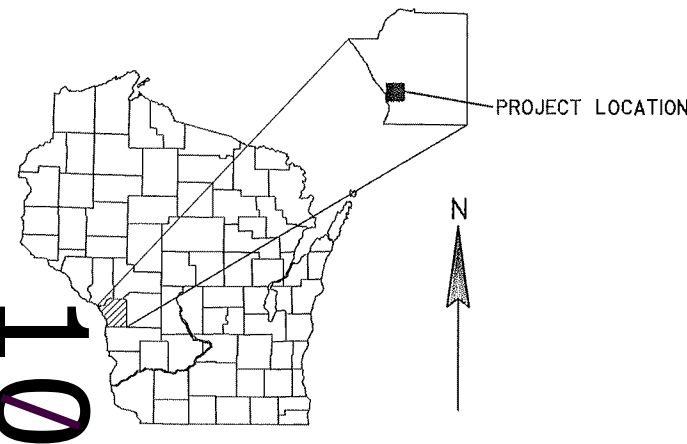


SWL PROJECT ID: 5991-05-78 WITH: COUNTY: LA CROSSE

APR 13

ORDER OF SHEETS

Section No.	Title
1	
2	Typical Sections and Details (includes erosion control plans)
3	Estimate of Quantities
3	Miscellaneous Quantities
4	Right of Way Plat
5	Plan and Profile
6	Standard Detail Drawings
7	Sign Plates
8	Structure Plans
9	Computer Earthwork Data
9	Cross Sections
TOTAL SHEETS = 98	



DESIGN DESIGNATION

A.A.D.T. 2013	=	3300
A.A.D.T. 2033	=	4100
D.H.V. 2033	=	873
D.D.	=	59/41
T.	=	10.0%
DESIGN SPEED	=	40 MPH
ESALS	=	1,036,600

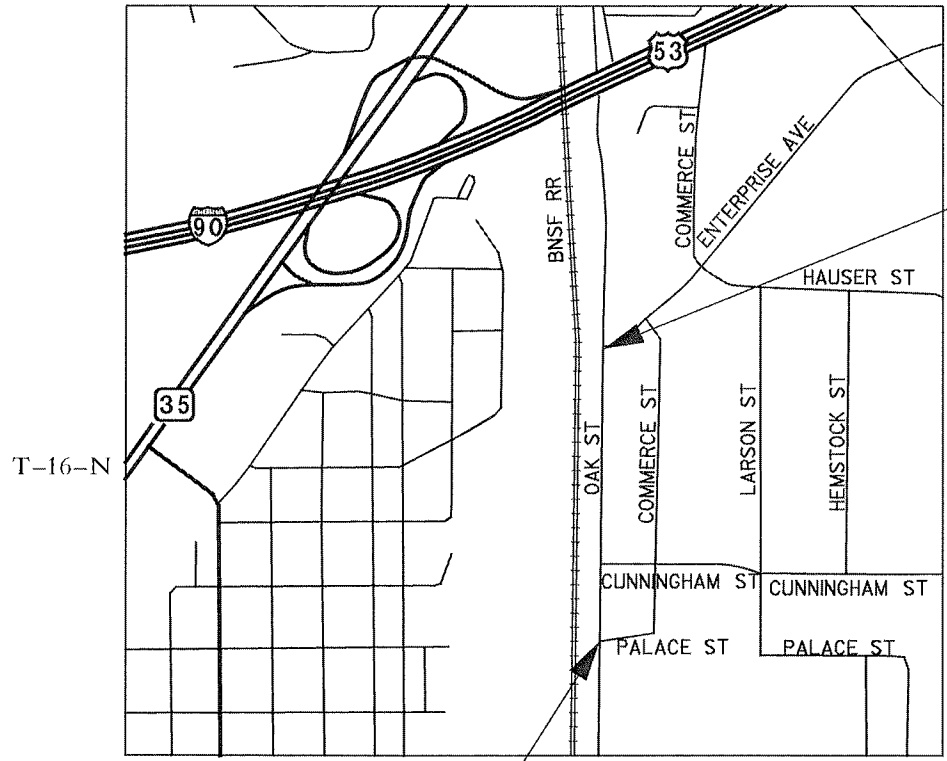
CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS	////
PROPERTY LINE	PL + 58.1
LOT LINE	----
LIMITED HIGHWAY EASEMENT	L ----
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	-----

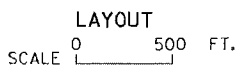
PROFILE

GRADE LINE	-----
ORIGINAL GROUND	-----
MARSH OR ROCK PROFILE (To be noted as such)	-----
SPECIAL DITCH	-----
GRADE ELEVATION	95.3
CULVERT (Profile View)	-----
UTILITIES	-----
ELECTRIC	-----
FIBER OPTIC	-----
GAS	-----
SANITARY SEWER	-----
STORM SEWER	-----
TELEPHONE	-----
WATER	-----
UTILITY PEDESTAL	-----
POWER POLE	-----
TELEPHONE POLE	-----



BEGIN PROJECT
STA 99+26.67
Y = 145,357.792
X = 451,005.277

END PROJECT
STA 118+95.16
Y = 147,325.757
X = 451,042.336



TOTAL NET LENGTH OF CENTERLINE = 0.373 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO AN ASSUMED COORDINATE SYSTEM ELEVATIONS BASED ON NAD 83 (2007)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
CITY OF LA CROSSE, OAK STREET
(PALACE STREET - ENTERPRISE AVENUE)
LOCAL STREET
LA CROSSE COUNTY

STATE PROJECT NUMBER
5991-05-78

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5991-05-78	WISC 2013212	1

ACCEPTED FOR

City of La Crosse

10/25/12 *Randy Turtenwald*
Randy Turtenwald, City Engineer
(Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
KNIGHT 700 N Third Street
Suite 104
La Crosse, WI 54601-3382
Engineers & Architects Phone: (608) 519-1455

WISCONSIN
RYAN B. MCKANE
E-37669
HOLMEN, WI
PROFESSIONAL ENGINEER
Ryan B. McKane

10/25/2012 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor LA CROSSE ENG. & SURVEY
Designer KNIGHT E/A INC
Management Consultant KJOHNSON ENGINEERS INC
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 10/31/12 *Kimberly A. Johnson*
(Management Consultant Signature)

E

STANDARD ABBREVIATIONS

AC	ACRE	CWT	HUNDREDWEIGHT
AGG	AGGREGATE	INL	INLET
AH	AHEAD	INV	INVERT
AADT	ANNUAL AVERAGE DAILY TRAFFIC	JCT	JUNCTION
ASPH	ASPHALTIC	LT	LEFT
AVG	AVERAGE	L	LENGTH OF CURVE
BK	BACK	LIN FT or LF	LINEAR FOOT
BM	BENCH MARK	LS	LUMP SUM
BR	BRIDGE	NC	NORMAL CROWN
CL or C/L	CENTER LINE	N	NORTH
CE	COMMERCIAL ENTRANCE	NB	NORTHBOUND
CONC	CONCRETE	NO	NUMBER
CPCA	CULVERT PIPE CORRUGATED ALUMINUM	PT	POINT
CPCS	CULVERT PIPE CORRUGATED STEEL	PCC	POINT OF COMPOUND CURVE
CO	COUNTY	PC	POINT OF CURVATURE
CTH	COUNTY TRUNK HIGHWAY	PI	POINT OF INTERSECTION
CR	CREEK	PT	POINT OF TANGENCY
CABC	CRUSHED AGGREGATE BASE COURSE	PCC	PORTLAND CEMENT CONCRETE
CY or CUYD	CUBIC YARD	LB	POUND
CULV	CULVERT	PE	PRIVATE ENTRANCE
CP	CULVERT PIPE	R	RADIUS
CPCP	CULVERT PIPE CORRUGATED POLYETHYLENE	RL or R/L	REFERENCE LINE
CPCSAC	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED	RT	RIGHT
CPCSPC	CULVERT PIPE CORRUGATED STEEL POLYMER COATED	R/W	RIGHT-OF-WAY
CPRC	CULVERT PIPE REINFORCED CONCRETE	RD	ROAD
C & G	CURB AND GUTTER	SHLDR	SHOULDER
D	DEGREE OF CURVE	SB	SOUTHBOUND
DIA	DIAMETER	SF or SQ FT	SQUARE FEET
DISCH	DISCHARGE	SY or SQ YD	SQUARE YARD
E	EAST	SDD	STANDARD DETAIL DRAWINGS
EB	EASTBOUND	STH	STATE TRUNK HIGHWAYS
EL or ELEV	ELEVATION	SE	SUPERELEVATION
EW	ENDWALL	T	TANGENT
ENT	ENTRANCE	TEMP	TEMPORARY
EXC	EXCAVATION	USH	UNITED STATES HIGHWAY
EX	EXISTING	V	VELOCITY OR DESIGN SPEED
FERT	FERTILIZE	VC	VERTICAL CURVE
FE	FIELD ENTRANCE	WB	WESTBOUND
FL or F/L	FLOW LINE	YD	YARD
FT	FOOT		

AREA CONTACTS

LA CROSSE ENGINEERING DEPARTMENT	DESIGN CONTACT	WISDNR: LA CROSSE COUNTY
MATT GALLAGER	KNIGHT E/A	KAREN KALVELAGE
400 LA CROSSE STREET	RYAN MCKANE	LA CROSSE OFFICE
LA CROSSE, WI 54601	700 N THIRD ST., SUITE 104	3550 MORMON COULEE RD
PHONE: (608) 789-7505	LA CROSSE, WI 54601	LA CROSSE, WI 54601
gallagerm@cityoflacrosse.org	PHONE: (608) 519-1455 EXT. #2	PHONE: (608) 785-9115
	RMCKANE@KNIGHTEA.COM	karen.kalvelage@wisconsin.gov

UTILITY CONTACTS

STEVE BLADO	NANCY DOTSON
CENTURYLINK - COMMUNICATION LINE	XCEL ENERGY
333 N FRONT ST	1414 W HAMILTON AVE
P.O. BOX 4800	P.O. BOX 8
LA CROSSE, WI 54602	EAU CLAIRE, WI 54702-0008
(608) 796-5543	(715) 737-2574
STEVE.BLADO@CENTURYLINK.COM	NANCY.J.DOTSON@XCELENERGY.COM
MARK JOHNSON	CLINTON TORP
CITY OF LA CROSSE - SEWER & WATER	LA CROSSE MUNICIPAL AIRPORT - AIRPORT FACILITY
400 LA CROSSE ST	2850 AIRPORT RD
LA CROSSE, WI 54601	LACROSSE, WI 54603
(608) 789-7536	(608) 789-7464
JOHNSONM@CITYOFLACROSSE.ORG	TORPC@CITYOFLACROSSE.ORG

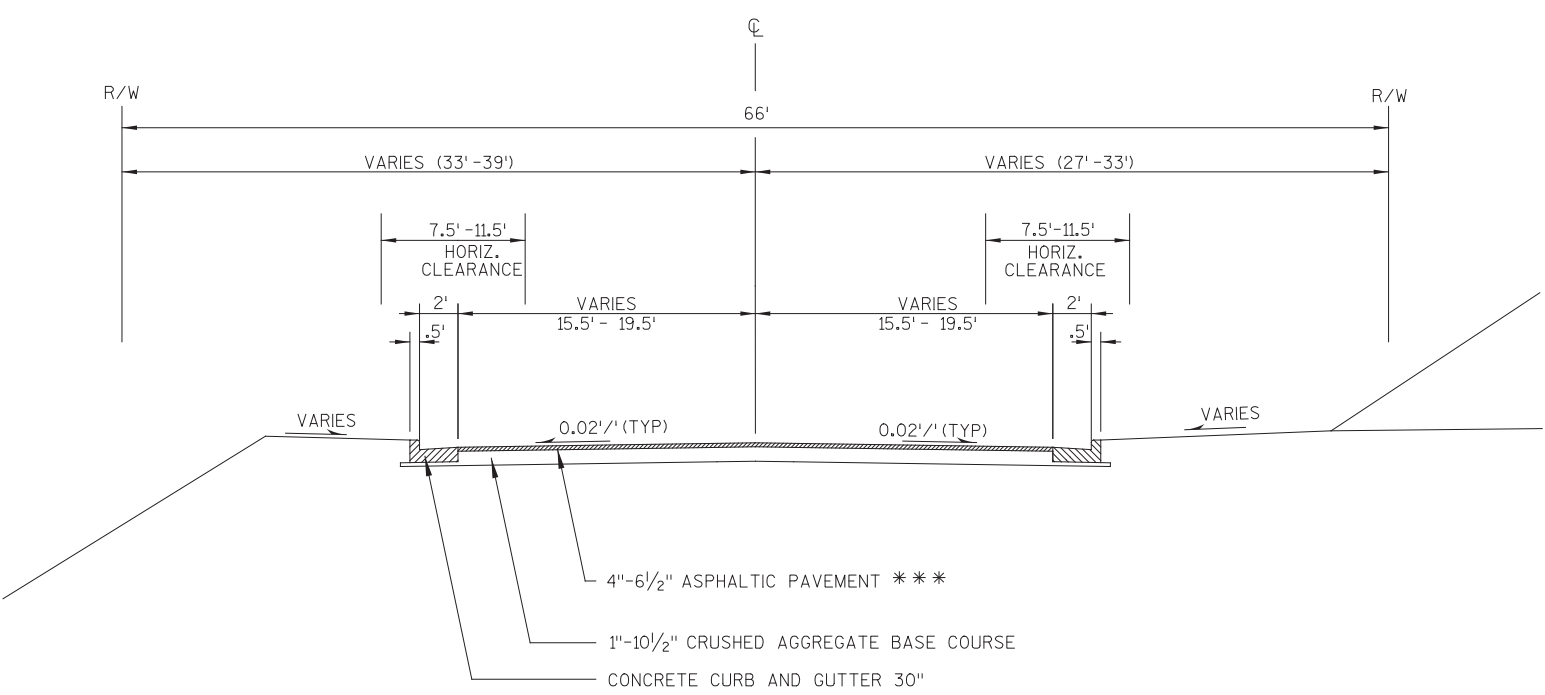


Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

GENERAL NOTES

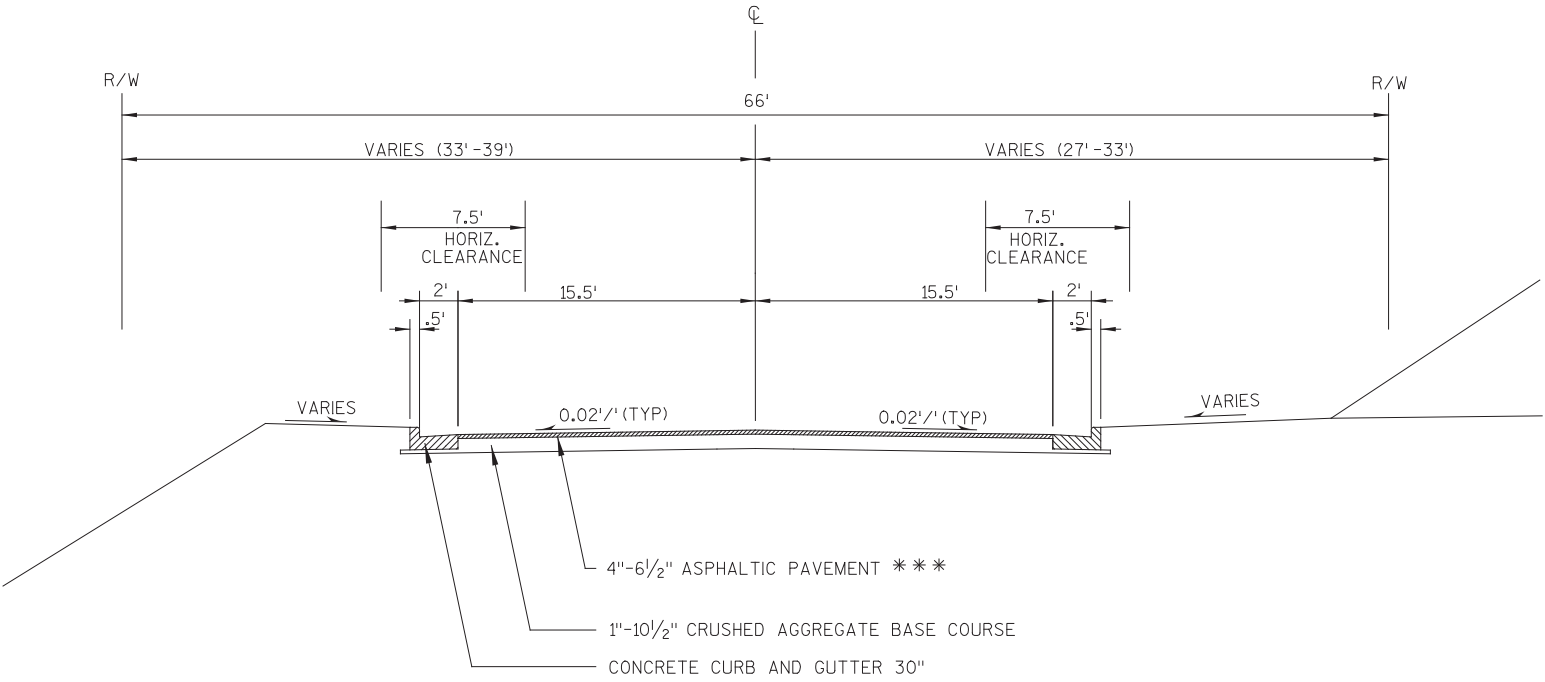
- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND MULCHED OR SODDED AS DIRECTED BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.
- HMA PAVEMENT SHALL BE CONSTRUCTED IN A 2-3/4" LOWER LAYER USING PG 64-22 AND 2-1/4" UPPER LAYER USING PG 64-28.
- TACK COAT SHALL BE REQUIRED BETWEEN THE LOWER AND UPPER LAYERS OF PAVEMENT.
- THE LOCATIONS OF UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT THAT ARE NOT SHOWN.
- AN UNDISTRIBUTED QUANTITY OF BASE AGGREGATE DENSE 1-1/4" AND COMMON EXCAVATION HAVE BEEN INCLUDED IN THE PROJECT TO BE UTILIZED IN AREAS OF FAILED UNDERLYING BASE MATERIAL. AREAS TO BE DETERMINED BY ENGINEER.

- ***PAVEMENT STRUCTURE BORING LOG
- BORING # 1, STA. 101+64, 5.5' RT, 4" ASPHALTIC PAVEMENT OVER 7" OF AGGREGATE BASE COURSE
 - BORING # 2, STA. 105+25 12' RT, 6" ASPHALTIC PAVEMENT OVER 6" OF AGGREGATE BASE COURSE
 - BORING # 3, STA. 109+04 10' LT, 6" ASPHALTIC PAVEMENT OVER 8½" OF AGGREGATE BASE COURSE
 - BORING # 4, STA 110+78 6.5' RT, 5½" ASPHALTIC PAVEMENT OVER 7½" OF AGGREGATE BASE COURSE
 - BORING # 5, STA 115+07 7.5' LT, 6" ASPHALTIC PAVEMENT OVER 1" OF AGGREGATE BASE COURSE
 - BORING # 6, STA 116+98 9' LT, 6½" ASPHALTIC PAVEMENT OVER 4" OF AGGREGATE BASE COURSE
 - BORING # 7, STA 118+48 10' LT, 6" ASPHALTIC PAVEMENT OVER 10½" OF AGGREGATE BASE COURSE



TYPICAL EXISTING CROSS SECTION FOR OAK STREET

STA 99+26.67 - 104+00



TYPICAL EXISTING CROSS SECTION FOR OAK STREET

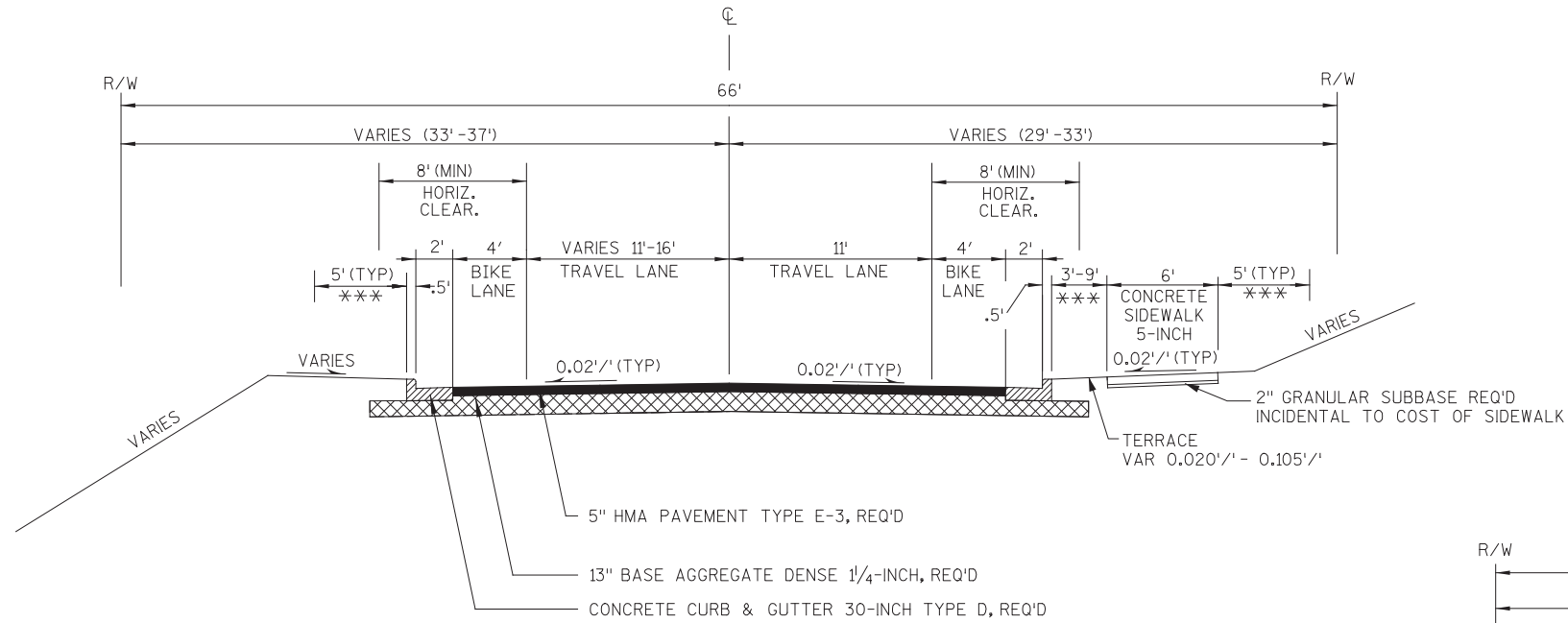
STA 104+00 - 118+95.16

2

2

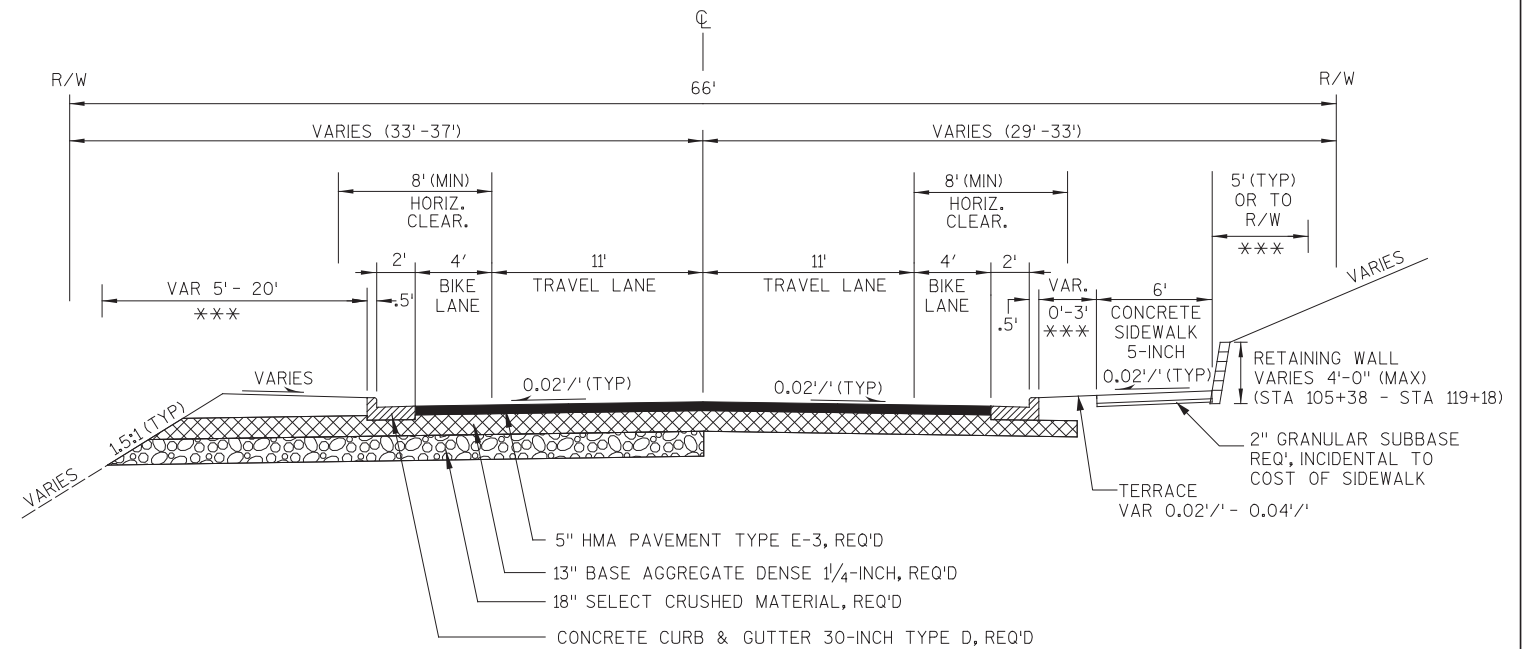


NOTES
*** EROSION CONTROL FINISHING ITEMS REQUIRED
(SEE PLAN SHEETS AND MISCELLANEOUS QUANTITIES FOR DETAILS)



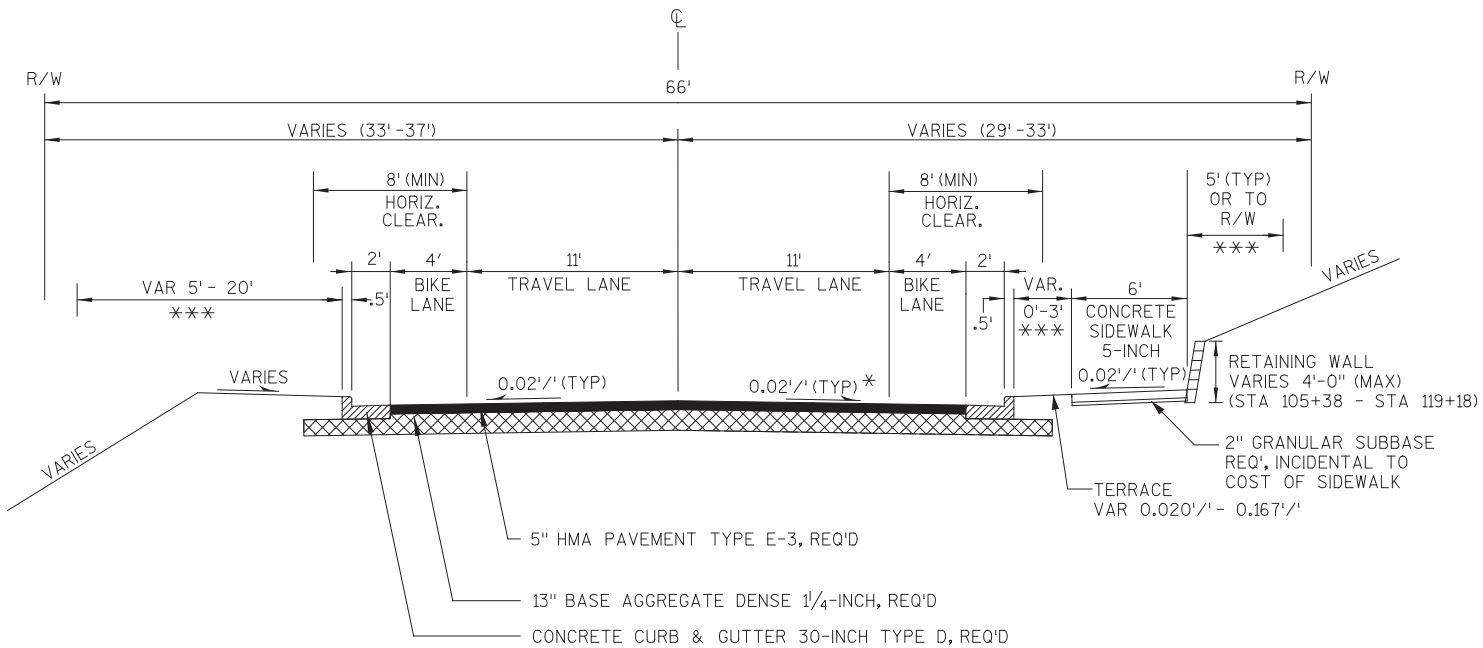
TYPICAL PROPOSED CROSS SECTION FOR OAK STREET

STA 99+26.67 - 104+00



TYPICAL PROPOSED CROSS SECTION FOR OAK STREET

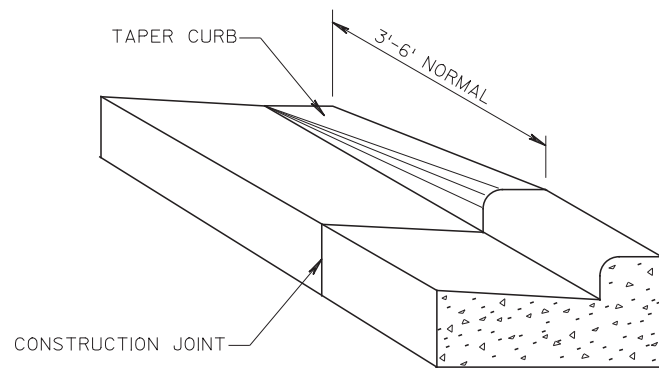
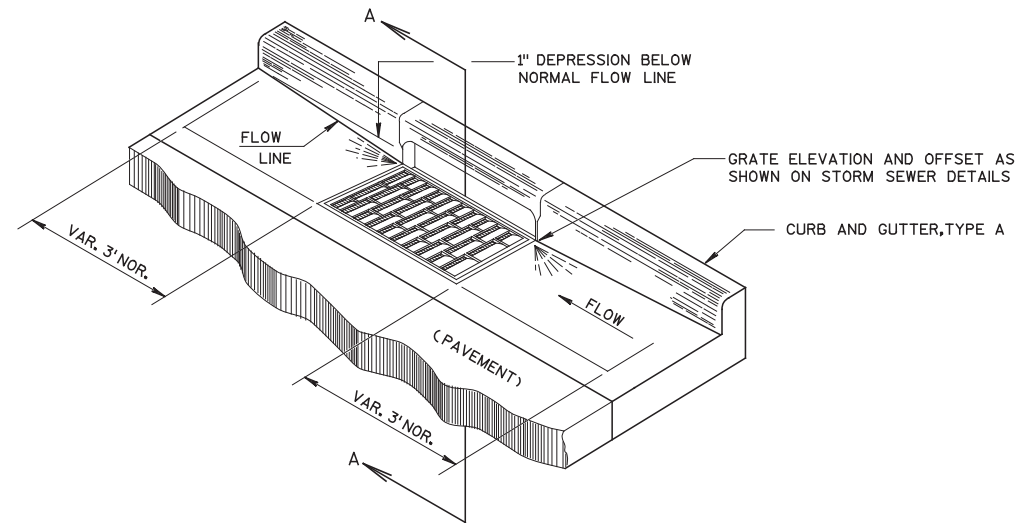
STA 117+00 - 118+95.16



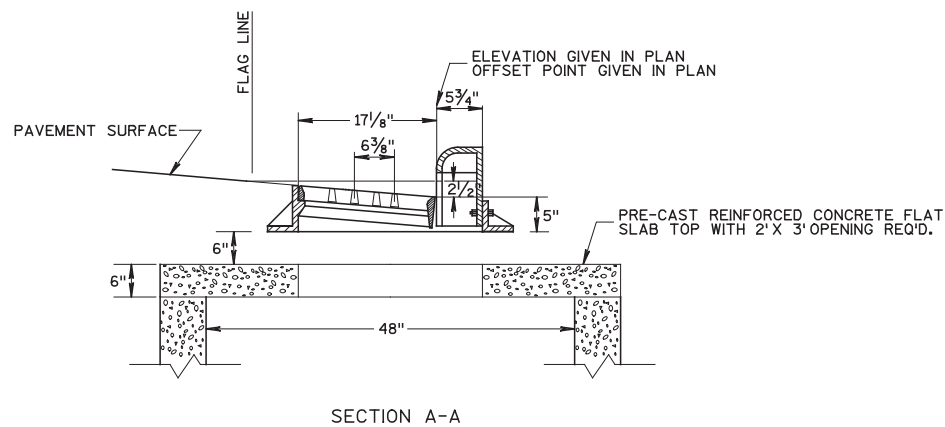
TYPICAL PROPOSED CROSS SECTION FOR OAK STREET

STA 104+00 - 117+00

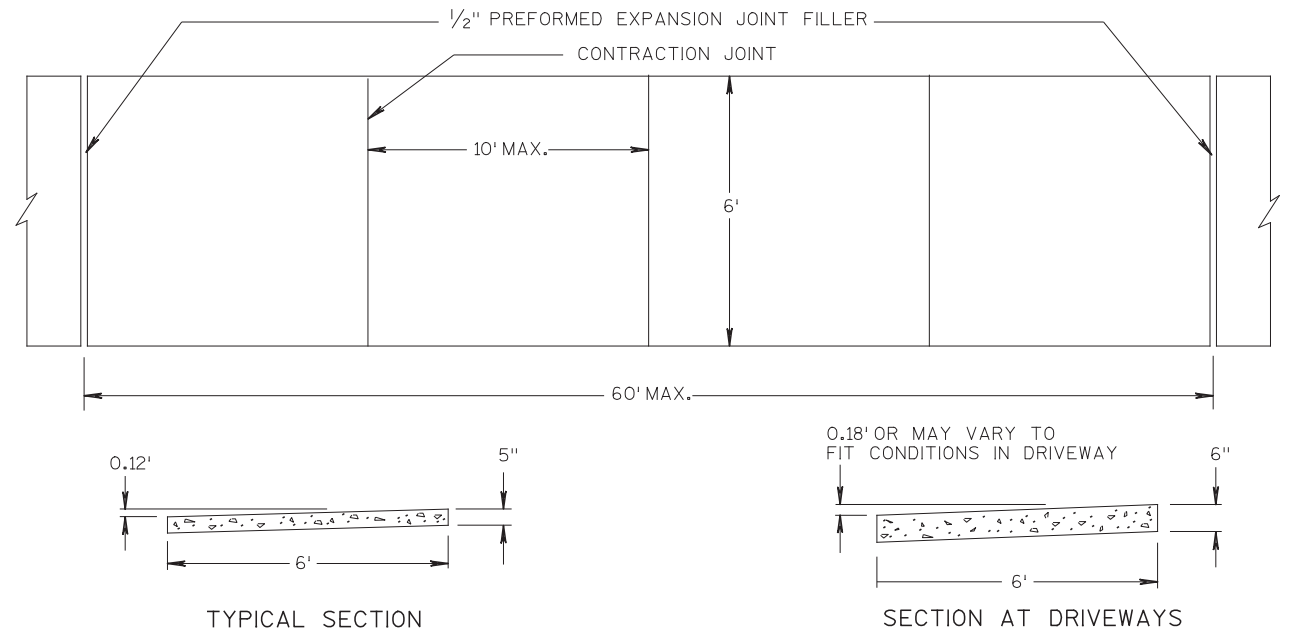
* STA 104+00 - 106+00 CROSS SLOPE LT & RT 0.01'/' (MIN)



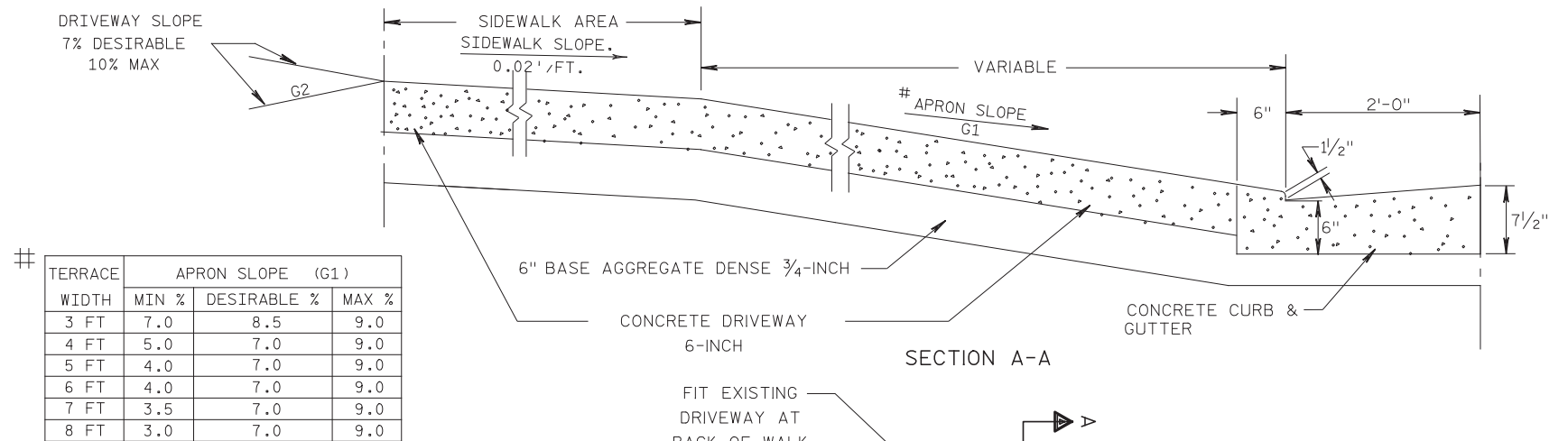
DETAIL OF CURB & GUTTER TERMINI



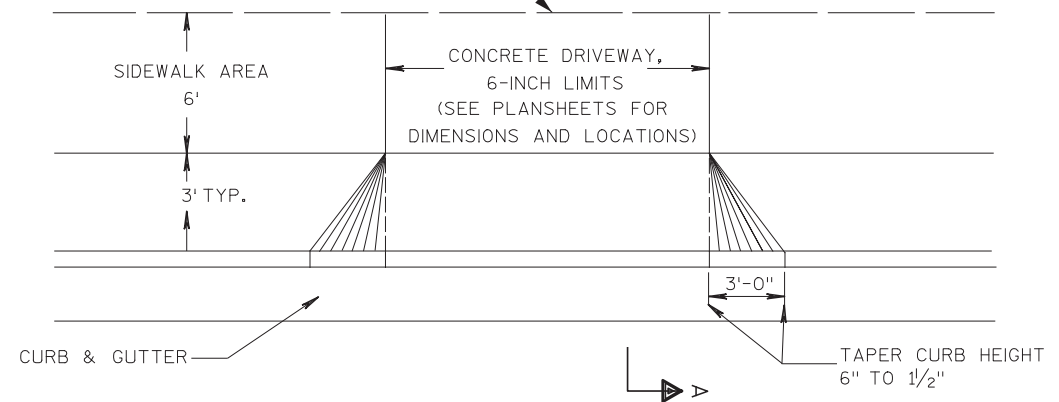
DETAIL OF CURB AND GUTTER AT INLETS
(CATCH BASIN TYPE 1-H SHOWN)



SECTION A-A



NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

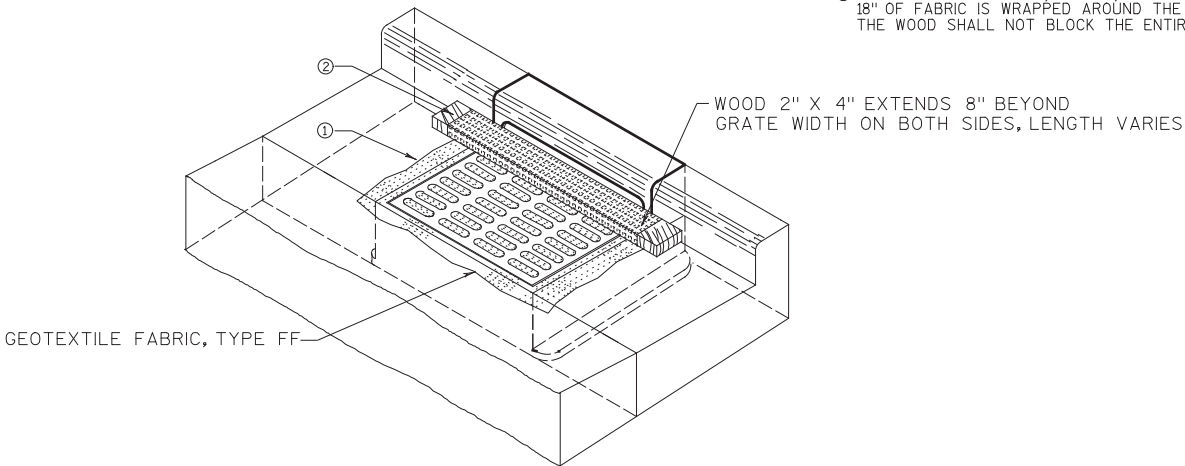


COMMERCIAL ENTRANCES

GENERAL NOTES:

FABRIC SHALL BE REPLACED AT THE ENGINEERS DISCRETION. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED FOR THE INLET PROTECTION TYPE SPECIFIED. 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 FABRIC SIZE SHALL BE 8" (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
- ② FOR INLET PROTECTION, TYPE C, WITH A 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.



INLET PROTECTION, TYPE C (WITH CURB BOX)

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 3.2 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.32 ACRES



SOIL PARAMETERS

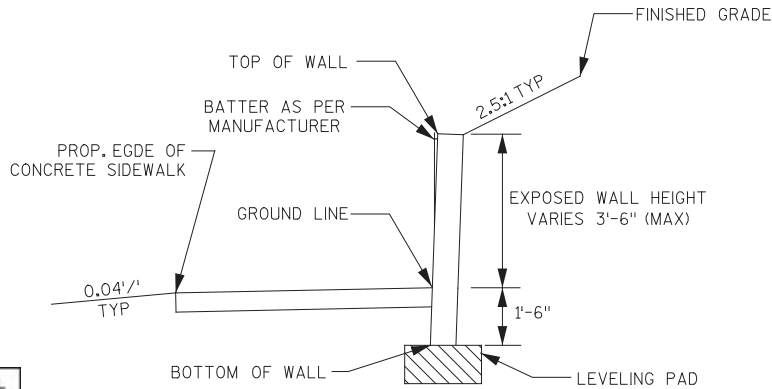
SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (DEGREES)	COHESION (psf)
SILTY SAND FILL	125	30	0
SILTY SAND TO CLAYEY SAND	115	28	0
POORLY GRADED SAND W/ SILT	120	32	0
POORLY GRADED SAND	120	34	0

TOTAL ESTIMATED QUANTITIES

WALL MODULAR = 4,810 SF
BLOCK GRAVITY

SAFETY FACTORS

ANALYSIS (DOT STANDARD)	GRAVITY WALL
SLIDING (FS > 1.5)	
OVERTURNING (FS > 2.0)	
GLOBAL STABILITY (FS > 1.3)	3.07
ALLOWABLE BEARING CAPACITY, PSF	2000 PSF
MINIMUM WALL EMBEDMENT	1'-6"



TYPICAL CROSS SECTION OF RETAINING WALL

DESIGN DATA

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

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

CONTACT CITY OF LA CROSSE FOR AESTHETIC TREATMENT/WALL COLOR SELECTION. MATT GALLAGER 608-789-7392

SEE SOIL BORINGS SHEET FOR BORING DETAILS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

PROJECT NO:5991-05-78

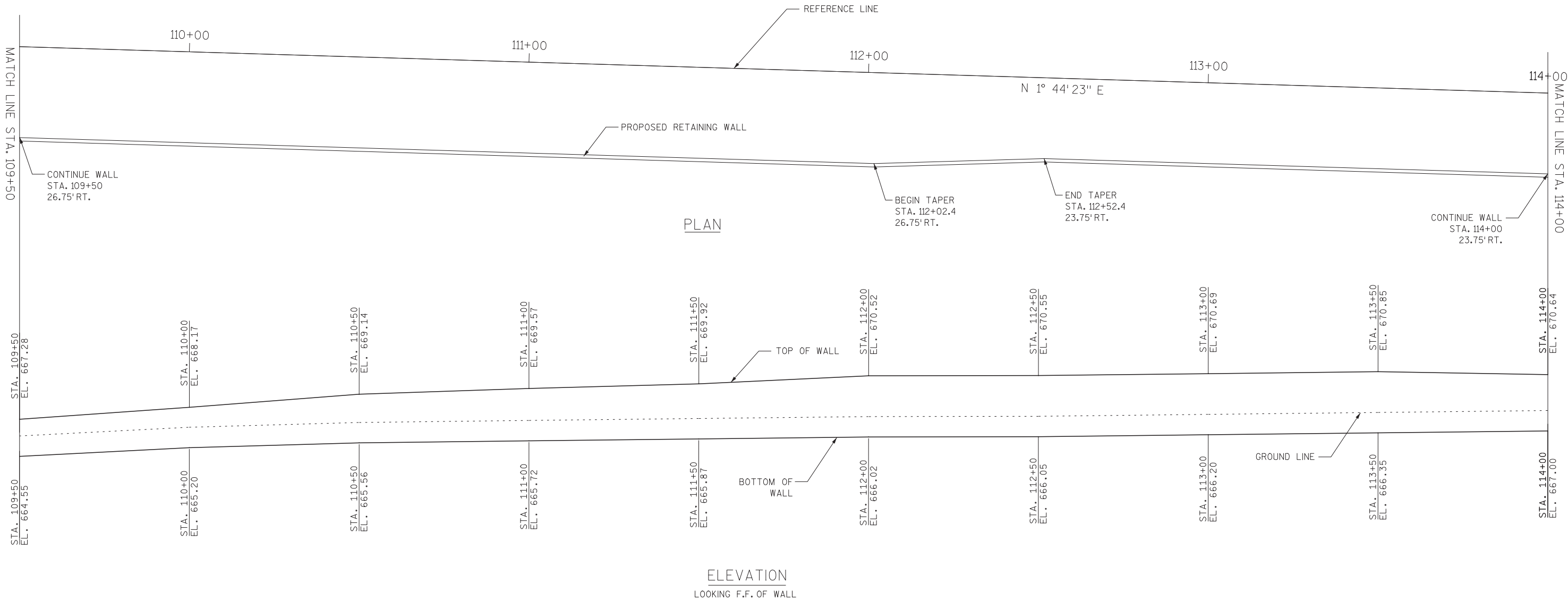
HWY:OAK STREET

COUNTY:LA CROSSE

CONSTRUCTION DETAIL - MODULAR BLOCK RETAINING WALL

SHEET

E



GENERAL NOTES
DRAWINGS SHALL NOT BE SCALED

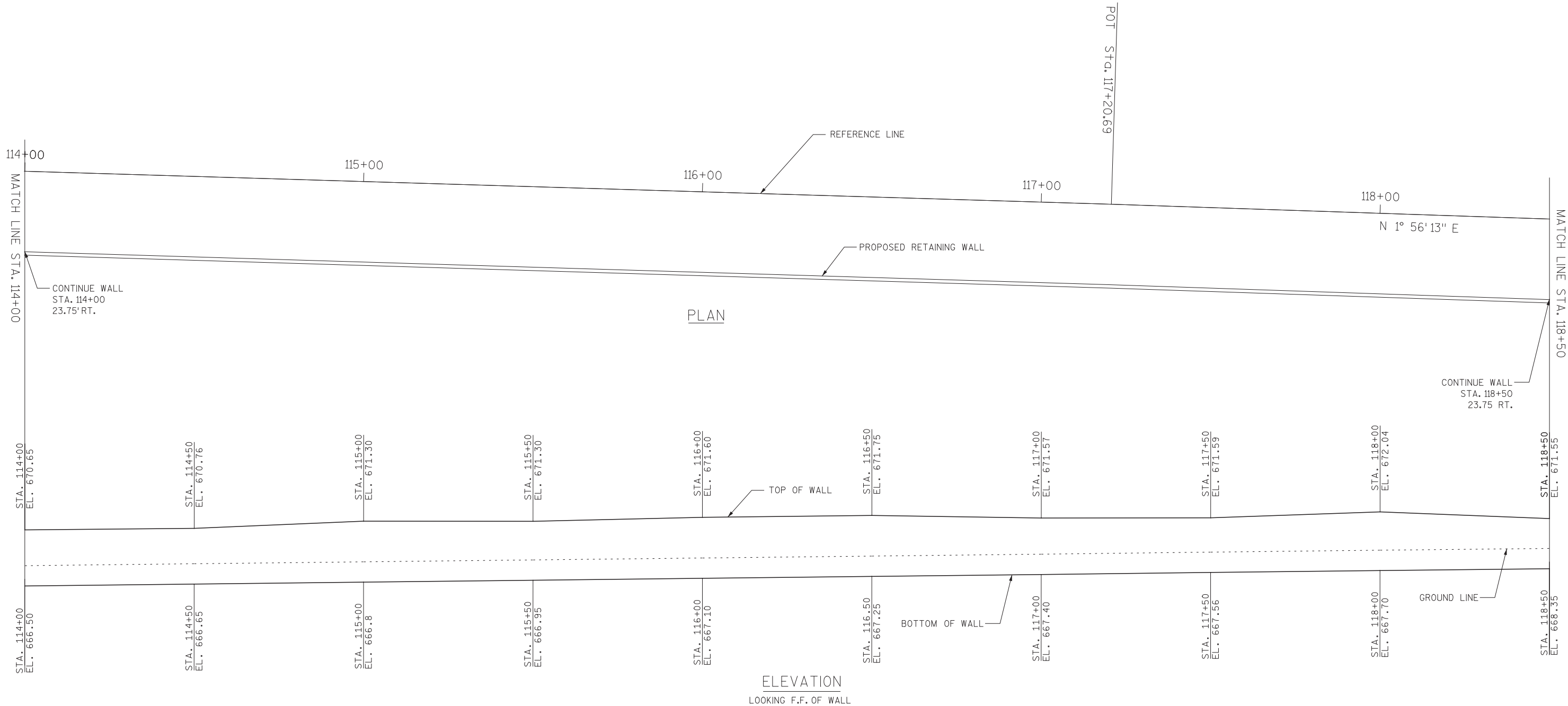
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DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

CONTACT CITY OF LA CROSSE FOR AESTHETIC TREATMENT/WALL COLOR SELECTION. MATT GALLAGER 608-789-7392

SEE SOIL BORINGS SHEET FOR BORING DETAILS.



GENERAL NOTES
DRAWINGS SHALL NOT BE SCALED

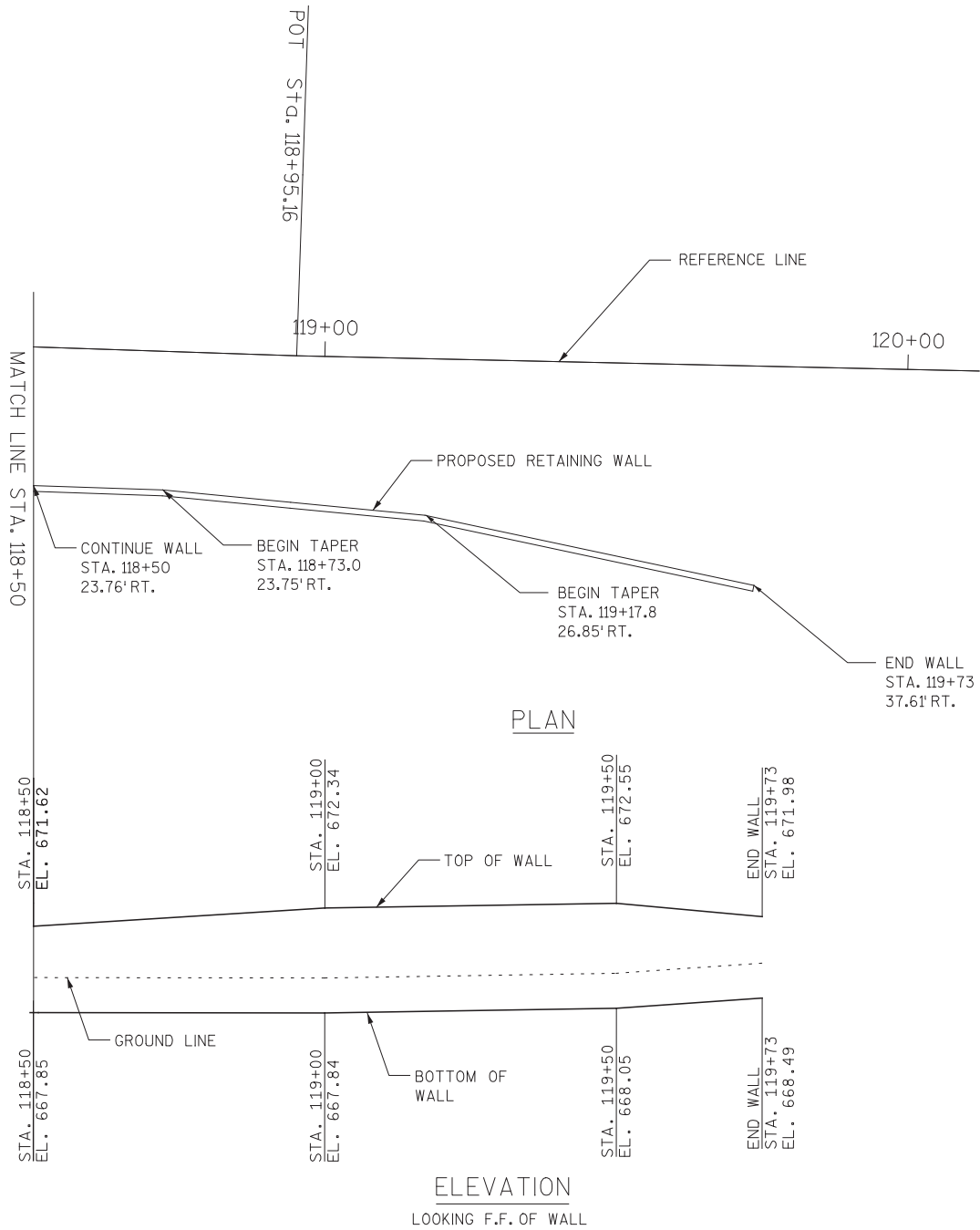
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THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

CONTACT CITY OF LA CROSSE FOR AESTHETIC TREATMENT/WALL COLOR SELECTION. MATT GALLAGER 608-789-7392

SEE SOIL BORINGS SHEET FOR BORING DETAILS.



GENERAL NOTES
DRAWINGS SHALL NOT BE SCALED

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

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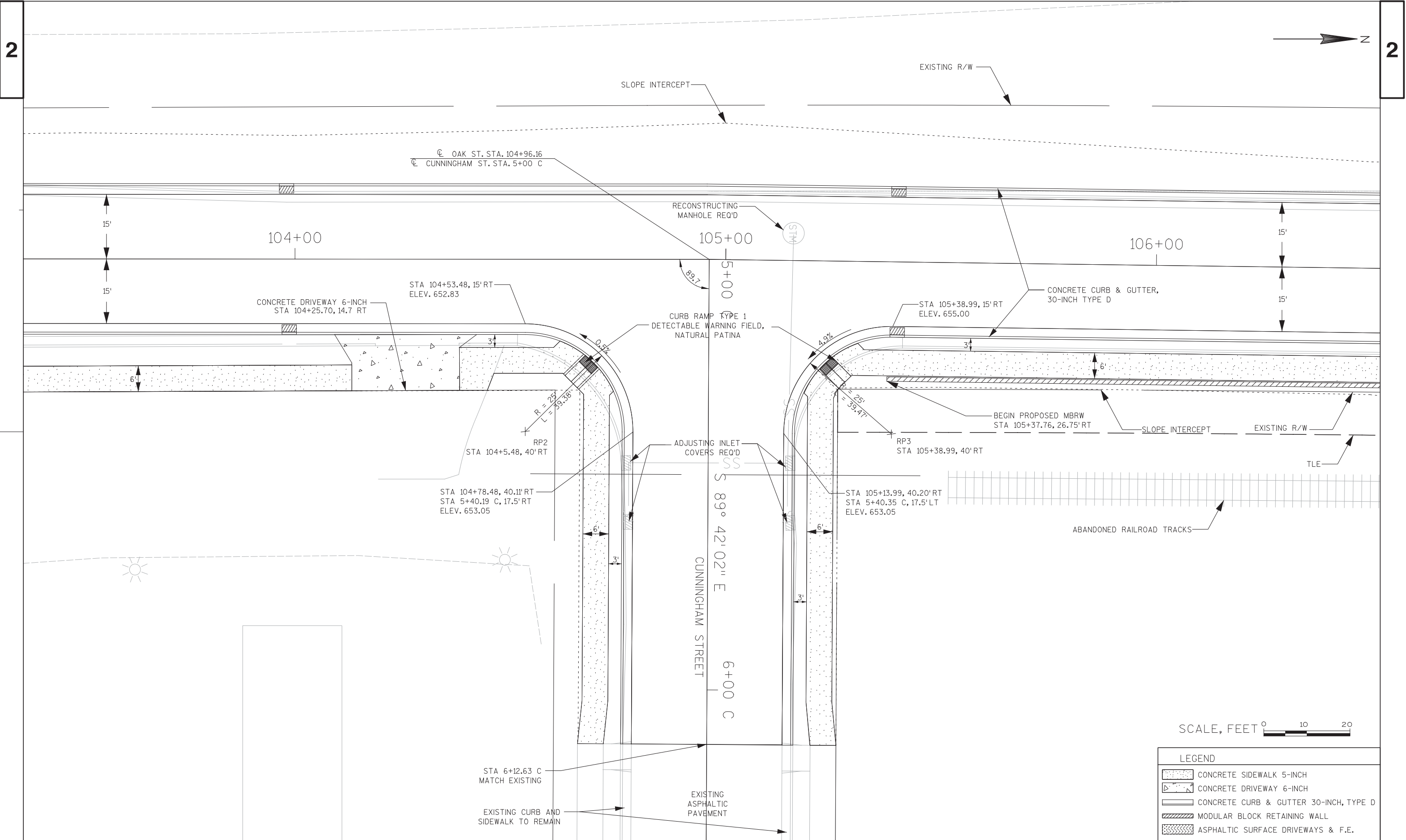
DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

CONTACT CITY OF LA CROSSE FOR AESTHETIC TREATMENT/WALL COLOR SELECTION. MATT GALLAGER 608-789-7392

SEE SOIL BORINGS SHEET FOR BORING DETAILS.

PROJECT NO:5991-05-78	HWY:OAK STREET	COUNTY:LA CROSSE	CONSTRUCTION DETAIL - MODULAR BLOCK RETAINING WALL	SHEET	E
-----------------------	----------------	------------------	--	-------	---





SCALE, FEET 0 10 20

LEGEND	
	CONCRETE SIDEWALK 5-INCH
	CONCRETE DRIVEWAY 6-INCH
	CONCRETE CURB & GUTTER 30-INCH, TYPE D
	MODULAR BLOCK RETAINING WALL
	ASPHALTIC SURFACE DRIVEWAYS & F.E.

PROJECT NO:5991-05-78

HWY:OAK STREET

COUNTY:LA CROSSE

INTERSECTION DETAILS: CUNNINGHAM STREET

SHEET

E

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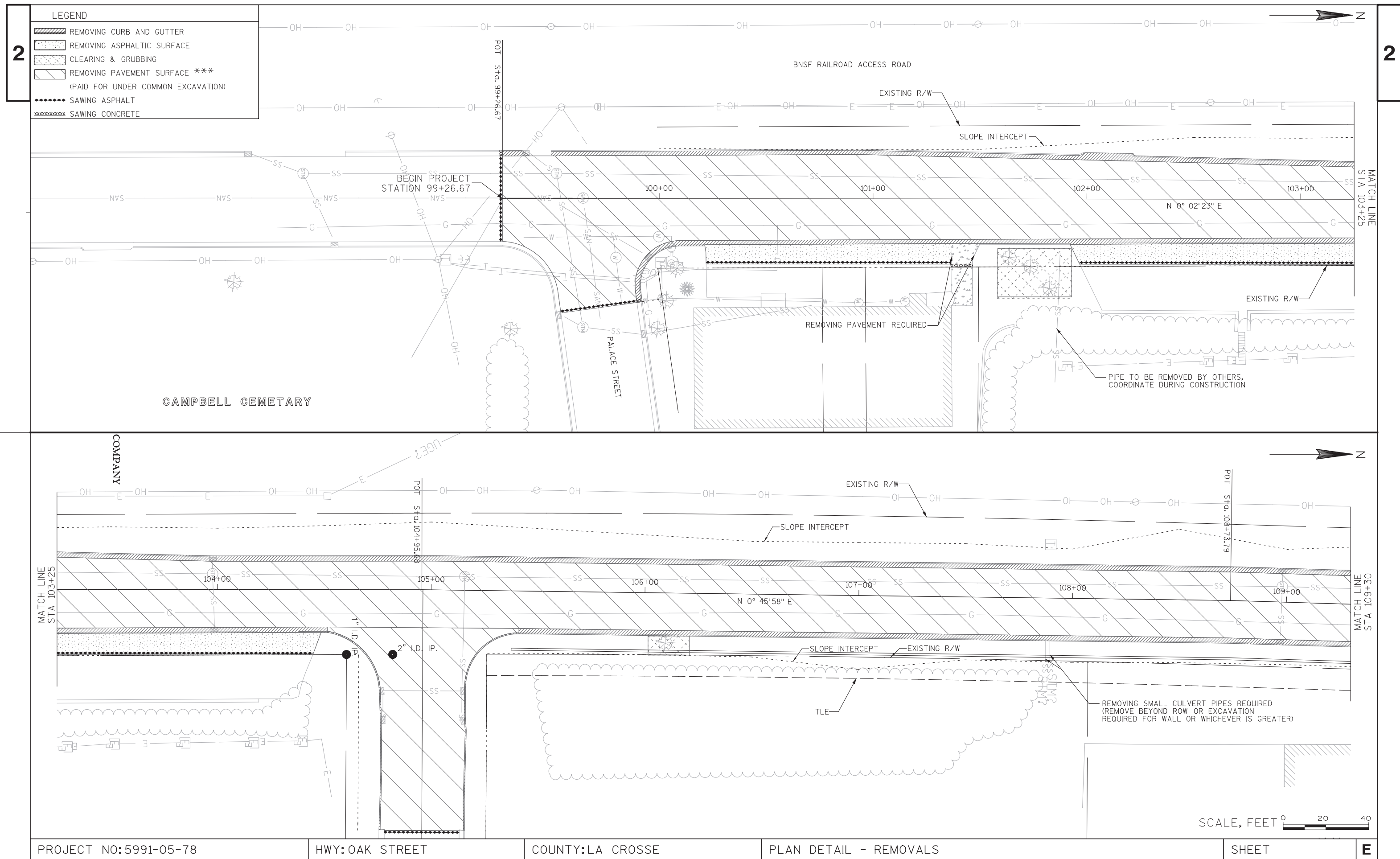
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PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

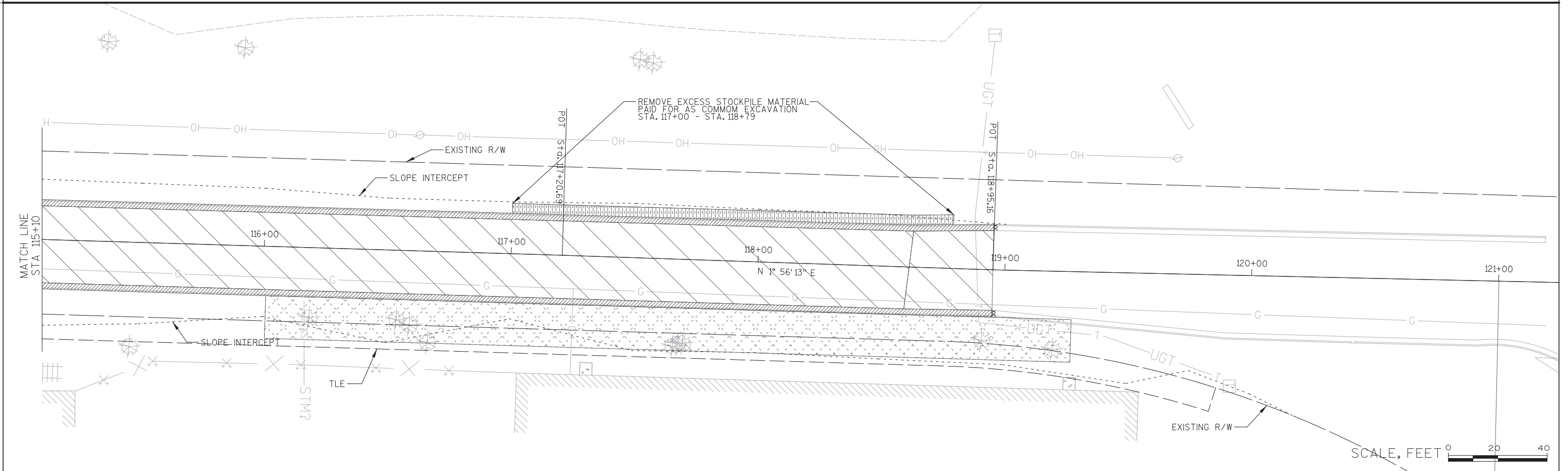
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WISDOT/CADDs SHEET 42

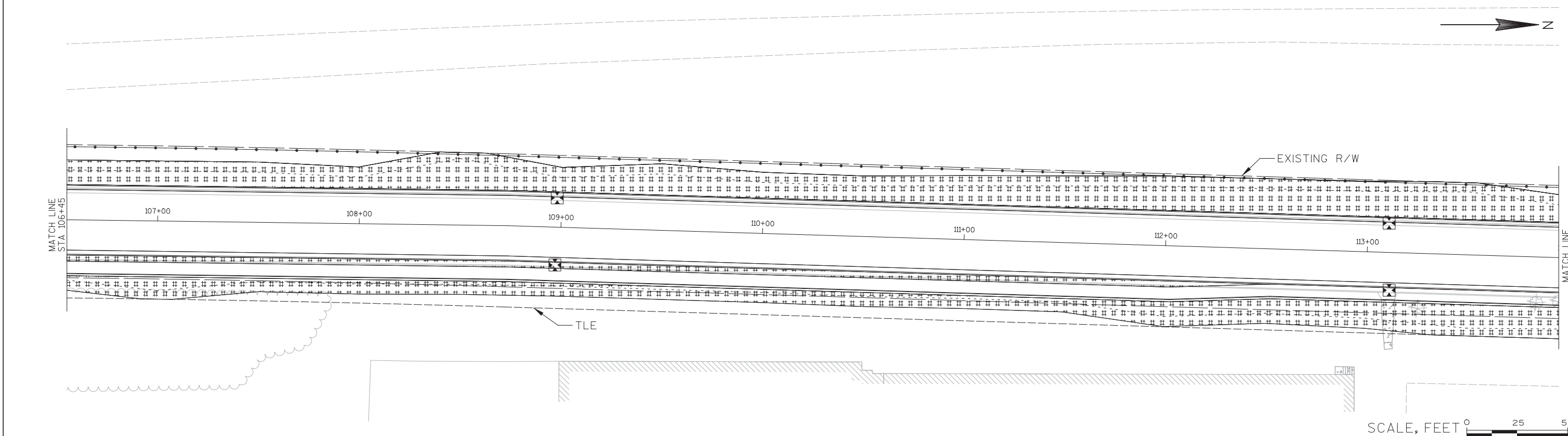
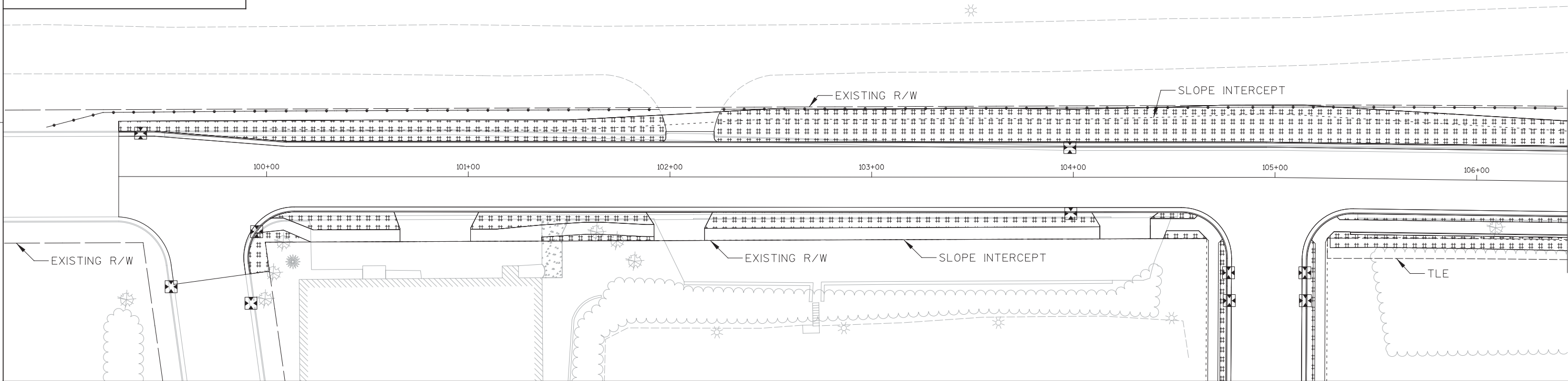


LEGEND	
	REMOVING CURB AND GUTTER
	REMOVING ASPHALTIC SURFACE
	CLEARING & GRUBBING
	REMOVING PAVEMENT SURFACE *** (PAID FOR UNDER COMMON EXCAVATION)
	SAWING ASPHALT
	SAWING CONCRETE

2



- LEGEND
- ##### EROSION MAT CLASS I, TYPE B (USE URBAN ON RT)
 - SILT FENCE
 - - - SLOPE INTERCEPT
 - ⊠ INLET PROTECTION



SCALE, FEET 0 25 50

PROJECT NO:5991-05-78

HWY:OAK STREET

COUNTY:LA CROSSE

EROSION CONTROL

SHEET

E

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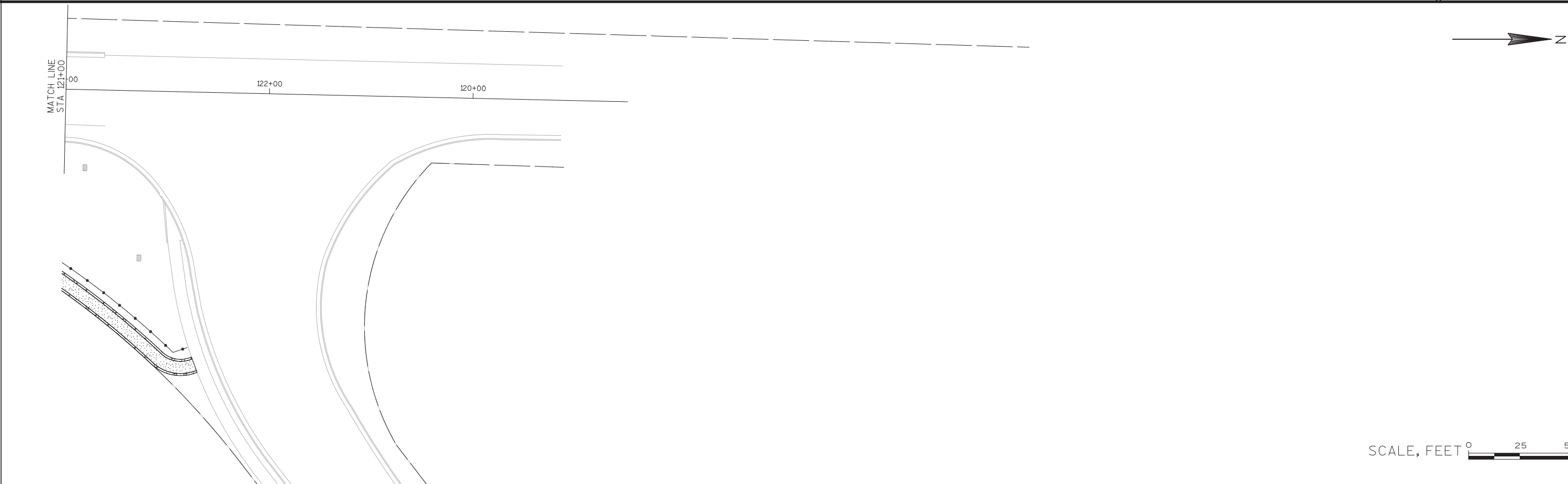
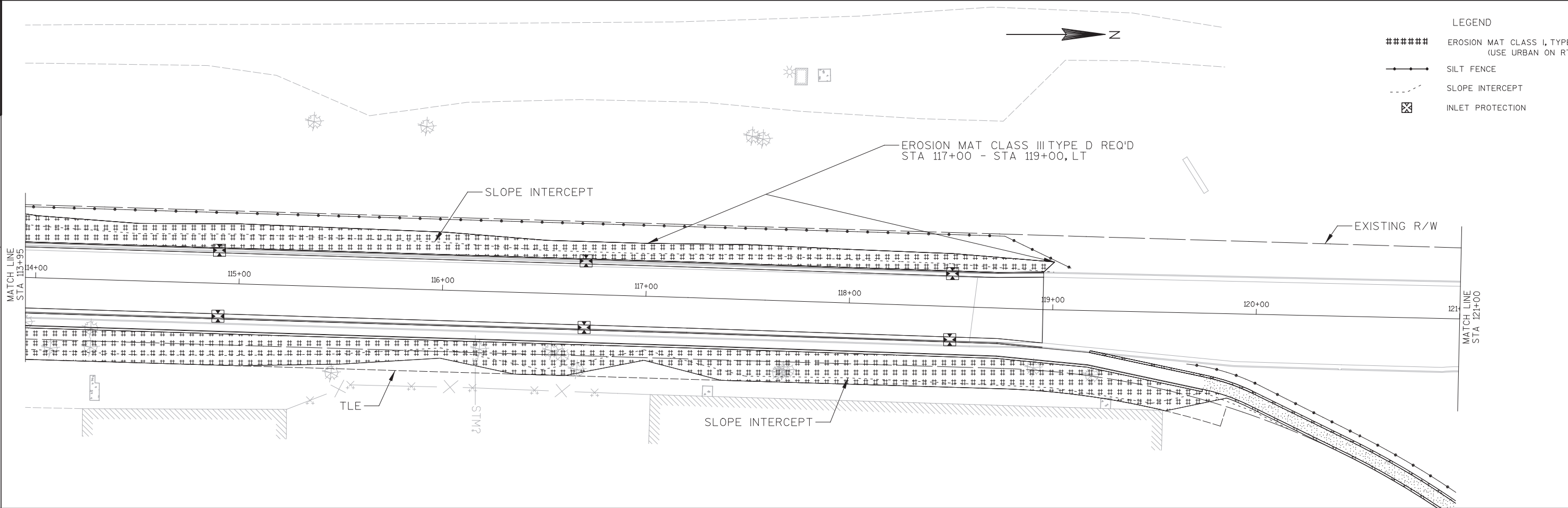
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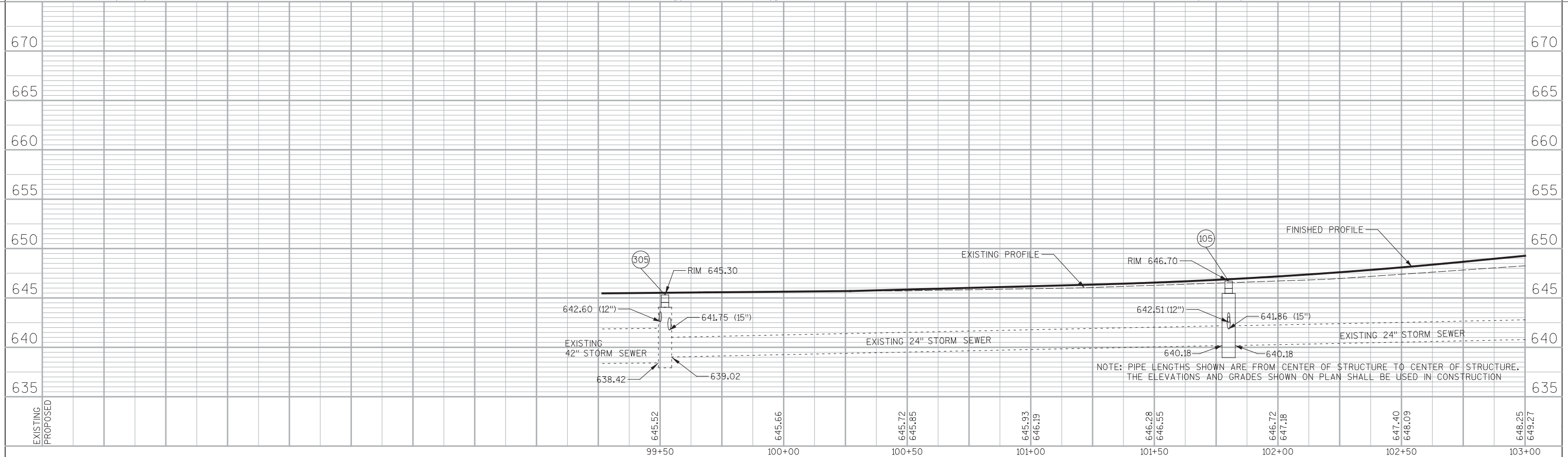
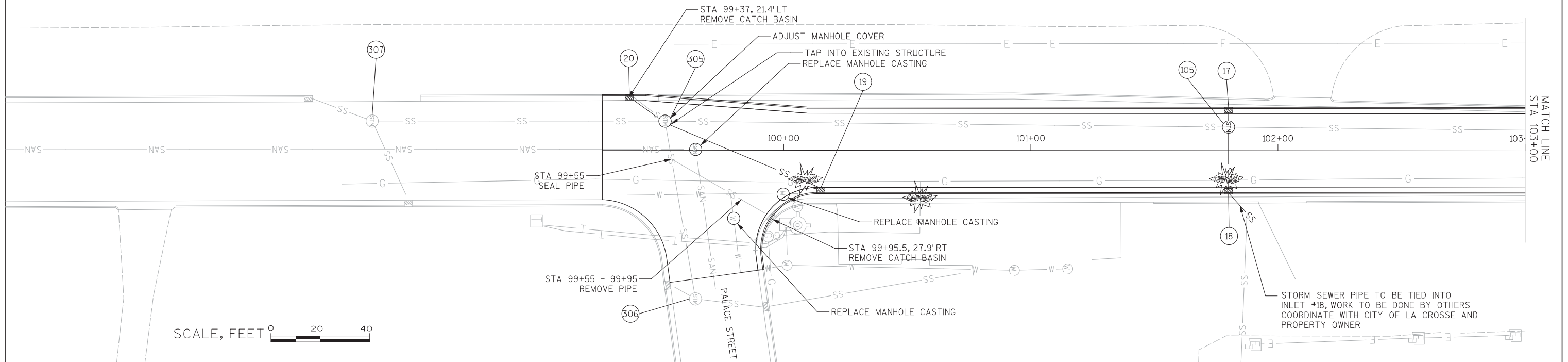
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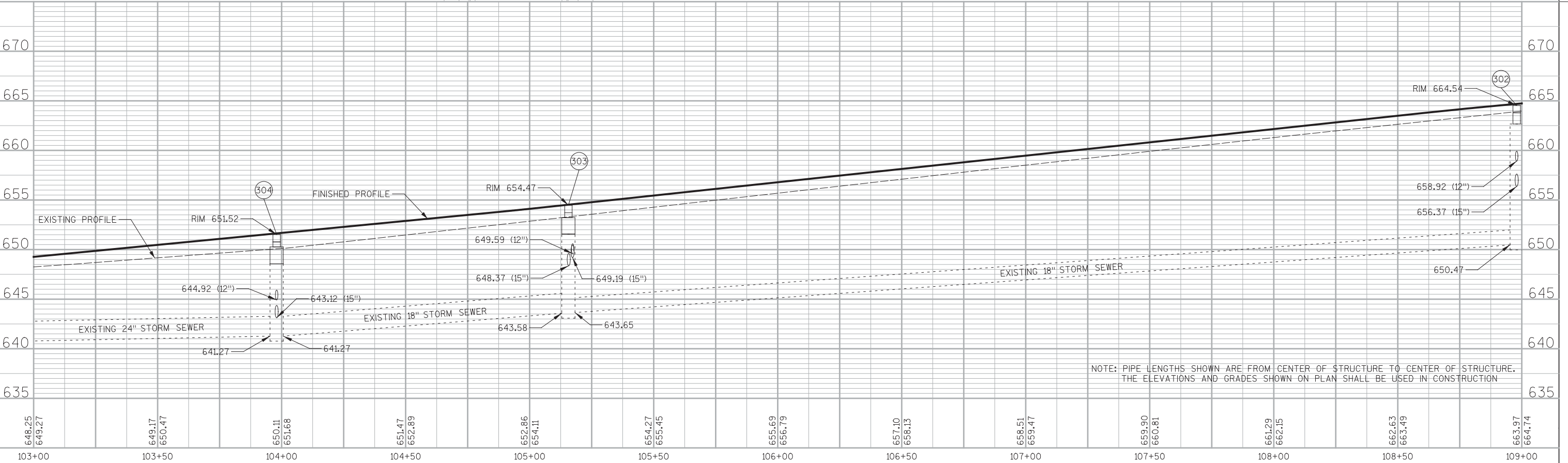
WISDOT/CADDs SHEET 42



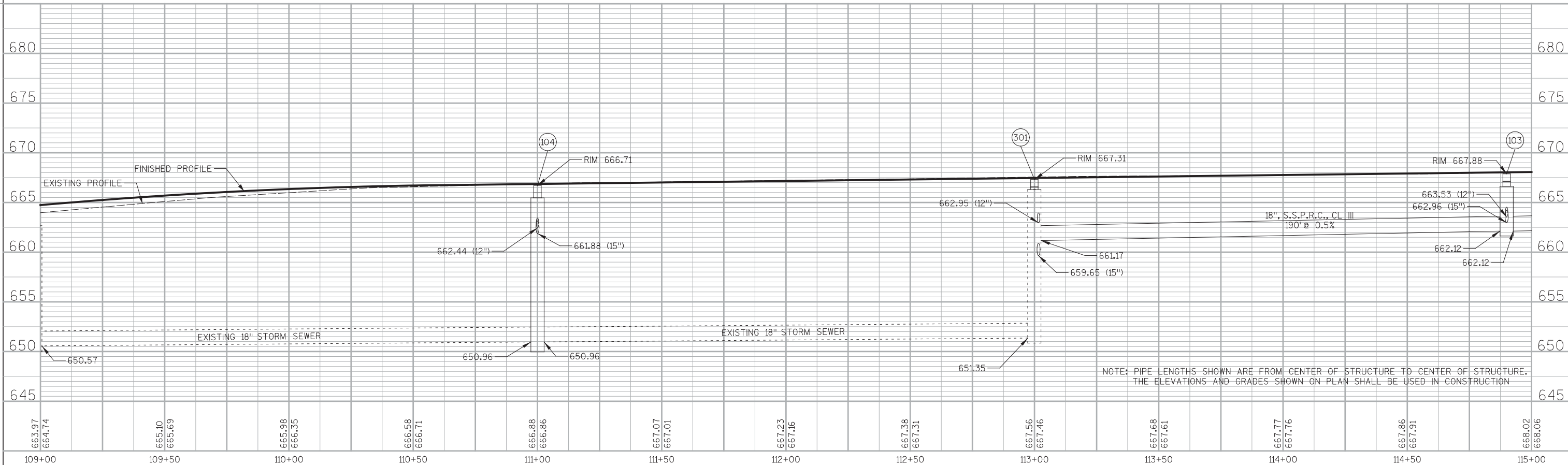
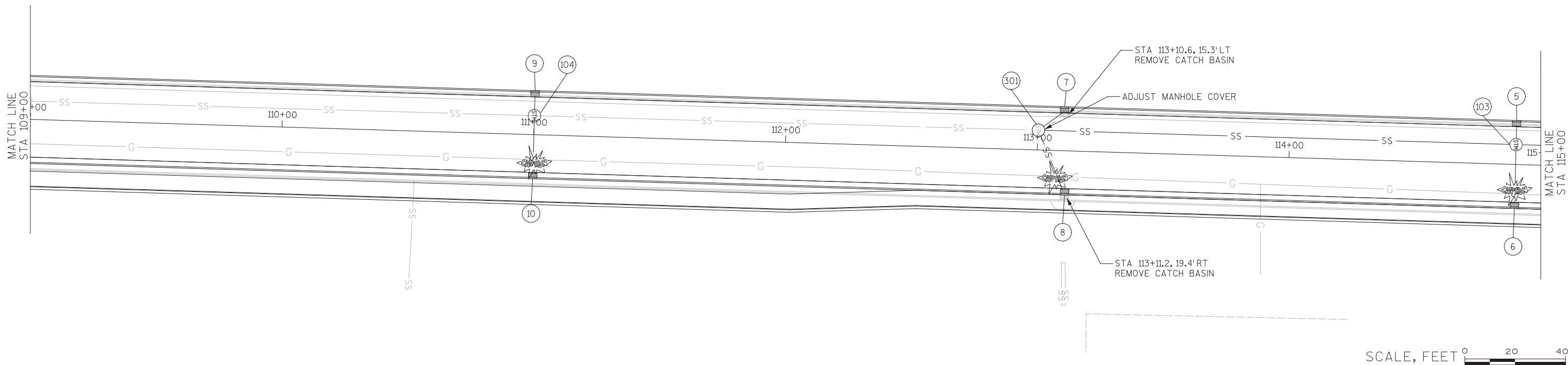
(0) — (99) NEW INLETS
 (100) — (199) NEW MANHOLES
 (300) — (399) EXISTING STRUCTURES

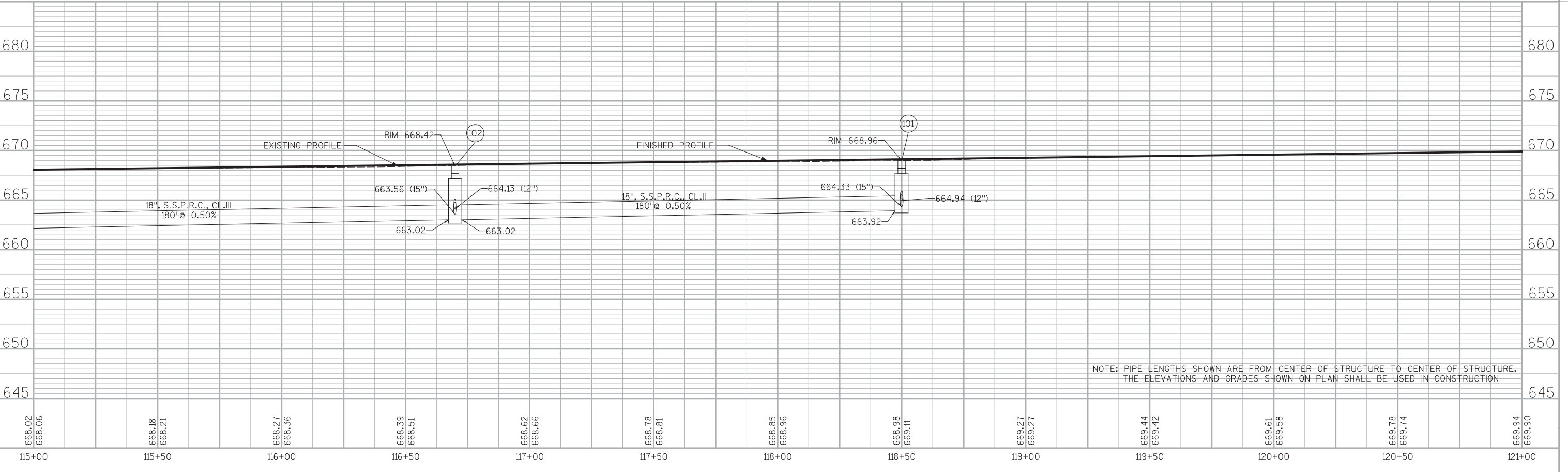


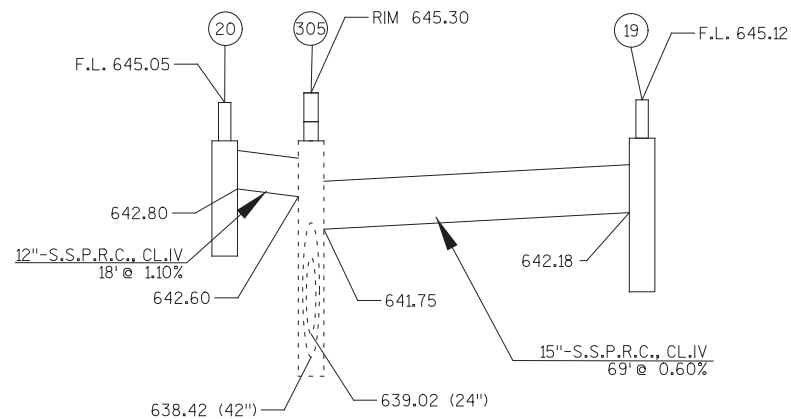
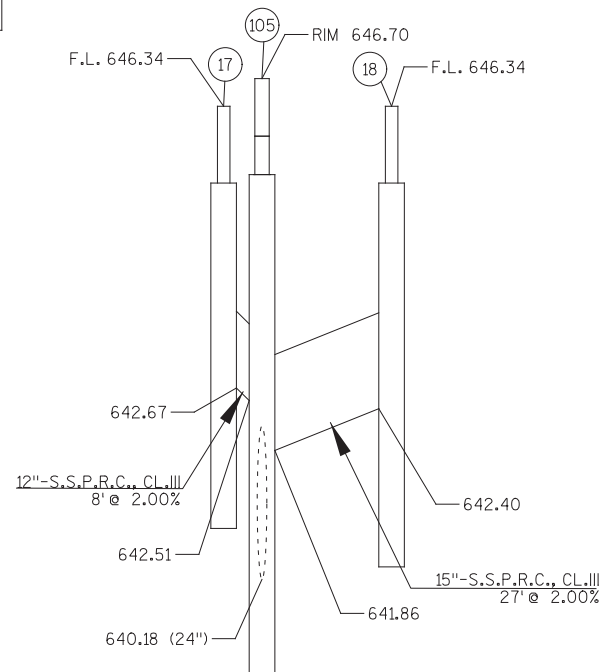
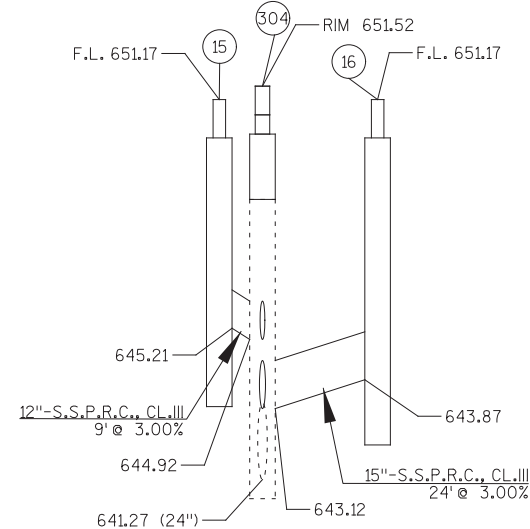
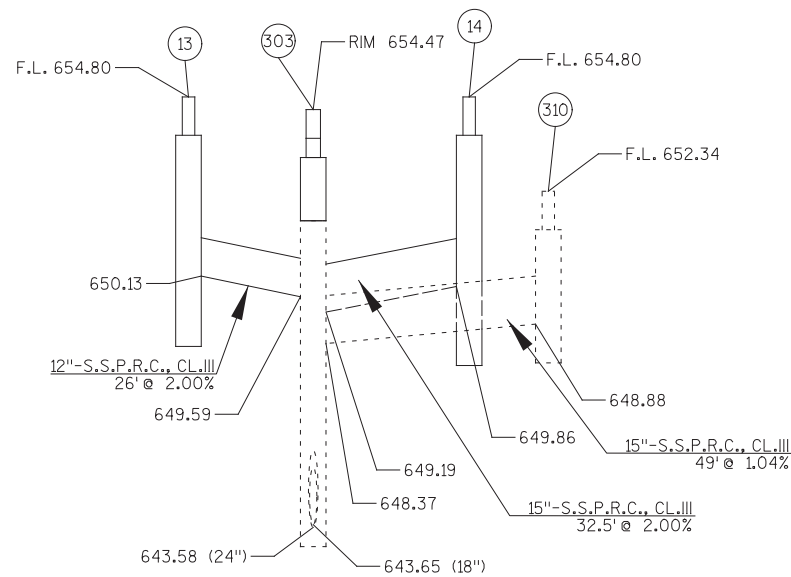
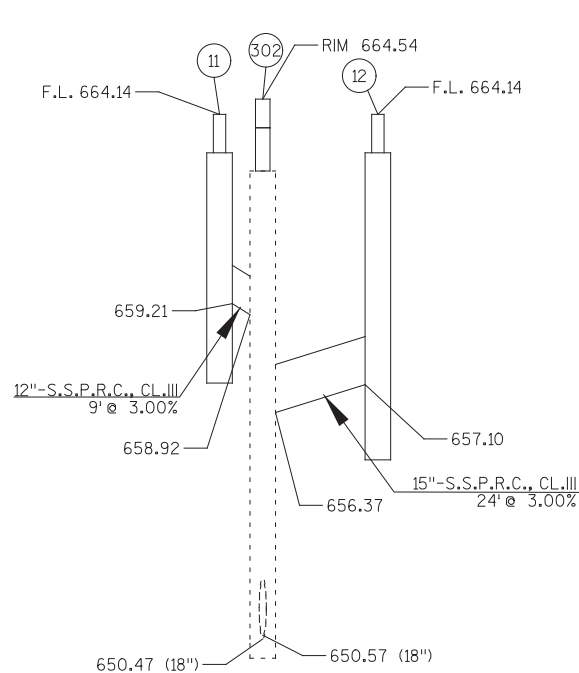
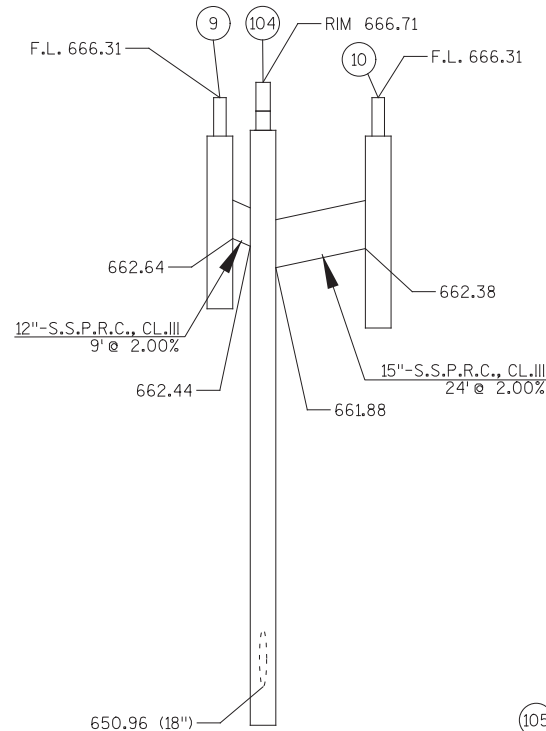
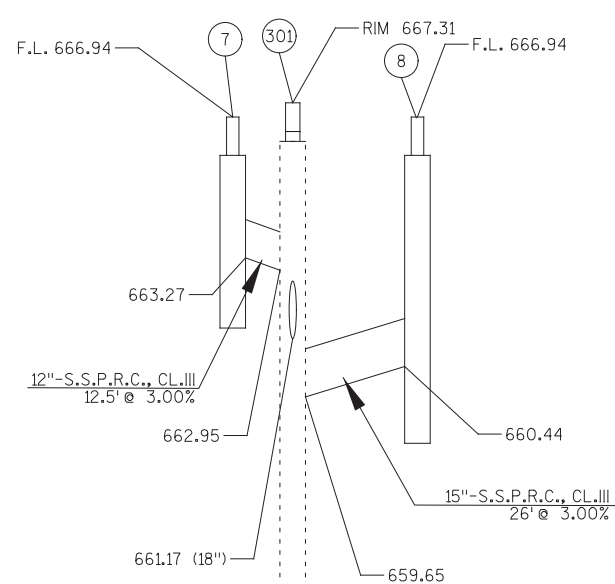
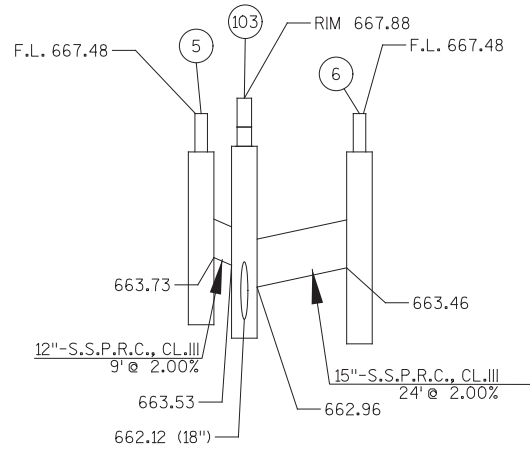
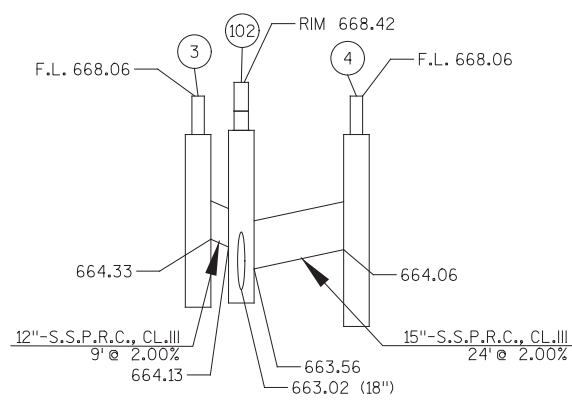
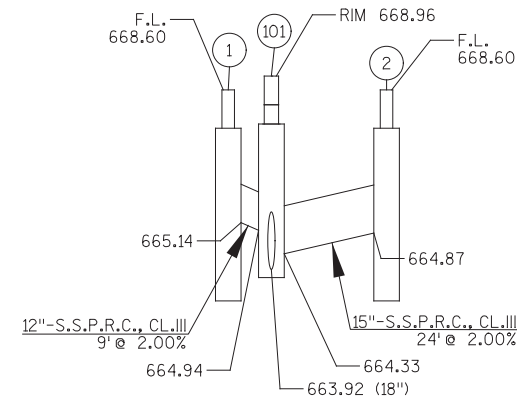
3



- LEGEND
- 0—99 NEW INLETS
 - 100—199 NEW MANHOLES
 - 300—399 EXISTING STRUCTURES

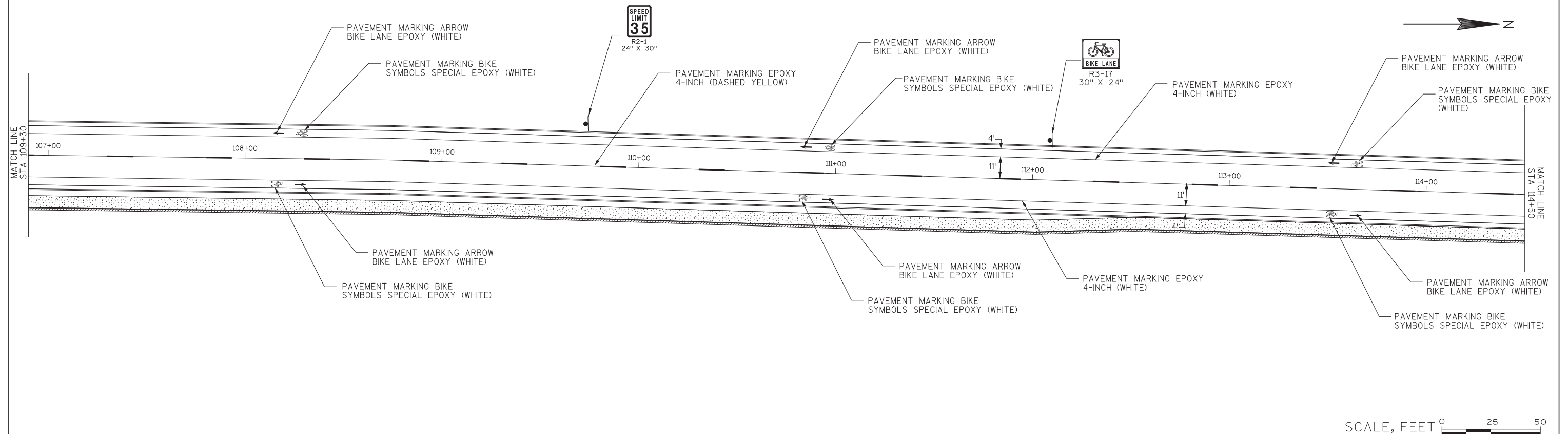
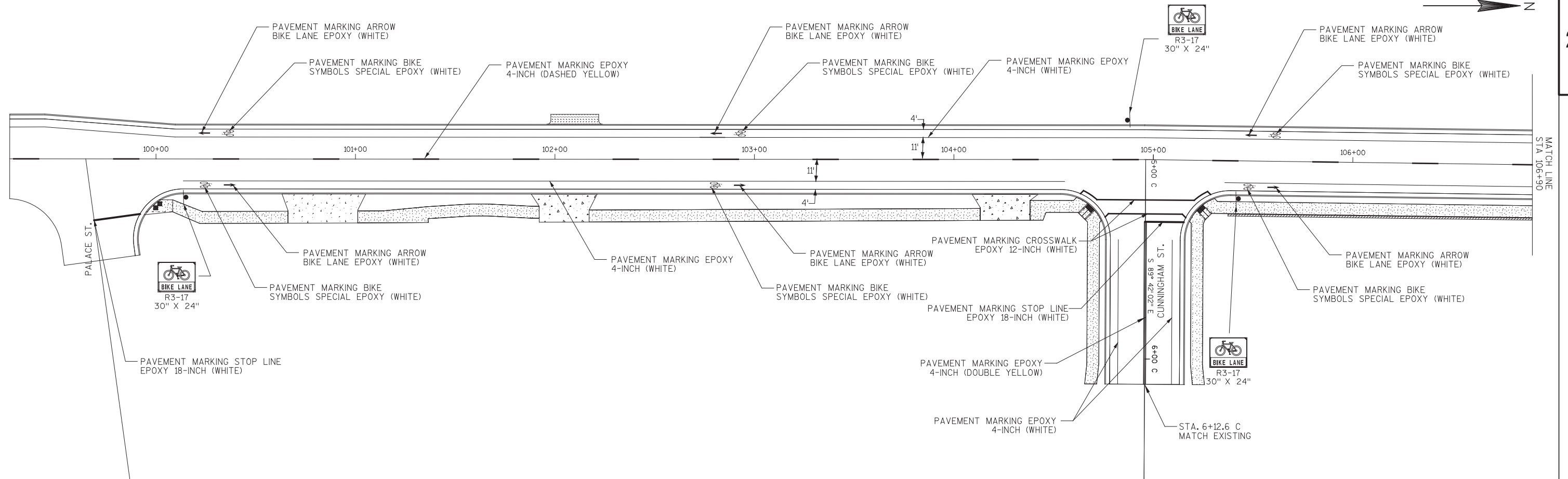


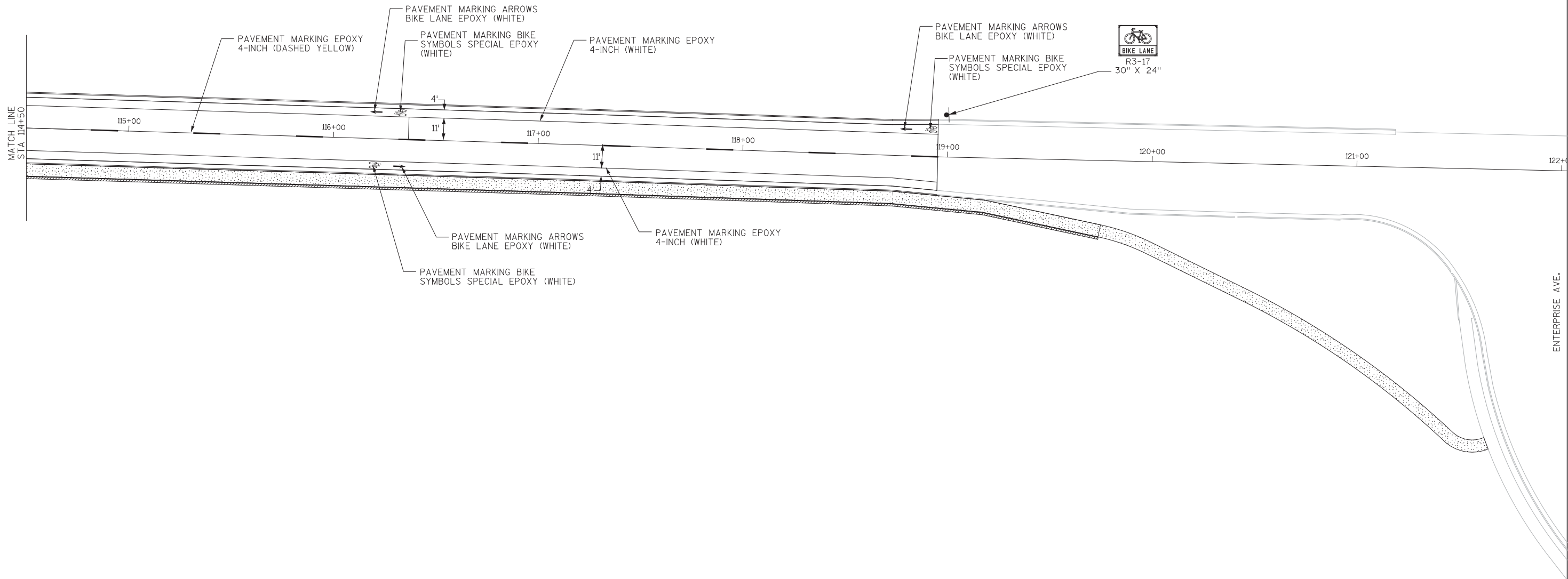




LEGEND		
0	99	NEW INLETS
100	199	NEW MANHOLES
300	399	EXISTING STRUCTURES

NOTE: PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. THE ELEVATIONS AND GRADES SHOWN ON PLAN SHALL BE USED IN CONSTRUCTION.





SCALE, FEET 0 25 50

SIGNING KEY

DETOUR
AHEAD
W20-2

1

END
DETOUR
M4-8A
24" X 18"

2

NORTH
OAK ST
DETOUR
M4-9R (MOD.)
30" X 24"

3

NORTH
OAK ST
DETOUR
M4-9L (MOD.)
30" X 24"

4

NORTH
OAK ST
DETOUR
M4-9 (MOD.)
30" X 27"

5

NORTH
OAK ST
DETOUR
M4-9L (MOD.)
30" X 24"

6

NORTH
OAK ST
DETOUR
M4-9R (MOD.)
30" X 24"

7

SOUTH
OAK ST
DETOUR
M4-9R (MOD.)
30" X 24"

8

SOUTH
OAK ST
DETOUR
M4-9L (MOD.)
30" X 27"

9

SOUTH
OAK ST
DETOUR
M4-9 (MOD.)
30" X 24"

10

SOUTH
OAK ST
DETOUR
M4-9L (MOD.)
30" X 24"

11

SOUTH
OAK ST
DETOUR
M4-9R (MOD.)
30" X 24"

12

* NEED TO SPECIFY SIGN AND TEXT SIZES.

LEGEND

POST WITH ATTACHED SIGN

DETOUR ROUTE

NOTE: SEE SPECIAL PROVISIONS FOR DETOUR REQUIREMENTS.
COVER ANY EXISTING SIGN CONFLICTS AT THE ENGINEER'S DIRECTION.
SEE S.D.D. DETOUR SIGNING FOR MAINLINE CLOSURES.
SEE TRAFFIC CONTROL DETAILS FOR ADDITIONAL SIGNING.

PROJECT NO:5991-05-78	HWY:OAK STREET	COUNTY:LA CROSSE	DETOUR PLAN	SHEET	E
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FILE NAME : \$\$....designfile....\$\$ PLOT DATE : \$\$...plottingdate...\$\$ PLOT BY : \$\$...plotuser...\$\$ PLOT NAME : PLOT SCALE : \$\$.....plotscale.....\$\$ WISDOT/CADDs SHEET 42

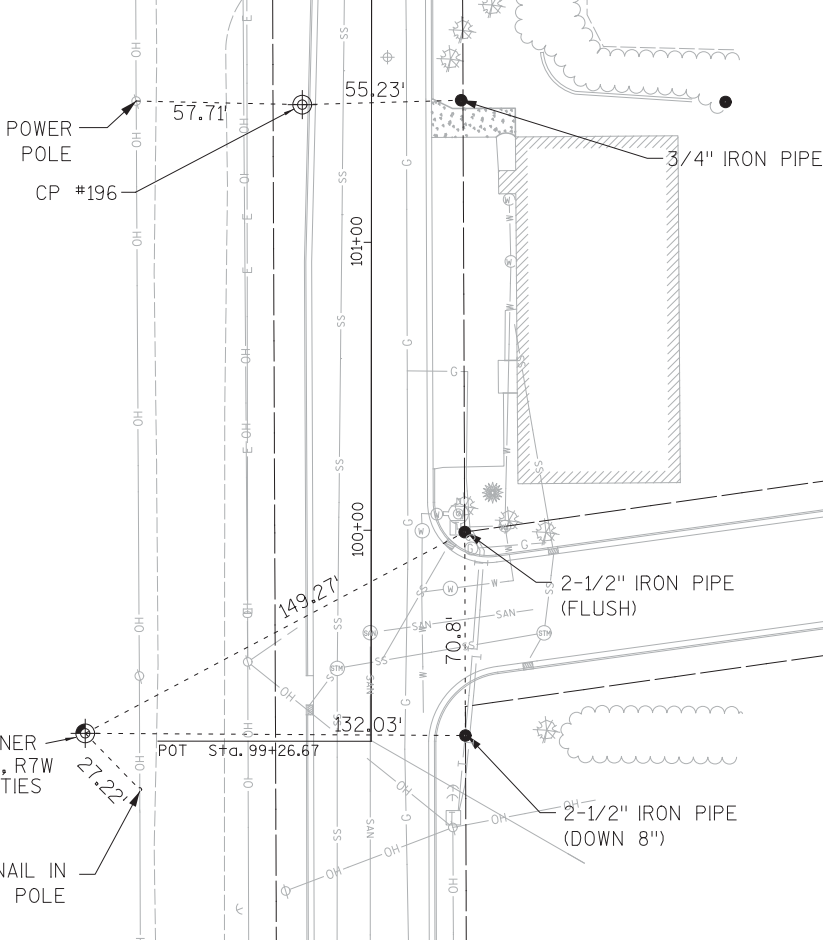
2

CP #196
10" SPIKE
STATION 101+47.823
OFFSET = 24.061' LT
N = 145,578.96
E = 450,981.37
ELEV = 646.20

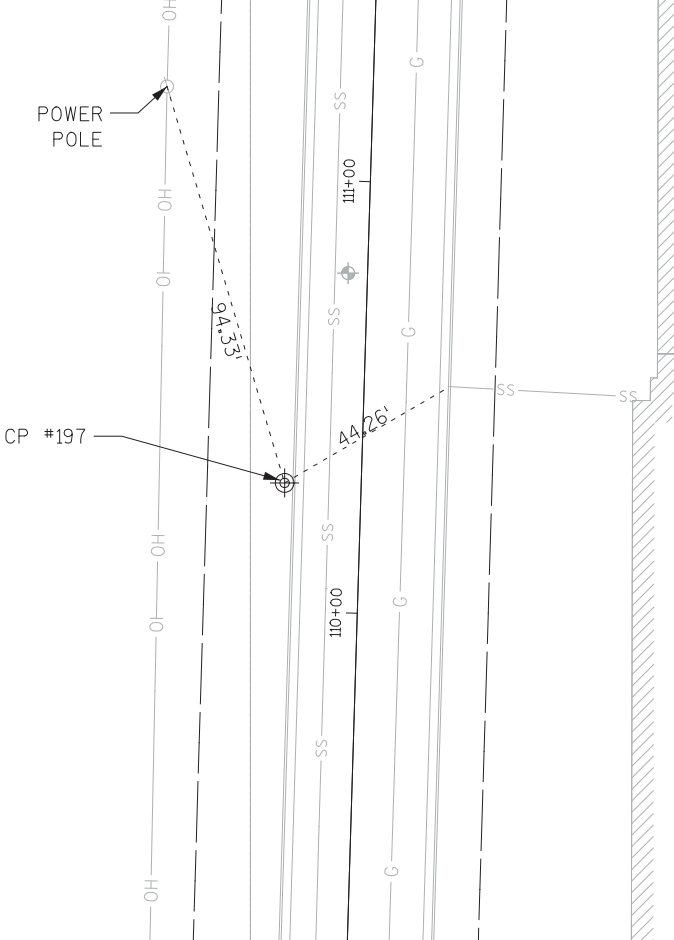
SW SECTION CORNER
STATION 99+29.36
OFFSET = 99.31' LT
N = 145,360.553
E = 450,905.972
BRASS CAPPED
LUNDE MARKER

SOUTHWEST CORNER
SECTION 16, T16N, R7W
LOCATED FROM TIES

PK NAIL IN
POWER POLE

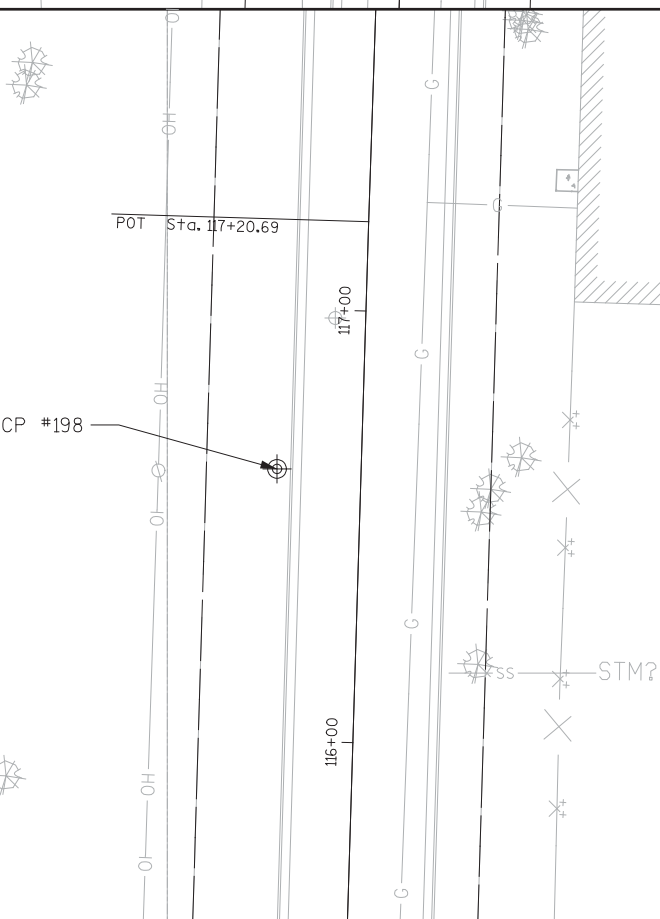


CP #197
10" SPIKE
STATION 110+29.671
OFFSET = 17.72' LT
N = 146,461.220
E = 450,997.740
ELEV = 666.54

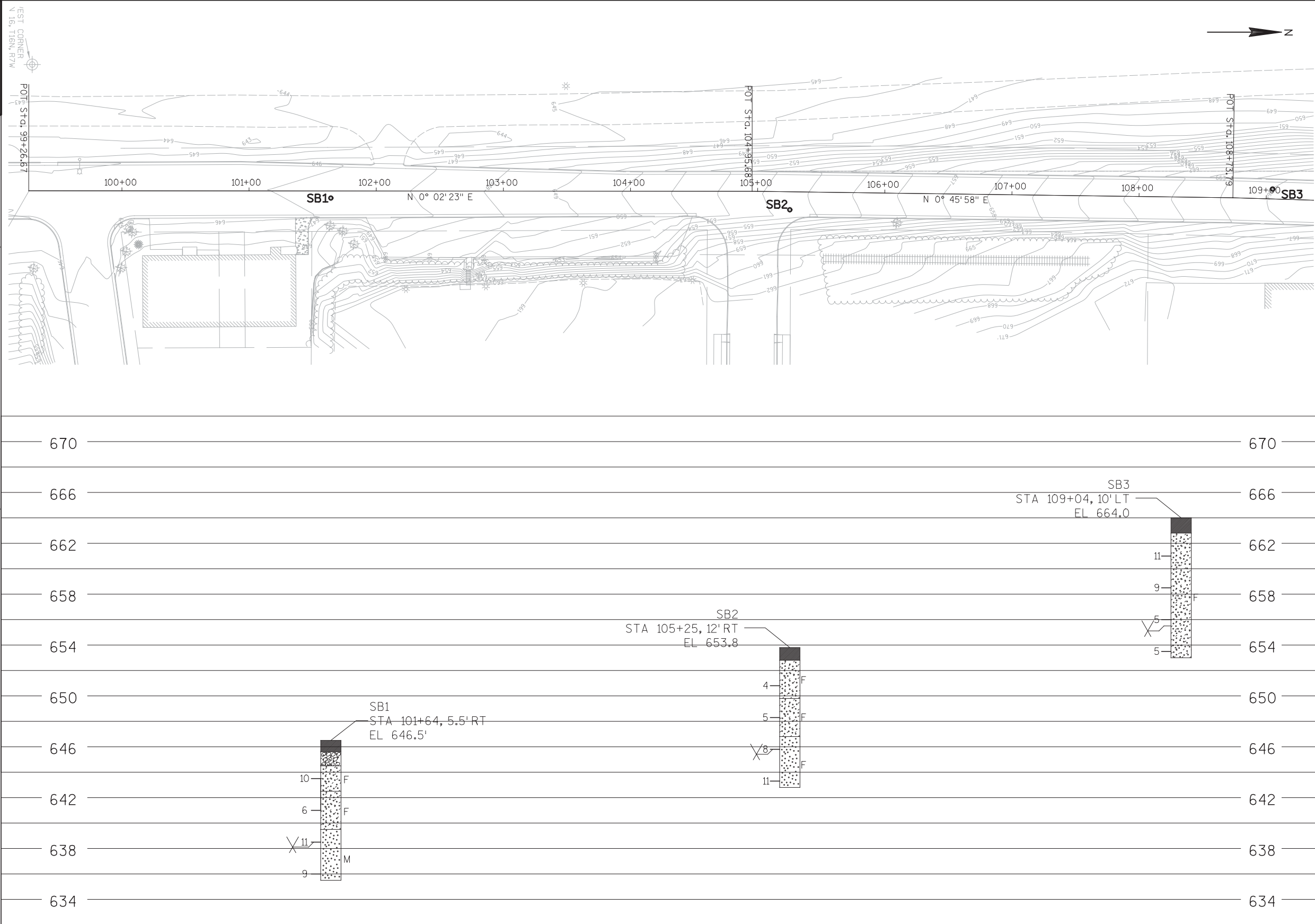


2

CP #198
10" SPIKE
STATION 116+62.836
OFFSET = 18.797' LT
N = 147,094.15
E = 451,015.22
ELEV = 668.21



PI STATIONS	N	E	BEARING
99+26.67	145,357.79	451,005.28	N 0° 02' 23" E
104+95.68	145,926.80	451,005.67	N 0° 45' 58" E
108+73.79	146,304.88	451,010.73	N 1° 44' 23" E
117+20.69	147,151.39	451,036.44	N 1° 56' 13" E
118+95.16	147,325.76	451,042.34	N 1° 16' 48" E
123+75.95	147,806.43	451,053.08	



ABBREVIATIONS

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

MATERIAL SYMBOLS

PAVEMENT STRUCTURE	SILT	SANDSTONE
SAND	PEAT	LIMESTONE
GRAVEL	CLAY	IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL

LEGEND OF BORING

BORING NO.
STA.
ELEV.
UNCONFINED STRENGTH
BLOWS PER 6-IN. USING 10# WT. FALLING 24"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION

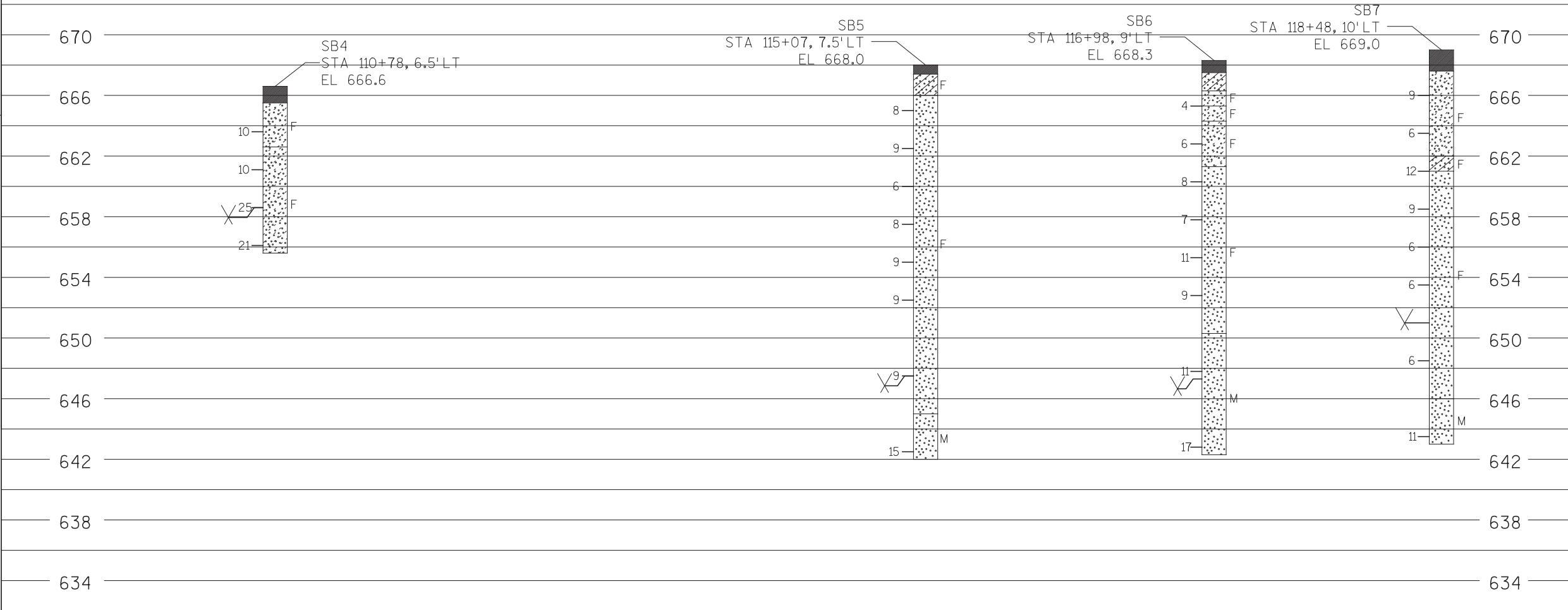
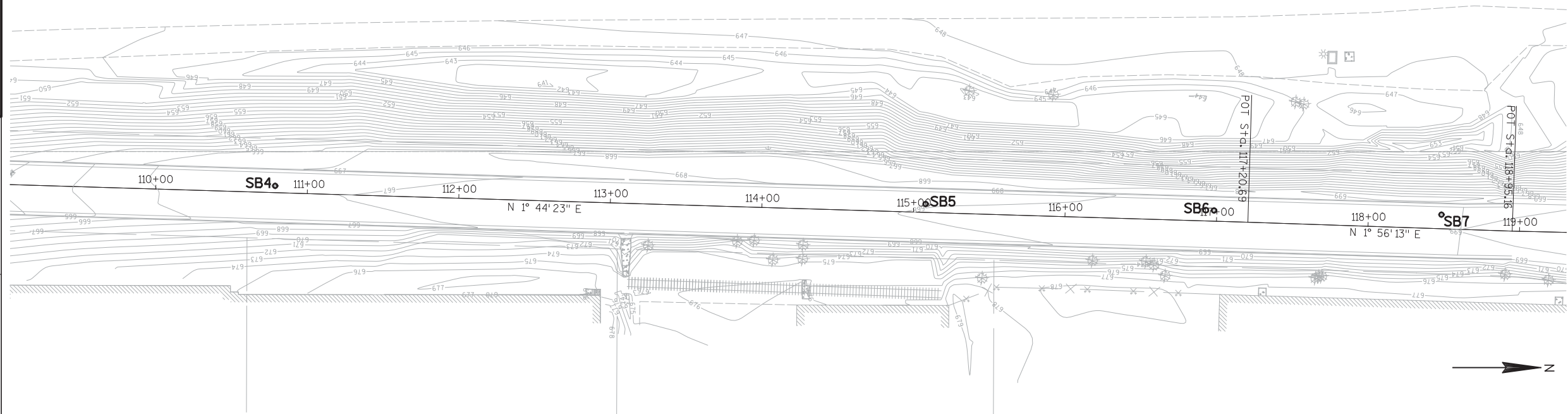
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER 6-INCH AT THE LOCATIONS INDICATED ARE BASED ON DCP TESTING. THE DCP TESTS WERE PREFORMED USING A SOLID METAL ROD FITTED WITH A 1-3/8-INCH DIAMETER CONICAL POINT. THE POINT IS DRIVEN INTO THE SOIL WITH A 10-POUND WEIGHT FALLING 24-INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

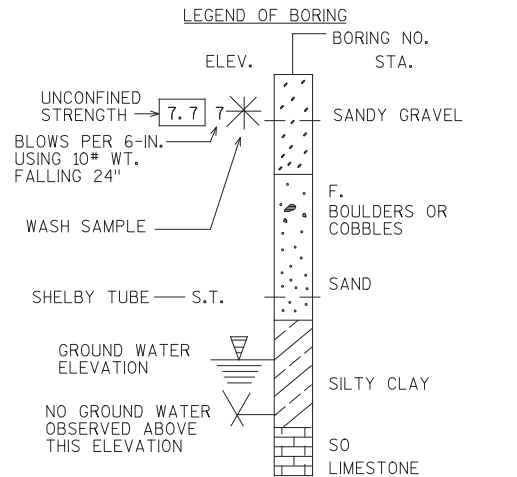
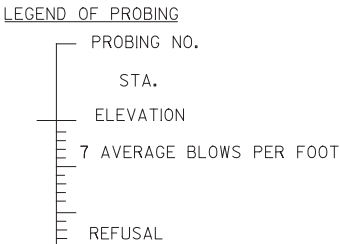
NOTES:
1. SOIL BORINGS COMPLETED BY BRAUN INTERTEC CORPORATION
2. ALL SOIL BORINGS WERE OBTAINED USING 3/4" HSA, AUTOHAMMER



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DATE 29JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE		5991-05-78			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	8.000	8.000
0020	201.0205	GRUBBING	STA	8.000	8.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	2.000	2.000
0040	204.0100	REMOVING PAVEMENT	SY	14.000	14.000
0050	204.0150	REMOVING CURB & GUTTER	LF	3,993.000	3,993.000
0060	204.0215	REMOVING CATCH BASINS	EACH	8.000	8.000
0070	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	77.000	77.000
0080	204.0245	REMOVING STORM SEWER (SIZE) 02. 15-INCH	LF	32.000	32.000
0090	204.0280	SEALING PIPES	EACH	1.000	1.000
0100	205.0100	EXCAVATION COMMON	CY	4,048.000	4,048.000
0110	213.0100	FINISHING ROADWAY (PROJECT) 01. 5991-05-78	EACH	1.000	1.000
0120	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	50.000	50.000
0130	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	6,701.000	6,701.000
0140	312.0110	SELECT CRUSHED MATERIAL	TON	550.000	550.000
0150	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	140.000	140.000
0160	455.0115	ASPHALTIC MATERIAL PG64-22	TON	63.000	63.000
0170	455.0120	ASPHALTIC MATERIAL PG64-28	TON	52.000	52.000
0180	455.0605	TACK COAT	GAL	180.000	180.000
0190	460.1103	HMA PAVEMENT TYPE E-3	TON	2,068.000	2,068.000
0200	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,330.000	1,330.000
0210	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	3.000	3.000
0220	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	4,810.000	4,810.000
0230	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	4,026.000	4,026.000
0240	602.0410	CONCRETE SIDEWALK 5-INCH	SF	13,439.000	13,439.000
0250	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	24.000	24.000
0260	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	100.500	100.500
0270	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	229.500	229.500
0280	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	566.000	566.000
0290	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	16.000	16.000
0300	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	18.000	18.000
0310	608.0415	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH	LF	69.000	69.000
0320	611.0420	RECONSTRUCTING MANHOLES	EACH	2.000	2.000
0330	611.0530	MANHOLE COVERS TYPE J	EACH	5.000	5.000
0340	611.0624	INLET COVERS TYPE H	EACH	20.000	20.000
0350	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	20.000	20.000
0360	611.2004	MANHOLES 4-FT DIAMETER	EACH	5.000	5.000
0370	611.8110	ADJUSTING MANHOLE COVERS	EACH	3.000	3.000
0380	611.8115	ADJUSTING INLET COVERS	EACH	4.000	4.000
0390	611.8120.S	COVER PLATES TEMPORARY	EACH	4.000	4.000
0400	619.1000	MOBILIZATION	EACH	1.000	1.000
0410	624.0100	WATER	MGAL	8.000	8.000
0420	625.0500	SALVAGED TOPSOIL	SY	3,775.000	3,775.000
0430	628.1504	SILT FENCE	LF	2,230.000	2,230.000
0440	628.1520	SILT FENCE MAINTENANCE	LF	2,230.000	2,230.000
0450	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	4.000
0460	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000

DATE 29JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE		5991-05-78			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0470	628.2004	EROSION MAT CLASS I TYPE B	SY	1,980.000	1,980.000
0480	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	1,775.000	1,775.000
0490	628.2039	EROSION MAT CLASS III TYPE D	SY	100.000	100.000
0500	628.7005	INLET PROTECTION TYPE A	EACH	20.000	20.000
0510	628.7015	INLET PROTECTION TYPE C	EACH	24.000	24.000
0520	629.0210	FERTILIZER TYPE B	CWT	2.500	2.500
0530	630.0140	SEEDING MIXTURE NO. 40	LB	71.000	71.000
0540	630.0200	SEEDING TEMPORARY	LB	25.000	25.000
0550	634.0414	POSTS WOOD 4X4-INCH X 14-FT	EACH	6.000	6.000
0560	637.0202	SIGNS REFLECTIVE TYPE II	SF	30.000	30.000
0570	638.2102	MOVING SIGNS TYPE II	EACH	9.000	9.000
0580	638.2602	REMOVING SIGNS TYPE II	EACH	2.000	2.000
0590	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	2.000	2.000
0600	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	8.000	8.000
0610	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0620	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5991-05-78	EACH	1.000	1.000
0630	643.0300	TRAFFIC CONTROL DRUMS	DAY	100.000	100.000
0640	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	424.000	424.000
0650	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	848.000	848.000
0660	643.0900	TRAFFIC CONTROL SIGNS	DAY	636.000	636.000
0670	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 5991-05-78	EACH	1.000	1.000
0680	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	3,127.000	3,127.000
0690	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	4,570.000	4,570.000
0700	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	15.000	15.000
0710	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	41.500	41.500
0720	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	90.000	90.000
0730	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	25.000	25.000
0740	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	2,067.000	2,067.000
0750	650.5000	CONSTRUCTION STAKING BASE	LF	2,067.000	2,067.000
0760	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	4,026.000	4,026.000
0770	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. WALL MODULAR BLOCK GRAVITY STA 112+55	LS	1.000	1.000
0780	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5991-05-78	LS	1.000	1.000
0790	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	2,067.000	2,067.000
0800	690.0150	SAWING ASPHALT	LF	474.000	474.000
0810	690.0250	SAWING CONCRETE	LF	27.000	27.000
0820	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,200.000	1,200.000
0830	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	600.000	600.000
0840	SPV.0060	SPECIAL 01. REPLACE MANHOLE CASTINGS	EACH	3.000	3.000
0850	SPV.0060	SPECIAL 02. PAVEMENT MARKING BIKE SYMBOL SPECIAL	EACH	15.000	15.000

CATEGORY 0010 ITEMS

CLEARING AND GRUBBING

				CLEARING 201.0105	GRUBBING 201.0205	
STATION	TO	STATION	LOCATION	STA	STA	REMARKS
101+00	-	102+00	RT	1	1	
106+00	-	107+00	RT	1	1	
113+00	-	115+00	RT	2	2	
116+00	-	120+00	RT	4	4	
PROJECT TOTALS =				8	8	

REMOVING CATCH BASINS

				204.0215	
STATION		LOCATION		EACH	REMARKS
99+37.6		21.9'	LT	1	
99+95.6		27.8'	RT	1	
103+98.0		15.1'	LT	1	
103+98.7		19.6'	RT	1	
108+97.7		15.2'	LT	1	
108+97.7		19.4'	RT	1	
113+10.4		15.3'	LT	1	
113+11.3		19.4'	RT	1	
PROJECT TOTALS =				8	

SEALING PIPES

				204.0280	
STATION		LOCATION		EACH	REMARKS
99+54.6		RT		1	
PROJECT TOTALS =				1	

REMOVING SMALL CULVERT PIPES

				203.0100	
STATION		LOCATION		EACH	REMARKS
107+90		RT		2	
PROJECT TOTALS =				2	

REMOVING STORM SEWER SUMMARY

				STORM SEWER (SIZE) 01. 12-INCH 204.0245	STORM SEWER (SIZE) 02. 15-INCH 204.0245	
STATION	TO	STATION	LOCATION	LF		REMARKS
99+55	-	95+95	RT	47	-	12" RCCP
103+98	-		LT	7	-	12" RCCP
103+99	-		RT	8	8	15" RCCP
108+98	-		LT	7	-	12" RCCP
108+98	-		RT	-	12	15" RCCP
113+11	-		LT	8	-	12" RCCP
113+11	-		RT	-	12	15" RCCP
PROJECT TOTALS =				77	32	

REMOVING PAVEMENT

				204.0100	
STATION	TO	STATION	LOCATION	SY	REMARKS
101+36	-	101+50	21' RT	14	
PROJECT TOTALS =				14	

EXCAVATION SUMMARY

						SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY	UNEXPANDED FILL CY	1.25* EXPANDED FILL CY	WASTE CY	
STATION	TO	STATION	LOCATION	204.0150 LF	REMARKS	205.0100 COMMON CY					REMARKS
99+27	-	118+95	LT	1,969	CONCRETE						
99+90	-	104+51	RT	483	CONCRETE						
104+51	-	105+41	CUNNINGHAM ST	188	ASPHALT						
105+41	-	118+95	RT	1,354	CONCRETE						
PROJECT TOTALS =				3,993		4,048	1,152	0	666	832	3,216

SEE EARTHWORK SUMMARY SHEET FOR DETAILS

CATEGORY 0010 ITEMS

PAVEMENT SUMMARY

FINISHING ROADWAY (PROJECT) 01. 5991-05-78

LOCATION	213.0100 EACH	REMARKS
PROJECT 5991-05-78	1	
PROJECT TOTALS =	1	

STATION	TO	STATION	LOCATION	ASPHALTIC MATERIAL PG 64-22 455.0115 TON	ASPHALTIC MATERIAL PG 64-28 455.0120 TON	TACK COAT 455.0605 GAL	HMA PAVEMENT TYPE E-3 460.1103 TON	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON	REMARKS
99+27	-	118+95	MAINLINE	58	47	166	1,903	-	
99+27	-	100+10	RT	1.5	2	4	48	-	PALACE STREET
101+96	-	102+24	LT	-	-	-	-	3	DRIVEWAY
5+15 C	-	6+12.6 C	MAINLINE	3.5	3	10	117	-	CUNNINGHAM STREET
PROJECT TOTALS =				63	52	180	2,068	3	

BASE AGGREGATE DENSE AND SELECT CRUSHED MATERIAL SUMMARY

STATION	TO	STATION	LOCATION	305.0110 B.A.D. 3/4-INCH TON	305.0120 B.A.D. 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	REMARKS
99+26.7	-	118+95.2	MAINLINE	-	6,240	-	
99+26.7	-	100+13.7	RT	-	118	-	PALACE ST
5+15 C	-	6+12.6 C	MAINLINE	-	343	-	CUNNINGHAM ST
117+00	-	118+95	LT	-	-	550	
			UNDISTRIBUTED	50	-	-	FOR DRIVEWAYS
PROJECT TOTALS =				50	6,701	550	

WALL MODULAR BLOCK GRAVITY

STATION	TO	STATION	LOCATION	532.0200.S SF	REMARKS
105+37	-	119+73	RT	4,810	
PROJECT TOTALS =				4,810	

CONCRETE DRIVEWAY AND SIDEWALK SUMMARY

STATION	STATION	LOCATION	416.0160 CONCRETE DRIVEWAY 6- INCH SY	602.0410 CONCRETE SIDEWALK 5- INCH SF	REMARKS
99+94.7	-	100+66.2	RT	418	
100+83.6	-		RT	60	
101+01.2	-	101+92.1	RT	570	
102+04.6	-		RT	42	
102+17.2	-	104+13.2	RT	1,176	
104+25.7	-		RT	38	
104+38.2	-	104+74.0	RT	212	
105+18.6	-	121+95.21	RT	10,030	
5+25 C	-	6+12.6 C	LT & RT	1,033	CUNNINGHAM ST
PROJECT TOTALS =			140	13,439	

CONCRETE CURB & GUTTER 30-INCH TYPE D

STATION	TO	STATION	LOCATION	601.0411 LF	REMARKS
99+27	-	118+95	LT	1,969	
100+14	-	104+54	RT	440	
105+36	-	118+95	RT	1,356	
99+90	-	100+14	RT	44	PALACE STREET
104+54	-	105+36	RT	217	CUNNINGHAM STREET
PROJECT TOTALS =				4,026	

CATEGORY 0010 ITEMS

STORM SEWER SCHEDULE (PIPES)

UPSTREAM		DOWNSTREAM		STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH 608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH 608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH 608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH 608.0415	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH 608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH 608.0324	SLOPE	COMMENTS
STRUCT. NO.	INVERT ELEVATION	TO	STRUCT. NO.	DISCHARGE ELEVATION	LF	LF	LF	LF	LF	%	
1	665.14		101	664.94	9	-	-	-	-	2.00	
2	664.87		101	664.33	-	-	24	-	-	2.00	
101	663.92		102	663.02	-	-	-	-	180	0.50	
3	664.33		102	664.13	9	-	-	-	-	2.00	
4	664.06		102	663.56	-	-	24	-	-	2.00	
102	663.02		103	662.12	-	-	-	-	180	0.50	
5	663.73		103	663.53	9	-	-	-	-	2.00	
6	663.46		103	662.96	-	-	24	-	-	2.00	
103	662.12		301	661.17	-	-	-	-	190	0.50	
7	663.27		301	662.95	12.5	-	-	-	-	3.00	TIE INTO EXIST
8	660.44		301	659.65	-	-	26	-	-	3.00	TIE INTO EXIST
301	661.17		104	650.96	-	-	-	-	8	-	TIE NEW MANHOLE TO EXIST PIPE
9	662.64		104	662.44	9	-	-	-	-	2.00	
10	662.38		104	661.88	-	-	24	-	-	2.00	
104	650.96		302	650.57	-	-	-	-	8	-	TIE NEW MANHOLE TO EXIST PIPE
11	659.21		302	658.92	9	-	-	-	-	3.00	TIE INTO EXIST
12	657.10		302	656.37	-	-	24	-	-	3.00	TIE INTO EXIST
13	650.13		303	649.59	26	-	-	-	-	2.00	
14	649.86		303	649.19	-	-	32.5	-	-	2.00	TAP INTO EXISTING STRUCTURE
15	645.21		304	644.92	9	-	-	-	-	3.00	TIE INTO EXIST
16	643.87		304	643.12	-	-	24	-	-	3.00	TIE INTO EXIST
304	641.27		105	640.18	-	-	-	-	-	8	TIE NEW MANHOLE TO EXIST PIPE
17	642.67		105	642.51	8	-	-	-	-	2.00	
18	642.40		105	641.86	-	-	27	-	-	2.00	
105	640.18		305	639.02	-	-	-	-	-	8	TIE NEW MANHOLE TO EXIST PIPE
19	642.18		305	641.75	-	-	-	69	-	0.60	TAP INTO EXISTING STRUCTURE
20	642.80		305	642.60	-	18	-	-	-	1.10	TIE INTO EXIST
PROJECT TOTALS :					100.5	18	229.5	69	566	16	

ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

CATEGORY 0010 ITEMS

STORM SEWER SCHEDULE (STRUCTURES)

STRUCT. NO.	STATION	LOCATION	CATCH BASINS	MANHOLES 4-	RECONSTRUCTING	MANHOLE COVER	INLET	F.L./RIM	TOP OF BOX	BOX DEPTH	INVERT OUT	DRAINS TO	UPSTREAM INVERT	FROM STRUCTURE	COMMENTS
			4-FT DIAMETER 611.1004 EACH	FT DIAMETER 611.2004 EACH	MANHOLES 611.0420 EACH	TYPE J 611.0530 EACH	COVERS TYPE H 611.0624 EACH								
101	118+50	7.5' LT	-	1	-	1	-	668.96	667.71	4.0	663.92	102	-	-	
1	118+50	17' LT	1	-	-	-	1	668.60	667.60	4.5	665.14	101	-	-	
2	118+50	17' RT	1	-	-	-	1	668.60	667.60	4.5	664.87	101	-	-	
102	116+70	7.5' LT	-	1	-	1	-	668.42	667.17	4.5	663.02	103	663.92	101	
3	116+70	17' LT	1	-	-	-	1	668.06	667.06	4.5	664.33	102	-	-	
4	116+70	17' RT	1	-	-	-	1	668.06	667.06	5.0	664.06	102	-	-	
103	114+90	7.5' LT	-	1	-	1	-	667.88	666.63	5.0	662.12	301	663.02	102	
5	114+90	17' LT	1	-	-	-	1	667.48	666.48	4.5	663.73	103	-	-	
6	114+90	17' RT	1	-	-	-	1	667.48	666.48	5.0	663.46	103	-	-	
301	113+00	7.5' LT	-	-	-	-	-	667.31	-	-	651.35	104	662.12	103	Ex. Structure
7	113+10.5	17' LT	1	-	-	-	1	666.94	665.94	4.5	663.27	301	-	-	
8	113+11.5	17' RT	1	-	-	-	1	666.94	665.94	7.5	660.44	301	-	-	
104	111+00	7.5' LT	-	1	-	1	-	666.71	665.46	15.5	650.96	302	651.35	301	
9	111+00	17' LT	1	-	-	-	1	666.31	665.31	4.5	662.64	104	-	-	
10	111+00	17' RT	1	-	-	-	1	666.31	665.31	5.0	662.38	104	-	-	
302	108+98	7.5' LT	-	-	-	-	-	664.54	-	-	650.47	303	650.96	104	Ex. Structure
11	108+98	17' LT	1	-	-	-	1	664.14	663.14	6.0	659.21	302	-	-	
12	108+98	17' RT	1	-	-	-	1	664.14	663.14	8.0	657.10	302	-	-	
303	105+15	6.3' LT	-	-	1	-	-	654.47	651.57	7.5	643.58	304	650.47	302	Ex. Structure
13	105+40	17' LT	1	-	-	-	1	654.80	653.80	5.5	650.13	303	-	-	
14	105+40	17' RT	1	-	-	-	1	654.80	653.80	6.0	649.86	303	-	-	
304	103+97	7.5' LT	-	-	1	-	-	651.52	648.57	8.75	641.27	105	643.58	303	Ex. Structure
15	103+97	17' LT	1	-	-	-	1	651.17	650.17	7.0	645.21	304	-	-	
16	103+97	17' RT	1	-	-	-	1	651.17	650.17	8.0	643.87	304	-	-	
105	101+80	9.5' LT	-	1	-	1	-	646.70	645.45	6.5	640.18	305	641.27	304	
17	101+80	17' LT	1	-	-	-	1	646.34	645.34	4.5	642.67	105	-	-	
18	101+80	17' RT	1	-	-	-	1	646.34	645.34	5.0	642.40	105	-	-	
305	99+52	11.2' LT	-	-	-	-	-	645.30	-	-	638.42	307	640.18	105	Ex. Structure
19	100+15	17' RT	1	-	-	-	1	645.12	644.12	4.0	642.18	305	-	-	
20	99+37	22.0' LT	1	-	-	-	1	645.05	644.05	3.0	642.80	305	-	-	
PROJECT TOTALS			20	5	2	5	20								

FOR INLET COVERS TYPE H PLACED ON CATCH BASINS 4-FT DIAMETER, A PRE-CAST REINFORCED CONCRETE FLAT SLAB TOP WITH A 2' x 3' OPENING IS REQUIRED.
FLOWLINE ELEVATIONS ARE AT THE FLOWLINE OF THE GUTTER AND ARE TYPICALLY DEPRESSED 1" BELOW THE NORMAL GUTTER FLOWLINE.
FOR NEW STRUCTURES, TOP OF BOX ELEVATIONS ARE TYPICALLY FLOWLINE/RIM ELEVATIONS MINUS CASTING DEPTH AND 6" FOR ADJUSTMENT RINGS. DEPTH FOR ADJUSTMENT MAY VARY.
OFFSETS ARE GIVEN TO CENTER OF STRUCTURE FOR MANHOLES AND FLOWLINE OF GUTTER LINE FOR CATCH BASINS.

ASSOCIATED PIPE WALL THICKNESS
USED IN DEPTH COMPUTATIONS

PIPE	WALL THICKNESS
12"	2.00"
15"	2.25"
18"	2.50"
21"	2.75"
24"	3.00"
27"	3.25"
30"	3.50"
36"	4.00"
42"	4.50"

CATEGORY 0010 ITEMS

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

602.0515			
STATION	LOCATION	SF	REMARKS
100+00.9	23.5' RT	8	
104+68.1	24.5' RT	8	
105+26.4	23.5' RT	8	
PROJECT TOTALS =		24	

WATER

624.0100			
STATION TO STATION	LOCATION	MGAL	REMARKS
99+27 - 118+95	PROJECT	8	

ADJUSTING COVER SUMMARY

ADJUSTING COVER SUMMARY						
STRUCT. NO.	STATION	LOCATION	ADJUSTING MANHOLE COVERS 611.8110	ADJUSTING INLET COVERS 611.8115	COVER PLATES TEMPORARY 611.8120.S	COMMENTS
			EACH	EACH	EACH	
301	113+00	8' LT	1	-	1	EXISTING STORM
302	108+98	7.5' LT	1	-	1	EXISTING STORM
305	99+52	11.7' LT	1	-	1	EXISTING STORM
308	104+77	47.2' RT	-	1	-	EXISTING INLET
309	104+77	61.0' RT	-	1	-	EXISTING INLET
310	105+16	47.2' RT	-	1	-	EXISTING INLET
311	105+16	61.0' RT	-	1	-	EXISTING INLET
CAT 0010 TOTALS =			3	4	3	

SILT FENCE SUMMARY

SILT FENCE SUMMARY						
STATION	TO	STATION	LOCATION	SILT FENCE 628.1504	SILT FENCE MAINTENANCE 628.1520	REMARKS
				LF	LF	
98+72	-	101+95	LT	305	305	
102+26	-	119+42	LT	1690	1690	
119+66	-	121+66	RT	235	235	
PROJECT TOTALS =				2,230	2,230	

EROSION CONTROL SUMMARY

EROSION CONTROL SUMMARY													
LOCATION	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500	EROSION MAT CLASS 1 TYPE B 628.2004	EROSION MAT URBAN CLASS 1 TYPE B 628.2008	EROSION MAT CLASS III TYPE D 628.2039	FERTILIZER TYPE B 629.0210	SEEDING MIXTURE NO. 40 630.0140	SEEDING TEMPORARY 630.0200	REMARKS	
					SY	SY	SY	SY	CWT	LB	LB		
PROJECT 5991-05-78	99+90	-	104+66	RT	335	-	335	-	0.21	6	-	CUNNINGHAM ST.	
	5+20'C'	-	6+12.6'C'	RT	75	-	75	-	0.04	1	-		
	105+30	-	121+95	RT	1,315	-	1,315	-	0.83	24	-		
	99+27	-	119+00	LT	1,955	1,955	-	-	1.23	36	-		
	117+00	-	119+00	LT	-	-	-	100	-	-	-		
UNDISTRIBUTED PROJECT					95	25	50	-	0.19	4	-		
UNDISTRIBUTED LT SIDE ONLY					-	-	-	-	-	-	25		
PROJECT TOTALS =					3,775	1,980	1,775	100	2.50	71	25		

3

CATEGORY 0010 ITEMS

MOBILIZATION EROSION CONTROL

LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	REMARKS
PROJECT 5991-05-78	4	2	
PROJECT TOTALS =	4	2	

POSTS WOOD 4X6-INCH X 14-FT AND SIGNS REFLECTIVE TYPE II

STA	DIR.	LOC.	SIGN CODE	SIZE	DESCRIPTION	SIGNS REFLECTIVE TYPE II 637.0202 SF	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH
101+15	NB	RT	R3-17	30" X 24"	BIKE LANE	5.00	1
105+43	NB	RT	R3-17	30" X 24"	BIKE LANE	5.00	1
104+76	SB	LT	R3-17	30" X 24"	BIKE LANE	5.00	1
109+75	SB	LT	R2-1	24" X 30"	SPEED LIMIT (35)	5.00	1
112+08	SB	LT	R3-17	30" X 24"	BIKE LANE	5.00	1
118+99	SB	LT	R3-17	30" X 24"	BIKE LANE	5.00	1
PROJECT TOTALS =						30.00	6

3

INLET PROTECTION SUMMARY

STATION	LOCATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH	REMARKS
99+37	21.4' LT	1	1	
100+15	16' RT	1	1	
101+80	16' LT	1	1	
101+80	16' RT	1	1	
103+97	16' LT	1	1	
103+97	16' RT	1	1	
105+40	16' LT	1	1	
105+40	15.5' RT	1	1	
108+98	17' LT	1	1	
108+98	16.5' RT	1	1	
111+00	16' LT	1	1	
111+00	16' RT	1	1	
113+10	15.9' LT	1	1	
113+11	16.2' RT	1	1	
114+90	16' LT	1	1	
114+90	16' RT	1	1	
116+70	15'LT	1	1	
116+70	15'RT	1	1	
118+50	17' LT	1	1	
118+50	17' RT	1	1	
5+47 C	19' LT	-	1	
5+47 C	19' RT	-	1	
5+61 C	19' LT	-	1	
5+61 C	19' RT	-	1	
PROJECT TOTALS =		20	24	

SIGN REMOVALS, MOVING SIGNS

STATION	LOCATION	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MOVING SIGNS TYPE II 638.2102 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
99+93	RT	-	-	1	1	STOP SIGN
99+98	RT	-	-	2	1	PALACE ST/OAK ST
101+32		1	1	-	-	BICYCLE ROUTE
101+88		-	-	1	1	NO PARKING
108+28		-	-	1	1	NO PARKING
108+28		-	-	1	1	NO PARKING
109+75		1	1	-	-	SPEED LIMIT 35MPH
113+87		-	-	1	1	NO PARKING
113+87		-	-	1	1	NO PARKING
118+42		-	-	1	1	NO PARKING
PROJECT TOTALS =		2	2	9	8	

FIELD OFFICE TYPE B

LOCATION	642.5001 EACH	REMARKS
PROJECT 5991-05-78	1	
PROJECT TOTALS =	1	

TRAFFIC CONTROL (PROJECT) 01. 5991-05-78

LOCATION	643.0100 EACH	REMARKS
PROJECT 5991-05-78	1	
PROJECT TOTALS =	1	

CATEGORY 0010 ITEMS

TRAFFIC CONTROL DETOUR (PROJECT)
01. 5991-05-78

643.2000		
LOCATION	EACH	REMARKS
PROJECT 5991-05-78	1	
PROJECT TOTALS =		
	1	

TRAFFIC CONTROL SUMMARY

				TRAFFIC CONTROL DRUMS 643.0300	TRAFFIC CONTROL BARRICADES TYPE III 643.0420	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705	REMARKS
STATION	TO	STATION	LOCATION	DAYS	DAYS	DAYS	
	-	99+20	RT & LT	-	106	212	
99+50	-	99+75	RT	-	106	212	
104+75	-	105+25	RT	-	106	212	
	-	119+00	RT & LT	-	106	212	
			UNDISTRIBUTED	100	-	-	
PROJECT TOTALS =				100	424	848	

TRAFFIC CONTROL SIGNS

		SIGN			643.0900		REMARKS
STATION	LOCATION	CODE	DESCRIPTION	EA	DAYS		
89+20	RT	W20-3C	ROAD CLOSED 1000 FT	1	53		
94+20	RT	W20-3D	ROAD CLOSED 500 FT	1	53		
96+70	RT	W20-3A	ROAD CLOSED AHEAD	1	53		
96+75	LT	G20-2A	END ROAD WORK	1	53		
99+20	RT	R11-2	ROAD CLOSED	1	53		
99+75	RT	R11-2	ROAD CLOSED	1	53		
105+25	RT	R11-2	ROAD CLOSED	1	53		CUNNINGHAM
119+00	RT	R11-2	ROAD CLOSED	1	53		
121+45	RT	G20-2A	END ROAD WORK	1	53		
121+50	LT	W20-3A	ROAD CLOSED AHEAD	1	53		
124+00	LT	W20-3D	ROAD CLOSED 500 FT	1	53		
129+00	LT	W20-3C	ROAD CLOSED 1000 FT	1	53		
PROJECT TOTALS =					636		

TRAFFIC CONTROL DETOUR SIGNS

643.3000					
GROUP	LOCATION	SIGN CODE	QTY	DAYS	REMARKS
1	VARIOUS	W20-2	10	530	DETOUR AHEAD
2	OAK ST	M4-8A	2	106	END DETOUR
3	VARIOUS	M4-9R (MOD.)	3	159	NORTH OAK ST/ DETOUR (RT TRN ARROW)
4	VARIOUS	M4-9L (MOD.)	3	159	NORTH OAK ST/ DETOUR (LT TRN ARROW)
5	VARIOUS	M4-9 (MOD.)	5	265	NORTH OAK ST/ DETOUR (UP ARROW)
6	VARIOUS	M4-9L	6	318	NORTH OAK ST/ DETOUR (LT ARROW)
7	VARIOUS	M4-9R	6	318	NORTH OAK ST/ DETOUR (RT ARROW)
8	VARIOUS	M4-9R (MOD.)	2	106	SOUTH OAK ST/ DETOUR (RT TRN ARROW)
9	VARIOUS	M4-9L (MOD.)	5	265	SOUTH OAK ST/ DETOUR (LT TRN ARROW)
10	VARIOUS	M4-9 (MOD.)	3	159	SOUTH OAK ST/ DETOUR (UP ARROW)
11	VARIOUS	M4-9L	8	424	SOUTH OAK ST/ DETOUR (LT ARROW)
12	VARIOUS	M4-9R	6	318	SOUTH OAK ST/ DETOUR (RT ARROW)
PROJECT TOTALS =				3,127	

PAVEMENT MARKING EPOXY 4-INCH

646.0106					
STATION	TO	STATION	LOCATION	LF	REMARKS
99+27	-	118+95	C/L	492	YELLOW SKIPS
99+27	-	118+95	LT	1,968	WHITE EDGE LINE
100+14	-	104+56	RT	442	WHITE EDGE LINE
105+36	-	118+95	RT	1,359	WHITE EDGE LINE
5+32 C	-	6+13 C	C/L	163	DOUBLE YELLOW
5+40 C	-	6+13 C	RT	73	WHITE EDGE LINE
5+40 C	-	6+13 C	LT	73	WHITE EDGE LINE
PROJECT TOTALS =				4,570	

PAVEMENT MARKING ARROWS & SYMBOLS

		647.0206	SPV.0060.02	
		PAVEMENT	PAVEMENT	
		MARKING	MARKING	
		ARROWS BIKE	SYMBOLS BIKE	
		LANE EPOXY	LANE EPOXY	
STATION	LOCATION	EACH	EACH	REMARKS
100+30	RT & LT	2	2	
102+84	RT & LT	2	2	
105+50	RT & LT	2	2	
108+19	RT & LT	2	2	
110+88	RT & LT	2	2	
113+55	RT & LT	2	2	
116+23	RT & LT	2	2	
118+88	LT	1	1	
PROJECT TOTALS =		15	15	

3

CATEGORY 0010 ITEMS

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

				647.0566	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+69	-	99+92	RT	23.0	PALACE STREET
104+96	-	105+15	RT	18.5	CUNNINGHAM STREET
PROJECT TOTALS =				41.5	

PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

				647.0776	
STATION	TO	STATION	LOCATION	LF	REMARKS
104+70	-	105+20	RT	90	CUNNINGHAM STREET
PROJECT TOTALS =				90	

CONSTRUCTION STAKING STORM SEWER

STATION	LOCATION	650.4000 EACH	REMARKS
99+37	21.4' LT	1	
100+15	16' RT	1	
101+80	9.5' LT	1	
101+80	16' RT	1	
101+80	16' LT	1	
103+97	16' RT	1	
103+97	16' LT	1	
105+40	15.5' RT	1	
105+40	16' LT	1	
108+98	16.5' RT	1	
108+98	17' LT	1	
111+00	16' RT	1	
111+00	16' LT	1	
111+00	7.5' LT	1	
113+12	16.2' RT	1	
113+11	15.9' LT	1	
114+90	16' RT	1	
114+90	16' LT	1	
114+90	7.9' LT	1	
116+70	15' RT	1	
116+70	15' LT	1	
116+70	8' LT	1	
118+50	17' RT	1	
118+50	17' LT	1	
118+50	8.6' LT	1	
PROJECT TOTALS =			25

CONSTRUCTION STAKING SUBGRADE

				650.4500	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+26	-	118+95	MAINLINE	1,969	OAK STREET
5+15 C	-	6+12.6 C	MAINLINE	98	CUNNINGHAM STREET
PROJECT TOTALS =				2,067	

CONSTRUCTION STAKING BASE

				650.5000	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+26	-	118+95	MAINLINE	1,969	OAK STREET
5+15 C	-	6+12.6 C	MAINLINE	98	CUNNINGHAM STREET
PROJECT TOTALS =				2,067	

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

				650.5500	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+27	-	118+95	LT	1,969	
100+14	-	104+56	RT	440	
105+36	-	118+95	RT	1,356	
99+90	-	100+14	RT	44	PALACE ST.
5+15 C	-	6+12.6 C	LT & RT	217	CUNNINGHAM ST.
PROJECT TOTALS =				4,026	

CONSTRUCTION STAKING STRUCTURE LAYOUT
(STRUCTURE) 01. WALL MODULAR BLOCK GRAVITY

		650.6500	
CATEGORY	LOCATION	LS	REMARKS
	PROJECT 5991-05-78	1	
PROJECT TOTALS =		1	

CONSTRUCTION STAKING SUPPLEMENTAL
CONTROL (PROJECT) 01. 5991-05-78

		650.9910	
LOCATION	LS	REMARKS	
PROJECT 5991-05-78	1		
PROJECT TOTALS =		1	

CONSTRUCTION STAKING SLOPE STAKES

				650.9920	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+26	-	118+95	MAINLINE	1,969	OAK STREET
5+15 C	-	6+12.6 C	MAINLINE	98	CUNNINGHAM STREET
PROJECT TOTALS =				2,067	

SAWING ASPHALT

				690.0150	
STATION	TO	STATION	LOCATION	LF	REMARKS
99+26.7			MAINLINE	40	
99+54.0	-	99+89.6	RT	36	PALACE STREET
100+22.0	-	101+36.5	RT	115	DRIVEWAY LOT
101+96.7	-	104+44.7	RT	248	DRIVEWAY LOT
6+12.6 C			MAINLINE	35	CUNNINGHAM STREET
PROJECT TOTALS =				474	

SAWING CONCRETE

		690.0250	
STATION	LOCATION	LF	REMARKS
99+27	LT	3	
99+90	RT	3	
101+36	RT	10	
118+95	RT/LT	6	
UNDISTRIBUTED		5	
PROJECT TOTALS =		27	

STATE PROJECT NO: 5991-05-78

HWY: OAK STREET

COUNTY: LA CROSSE

MISCELLANEOUS QUANTITIES

SHEET NO:

E

3

CATEGORY 0020 (Non-Participating Items)

ADJUSTING COVER SUMMARY

CAT	STRUCT. NO.	STATION	LOCATION	COVER PLATES TEMPORARY	REPLACING MANHOLE CASTINGS	COMMENTS
				611.8120.S EACH	SPV.0060.01 EACH	
0020		99+65	C/L	1	1	SANITARY MANHOLE
0020		99+80	32' RT	-	1	WATER MANHOLE
0020		100+00	16' RT	-	1	WATER MANHOLE
CAT 0020 TOTALS =				1	3	

R/W PROJECT NUMBER 5991-05-03	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.01	5
PLAT OF RIGHT-OF-WAY REQUIRED FOR CITY OF LA CROSSE, OAK ST (PALACE STREET TO ENTERPRISE AVE)		
LOCAL STREET		LA CROSSE COUNTY
CONSTRUCTION PROJECT NUMBER 5991-05-78		

CONVENTIONAL ABBREVIATIONS		
ACCESS POINT / DRIVEWAY CONNECTION	AP	REFERENCE LINE
ACCESS RIGHTS	AR	RELEASE OF RIGHTS
ACRES	AC.	REMAINING
AND OTHERS	ET AL.	RIGHT-OF-WAY
CENTERLINE	C/L	SECTION
CERTIFIED SURVEY MAP	CSM	STATION
CORNER	COR.	TEMPORARY LIMITED EASEMENT
DOCUMENT	DOC.	VOLUME
EASEMENT	EASE.	CURVE DATA
HIGHWAY EASEMENT	H.E.	
LAND CONTRACT	LC	LONG CHORD
MONUMENT	MON.	LONG CHORD BEARING
PAGE	P.	RADIUS
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA
RECORDED AS	(100')	LENGTH OF CURVE
		TANGENT

CONVENTIONAL SYMBOLS		
FOUND IRON PIPE/PIN	IF (UNLESS NOTED)	PROPOSED R/W LINE
R/W MONUMENT	• (SET)	EXISTING H.E. LINE
R/W STANDARD	▲ (SET)	PROPERTY LINE
SIGN	ISIGN	LOT & TIE LINES
SECTION CORNER MONUMENT	•	SLOPE INTERCEPTS
SECTION CORNER SYMBOL	•	CORPORATE LIMITS
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
R/W BOUNDARY POINT	RWB20	SECTION LINE
PARCEL NUMBER	802	QUARTER LINE
UTILITY PARCEL NUMBER	92	SIXTEENTH LINE
SIGN NUMBER (OFF PREMISE)	21	EXISTING CENTERLINE
BUILDING		PROPOSED REFERENCE LINE
		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
NON COMPENSABLE	NON
POWER POLE	•
TELEPHONE POLE	•
TELEPHONE PEDESTAL	•
ELECTRIC TOWER	•

NOTES

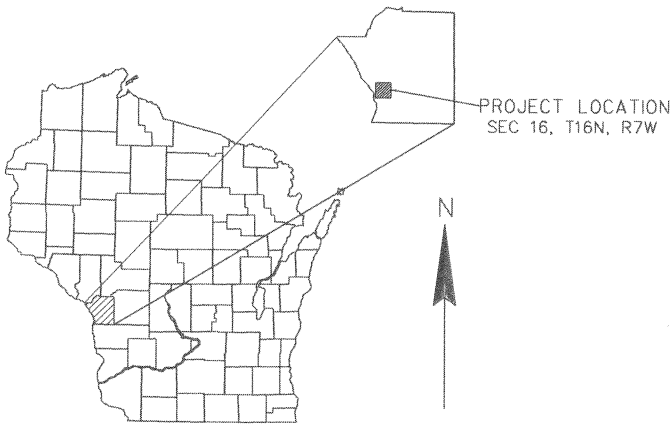
COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, LA CROSSE COUNTY ZONE, NAD 83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE 3/4" x 24" REBAR 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.

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 TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT. FOR WHICH THIS INSTRUMENT IS GIVEN.

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



END RELOCATION ORDER
STA 119+85.36
2055.42' N AND 138.38' E FROM
SW COR SEC 16, T-16-N, R-7-W



LAYOUT
SCALE 0 .25 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.390 MI.

BEGIN RELOCATION ORDER
STA 99+26.67
2.11' N AND 99.34' E FROM
SW COR SEC 16, T-16-N, R-7-W

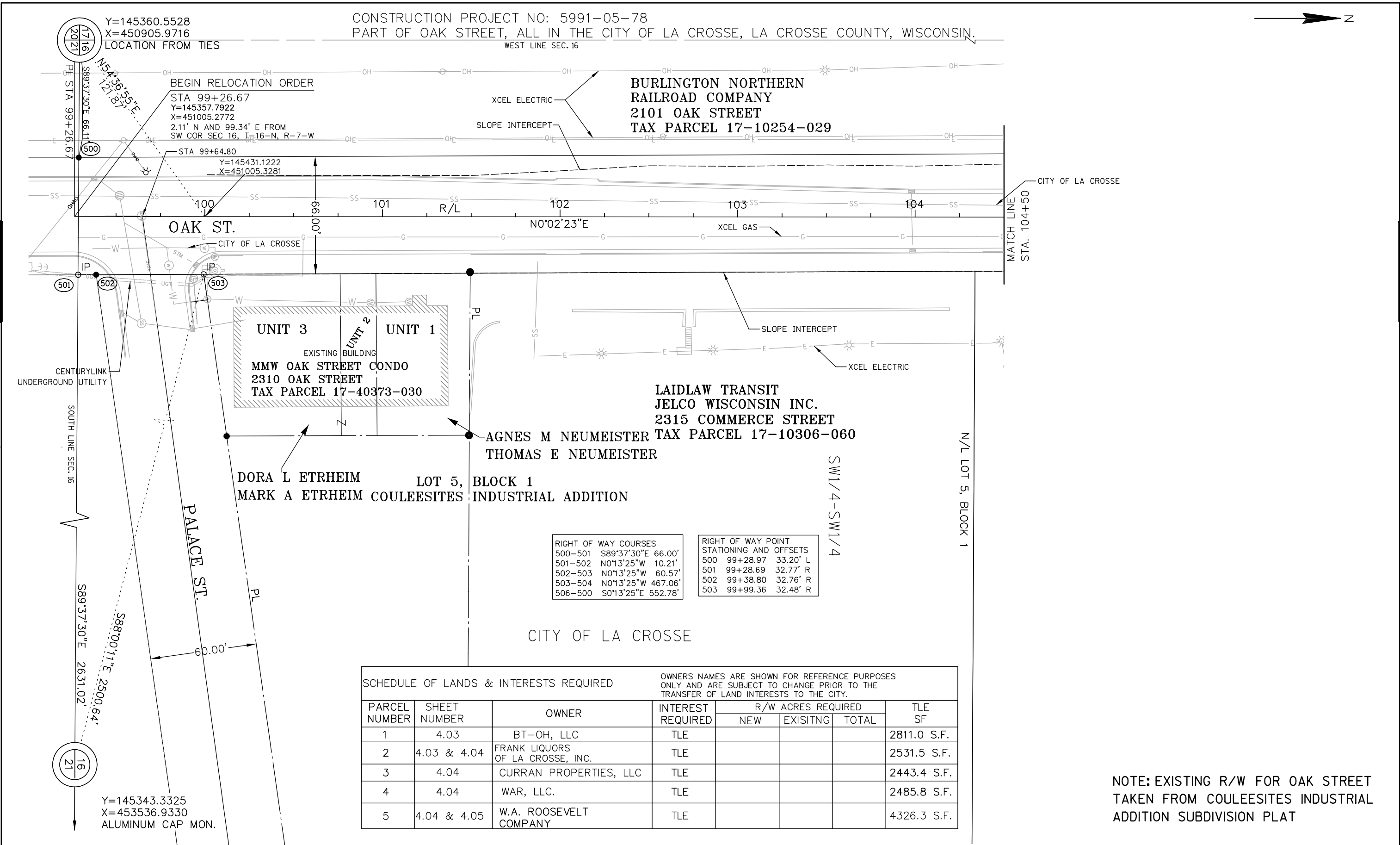


ACCEPTED FOR
CITY LA CROSSE
10.22.12 <i>Ref. T. Hilby</i>
CITY ENGINEER
(Date) (Signature & Title of Official)
ORIGINAL PLAT PREPARED BY
10/17/2012 <i>Frederick J. Hilby</i>
(Date) (Signature)

E

4

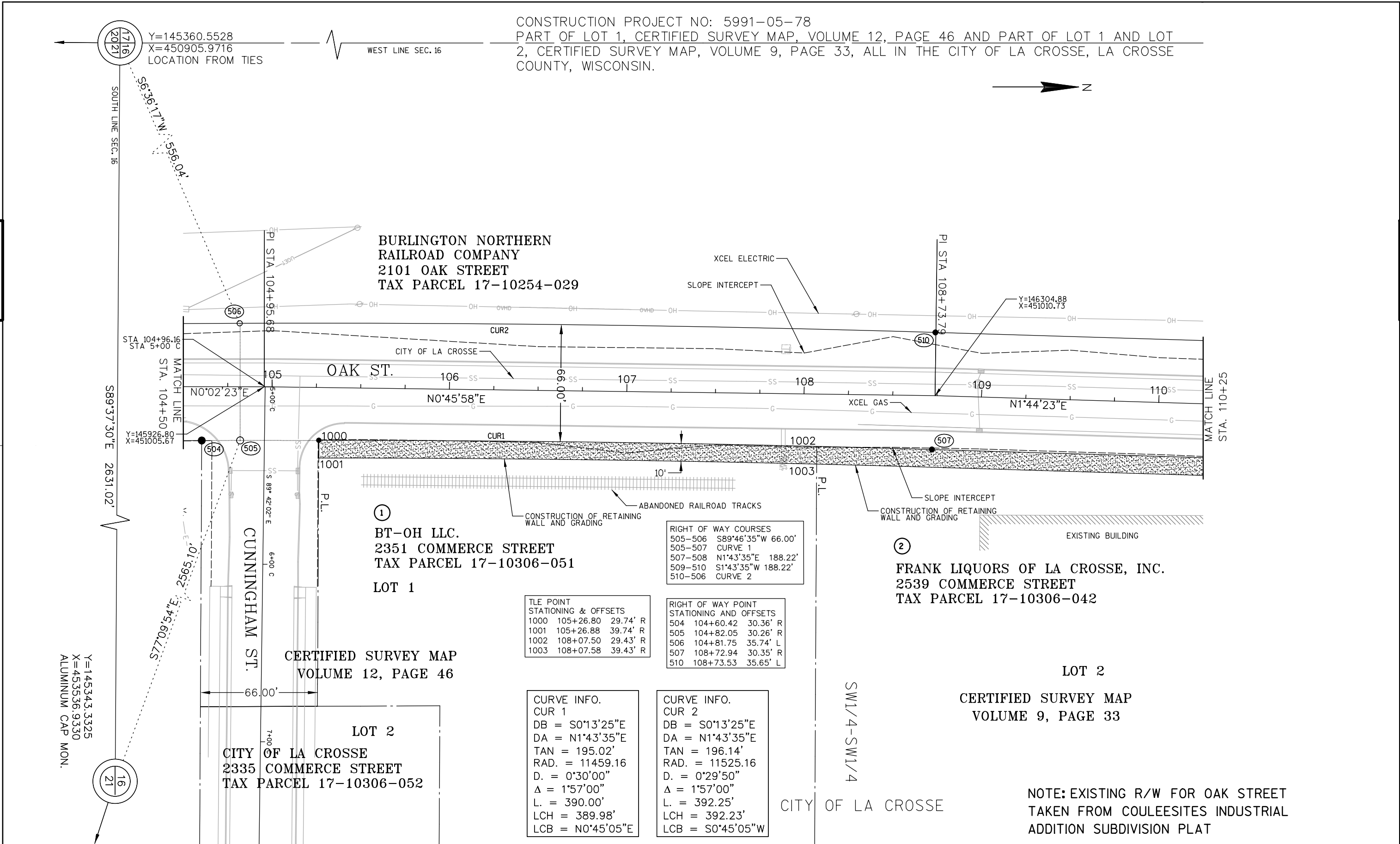
4



REVISION DATE	DATE	SCALE, FEET 0 50	HWY: OAK STREET	STATE R/W PROJECT NUMBER 5991-05-03	PLAT SHEET 4.02	E
	GRID FACTOR 1.0		COUNTY: LA CROSSE	CONSTRUCTION PROJECT NUMBER 5991-05-78	PS&E SHEET	

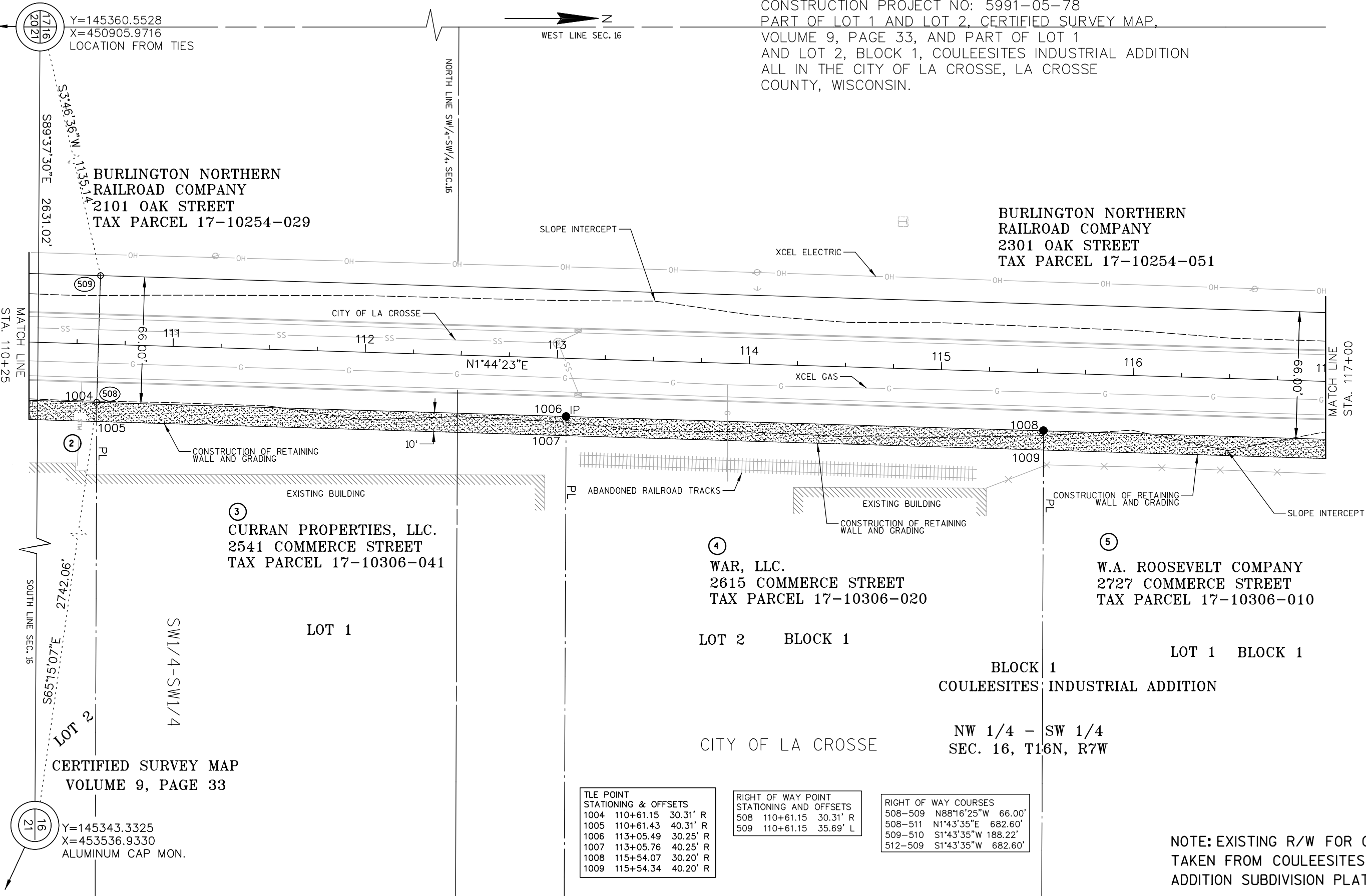
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4



REVISION DATE	DATE	SCALE, FEET 0 50	HWY: OAK STREET	STATE R/W PROJECT NUMBER 5991-05-03	PLAT SHEET 4.03	E
	GRID FACTOR 1.0		COUNTY: LA CROSSE	CONSTRUCTION PROJECT NUMBER 5991-05-78	PS&E SHEET	

CONSTRUCTION PROJECT NO: 5991-05-78
PART OF LOT 1 AND LOT 2, CERTIFIED SURVEY MAP,
VOLUME 9, PAGE 33, AND PART OF LOT 1
AND LOT 2, BLOCK 1, COULEESITES INDUSTRIAL ADDITION
ALL IN THE CITY OF LA CROSSE, LA CROSSE
COUNTY, WISCONSIN.



TIE POINT STATIONING & OFFSETS		
1004	110+61.15	30.31' R
1005	110+61.43	40.31' R
1006	113+05.49	30.25' R
1007	113+05.76	40.25' R
1008	115+54.07	30.20' R
1009	115+54.34	40.20' R

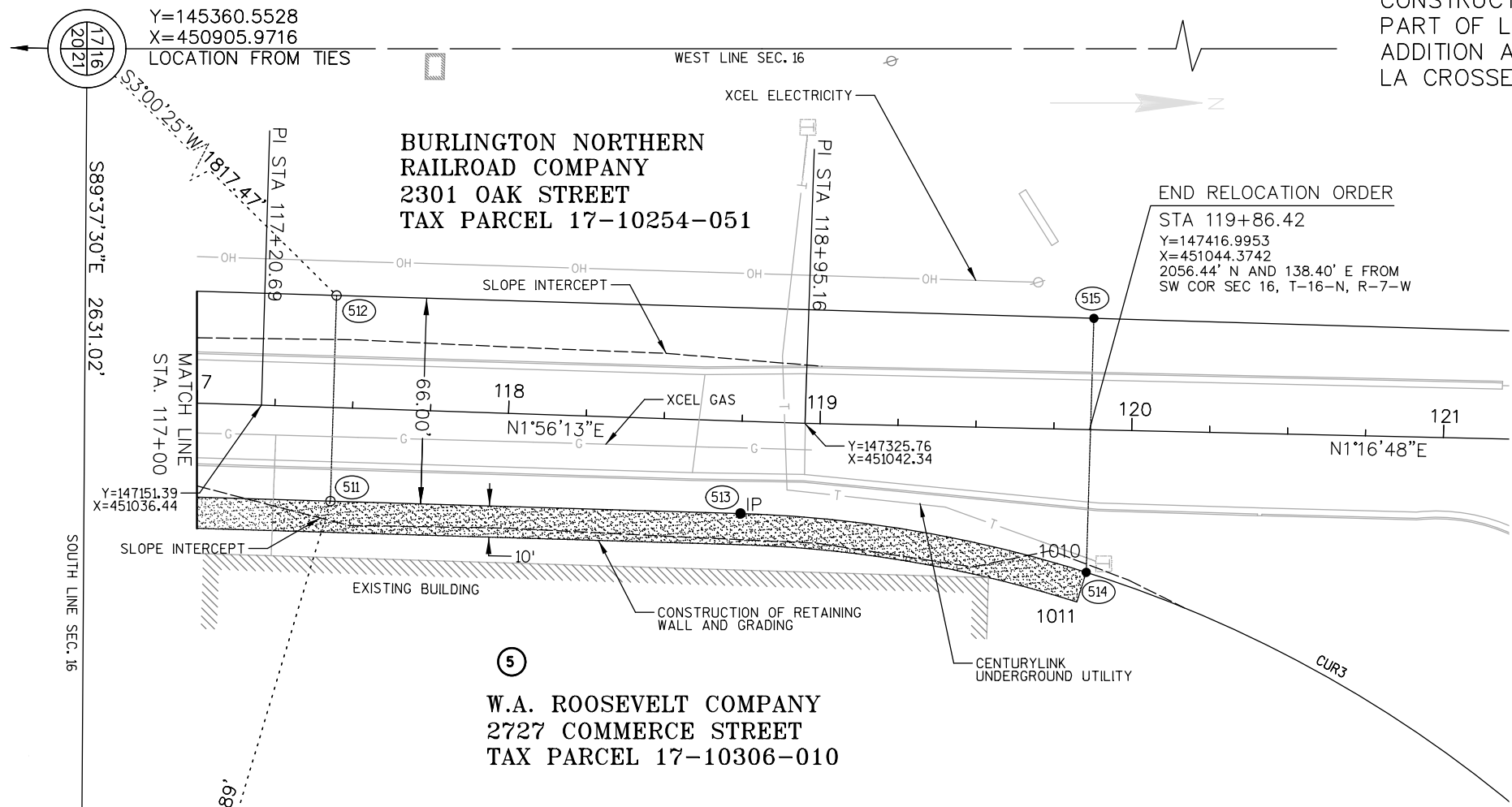
RIGHT OF WAY POINT STATIONING AND OFFSETS		
508	110+61.15	30.31' R
509	110+61.15	35.69' L

RIGHT OF WAY COURSES		
508-509	N88°16'25"W	66.00'
508-511	N1°43'35"E	682.60'
509-510	S1°43'35"W	188.22'
512-509	S1°43'35"W	682.60'

NOTE: EXISTING R/W FOR OAK STREET
TAKEN FROM COULEESITES INDUSTRIAL
ADDITION SUBDIVISION PLAT

REVISION DATE	DATE	SCALE, FEET 0 50	HWY: OAK STREET	STATE R/W PROJECT NUMBER 5991-05-03	PLAT SHEET 4.04
	GRID FACTOR 1.0		COUNTY: LA CROSSE	CONSTRUCTION PROJECT NUMBER 5991-05-78	PS&E SHEET E

CONSTRUCTION PROJECT NO: 5991-05-78
PART OF LOT 1, BLOCK 1, COULEESITES INDUSTRIAL
ADDITION ALL IN THE CITY OF LA CROSSE,
LA CROSSE COUNTY, WISCONSIN.



BLOCK 1
COULEESITES INDUSTRIAL ADDITION
NW 1/4 - SW 1/4
SEC. 16, T16N, R7W

TLE POINT STATIONING & OFFSETS		
1010	119+86.42	45.74' R
1011	119+83.61	55.33' R

RIGHT OF WAY COURSES		
511-512	N88°16'25"W	66.00'
511-513	N1°43'35"E	131.61'
513-514	CUR 3	
514-515	N88°16'25"E	81.11'
515-512	S1°43'35"W	243.03'

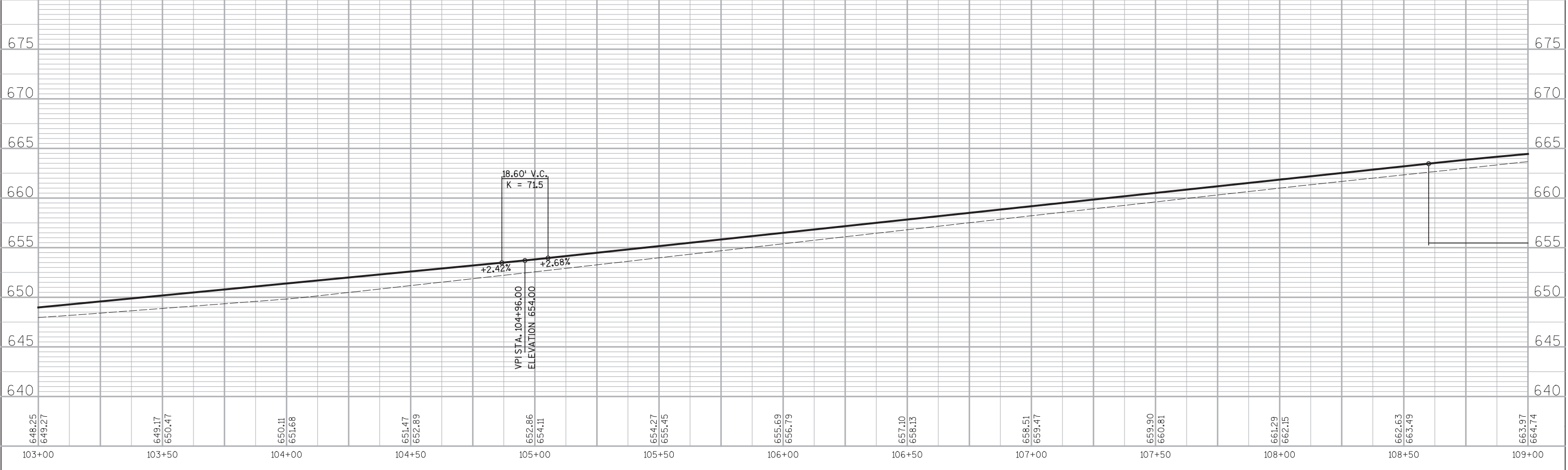
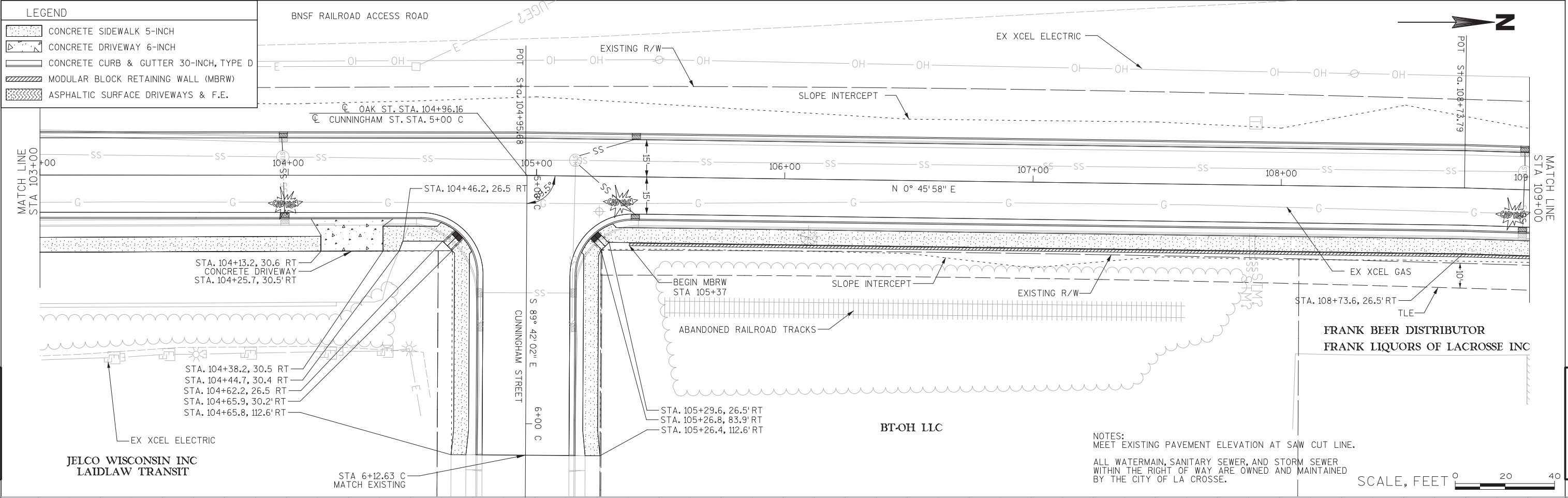
RIGHT OF WAY POINT STATIONING AND OFFSETS		
511	117+43.86	30.07' R
512	117+43.62	35.93' L
513	118+75.47	29.59' R
514	119+86.42	45.74' R
515	119+87.06	35.77' L

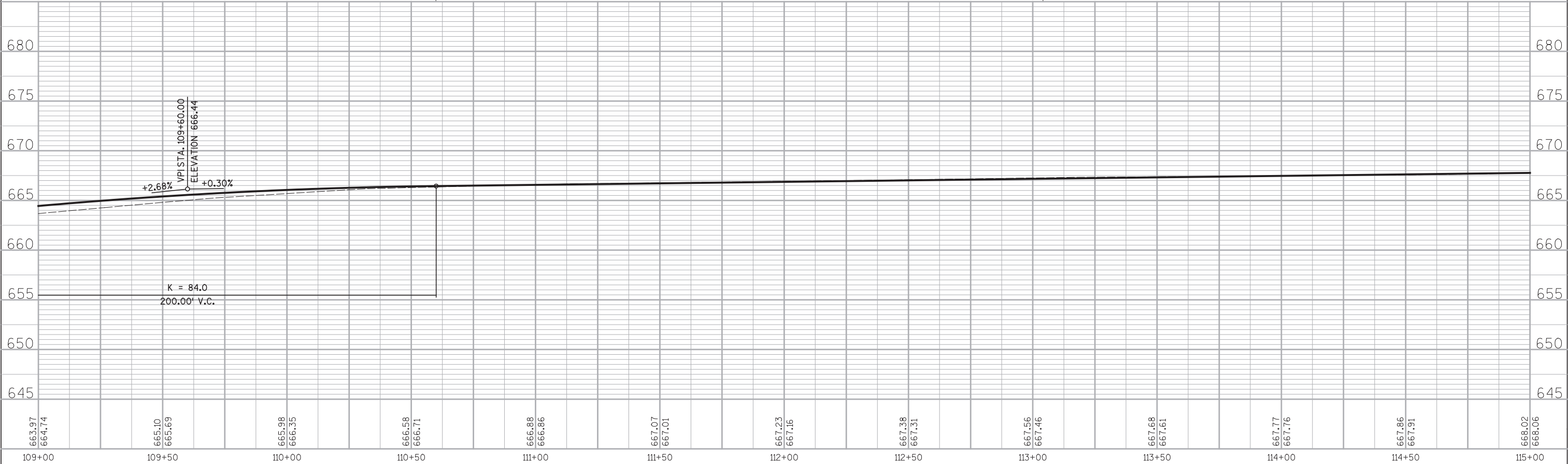
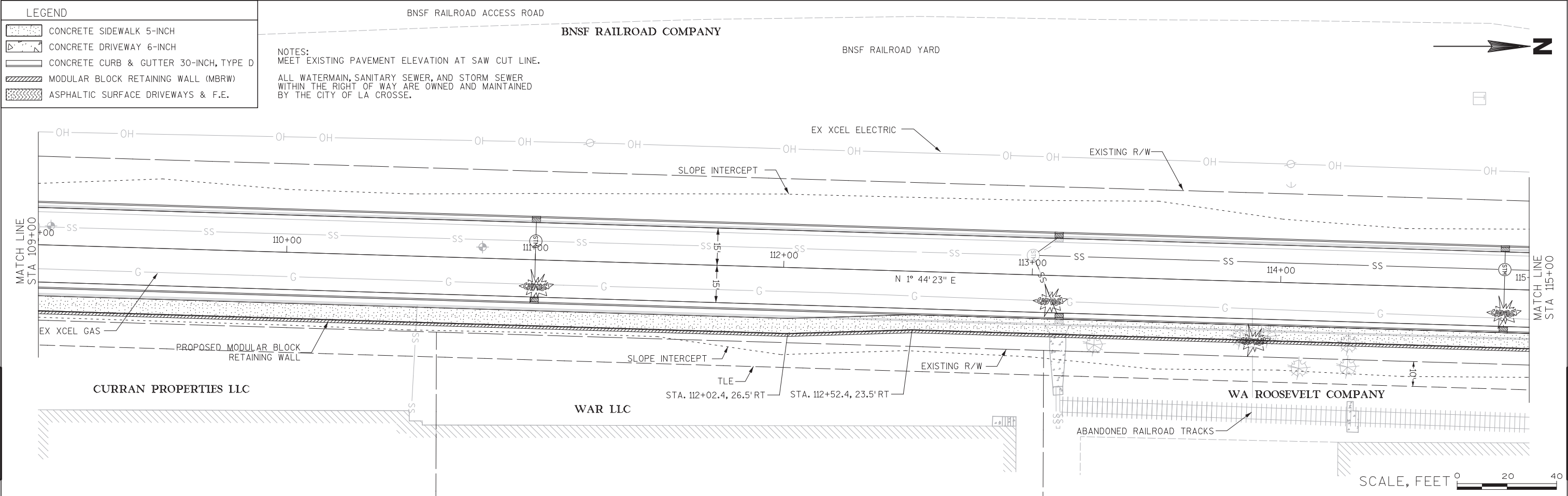
CURVE INFO.	
CUR 3	
DB	= S1°43'35"W
DA	= N52°28'10"E
TAN	= 193.49'
RAD.	= 408.01
D.	= 14°02'34"
Δ	= 50°44'35"
L.	= 361.35'
LCH	= 349.65'
LCB	= N27°05'53"E

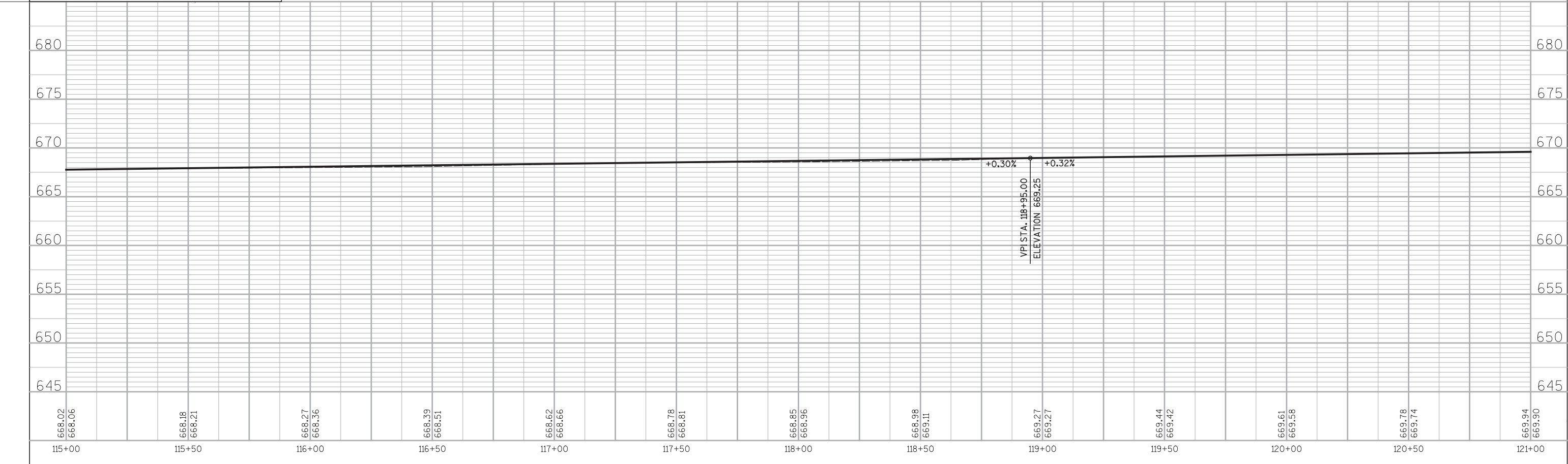
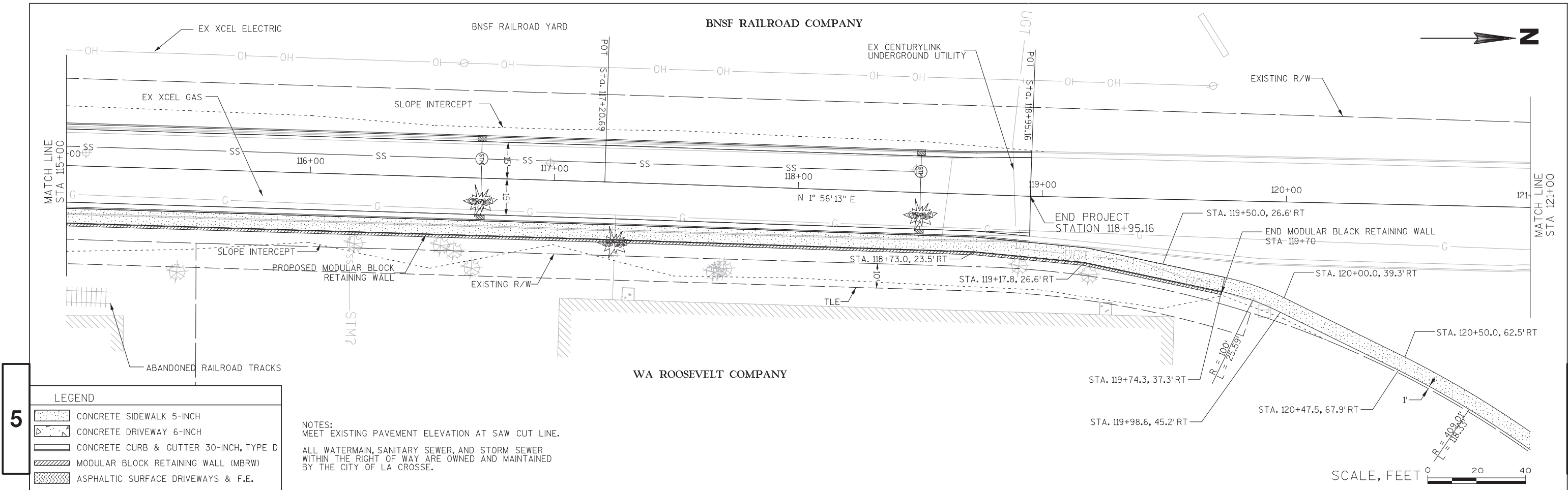
NOTE: EXISTING R/W FOR OAK STREET
TAKEN FROM COULEESITES INDUSTRIAL
ADDITION SUBDIVISION PLAT

REVISION DATE	DATE	SCALE, FEET 0 50	HWY: OAK STREET	STATE R/W PROJECT NUMBER 5991-05-03	PLAT SHEET 4.05	E
	GRID FACTOR 1.0		COUNTY: LA CROSSE	CONSTRUCTION PROJECT NUMBER 5991-05-78	PS&E SHEET	

[illegible]

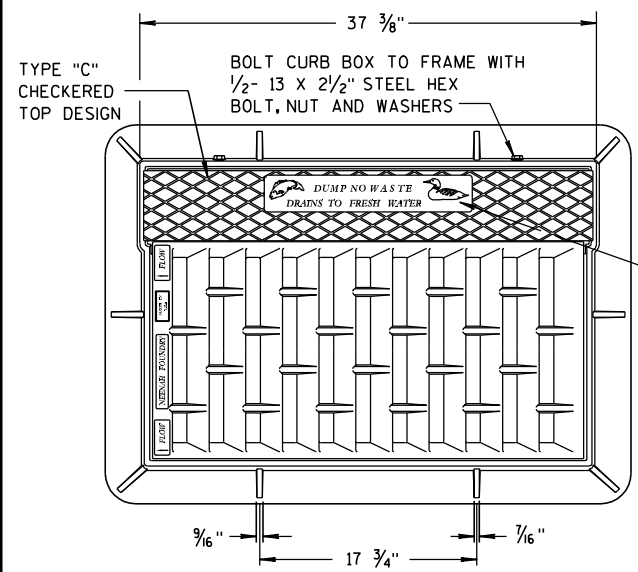




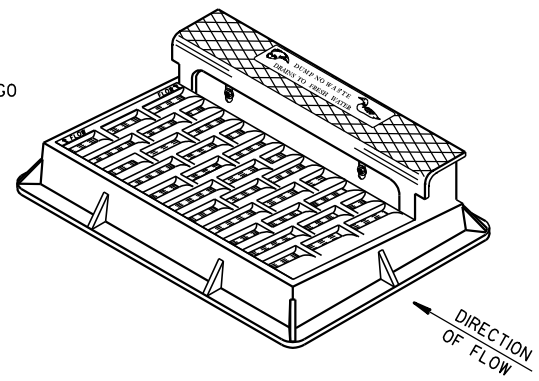


Standard Detail Drawing List

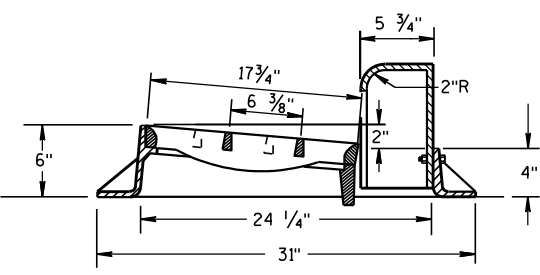
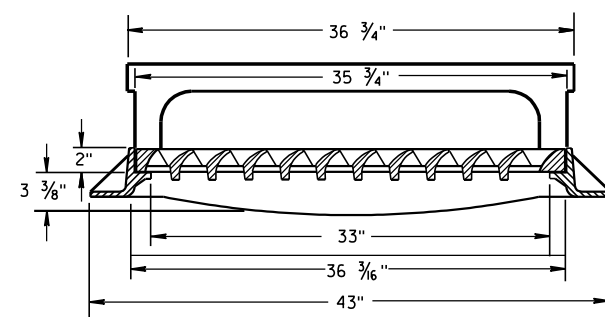
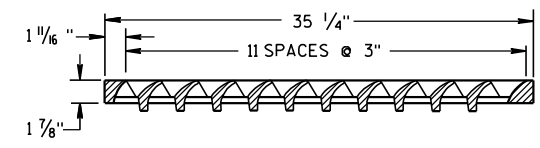
08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B06-04	MANHOLES TYPE 1
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C08-14A	PAVEMENT MARKING (MAINLINE)
15C29-02B	BICYCLE LANE MARKING
15C29-02E	PAVEMENT MARKING FOR BIKE LANES



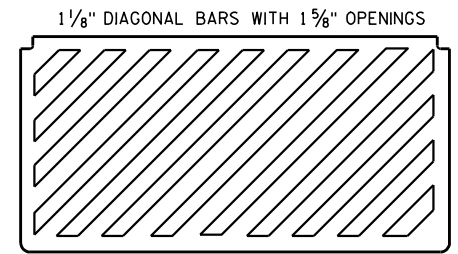
NOTE:
GRATE IS REVERSIBLE.



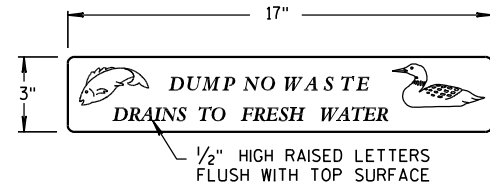
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



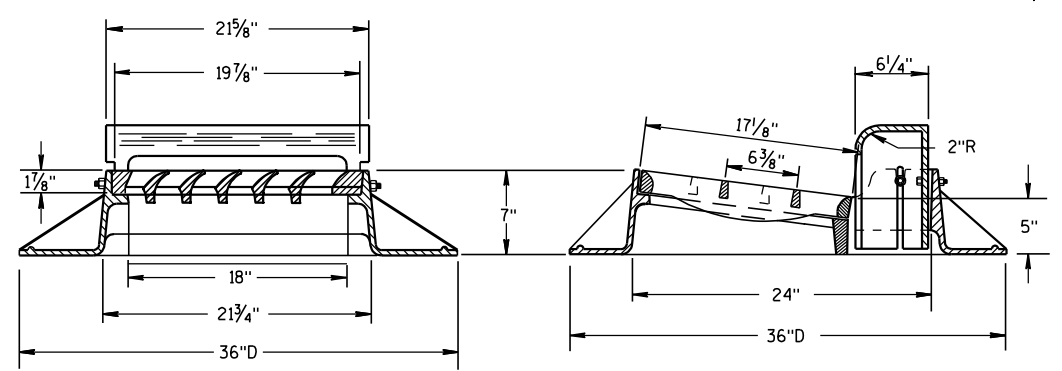
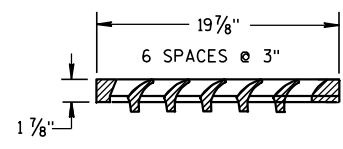
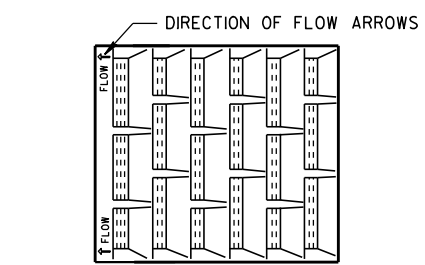
TYPE "H"
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER
(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



TYPE "A"
(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.

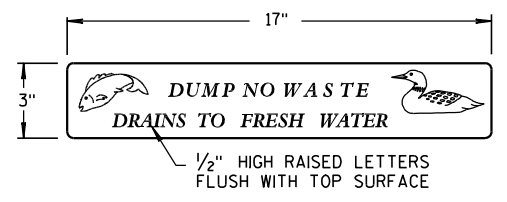
GENERAL NOTES

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

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

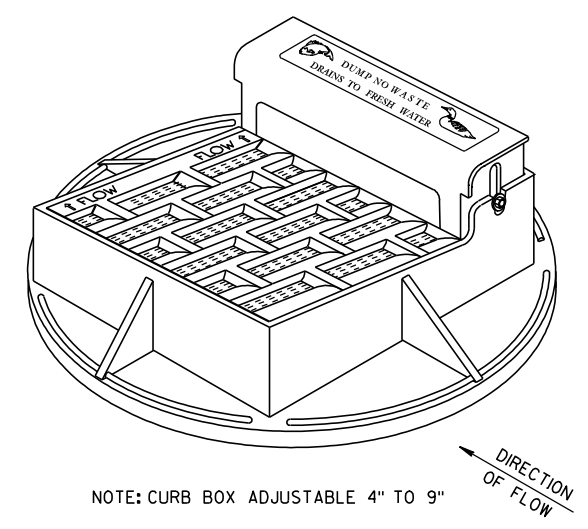
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

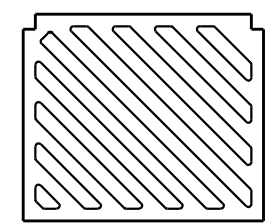


LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



1" DIAGONAL BARS WITH 1 1/2" OPENINGS

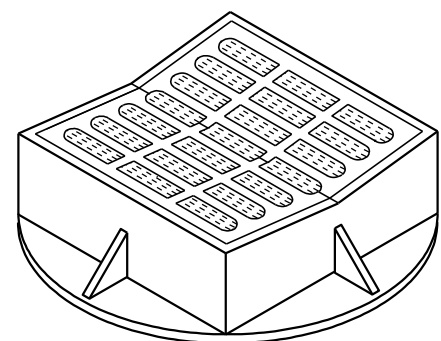
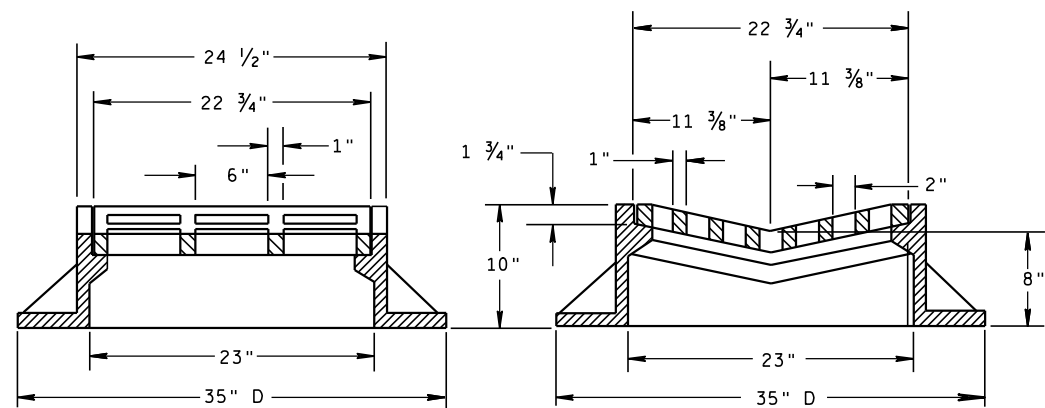


SPECIAL GRATE FOR TYPE "A" COVER
(MEASURES 19 3/4" X 17" X 1 7/8")
GRATE..... 84 LBS.
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

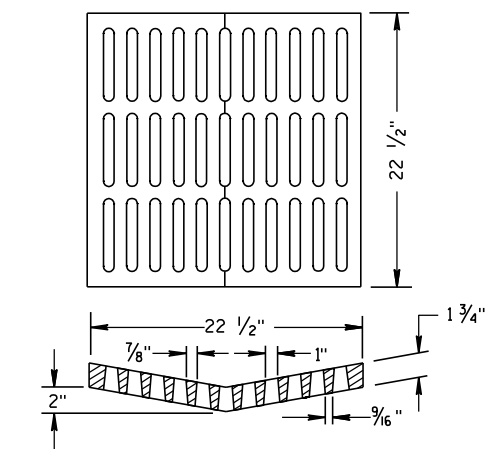
**INLET COVERS
TYPE A, H, A-S, & H-S**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



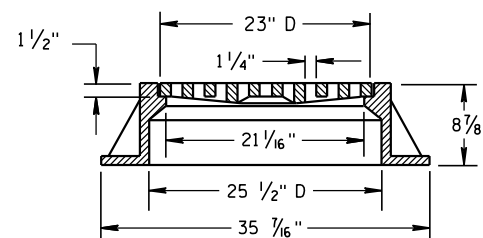
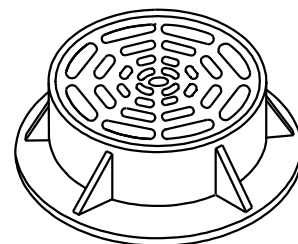
TYPE "B"
(APPROXIMATE WEIGHT 405 LBS.)
FRAME..... 294 LBS.
GRATE..... 111 LBS.



**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

(APPROXIMATE GRATE WEIGHT 134 LBS.)

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



TYPE "C"
(APPROXIMATE WEIGHT 259 LBS.)

FRAME..... 152 LBS.
GRATE..... 107 LBS.

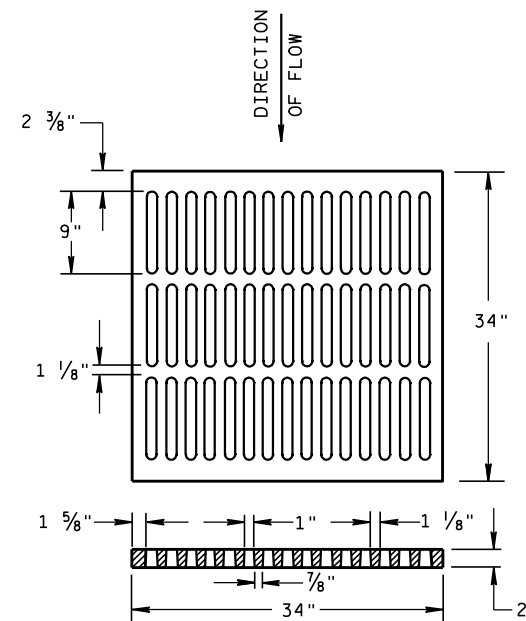
GENERAL NOTES

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

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

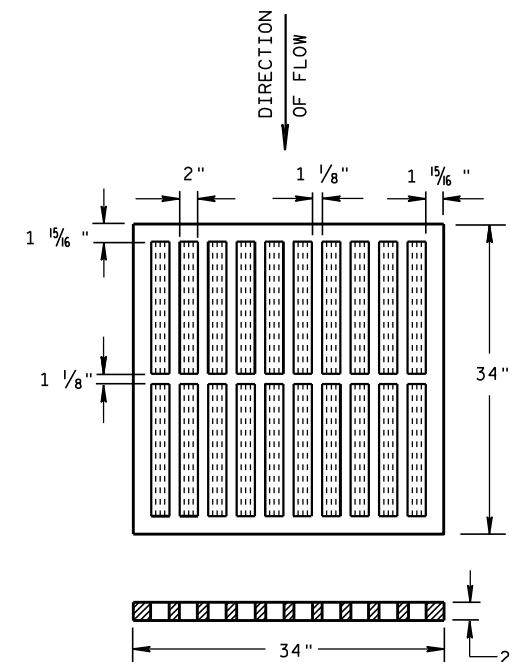
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



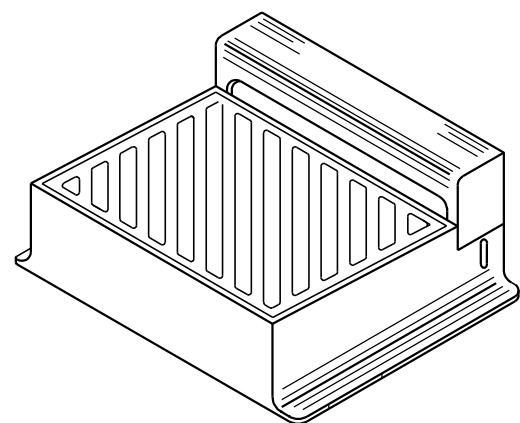
ALTERNATIVE TYPE "MS"
(APPROXIMATE GRATE WEIGHT 329 LBS.)

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



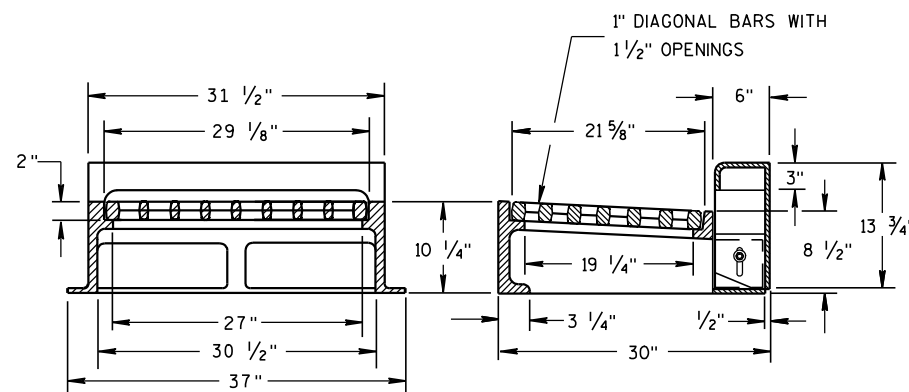
TYPE "MS"
(APPROXIMATE GRATE WEIGHT 268 LBS.)

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



DIRECTION
OF FLOW

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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"
(APPROXIMATE WEIGHT 648 LBS.)

FRAME..... 355 LBS.
GRATE..... 156 LBS.
CURB BOX..... 137 LBS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012

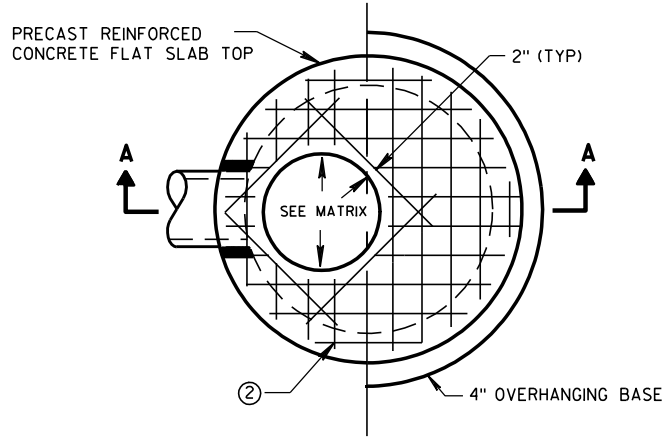
DATE

FHWA

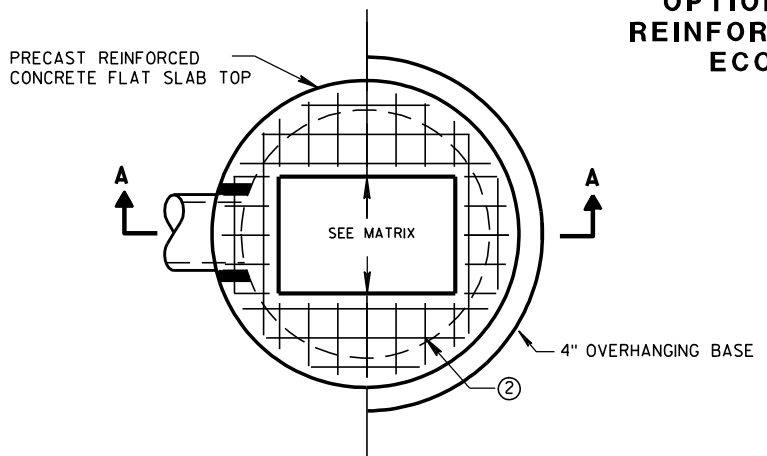
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

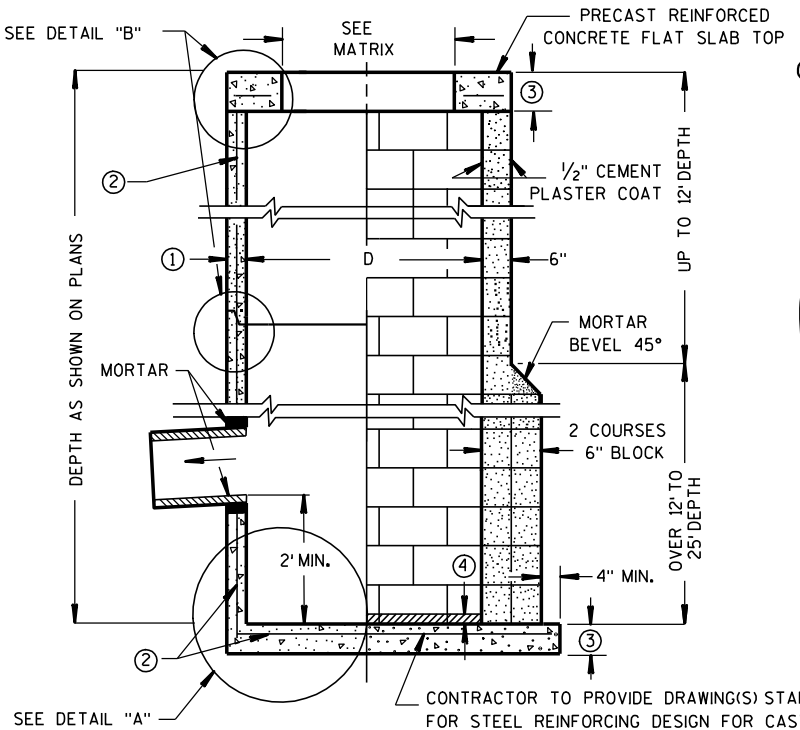
ENGINEER



PLAN VIEW CIRCULAR OPENING

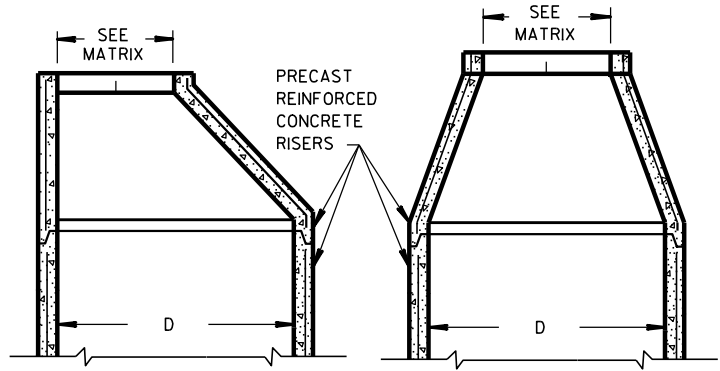


PLAN VIEW RECTANGULAR OPENING



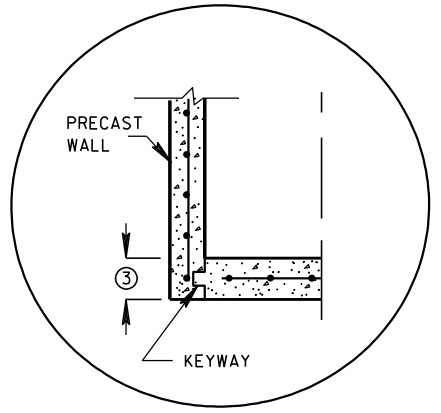
SECTION A-A

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

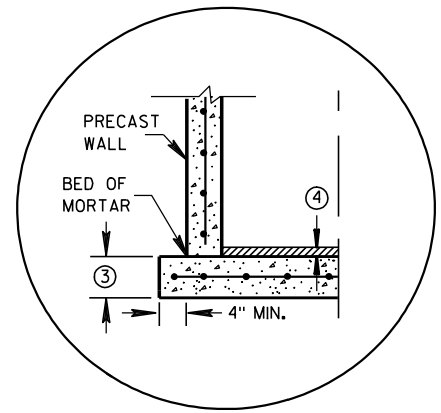


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

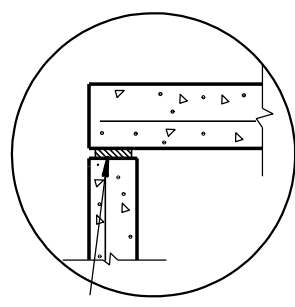


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

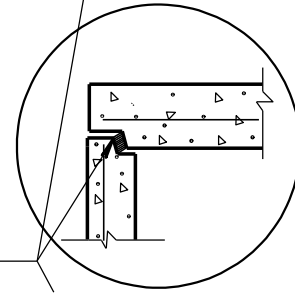


SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

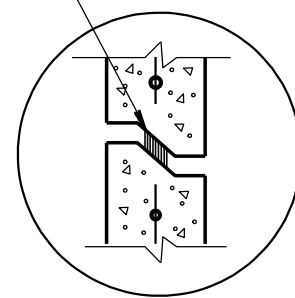
DETAIL "A"



TOP WITH PLAIN END JOINT

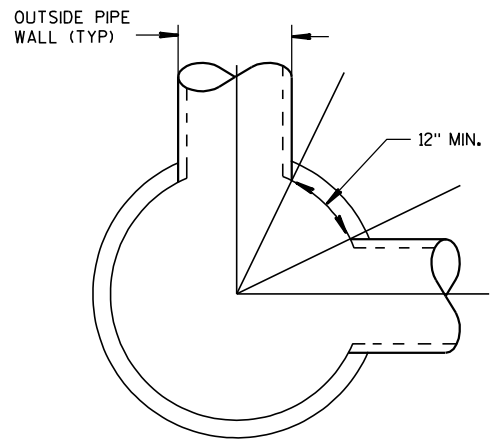


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER OPENING MATRIX

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

PIPE MATRIX

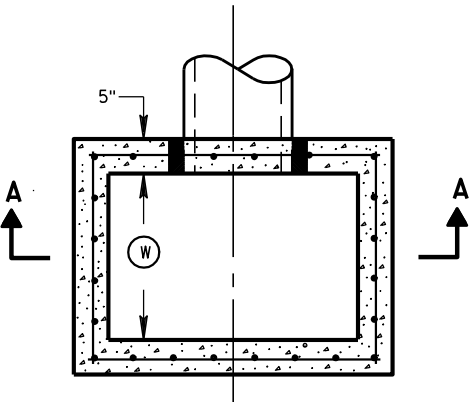
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

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

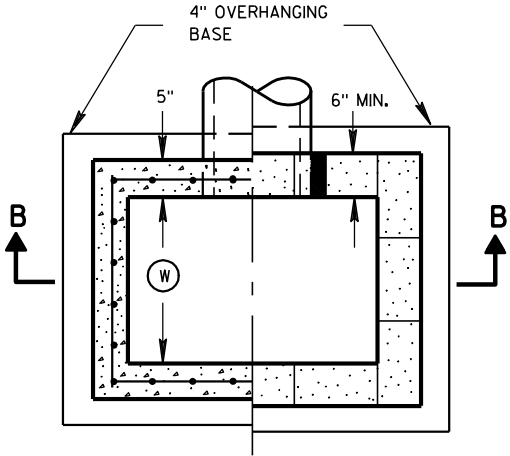
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

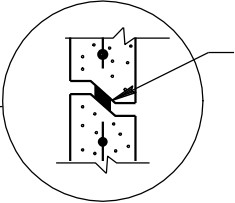
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER



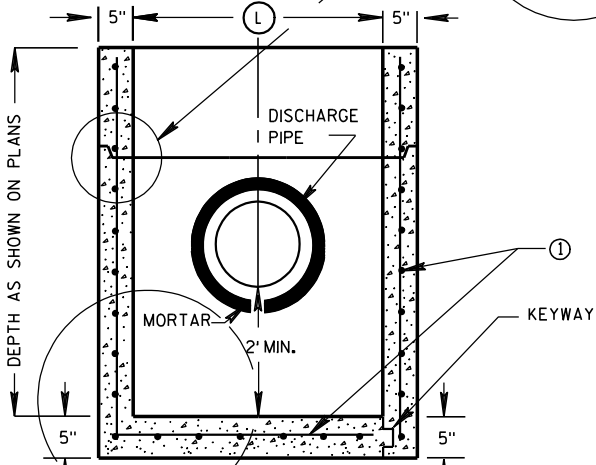
PLAN VIEW



PLAN VIEW



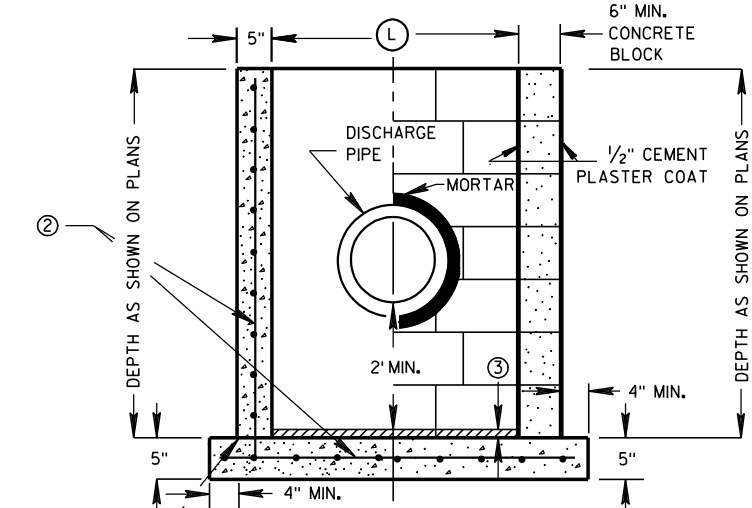
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

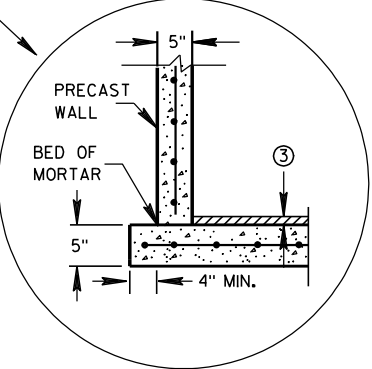
SECTION A-A



CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK ON CAST-IN-PLACE WITH PRECAST REINFORCED CONCRETE BASE ①

SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

CATCH BASINS 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

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

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

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

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

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

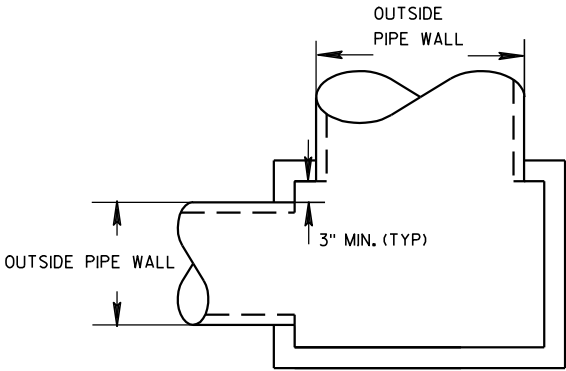
- ① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.
- ③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2'SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH ① (FT)	LENGTH ② (FT)	F	ALL H'S
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

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

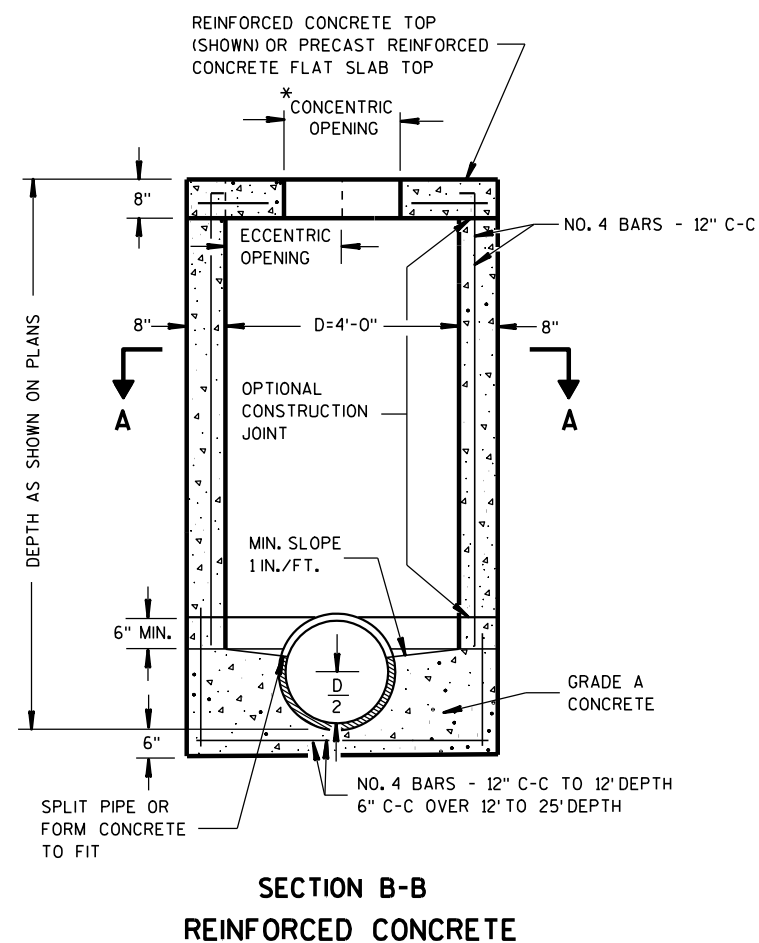
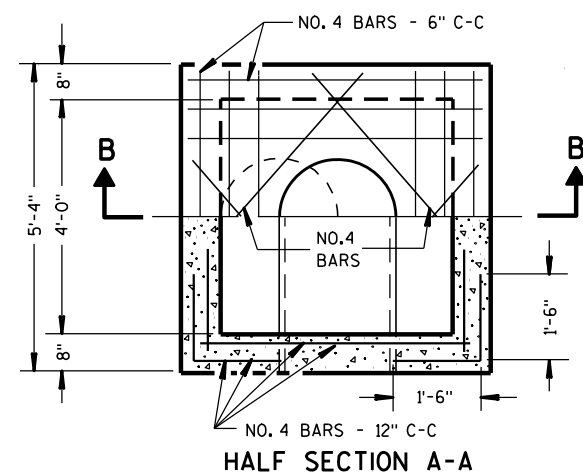


DETAIL "A"

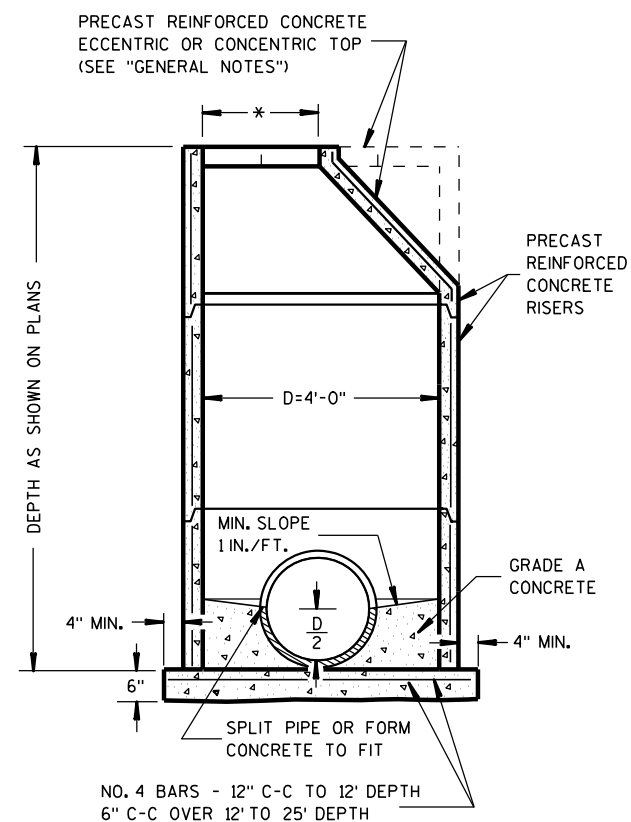
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

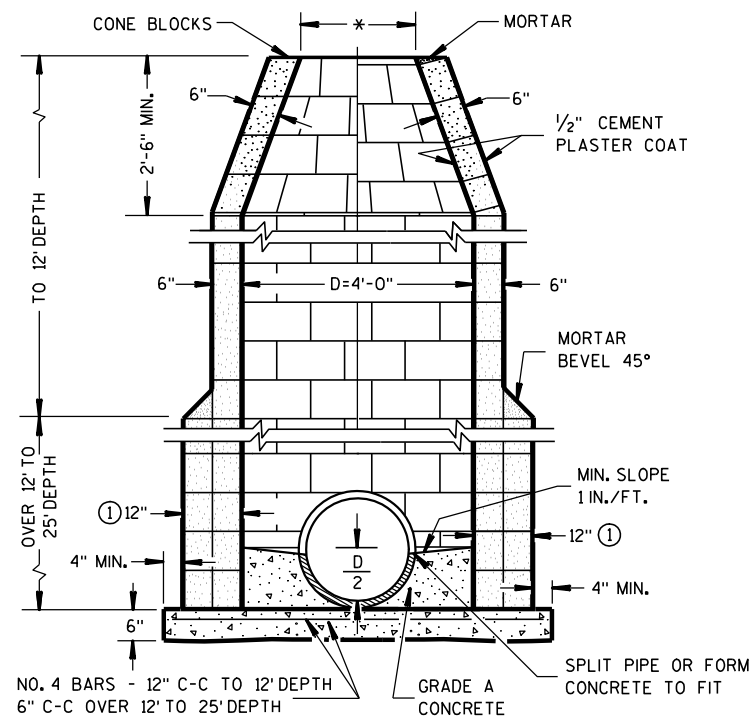
APPROVED
6/5/2012 DATE /S/ Jerry H. Zogg
FHWA ROADWAY STANDARDS DEVELOPMENT ENGINEER



MANHOLES TYPE 1



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

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

DETAILED DRAWINGS 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 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED 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) 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 CONFORMING TO AASHTO M 199 SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT.

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

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS AND MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.

MANHOLES TYPE 1

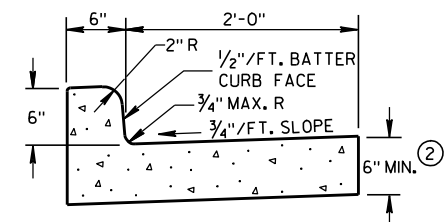
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

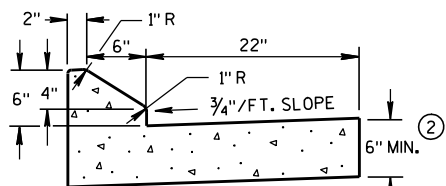
9/9/05
DATE

FHWA

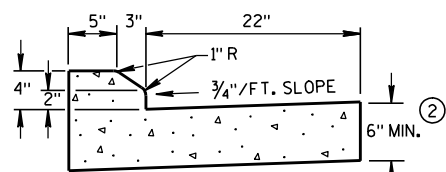
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TYPES A & D ①

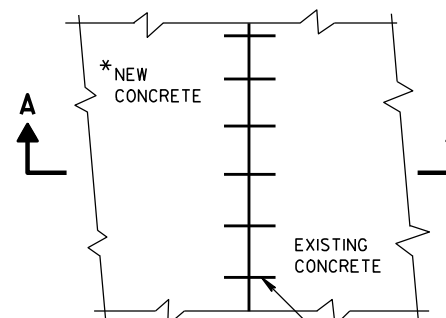


6" SLOPED CURB TYPES G & J ①

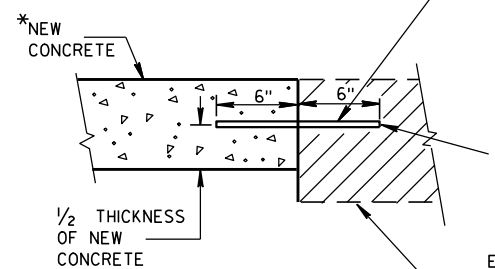


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

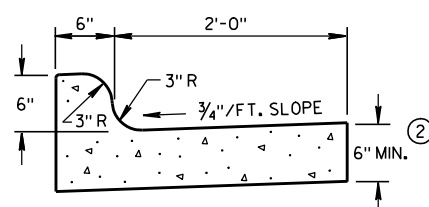


PLAN VIEW

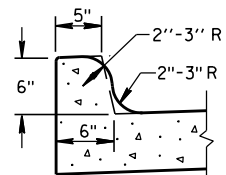
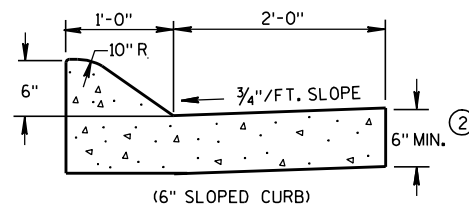
SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

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

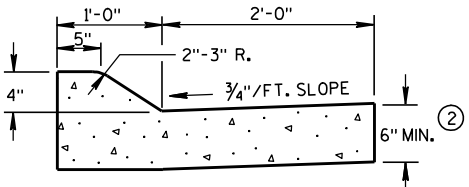
*NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



TYPES K & L ①

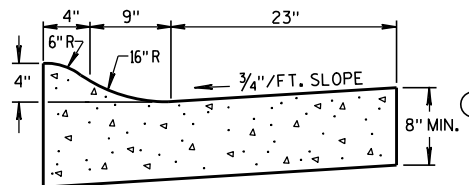
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)

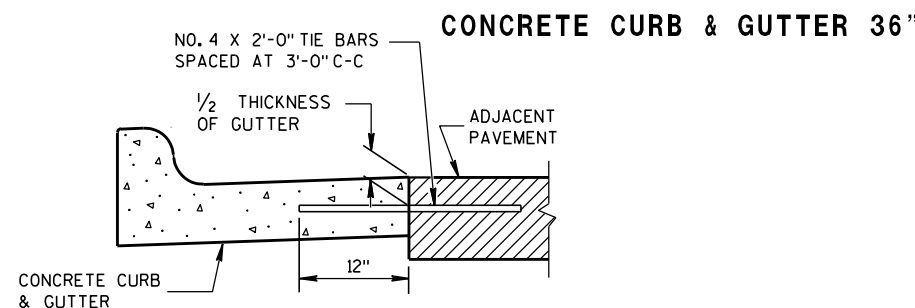


(4" SLOPED CURB)

TYPES A & D ①

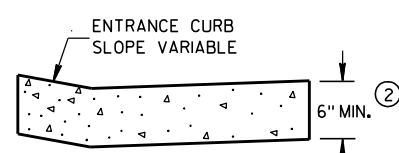


4" SLOPED CURB TYPES R & T ① ④



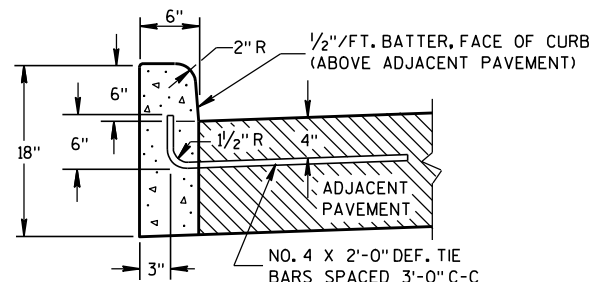
CONCRETE CURB & GUTTER 36"

TYPICAL TIE BAR LOCATION ①



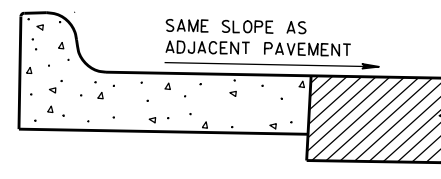
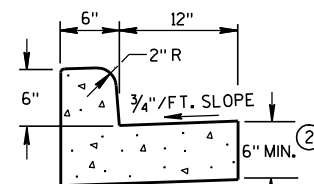
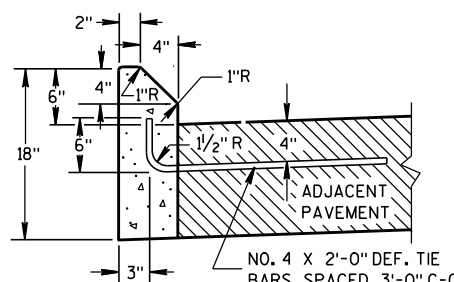
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

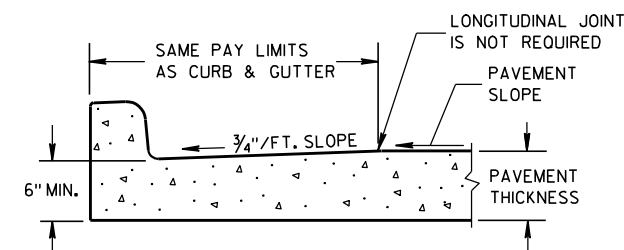
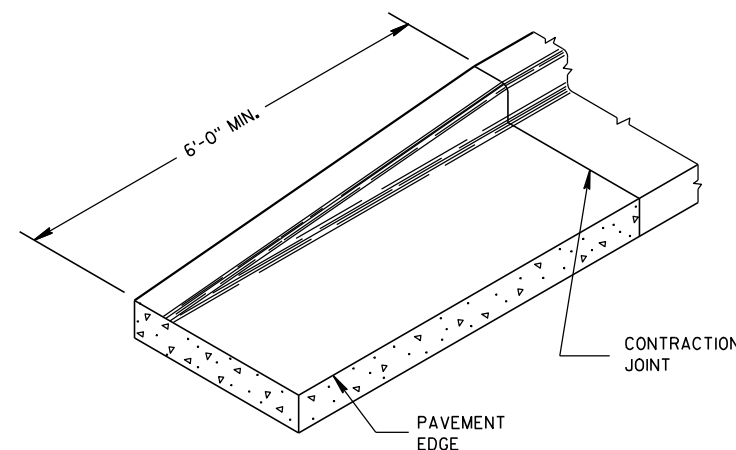
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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

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

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

PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

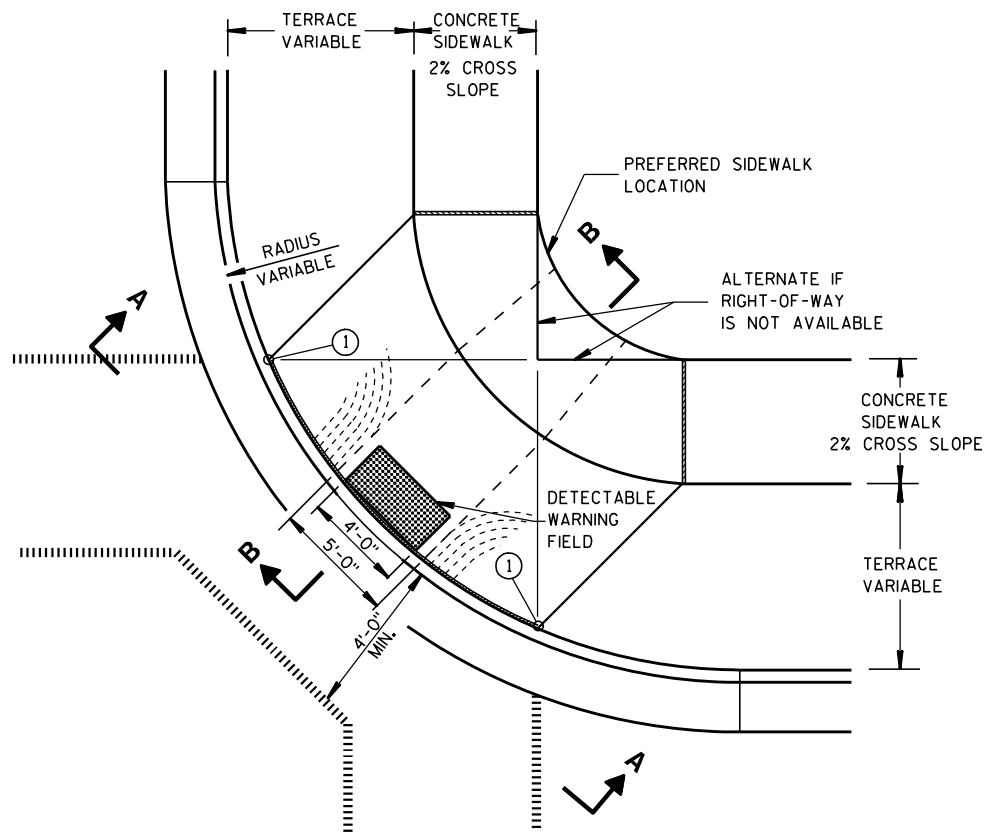
APPROVED

9/4/08

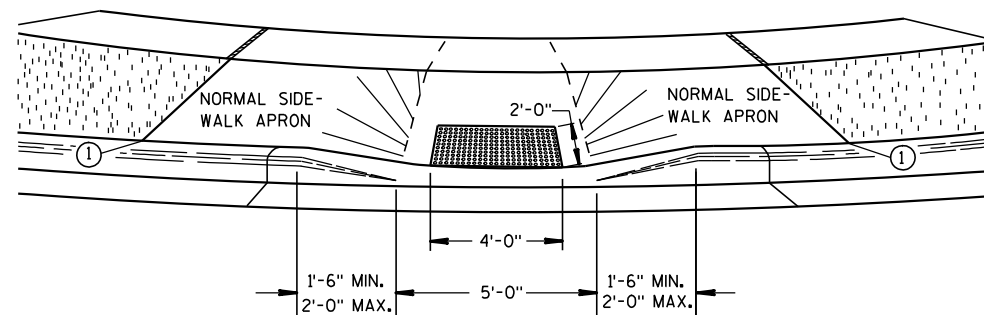
DATE

FHWA

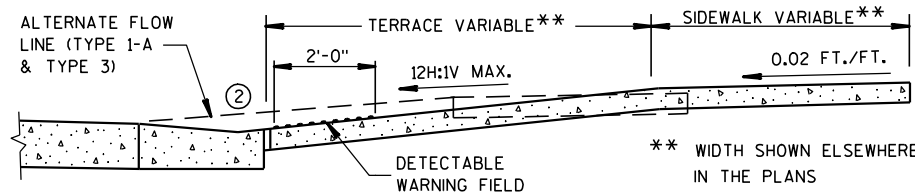
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



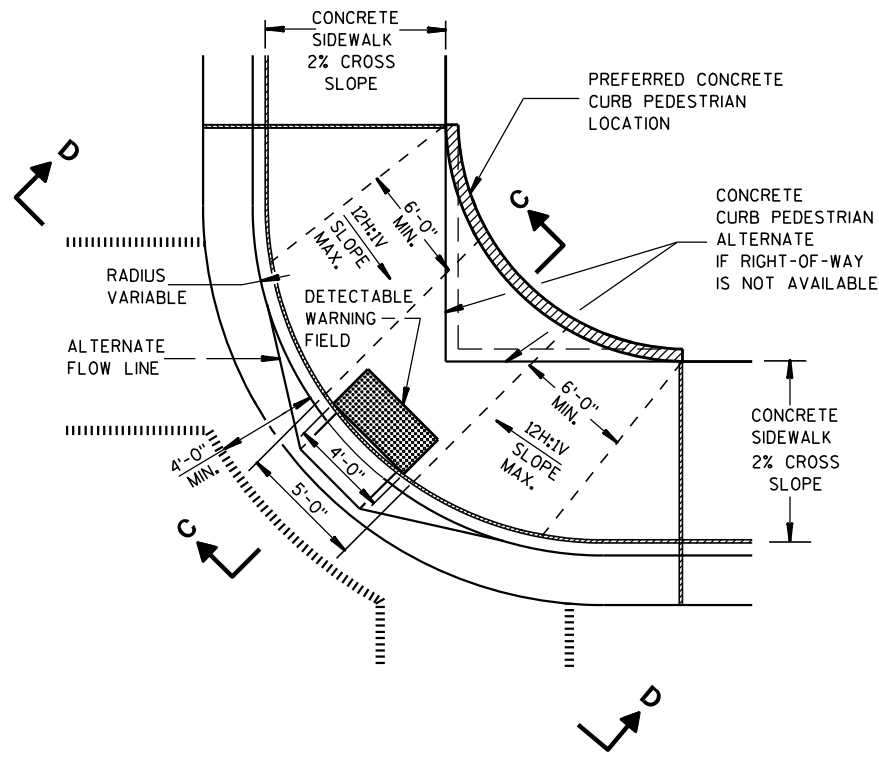
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



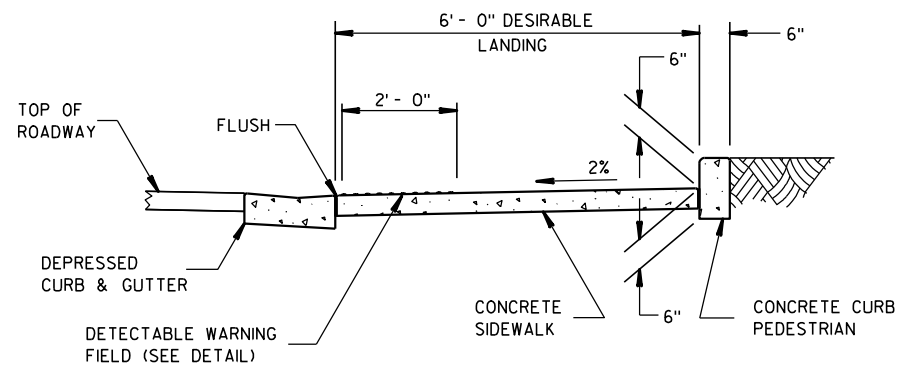
VIEW A-A



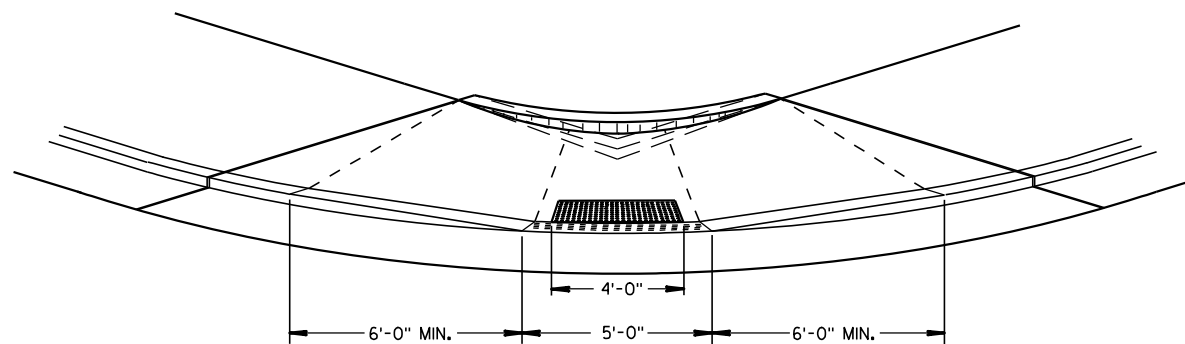
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

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

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

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

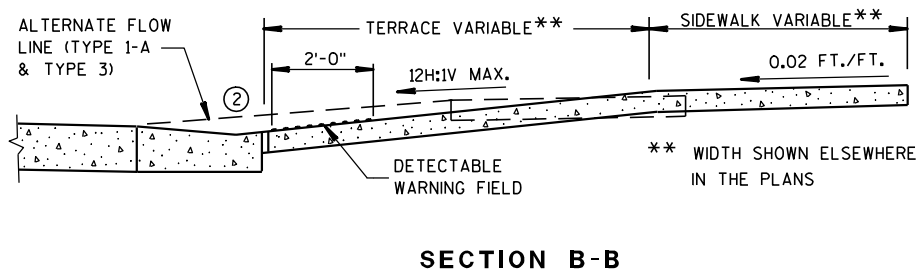
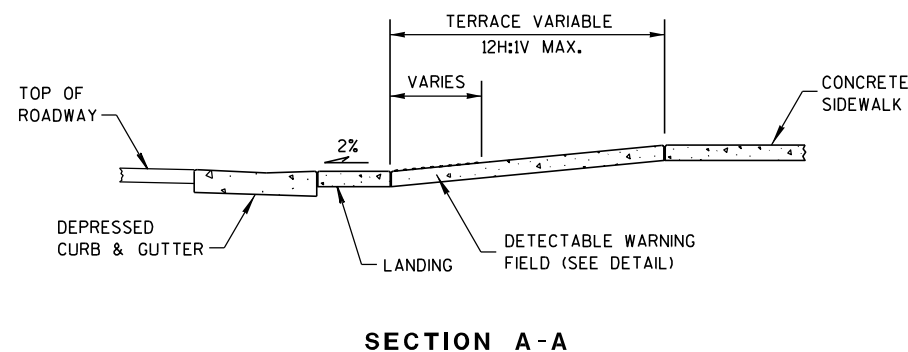
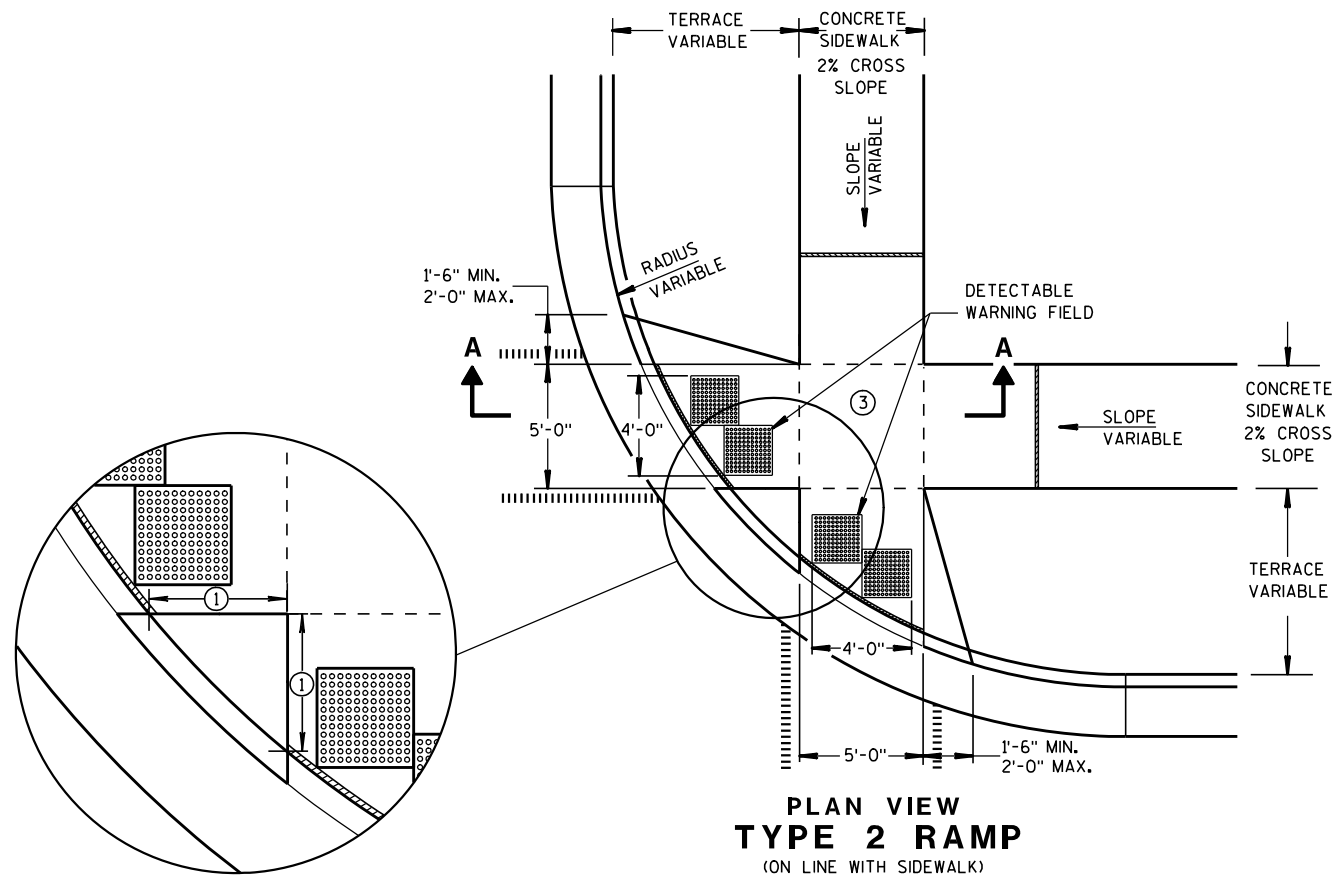
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

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

CURB RAMPS
TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



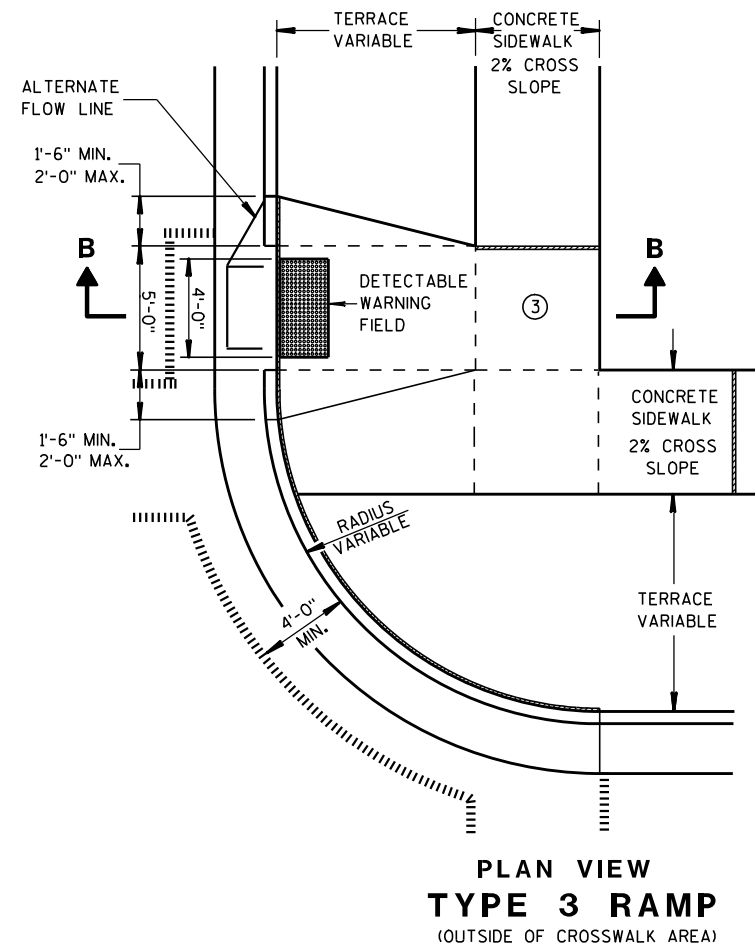
GENERAL NOTES

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

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

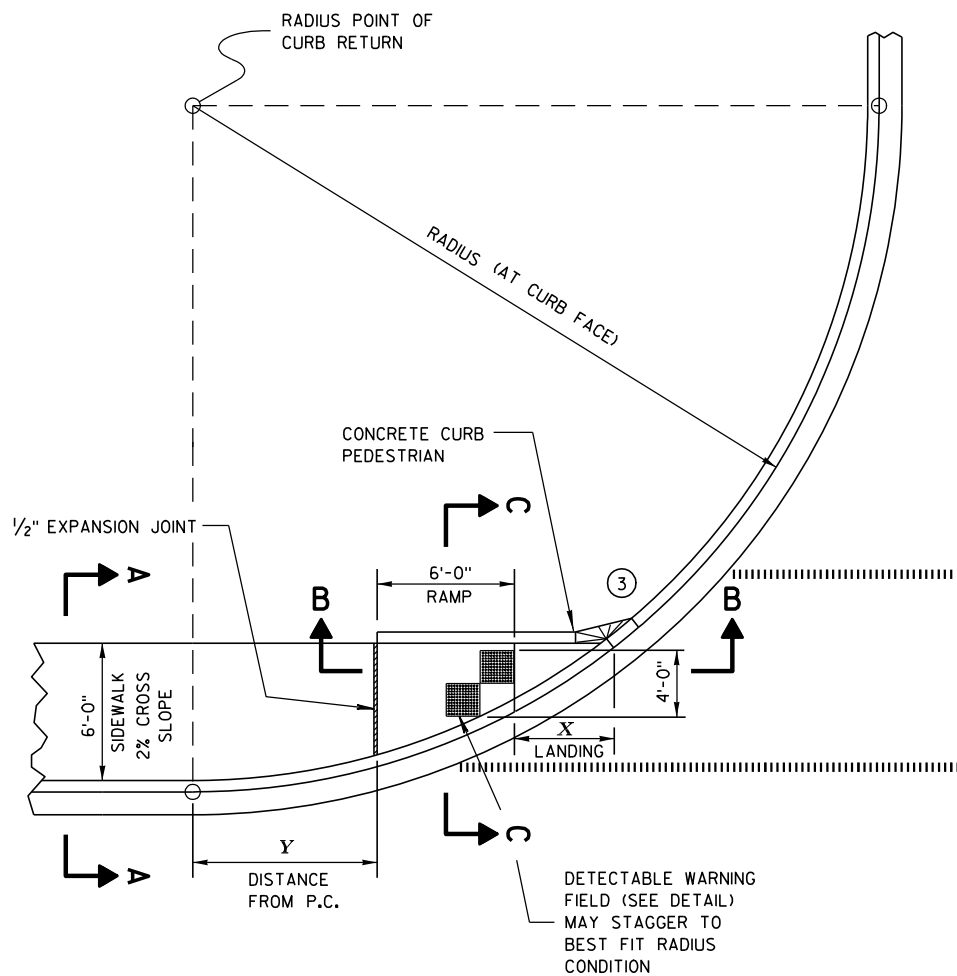
LEGEND

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

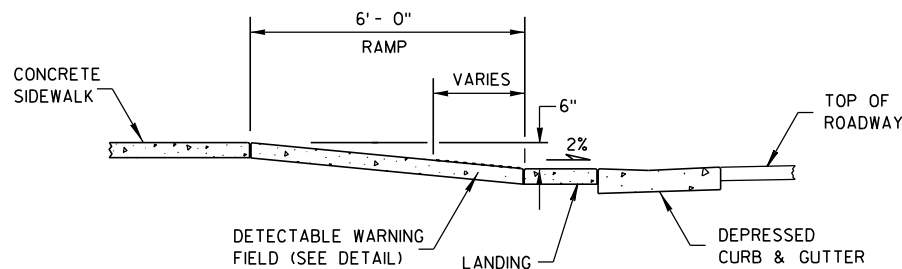


CURB RAMPS TYPES 2 AND 3

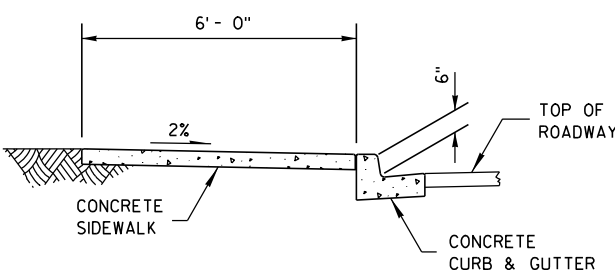
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



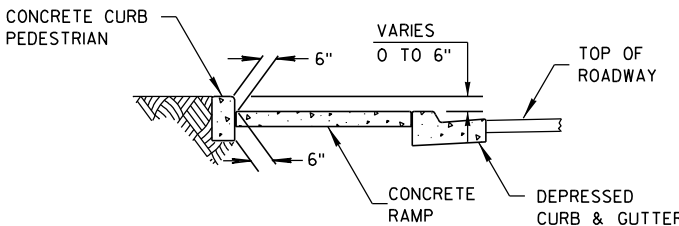
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



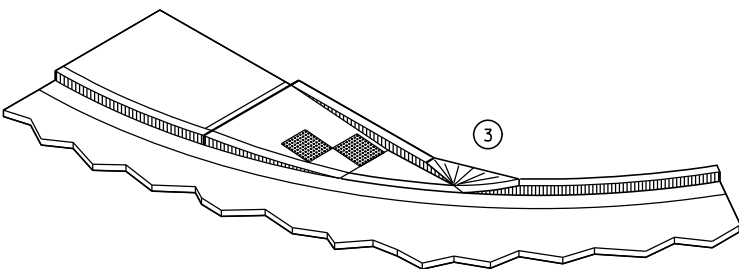
SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-13/4"	2'-7 1/4"
30 FEET	7'-11 3/4"	4'-8 1/4"
40 FEET	9'-5 1/4"	6'-5"
50 FEET	10'-8 3/4"	7'-11 1/4"
60 FEET	11'-10 1/4"	9'-3 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

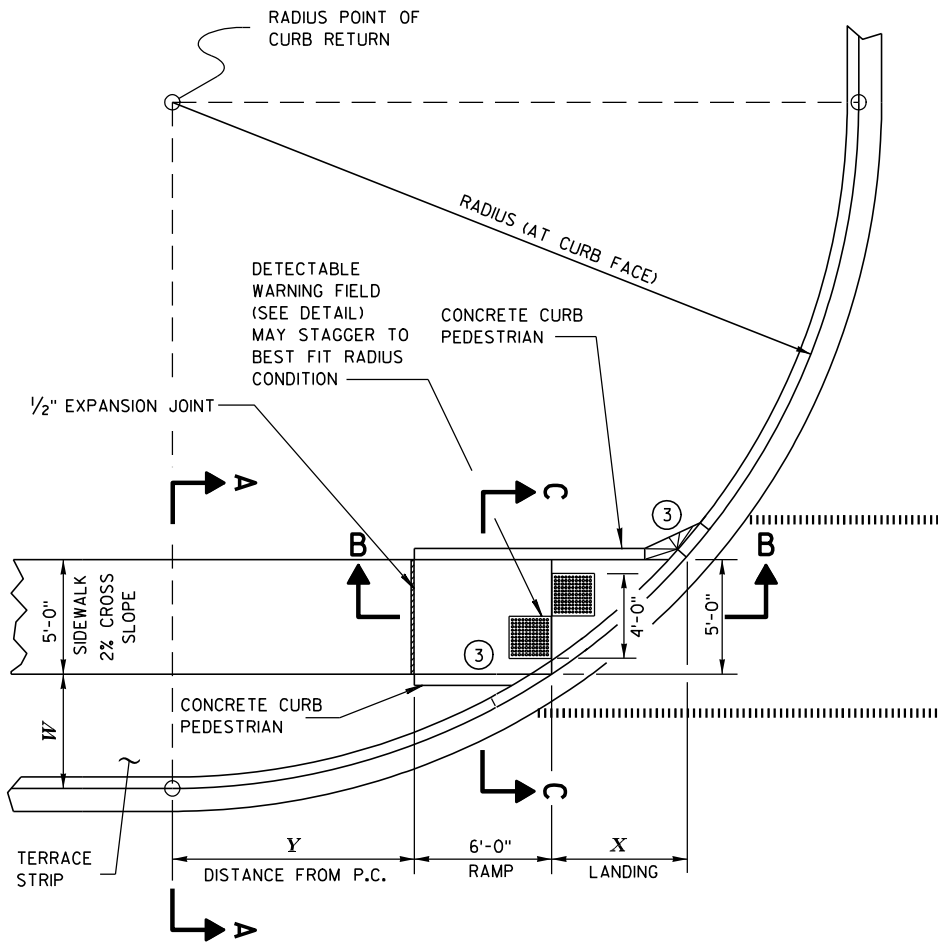


ISOMETRIC VIEW

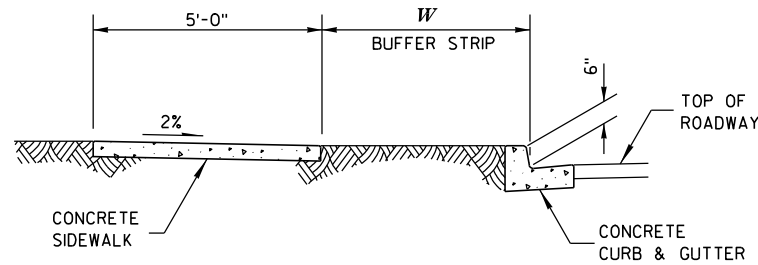
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

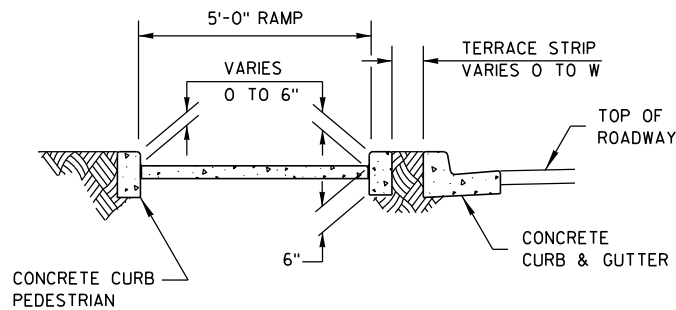
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



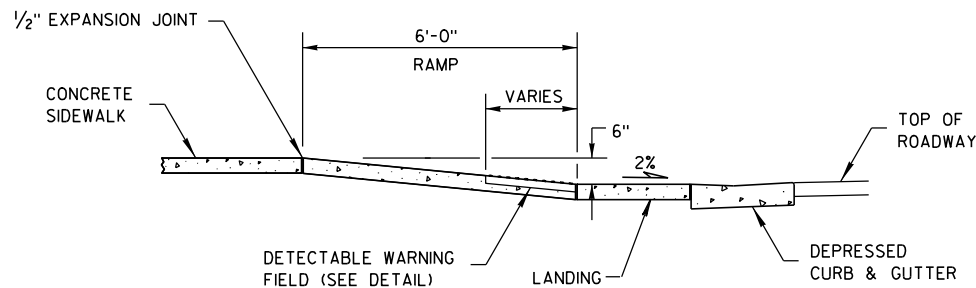
**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

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

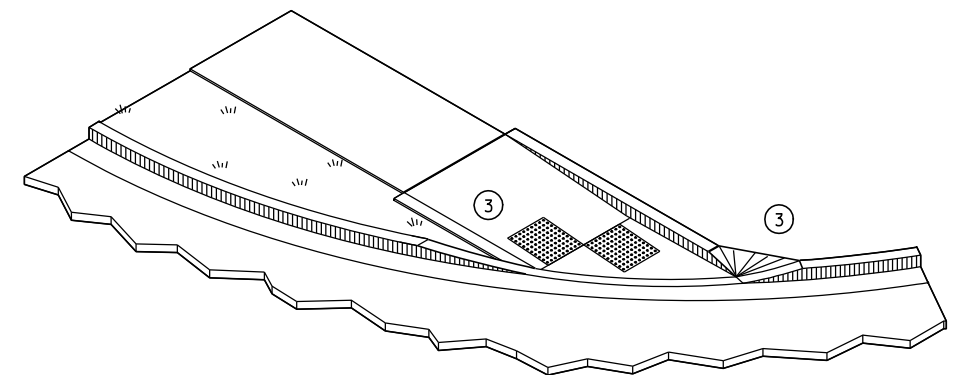
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

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"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'-½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



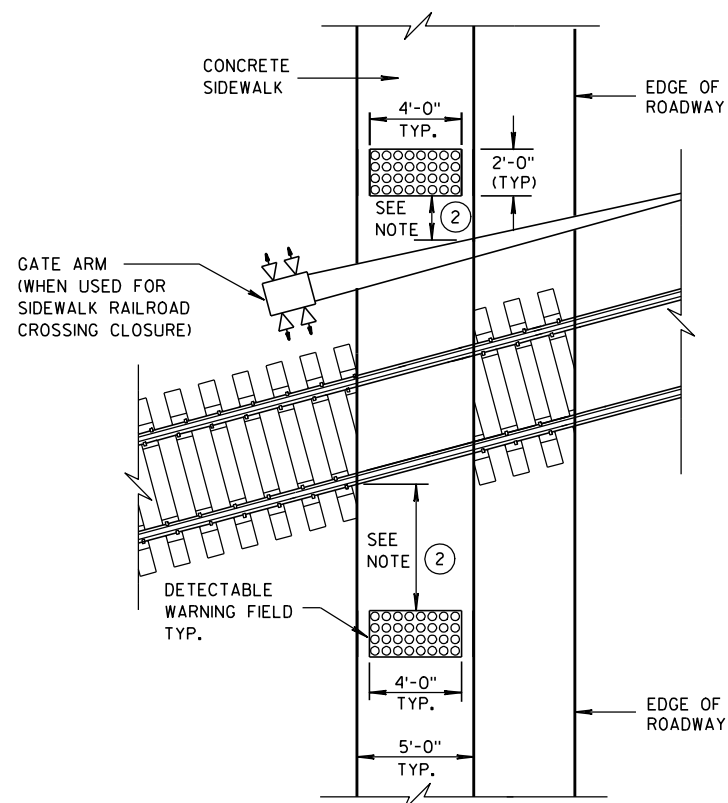
ISOMETRIC VIEW

LEGEND

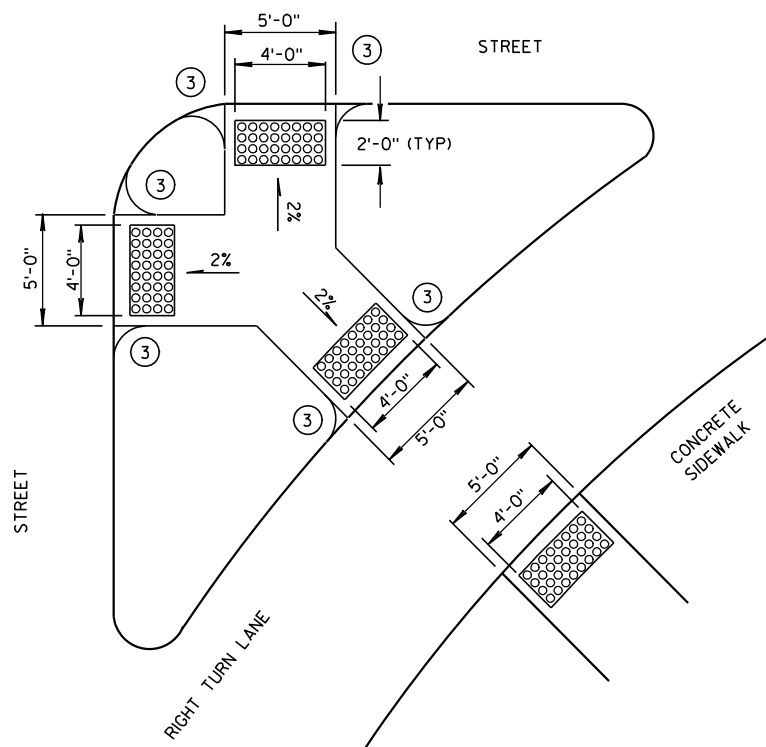
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPE 4B**

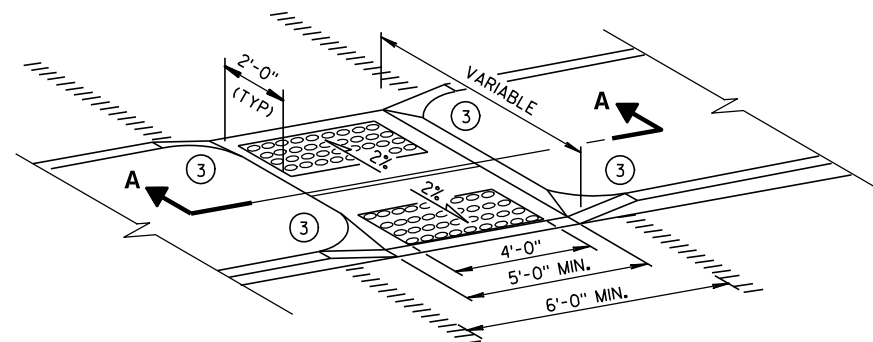
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



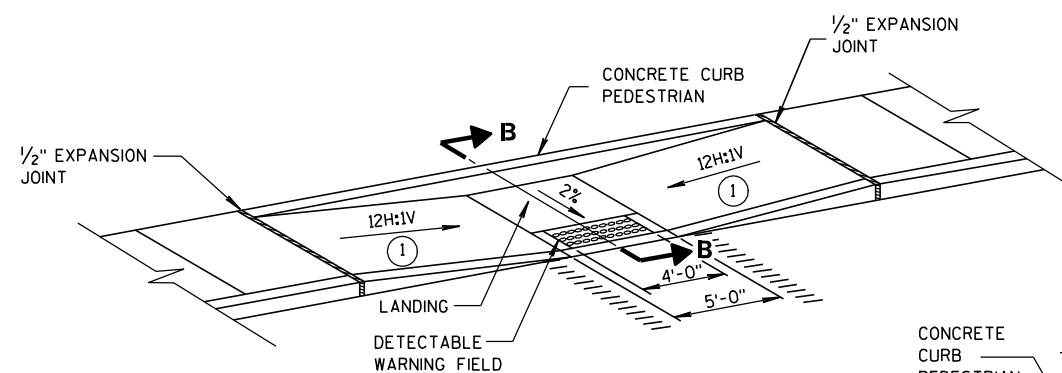
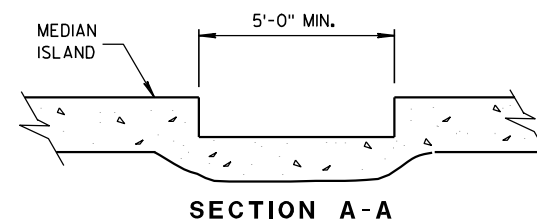
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



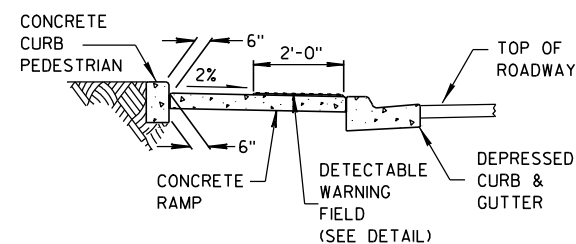
TYPE 6
DETECTABLE WARNING AT ISLANDS



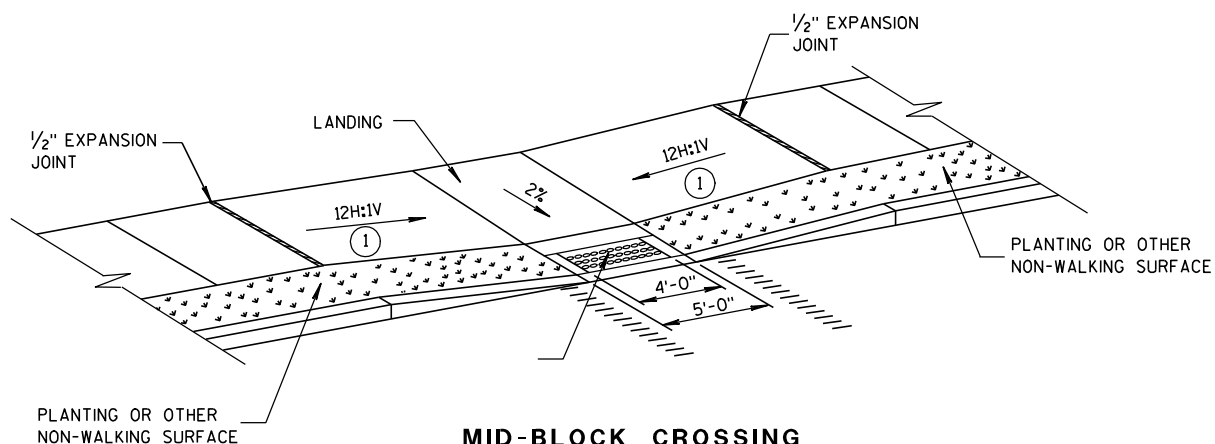
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

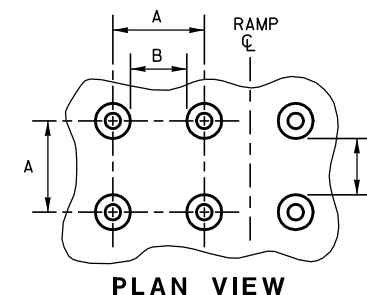
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

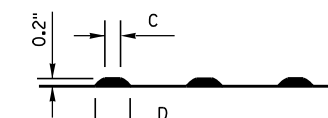
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

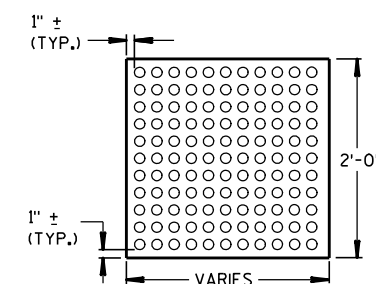
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



ELEVATION VIEW

TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

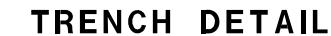
2-9-10
DATE

FHWA

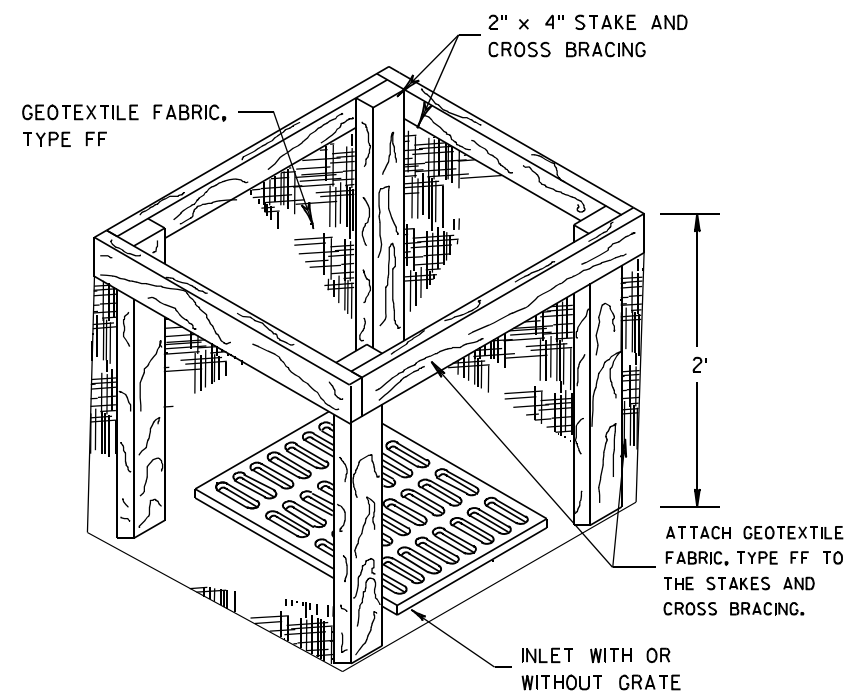
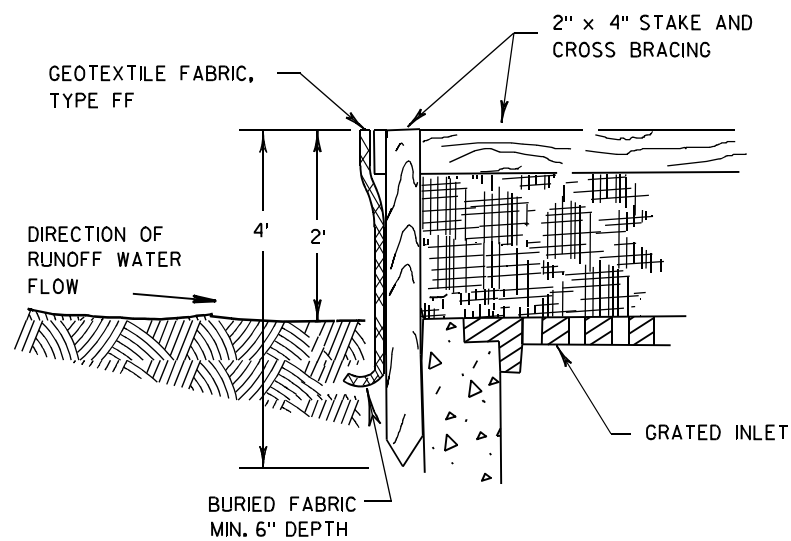
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



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



INLET PROTECTION, TYPE A

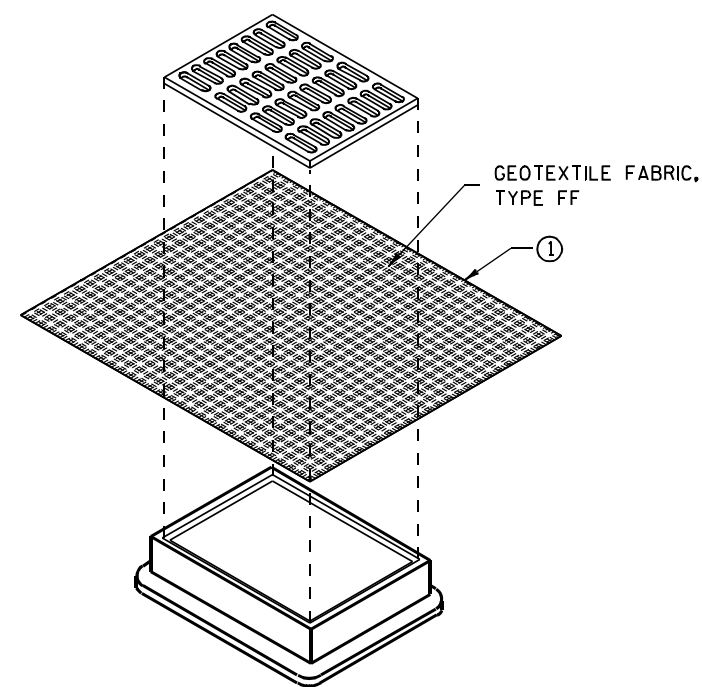
GENERAL NOTES

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

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

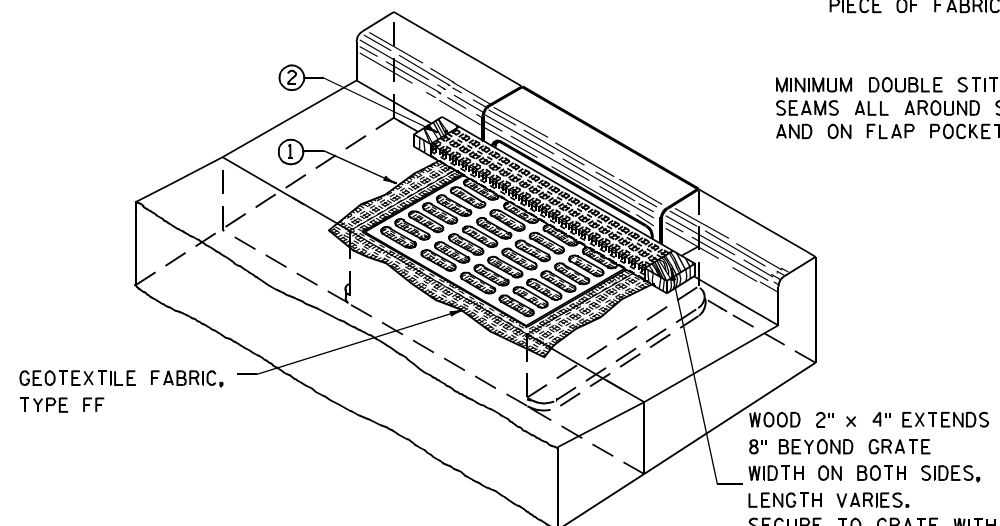
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

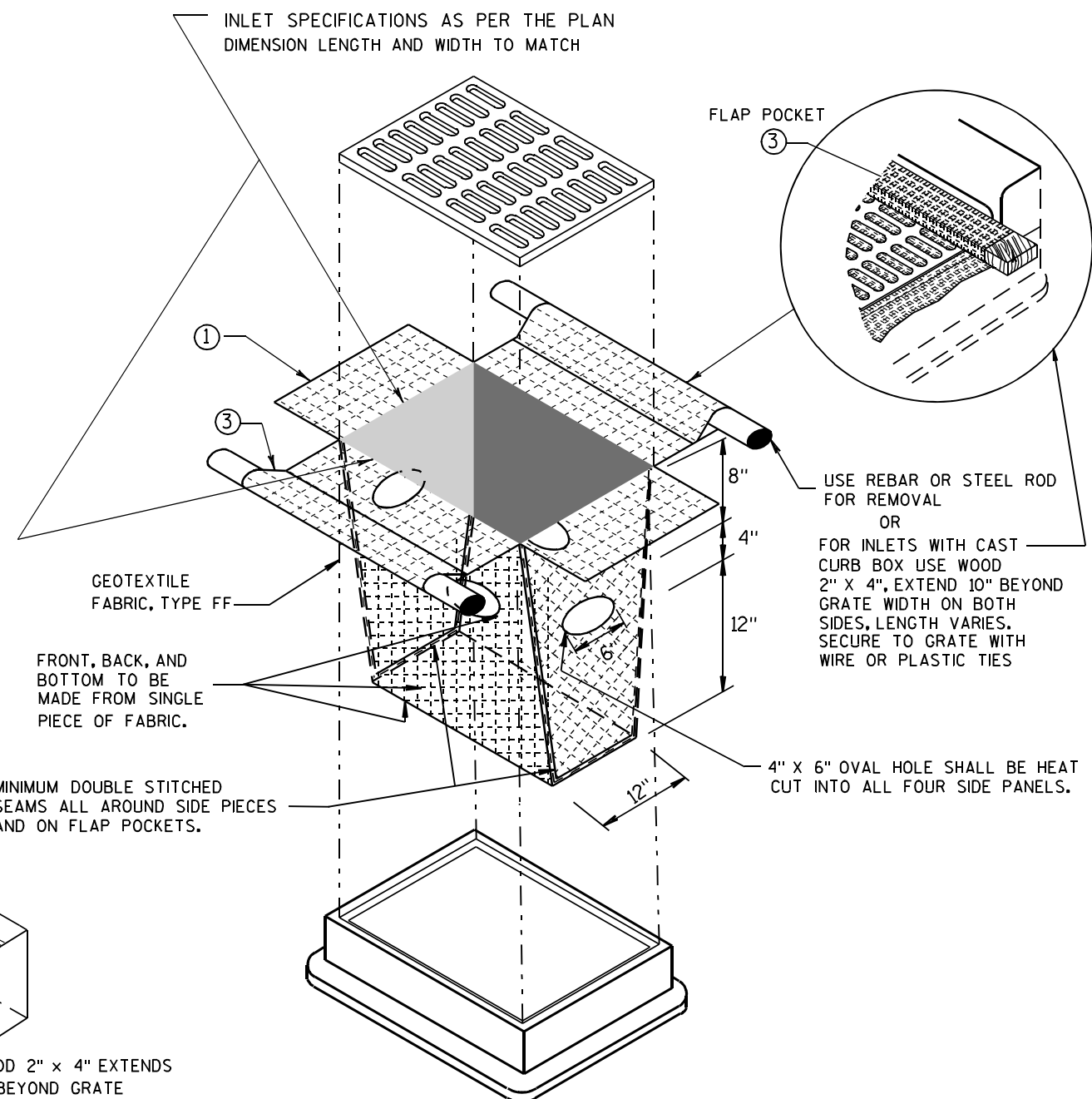
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



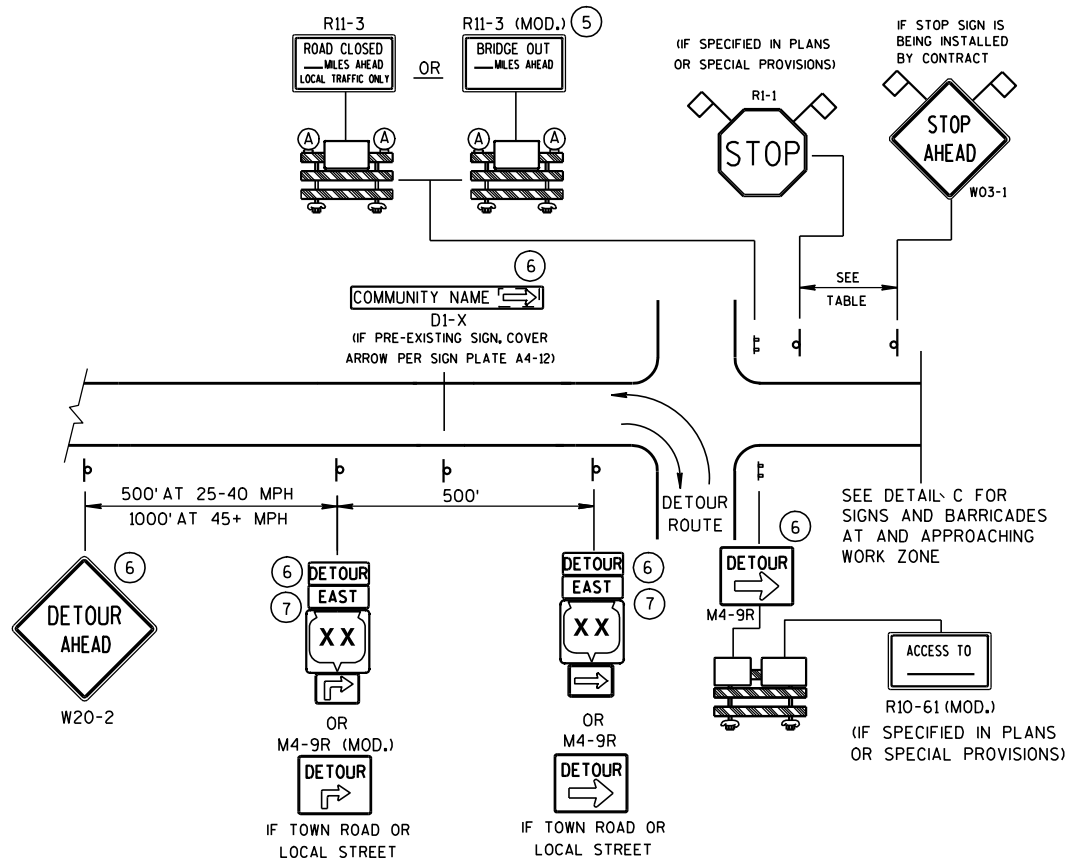
INLET PROTECTION, TYPE D

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

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

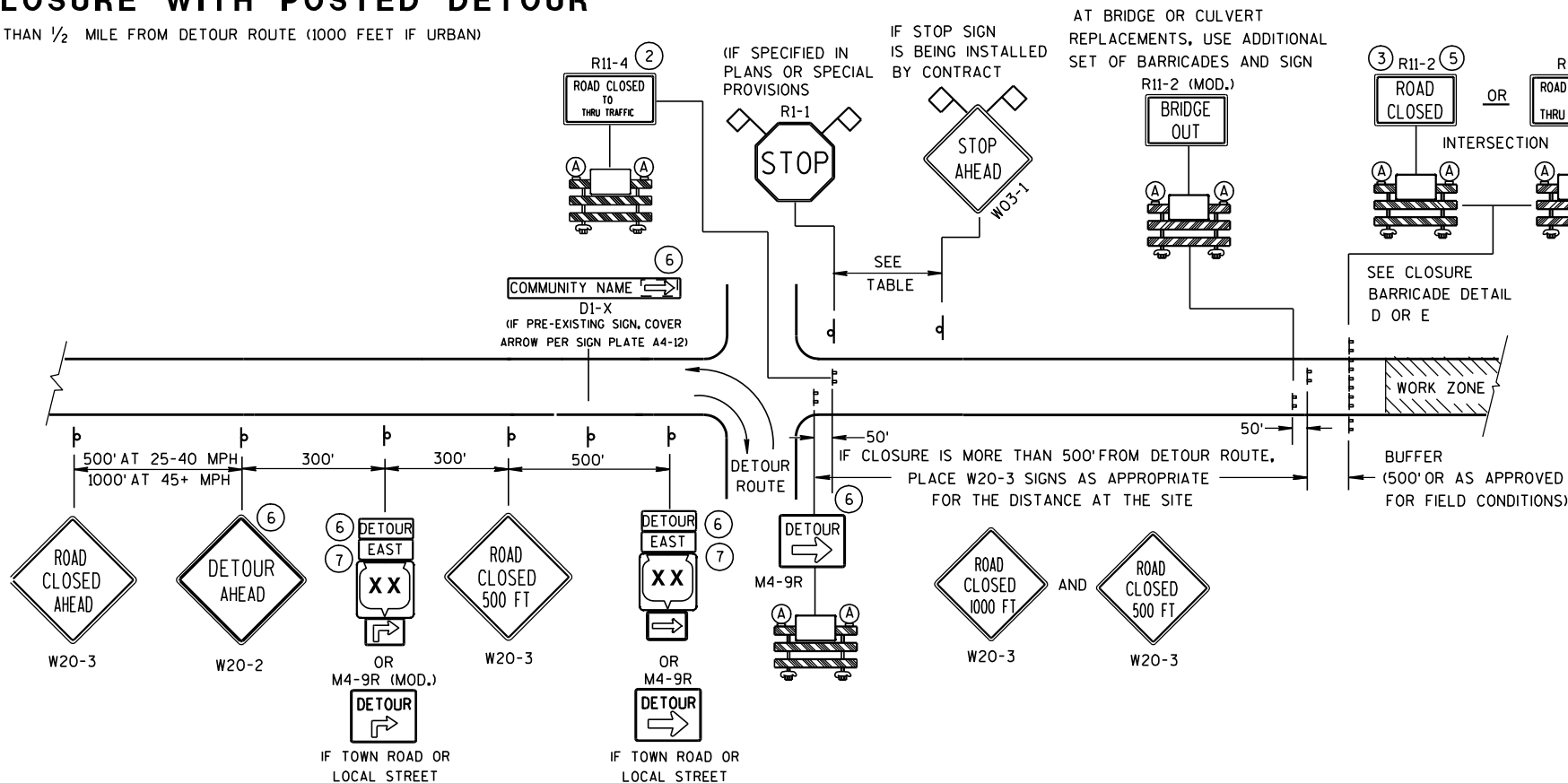
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



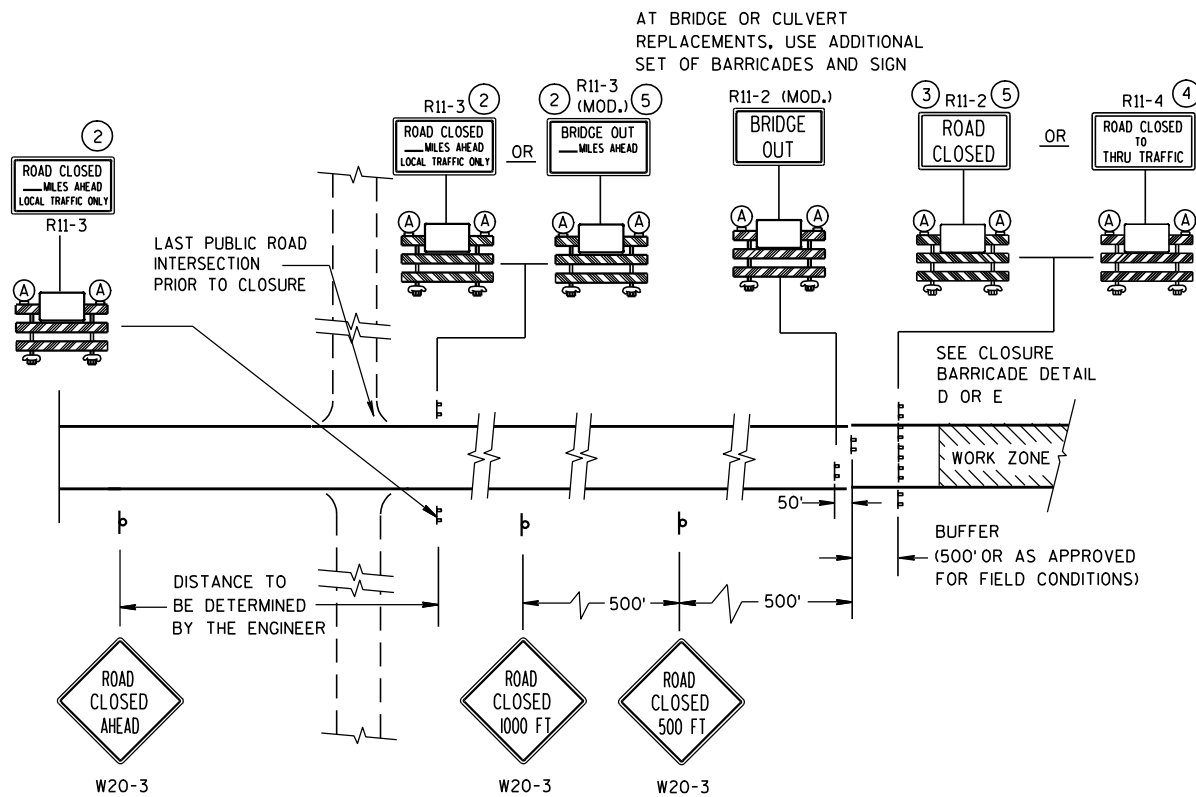
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

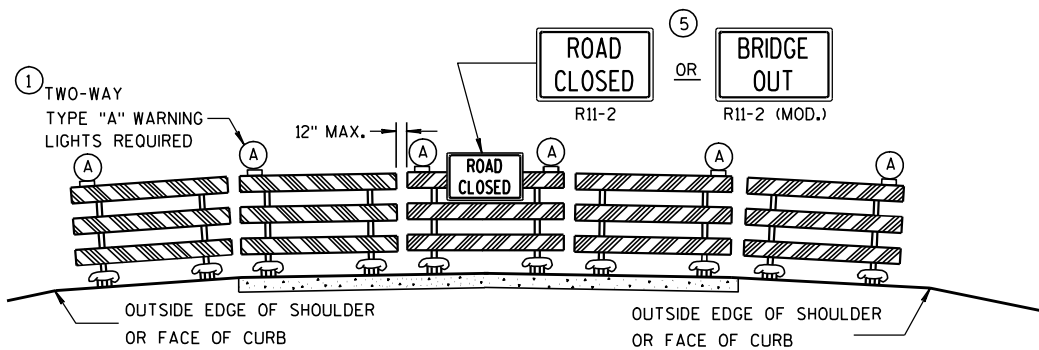
SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

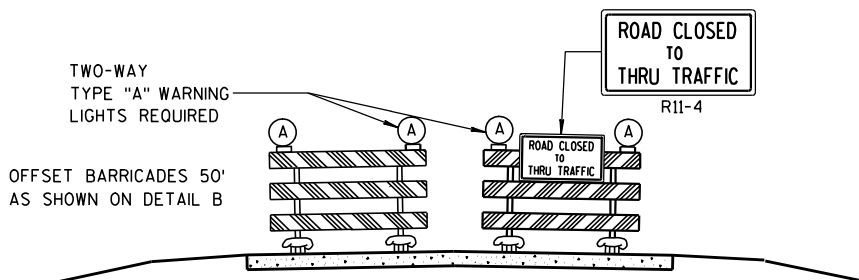
- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST M4-8 M3-X
- MI-4 OR MI-5A OR MI-6
- MO5-1 OR MO6-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

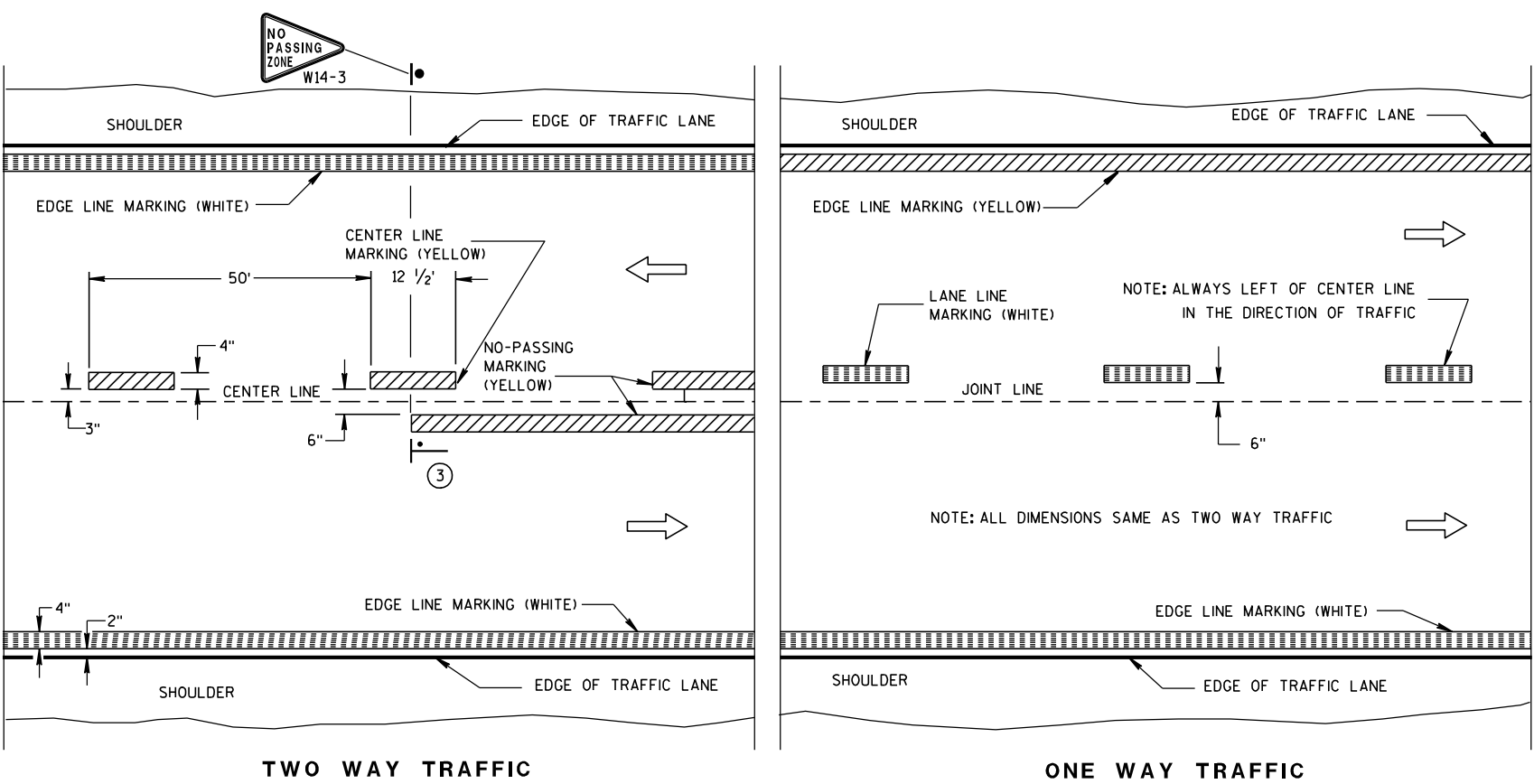
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

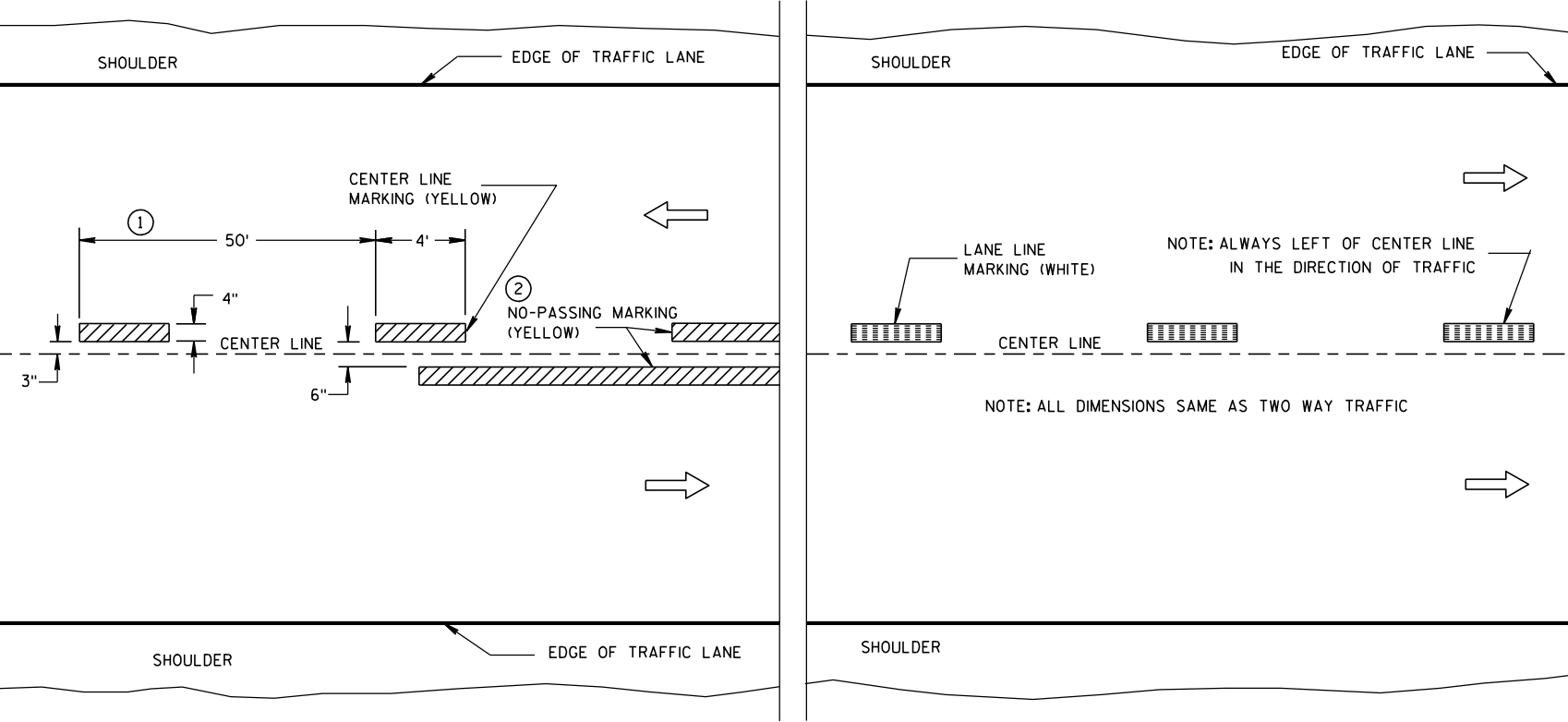
BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
<u>9/16/03</u> DATE	<u>/S/ Thomas N. Notbohm</u> CHIEF SIGNS AND MARKING ENGINEER
FHWA	



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC

ONE WAY TRAFFIC

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

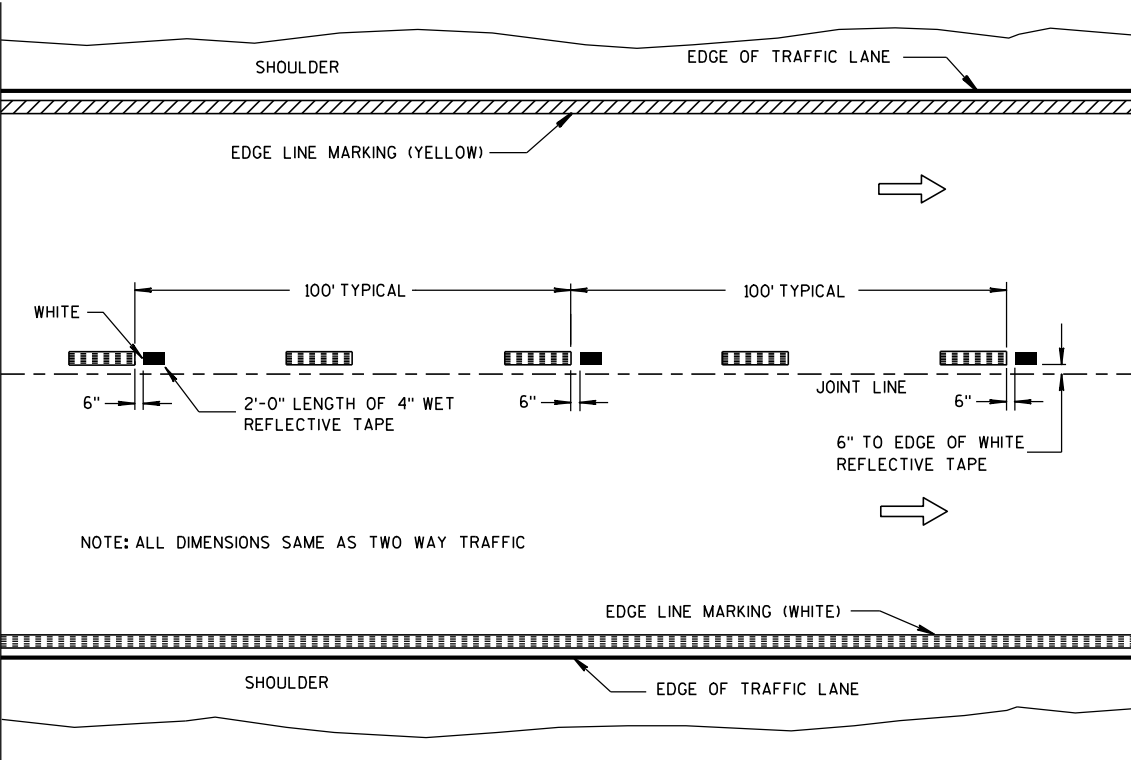
GENERAL NOTES

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

- 1 HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- 2 NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- 3 NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

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
6-23-11 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

GENERAL NOTES

- ① 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.

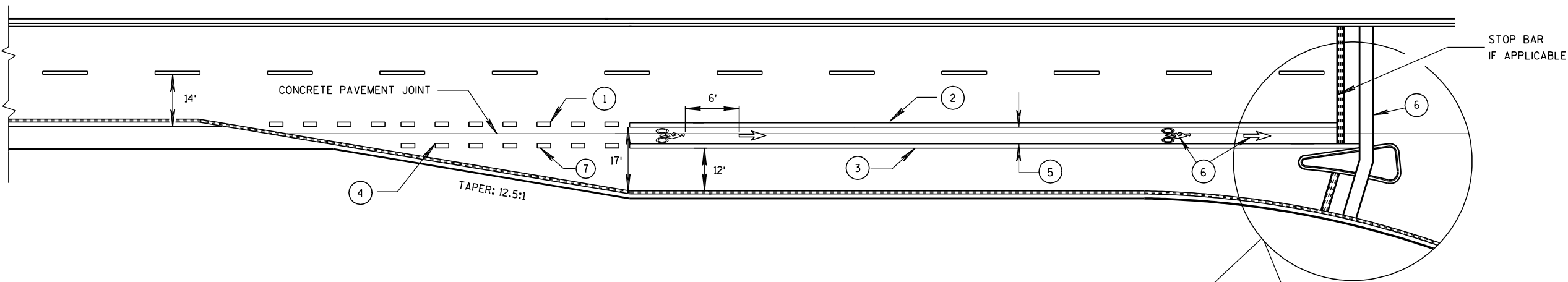
② 4-INCH, WHITE.

③ 8-INCH, WHITE.

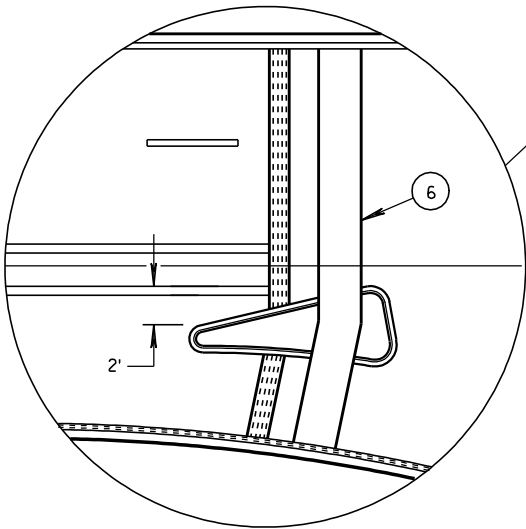
④ IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
- ⑤ BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
2 LANE (3' LEFT, 2' RIGHT OF JOINT).
4 LANE (2' LEFT, 3' RIGHT OF JOINT).
BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4',
5' AT ≥ 45 MPH.

⑥ REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

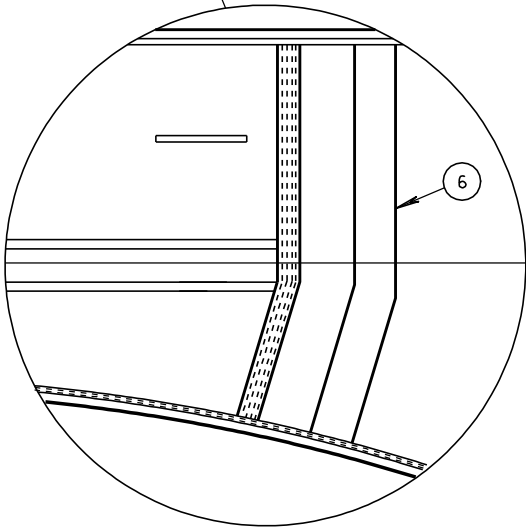
⑦ 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.



BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE



4 LANE DIVIDED WITH ISLAND



4 LANE DIVIDED WITHOUT ISLAND

BICYCLE LANE MARKING

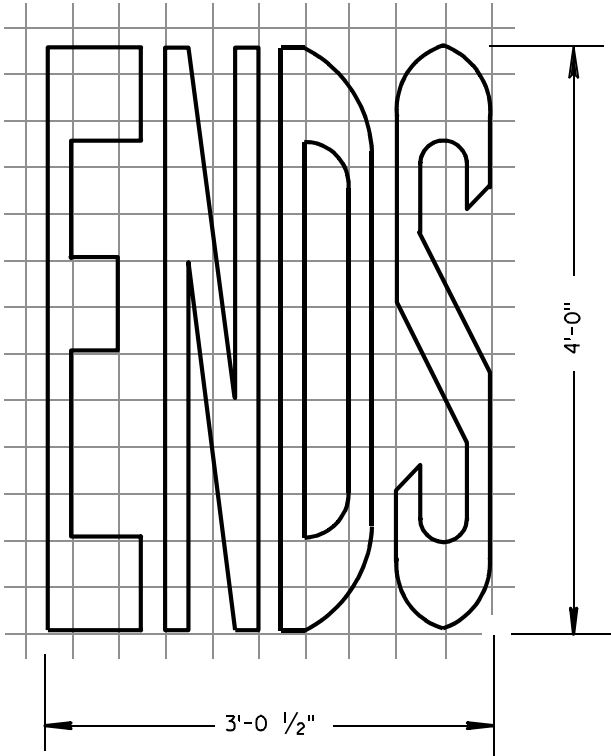
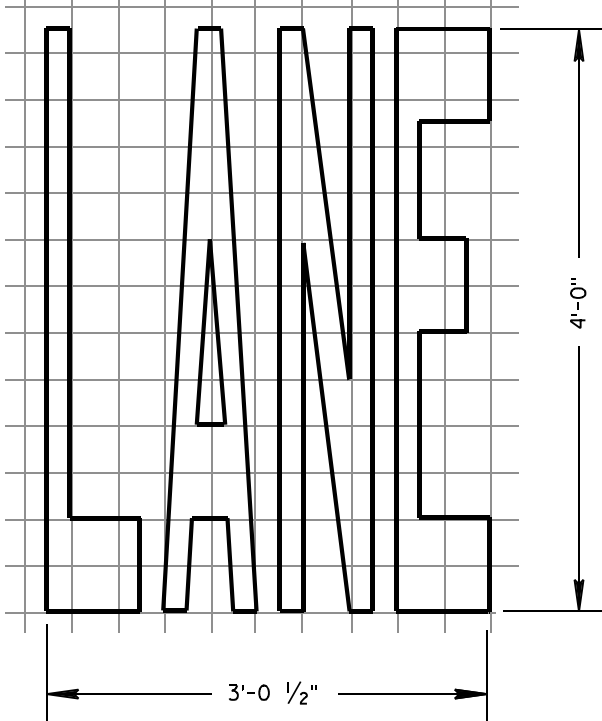
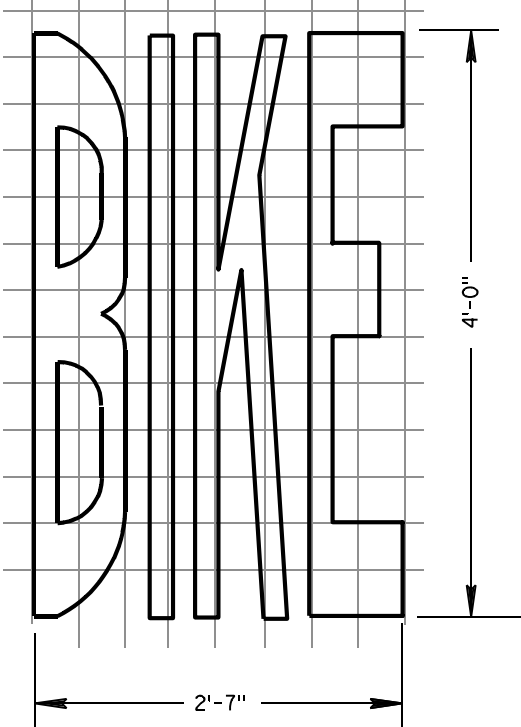
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/6/2012 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

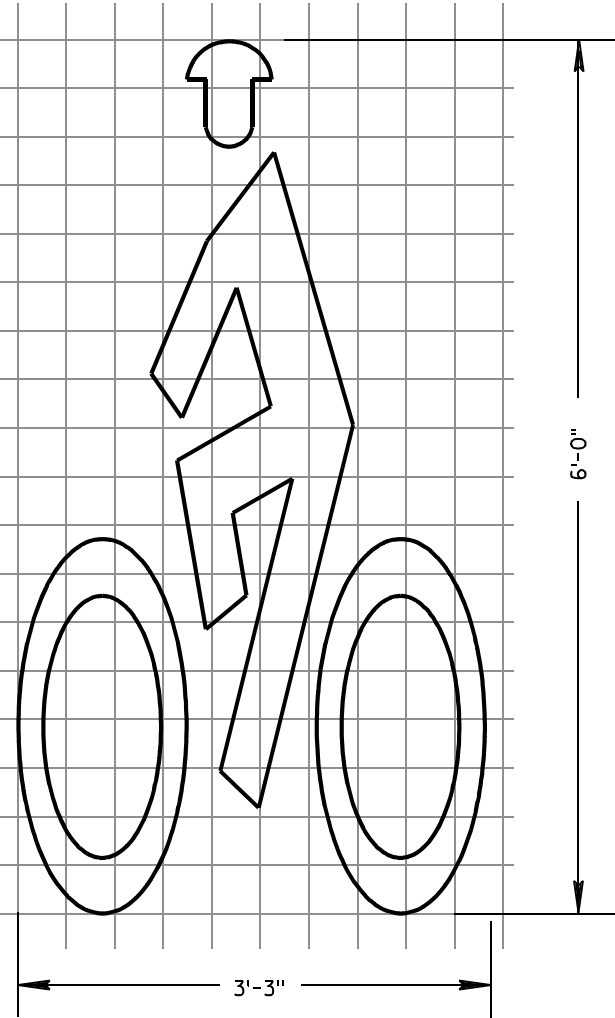
GENERAL NOTES

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

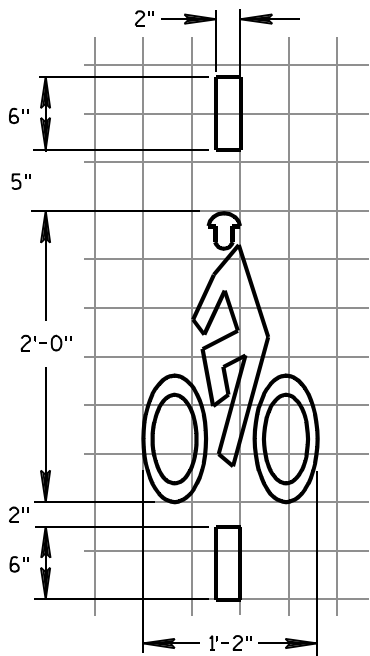
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



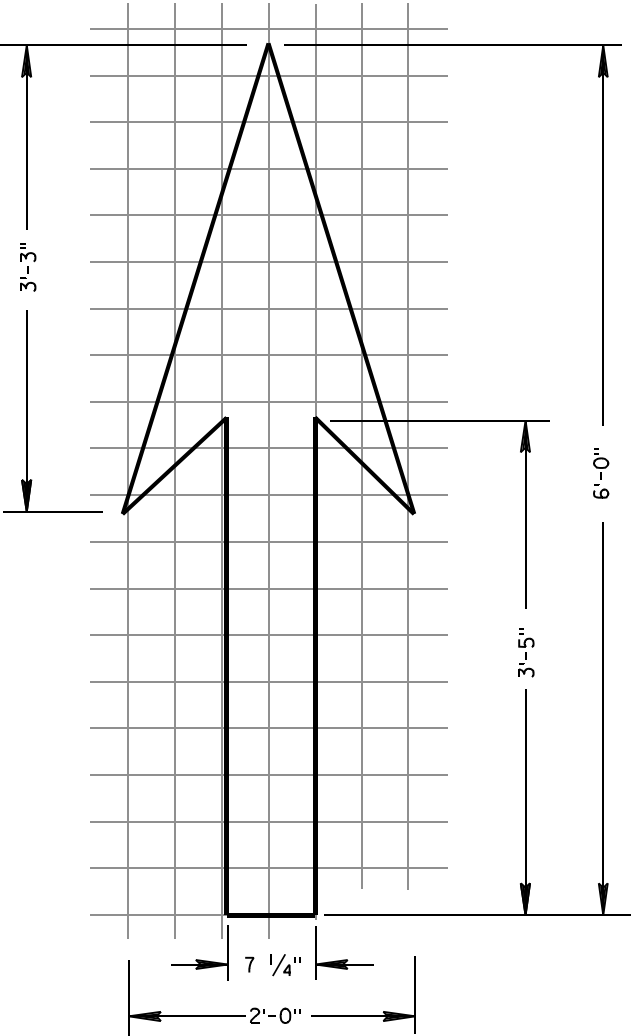
BIKE LANE WORDS



BIKE LANE SYMBOL



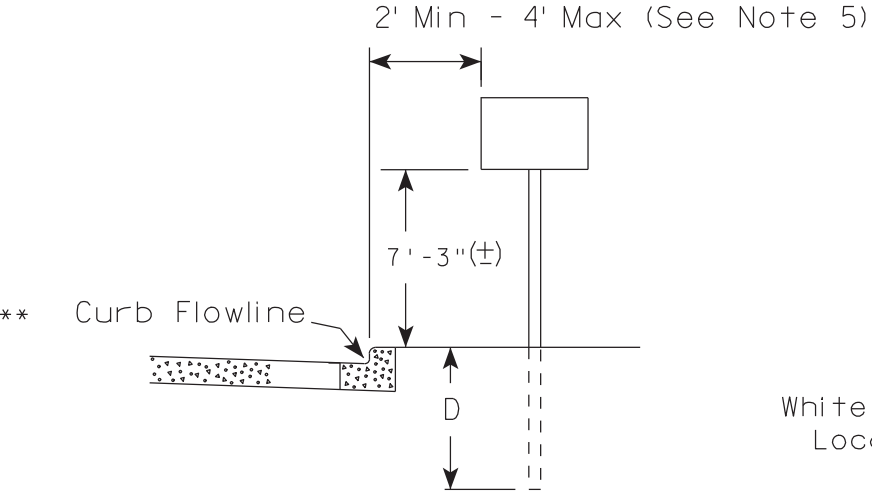
BICYCLE DETECTOR
PAVEMENT MARKING



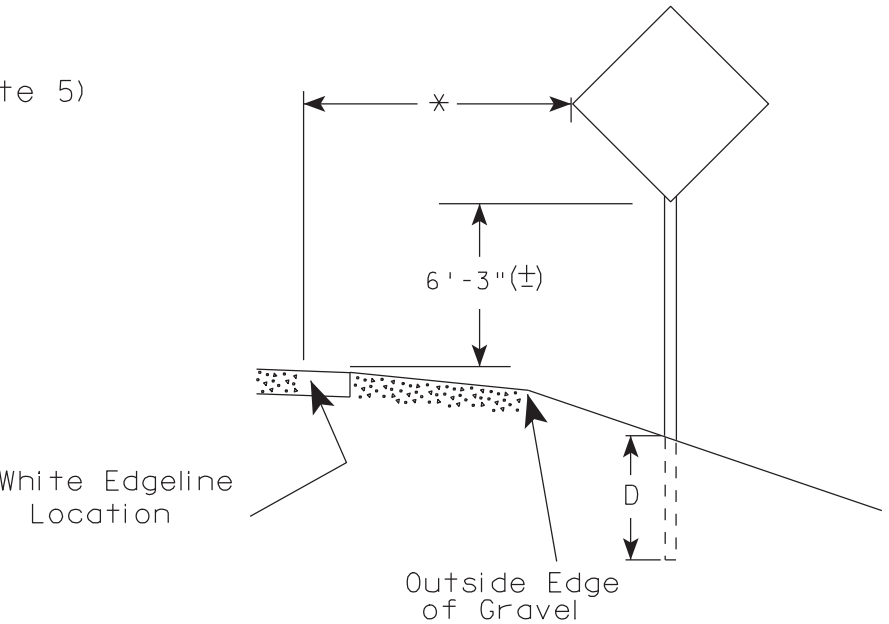
BIKE LANE ARROW

PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-6-2012 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN FHWA

URBAN AREA

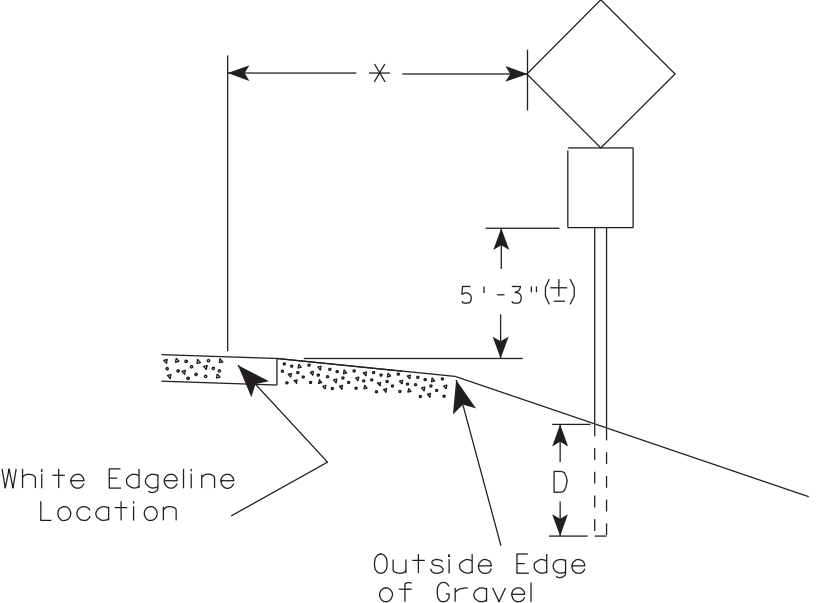
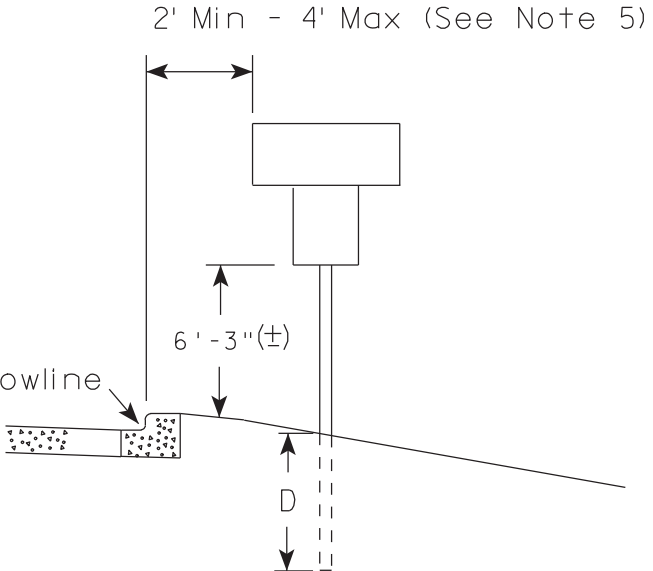


RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).



POST EMBEDMENT DEPTH

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

✱✱ 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.

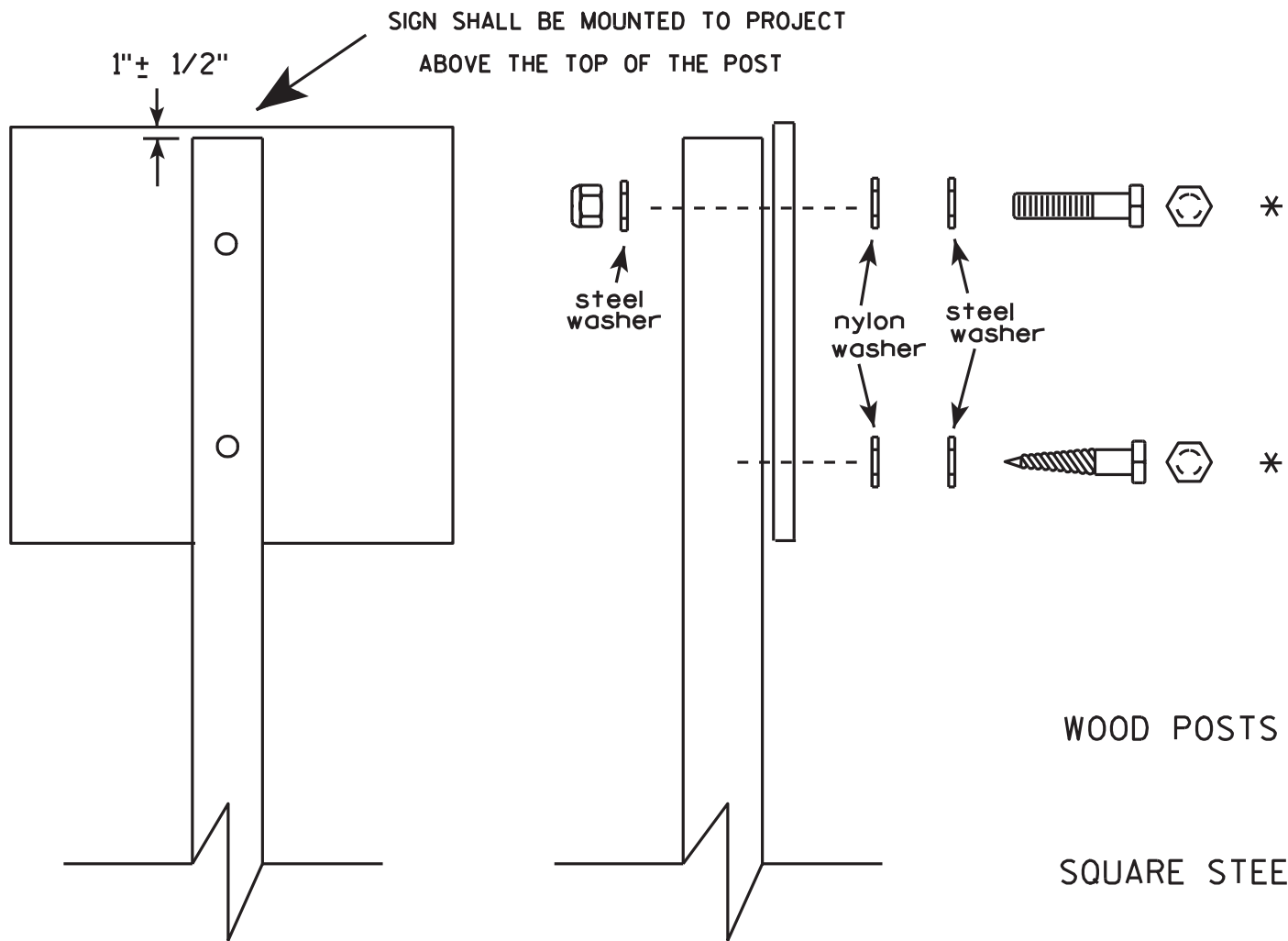
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

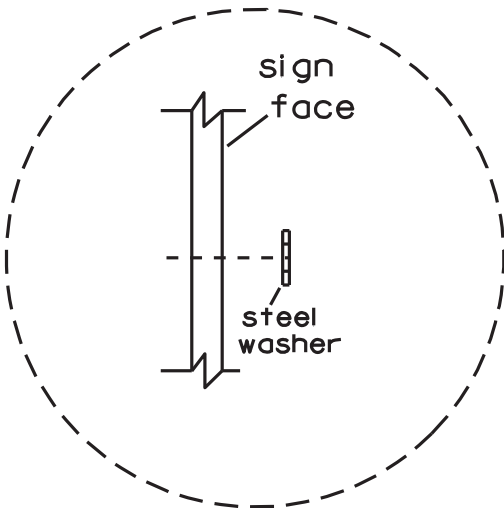


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

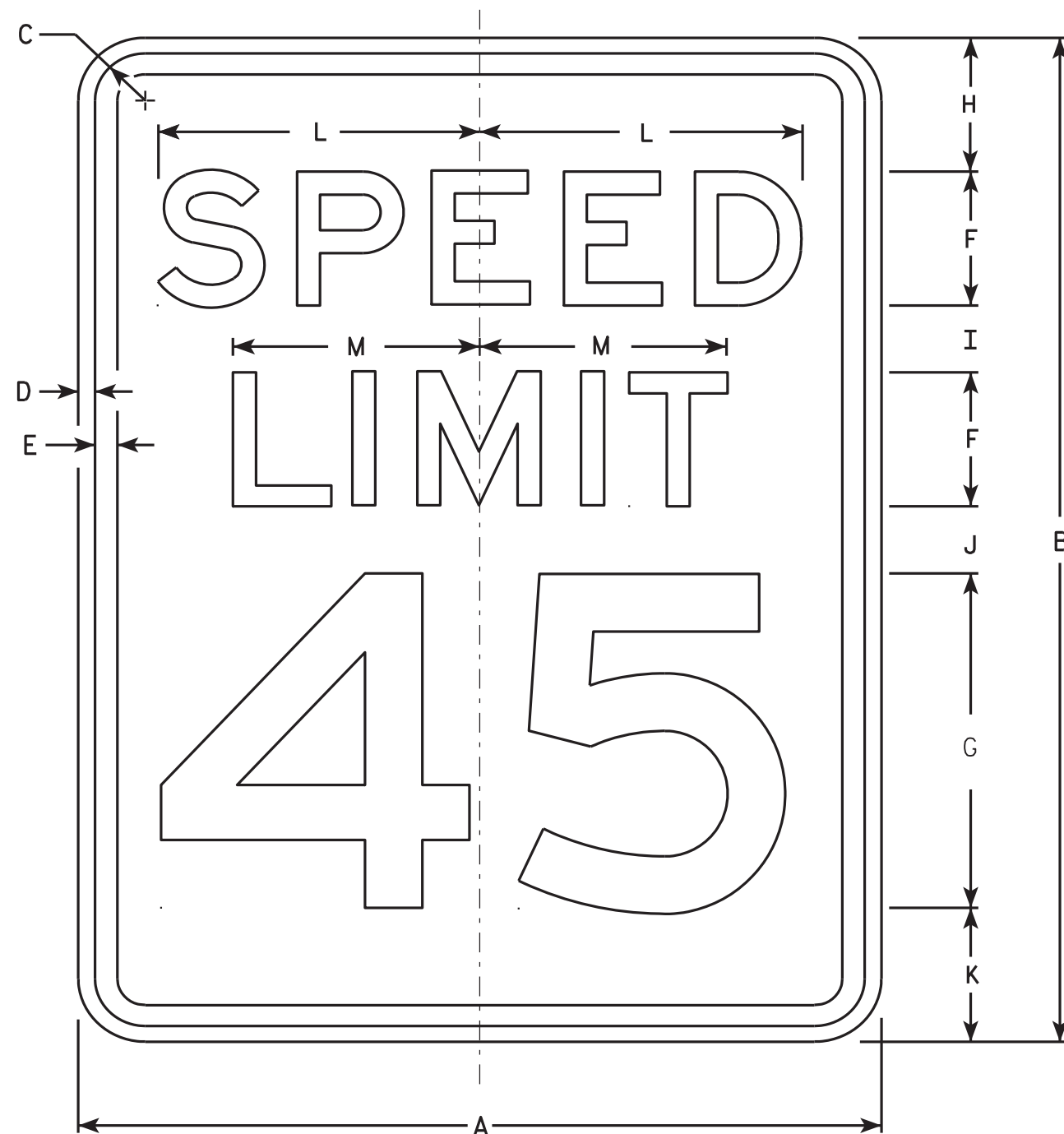
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3"
- MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE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



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

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

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



R2-1

NOTES

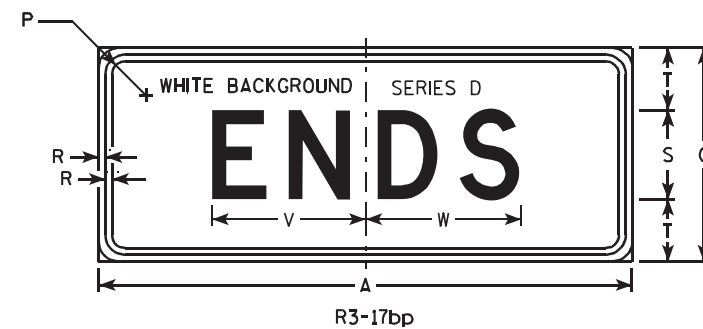
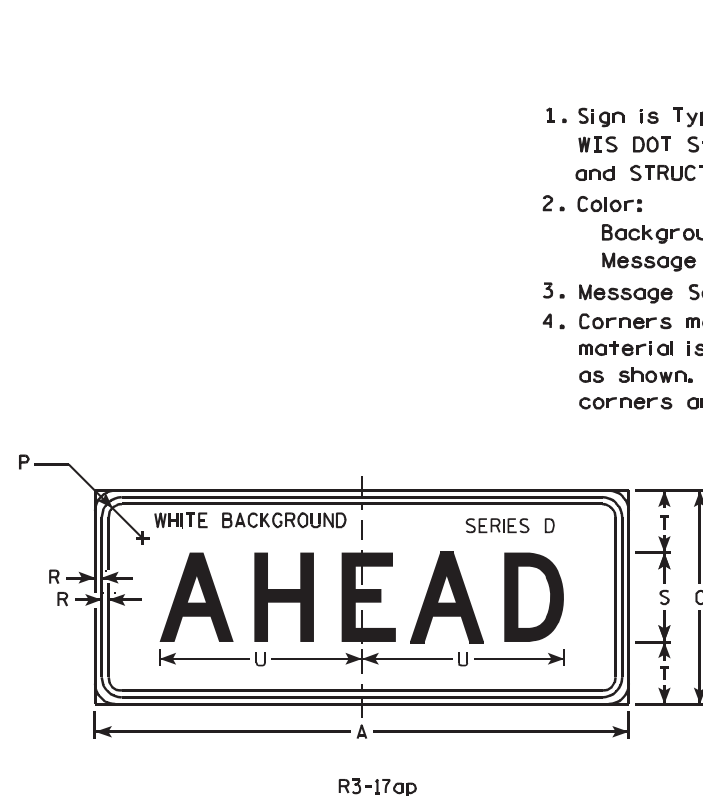
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

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

STANDARD SIGN
R2-1

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

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

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

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17b Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

WISCONSIN DEPT OF TRANSPORTATION

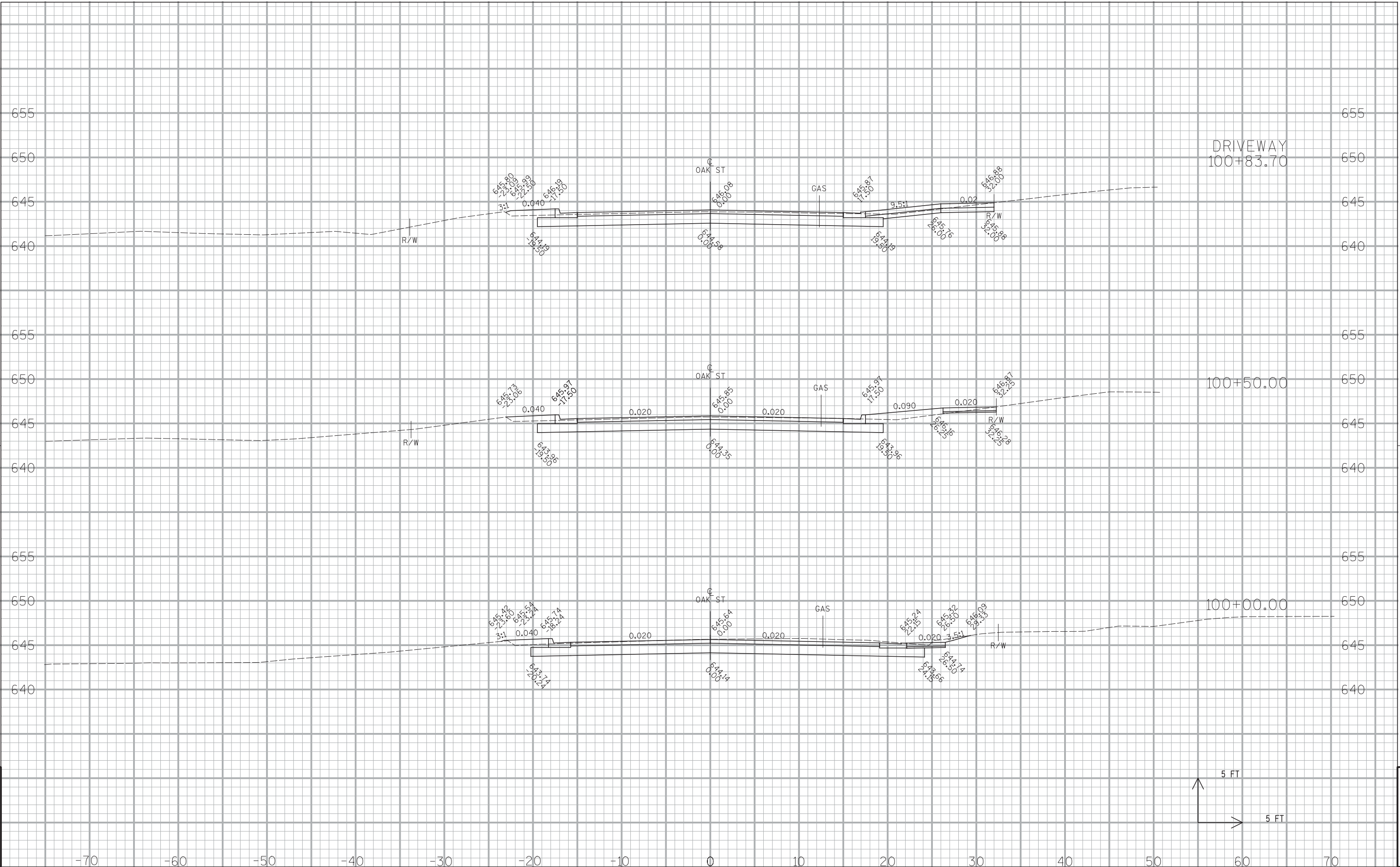
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

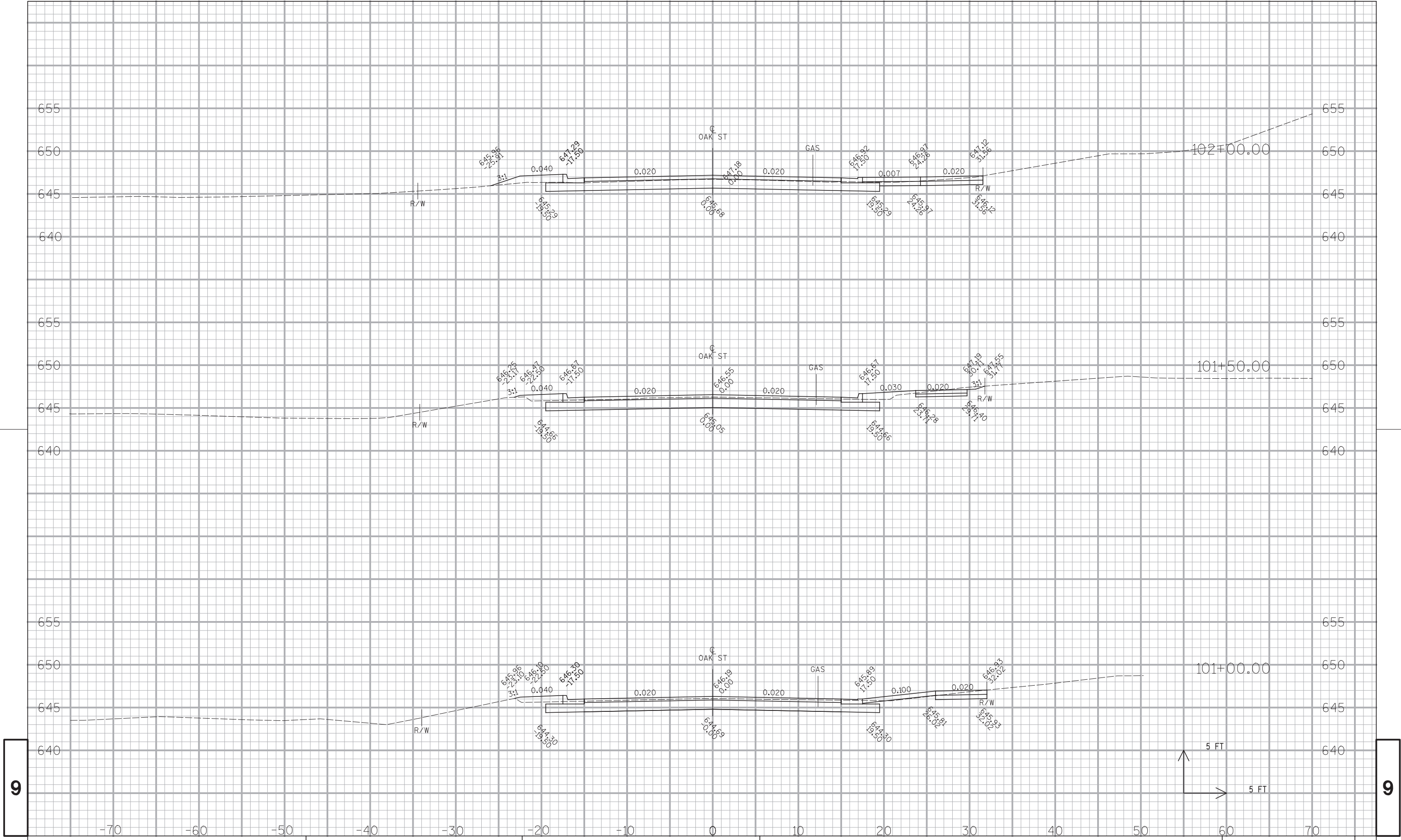
	Common Excavation								Fill				
Station	Area		Area Total	Volume		Cum. Volume			Area	Volume	Expanded	Cum Volume	Mass Ordinate
	Salvaged Unusable Pavement Material (SF)	Cut (Unclassified) (SF)		Salvaged Unusable Pavement Material (CY)	Cut (Unclassified) (SF)	Salvaged Unusable Pavement Material (CY)	Cut (Unclassified) (SF)	Total (CY)	Unclassified (SF)	Unclassified (CY)	Vol. (1.25) (CY)	Unclassified (CY)	
99+27.0	13.33	38.78	52.11	0	0	0	0	0	3.97	0	0	0	0
100+50.0	13.30	43.57	56.87	61	188	61	188	248	11.71	36	45	45	143
101+00.0	13.23	39.17	52.40	25	77	85	264	349	5.27	16	20	64	200
101+50.0	12.77	38.69	51.46	24	72	109	336	446	8.67	13	16	80	256
102+00.0	12.95	27.85	40.80	24	62	133	398	531	11.26	18	23	103	294
102+50.0	13.21	19.88	33.09	24	44	157	442	599	13.03	22	28	132	310
103+00.0	13.43	6.53	19.96	25	24	182	467	649	18.87	30	37	169	298
103+50.0	13.62	4.43	18.05	25	10	207	477	684	29.19	45	56	224	253
104+00.0	13.67	3.78	17.45	25	8	232	484	717	38.23	62	78	302	182
104+50.0	14.33	1.02	15.35	26	4	258	489	747	25.01	59	73	375	113
105+00.0	15.19	0.67	15.86	27	2	286	490	776	28.85	50	62	438	53
105+50.0	15.50	6.47	21.97	28	7	314	497	811	26.82	52	64	502	-5
106+00.0	15.45	9.24	24.69	29	15	343	511	854	20.34	44	55	557	-45
106+50.0	15.45	15.34	30.79	29	23	371	534	905	7.13	25	32	589	-54
107+00.0	15.45	18.02	33.47	29	31	400	565	965	8.91	15	19	607	-42
107+50.0	15.45	18.61	34.06	29	34	428	599	1,028	8.96	17	21	628	-29
108+00.0	15.40	13.35	28.75	29	30	457	629	1,086	7.91	16	20	647	-19
108+50.0	15.40	14.38	29.78	29	26	486	654	1,140	9.63	16	20	668	-13
109+00.0	15.40	18.86	34.26	29	31	514	685	1,199	7.97	16	20	688	-3
109+50.0	14.72	26.13	40.85	28	42	542	727	1,269	10.70	17	22	710	17
110+00.0	13.98	40.11	54.09	27	61	569	788	1,357	6.31	16	20	729	59
110+50.0	13.25	54.54	67.79	25	88	594	876	1,469	4.44	10	12	742	134
111+00.0	12.96	57.50	70.46	24	104	618	979	1,597	4.85	9	11	752	227
111+50.0	13.26	59.74	73.00	24	109	642	1,088	1,730	4.49	9	11	763	325
112+00.0	13.56	81.64	95.20	25	131	667	1,219	1,886	1.63	6	7	770	449
112+50.0	13.86	65.62	79.48	25	136	693	1,355	2,048	0.00	2	2	772	583
113+00.0	14.21	61.28	75.49	26	118	719	1,473	2,191	0.00	0	0	772	701
113+50.0	14.55	73.29	87.84	27	125	745	1,597	2,343	0.00	0	0	772	825
114+00.0	14.86	57.07	71.93	27	121	772	1,718	2,490	0.00	0	0	772	946
114+50.0	15.21	59.81	75.02	28	108	800	1,826	2,627	0.00	0	0	772	1,054
115+00.0	15.51	58.92	74.43	28	110	829	1,936	2,765	1.22	1	1	774	1,163
115+50.0	15.89	51.54	67.43	29	102	858	2,038	2,896	1.30	2	3	777	1,262
116+00.0	16.29	44.30	60.59	30	89	888	2,127	3,015	3.55	4	6	782	1,345
116+50.0	16.63	47.85	64.48	30	85	918	2,213	3,131	1.10	4	5	788	1,425
117+00.0	16.99	46.26	63.25	31	87	949	2,300	3,249	1.30	2	3	790	1,509
117+50.0	16.55	47.66	64.21	31	87	980	2,387	3,367	2.32	3	4	795	1,592
118+00.0	16.17	50.86	67.03	30	91	1,011	2,478	3,488	0.18	2	3	797	1,680
118+50.0	15.75	49.04	64.79	30	93	1,040	2,570	3,610	0.23	0	0	798	1,772
118+95.0	16.15	29.37	45.52	27	65	1,067	2,636	3,702	0.00	0	0	798	1,838
Palace Street				18	60	1,085	2,696	3,781		0	0	798	1,898
Cunningham Street				66	107	1,152	2,803	3,955		27	34	832	1,971
Excess Material (STA 117+14 - STA 118+70)				0	71	1,152	2,874	4,026				832	2,042
Undistributed				0	22	1,152	2,897	4,048			832	2,065	

Notes:
1. Common Excavation is the sum of the Cut (Item number 205.0100).
2. Salvaged/Unusable Pavement Material is included in the Cut.
3. Salvaged/Unusable Pavement Material - Includes Asphaltic Pavement volumes.
4. Available Material = Cut - Salvaged/Unusable Pavement Material.
5. Borrow is the sum of the Fill (Item number 208.0100).
6. Expanded Fill = Unexpanded Fill * Expanded Fill Factor (= 1.25)
7. The Mass Ordinate + or - quantity calculated for the Division.
Plus quantity indicates an excess of material within the Division.
Minus indicates a shortage of material within the Division.
Mass Ordinate = Unclassified Cut - Unclassified Fill
Estimated Waste = Unusable Asphalt + Mass Ordinate => 3,216 C.Y.

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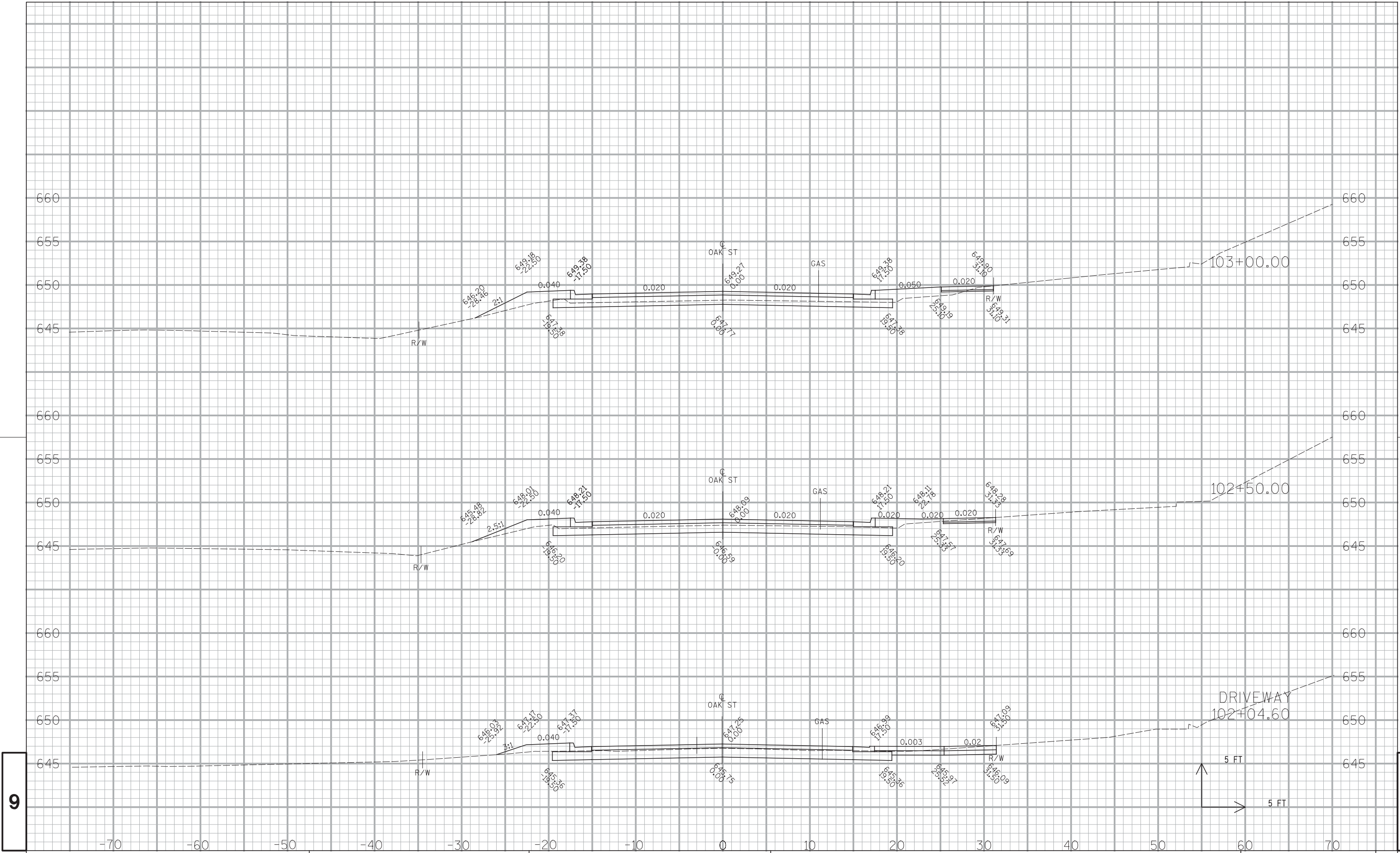


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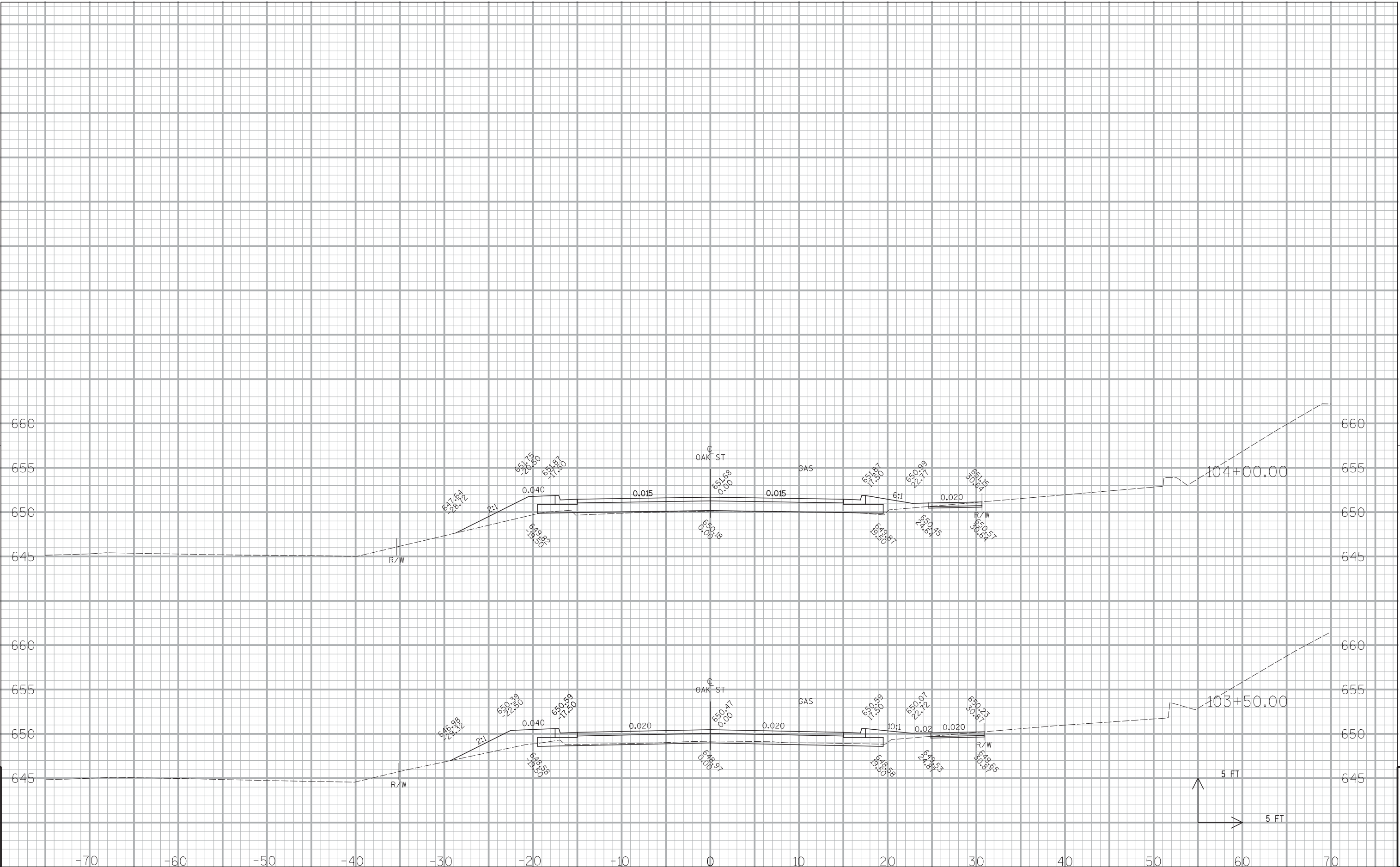
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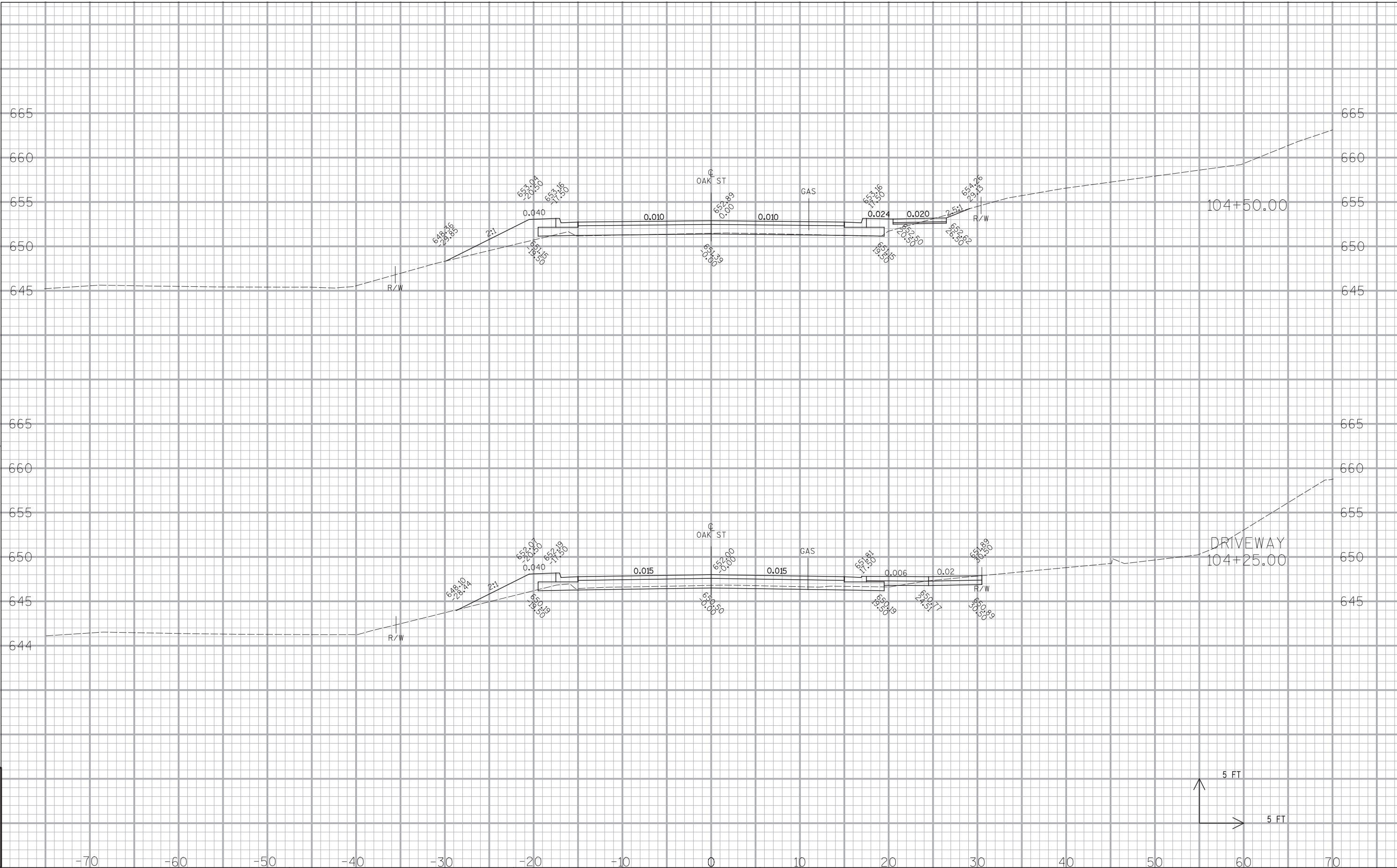
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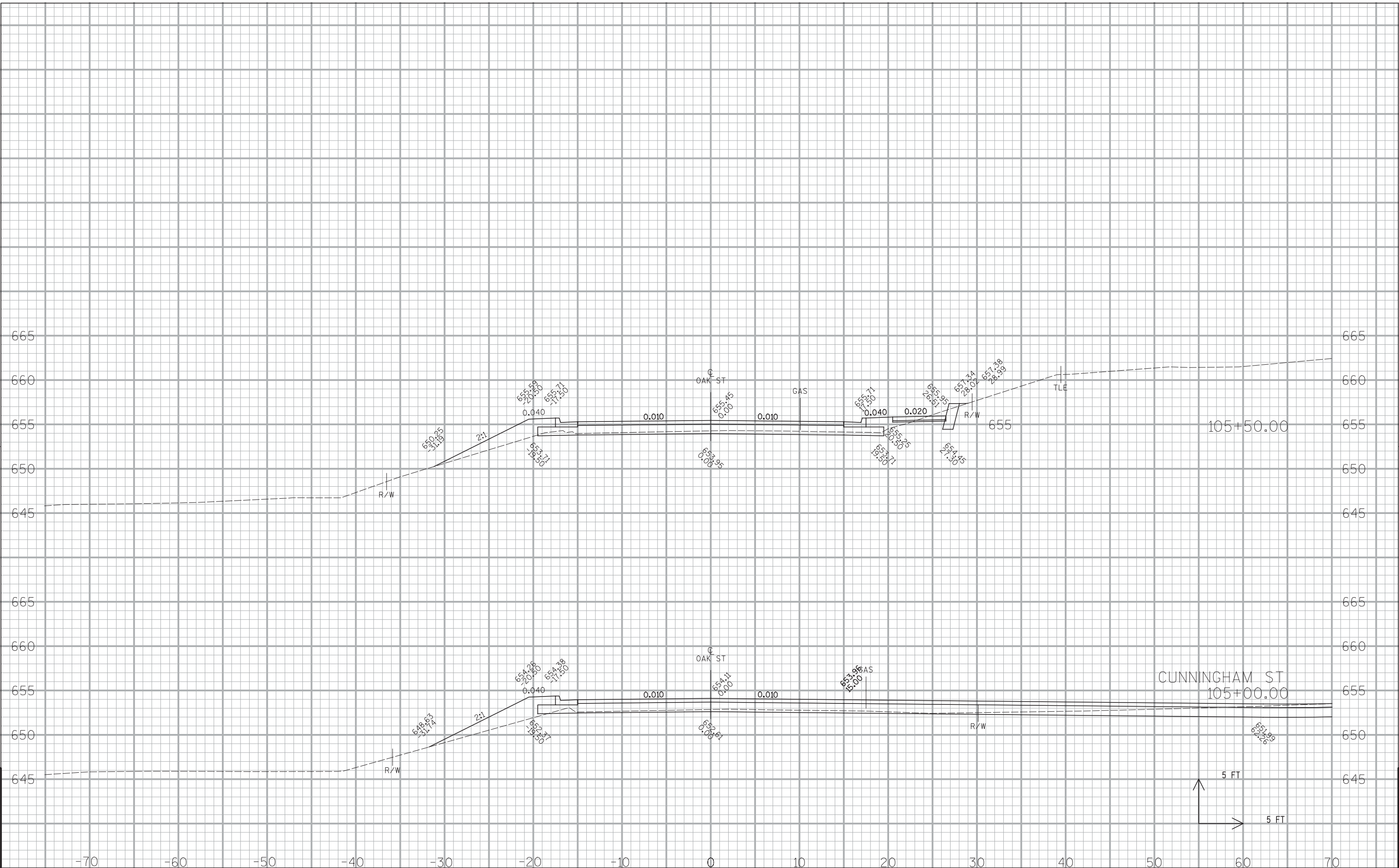
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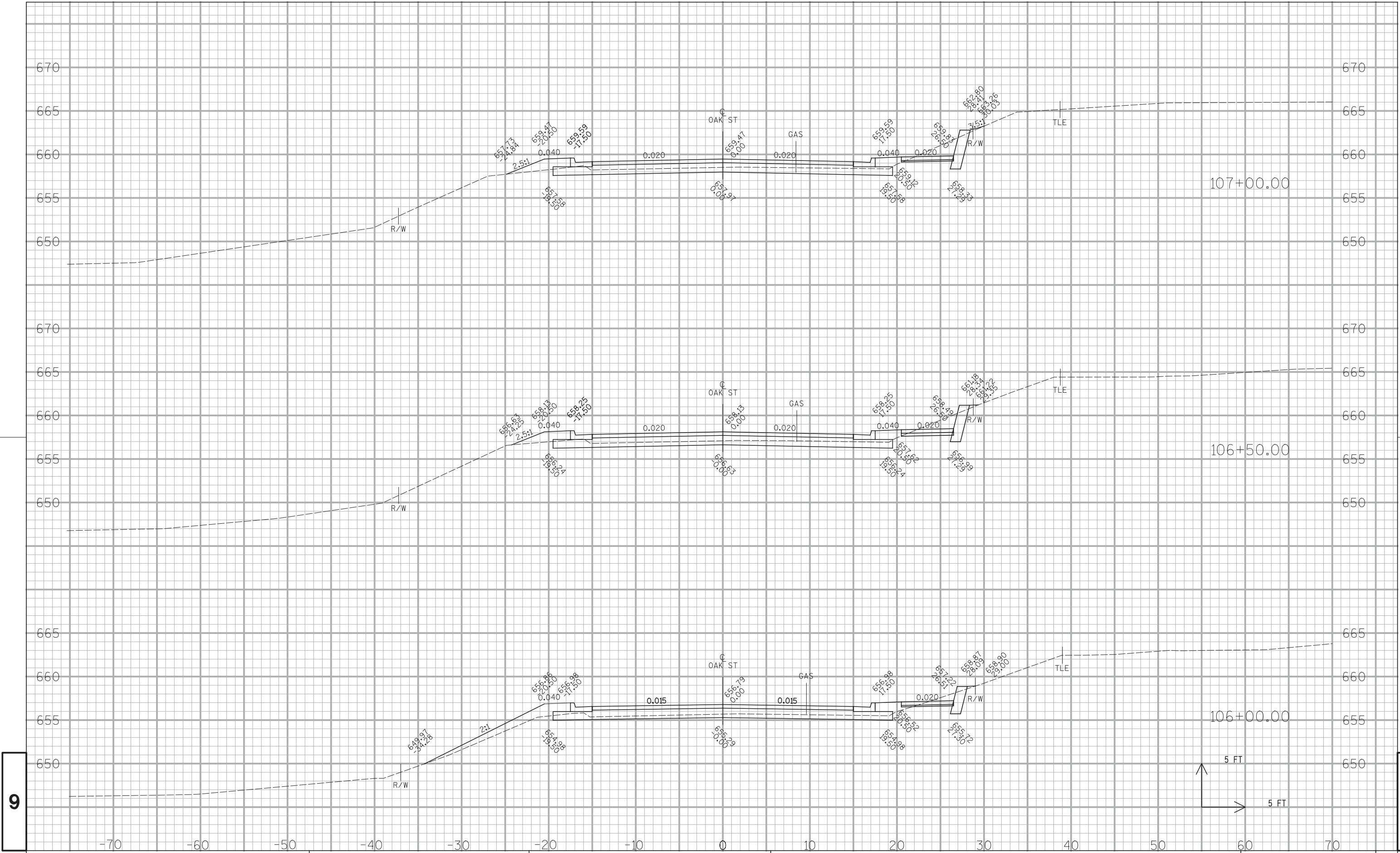


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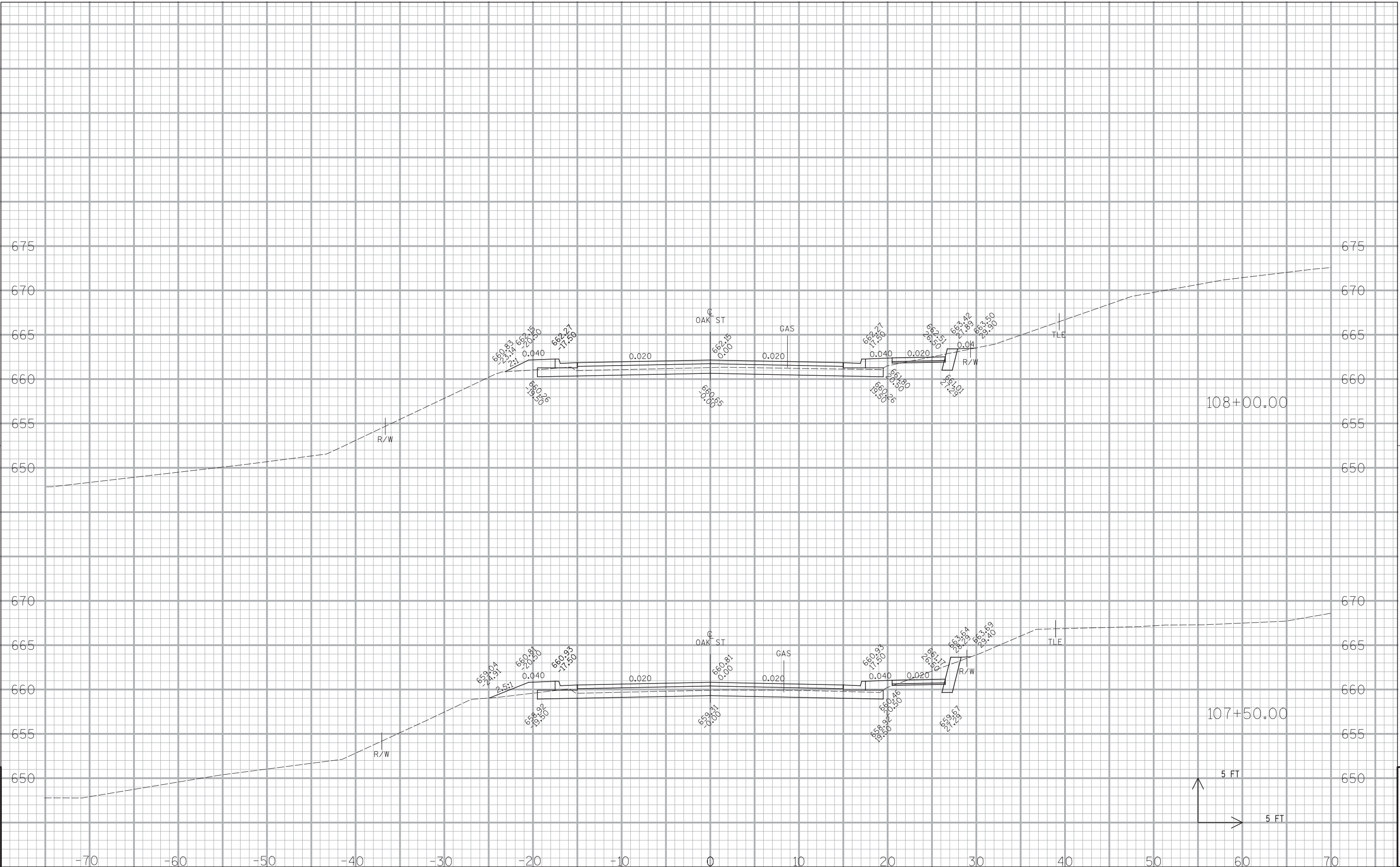
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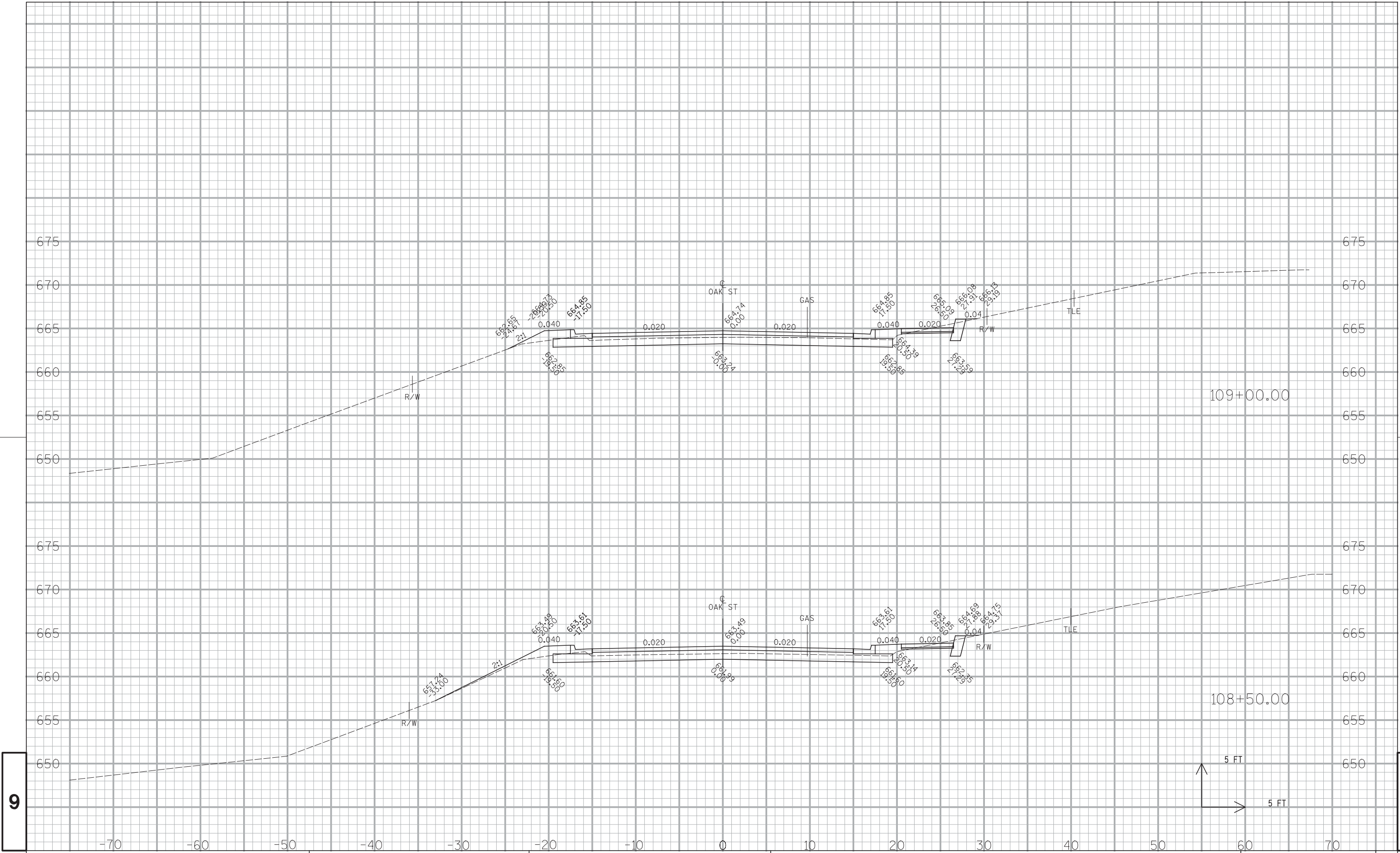
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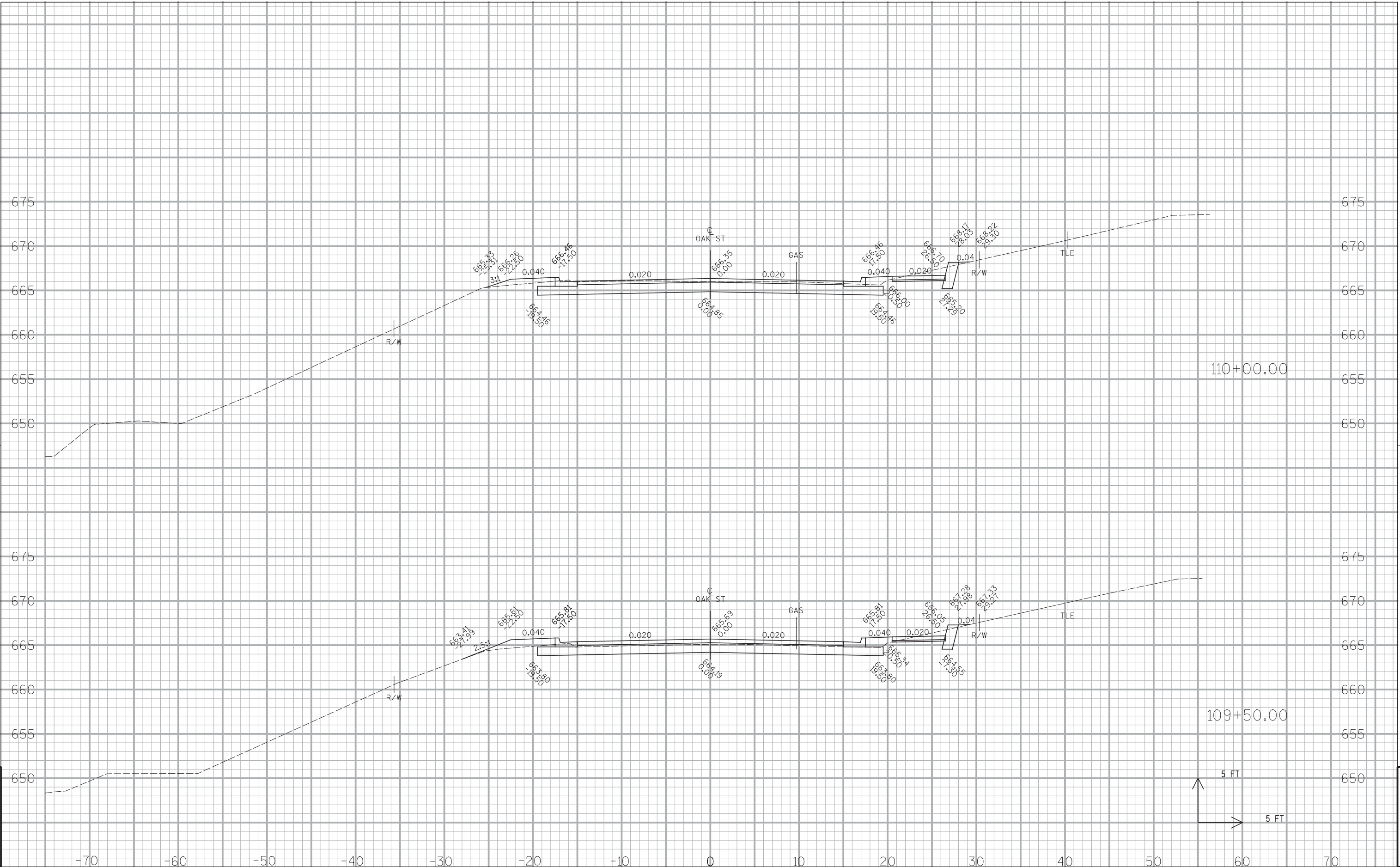
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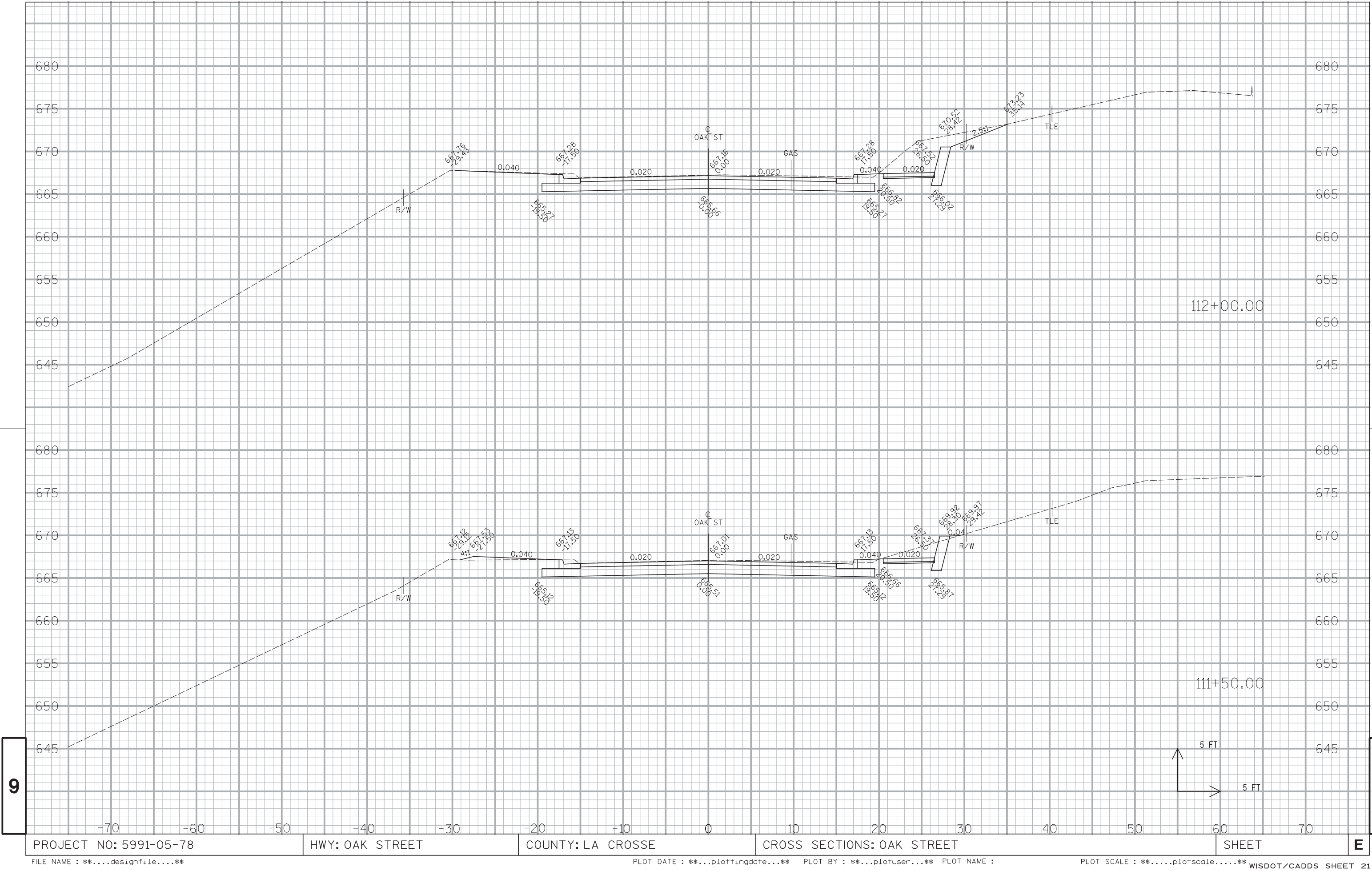
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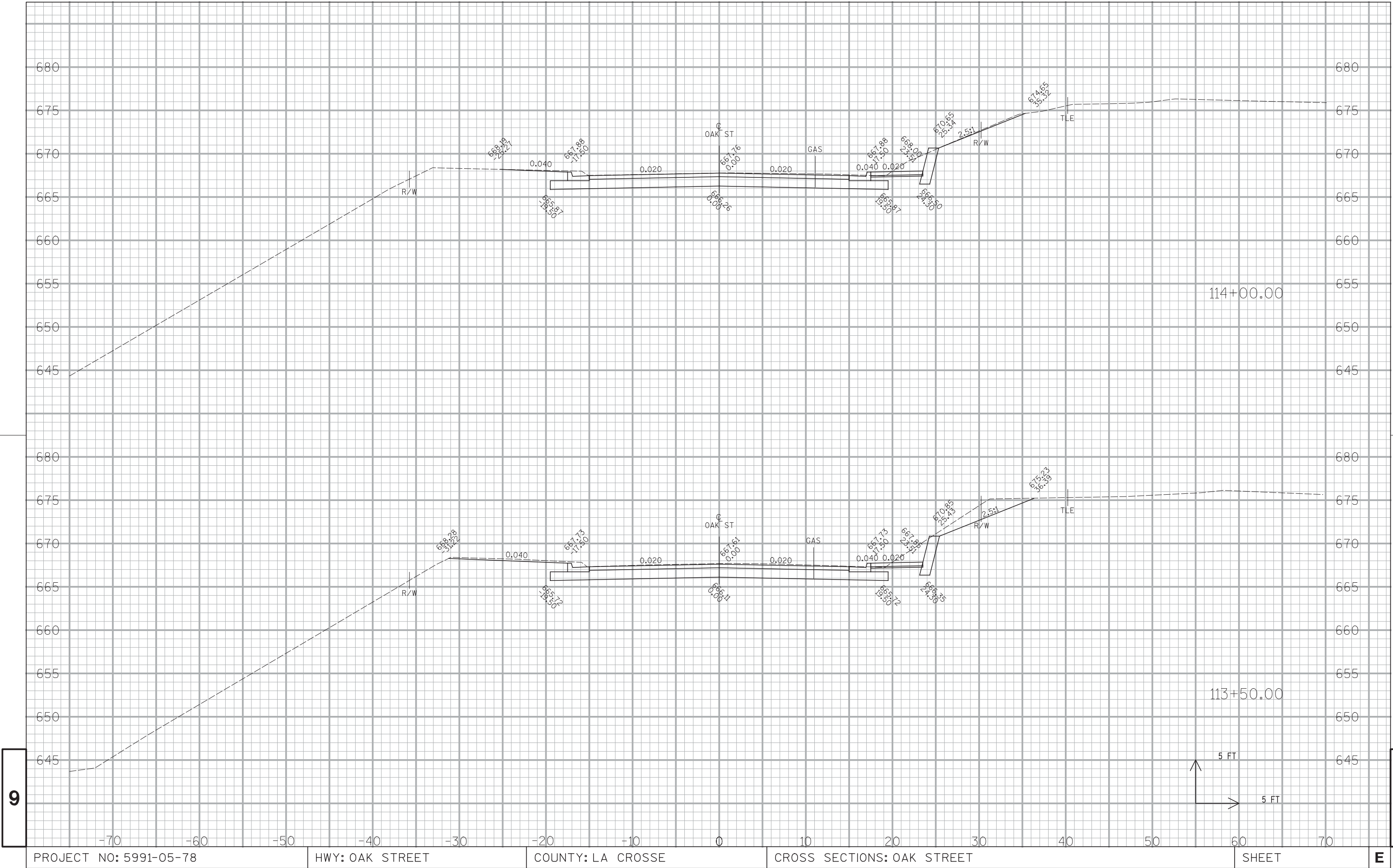


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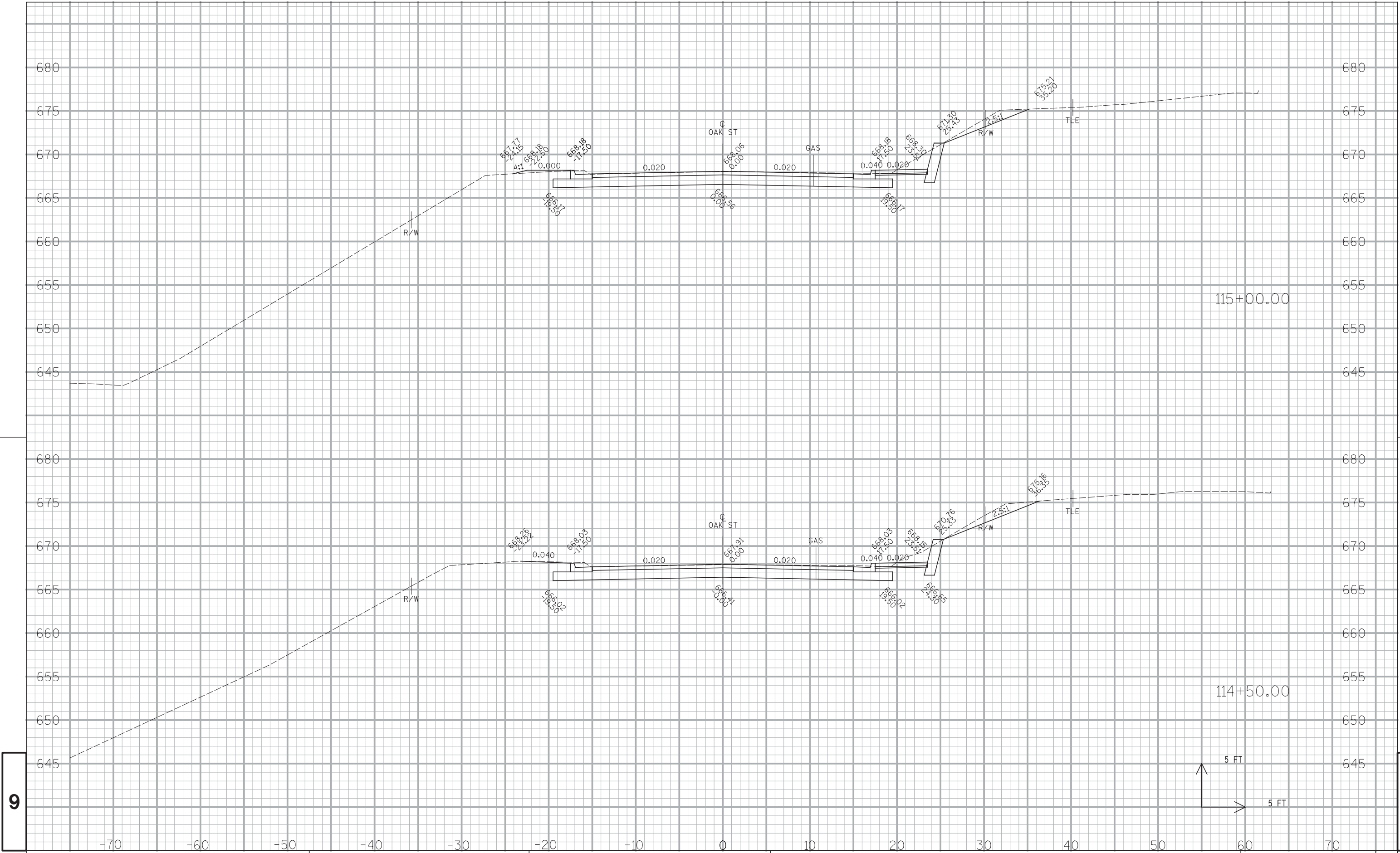
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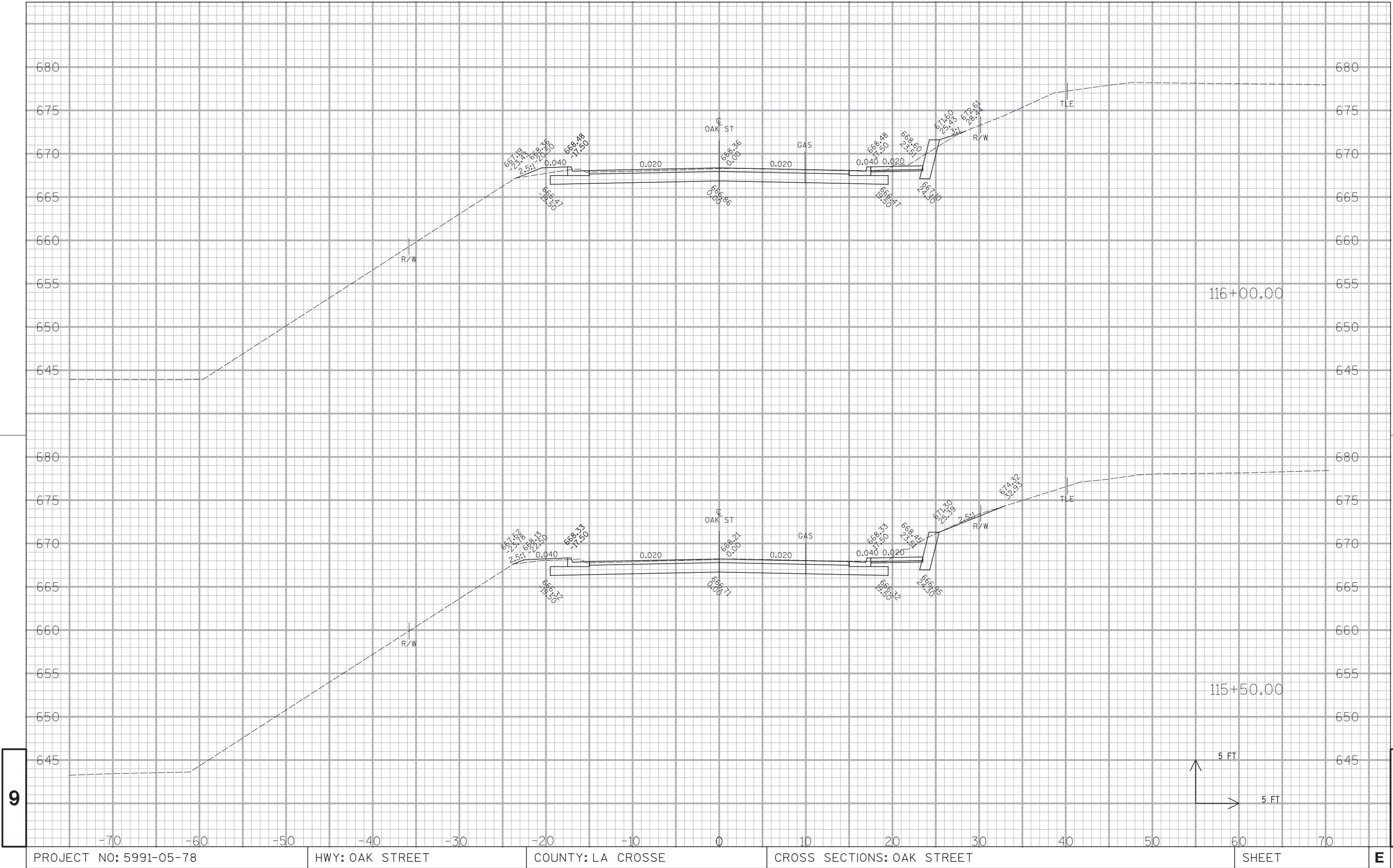
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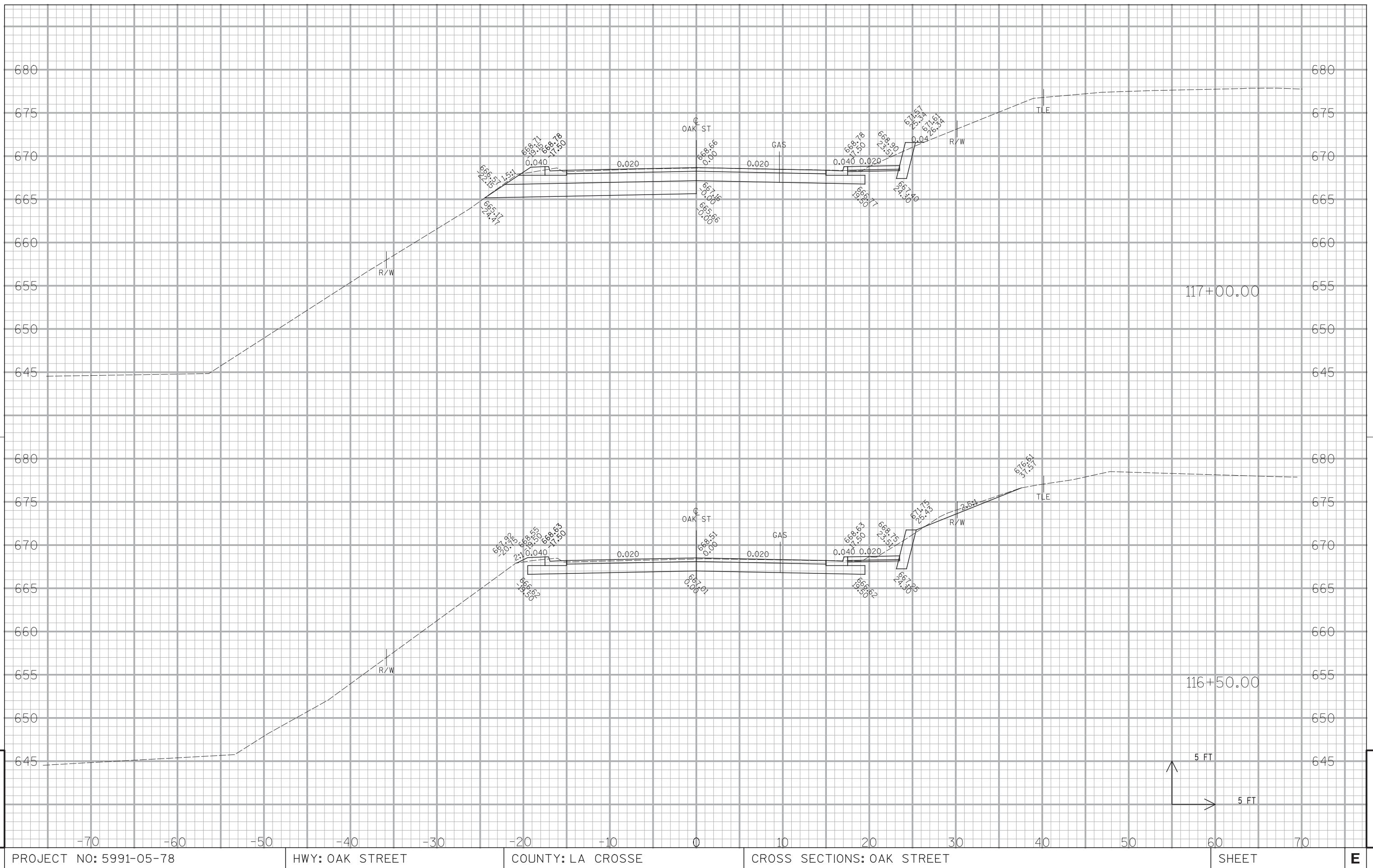
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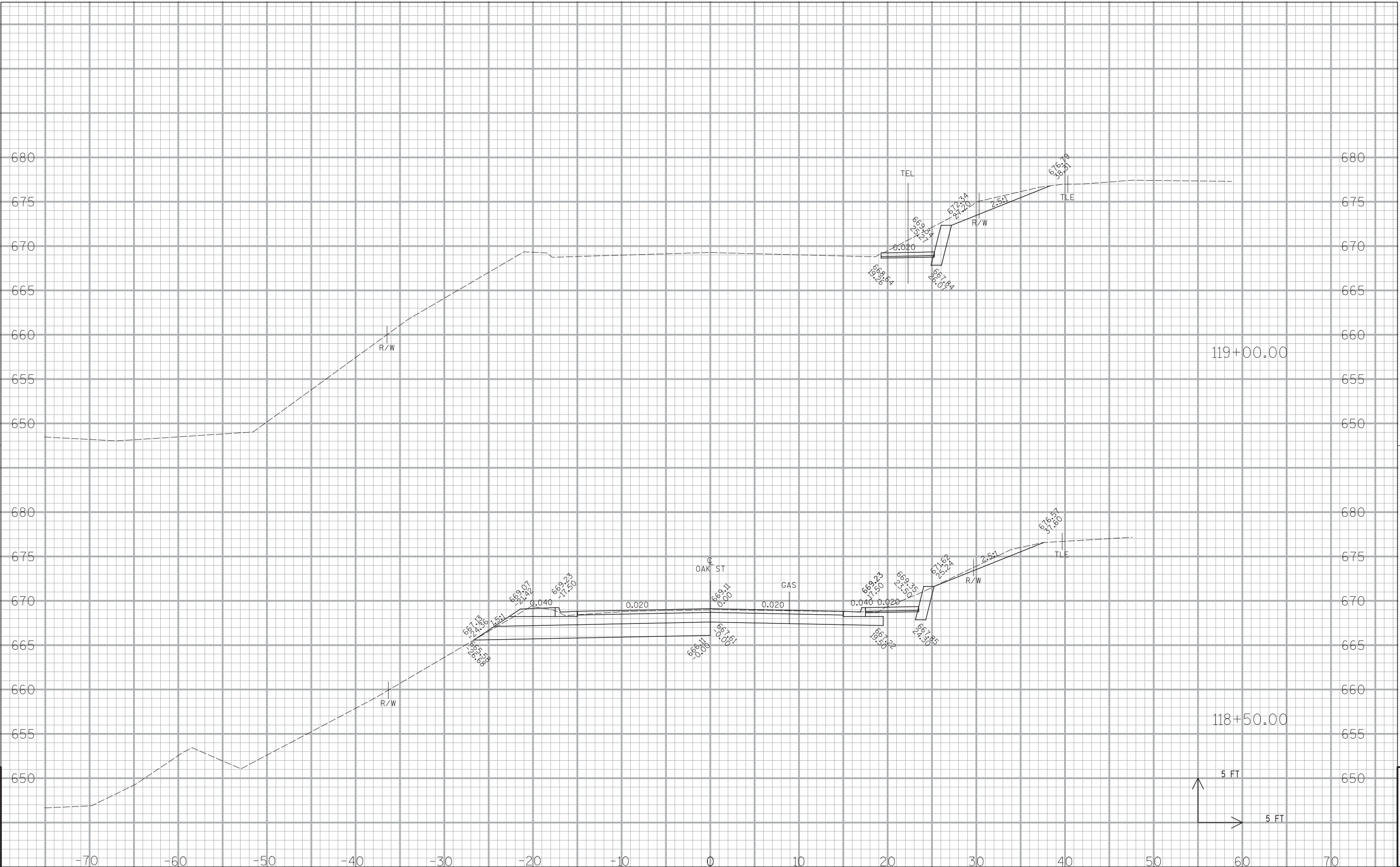


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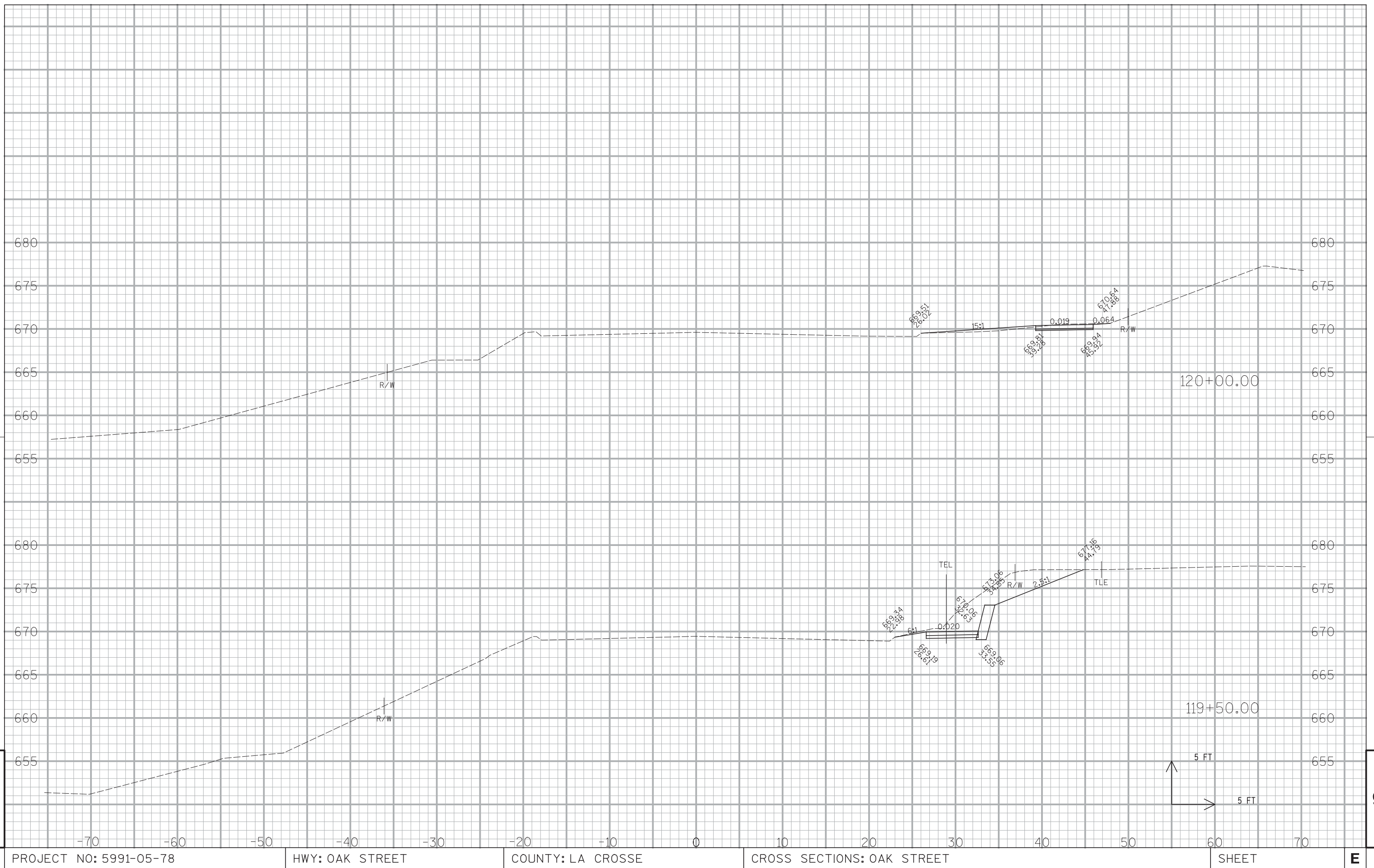
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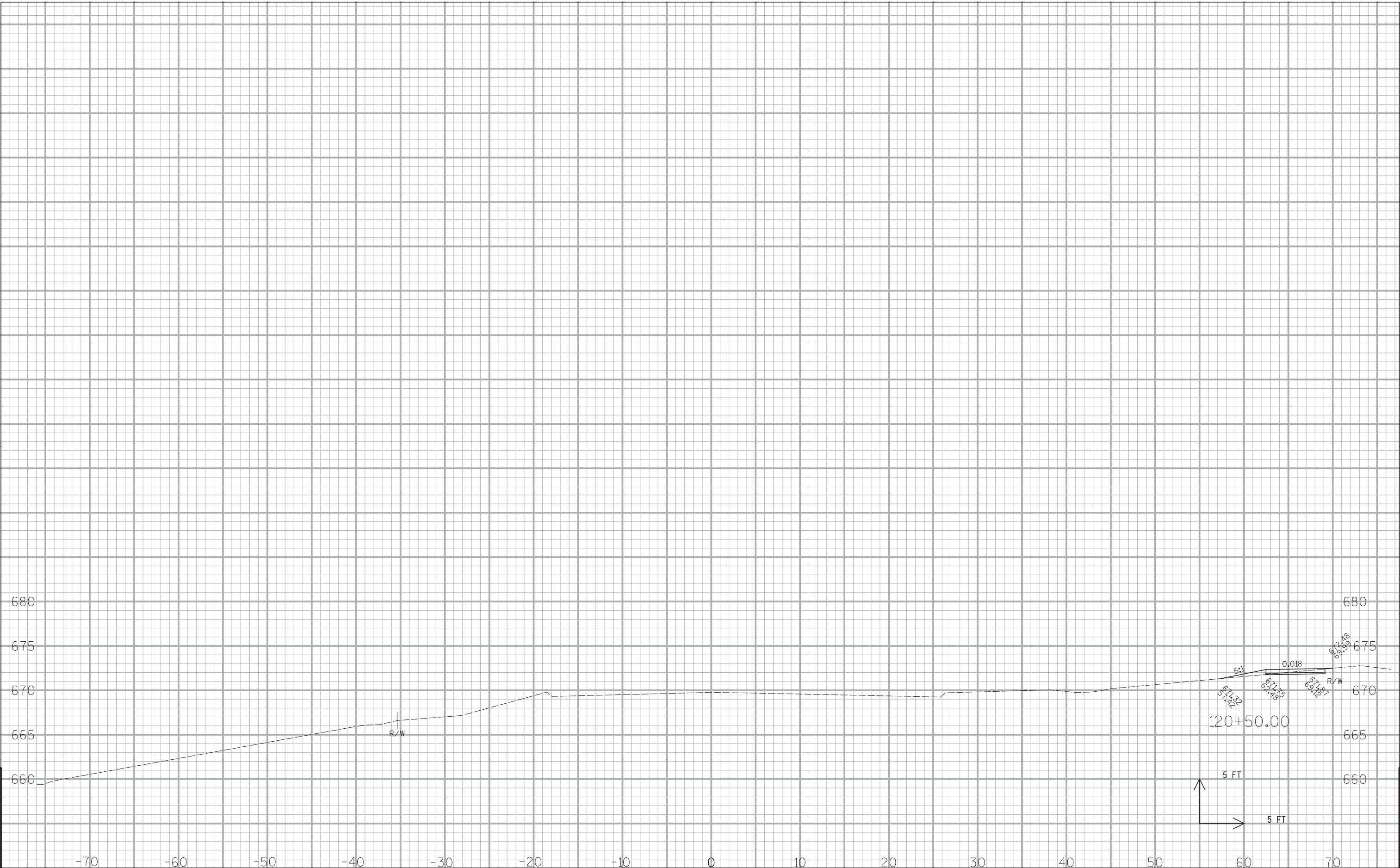
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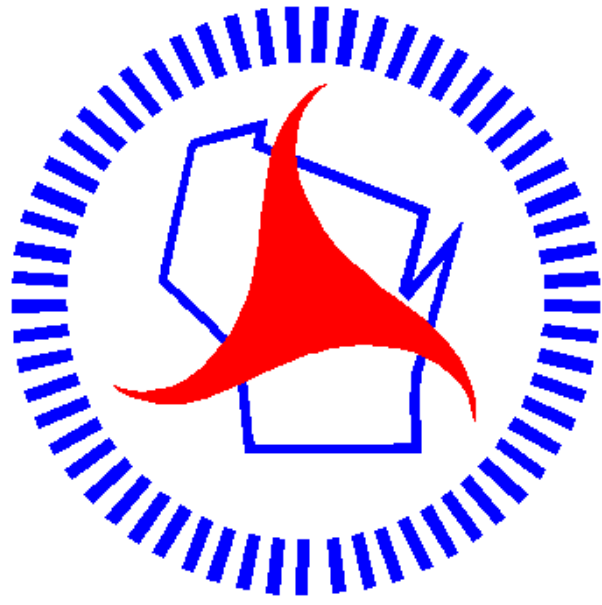
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