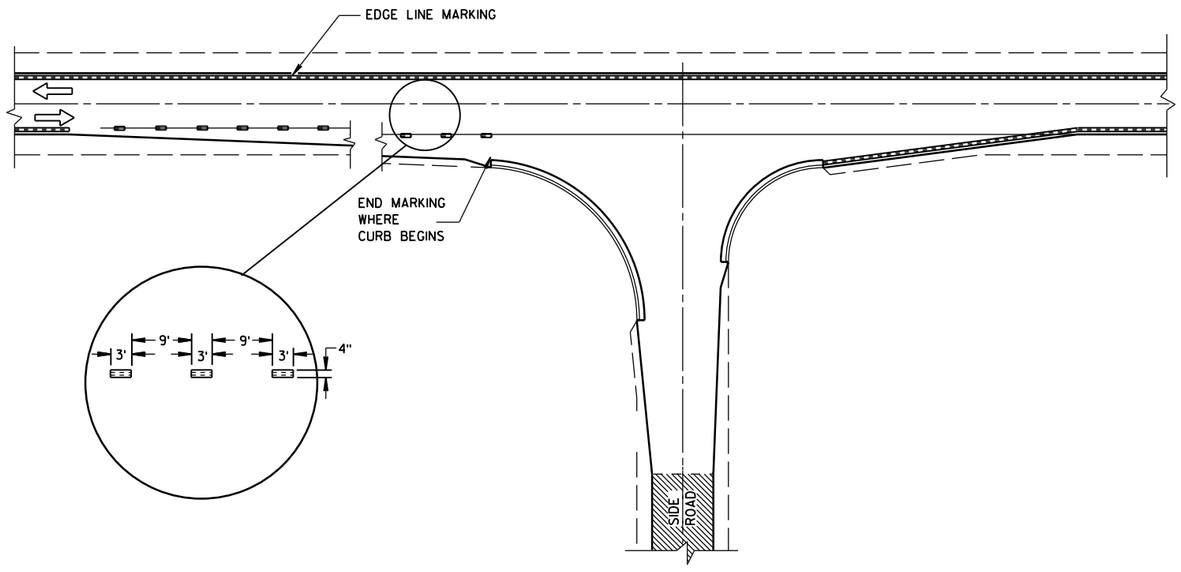
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



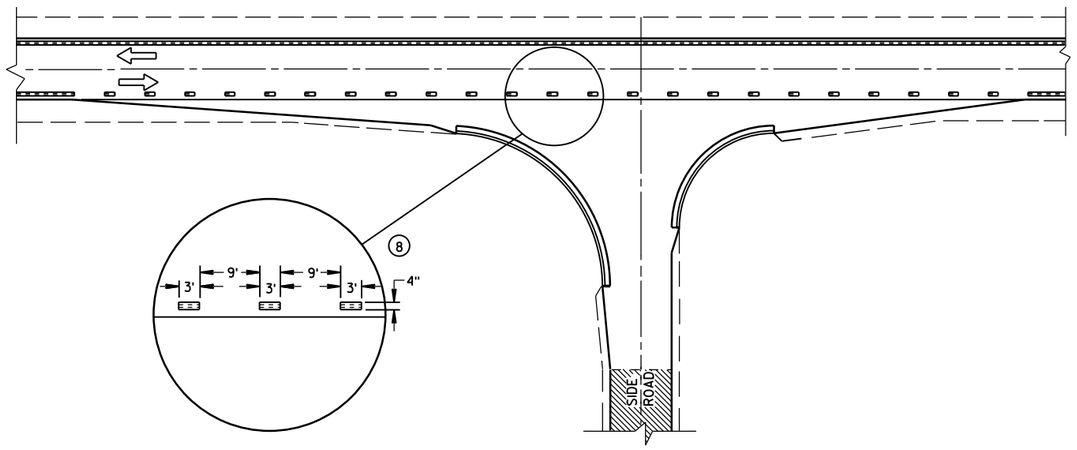
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

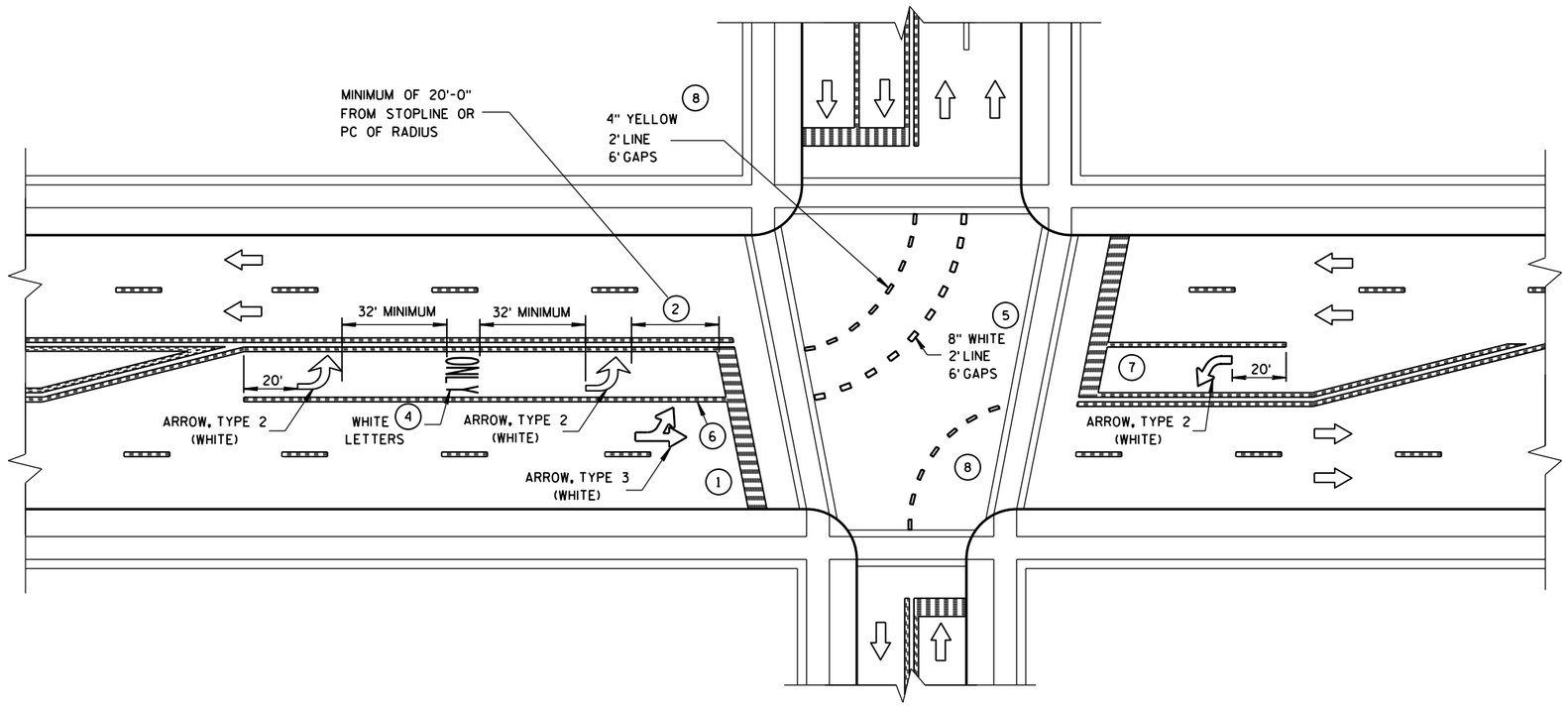
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 C 8-16b

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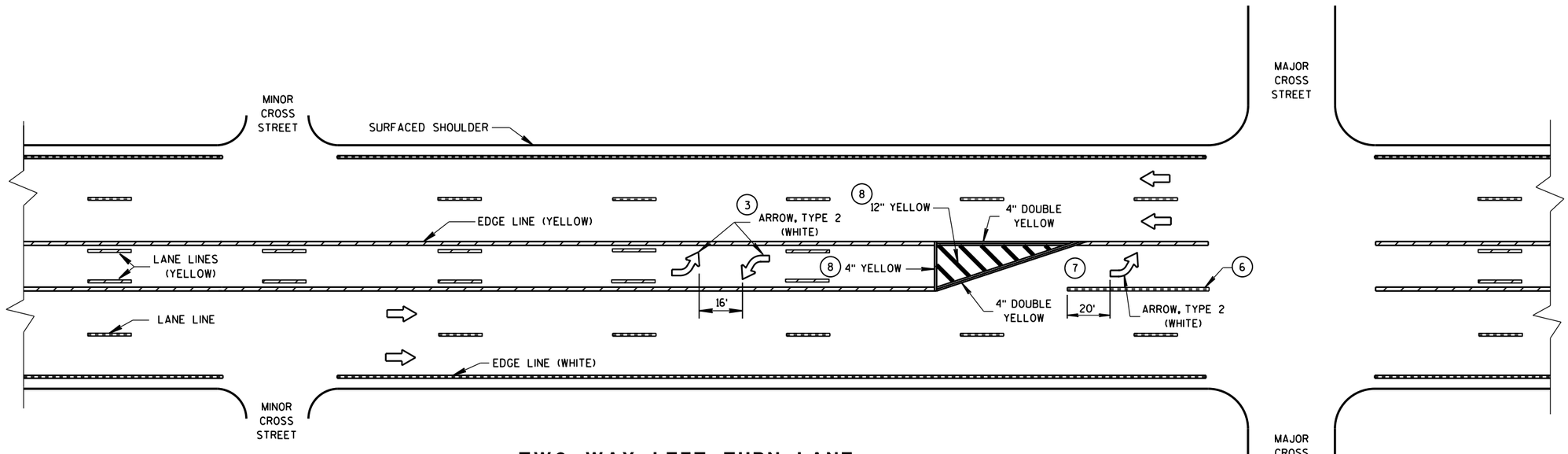
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

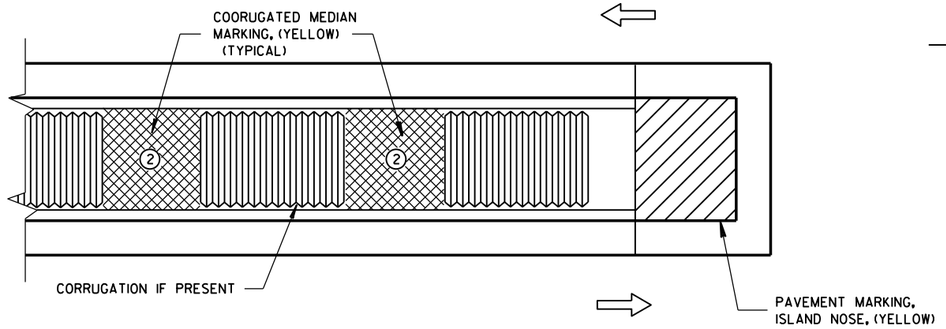
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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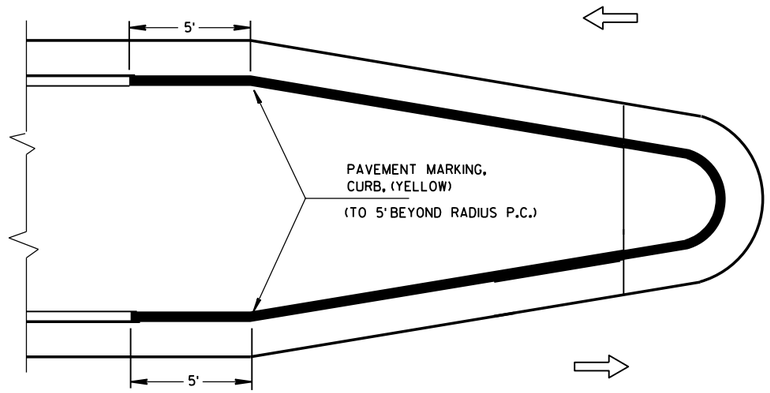
S.D.D. 15 C 8-16e

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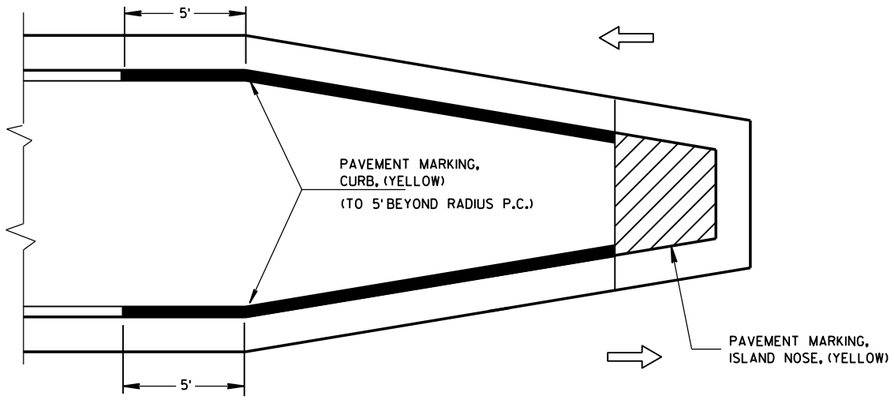
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE

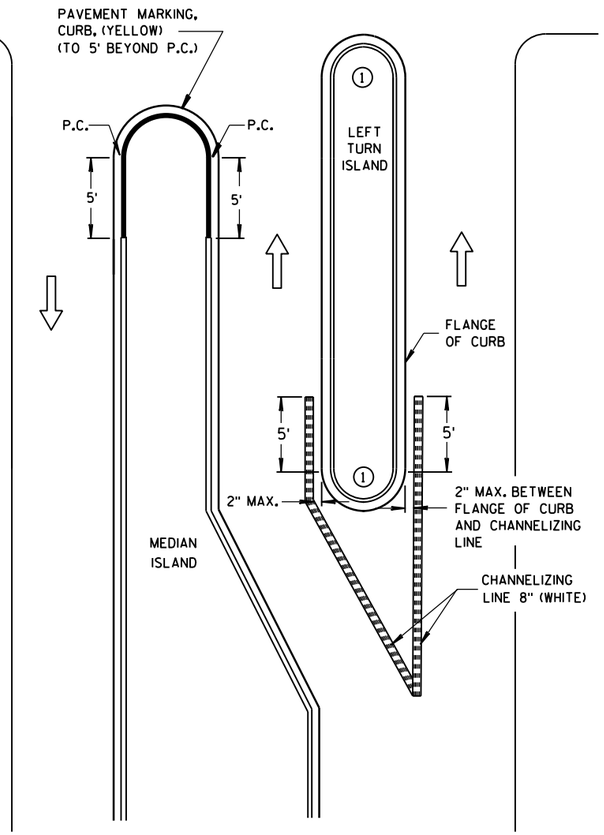


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

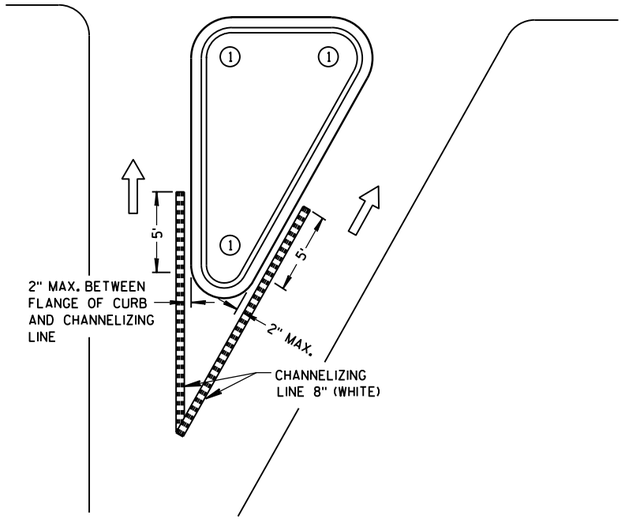


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

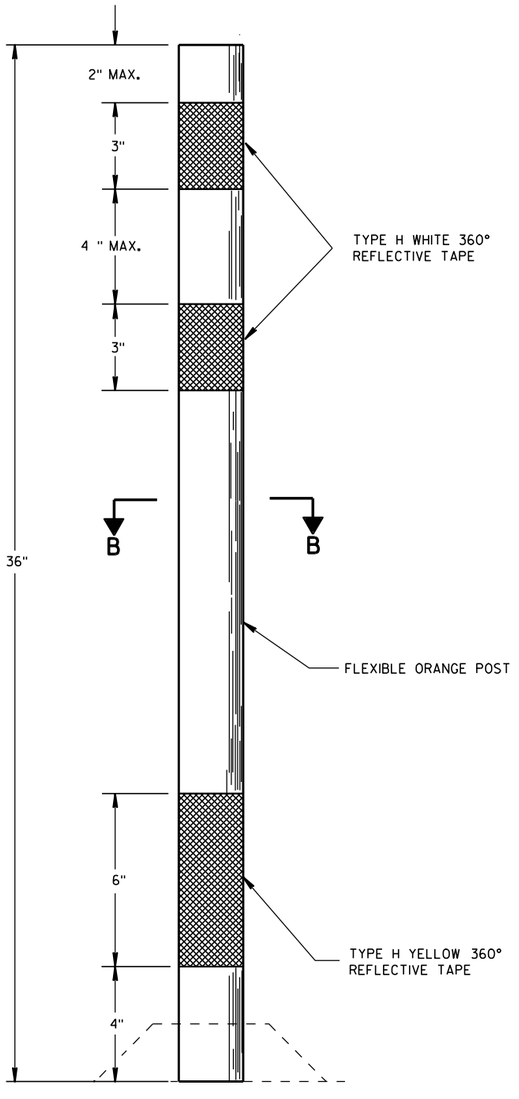
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

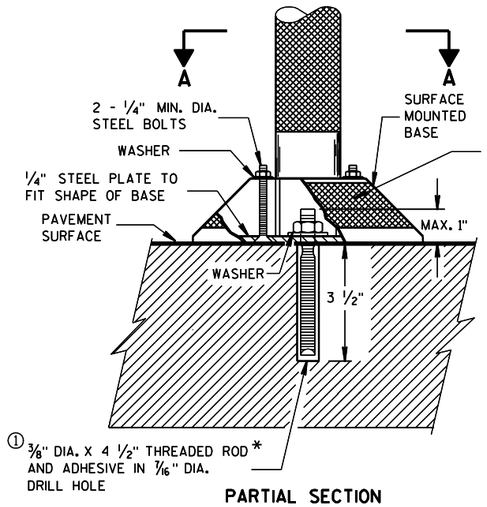
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

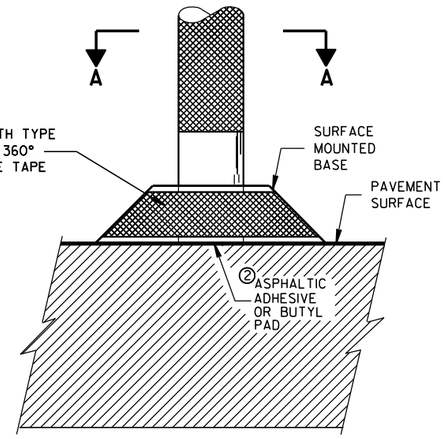
S.D.D. 15 C 8-16f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

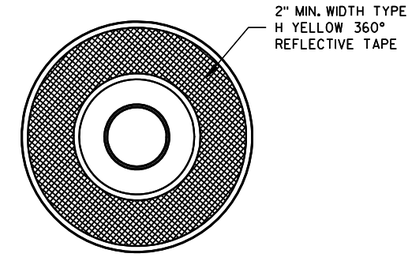
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

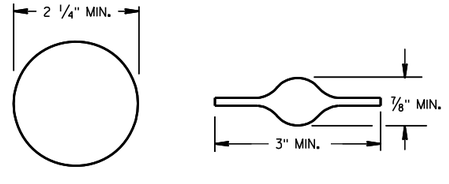
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



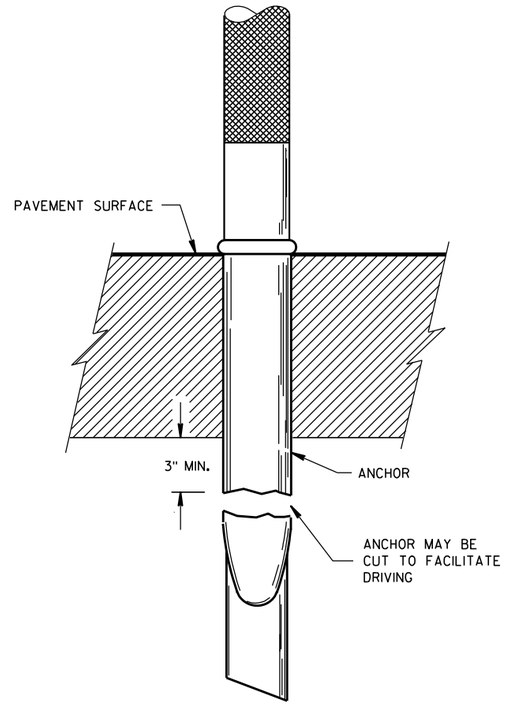
SECTION A-A

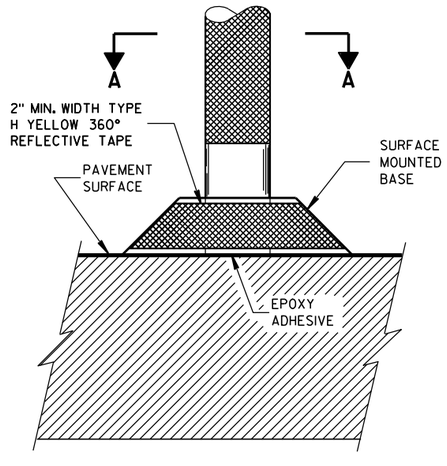
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O 452

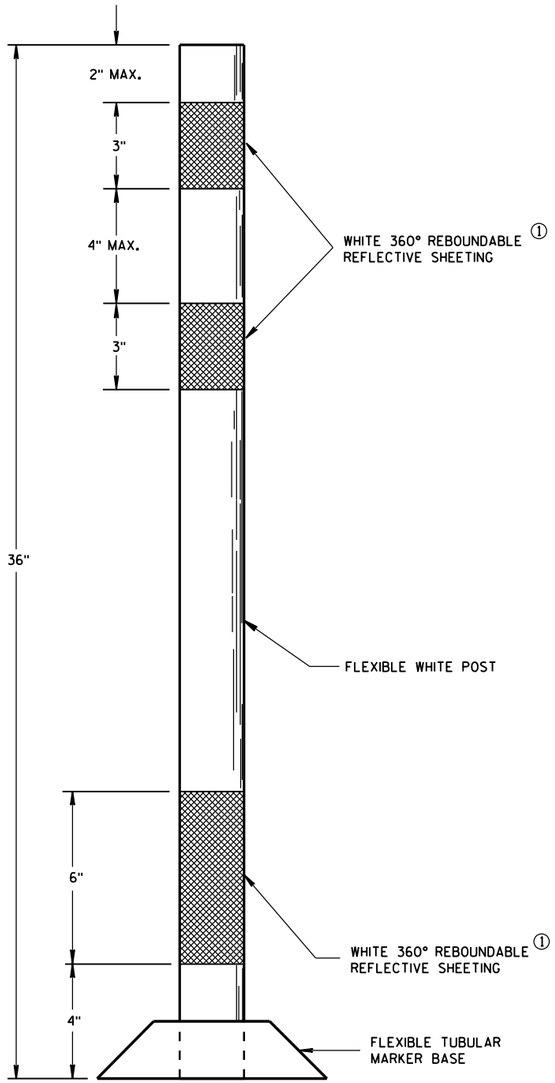
FHWA

6

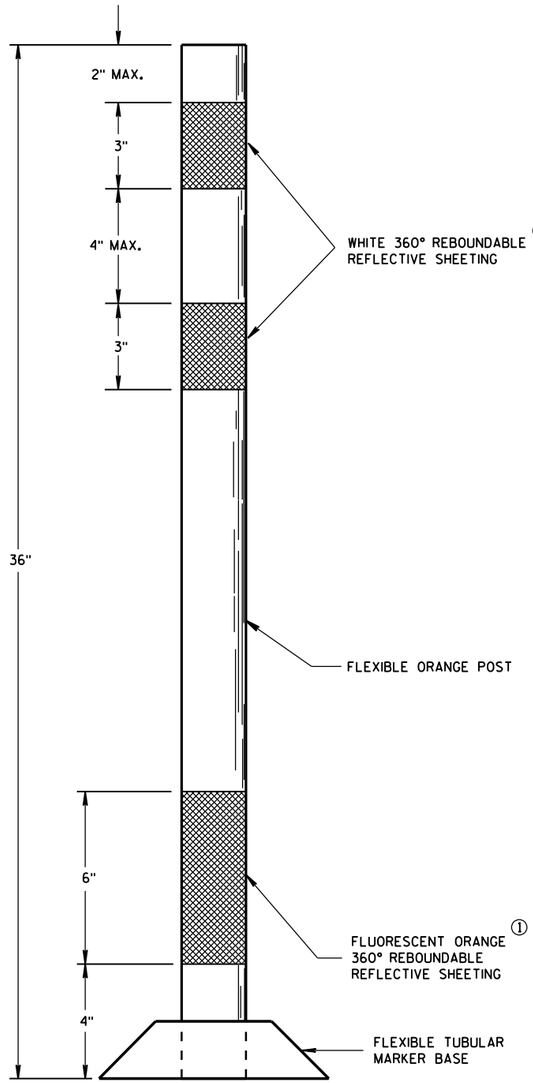
S.D.D. 15 C 11-5

6

S.D.D. 15 C 11-5



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-16-2015
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON
SAFETY ENGINE

6

S.D.D. 15 C 11-6

6

S.D.D. 15 C 11-6

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

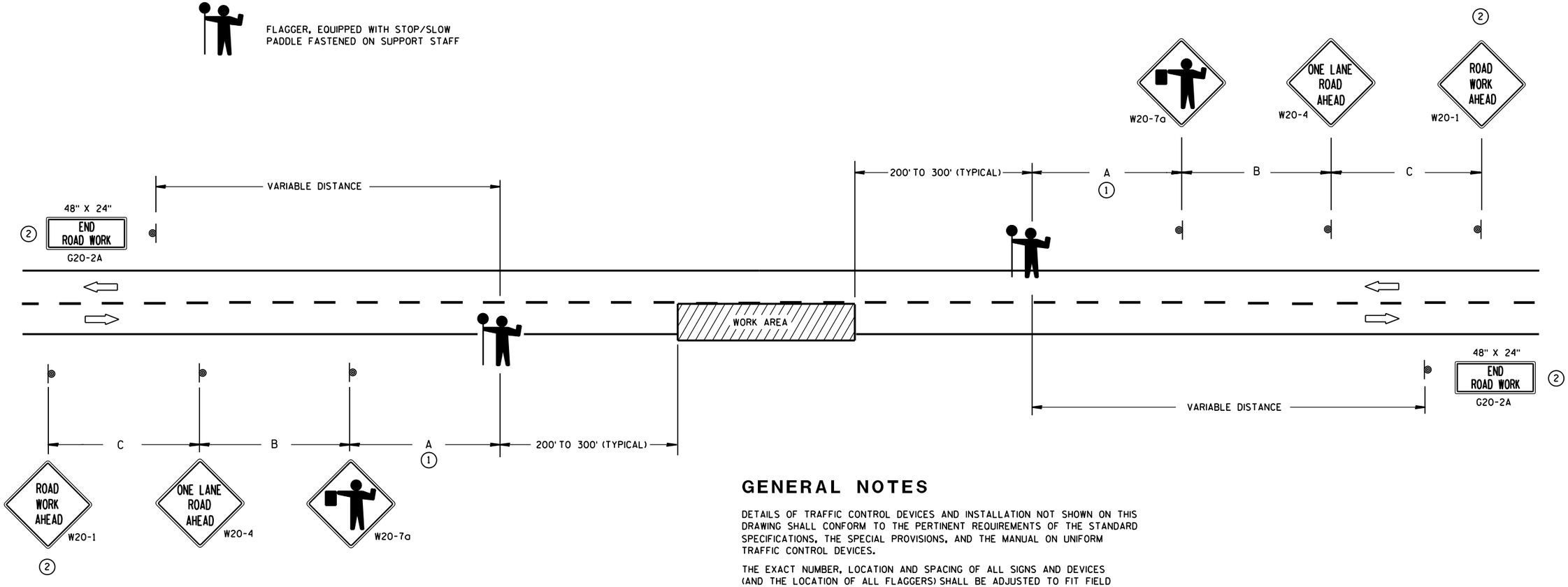
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

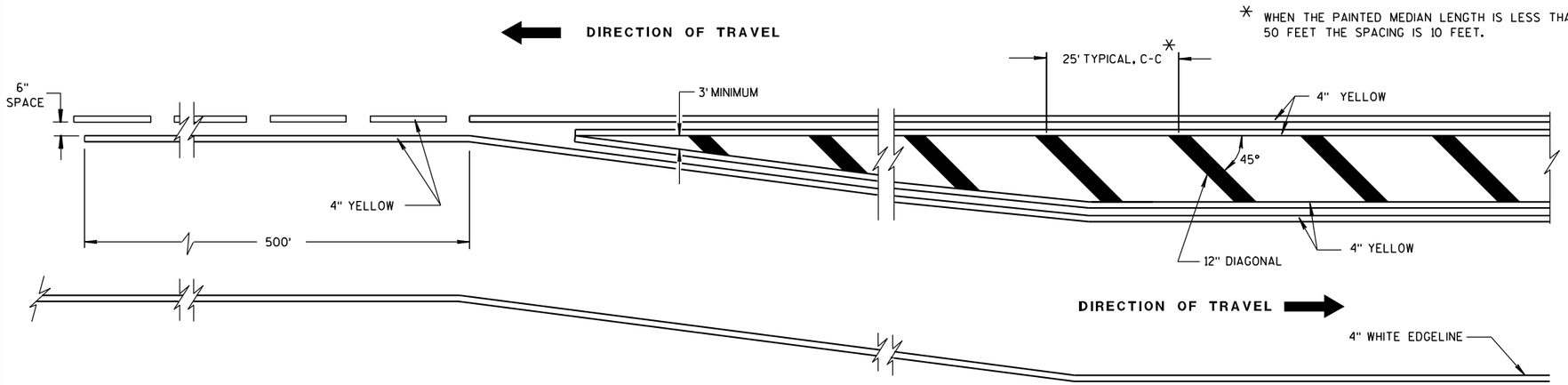
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

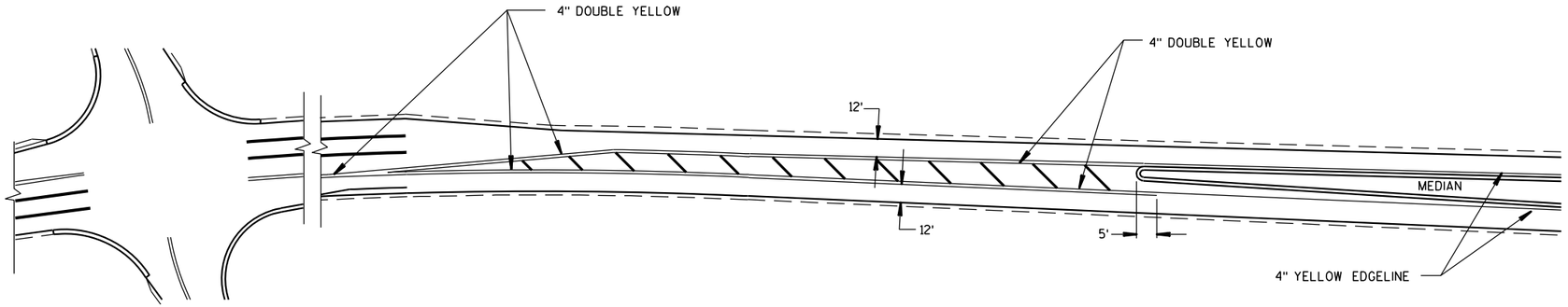
S.D.D. 15 C 12-4



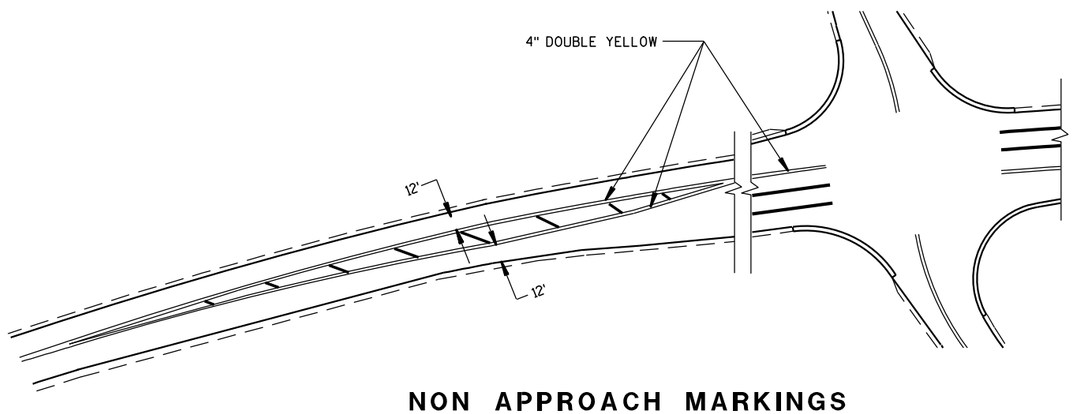
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

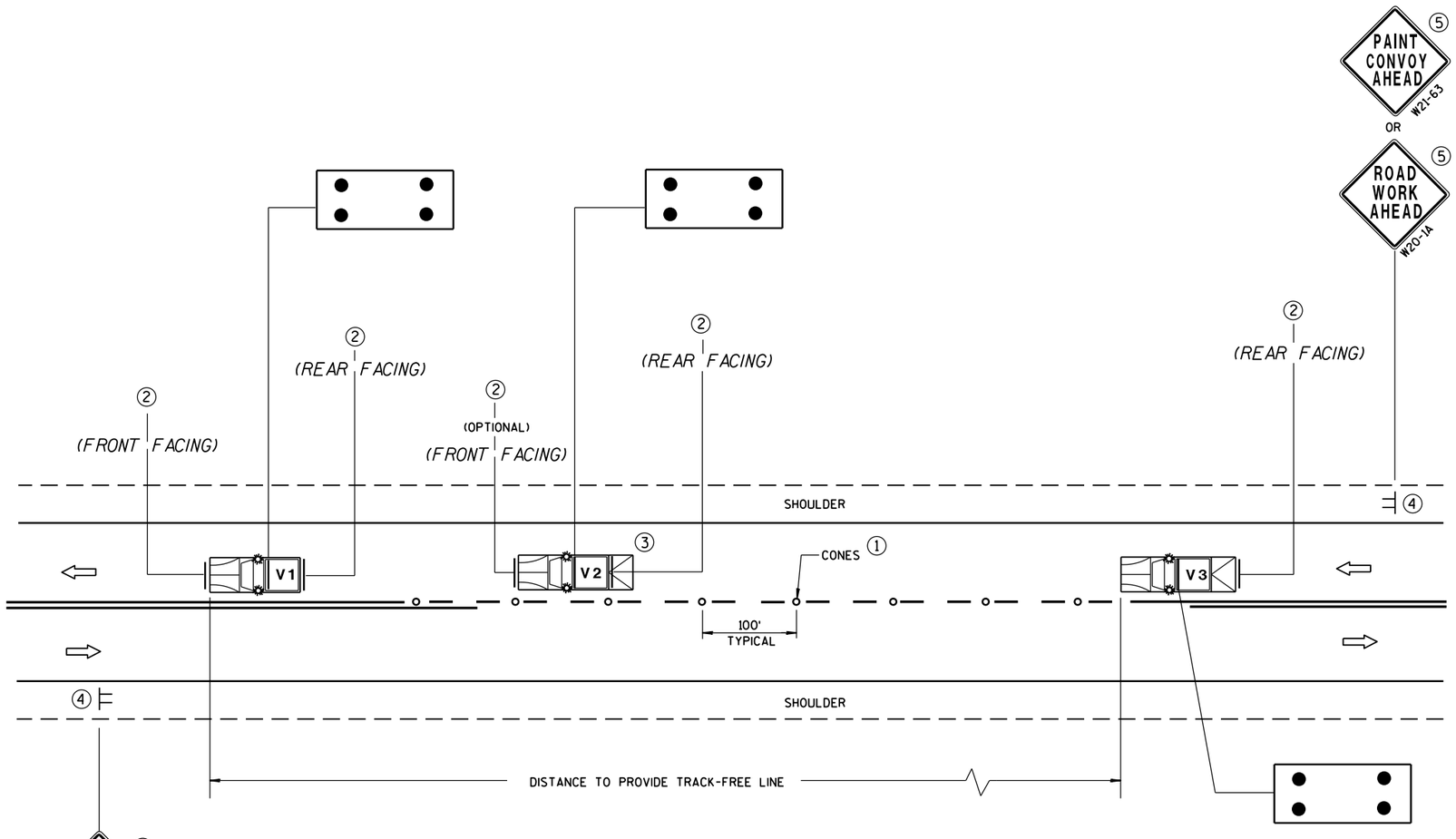
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 455 IGN
FHWA	

6

S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
⊢	SIGN ON TEMPORARY SUPPORT
⇨	DIRECTION OF TRAFFIC
o	CONES
⁘	FLASHING ARROW PANEL (CAUTION)

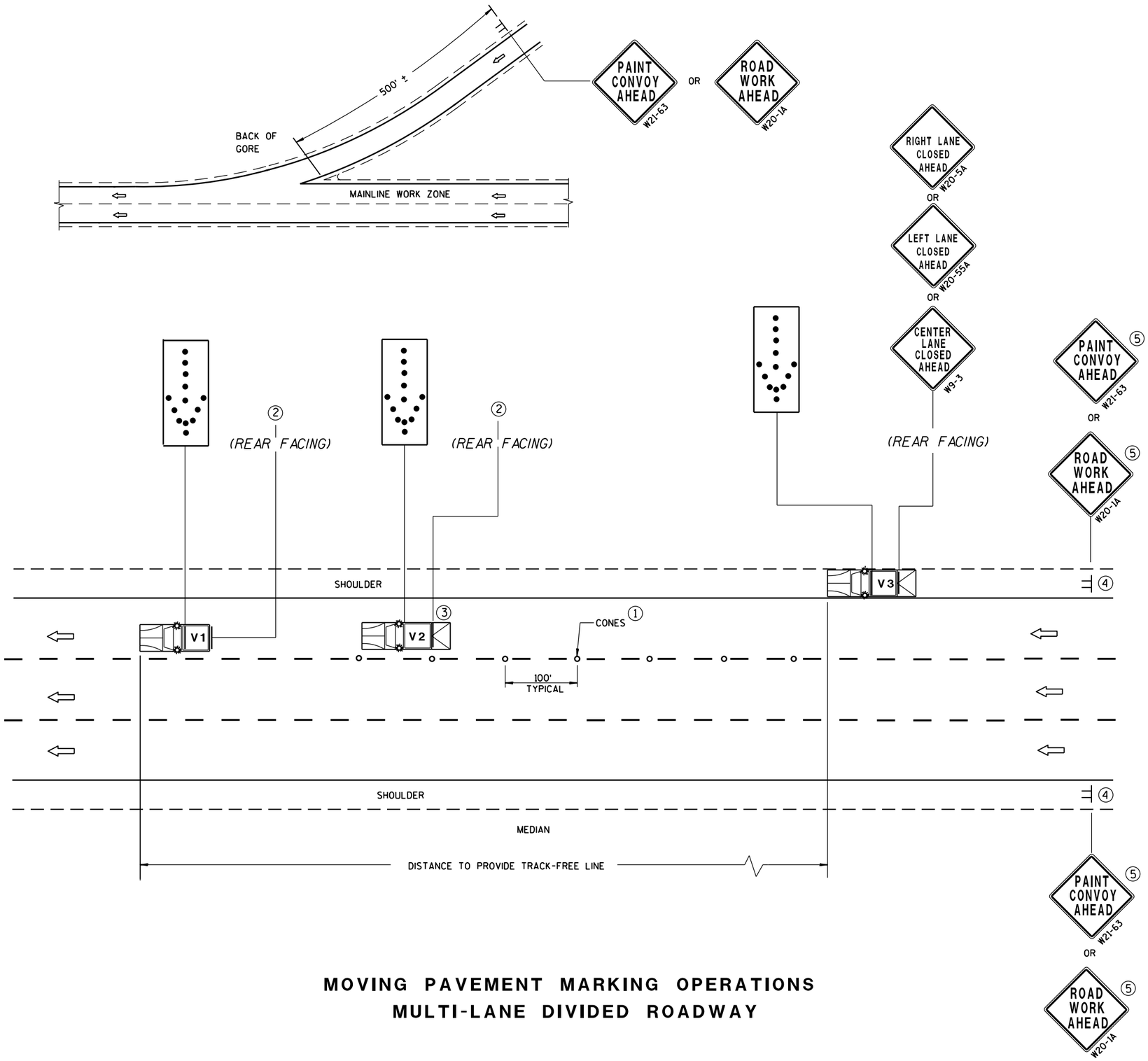
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED DATE: _____ /S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER FHWA

6

S.D.D. 15 C 19-3a

6

S.D.D. 15 C 19-3a



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGINI
FHWA

6

S.D.D. 15 C 19-3c

6

S.D.D. 15 C 19-3c

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) OPTIONAL - USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

SYMBOLS

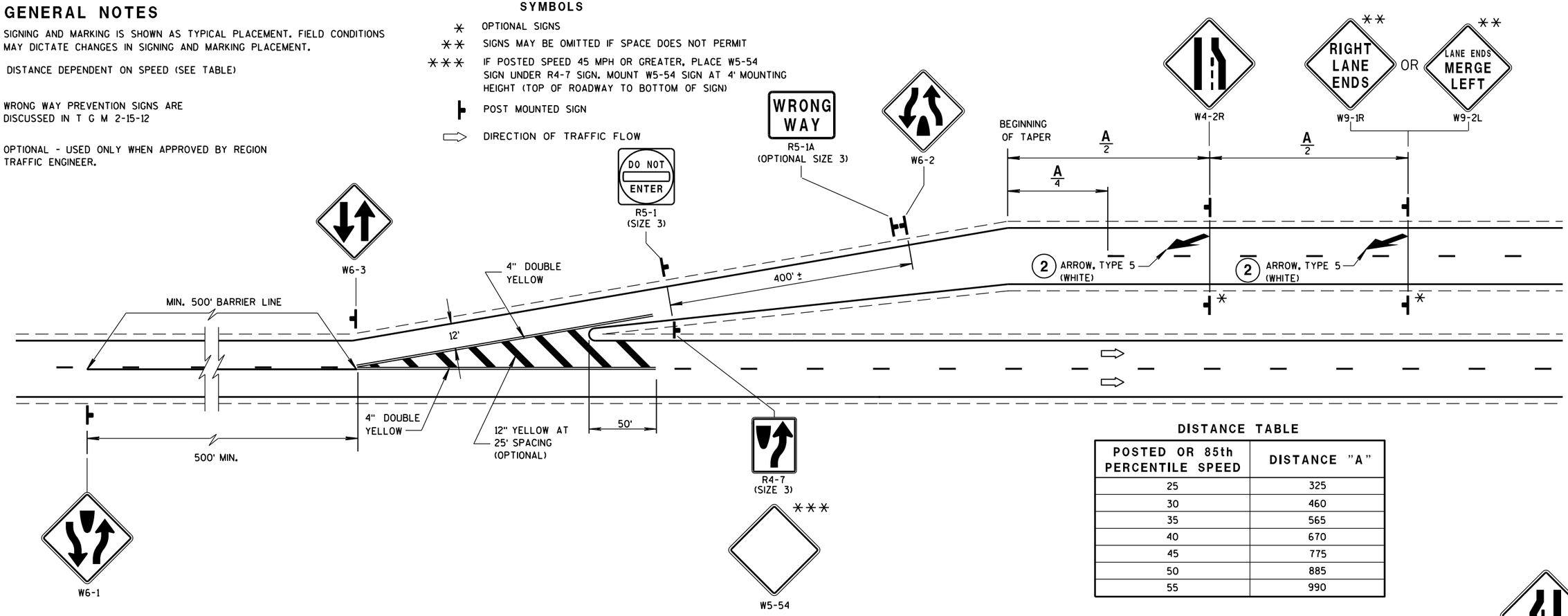
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

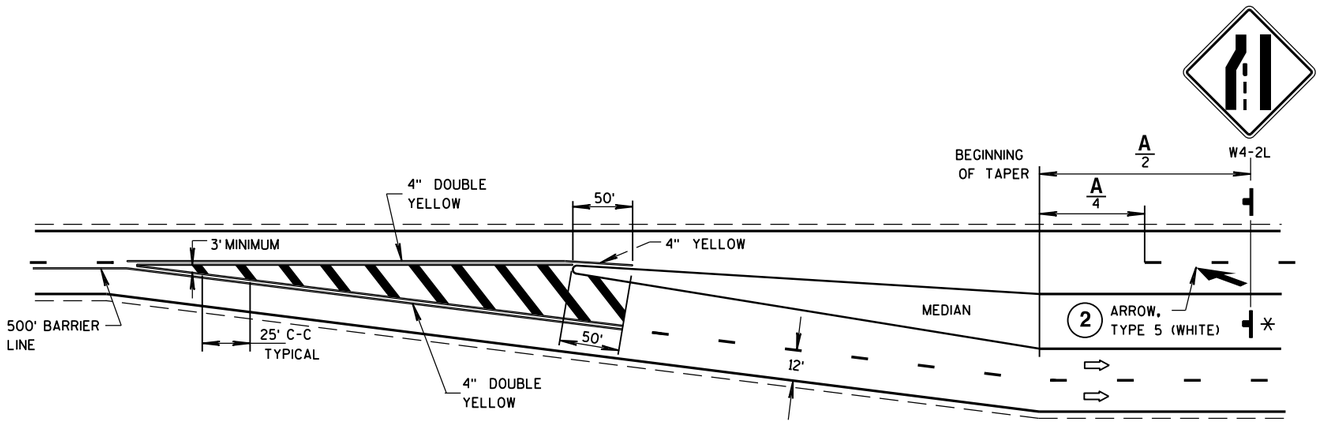
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

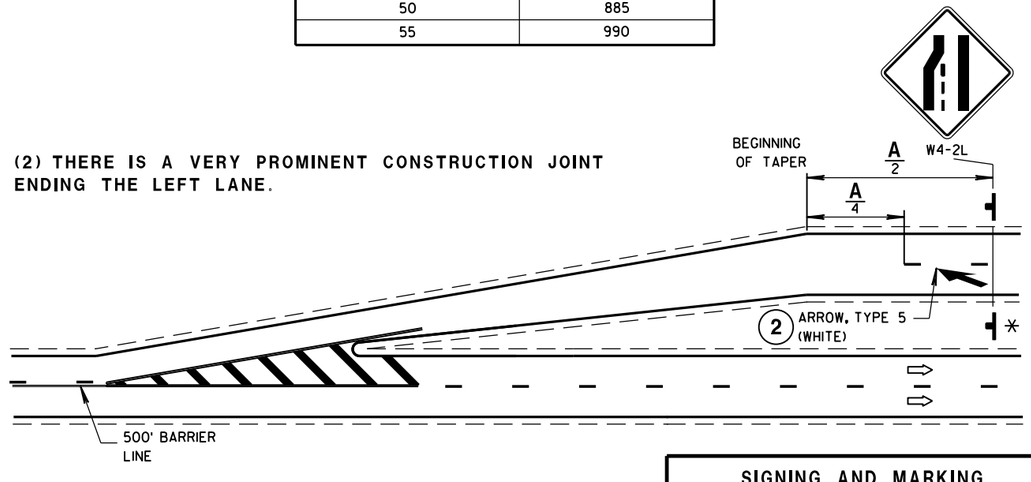
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

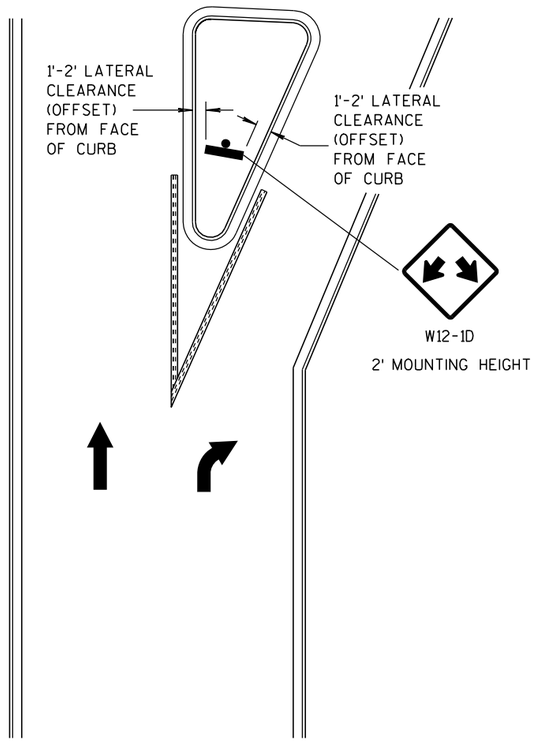
6

S.D.D. 15 C 21-6

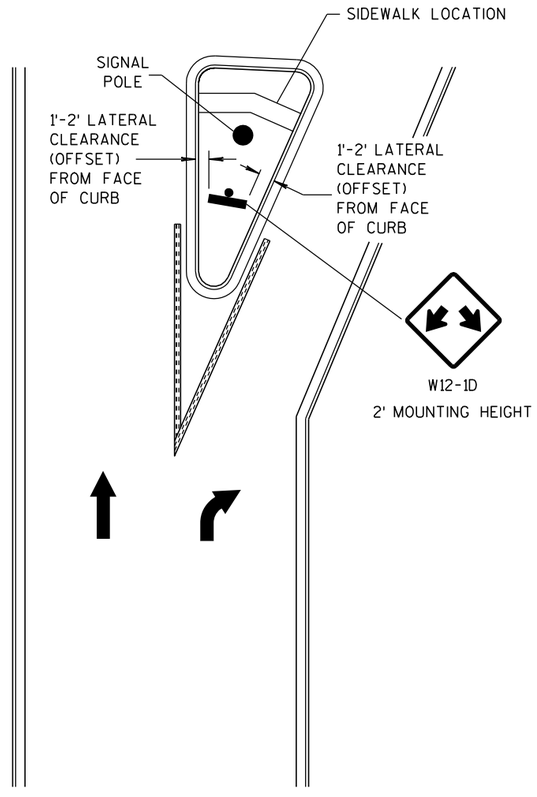
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

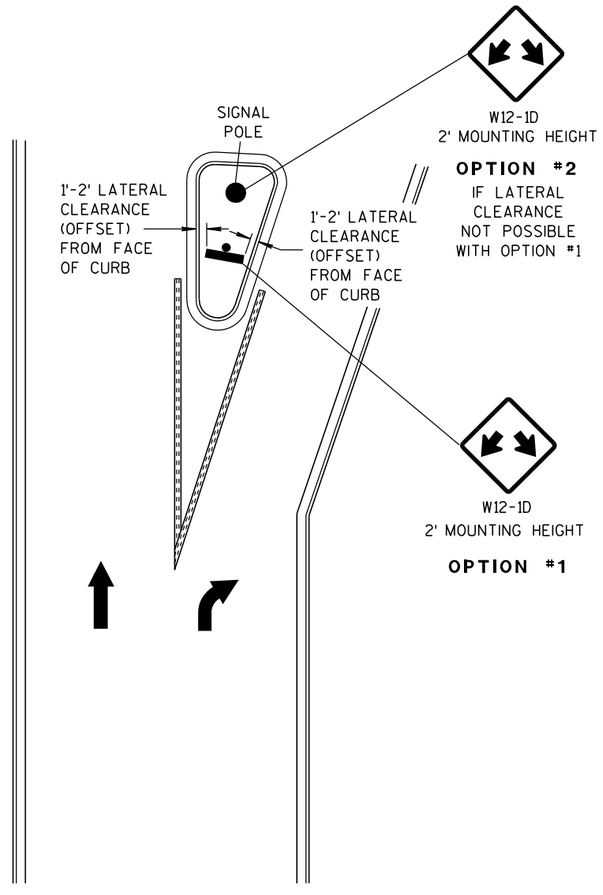
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

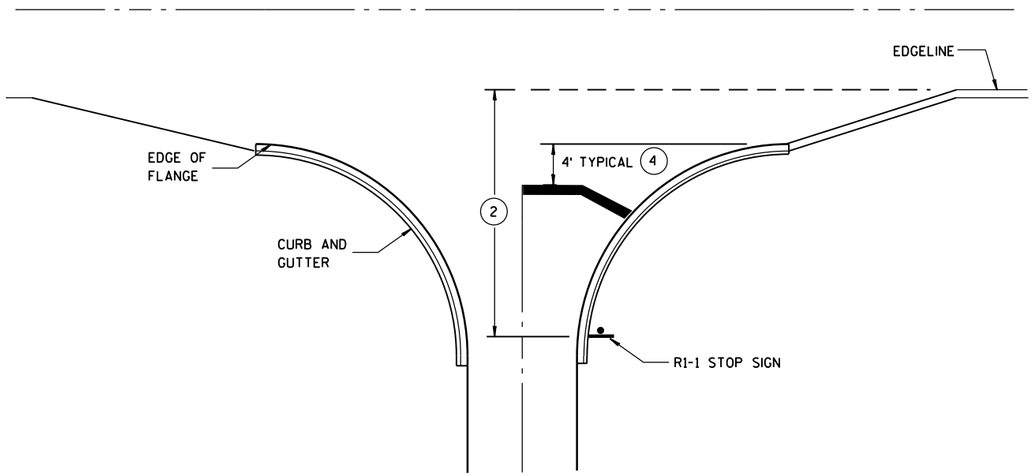
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	459 IGN

6

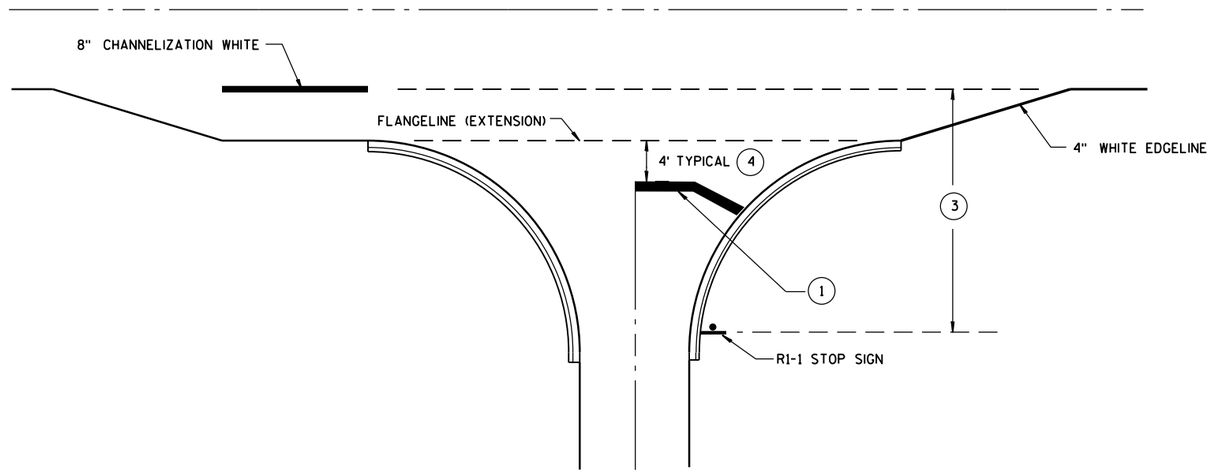
S.D.D. 15 C 27-1

6

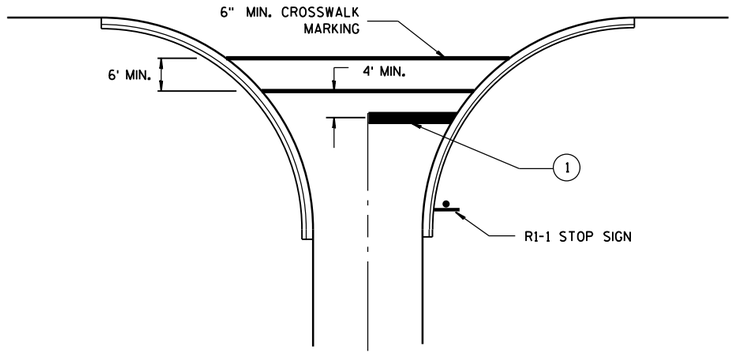
S.D.D. 15 C 27-1



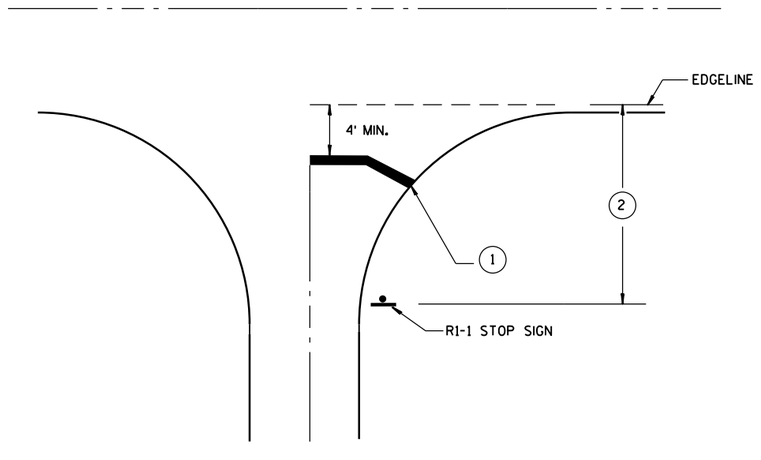
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

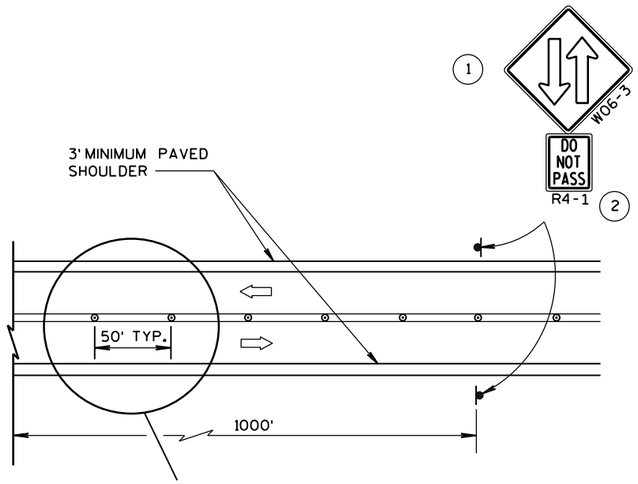
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

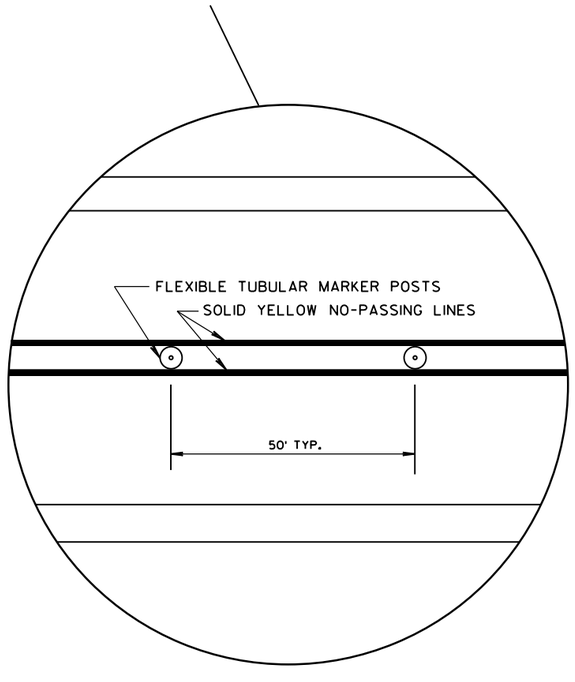
FHWA

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S.D.D. 15 C 33-1



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

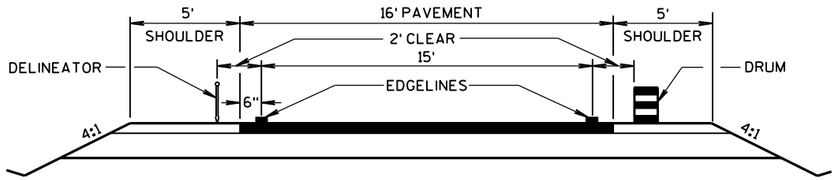
TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEE SIGN
FHWA

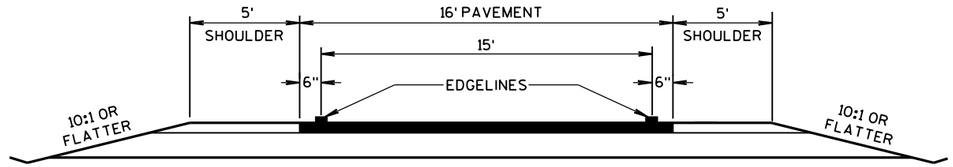
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S.D.D. 15 D 6-3



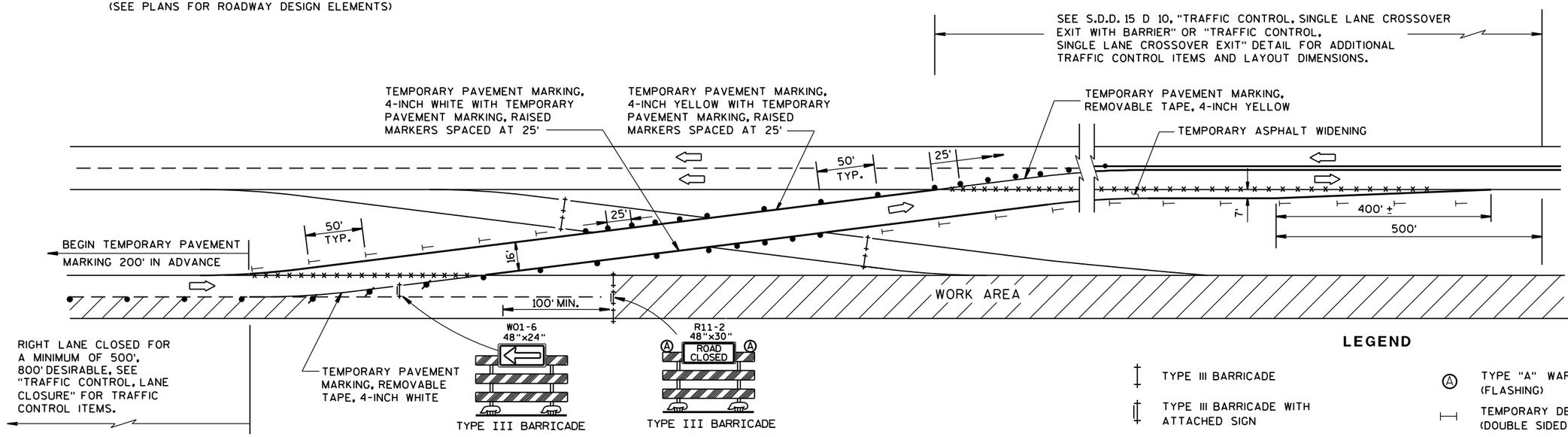
TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TYPE "A" WARNING LIGHT (FLASHING)
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- REMOVING PAVEMENT MARKINGS
- DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

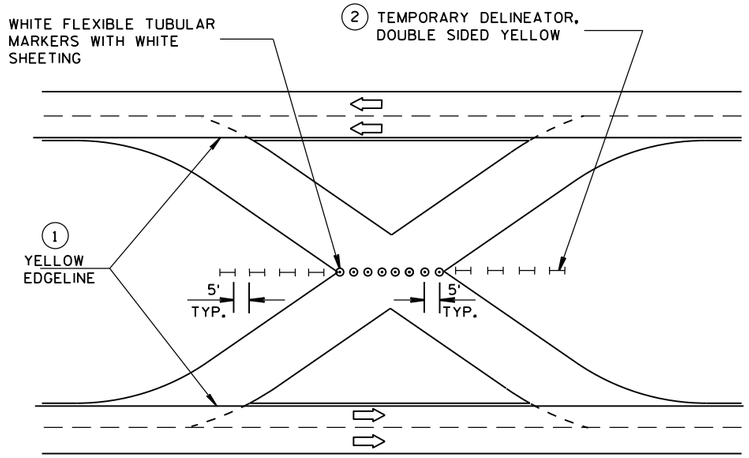
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-16-2015 DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 11-6

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S.D.D. 15 D 11-6

LEGEND

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

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

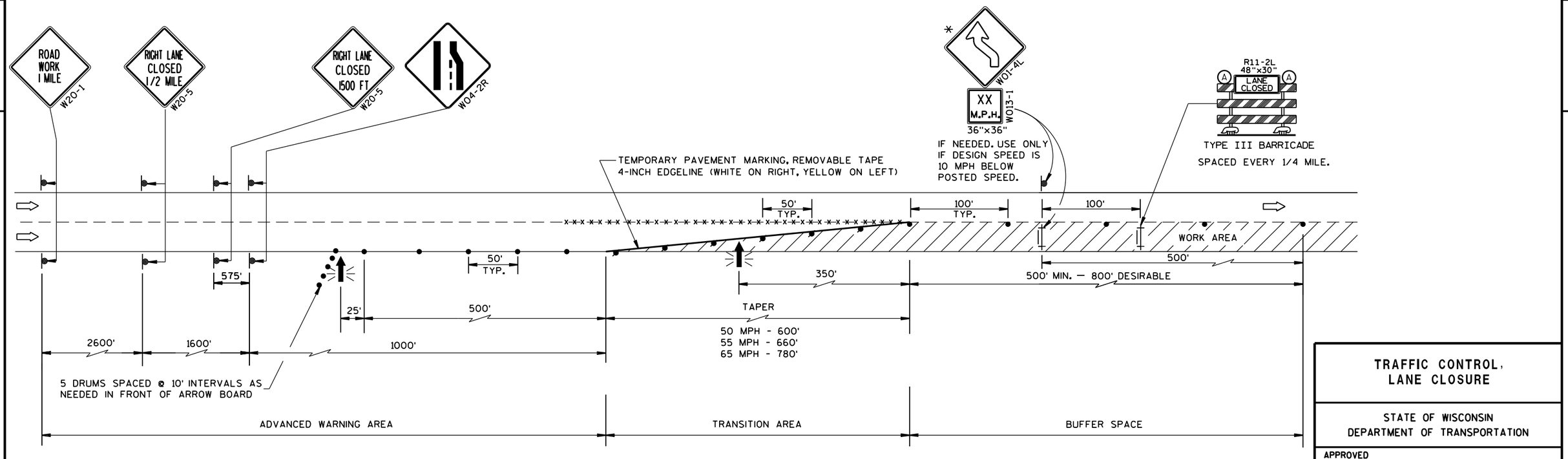
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

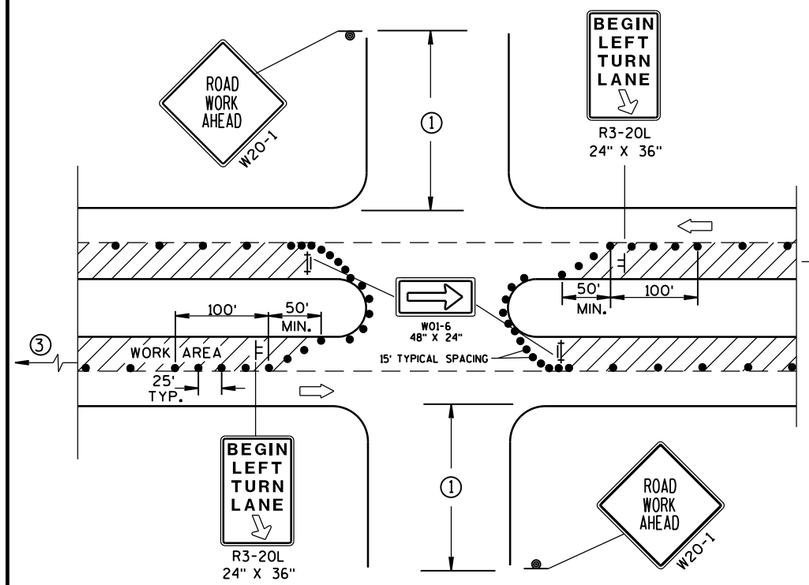
* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

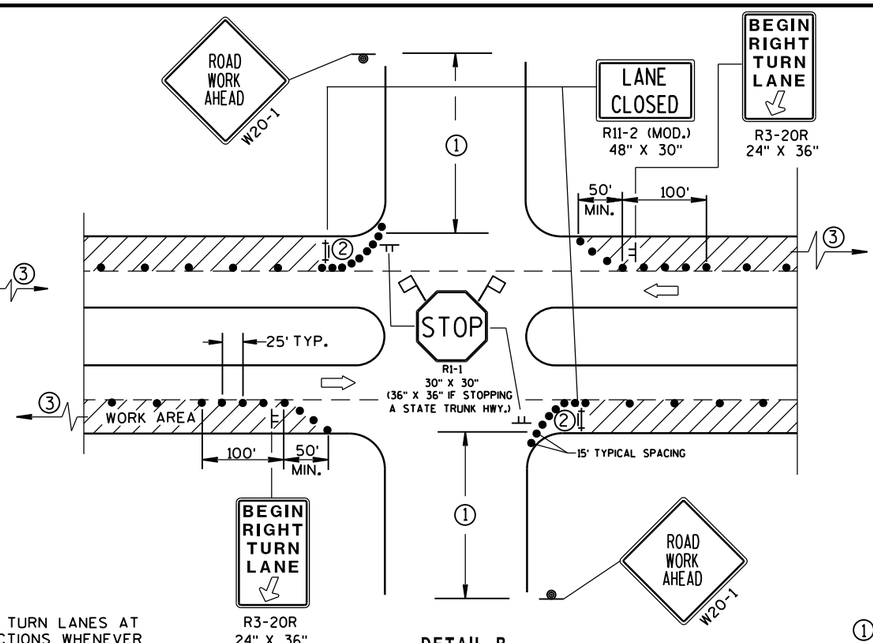
APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

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

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

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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

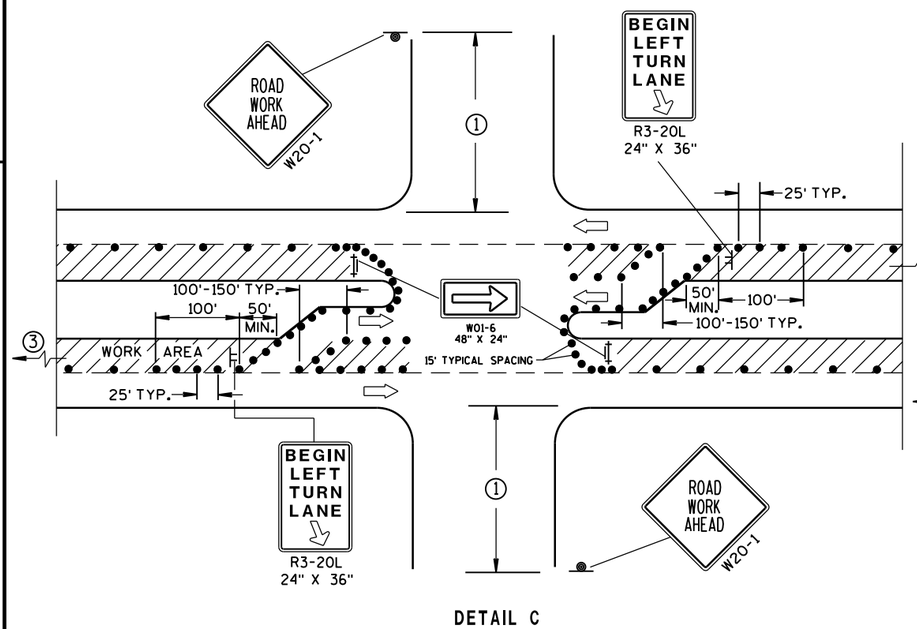
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

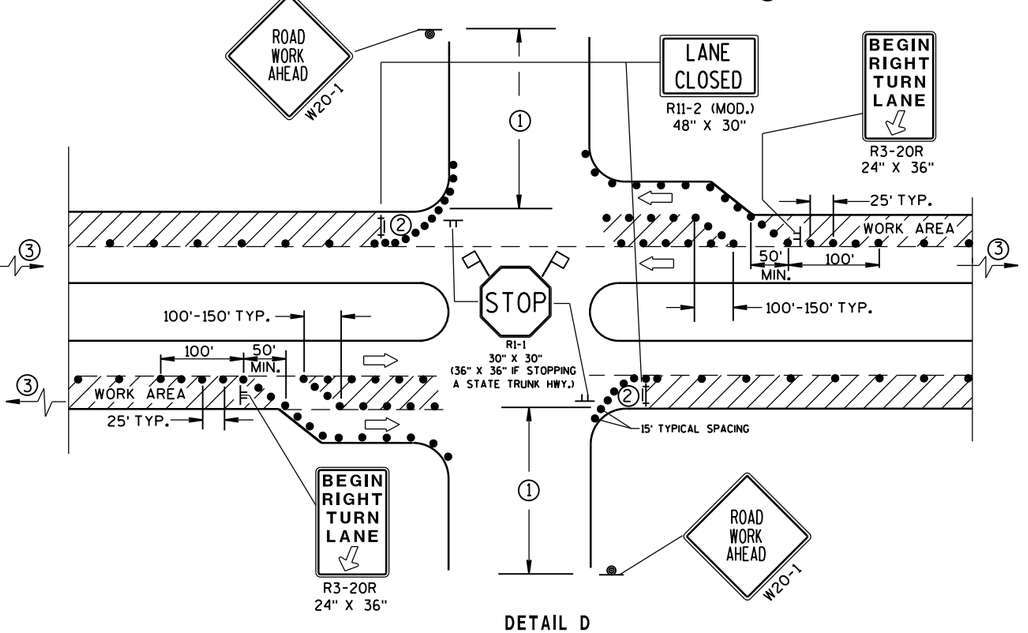
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 21-3

GENERAL NOTES

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

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

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

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

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

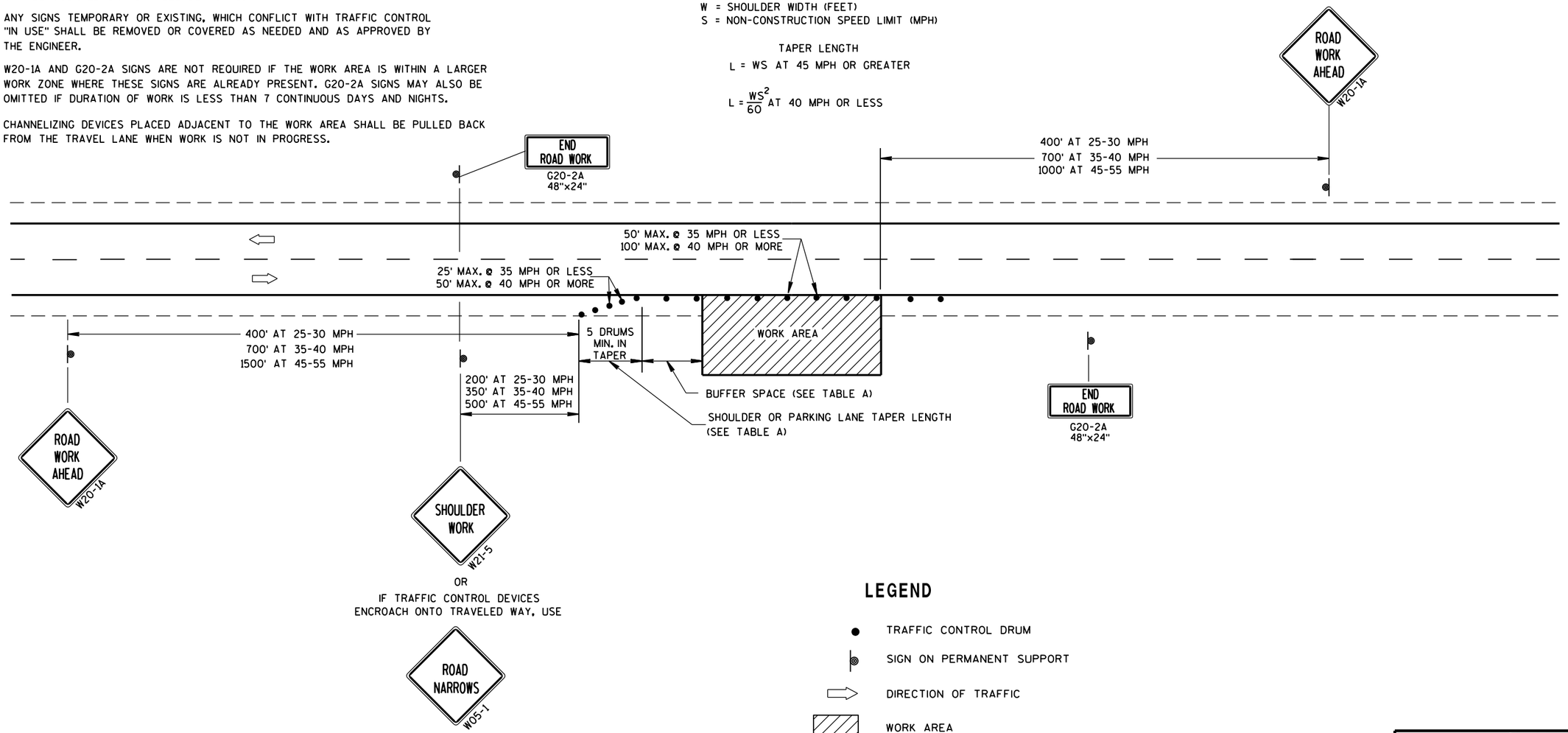
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGII[illegible] FIC

FHWA

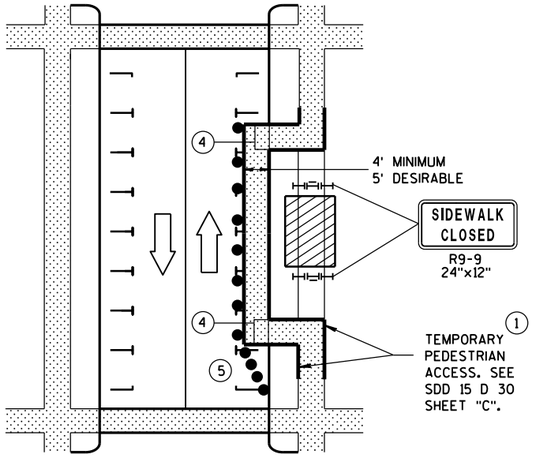
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S.D.D. 15 D 28-3

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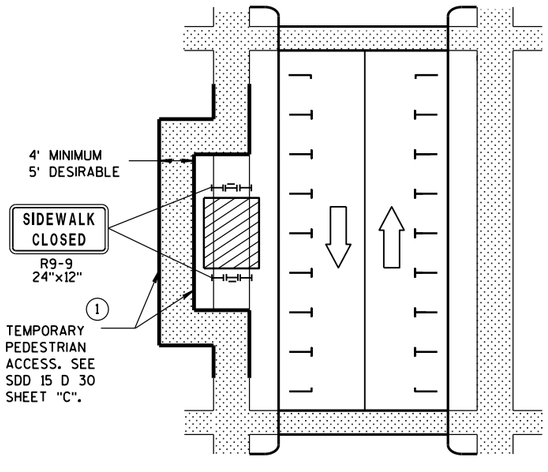
S.D.D. 15 D 28-3

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

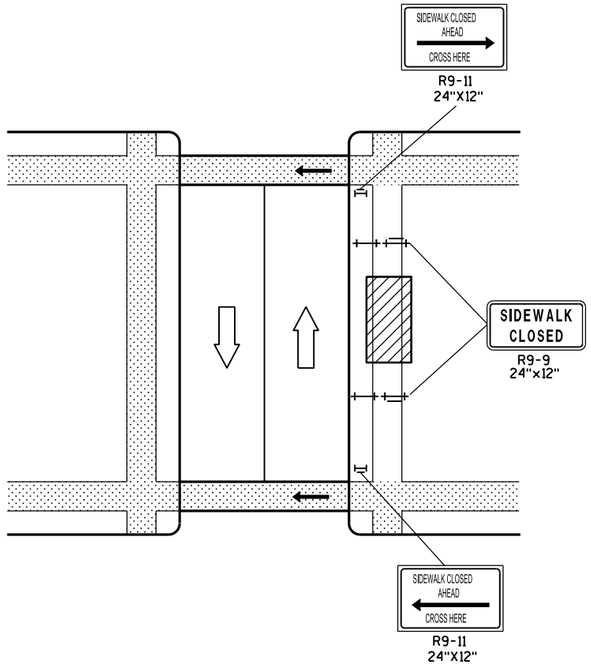


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

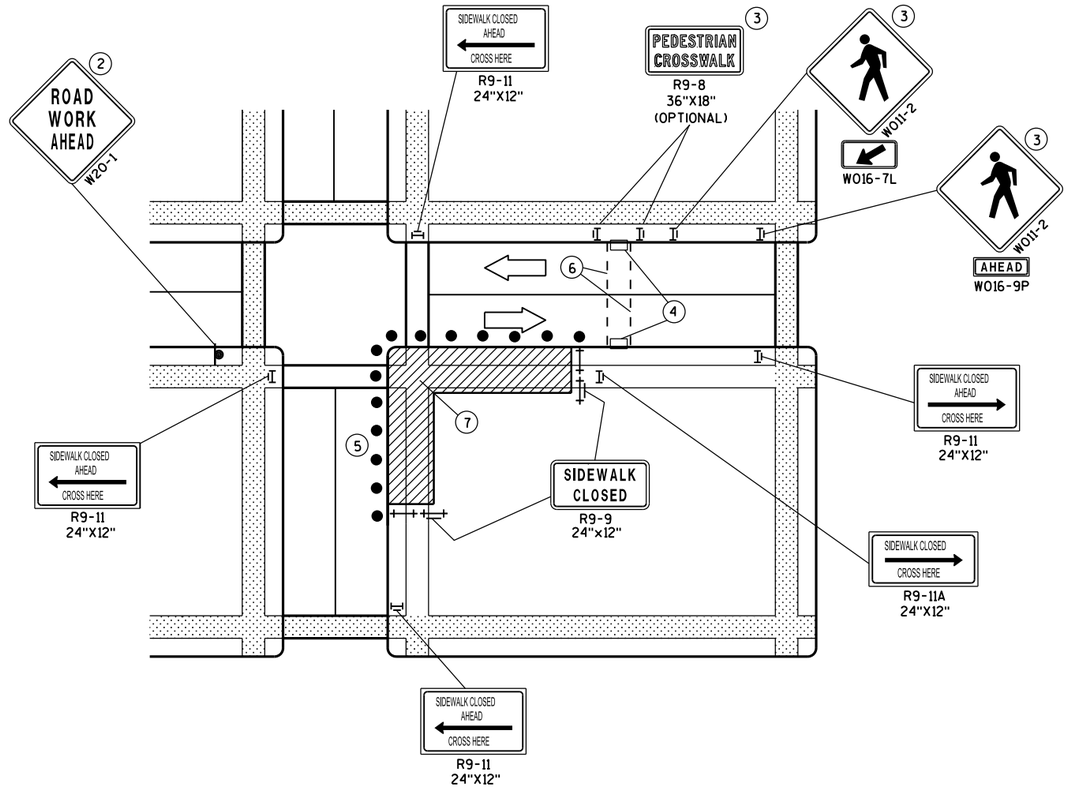
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

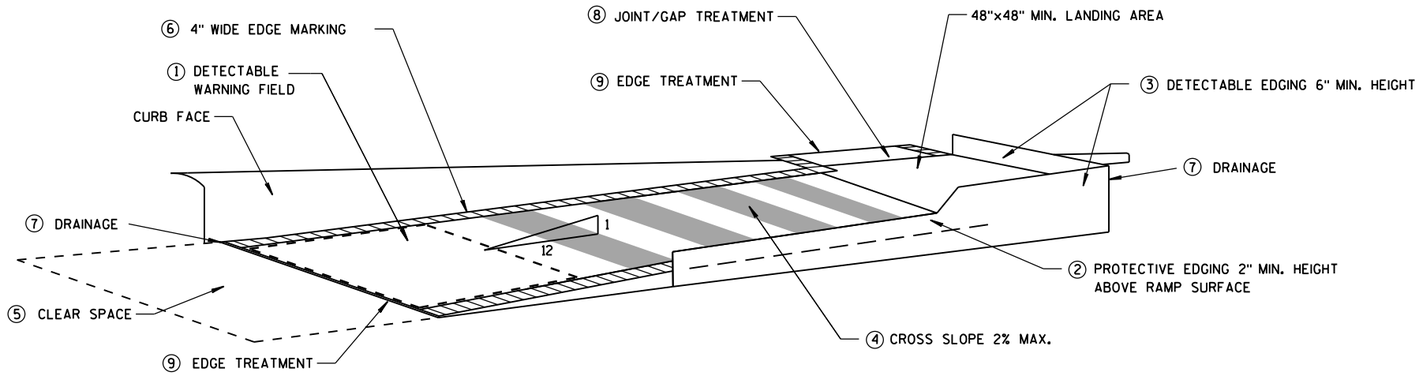
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-2a

6

S.D.D. 15 D 30-2a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

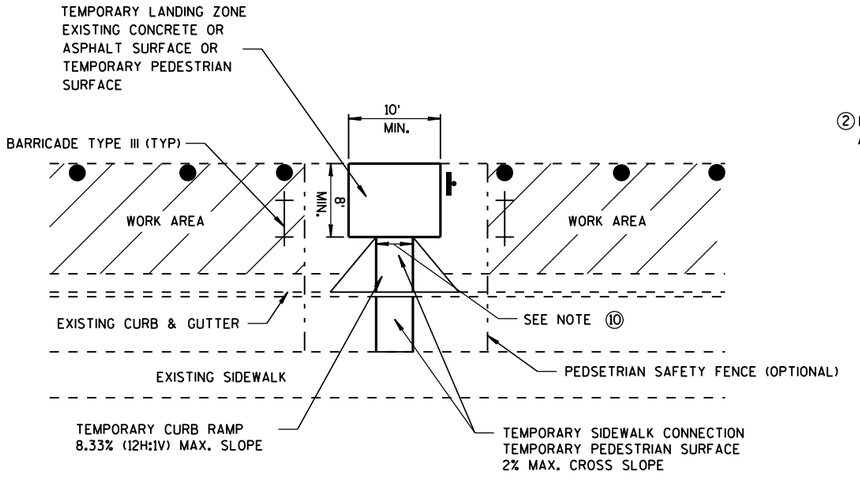
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

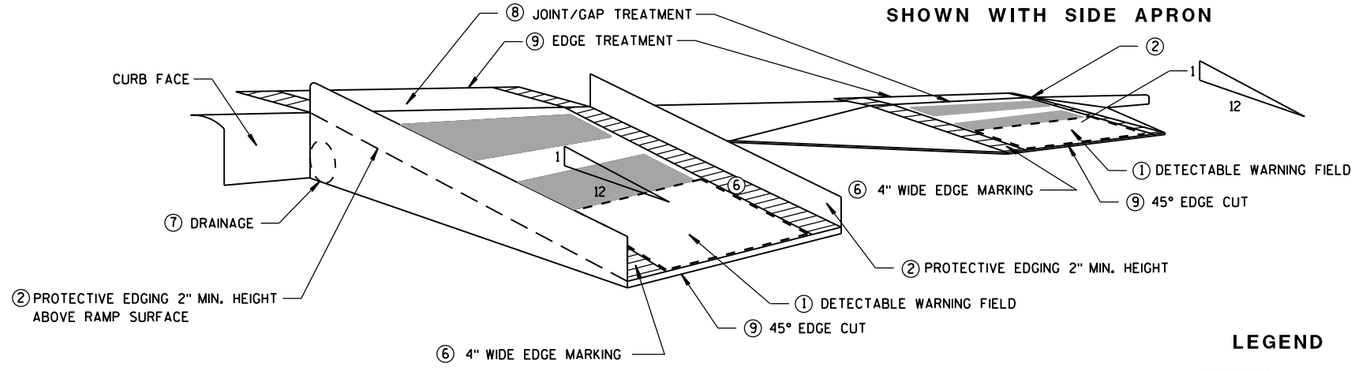
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

SHOWN WITH SIDE APRON

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2015 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — SIGN

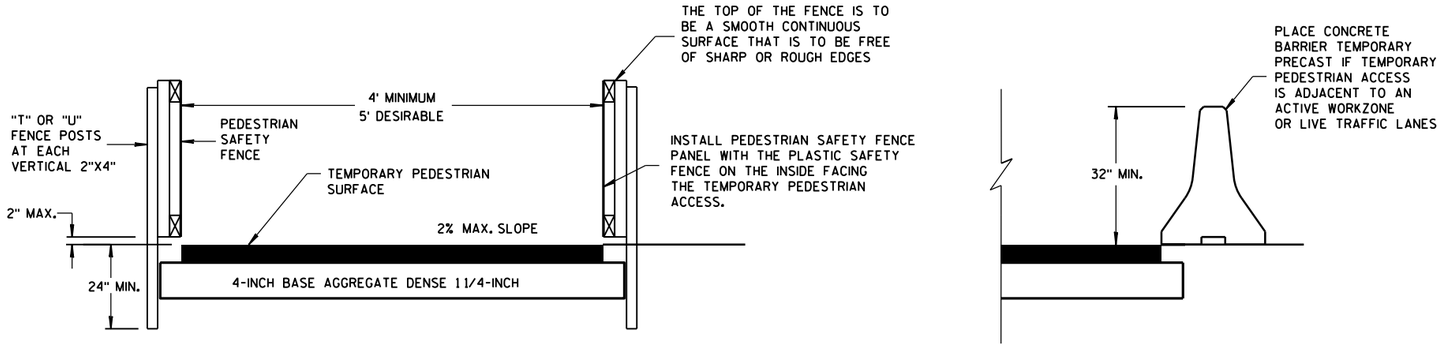
FHWA

6

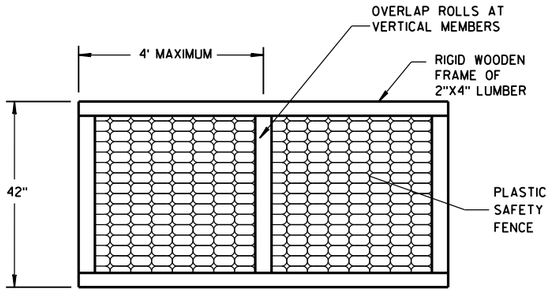
S.D.D. 15 D 30-2b

6

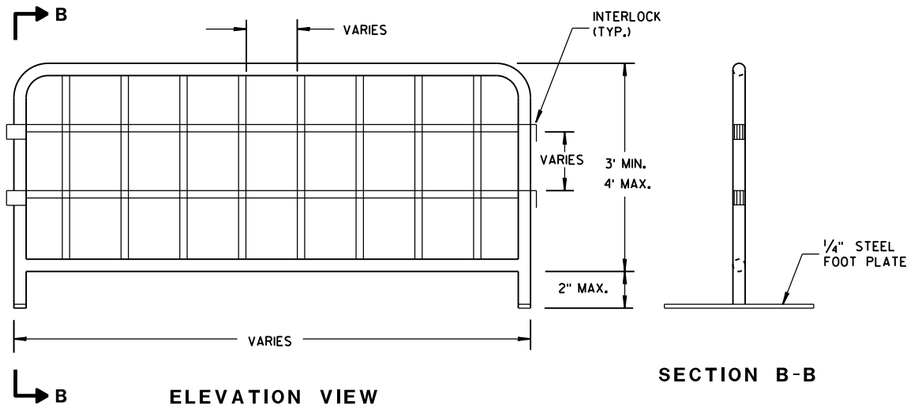
S.D.D. 15 D 30-2b



TEMPORARY PEDESTRIAN ACCESS



PEDESTRIAN SAFETY FENCE



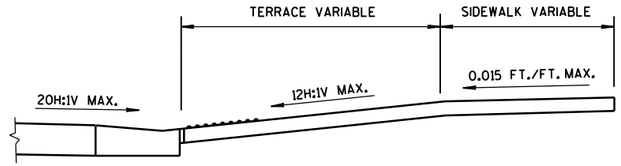
ELEVATION VIEW

SECTION B-B

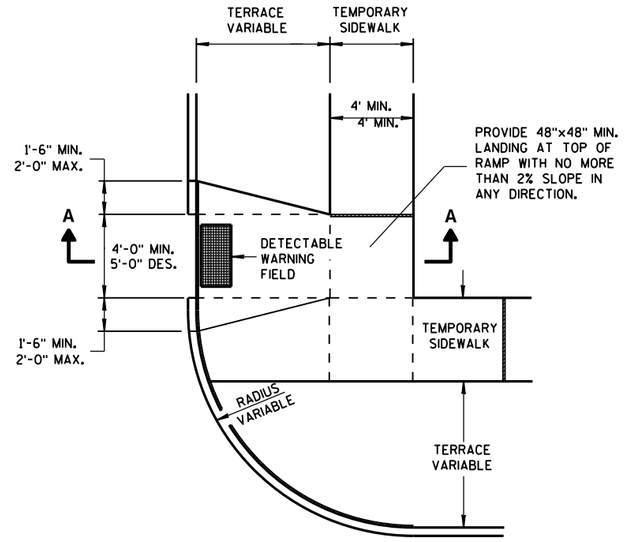
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)

GENERAL NOTES

(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



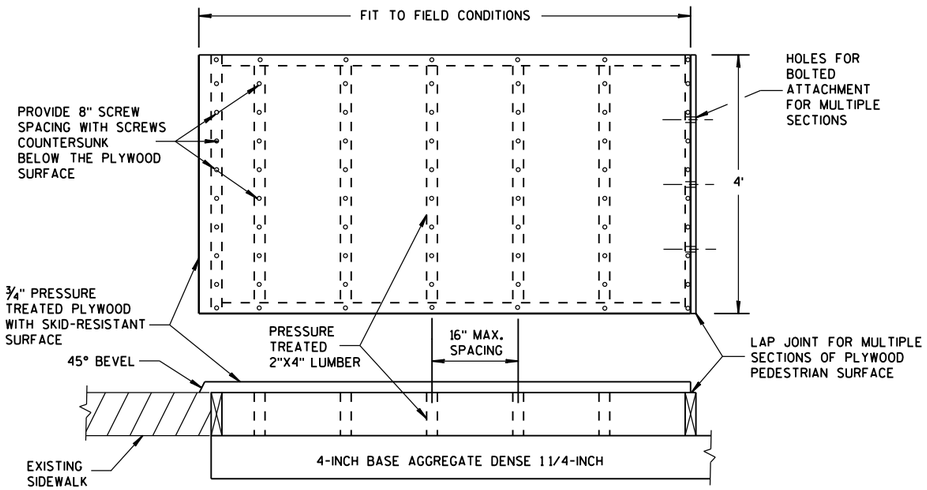
SECTION A-A



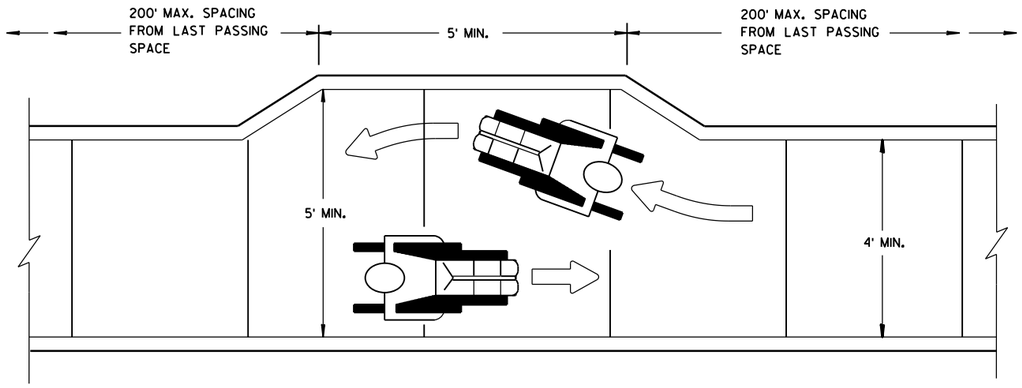
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
SIGN
FHWA

6

S.D.D. 15 D 30-2c

6

S.D.D. 15 D 30-2c

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC
- 4" X 6" WOOD POST
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

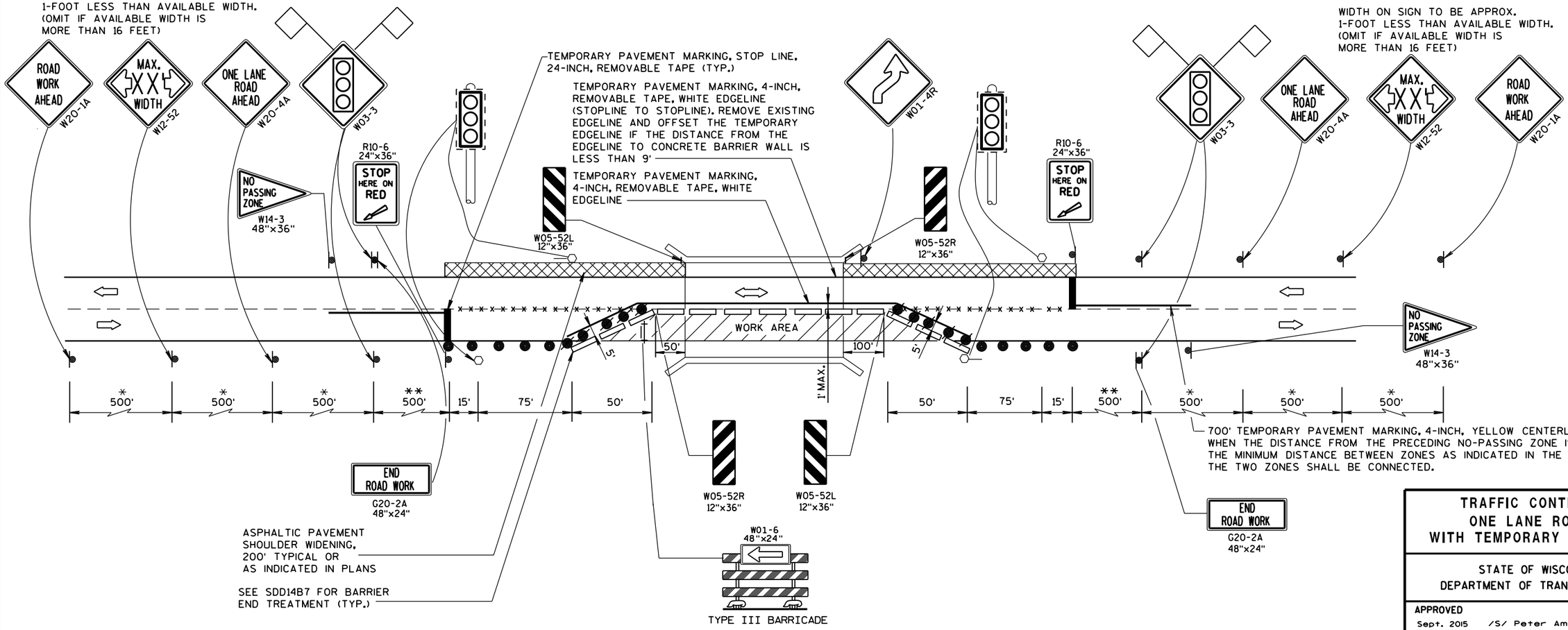
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

** USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.

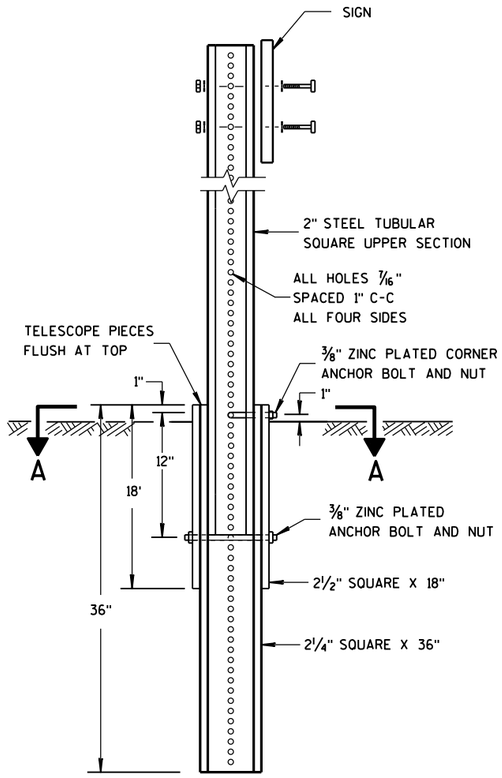


TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

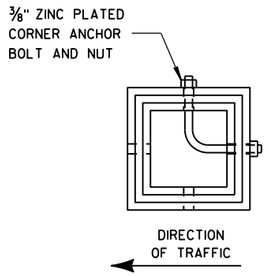
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

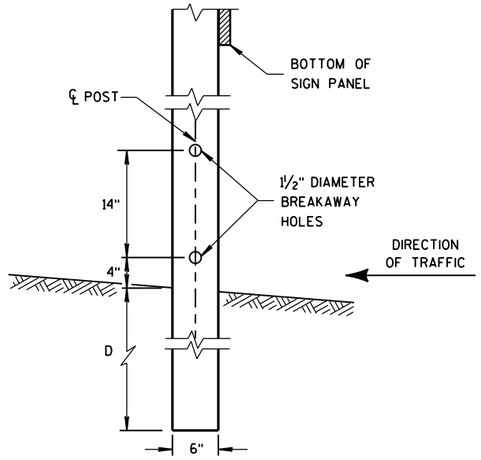
S.D.D. 15 D 33-4



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



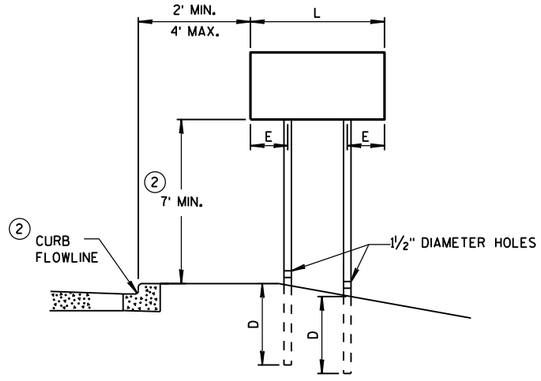
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

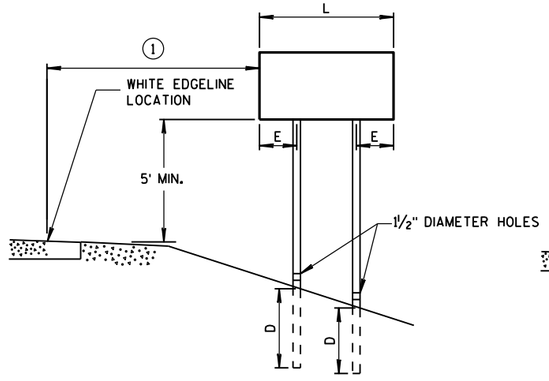
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

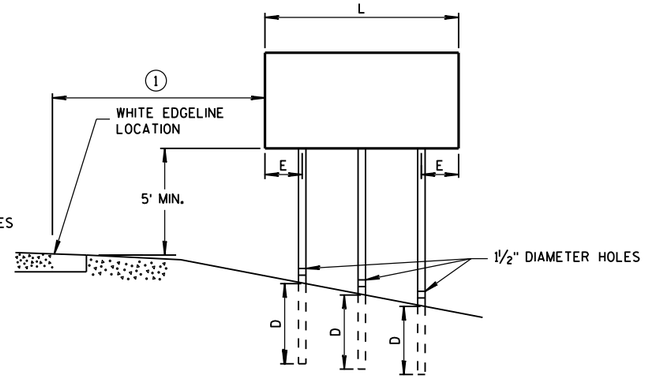
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

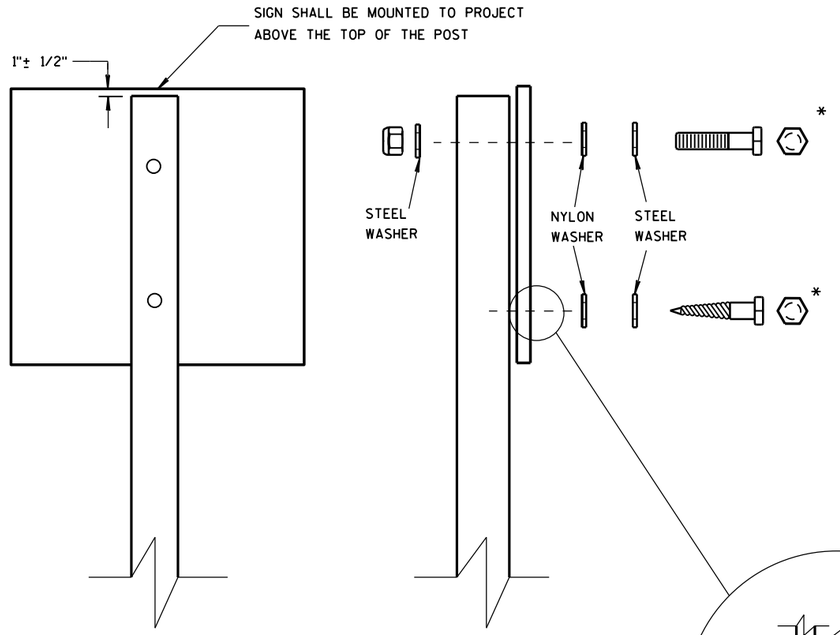
SEE NOTE (3)

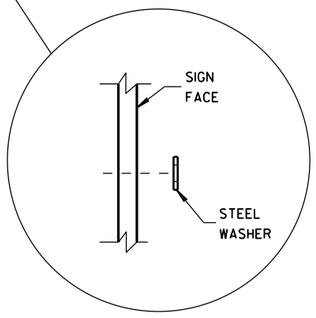
TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6

S.D.D. 15 D 38-1a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

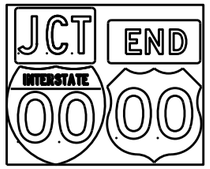
APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

SIGN

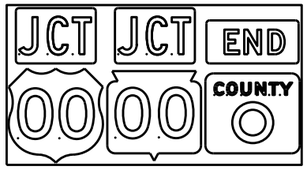
TYPICAL ASSEMBLIES



J1-1



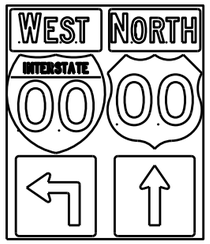
J1-2



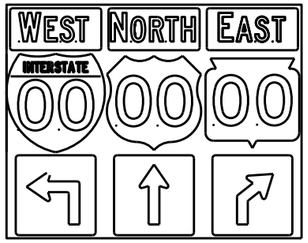
J1-3



J2-1



J2-2

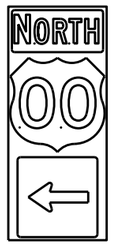


J2-3

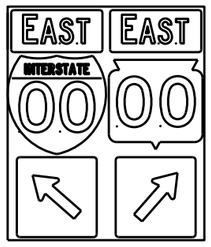


JV

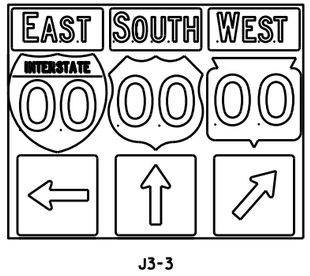
(Typical Vertical J-Assembly
See Note 10 and 11)



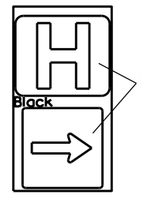
J3-1



J3-2



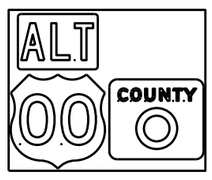
J3-3



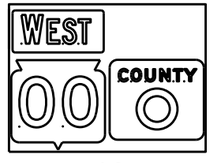
JH-1



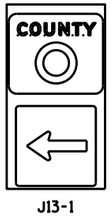
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

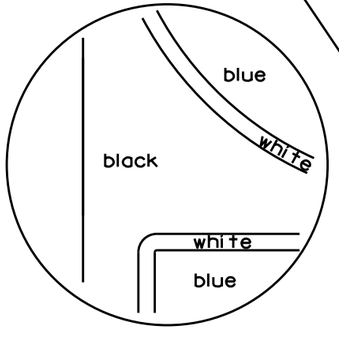


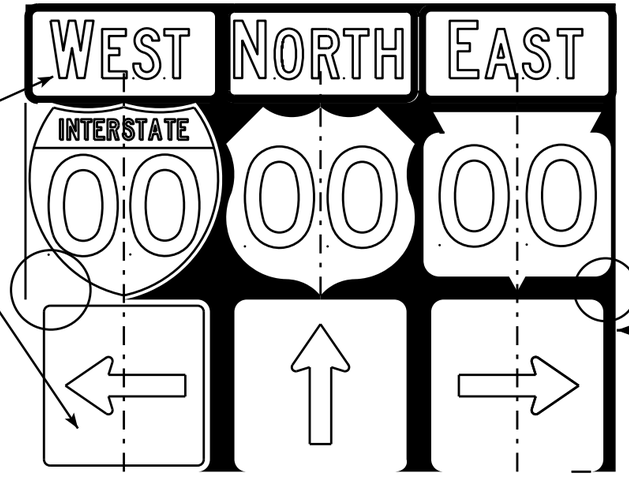
J23-1

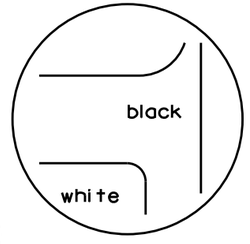


J22-1

blue background
with interstate







black background

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

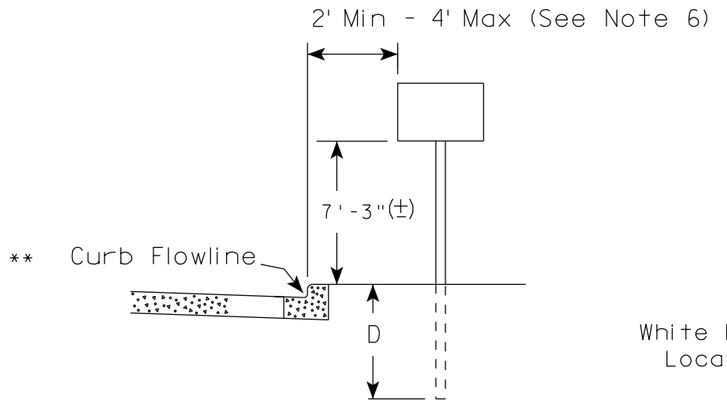
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PROJECT NO: | SHEET NO: E

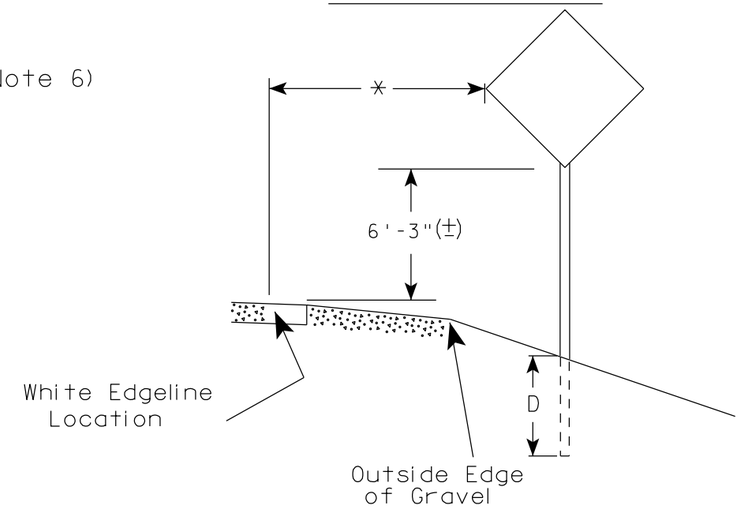
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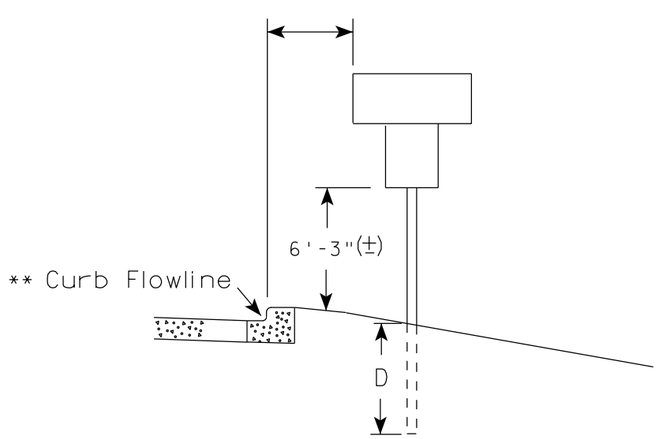
WISDOT/CADDS SHEET 42

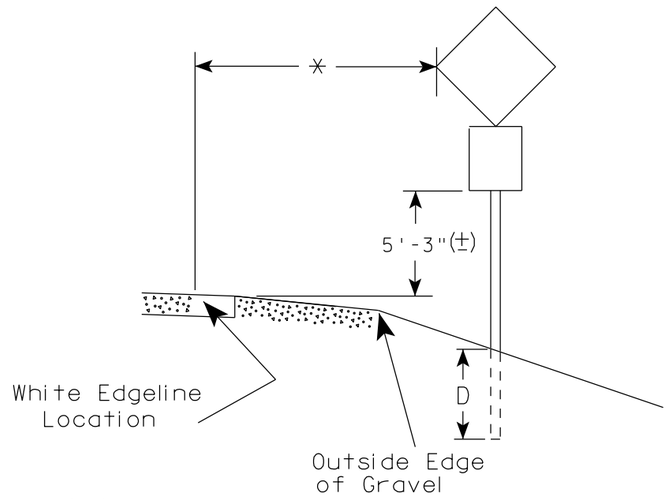
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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

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

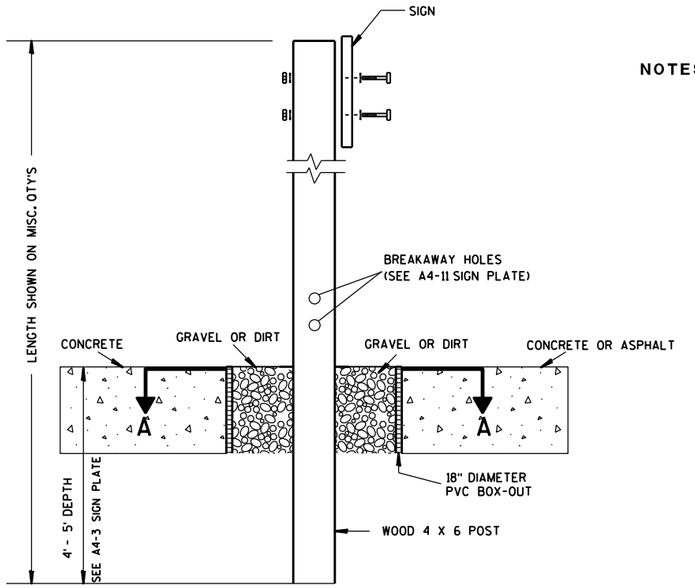
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

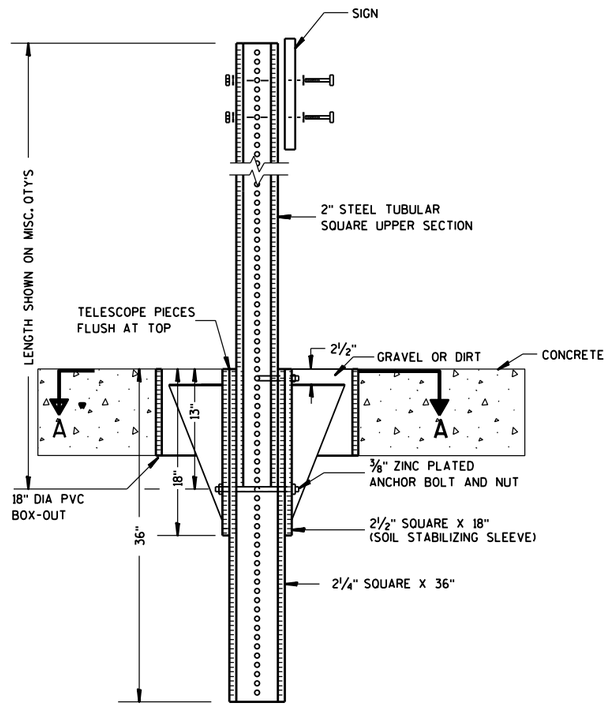
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

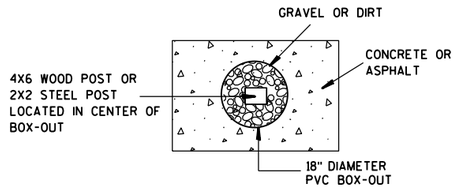
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

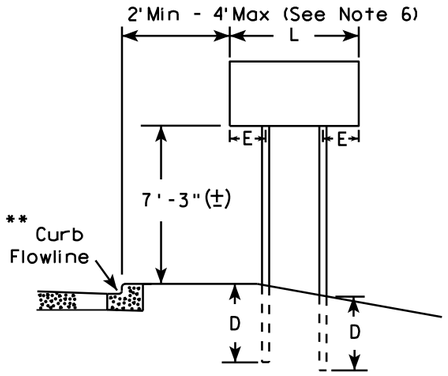
APPROVED Matthew R Rauch
for State Traffic Engineer

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

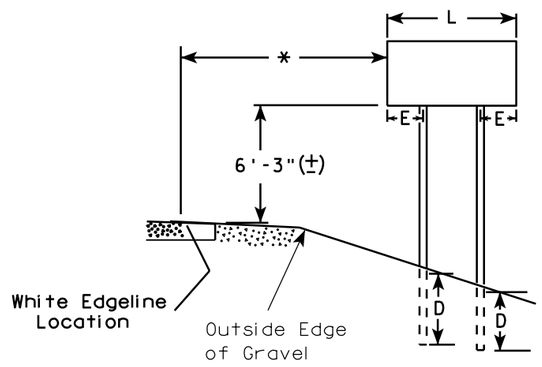
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

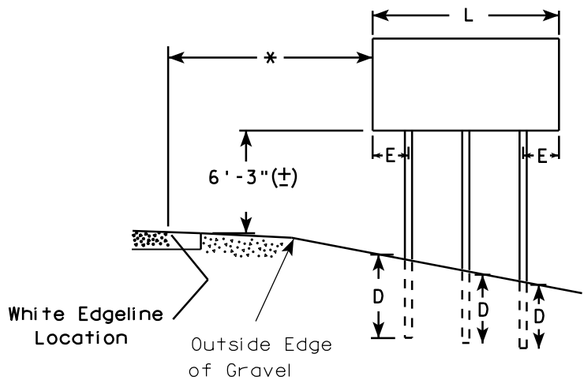
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

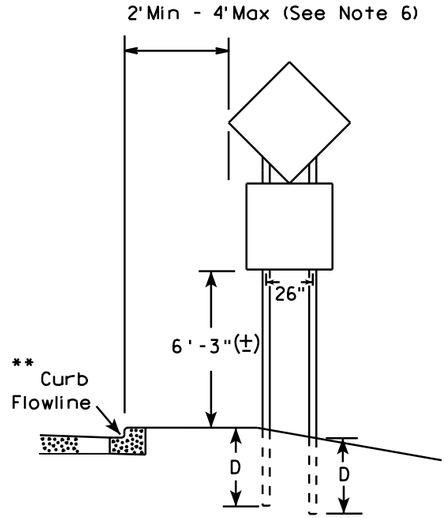
URBAN AREA



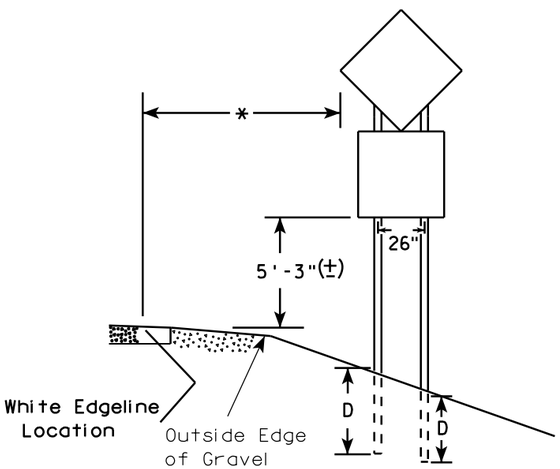
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

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

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

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

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

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

***

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

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

POST EMBEDMENT DEPTH

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

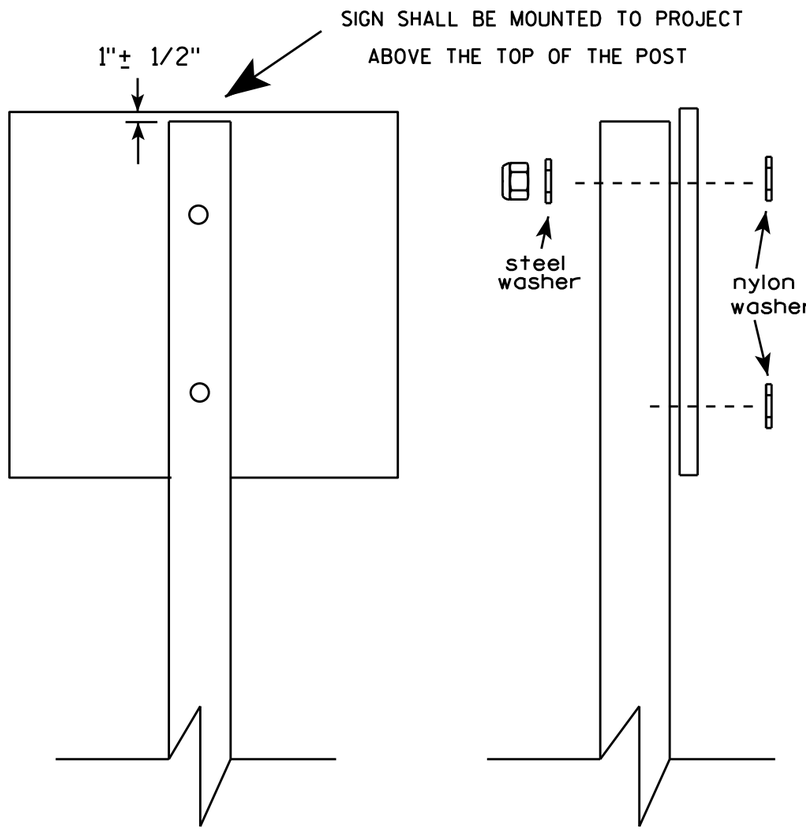
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

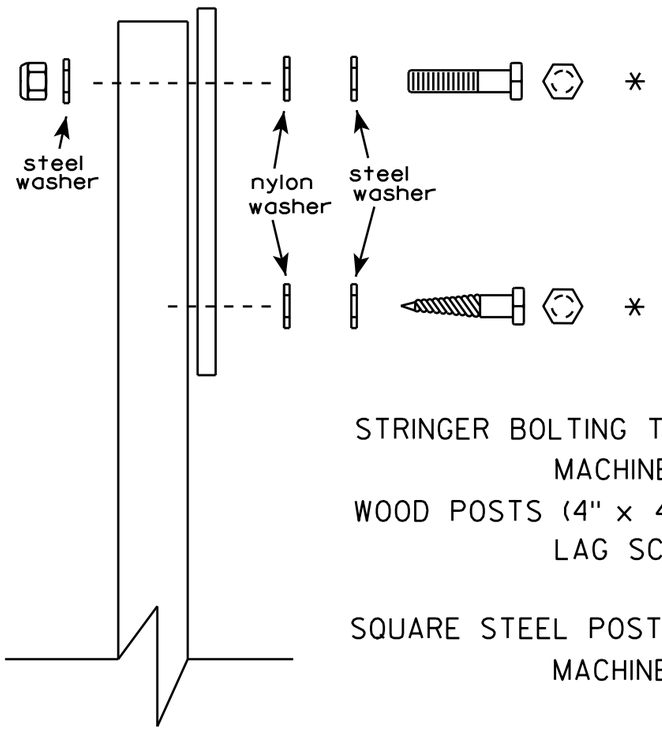
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 475 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* 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

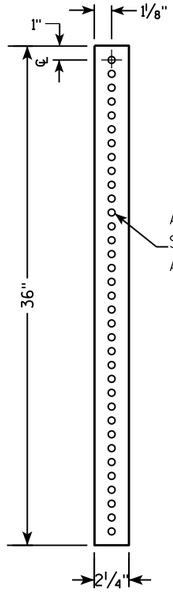
DATE 4/27/16 PLATE NO. A4-8.8

PROJECT NO: | SHEET NO: E

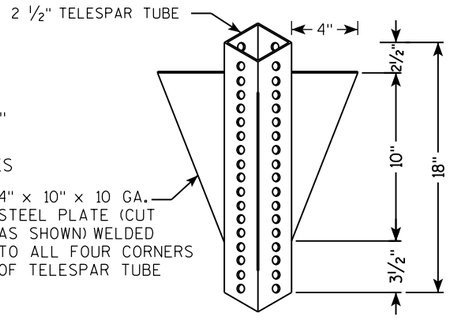
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 27-APR-2016 09:07 PLOT BY : mscj9h
WISDOT/CADDS SHEET 42

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

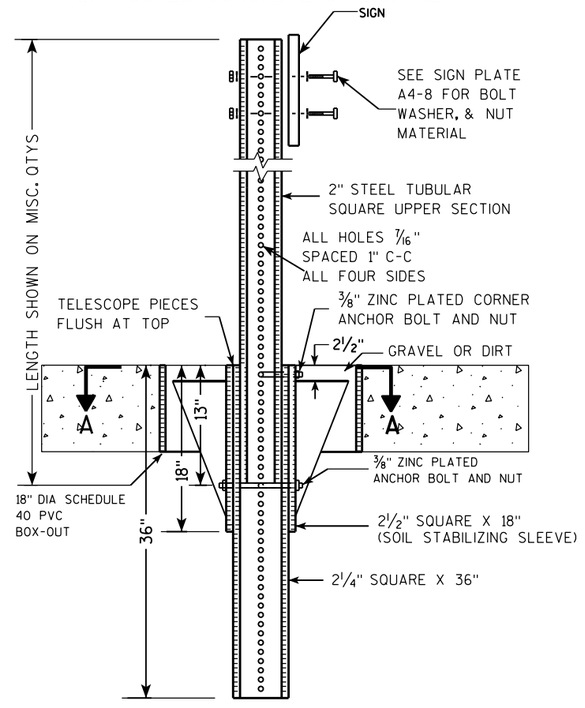
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



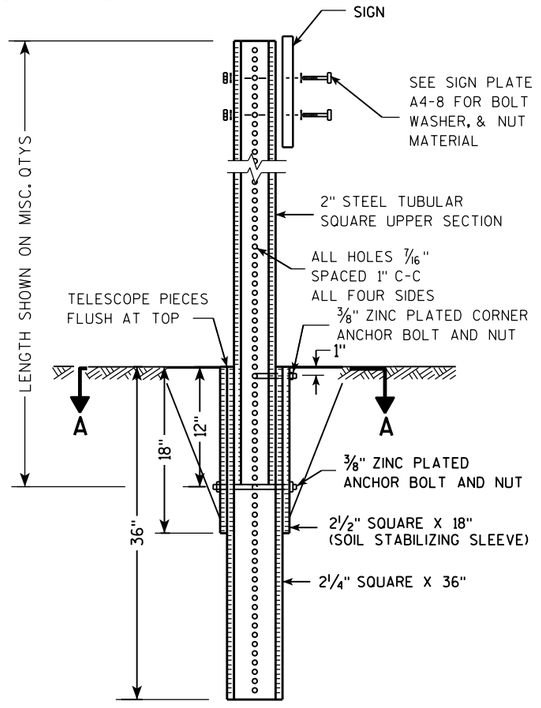
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

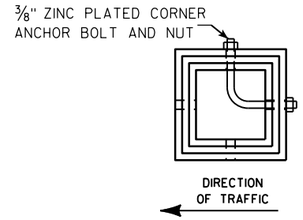


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

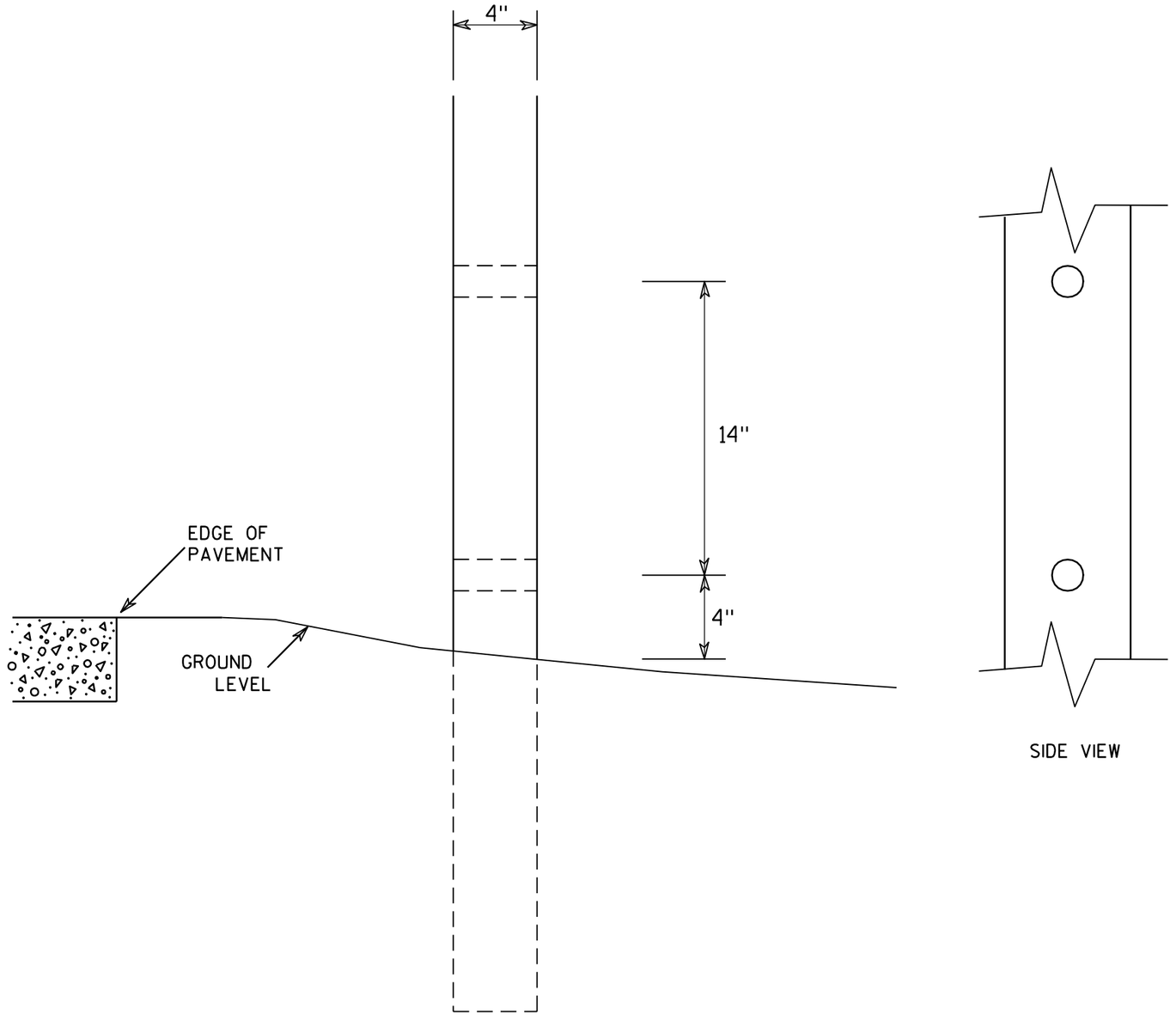
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 477 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000



SIDE VIEW

GENERAL NOTES

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

7

7

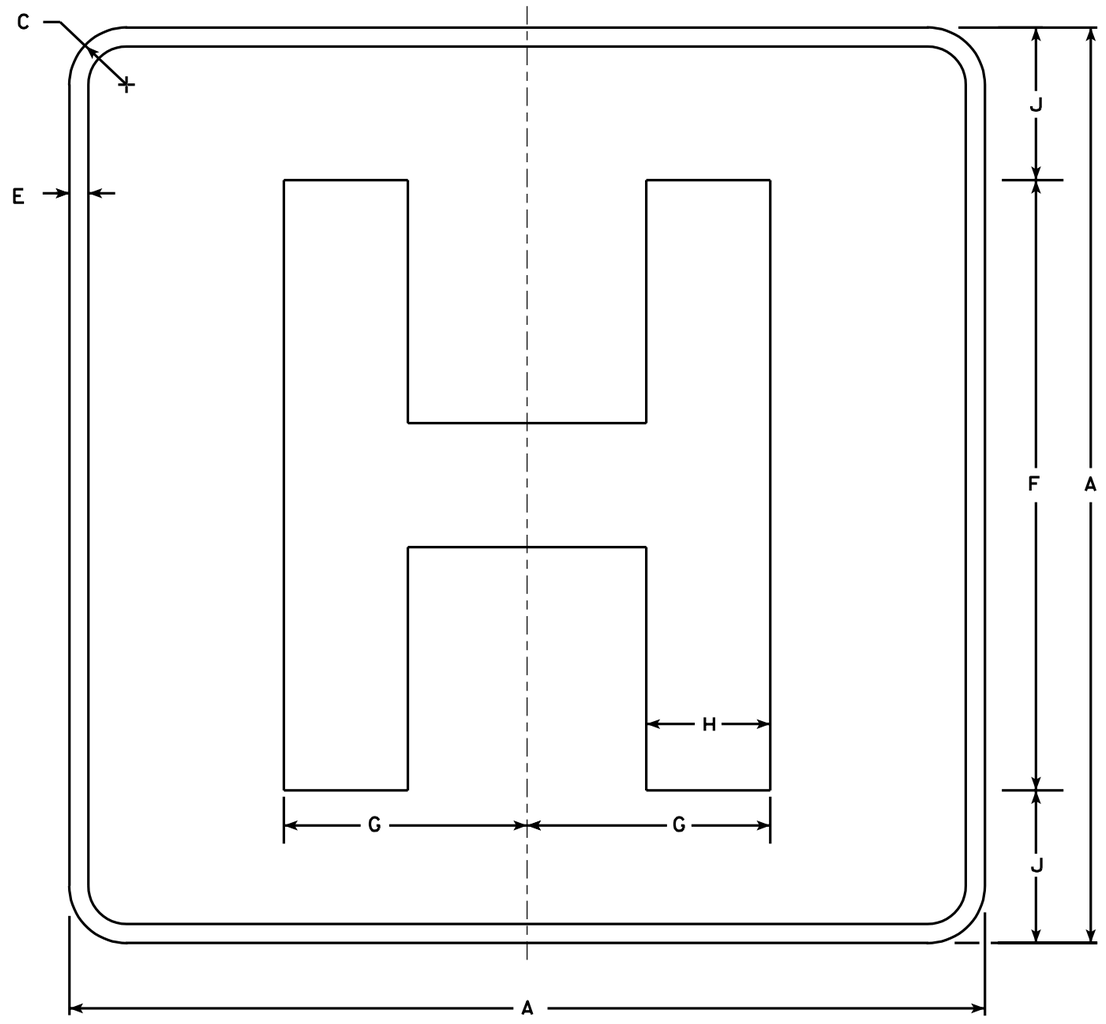
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 478	E



D9-2

NOTES

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

Metric equivalent for this sign is:

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

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		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

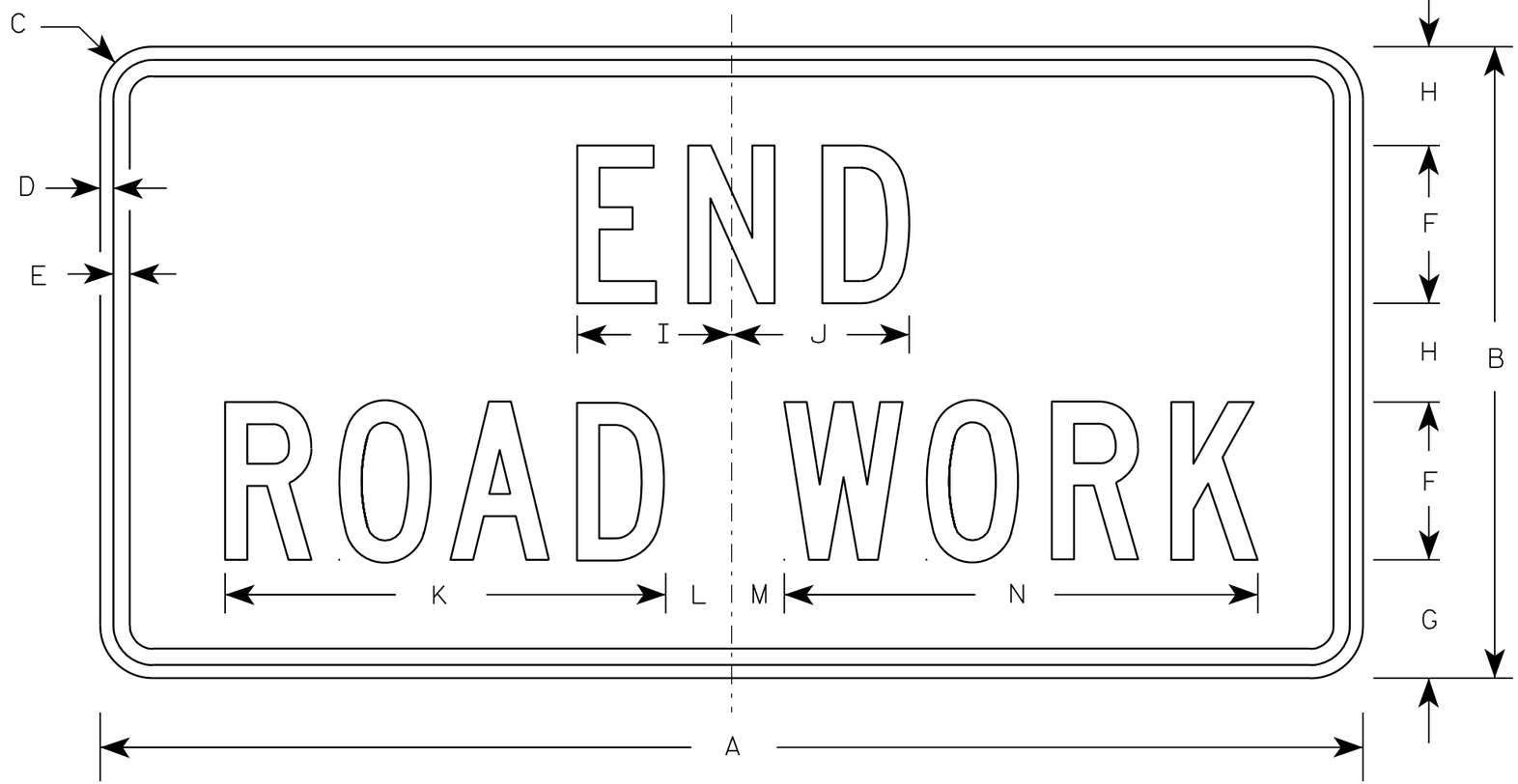
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 479 E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

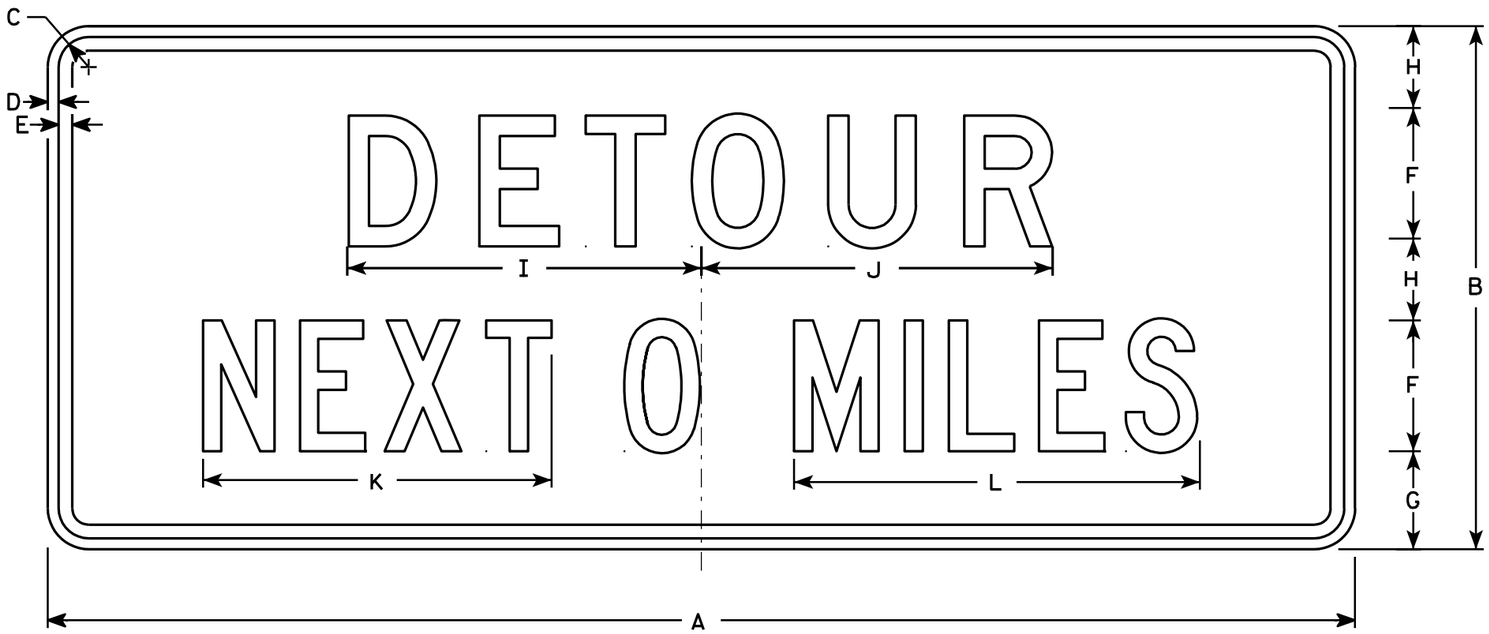
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 480	E



G20-51

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 - Line 1 is D and Line 2 is C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
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	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10	.90
3																												
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10	.90
5																												

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

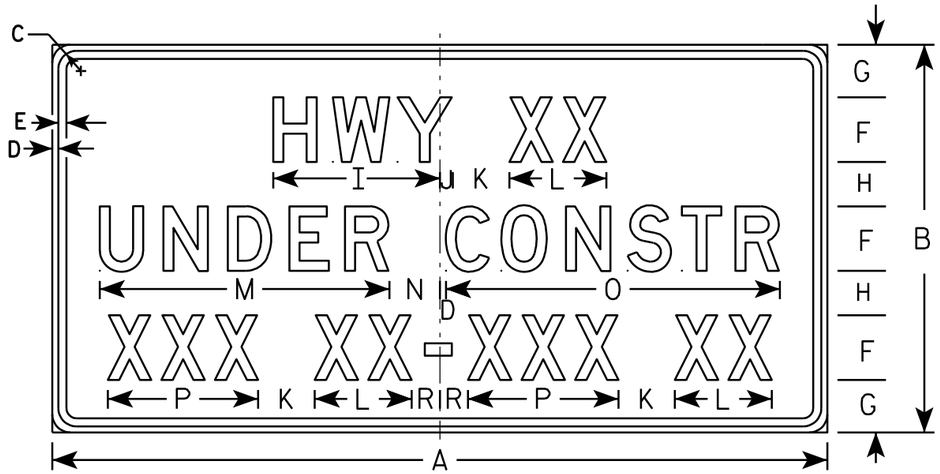
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/02 PLATE NO. G20-51.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	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. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	2400 mm X 1200 mm
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																												
3																												
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	1 5/8	7	12	35 7/8	6 1/4	41 3/8	18 5/8		3 1/2									32.0	2.88
5																												

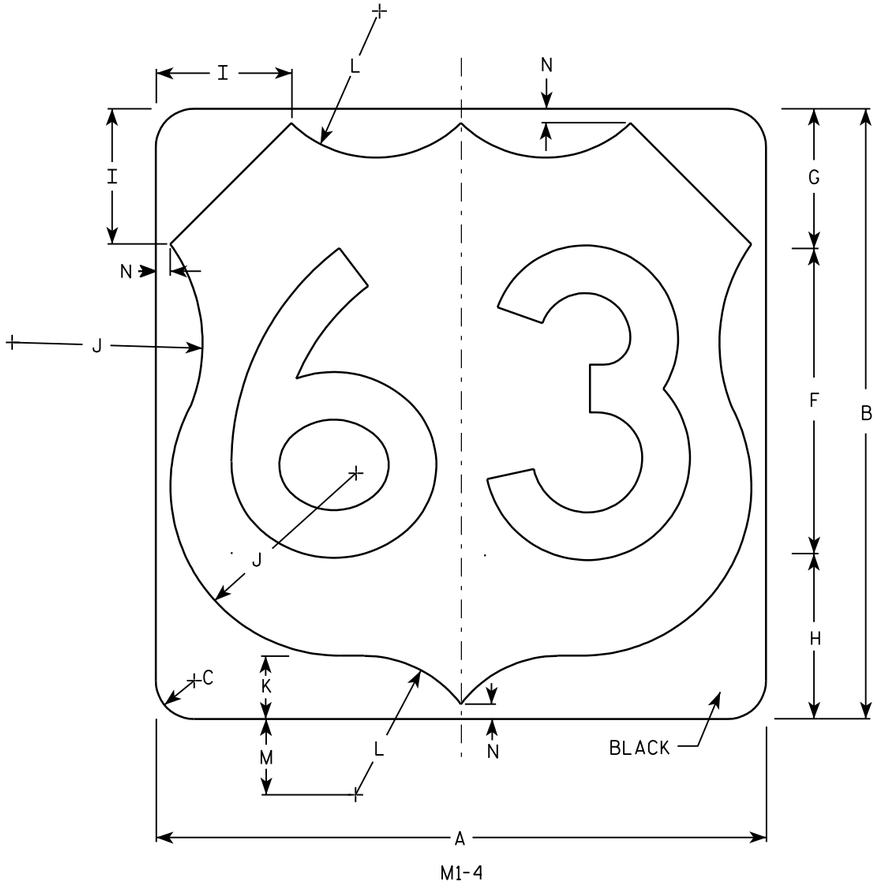
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

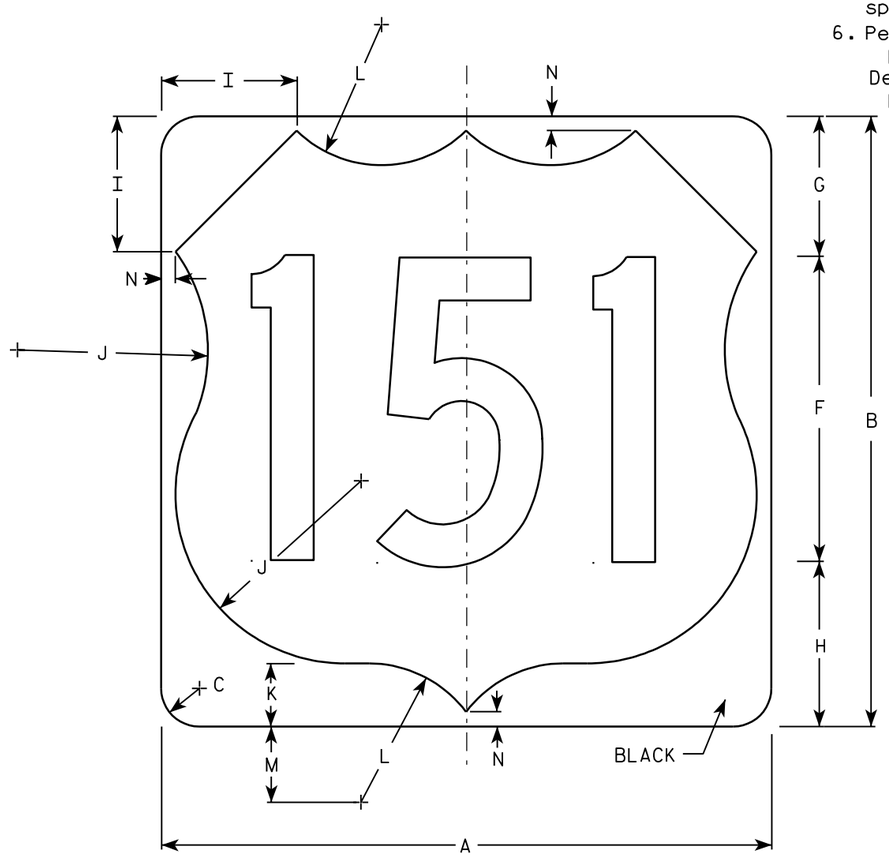
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/13/09 PLATE NO. G20-57.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 482	E



M1-4



M1-4

NOTES

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

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

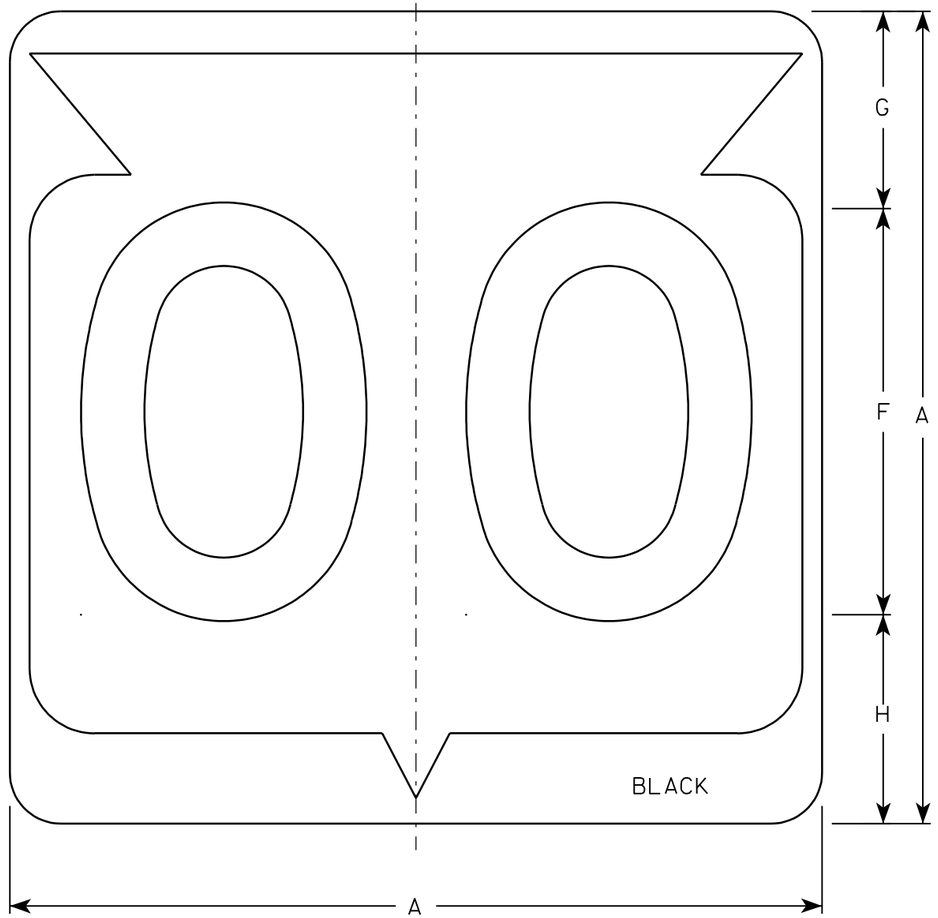
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

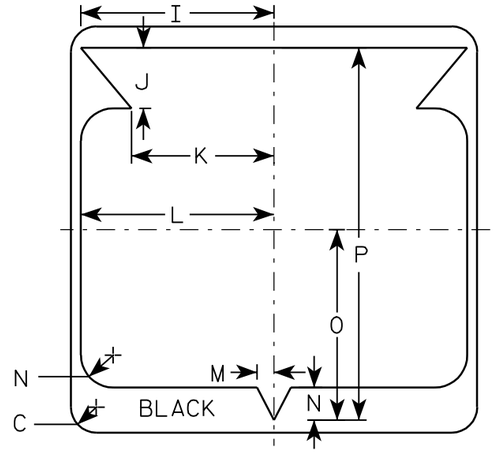
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 483 | E



M1-6

NOTES

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



Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

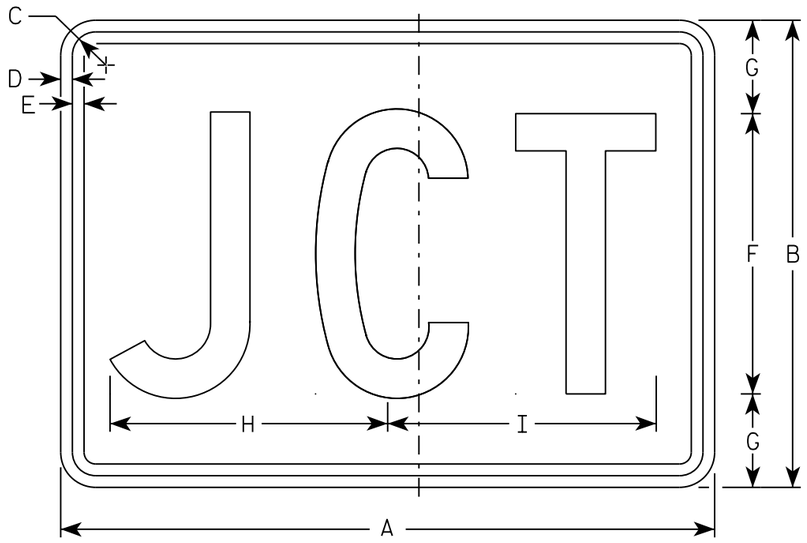
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

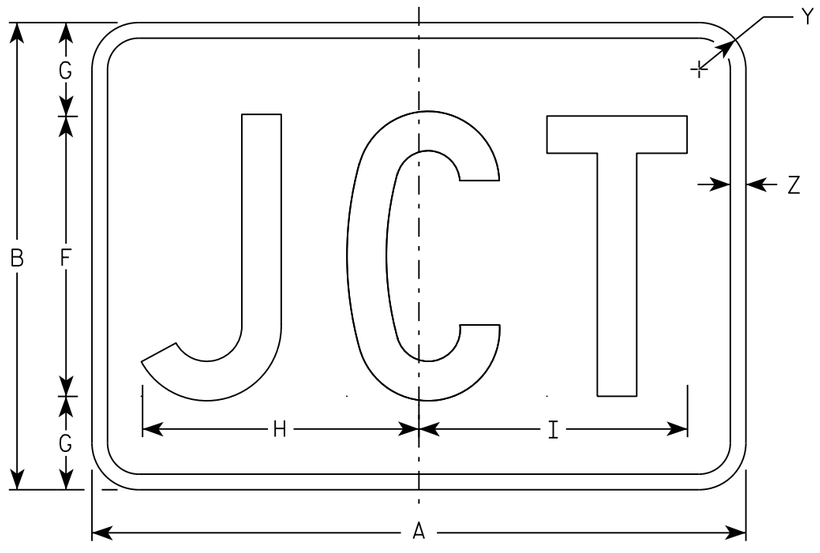
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 484	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

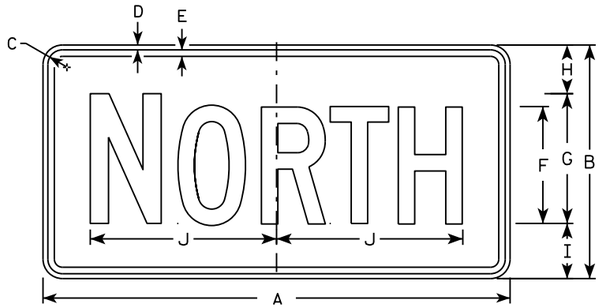
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

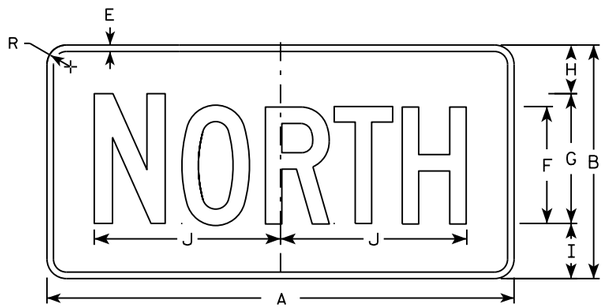
DATE 10/15/15 PLATE 485 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



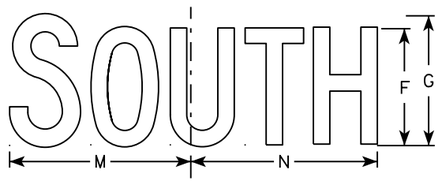
MB3-1
MK3-1
MN3-1



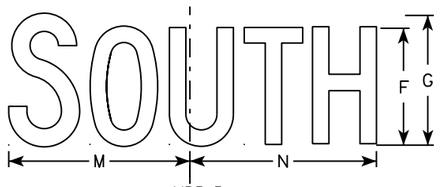
M3-2
MM3-2
MP3-2



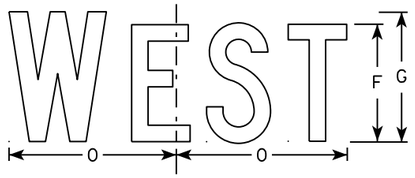
MB3-2
MK3-2
MN3-2



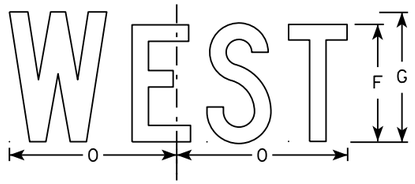
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

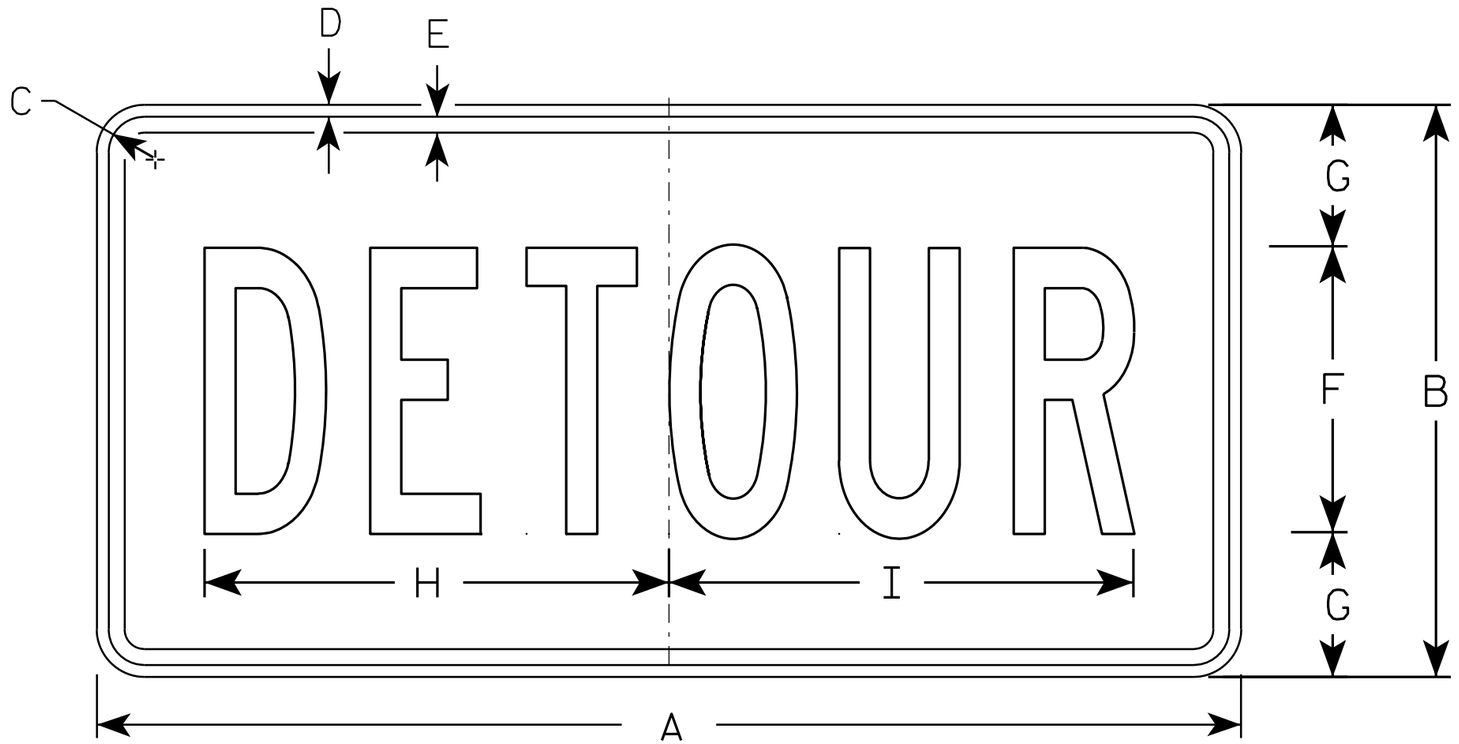
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

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

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

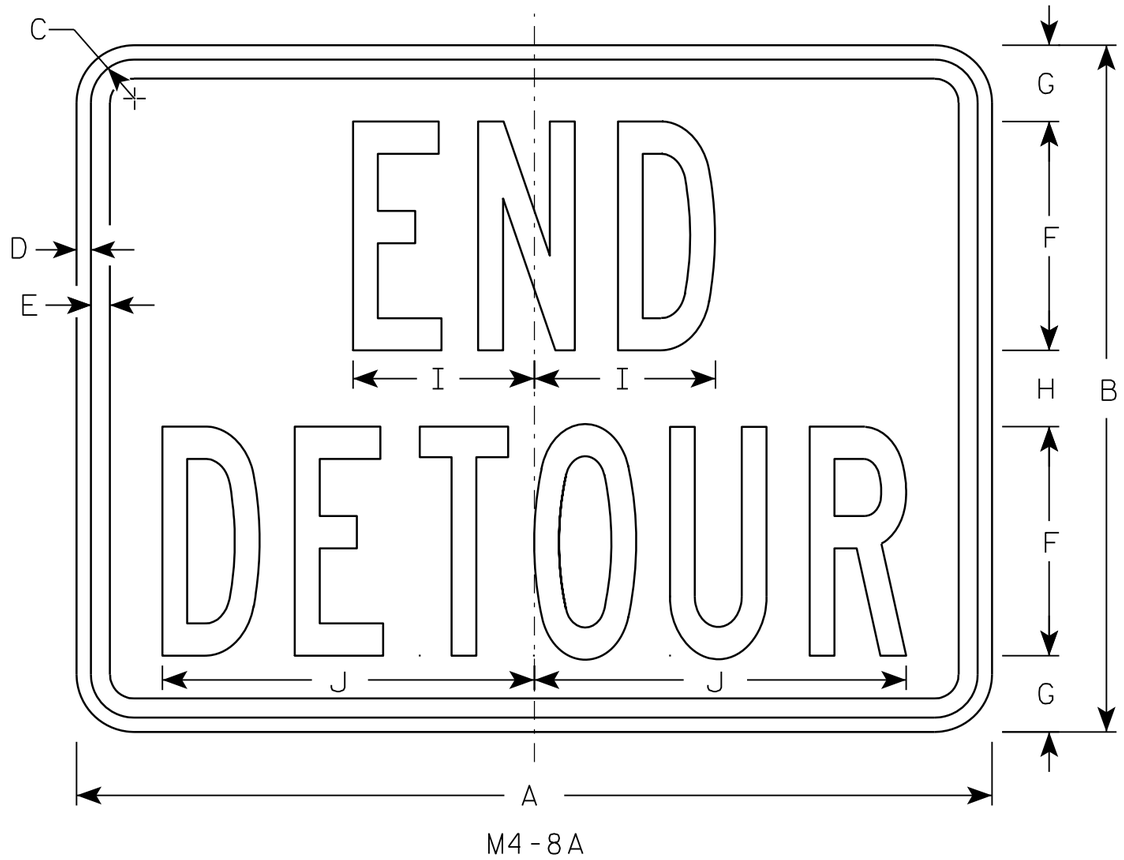
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 487	E



M4-8A

NOTES

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

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

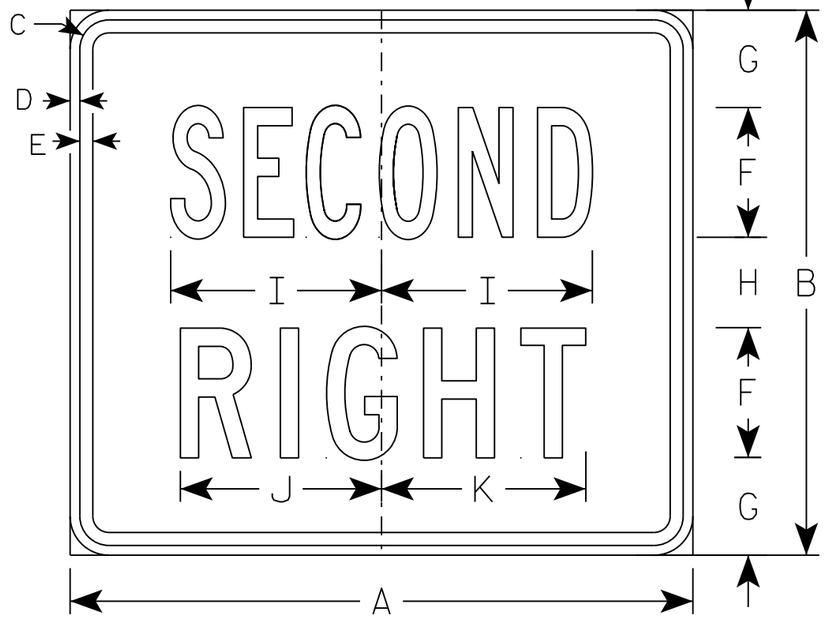
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

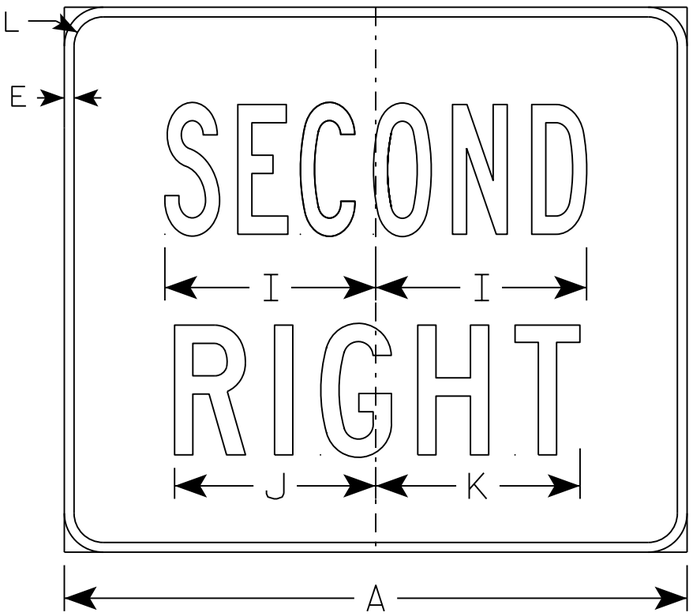
APPROVED Matthew R Rauch
for State Traffic Engineer

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

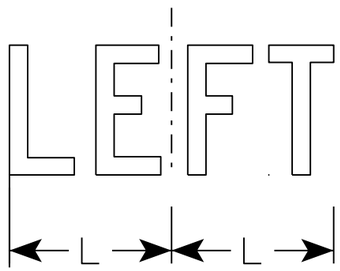
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 488	E



M4-22R
MM4-22R
M04-22R
MP4-22R



MB4-22R
MK4-22R
MN4-22R
MR4-22R



M4-22L
MB4-22L
MK4-22L
MM4-22L
MN4-22L
M04-22L
MP4-22L
MR4-22L

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-22 Background - White
   Message - Black
   MB4-22 Background - Blue
   Message - White
   MK4-22 Background - Green
   Message - White
   MM4-22 Background - White
   Message - Green
   MN4-22 Background - Brown
   Message - White
   M04-22 Background - Orange - Type F Reflective
   Message - Black
   MP4-22 Background - White
   Message - Blue
   MR4-22 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8	1 1/2															3.5
3	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2	1 7/8															7.5
4																											
5																											

STANDARD SIGN
M4-22

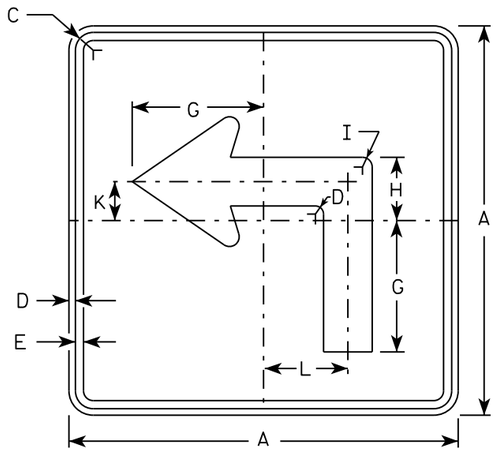
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

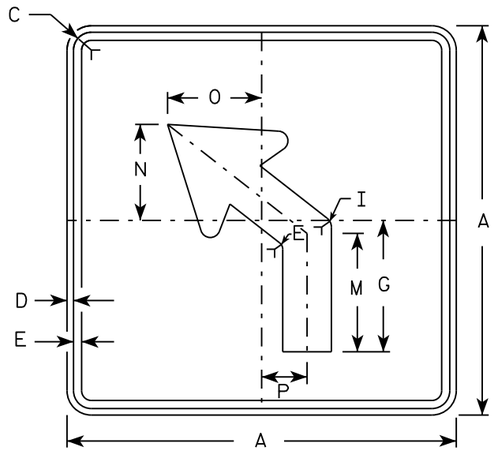
DATE 10/15/15 PLATE NO 489 M4-22.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

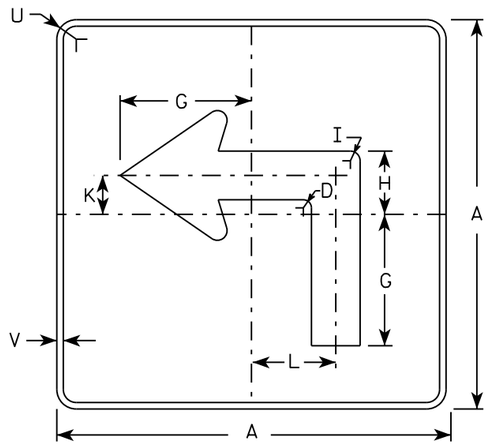
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M422.DGN PLOT DATE : 01-DEC-2015 18:04 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



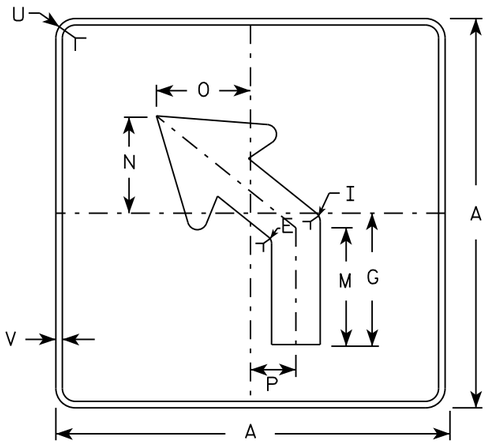
M5-1L
MM5-1L
MO5-1L
MP5-1L



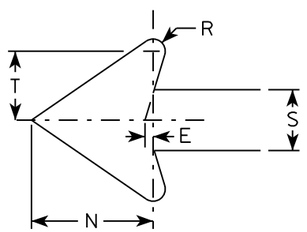
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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

STANDARD SIGN
M5-1 & M5-2

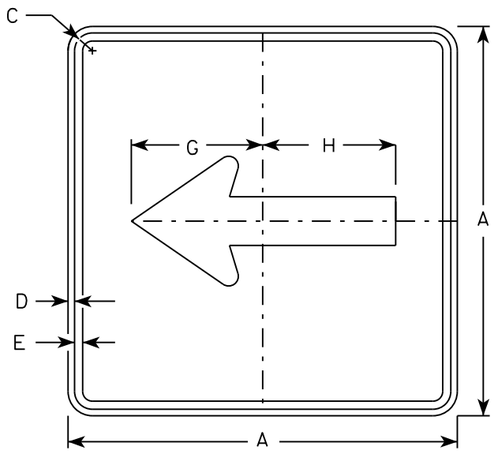
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

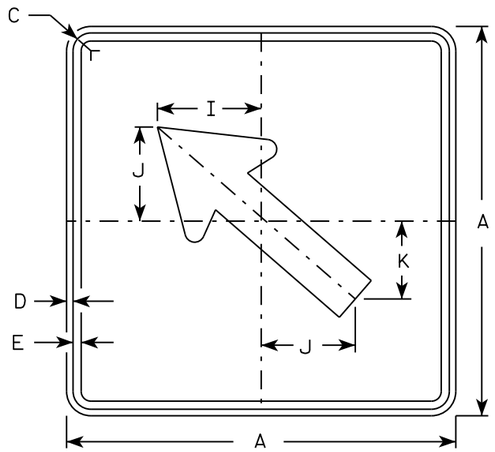
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



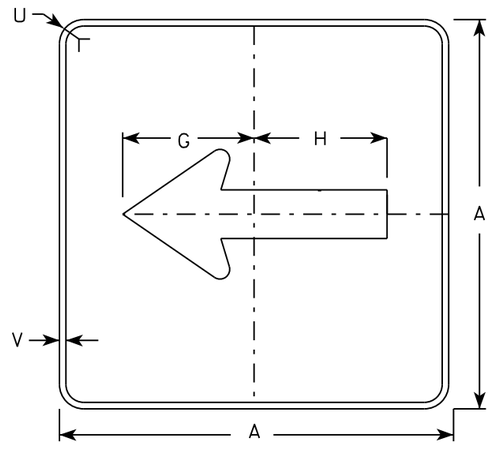
M6-1
MM6-1
MO6-1
MP6-1



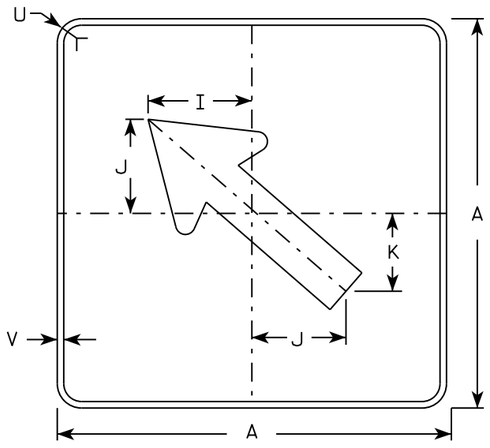
M6-2
MM6-2
MO6-2
MP6-2

NOTES

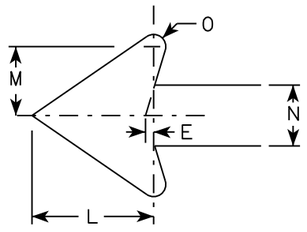
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

STANDARD SIGN
M6-1 & M6-2
SERIES

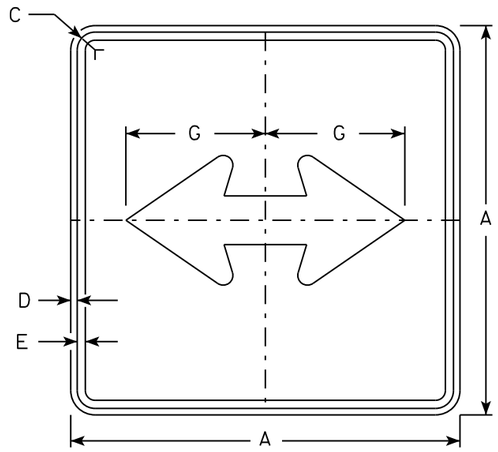
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

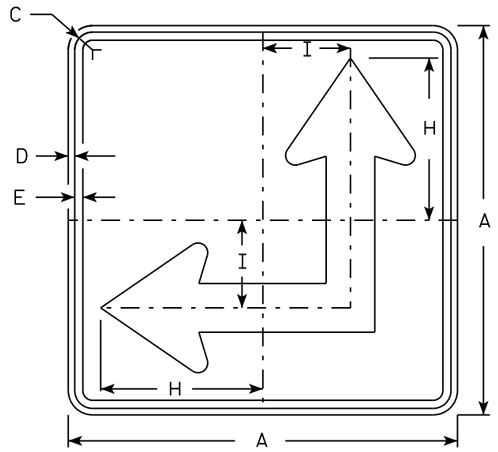
DATE 10/15/15 PLATE 491 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



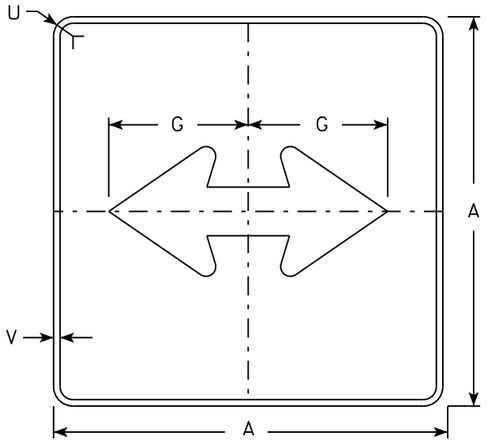
M6-4
MM6-4
MO6-4
MP6-4



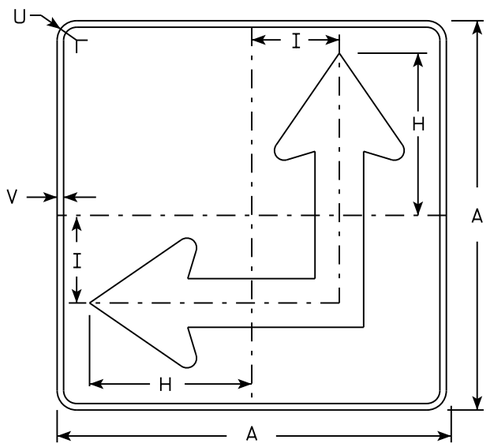
M6-6
MM6-6
MO6-6
MP6-6

NOTES

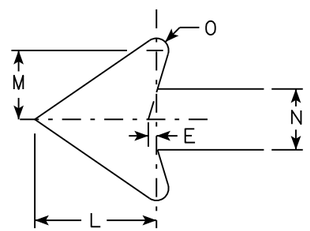
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



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

STANDARD SIGN
M6-4 & M6-6
SERIES

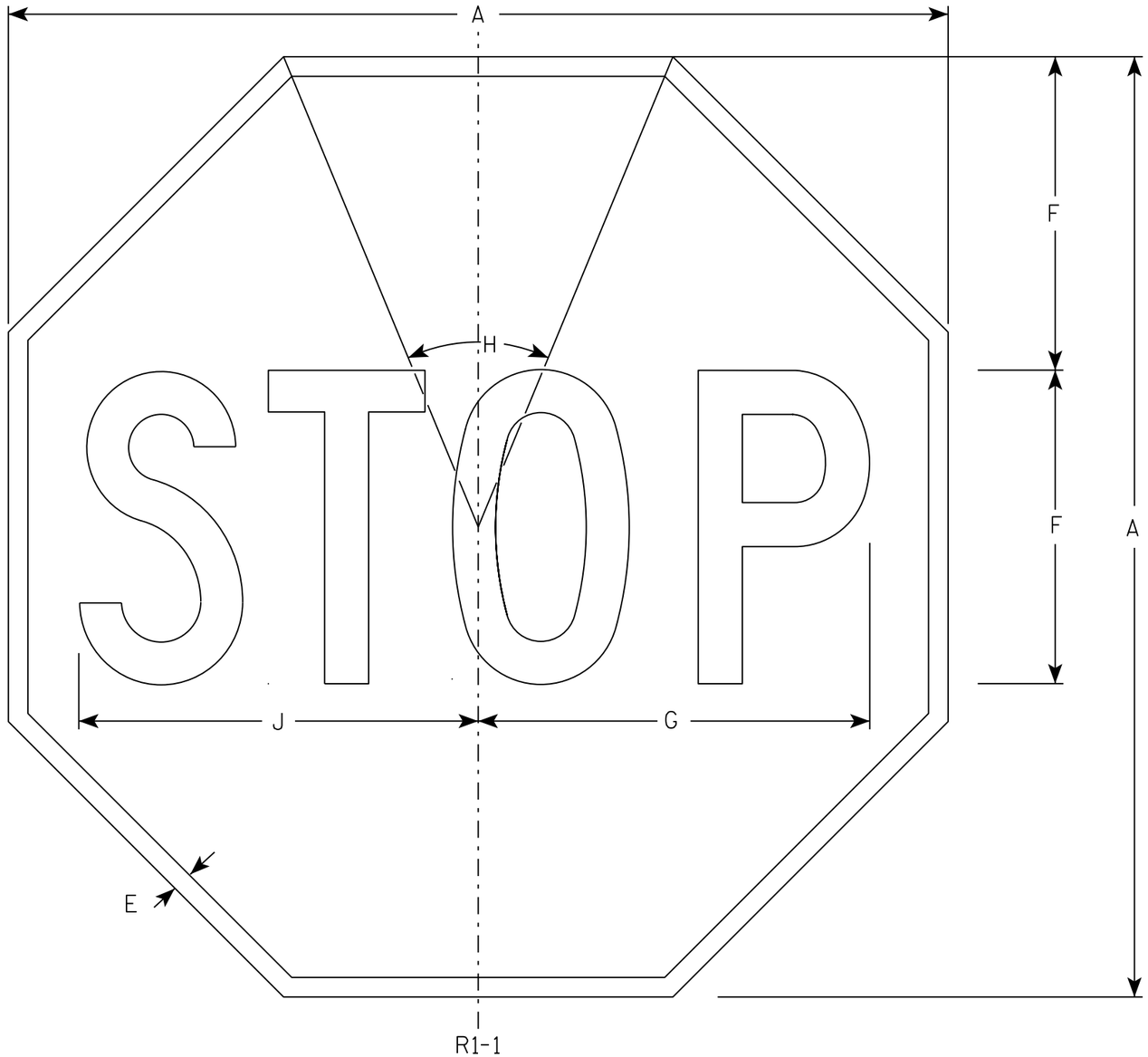
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 492 M6-4.10

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

STANDARD SIGN
R1-1

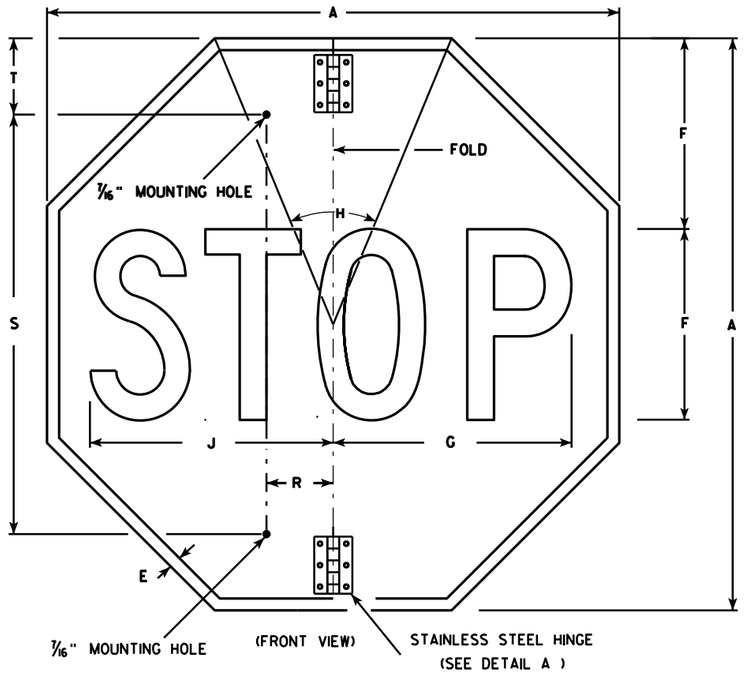
WISCONSIN DEPT OF TRANSPORTATION

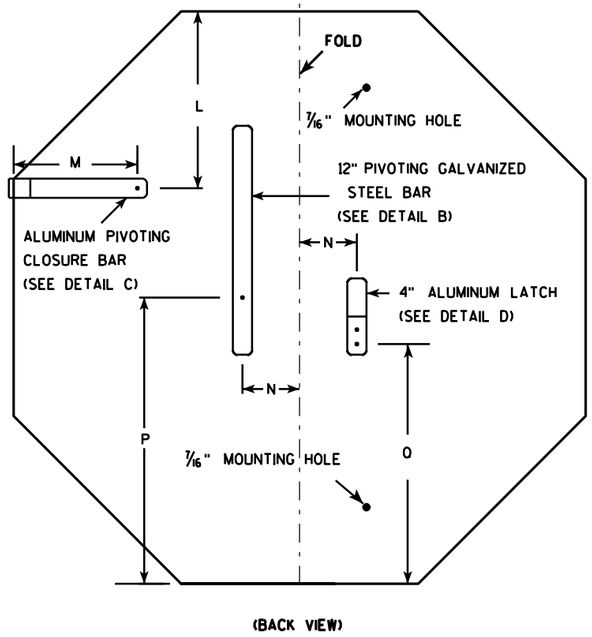
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 493 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

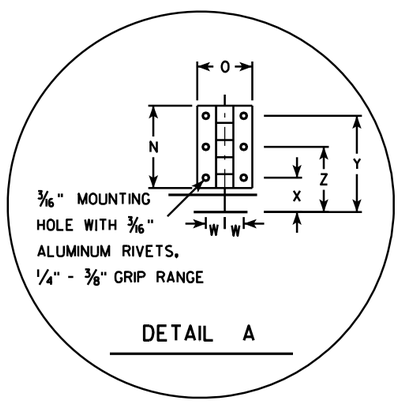
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



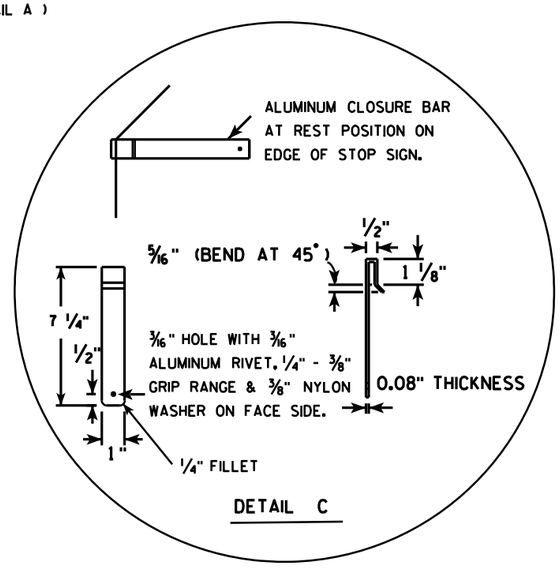


NOTES

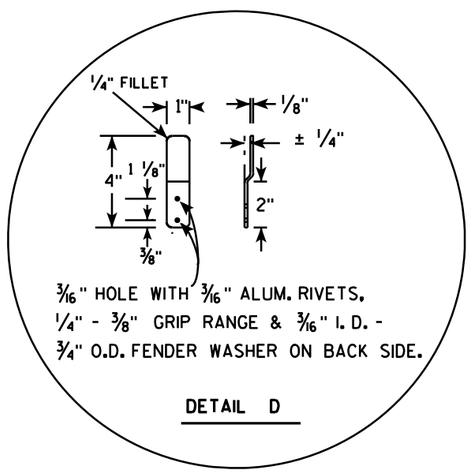
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



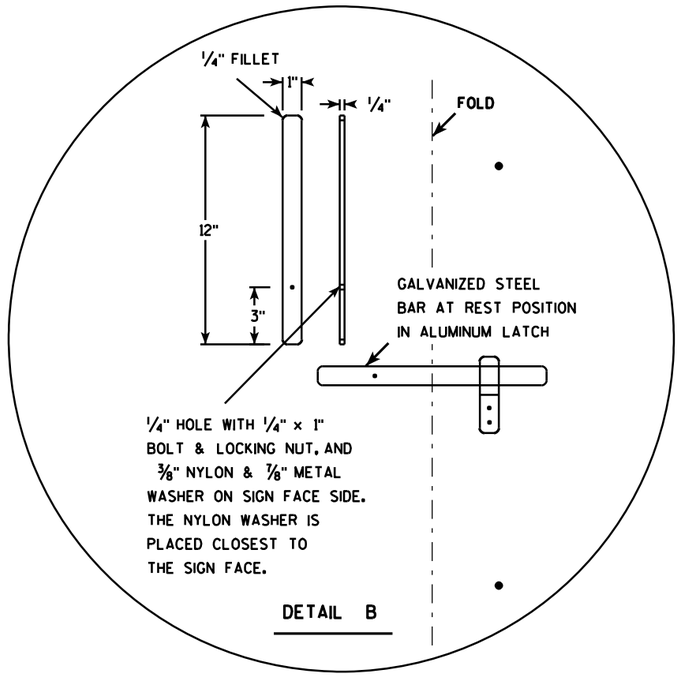
DETAIL A



DETAIL C



DETAIL D



DETAIL B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

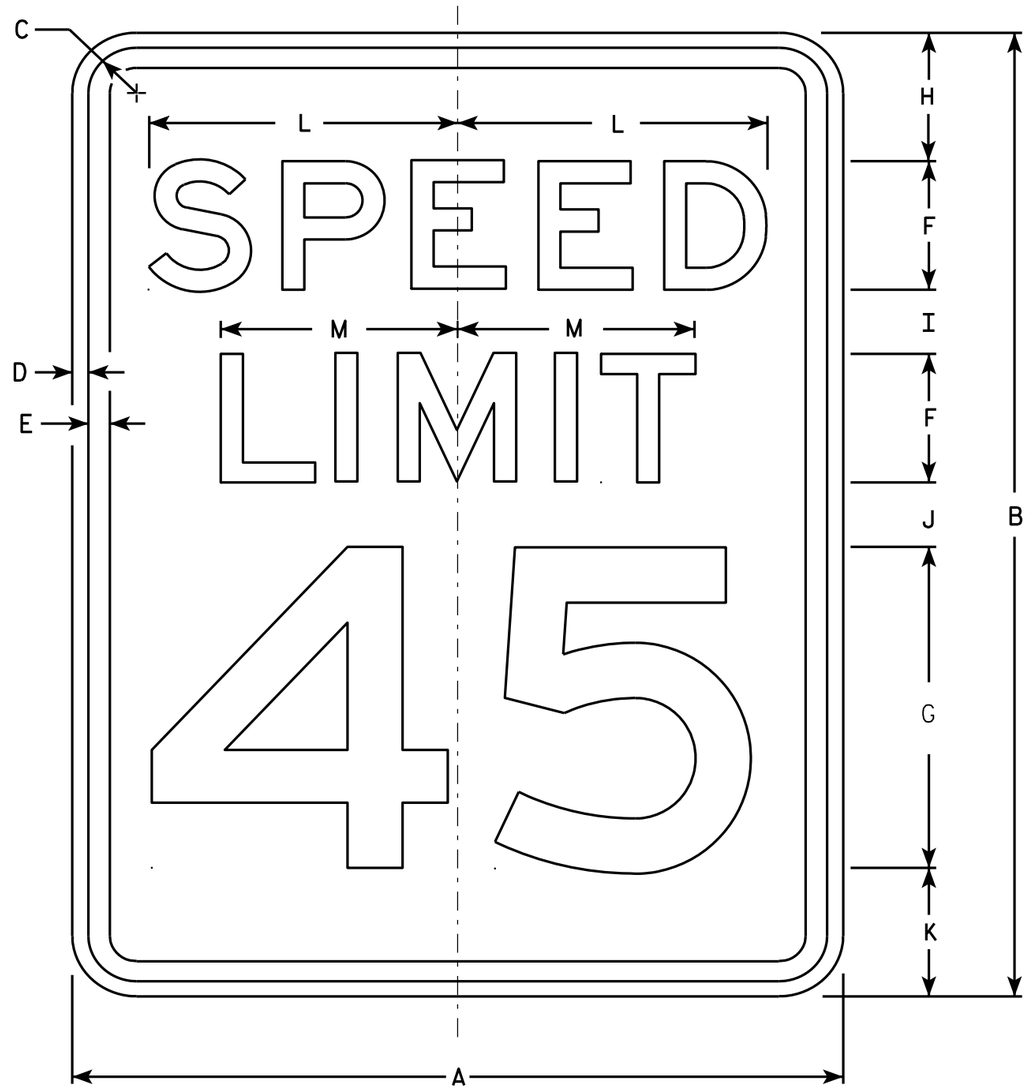
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 494	E



R2-1

NOTES

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

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

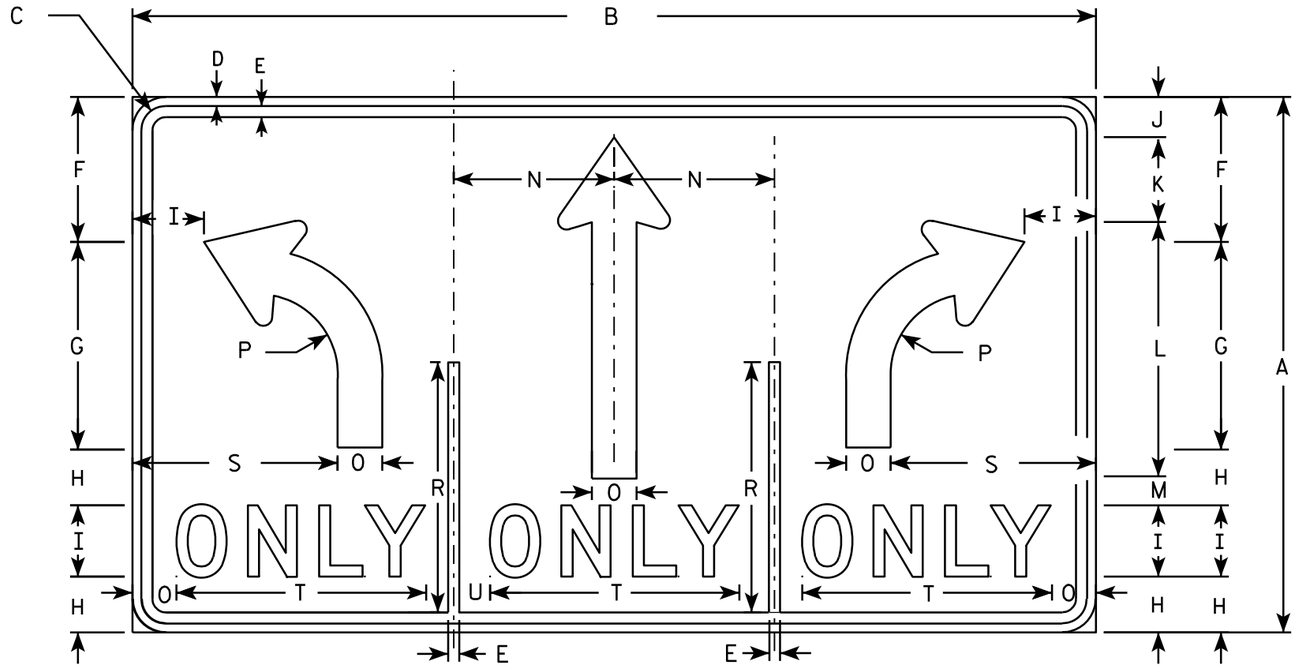
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

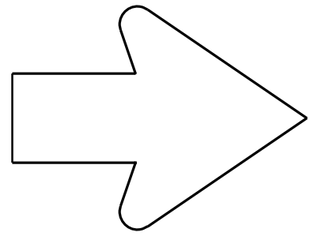
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 495	E



R3-8W

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.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

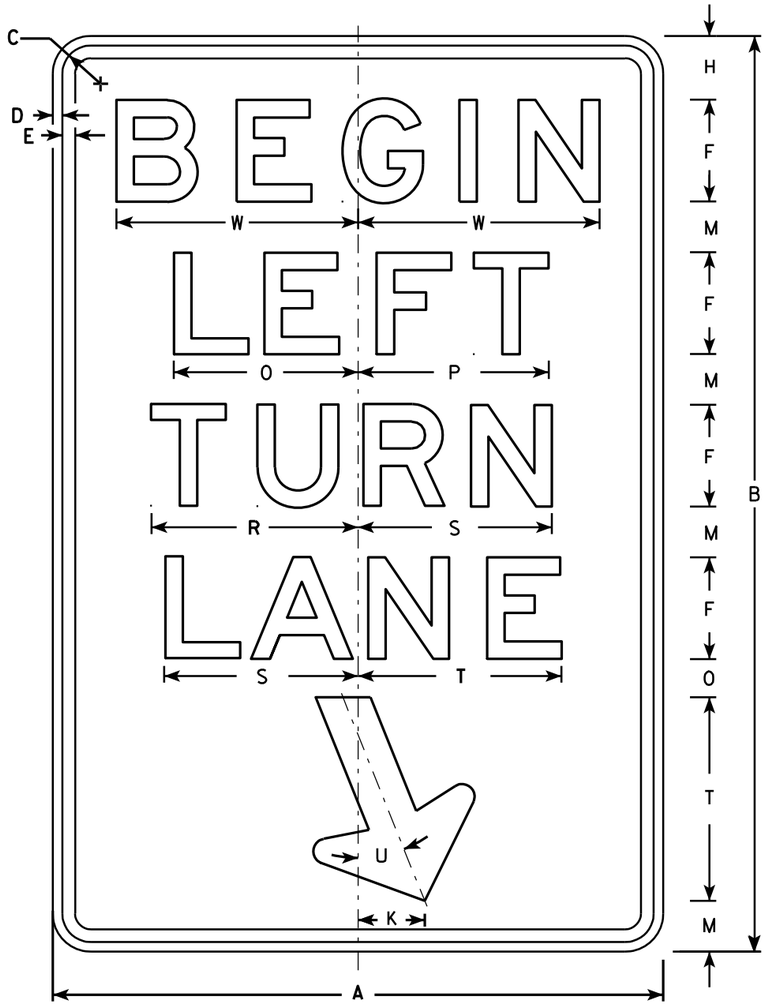
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

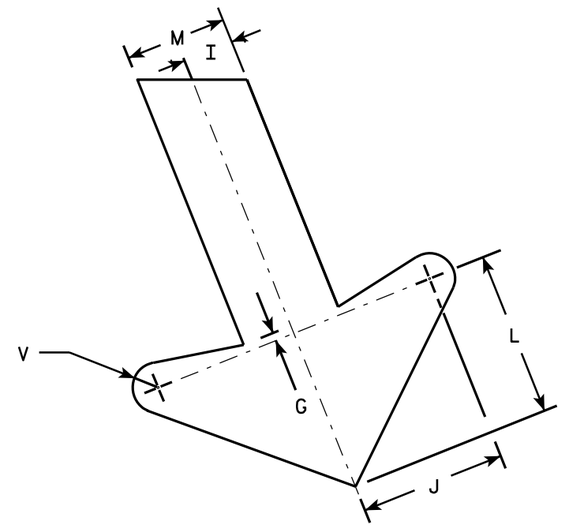
SHEET NO: 496 E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

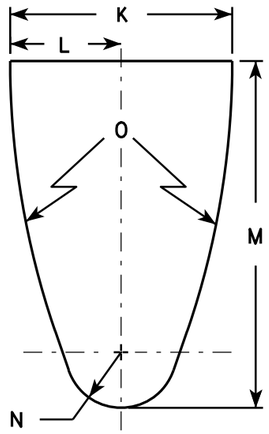
STANDARD SIGN
R3-20L

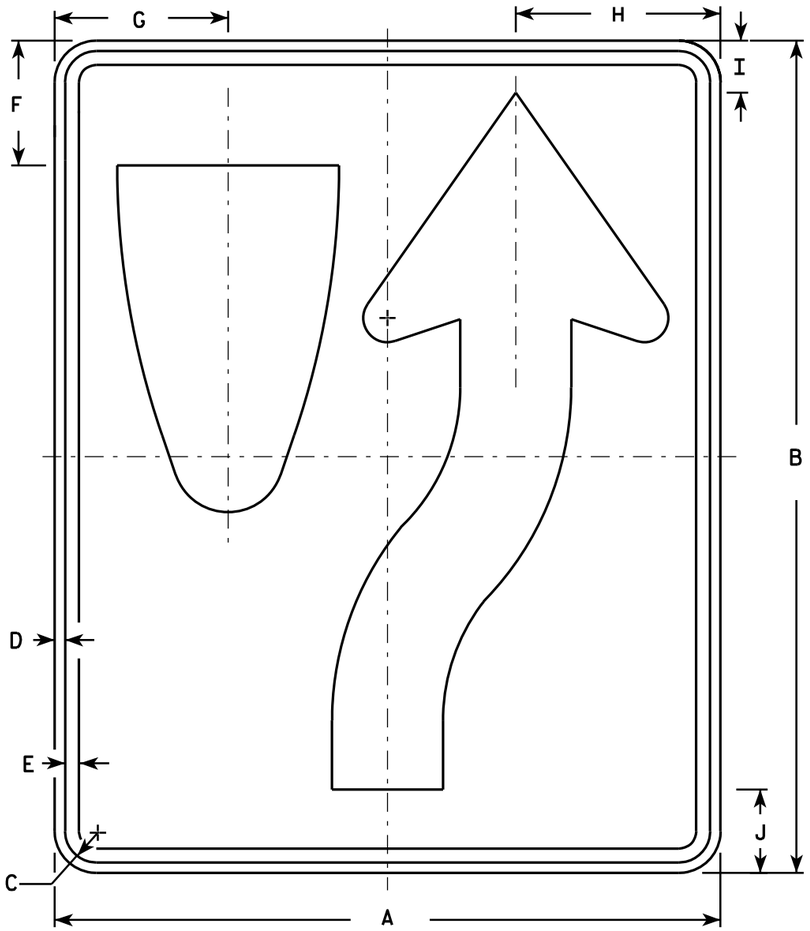
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 497 | E

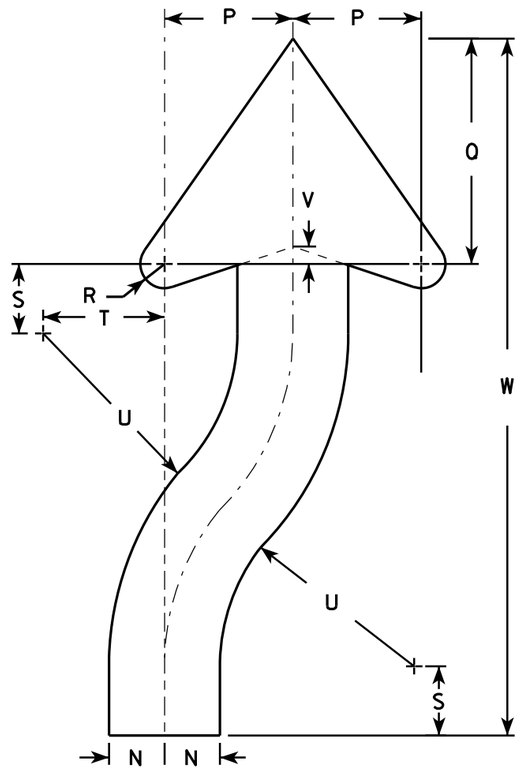




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

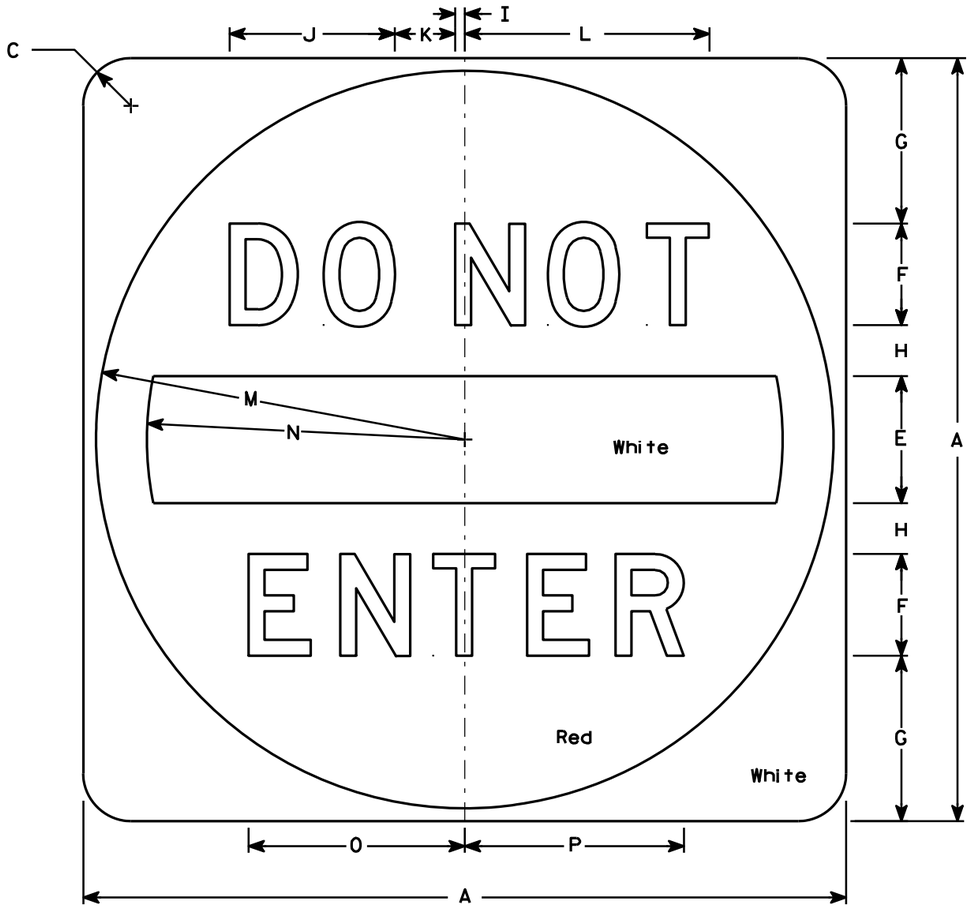
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 498	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

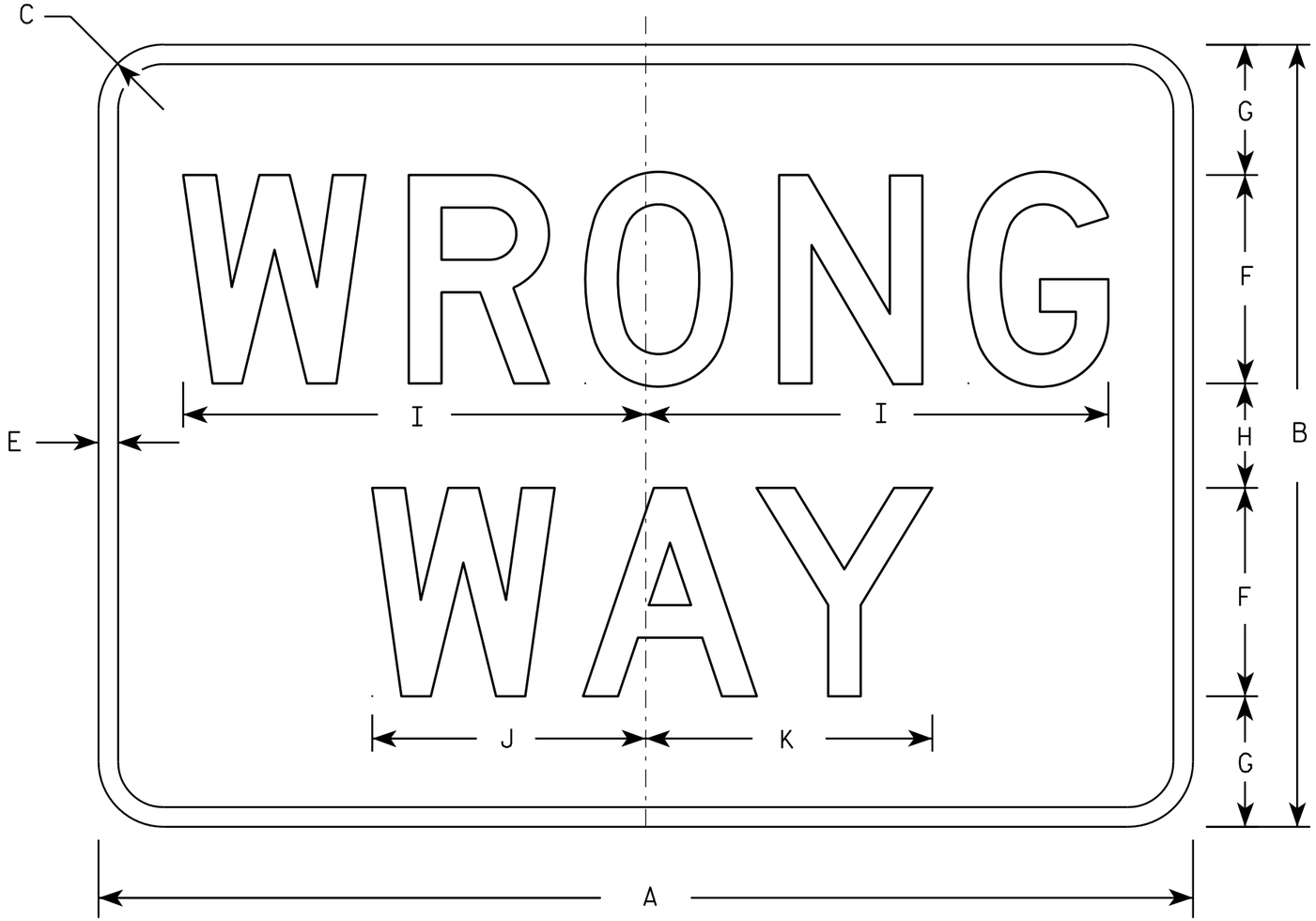
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 499 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

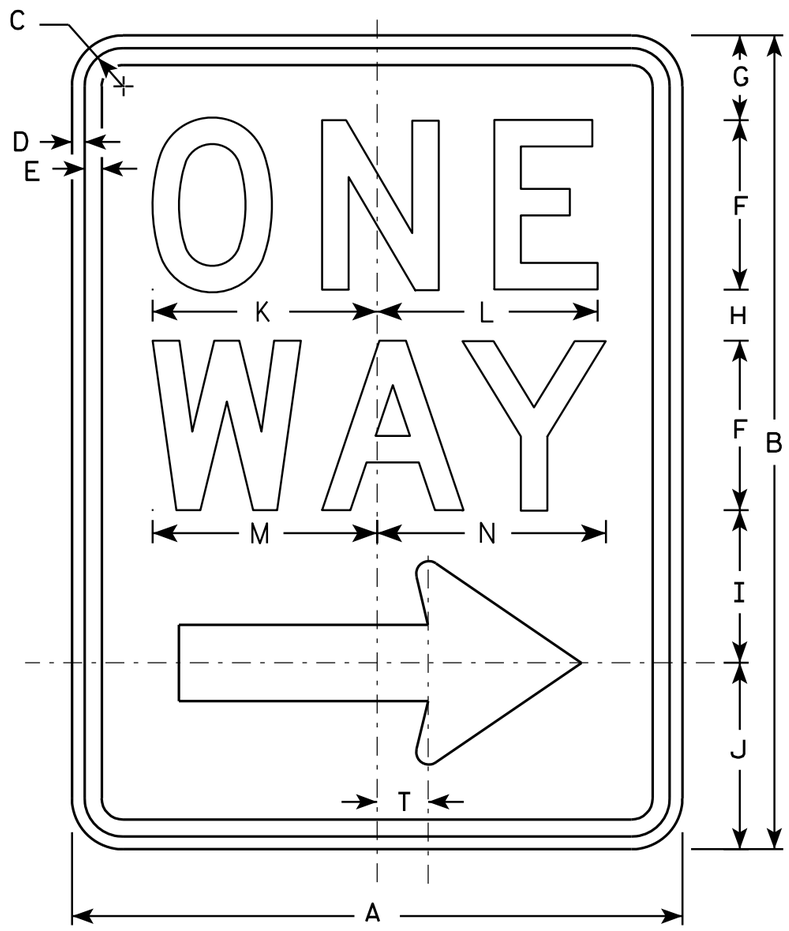
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

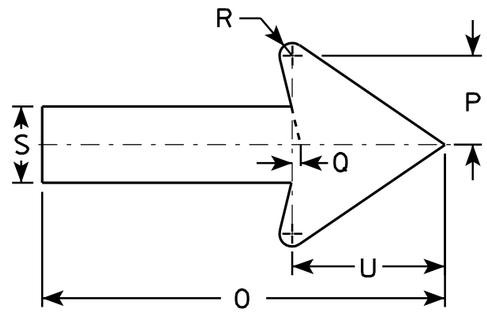
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 500	E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

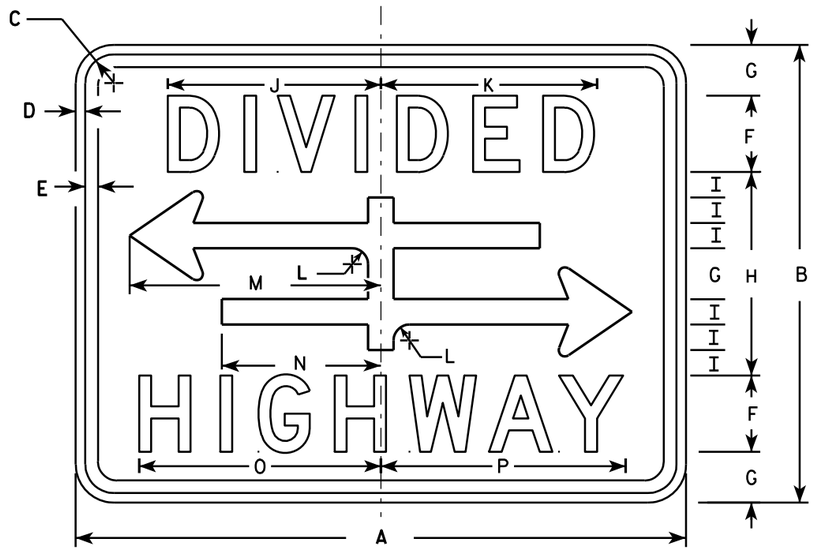
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

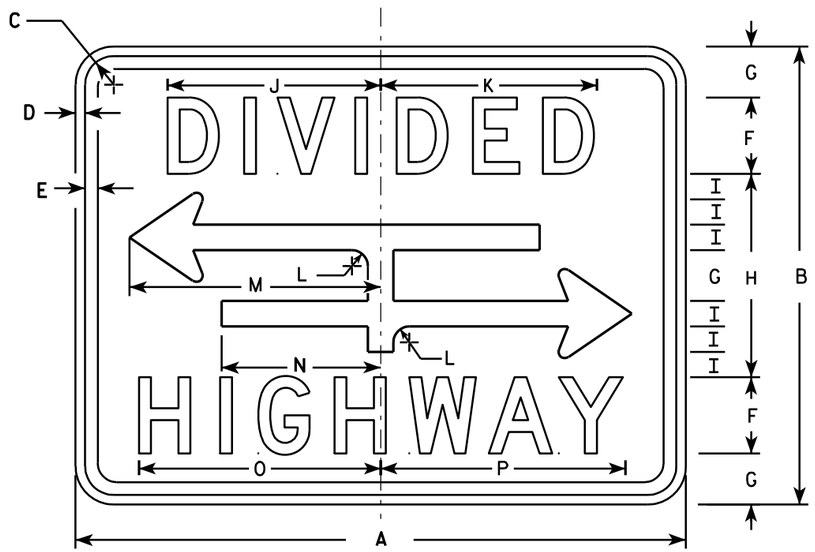
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 501	E



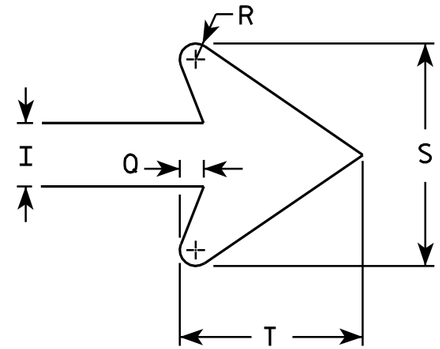
R6-3

NOTES

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



R6-3A



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	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

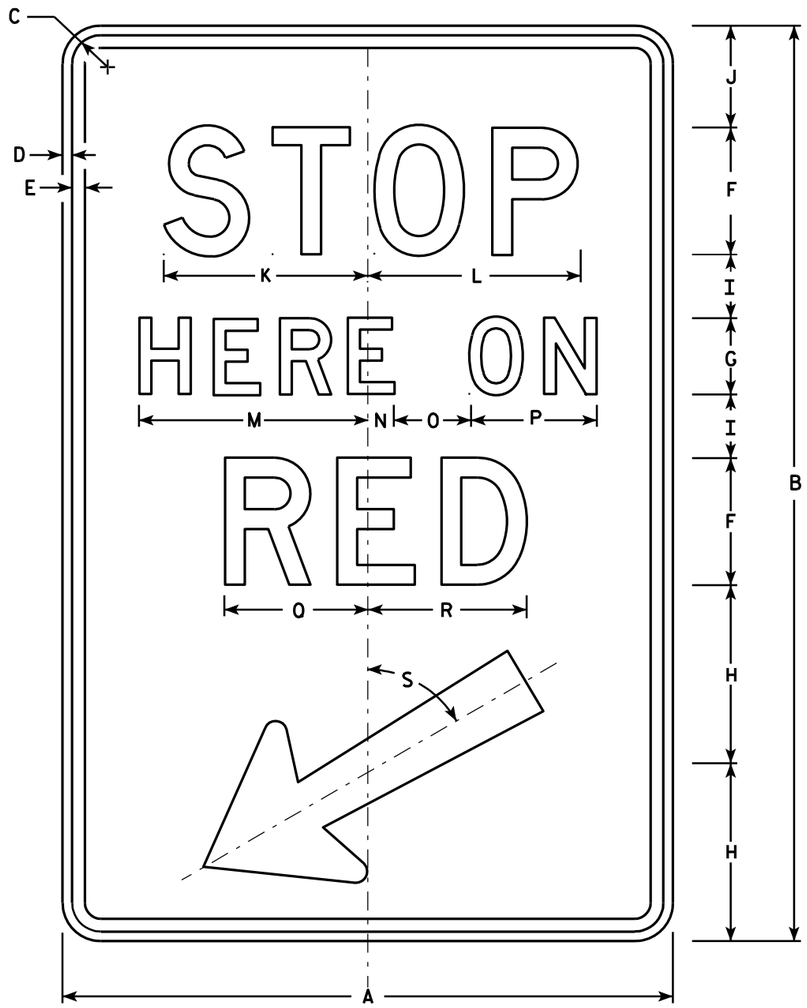
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

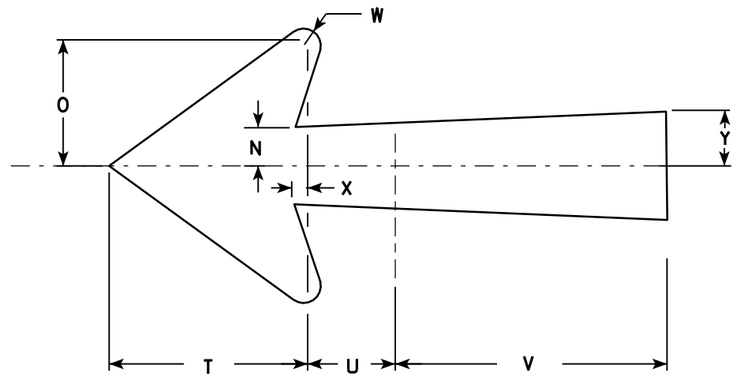
SHEET NO: 502 E



R10-6

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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 503	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R106.DGN PLOT DATE : 05-APR-2011 09:50 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

7



R10-71



R10-71L

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.



R10-71R

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	R10-71L&R Area sq. ft.	R10-71 Area sq. ft.
1																												
2S	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
2M	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-71

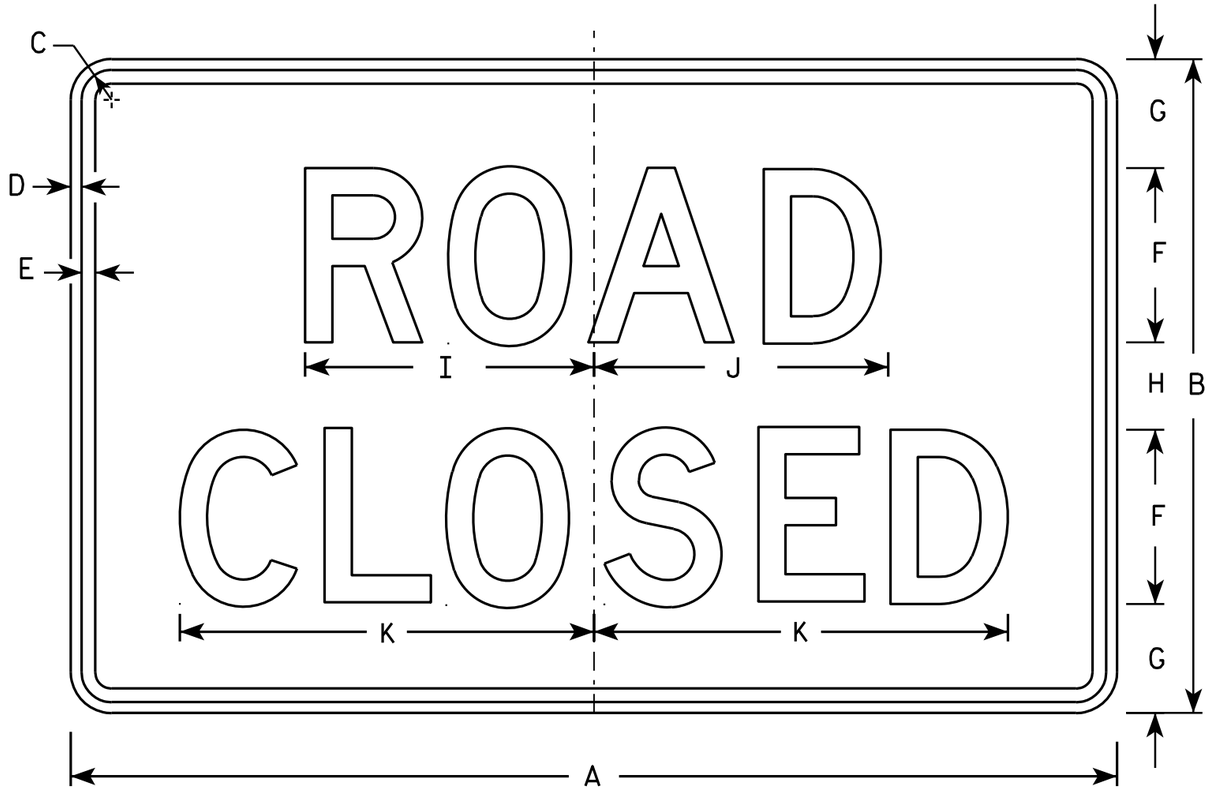
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-71.3

PROJECT NO:

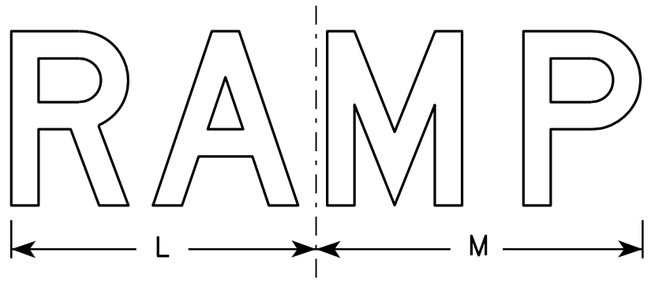
SHEET NO: 504 E



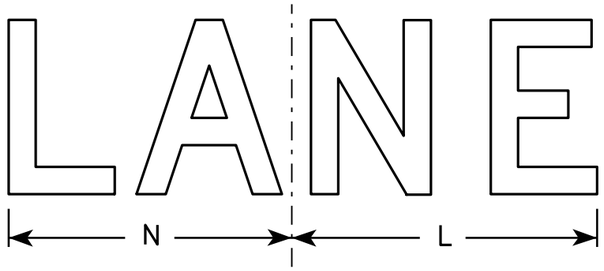
R11-2

NOTES

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



R11-2R



R11-2L

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

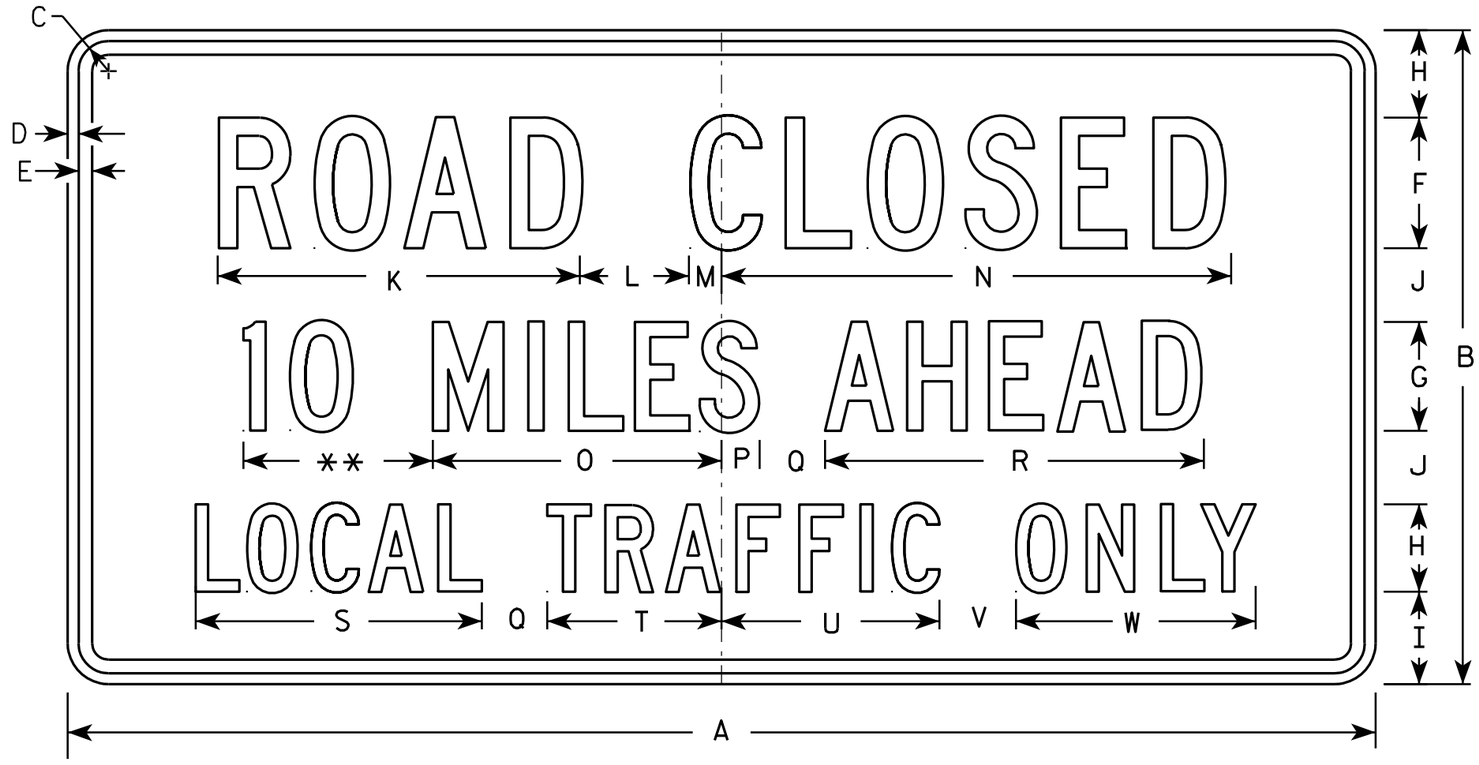
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 505 | E



R11-3

NOTES

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

** See Note 5

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

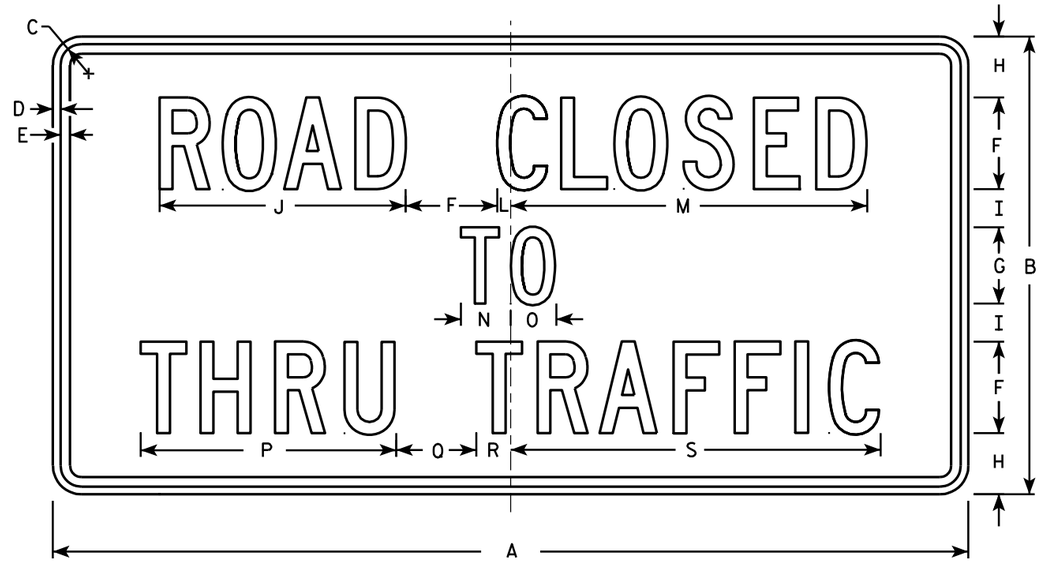
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 506 | E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

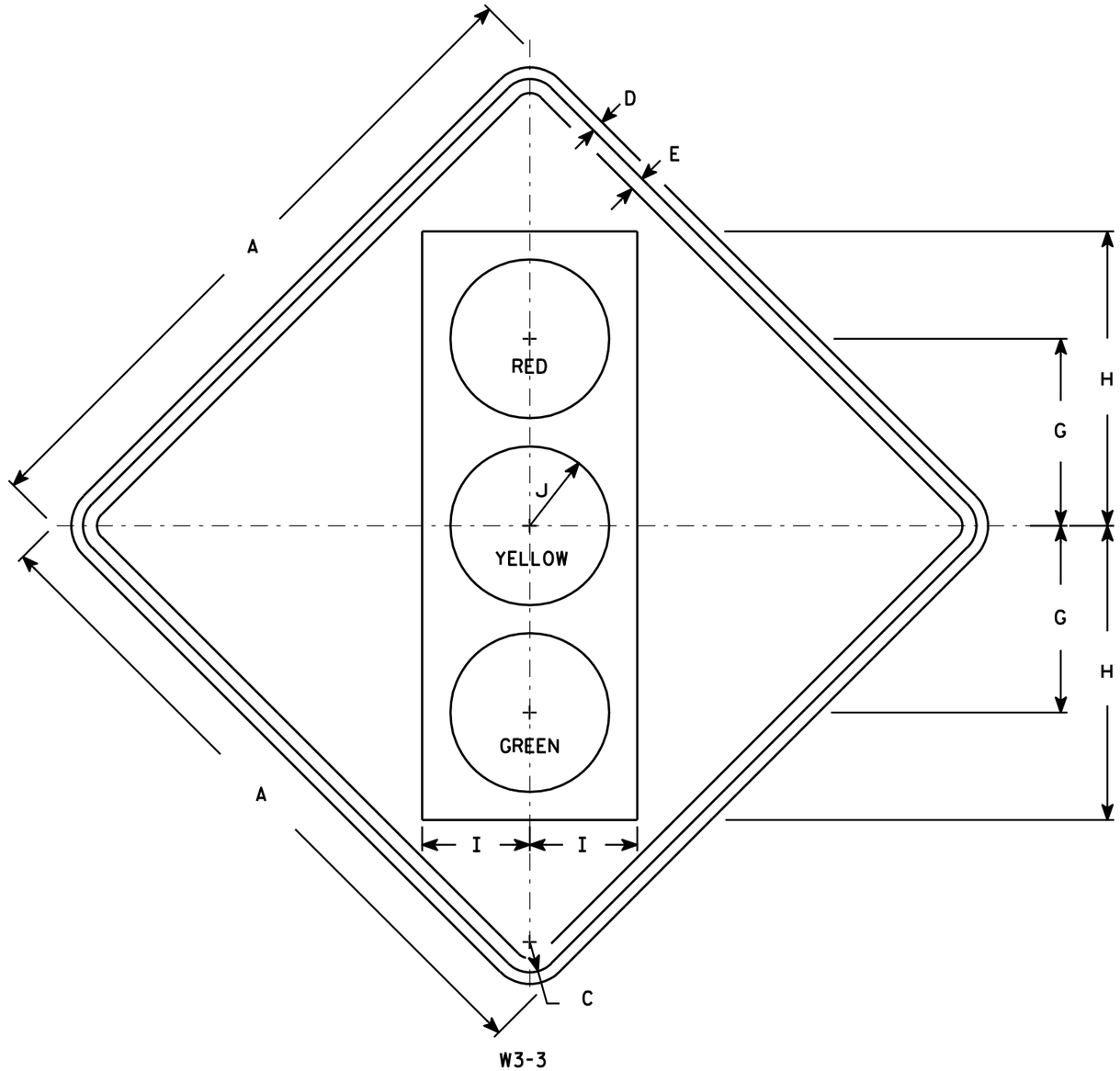
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 507 | 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 - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

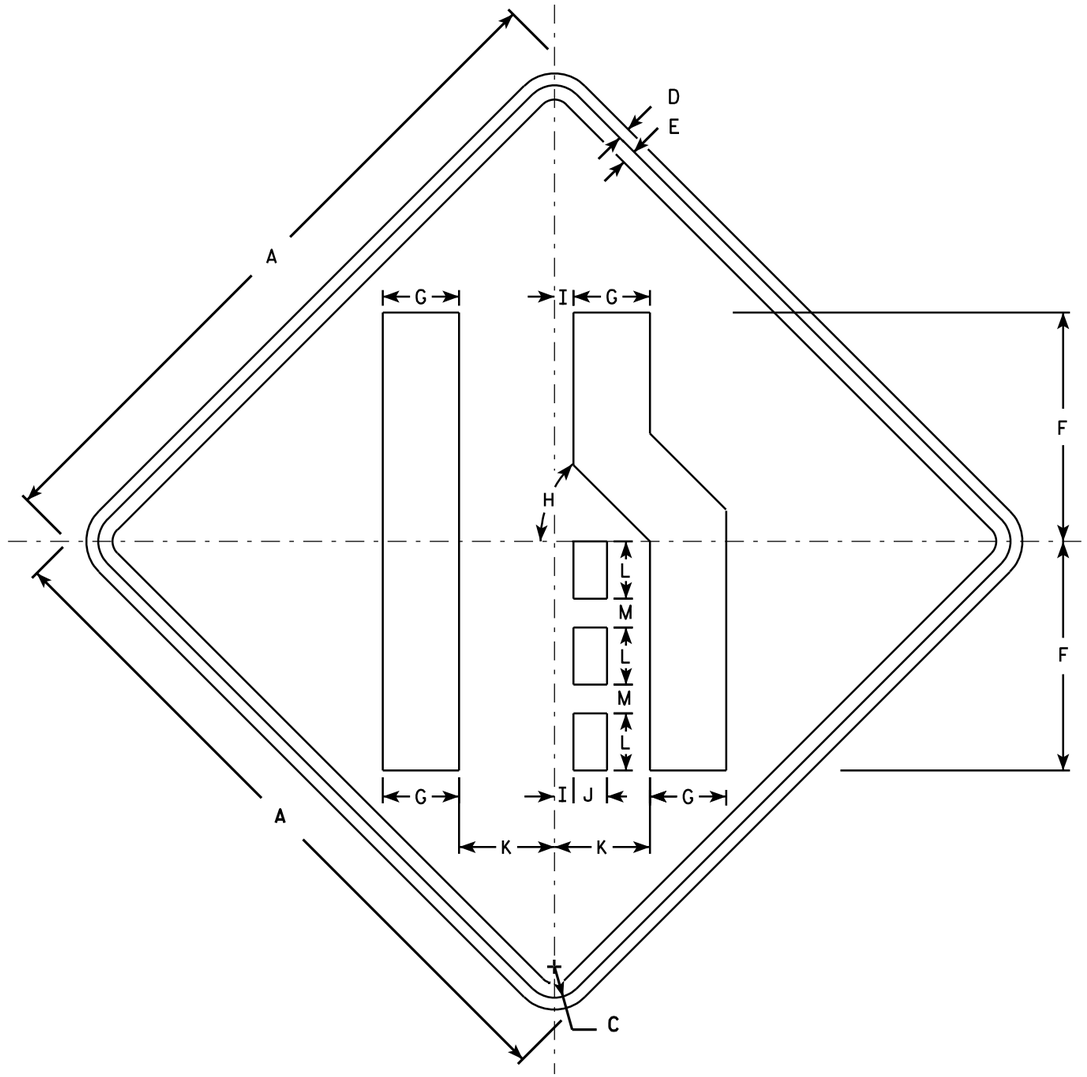
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 508 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000
WISDOT/CADDS SHEET 42



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 symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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

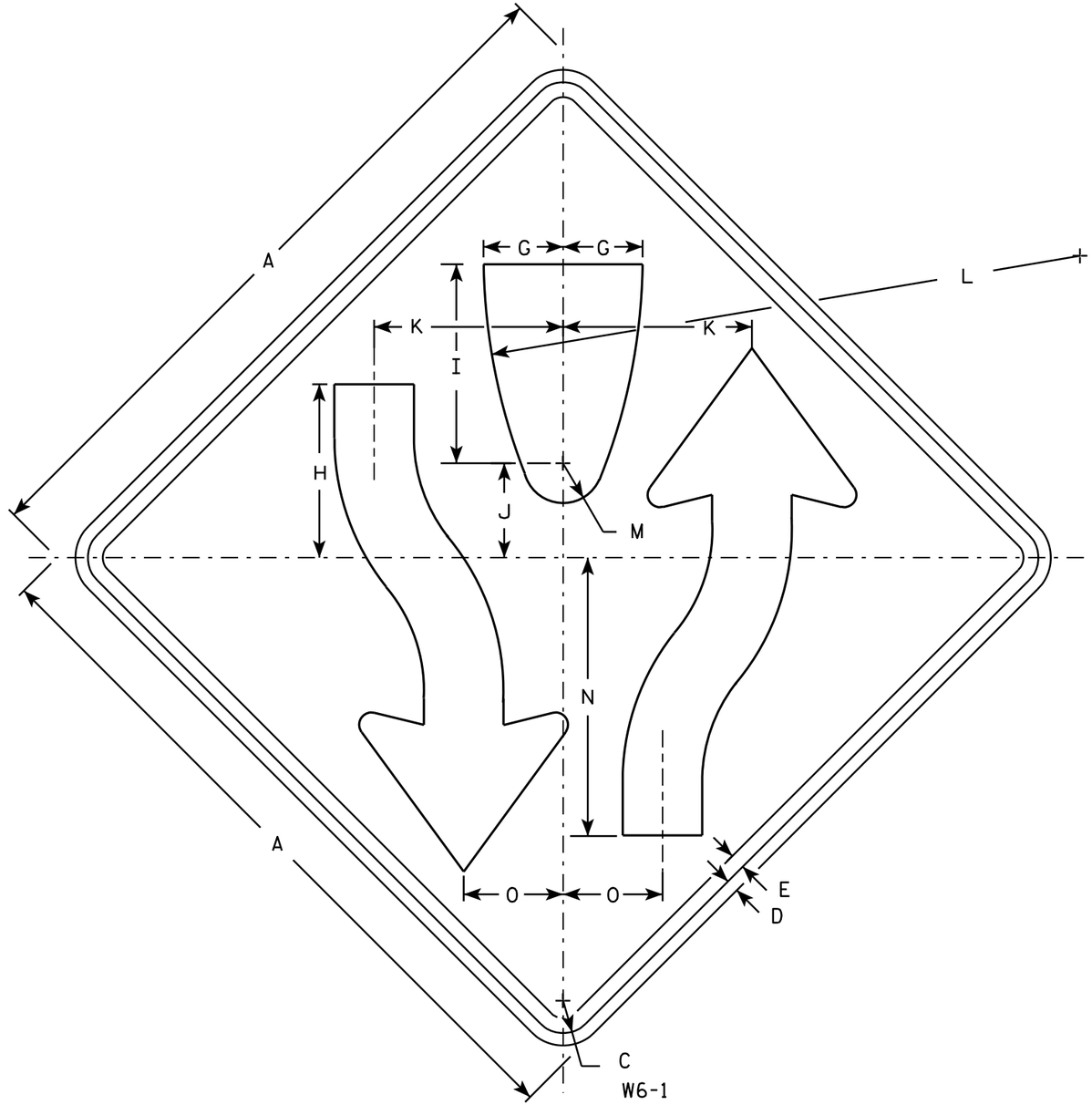
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

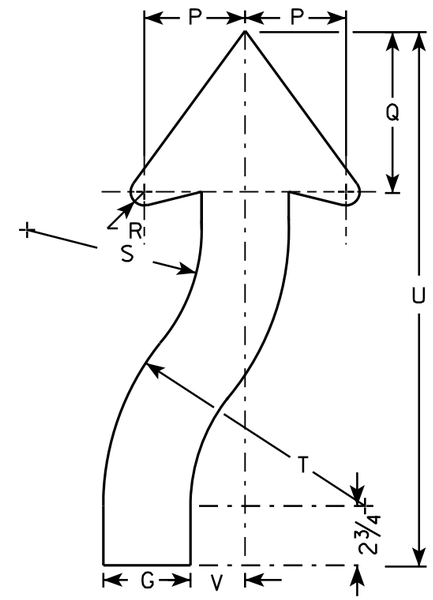
PROJECT NO:

SHEET NO: 509 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. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

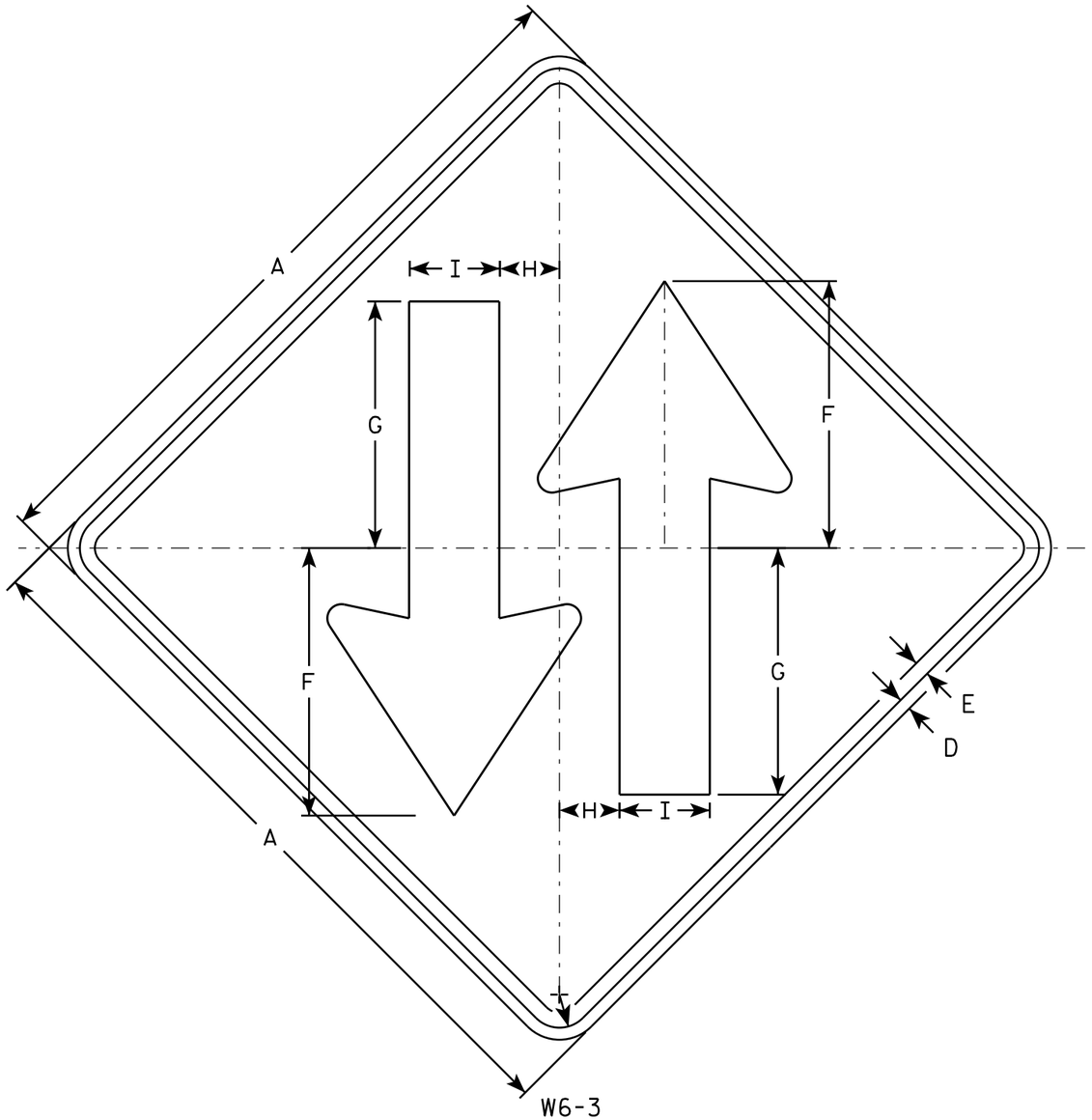
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 510	E

7

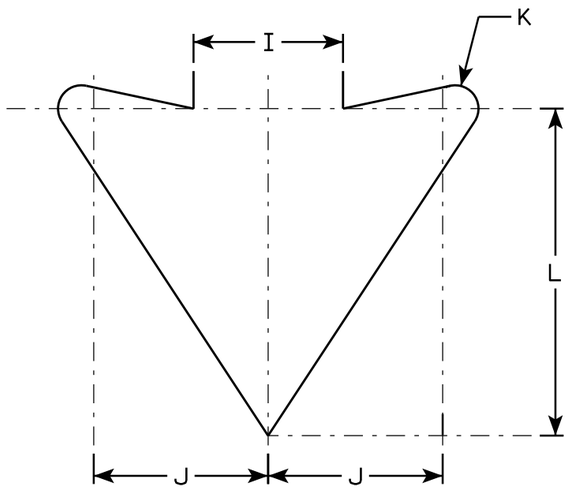
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W6-3

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.



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	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

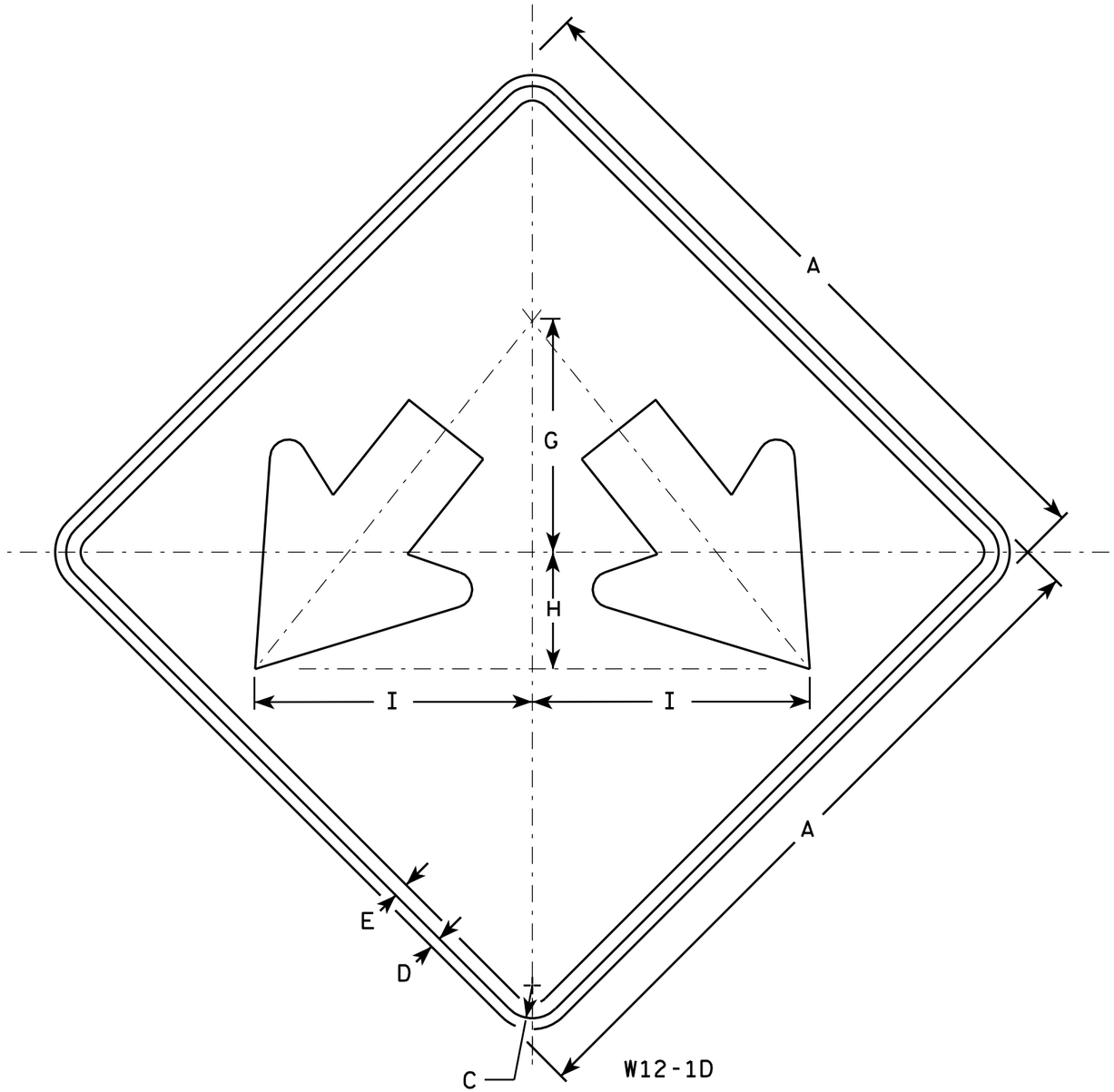
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

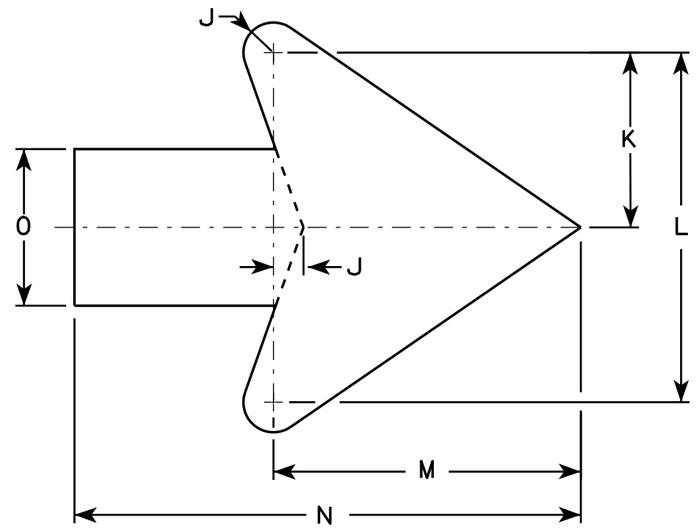
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

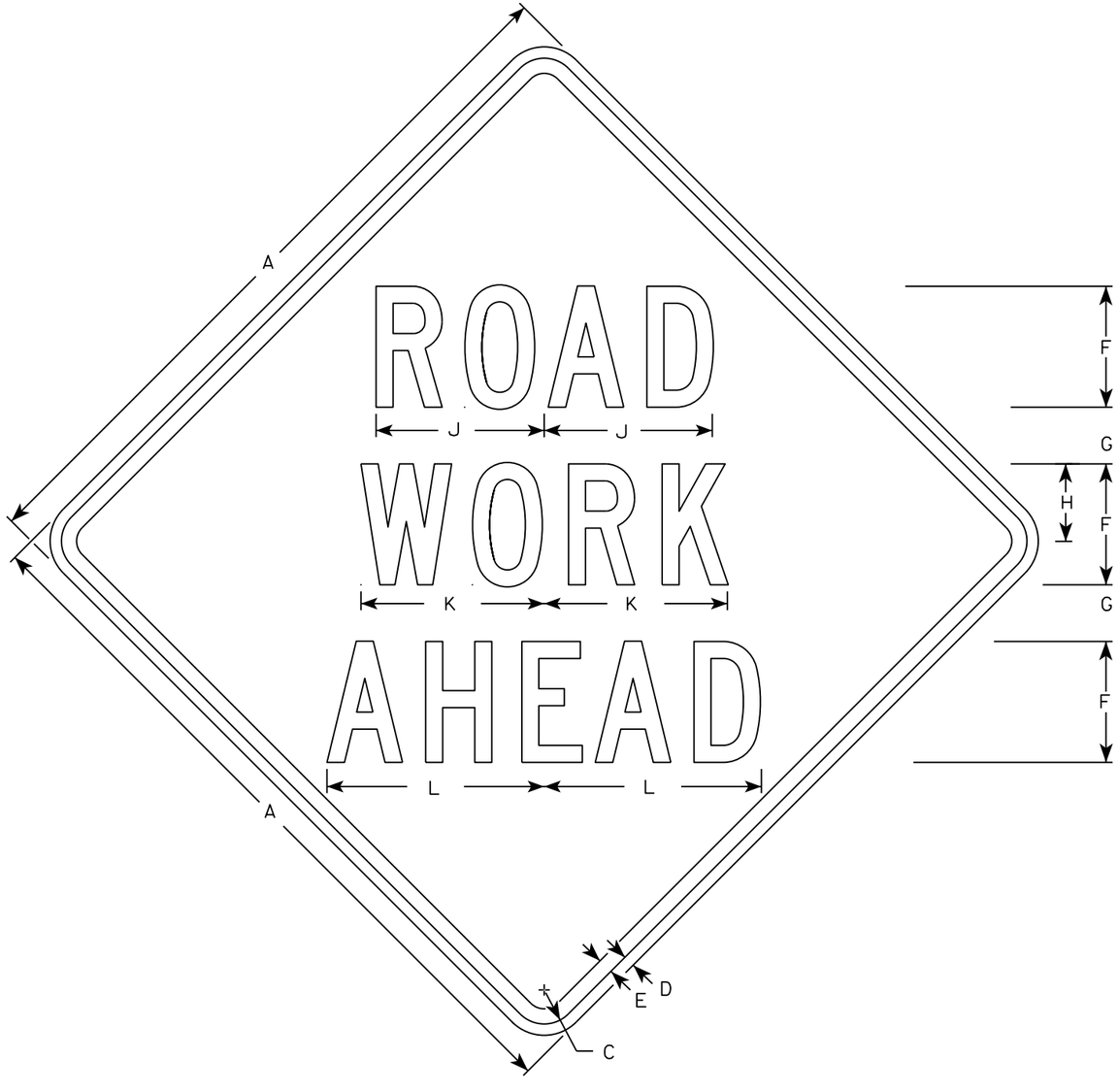
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

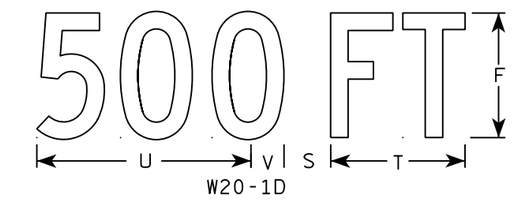
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

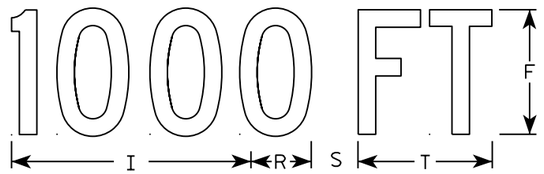
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 512 | E



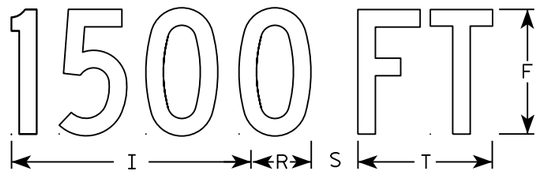
W20-1A



W20-1D



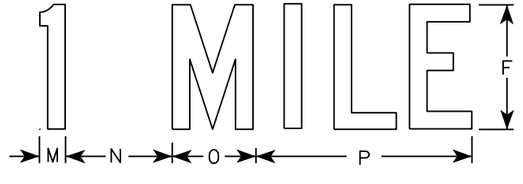
W20-1C



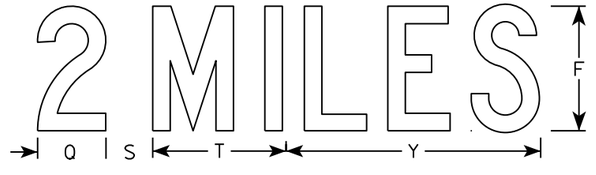
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

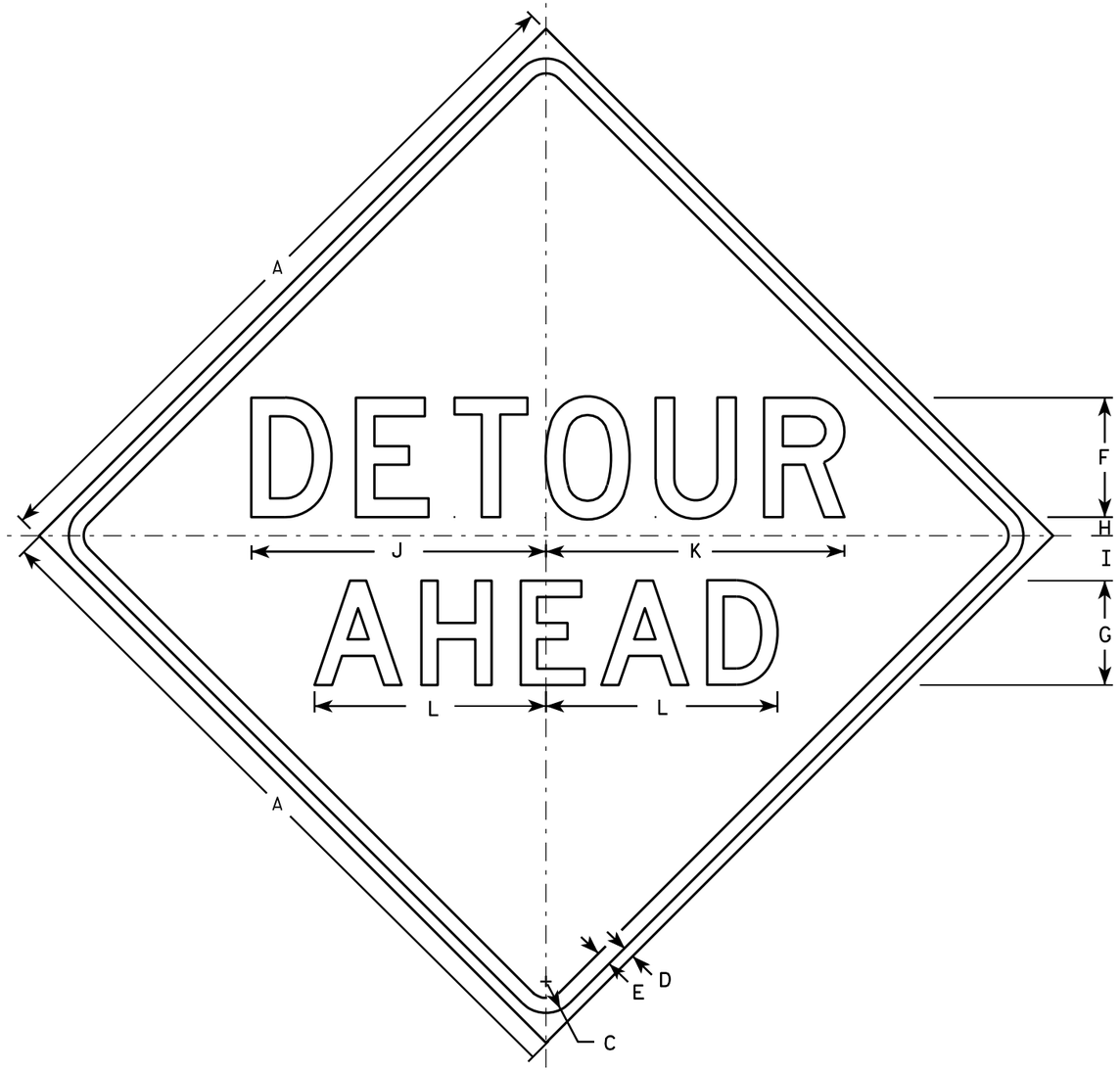
APPROVED Matthew R Rauch
for State Traffic Engineer

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

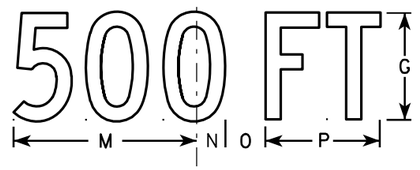
PROJECT NO:

SHEET NO: E

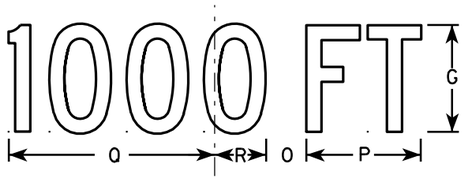
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



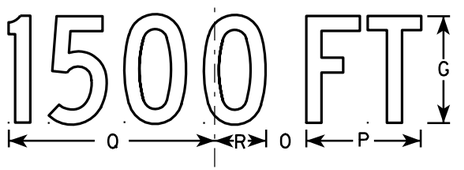
W20-2A



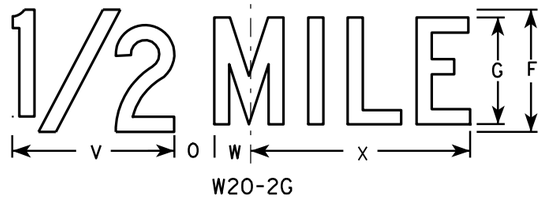
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

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

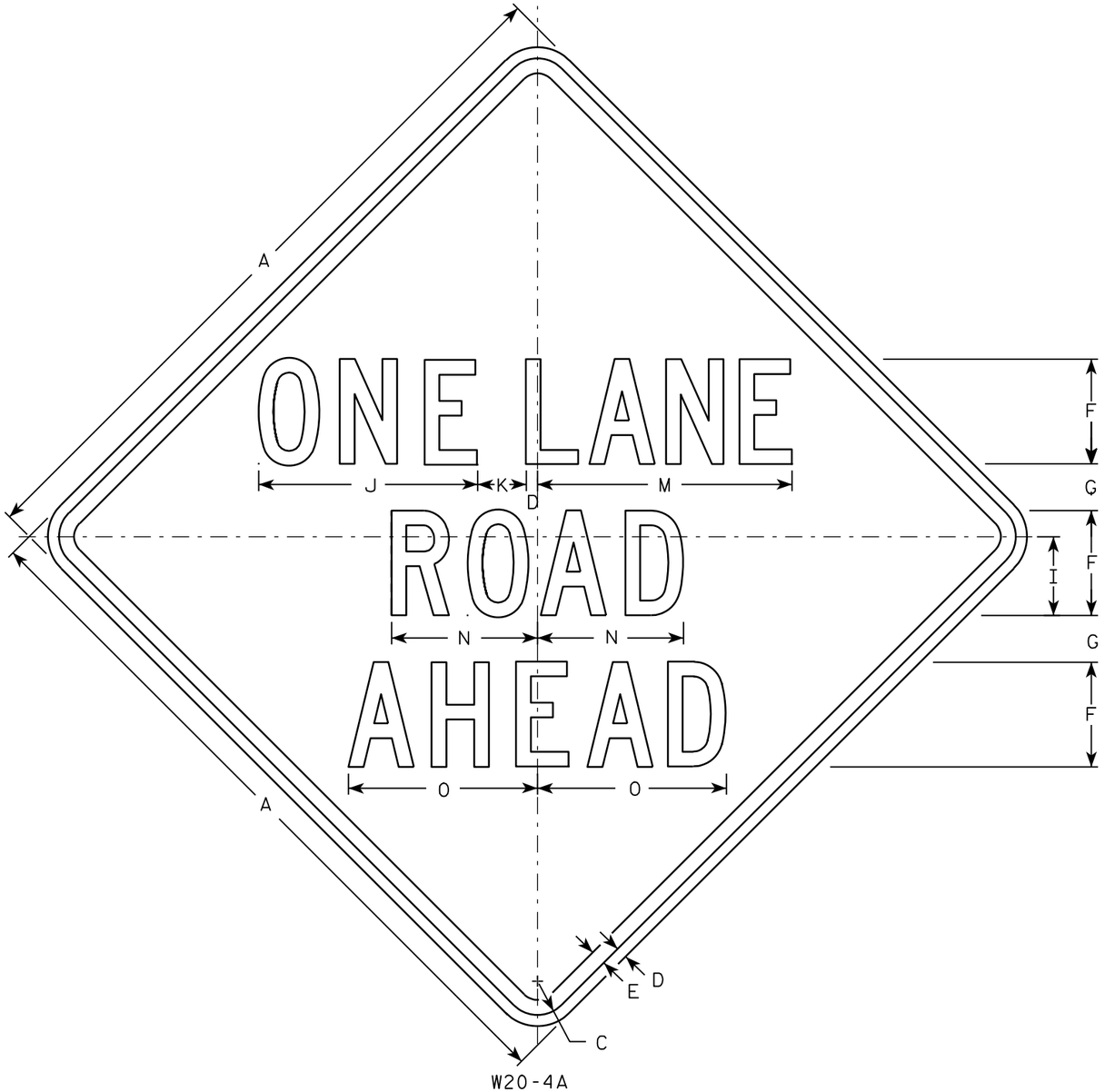
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

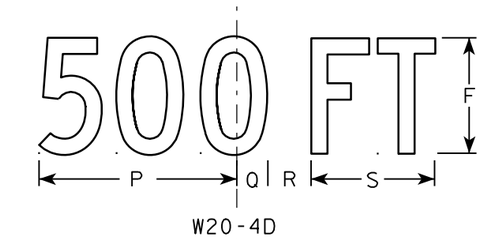
APPROVED Matthew R Rauch
for State Traffic Engineer

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

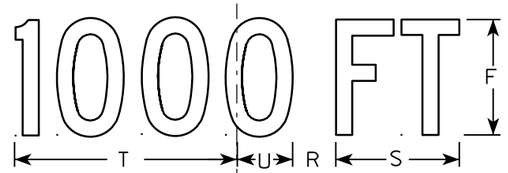
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 514 | E



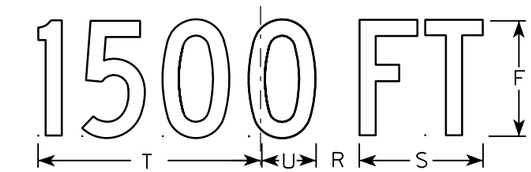
W20-4A



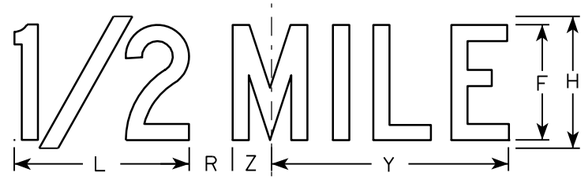
W20-4D



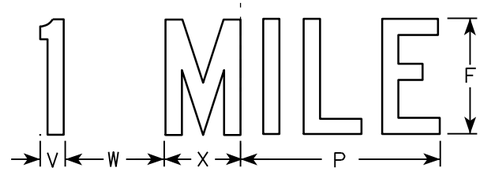
W20-4C



W20-4B



W20-4G



W20-4F

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 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	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	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

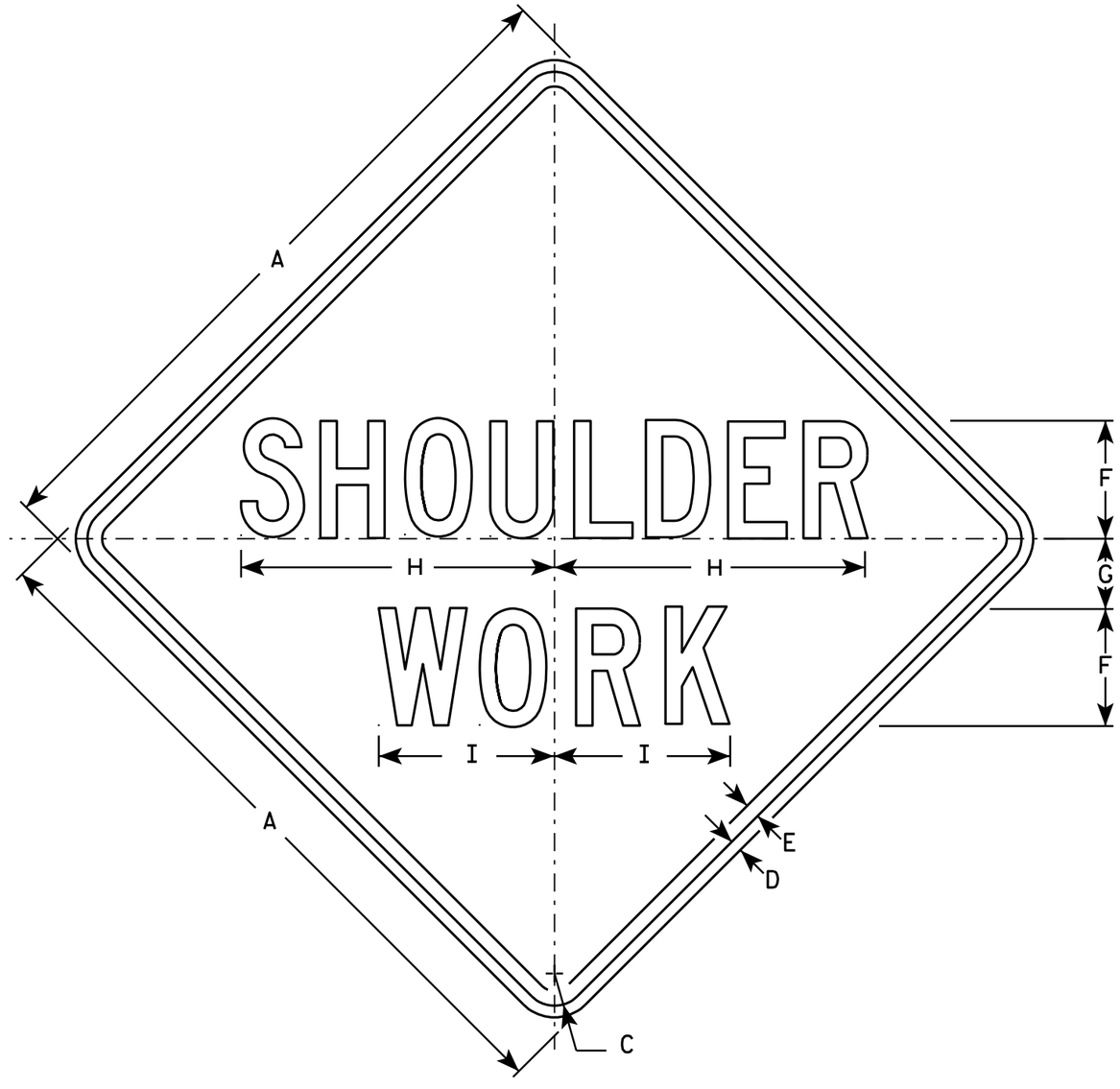
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-4.9

PROJECT NO:

SHEET NO: 515 E



W21-5

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

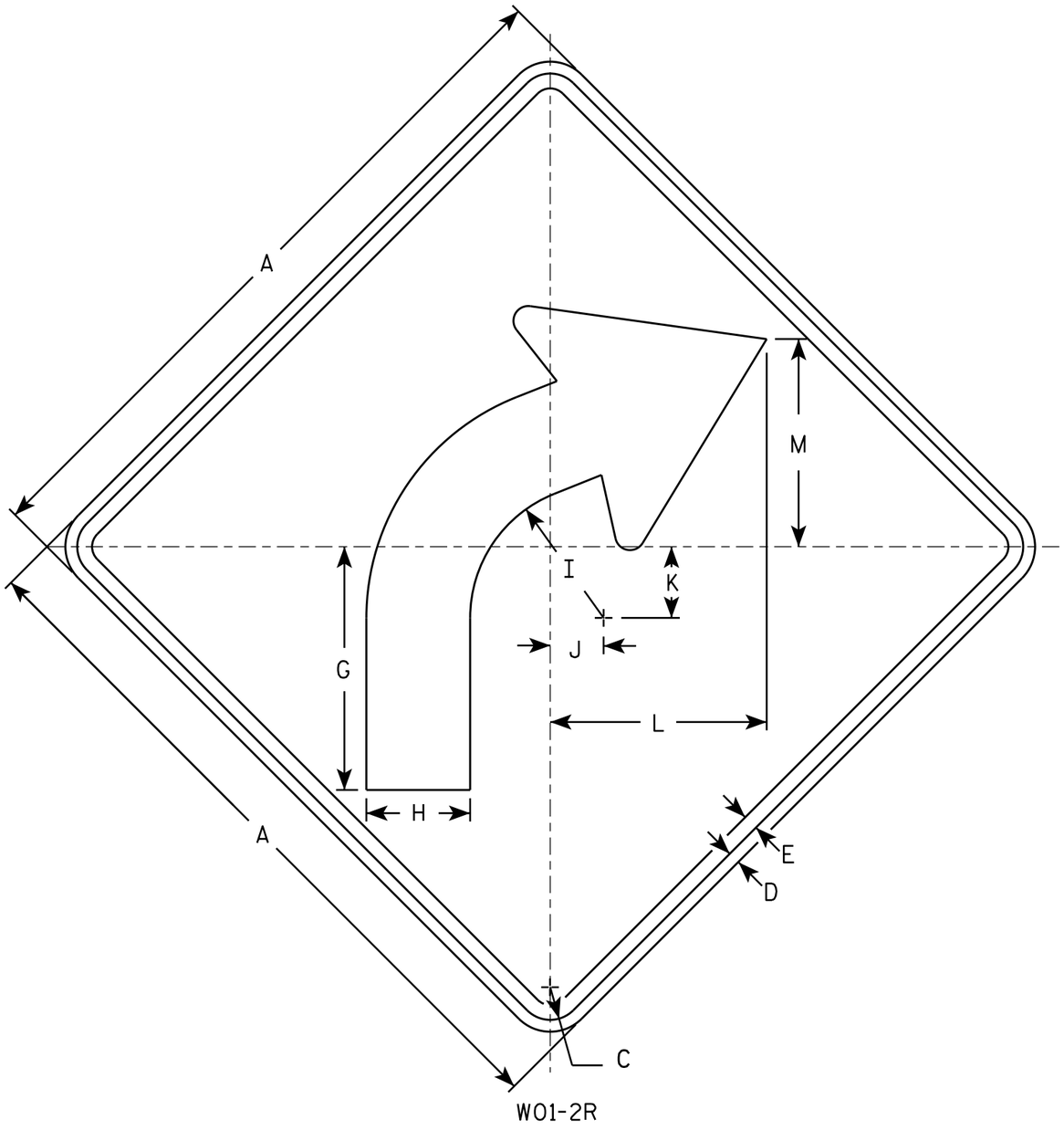
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

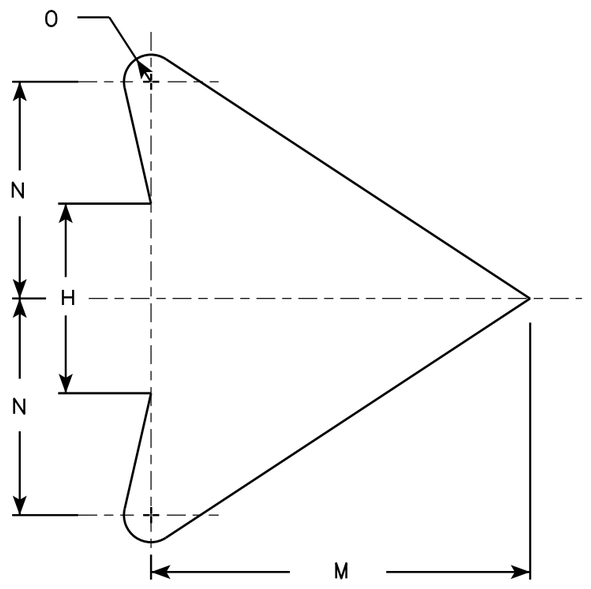
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 516	E



W01-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



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	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												4.0
2S	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
2M	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
3	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
4	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
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
W01-2

WISCONSIN DEPT OF TRANSPORTATION

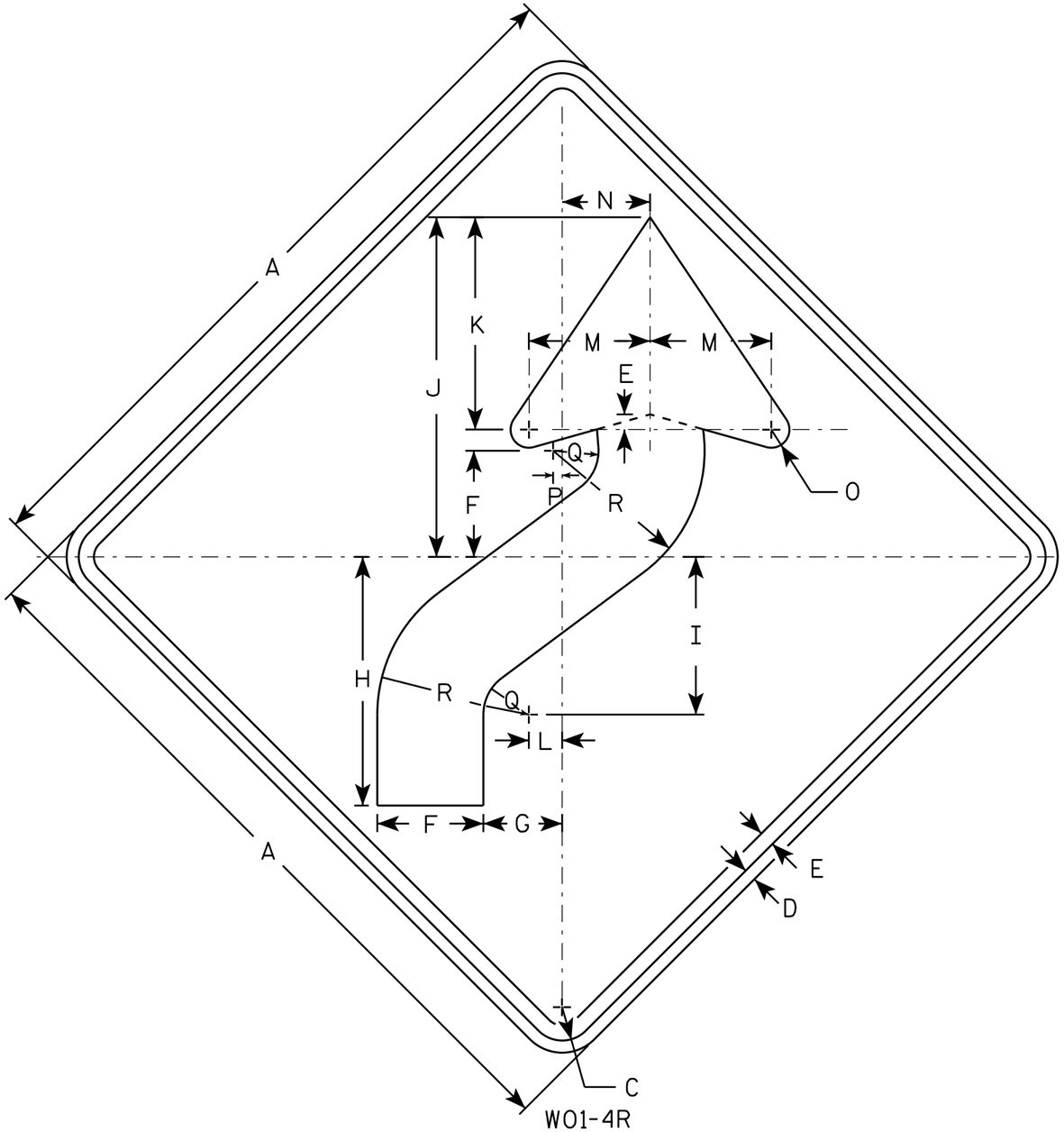
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

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

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

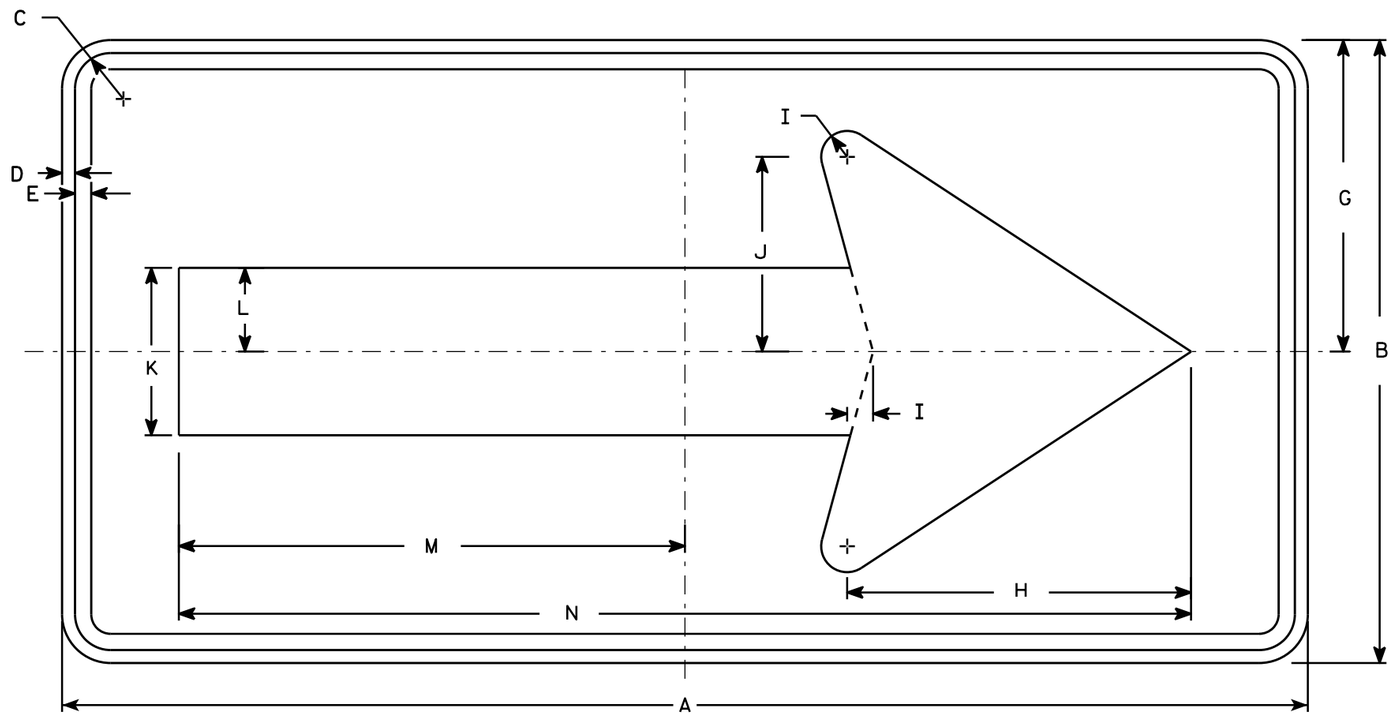
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

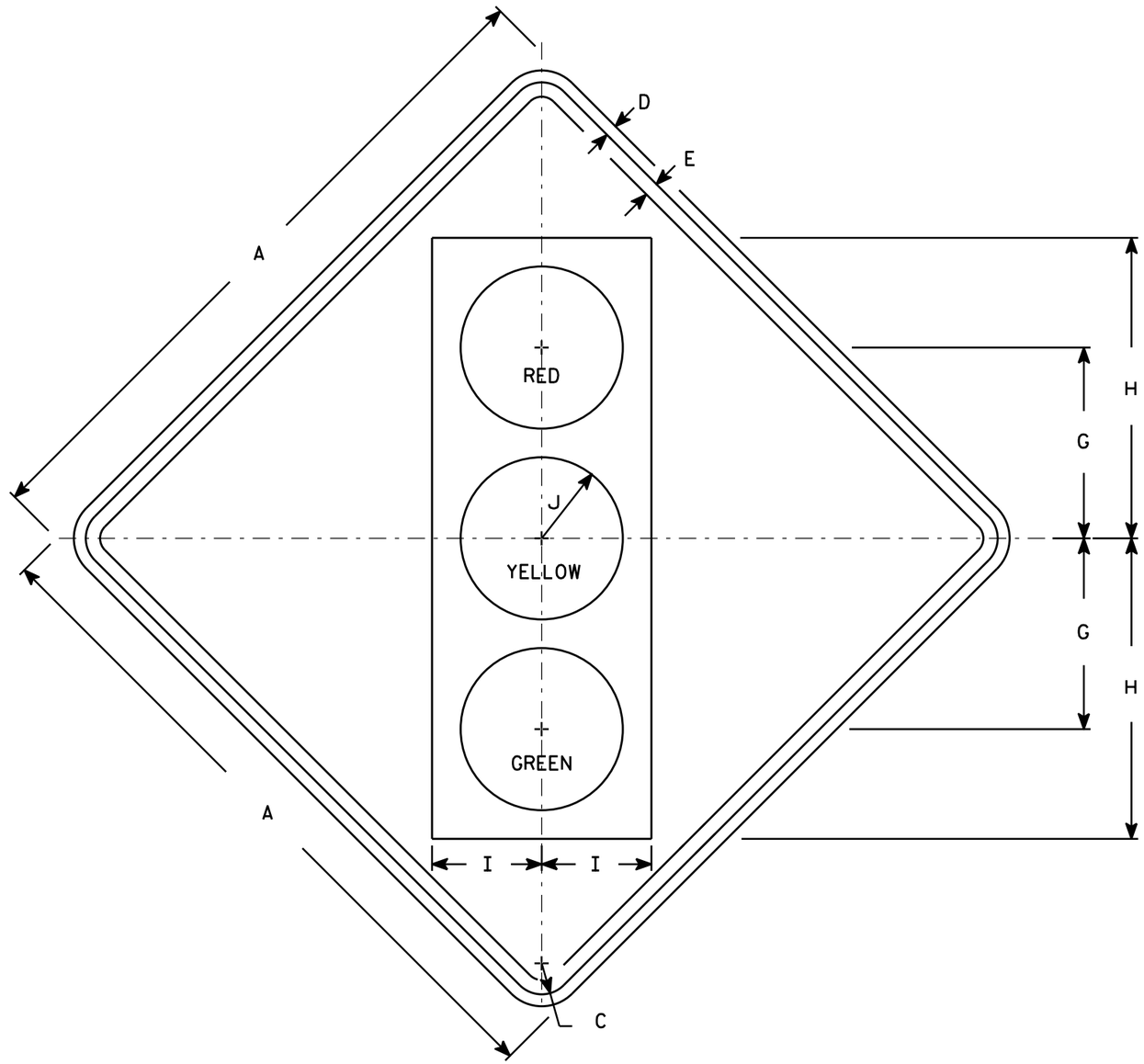
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

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

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



W03-3

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 - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		10	15 3/4	5 3/4	4 1/4																	9.0
2S	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
2M	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
3	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

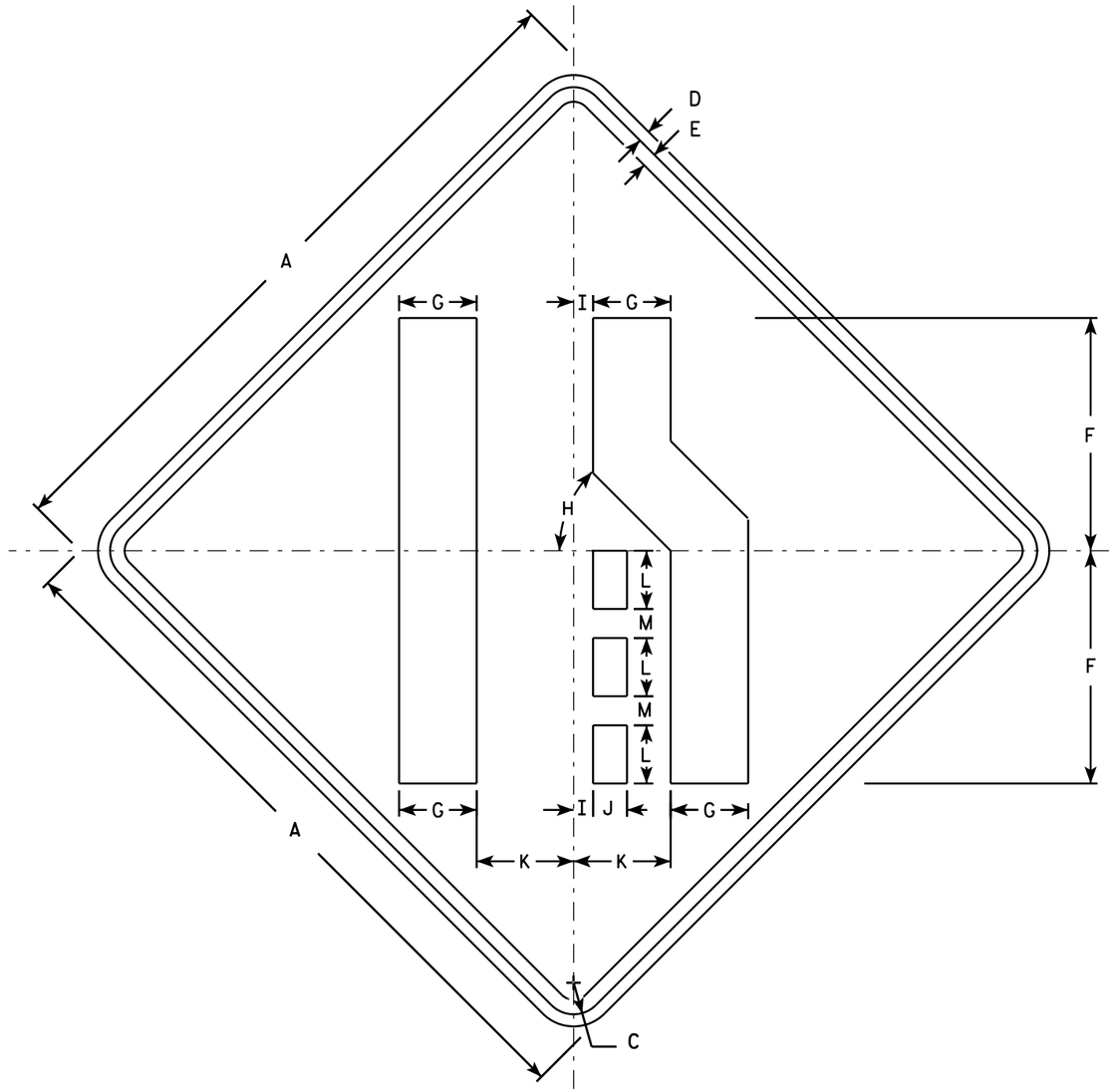
STANDARD SIGN
W03-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 520 W03-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W04-2R

NOTES

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

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

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 521 W04-2.1

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W042.DGN PLOT DATE : 20-NOV-2013 11:43 PLOT BY : mscsja

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 or Select Fill
4 - Expanded Marsh Backfill	Will be backfilled with Cut or Borrow
5 - Reduced Marsh in Fill	Reduced Marsh Excavation that can be used in Fill
6 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
7 - Mass Ordinate	If Marsh and EBS to be backfilled with Cut or Borrow: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]
8 - Select Fill	Area under inside 1:1's extended down from subgrade shoulder points

STAGE 1 (STA 120+00WB - STA 130+43WB): STH 16

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF) Note 1	Salvaged/Unusable Pavement Material (SF) Note 2	Fill (SF) Note 3	Marsh Exc (SF) Note 4	EBS (SF) Note 5	Cut (CY) Note 1	Salvaged/Unusable Pavement Material (CY) Note 2	Fill (CY) Note 3	Marsh Exc (CY) Note 4	EBS (CY) Note 5	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
120+36		10.9	0.0	0.0	0.0	0.0											
120+50	14	11.1	0.0	0.0	0.0	0.0	5	0	0	0	0	5	0	0	0	0	5
121+00	50	21.0	0.0	0.0	0.0	0.0	30	0	0	0	0	35	0	0	0	0	35
121+50	50	28.6	0.0	0.0	0.0	0.0	46	0	0	0	0	81	0	0	0	0	81
122+00	50	33.8	0.0	0.0	0.0	0.0	58	0	0	0	0	139	0	0	0	0	139
122+50	50	40.9	0.0	0.0	0.0	0.0	69	0	0	0	0	208	0	0	0	0	208
123+00	50	52.6	0.0	0.0	0.0	0.0	87	0	0	0	0	295	0	0	0	0	295
123+50	50	32.9	0.0	0.0	0.0	0.0	79	0	0	0	0	374	0	0	0	0	374
124+00	50	24.7	0.0	0.0	0.0	0.0	53	0	0	0	0	427	0	0	0	0	427
124+50	50	22.0	0.0	0.0	0.0	0.0	43	0	0	0	0	470	0	0	0	0	470
125+00	50	29.2	0.0	0.0	0.0	0.0	47	0	0	0	0	517	0	0	0	0	517
125+50	50	42.6	0.0	0.0	0.0	0.0	66	0	0	0	0	584	0	0	0	0	584
126+00	50	44.2	0.0	0.0	0.0	0.0	80	0	0	0	0	664	0	0	0	0	664
126+40	40	40.6	0.0	0.0	0.0	0.0	63	0	0	0	0	727	0	0	0	0	727
130+10		19.6	0.0	0.0	0.0	0.0											
130+43	33	14.1	0.0	0.0	0.0	0.0	21	0	0	0	0	21	0	0	0	0	21
							748	0	0	0	0						

STAGE 1 (STA 131+06WB - STA 131+46NB): STH 16

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF) Note 1	Salvaged/Unusable Pavement Material (SF) Note 2	Fill (SF) Note 3	Marsh Exc (SF) Note 4	EBS (SF) Note 5	Cut (CY) Note 1	Salvaged/Unusable Pavement Material (CY) Note 2	Fill (CY) Note 3	Marsh Exc (CY) Note 4	EBS (CY) Note 5	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
131+06		0.1	0.0	0.0	0.0	0.0											
131+25	19	22.9	0.0	0.0	0.0	0.0	8	0	0	0	0	8	0	0	0	0	8
131+46	21	2.7	0.0	0.0	0.0	0.0	10	0	0	0	0	18	0	0	0	0	18
							18	0	0	0	0						

STAGE 1 (STA 10+00ID - STA 12+79ID): DIX STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	Note 3 (CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
9+75		16.3	0.0	0.0	0.0	0.0											
10+00	25	23.5	0.0	0.0	0.0	0.0	18	0	0	0	0	18	0	0	0	0	18
10+50	50	27.0	0.0	0.0	0.0	0.0	47	0	0	0	0	65	0	0	0	0	65
11+00	50	26.5	0.0	0.0	0.0	0.0	50	0	0	0	0	114	0	0	0	0	114
11+50	50	53.5	0.0	0.0	0.0	0.0	74	0	0	0	0	189	0	0	0	0	189
12+00	50	35.8	0.0	0.0	0.0	0.0	83	0	0	0	0	271	0	0	0	0	271
12+50	50	34.6	0.0	0.0	0.0	0.0	65	0	0	0	0	336	0	0	0	0	336
13+00	50	34.5	0.0	0.2	0.0	0.0	64	0	0	0	0	400	0	0	0	0	400
13+50	50	31.1	0.0	0.0	0.0	0.0	61	0	0	0	0	461	0	0	0	0	461
13+71	21	0.0	0.0	0.0	0.0	0.0	12	0	0	0	0	473	0	0	0	0	473
							473	0	0	0	0						

STAGE 1 (STA 15+79ID - STA 17+78ID): INDUSTRIAL DRIVE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	Note 3 (CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
14+66		11.2	0.0	0.0	0.0	0.0											
15+00	34	20.2	0.0	0.4	0.0	0.0	20	0	0	0	0	20	0	0	0	0	19
15+50	50	43.8	0.0	0.1	0.0	0.0	59	0	1	0	0	79	1	0	0	0	78
16+00	50	52.7	0.0	0.0	0.0	0.0	89	0	0	0	0	168	1	0	0	0	167
16+50	50	51.2	0.0	0.0	0.0	0.0	96	0	0	0	0	264	1	0	0	0	263
17+00	50	44.8	0.0	0.0	0.0	0.0	89	0	0	0	0	353	1	0	0	0	352
17+50	50	59.0	0.0	0.0	0.0	0.0	96	0	0	0	0	450	1	0	0	0	448
17+86	36	26.5	0.0	0.0	0.0	0.0	57	0	0	0	0	507	1	0	0	0	506
							507	0	1	0	0						

STAGE 1 (STA 178+03WB - STA 194+59WB): STH 16

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	Note 4 (CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
178+03		230.3	0.0	0.0	0.0	2.7											
178+50	47	132.5	0.0	0.0	0.0	2.7	316	0	0	0	5	316	-5	0	0	4	320
179+00	50	126.7	0.0	0.0	0.0	2.7	240	0	0	0	5	556	-10	0	0	8	565
179+50	50	123.6	0.0	0.0	0.0	2.7	232	0	0	0	5	787	-14	0	0	12	802
180+00	50	125.6	0.0	0.0	0.0	2.7	231	0	0	0	5	1018	-19	0	0	15	1037
180+50	50	129.5	0.0	0.0	0.0	2.7	236	0	0	0	5	1254	-24	0	0	19	1279
181+00	50	142.5	0.0	0.0	0.0	2.7	252	0	0	0	5	1506	-29	0	0	23	1535
181+50	50	171.3	0.0	0.0	0.0	2.7	291	0	0	0	5	1797	-34	0	0	27	1831
182+00	50	199.8	0.0	0.0	0.0	2.7	344	0	0	0	5	2140	-39	0	0	31	2179
182+50	50	151.4	0.0	0.0	0.0	2.8	325	0	0	0	5	2466	-44	0	0	35	2510
183+00	50	162.2	0.0	0.0	0.0	2.8	290	0	0	0	5	2756	-49	0	0	39	2805
183+50	50	159.1	0.0	0.0	0.0	2.8	298	0	0	0	5	3053	-54	0	0	43	3108
184+00	50	128.6	0.0	0.0	0.0	2.8	266	0	0	0	5	3320	-59	0	0	47	3379
184+50	50	122.0	0.0	0.3	0.0	2.8	232	0	0	0	5	3552	-64	0	0	51	3616
185+00	50	125.6	0.0	0.1	0.0	2.8	229	0	0	0	5	3781	-69	0	0	56	3850
185+50	50	199.0	0.0	0.0	0.0	2.8	301	0	0	0	5	4082	-73	0	0	60	4155
186+00	50	152.7	0.0	0.0	0.0	2.8	326	0	0	0	5	4407	-79	0	0	64	4486
186+50	50	144.0	0.0	0.0	0.0	2.8	275	0	0	0	5	4682	-84	0	0	68	4766
187+00	50	143.1	0.0	0.0	0.0	2.8	266	0	0	0	5	4948	-89	0	0	72	5037
187+50	50	131.7	0.0	0.0	0.0	2.8	254	0	0	0	5	5202	-94	0	0	76	5296
188+00	50	189.0	0.0	0.0	0.0	2.8	297	0	0	0	5	5499	-99	0	0	80	5598
188+50	50	152.1	0.0	0.0	0.0	2.8	316	0	0	0	5	5815	-104	0	0	84	5919
189+00	50	127.1	0.0	0.0	0.0	2.8	258	0	0	0	5	6073	-109	0	0	88	6183
189+50	50	129.2	0.0	0.0	0.0	2.8	237	0	0	0	5	6311	-114	0	0	92	6425
190+00	50	127.3	0.0	0.2	0.0	2.8	238	0	0	0	5	6548	-119	0	0	96	6667
190+50	50	124.1	0.0	0.2	0.0	2.8	233	0	0	0	5	6781	-124	0	0	100	6905
191+00	50	119.2	0.0	0.2	0.0	2.8	225	0	0	0	5	7006	-128	0	0	104	7135
191+50	50	237.8	0.0	0.0	0.0	2.8	331	0	0	0	5	7337	-133	0	0	109	7470
192+00	50	131.5	0.0	10.6	0.0	2.5	342	0	10	0	5	7679	-126	0	0	112	7805
192+50	50	126.3	0.0	0.6	0.0	2.5	239	0	10	0	5	7918	-118	0	0	116	8035
193+00	50	122.1	0.0	0.0	0.0	2.5	230	0	1	0	5	8148	-121	0	0	120	8269
193+50	50	120.0	0.0	0.0	0.0	2.5	224	0	0	0	5	8372	-126	0	0	123	8498
194+00	50	119.9	0.0	0.0	0.0	2.5	222	0	0	0	5	8594	-130	0	0	127	8724
194+50	50	152.9	0.0	0.0	0.0	2.5	253	0	0	0	5	8846	-135	0	0	131	8981
194+59	9	140.3	0.0	0.0	0.0	2.5	49	0	0	0	1	8895	-136	0	0	131	9031
							8895	0	22	0	164						

STAGE 1 (STA 10+83 S - STA 10+93 S): STH 73/LUDINGTON STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	Note 4 (CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+75		87.2	0.0	0.0	0.0	1.3											
11+00	25	137.3	0.0	0.0	0.0	1.3	104	0	0	0	1	104	-1	0	0	1	105
							104	0	0	0	1						

STAGE 1 (STA 12+32 N - STA 12+35 N): STH 73/LUDINGTON STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	Note 4 (CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
12+00		136.8	0.0	0.0	0.0	1.3											
12+35	35	90.2	0.0	0.0	0.0	1.3	147	0	0	0	2	147	-2	0	0	1	149
							147	0	0	0	2						

STAGE 1 (STA 10+76 SW - STA 11+07 SW): WATER STREET

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+76		57.2	0.0	1.0	0.0	1.7											
11+00	24	65.8	0.0	0.2	0.0	1.7	56	0	1	0	2	56	-1	0	0	1	57
							56	0	1	0	2						

STAGE 1 (STA 11+98 NW - STA 12+17 NW): WATER STREET

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
12+00		82.7	0.0	0.0	0.0	1.7											
12+16	16	75.0	0.0	0.0	0.0	1.7	48	0	0	0	1	48	-1	0	0	1	49
							48	0	0	0	1						

STAGE 1 (STA 10+88 W - STA 10+98 W): WATERLOO STREET

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+88		63.6	0.0	0.5	0.0	1.8											
11+00	12	97.0	0.0	0.0	0.0	1.8	36	0	0	0	1	36	-1	0	0	1	36
							36	0	0	0	1						

STAGE 1 (STA 11+91 U - STA 12+08 U): UDEY STREET

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
12+00		42.4	0.0	0.0	0.0	1.1											
12+08	8	33.9	0.0	0.1	0.0	1.1	12	0	0	0	0	12	0	0	0	0	12
							12	0	0	0	0						

STAGE 1 (STA 10+45 MS - STA 11+26 MS): MANNING STREET

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+45		60.1	0.0	0.0	0.0	1.9											
10+50	5	58.1	0.0	0.0	0.0	1.9	10	0	0	0	0	10	0	0	0	0	11
11+00	50	71.1	0.0	3.9	0.0	1.9	117	0	2	0	3	117	0	0	0	3	117
							127	0	2	0	4						

STAGE 1 (STA 10+32 R - STA 10+42 R): RIVER ROAD

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+32		42.1	0.0	0.3	0.0	1.1											
10+40	8	42.1	0.0	0.1	0.0	1.1	12	0	0	0	0	12	0	0	0	0	13
							12	0	0	0	0						

STAGE 2 (STA 123+42 EB - STA 130+80 EB): STH 16

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
123+42		0.0	0.0	0.0	0.0	0.0											
123+50	8	0.8	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0
124+00	50	25.0	0.0	0.0	0.0	0.0	24	0	0	0	0	24	0	0	0	0	24
124+50	50	42.3	0.0	0.0	0.0	0.0	62	0	0	0	0	86	0	0	0	0	86
125+00	50	44.2	0.0	0.0	0.0	0.0	80	0	0	0	0	166	0	0	0	0	166
125+50	50	34.8	0.0	0.0	0.0	0.0	73	0	0	0	0	240	0	0	0	0	240
126+00	50	26.1	0.0	0.0	0.0	0.0	56	0	0	0	0	296	0	0	0	0	296
126+40	40	132.1	0.0	10.8	0.0	3.1	117	0	8	0	2	413	8	0	0	2	405
127+00	60	154.1	0.0	3.1	0.0	3.1	318	0	15	0	7	731	20	0	0	7	711
127+50	50	155.1	0.0	3.9	0.0	3.1	286	0	6	0	6	1017	23	0	0	12	995
128+00	50	181.3	0.0	7.7	0.0	3.1	312	0	11	0	6	1329	30	0	0	17	1299
128+50	50	175.1	0.0	23.2	0.0	3.1	330	0	29	0	6	1659	60	0	0	21	1599
129+00	50	173.2	0.0	20.4	0.0	3.1	322	0	40	0	6	1981	105	0	0	26	1876
129+50	50	169.7	0.0	26.0	0.0	3.1	318	0	43	0	6	2299	153	0	0	30	2146
130+00	50	188.3	0.0	28.1	0.0	3.1	331	0	50	0	6	2630	210	0	0	35	2421
130+50	50	232.3	0.0	1.5	0.0	3.1	389	0	27	0	6	3020	238	0	0	39	2781
130+80	30	350.1	0.0	1.1	0.0	3.1	320	0	1	0	3	3339	236	0	0	42	3103
							3339	0	231	0	53						

STAGE 2 (STA 130+80 EB - STA 139+26 EB): STH 16

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
130+80		350.1	0.0	1.1	0.0	3.1											
131+00	20	470.1	0.0	0.0	0.0	3.1	309	0	0	0	2	309	-2	0	0	2	311
131+50	50	447.5	0.0	0.0	0.0	3.1	850	0	0	0	6	1159	-8	0	0	6	1166
132+00	50	249.9	0.0	0.0	0.0	3.1	646	0	0	0	6	1804	-13	0	0	11	1818
132+50	50	204.3	0.0	0.0	0.0	1.9	421	0	0	0	5	2225	-18	0	0	15	2243
133+00	50	194.2	0.0	0.0	0.0	1.9	369	0	0	0	4	2594	-21	0	0	18	2615
133+50	50	153.4	0.0	0.4	0.0	1.9	322	0	0	0	4	2916	-25	0	0	20	2940
134+00	50	112.6	0.0	10.1	0.0	1.9	246	0	10	0	4	3162	-16	0	0	23	3178
134+50	50	95.1	0.0	23.8	0.0	1.9	192	0	31	0	4	3354	20	0	0	26	3334
135+00	50	82.4	0.0	38.6	0.0	1.9	164	0	58	0	4	3518	88	0	0	29	3430
135+50	50	71.9	0.0	48.5	0.0	1.9	143	0	81	0	4	3661	186	0	0	32	3476
136+00	50	65.0	0.0	53.4	0.0	1.9	127	0	94	0	4	3788	300	0	0	34	3488
136+50	50	59.1	0.0	37.5	0.0	1.9	115	0	84	0	4	3903	402	0	0	37	3501
137+00	50	62.8	0.0	4.5	0.0	1.9	113	0	39	0	4	4016	447	0	0	40	3569
137+50	50	76.1	0.0	0.2	0.0	1.9	129	0	4	0	4	4144	449	0	0	43	3696
138+00	50	91.9	0.0	0.0	0.0	1.9	156	0	0	0	4	4300	445	0	0	46	3855
138+50	50	76.5	0.0	0.0	0.0	1.9	156	0	0	0	4	4456	442	0	0	49	4014
139+00	50	65.2	0.0	0.3	0.0	1.9	131	0	0	0	4	4587	439	0	0	51	4149
139+26	26	56.7	0.0	3.6	0.0	1.9	59	0	2	0	2	4646	439	0	0	53	4207
							4646	0	404	0	66						

STAGE 2 (STA 139+26 WB - STA 178+03 WB): STH 16

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
139+26		145.1	0.0	3.6	0.0	2.2											
139+50	24	121.0	0.0	5.8	0.0	2.2	119	0	4	0	2	119	3	0	0	2	115
140+00	50	80.6	0.0	12.4	0.0	2.2	187	0	17	0	4	305	20	0	0	5	285
140+50	50	92.5	0.0	7.1	0.0	2.2	160	0	18	0	4	466	39	0	0	8	427
141+00	50	124.1	0.0	2.0	0.0	2.2	201	0	8	0	4	666	45	0	0	11	621
141+50	50	146.5	0.0	0.3	0.0	2.2	251	0	2	0	4	917	44	0	0	14	873
142+00	50	151.3	0.0	3.2	0.0	2.2	276	0	3	0	4	1193	44	0	0	17	1148
142+50	50	189.7	0.0	5.5	0.0	2.2	316	0	8	0	4	1508	50	0	0	21	1458
143+00	50	136.7	0.0	7.5	0.0	2.2	302	0	12	0	4	1810	61	0	0	24	1749
143+50	50	124.8	0.0	10.1	0.0	2.2	242	0	16	0	4	2053	78	0	0	27	1975
144+00	50	182.3	0.0	0.0	0.0	2.2	284	0	9	0	4	2337	85	0	0	30	2252
144+50	50	135.0	0.0	2.1	0.0	2.2	294	0	2	0	4	2631	84	0	0	33	2547
145+00	50	114.8	0.0	5.5	0.0	2.2	231	0	7	0	4	2862	89	0	0	37	2774
145+50	50	108.7	0.0	6.1	0.0	2.2	207	0	11	0	4	3069	98	0	0	40	2971
146+00	50	116.5	0.0	1.4	0.0	2.2	209	0	7	0	4	3278	103	0	0	43	3175
146+50	50	116.0	0.0	0.7	0.0	2.2	215	0	2	0	4	3493	101	0	0	46	3392
147+00	50	140.2	0.0	0.0	0.0	2.2	237	0	1	0	4	3730	98	0	0	49	3632
147+50	50	142.1	0.0	0.0	0.0	2.2	261	0	0	0	4	3992	94	0	0	52	3898
148+00	50	163.8	0.0	0.0	0.0	2.2	283	0	0	0	4	4275	90	0	0	56	4185
148+50	50	119.4	0.0	0.6	0.0	2.2	262	0	1	0	4	4537	87	0	0	59	4450
149+00	50	125.5	0.0	1.8	0.0	2.2	227	0	2	0	4	4764	86	0	0	62	4678
149+50	50	118.2	0.0	3.5	0.0	2.2	226	0	5	0	4	4989	88	0	0	65	4902
150+00	50	103.6	0.0	12.4	0.0	2.2	205	0	15	0	4	5195	102	0	0	68	5093
150+50	50	119.1	0.0	8.3	0.0	2.2	206	0	19	0	4	5401	122	0	0	72	5279
151+00	50	147.7	0.0	0.0	0.0	2.2	247	0	8	0	4	5648	128	0	0	75	5520
151+50	50	178.0	0.0	0.0	0.0	2.2	302	0	0	0	4	5949	124	0	0	78	5826
152+00	50	129.5	0.0	0.7	0.0	2.2	285	0	1	0	4	6234	121	0	0	81	6114
152+50	50	166.8	0.0	0.0	0.0	2.2	274	0	1	0	4	6508	117	0	0	84	6391
153+00	50	152.8	0.0	0.2	0.0	2.2	296	0	0	0	4	6804	114	0	0	88	6691
153+50	50	155.0	0.0	0.0	0.0	2.2	285	0	0	0	4	7089	110	0	0	91	6980
154+00	50	132.8	0.0	0.2	0.0	2.2	267	0	0	0	4	7356	106	0	0	94	7250
154+50	50	134.0	0.0	0.1	0.0	2.2	247	0	0	0	4	7603	102	0	0	97	7500
155+00	50	133.8	0.0	0.0	0.0	2.2	248	0	0	0	4	7851	99	0	0	100	7752
155+50	50	222.6	0.0	0.0	0.0	2.2	330	0	0	0	4	8181	95	0	0	103	8086
156+00	50	166.6	0.0	0.0	0.0	2.2	360	0	0	0	4	8541	91	0	0	107	8451
156+50	50	137.5	0.0	0.4	0.0	2.2	282	0	0	0	4	8823	87	0	0	110	8736
157+00	50	121.0	0.0	0.7	0.0	2.2	239	0	1	0	4	9062	84	0	0	113	8978
157+50	50	124.8	0.0	0.6	0.0	2.2	228	0	1	0	4	9290	82	0	0	116	9208
158+00	50	126.8	0.0	0.5	0.0	2.2	233	0	1	0	4	9523	79	0	0	119	9444
158+50	50	138.5	0.0	0.4	0.0	2.2	246	0	1	0	4	9768	76	0	0	123	9692
159+00	50	220.2	0.0	0.0	0.0	2.2	332	0	0	0	4	10101	73	0	0	126	10028
159+50	50	152.2	0.0	0.0	0.0	2.8	345	0	0	0	5	10445	68	0	0	129	10377
160+00	50	143.1	0.0	0.0	0.0	2.8	273	0	0	0	5	10719	63	0	0	133	10656
160+50	50	135.7	0.0	0.0	0.0	2.8	258	0	0	0	5	10977	58	0	0	138	10919
161+00	50	133.0	0.0	0.0	0.0	2.8	249	0	0	0	5	11226	53	0	0	142	11173
161+50	50	145.7	0.0	0.0	0.0	2.8	258	0	0	0	5	11484	48	0	0	146	11436
162+00	50	142.4	0.0	0.0	0.0	2.8	267	0	0	0	5	11751	43	0	0	150	11708
162+50	50	174.2	0.0	0.0	0.0	2.8	293	0	0	0	5	12044	38	0	0	154	12006
163+00	50	161.2	0.0	0.0	0.0	2.8	311	0	0	0	5	12355	32	0	0	158	12322
163+50	50	141.1	0.0	0.2	0.0	2.8	280	0	0	0	5	12634	28	0	0	162	12607
164+00	50	146.9	0.0	0.0	0.0	2.8	267	0	0	0	5	12901	23	0	0	166	12878
164+50	50	147.7	0.0	0.0	0.0	2.8	273	0	0	0	5	13174	18	0	0	170	13156
165+00	50	153.6	0.0	0.0	0.0	2.8	279	0	0	0	5	13453	12	0	0	174	13440
165+50	50	130.2	0.0	0.1	0.0	2.8	263	0	0	0	5	13716	7	0	0	178	13708
166+00	50	115.0	0.0	0.5	0.0	2.8	227	0	1	0	5	13943	3	0	0	182	13940
166+50	50	115.1	0.0	0.0	0.0	2.8	213	0	0	0	5	14156	-2	0	0	186	14157
167+00	50	133.7	0.0	0.0	0.0	2.8	230	0	0	0	5	14386	-7	0	0	190	14392
167+50	50	130.2	0.0	0.0	0.0	2.8	244	0	0	0	5	14630	-12	0	0	195	14642
168+00	50	136.1	0.0	0.1	0.0	2.8	247	0	0	0	5	14877	-17	0	0	199	14893
168+50	50	134.9	0.0	0.2	0.0	2.8	251	0	0	0	5	15128	-21	0	0	203	15149
169+00	50	135.1	0.0	0.3	0.0	2.8	250	0	0	0	5	15378	-26	0	0	207	15404
169+50	50	152.8	0.0	0.0	0.0	2.8	267	0	0	0	5	15644	-31	0	0	211	15675
170+00	50	144.8	0.0	0.0	0.0	2.8	276	0	0	0	5	15920	-36	0	0	215	15956
170+50	50	228.9	0.0	0.0	0.0	2.8	346	0	0	0	5	16266	-41	0	0	219	16307
171+00	50	142.7	0.0	0.0	0.0	2.8	344	0	0	0	5	16610	-46	0	0	223	16656
171+50	50	140.1	0.0	0.3	0.0	2.8	262	0	0	0	5	16872	-51	0	0	227	16923
172+00	50	149.3	0.0	0.0	0.0	2.8	268	0	0	0	5	17140	-55	0	0	231	17195
172+50	50	155.5	0.0	0.0	0.0	2.8	282	0	0	0	5	17422	-61	0	0	235	17483
173+00	50	148.3	0.0	0.0	0.0	2.8	281	0	0	0	5	17703	-66	0	0	239	17769
173+50	50	148.7	0.0	0.0	0.0	2.8	275	0	0	0	5	17978	-71	0	0	243	18049
174+00	50	244.9	0.0	0.0	0.0	2.8	364	0	0	0	5	18343	-76	0	0	248	18418
174+50	50	245.5	0.0	0.0	0.0	2.8	454	0	0	0	5	18797	-81	0	0	252	18878
175+00	50	135.8	0.0	0.0	0.0	2.8	353	0	0	0	5	19150	-86	0	0	256	19236
175+50	50	139.7	0.0	0.0	0.0	2.8	255	0	0	0	5	19405	-91	0	0	260	19496
176+00	50	132.0	0.0	0.0	0.0	2.8	252	0	0	0	5	19656	-96	0	0	264	19752
176+50	50	129.0	0.0	0.0	0.0	2.8	242	0	0	0	5	19898	-101	0	0	268	19999
177+00	50	125.6	0.0	0.0	0.0	2.8	236	0	0	0	5	20134	-106	0	0	272	20240
177+50	50	120.4	0.0	0.0	0.0	2.8	228	0	0	0	5	20361	-111	0	0	276	20473
178+00	50	227.4	0.0	0.0	0.0	2.8	322	0	0	0	5	20683	-117	0	0	280	20800
178+03	3	230.3	0.0	0.0	0.0	2.8	25	0	0	0	0	20709	-117	0	0	280	20826
							20709	0	187	0	350						

STAGE 2 (STA 10+00 ID - STA 12+79 ID): DIX STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+00		31.1	0.0	0.3	0.0	2.8											
10+50	50	85.0	0.0	4.4	0.0	2.8	108	0	4	0	5	108	0	0	0	4	107
11+00	50	92.5	0.0	0.4	0.0	2.8	164	0	4	0	5	272	1	0	0	8	271
11+50	50	82.9	0.0	0.6	0.0	2.8	162	0	1	0	5	434	-3	0	0	12	437
12+00	50	104.3	0.0	2.6	0.0	2.8	173	0	3	0	5	608	-5	0	0	16	612
12+50	50	109.2	0.0	4.2	0.0	2.8	198	0	6	0	5	805	-2	0	0	20	807
13+00	50	222.1	0.0	1.6	0.0	2.8	307	0	5	0	5	1112	0	0	0	24	1112
							1112	0	24	0	31						

STAGE 2 (STA 10+79 M - STA 10+99 M): MEISTER DRIVE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+79		39.2	0.0	0.0	0.0	2.0											
11+00	21	95.2	0.0	0.0	0.0	2.0	53	0	0	0	2	53	-2	0	0	1	54
							53	0	0	0	2						

STAGE 2 (STA 10+96 HU - STA 11+06 HU): HURELLE STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+96		46.3	0.0	0.0	0.0	1.7											
11+00	4	48.3	0.0	0.0	0.0	1.7	8	0	0	0	0	8	0	0	0	0	8
							8	0	0	0	0						

STAGE 2 (STA 12+00 A - STA 12+09 A): APC WAY

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
12+00		63.6	0.0	0.0	0.0	2.3											
12+20	20	63.9	0.0	0.0	0.0	2.3	47	0	0	0	2	47	-2	0	0	1	49
							47	0	0	0	2						

STAGE 2 (STA 11+00 MA - STA 11+11 MA): MAPLE AVENUE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
11+00		121.5	0.0	0.0	0.0	2.5											
11+05	5	133.2	0.0	0.0	0.0	2.5	23	0	0	0	0	23	0	0	0	0	24
							23	0	0	0	0						

STAGE 2 (STA 11+87 B - STA 11+97 B): BLACKHAWK DRIVE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
11+90		57.5	0.0	0.6	0.0	2.1											
11+97	7	57.1	0.0	0.0	0.0	2.1	15	0	0	0	1	15	0	0	0	0	15
							15	0	0	0	1						

STAGE 2 (STA 10+83 CH - STA 11+03 CH): CHARLES STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+83		58.8	0.0	0.0	0.0	1.9											
11+00	17	59.2	0.0	0.0	0.0	1.9	38	0	0	0	1	38	-1	0	0	1	39
							38	0	0	0	1						

STAGE 2 (STA 11+98 L - STA 12+33 L): LEGION COURT

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
12+00		58.8	0.0	0.0	0.0	1.4											
12+33	33	35.4	0.0	0.0	0.0	1.4	58	0	0	0	2	58	-2	0	0	1	59
							58	0	0	0	2						

STAGE 2 (STA 10+80 SL - STA 11+07 SL): LEWIS STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+80		59.1	0.0	0.1	0.0	1.7											
11+00	20	77.5	0.0	0.0	0.0	1.7	51	0	0	0	1	51	-1	0	0	1	52
							51	0	0	0	1						

STAGE 2 (STA 11+93 NL - STA 12+08 NL): LEWIS STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
12+00		64.9	0.0	0.0	0.0	1.7											
12+08	8	62.5	0.0	0.1	0.0	1.7	19	0	0	0	1	19	0	0	0	0	19
							19	0	0	0	1						

STAGE 2 (STA 10+82 SB - STA 11+08 SB): BIRDSEY STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+82		58.2	0.0	0.2	0.0	1.8											
11+00	18	71.2	0.0	0.0	0.0	1.8	43	0	0	0	1	43	-1	0	0	1	44
							43	0	0	0	1						

STAGE 2 (STA 11+92 NB - STA 12+08 NB): BIRDSEY STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
12+00		94.5	0.0	0.0	0.0	1.7											
12+08	8	87.0	0.0	0.0	0.0	1.7	27	0	0	0	1	27	0	0	0	0	27
							27	0	0	0	1						

STAGE 2 (STA 10+92 SM - STA 11+08 SM): MAIN STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+92		61.8	0.0	0.0	0.0	1.7											
11+00	8	56.5	0.0	0.0	0.0	1.7	17	0	0	0	1	17	0	0	0	0	18
							17	0	0	0	1						

STAGE 2 (STA 11+92 NM - STA 12+23 NM): MAIN STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
12+00		65.0	0.0	0.4	0.0	1.7											
12+23	23	53.9	0.0	0.6	0.0	1.7	51	0	0	0	1	51	-1	0	0	1	52
							51	0	0	0	1						

STAGE 2 (STA 10+92 SS - STA 11+07 SS): SPRING STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+92		88.2	0.0	0.6	0.0	1.7											
11+00	8	98.3	0.0	0.0	0.0	1.7	29	0	0	0	1	29	0	0	0	0	30
							29	0	0	0	1						

STAGE 2 (STA 11+93 NS - STA 12+08 NS): SPRING STREET

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
12+00		70.7	0.0	0.0	0.0	1.7											
12+08	8	58.7	0.0	0.1	0.0	1.7	19	0	0	0	1	19	0	0	0	0	20
							19	0	0	0	1						

STAGE 2 (STA 10+81 NBD - STA 11+00 NBD): DICKASON BOULEVARD

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
10+81		85.3	0.0	0.0	0.0	2.6											
11+00	19	83.0	0.0	1.3	0.0	2.6	59	0	0	0	2	59	-1	0	0	1	60
							59	0	0	0	2						

STAGE 2 (STA 11+99 DNB - STA 12+36 DNB): DICKASON BOULEVARD

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
12+00		106.3	0.0	4.1	0.0	2.1											
12+15	15	92.3	0.0	8.8	0.0	2.1	55	0	4	0	1	55	3	0	0	1	52
							55	0	4	0	1						

STAGE 3 (STA 126+40 WB - 130+80 WB): STH 16

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
125+00		1.0	0.0	0.0	0.0	1.9	0	0	0	0	0	0	0	0	0	0	0
125+50	50	4.4	0.0	0.0	0.0	1.9	5	0	0	0	3	5	-3	0	0	3	8
126+00	50	5.0	0.0	0.0	0.0	1.9	9	0	0	0	3	14	-7	0	0	5	21
126+40	40	104.5	0.0	0.0	0.0	1.9	81	0	0	0	3	95	-10	0	0	8	105
127+00	60	121.2	0.0	1.1	0.0	1.9	251	0	1	0	4	346	-12	0	0	11	358
127+50	50	83.1	0.0	18.8	0.0	1.9	189	0	18	0	3	535	8	0	0	14	527
128+00	50	81.9	0.0	26.0	0.0	1.9	153	0	41	0	3	688	56	0	0	16	632
128+50	50	97.6	0.0	19.9	0.0	1.9	166	0	42	0	3	854	106	0	0	19	748
129+00	50	87.2	0.0	18.4	0.0	1.9	171	0	35	0	3	1025	146	0	0	22	879
129+50	50	90.0	0.0	18.9	0.0	1.9	164	0	35	0	3	1189	186	0	0	25	1003
130+00	50	173.8	0.0	0.0	0.0	1.9	244	0	18	0	3	1433	205	0	0	27	1229
130+50	50	189.2	0.0	0.0	0.0	1.9	336	0	0	0	3	1770	201	0	0	30	1568
130+80	30	200.3	0.0	0.0	0.0	1.9	214	0	0	0	2	1983	199	0	0	32	1784
							1970	0	191	0	33						

STAGE 3 (STA 130+80 WB - STA 139+26 WB): STH 16

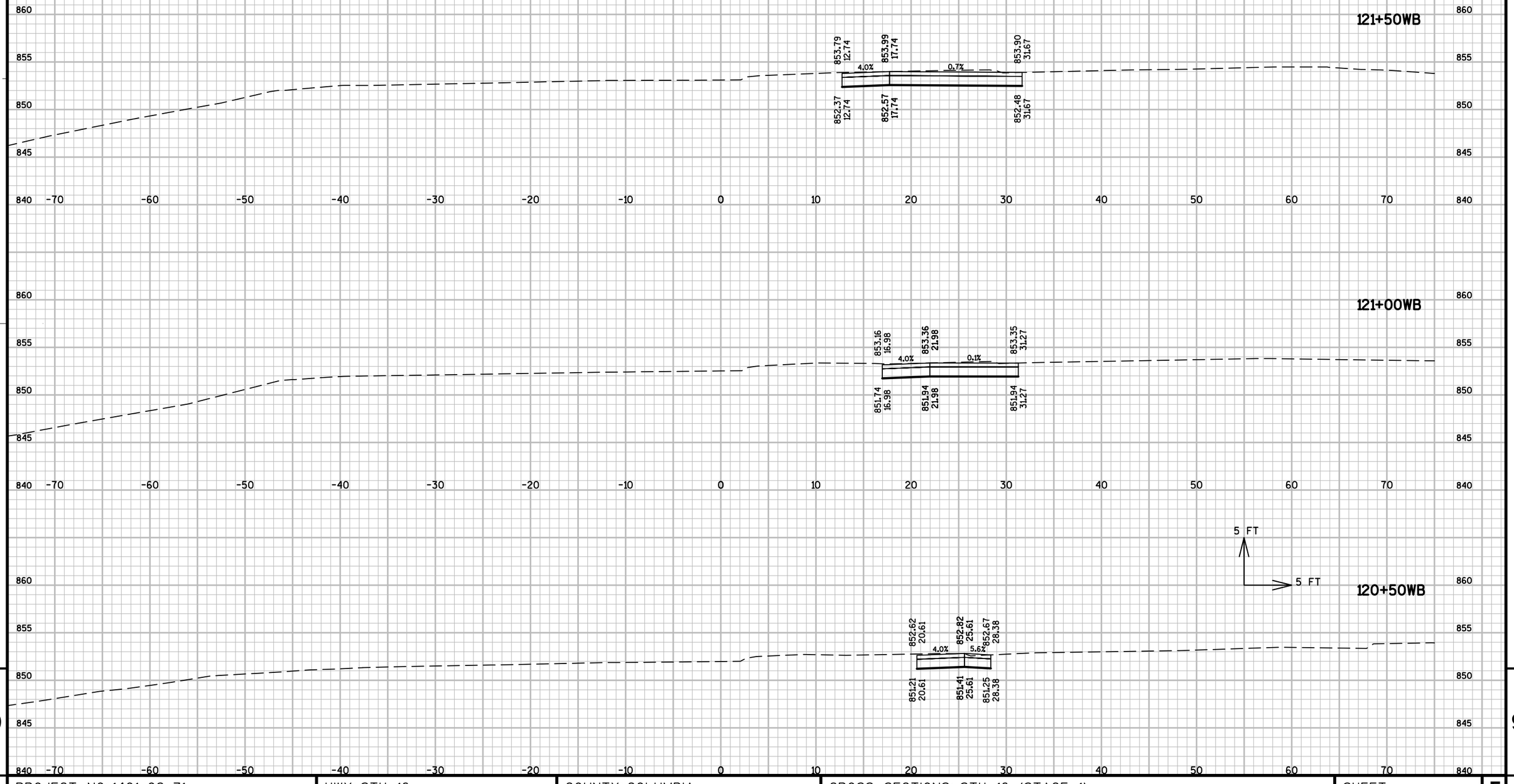
STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
130+80		200.3	0.0	0.0	0.0	3.1											
131+00	20	204.4	0.0	0.0	0.0	3.1	152	0	0	0	2	152	-2	0	0	2	155
131+50	50	147.3	0.0	2.8	0.0	3.1	326	0	3	0	6	478	-5	0	0	6	483
132+00	50	165.5	0.0	0.9	0.0	3.1	290	0	3	0	6	768	-6	0	0	11	774
132+50	50	164.0	0.0	0.9	0.0	1.9	305	0	2	0	5	1073	-9	0	0	15	1082
133+00	50	146.7	0.0	6.3	0.0	1.9	288	0	7	0	4	1361	-4	0	0	18	1365
133+50	50	120.5	0.0	3.7	0.0	1.9	247	0	9	0	4	1608	4	0	0	20	1604
134+00	50	95.4	0.0	4.9	0.0	1.9	200	0	8	0	4	1808	10	0	0	23	1798
134+50	50	81.0	0.0	6.1	0.0	1.9	163	0	10	0	4	1971	20	0	0	26	1952
135+00	50	69.4	0.0	8.2	0.0	1.9	139	0	13	0	4	2110	33	0	0	29	2078
135+50	50	61.1	0.0	12.3	0.0	1.9	121	0	19	0	4	2231	53	0	0	32	2178
136+00	50	57.0	0.0	19.7	0.0	1.9	109	0	30	0	4	2341	86	0	0	34	2254
136+50	50	54.6	0.0	23.9	0.0	1.9	103	0	40	0	4	2444	133	0	0	37	2311
137+00	50	56.3	0.0	23.8	0.0	1.9	103	0	44	0	4	2547	185	0	0	40	2362
137+50	50	61.5	0.0	14.9	0.0	1.9	109	0	36	0	4	2656	226	0	0	43	2429
138+00	50	67.4	0.0	6.2	0.0	1.9	119	0	20	0	4	2775	247	0	0	46	2528
138+50	50	62.7	0.0	1.0	0.0	1.9	120	0	7	0	4	2895	252	0	0	49	2643
139+00	50	53.8	0.0	0.8	0.0	1.9	108	0	2	0	4	3003	251	0	0	51	2753
139+26	26	88.5	0.0	0.0	0.0	1.9	68	0	0	0	2	3072	249	0	0	53	2822
							3072	0	252	0	66						

STAGE 3 (STA 15+79 ID - STA 17+78 ID): INDUSTRIAL DRIVE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
15+50		185.32	0.0	0.2	0.0	2.8											
16+00	50	86.6	0.0	3.7	0.0	2.8	252	0	4	0	5	252	-1	0	0	4	252
16+50	50	75.7	0.0	1.4	0.0	2.8	150	0	5	0	5	402	0	0	0	8	402
17+00	50	80.1	0.0	4.0	0.0	2.8	144	0	5	0	5	546	1	0	0	12	545
17+50	50	81.4	0.0	0.0	0.0	2.8	150	0	4	0	5	696	1	0	0	16	695
17+76	26	67.4	0.0	0.0	0.0	2.8	72	0	0	0	3	767	-2	0	0	18	769
							767	0	17	0	23						

STAGE 3 (STA 11+96 C - STA 12+06 C): CONTINENTAL DRIVE

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
12+00		71.7	0.0	0.1	0.0	2.7											
12+35	35	74.2	0.0	0.0	0.0	2.7	95	0	0	0	3	95	-3	0	0	3	98
							95	0	0	0	3						



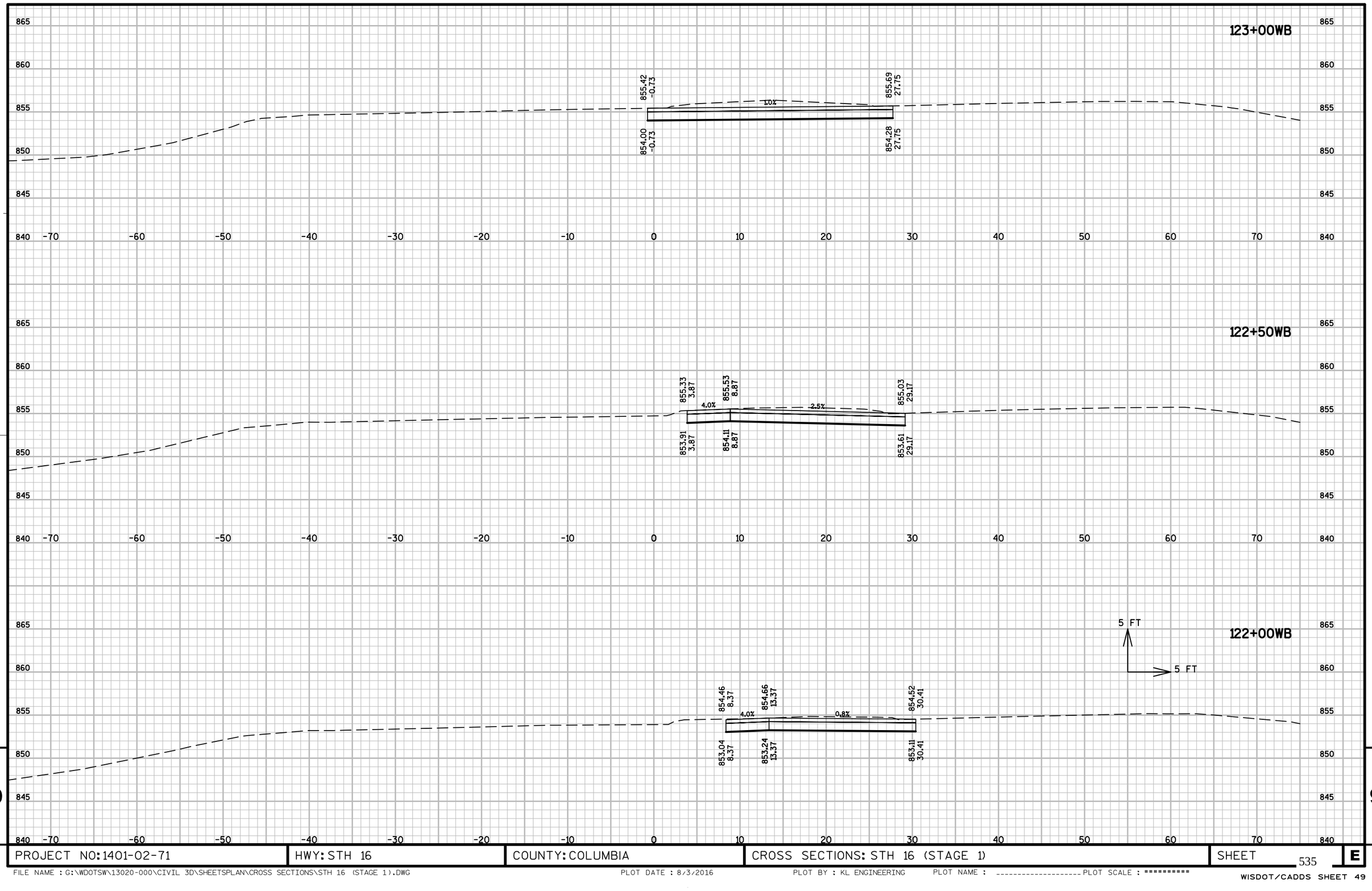
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 1)	SHEET 534 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 1).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

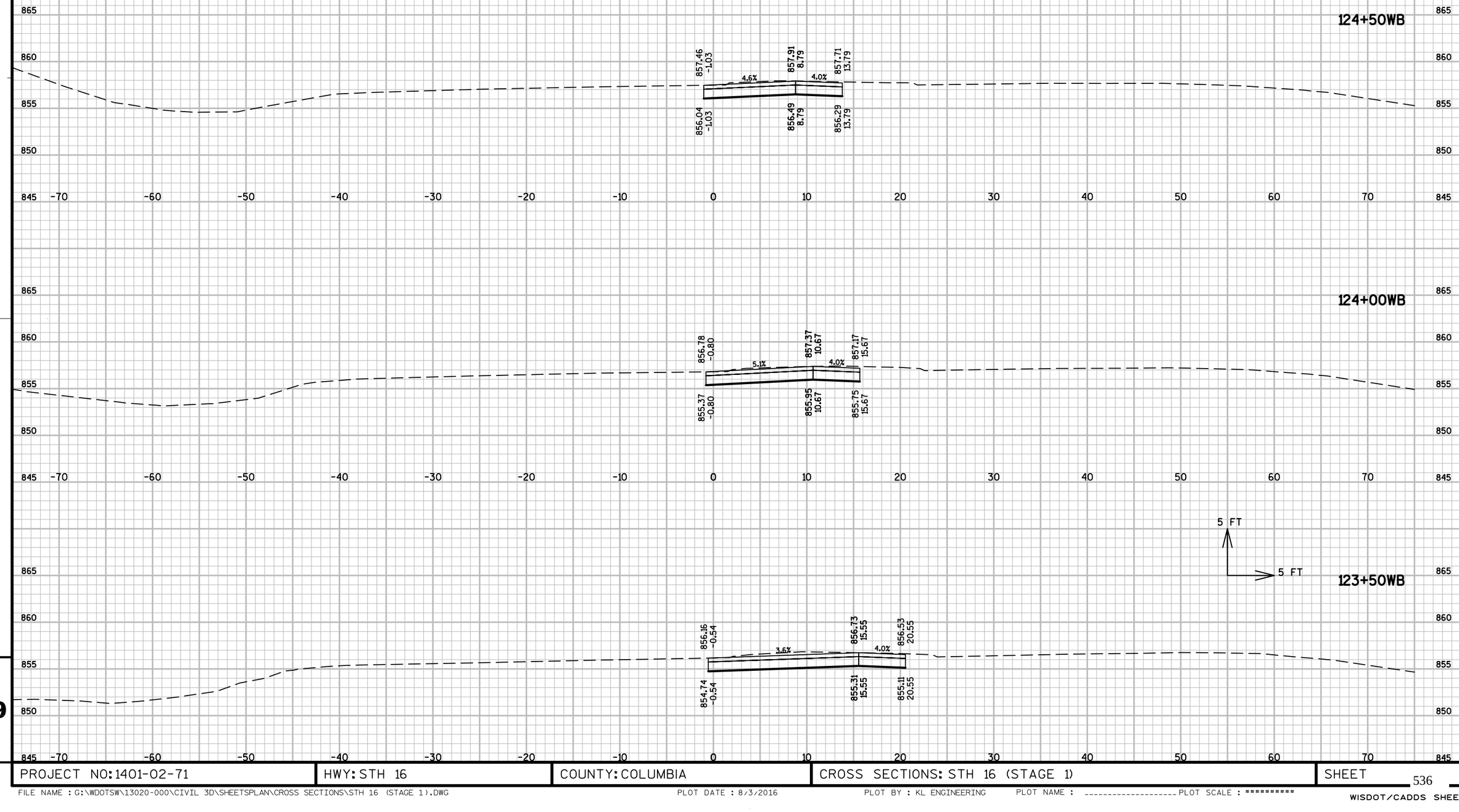


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 1)	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 1).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



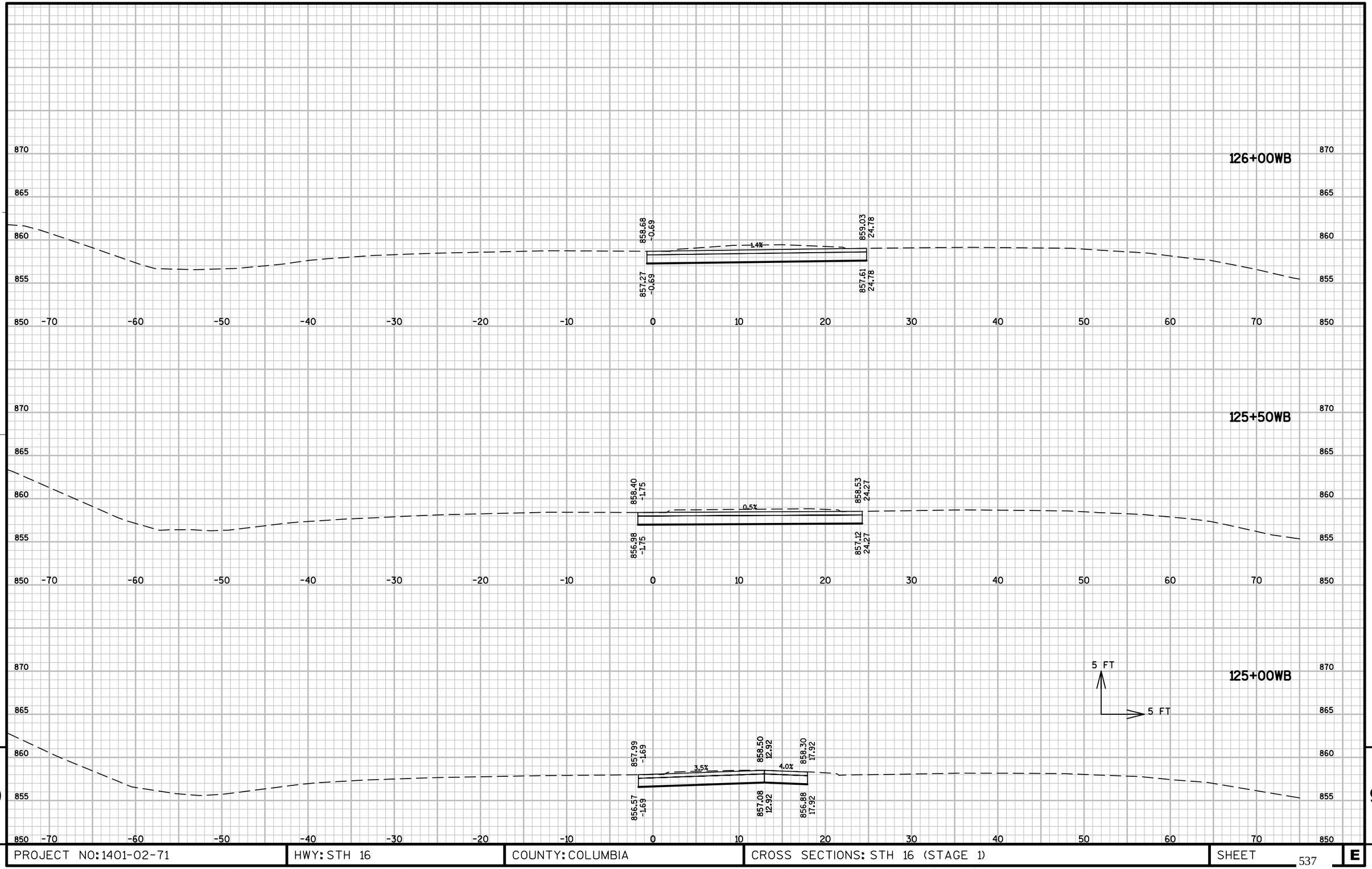
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 1)	SHEET 536	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 1).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

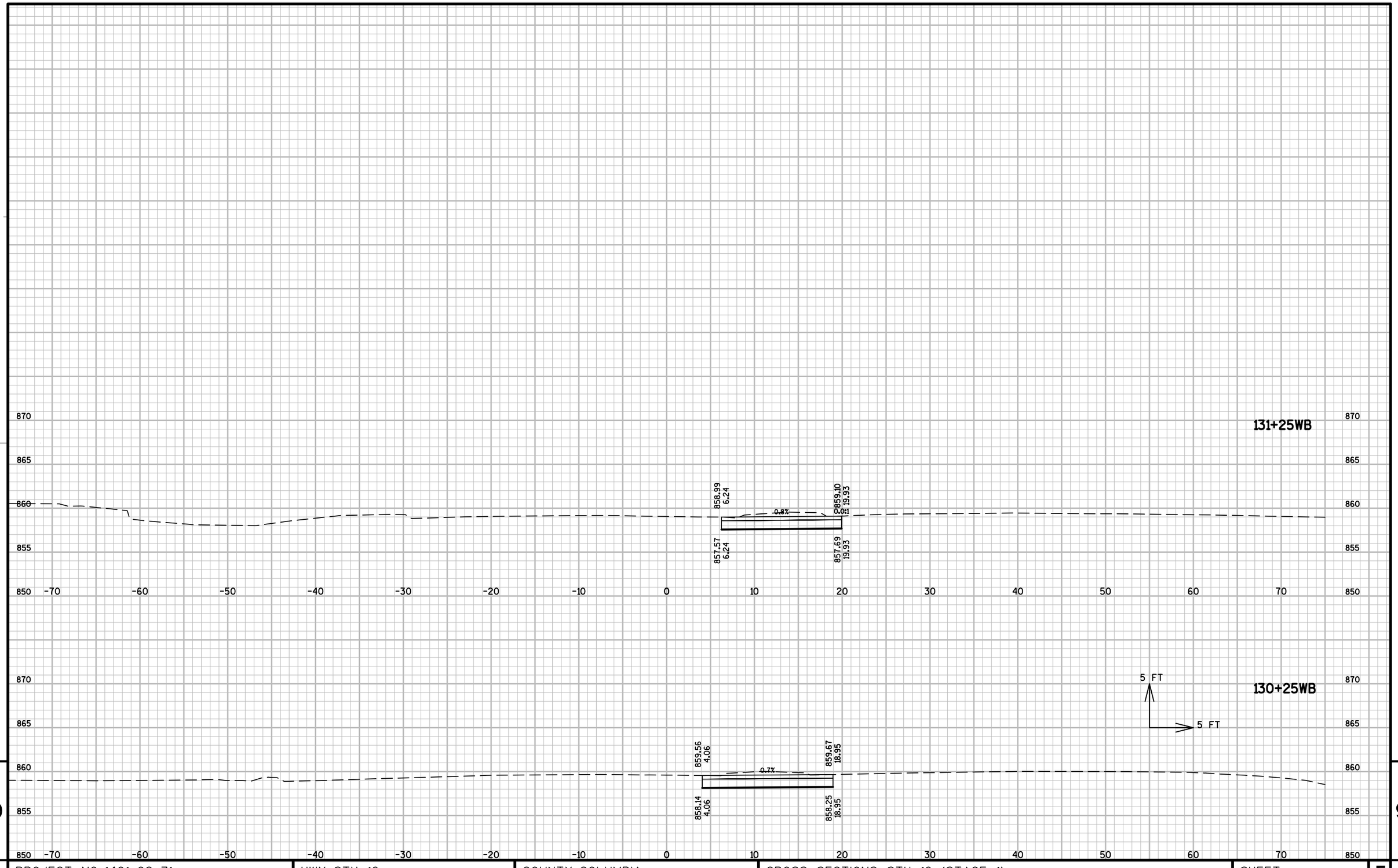
WISDOT/CADDS SHEET 49



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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 1)	SHEET 537	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 1).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

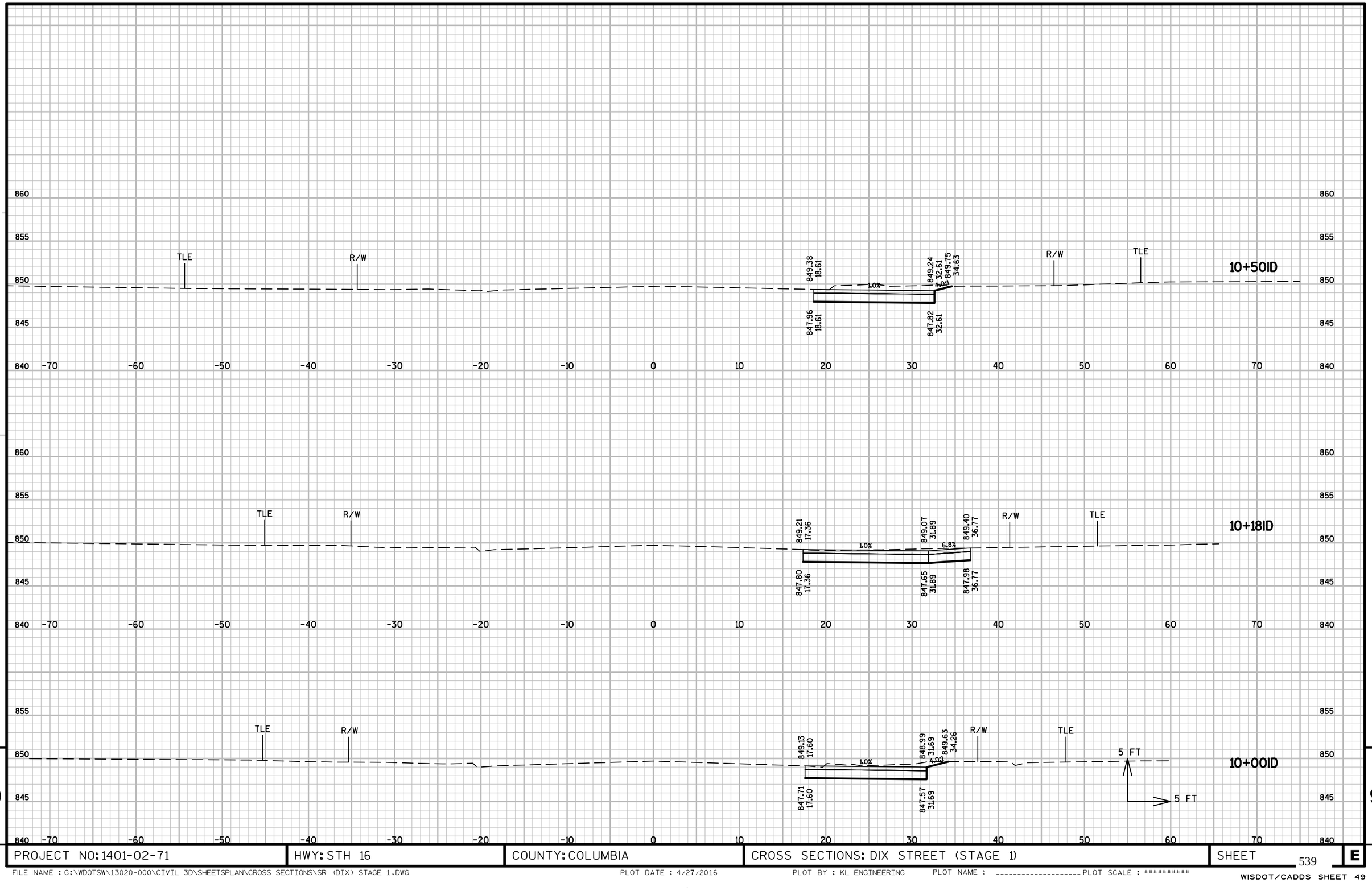


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 1)	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 1).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

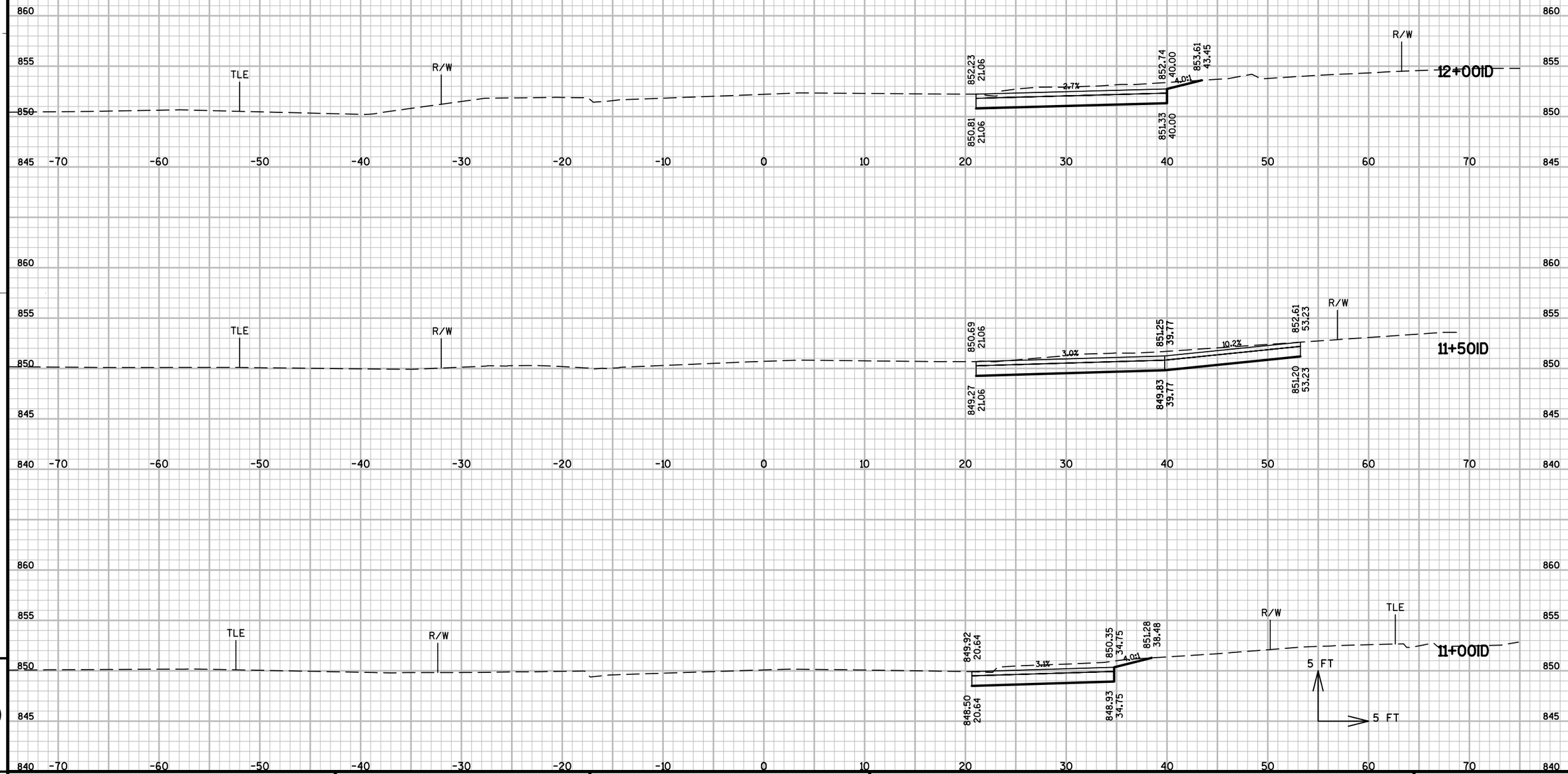


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET (STAGE 1)	SHEET 539	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX) STAGE 1.DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

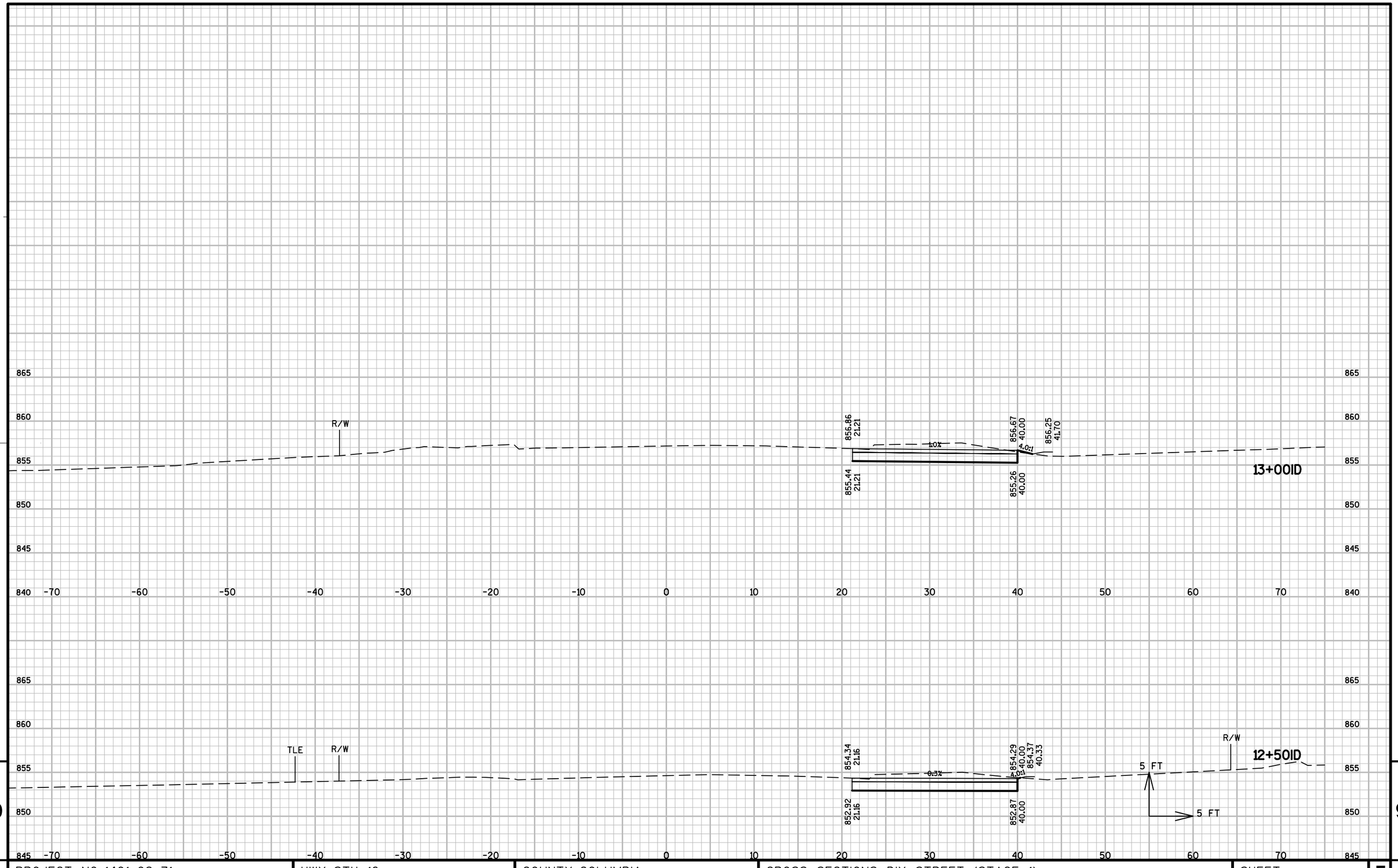


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET (STAGE 1)	SHEET 540	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX) STAGE 1.DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

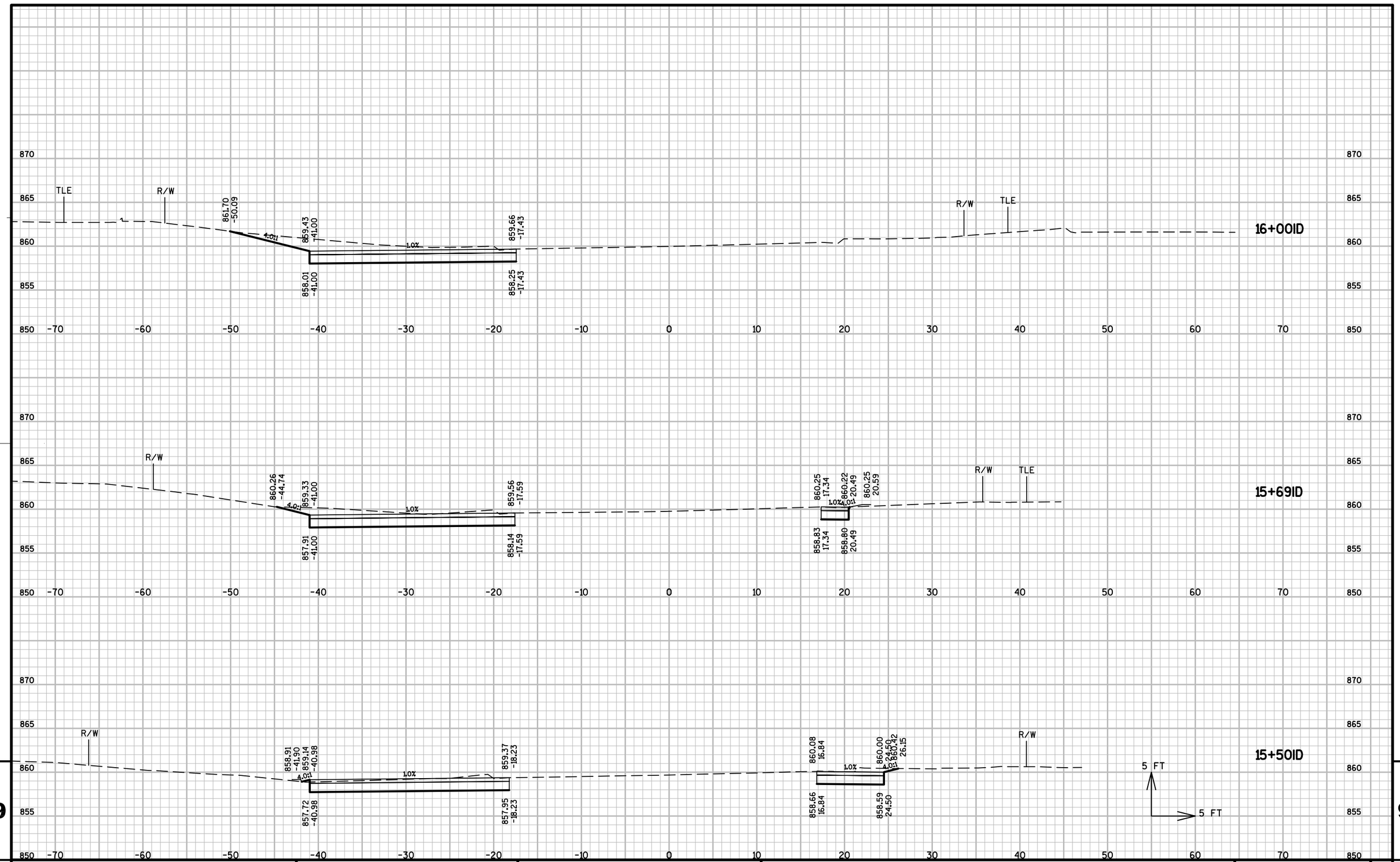


9

9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET (STAGE 1)	SHEET 541	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX) STAGE 1.DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



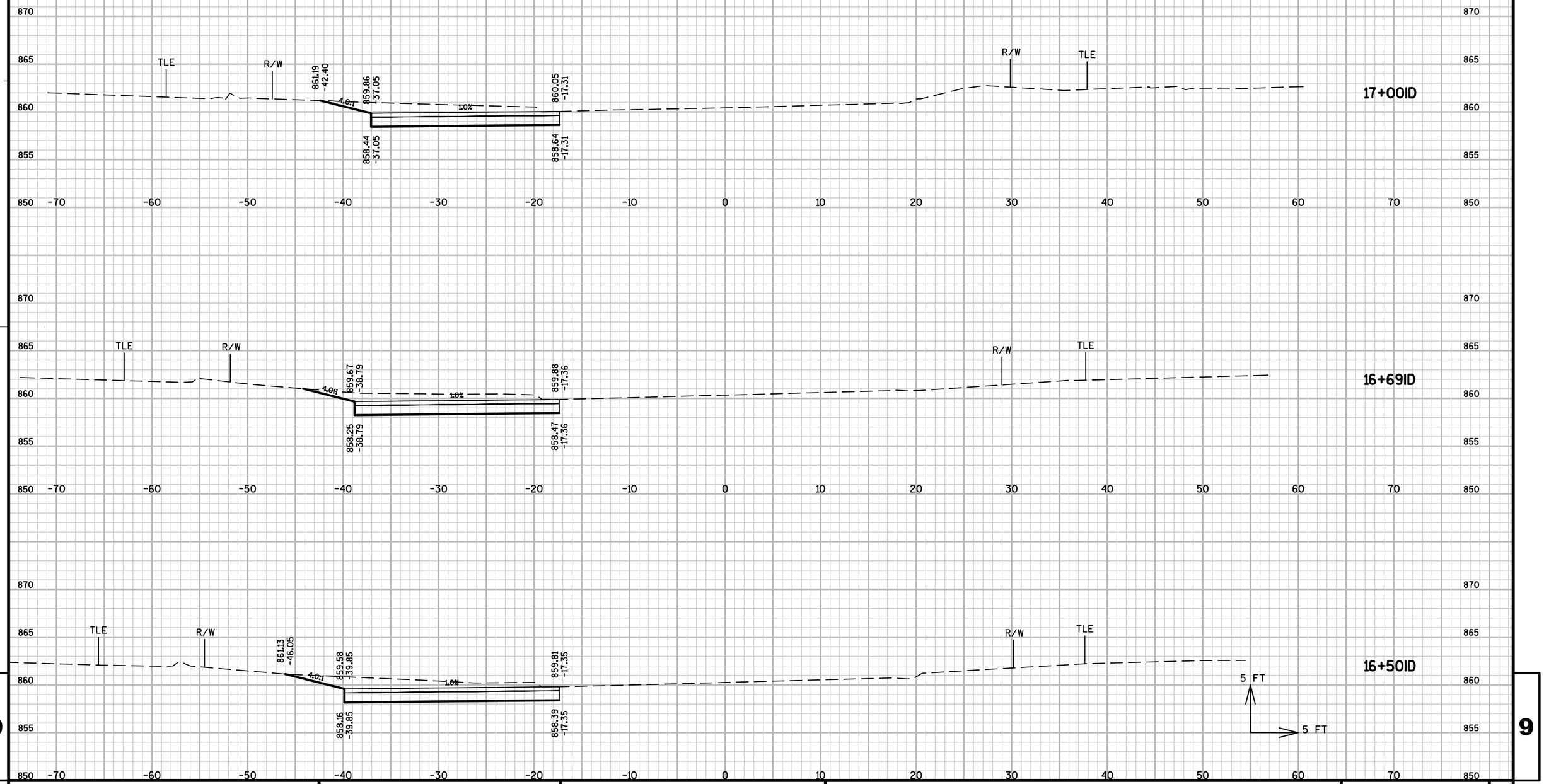
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE (STAGE 1)	SHEET 542	E

9

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (INDUSTRIAL) STAGE 1.DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE (STAGE 1)	SHEET 543	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (INDUSTRIAL) STAGE 1.DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

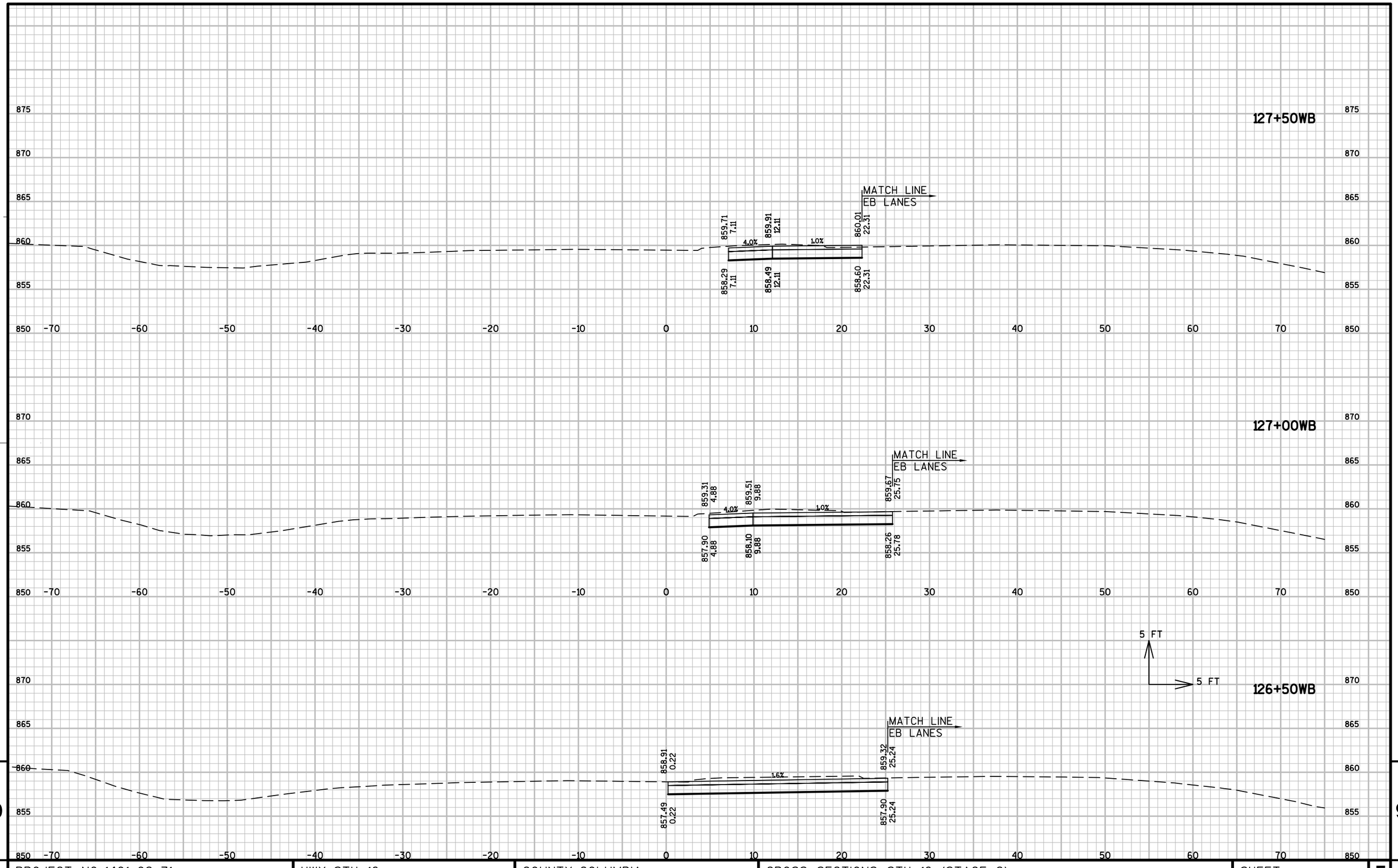
WISDOT/CADDS SHEET 49



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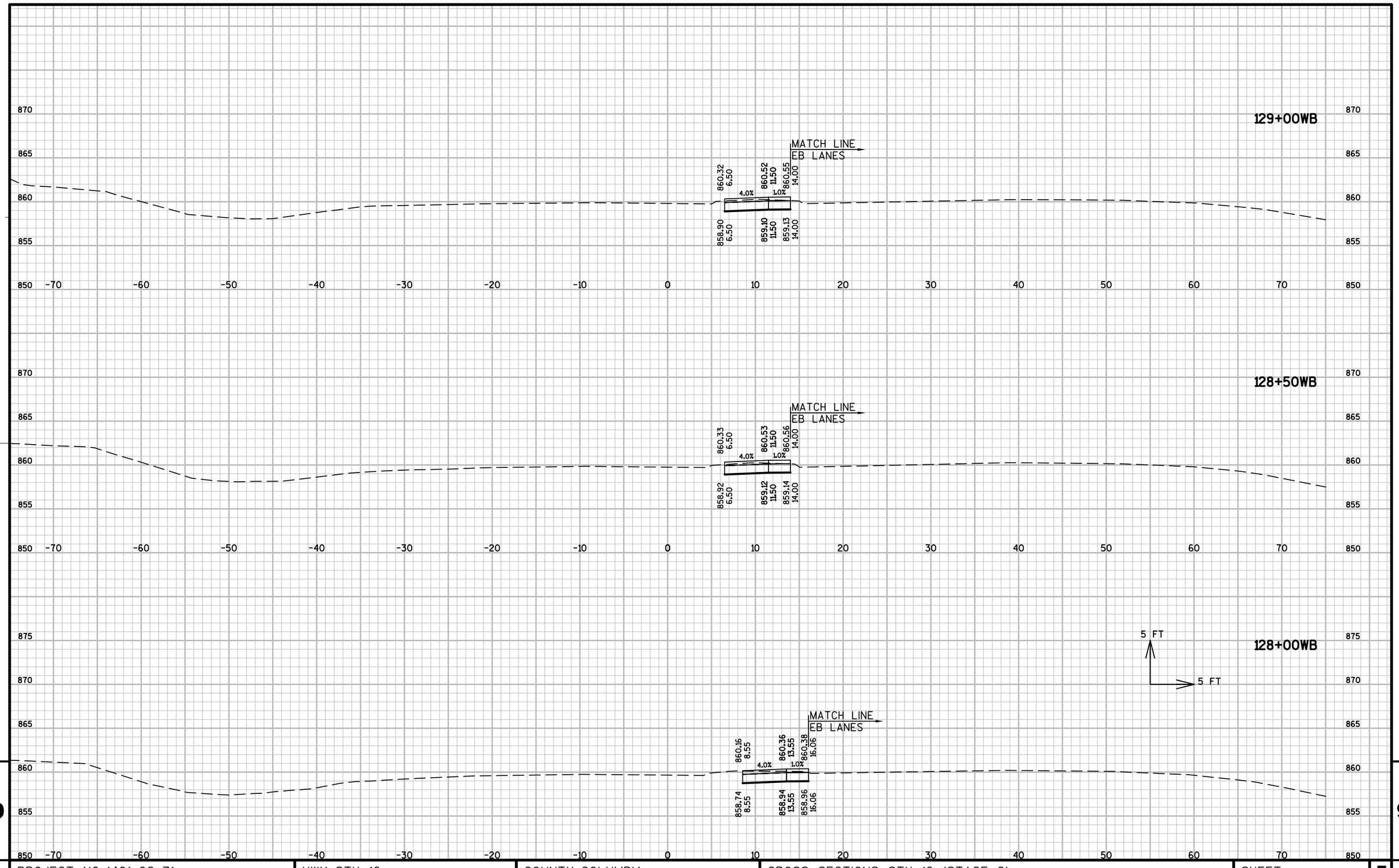
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE (STAGE 1)	SHEET 544	E



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 2)	SHEET	E

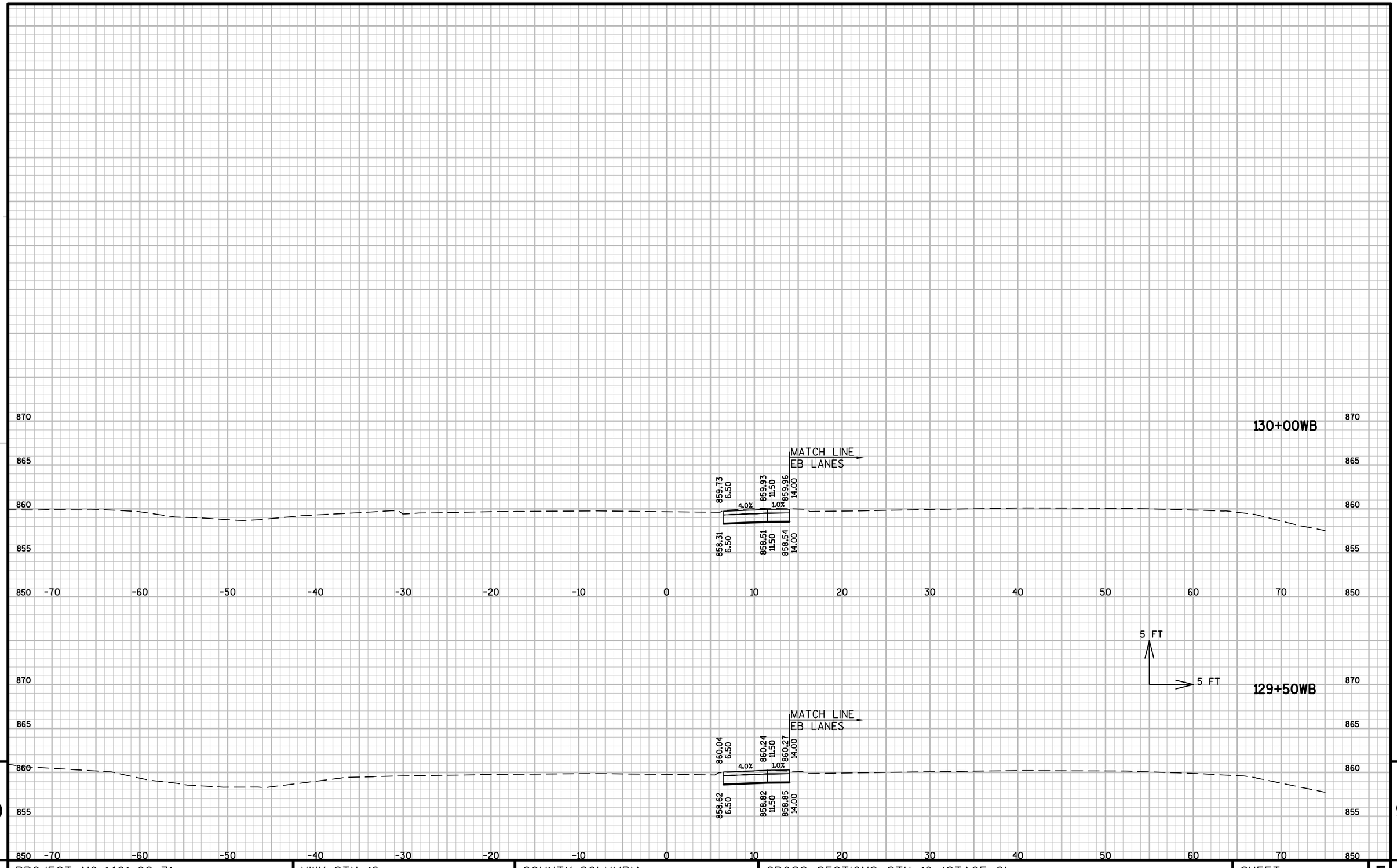
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9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 2)	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 2).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



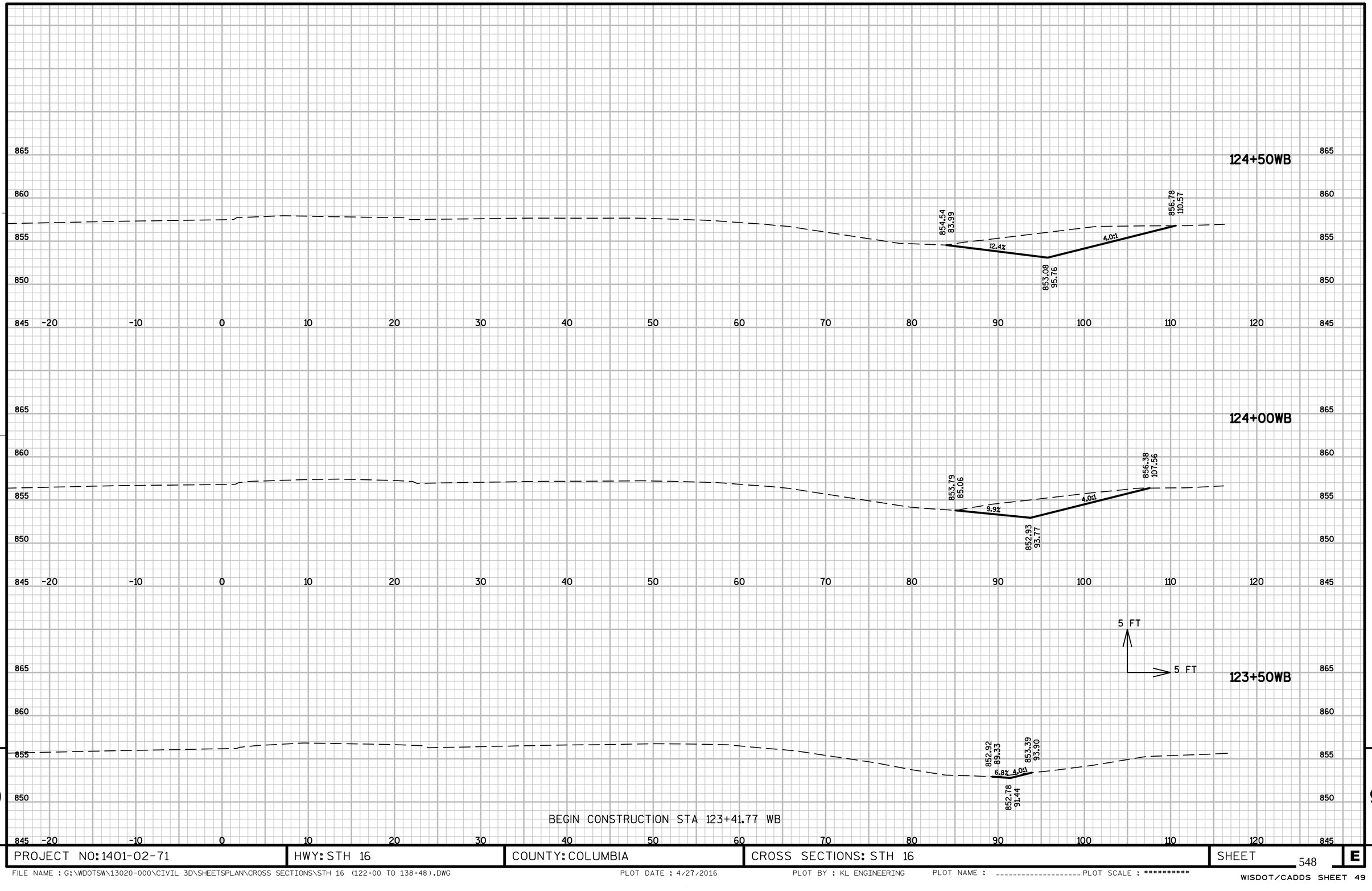
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9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16 (STAGE 2)	SHEET 547	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (STAGE 2).DWG PLOT DATE : 8/3/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

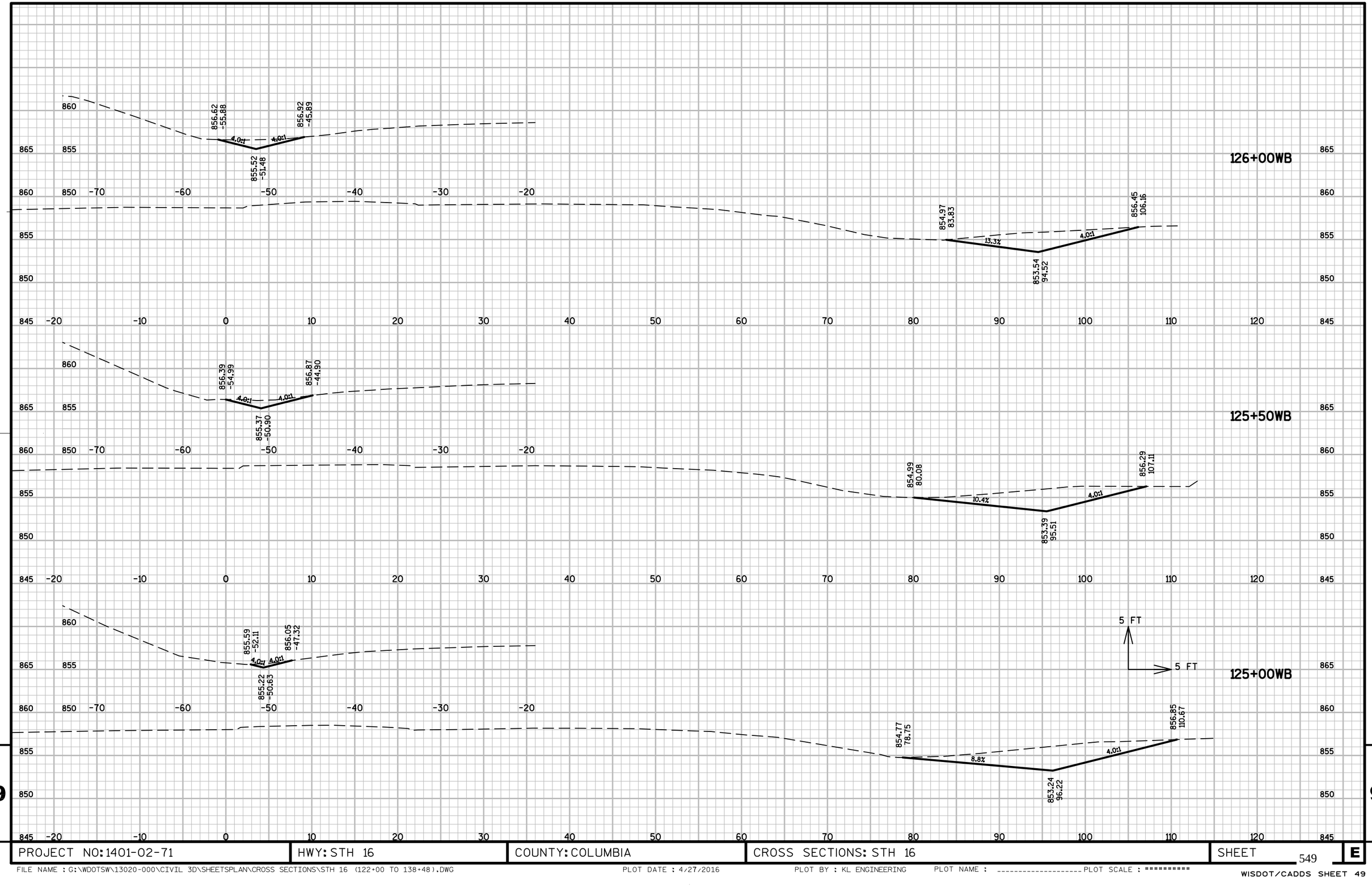
WISDOT/CADDS SHEET 49



BEGIN CONSTRUCTION STA 123+41.77 WB

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 548 E

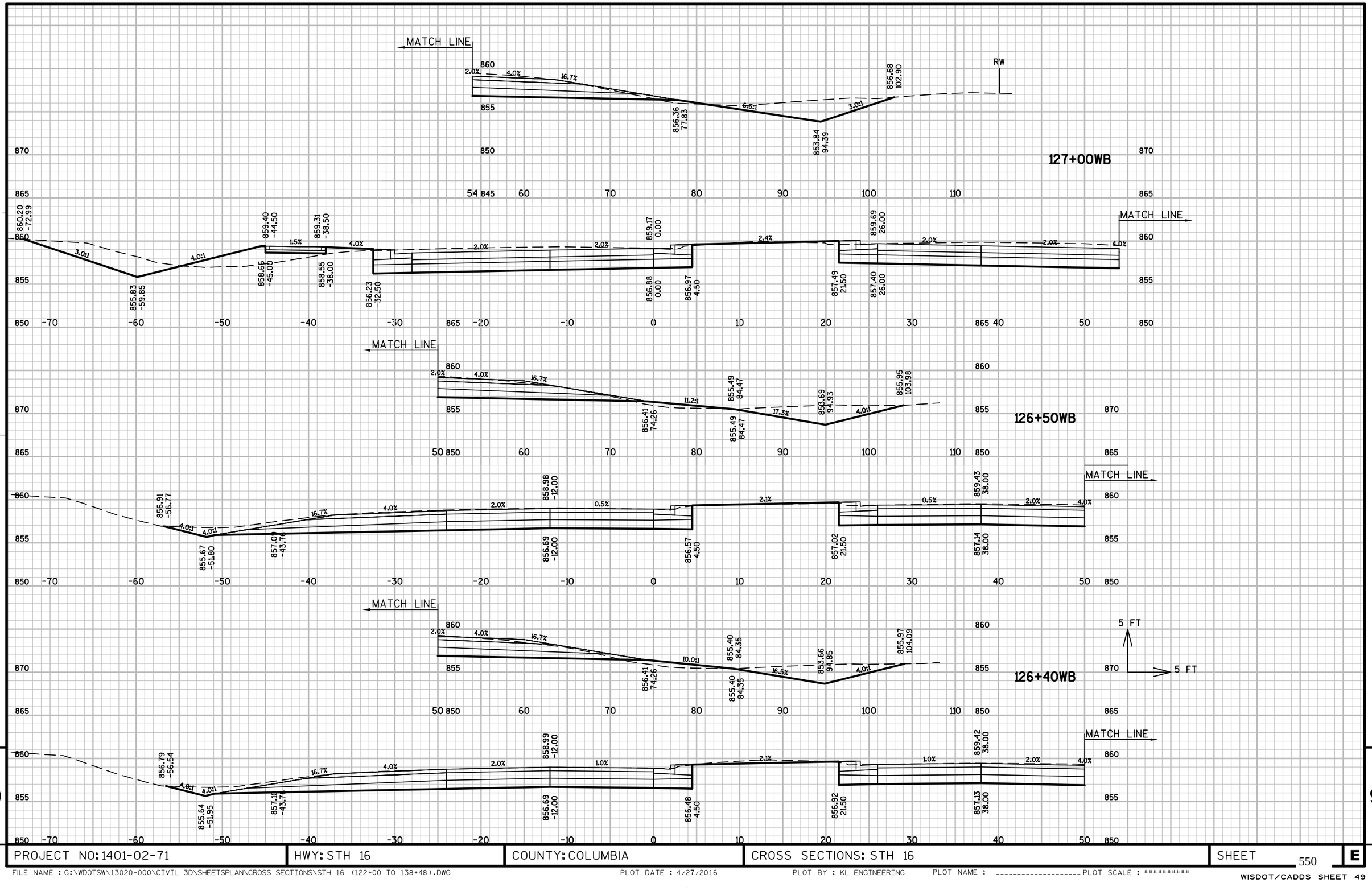
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 549	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (122+00 TO 138+48).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

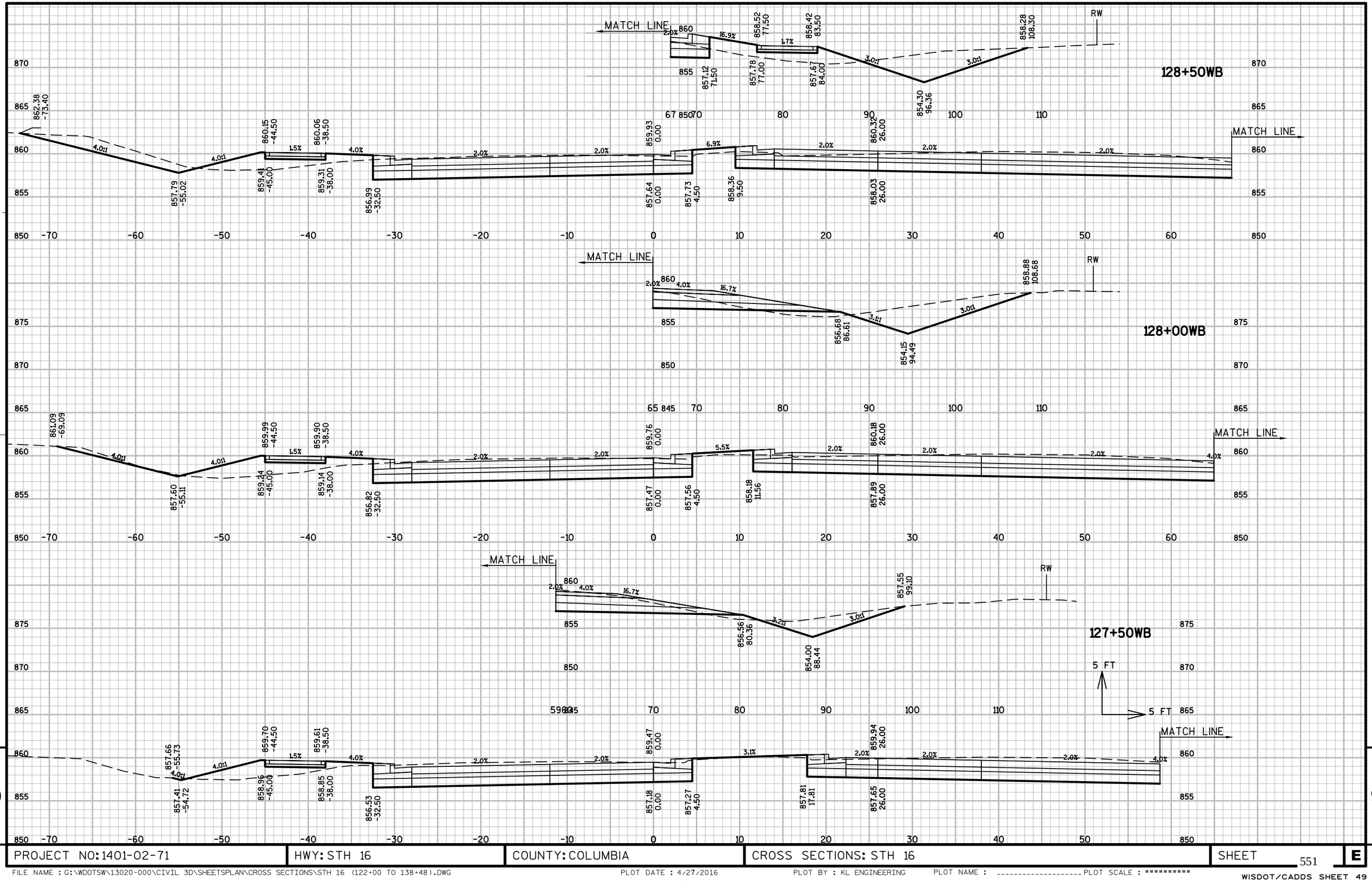
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 550 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (122+00 TO 138+48).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

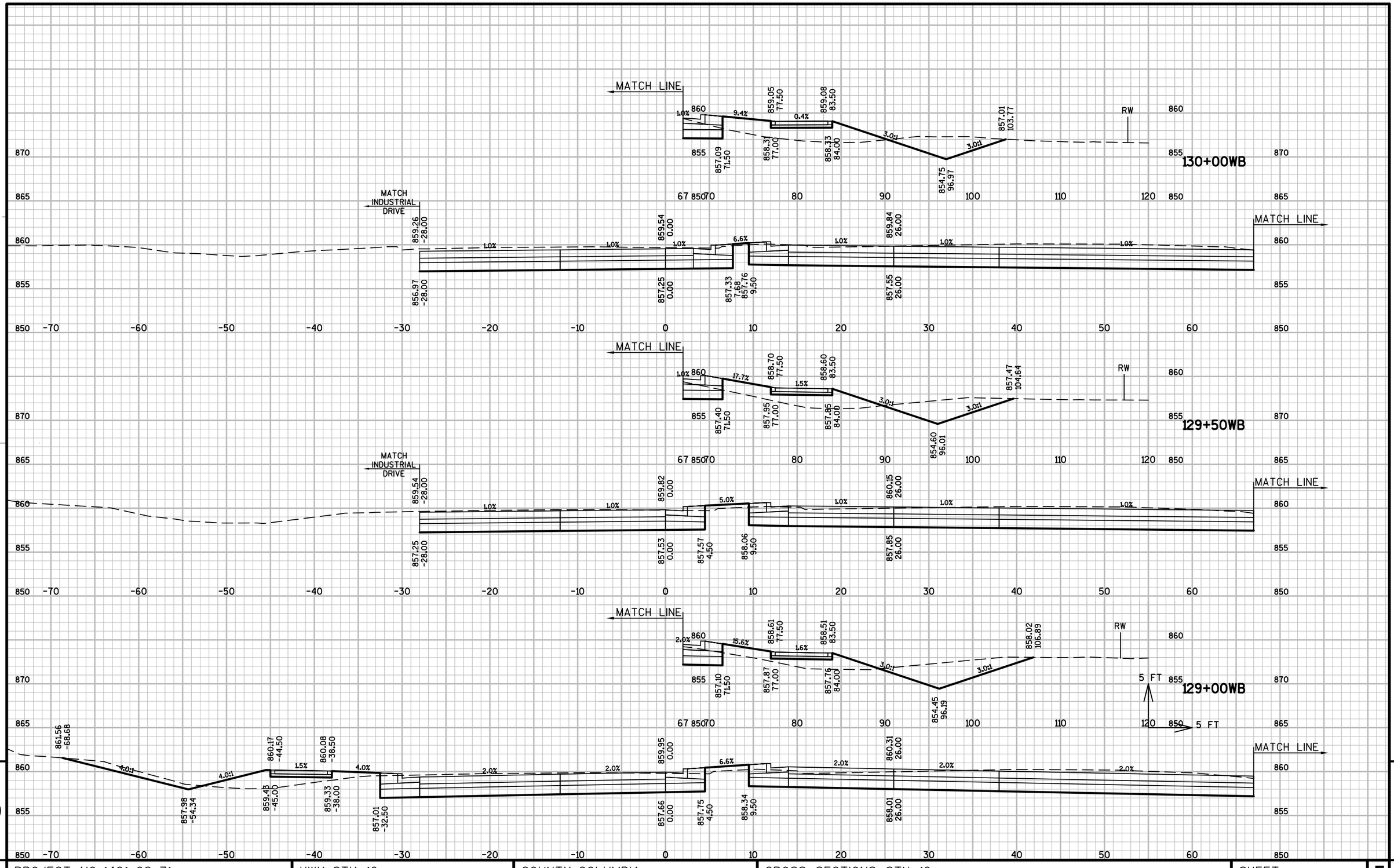
WISDOT/CADDS SHEET 49



9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET	E

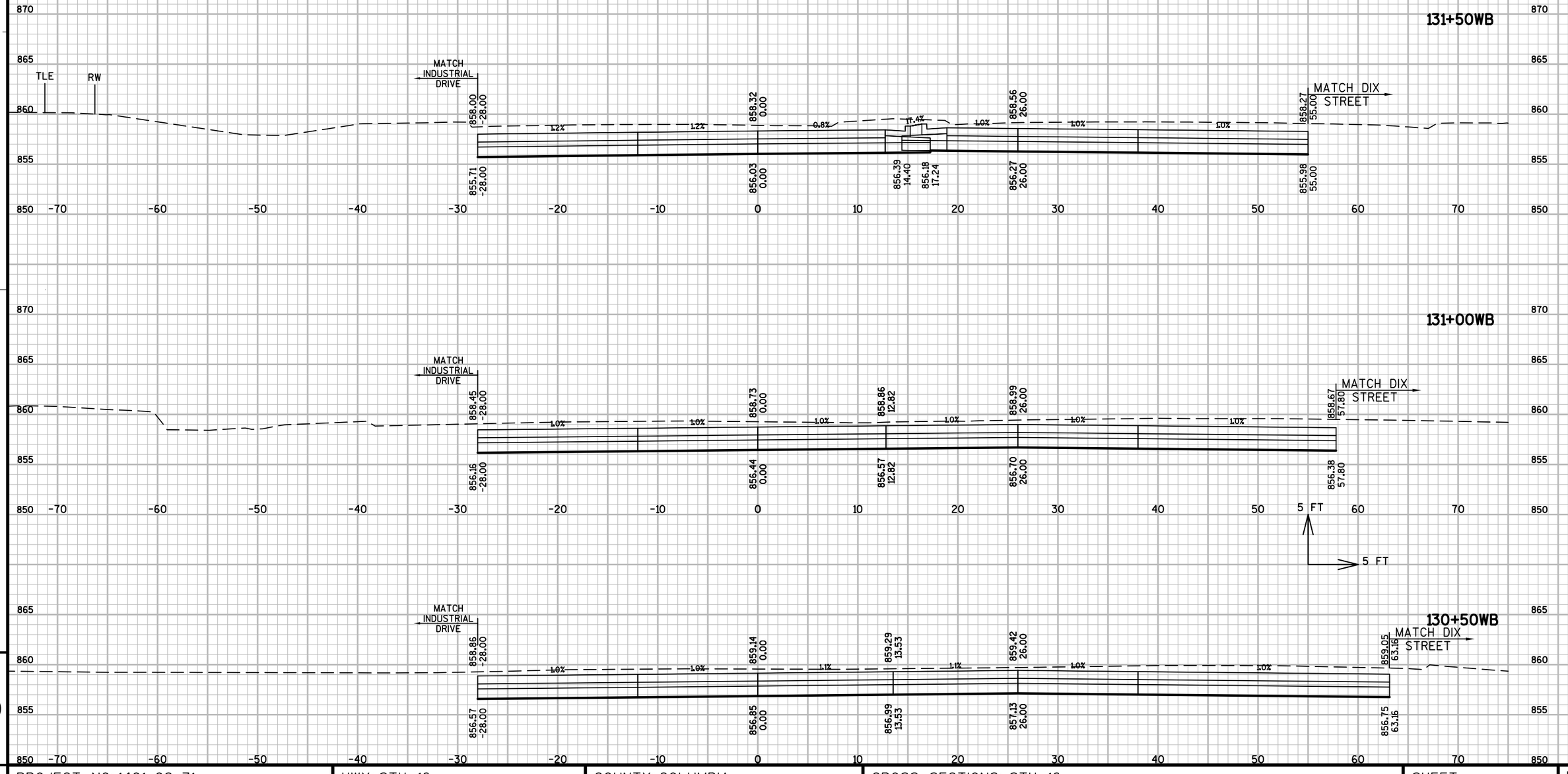
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 552 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (122+00 TO 138+48).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

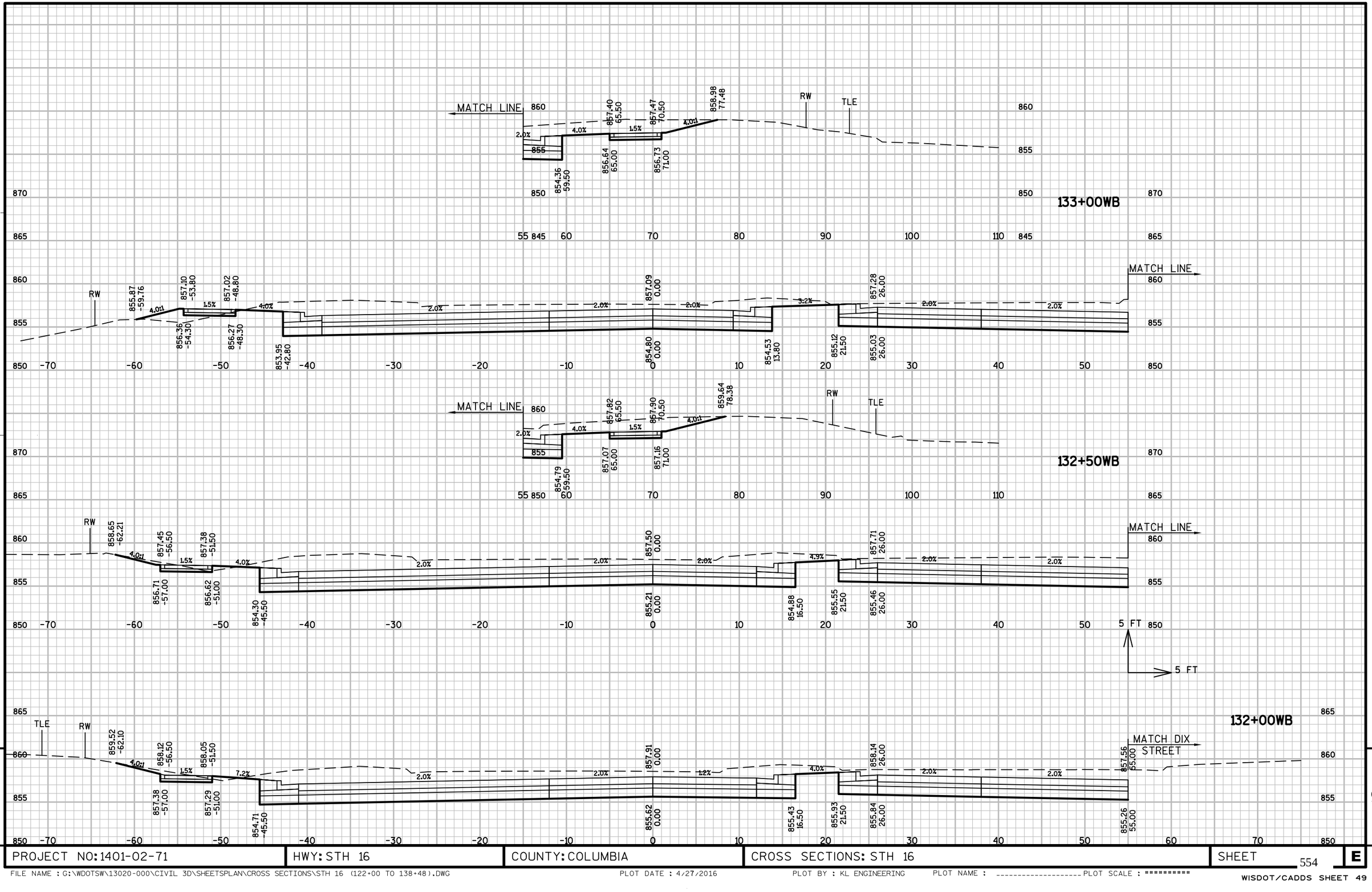
WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 553	E

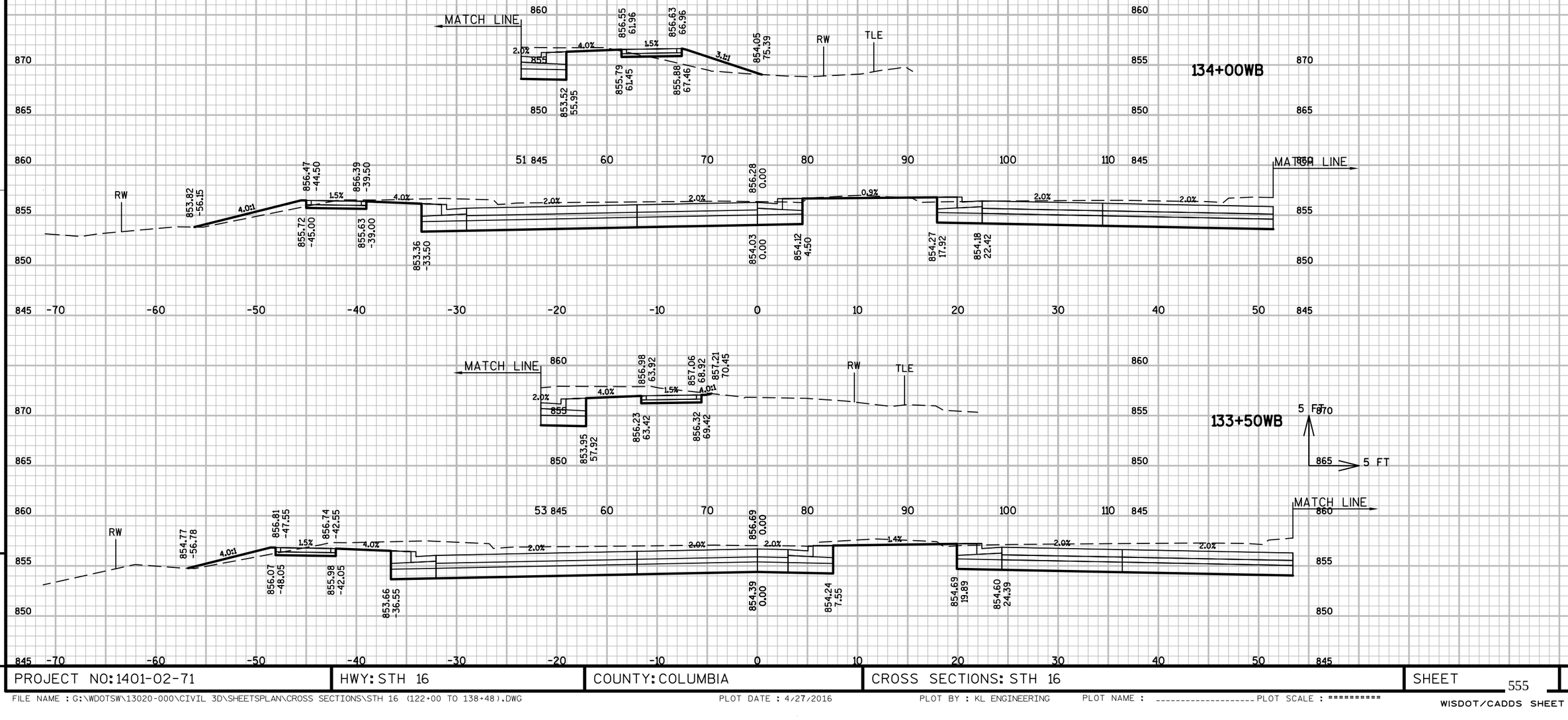


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 554	E

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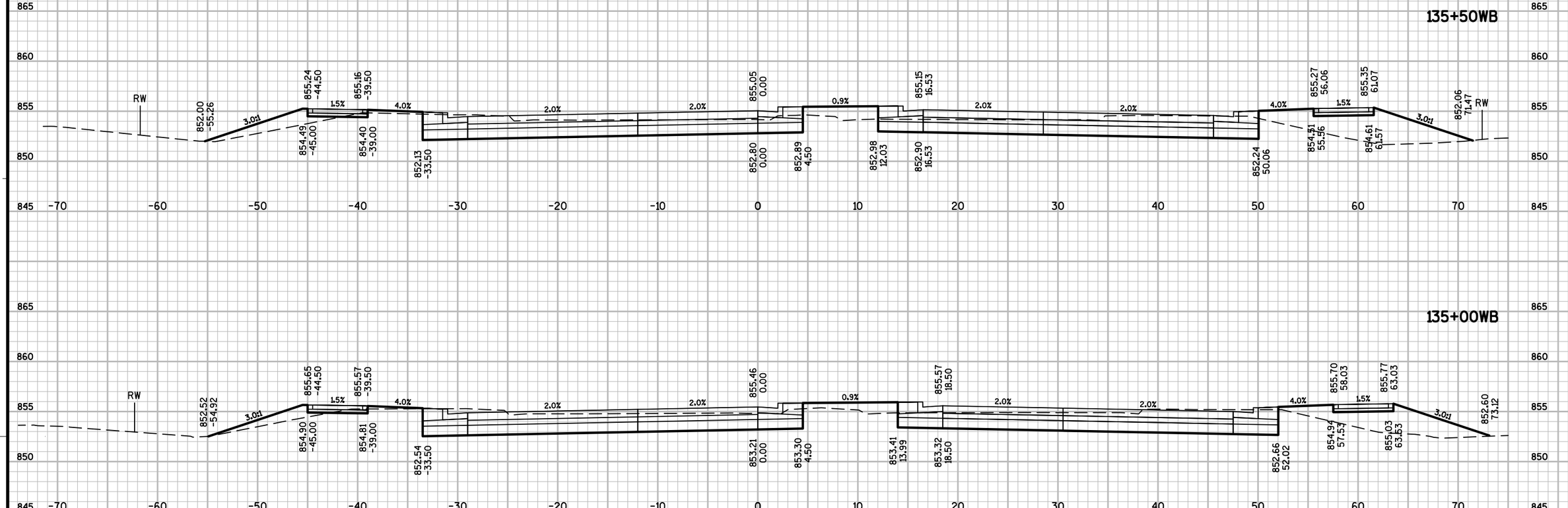
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 555 E

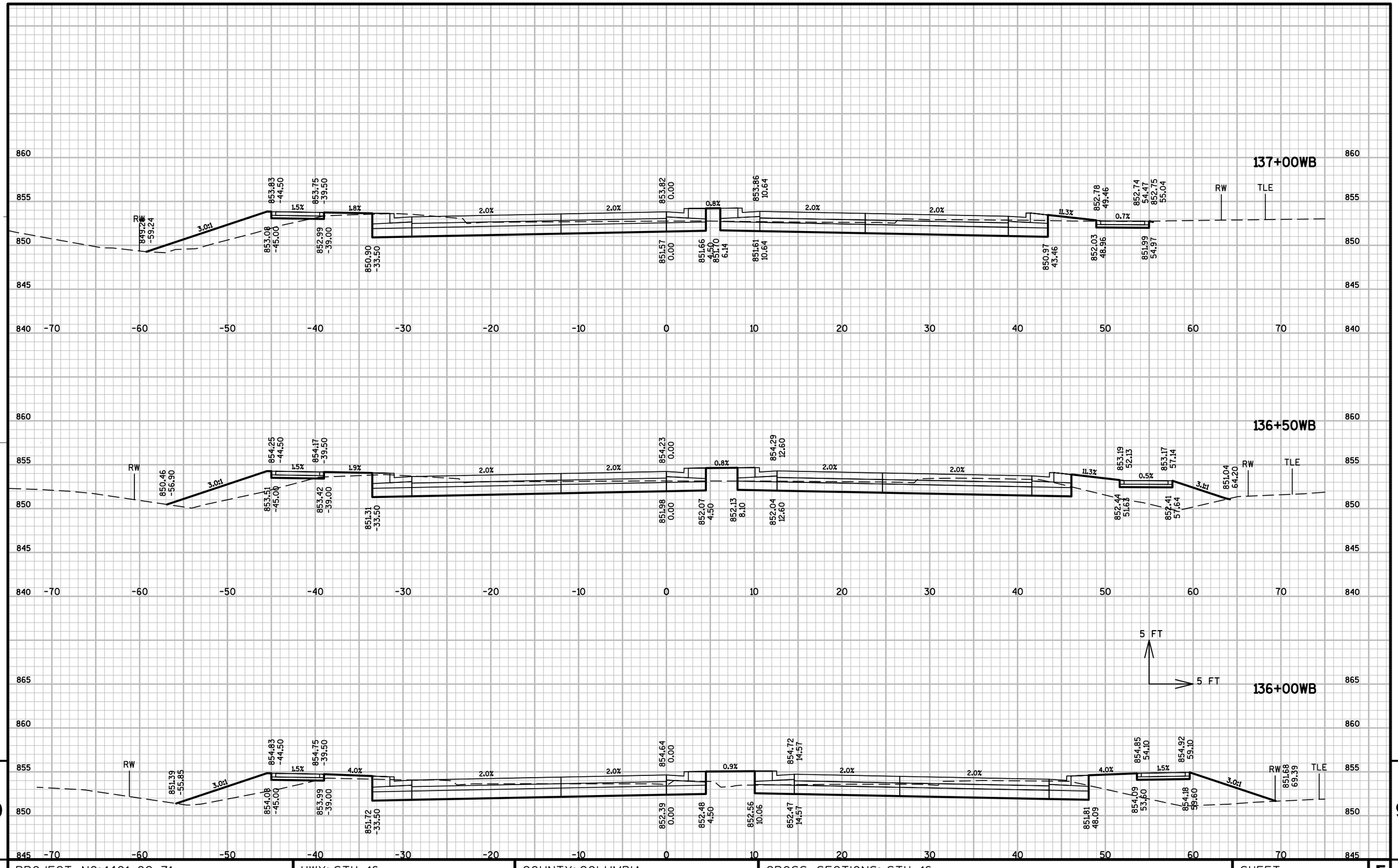


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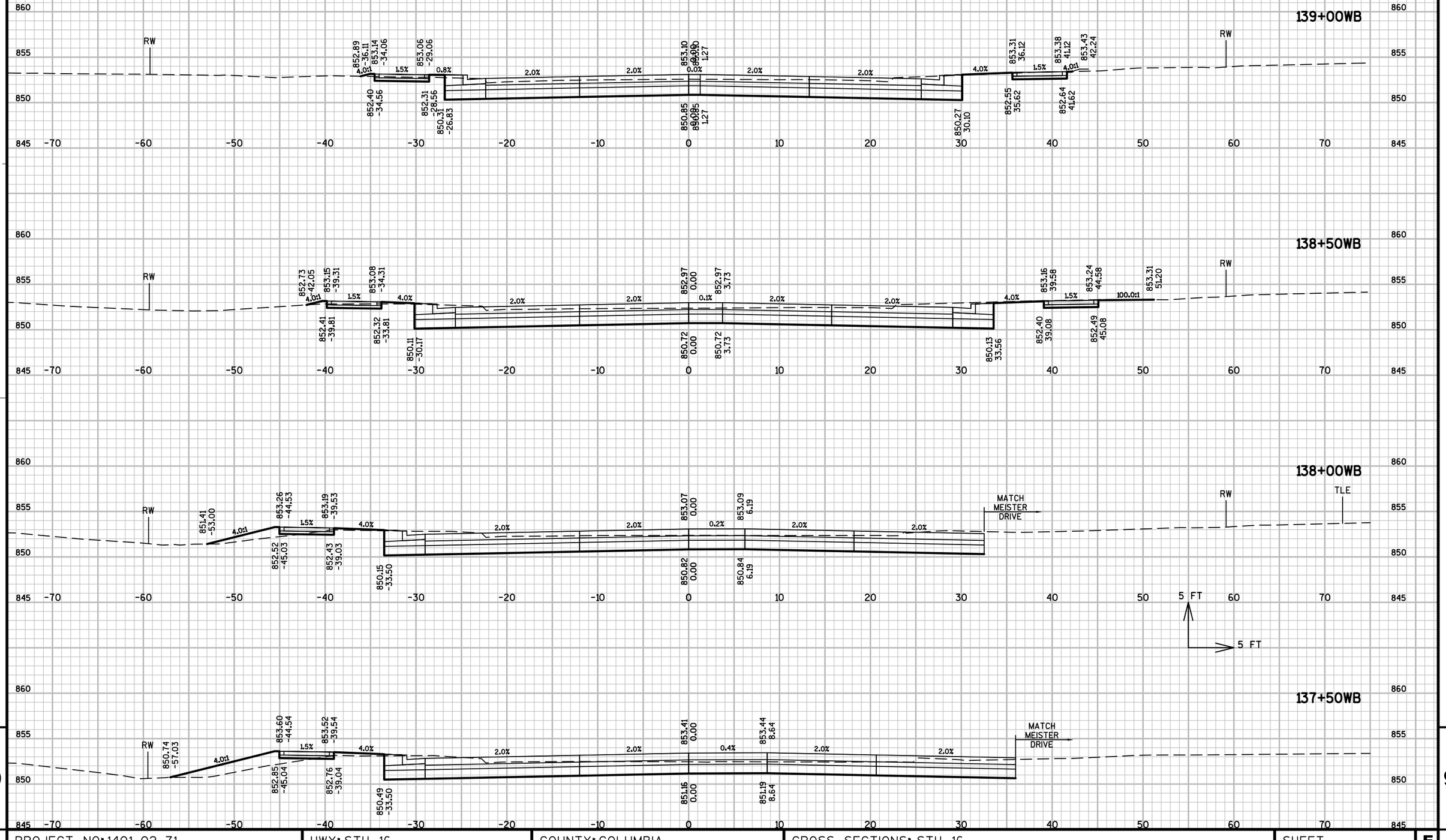
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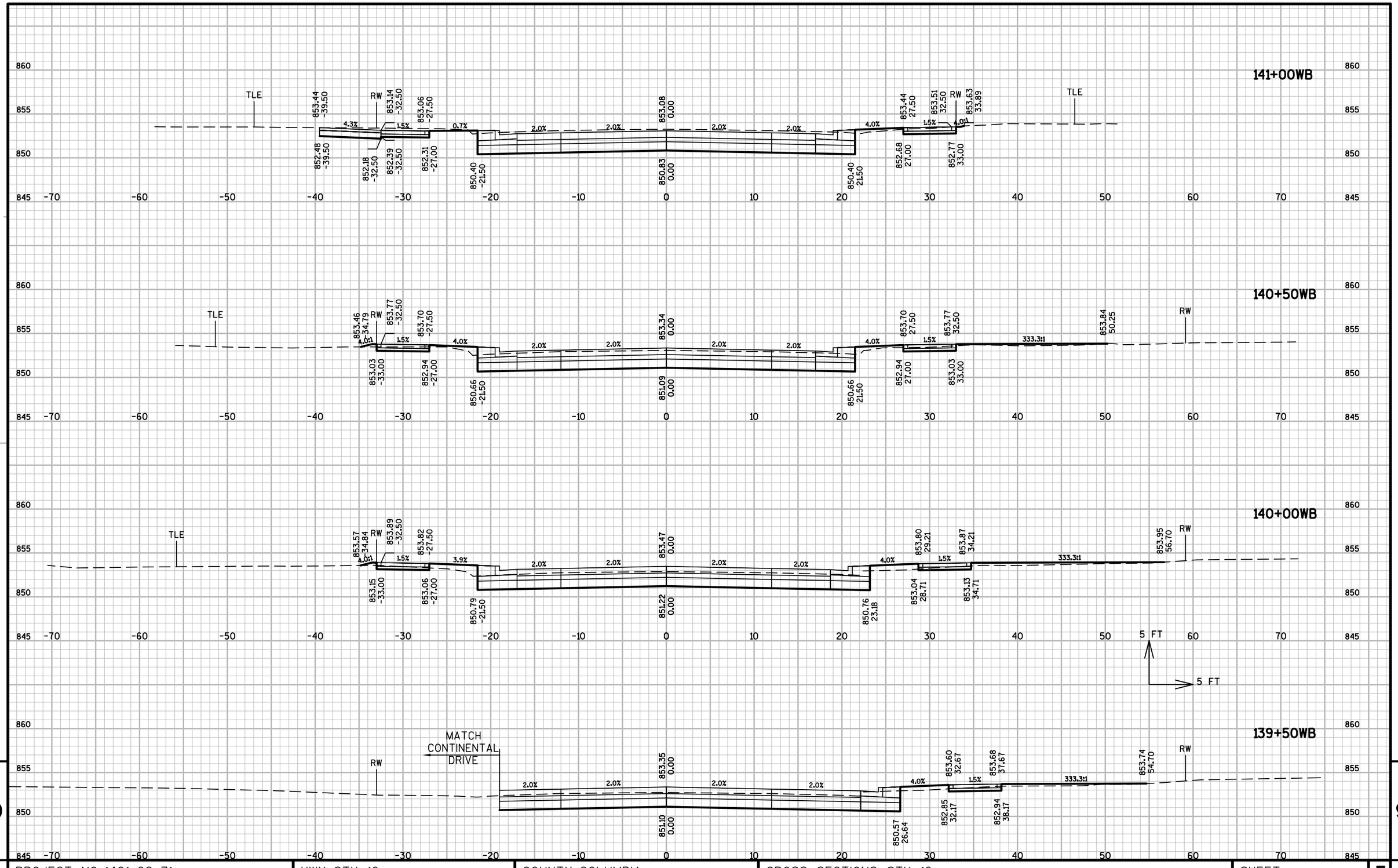
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FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (122+00 TO 138+48).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 558	E

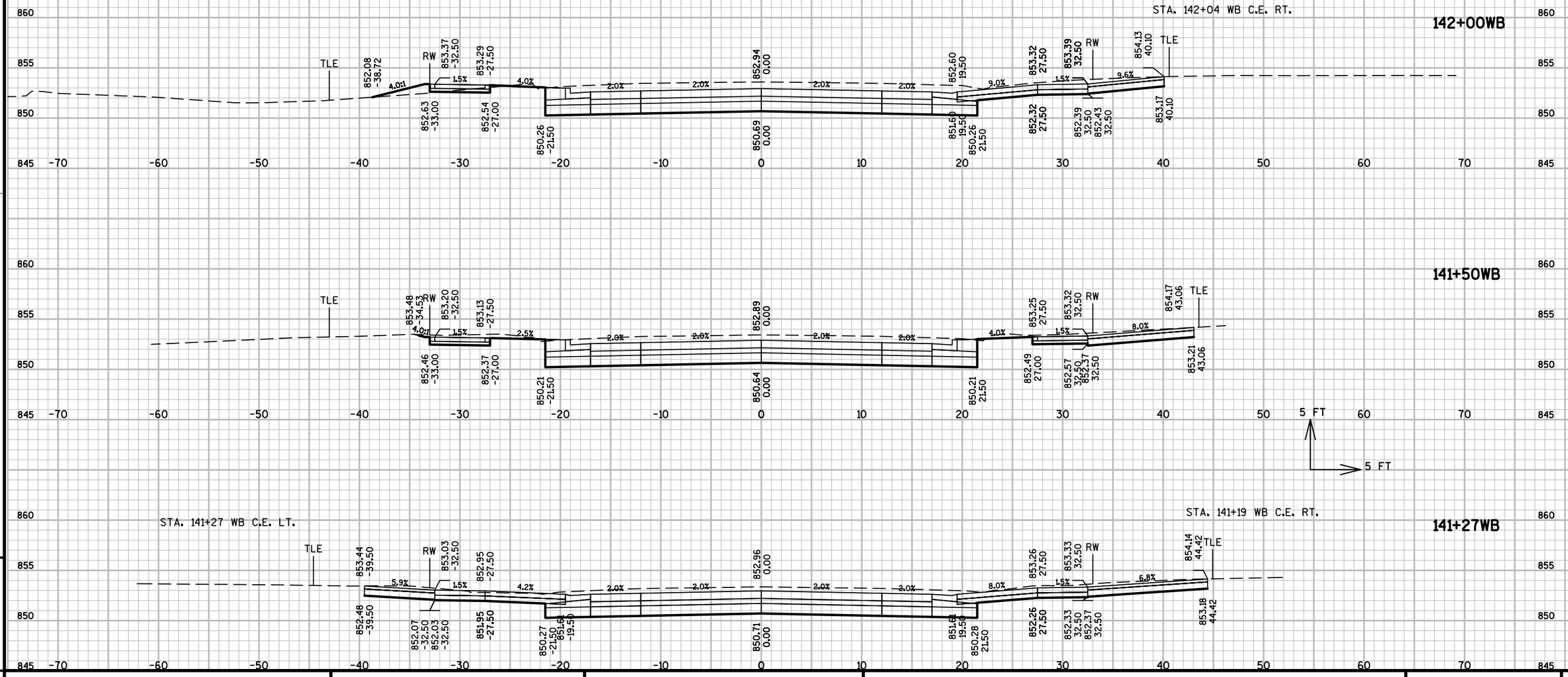


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 559	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (122+00 TO 138+48).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

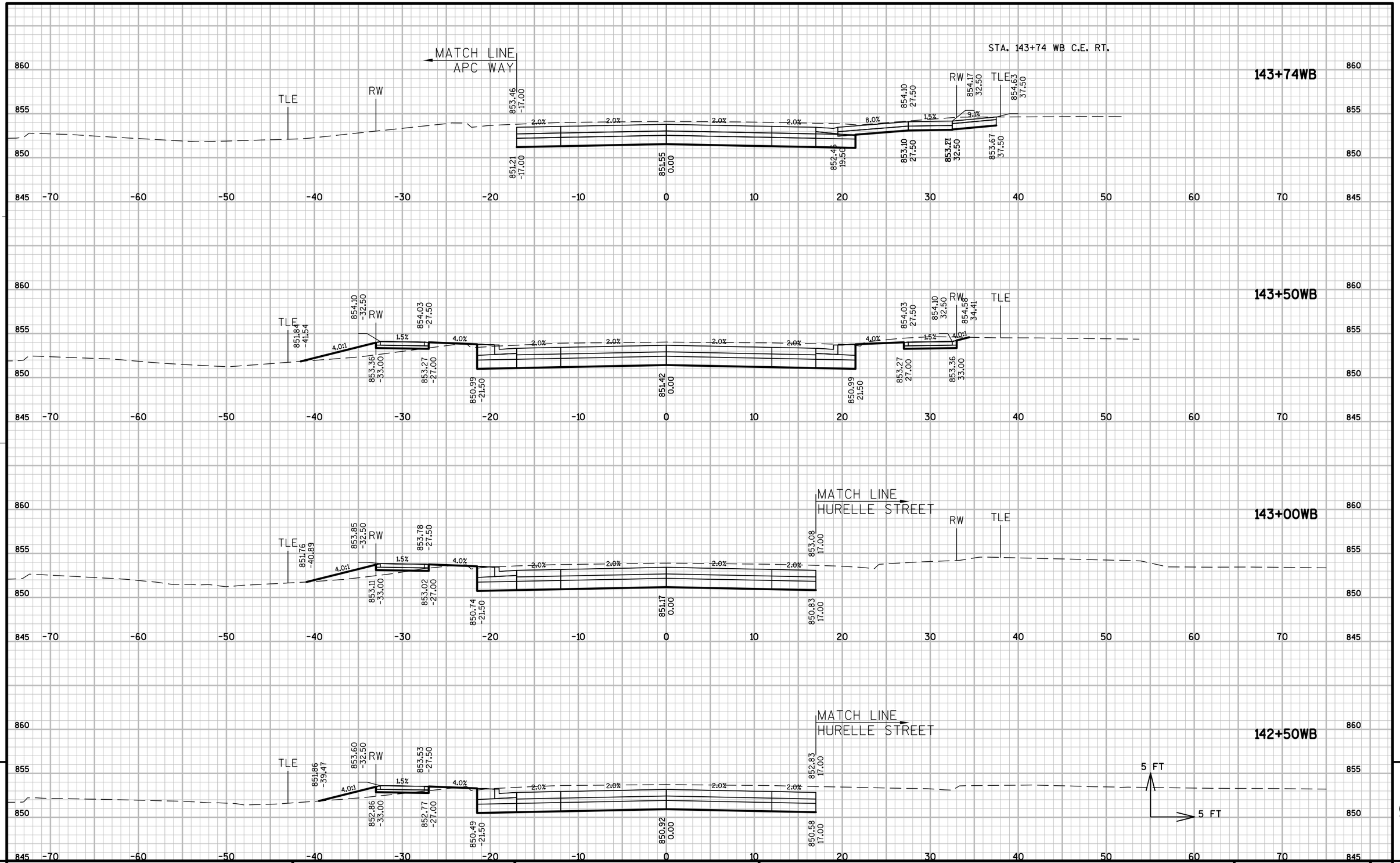
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 560 E

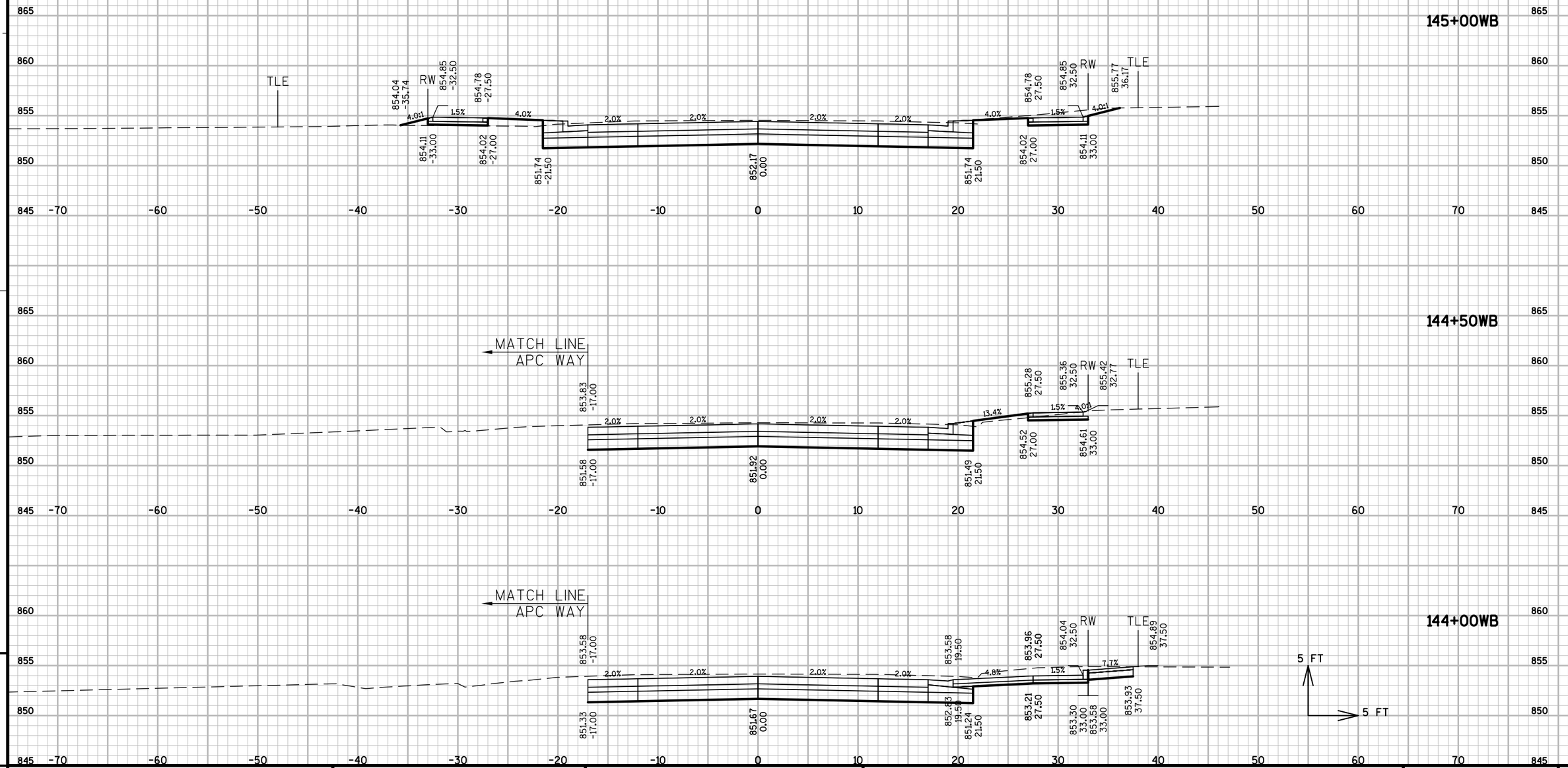
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WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET	E

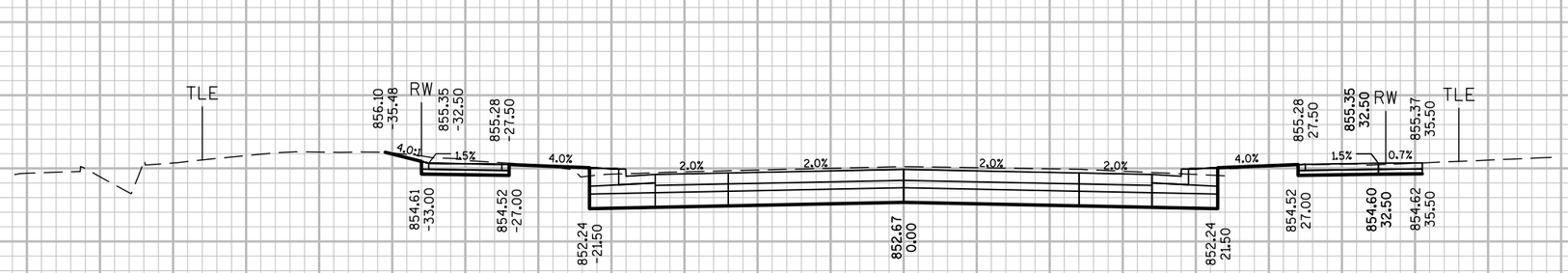
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

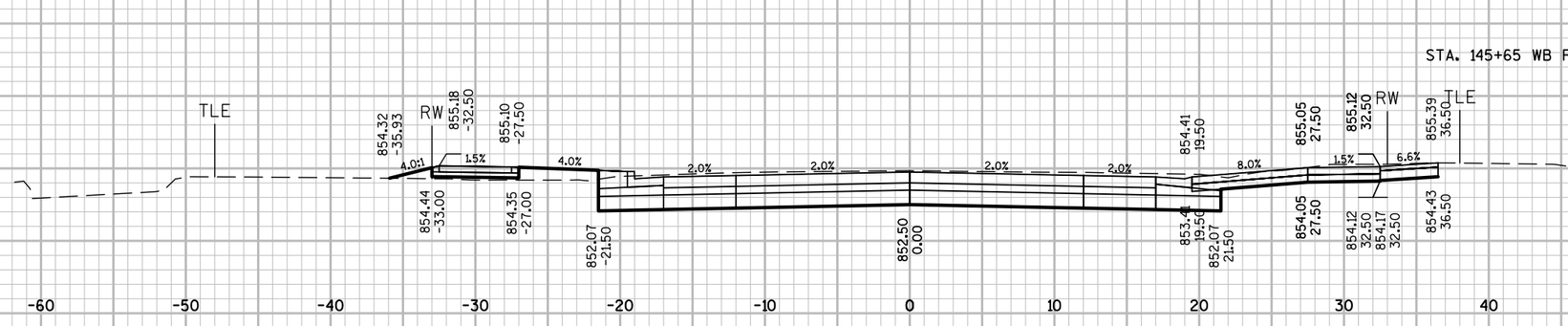


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 562	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49





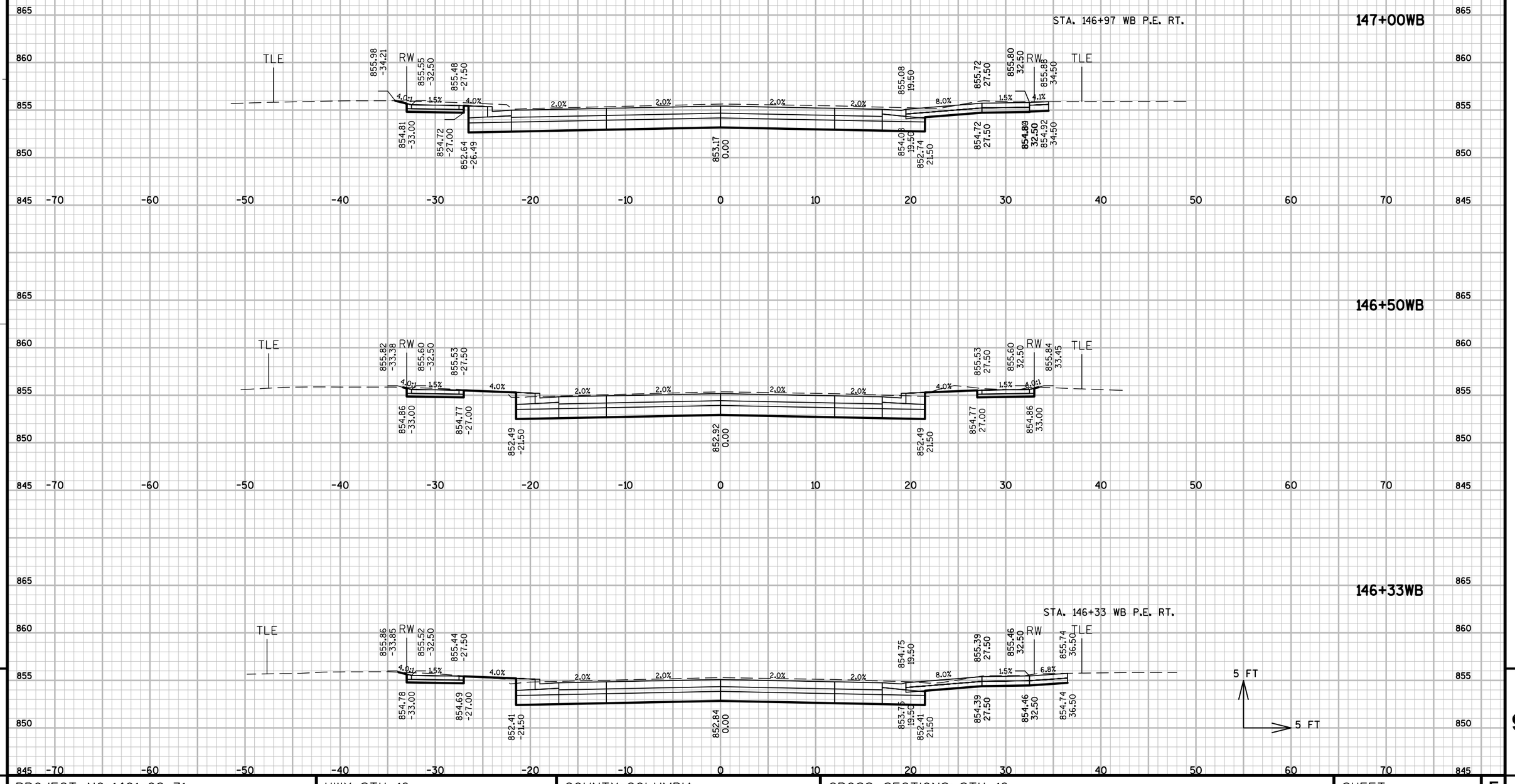


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 563	E

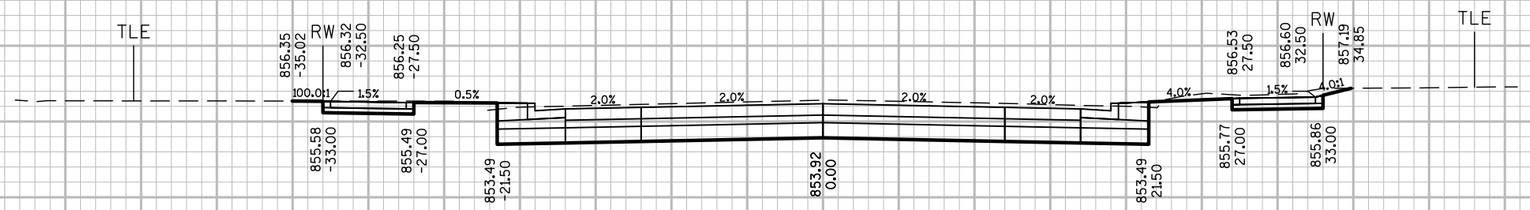
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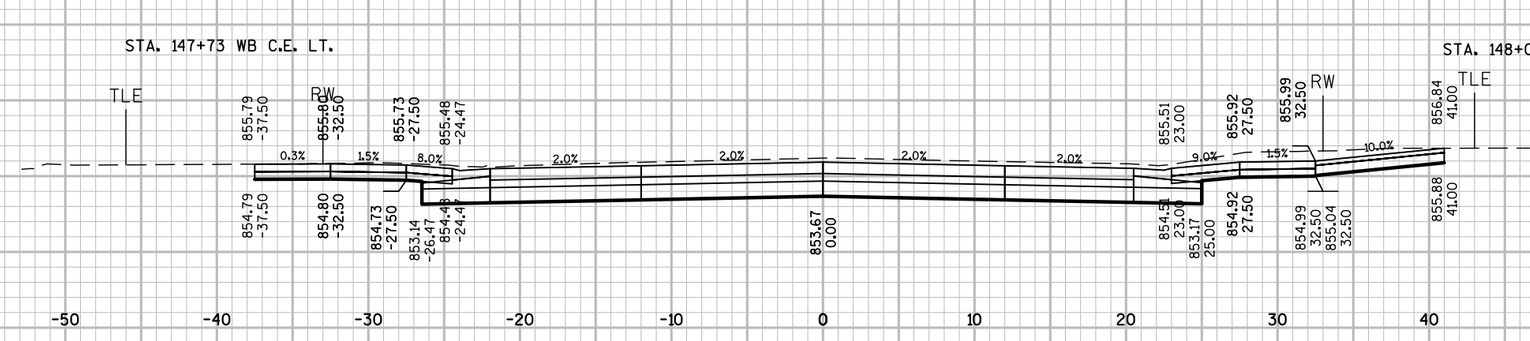


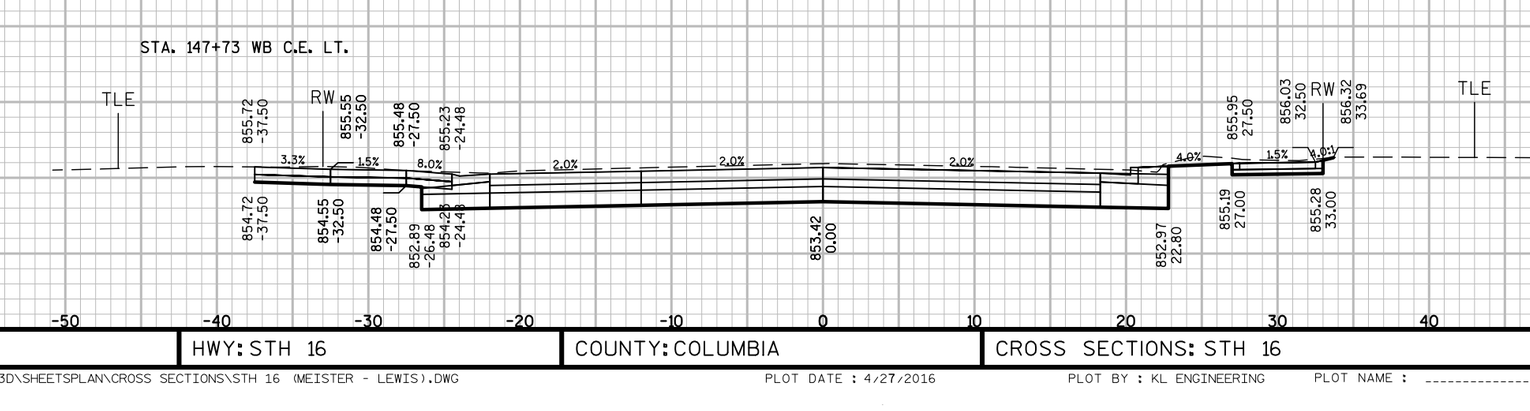
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 564 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49





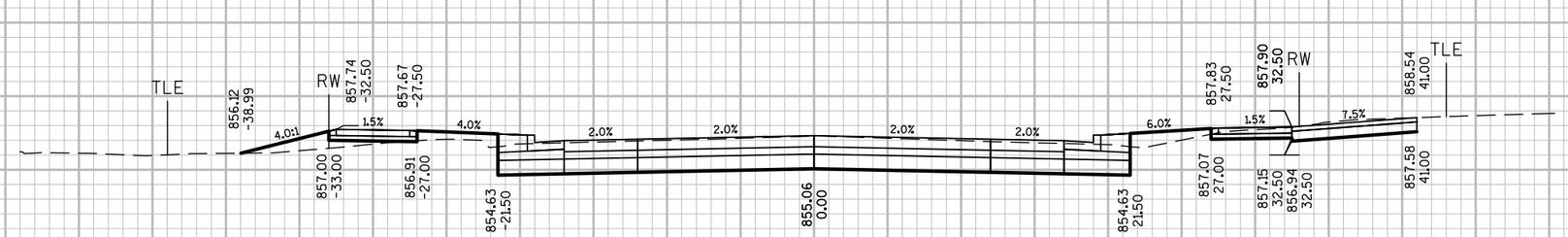


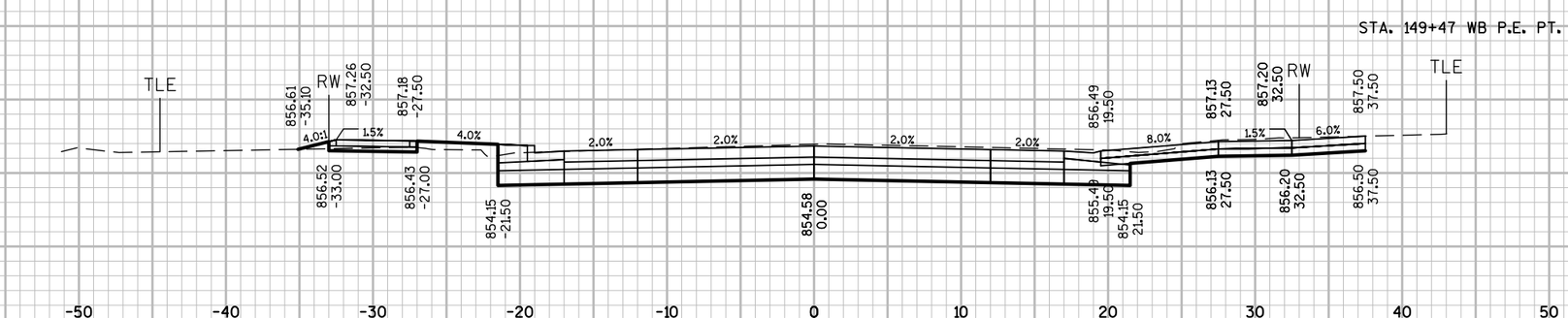
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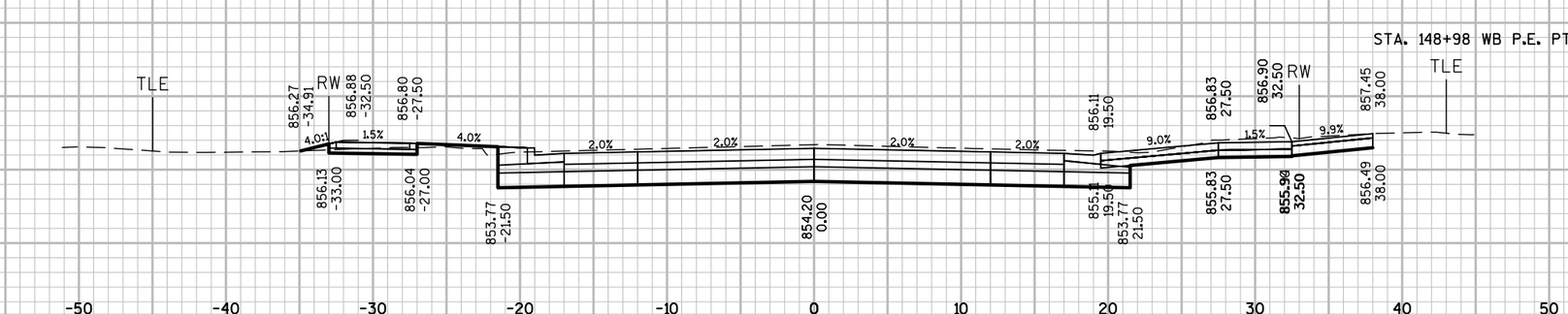
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 565	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********





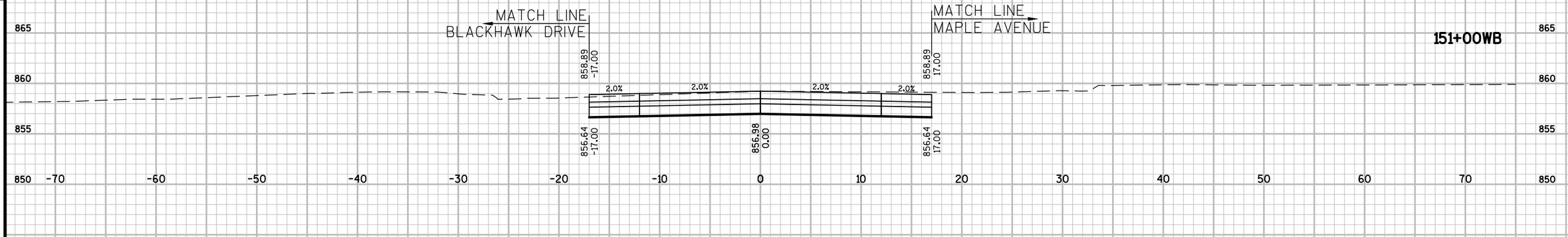


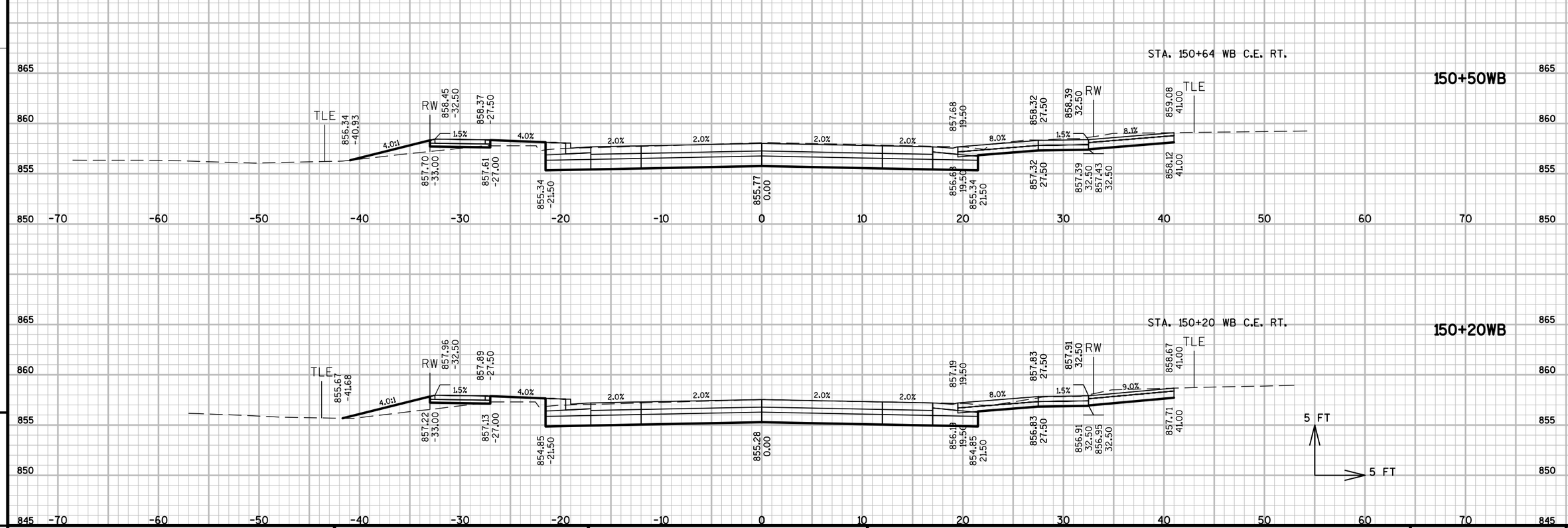
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 566	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49



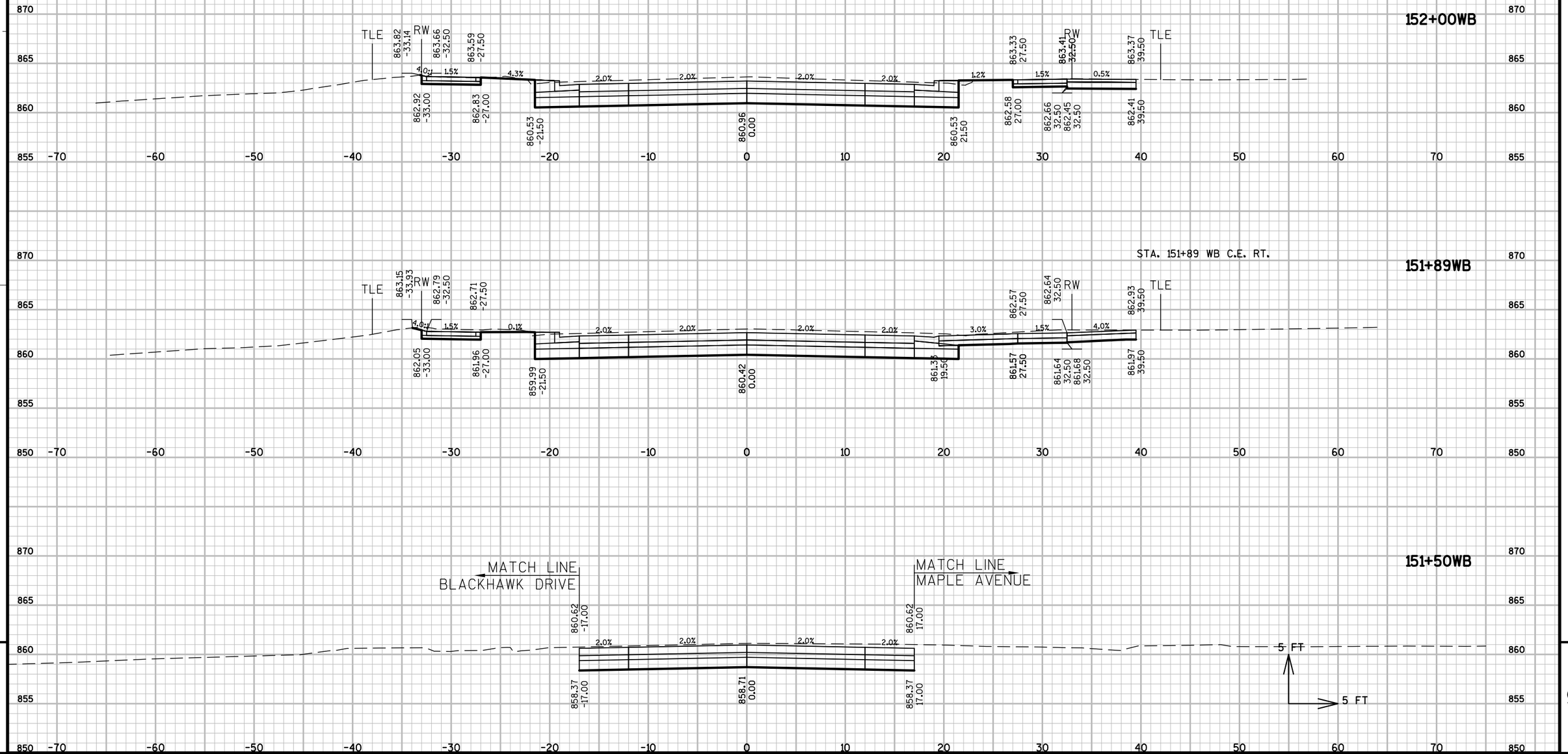


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



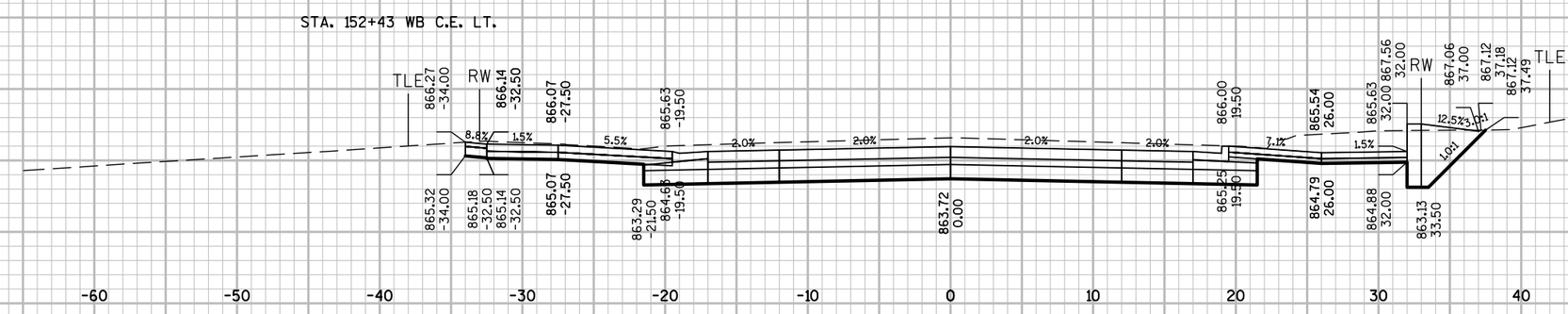
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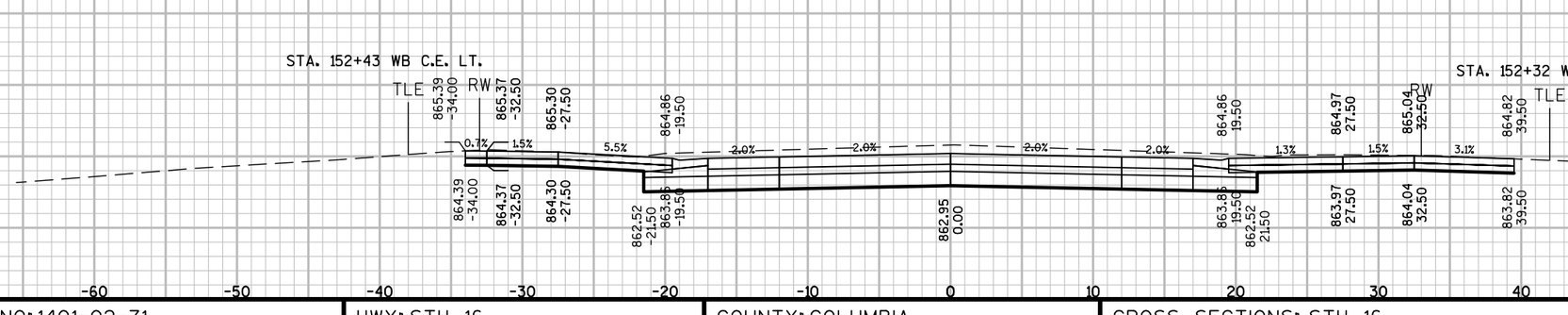
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********







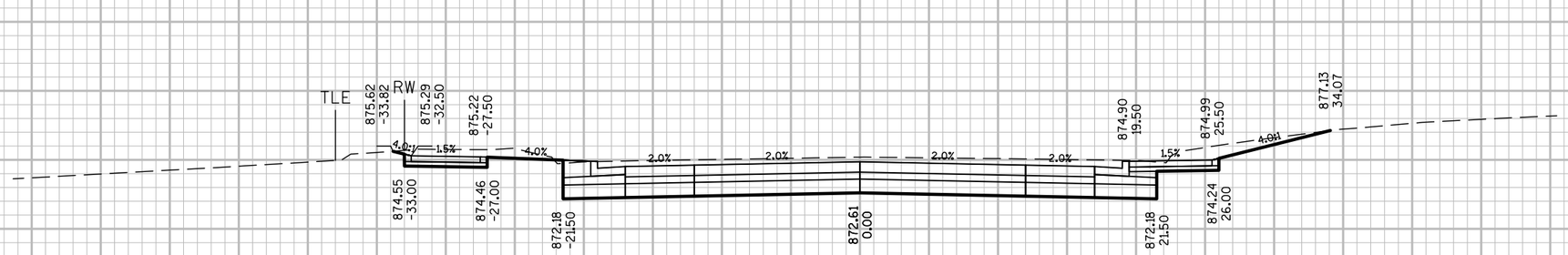
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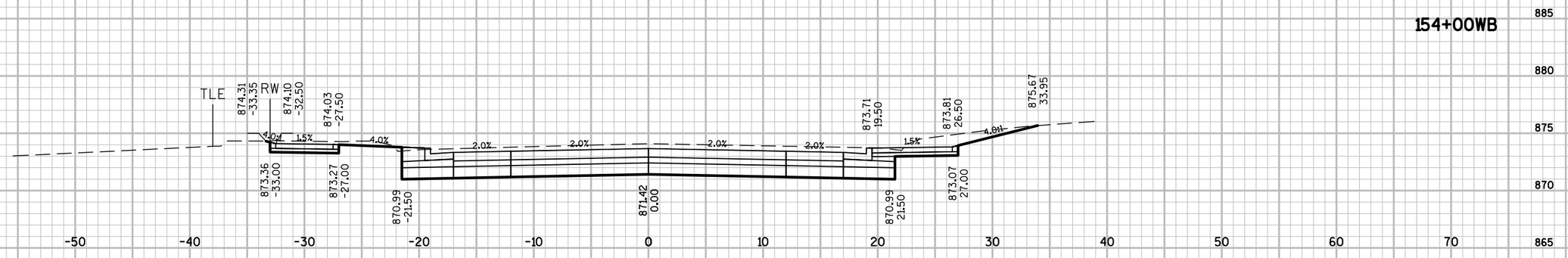
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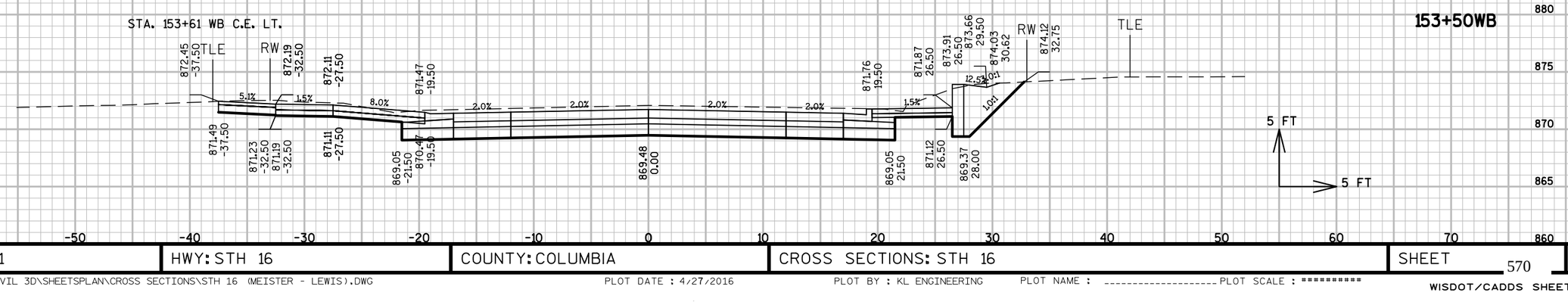
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FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49





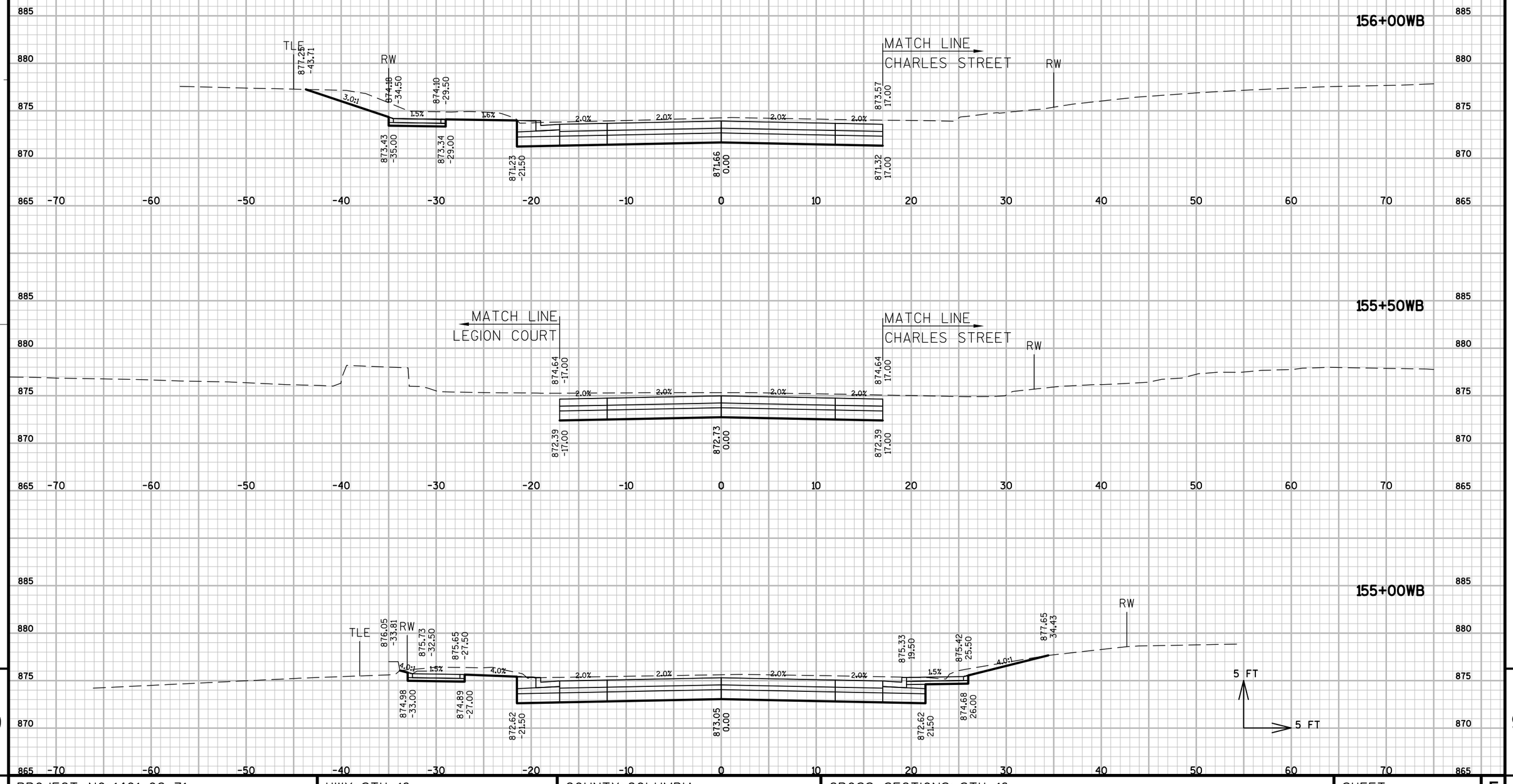


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 570	E

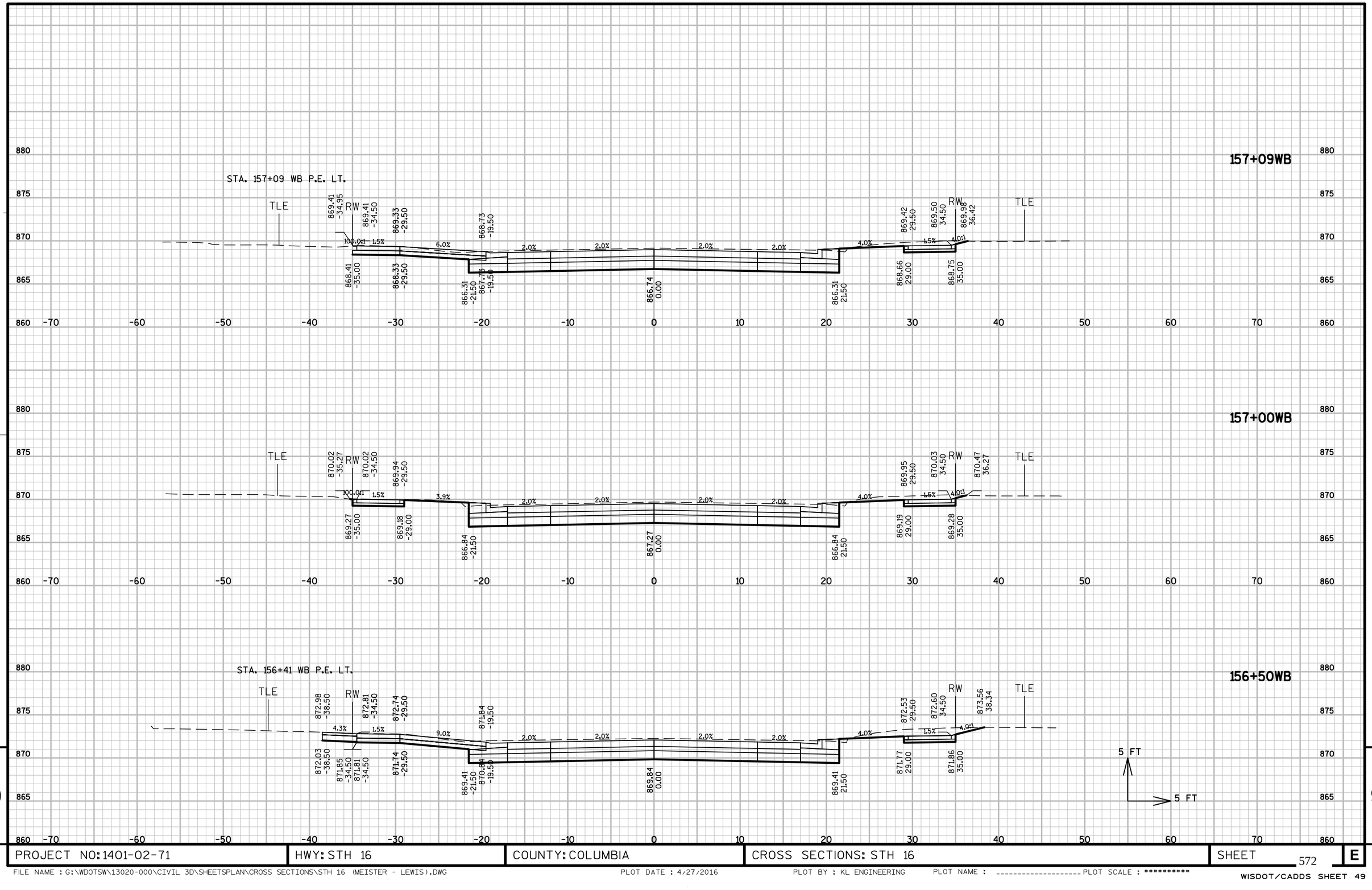
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 571	E

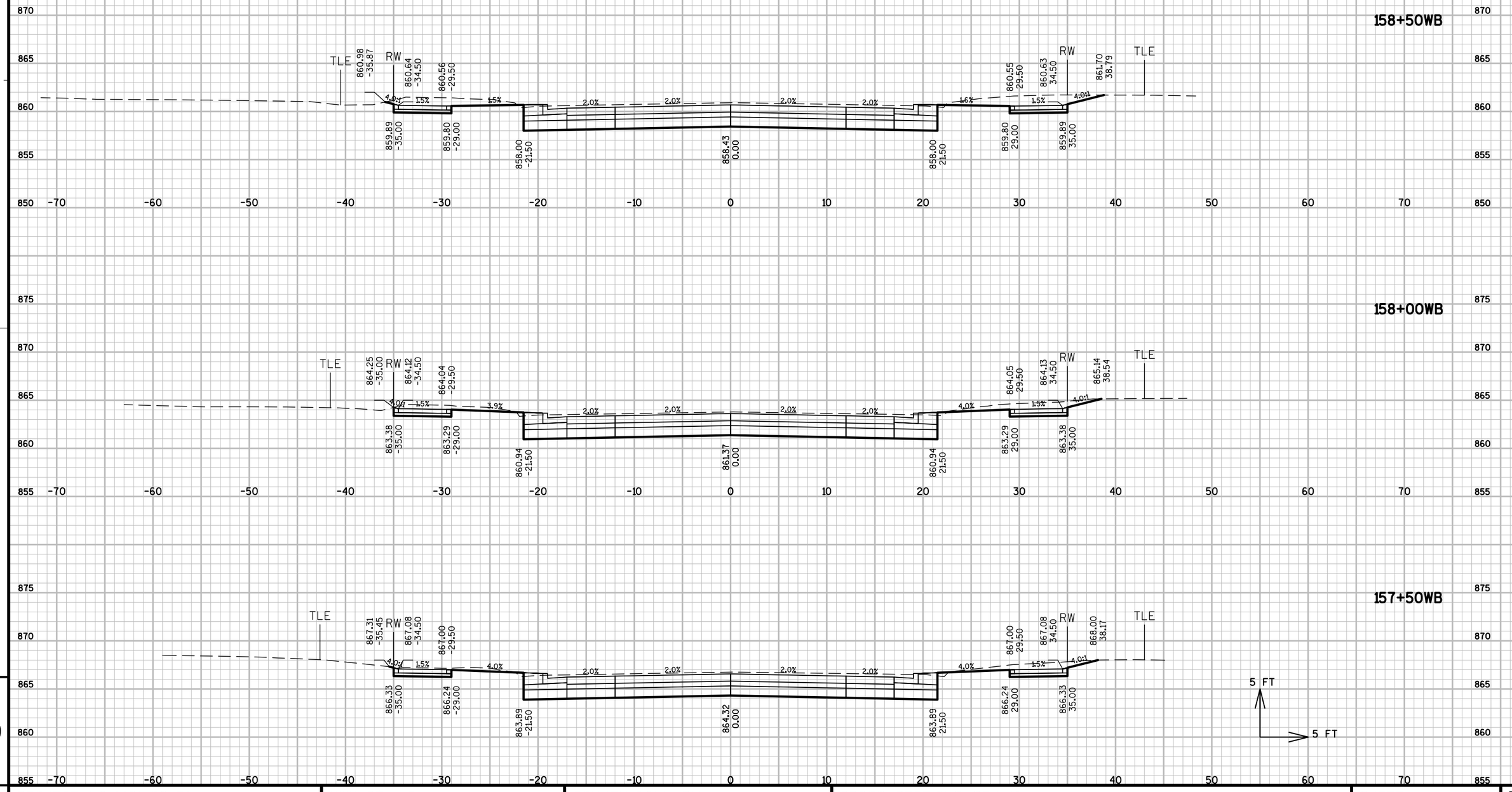


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 572	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

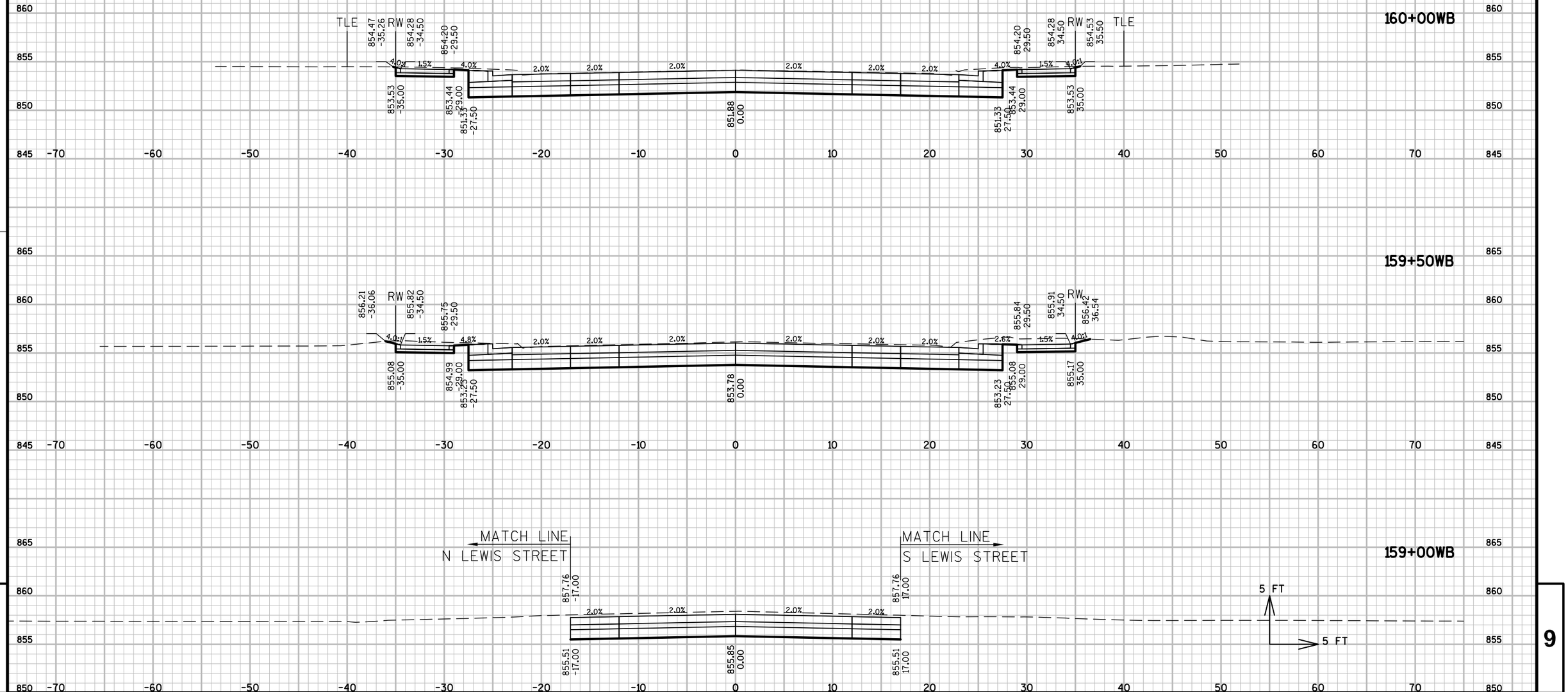


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 573	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

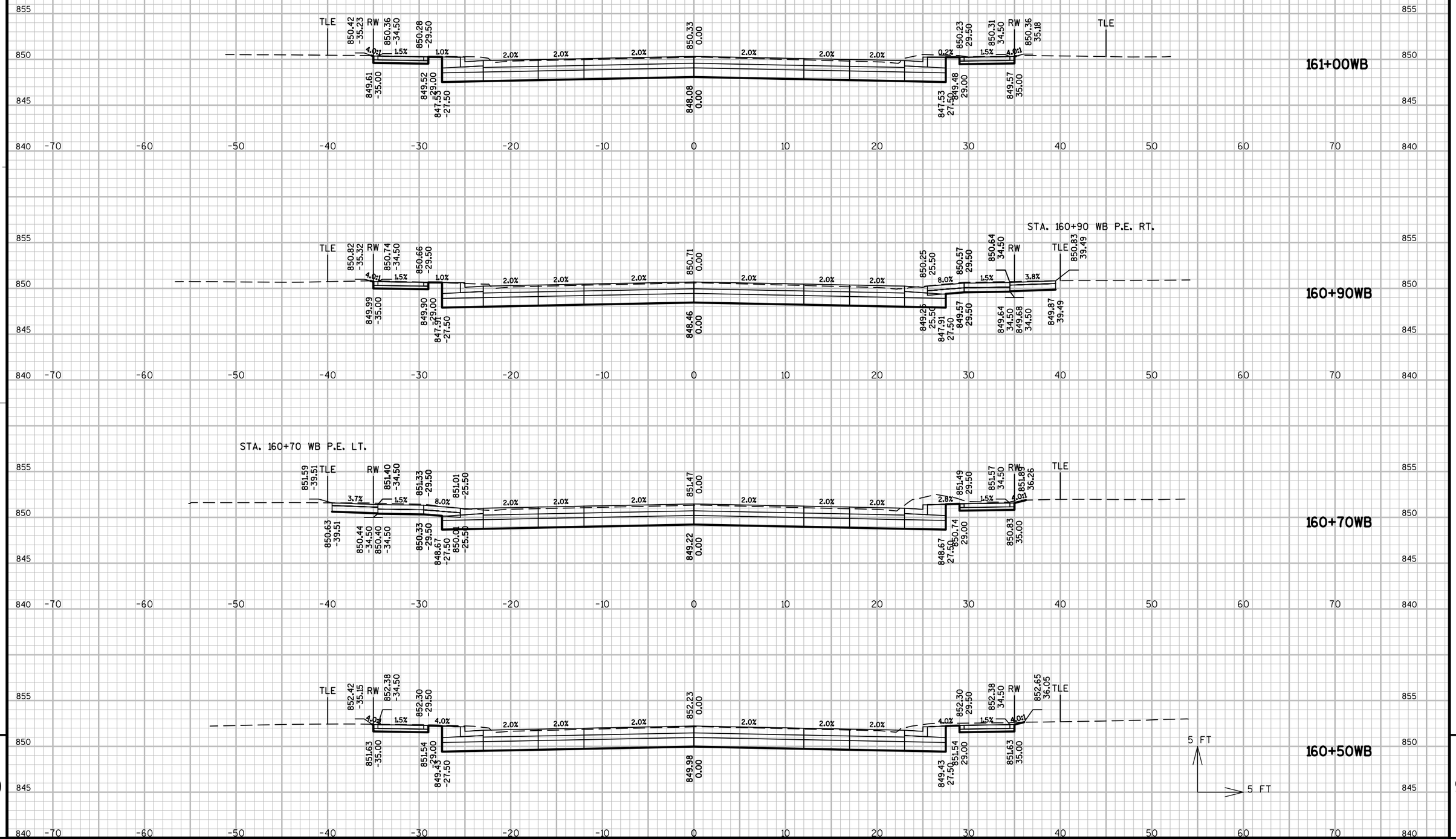


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 574	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (MEISTER - LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

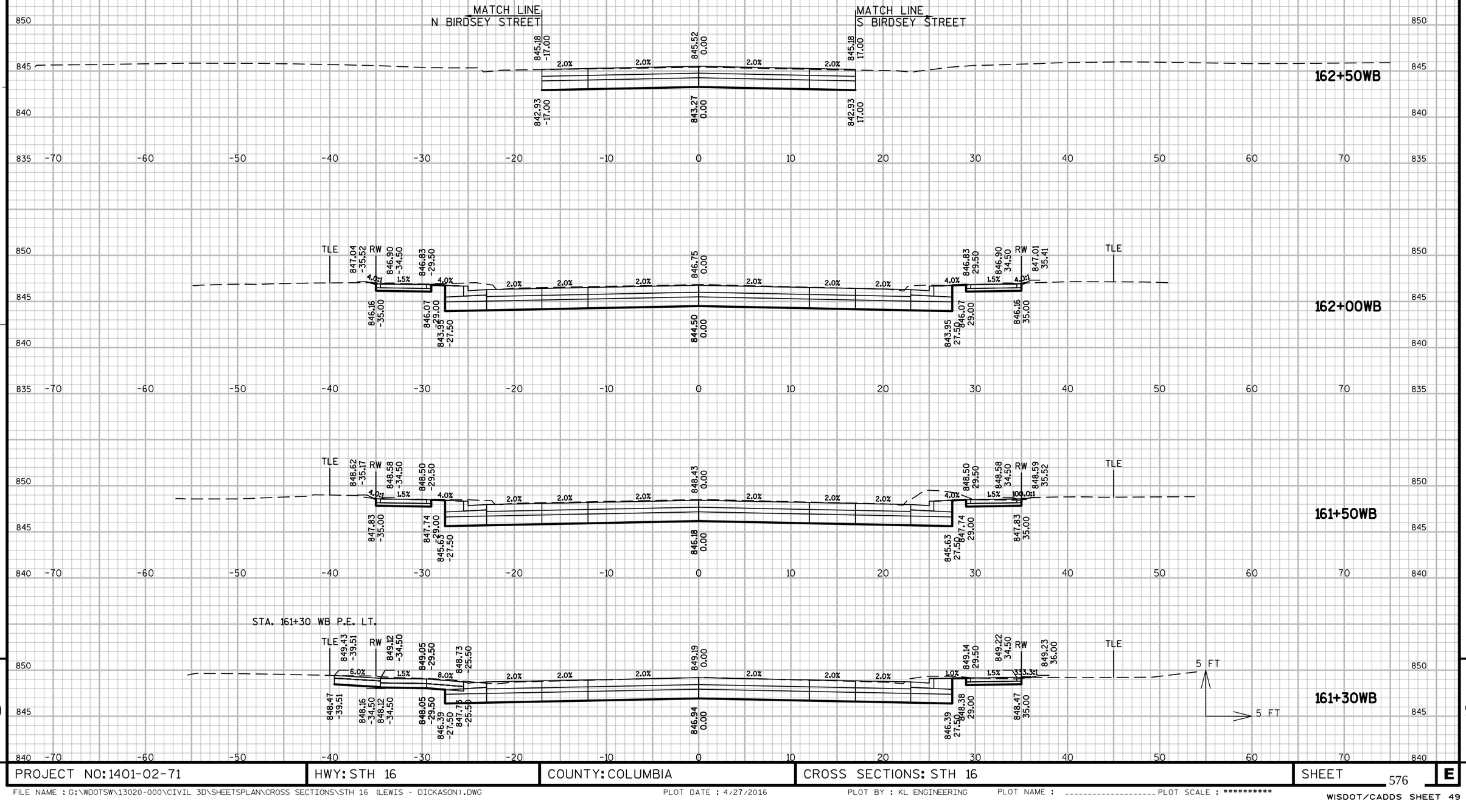


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 575	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



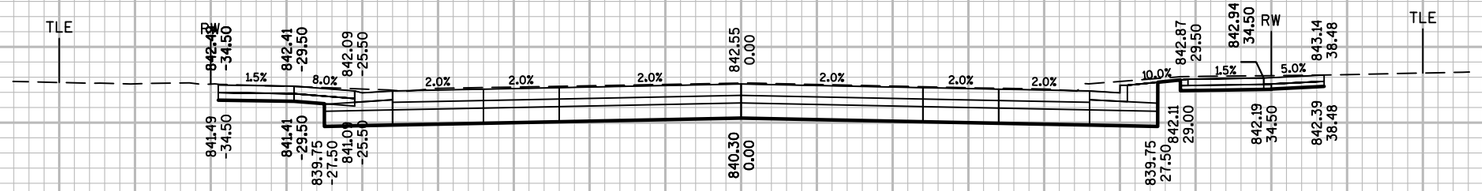
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 576	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

STA. 164+05 WB P.E. LT.

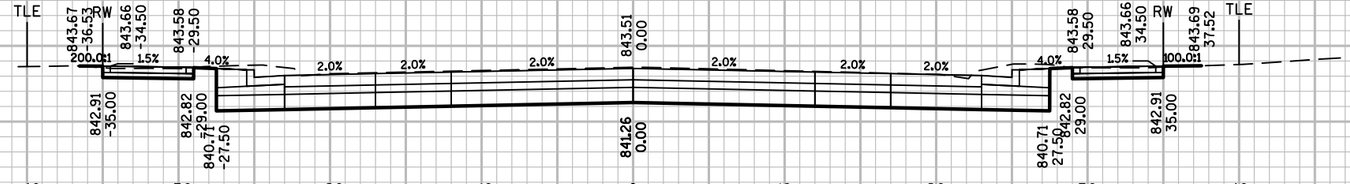


164+00WB

STA. 163+83 WB P.E. LT.



163+83WB



163+50WB



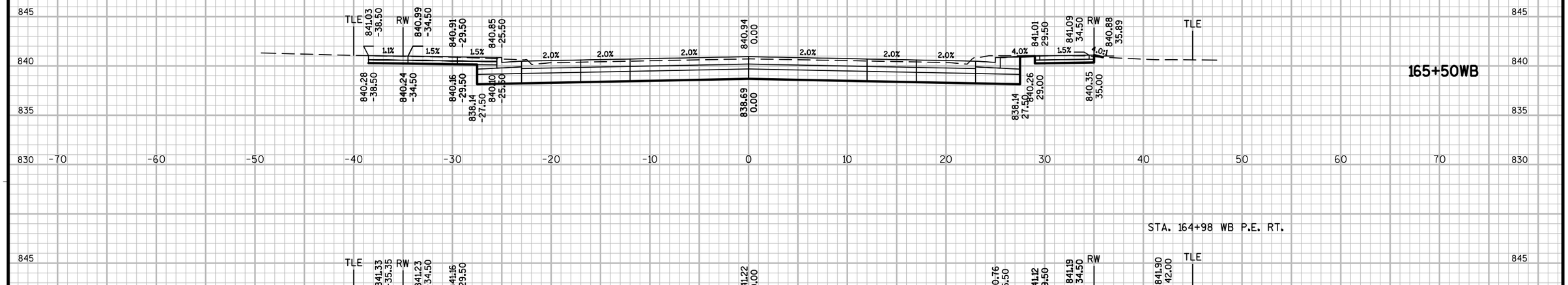
163+00WB

9

9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 577	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

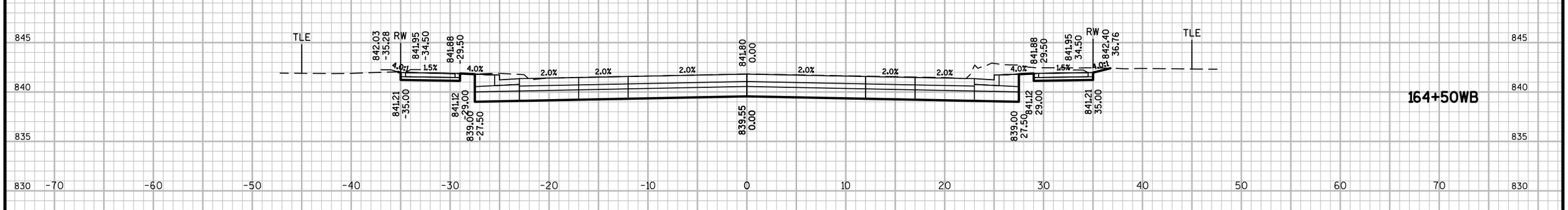


165+50WB

STA. 164+98 WB P.E. RT.

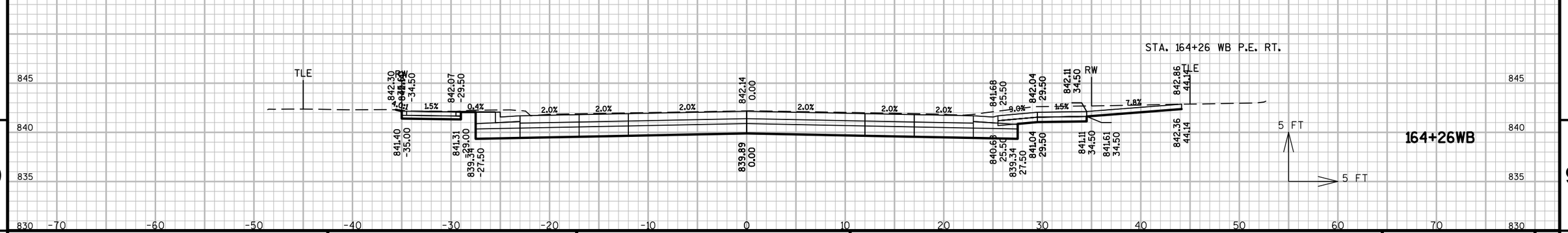


165+00WB



164+50WB

STA. 164+26 WB P.E. RT.



164+26WB

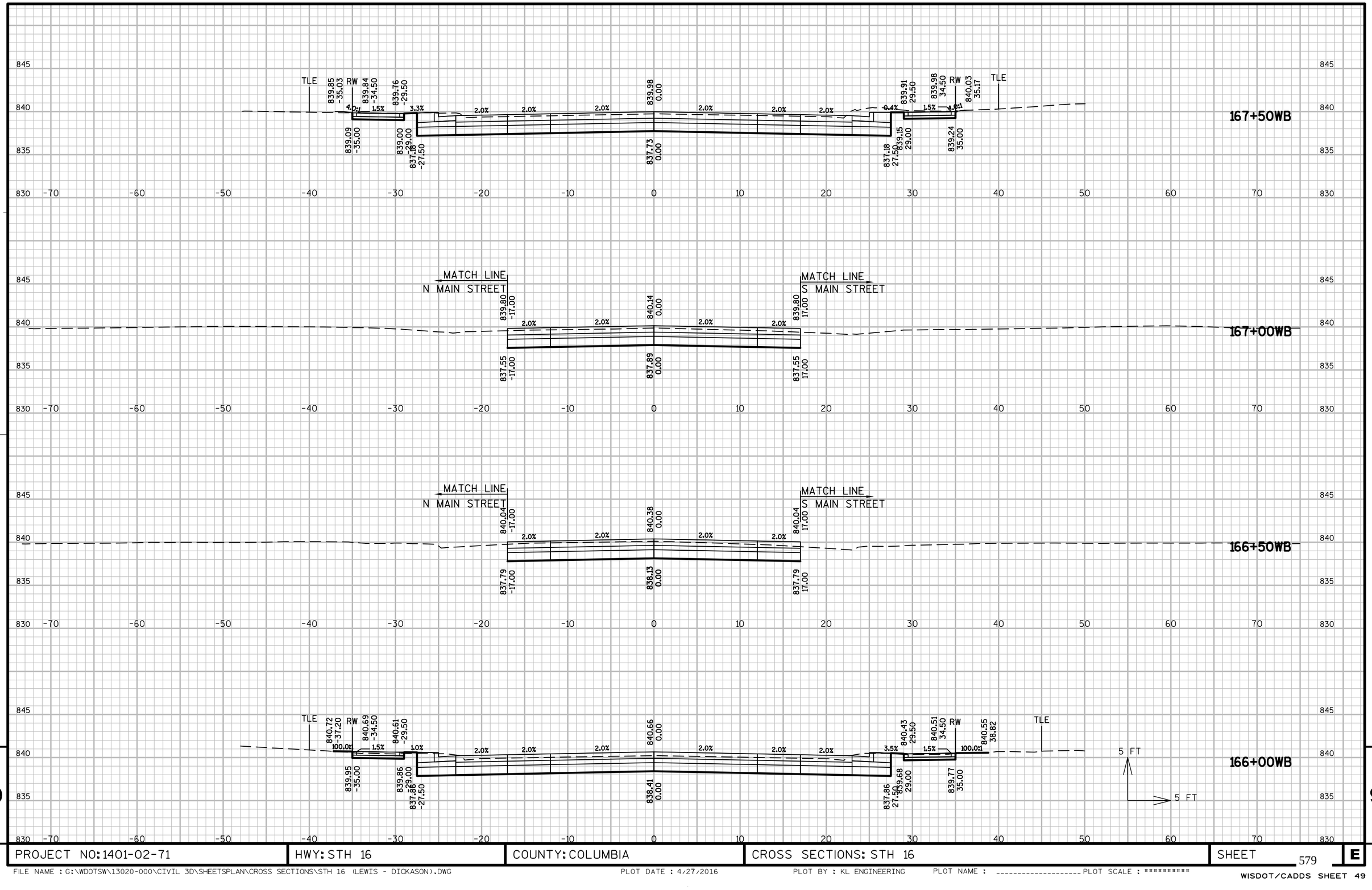
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9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 578	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

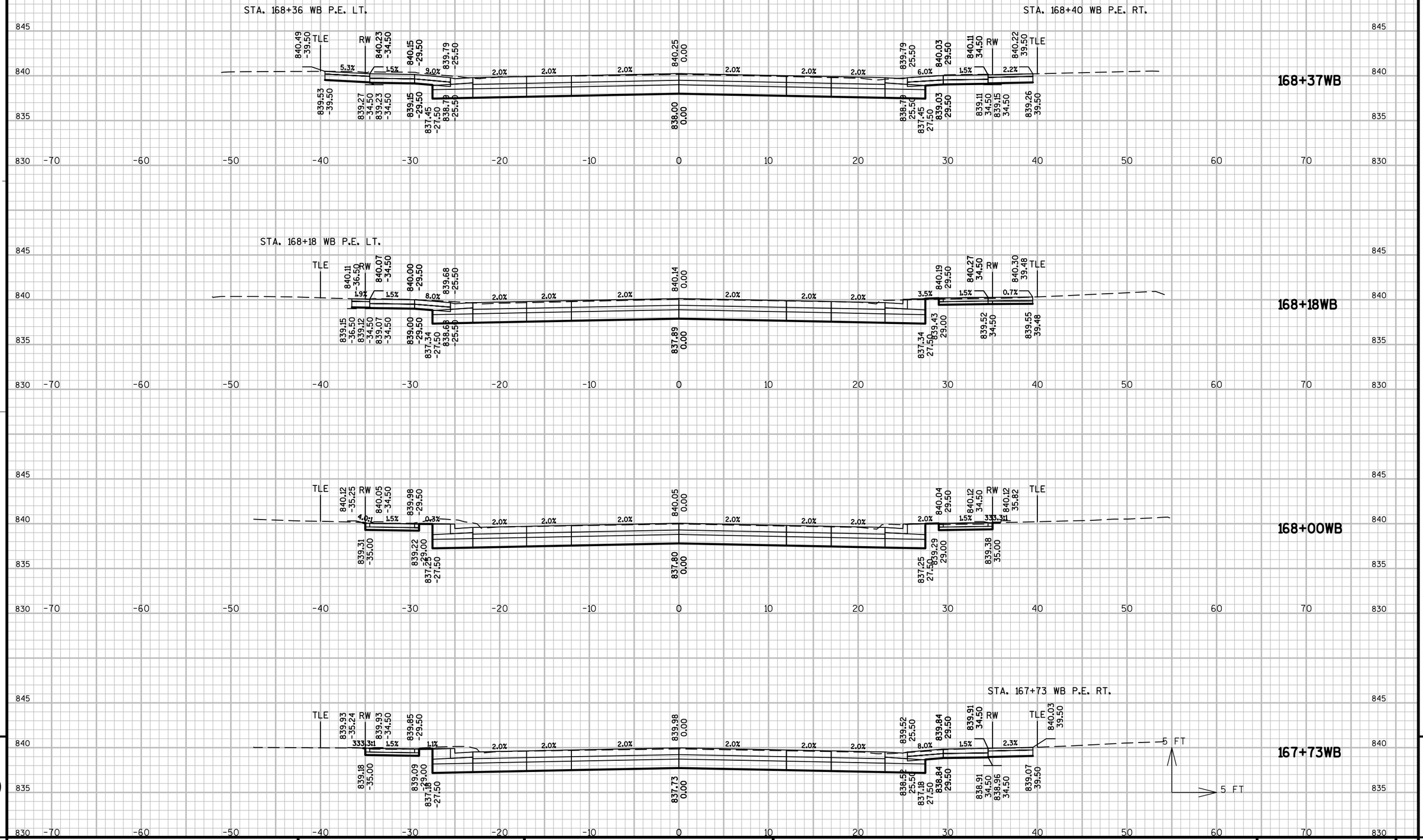
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 579 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49



PROJECT NO:1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 580 E

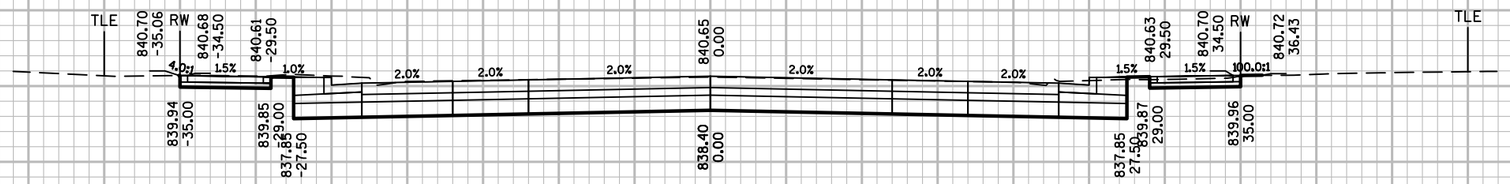
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

STA. 169+46 WB P.E. LT.



169+50WB



169+00WB

STA. 168+62 WB P.E. RT.



168+62WB



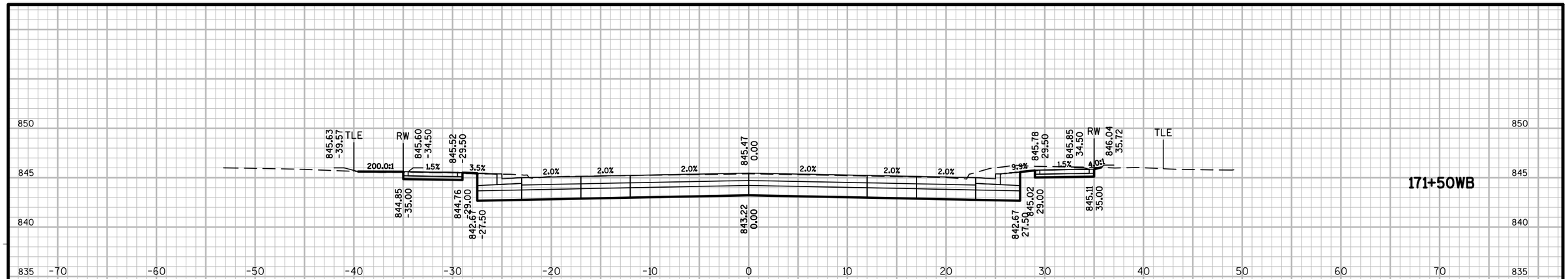
168+50WB

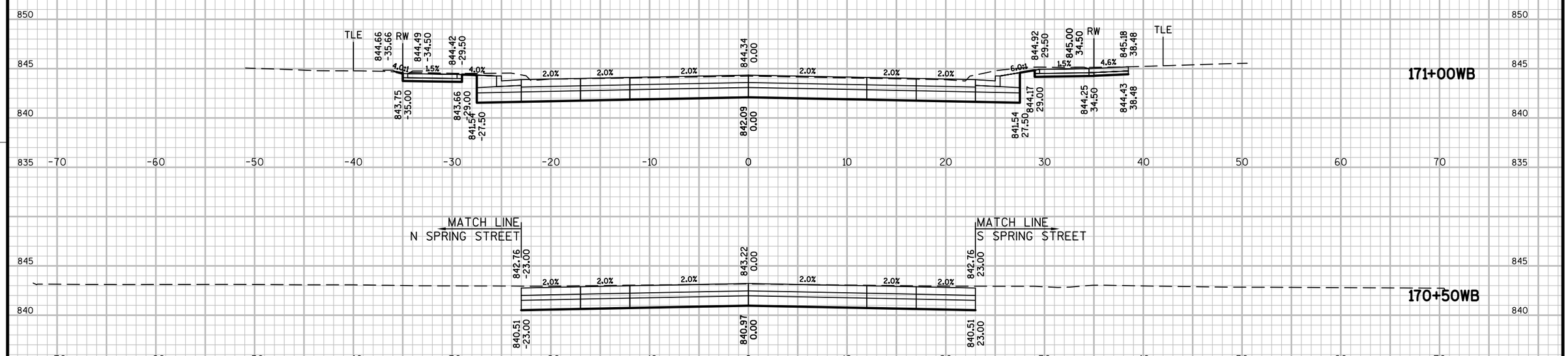
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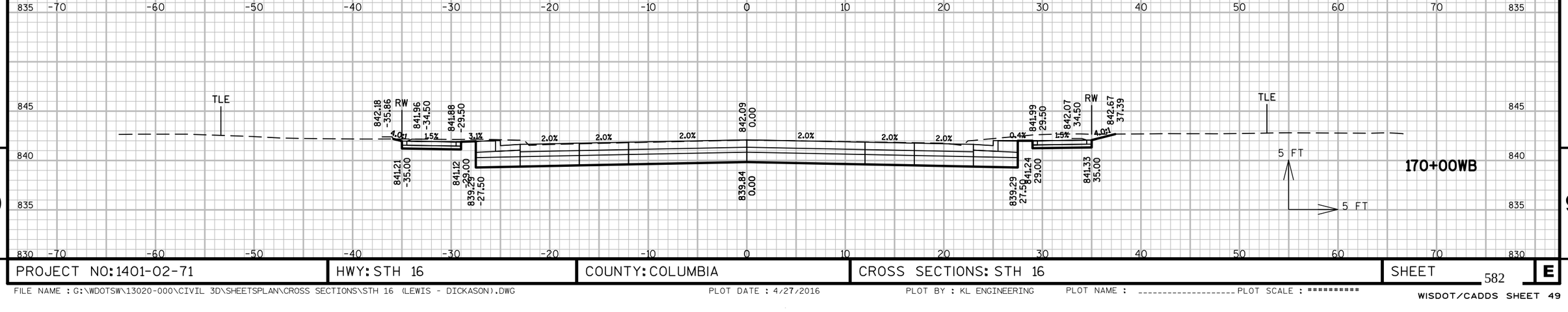
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 581	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********





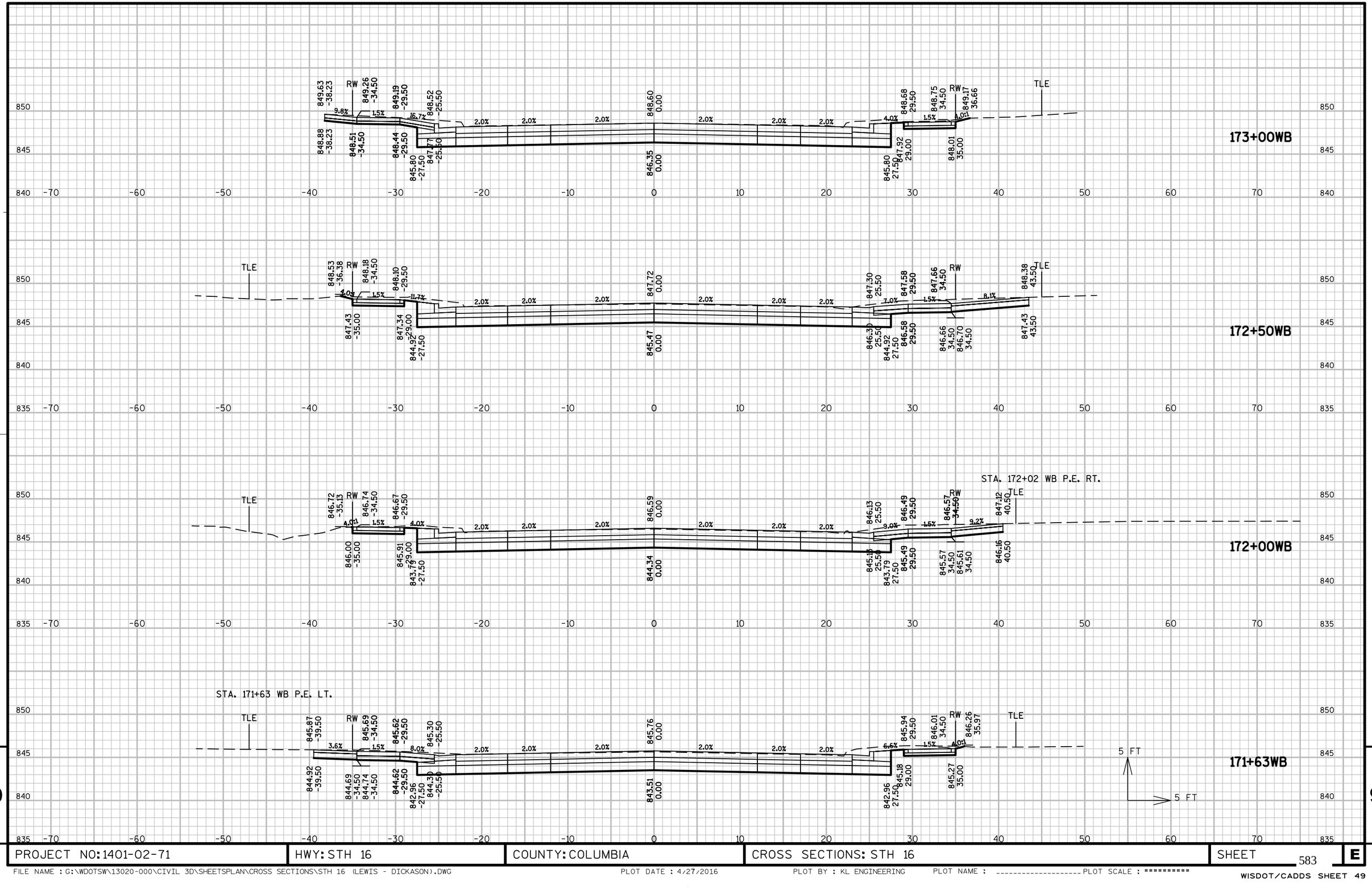


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 582	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

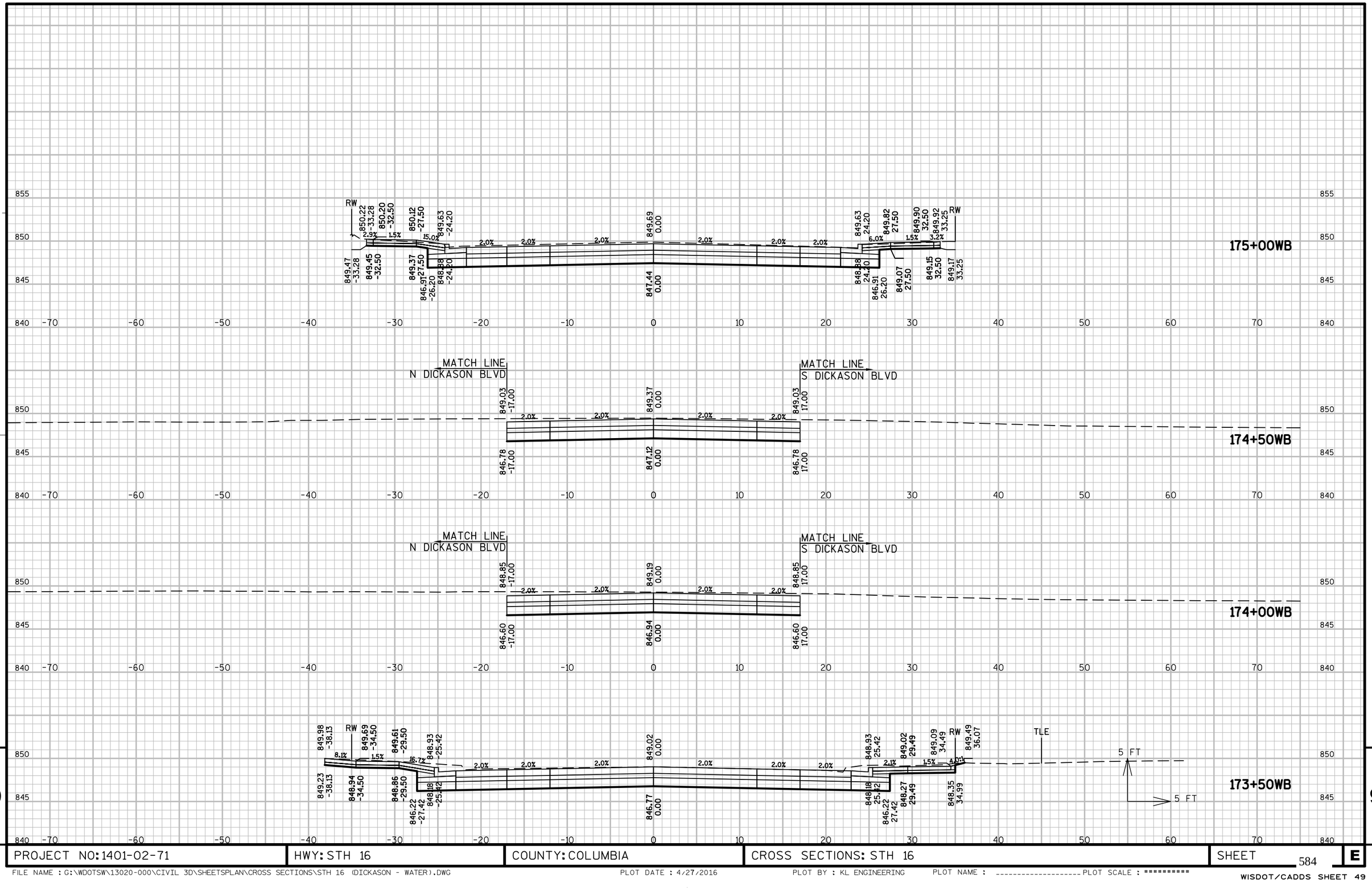


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9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 583	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (LEWIS - DICKASON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



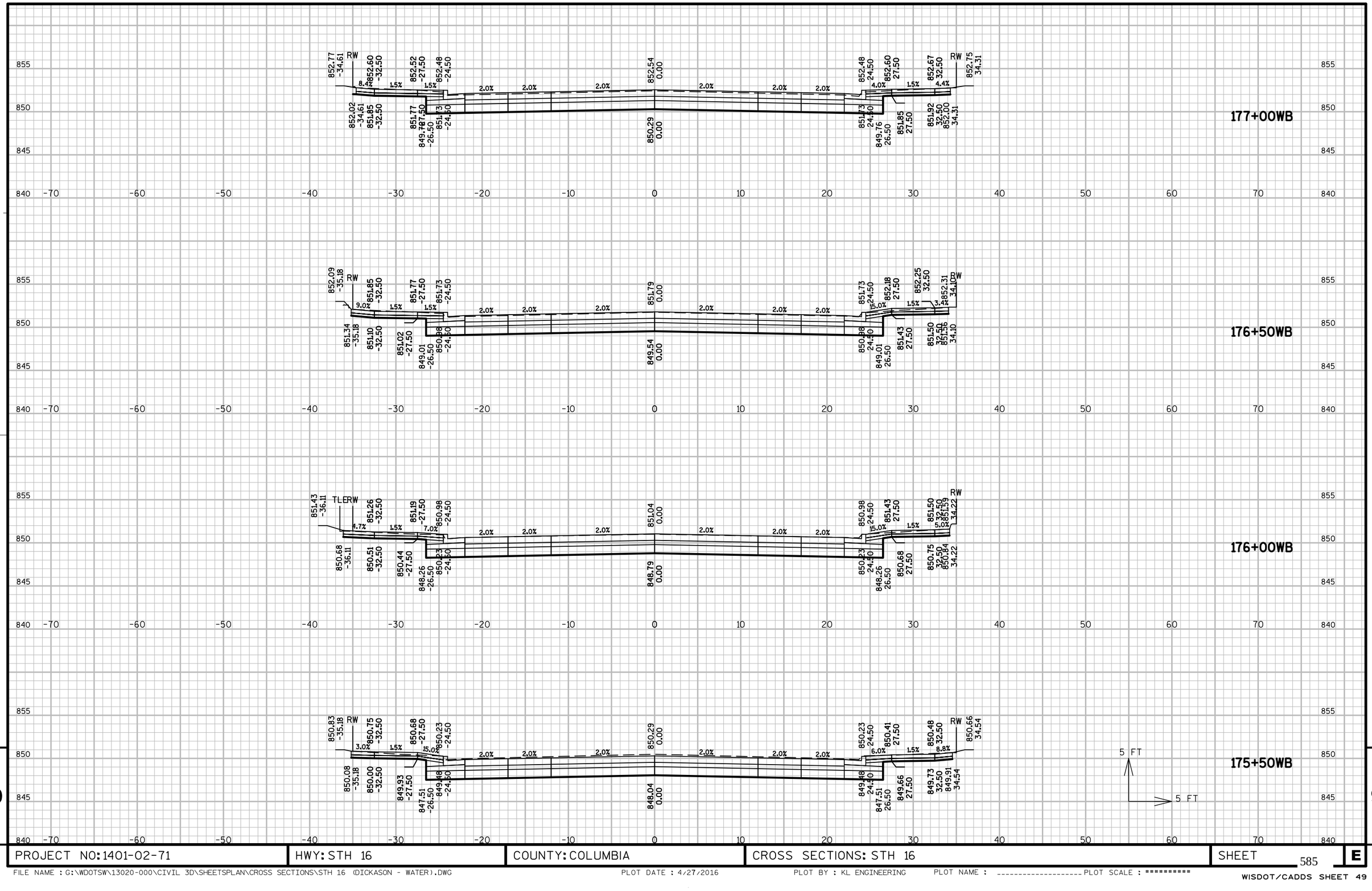
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 584	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (DICKASON - WATER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

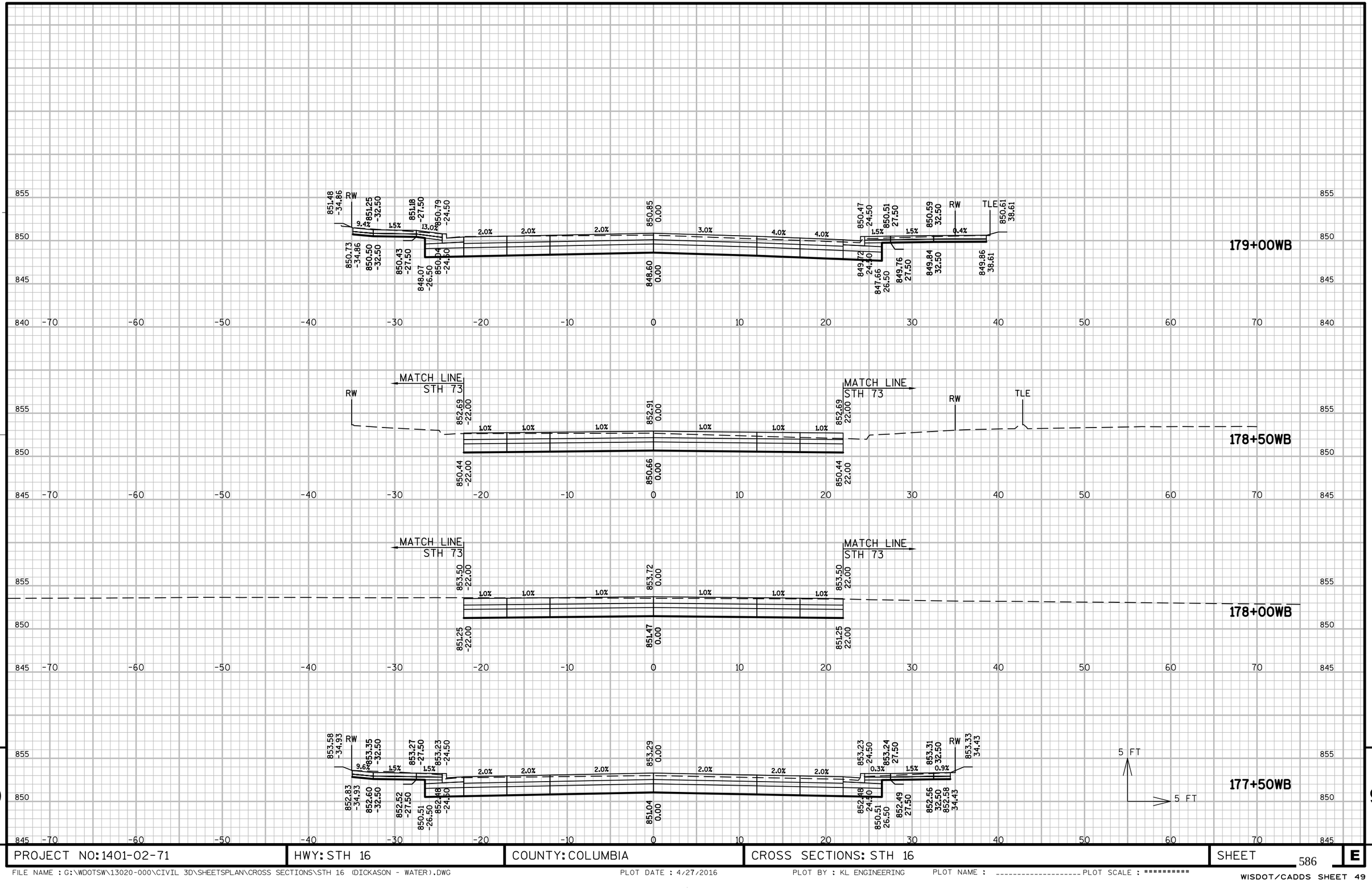
WISDOT/CADDS SHEET 49

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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 585 E

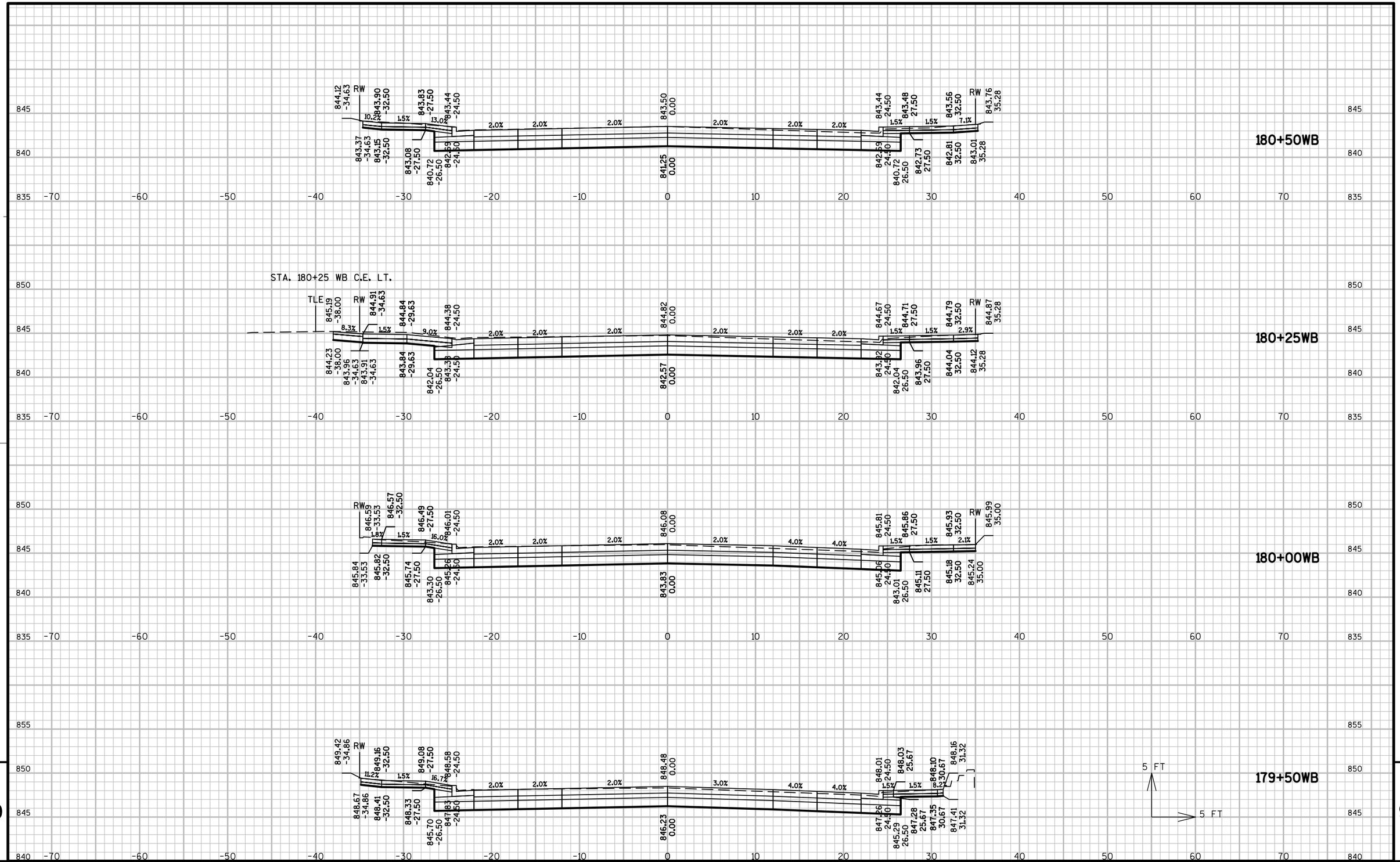
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 586 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (DICKASON - WATER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

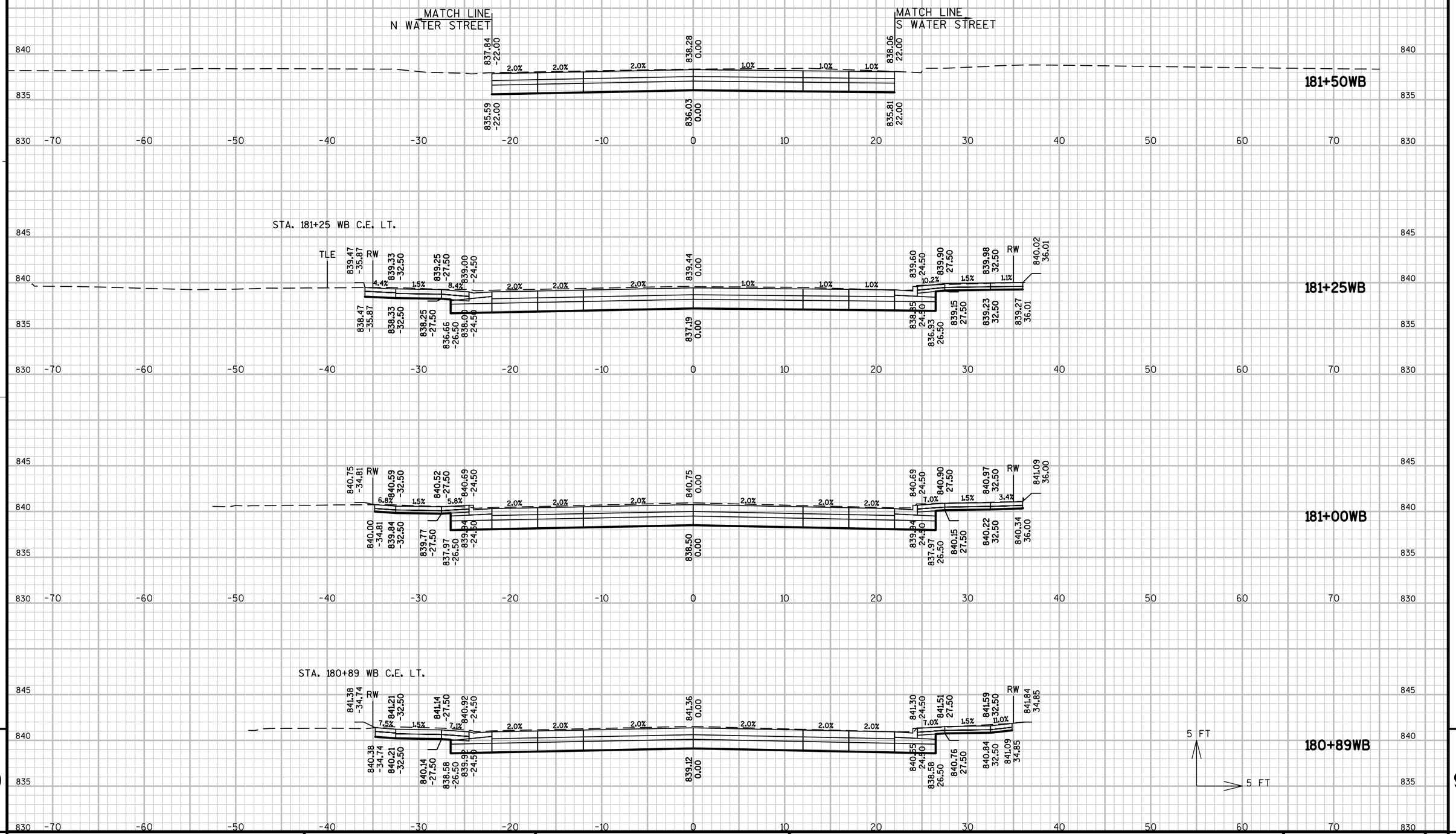


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 587	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (DICKASON - WATER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

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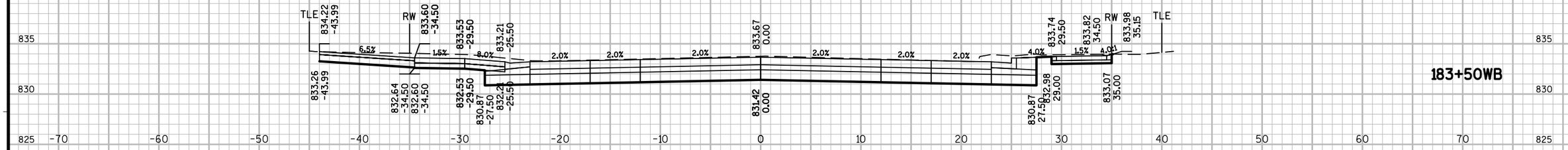


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 588 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (DICKASON - WATER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

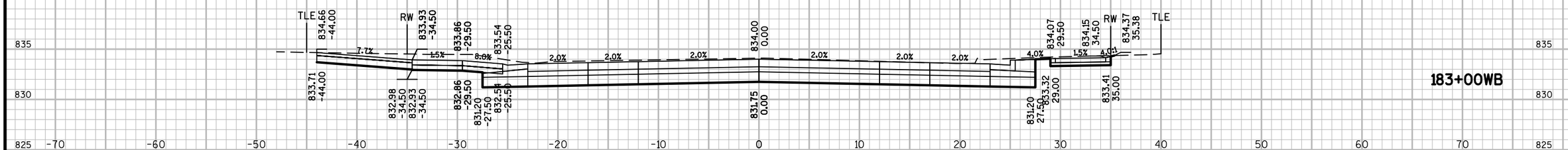
WISDOT/CADDS SHEET 49

STA. 183+48 WB C.E. LT.

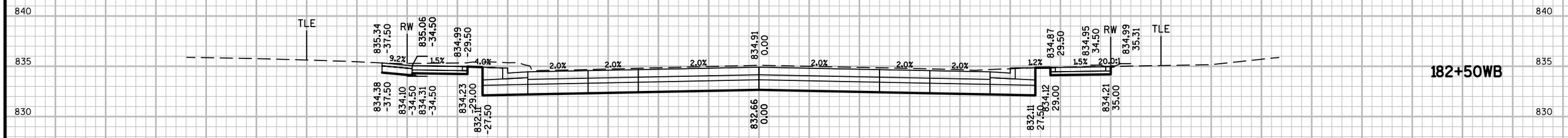


183+50WB

STA. 182+97 WB C.E. LT.



183+00WB



182+50WB



182+00WB

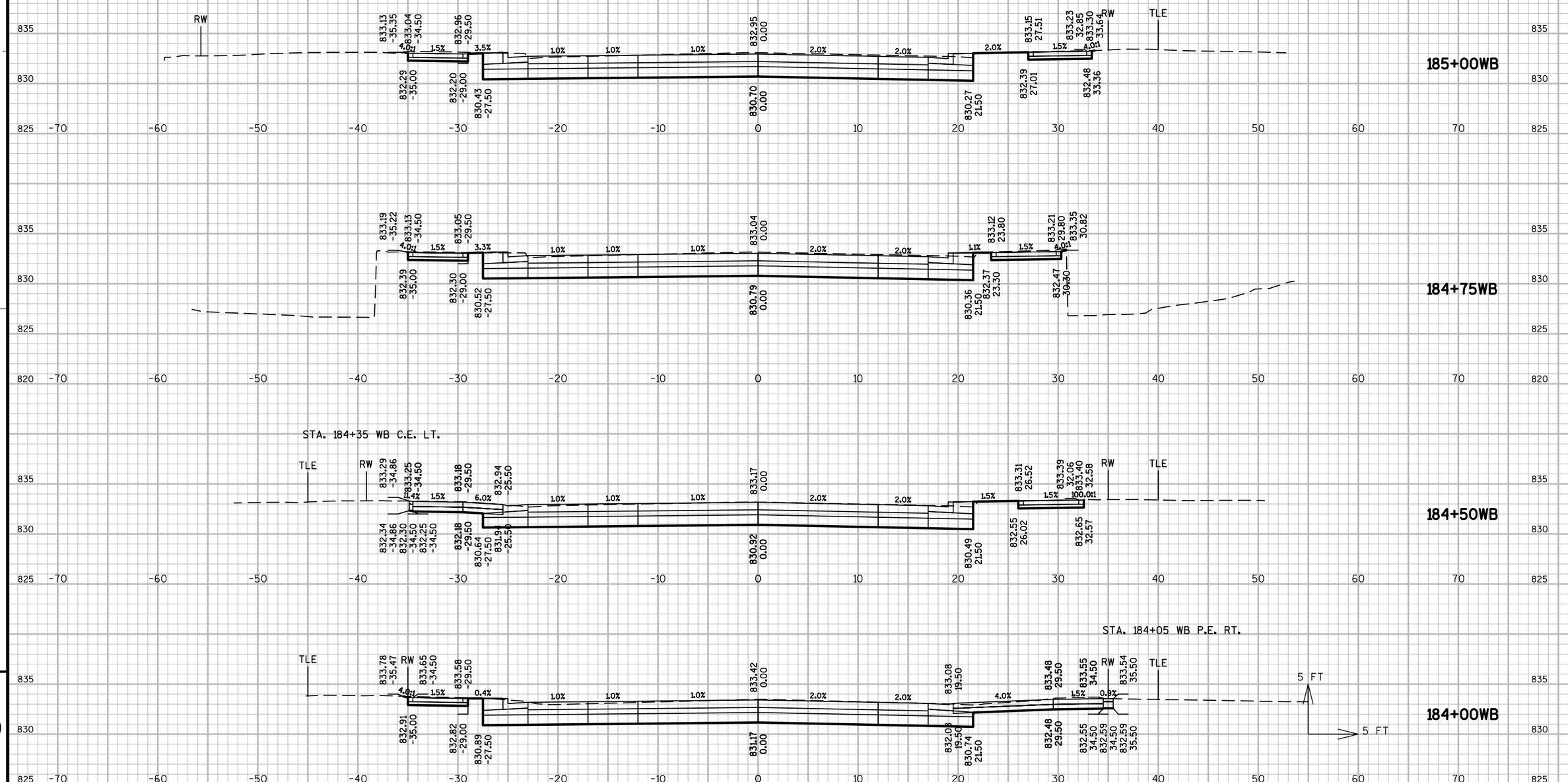
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PROJECT NO: 1401-02-71 | HWY: STH 16 | COUNTY: COLUMBIA | CROSS SECTIONS: STH 16 | SHEET 589 | E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (DICKASON - WATER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

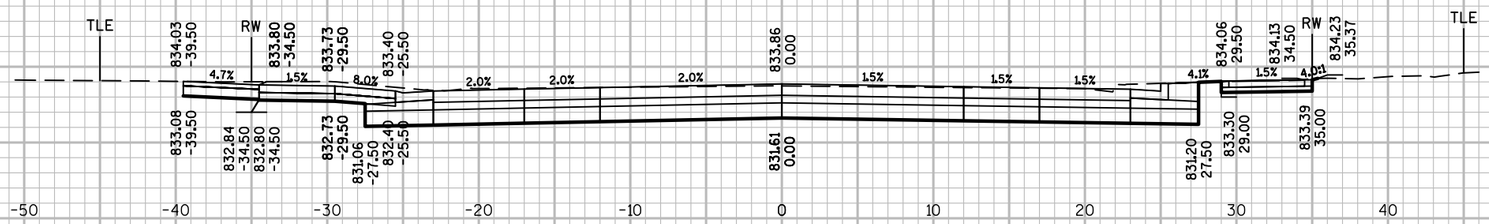
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 590 E

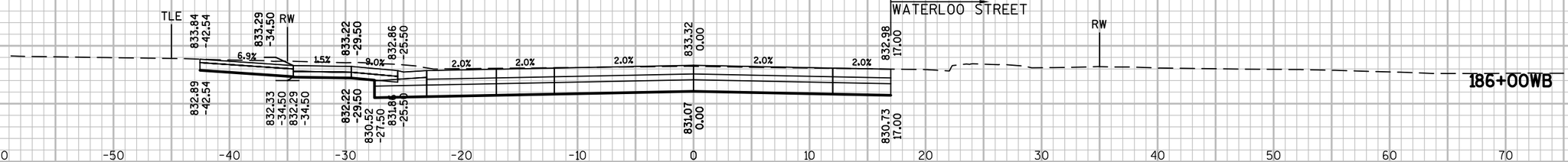
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (WATER - RIVER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

STA. 186+75 WB P.E. LT.

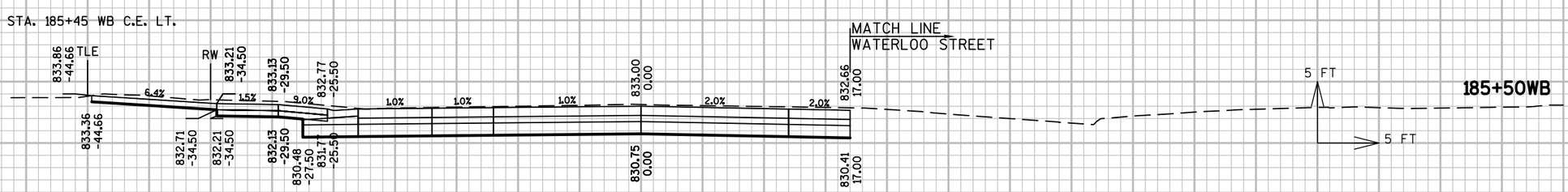




STA. 186+13 WB C.E. LT.



STA. 185+45 WB C.E. LT.

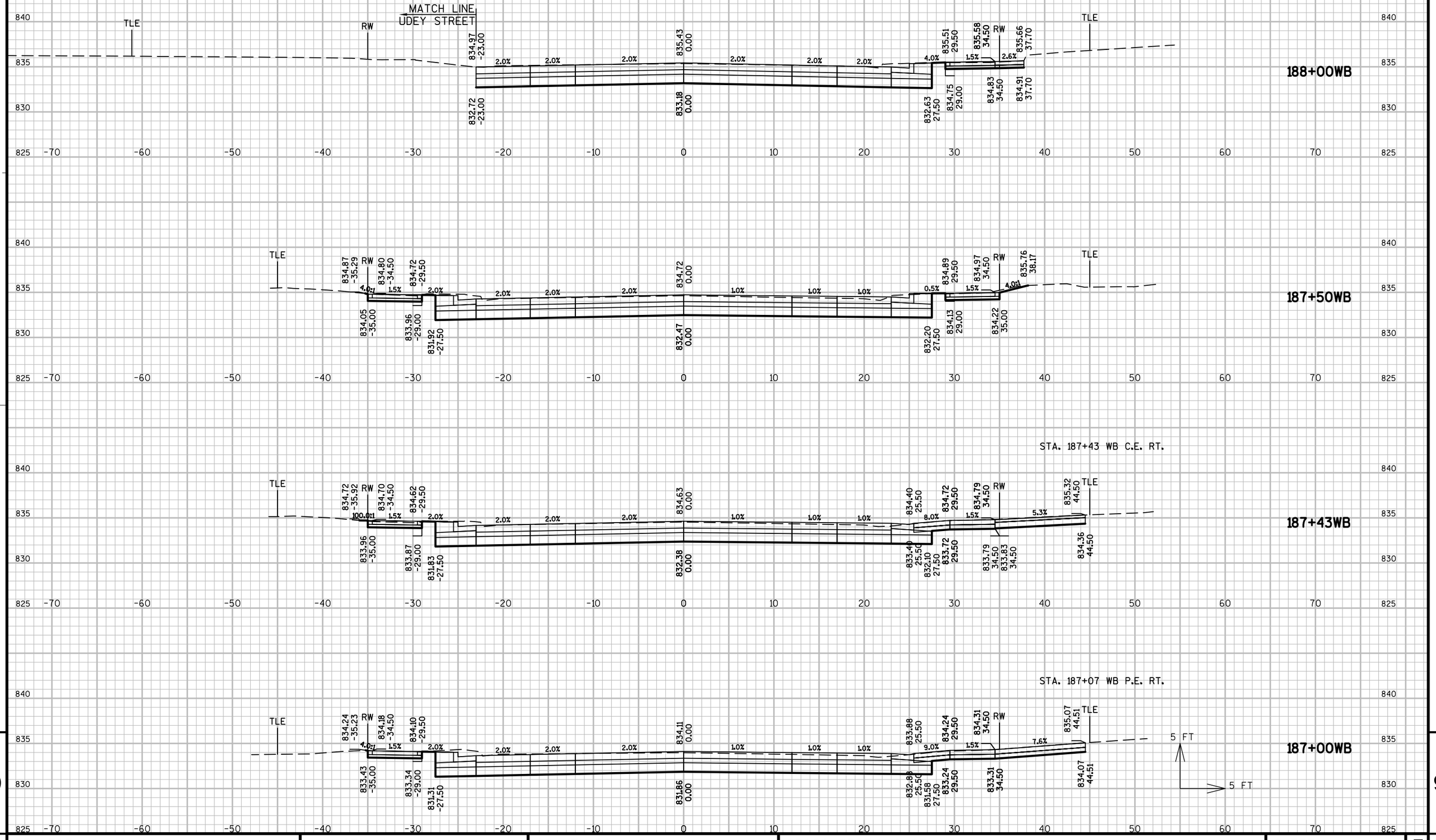


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 591	E

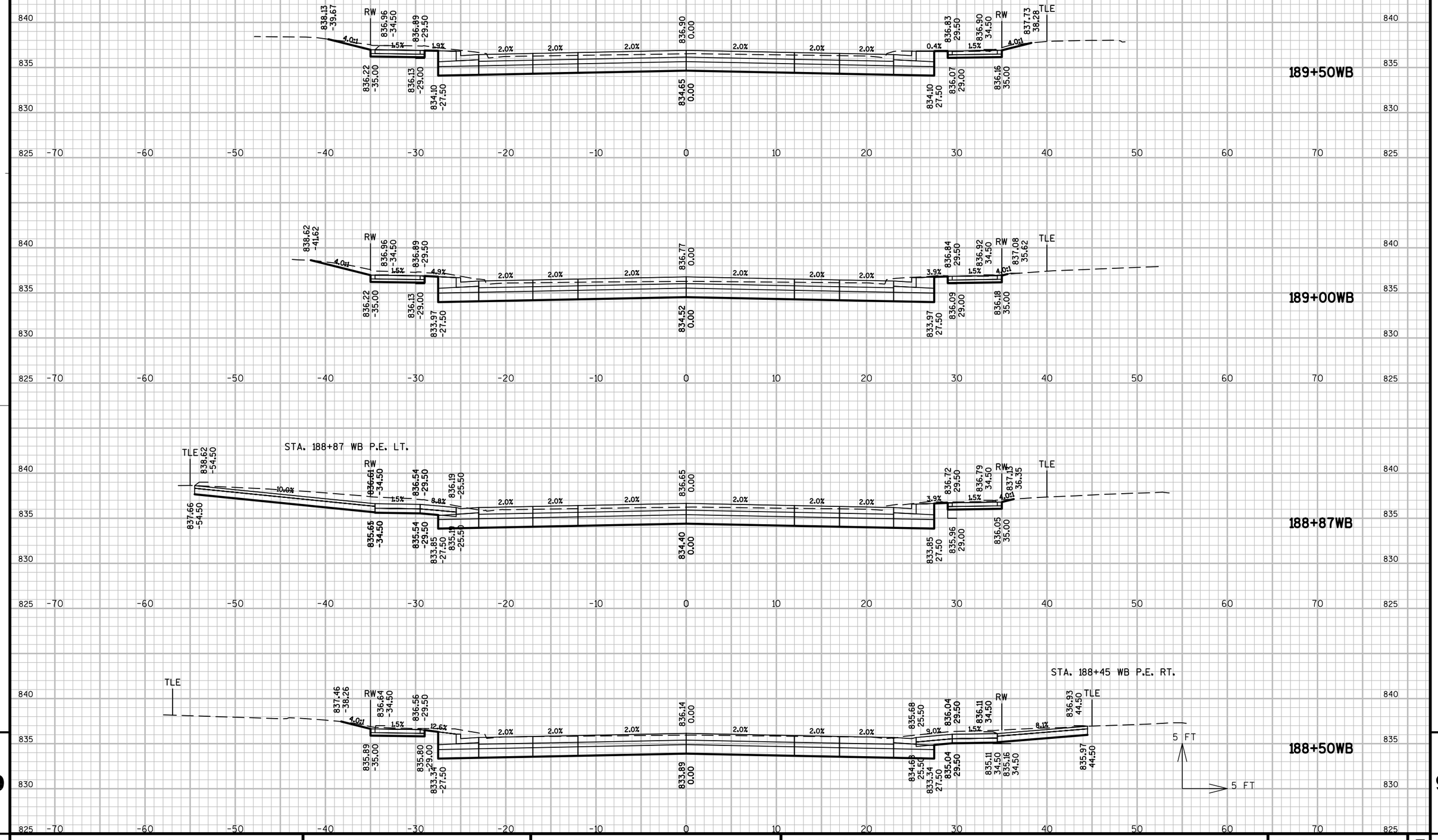
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (WATER - RIVER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 592 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (WATER - RIVER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49



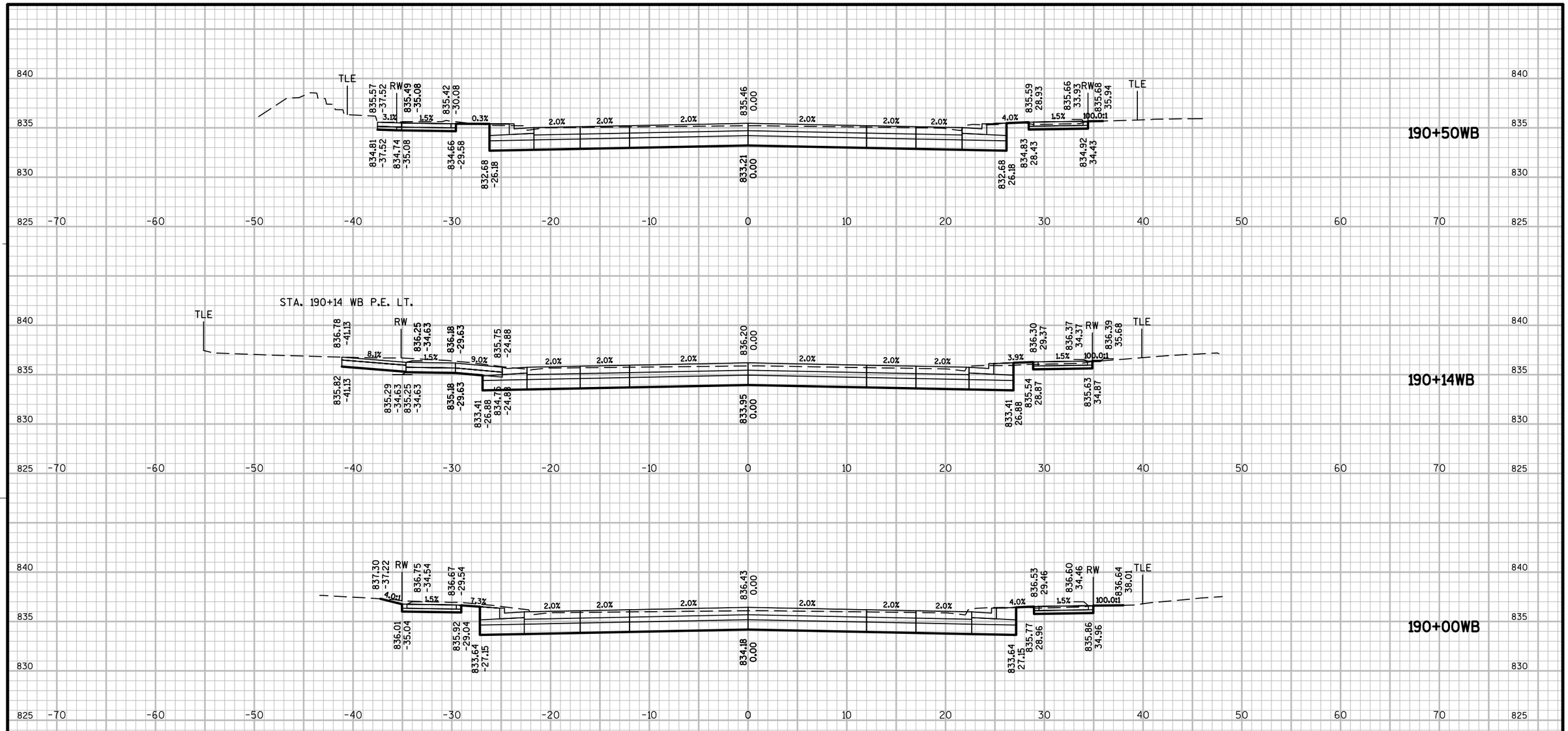
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 593	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (WATER - RIVER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

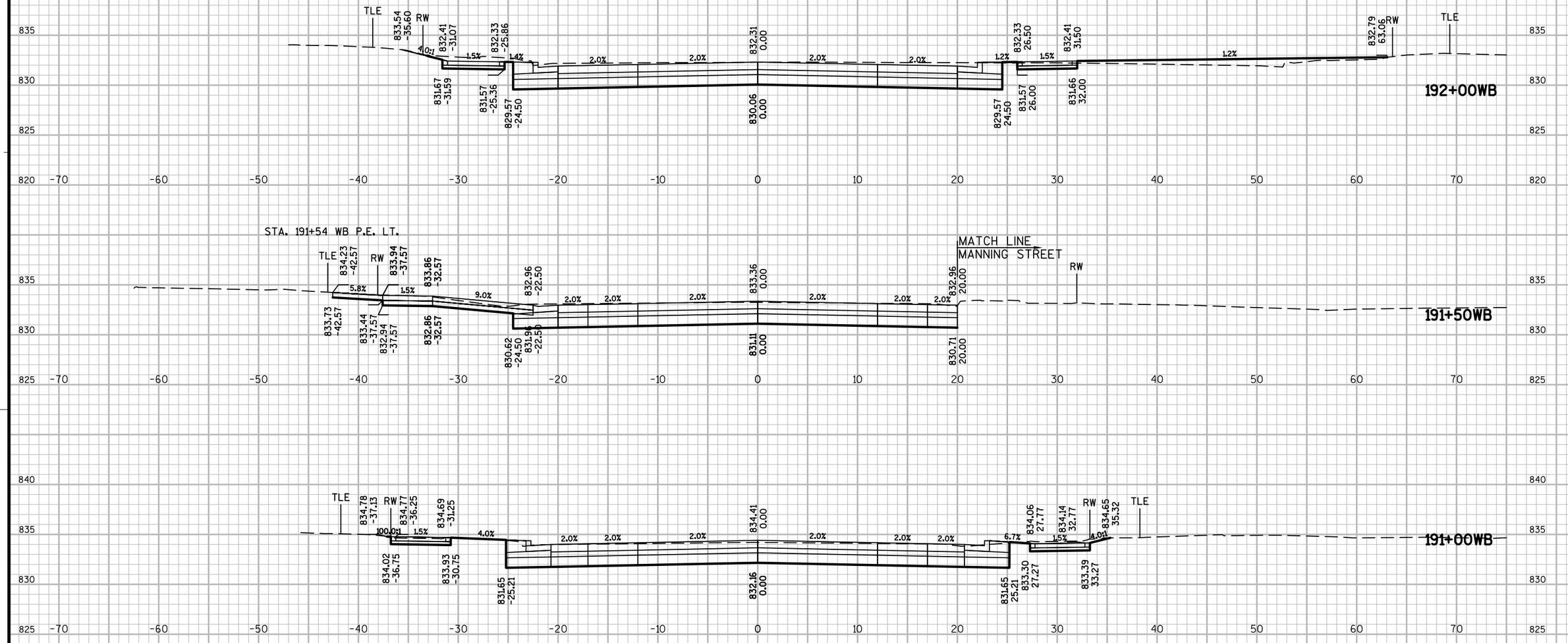


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 594	E

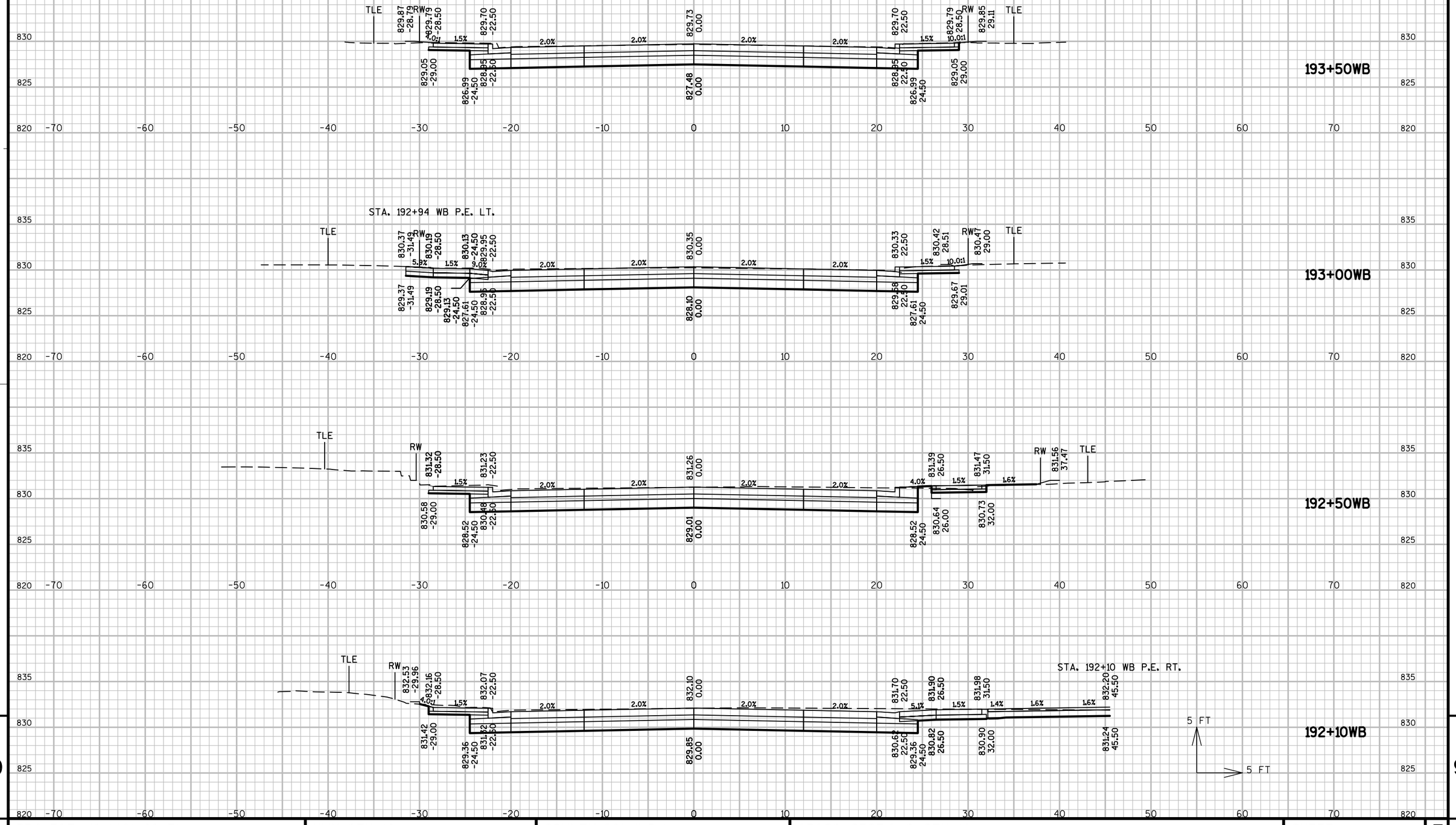
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 595 E

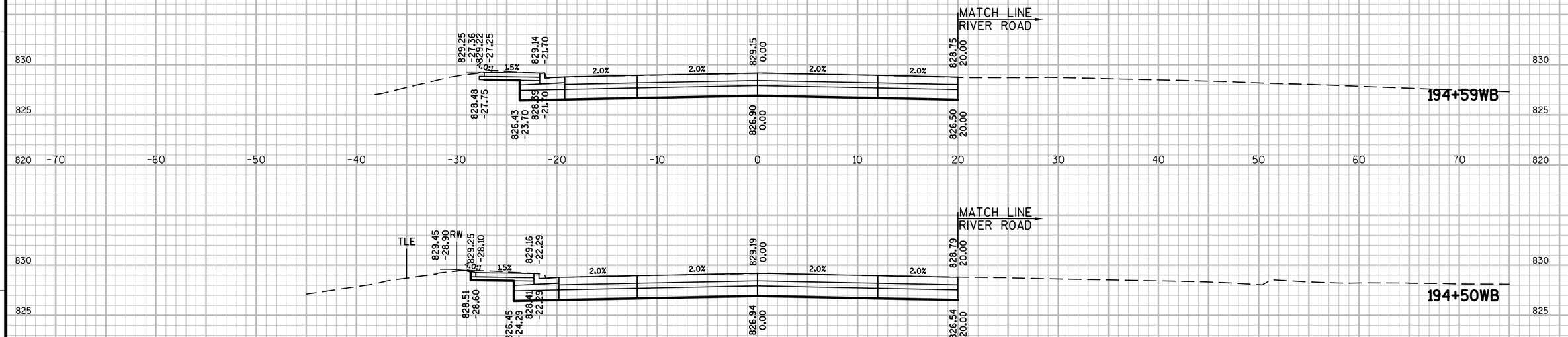
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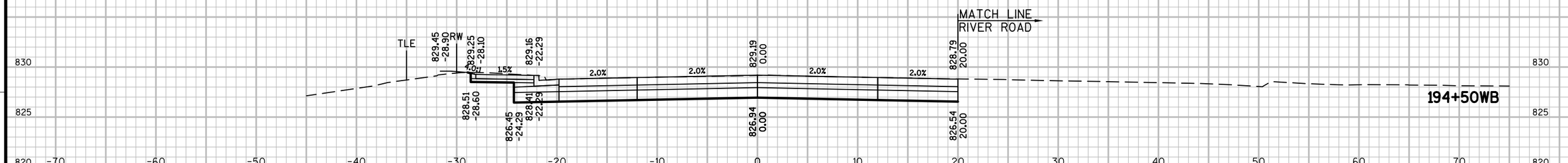
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 596 E

END CONSTRUCTION STA 194+59.01 WB







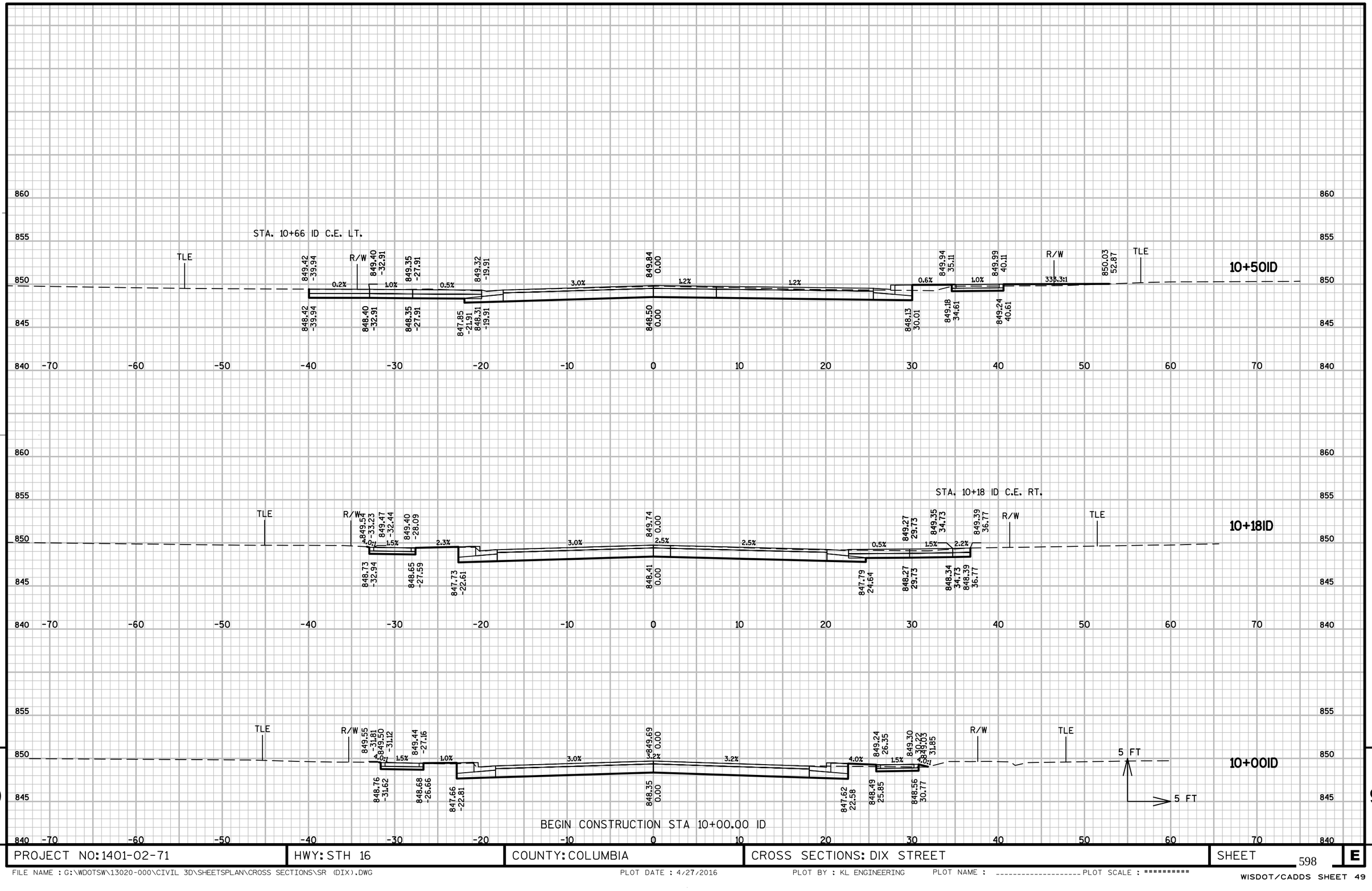


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9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 597	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\STH 16 (WATER - RIVER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

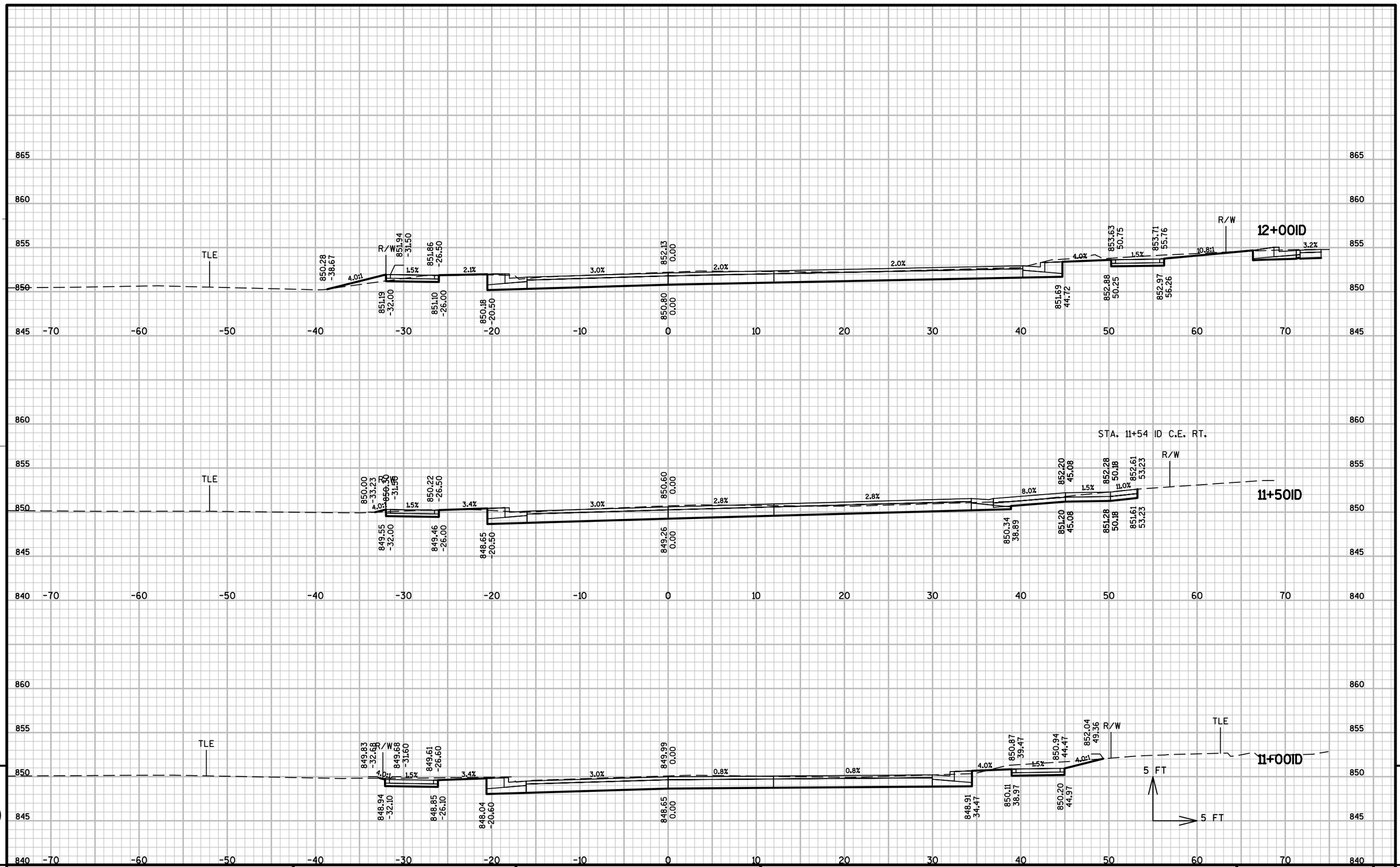


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET	SHEET 598 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

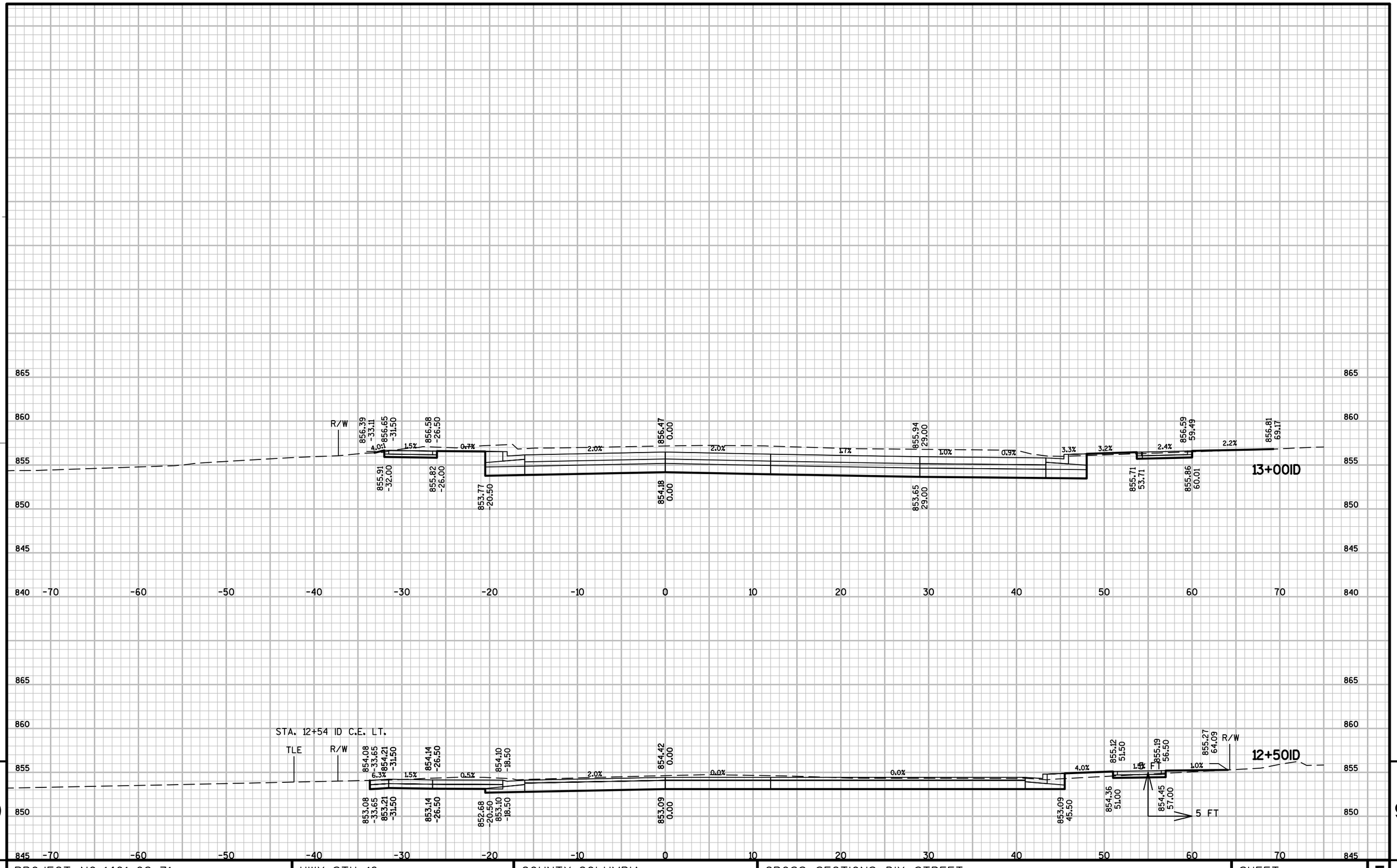
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET	SHEET 599	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

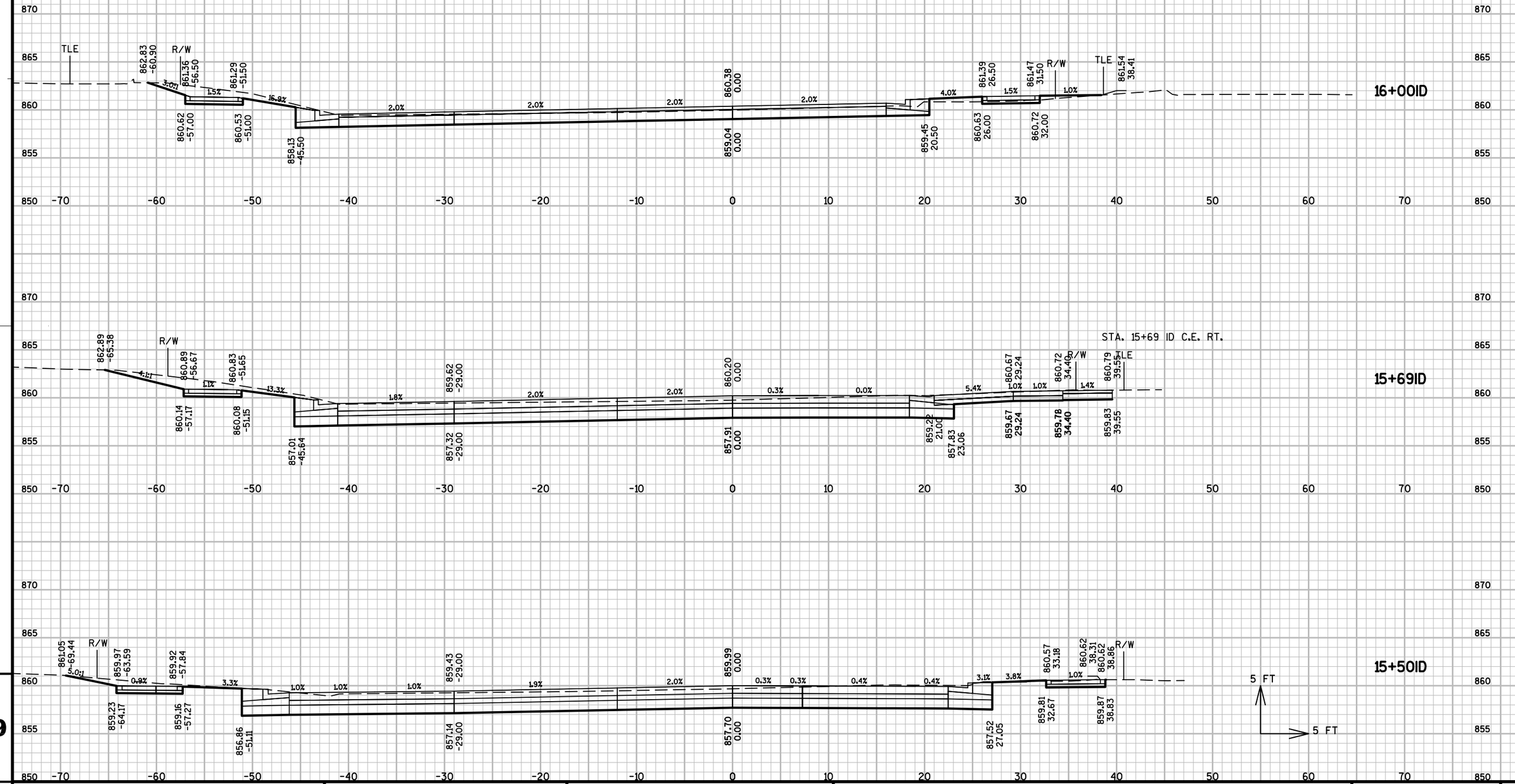


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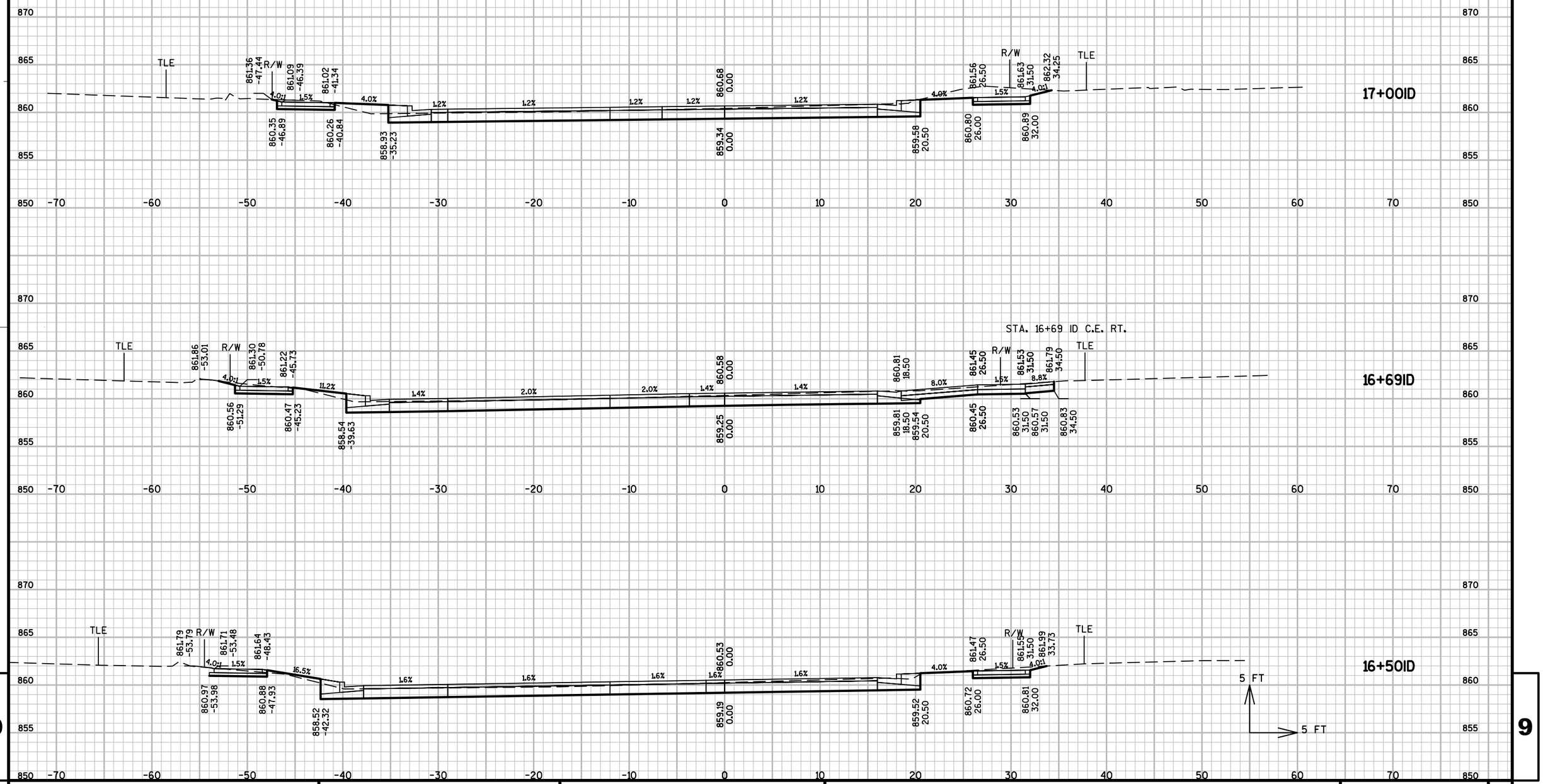
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DIX STREET	SHEET 600	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (DIX).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



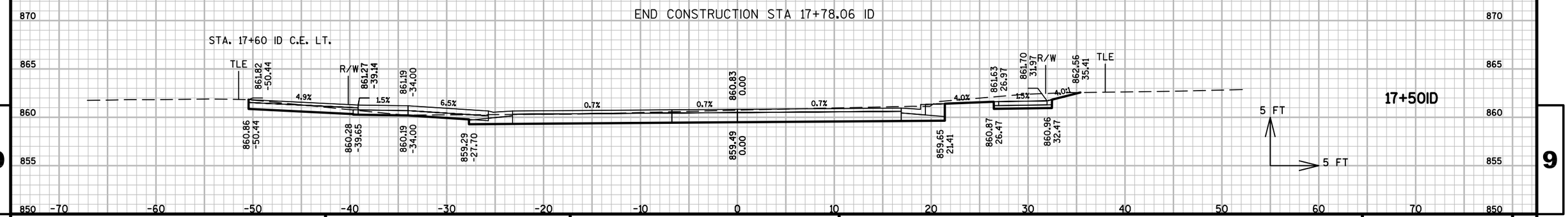
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE	SHEET 601	E



9

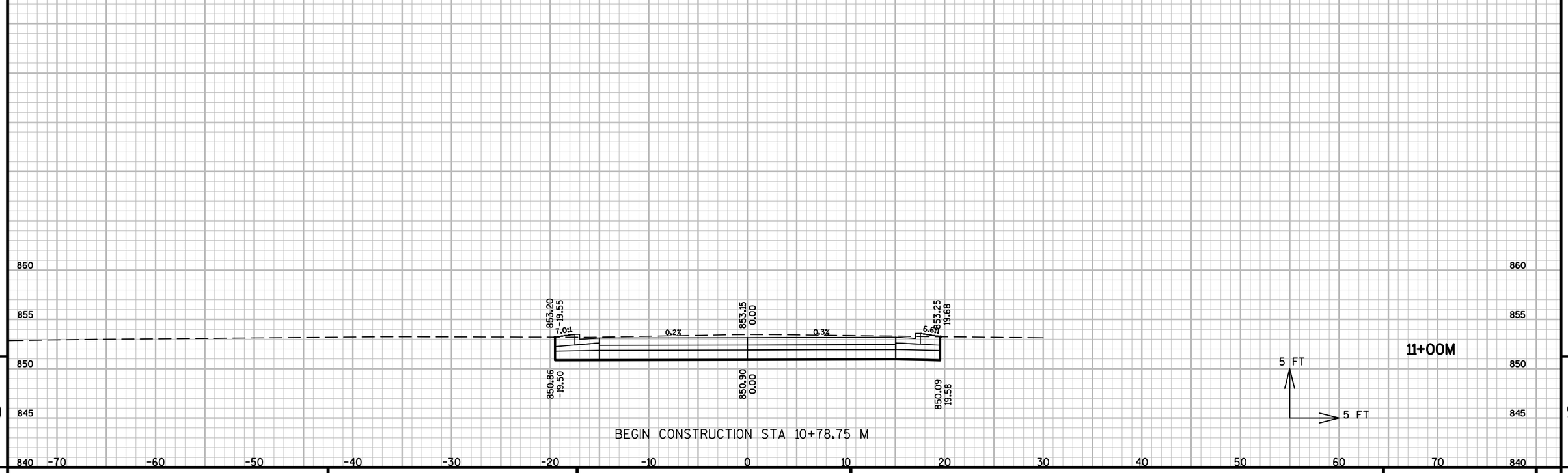
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE	SHEET 602	E



9

PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: INDUSTRIAL DRIVE	SHEET 603	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (INDUSTRIAL).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



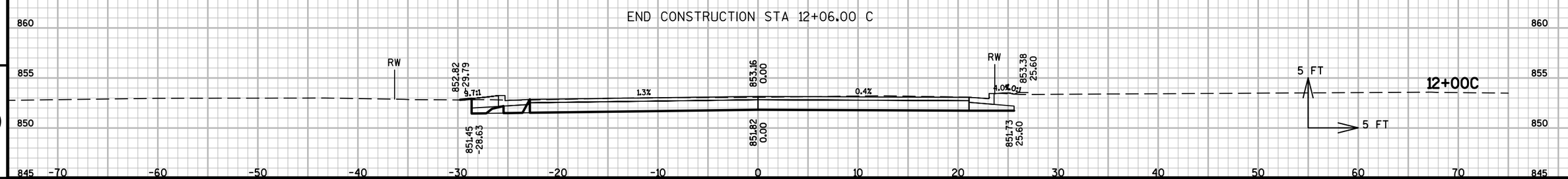
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: MEISTER STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (MEISTER).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

END CONSTRUCTION STA 12+06.00 C



9

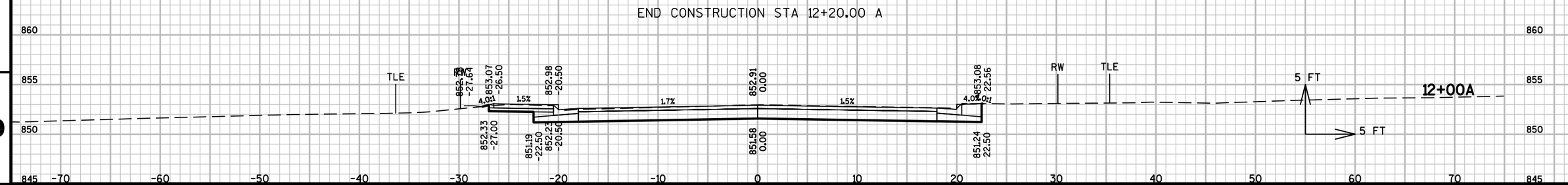
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: CONTINENTAL DRIVE	SHEET 605	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (CONTINENTAL).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

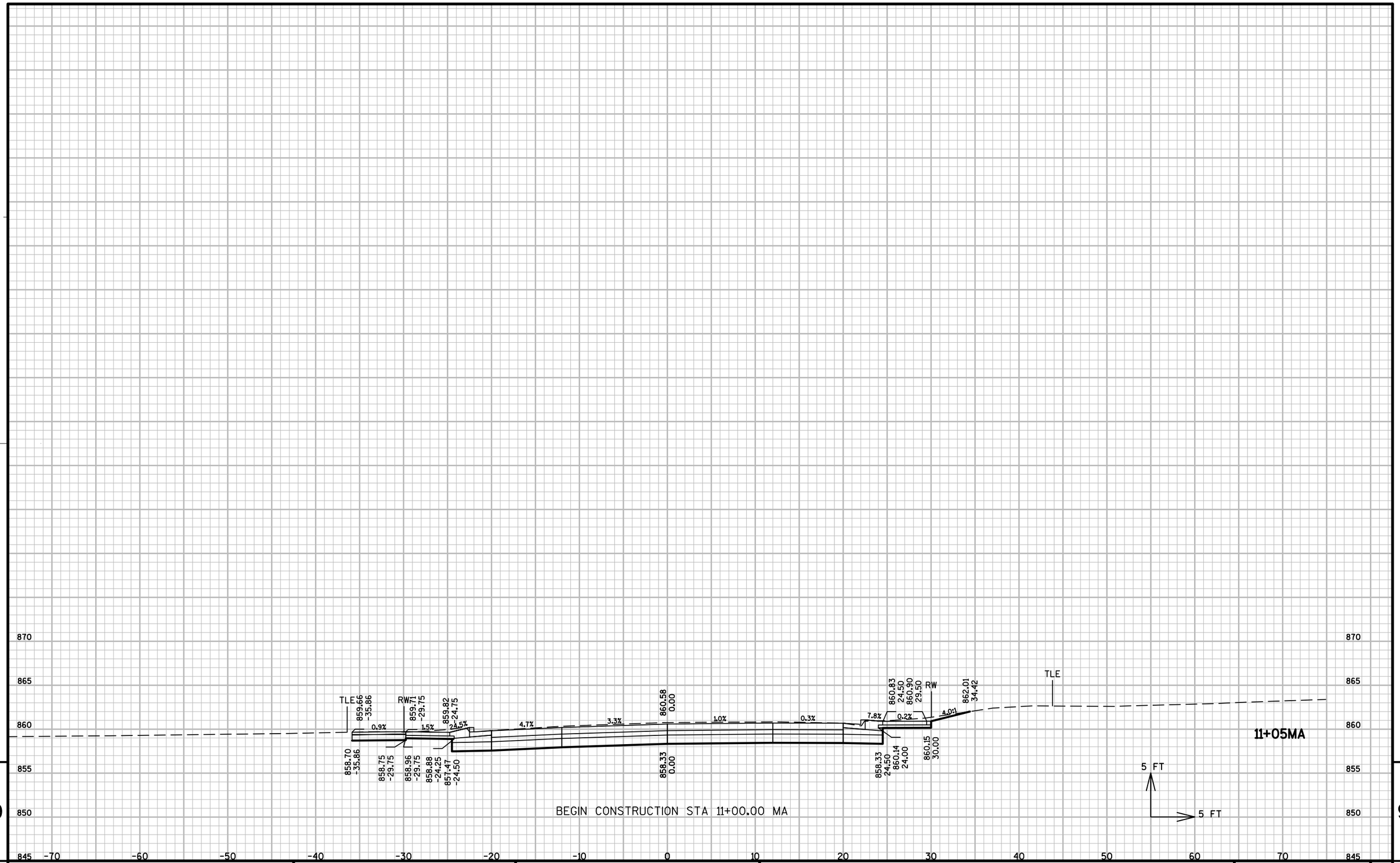
END CONSTRUCTION STA 12+20.00 A



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: APC WAY	SHEET 606	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (APC WAY).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

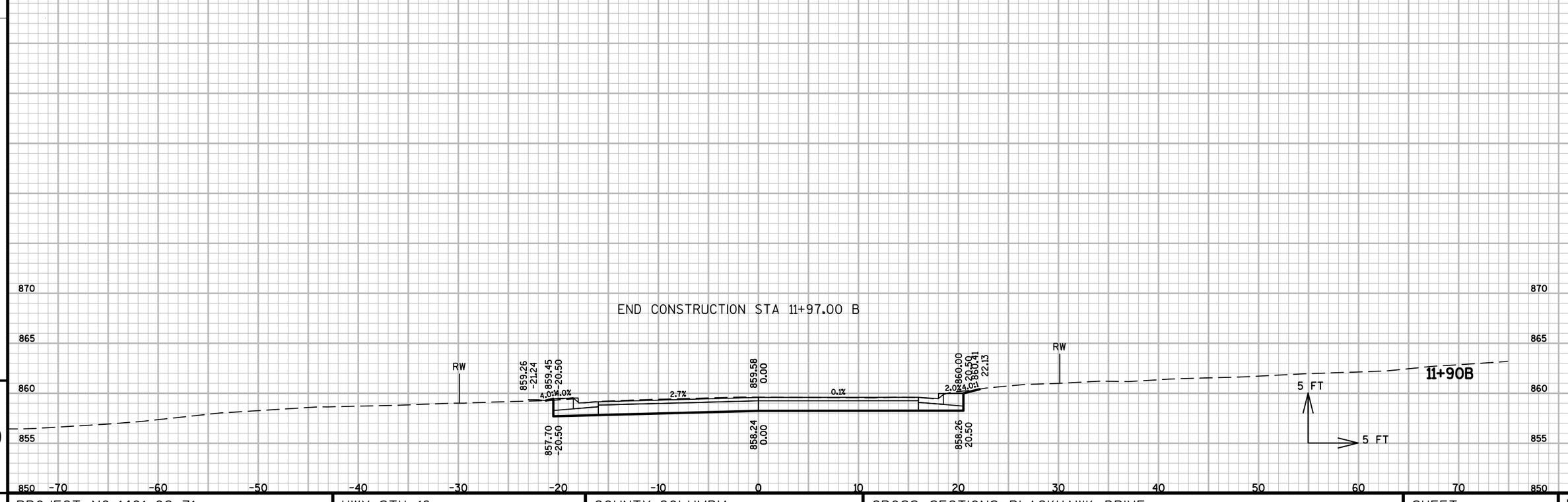


PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: MAPLE AVENUE	SHEET 607 E

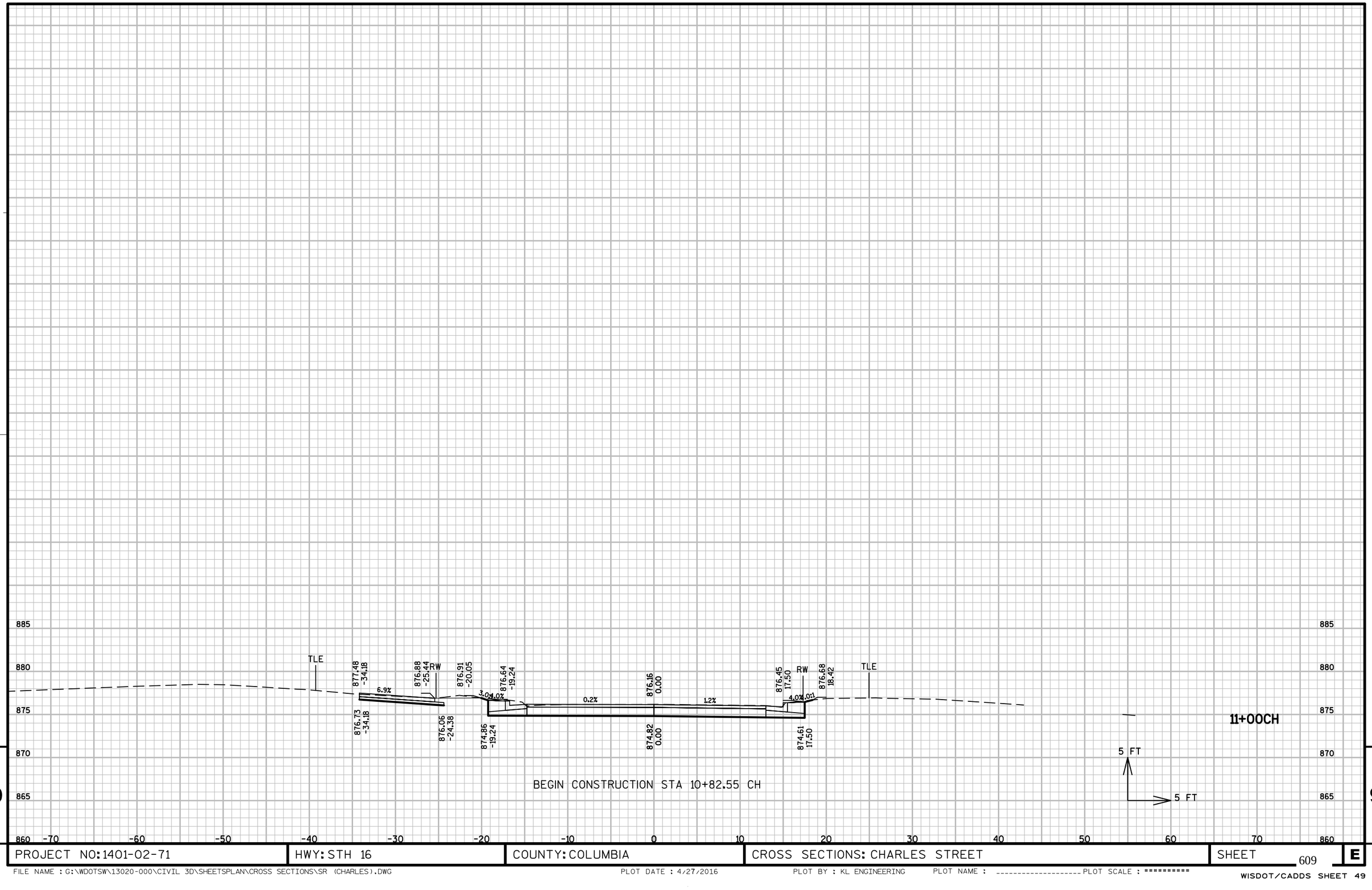
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WISDOT/CADDS SHEET 49

END CONSTRUCTION STA 11+97.00 B



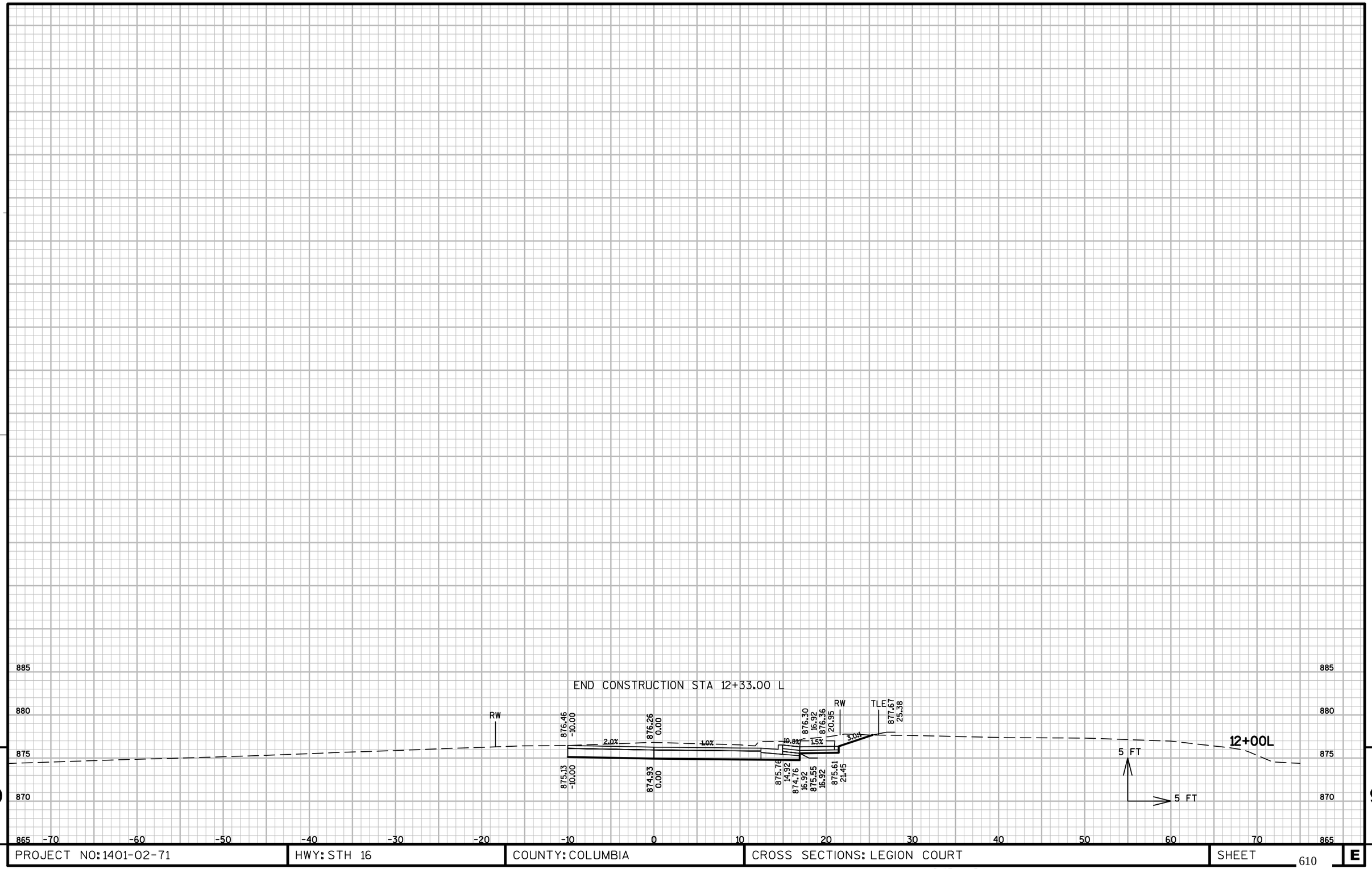
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: BLACKHAWK DRIVE	SHEET 608	E



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: CHARLES STREET	SHEET 609 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (CHARLES).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

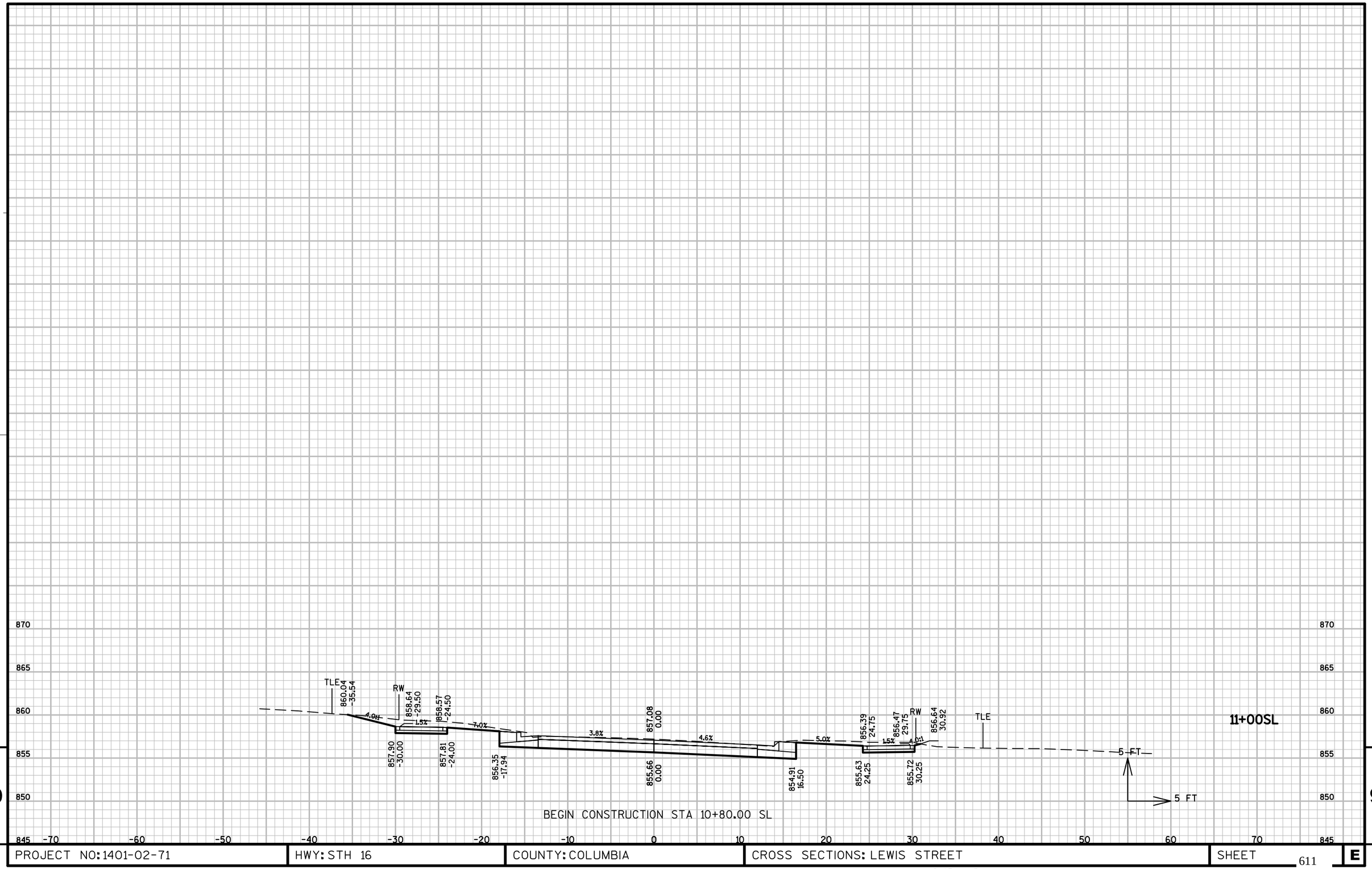


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: LEGION COURT	SHEET	E

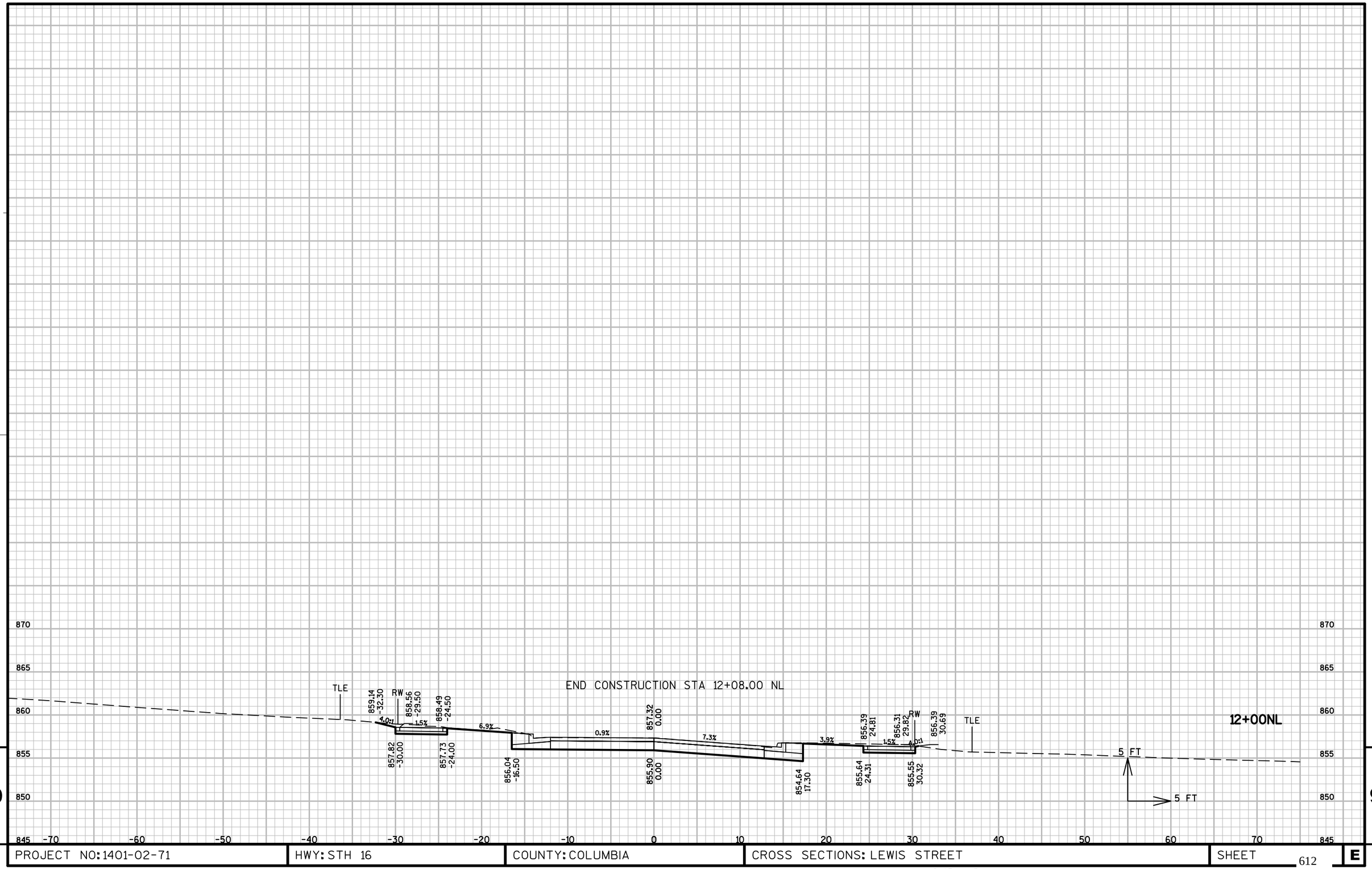
FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (LEGION).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: LEWIS STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

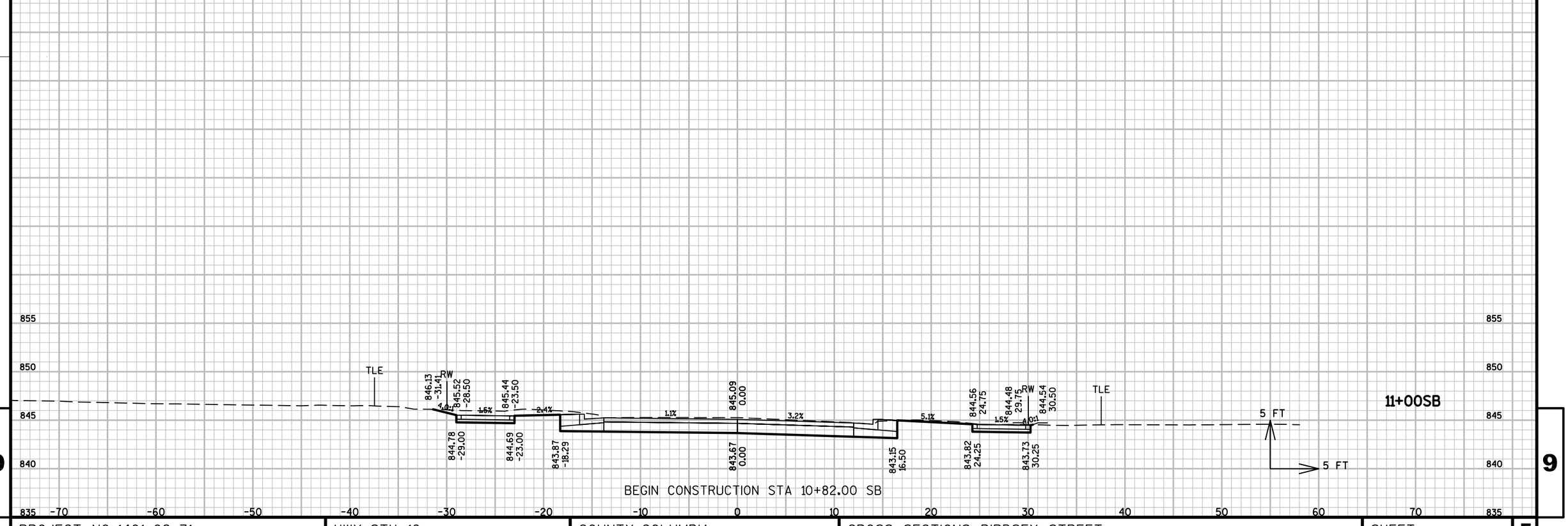


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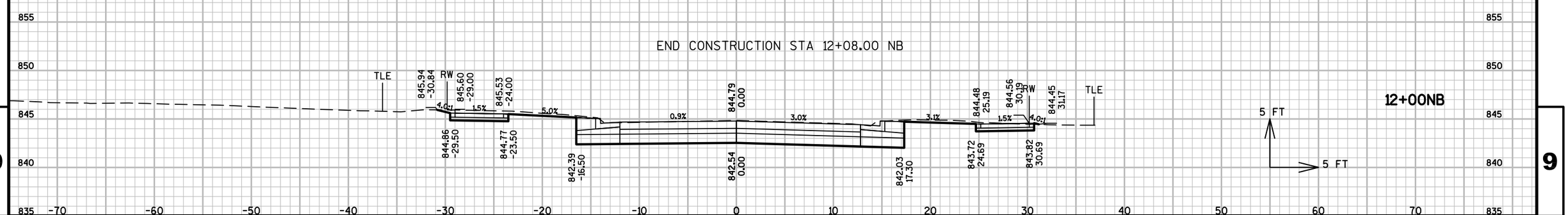
PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: LEWIS STREET	SHEET 612	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (LEWIS).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: BIRDSEY STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (BIRDSEY).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



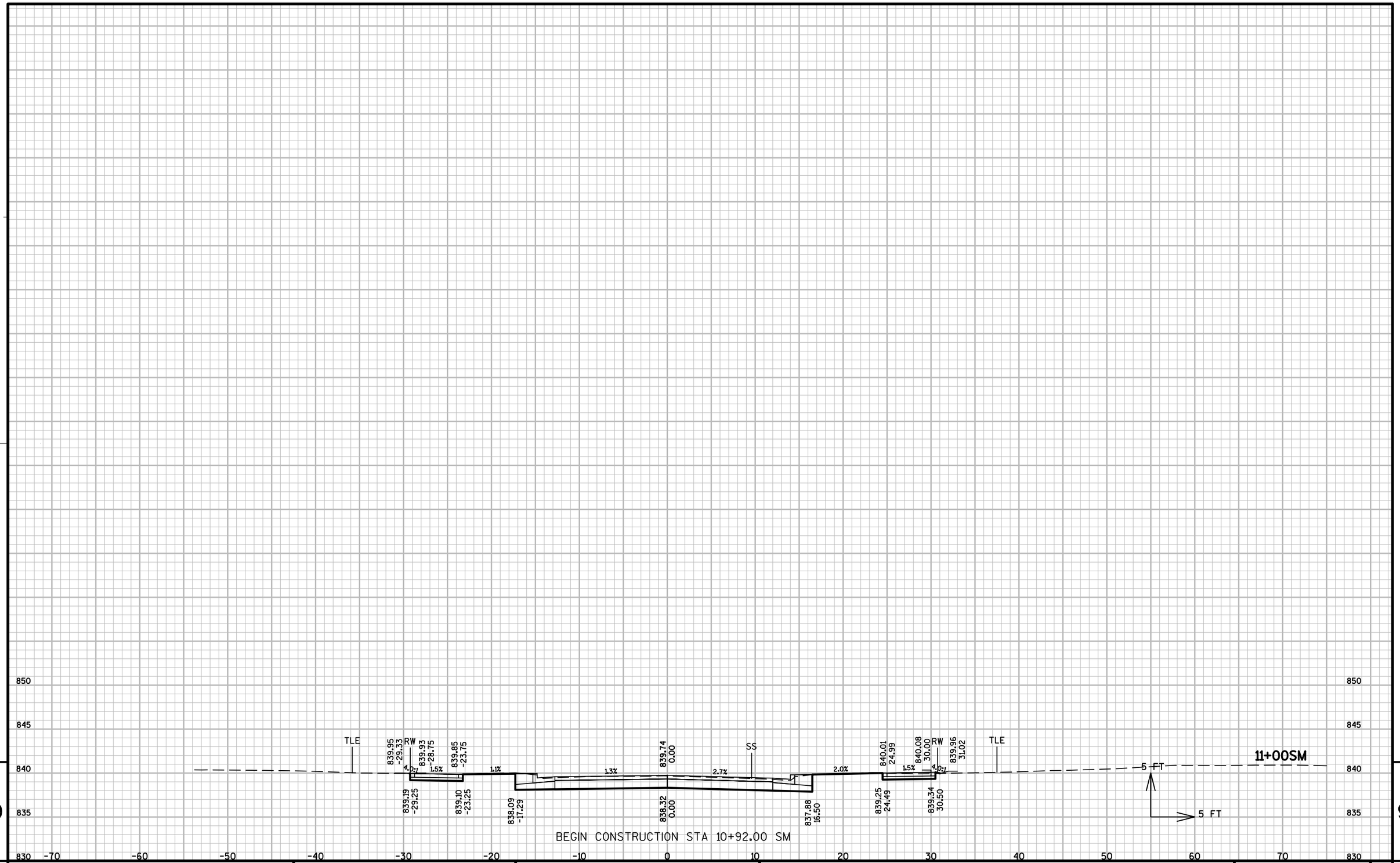
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: BIRDSEY STREET	SHEET 614	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (BIRDSEY).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

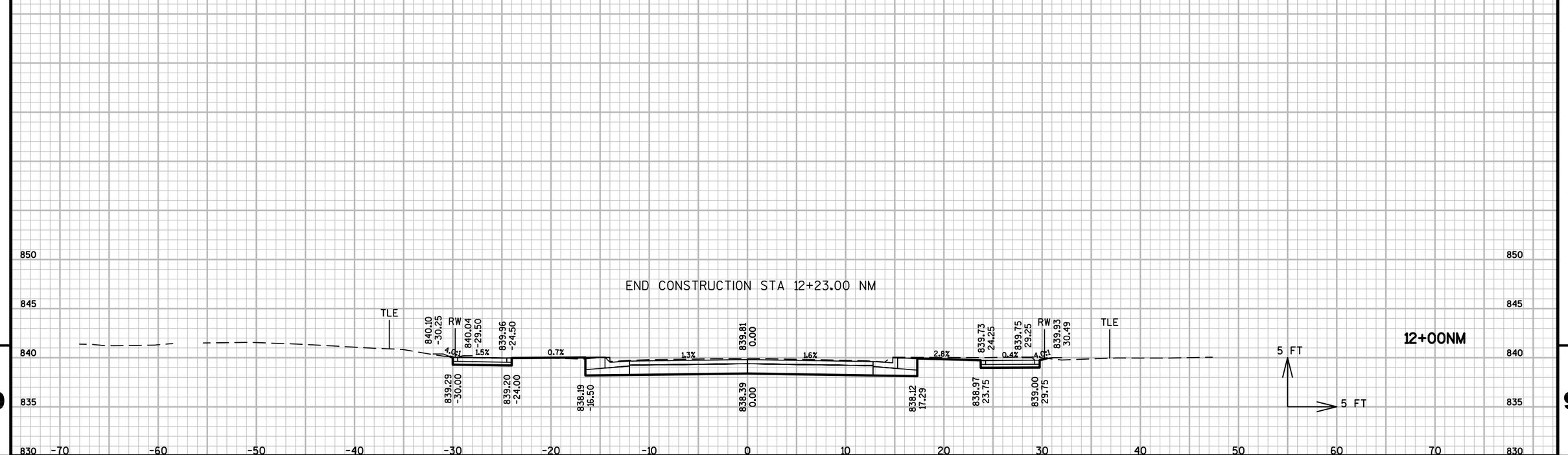


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: MAIN STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (MAIN).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

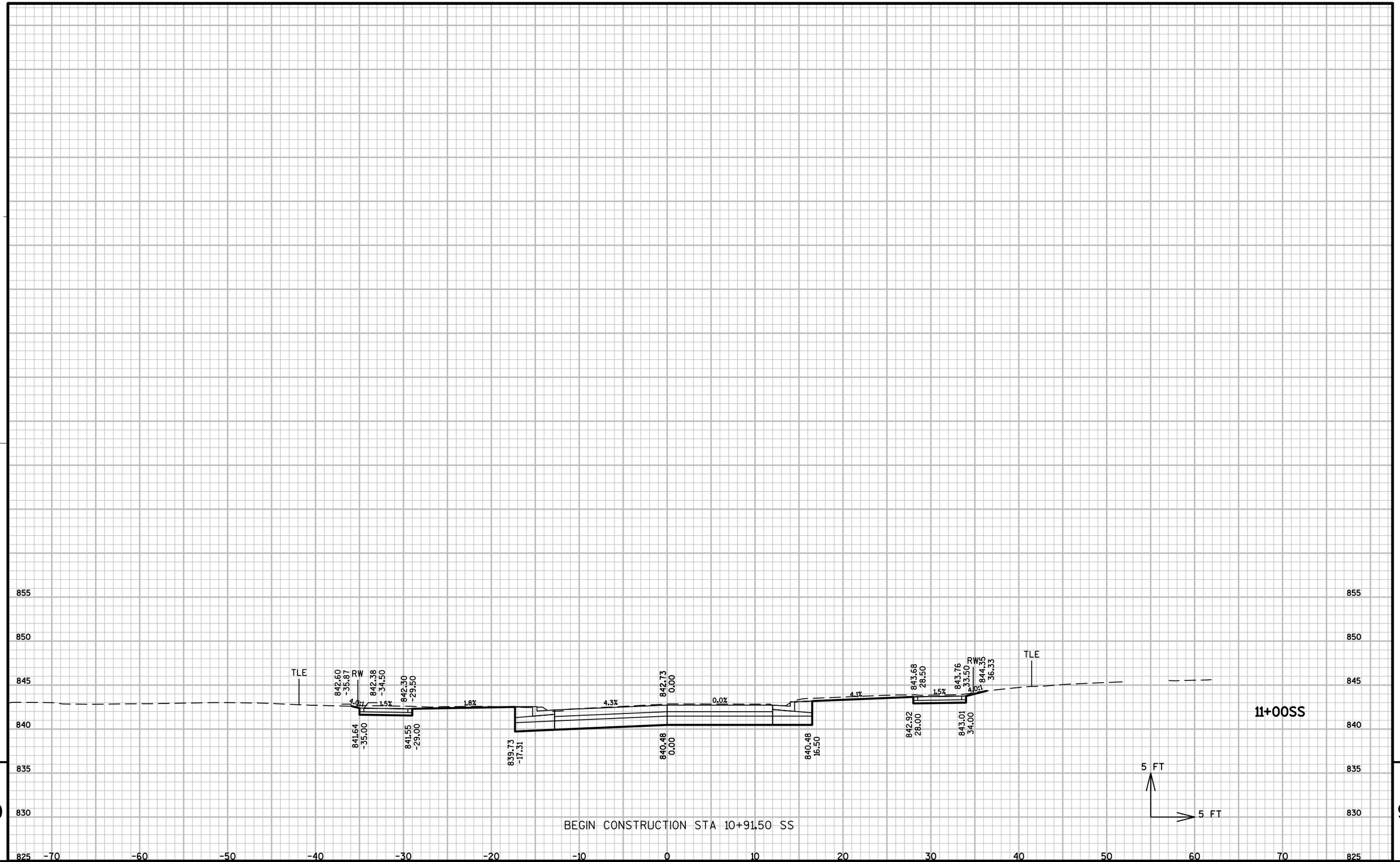
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: MAIN STREET	SHEET 616	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (MAIN).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

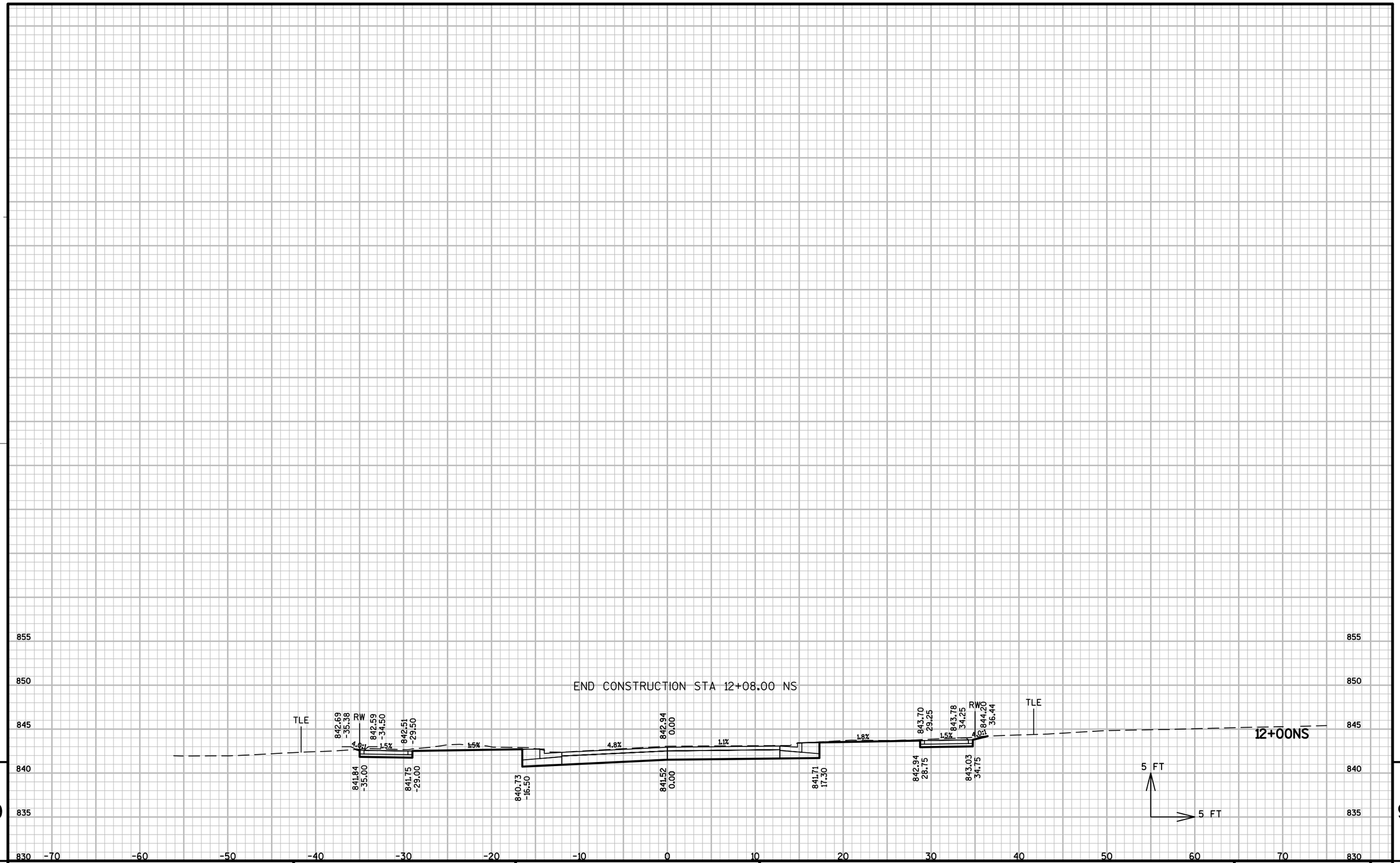
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: SPRING STREET	SHEET 617	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (SPRING).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

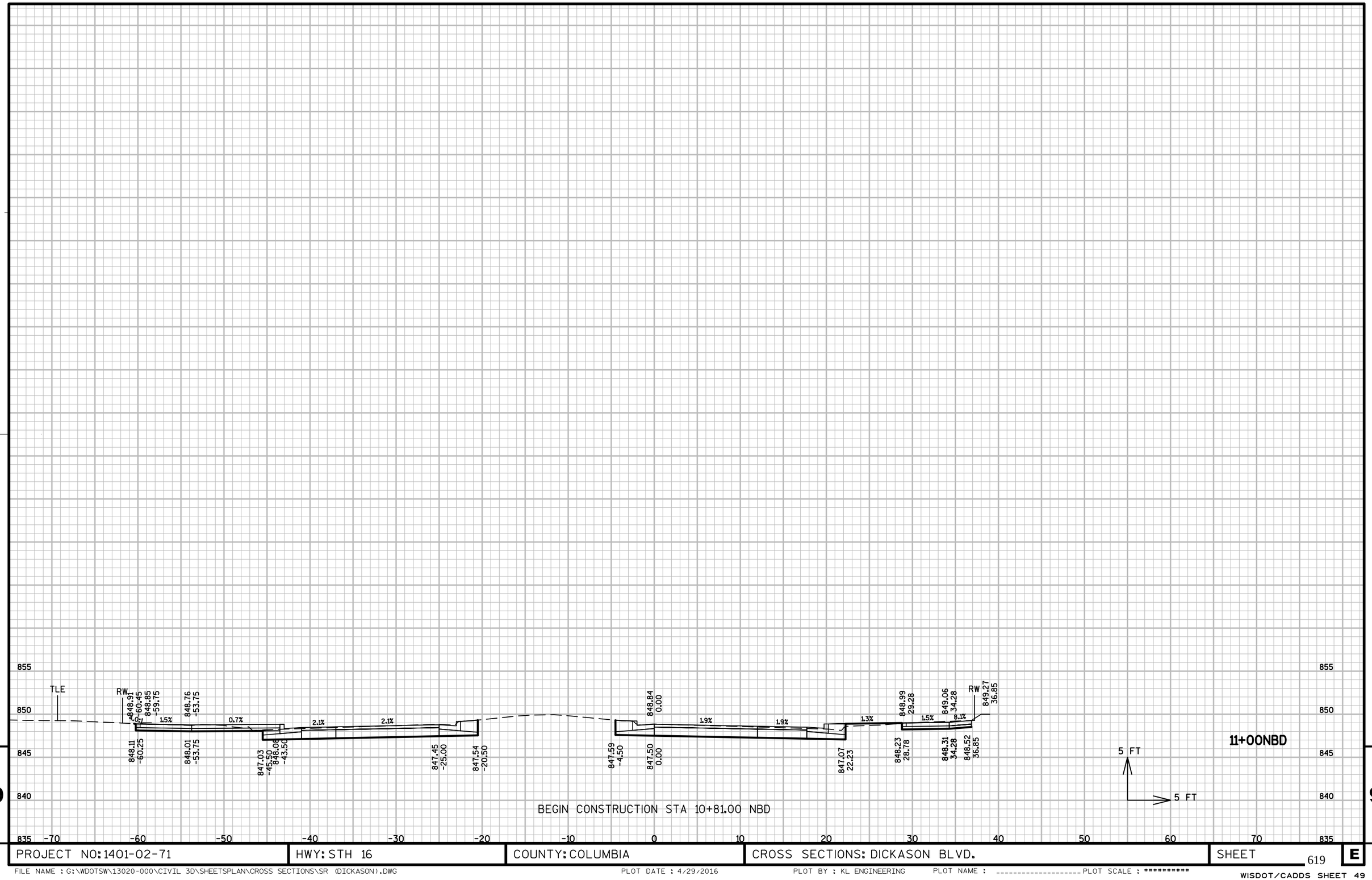
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: SPRING STREET	SHEET 618 E

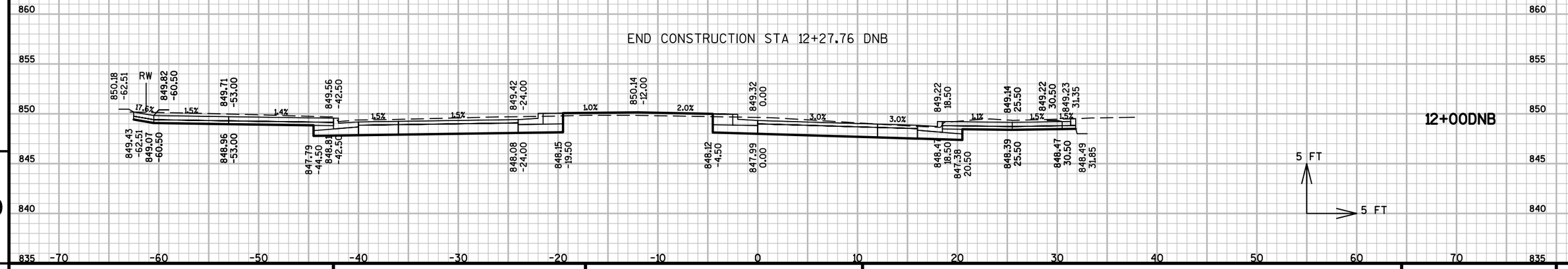
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WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DICKASON BLVD.	SHEET 619 E

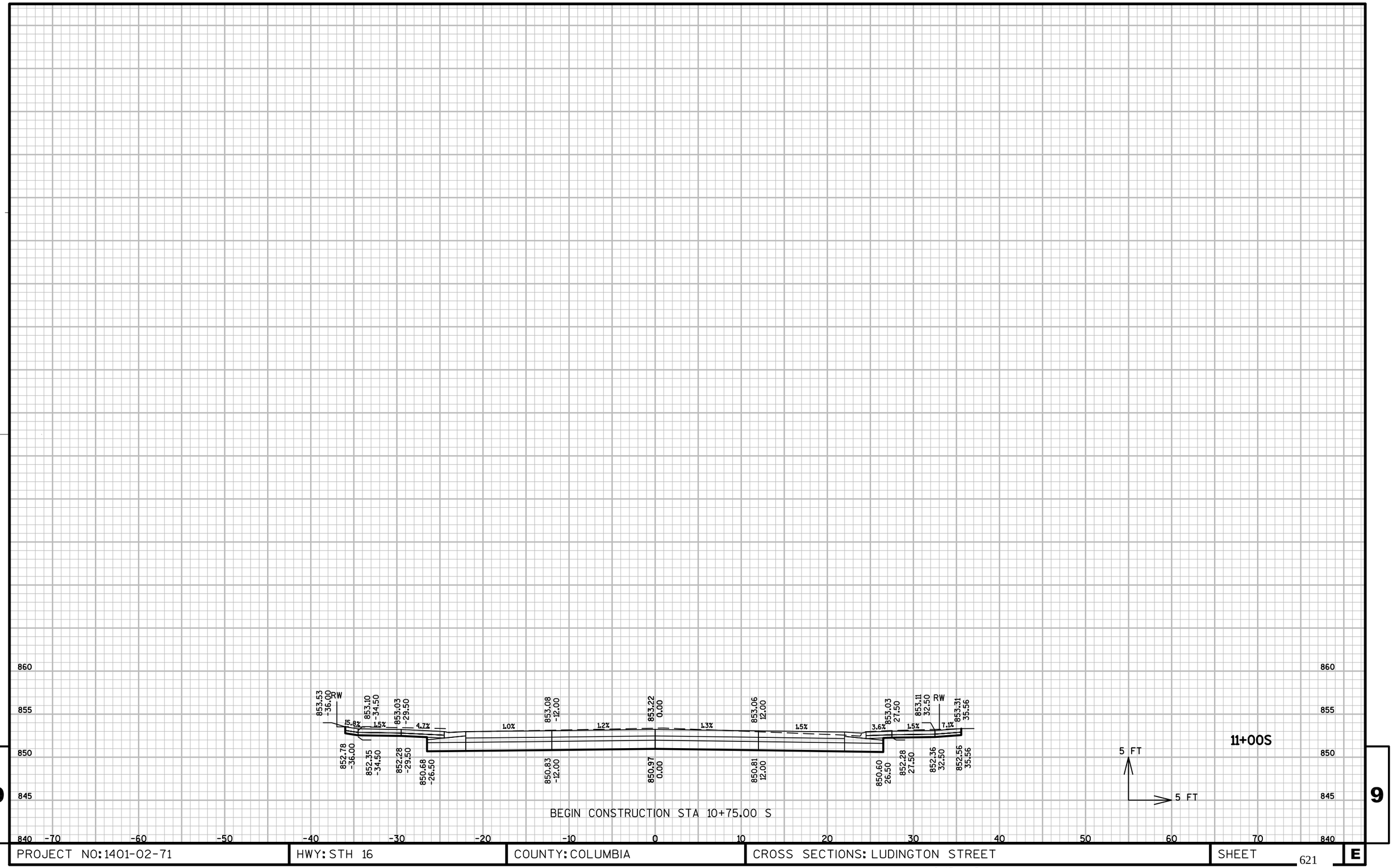
END CONSTRUCTION STA 12+27.76 DNB



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DICKASON BLVD.	SHEET 620	E

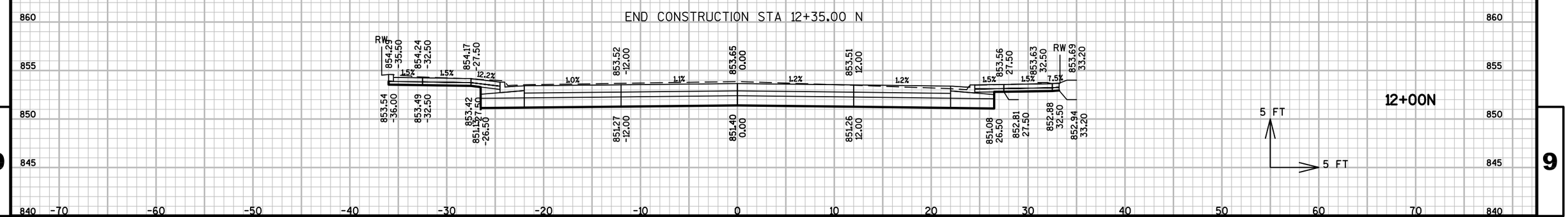
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WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: LUDINGTON STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (LUDINGTON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

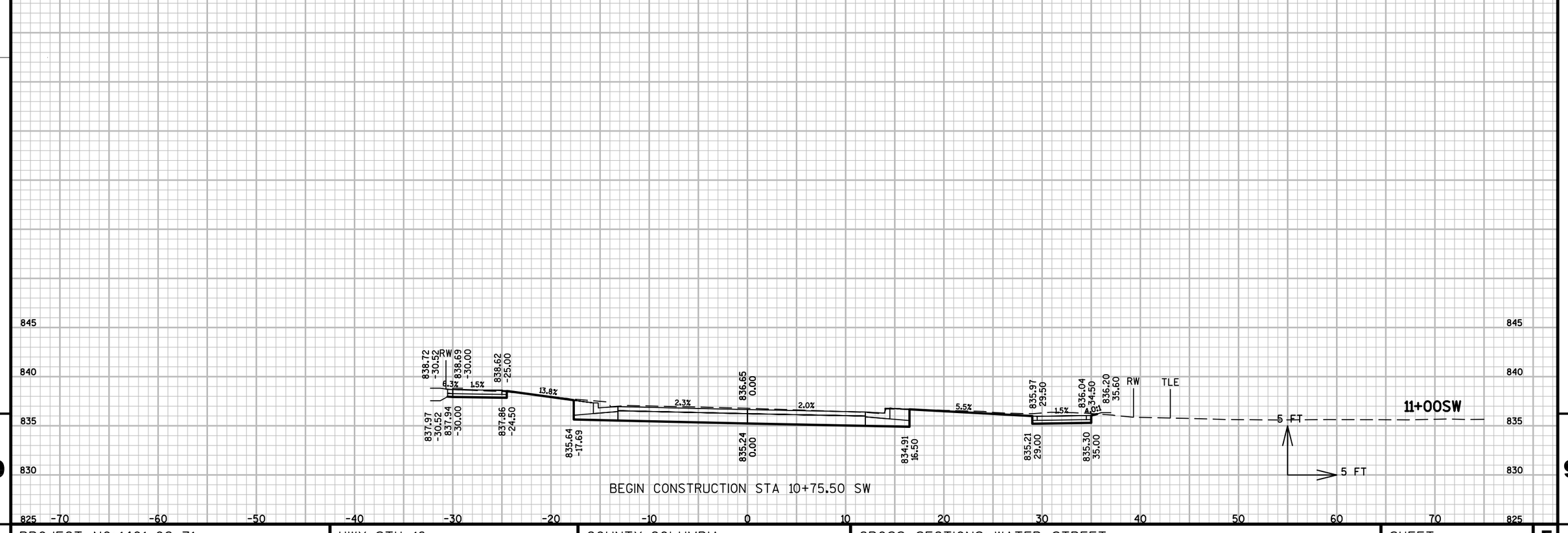


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: LUDINGTON STREET	SHEET 622	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (LUDINGTON).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

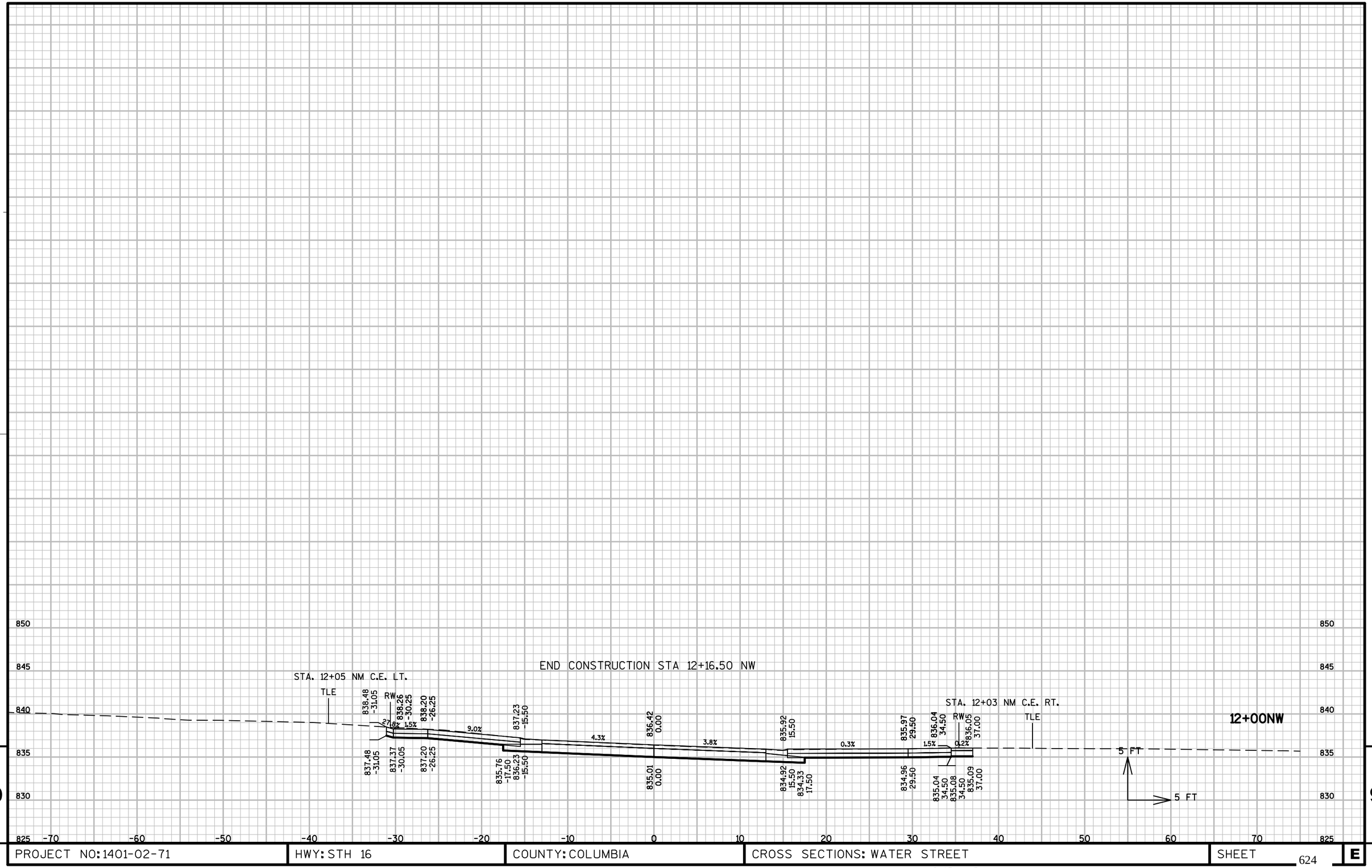
WISDOT/CADDS SHEET 49



PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: WATER STREET	SHEET 623 E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (WATER).DWG PLOT DATE : 1/18/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

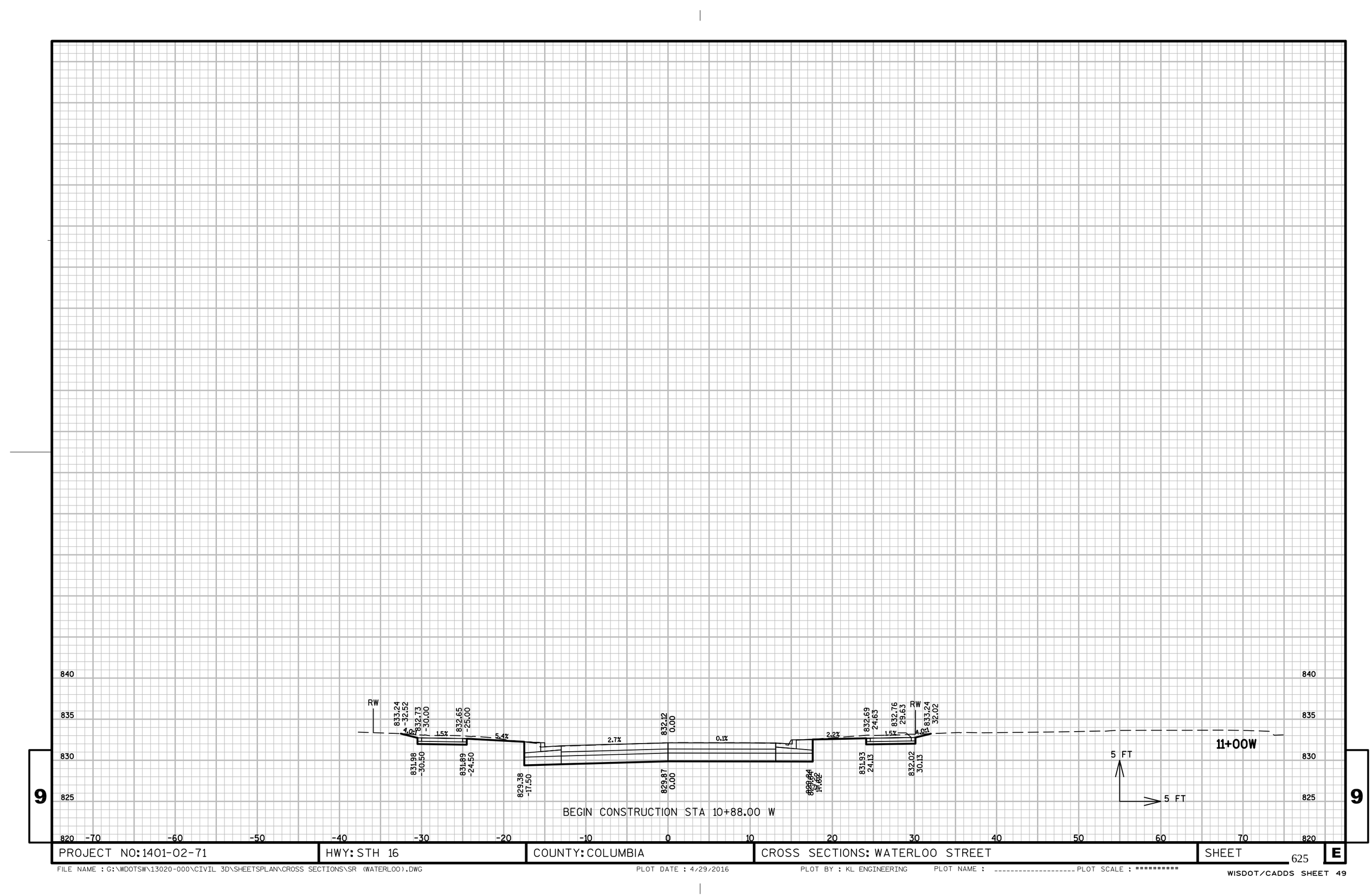


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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: WATER STREET	SHEET 624	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (WATER).DWG PLOT DATE : 1/19/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



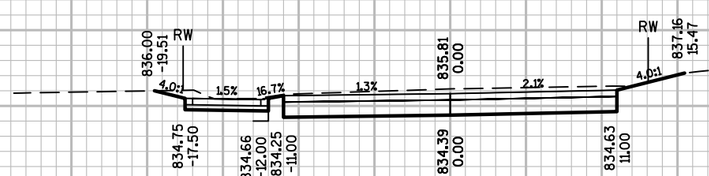
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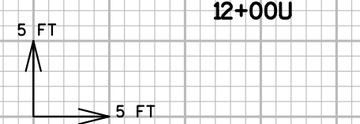
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: WATERLOO STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (WATERLOO).DWG PLOT DATE : 4/29/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

END CONSTRUCTION STA 12+08.25 U





845 840 835 830 825

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

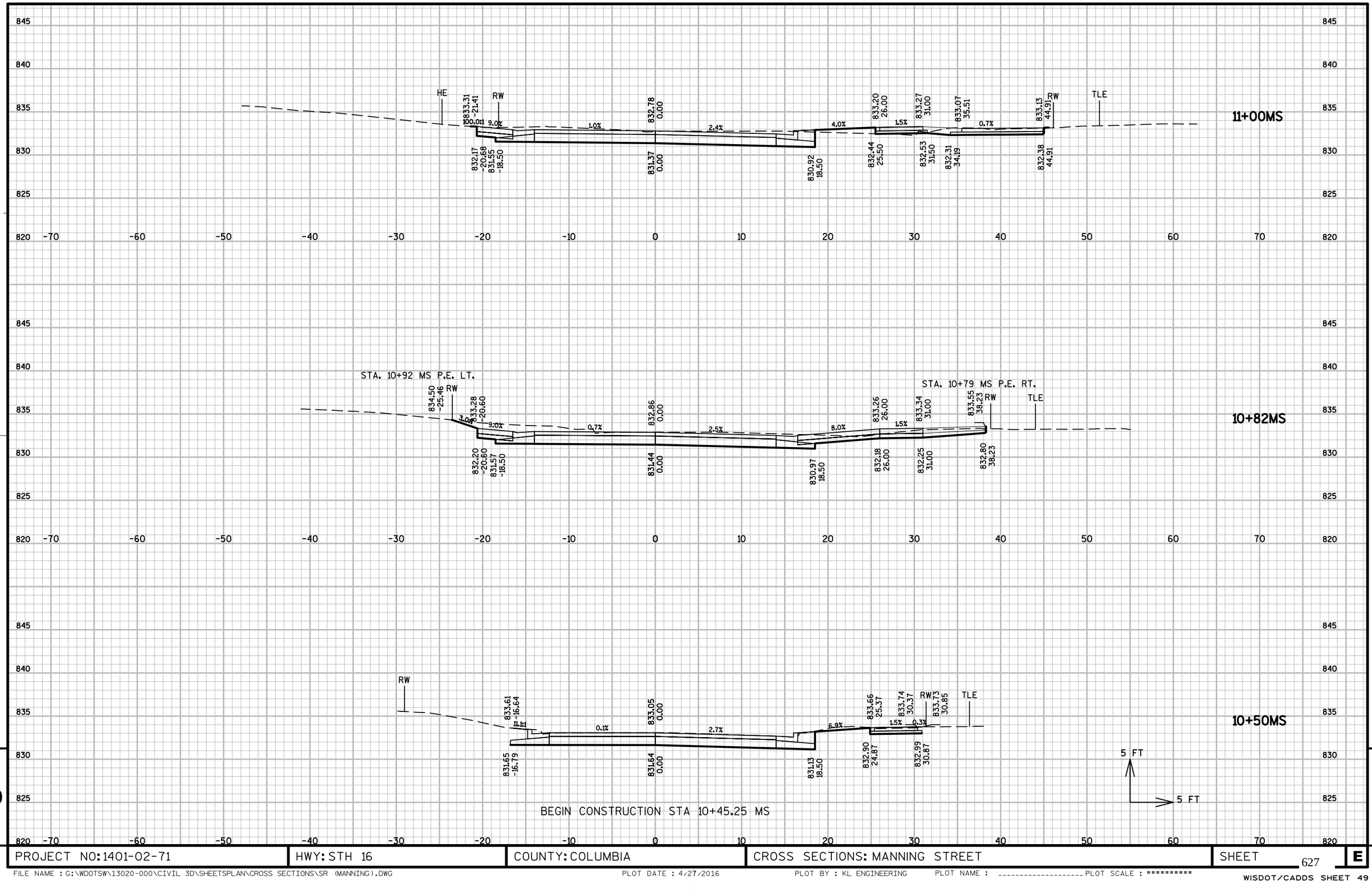
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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: UDEY STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (UDEY).DWG PLOT DATE : 1/26/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

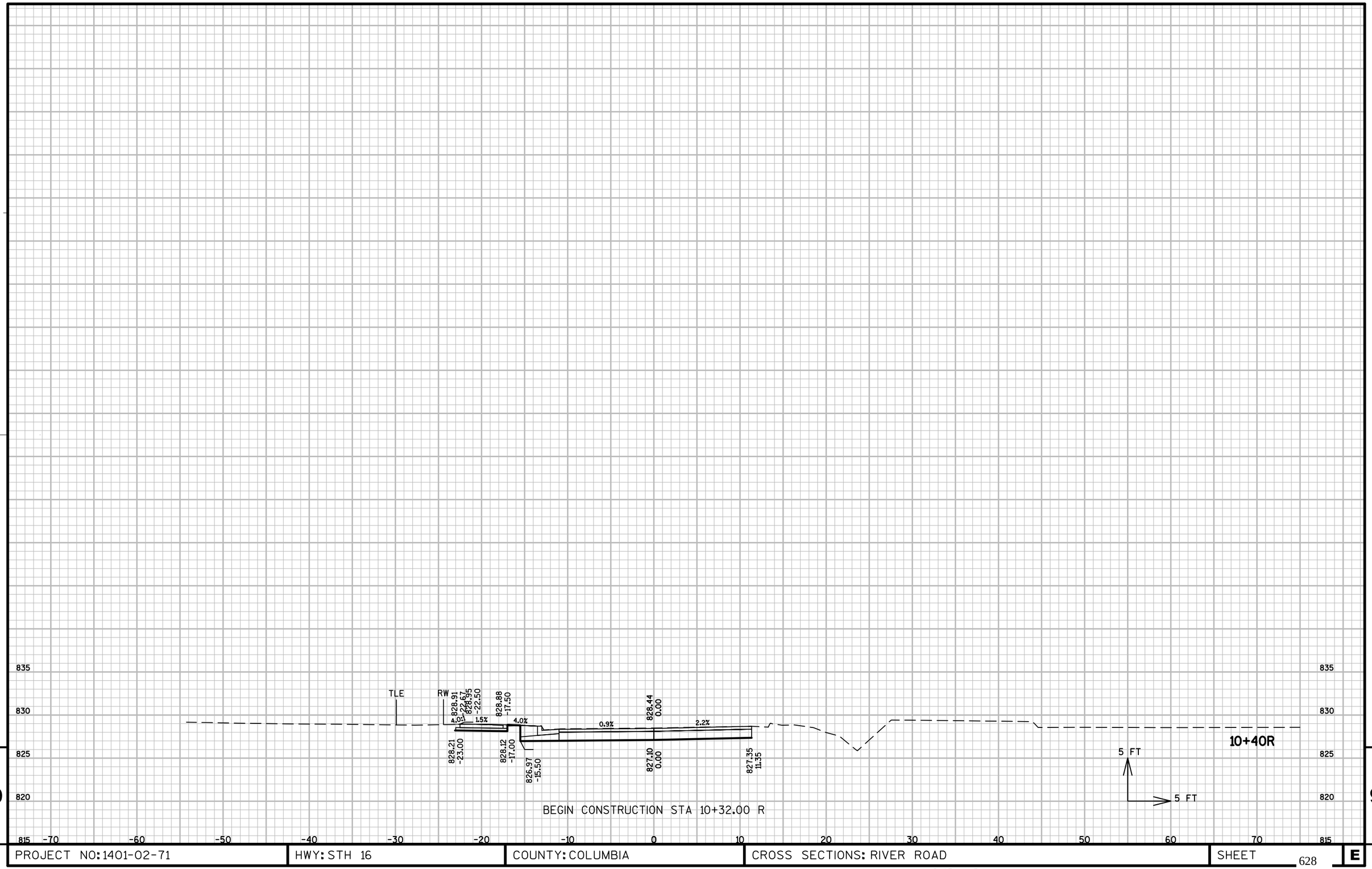
WISDOT/CADDS SHEET 49



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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: MANNING STREET	SHEET	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (MANNING).DWG PLOT DATE : 4/27/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



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PROJECT NO: 1401-02-71	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: RIVER ROAD	SHEET 628	E

FILE NAME : G:\WDOTSW\13020-000\CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\SR (RIVER).DWG PLOT DATE : 1/26/2016 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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