

EAU

PROJECT ID:
WITH:

1520-05-70

COUNTY:

CLARK

NOVEMBER 2019

ORDER OF SHEETS

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

TOTAL SHEETS = 142



DESIGN DESIGNATION 1520-05-00

A.A.D.T.	2013	=	1,500
A.A.D.T.	2033	=	1,700
D.H.V.		=	19.3
D.D.		=	62/38
T.		=	10.0%
DESIGN SPEED		=	55 MPH
ESALS		=	445,300

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

PROPERTY LINE

LOT LINE

LIMITED HIGHWAY EASEMENT

EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

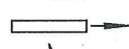
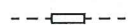
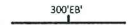
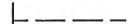
EXISTING CULVERT

PROPOSED CULVERT
(Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA



PROFILE

GRADE LINE

ORIGINAL GROUND

MARSH OR ROCK PROFILE
(To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

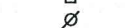
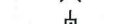
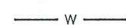
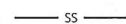
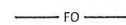
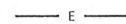
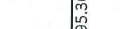
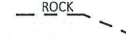
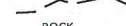
TELEPHONE

WATER

UTILITY PEDESTAL

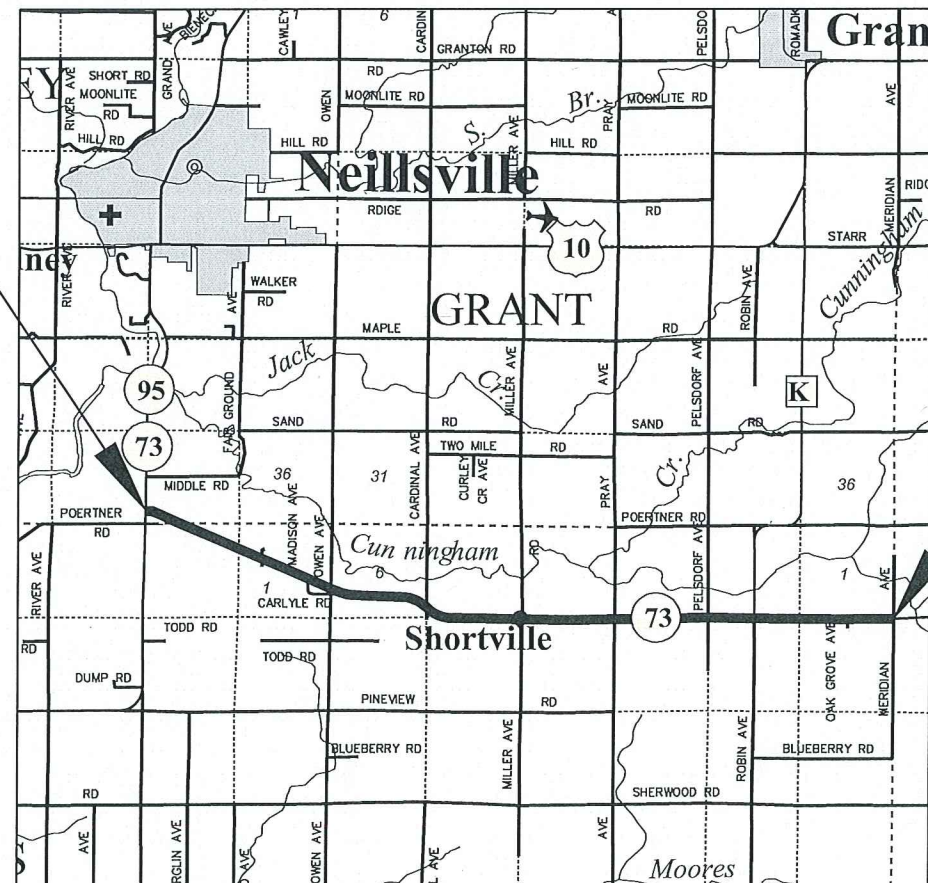
POWER POLE

TELEPHONE POLE



END PROJECT 1520-05-70
STA 873+99

X = 684562.3386
Y = 332200.1379



R-2-W R-1-W

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 8.25 MI

R-1-W R-1-E

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN
COORDINATE REFERENCE SYSTEM (WISCRS), CLARK COUNTY,
NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID
COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES
ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED
TO NAVD 88 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

PITTSVILLE - NEILLSVILLE

EAST COUNTY LINE TO STH 95

STH 73

CLARK COUNTY

STATE PROJECT NUMBER

1520-05-70

STATE PROJECT

1520-05-70

FEDERAL PROJECT

PROJECT

WISC 2019694

CONTRACT

1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	ADAM HETRICK
Project Manager	DAVID KOEPP
Regional Examiner	JENNIFER OLDENBURG
Regional Supervisor	JAMES KOENIG

APPROVED FOR THE DEPARTMENT

DATE: 1/22/2019 

E

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

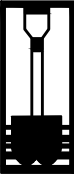
UTILITIES CONTACTS

TDS TELECOM (BADGER TELECOM LLC) - COMMUNICATION LINE
ATTN: JEFF SHAW
202 E OGDEN ST
MEDFORD, WI 54451
OFFICE PHONE: (715) 748-6970
MOBILE PHONE: (715) 323-8464
EMAIL: JEFF.SHAW@TDSTELECOM.COM

TDS TELECOM (CENTRAL STATE TELEPHONE CO) - COMMUNICATION LINE
ATTN:JEFF SHAW
202 E OGDEN ST
MEDFORD, WI 54451
OFFICE PHONE: (715) 748-6970
MOBILE PHONE: (715) 323-8464
EMAIL: JEFF.SHAW@TDSTELECOM.COM

CLARK ELECTRIC COOPERATIVE - ELECTRICITY
ATTN: RICK SUDA
1209 W DAL-BERG RD
P.O. BOX 190
GREENWOOD, WI 54437-0190
OFFICE PHONE: (715) 267-7954
MOBILE PHONE: (715) 797-0081
EMAIL: RSUDA@CECOOP.COM

DIGGERS



HOTLINE

Dial



or (800)242-8511

www.DiggersHotline.com

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS, AND WORK NOT SHOWN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, STANDARD DETAILS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THERE ARE EXISTING UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA PRIOR TO BEGINNING WORK OPERATIONS TO CONFIRM ALL UTILITY LOCATIONS. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE. UTILITY FACILITIES WERE NOT FIELD LOCATED AND VERIFIED.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY ARE TO BE SEEDED, FERTILIZED, AND MULCHED AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS EROSION CONTROL IMPLEMENTATION PLAN AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.

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

WETLAND AREAS SHOWN ON THE PLANS WERE FIELD DELINEATED ONLY IN THE LOCATIONS OF PROPOSED GRADING. OTHER WETLAND AREAS MAY EXIST WITHIN THE PROJECT LIMITS. ANY CHANGES TO THE GRADING LIMITS SHOWN ON THE PLANS WILL REQUIRE APPROVAL OF THE ENGINEER AND VERIFICATION OF ANY WETLAND IMPACTS.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA / ASPHALTIC PAVEMENT IS MEASURED BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE 3.25" HMA PAVEMENT OVERLAY SHALL CONSIST OF A 1.5" LOWER LEVELING LAYER OF HMA PAVEMENT TYPE 4 MT 58-28H AND A 1.75" UPPER LAYER OF HMA PAVEMENT TYPE 4 MT 58-34H.

THE 4" HMA PAVEMENT OVERLAY SHALL CONSIST OF A 1.75" LOWER LEVELING LAYER OF HMA PAVEMENT TYPE 4 MT 58-28H AND A 2.25" UPPER LAYER OF HMA PAVEMENT TYPE 4 MT 58-34H.

PROVIDE JOINT TIES AND TIE THE ENTIRE LENGTH OF ALL REINFORCED CONCRETE CULVERT PIPES. ALL JOINT TIES ARE INCIDENTAL TO THE REINFORCED CONCRETE CULVERT PIPE BID ITEMS.

DESIGN CONTACT

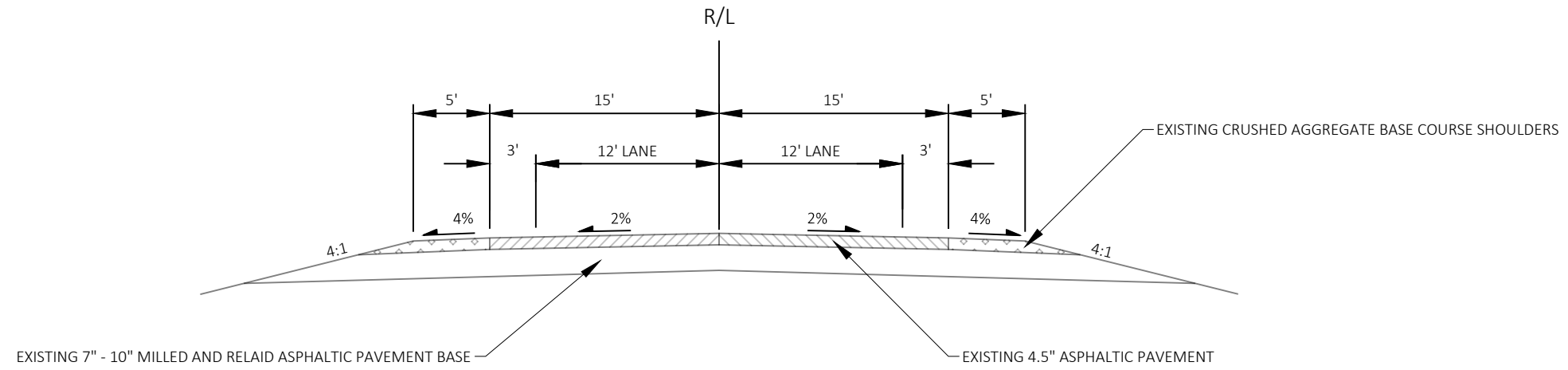
DAVID KOEPP, P.E.
PROJECT MANAGER
WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE OFFICE
718 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
PHONE: (715) 563-8402
EMAIL: DAVID.KOEPP@DOT.WI.GOV

WISCONSIN DOT - STORMWATER

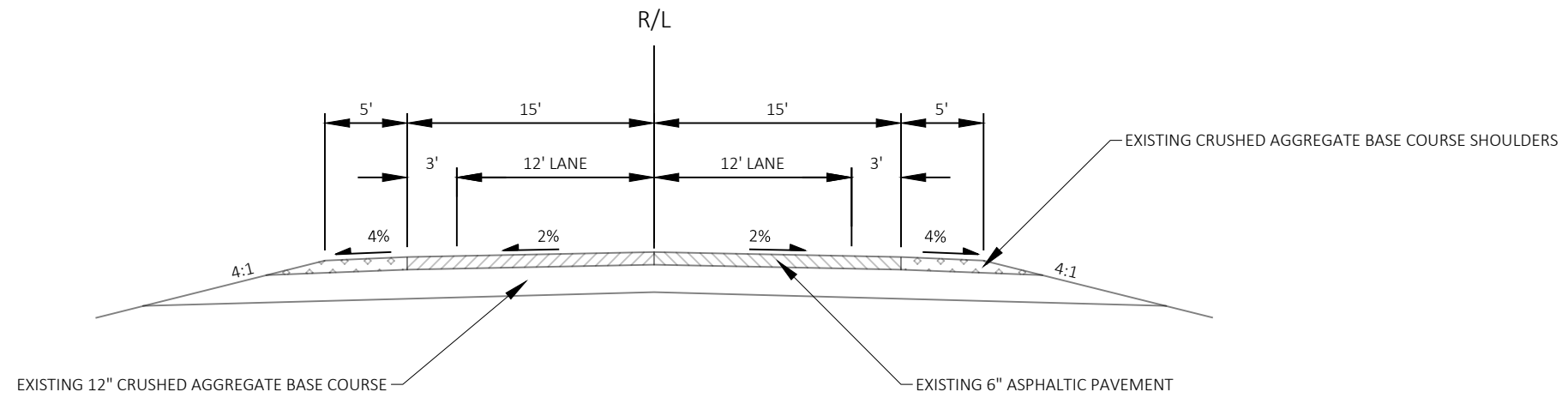
DAVID LARSON
WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE OFFICE
718 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
PHONE: (715) 836-2067
EMAIL: DAVID.LARSON@DOT.WI.GOV

WISCONSIN DNR - LIASON

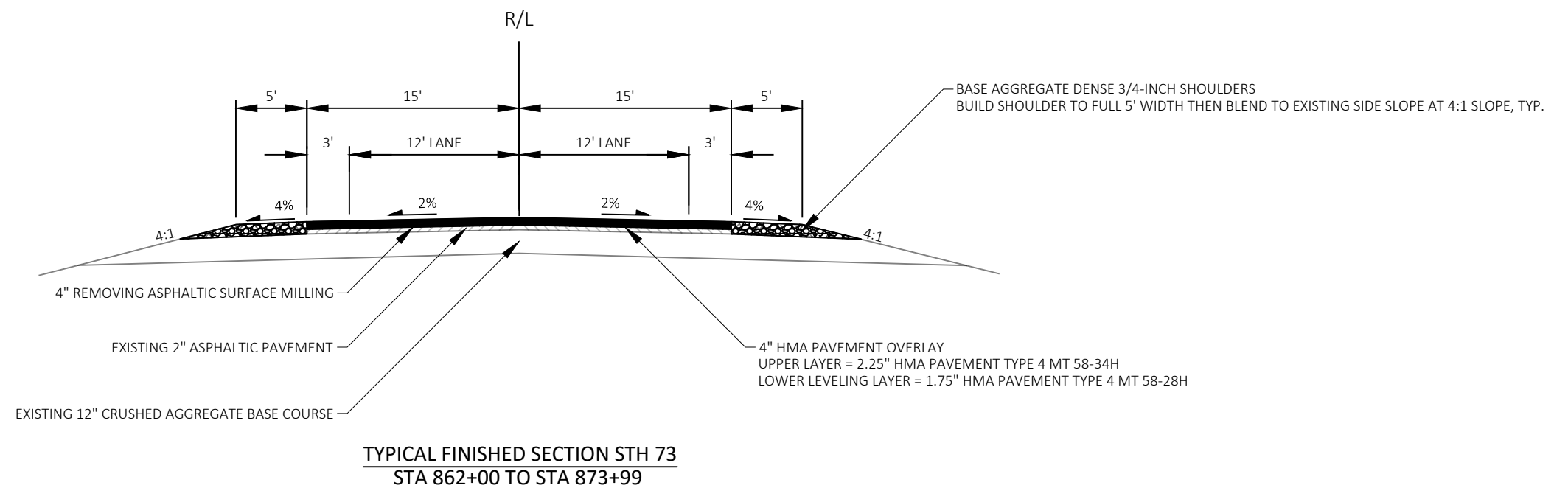
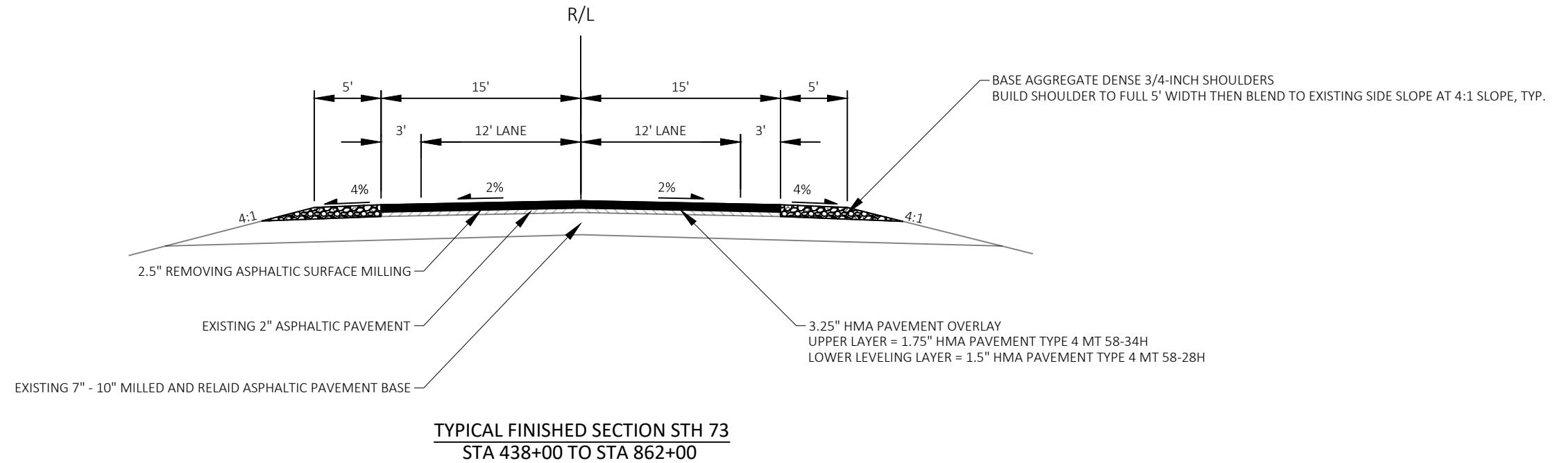
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
WEST CENTRAL REGION HEADQUARTERS
ATTN: LEAH NICOL
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
PHONE: (715) 934-9014
EMAIL: LEAH.NICOL@WISCONSIN.GOV

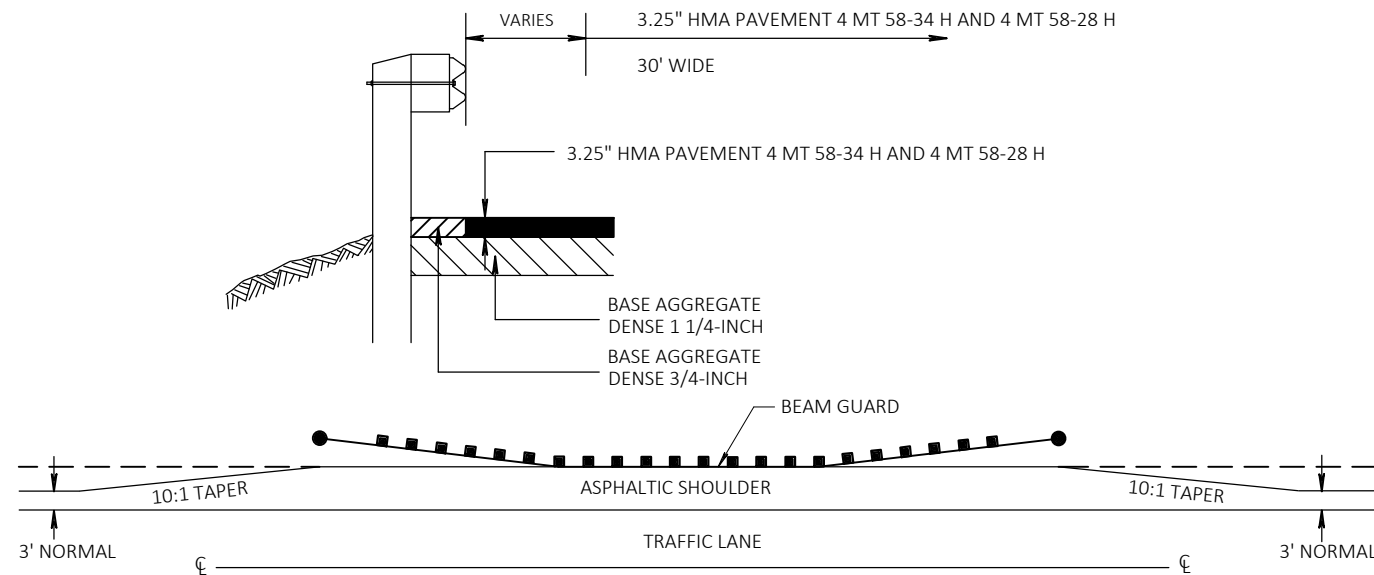


TYPICAL EXISTING SECTION STH 73
STA 438+00 TO STA 862+00

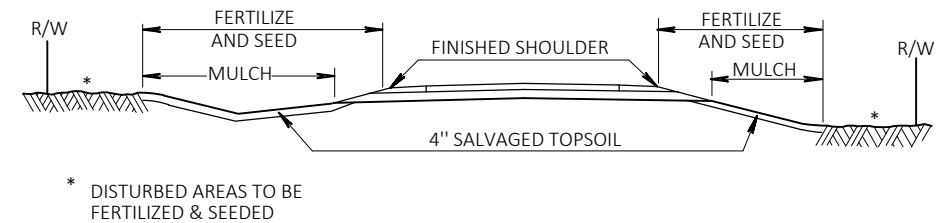


TYPICAL EXISTING SECTION STH 73
STA 862+00 TO STA 873+99

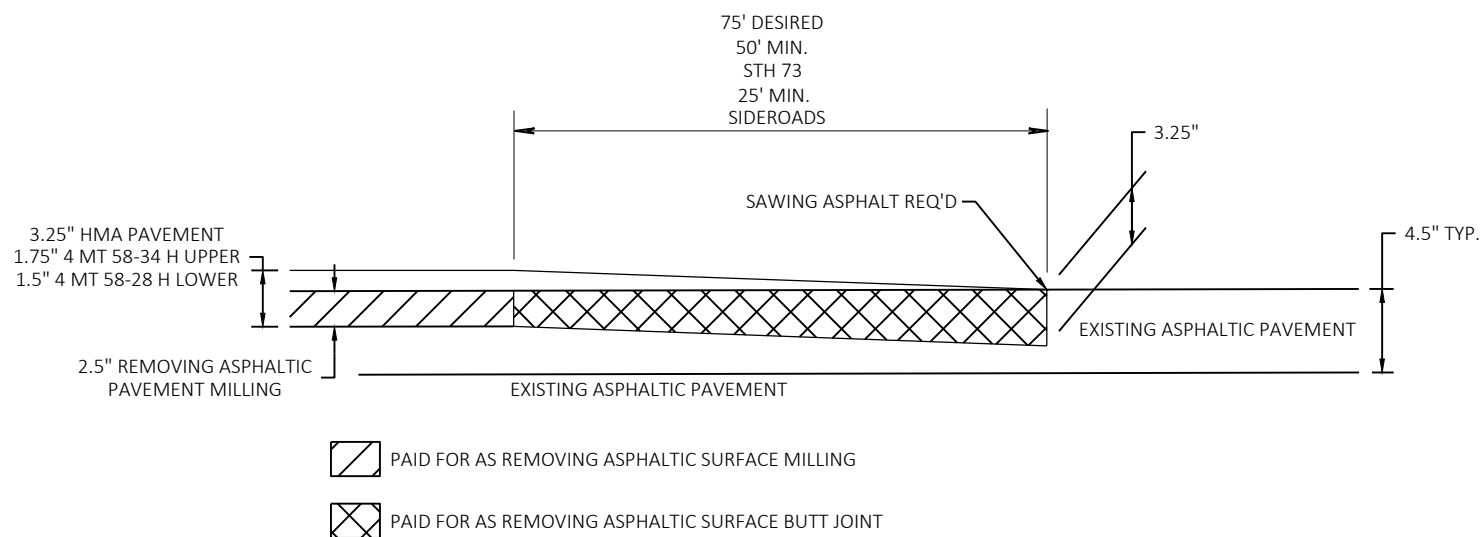




DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD



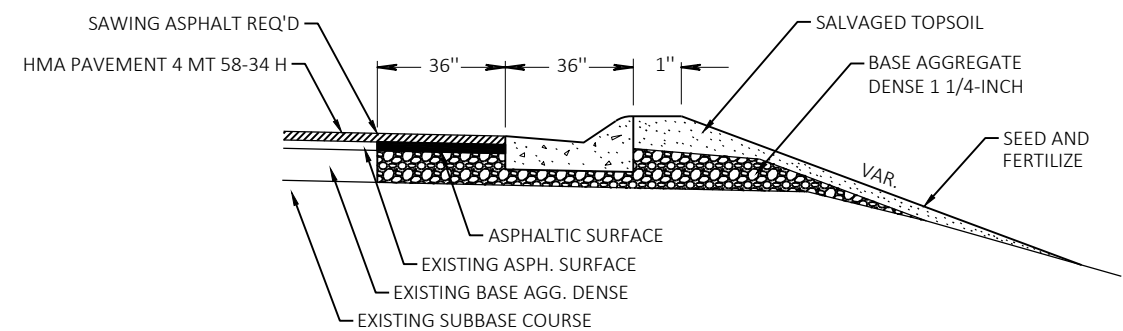
DETAIL FOR FINISHING ITEMS



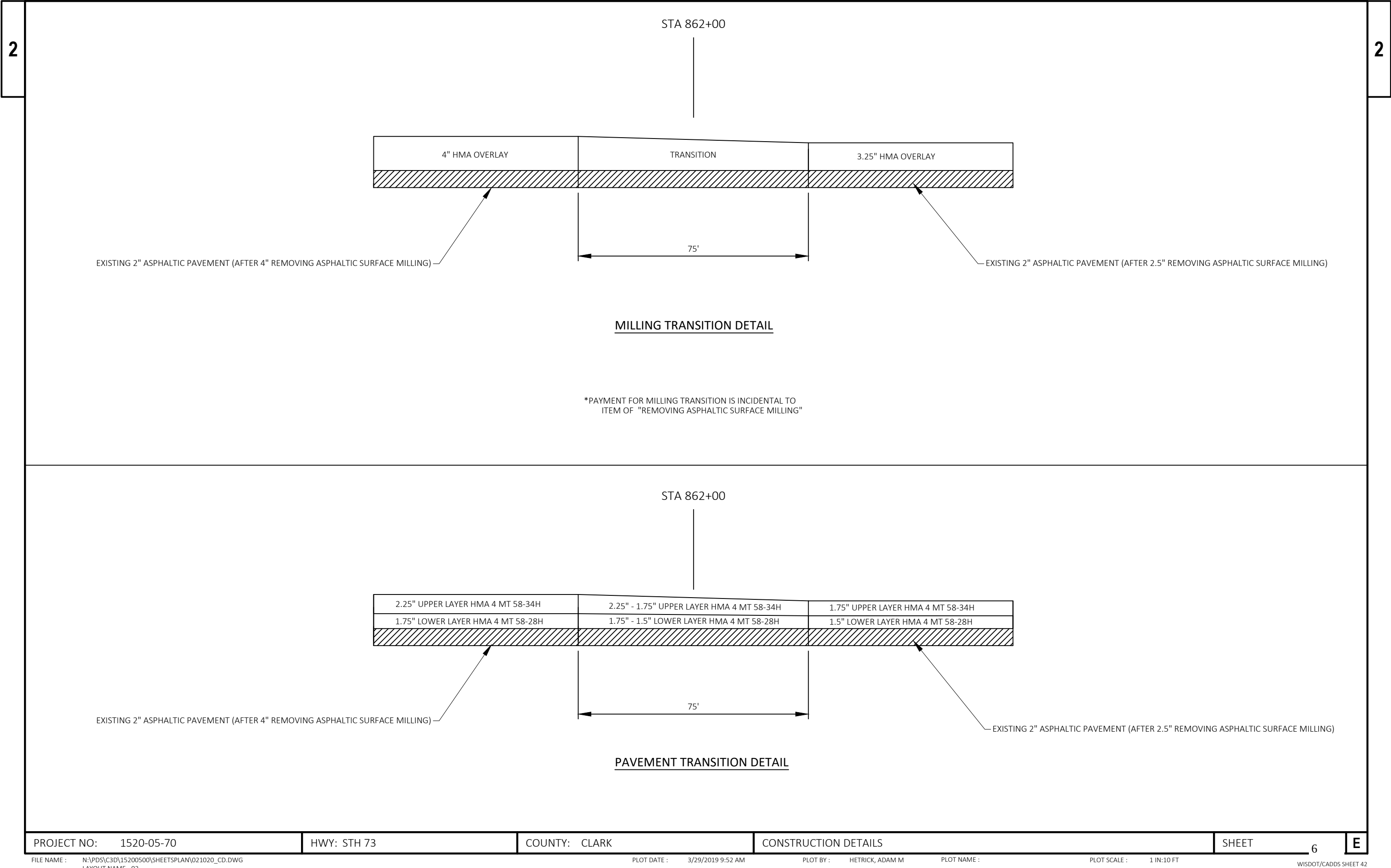
DETAIL OF BUTT JOINT

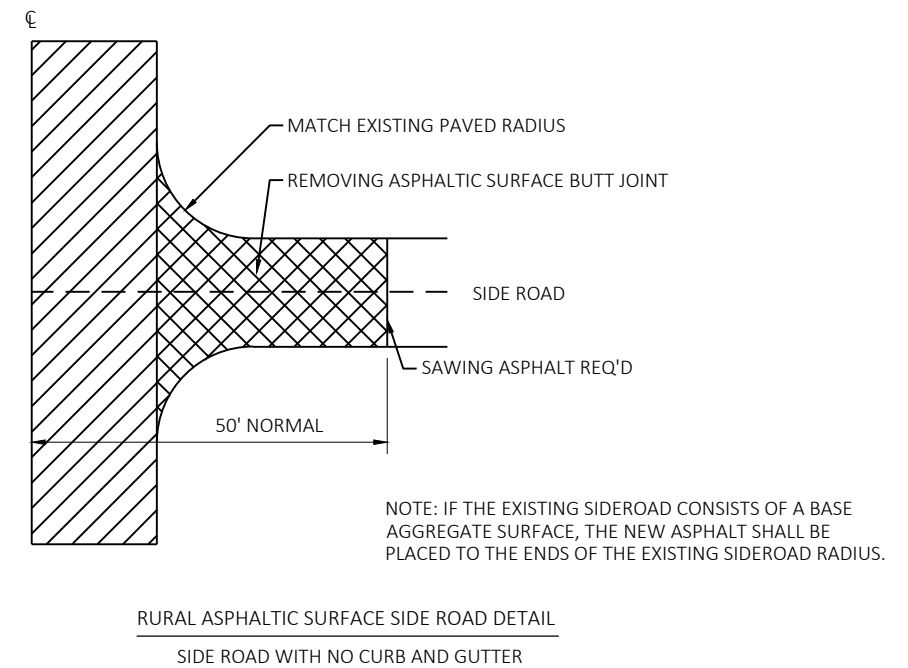
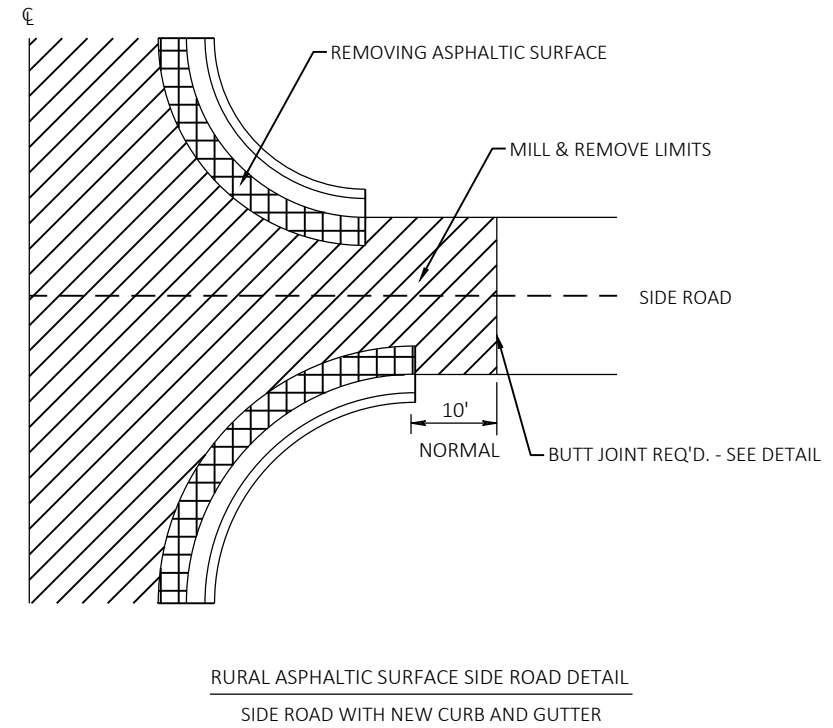
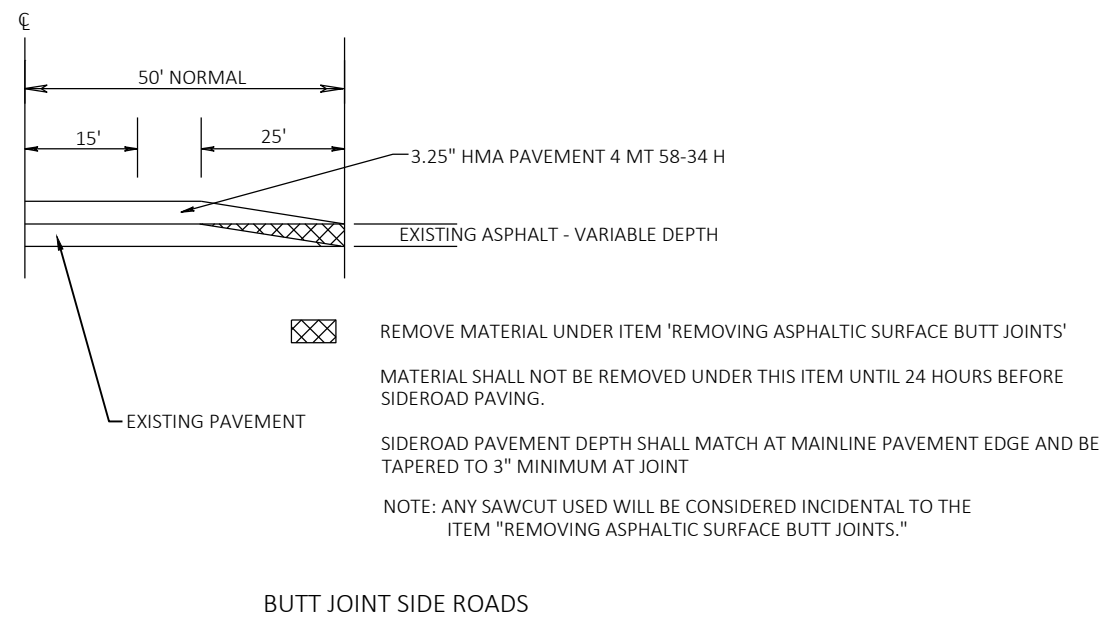
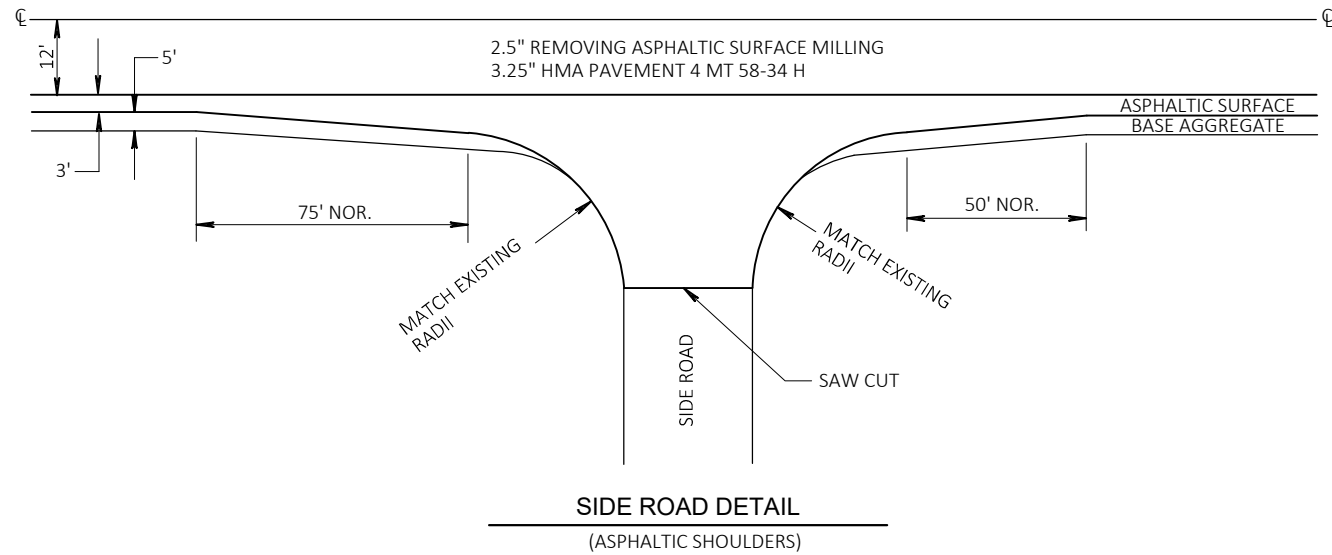
REQUIRED AT BEGIN AND END
PAVING LOCATIONS

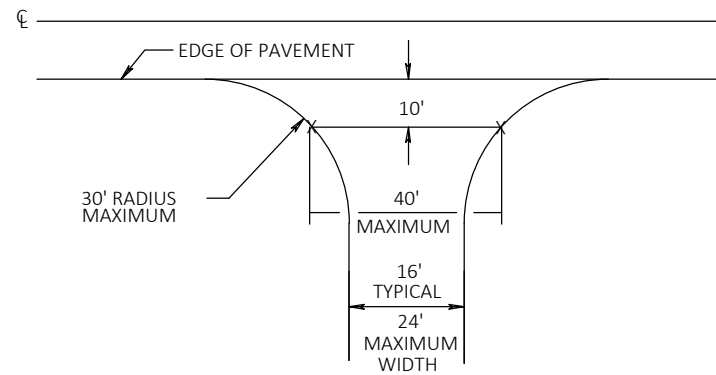
* EXACT DIMENSIONS TO BE DETERMINED
BY ENGINEER IN THE FIELD



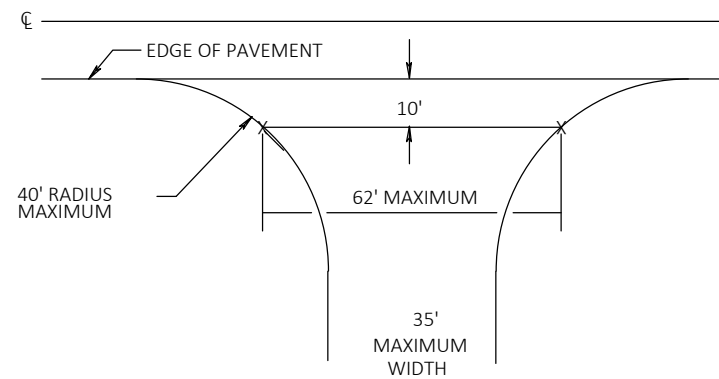
DETAIL OF CURB & GUTTER INSTALLATION





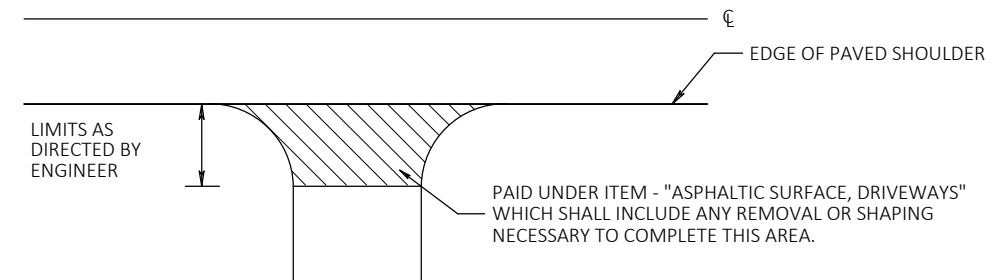


TYPICAL DRIVEWAY DETAIL
(NON-COMMERCIAL RURAL)

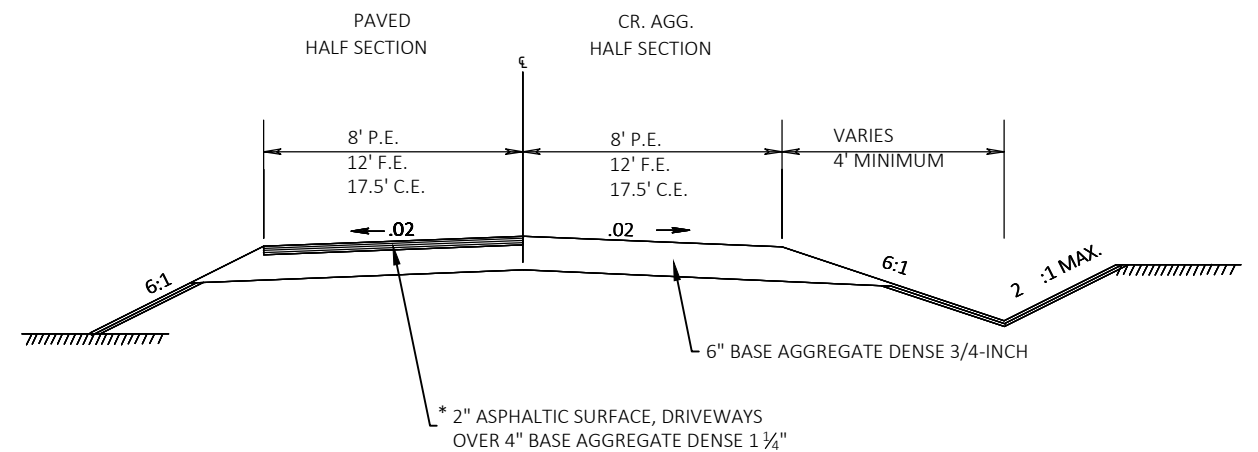


TYPICAL DRIVEWAY DETAIL
(COMMERCIAL RURAL)

RURAL DRIVEWAY DETAIL - ASPHALT

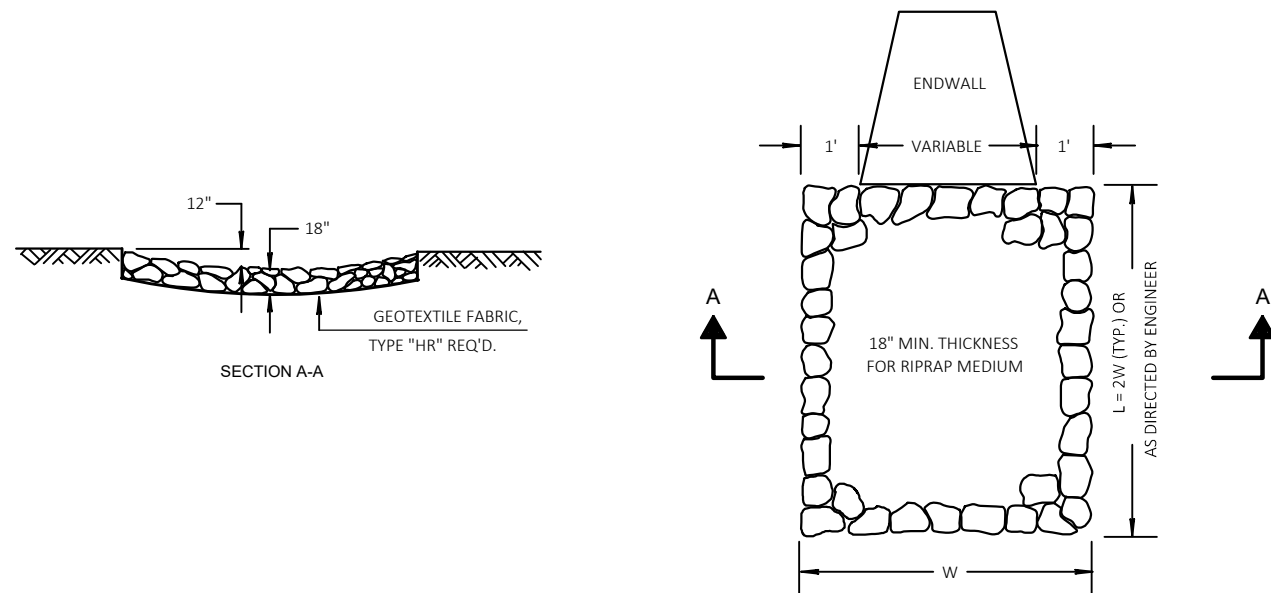


ANY ADDITIONAL BASE AGGREGATE DENSE REQ'D. SHALL BE PAID
UNDER ITEM - "BASE AGGREGATE DENSE 3/4-INCH"

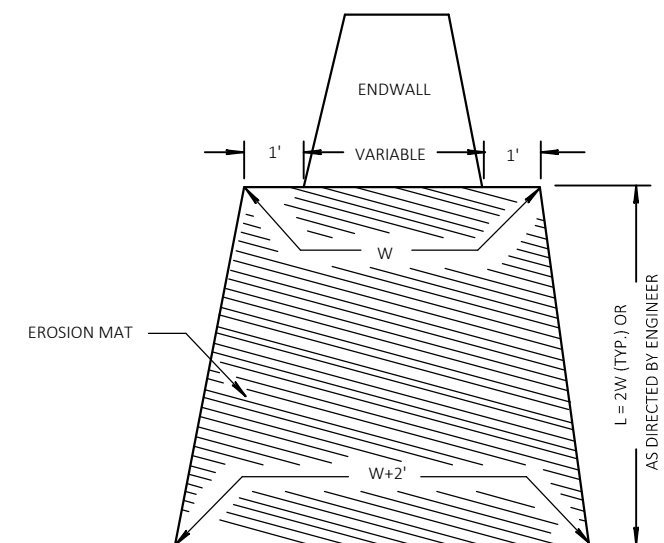


TYPICAL SECTION
FOR PRIVATE ENTRANCES

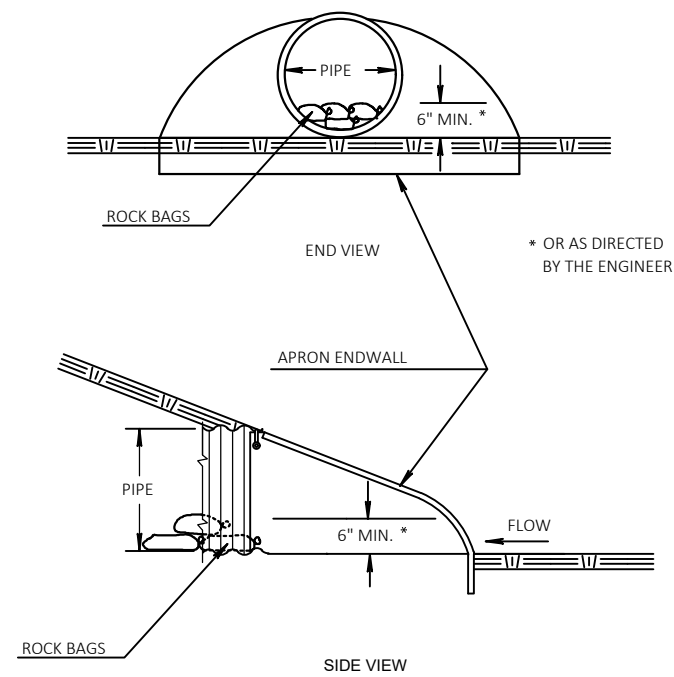
NOTE:
DRIVEWAY PROFILES NOT EXPECTED TO EXCEED
10%. PLACE LOW POINT OF DRIVEWAY PROFILE
OVER DITCH FLOW LINE.



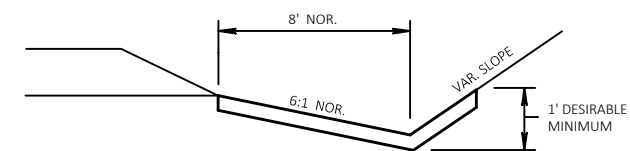
RIPRAP MEDIUM TREATMENT AT CULVERTS



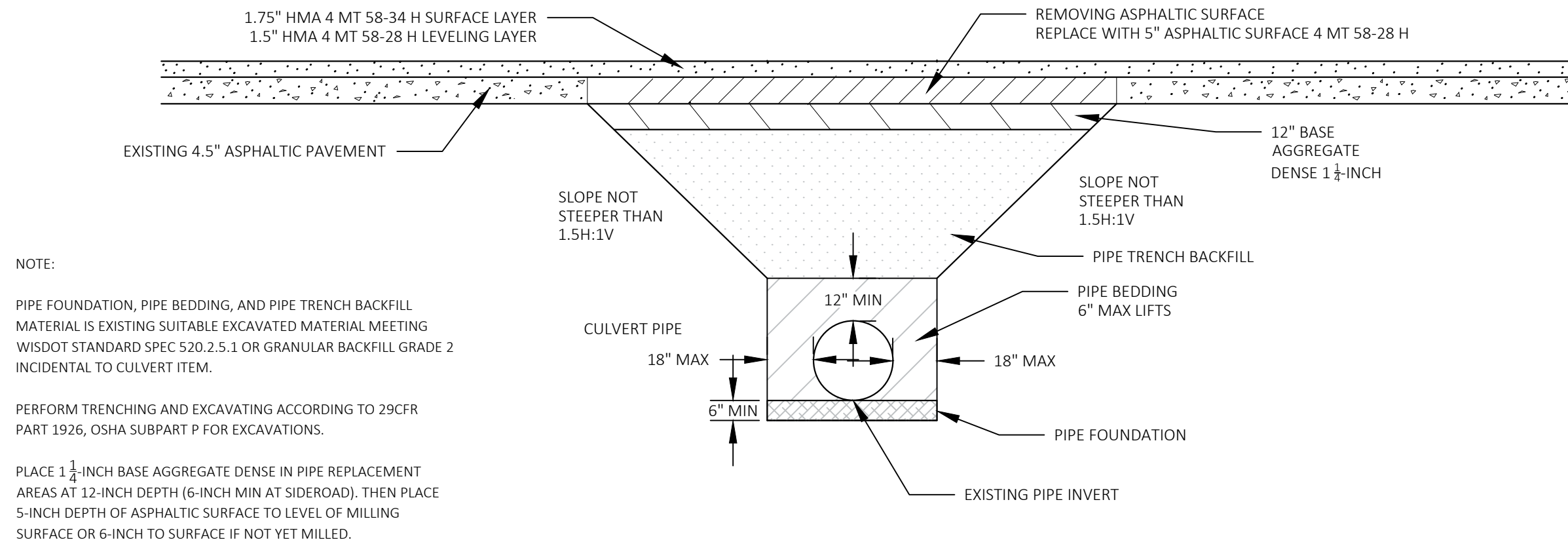
EROSION MAT TREATMENT AT CULVERTS



CULVERT PIPE CHECK



EROSION MAT DETAIL FOR DITCHES



DETAIL FOR CULVERT PIPE INSTALLATION

Superelevation Data: STH 73 Curve 1					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 2					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 3					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 4					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 5					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 6					
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
685+46.67'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
685+46.67'	End Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
686+00.11'	Level Crown	-4.00%	0.00%	-4.00%	-2.00%
686+53.55'	Reverse Crown	-4.00%	2.00%	-4.00%	-2.00%
687+06.99'	Low Shoulder Match	-4.00%	4.00%	-4.00%	-4.00%
687+46.78'	Begin Full Super	-4.00%	5.50%	-5.50%	-5.50%
699+92.73'	End Full Super	-4.00%	5.50%	-5.50%	-5.50%
700+32.51'	Low Shoulder Match	-4.00%	4.00%	-4.00%	-4.00%
700+85.96'	Reverse Crown	-4.00%	2.00%	-4.00%	-2.00%
701+39.40'	Level Crown	-4.00%	0.00%	-4.00%	-2.00%
701+92.84'	Begin Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
701+92.84'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
Superelevation Data: STH 73 Curve 7					
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
703+13.73'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
703+13.73'	End Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
703+67.17'	Level Crown	-4.00%	-2.00%	-4.00%	0.00%
704+20.61'	Reverse Crown	-4.00%	-2.00%	-4.00%	2.00%
704+74.05'	Low Shoulder Match	-4.00%	-4.00%	-4.00%	4.00%
705+13.84'	Begin Full Super	-5.50%	-5.50%	-4.00%	5.50%
716+86.02'	End Full Super	-5.50%	-5.50%	-4.00%	5.50%
717+25.81'	Low Shoulder Match	-4.00%	-4.00%	-4.00%	4.00%
717+79.25'	Reverse Crown	-4.00%	-2.00%	-4.00%	2.00%
718+32.69'	Level Crown	-4.00%	-2.00%	-4.00%	0.00%
718+86.14'	Begin Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
718+86.14'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%

Superelevation Data: STH 73 Curve 8					
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
744+12.72'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
744+12.72'	End Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
744+65.97'	Level Crown	-4.00%	0.00%	-4.00%	-2.00%
745+19.23'	Reverse Crown	-4.00%	2.00%	-4.00%	-2.00%
745+72.48'	Low Shoulder Match	-4.00%	4.00%	-4.00%	-4.00%
745+84.35'	Begin Full Super	-4.00%	4.50%	-4.50%	-4.50%
755+55.19'	End Full Super	-4.00%	4.50%	-4.50%	-4.50%
755+67.07'	Low Shoulder Match	-4.00%	4.00%	-4.00%	-4.00%
756+20.32'	Reverse Crown	-4.00%	2.00%	-4.00%	-2.00%
756+73.57'	Level Crown	-4.00%	0.00%	-4.00%	-2.00%
757+26.82'	Begin Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
757+26.82'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
Superelevation Data: STH 73 Curve 9					
Normal Crown. No Superelevation Required.					
Superelevation Data: STH 73 Curve 10					
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
867+77.00'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
867+77.00'	End Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
868+30.34'	Level Crown	-4.00%	-2.00%	-4.00%	0.00%
868+83.67'	Reverse Crown	-4.00%	-2.00%	-4.00%	2.00%
869+37.00'	Low Shoulder Match	-4.00%	-4.00%	-4.00%	4.00%
869+90.34'	Begin Full Super	-6.00%	-6.00%	-4.00%	6.00%
870+81.90'	End Full Super	-6.00%	-6.00%	-4.00%	6.00%
871+35.23'	Low Shoulder Match	-4.00%	-4.00%	-4.00%	4.00%
871+88.56'	Reverse Crown	-4.00%	-2.00%	-4.00%	2.00%
872+41.90'	Level Crown	-4.00%	-2.00%	-4.00%	0.00%
872+95.23'	Begin Normal Crown	-4.00%	-2.00%	-4.00%	-2.00%
872+95.23'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
873+98.79'	End Alignment	-4.00%	-2.00%	-4.00%	-2.00%

NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

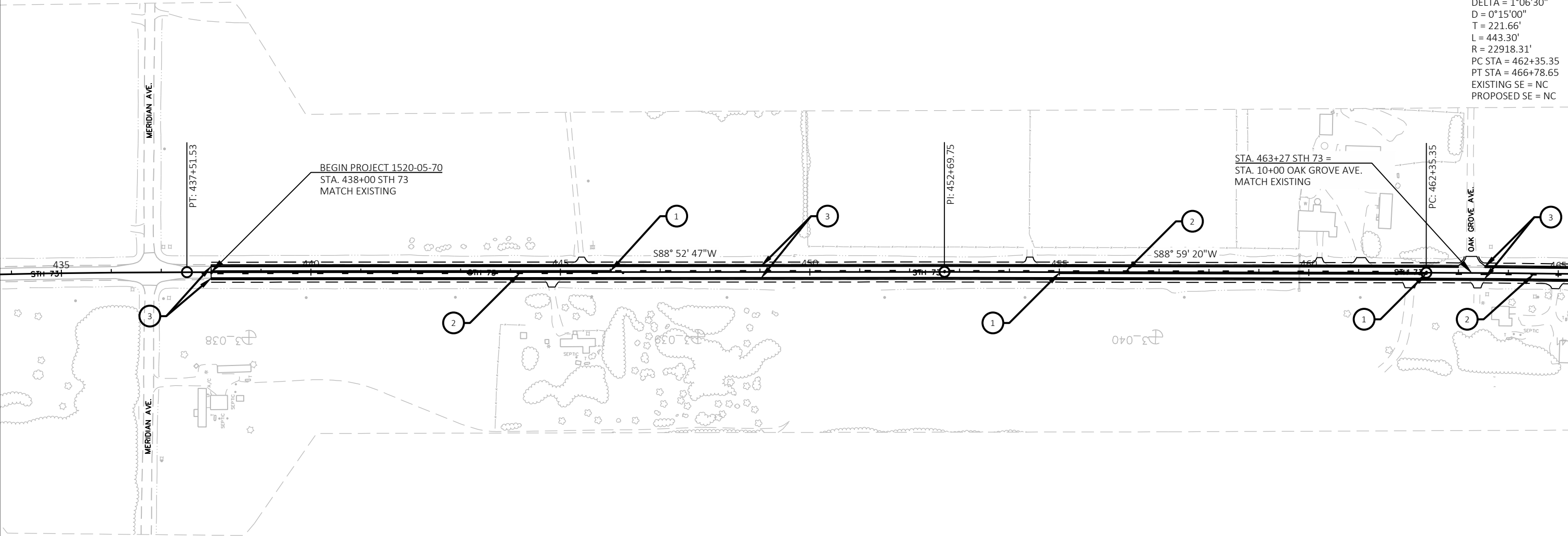
MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH

PI STA = 434+70.39
Y = 326423.582
X = 727244.170
DELTA = 1°58'05"
D = 0°21'00"
T = 281.19'
L = 562.33'
R = 16370.22'
PC STA = 431+89.20
PT STA = 437+51.53
EXISTING SE = NC
PROPOSED SE = NC

PI STA = 464+57.00
Y = 326367.457
X = 724258.030
DELTA = 1°06'30"
D = 0°15'00"
T = 221.66'
L = 443.30'
R = 22918.31'
PC STA = 462+35.35
PT STA = 466+78.65
EXISTING SE = NC
PROPOSED SE = NC



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

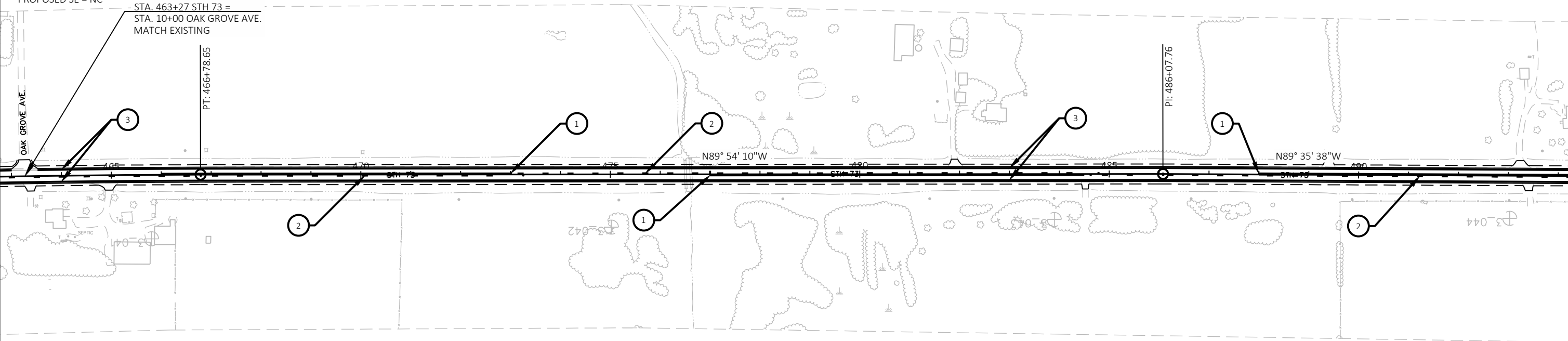
5

MARKING STOP LINE EPOXY 18-INCH



PI STA = 464+57.00
Y = 326367.457
X = 724258.030
DELTA = 1°06'30"
D = 0°15'00"
T = 221.66'
L = 443.30'
R = 22918.31'
PC STA = 462+35.35
PT STA = 466+78.65
EXISTING SE = NC
PROPOSED SE = NC

STA. 463+27 STH 73 =
STA. 10+00 OAK GROVE AVE.
MATCH EXISTING



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

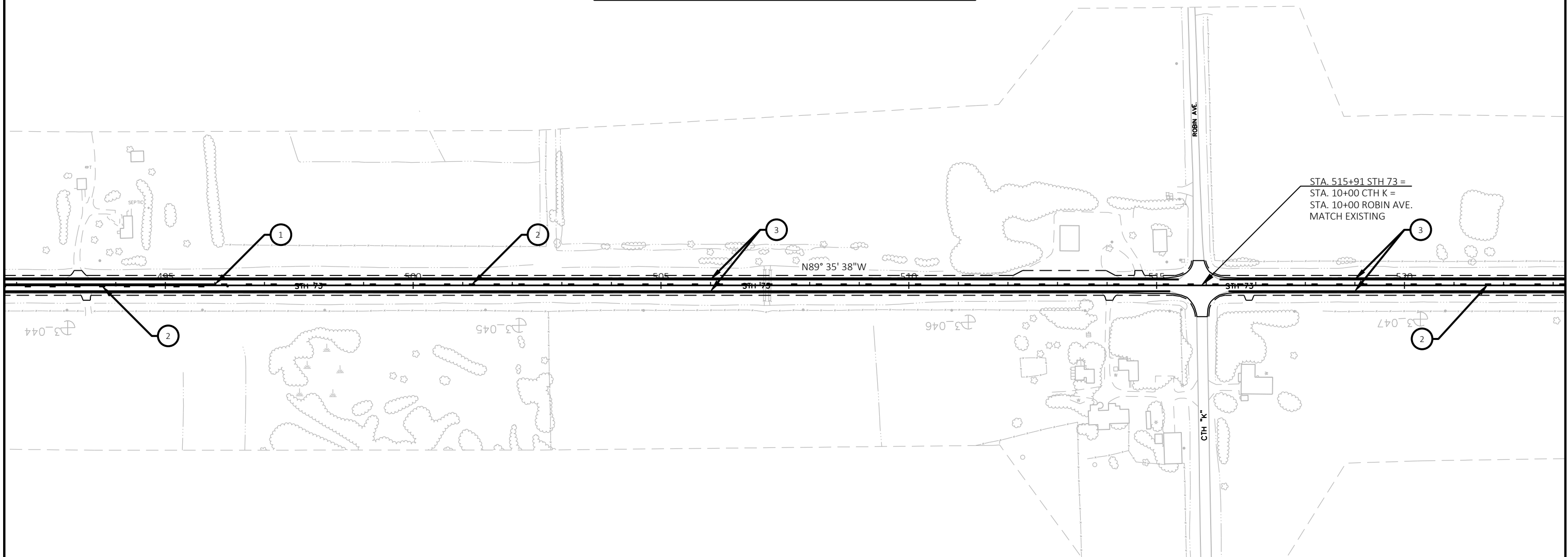
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

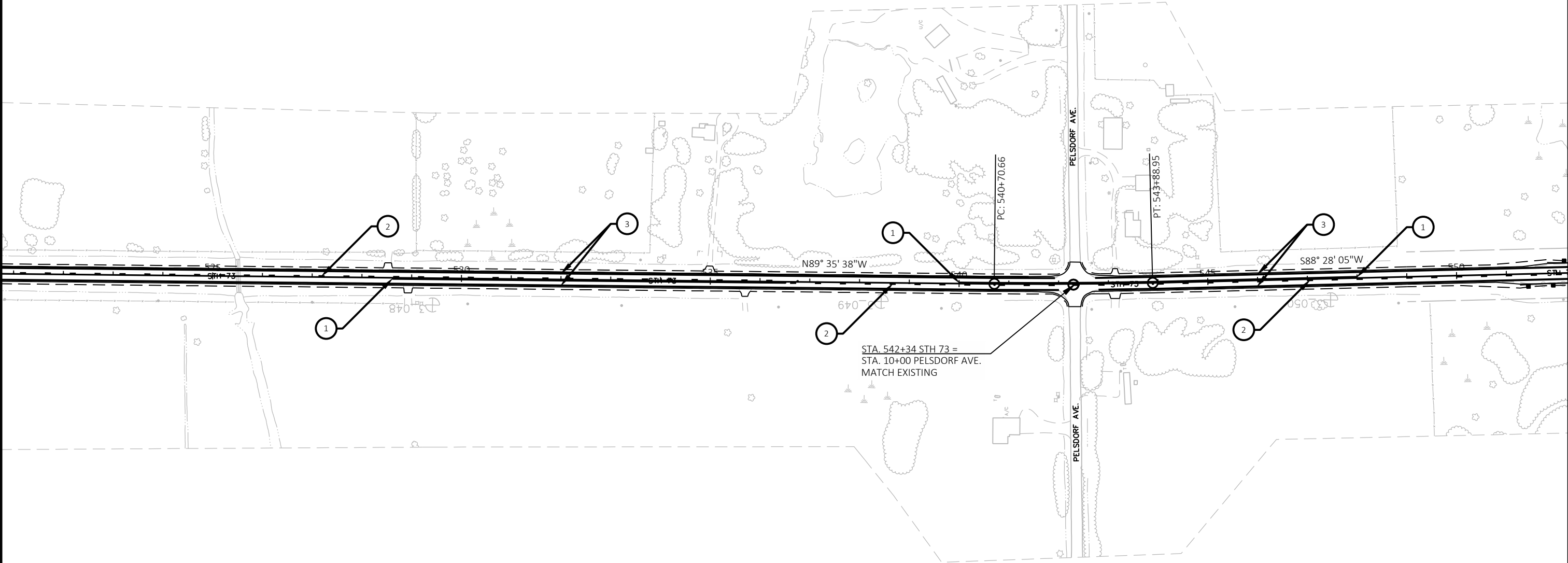
4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH

PI STA = 542+29.82
Y = 326410.962
X = 716485.342
DELTA = 1°56'17"
D = 0°36'32"
T = 159.16'
L = 318.29'
R = 9410.00'
PC STA = 540+70.66
PT STA = 543+88.95
EXISTING SE = NC
PROPOSED SE = NC



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

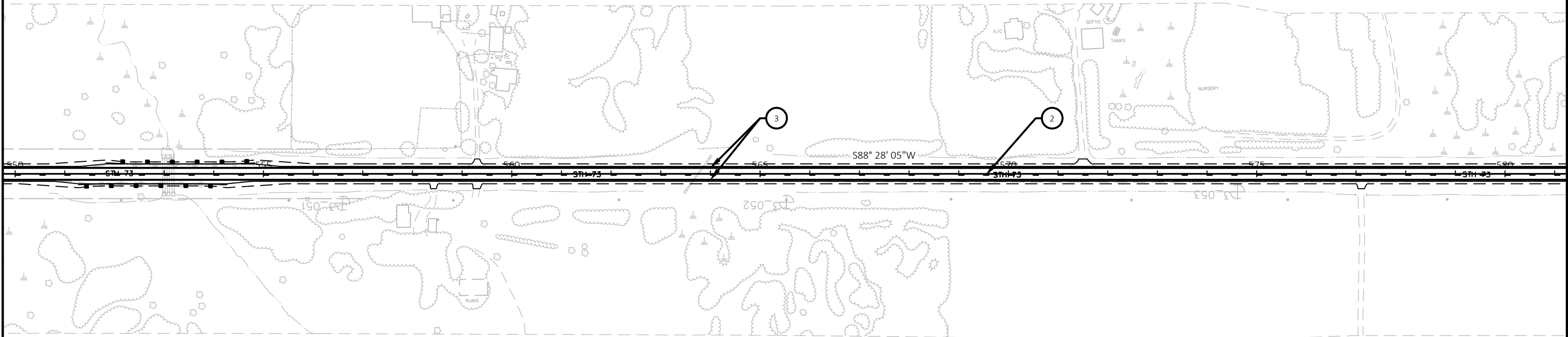
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

- LEGEND
- 1

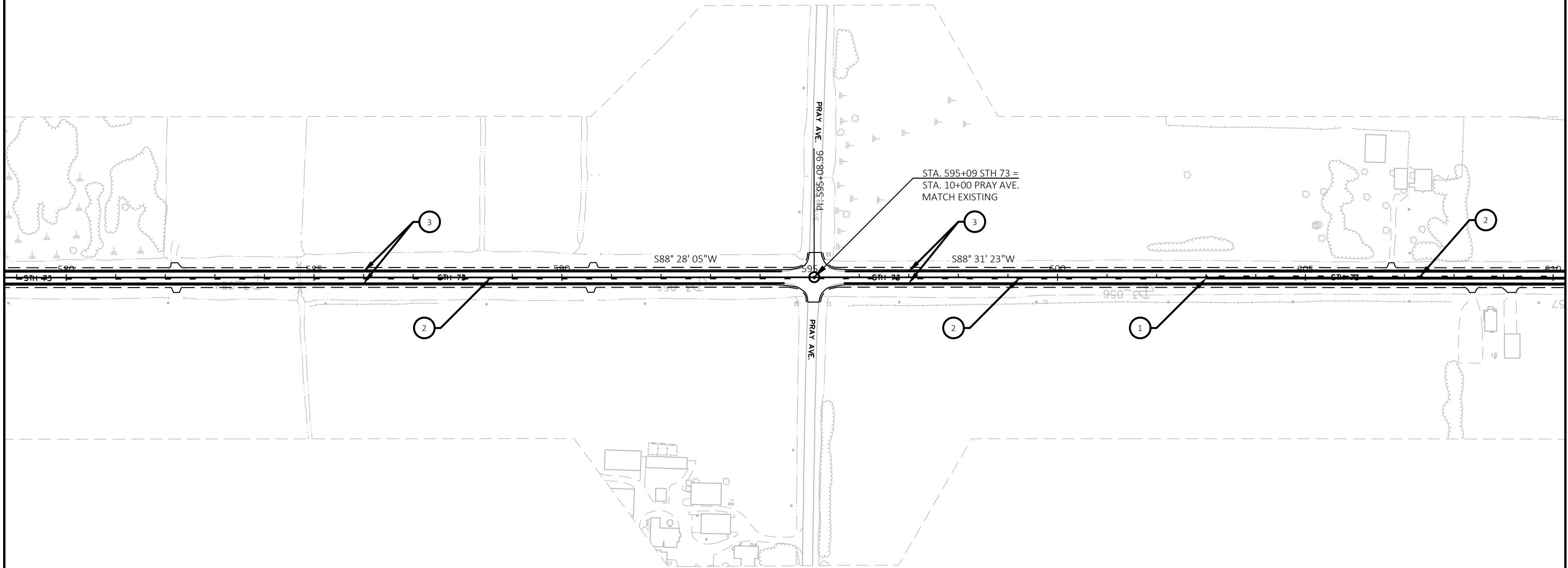
MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)
- 2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)
- 3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)
- 4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)
- 5

MARKING STOP LINE EPOXY 18-INCH



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

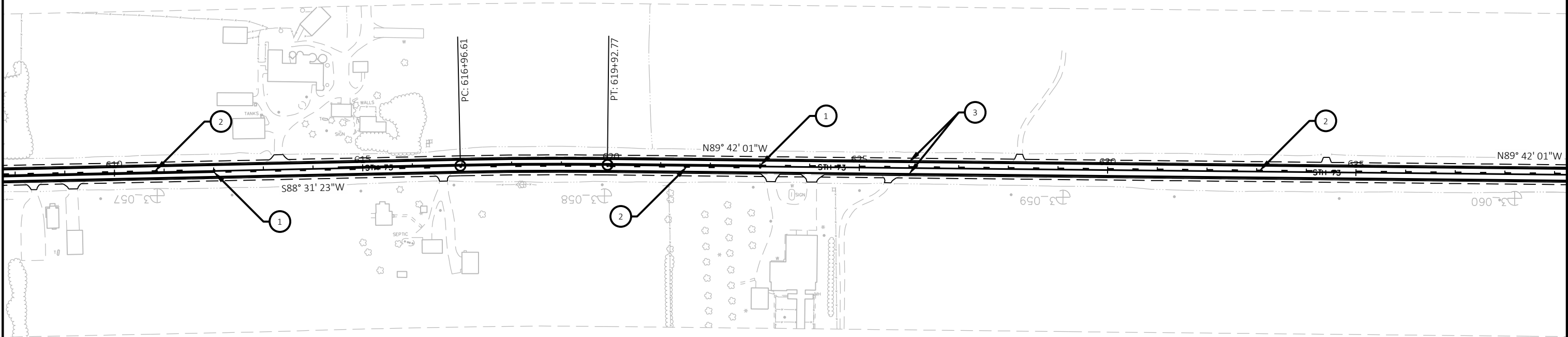
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



PI STA = 618+44.70
Y = 326209.630
X = 708873.095
DELTA = 1°46'37"
D = 0°36'00"
T = 148.09'
L = 296.15'
R = 9549.30'
PC STA = 616+96.61
PT STA = 619+92.77
EXISTING SE = NC
PROPOSED SE = NC

NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

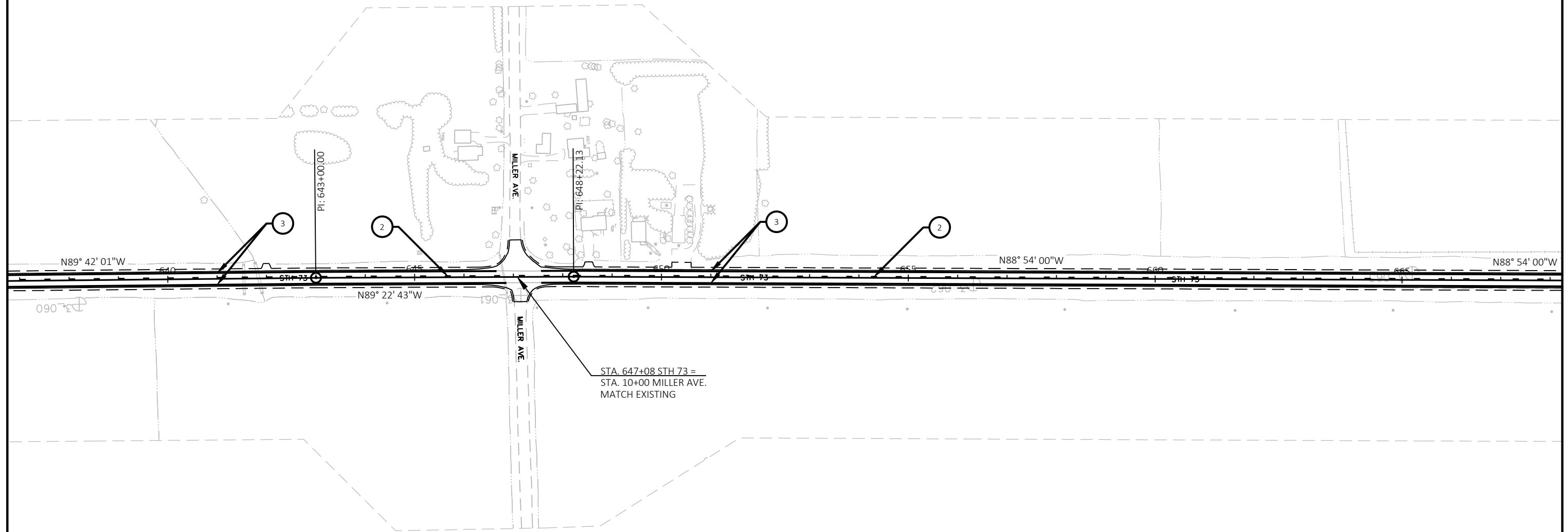
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



PI STA = 671+98.48
Y = 326273.763
X = 703519.797
DELTA = 1°27'52"
D = 0°36'00"
T = 122.04'
L = 244.06'
R = 9549.30'
PC STA = 670+76.44
PT STA = 673+20.50
EXISTING SE = NC
PROPOSED SE = NC

NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

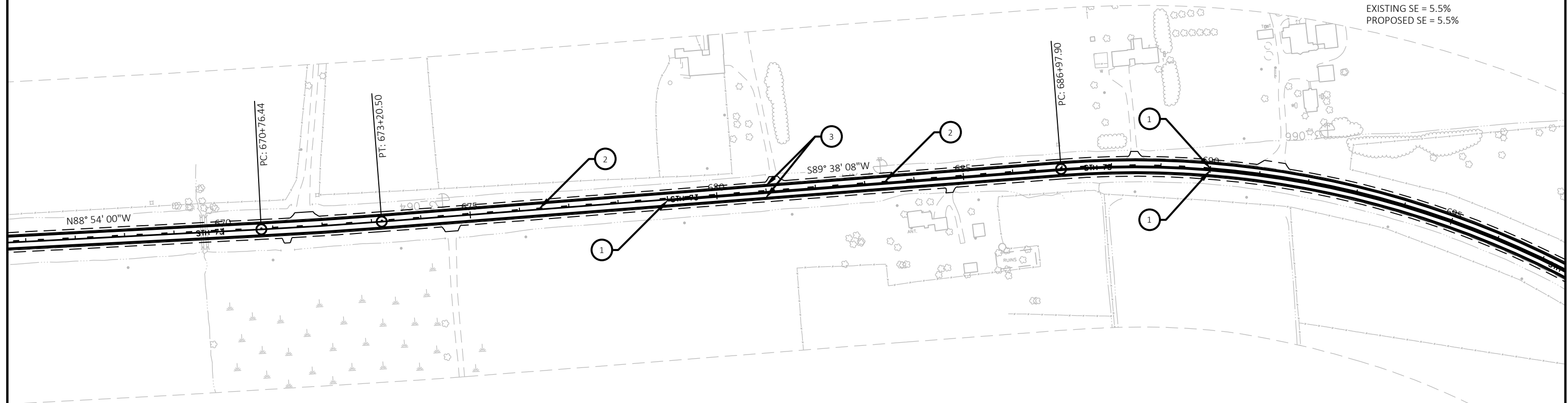
4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH

PI STA = 693+98.91
Y = 326259.772
X = 701319.395
DELTA = 40°18'38"
D = 3°00'00"
T = 701.02'
L = 1343.72'
R = 1909.90'
PC STA = 686+97.90
PT STA = 700+41.61
EXISTING SE = 5.5%
PROPOSED SE = 5.5%



2

2

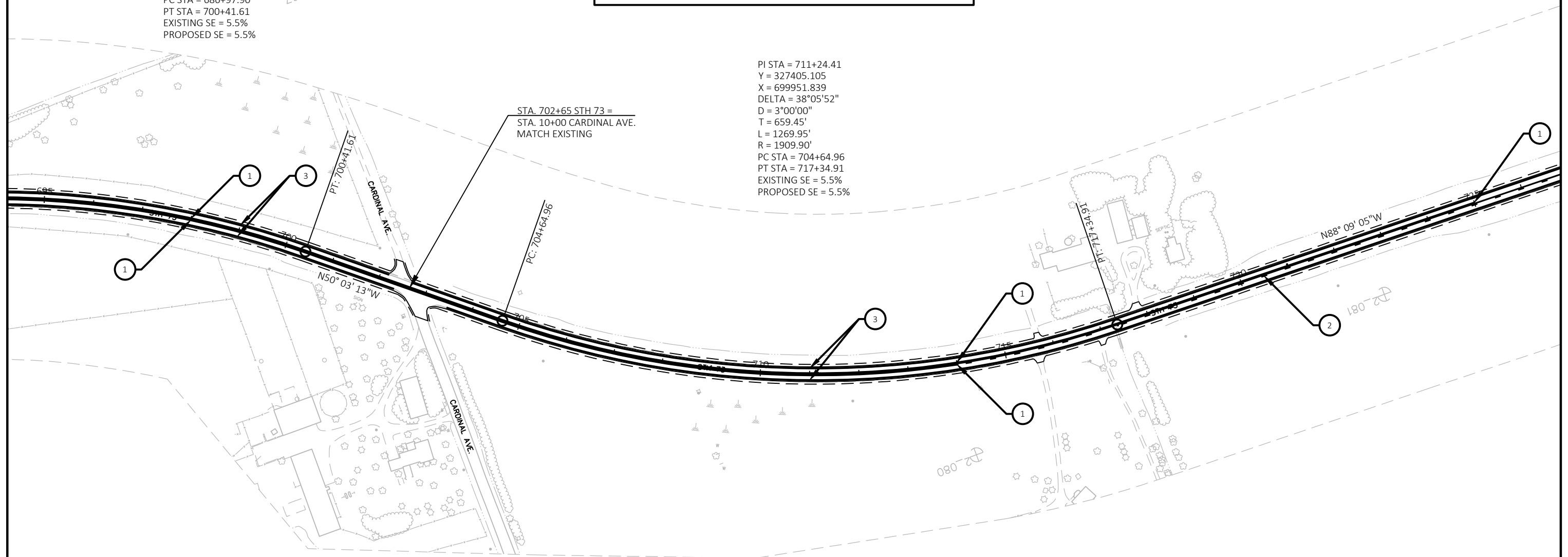
NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND	
1	MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)
2	MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)
3	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)
4	MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)
5	MARKING STOP LINE EPOXY 18-INCH

- | LEGEND | |
|--------|---|
| 1 | MARKING LINE EPOXY 4-INCH (SOLID, YELLOW) |
| 2 | MARKING LINE EPOXY 4-INCH (DASHED, YELLOW) |
| 3 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE) |
| 4 | MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH |

PI STA = 693+98.91
Y = 326259.772
X = 701319.395
DELTA = 40°18'38"
D = 3°00'00"
T = 701.02'
L = 1343.72'
R = 1909.90'
PC STA = 686+97.90
PT STA = 700+41.61
EXISTING SE = 5.5%
PROPOSED SE = 5.5%

PI STA = 711+24.41
Y = 327405.105
X = 699951.839
DELTA = 38°05'52"
D = 3°00'00"
T = 659.45'
L = 1269.95'
R = 1909.90'
PC STA = 704+64.96
PT STA = 717+34.91
EXISTING SE = 5.5%
PROPOSED SE = 5.5%



PROJECT NO:	1520-05-70
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HWY: STH 73

COUNTY: CLARK

PAVEMENT MARKING

SHEET	22	E
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FILE NAME : N:\PDS\C3D\15200500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 25

PLOT DATE : 4/17/2019 12:42 PM

PLOT BY : HETRICK, ADAM M

PLOT NAME :

PLOT SCALE : #####

WISDOT/CADDS SHEET 42

NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

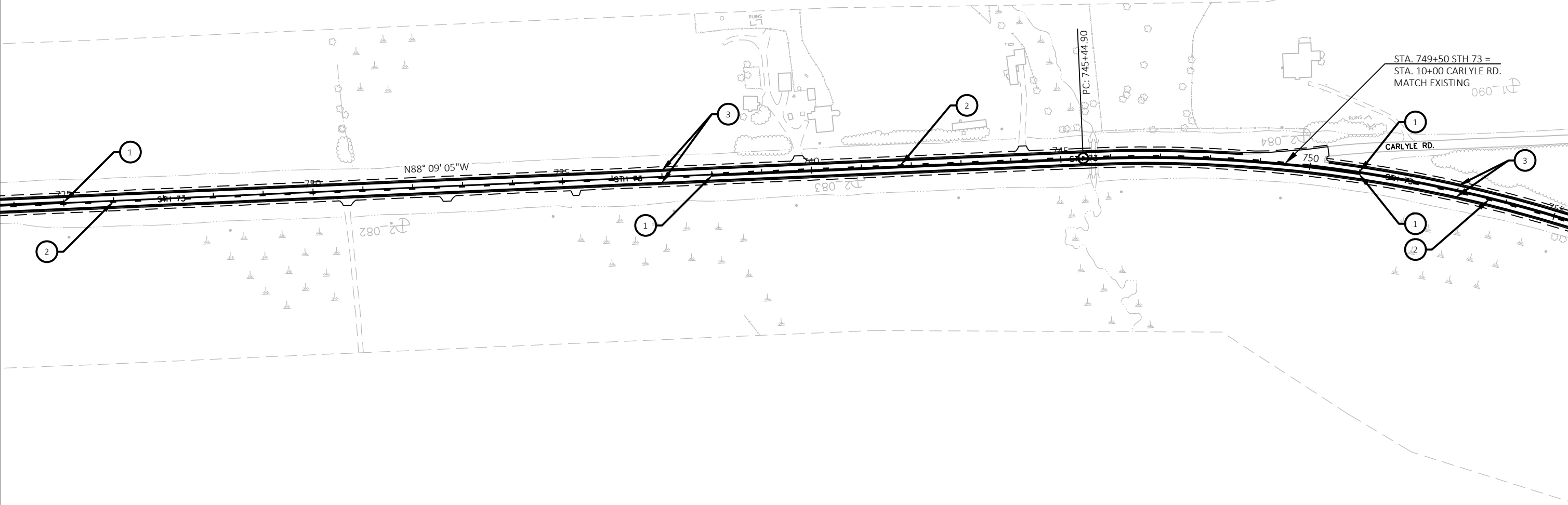
4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH

PI STA = 750+75.73
Y = 327534.142
X = 695953.650
DELTA = 20°59'42"
D = 2°00'00"
T = 530.83'
L = 1049.75'
R = 2864.79'
PC STA = 745+44.90
PT STA = 755+94.65
EXISTING SE = 4.0%
PROPOSED SE = 4.5%



PI STA = 750+75.73
Y = 327534.142
X = 695953.650
DELTA = 20°59'42"
D = 2°00'00"
T = 530.83'
L = 1049.75'
R = 2864.79'
PC STA = 745+44.90
PT STA = 755+94.65
EXISTING SE = 4.0%
PROPOSED SE = 4.5%

NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

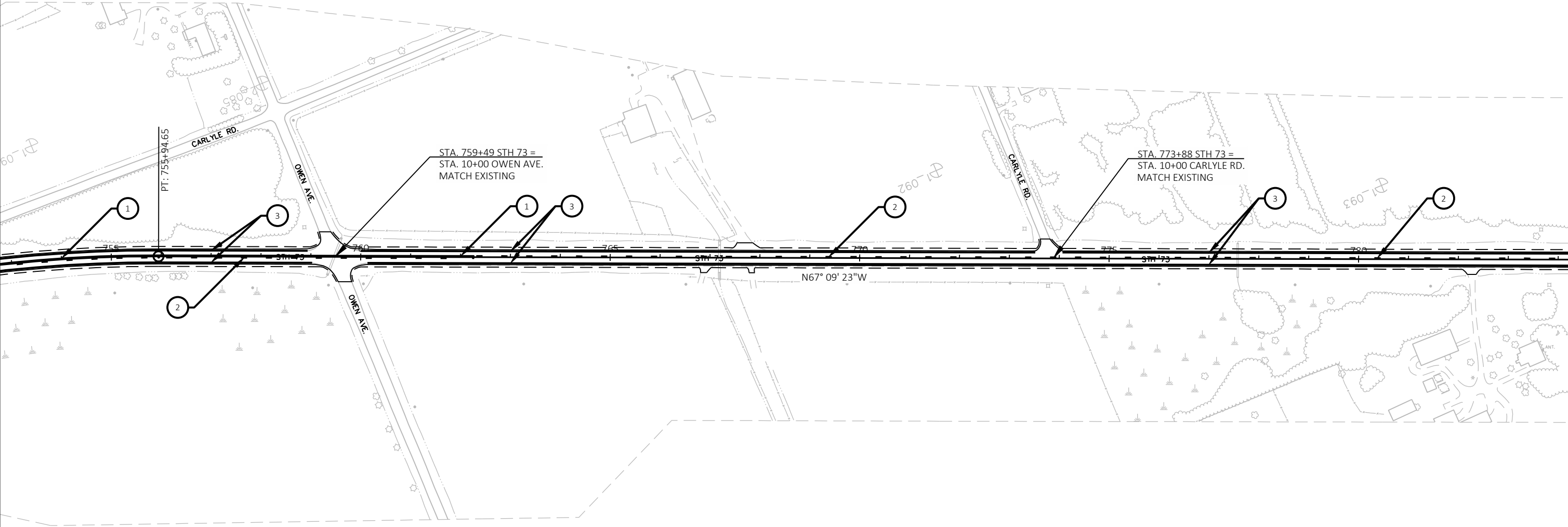
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

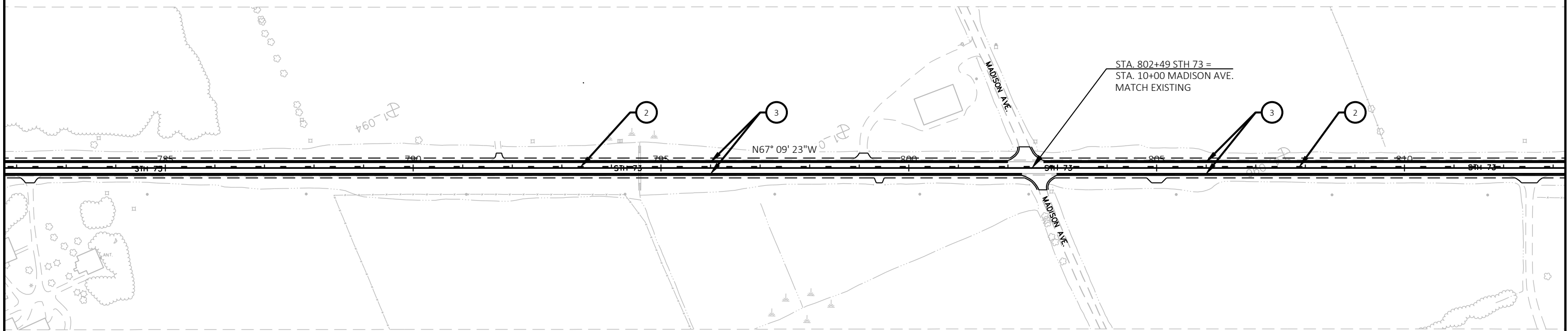
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE.
ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

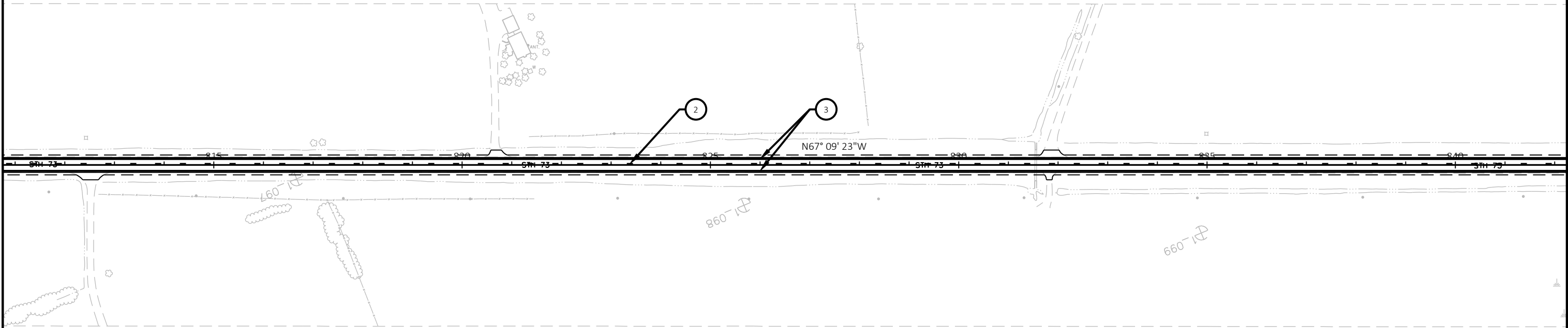
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

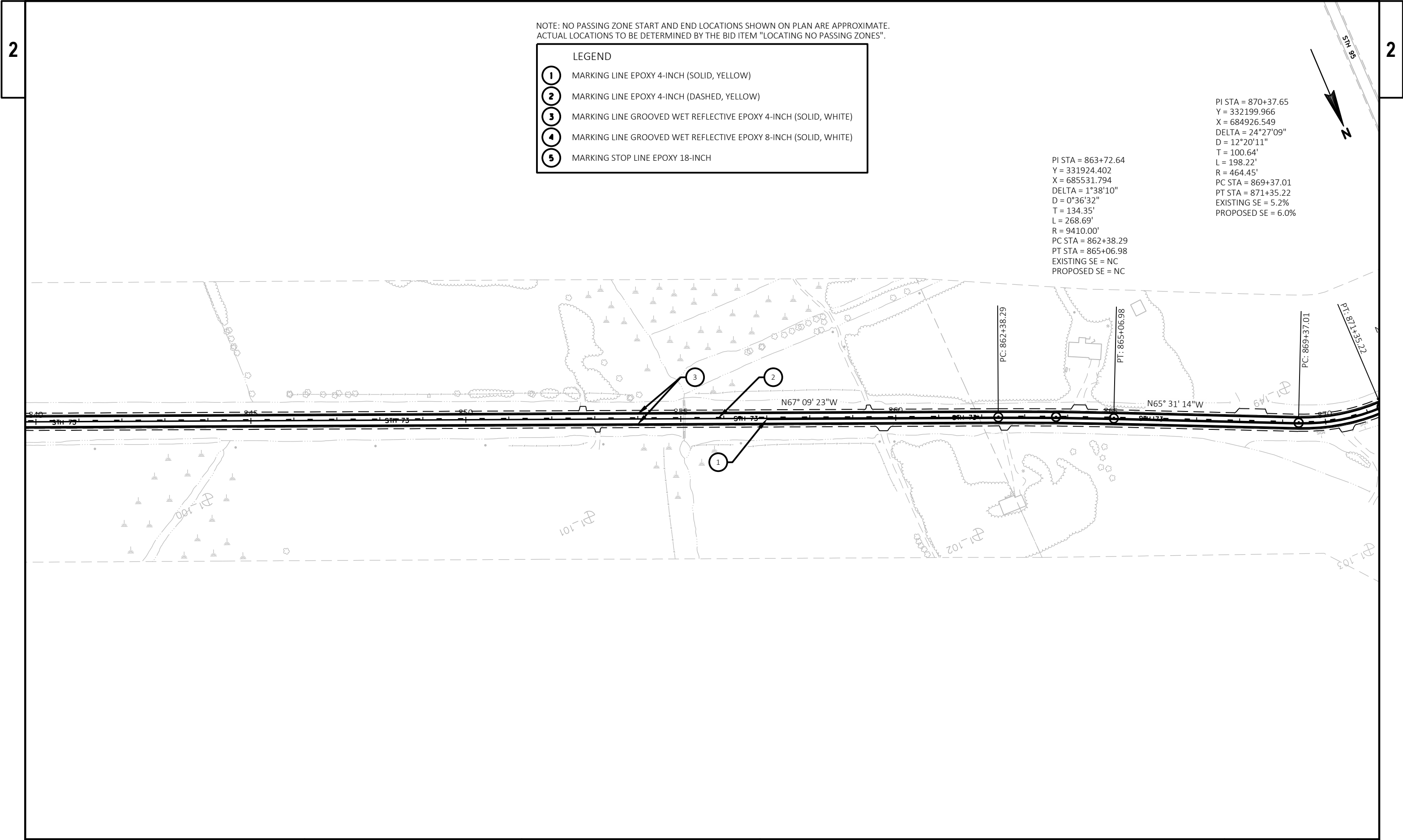
4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

MARKING STOP LINE EPOXY 18-INCH





NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE. ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

- LEGEND
- 1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)
- 2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)
- 3

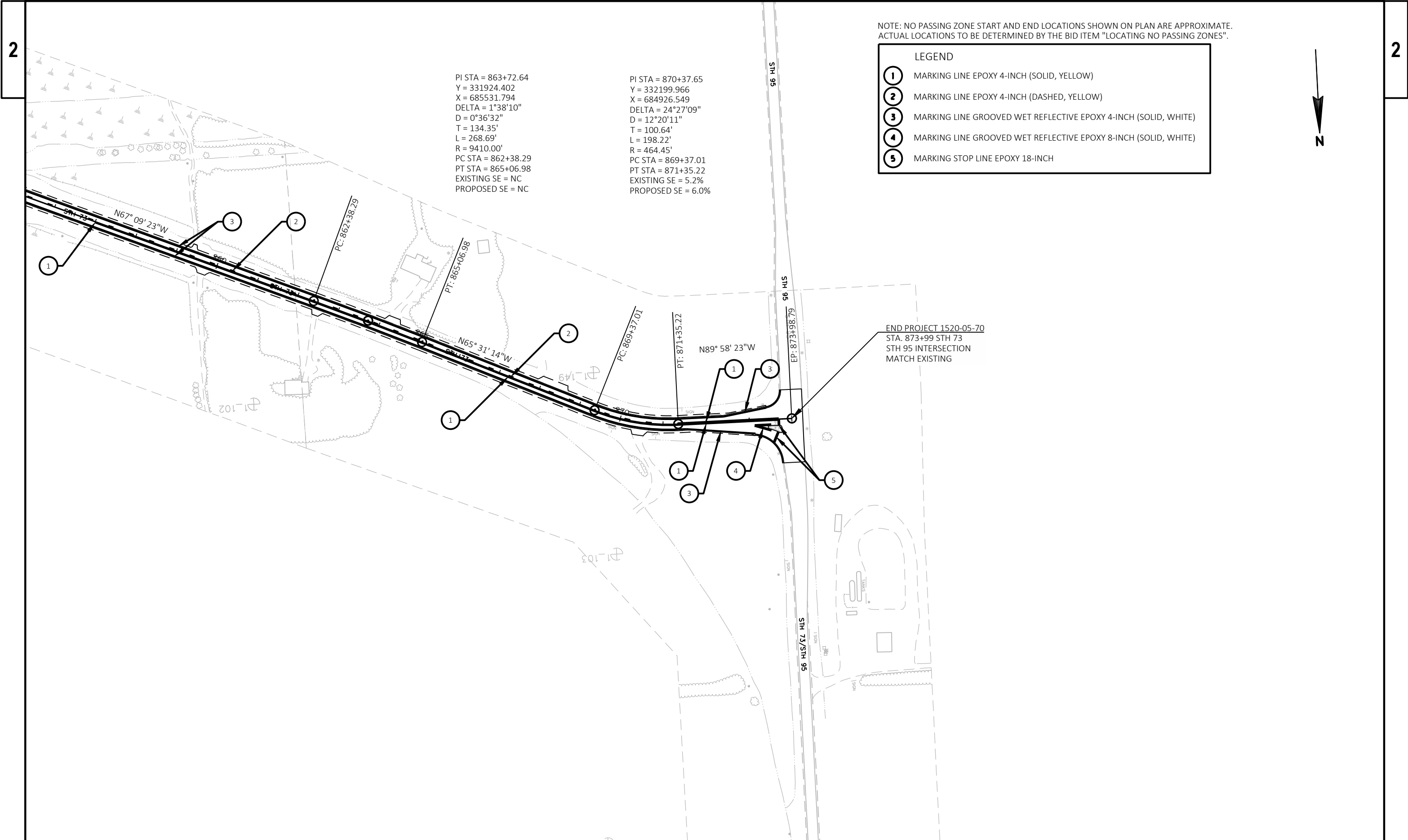
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)
- 4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)
- 5

MARKING STOP LINE EPOXY 18-INCH

PI STA = 863+72.64
Y = 331924.402
X = 685531.794
DELTA = 1°38'10"
D = 0°36'32"
T = 134.35'
L = 268.69'
R = 9410.00'
PC STA = 862+38.29
PT STA = 865+06.98
EXISTING SE = NC
PROPOSED SE = NC

PI STA = 870+37.65
Y = 332199.966
X = 684926.549
DELTA = 24°27'09"
D = 12°20'11"
T = 100.64'
L = 198.22'
R = 464.45'
PC STA = 869+37.01
PT STA = 871+35.22
EXISTING SE = 5.2%
PROPOSED SE = 6.0%



NOTE: NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE. ACTUAL LOCATIONS TO BE DETERMINED BY THE BID ITEM "LOCATING NO PASSING ZONES".

LEGEND

1

MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)

2

MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)

3

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID, WHITE)

4

MARKING LINE GROOVED WET REFLECTIVE EPOXY 8-INCH (SOLID, WHITE)

5

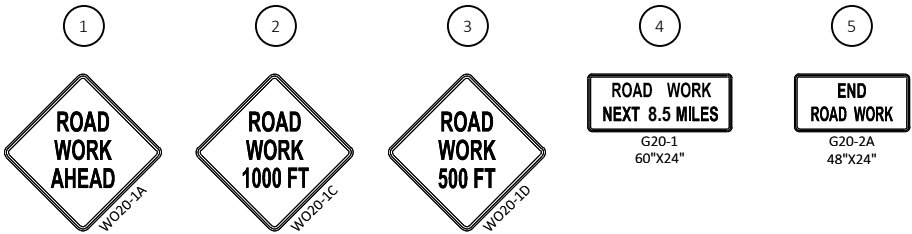
MARKING STOP LINE EPOXY 18-INCH

PI STA = 863+72.64
Y = 331924.402
X = 685531.794
DELTA = 1°38'10"
D = 0°36'32"
T = 134.35'
L = 268.69'
R = 9410.00'
PC STA = 862+38.29
PT STA = 865+06.98
EXISTING SE = NC
PROPOSED SE = NC

PI STA = 870+37.65
Y = 332199.966
X = 684926.549
DELTA = 24°27'09"
D = 12°20'11"
T = 100.64'
L = 198.22'
R = 464.45'
PC STA = 869+37.01
PT STA = 871+35.22
EXISTING SE = 5.2%
PROPOSED SE = 6.0%

END PROJECT 1520-05-70
STA. 873+99 STH 73
STH 95 INTERSECTION
MATCH EXISTING

SIGNING KEY



TRAFFIC CONTROL GENERAL NOTES:

SEE STANDARD DETAIL DRAWING 15C4-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC", STANDARD DETAIL DRAWING 15C5-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC", STANDARD DETAIL DRAWING 15C12-6 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR TRAFFIC CONTROL DETAILS.

FOR SIDE ROAD APPROACH ADVANCE WARNING SIGN DETAIL SEE STANDARD DETAIL DRAWING 15C4-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" AND STANDARD DETAIL DRAWING 15C5-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

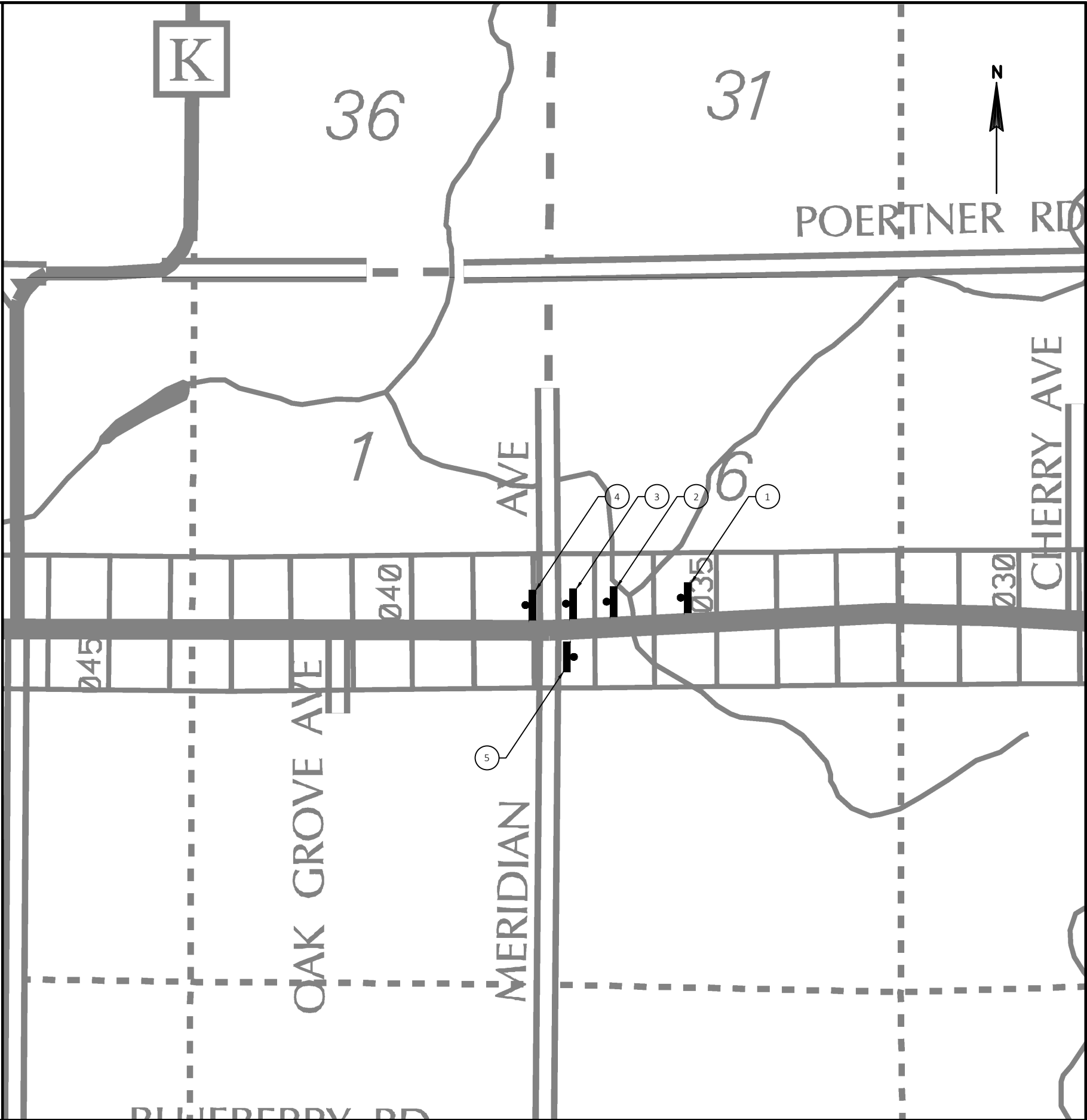
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

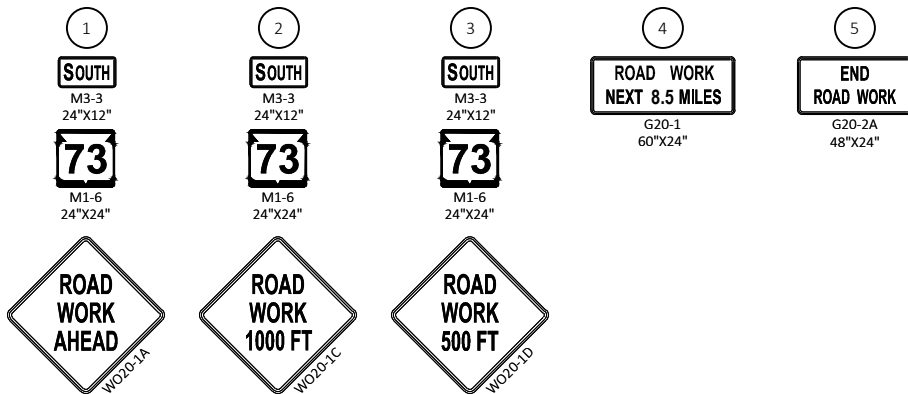
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

GROOVED PAVEMENT SIGNS TO BE USED DURING PAVEMENT MILLING OPERATIONS WHEN TRAFFIC IS ON MILLED PAVEMENT SURFACE. PLACE GROOVED PAVEMENT SIGNS 350' IN ADVANCE OF MILLED PAVEMENT SURFACES AND AT 1-MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.



SIGNING KEY



TRAFFIC CONTROL GENERAL NOTES:

SEE STANDARD DETAIL DRAWING 15C4-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC", STANDARD DETAIL DRAWING 15C5-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC", STANDARD DETAIL DRAWING 15C12-6 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", AND STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR TRAFFIC CONTROL DETAILS.

FOR SIDE ROAD APPROACH ADVANCE WARNING SIGN DETAIL SEE STANDARD DETAIL DRAWING 15C4-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" AND STANDARD DETAIL DRAWING 15C5-5 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

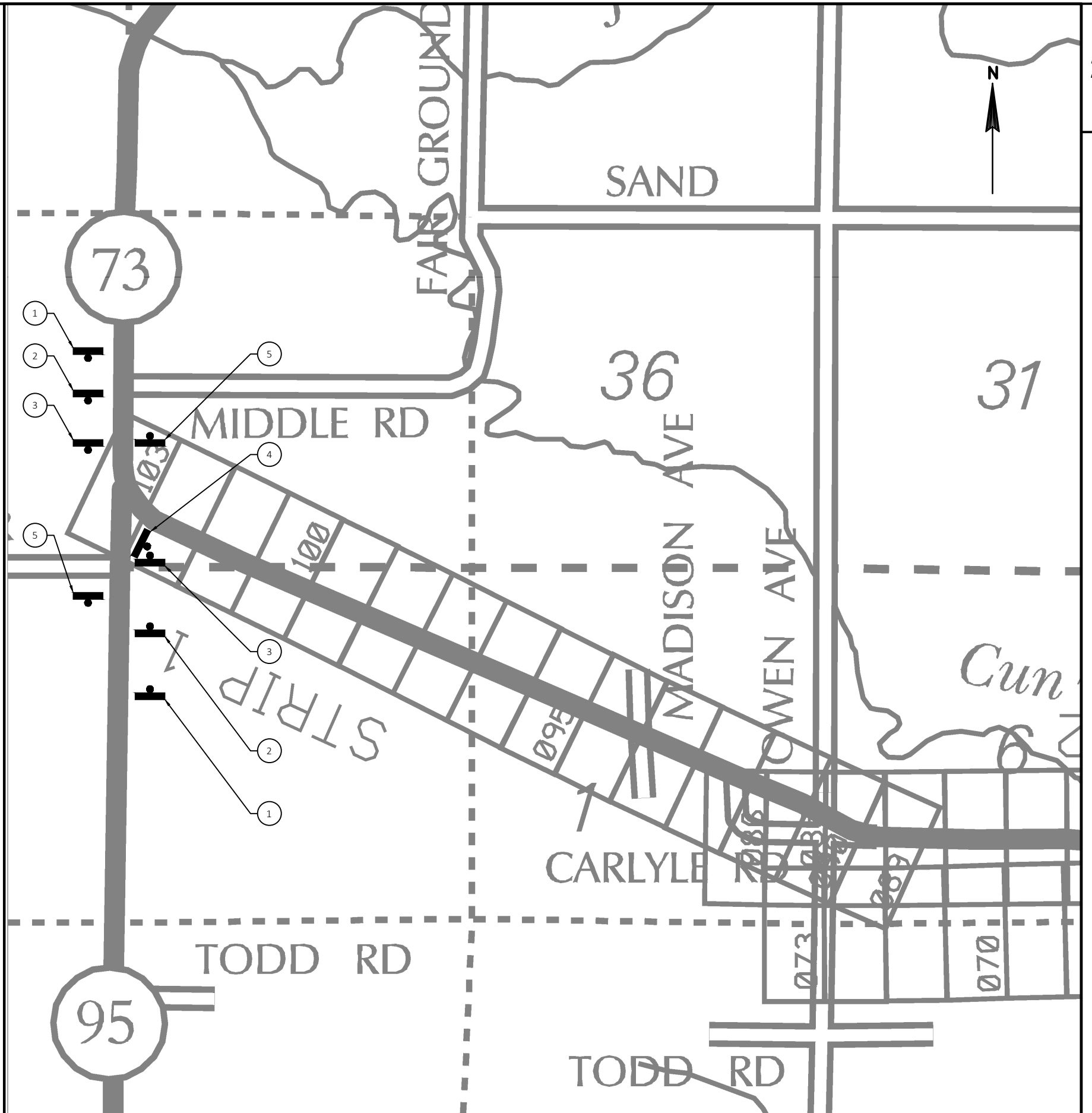
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

GROOVED PAVEMENT SIGNS TO BE USED DURING PAVEMENT MILLING OPERATIONS WHEN TRAFFIC IS ON MILLED PAVEMENT SURFACE. PLACE GROOVED PAVEMENT SIGNS 350' IN ADVANCE OF MILLED PAVEMENT SURFACES AND AT 1-MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.



SIGN ON TEMPORARY POST



PROJECT NO: 1520-05-70

HWY: STH 73

COUNTY: CLARK

TRAFFIC CONTROL

SHEET

30

E

GENERAL NOTES:

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM.

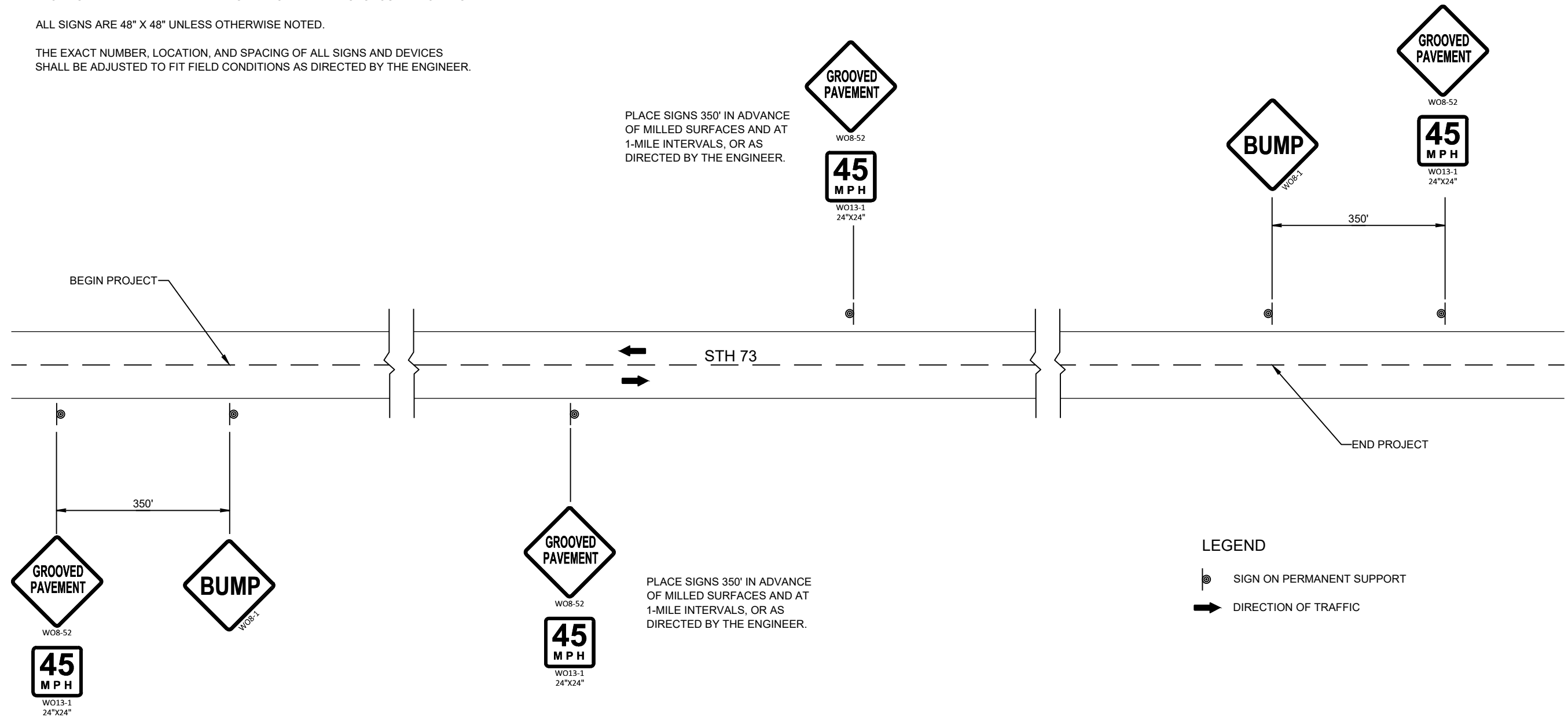
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH WISDOT STANDARD SIGN PLATES.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1-MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.



TRAFFIC CONTROL DETAIL FOR SIGNING ON MAINLINE MILLED SURFACES

Alignment: STH 73							
Tangent	N	311332.382	E	758489.76	Z	Station	00+00
	Distance	1442.648'	Bearing	S 89° 18' 49.93 W"			
Arc							
	PC N	311315.106	E	757047.216		Station	14+42.65
	CC N	312460.924	E	757033.494			
	PI N	311301.513	E	755912.191		Station	25+77.75
		TAN	1135.107'				
		DB	S 89° 18' 49.93 W"				
		DA	N 1° 13' 42.08 W"				
		LChord Distance	1612.861'	Bearing	N 45° 57' 26.08 W"		
		External Distance	467.033'				
		Middle Ordinate	331.801'				
		Radius	1145.900'				
		DEG	5° 0' 0.24"				
		DELTA	89° 27' 28"				
		LENGTH	1789.131'				
	PT N	312436.359	E	755887.857		Station	32+31.78
Tangent	N	312436.359	E	755887.857	Z	Station	32+31.78
	Distance	1278.713'	Bearing	N 1° 13' 42.08 W"			
Tangent	N	313714.778	E	755860.445	Z	Station	45+10.49
	Distance	1280.487'	Bearing	N 1° 22' 41.77 W"			
Arc							
	PC N	314994.894	E	755829.646		Station	57+90.98
	CC N	314960.441	E	754397.66			
	PI N	316414.788	E	755795.483		Station	72+11.28
		TAN	1420.305'				
		DB	N 1° 22' 41.77 W"				
		DA	S 89° 6' 27.33 W"				
		LChord Distance	2017.112'	Bearing	N 46° 8' 7.22 W"		
		External Distance	584.785'				
		Middle Ordinate	415.255'				
		Radius	1432.400'				
		DEG	3° 59' 59.94"				
		DELTA	89° 30' 50.9"				
		LENGTH	2237.862'				
	PT N	316392.667	E	754375.351		Station	80+28.84

Alignment: STH 73							
Tangent	N	316392.667	E	754375.351	Z	Station	80+28.84
	Distance	1432.367'	Bearing	S 89° 6' 27.33 W"			
Tangent	N	316370.358	E	752943.157	Z	Station	94+61.21
	Distance	1418.691'	Bearing	S 89° 12' 39.02 W"			
Tangent	N	316350.818	E	751524.601	Z	Station	108+79.9
	Distance	2126.210'	Bearing	S 89° 19' 58.02 W"			
Arc							
	PC N	316326.059	E	749398.535		Station	130+06.11
	CC N	317599.173	E	749383.709			
	PI N	316311.039	E	748108.77		Station	142+95.96
		TAN	1289.853'				
		DB	S 89° 19' 58.02 W'''				
		DA	N 0° 4' 38.28 E'''				
		LChord Distance	1812.237'	Bearing	N 45° 17' 41.85 W"		
		External Distance	539.190'				
		Middle Ordinate	378.780'				
		Radius	1273.200'				
		DEG	4° 30' 0.5'''				
		DELTA	90° 44' 40.27'''				
		LENGTH	2016.482'				
	PT N	317600.89	E	748110.51		Station	150+22.59
Tangent	N	317600.89	E	748110.51	Z	Station	150+22.59
	Distance	1444.867'	Bearing	N 0° 4' 38.28 E"			
Tangent	N	319045.757	E	748112.459	Z	Station	164+67.46
	Distance	613.508'	Bearing	N 0° 21' 45.16 E"			
Arc							
	PC N	319659.252	E	748116.341		Station	170+80.97
	CC N	319731.761	E	736657.415			
	PI N	319859.136	E	748117.606		Station	172+80.85
		TAN	199.887'				
		DB	N 0° 21' 45.16 E'''				
		DA	N 1° 38' 10.05 W'''				
		LChord Distance	399.714'	Bearing	N 0° 38' 12.44 W"		
		External Distance	1.743'				
		Middle Ordinate	1.743'				
		Radius	11459.156'				
		DEG	0° 30' 0'''				
		DELTA	1° 59' 55.22'''				
		LENGTH	399.734'				
	PT N	320058.942	E	748111.899		Station	174+80.7

Alignment: STH 73							
Tangent	N	320058.942	E	748111.899	Z	Station	174+80.7
	Distance	1951.366'	Bearing	N 1° 38' 10.05 W"			
Tangent	N	322009.512	E	748056.184	Z	Station	194+32.07
	Distance	2085.115'	Bearing	N 1° 34' 13.11 W"			
Arc							
	PC N	324093.844	E	747999.044		Station	215+17.18
	CC N	324041.506	E	746089.861			
	PI N	325390.193	E	747963.506		Station	228+14.02
		TAN	1296.836'				
		DB	N 1° 34' 13.11 W"				
		DA	N 69° 55' 26 W"				
		LChord Distance	2145.766'	Bearing	N 35° 44' 49.55 W"		
		External Distance	398.671'				
		Middle Ordinate	329.824'				
		Radius	1909.900'				
		DEG	2° 59' 59.77"				
		DELTA	68° 21' 12.9"				
		LENGTH	2278.501'				
	PT N	325835.356	E	746745.469		Station	237+95.68
Tangent	N	325835.356	E	746745.469	Z	Station	237+95.68
	Distance	2429.166'	Bearing	N 69° 55' 26 W"			
Arc							
	PC N	326669.211	E	744463.906		Station	262+24.85
	CC N	324875.361	E	743808.298			
	PI N	326799.56	E	744107.248		Station	266+04.58
		TAN	379.731'				
		DB	N 69° 55' 26 W"				
		DA	S 87° 35' 9.72 W"				
		LChord Distance	744.882'	Bearing	N 81° 10' 8.14 W"		
		External Distance	37.384'				
		Middle Ordinate	36.666'				
		Radius	1909.900'				
		DEG	2° 59' 59.77"				
		DELTA	22° 29' 24.28"				
		LENGTH	749.685'				
	PT N	326783.566	E	743727.854		Station	269+74.53
Tangent	N	326783.566	E	743727.854	Z	Station	269+74.53
	Distance	5715.641'	Bearing	S 87° 35' 9.72 W"			

Alignment: STH 73							
Arc							
	PC N	326542.828	E	738017.285		Station	326+90.18
	CC N	332267.344	E	737775.959			
	PI N	326534.67	E	737823.766		Station	328+83.87
		TAN	193.691'				
		DB	S 87° 35' 9.72 W'''				
		DA	N 88° 32' 29.87 W'''				
		LChord Distance	387.162'	Bearing	S 89° 31' 19.93 W"		
		External Distance	3.273'				
		Middle Ordinate	3.271'				
		Radius	5729.600'				
		DEG	0° 59' 59.99'''				
		DELTA	3° 52' 20.42'''				
		LENGTH	387.235'				
	PT N	326539.6	E	737630.137		Station	330+77.41
Tangent	N	326539.6	E	737630.137	Z	Station	330+77.41
	Distance	1529.489'	Bearing	N 88° 32' 29.87 W"			
Tangent	N	326578.526	E	736101.143	Z	Station	346+06.9
	Distance	1900.476'	Bearing	N 88° 24' 31.34 W"			
Tangent	N	326631.302	E	734201.4	Z	Station	365+07.38
	Distance	1101.246'	Bearing	N 88° 32' 53.7 W"			
Arc							
	PC N	326659.202	E	733100.507		Station	376+08.62
	CC N	317252.222	E	732862.103			
	PI N	326666.681	E	732805.395		Station	379+03.83
		TAN	295.206'				
		DB	N 88° 32' 53.7 W'''				
		DA	S 87° 51' 28.84 W'''				
		LChord Distance	590.123'	Bearing	S 89° 39' 17.57 W"		
		External Distance	4.629'				
		Middle Ordinate	4.627'				
		Radius	9410.000'				
		DEG	0° 36' 31.97'''				
		DELTA	3° 35' 37.46'''				
		LENGTH	590.219'				
	PT N	326655.647	E	732510.395		Station	381+98.84
Tangent	N	326655.647	E	732510.395	Z	Station	381+98.84
	Distance	1374.563'	Bearing	S 87° 51' 28.84 W"			
Tangent	N	326604.272	E	731136.792	Z	Station	395+73.41
	Distance	1401.248'	Bearing	S 88° 2' 7.24 W"			

Alignment: STH 73							
Arc							
	PC N	326556.233	E	729736.368		Station	409+74.65
	CC N	317151.764	E	730058.97			
	PI N	326553.069	E	729644.147		Station	410+66.93
		TAN	92.275'				
		DB	S 88° 2' 7.24 W'''				
		DA	S 86° 54' 42.1 W'''				
		LChord Distance	184.541'	Bearing	S 87° 28' 24.67 W"		
		External Distance	.452'				
		Middle Ordinate	.452'				
		Radius	9410.000'				
		DEG	0° 36' 31.97'''				
		DELTA	1° 7' 25.15'''				
		LENGTH	184.544'				
	PT N	326548.098	E	729552.006		Station	411+59.2
Tangent	N	326548.098	E	729552.006	Z	Station	411+59.2
	Distance	2029.999'	Bearing	S 86° 54' 42.1 W"			
Arc							
	PC N	326438.732	E	727524.956		Station	431+89.2
	CC N	342785.18	E	726643.009			
	PI N	326423.582	E	727244.17		Station	434+70.39
		TAN	281.194'				
		DB	S 86° 54' 42.1 W'''				
		DA	S 88° 52' 47.5 W'''				
		LChord Distance	562.306'	Bearing	S 87° 53' 44.8 W"		
		External Distance	2.415'				
		Middle Ordinate	2.415'				
		Radius	16370.223'				
		DEG	0° 21' 0'''				
		DELTA	1° 58' 5.4'''				
		LENGTH	562.333'				
	PT N	326418.085	E	726963.029		Station	437+51.53
Tangent	N	326418.085	E	726963.029	Z	Station	437+51.53
	Distance	1518.217'	Bearing	S 88° 52' 47.5 W"			
Tangent	N	326388.406	E	725445.103	Z	Station	452+69.75
	Distance	965.600'	Bearing	S 88° 59' 20.32 W"			

Alignment: STH 73							
Arc							
	PC N	326371.368	E	724479.653		Station	462+35.35
	CC N	349286.112	E	724075.265			
	PI N	326367.457	E	724258.03		Station	464+57
		TAN	221.657'				
		DB	S 88° 59' 20.32 W'''				
		DA	N 89° 54' 9.98 W'''				
		LChord Distance	443.294'	Bearing	S 89° 32' 35.17 W"		
		External Distance	1.072'				
		Middle Ordinate	1.072'				
		Radius	22918.312'				
		DEG	0° 15' 0'''				
		DELTA	1° 6' 29.71'''				
		LENGTH	443.301'				
	PT N	326367.833	E	724036.373		Station	466+78.65
Tangent	N	326367.833	E	724036.373	Z	Station	466+78.65
	Distance	1929.110'	Bearing	N 89° 54' 9.98 W"			
Tangent	N	326371.107	E	722107.267	Z	Station	486+07.76
	Distance	5462.906'	Bearing	N 89° 35' 37.74 W"			
Arc							
	PC N	326409.834	E	716644.498		Station	540+70.66
	CC N	317000.071	E	716577.789			
	PI N	326410.962	E	716485.342		Station	542+29.82
		TAN	159.160'				
		DB	N 89° 35' 37.74 W'''				
		DA	S 88° 28' 5.44 W'''				
		LChord Distance	318.274'	Bearing	S 89° 26' 13.85 W"		
		External Distance	1.346'				
		Middle Ordinate	1.346'				
		Radius	9410.000'				
		DEG	0° 36' 31.97'''				
		DELTA	1° 56' 16.82'''				
		LENGTH	318.289'				
	PT N	326406.708	E	716326.239		Station	543+88.95
Tangent	N	326406.708	E	716326.239	Z	Station	543+88.95
	Distance	5120.012'	Bearing	S 88° 28' 5.44 W"			
Tangent	N	326269.839	E	711208.057	Z	Station	595+08.96
	Distance	2187.650'	Bearing	S 88° 31' 22.53 W"			

Alignment: STH 73							
Arc							
	PC N	326213.448	E	709021.134		Station	616+96.61
	CC N	335759.571	E	708774.982			
	PI N	326209.63	E	708873.095		Station	618+44.7
		TAN	148.089'				
		DB	S 88° 31' 22.53 W'''				
		DA	N 89° 42' 0.56 W'''				
		LChord Distance	296.142'	Bearing	S 89° 24' 40.99 W"		
		External Distance	1.148'				
		Middle Ordinate	1.148'				
		Radius	9549.296'				
		DEG	0° 36' 0'''				
		DELTA	1° 46' 36.91'''				
		LENGTH	296.153'				
	PT N	326210.405	E	708725.008		Station	619+92.77
Tangent	N	326210.405	E	708725.008	Z	Station	619+92.77
	Distance	2307.228'	Bearing	N 89° 42' 0.56 W"			
Tangent	N	326222.48	E	706417.812	Z	Station	643+00
	Distance	522.132'	Bearing	N 89° 22' 43.46 W"			
Tangent	N	326228.141	E	705895.711	Z	Station	648+22.13
	Distance	2254.314'	Bearing	N 88° 53' 59.81 W"			
Arc							
	PC N	326271.42	E	703641.812		Station	670+76.44
	CC N	316723.884	E	703458.481			
	PI N	326273.763	E	703519.797		Station	671+98.48
		TAN	122.038'				
		DB	N 88° 53' 59.81 W'''				
		DA	S 89° 38' 8.44 W'''				
		LChord Distance	244.056'	Bearing	N 89° 37' 55.68 W"		
		External Distance	.780'				
		Middle Ordinate	.780'				
		Radius	9549.296'				
		DEG	0° 36' 0'''				
		DELTA	1° 27' 51.76'''				
		LENGTH	244.063'				
	PT N	326272.987	E	703397.761		Station	673+20.5
Tangent	N	326272.987	E	703397.761	Z	Station	673+20.5
	Distance	1377.393'	Bearing	S 89° 38' 8.44 W"			

Alignment: STH 73							
Arc							
	PC N	326264.229	E	702020.397		Station	686+97.9
	CC N	328174.09	E	702008.252			
	PI N	326259.772	E	701319.395		Station	693+98.91
		TAN	701.015'				
		DB	S 89° 38' 8.44 W'''				
		DA	N 50° 3' 13.35 W'''				
		LChord Distance	1316.173'	Bearing	N 70° 12' 32.45 W"		
		External Distance	124.588'				
		Middle Ordinate	116.958'				
		Radius	1909.900'				
		DEG	2° 59' 59.77'''				
		DELTA	40° 18' 38.22'''				
		LENGTH	1343.716'				
	PT N	326709.872	E	700781.964		Station	700+41.61
Tangent	N	326709.872	E	700781.964	Z	Station	700+41.61
	Distance	423.345'	Bearing	N 50° 3' 13.35 W"			
Arc							
	PC N	326981.689	E	700457.408		Station	704+64.96
	CC N	325517.471	E	699231.12			
	PI N	327405.105	E	699951.839		Station	711+24.41
		TAN	659.455'				
		DB	N 50° 3' 13.35 W'''				
		DA	N 88° 9' 5.31 W'''				
		LChord Distance	1246.686'	Bearing	N 69° 6' 9.33 W"		
		External Distance	110.644'				
		Middle Ordinate	104.585'				
		Radius	1909.900'				
		DEG	2° 59' 59.77'''				
		DELTA	38° 5' 51.96'''				
		LENGTH	1269.953'				
	PT N	327426.377	E	699292.728		Station	717+34.91
Tangent	N	327426.377	E	699292.728	Z	Station	717+34.91
	Distance	2809.989'	Bearing	N 88° 9' 5.31 W"			

Alignment: STH 73							
Arc							
	PC N	327517.019	E	696484.202		Station	745+44.9
	CC N	330380.318	E	696576.612			
	PI N	327534.142	E	695953.65		Station	750+75.73
		TAN	530.828'				
		DB	N 88° 9' 5.31 W'''				
		DA	N 67° 9' 23.38 W'''				
		LChord Distance	1043.886'	Bearing	N 77° 39' 14.35 W"		
		External Distance	48.764'				
		Middle Ordinate	47.948'				
		Radius	2864.790'				
		DEG	2° 0' 0'''				
		DELTA	20° 59' 41.92'''				
		LENGTH	1049.749'				
	PT N	327740.218	E	695464.456		Station	755+94.65
Tangent	N	327740.218	E	695464.456	Z	Station	755+94.65
	Distance	10643.643'	Bearing	N 67° 9' 23.38 W"			
Arc							
	PC N	331872.244	E	685655.609		Station	862+38.29
	CC N	340544.205	E	689308.716			
	PI N	331924.402	E	685531.794		Station	863+72.64
		TAN	134.352'				
		DB	N 67° 9' 23.38 W'''				
		DA	N 65° 31' 13.84 W'''				
		LChord Distance	268.677'	Bearing	N 66° 20' 18.61 W"		
		External Distance	.959'				
		Middle Ordinate	.959'				
		Radius	9410.000'				
		DEG	0° 36' 31.97'''				
		DELTA	1° 38' 9.54'''				
		LENGTH	268.687'				
	PT N	331980.073	E	685409.518		Station	865+06.98
Tangent	N	331980.073	E	685409.518	Z	Station	865+06.98
	Distance	430.031'	Bearing	N 65° 31' 13.84 W"			

Alignment: STH 73							
Arc							
	PC N	332158.264	E	685018.143		Station	869+37.01
	CC N	331735.564	E	684825.69			
	PI N	332199.966	E	684926.549		Station	870+37.65
		TAN	100.640'				
		DB	N 65° 31' 13.84 W'''				
		DA	N 89° 58' 22.86 W'''				
		LChord Distance	196.716'	Bearing	N 77° 44' 48.35 W"		
		External Distance	10.779'				
		Middle Ordinate	10.534'				
		Radius	464.450'				
		DEG	12° 20' 10.55'''				
		DELTA	24° 27' 9.01'''				
		LENGTH	198.216'				
	PT N	332200.014	E	684825.909		Station	871+35.22
Tangent	N	332200.014	E	684825.909	Z	Station	871+35.22
	Distance	263.570'	Bearing	N 89° 58' 22.86 W"			
End	N	332200.138	E	684562.339	Z	Station	873+98.79
Alignment Length = 87398.79'							

Estimate Of Quantities

1520-05-70					
Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	11.000	11.000
0004	203.0200	Removing Old Structure (station) 01. 717+30	LS	1.000	1.000
0006	203.0200	Removing Old Structure (station) 02. 745+66	LS	1.000	1.000
0008	203.0200	Removing Old Structure (station) 04. 767+20	LS	1.000	1.000
0010	203.0200	Removing Old Structure (station) 05. 794+58	LS	1.000	1.000
0012	203.0200	Removing Old Structure (station) 06. 831+55	LS	1.000	1.000
0014	203.0200	Removing Old Structure (station) 07. 855+08	LS	1.000	1.000
0016	204.0100	Removing Pavement	SY	105.000	105.000
0018	204.0110	Removing Asphaltic Surface	SY	2,278.000	2,278.000
0020	204.0115	Removing Asphaltic Surface Butt Joints	SY	856.000	856.000
0022	204.0120	Removing Asphaltic Surface Milling	SY	149,789.000	149,789.000
0024	204.0150	Removing Curb & Gutter	LF	170.000	170.000
0026	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1520-05-70	LS	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 1520-05-70	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	12,650.000	12,650.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,040.000	2,040.000
0034	305.0500	Shaping Shoulders	STA	872.000	872.000
0036	455.0605	Tack Coat	GAL	20,762.000	20,762.000
0038	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0040	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0042	460.2005	Incentive Density PWL HMA Pavement	DOL	11,490.000	11,490.000
0044	460.2010	Incentive Air Voids HMA Pavement	DOL	27,510.000	27,510.000
0046	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	43,600.000	43,600.000
0048	460.6424	HMA Pavement 4 MT 58-28 H	TON	12,668.000	12,668.000
0050	460.6444	HMA Pavement 4 MT 58-34 H	TON	14,804.000	14,804.000
0052	465.0105	Asphaltic Surface	TON	4,680.000	4,680.000
0054	465.0110	Asphaltic Surface Patching	TON	100.000	100.000
0056	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	10.000	10.000
0058	465.0450	Asphaltic Intersection Rumble Strips	SY	81.000	81.000
0060	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	39,200.000	39,200.000
0062	520.8700	Cleaning Culvert Pipes	EACH	8.000	8.000
0064	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	136.000	136.000
0066	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	80.000	80.000
0068	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	760.000	760.000
0070	522.0172	Culvert Pipe Reinforced Concrete Class III 72-Inch	LF	192.000	192.000
0072	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0074	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000

Estimate Of Quantities

1520-05-70

Line	Item	Item Description	Unit	Total	Qty
0076	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	24.000	24.000
0078	522.1072	Apron Endwalls for Culvert Pipe Reinforced Concrete 72-Inch	EACH	6.000	6.000
0080	524.0130	Culvert Pipe Salvaged 30-Inch	LF	72.000	72.000
0082	524.0148	Culvert Pipe Salvaged 48-Inch	LF	128.000	128.000
0084	524.0172	Culvert Pipe Salvaged 72-Inch	LF	48.000	48.000
0086	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	2.000	2.000
0088	524.0648	Apron Endwalls for Culvert Pipe Salvaged 48-Inch	EACH	4.000	4.000
0090	524.0672	Apron Endwalls for Culvert Pipe Salvaged 72-Inch	EACH	2.000	2.000
0092	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	170.000	170.000
0094	606.0200	Riprap Medium	CY	6.000	6.000
0096	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	2.000
0098	614.0920	Salvaged Rail	LF	550.000	550.000
0100	614.2300	MGS Guardrail 3	LF	175.000	175.000
0102	614.2340	MGS Guardrail 3 L	LF	225.000	225.000
0104	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0106	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1520-05-70	EACH	1.000	1.000
0108	619.1000	Mobilization	EACH	1.000	1.000
0110	624.0100	Water	MGAL	50.000	50.000
0112	625.0500	Salvaged Topsoil	SY	2,980.000	2,980.000
0114	627.0200	Mulching	SY	2,980.000	2,980.000
0116	628.1504	Silt Fence	LF	2,855.000	2,855.000
0118	628.1520	Silt Fence Maintenance	LF	2,855.000	2,855.000
0120	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0122	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0124	628.2023	Erosion Mat Class II Type B	SY	416.000	416.000
0126	628.7555	Culvert Pipe Checks	EACH	302.000	302.000
0128	629.0210	Fertilizer Type B	CWT	2.000	2.000
0130	630.0130	Seeding Mixture No. 30	LB	54.000	54.000
0132	630.0160	Seeding Mixture No. 60	LB	6.000	6.000
0134	630.0200	Seeding Temporary	LB	81.000	81.000
0136	633.5200	Markers Culvert End	EACH	38.000	38.000
0138	642.5001	Field Office Type B	EACH	1.000	1.000
0140	643.0300	Traffic Control Drums	DAY	500.000	500.000
0142	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0144	643.0900	Traffic Control Signs	DAY	5,400.000	5,400.000
0146	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0148	643.5000	Traffic Control	EACH	1.000	1.000

Estimate Of Quantities

1520-05-70					
Line	Item	Item Description	Unit	Total	Qty
0150	645.0120	Geotextile Type HR	SY	11.000	11.000
0152	646.1020	Marking Line Epoxy 4-Inch	LF	28,532.000	28,532.000
0154	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	85,115.000	85,115.000
0156	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	88.000	88.000
0158	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	28,532.000	28,532.000
0160	646.6120	Marking Stop Line Epoxy 18-Inch	LF	43.000	43.000
0162	648.0100	Locating No-Passing Zones	MI	8.260	8.260
0164	649.0105	Temporary Marking Line Paint 4-Inch	LF	57,064.000	57,064.000
0166	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	170.000	170.000
0168	650.6000	Construction Staking Pipe Culverts	EACH	22.000	22.000
0170	650.8000	Construction Staking Resurfacing Reference	LF	43,600.000	43,600.000
0172	650.9910	Construction Staking Supplemental Control (project) 01. 1520-05-70	LS	1.000	1.000
0174	690.0150	Sawing Asphalt	LF	1,655.000	1,655.000
0176	740.0440	Incentive IRI Ride	DOL	33,040.000	33,040.000
0178	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,000.000	2,000.000
0180	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	630.000	630.000
0182	SPV.0060	Special 01. Ditch Cleaning	EACH	38.000	38.000
0184	SPV.0090	Special 01. Concrete Curb & Gutter Cure and Seal Treatment	LF	170.000	170.000
0186	SPV.0105	Special 01. Material Transfer Vehicle	LS	1.000	1.000

REMOVING SMALL PIPE CULVERTS

203.0100				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	449+68	STH 73	1	1 - 24" X 58' CPCS
0010	476+56	STH 73	2	2 - 48" X 54' CPCS
0010	507+15	STH 73	2	2 - 48" X 60' CPCS
0010	525+54	STH 73	2	2 - 36" X 64' CPRC
0010	641+54	STH 73	1	1 - 30" X 56' CPCS
0010	641+84	STH 73	1	1 - 42" X 29" X 60' CPCS
0010	759+46	STH 73	1	1 - 30" X 80' CPCS
0010	777+58	STH 73	1	1 - 24" X 68' CPCS
TOTAL 0010			11	

REMOVING PAVEMENT

204.0100					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	864+10	-	864+35	STH 73 RT.	35 CONCRETE INTERSECTION RUMBLE STRIPS
0010	867+25	-	867+50	STH 73 RT.	35 CONCRETE INTERSECTION RUMBLE STRIPS
0010	869+60	-	869+85	STH 73 RT.	35 CONCRETE INTERSECTION RUMBLE STRIPS
TOTAL 0010				105	

REMOVING OLD STRUCTURE (STATION)

203.0200				
CATEGORY	STATION	LOCATION	LS	REMARKS
0010	717+30	STH 73	1	3.5' X 6' X 67' BOX CULVERT C-10-955
0010	745+66	STH 73	1	2 - 60" X 60' CPCS
0010	767+20	STH 73	1	3.5' X 6' X 54' BOX CULVERT C-10-954
0010	794+58	STH 73	1	3.5' X 6' X 59' BOX CULVERT C-10-953
0010	831+55	STH 73	1	3.5' X 6' X 60' BOX CULVERT C-10-952
0010	855+08	STH 73	1	3.5' X 6' X 59' BOX CULVERT C-10-951
TOTAL 0010			6	

REMOVING ASPHALTIC SURFACE

204.0110				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	449+68	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (1 - 24" X 58' CPCS)
0010	476+56	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (2 - 48" X 54' CPCS)
0010	507+15	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (2 - 48" X 60' CPCS)
0010	525+54	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (2 - 36" X 64' CPRC)
0010	584+70	STH 73 LT. & RT.	134	RELAID CULVERT PIPE (1 - 72" X 48' CPRC)
0010	641+54	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (1 - 30" X 56' CPCS)
0010	641+84	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (1 - 42" X 29" X 60' CPCS)
0010	646+80	STH 73 LT. & RT.	134	RELAID CULVERT PIPE (1 - 30" X 72' CPRC)
0010	669+60	STH 73 LT. & RT.	134	RELAID CULVERT PIPE (2 - 48" X 64' CPRC)
0010	717+30	STH 73 LT. & RT.	134	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 67' BOX CULVERT)
0010	745+66	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (2 - 60" X 60' CPCS)
0010	759+46	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (1 - 30" X 80' CPCS)
0010	767+20	STH 73 LT. & RT.	134	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 54' BOX CULVERT)
0010	777+58	STH 73 LT. & RT.	134	CULVERT PIPE REPLACEMENT (1 - 24" X 68' CPCS)
0010	794+58	STH 73 LT. & RT.	134	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)
0010	831+55	STH 73 LT. & RT.	134	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 60' BOX CULVERT)
0010	855+08	STH 73 LT. & RT.	134	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)
TOTAL 0010			2278	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

204.0115						
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS	
0010	437+50 -	438+00	LT. & RT.	167	STH 73	
0010	515+91	515+91	RT.	67	CTH K	
0010	759+49	759+49	LT.	67	OWEN AVENUE	
0010	873+99 -	873+99	RT.	278	STH 73 / STH 95	
0010	873+99 -	873+99	LT.	278	STH 95	
TOTAL 0010				856		

REMOVING CURB & GUTTER

204.0150						
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS	
0010	873+10 -	873+75	RT.	105	STH 73/STH 95 INTERSECTION	
0010	873+36 -	873+75	LT.	65	STH 73/STH 95 INTERSECTION	
TOTAL 0010				170		

REMOVING ASPHALTIC SURFACE MILLING

204.0120						
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS	
0010	438+00 -	873+99	STH 73	145334	STH 73 MAINLINE 30'	
0010	463+00 -	463+52	STH 73 LT.	66	OAK GROVE AVE. INTERSECTION	
0010	515+25 -	516+58	STH 73 RT.	235	CTH K INTERSECTION	
0010	515+25 -	516+58	STH 73 LT.	174	ROBIN AVE. INTERSECTION	
0010	541+45 -	542+85	STH 73 RT.	142	PELSDORF AVE. INTERSECTION	
0010	541+45 -	542+85	STH 73 LT.	136	PELSDORF AVE. INTERSECTION	
0010	550+77 -	554+78	STH 73 RT.	195	BEAM GUARD AREA	
0010	551+32 -	555+33	STH 73 LT.	195	BEAM GUARD AREA	
0010	594+24 -	595+90	STH 73 RT.	168	PRAY AVE. INTERSECTION	
0010	594+24 -	595+90	STH 73 LT.	163	PRAY AVE. INTERSECTION	
0010	646+00 -	648+25	STH 73 RT.	180	MILLER AVE. INTERSECTION	
0010	646+00 -	648+25	STH 73 LT.	353	MILLER AVE. INTERSECTION	
0010	702+15 -	703+45	STH 73 RT.	173	CARDINAL AVE. INTERSECTION	
0010	702+15 -	703+45	STH 73 LT.	90	CARDINAL AVE. INTERSECTION	
0010	748+40 -	750+35	STH 73 LT.	220	CARLYLE RD. INTERSECTION	
0010	758+90 -	760+20	STH 73 RT.	166	OWEN AVE. INTERSECTION	
0010	758+90 -	760+20	STH 73 LT.	171	OWEN AVE. INTERSECTION	
0010	773+50 -	774+05	STH 73 LT.	85	CARLYLE RD. INTERSECTION	
0010	802+00 -	803+00	STH 73 RT.	103	MADISON AVE. INTERSECTION	
0010	802+00 -	803+00	STH 73 LT.	115	MADISON AVE. INTERSECTION	
0010	871+62 -	873+99	STH 73 LT. & RT.	1325	STH 95 INTERSECTION AREA	
TOTAL 0010				149789		

PREPARE FOUNDATION FOR ASPHALTIC PAVING (1520-05-70)

211.0100						
CATEGORY	STATION TO	STATION	LOCATION	LS	REMARKS	
0010	438+00 -	873+99	STH 73	1	PROJECT 1520-05-70	
TOTAL 0010				1		

3

FINISHING ROADWAY (1520-05-70)

213.0100					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00	- 873+99	STH 73	1	PROJECT 1520-05-70
TOTAL 0010				1	

BASE AGGREGATE DENSE 3/4-INCH

305.0110					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	12250	SHOULDER MATERIAL
0010	438+00	- 873+99	STH 73 LT. & RT.	400	DRIVEWAYS
TOTAL 0010				12650	

BASE AGGREGATE DENSE 1 1/4-INCH

305.0120					
CATEGORY	STATION	LOCATION	TON	REMARKS	
0010	449+68	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (1 - 24" X 58' CPCS)	
0010	476+56	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (2 - 48" X 54' CPCS)	
0010	507+15	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (2 - 48" X 60' CPCS)	
0010	525+54	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (2 - 36" X 64' CPRC)	
0010	584+70	STH 73 LT. & RT.	120	RELAID CULVERT PIPE (1 - 72" X 48' CPRC)	
0010	641+54	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (1 - 30" X 56' CPCS)	
0010	641+84	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (1 - 42" X 29" X 60' CPCSA)	
0010	646+80	STH 73 LT. & RT.	120	RELAID CULVERT PIPE (1 - 30" X 72' CPRC)	
0010	669+60	STH 73 LT. & RT.	120	RELAID CULVERT PIPE (2 - 48" X 64' CPRC)	
0010	717+30	STH 73 LT. & RT.	120	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 67' BOX CULVERT)	
0010	745+66	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (2 - 60" X 60' CPCS)	
0010	759+46	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (1 - 30" X 80' CPCS)	
0010	767+20	STH 73 LT. & RT.	120	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 54' BOX CULVERT)	
0010	777+58	STH 73 LT. & RT.	120	CULVERT PIPE REPLACEMENT (1 - 24" X 68' CPCS)	
0010	794+58	STH 73 LT. & RT.	120	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)	
0010	831+55	STH 73 LT. & RT.	120	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 60' BOX CULVERT)	
0010	855+08	STH 73 LT. & RT.	120	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)	
TOTAL 0010			2040		

SHAPING SHOULDERS

305.0500					
CATEGORY	STATION TO	STATION	LOCATION	STA	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	872	PROJECT 1520-05-70
TOTAL 0010				872	

3

TACK COAT

455.0605					
CATEGORY	STATION TO	STATION	LOCATION	GAL	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	10174	STH 73 MAINLINE 30' LOWER LAYER
0010	438+00	- 873+99	STH 73 LT. & RT.	10174	STH 73 MAINLINE 30' UPPER LAYER
0010	463+00	- 463+52	STH 73 LT.	5	OAK GROVE AVE. INTERSECTION
0010	515+25	- 516+58	STH 73 RT.	17	CTH K INTERSECTION
0010	515+25	- 516+58	STH 73 LT.	13	ROBIN AVE. INTERSECTION
0010	541+45	- 542+85	STH 73 RT.	10	PELSDORF AVE. INTERSECTION
0010	541+45	- 542+85	STH 73 LT.	10	PELSDORF AVE. INTERSECTION
0010	550+77	- 554+78	STH 73 RT.	14	BEAM GUARD AREA
0010	551+32	- 555+33	STH 73 LT.	14	BEAM GUARD AREA
0010	594+24	- 595+90	STH 73 RT.	12	PRAY AVE. INTERSECTION
0010	594+24	- 595+90	STH 73 LT.	12	PRAY AVE. INTERSECTION
0010	646+00	- 648+25	STH 73 RT.	13	MILLER AVE. INTERSECTION
0010	646+00	- 648+25	STH 73 LT.	25	MILLER AVE. INTERSECTION
0010	702+15	- 703+45	STH 73 RT.	13	CARDINAL AVE. INTERSECTION
0010	702+15	- 703+45	STH 73 LT.	7	CARDINAL AVE. INTERSECTION
0010	748+40	- 750+35	STH 73 LT.	16	CARLYLE RD. INTERSECTION
0010	758+90	- 760+20	STH 73 RT.	12	OWEN AVE. INTERSECTION
0010	758+90	- 760+20	STH 73 LT.	12	OWEN AVE. INTERSECTION
0010	773+50	- 774+05	STH 73 LT.	6	CARLYLE RD. INTERSECTION
0010	802+00	- 803+00	STH 73 RT.	8	MADISON AVE. INTERSECTION
0010	802+00	- 803+00	STH 73 LT.	9	MADISON AVE. INTERSECTION
0010	871+62	- 873+99	STH 73 LT. & RT.	93	STH 95 INTERSECTION AREA LOWER LAYER
0010	871+62	- 873+99	STH 73 LT. & RT.	93	STH 95 INTERSECTION AREA UPPER LAYER
TOTAL 0010				20762	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP

460.0105.S						460.0110.S	
HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS						HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY	
CATEGORY	STATION TO	STATION	LOCATION	EACH		EACH	REMARKS
0010	438+00	- 873+99	STH 73	2		1	PROJECT 1520-05-70
TOTAL 0010				2		1	

INCENTIVE DENSITY PWL HMA PAVEMENT

460.2005					
CATEGORY	STATION TO	STATION	LOCATION	DOL	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	11490	PROJECT 1520-05-70
TOTAL 0010				11490	

INCENTIVE AIR VOIDS HMA PAVEMENT

460.2010					
CATEGORY	STATION TO	STATION	LOCATION	DOL	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	27510	PROJECT 1520-05-70
TOTAL 0010				27510	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

460.4110.S					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	438+00	- 873+99	STH 73 LT. & RT.	43600	PROJECT 1520-05-70
TOTAL 0010				43600	

3

HMA PAVEMENT

460.6424
HMA PAVEMENT
4 MT 58-28 H

460.6444
HMA PAVEMENT
4 MT 58-34 H

CATEGORY	STATION TO	STATION	LOCATION	TON	TON	REMARKS
0010	438+00 -	862+00	STH 73 LT. & RT.	9498	11081	STH 73 MAINLINE 24'
0010	862+00 -	873+99	STH 73 LT. & RT.	314	404	STH 73 MAINLINE 24'
0010	438+00 -	862+00	STH 73 LT. & RT.	2375	2771	STH 73 PAVED SHOULDER 3'
0010	862+00 -	873+99	STH 73 LT. & RT.	79	101	STH 73 PAVED SHOULDER 3'
0010	463+00 -	463+52	STH 73 LT.	6	7	OAK GROVE AVE. INTERSECTION
0010	515+25 -	516+58	STH 73 RT.	20	24	CTH K INTERSECTION
0010	515+25 -	516+58	STH 73 LT.	15	18	ROBIN AVE. INTERSECTION
0010	541+45 -	542+85	STH 73 RT.	12	14	PELSDORF AVE. INTERSECTION
0010	541+45 -	542+85	STH 73 LT.	12	14	PELSDORF AVE. INTERSECTION
0010	550+77 -	554+78	STH 73 RT.	17	20	BEAM GUARD AREA
0010	551+32 -	555+33	STH 73 LT.	17	20	BEAM GUARD AREA
0010	594+24 -	595+90	STH 73 RT.	15	17	PRAY AVE. INTERSECTION
0010	594+24 -	595+90	STH 73 LT.	14	16	PRAY AVE. INTERSECTION
0010	646+00 -	648+25	STH 73 RT.	16	18	MILLER AVE. INTERSECTION
0010	646+00 -	648+25	STH 73 LT.	30	35	MILLER AVE. INTERSECTION
0010	702+15 -	703+45	STH 73 RT.	15	17	CARDINAL AVE. INTERSECTION
0010	702+15 -	703+45	STH 73 LT.	8	9	CARDINAL AVE. INTERSECTION
0010	748+40 -	750+35	STH 73 LT.	19	22	CARLYLE RD. INTERSECTION
0010	758+90 -	760+20	STH 73 RT.	14	17	OWEN AVE. INTERSECTION
0010	758+90 -	760+20	STH 73 LT.	15	17	OWEN AVE. INTERSECTION
0010	773+50 -	774+05	STH 73 LT.	8	9	CARLYLE RD. INTERSECTION
0010	802+00 -	803+00	STH 73 RT.	9	11	MADISON AVE. INTERSECTION
0010	802+00 -	803+00	STH 73 LT.	10	12	MADISON AVE. INTERSECTION
0010	871+62 -	873+99	STH 73 LT. & RT.	130	130	STH 73/STH 95 INTERSECTION AREA
TOTAL 0010				12668	14804	

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12' DRIVING LANE	438+00 - 862+00	UPPER LAYER	4 MT 58-28H	4 MT 58-34H	11,081	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12' DRIVING LANE	438+00 - 862+00	LOWER LEVELING LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28H	9,498	1 1/2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
12' DRIVING LANE	862+00 - 873+99	UPPER LAYER	4 MT 58-28H	4 MT 58-34H	404	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12' DRIVING LANE	862+00 - 873+99	LOWER LEVELING LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28H	314	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
3' SHOULDER / SIDE ROADS	438+00 - 862+00	UPPER LAYER	4 MT 58-28H	4 MT 58-34H	3,088	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
3' SHOULDER / SIDE ROADS	438+00 - 862+00	LOWER LEVELING LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28H	2,647	1 1/2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
3' SHOULDER / SIDE ROADS	862+00 - 873+99	UPPER LAYER	4 MT 58-28H	4 MT 58-34H	231	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
3' SHOULDER / SIDE ROADS	862+00 - 873+99	LOWER LEVELING LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28H	209	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
VARIOUS	438+00 - 873+99	CULVERT PATCHES	BASE AGGREGATE DENSE	ASPHALTIC SURFACE	680	5"	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

ASPHALTIC SURFACE

465.0105					
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	438+00 -	873+99	STH 73 LT. & RT.	3400	FOR WEDGING AND LEVELING
0010	438+00 -	873+99	STH 73 LT. & RT.	600	FOR HMA REPAIRS
0010	449+68 -	449+68	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (1 - 24" X 58' CPCS)
0010	476+56 -	476+56	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (2 - 48" X 54' CPCS)
0010	507+15 -	507+15	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (2 - 48" X 60' CPCS)
0010	525+54 -	525+54	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (2 - 36" X 64' CPRC)
0010	584+70 -	584+70	STH 73 LT. & RT.	40	RELAID CULVERT PIPE (1 - 72" X 48' CPRC)
0010	641+54 -	641+54	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (1 - 30" X 56' CPCS)
0010	641+84 -	641+84	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (1 - 42" X 29" X 60' CPCS)
0010	646+80 -	646+80	STH 73 LT. & RT.	40	RELAID CULVERT PIPE (1 - 30" X 72' CPRC)
0010	669+60 -	669+60	STH 73 LT. & RT.	40	RELAID CULVERT PIPE (2 - 48" X 64' CPRC)
0010	717+30 -	717+30	STH 73 LT. & RT.	40	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 67' BOX CULVERT)
0010	745+66 -	745+66	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (2 - 60" X 60' CPCS)
0010	759+46 -	759+46	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (1 - 30" X 80' CPCS)
0010	767+20 -	767+20	STH 73 LT. & RT.	40	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 54' BOX CULVERT)
0010	777+58 -	777+58	STH 73 LT. & RT.	40	CULVERT PIPE REPLACEMENT (1 - 24" X 68' CPCS)
0010	794+58 -	794+58	STH 73 LT. & RT.	40	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)
0010	831+55 -	831+55	STH 73 LT. & RT.	40	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 60' BOX CULVERT)
0010	855+08 -	855+08	STH 73 LT. & RT.	40	BOX CULVERT REPLACEMENT (1 - 3.5' X 6' X 59' BOX CULVERT)
TOTAL 0010				4680	

ASPHALTIC SURFACE PATCHING

						465.0110		
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS			
0010	438+00	- 873+99	STH 73 LT. & RT.	100	FOR MINOR REPAIRS, POP OUTS, AND RAMPING			
TOTAL 0010				100				

ASPHALTIC INTERSECTION RUMBLE STRIPS

						465.0450		
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS			
0010	864+10	- 864+35	STH 73 RT.	27	INTERSECTION RUMBLE STRIPS			
0010	867+25	- 867+50	STH 73 RT.	27	INTERSECTION RUMBLE STRIPS			
0010	869+60	- 869+85	STH 73 RT.	27	INTERSECTION RUMBLE STRIPS			
TOTAL 0010				81				

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

						465.0120		
CATEGORY	STATION	LOCATION	TON	REMARKS				
0010	623+22	STH 73 RT.	5	C.E.				
0010	624+05	STH 73 RT.	5	C.E.				
TOTAL 0010			10					

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

						465.0475		
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS			
0010	438+00	- 873+99	STH 73 LT. & RT.	39200	PROJECT 1520-05-70			
TOTAL 0010				39200				

CLEANING CULVERT PIPES

520.8700				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	553+08	STH 73 LT. & RT.	3	3 - 54" X 58' CPRC
0010	563+75	STH 73 LT. & RT.	1	1 - 30" X 72' HDPE
0010	584+70	STH 73 LT. & RT.	1	1 - 72" X 48' CPRC
0010	646+80	STH 73 LT. & RT.	1	1 - 30" X 72' CPRC
0010	669+60	STH 73 LT. & RT.	2	2 - 48" X 64' CPRC
TOTAL 0010			8	

CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH

522.0130				
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	759+46	STH 73 LT. & RT.	80	1 - 30" X 80' CPRC
TOTAL 0010			80	

CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH

522.0124				
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	449+68	STH 73 LT. & RT.	64	1 - 24" X 64' CPRC
0010	777+58	STH 73 LT. & RT.	72	1 - 24" X 72' CPRC
TOTAL 0010			136	

CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH

522.0148				
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	476+56	STH 73 LT. & RT.	112	2 - 48" X 56' CPRC
0010	507+15	STH 73 LT. & RT.	128	2 - 48" X 64' CPRC
0010	525+54	STH 73 LT. & RT.	128	2 - 48" X 64' CPRC
0010	641+84	STH 73 LT. & RT.	128	2 - 48" X 64' CPRC
0010	717+30	STH 73 LT. & RT.	72	1 - 48" X 72' CPRC
0010	767+20	STH 73 LT. & RT.	64	1 - 48" X 64' CPRC
0010	794+58	STH 73 LT. & RT.	64	1 - 48" X 64' CPRC
0010	831+55	STH 73 LT. & RT.	64	1 - 48" X 64' CPRC
TOTAL 0010			760	

CULVERT PIPE REINFORCED CONCRETE CLASS III 72-INCH

				522.0172	
CATEGORY	STATION	LOCATION	LF	REMARKS	
0010	745+66	STH 73 LT. & RT.	128	2 - 72" X 64' CPRC	
0010	855+08	STH 73 LT. & RT.	64	1 - 72" X 64' CPRC	
TOTAL 0010			192		

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH

				522.1030	
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	759+46	STH 73 LT. & RT.	2	1 - 30" X 80' CPRC	
TOTAL 0010			2		

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH

				522.1024	
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	449+68	STH 73 LT. & RT.	2	1 - 24" X 64' CPRC	
0010	777+58	STH 73 LT. & RT.	2	1 - 24" X 72' CPRC	
TOTAL 0010			4		

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH

				522.1048	
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	476+56	STH 73 LT. & RT.	4	2 - 48" X 56' CPRC	
0010	507+15	STH 73 LT. & RT.	4	2 - 48" X 64' CPRC	
0010	525+54	STH 73 LT. & RT.	4	2 - 48" X 64' CPRC	
0010	641+84	STH 73 LT. & RT.	4	2 - 48" X 64' CPRC	
0010	717+30	STH 73 LT. & RT.	2	1 - 48" X 72' CPRC	
0010	767+20	STH 73 LT. & RT.	2	1 - 48" X 64' CPRC	
0010	794+58	STH 73 LT. & RT.	2	1 - 48" X 64' CPRC	
0010	831+55	STH 73 LT. & RT.	2	1 - 48" X 64' CPRC	
TOTAL 0010			24		

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 72-INCH

CATEGORY	STATION	LOCATION	522.1072 EACH	REMARKS
0010	745+66	STH 73 LT. & RT.	4	2 - 72" X 64' CPRC
0010	855+08	STH 73 LT. & RT.	2	1 - 72" X 64' CPRC
TOTAL 0010			6	

CULVERT PIPE SALVAGED 48-INCH

CATEGORY	STATION	LOCATION	524.0148 LF	REMARKS
0010	669+60	STH 73 LT. AND RT.	128	2 - 48" X 64' CPRC
TOTAL 0010			128	

CULVERT PIPE SALVAGED 30-INCH

CATEGORY	STATION	LOCATION	524.0130 LF	REMARKS
0010	646+80	STH 73 LT. AND RT.	72	1 - 30" X 72' CPRC
TOTAL 0010			72	

CULVERT PIPE SALVAGED 72-INCH

524.0172				
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	584+70	STH 73 LT. AND RT.	48	1 - 72" X 48' CPRC
TOTAL 0010			48	

APRON ENDWALLS FOR CULVERT PIPE SALVAGED 48-INCH

524.0648				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	669+60	STH 73 LT. AND RT.	4	2 - 48" X 64' CPRC
TOTAL 0010			4	

APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH

524.0630				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	646+80	STH 73 LT. AND RT.	2	1 - 30" X 72' CPRC
TOTAL 0010			2	

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APRON ENDWALLS FOR CULVERT PIPE SALVAGED 72-INCH

524.0672				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	584+70	STH 73 LT. AND RT.	2	1 - 72" X 48' CPRC
TOTAL 0010			2	

RIPRAP MEDIUM

606.0200				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	646+80	STH 73 RT.	6	1 - 30" X 72' CPRC
TOTAL 0010			6	

3

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

601.0557					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	873+10 -	873+75	RT.	105	STH 73/STH 95 INTERSECTION
0010	873+36 -	873+75	LT.	65	STH 73/STH 95 INTERSECTION
TOTAL 0010				170	

GEOTEXTILE TYPE HR

645.0120				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	646+80	STH 73 RT.	11	1 - 30" X 72' CPRC
TOTAL 0010			11	

BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	STATION TO	STATION	LOCATION	614.0010 EACH	REMARKS
0010	550+08 -	555+46	STH 73 RT.	1	STRUCTURE C-10-16
0010	550+66 -	556+02	STH 73 LT.	1	STRUCTURE C-10-16
TOTAL 0010				2	

EAT STATION	BORROW FILL FACTOR 1.3 (CY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE B (CWT)	TEMPORARY SEEDING (LB)	SEEDING MIX #30 (LB)	EROSION MAT CLASS II TYPE B (SY)	CONSTRUCTION STAKING SLOPE STAKES (LF)
551+27, RT		790	0.50	21	14	790	50
551+83, LT		775	0.49	21	14	775	50
TOTAL	0	1565	0.99	42	28	1565	100

NOTE: ALL QUANTITIES ARE FOR INFORMATION PURPOSES ONLY.

SEE CROSS SECTIONS FOR GRADING DETAILS AT SPECIFIC STATIONS.

BASE AGGREGATE QUANTITIES ARE SHOWN IN MISCELLANEOUS QUANTITIES.

TOTAL 00102 EACH

SALVAGED RAIL

CATEGORY	STATION TO	STATION	LOCATION	614.0920 LF	REMARKS
0010	551+45 -	554+20	STH 73 RT.	275	STRUCTURE C-10-16
0010	551+95 -	554+70	STH 73 LT.	275	STRUCTURE C-10-16
TOTAL 0010				550	

3

3

BEAM GUARD

614.2300
MGS GUARDRAIL
3

614.2340
MGS GUARDRAIL
3 L

614.2610
MGS GUARDRAIL
TERMINAL EAT

CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	EACH	REMARKS
0010	551+27	-	551+77	STH 73 RT.	-	-	1	STRUCTURE C-10-16
0010	551+77	-	552+52	STH 73 RT.	75.0	-	-	STRUCTURE C-10-16
0010	551+83	-	552+33	STH 73 LT.	-	-	1	STRUCTURE C-10-16
0010	552+33	-	552+58	STH 73 LT.	25.0	-	-	STRUCTURE C-10-16
0010	552+52	-	553+65	STH 73 RT.	-	112.50	-	STRUCTURE C-10-16
0010	552+58	-	553+71	STH 73 LT.	-	112.50	-	STRUCTURE C-10-16
0010	553+65	-	553+78	STH 73 RT.	12.5	-	-	STRUCTURE C-10-16
0010	553+71	-	554+33	STH 73 LT.	62.5	-	-	STRUCTURE C-10-16
0010	553+78	-	554+28	STH 73 RT.	-	-	1	STRUCTURE C-10-16
0010	554+33	-	554+83	STH 73 LT.	-	-	1	STRUCTURE C-10-16
			TOTAL 0010		175.0	225.0	4	

MAINTENANCE AND REPAIR OF HAUL ROADS (1520-05-70)

618.0100

CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00 -	873+99	STH 73	1	PROJECT 1520-05-7
			TOTAL 0010	<u>1</u>	

MOBILIZATION

619.1000

CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00 -	873+99	STH 73	1	PROJECT 1520-05-70
			TOTAL 0010	<u>1</u>	

WATER

624.0100					
CATEGORY	STATION TO	STATION	LOCATION	MGAL	REMARKS
0010	438+00	- 873+99	STH 73	50	PROJECT 1520-05-70
TOTAL 0010				50	

SALVAGED TOPSOIL

625.0500					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	449+68	- 449+68	STH 73 LT. & RT.	130	1 - 24" X 64' CPRC
0010	459+60	- 460+00	STH 73 RT. & LT.	130	1 - 24" X 56' CPRC
0010	476+36	- 476+76	STH 73 RT. & LT.	170	2 - 48" X 56' CPRC
0010	506+95	- 507+35	STH 73 RT. & LT.	195	2 - 48" X 64' CPRC
0010	525+34	- 525+74	STH 73 RT. & LT.	185	2 - 48" X 64' CPRC
0010	584+50	- 584+90	STH 73 RT. & LT.	145	1 - 72" X 48' CPRC
0010	641+34	- 642+00	STH 73 RT. & LT.	300	2 - 48" X 64' CPRC
0010	646+60	- 647+00	STH 73 RT. & LT.	125	1 - 30" X 72' CPRC
0010	669+40	- 669+80	STH 73 RT. & LT.	205	2 - 48" X 64' CPRC
0010	717+10	- 717+50	STH 73 RT. & LT.	165	1 - 48" X 72' CPRC
0010	745+46	- 745+86	STH 73 RT. & LT.	270	2 - 72" X 64' CPRC
0010	759+26	- 759+66	STH 73 RT. & LT.	145	1 - 30" X 80' CPRC
0010	767+00	- 767+40	STH 73 RT. & LT.	140	1 - 48" X 64' CPRC
0010	777+38	- 777+78	STH 73 RT. & LT.	165	1 - 24" X 72' CPRC
0010	794+37	- 794+77	STH 73 RT. & LT.	155	1 - 48" X 64' CPRC
0010	831+35	- 831+75	STH 73 RT. & LT.	180	1 - 48" X 64' CPRC
0010	854+88	- 855+28	STH 73 RT. & LT.	175	1 - 72" X 64' CPRC
TOTAL 0010				2980	

MULCHING

627.0200					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	449+68	- 449+68	STH 73 LT. & RT.	130	1 - 24" X 64' CPRC
0010	459+60	- 460+00	STH 73 RT. & LT.	130	1 - 24" X 56' CPRC
0010	476+36	- 476+76	STH 73 RT. & LT.	170	2 - 48" X 56' CPRC
0010	506+95	- 507+35	STH 73 RT. & LT.	195	2 - 48" X 64' CPRC
0010	525+34	- 525+74	STH 73 RT. & LT.	185	2 - 48" X 64' CPRC
0010	584+50	- 584+90	STH 73 RT. & LT.	145	1 - 72" X 48' CPRC
0010	641+34	- 642+00	STH 73 RT. & LT.	300	2 - 48" X 64' CPRC
0010	646+60	- 647+00	STH 73 RT. & LT.	125	1 - 30" X 72' CPRC
0010	669+40	- 669+80	STH 73 RT. & LT.	205	2 - 48" X 64' CPRC
0010	717+10	- 717+50	STH 73 RT. & LT.	165	1 - 48" X 72' CPRC
0010	745+46	- 745+86	STH 73 RT. & LT.	270	2 - 72" X 64' CPRC
0010	759+26	- 759+66	STH 73 RT. & LT.	145	1 - 30" X 80' CPRC
0010	767+00	- 767+40	STH 73 RT. & LT.	140	1 - 48" X 64' CPRC
0010	777+38	- 777+78	STH 73 RT. & LT.	165	1 - 24" X 72' CPRC
0010	794+37	- 794+77	STH 73 RT. & LT.	155	1 - 48" X 64' CPRC
0010	831+35	- 831+75	STH 73 RT. & LT.	180	1 - 48" X 64' CPRC
0010	854+88	- 855+28	STH 73 RT. & LT.	175	1 - 72" X 64' CPRC
TOTAL 0010				2980	

SILT FENCE

628.1504					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	449+68 -	449+68	STH 73 RT.	50	1 - 24" X 64' CPRC
0010	449+68 -	449+68	STH 73 LT.	50	1 - 24" X 64' CPRC
0010	476+36 -	476+76	STH 73 RT.	50	2 - 48" X 56' CPRC
0010	476+36 -	476+76	STH 73 LT.	50	2 - 48" X 56' CPRC
0010	506+95 -	507+35	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	506+95 -	507+35	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	525+34 -	525+74	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	525+34 -	525+74	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	550+08 -	556+00	STH 73 RT.	600	BEAM GUARD AREA
0010	550+66 -	555+46	STH 73 LT.	600	BEAM GUARD AREA
0010	584+50 -	584+90	STH 73 RT.	50	1 - 72" X 48' CPRC
0010	584+50 -	584+90	STH 73 LT.	50	1 - 72" X 48' CPRC
0010	641+34 -	642+00	STH 73 RT.	90	2 - 48" X 64' CPRC
0010	641+34 -	642+00	STH 73 LT.	65	2 - 48" X 64' CPRC
0010	646+60 -	647+00	STH 73 RT.	50	1 - 30" X 72' CPRC
0010	646+60 -	647+00	STH 73 LT.	50	1 - 30" X 72' CPRC
0010	669+40 -	669+80	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	669+40 -	669+80	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	717+10 -	717+50	STH 73 RT.	50	1 - 48" X 72' CPRC
0010	717+10 -	717+50	STH 73 LT.	50	1 - 48" X 72' CPRC
0010	745+46 -	745+86	STH 73 RT.	50	2 - 72" X 64' CPRC
0010	745+46 -	745+86	STH 73 LT.	50	2 - 72" X 64' CPRC
0010	759+26 -	759+66	STH 73 RT.	50	1 - 30" X 80' CPRC
0010	759+26 -	759+66	STH 73 LT.	50	1 - 30" X 80' CPRC
0010	767+00 -	767+40	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	767+00 -	767+40	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	777+38 -	777+78	STH 73 RT.	50	1 - 24" X 72' CPRC
0010	777+38 -	777+78	STH 73 LT.	50	1 - 24" X 72' CPRC
0010	794+37 -	794+77	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	794+37 -	794+77	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	831+35 -	831+75	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	831+35 -	831+75	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	854+88 -	855+28	STH 73 RT.	50	1 - 72" X 64' CPRC
0010	854+88 -	855+28	STH 73 LT.	50	1 - 72" X 64' CPRC
TOTAL 0010				2855	

SILT FENCE MAINTENANCE

628.1520					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	449+68 -	449+68	STH 73 RT.	50	1 - 24" X 64' CPRC
0010	449+68 -	449+68	STH 73 LT.	50	1 - 24" X 64' CPRC
0010	476+36 -	476+76	STH 73 RT.	50	2 - 48" X 56' CPRC
0010	476+36 -	476+76	STH 73 LT.	50	2 - 48" X 56' CPRC
0010	506+95 -	507+35	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	506+95 -	507+35	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	525+34 -	525+74	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	525+34 -	525+74	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	550+08 -	556+00	STH 73 RT.	600	BEAM GUARD AREA
0010	550+66 -	555+46	STH 73 LT.	600	BEAM GUARD AREA
0010	584+50 -	584+90	STH 73 RT.	50	1 - 72" X 48' CPRC
0010	584+50 -	584+90	STH 73 LT.	50	1 - 72" X 48' CPRC
0010	641+34 -	642+00	STH 73 RT.	90	2 - 48" X 64' CPRC
0010	641+34 -	642+00	STH 73 LT.	65	2 - 48" X 64' CPRC
0010	646+60 -	647+00	STH 73 RT.	50	1 - 30" X 72' CPRC
0010	646+60 -	647+00	STH 73 LT.	50	1 - 30" X 72' CPRC
0010	669+40 -	669+80	STH 73 RT.	50	2 - 48" X 64' CPRC
0010	669+40 -	669+80	STH 73 LT.	50	2 - 48" X 64' CPRC
0010	717+10 -	717+50	STH 73 RT.	50	1 - 48" X 72' CPRC
0010	717+10 -	717+50	STH 73 LT.	50	1 - 48" X 72' CPRC
0010	745+46 -	745+86	STH 73 RT.	50	2 - 72" X 64' CPRC
0010	745+46 -	745+86	STH 73 LT.	50	2 - 72" X 64' CPRC
0010	759+26 -	759+66	STH 73 RT.	50	1 - 30" X 80' CPRC
0010	759+26 -	759+66	STH 73 LT.	50	1 - 30" X 80' CPRC
0010	767+00 -	767+40	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	767+00 -	767+40	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	777+38 -	777+78	STH 73 RT.	50	1 - 24" X 72' CPRC
0010	777+38 -	777+78	STH 73 LT.	50	1 - 24" X 72' CPRC
0010	794+37 -	794+77	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	794+37 -	794+77	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	831+35 -	831+75	STH 73 RT.	50	1 - 48" X 64' CPRC
0010	831+35 -	831+75	STH 73 LT.	50	1 - 48" X 64' CPRC
0010	854+88 -	855+28	STH 73 RT.	50	1 - 72" X 64' CPRC
0010	854+88 -	855+28	STH 73 LT.	50	1 - 72" X 64' CPRC
TOTAL 0010				2855	

MOBILIZATIONS EROSION CONTROL

628.1905					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00	- 873+99	STH 73	6	PROJECT 1520-05-70
TOTAL 0010				6	

EROSION MAT CLASS II TYPE B

628.2023					
CATEGORY	STATION	LOCATION	SY	REMARKS	
0010	449+68	STH 73 RT.	10	1 - 24" X 64' CPRC	
0010	459+80	STH 73 RT.	10	1 - 24" X 56' CPRC	
0010	476+56	STH 73 RT.	33	2 - 48" X 56' CPRC	
0010	507+15	STH 73 RT.	23	2 - 48" X 64' CPRC	
0010	525+54	STH 73 RT.	22	2 - 48" X 64' CPRC	
0010	584+70	STH 73 RT.	22	1 - 72" X 48' CPRC	
0010	641+84	STH 73 RT.	22	2 - 48" X 64' CPRC	
0010	669+60	STH 73 RT.	60	2 - 48" X 64' CPRC	
0010	717+30	STH 73 RT.	20	1 - 48" X 72' CPRC	
0010	745+66	STH 73 RT.	84	2 - 72" X 64' CPRC	
0010	759+46	STH 73 RT.	13	1 - 30" X 80' CPRC	
0010	767+20	STH 73 RT.	20	1 - 48" X 64' CPRC	
0010	777+58	STH 73 RT.	10	1 - 24" X 72' CPRC	
0010	794+58	STH 73 RT.	20	1 - 48" X 64' CPRC	
0010	831+55	STH 73 LT.	20	1 - 48" X 64' CPRC	
0010	855+08	STH 73 RT.	27	1 - 72" X 64' CPRC	
TOTAL 0010			416		

MOBILIZATIONS EMERGENCY EROSION CONTROL

628.1910					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00	- 873+99	STH 73	6	PROJECT 1520-05-70
TOTAL 0010				6	

CULVERT PIPE CHECKS

628.7555					
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	449+68	STH 73 LT.	3	1 - 24" X 64' CPRC	
0010	476+56	STH 73 LT.	20	2 - 48" X 56' CPRC	
0010	507+15	STH 73 LT.	20	2 - 48" X 64' CPRC	
0010	525+54	STH 73 LT.	20	2 - 48" X 64' CPRC	
0010	553+08	STH 73 LT.	36	3 - 54" X 58' CPRC	
0010	584+70	STH 73 LT.	20	1 - 72" X 48' CPRC	
0010	641+84	STH 73 LT.	20	2 - 48" X 64' CPRC	
0010	646+80	STH 73 LT.	5	1 - 30" X 72' CPRC	
0010	669+60	STH 73 LT.	20	2 - 48" X 64' CPRC	
0010	717+30	STH 73 LT.	10	1 - 48" X 72' CPRC	
0010	745+66	STH 73 LT.	40	2 - 72" X 64' CPRC	
0010	759+46	STH 73 LT.	5	1 - 30" X 80' CPRC	
0010	767+20	STH 73 LT.	10	1 - 48" X 64' CPRC	
0010	777+58	STH 73 LT.	3	1 - 24" X 72' CPRC	
0010	794+58	STH 73 LT.	10	1 - 48" X 64' CPRC	
0010	831+55	STH 73 RT.	10	1 - 48" X 64' CPRC	
0010	855+08	STH 73 LT.	20	1 - 72" X 64' CPRC	
0010	-	UNDISTRIBUTED	30		
TOTAL 0010			302		

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FERTILIZER TYPE B

629.0210						
CATEGORY	STATION	TO	STATION	LOCATION	CWT	REMARKS
0010	449+68	-	449+68	STH 73 RT. & LT.	0.09	1 - 24" X 64' CPRC
0010	459+60	-	460+00	STH 73 RT. & LT.	0.09	1 - 24" X 56' CPRC
0010	476+36	-	476+76	STH 73 RT. & LT.	0.11	2 - 48" X 56' CPRC
0010	506+95	-	507+35	STH 73 RT. & LT.	0.13	2 - 48" X 64' CPRC
0010	525+34	-	525+74	STH 73 RT. & LT.	0.12	2 - 48" X 64' CPRC
0010	584+50	-	584+90	STH 73 RT. & LT.	0.10	1 - 72" X 48' CPRC
0010	641+34	-	642+00	STH 73 RT. & LT.	0.19	2 - 48" X 64' CPRC
0010	646+60	-	647+00	STH 73 RT. & LT.	0.08	1 - 30" X 72' CPRC
0010	669+40	-	669+80	STH 73 RT. & LT.	0.13	2 - 48" X 64' CPRC
0010	717+10	-	717+50	STH 73 RT. & LT.	0.11	1 - 48" X 72' CPRC
0010	745+46	-	745+86	STH 73 RT. & LT.	0.18	2 - 72" X 64' CPRC
0010	759+26	-	759+66	STH 73 RT. & LT.	0.10	1 - 30" X 80' CPRC
0010	767+00	-	767+40	STH 73 RT. & LT.	0.09	1 - 48" X 64' CPRC
0010	777+38	-	777+78	STH 73 RT. & LT.	0.11	1 - 24" X 72' CPRC
0010	794+37	-	794+77	STH 73 RT. & LT.	0.10	1 - 48" X 64' CPRC
0010	831+35	-	831+75	STH 73 RT. & LT.	0.12	1 - 48" X 64' CPRC
0010	854+88	-	855+28	STH 73 RT. & LT.	0.12	1 - 72" X 64' CPRC
TOTAL 0010					2.00	

SEEDING MIXTURE NO. 60

630.0160				
CATEGORY	STATION	LOCATION	LB	REMARKS
0010	449+68	STH 73 RT.	0.1	1 - 24" X 64' CPRC
0010	459+80	STH 73 RT.	0.1	1 - 24" X 56' CPRC
0010	476+56	STH 73 RT.	0.5	2 - 48" X 56' CPRC
0010	507+15	STH 73 RT.	0.3	2 - 48" X 64' CPRC
0010	525+54	STH 73 RT.	0.3	2 - 48" X 64' CPRC
0010	584+70	STH 73 RT.	0.3	1 - 72" X 48' CPRC
0010	641+84	STH 73 RT.	0.3	2 - 48" X 64' CPRC
0010	669+60	STH 73 RT.	0.8	2 - 48" X 64' CPRC
0010	717+30	STH 73 RT.	0.3	1 - 48" X 72' CPRC
0010	745+66	STH 73 RT.	1.1	2 - 72" X 64' CPRC
0010	759+46	STH 73 RT.	0.2	1 - 30" X 80' CPRC
0010	767+20	STH 73 RT.	0.3	1 - 48" X 64' CPRC
0010	777+58	STH 73 RT.	0.1	1 - 24" X 72' CPRC
0010	794+58	STH 73 RT.	0.3	1 - 48" X 64' CPRC
0010	831+55	STH 73 LT.	0.3	1 - 48" X 64' CPRC
0010	855+08	STH 73 RT.	0.4	1 - 72" X 64' CPRC
TOTAL 0010			6.0	

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SEEDING MIXTURE NO. 30

630.0130						
CATEGORY	STATION	TO	STATION	LOCATION	LB	REMARKS
0010	449+68	-	449+68	STH 73 RT. & LT.	2.3	1 - 24" X 64' CPRC
0010	459+60	-	460+00	STH 73 RT. & LT.	2.3	1 - 24" X 56' CPRC
0010	476+36	-	476+76	STH 73 RT. & LT.	3.1	2 - 48" X 56' CPRC
0010	506+95	-	507+35	STH 73 RT. & LT.	3.5	2 - 48" X 64' CPRC
0010	525+34	-	525+74	STH 73 RT. & LT.	3.3	2 - 48" X 64' CPRC
0010	584+50	-	584+90	STH 73 RT. & LT.	2.6	1 - 72" X 48' CPRC
0010	641+34	-	642+00	STH 73 RT. & LT.	5.4	2 - 48" X 64' CPRC
0010	646+60	-	647+00	STH 73 RT. & LT.	2.3	1 - 30" X 72' CPRC
0010	669+40	-	669+80	STH 73 RT. & LT.	3.7	2 - 48" X 64' CPRC
0010	717+10	-	717+50	STH 73 RT. & LT.	3.0	1 - 48" X 72' CPRC
0010	745+46	-	745+86	STH 73 RT. & LT.	4.9	2 - 72" X 64' CPRC
0010	759+26	-	759+66	STH 73 RT. & LT.	2.6	1 - 30" X 80' CPRC
0010	767+00	-	767+40	STH 73 RT. & LT.	2.5	1 - 48" X 64' CPRC
0010	777+38	-	777+78	STH 73 RT. & LT.	3.0	1 - 24" X 72' CPRC
0010	794+37	-	794+77	STH 73 RT. & LT.	2.8	1 - 48" X 64' CPRC
0010	831+35	-	831+75	STH 73 RT. & LT.	3.2	1 - 48" X 64' CPRC
0010	854+88	-	855+28	STH 73 RT. & LT.	3.2	1 - 72" X 64' CPRC
TOTAL 0010					54.0	

SEEDING TEMPORARY

630.0200					
CATEGORY	STATION	TO	STATION	LOCATION	REMARKS
0010	449+68	-	449+68	STH 73 RT. & LT.	3.5 1 - 24" X 64' CPRC
0010	459+60	-	460+00	STH 73 RT. & LT.	3.5 1 - 24" X 56' CPRC
0010	476+36	-	476+76	STH 73 RT. & LT.	4.6 2 - 48" X 56' CPRC
0010	506+95	-	507+35	STH 73 RT. & LT.	5.3 2 - 48" X 64' CPRC
0010	525+34	-	525+74	STH 73 RT. & LT.	5.0 2 - 48" X 64' CPRC
0010	584+50	-	584+90	STH 73 RT. & LT.	3.9 1 - 72" X 48' CPRC
0010	641+34	-	642+00	STH 73 RT. & LT.	8.1 2 - 48" X 64' CPRC
0010	646+60	-	647+00	STH 73 RT. & LT.	3.4 1 - 30" X 72' CPRC
0010	669+40	-	669+80	STH 73 RT. & LT.	5.5 2 - 48" X 64' CPRC
0010	717+10	-	717+50	STH 73 RT. & LT.	4.5 1 - 48" X 72' CPRC
0010	745+46	-	745+86	STH 73 RT. & LT.	7.3 2 - 72" X 64' CPRC
0010	759+26	-	759+66	STH 73 RT. & LT.	3.9 1 - 30" X 80' CPRC
0010	767+00	-	767+40	STH 73 RT. & LT.	3.8 1 - 48" X 64' CPRC
0010	777+38	-	777+78	STH 73 RT. & LT.	4.5 1 - 24" X 72' CPRC
0010	794+37	-	794+77	STH 73 RT. & LT.	4.2 1 - 48" X 64' CPRC
0010	831+35	-	831+75	STH 73 RT. & LT.	4.9 1 - 48" X 64' CPRC
0010	854+88	-	855+28	STH 73 RT. & LT.	4.7 1 - 72" X 64' CPRC
TOTAL 0010				81.0	

MARKERS CULVERT END

633.5200					
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	449+68	STH 73	2	1 - 24" X 58' CPCS	
0010	459+80	STH 73	2	1 - 24" X 56' CPRC	
0010	476+56	STH 73	2	2 - 48" X 56' CPRC	
0010	507+15	STH 73	2	2 - 48" X 64' CPRC	
0010	525+54	STH 73	2	2 - 48" X 64' CPRC	
0010	553+08	STH 73	2	3 - 54" X 58' CPRC STRUCTURE C-10-16	
0010	563+75	STH 73	2	1 - 30" X 72' HDPE	
0010	584+70	STH 73	2	1 - 72" X 48' CPRC	
0010	641+84	STH 73	2	2 - 48" X 64' CPRC	
0010	646+80	STH 73	2	1 - 30" X 72' CPRC	
0010	669+60	STH 73	2	2 - 48" X 64' CPRC	
0010	717+30	STH 73	2	1 - 48" X 72' CPRC	
0010	745+66	STH 73	2	2 - 72" X 64' CPRC	
0010	759+46	STH 73	2	1 - 30" X 80' CPRC	
0010	767+20	STH 73	2	1 - 48" X 64' CPRC	
0010	777+58	STH 73	2	1 - 24" X 72' CPRC	
0010	794+58	STH 73	2	1 - 48" X 64' CPRC	
0010	831+55	STH 73	2	1 - 48" X 64' CPRC	
0010	855+08	STH 73	2	1 - 72" X 64' CPRC	
TOTAL 0010			38		

FIELD OFFICE TYPE B

642.5001					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	438+00 -	873+99	STH 73	1	PROJECT 1520-05-70
TOTAL 0010				1	

TRAFFIC CONTROL

				643.0300	643.0900	643.1050		
				TRAFFIC	TRAFFIC	TRAFFIC		
				CONTROL	CONTROL	CONTROL		
				DRUMS	SIGNS	SIGNS		
				PCMS				
CATEGORY	STATION	TO	STATION	LOCATION	DAY	DAY	DAY	REMARKS
0010	438+00	-	873+99	STH 73	500	5400	14	PROJECT 1520-05-70
TOTAL 0010					500	5400	14	

TEMPORARY PORTABLE RUMBLE STRIPS

				643.0310.S		
				LS		
CATEGORY	STATION	TO	STATION	LOCATION	REMARKS	
0010	438+00	-	873+99	STH 73	1	PROJECT 1520-05-70
TOTAL 0010				1		

TRAFFIC CONTROL

				643.5000		
				EACH		
CATEGORY	STATION	TO	STATION	LOCATION	REMARKS	
0010	438+00	-	873+99	STH 73	1	PROJECT 1520-05-70
TOTAL 0010				1		

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH		646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH		646.6120 MARKING STOP LINE EPOXY 18-INCH	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH		REMARKS
					SOLID YELLOW	DASHED YELLOW	SOLID WHITE	SOLID WHITE	SOLID YELLOW	DASHED YELLOW	SOLID WHITE	SOLID YELLOW	DASHED YELLOW	
					LF	LF	LF	LF	LF	LF	LF	LF	LF	
0010	438+00	-	515+91	STH 73 RT.	4514	551	7843	-	4514	551	-	9028	1102	STH 73/STH 95 INTERSECTION
0010	515+91	-	542+34	STH 73 RT.	985	921	2559	-	985	921	-	1970	1842	
0010	542+34	-	595+09	STH 73 RT.	884	-	5205	-	884	-	-	1768	-	
0010	595+09	-	647+08	STH 73 RT.	2064	1471	5127	-	2064	1471	-	4128	2942	
0010	647+08	-	702+65	STH 73 RT.	1341	1400	5488	-	1341	1400	-	2682	2800	
0010	702+65	-	759+49	STH 73 RT.	9061	350	5594	-	9061	350	-	18122	700	
0010	759+49	-	873+99	STH 73 RT.	2602	2388	10160	88	2602	2388	43	5204	4776	
0010	438+00	-	463+27	STH 73 LT.	-	-	2596	-	-	-	-	-	-	STH 73/STH 95 INTERSECTION
0010	463+27	-	515+91	STH 73 LT.	-	-	5181	-	-	-	-	-	-	
0010	515+91	-	542+34	STH 73 LT.	-	-	2588	-	-	-	-	-	-	
0010	542+34	-	595+09	STH 73 LT.	-	-	5208	-	-	-	-	-	-	
0010	595+09	-	647+08	STH 73 LT.	-	-	5109	-	-	-	-	-	-	
0010	647+08	-	702+65	STH 73 LT.	-	-	5472	-	-	-	-	-	-	
0010	702+65	-	750+25	STH 73 LT.	-	-	4604	-	-	-	-	-	-	
0010	750+25	-	759+49	STH 73 LT.	-	-	885	-	-	-	-	-	-	
0010	759+49	-	773+88	STH 73 LT.	-	-	1380	-	-	-	-	-	-	
0010	773+88	-	802+49	STH 73 LT.	-	-	2814	-	-	-	-	-	-	
0010	802+49	-	873+99	STH 73 LT.	-	-	7302	-	-	-	-	-	-	
TOTAL 0010					28532		85115	88	28532		43	57064		

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LOCATING NO-PASSING ZONES

648.0100					
CATEGORY	STATION TO	STATION	LOCATION	MI	REMARKS
0010	438+00	- 873+99	STH 73	8.26	PROJECT 1520-05-70
TOTAL 0010				8.26	

CONSTRUCTION STAKING PIPE CULVERTS

650.6000					
CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	449+68	STH 73 LT. & RT.	1	1 - 24" X 64' CPRC	
0010	476+56	STH 73 LT. & RT.	2	2 - 48" X 56' CPRC	
0010	507+15	STH 73 LT. & RT.	2	2 - 48" X 64' CPRC	
0010	525+54	STH 73 LT. & RT.	2	2 - 48" X 64' CPRC	
0010	584+70	STH 73 LT. & RT.	1	1 - 72" X 48' CPRC	
0010	641+84	STH 73 LT. & RT.	2	2 - 48" X 64' CPRC	
0010	646+80	STH 73 LT. & RT.	1	1 - 30" X 72' CPRC	
0010	669+60	STH 73 LT. & RT.	2	2 - 48" X 64' CPRC	
0010	717+30	STH 73 LT. & RT.	1	1 - 48" X 72' CPRC	
0010	745+66	STH 73 LT. & RT.	2	2 - 72" X 64' CPRC	
0010	759+46	STH 73 LT. & RT.	1	1 - 30" X 80' CPRC	
0010	767+20	STH 73 LT. & RT.	1	1 - 48" X 64' CPRC	
0010	777+58	STH 73 LT. & RT.	1	1 - 24" X 72' CPRC	
0010	794+58	STH 73 LT. & RT.	1	1 - 48" X 64' CPRC	
0010	831+55	STH 73 LT. & RT.	1	1 - 48" X 64' CPRC	
0010	855+08	STH 73 LT. & RT.	1	1 - 72" X 64' CPRC	
TOTAL 0010			22		

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CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

650.5500					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	873+10	- 873+75	RT.	105	STH 73/STH 95 INTERSECTION
0010	873+36	- 873+75	LT.	65	STH 73/STH 95 INTERSECTION
TOTAL 0010				170	

CONSTRUCTION STAKING RESURFACING REFERENCE

650.8000					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	438+00	- 873+99	STH 73	43600	PROJECT 1520-05-70
TOTAL 0010				43600	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)

						650.9910	
CATEGORY	STATION TO	STATION	LOCATION	LS	REMARKS		
0010	438+00	- 873+99	STH 73	1	PROJECT 1520-05-70		
TOTAL 0010				1			

SAWING ASPHALT

						690.0150	
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS		
0010	438+00	- 438+00	STH 73	30	BEGIN PROJECT BUTT JOINT		
0010	449+68	- 449+68	STH 73	60	CULVERT PIPE REPLACEMENT (1 - 24" X 58' CPCS)		
0010	476+36	- 476+76	STH 73	60	CULVERT PIPE REPLACEMENT (2 - 48" X 54' CPCS)		
0010	506+95	- 507+35	STH 73	60	CULVERT PIPE REPLACEMENT (2 - 48" X 60' CPCS)		
0010	515+80	- 516+02	STH 73	25	BUTT JOINT AT CTH K		
0010	525+34	- 525+74	STH 73	60	CULVERT PIPE REPLACEMENT (2 - 36" X 64' CPRC)		
0010	584+50	- 584+90	STH 73	60	RELAID CULVERT PIPE (1 - 72" X 48' CPRC)		
0010	641+34	- 642+00	STH 73	30	CULVERT PIPE REPLACEMENT (1 - 30" X 56' CPCS)		
0010	641+34	- 642+00	STH 73	30	CULVERT PIPE REPLACEMENT (1 - 42" X 29" X 60' CPCSA)		
0010	646+60	- 647+00	STH 73	115	RELAID CULVERT PIPE (1 - 30" X 72' CPRC)		
0010	669+40	- 669+80	STH 73	60	RELAID CULVERT PIPE (2 - 48" X 64' CPRC)		
0010	717+10	- 717+50	STH 73	60	BOX CULVERT REPLACEMENT (C-10-955)		
0010	745+46	- 745+86	STH 73	60	CULVERT PIPE REPLACEMENT (2 - 60" X 60' CPCS)		
0010	759+26	- 759+66	STH 73	140	CULVERT PIPE REPLACEMENT (1 - 30" X 80' CPCS)		
0010	767+00	- 767+40	STH 73	60	BOX CULVERT REPLACEMENT (C-10-954)		
0010	777+38	- 777+78	STH 73	60	CULVERT PIPE REPLACEMENT (1 - 24" X 68' CPCS)		
0010	794+37	- 794+77	STH 73	60	BOX CULVERT REPLACEMENT (C-10-953)		
0010	831+35	- 831+75	STH 73	60	BOX CULVERT REPLACEMENT (C-10-952)		
0010	854+88	- 855+28	STH 73	60	BOX CULVERT REPLACEMENT (C-10-951)		
0010	864+10	- 864+35	STH 73 RT.	75	REMOVING CONCRETE INTERSECTION RUMBLE STRIPS		
0010	867+25	- 867+50	STH 73 RT.	75	REMOVING CONCRETE INTERSECTION RUMBLE STRIPS		
0010	869+60	- 869+85	STH 73 RT.	75	REMOVING CONCRETE INTERSECTION RUMBLE STRIPS		
0010	873+13	- 873+75	STH 73 RT.	110	CURB REPLACEMENT AT STH 73 / STH 95		
0010	873+41	- 873+75	STH 73 LT.	70	CURB REPLACEMENT AT STH 73 / STH 95		
0010	873+99	- 873+99	STH 73 RT.	50	END PROJECT BUTT JOINT AT STH 73 / STH 95		
0010	873+99	- 873+99	STH 73 LT.	50	END PROJECT BUTT JOINT AT STH 73 / STH 95		
TOTAL 0010				1655			

SPECIAL 01. DITCH CLEANING

SPV.0060.01				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	449+68	STH 73 RT. & LT.	2	1 - 24" X 58' CPCS
0010	459+80	STH 73 RT. & LT.	2	1 - 24" X 56' CPRC
0010	476+56	STH 73 RT. & LT.	2	2 - 48" X 56' CPRC
0010	507+15	STH 73 RT. & LT.	2	2 - 48" X 64' CPRC
0010	525+54	STH 73 RT. & LT.	2	2 - 48" X 64' CPRC
0010	553+08	STH 73 RT. & LT.	2	3 - 54" X 58' CPRC STRUCTURE C-10-16
0010	563+75	STH 73 RT. & LT.	2	1 - 30" X 72' HDPE
0010	584+70	STH 73 RT. & LT.	2	1 - 72" X 48' CPRC
0010	641+84	STH 73 RT. & LT.	2	2 - 48" X 64' CPRC
0010	646+80	STH 73 RT. & LT.	2	1 - 30" X 72' CPRC
0010	669+60	STH 73 RT. & LT.	2	2 - 48" X 64' CPRC
0010	717+30	STH 73 RT. & LT.	2	1 - 48" X 72' CPRC
0010	745+66	STH 73 RT. & LT.	2	2 - 72" X 64' CPRC
0010	759+46	STH 73 RT. & LT.	2	1 - 30" X 80' CPRC
0010	767+20	STH 73 RT. & LT.	2	1 - 48" X 64' CPRC
0010	777+58	STH 73 RT. & LT.	2	1 - 24" X 72' CPRC
0010	794+58	STH 73 RT. & LT.	2	1 - 48" X 64' CPRC
0010	831+55	STH 73 RT. & LT.	2	1 - 48" X 64' CPRC
0010	855+08	STH 73 RT. & LT.	2	1 - 72" X 64' CPRC
TOTAL 0010			38	

SPECIAL 01. CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT

SPV.0090.01					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	873+10	- 873+75	RT.	105	STH 73/STH 95 INTERSECTION
0010	873+36	- 873+75	LT.	65	STH 73/STH 95 INTERSECTION
TOTAL 0010				170	

SPECIAL 01. MATERIAL TRANSFER VEHICLE

					SPV.0105.01	
CATEGORY	STATION TO	STATION	LOCATION	LS	REMARKS	
0010	438+00 -	873+99	STH 73	1	PROJECT 1520-05-70	
TOTAL 0010				1		

CURVE 1
PI STA = 434+70.39
Y = 326423.582
X = 727244.170
DELTA = 1°58'05"
D = 0°21'00"
T = 281.19'
L = 562.33'
R = 16370.22'
PC STA = 431+89.20
PT STA = 437+51.53
EXISTING SE = NC
PROPOSED SE = NC



CURVE 2
PI STA = 464+57.00
Y = 326367.457
X = 724258.030
DELTA = 1°06'30"
D = 0°15'00"
T = 221.66'
L = 443.30'
R = 22918.31'
PC STA = 462+35.35
PT STA = 466+78.65
EXISTING SE = NC
PROPOSED SE = NC

STA. 449+68
1 - 24" X 58' CPCS W/APRON ENDWALLS
1 - REMOVING SMALL PIPE CULVERTS REQ'D
1 - 24" X 64' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 24-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

STA. 459+81
1 - 24" X 60' CPRC W/APRON ENDWALLS
EXISTING TO REMAIN
CLEANING DITCH REQ'D RT.
2 - MARKERS CULVERT END REQ'D

STA. 463+27 STH 73 =
STA. 10+00 OAK GROVE AVE.
BASE AGGREGATE SIDE ROAD LT.
MATCH EXISTING PAVED RADIUS LT.

BEGIN PROJECT 1520-05-70
STA. 438+00 STH 73
MATCH EXISTING PAVEMENT
SAW CUT REQ'D

STA. 445+43 LT.
BASE AGGREGATE P.E.

STA. 454+41 LT.
BASE AGGREGATE F.E.

STA. 461+05 LT.
BASE AGGREGATE P.E.
STA. 460+21 LT.
BASE AGGREGATE P.E.

STA. 462+03 RT.
BASE AGGREGATE P.E.
STA. 463+38 RT.
BASE AGGREGATE P.E.
STA. 464+95 RT.
BASE AGGREGATE P.E.

STA. 444+83 RT.
BASE AGGREGATE P.E.

SAW CUT REQ'D
SILT FENCE

CLARK ELECTRIC COOPERATIVE
SAW CUT REQ'D
EXISTING R/W
WETLAND LIMITS

EXISTING R/W
CLARK ELECTRIC COOPERATIVE
EROSION CONTROL MAT CLASS II TYPE B

WETLAND LIMITS

CULVERT PIPE CHECKS

TDS TELECOM
WETLAND LIMITS
EXISTING R/W

TDS TELECOM
WETLAND LIMITS
EXISTING R/W

S88° 52' 47"W

S88° 59' 20"W

STA. 436+77 STH 73 =
STA. 10+00 MERIDIAN AVE.

MERIDIAN AVE.

MERIDIAN AVE.

OAK GROVE AVE.

5

5

PROJECT NO: 1520-05-70

HWY: STH 73

COUNTY: CLARK

PLAN

SHEET

69

E

CURVE 2
PI STA = 464+57.00
Y = 326367.457
X = 724258.030
DELTA = 1°06'30"
D = 0°15'00"
T = 221.66'
L = 443.30'
R = 22918.31'
PC STA = 462+35.35
PT STA = 466+78.65
EXISTING SE = NC
PROPOSED SE = NC

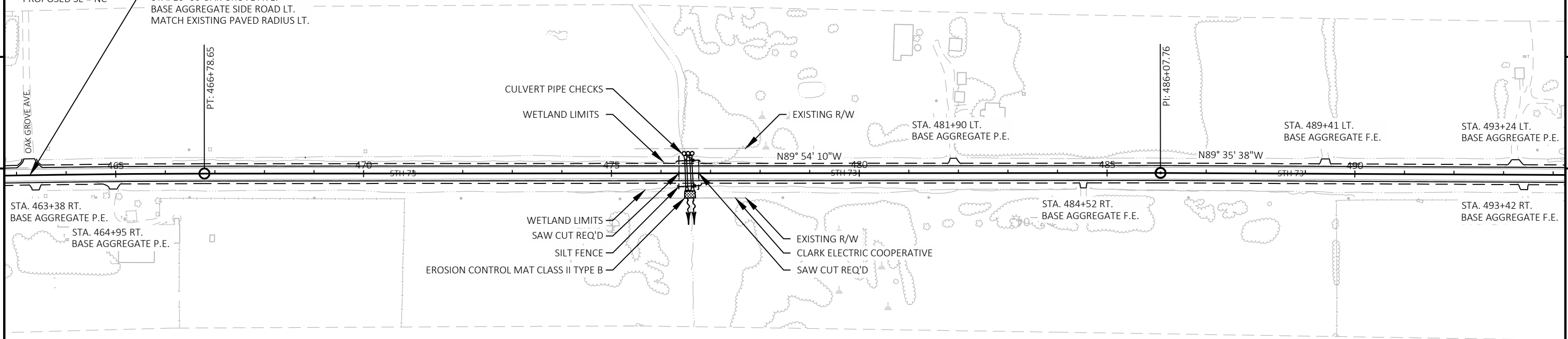
STA. 463+27 STH 73 =
STA. 10+00 OAK GROVE AVE.
BASE AGGREGATE SIDE ROAD LT.
MATCH EXISTING PAVED RADIUS LT.

STA. 476+56
2 - 48" X 54' CPCS W/APRON ENDWALLS
2 - REMOVING SMALL PIPE CULVERTS REQ'D
2 - 48" X 56' CPCR CLASS III REQ'D
4 - APRON ENDWALLS FOR CPCR 48-INCH REQ'D
SKEW 2° RHF
2 - MARKERS CULVERT END REQ'D



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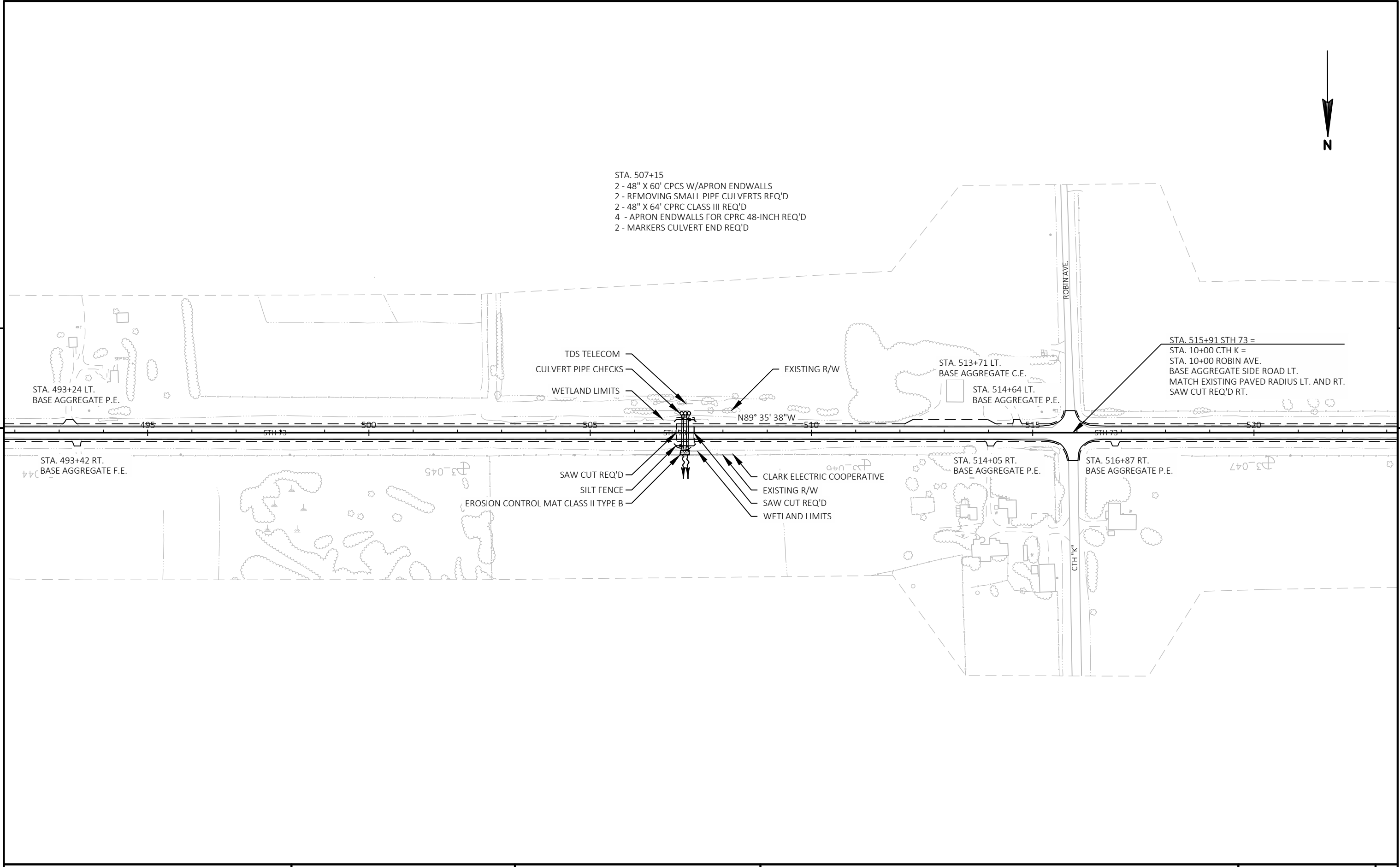




STA. 507+15
2 - 48" X 60' CPCS W/APRON ENDWALLS
2 - REMOVING SMALL PIPE CULVERTS REQ'D
2 - 48" X 64' CPCR CLASS III REQ'D
4 - APRON ENDWALLS FOR CPCR 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

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PROJECT NO: 1520-05-70	HWY: STH 73	COUNTY: CLARK	PLAN	SHEET 71	E
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STA. 525+54
2 - 36" X 64' CPRC W/MORTAR & RUBBLE HEADWALLS
2 - REMOVING SMALL PIPE CULVERTS REQ'D
2 - 48" X 64' CPRC CLASS III REQ'D
4 - APRON ENDWALLS FOR CPRC 48-INCH REQ'D
SKEW 3° RHF
2 - MARKERS CULVERT END REQ'D

CURVE 3
PI STA = 542+29.82
Y = 326410.962
X = 716485.342
DELTA = 1°56'17"
D = 0°36'32"
T = 159.16'
L = 318.29'
R = 9410.00'
PC STA = 540+70.66
PT STA = 543+88.95
EXISTING SE = NC
PROPOSED SE = NC

SALVAGED RAIL
STA. 551+93 - STA. 554+71 LT.

STA. 551+83 - STA. 552+33 LT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' LT.

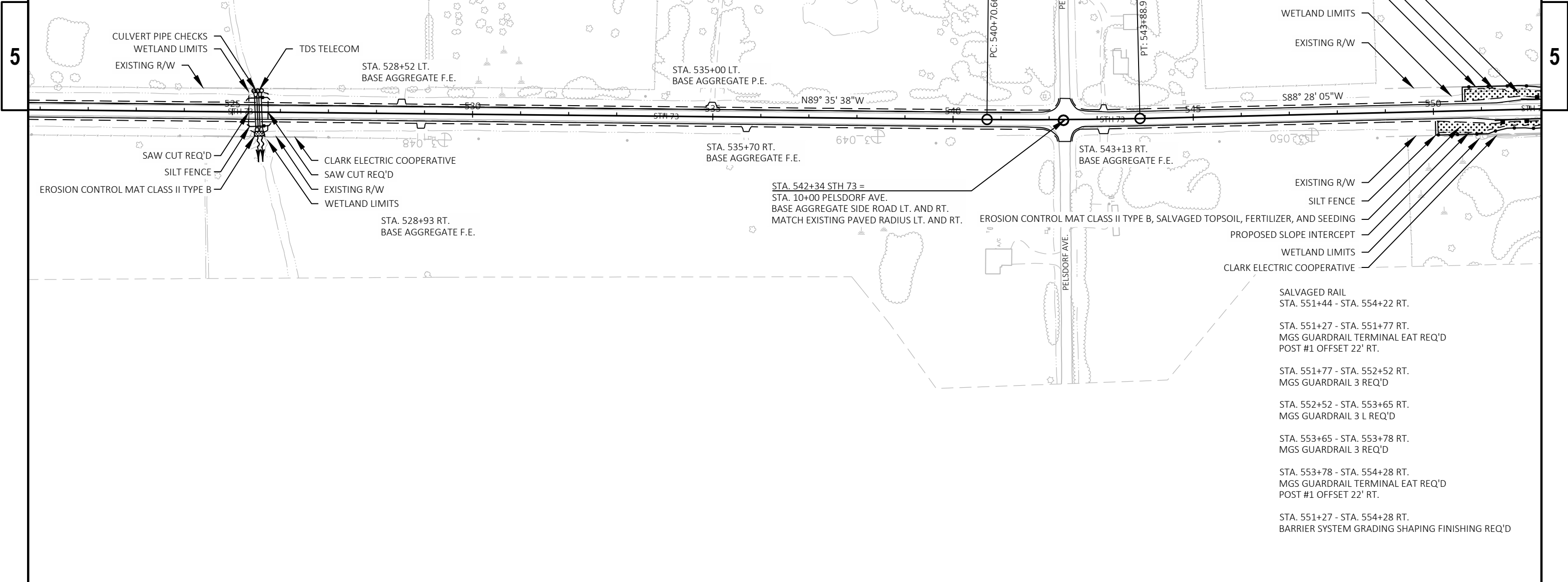
STA. 552+33 - STA. 552+58 LT.
MGS GUARDRAIL 3 REQ'D

STA. 552+58 - STA. 553+71 LT.
MGS GUARDRAIL 3 L REQ'D

STA. 553+71 - STA. 554+33 LT.
MGS GUARDRAIL 3 REQ'D

STA. 554+33 - STA. 554+83 LT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' LT.

STA. 551+83 - STA. 554+83 LT.
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D



SALVAGED RAIL REQ'D
STA. 551+95 - STA. 554+70 LT.

STA. 551+83 - STA. 552+33 LT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' LT.

STA. 552+33 - STA. 552+58 LT.
MGS GUARDRAIL 3 REQ'D

STA. 552+58 - STA. 553+71 LT.
MGS GUARDRAIL 3 L REQ'D

STA. 553+71 - STA. 554+33 LT.
MGS GUARDRAIL 3 REQ'D

STA. 554+33 - STA. 554+83 LT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' LT.

STA. 551+83 - STA. 554+83 LT.
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D

STA. 553+08
STRUCTURE C-10-16
3 - 54" X 58' CPRC W/APRON ENDWALLS
EXISTING TO REMAIN
3 - CLEANING CULVERT PIPES REQ'D
2 - MARKERS CULVERT END REQ'D

STA. 563+75
1 - 30" X 72' HDPE CULVERT PIPE W/APRON ENDWALLS
EXISTING TO REMAIN
1 - CLEANING CULVERT PIPES REQ'D
2 - MARKERS CULVERT END REQ'D

CULVERT PIPE CHECKS
WETLAND LIMITS

EXISTING R/W
PROPOSED SLOPE INTERCEPT
EROSION CONTROL MAT CLASS II TYPE B, SALVAGED TOPSOIL, FERTILIZER, AND SEEDING
SILT FENCE
STA. 559+30 LT.
BASE AGGREGATE P.E.

WETLAND LIMITS
EXISTING R/W

STA. 571+50 LT.
BASE AGGREGATE P.E.

STA. 558+43 RT.
BASE AGGREGATE P.E.
STA. 559+29 RT.
BASE AGGREGATE P.E.

SILT FENCE
EXISTING R/W
EROSION CONTROL MAT CLASS II TYPE B, SALVAGED TOPSOIL, FERTILIZER, AND SEEDING
PROPOSED SLOPE INTERCEPT
WETLAND LIMITS
CLARK ELECTRIC COOPERATIVE

SALVAGED RAIL REQ'D
STA. 551+45 - STA. 554+20 RT.

STA. 551+27 - STA. 551+77 RT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' RT.

STA. 551+77 - STA. 552+52 RT.
MGS GUARDRAIL 3 REQ'D

STA. 552+52 - STA. 553+65 RT.
MGS GUARDRAIL 3 L REQ'D

STA. 553+65 - STA. 553+78 RT.
MGS GUARDRAIL 3 REQ'D

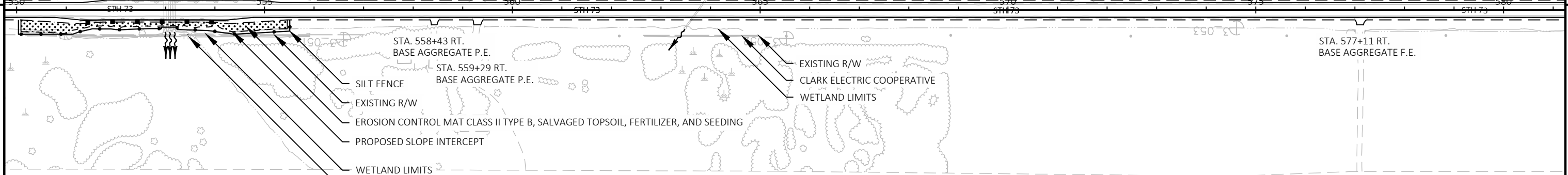
STA. 553+78 - STA. 554+28 RT.
MGS GUARDRAIL TERMINAL EAT REQ'D
POST #1 OFFSET 22' RT.

STA. 551+27 - STA. 554+28 RT.
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D



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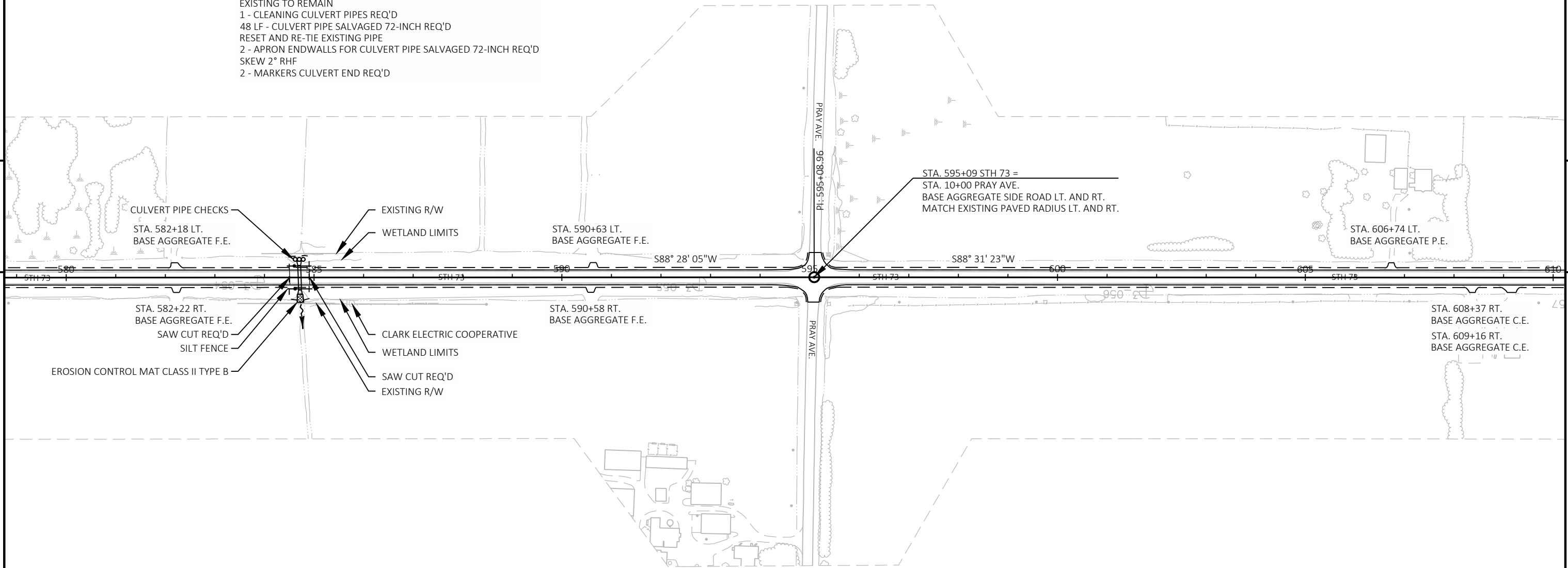




STA. 584+70
1 - 72" X 48' CPRC W/APRON ENDWALLS
EXISTING TO REMAIN
1 - CLEANING CULVERT PIPES REQ'D
48 LF - CULVERT PIPE SALVAGED 72-INCH REQ'D
RESET AND RE-TIE EXISTING PIPE
2 - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 72-INCH REQ'D
SKEW 2° RHF
2 - MARKERS CULVERT END REQ'D

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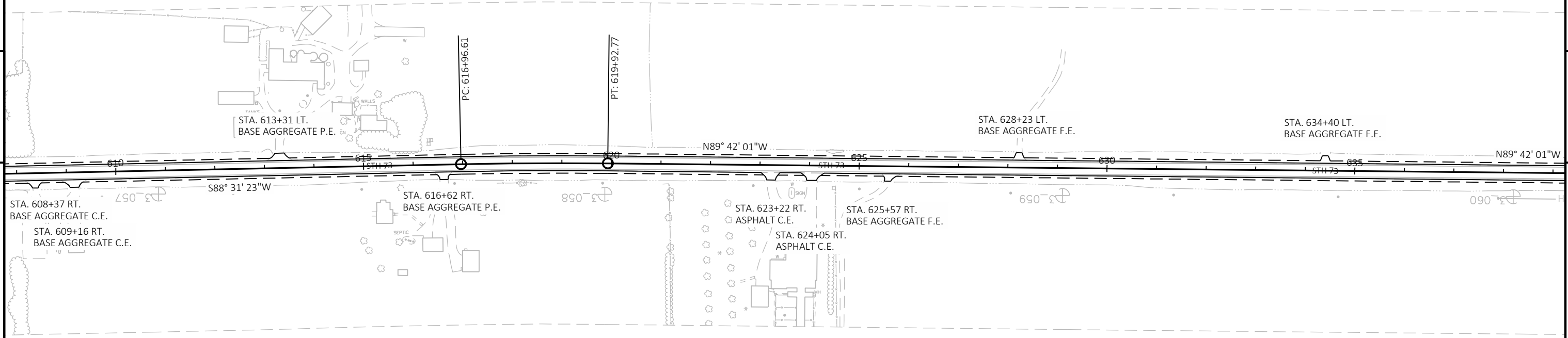




CURVE 4
PI STA = 618+44.70
Y = 326209.630
X = 708873.095
DELTA = 1°46'37"
D = 0°36'00"
T = 148.09'
L = 296.15'
R = 9549.30'
PC STA = 616+96.61
PT STA = 619+92.77
EXISTING SE = NC
PROPOSED SE = NC

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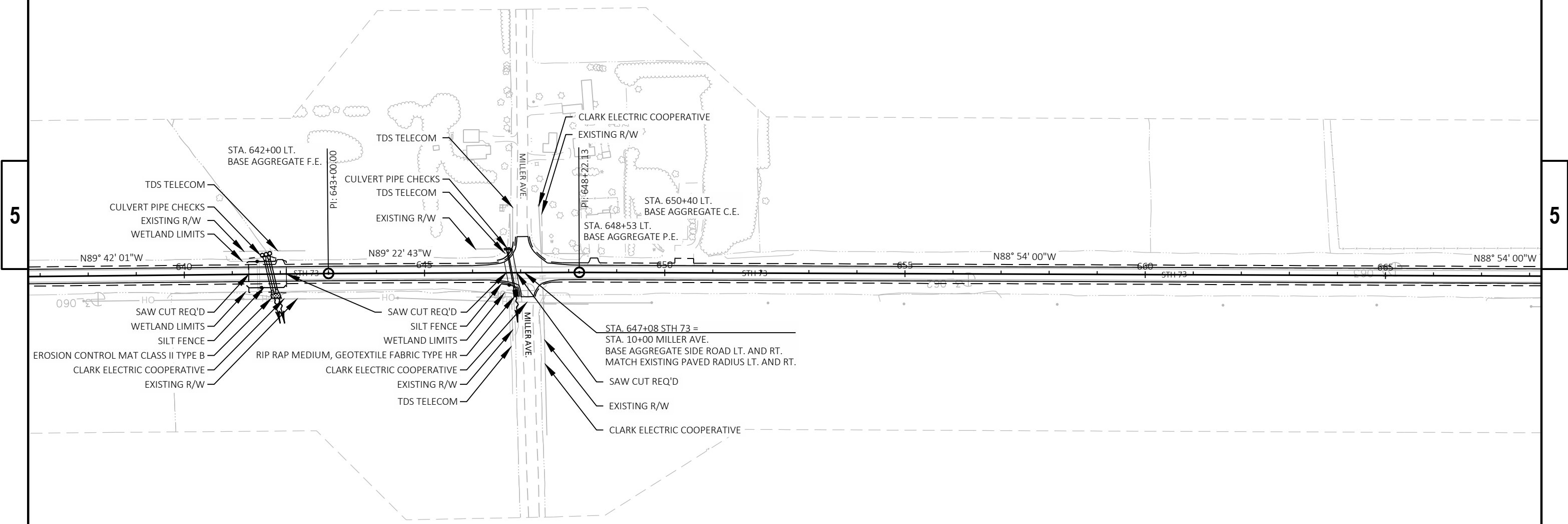
5



STA. 641+84
1 - 42" X 29" X 60' CPCS W/APRON ENDWALLS
1 - REMOVING SMALL PIPE CULVERTS REQ'D
2 - 48" X 64' CPCR CLASS III REQ'D
4 - APRON ENDWALLS FOR CPCR 48-INCH REQ'D
SKEW 13° RHF
2 - MARKERS CULVERT END REQ'D

STA. 641+54
1 - 30" X 56' CPCS W/APRON ENDWALLS
1 - REMOVING SMALL PIPE CULVERTS REQ'D

STA. 646+80
1 - 30" X 72' CPCR W/APRON ENDWALLS
EXISTING TO REMAIN
1 - CLEANING CULVERT PIPES REQ'D
72 LF - CULVERT PIPE SALVAGED 30-INCH REQ'D
RESET AND RE-TIE EXISTING PIPE
2 - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH REQ'D
RIP RAP MEDIUM REQ'D RT.
GEOTEXTILE FABRIC TYPE HR REQ'D RT.
FIX WASHOUT AT PIPE OUTLET RT.
SKEW 10° RHF
2 - MARKERS CULVERT END REQ'D

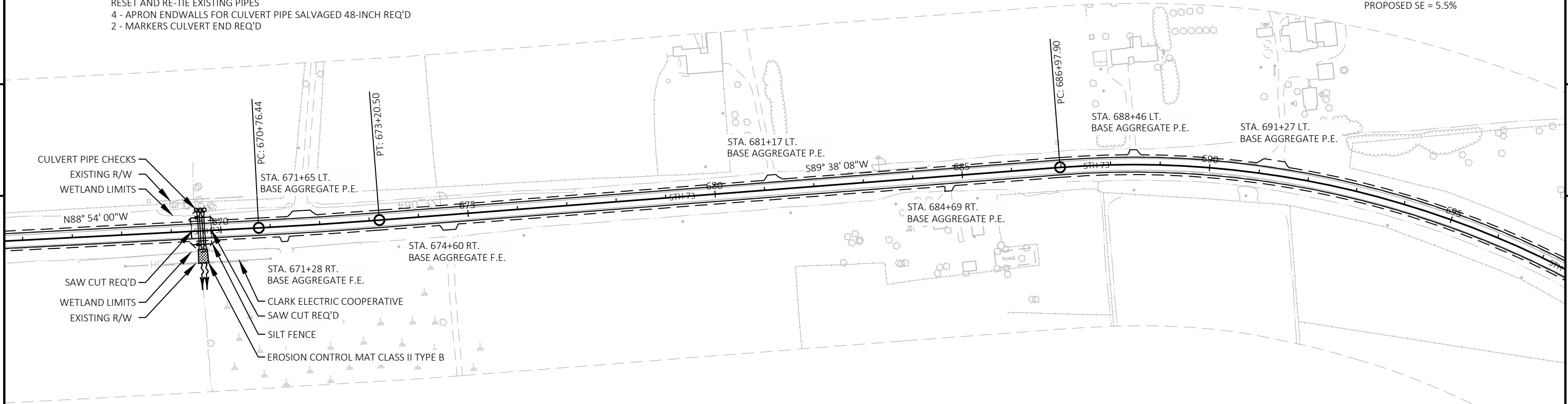


CURVE 5
PI STA = 671+98.48
Y = 326273.763
X = 703519.797
DELTA = 1°27'52"
D = 0°36'00"
T = 122.04'
L = 244.06'
R = 9549.30'
PC STA = 670+76.44
PT STA = 673+20.50
EXISTING SE = NC
PROPOSED SE = NC

CURVE 6
PI STA = 693+98.91
Y = 326259.772
X = 701319.395
DELTA = 40°18'38"
D = 3°00'00"
T = 701.02'
L = 1343.72'
R = 1909.90'
PC STA = 686+97.90
PT STA = 700+41.61
EXISTING SE = 5.5%
PROPOSED SE = 5.5%



STA. 669+60
2 - 48" X 64' CPRC W/APRON ENDWALLS
EXISTING TO REMAIN
2 - CLEANING CULVERT PIPES REQ'D
128 LF - CULVERT PIPE SALVAGED 48-INCH REQ'D
RESET AND RE-TIE EXISTING PIPES
4 - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D



CURVE 6
PI STA = 693+98.91
Y = 326259.772
X = 701319.395
DELTA = 40°18'38"
D = 3°00'00"
T = 701.02'
L = 1343.72'
R = 1909.90'
PC STA = 686+97.90
PT STA = 700+41.61
EXISTING SE = 5.5%
PROPOSED SE = 5.5%

CURVE 7
PI STA = 711+24.41
Y = 327405.105
X = 699951.839
DELTA = 38°05'52"
D = 3°00'00"
T = 659.45'
L = 1269.95'
R = 1909.90'
PC STA = 704+64.96
PT STA = 717+34.91
EXISTING SE = 5.5%
PROPOSED SE = 5.5%

STA. 717+30
STRUCTURE C-10-955
1 - 3.5' X 6' X 67' CONCRETE BOX CULVERT W/WINGWALLS
INACTIVE CATTLE PASS
1 - REMOVING OLD STRUCTURE REQ'D
1 - 48" X 72' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

STA. 702+65 STH 73 =
STA. 10+00 CARDINAL AVE.
BASE AGGREGATE SIDE ROAD LT. AND RT.
MATCH EXISTING PAVED RADIUS LT. AND RT.

STA. 717+84 LT.
BASE AGGREGATE P.E.

EXISTING R/W

CLARK ELECTRIC COOPERATIVE

SAW CUT REQ'D

WETLAND LIMITS

EXISTING R/W

STA. 715+71 LT.
BASE AGGREGATE F.E.

CULVERT PIPE CHECKS

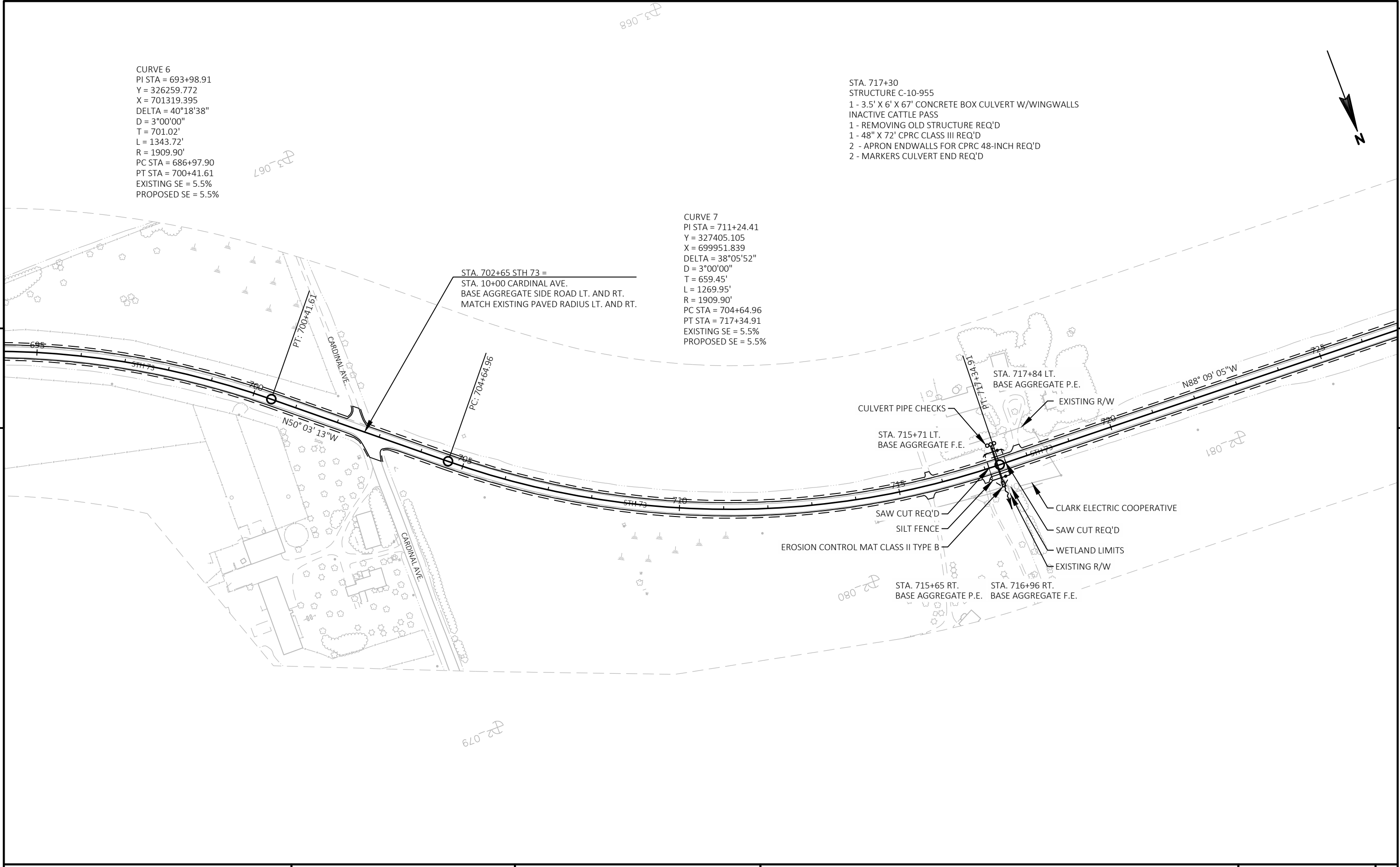
SAW CUT REQ'D

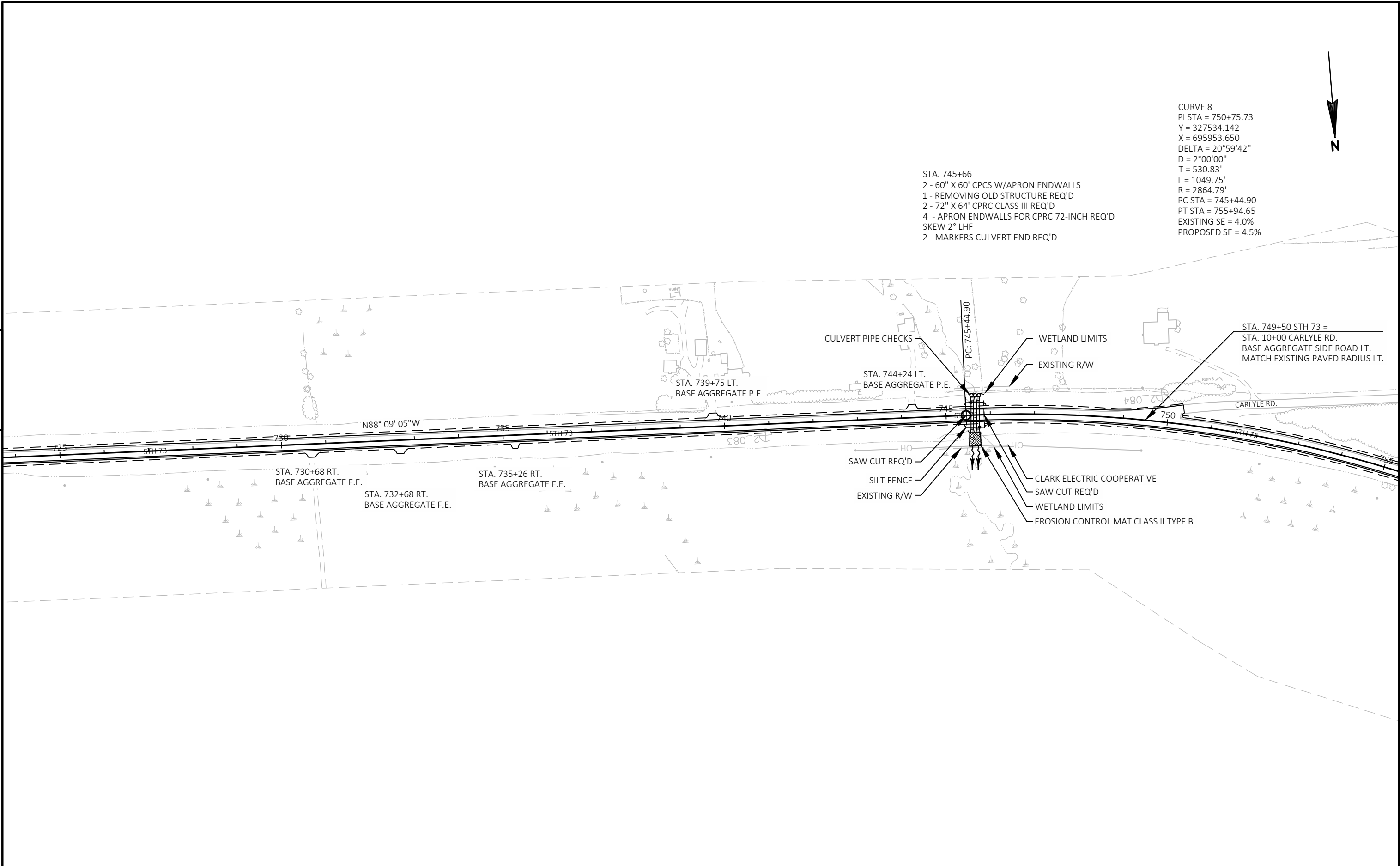
SILT FENCE

EROSION CONTROL MAT CLASS II TYPE B

STA. 715+65 RT.
BASE AGGREGATE P.E.

STA. 716+96 RT.
BASE AGGREGATE F.E.



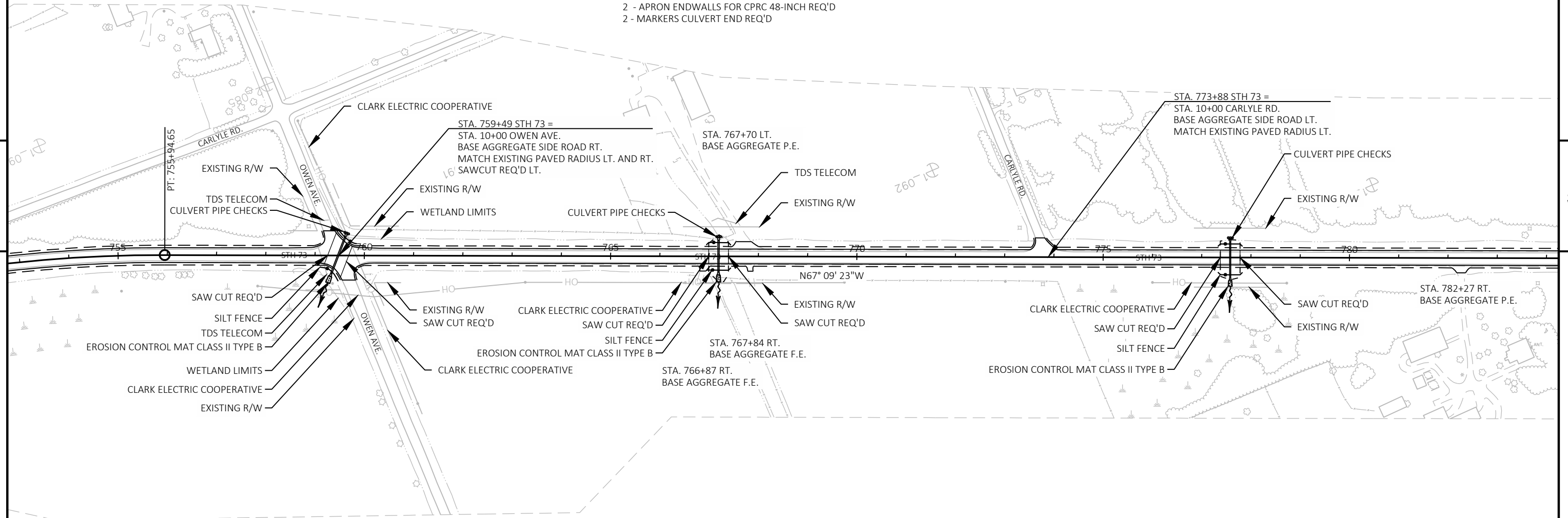


CURVE 8
PI STA = 750+75.73
Y = 327534.142
X = 695953.650
DELTA = 20°59'42"
D = 2°00'00"
T = 530.83'
L = 1049.75'
R = 2864.79'
PC STA = 745+44.90
PT STA = 755+94.65
EXISTING SE = 4.0%
PROPOSED SE = 4.5%

STA. 759+46
1 - 30" X 80' CPCS W/APRON ENDWALLS
1 - REMOVING SMALL PIPE CULVERTS REQ'D
1 - 30" X 80' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 30-INCH REQ'D
SKEW 20° LHF
2 - MARKERS CULVERT END REQ'D

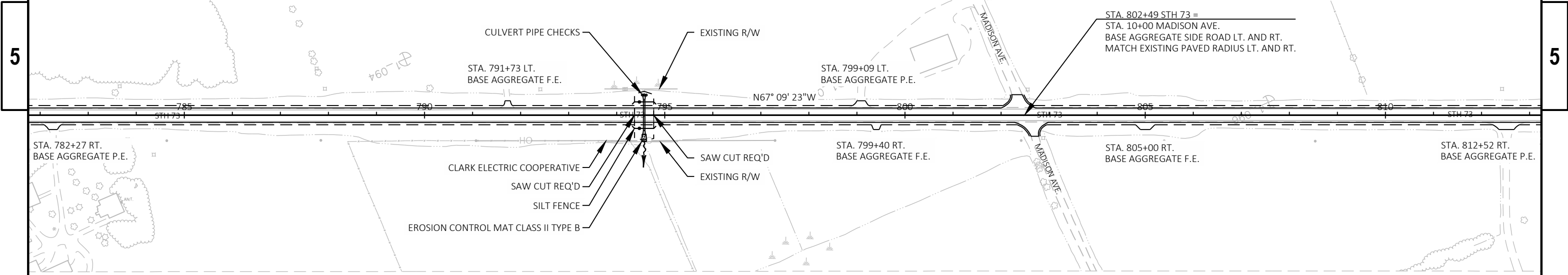
STA. 767+20
STRUCTURE C-10-954
1 - 3.5' X 6' X 54' CONCRETE BOX CULVERT W/WINGWALLS
INACTIVE CATTLE PASS
1 - REMOVING OLD STRUCTURE REQ'D
1 - 48" X 64' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

STA. 777+58
1 - 24" X 68' CPCS W/APRON ENDWALLS
1 - REMOVING SMALL PIPE CULVERTS REQ'D
1 - 24" X 72' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 24-INCH REQ'D
2 - MARKERS CULVERT END REQ'D





STA. 794+57
STRUCTURE C-10-953
1 - 3.5' X 6' X 59' CONCRETE BOX CULVERT W/WINGWALLS
INACTIVE CATTLE PASS
1 - REMOVING OLD STRUCTURE REQ'D
1 - 48" X 64' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

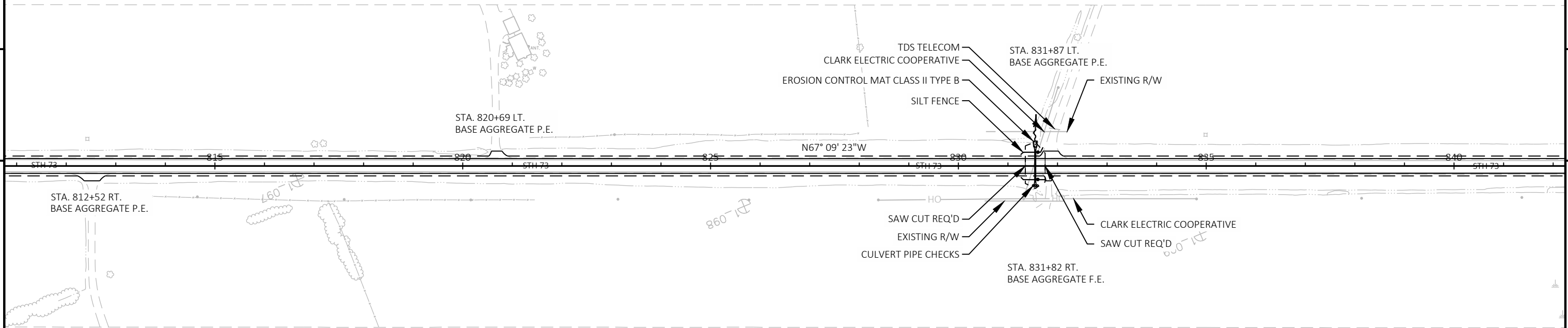


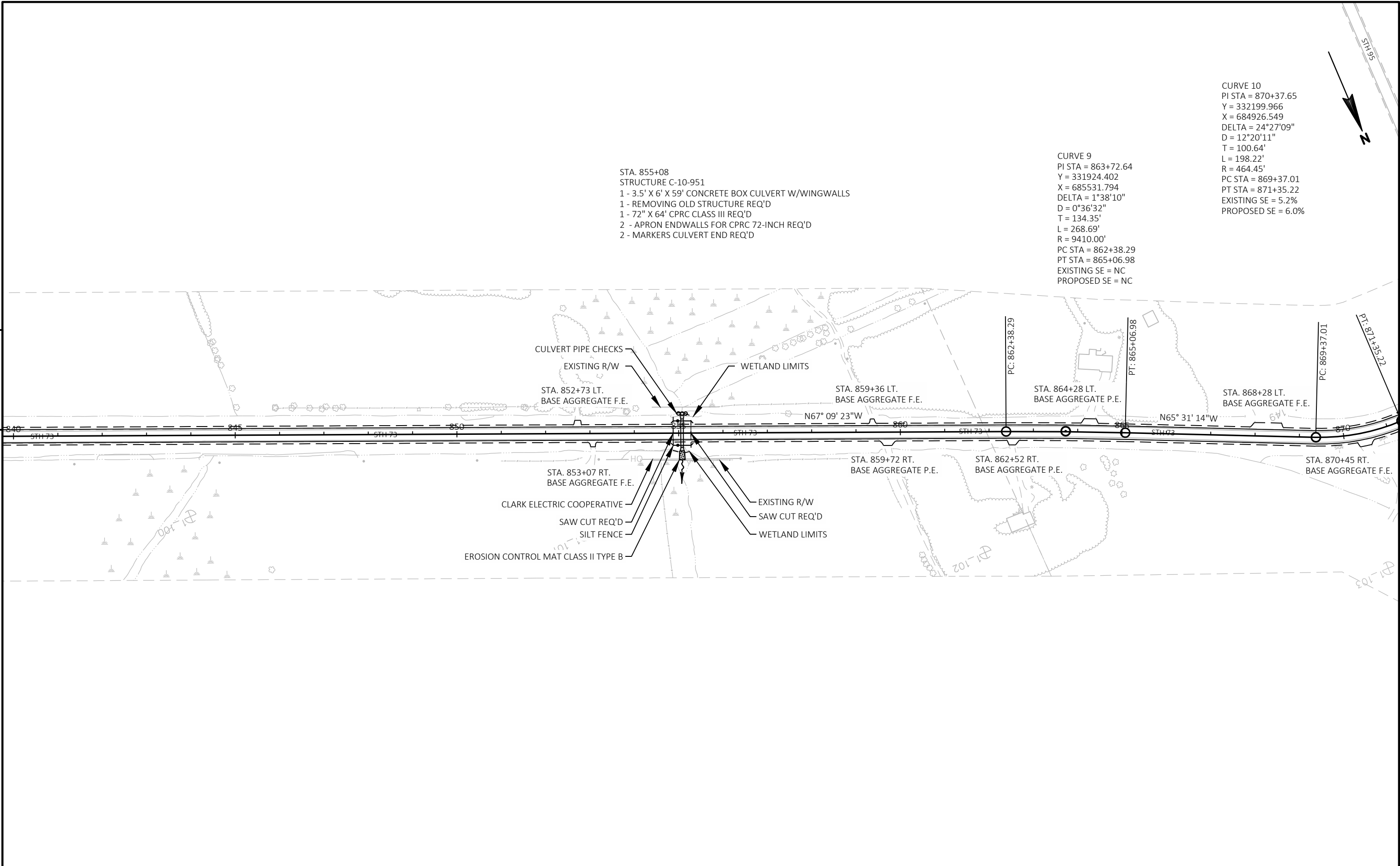


STA. 831+55
STRUCTURE C-10-952
1 - 3.5' X 6' X 60' CONCRETE BOX CULVERT W/WINGWALLS
INACTIVE CATTLE PASS
1 - REMOVING OLD STRUCTURE REQ'D
1 - 48" X 64' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 48-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

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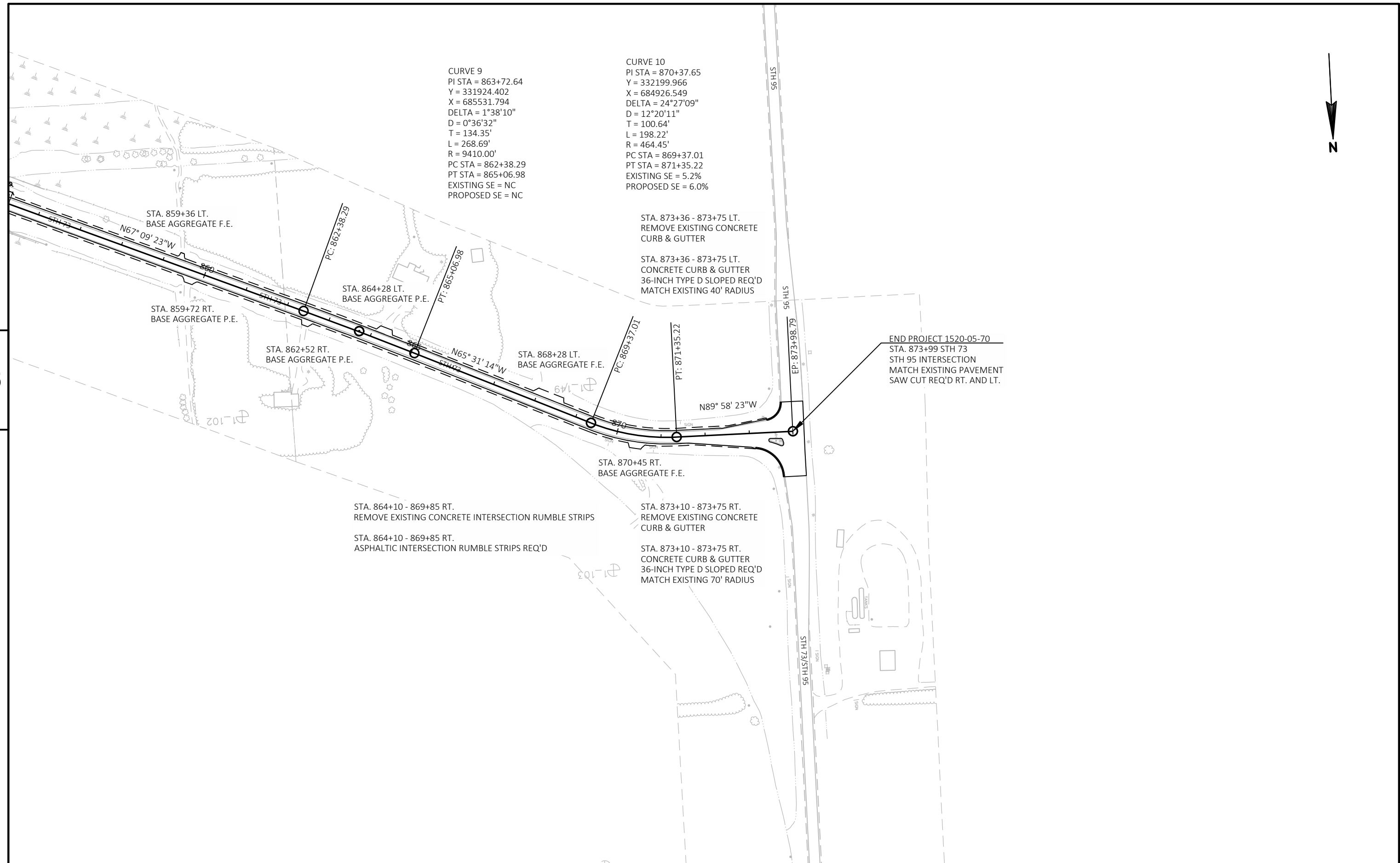




STA. 855+08
STRUCTURE C-10-951
1 - 3.5' X 6' X 59' CONCRETE BOX CULVERT W/WINGWALLS
1 - REMOVING OLD STRUCTURE REQ'D
1 - 72" X 64' CPRC CLASS III REQ'D
2 - APRON ENDWALLS FOR CPRC 72-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

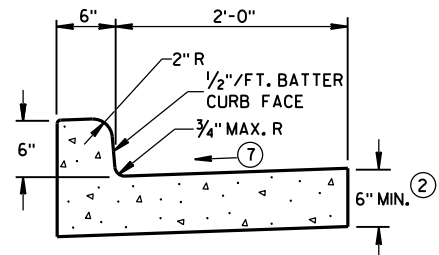
CURVE 9
PI STA = 863+72.64
Y = 331924.402
X = 685531.794
DELTA = 1°38'10"
D = 0°36'32"
T = 134.35'
L = 268.69'
R = 9410.00'
PC STA = 862+38.29
PT STA = 865+06.98
EXISTING SE = NC
PROPOSED SE = NC

CURVE 10
PI STA = 870+37.65
Y = 332199.966
X = 684926.549
DELTA = 24°27'09"
D = 12°20'11"
T = 100.64'
L = 198.22'
R = 464.45'
PC STA = 869+37.01
PT STA = 871+35.22
EXISTING SE = 5.2%
PROPOSED SE = 6.0%

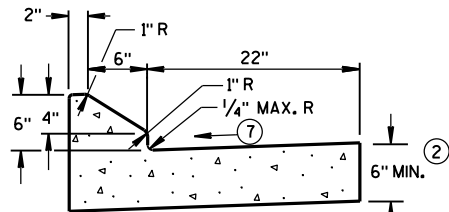


Standard Detail Drawing List

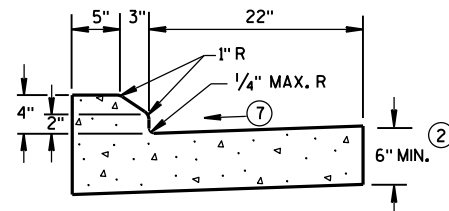
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C27-03A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



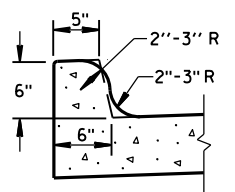
TYPES A^① & D



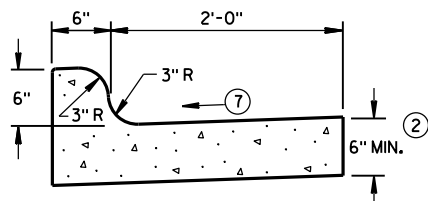
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

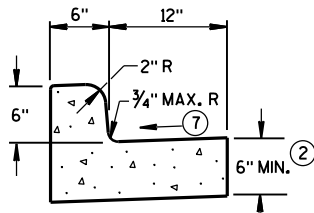


TYPES K^① & L
(OPTIONAL CURB SHAPE)



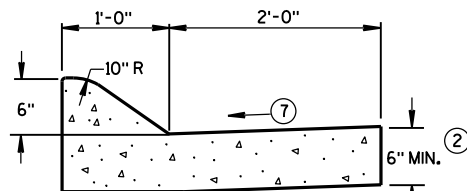
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

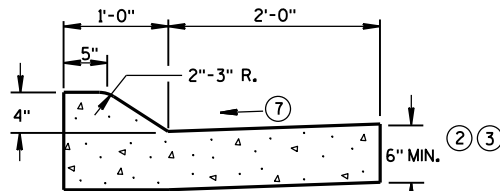


TYPES A^① & D

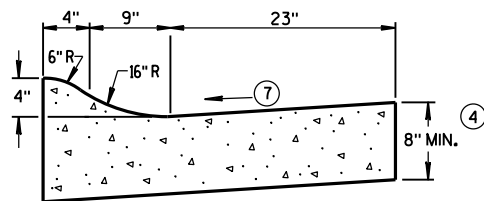
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

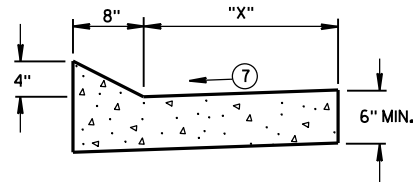


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

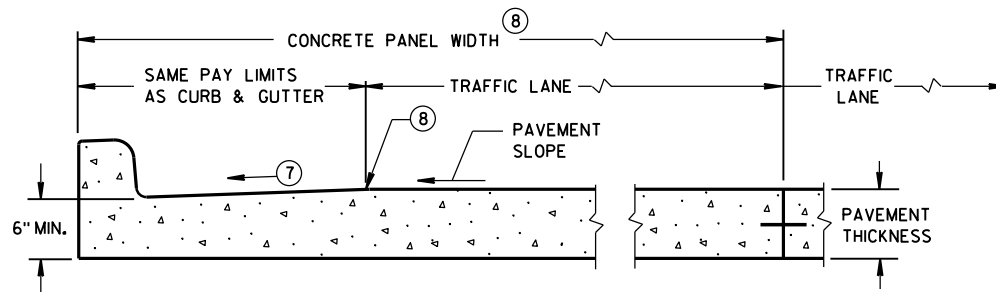
CONCRETE CURB & GUTTER 36"



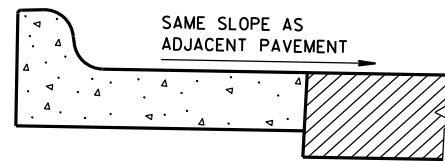
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ 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.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

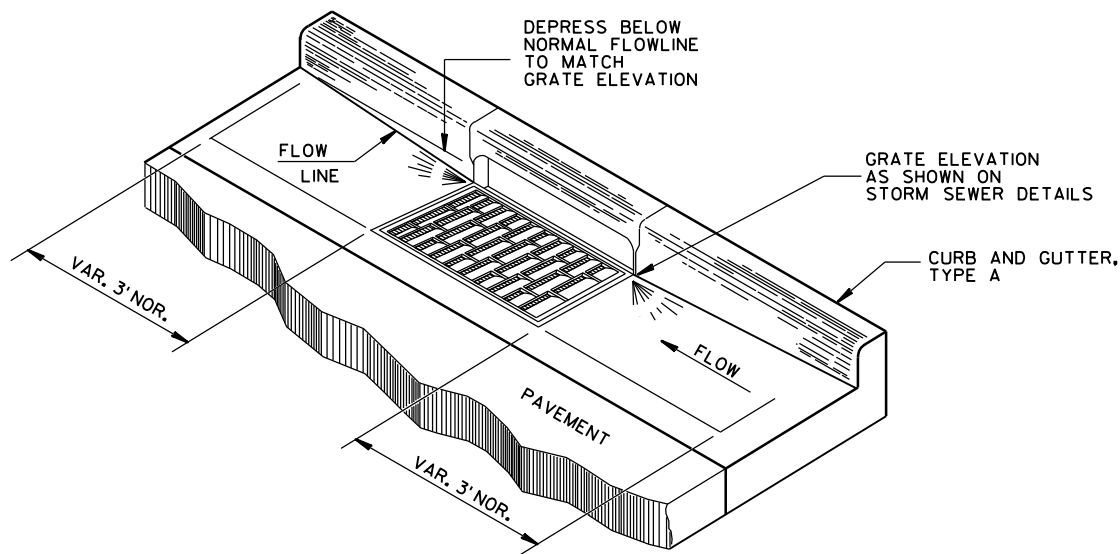
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

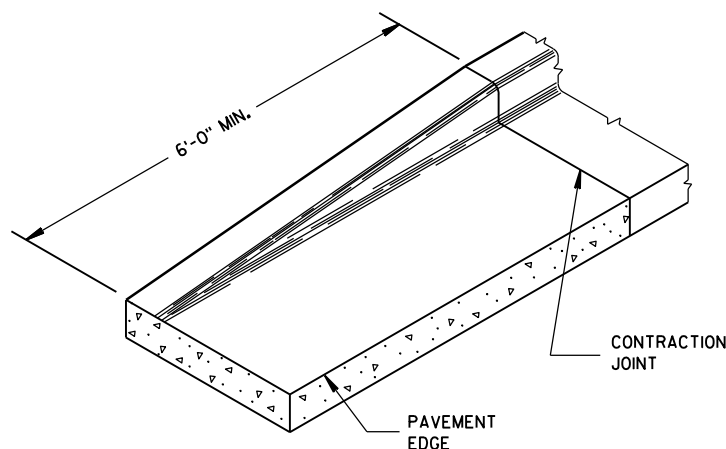
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

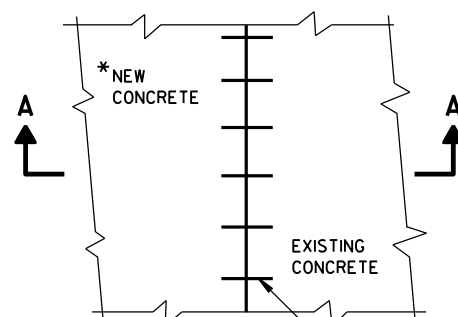
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



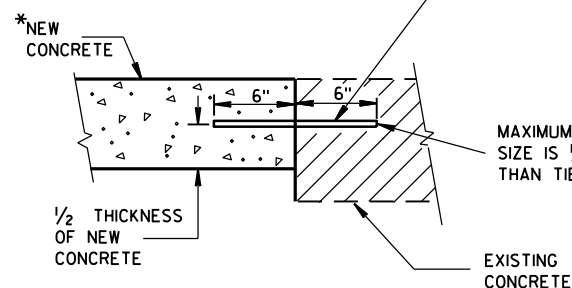
DETAIL OF CURB AND GUTTER AT INLETS
(TYPE H INLET COVER SHOWN)



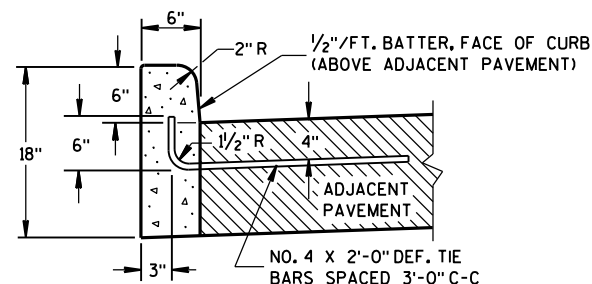
END SECTION CURB & GUTTER



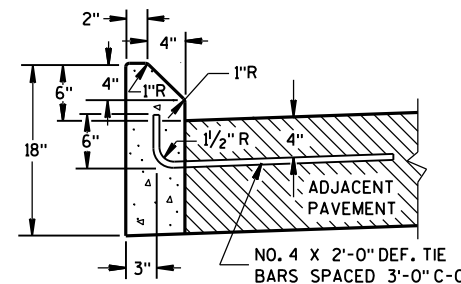
PLAN VIEW



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT



TYPES A^① & D

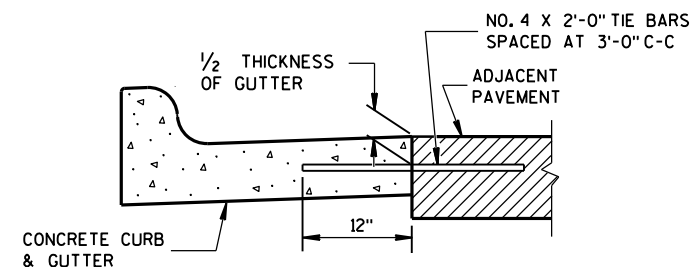


TYPES G^① & J

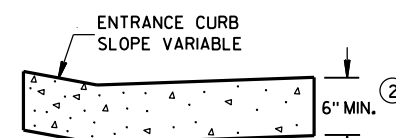
GENERAL NOTES

- 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.
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
 - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ③ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

CONCRETE CURB



TYPICAL TIE BAR LOCATION^①

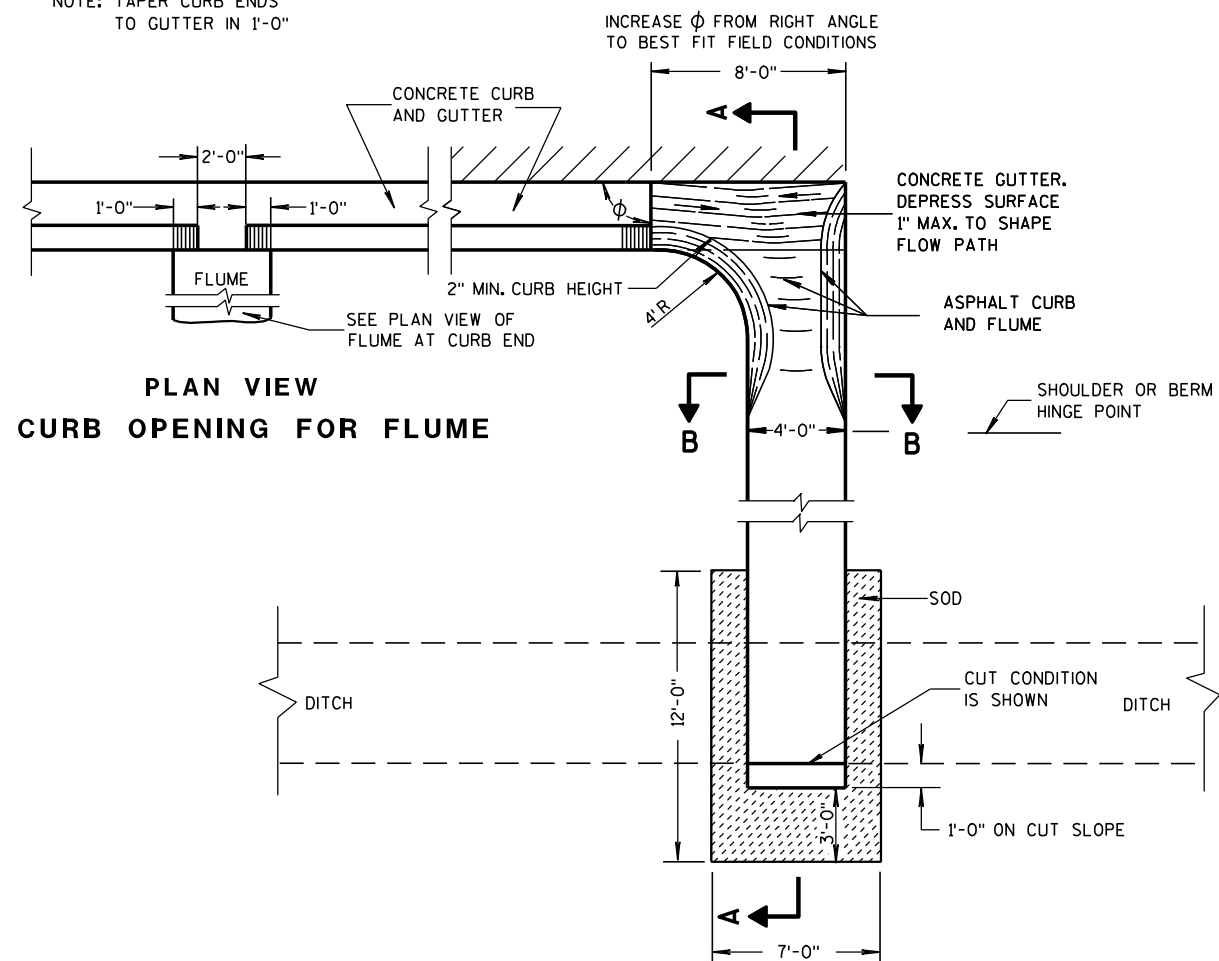


DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED June, 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARDS 87 UNIT SUPERVISOR	ENT	
FHWA			

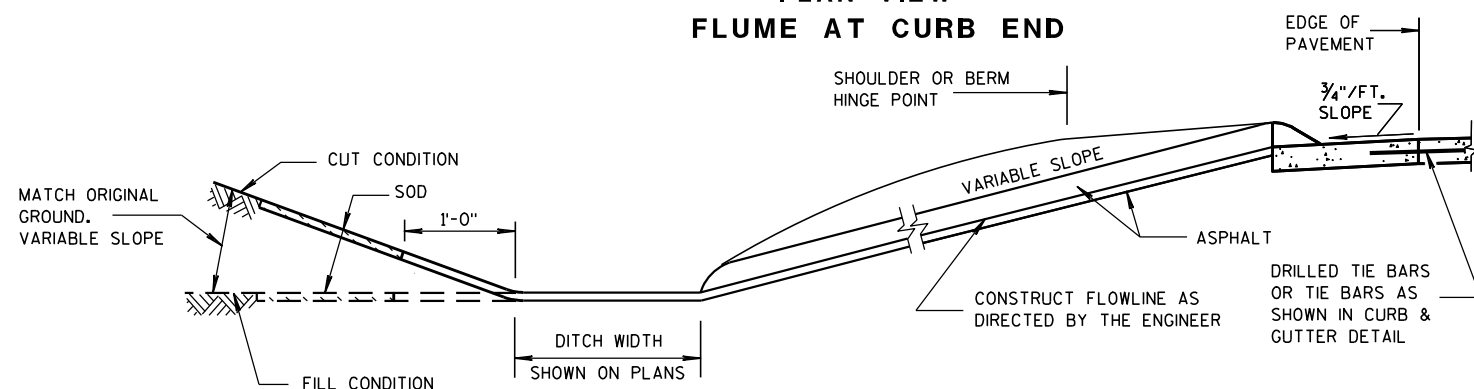
ASPHALTIC FLUME

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

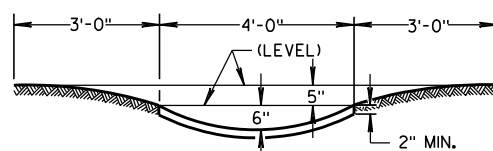


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

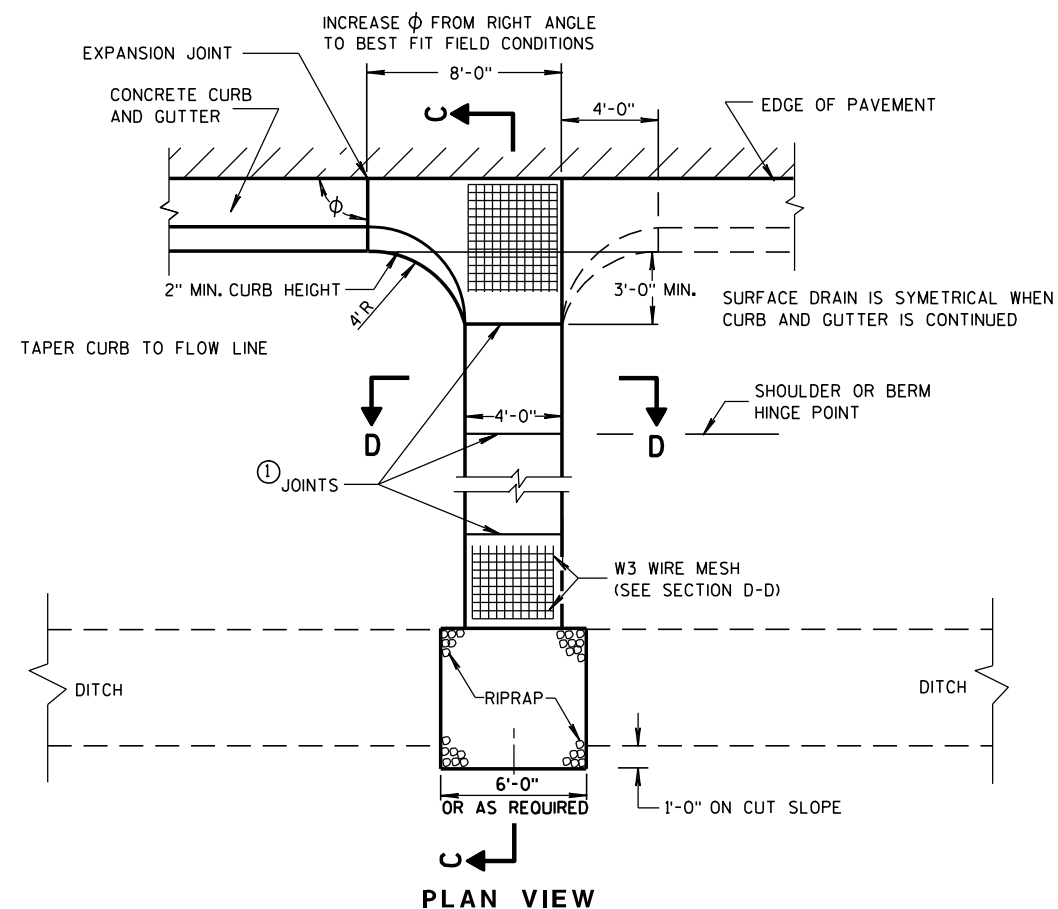
GENERAL NOTES

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

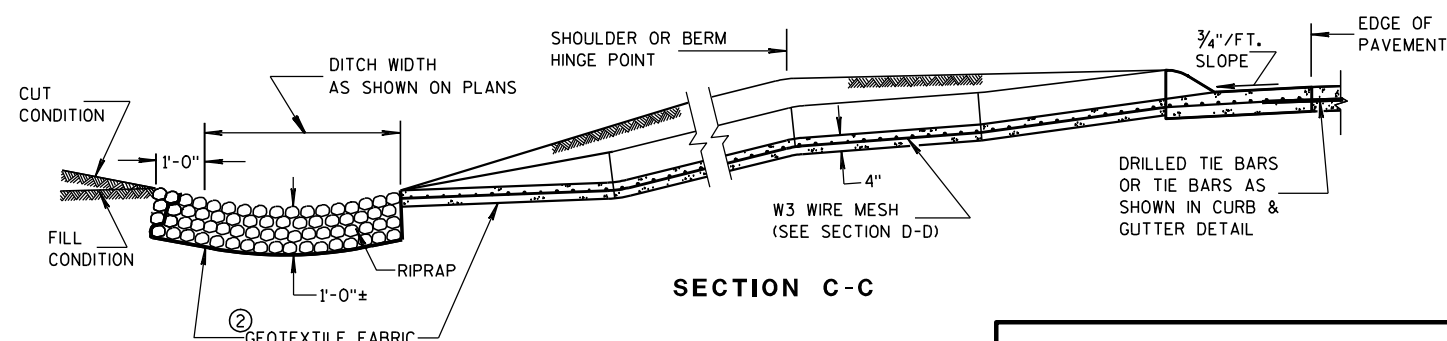
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

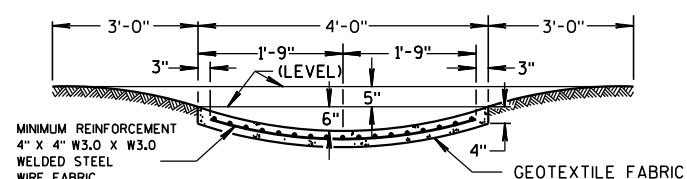
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C

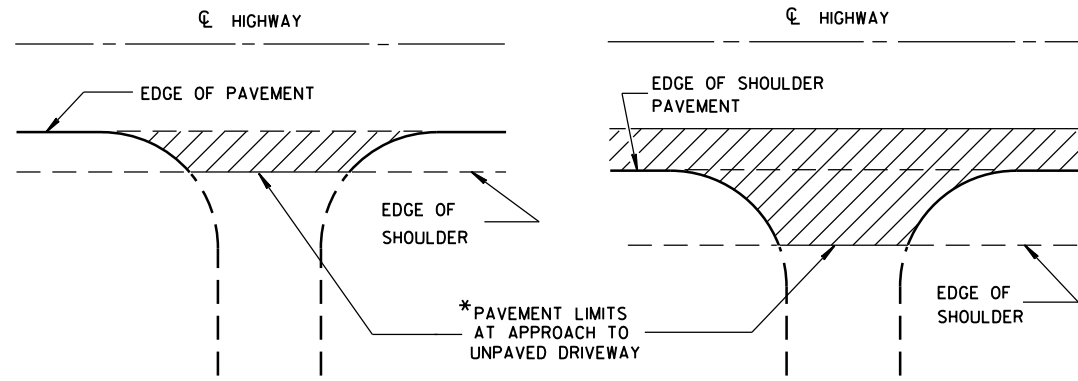


SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 /S/ Jerry H. Zapp
DATE ROADWAY STANDARDS 88
FHWA ENGINEER

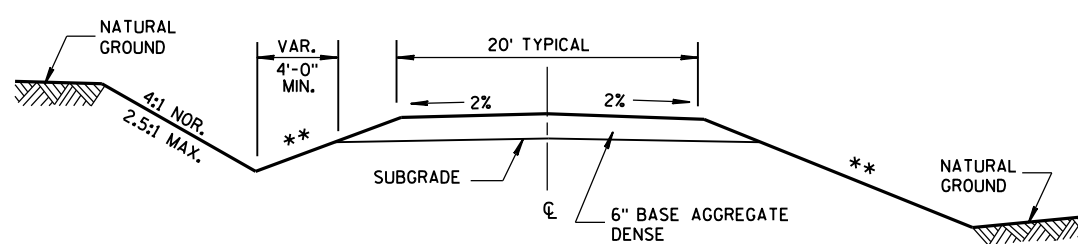


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

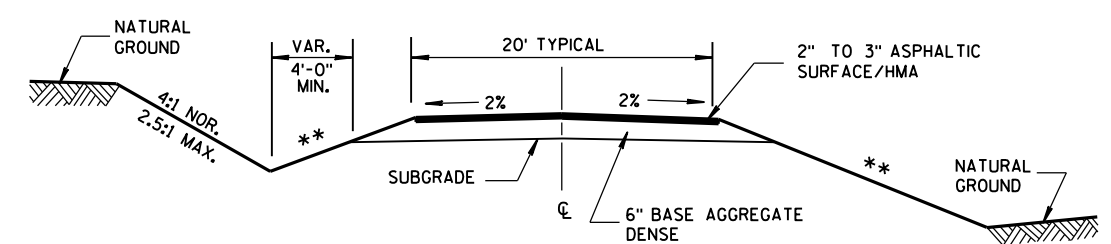
RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)



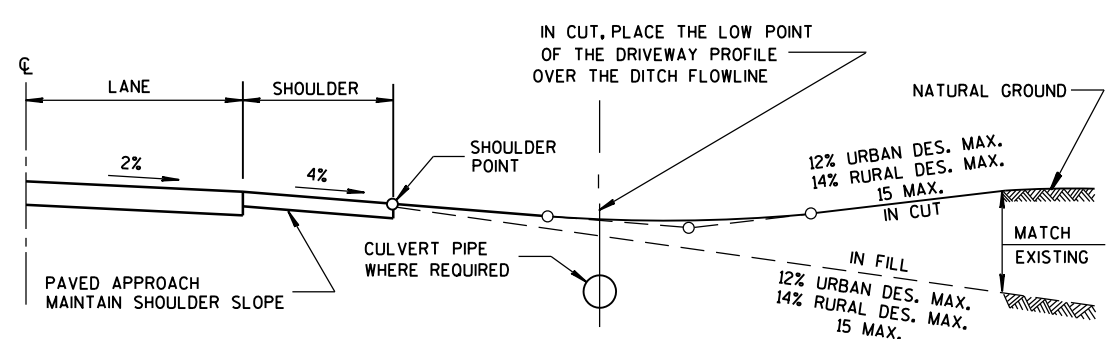
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥35 TO <60	6:1
≥60	10:1



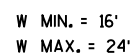
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE



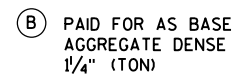
TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED December, 2016	/S/ Rodney Taylor		
DATE	ROADWAY STANDARDS	89	ENT
FHWA	UNIT SUPERV		

① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

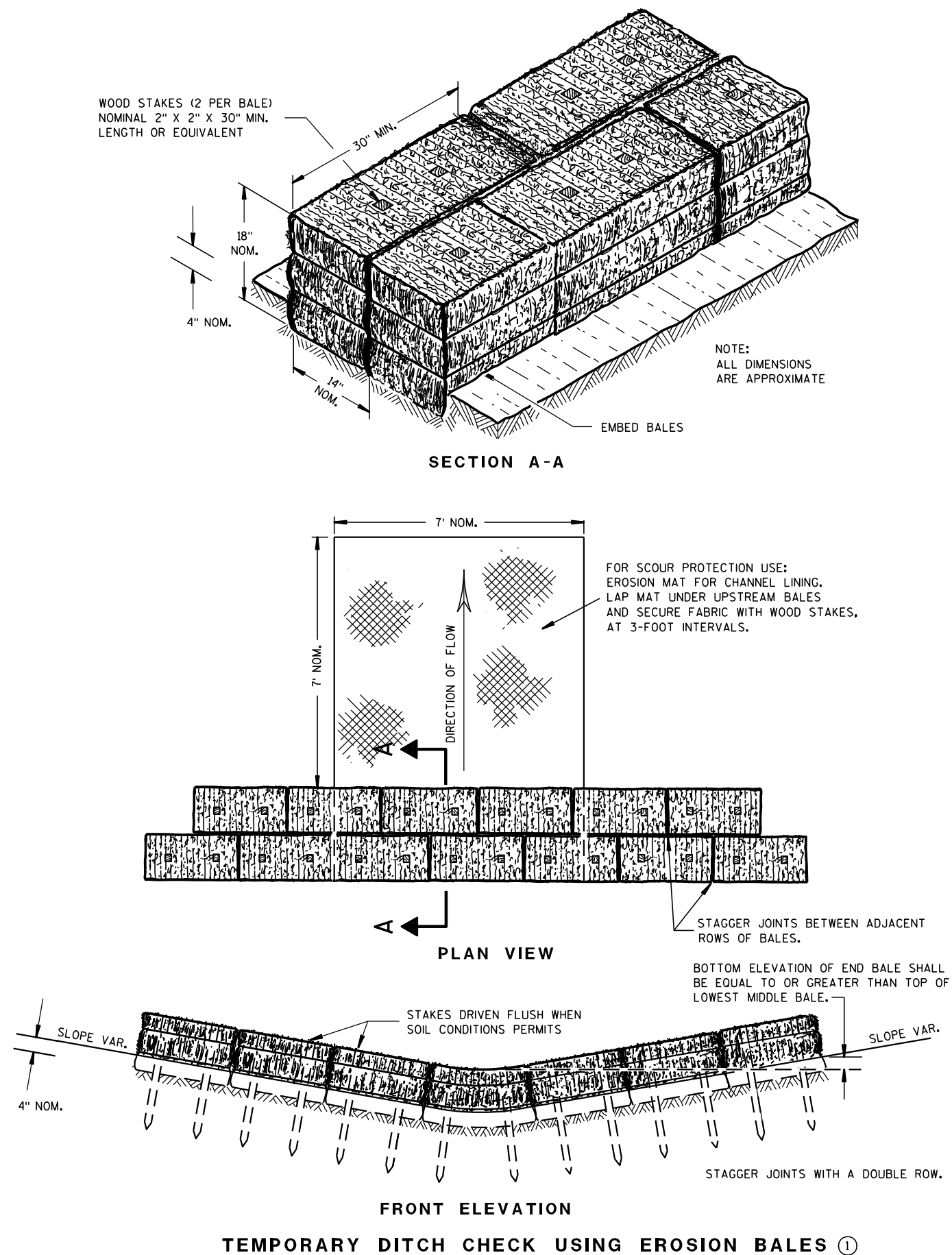


PLAN VIEW
HALF SECTION



PLAN VIEW
HALF SECTION

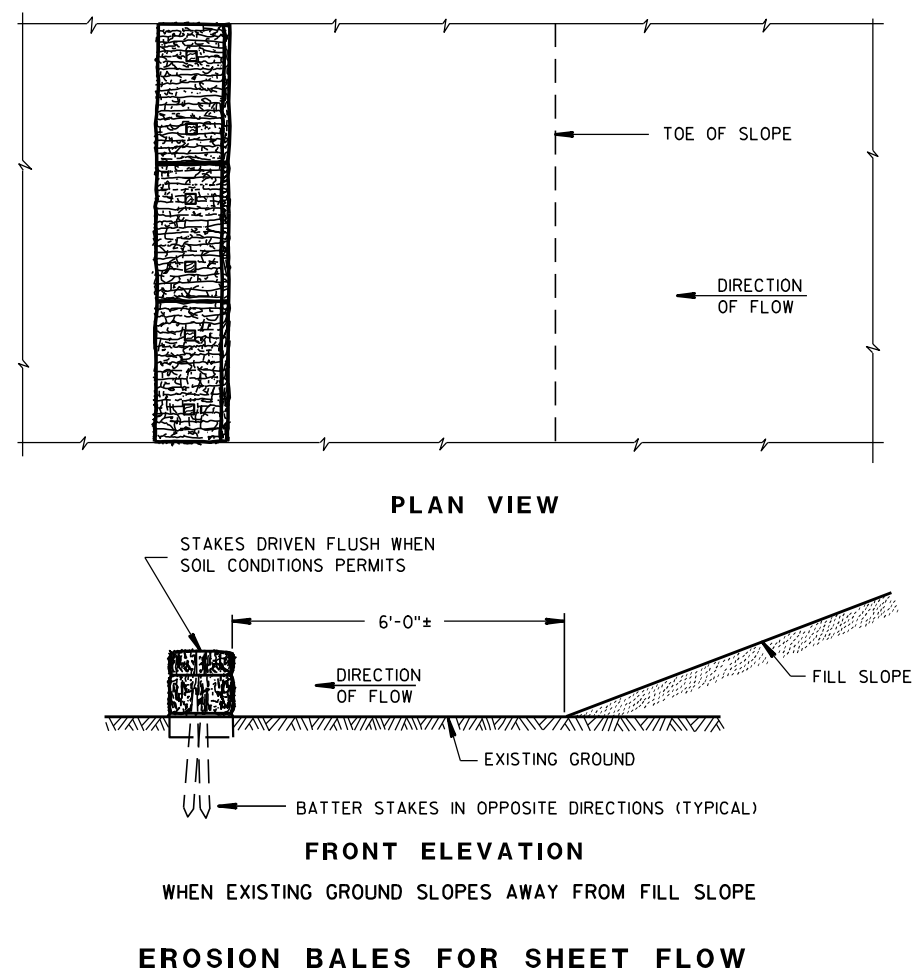
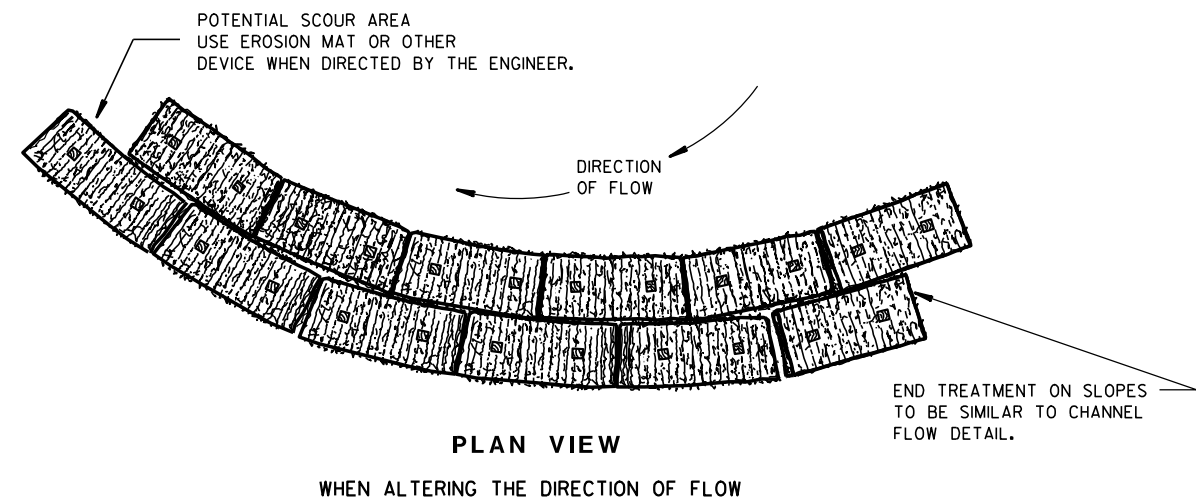




GENERAL NOTES

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

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

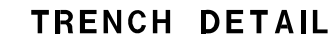
6/04/02
DATE/S/ Beth Connors
CHIEF ROADWAY DEVELOPER

ENGINEER

FHWA



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



SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE

/S/ Beth Cannata
CHIEF ROADWAY DEVELOPMENT

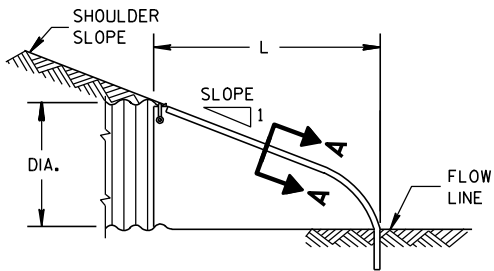
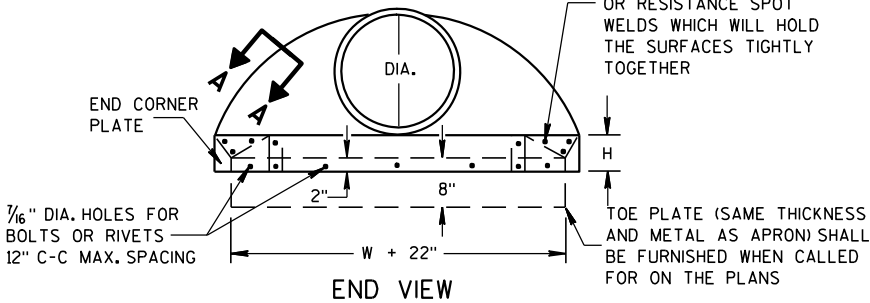
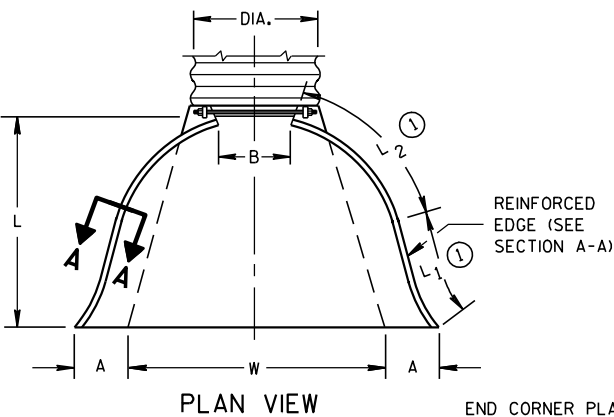
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ENGINEER

FHWA

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3	3 Pc.

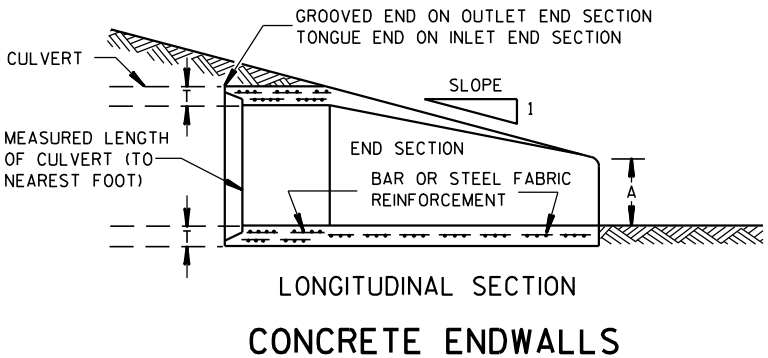
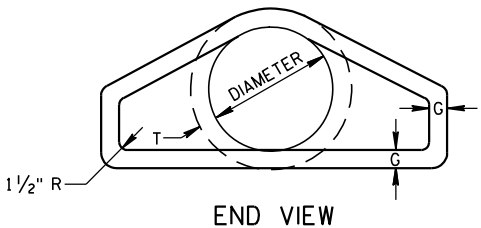
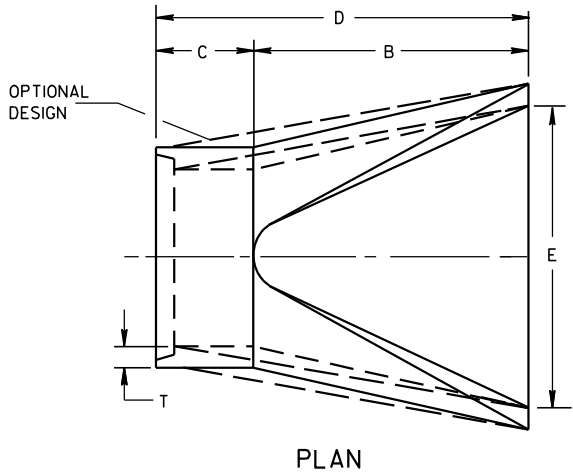
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



METAL ENDWALLS

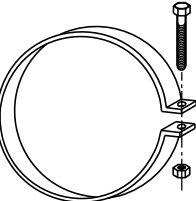
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4	98 1/4	90	5 1/2	2 1/2 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

* MINIMUM
** MAXIMUM

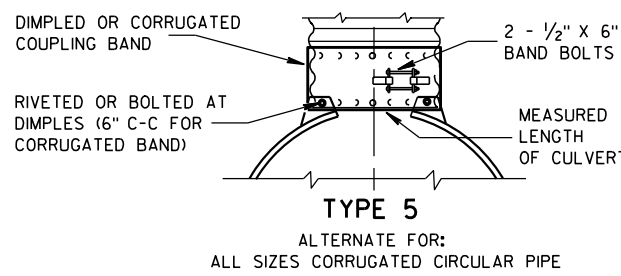
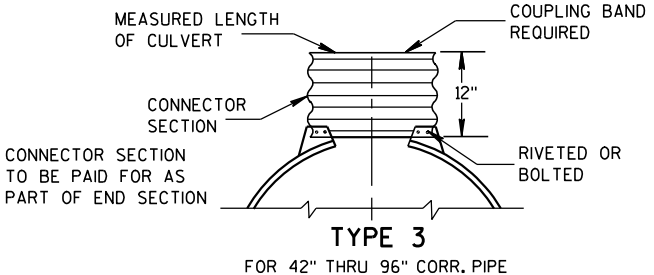
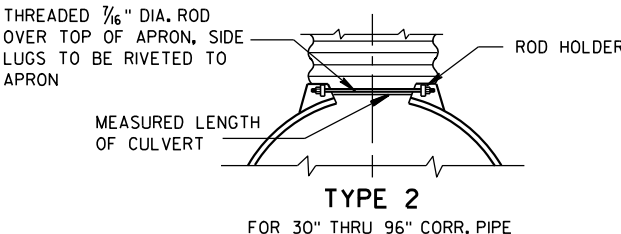
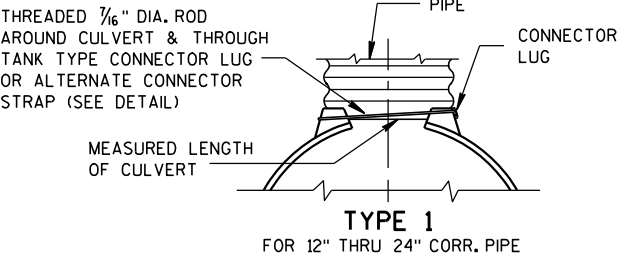


CONCRETE ENDWALLS

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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



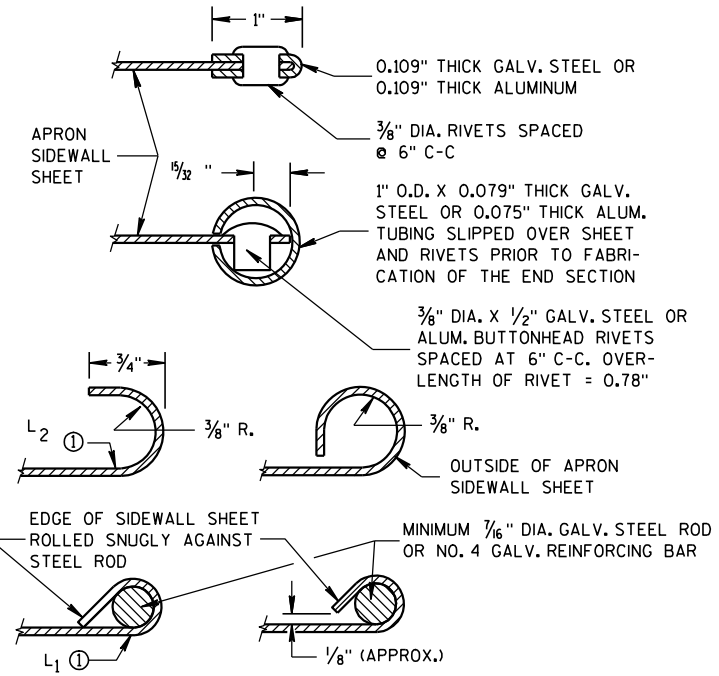
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

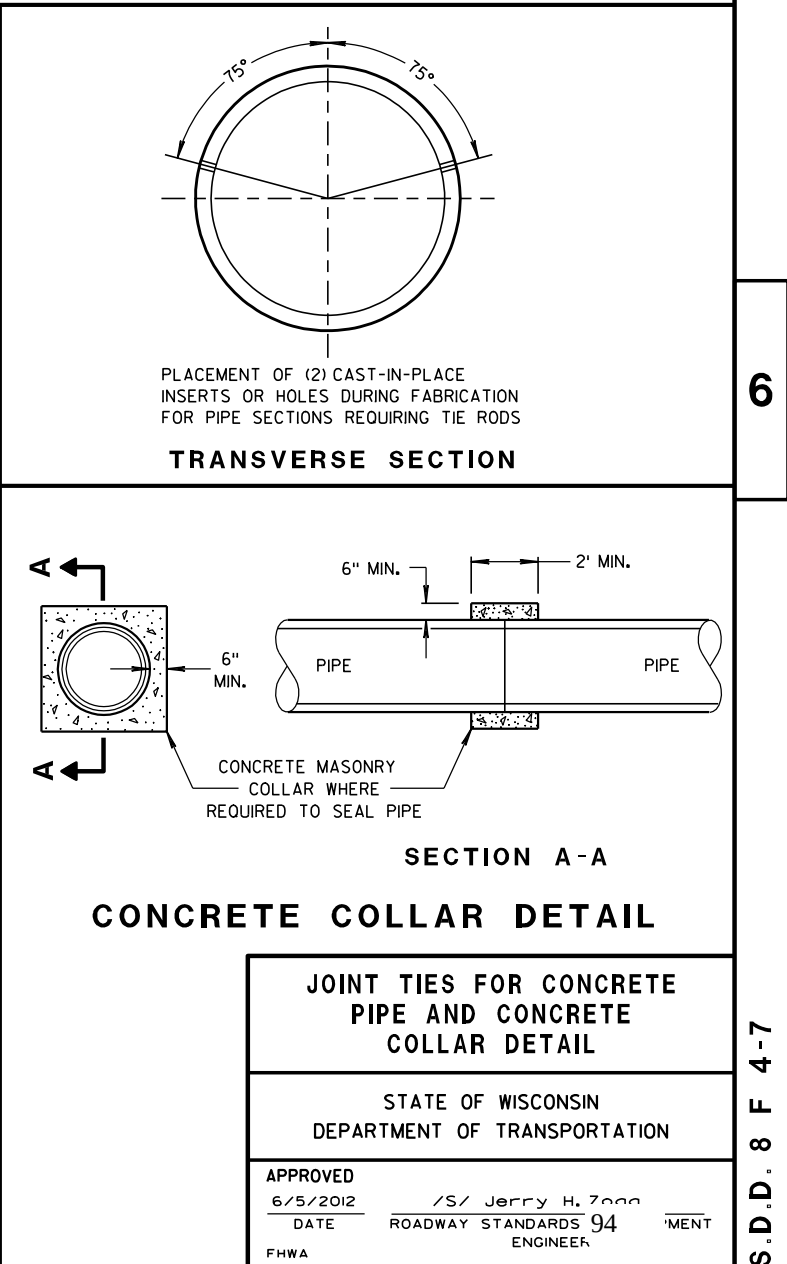
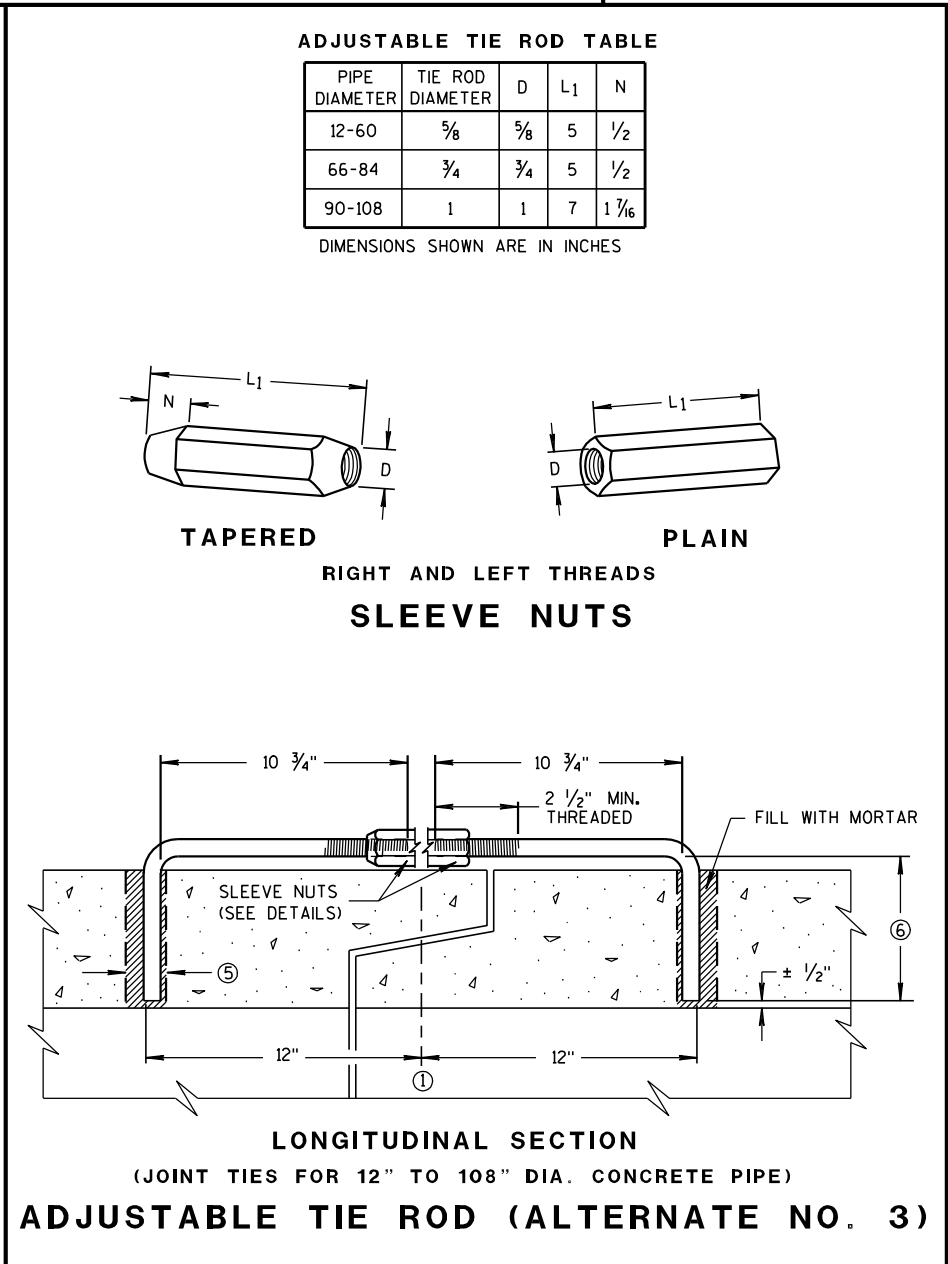
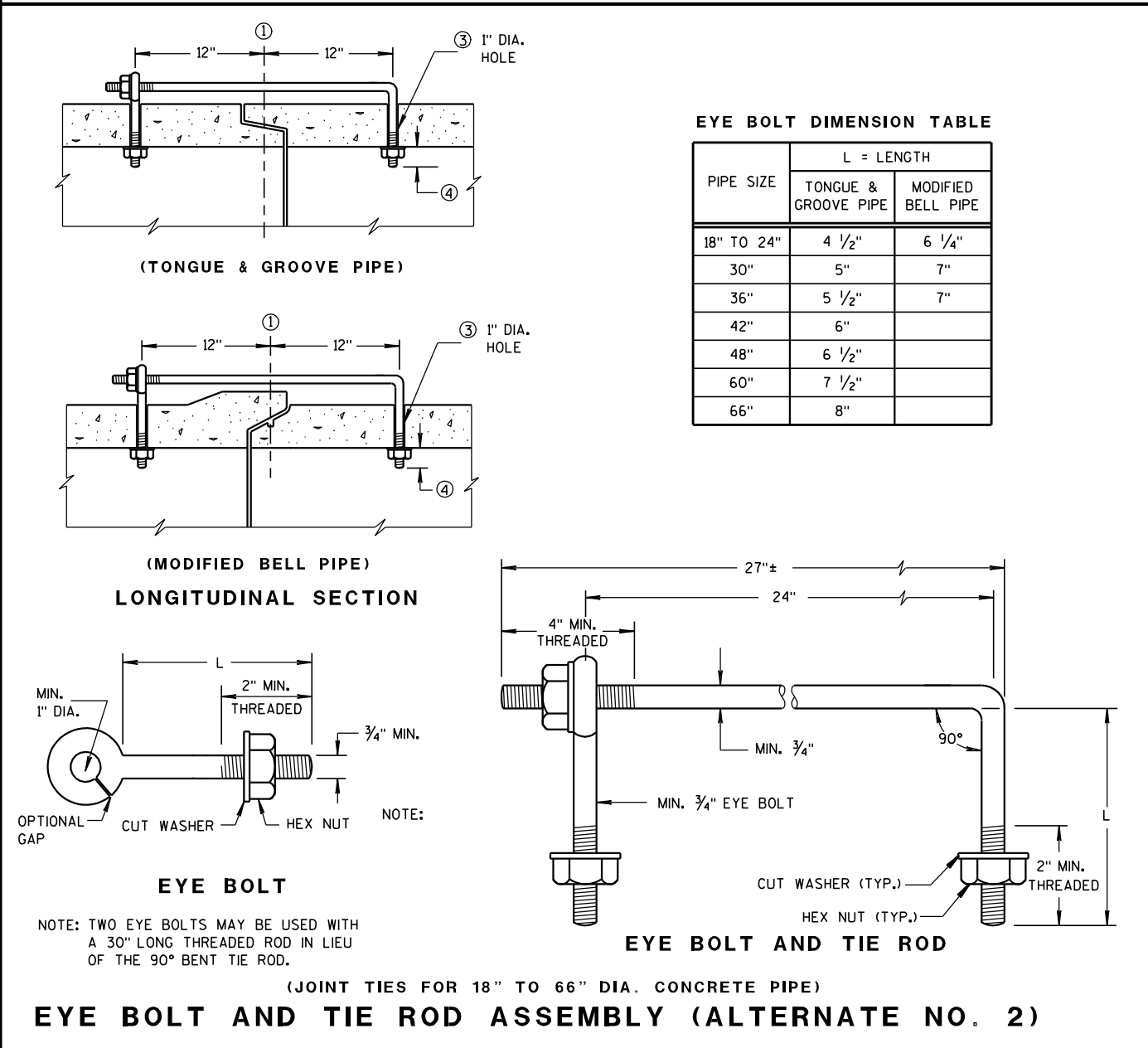
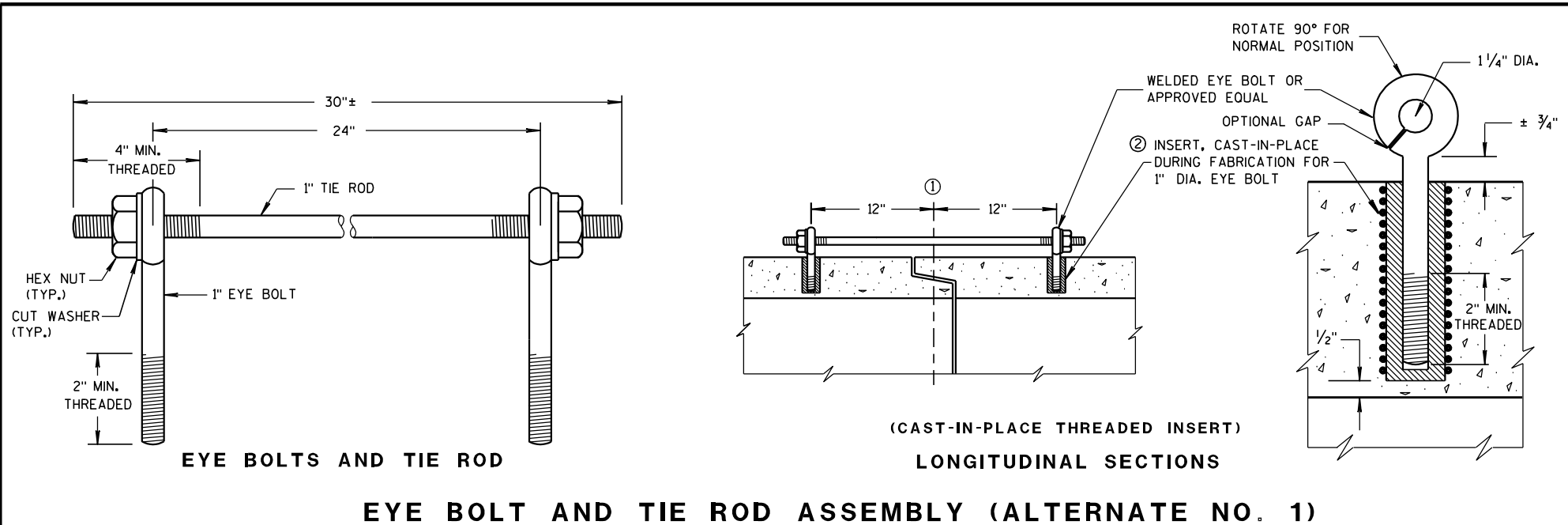
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

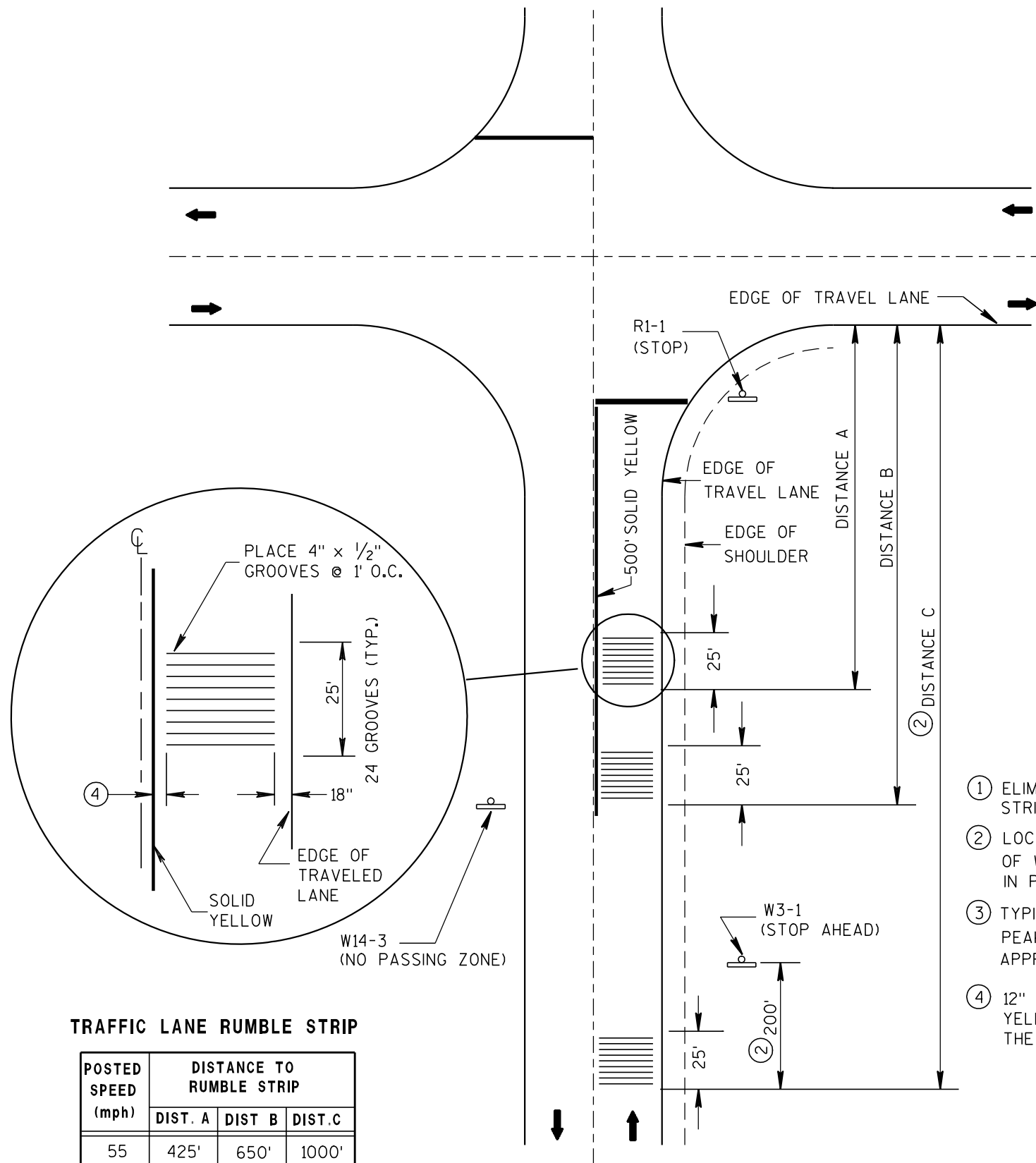
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinehart CHIEF ROADWAY DEVELOP	93	NEER
FHWA			





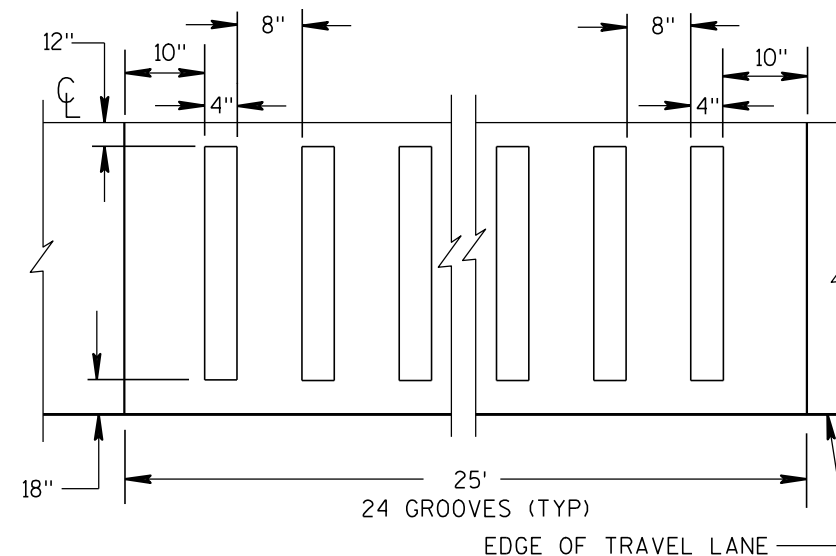
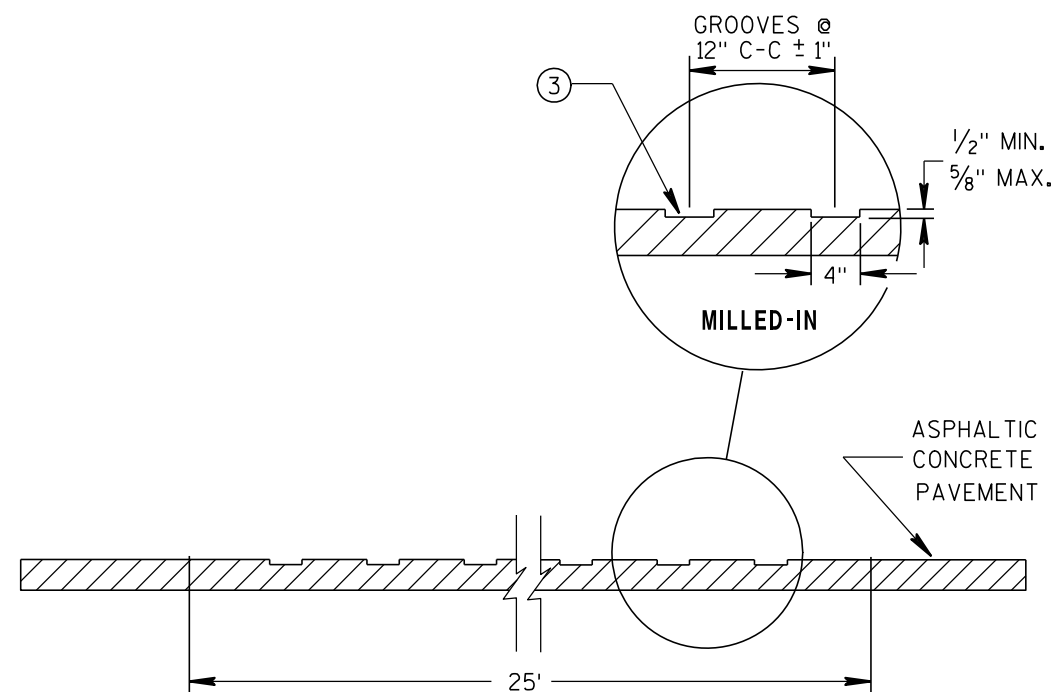
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY $\frac{1}{16}$ "
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011

DATE

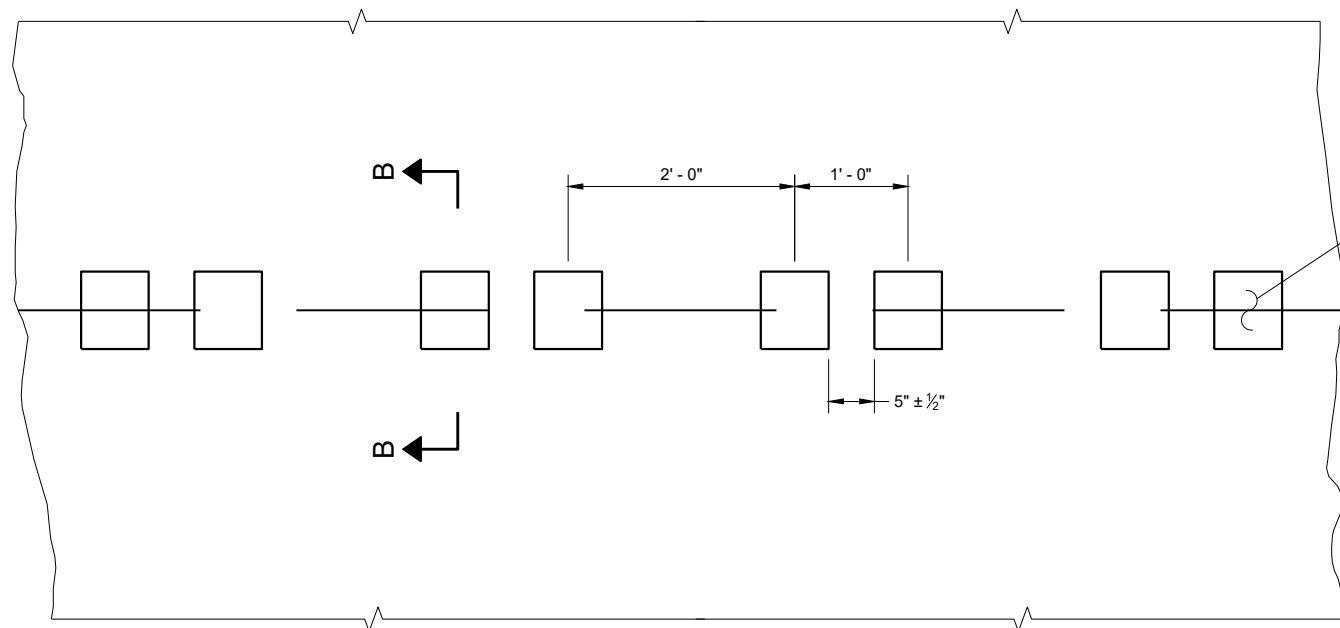
FHWA

/s/ Jerry H. Zogg

ROADWAY STANDARDS 195

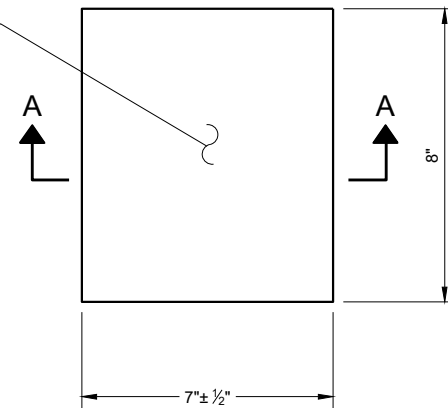
ENGINEER

ENT



PLAN VIEW
SHOULDER WITH GROOVES

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

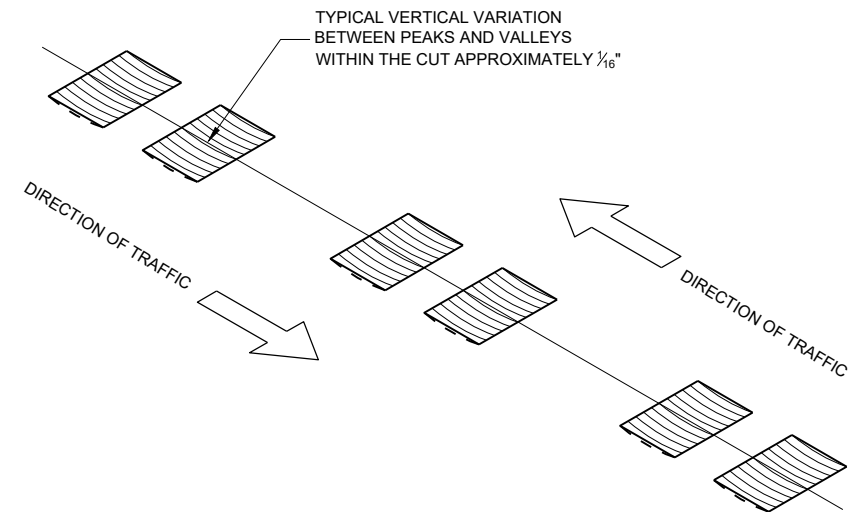
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

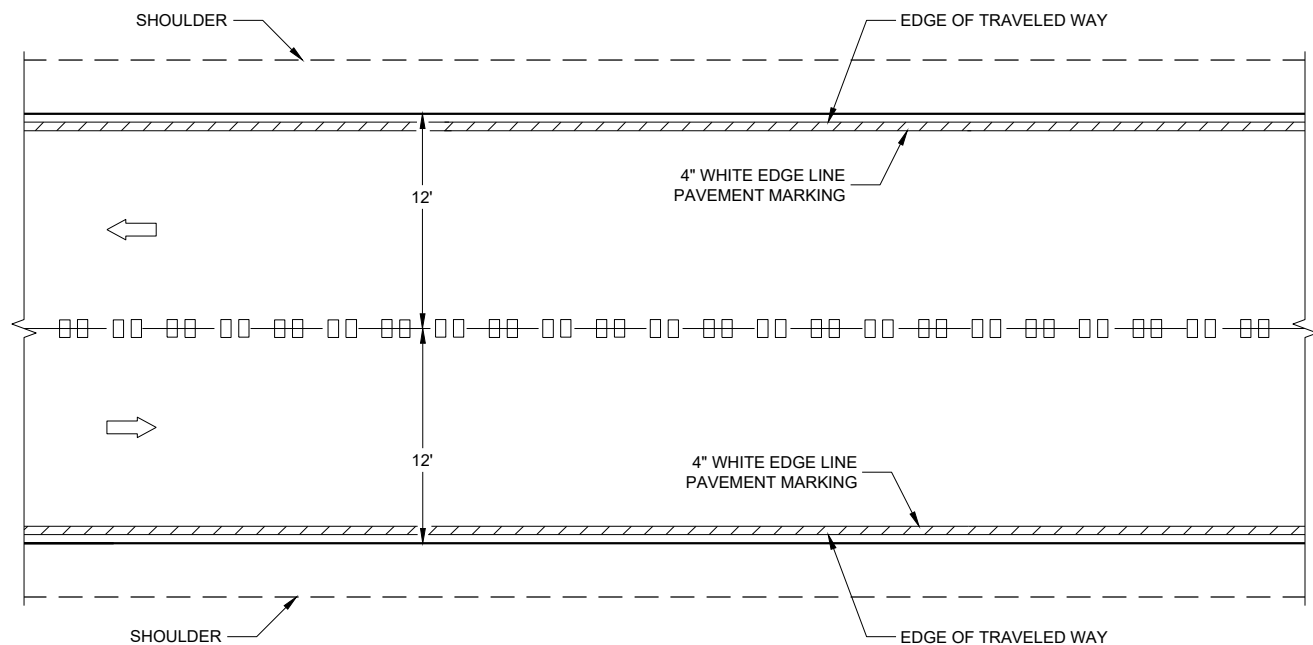
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

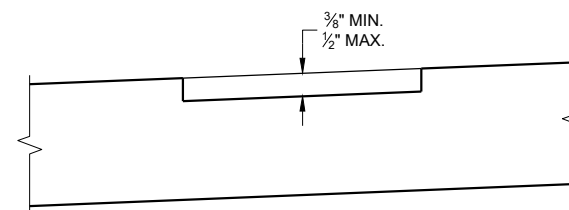
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



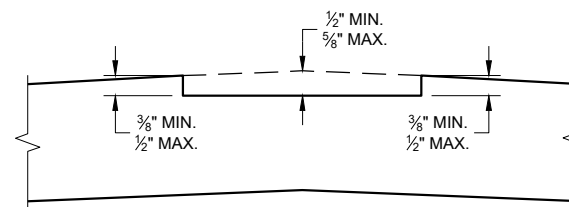
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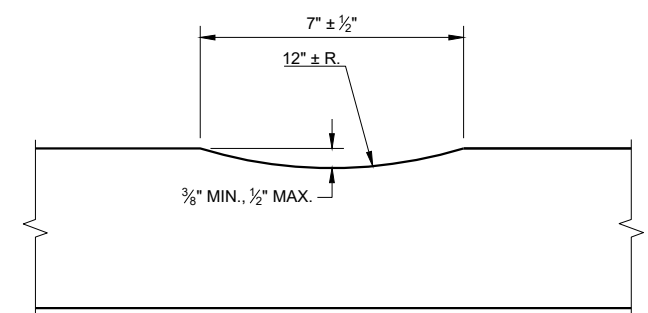
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



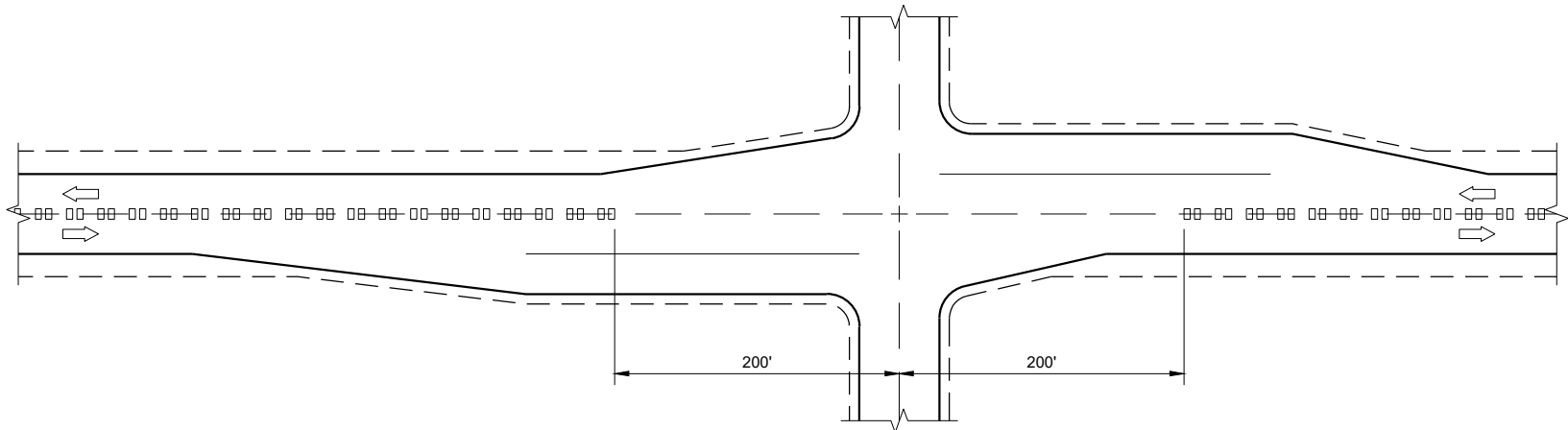
SECTION B - B
CROWNED ROADWAY



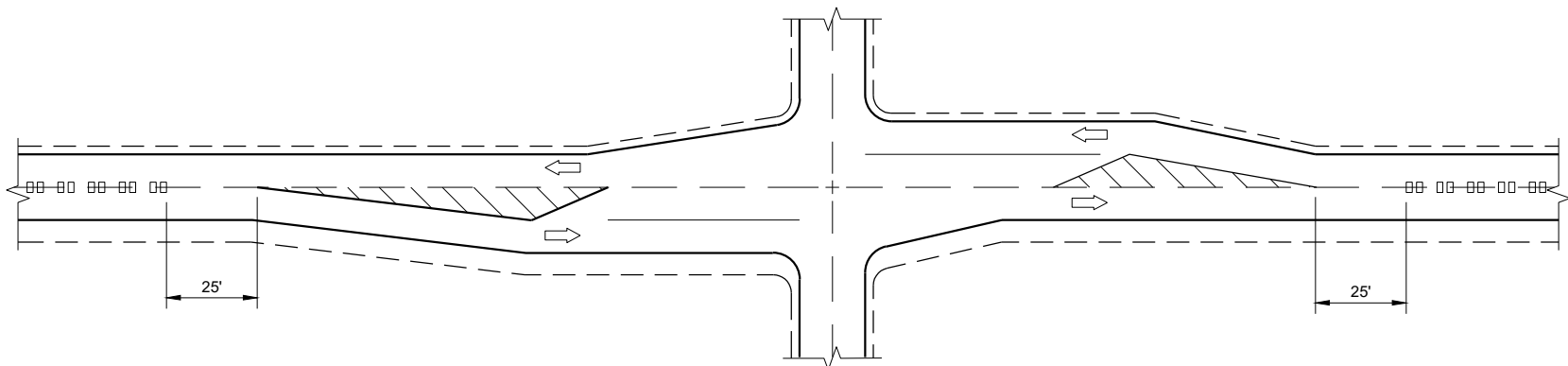
SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

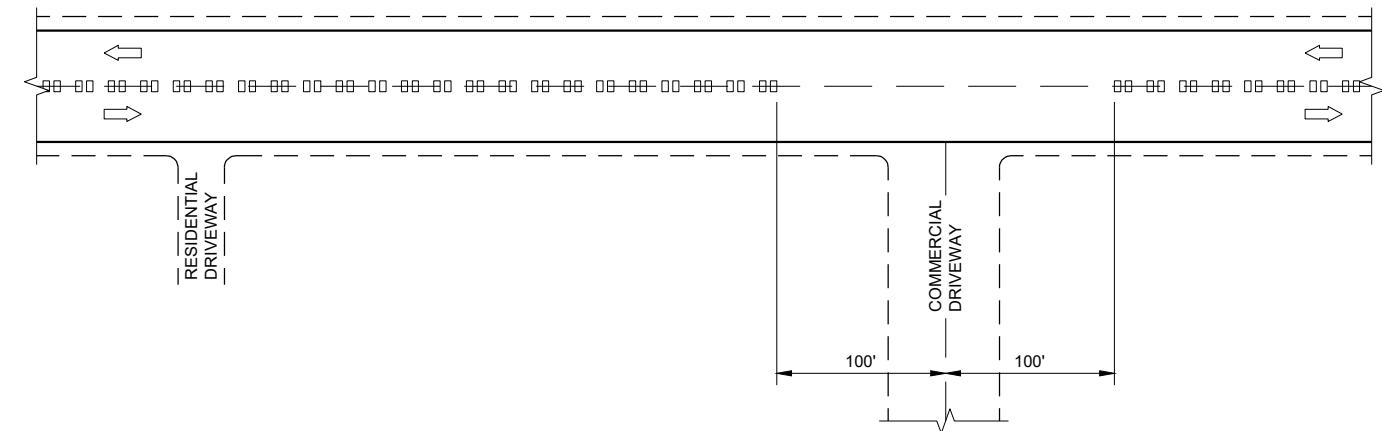
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 196



CENTERLINE GROOVES AT INTERSECTIONS



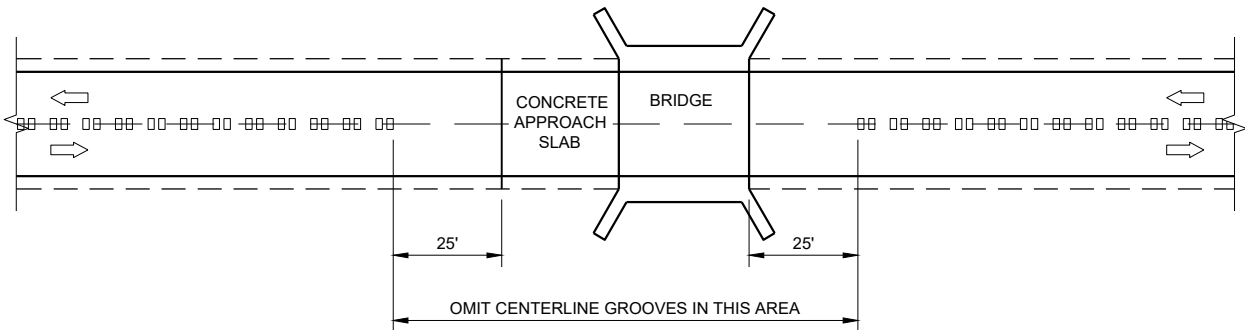
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



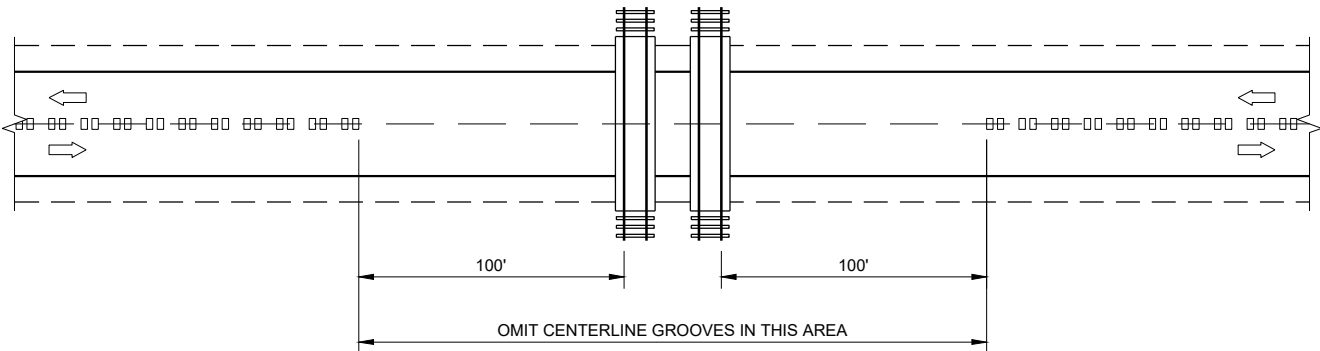
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



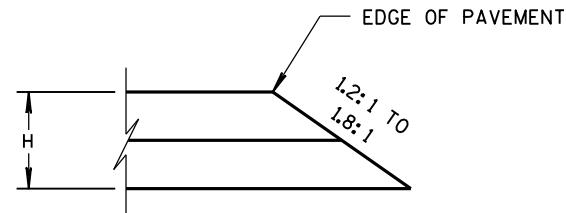
CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

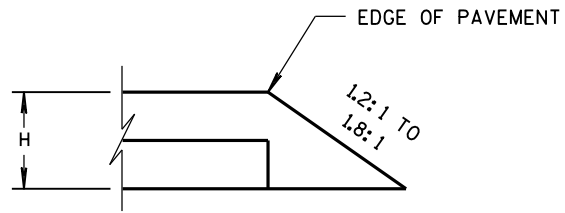
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

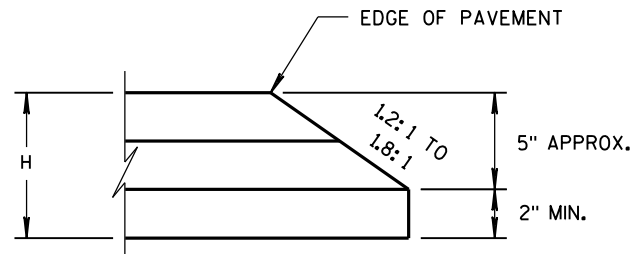
FHWA



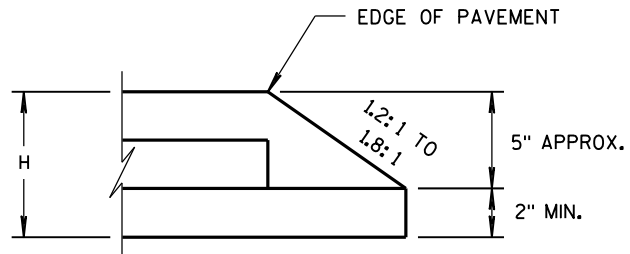
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

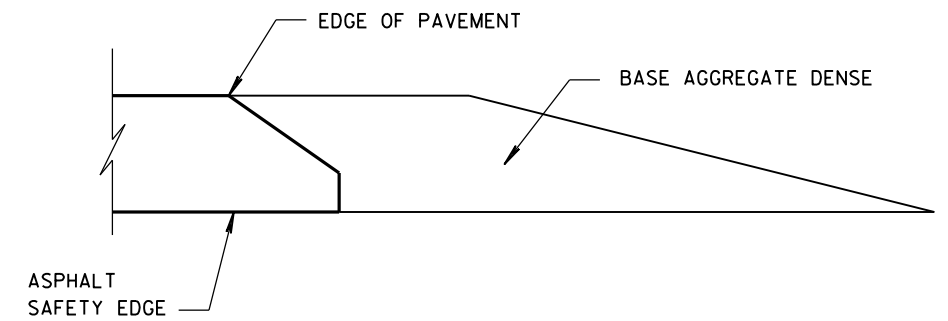


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

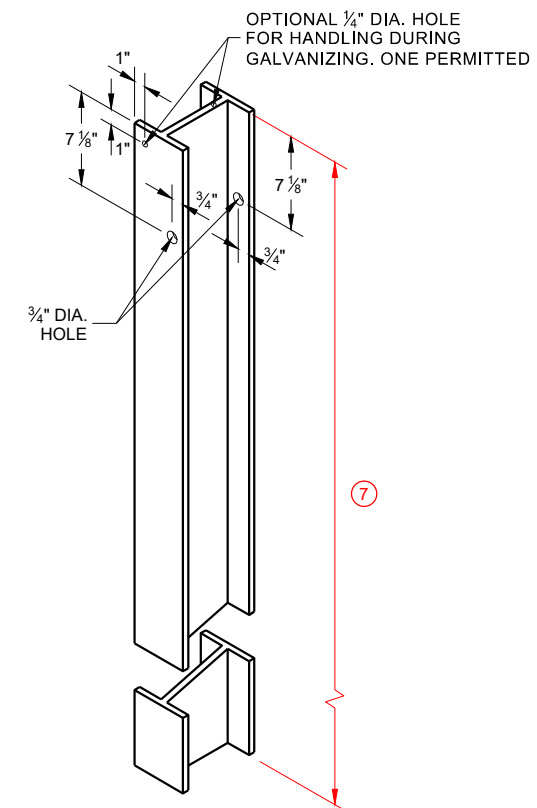
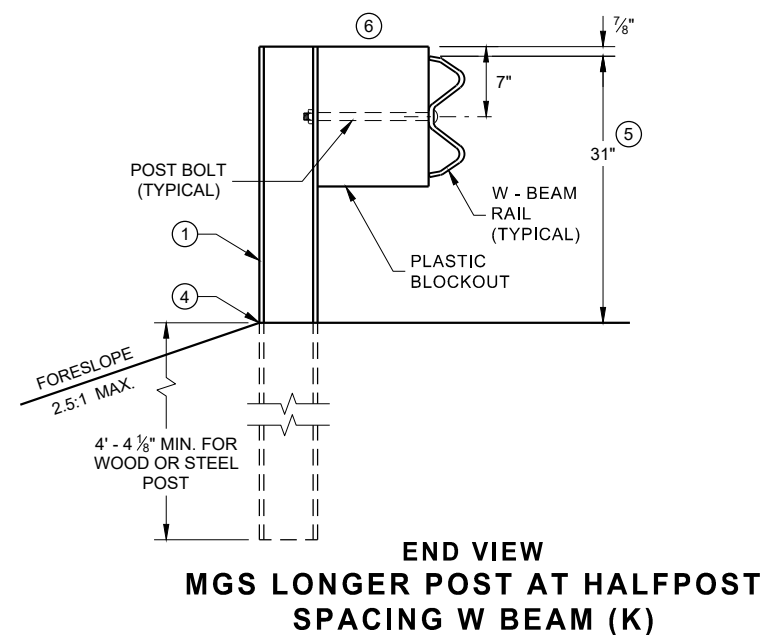
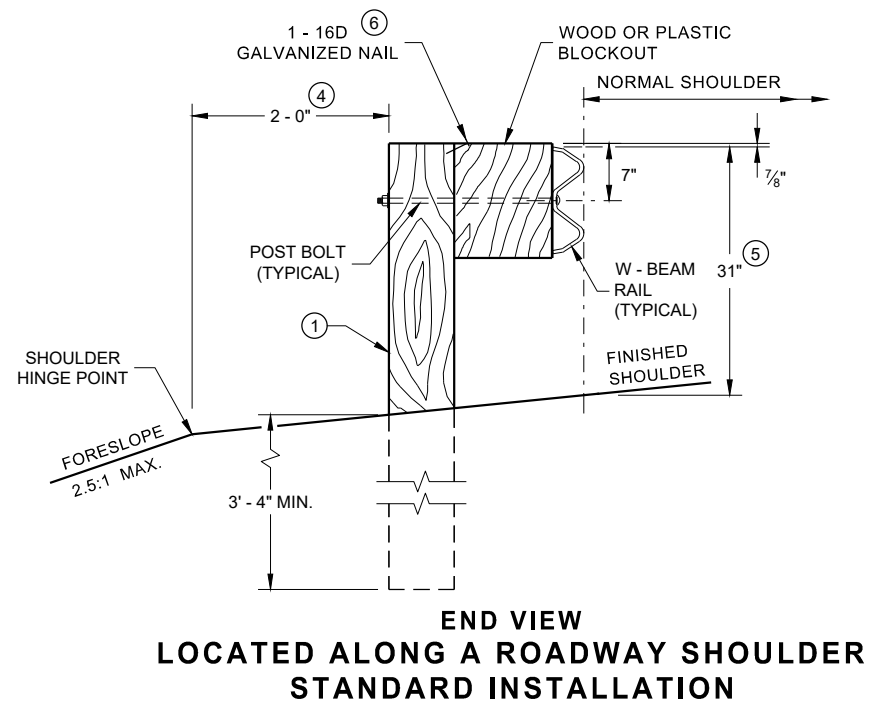
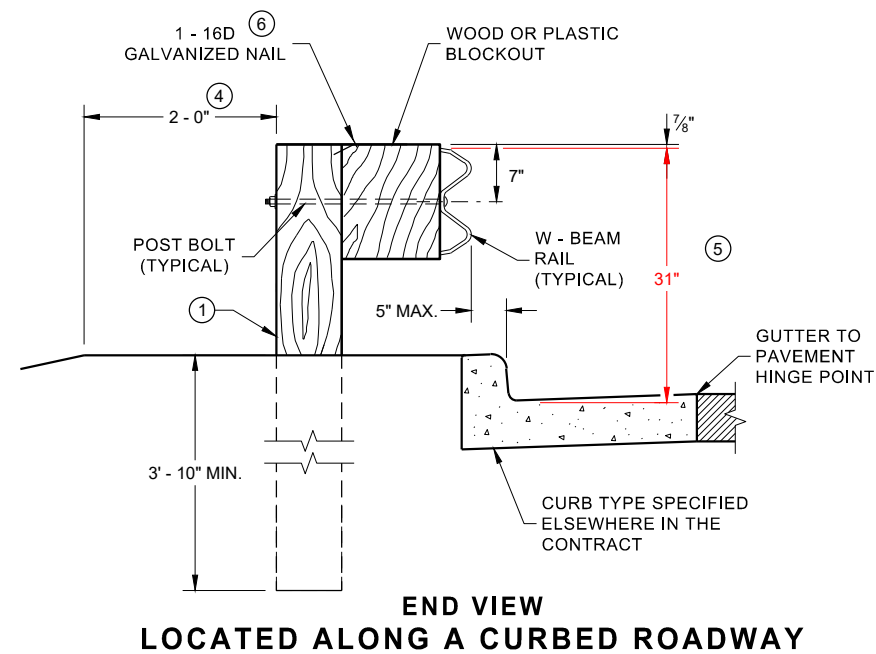
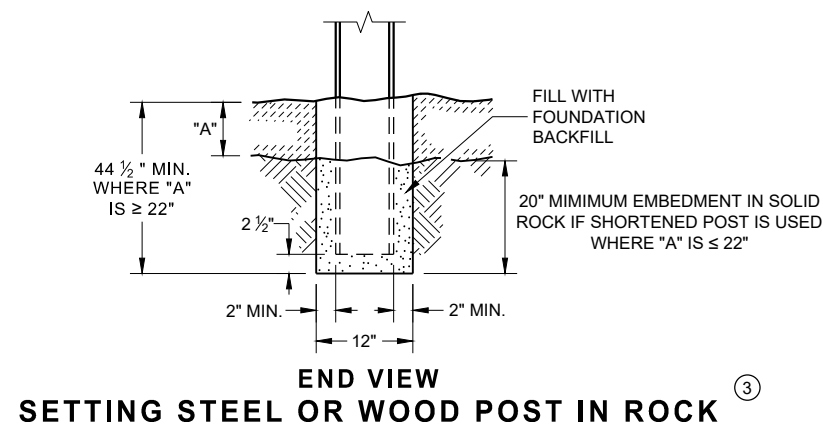
11/30/2012
DATE

FHWA

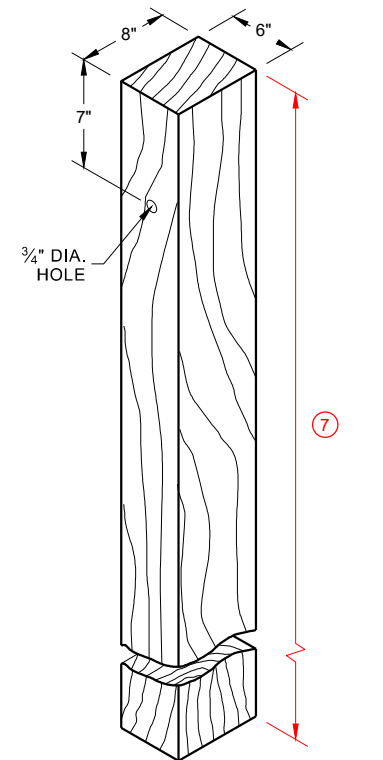
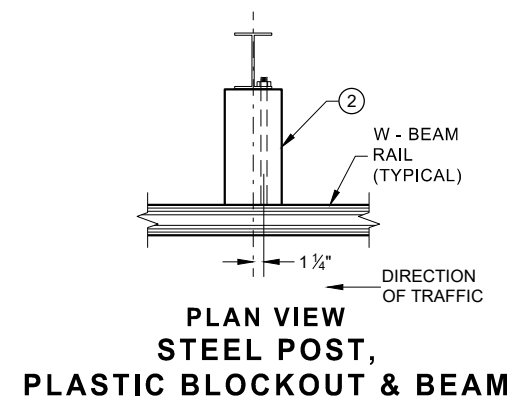
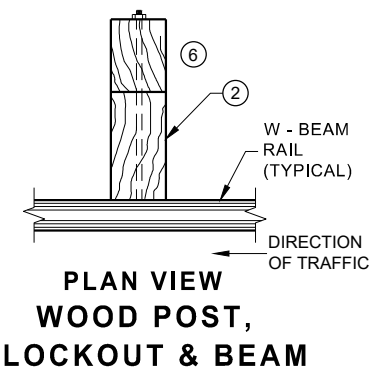
/s/ Jerry H. Zogg
ROADWAY STANDARDS
ENGINEER

ENT

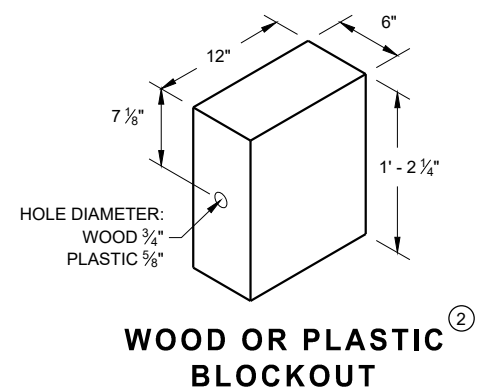
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 $\frac{3}{4}"$ TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- ⑦ TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



**STEEL POST & HOLE
PUNCHING DETAIL
(W 6 X 9) ①**

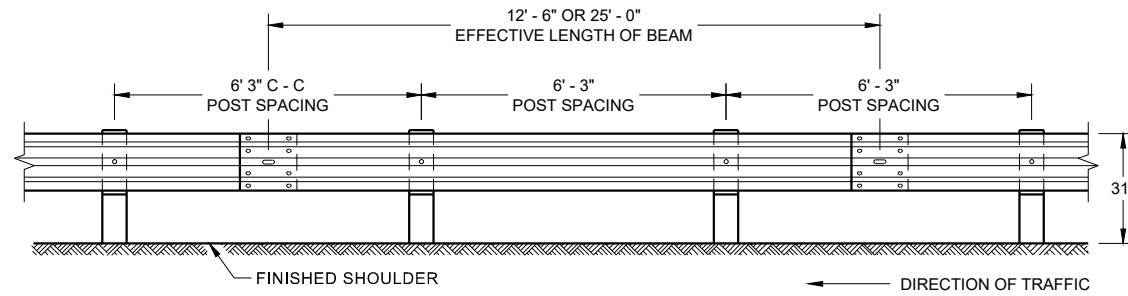


WOOD POST (6" X 8") NOMINAL ⁽¹⁾

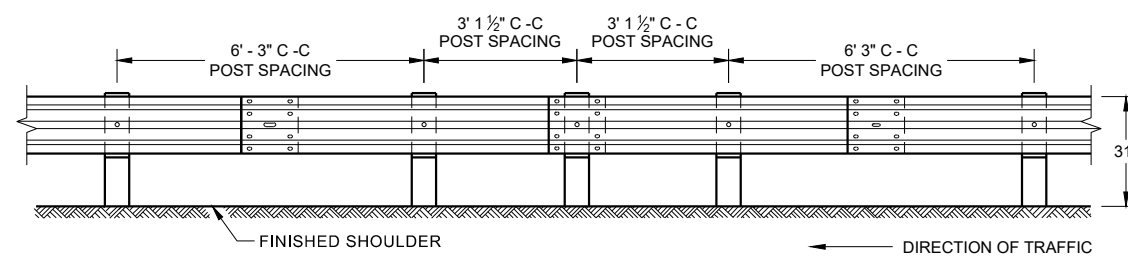


MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

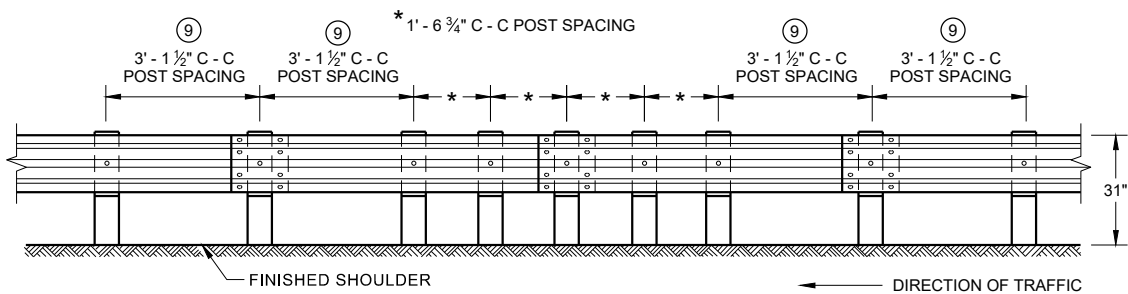
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 199



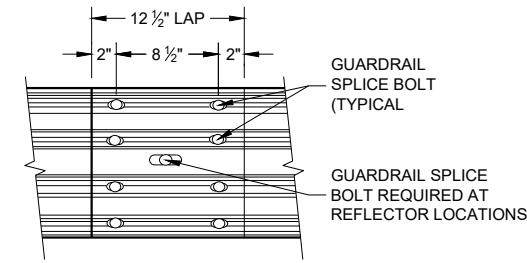
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



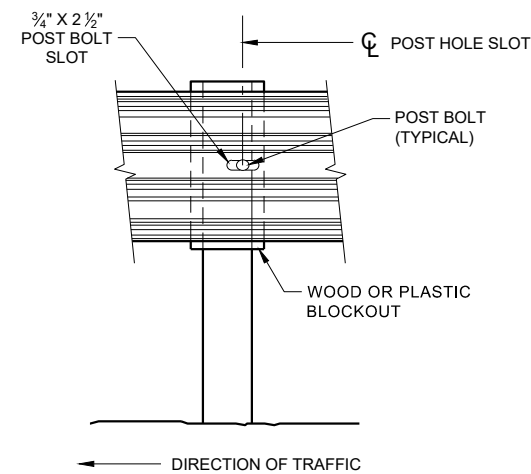
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



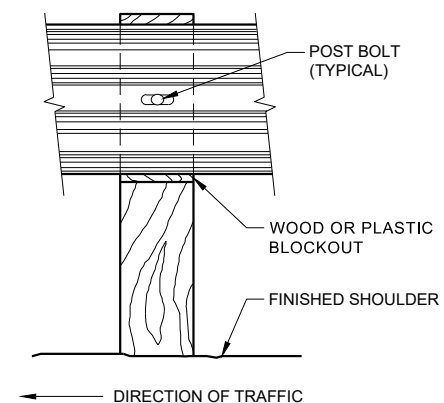
**FRONT VIEW
QUARTER POST SPACING (QS)**



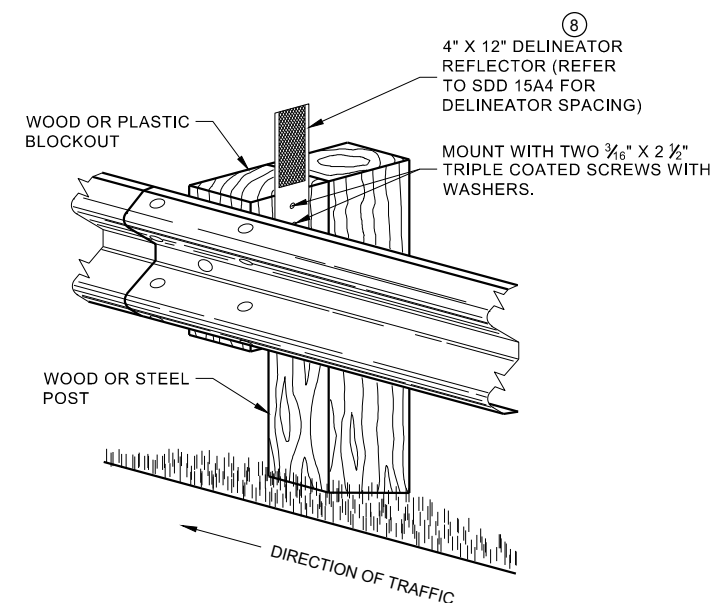
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



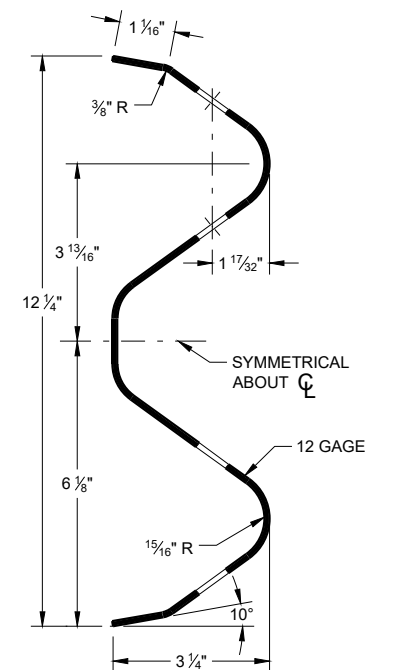
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
- ⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/4" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

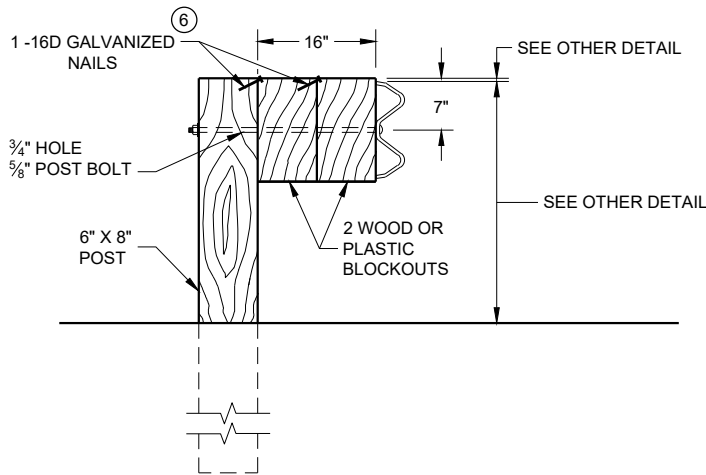
GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

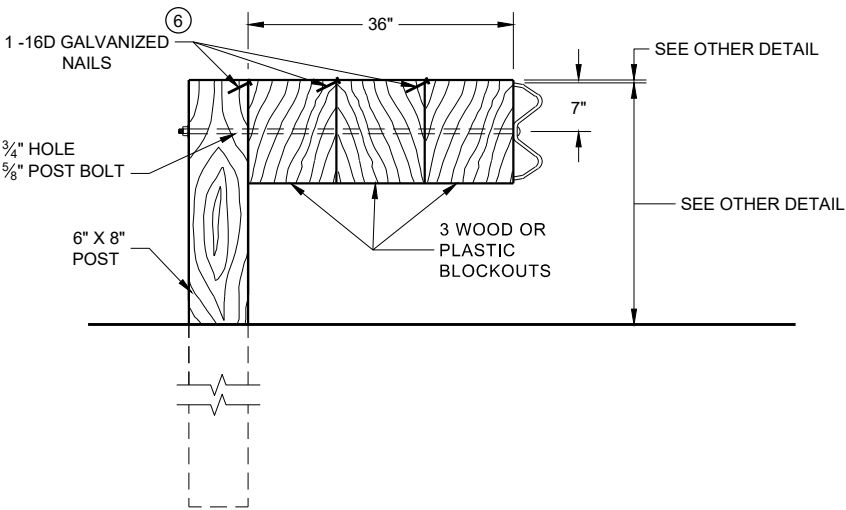
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

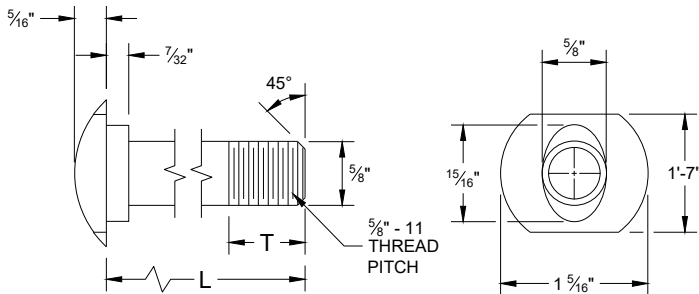
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



DETAIL FOR 36" BLOCKOUT DEPTH

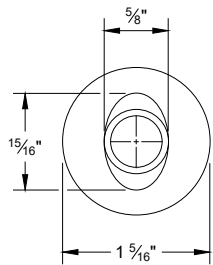
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

- NOTE:
- 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
 - 2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

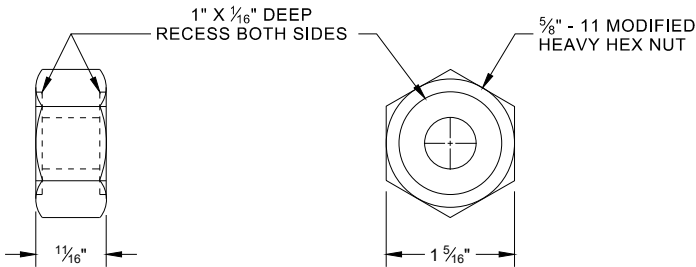


POST BOLT TABLE

L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

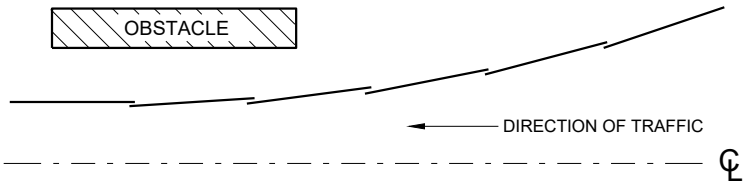


ALTERNATE BOLT HEAD

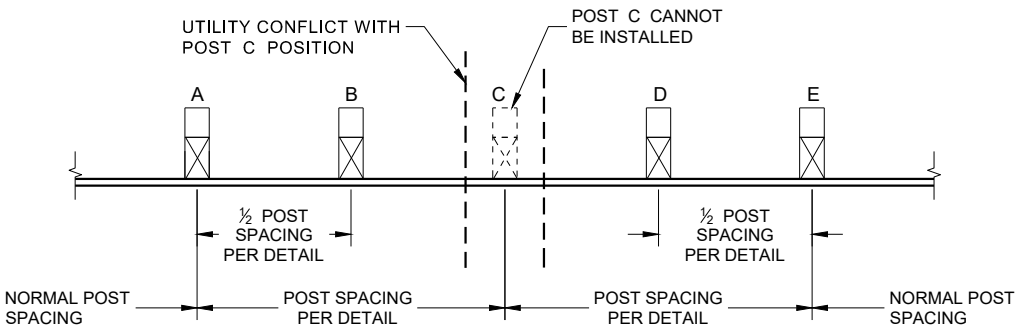


POST BOLT, SPLICE BOLT AND RECESS NUT

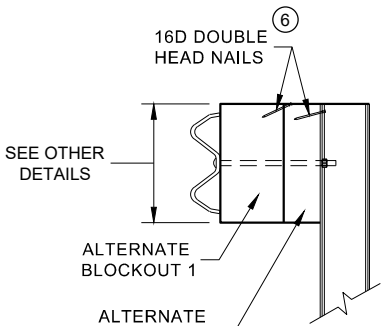
- 6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



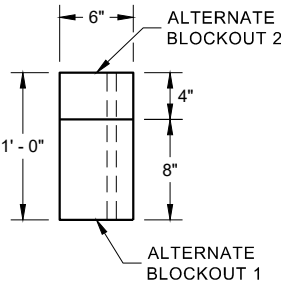
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW

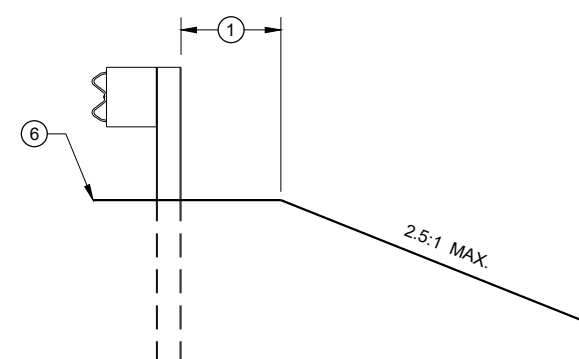
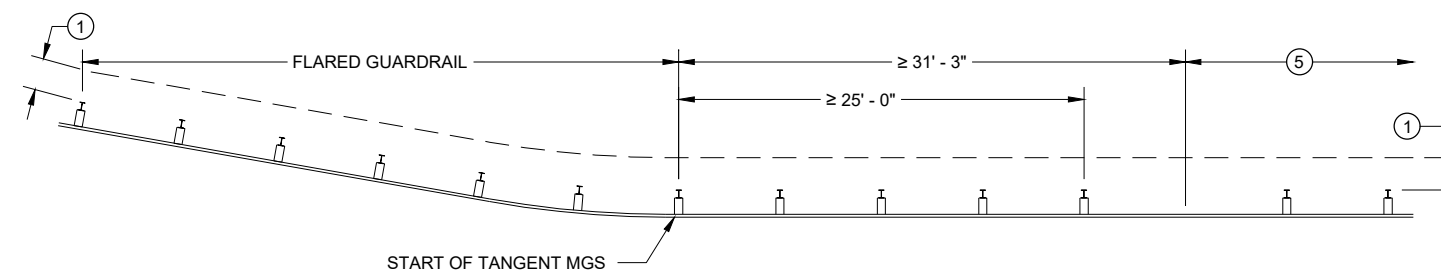
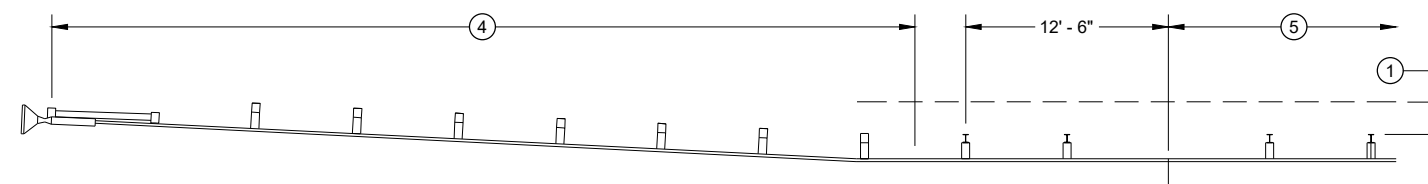
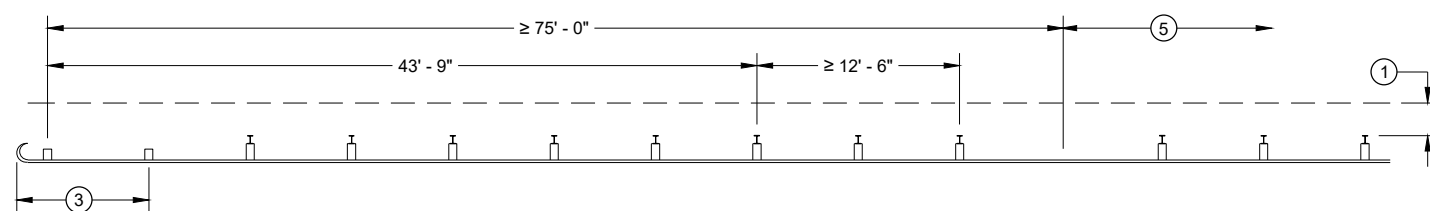
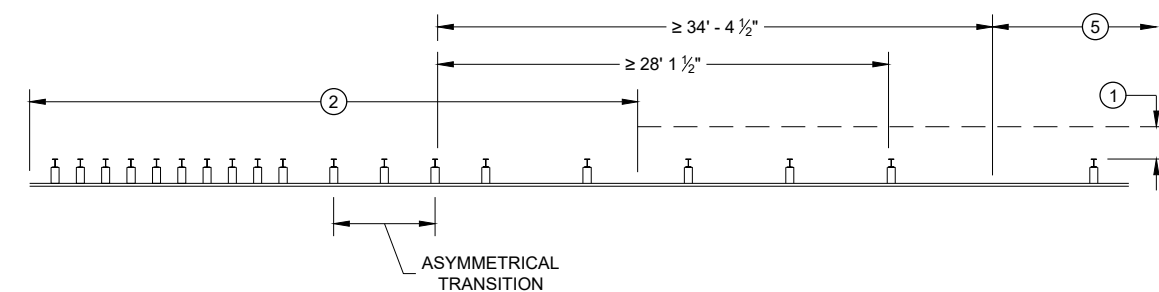
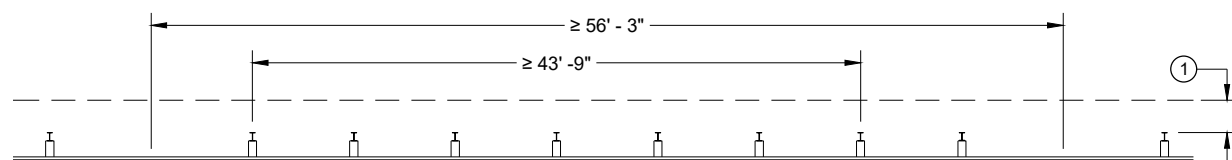


PLAN VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 101



- ① MINIMUM OF 2 FEET OF GRADING BEHIND POST.
- ② SEE SDD 14B45 FOR MORE DETAILS.
- ③ SEE SDD 14B47 FOR MORE DETAILS.
- ④ SEE SDD 14B44 FOR MORE DETAILS.
- ⑤ SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
- ⑥ SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>7/2018</u> DATE	<u>/S/ Rodney Taylor</u> ROADWAY STANDARDS DEVE UNIT SUPERVISOR

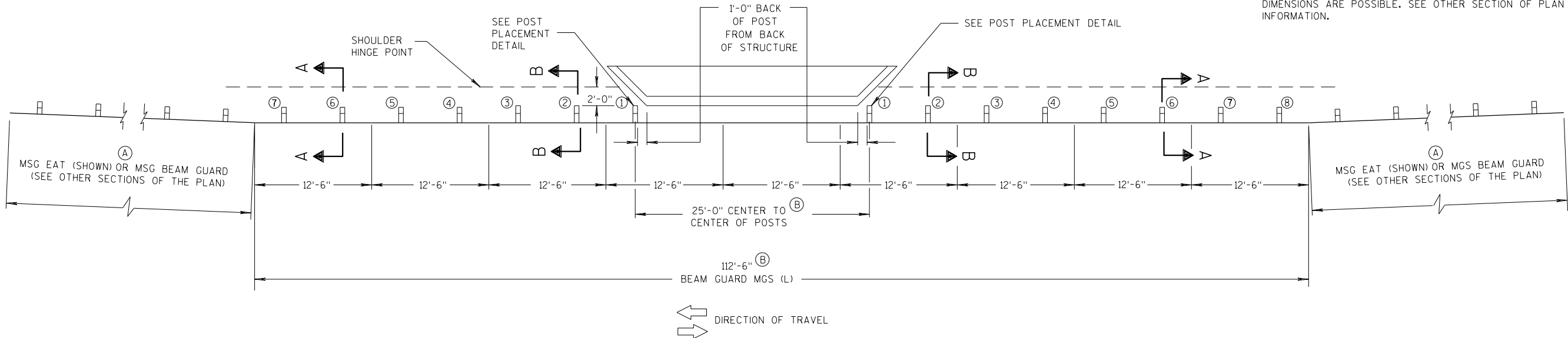
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

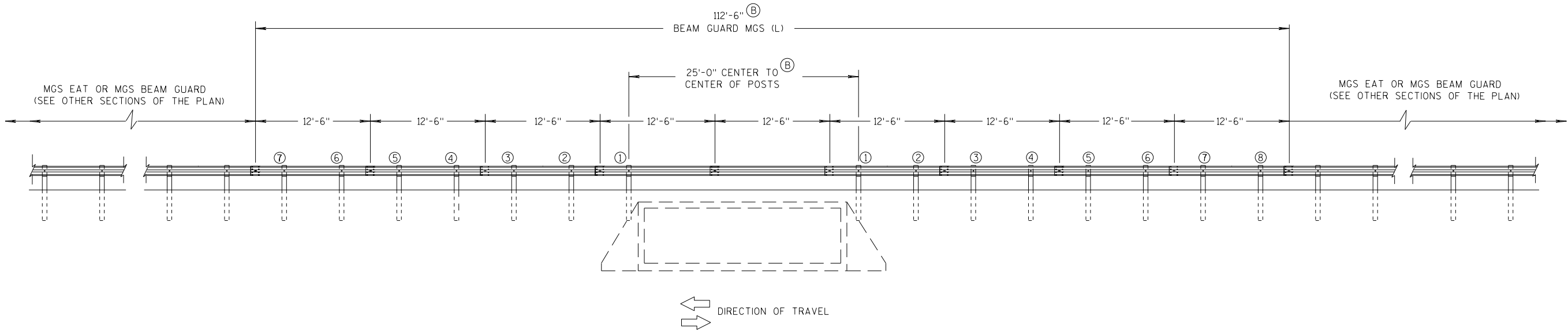
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN, IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

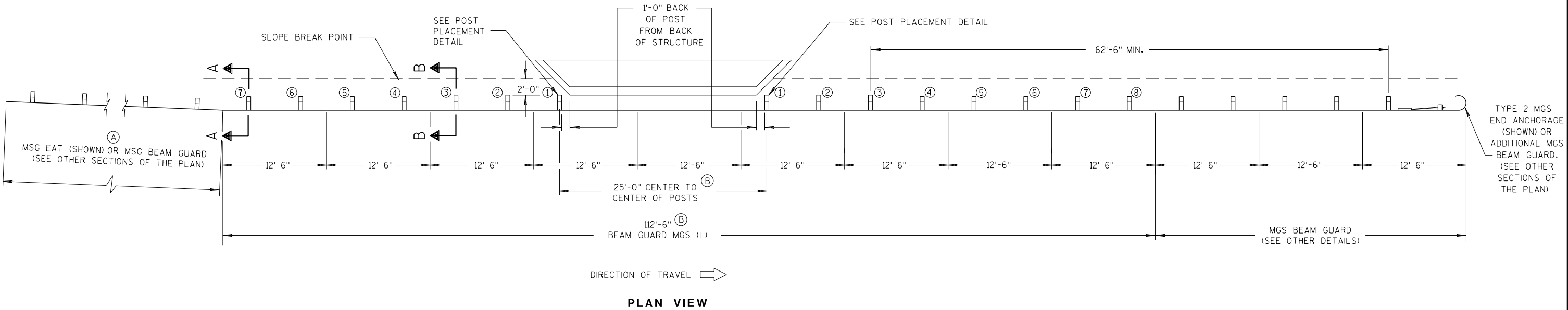
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

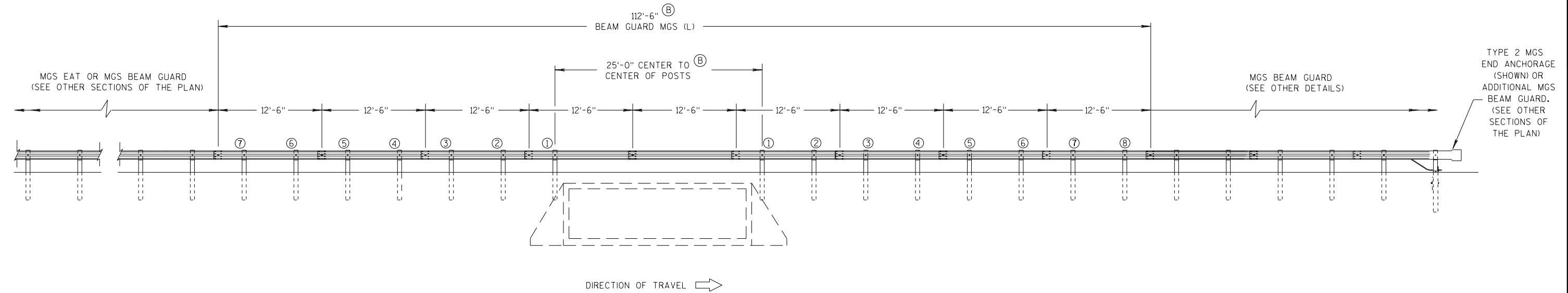
POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

SEE SDD 14 B 42 FOR MORE DETAILS.

- (A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.
- (B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW

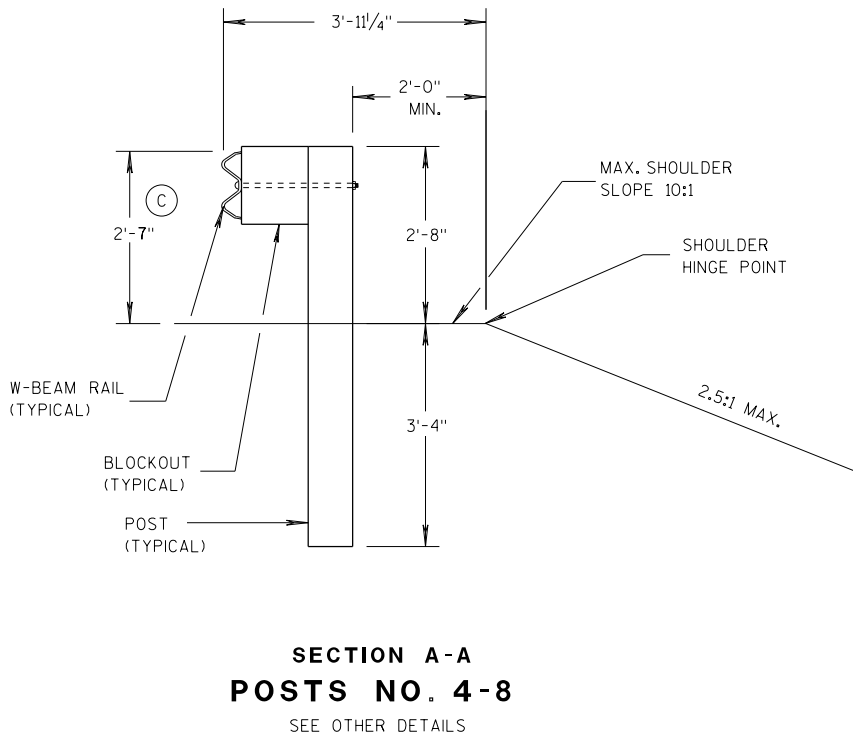
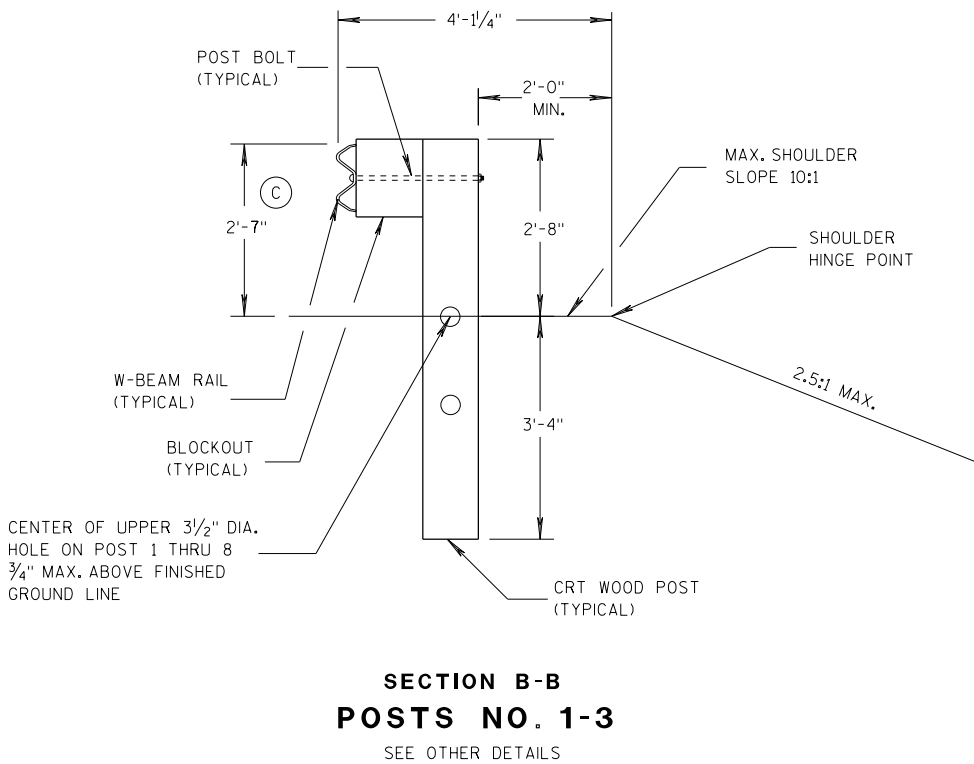
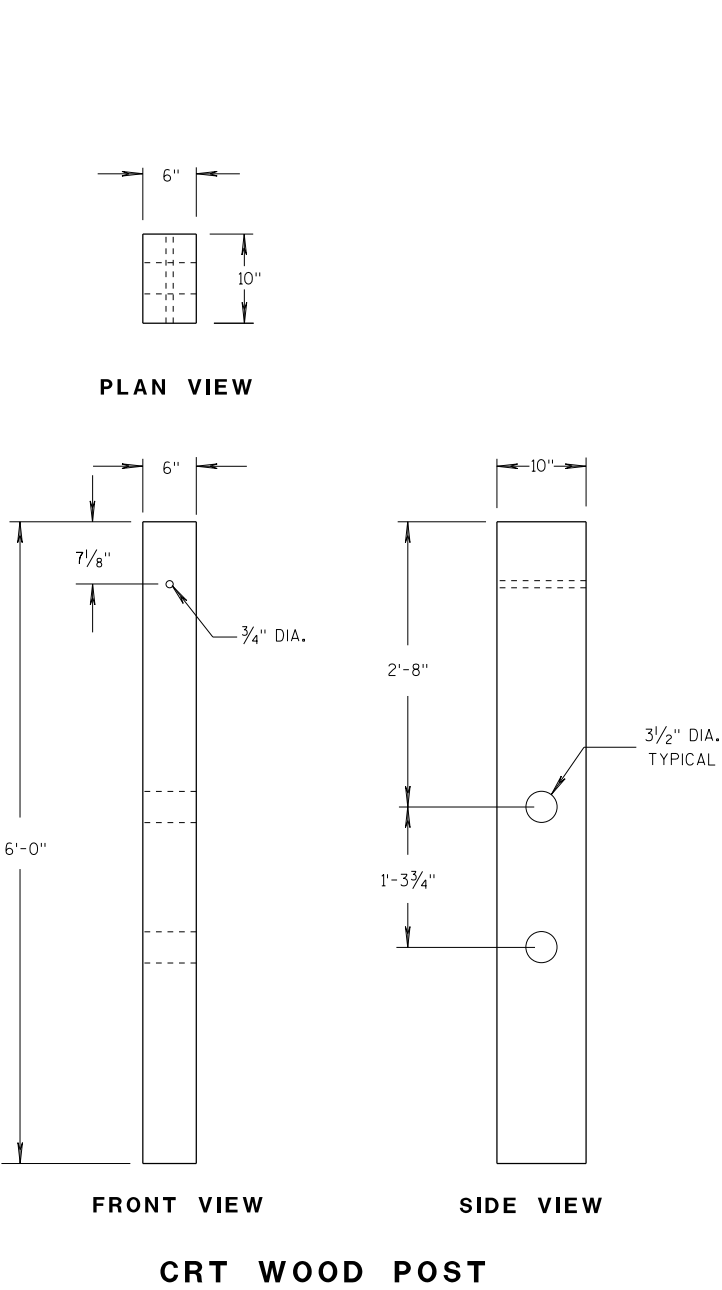


ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

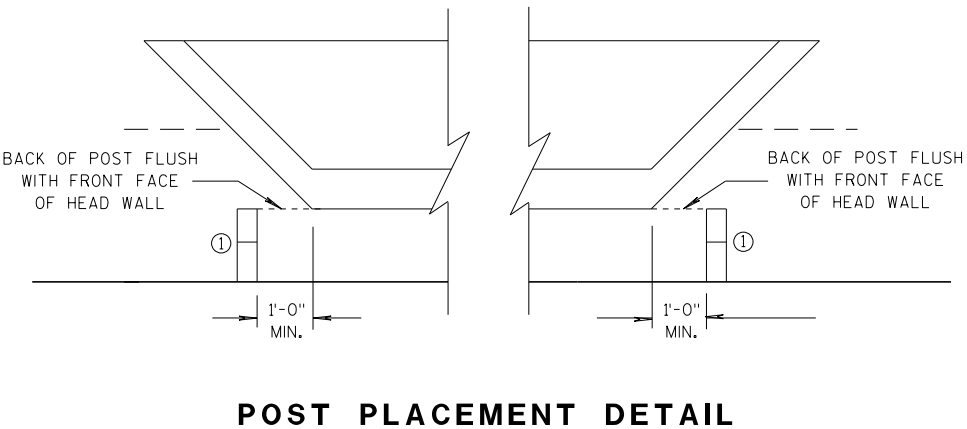
MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



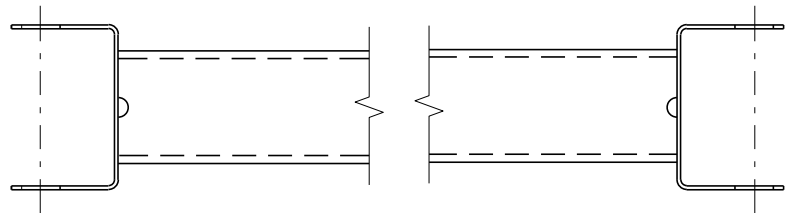
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED			
07/2018	/S/ Rodney Taylor		
DATE	ROADWAY STANDARDS D 105	NT	
FHWA	ENGINEER		

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED
- (C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.
- (D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.
- (E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

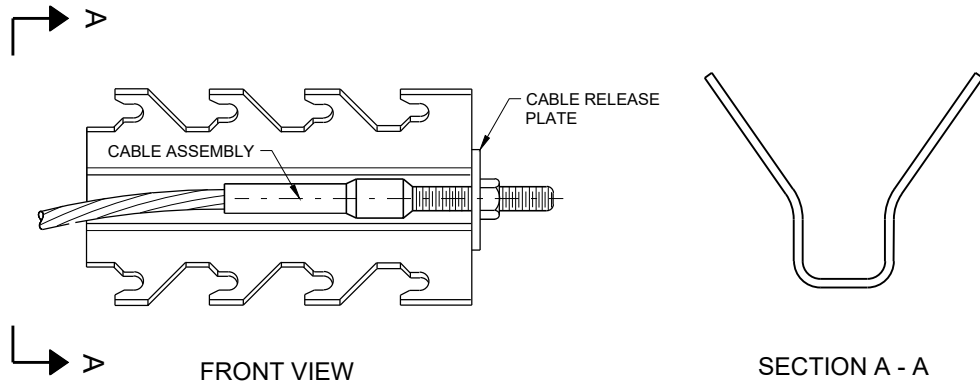
THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 106

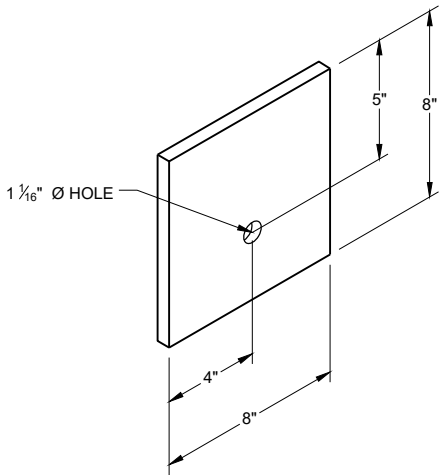


GENERIC GROUND STRUT^⑨ [Ⓔ]

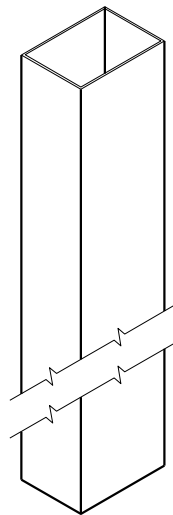
BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



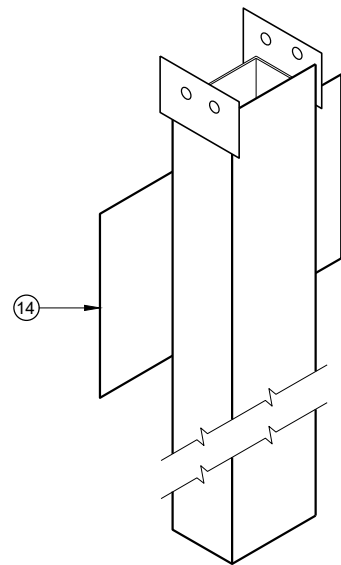
GENERIC ANCHOR CABLE BOX^⑨ [Ⓔ]



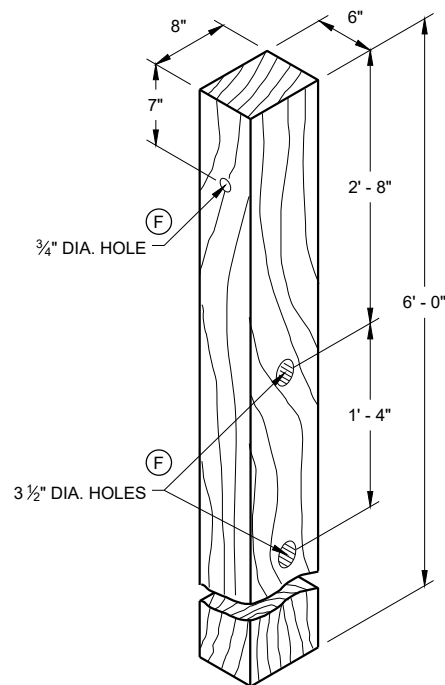
BEARING PLATE^⑥ [Ⓔ]



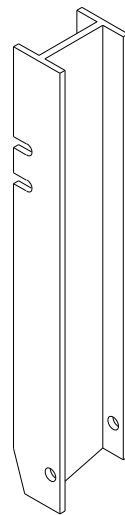
UPPER POST NO. 1 ⁽¹⁾ (E)



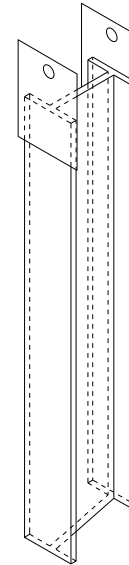
LOWER POST NO. 1 ⁽²⁾ (E)



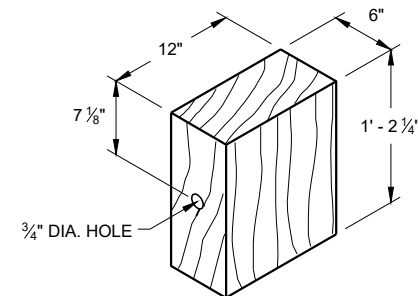
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



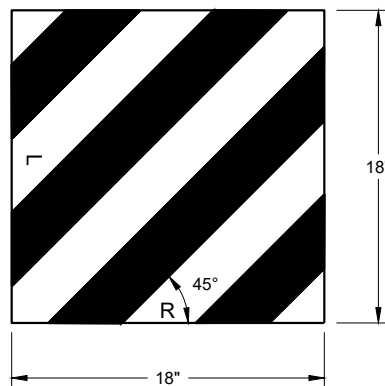
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



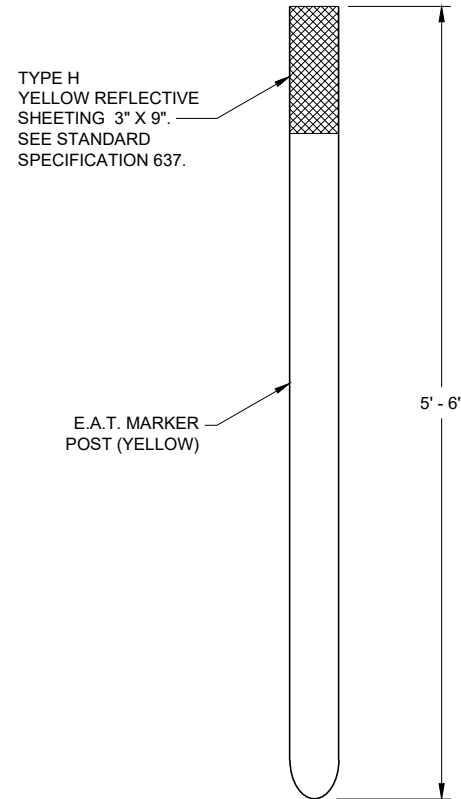
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

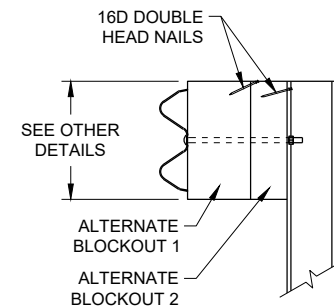


REFLECTIVE SHEETING DETAIL ^(E)



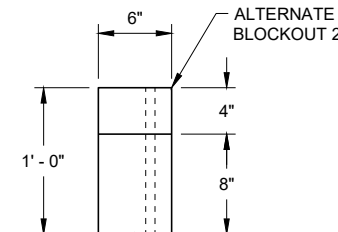
FRONT VIEW SIDE VIEW

E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



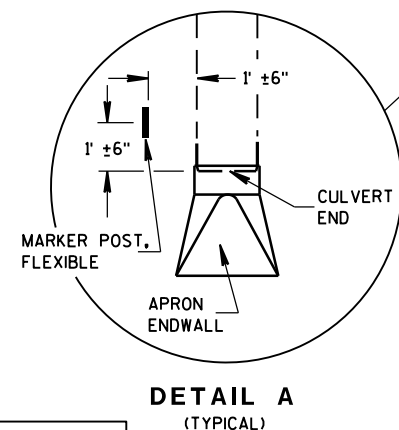
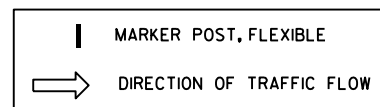
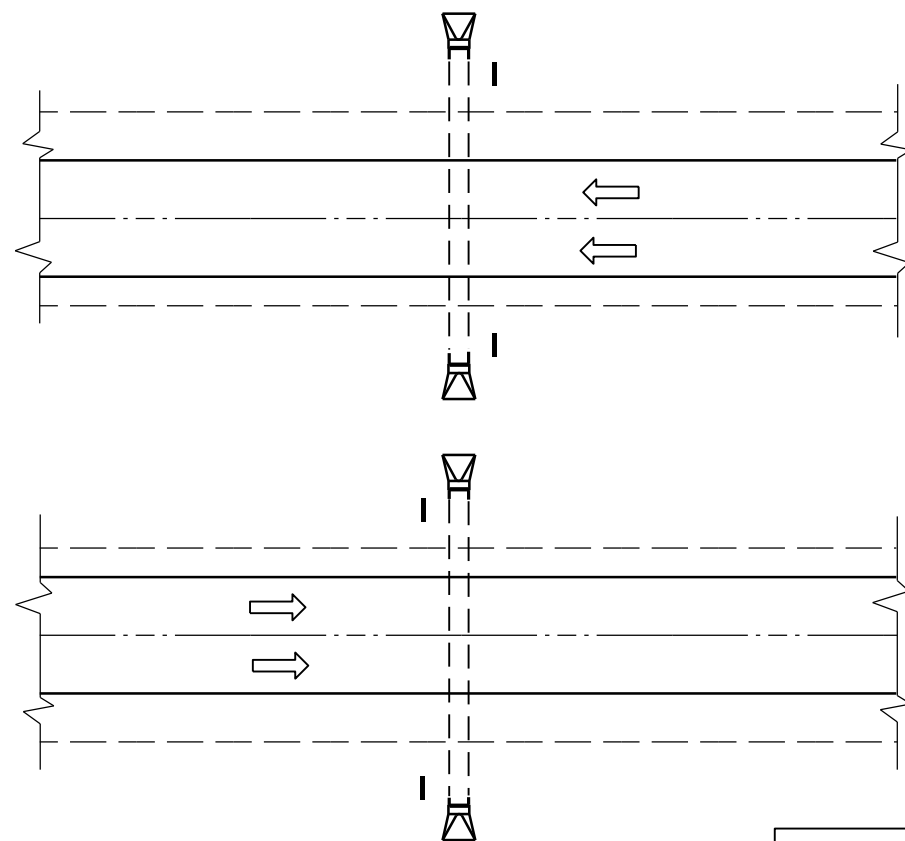
TOP VIEW

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

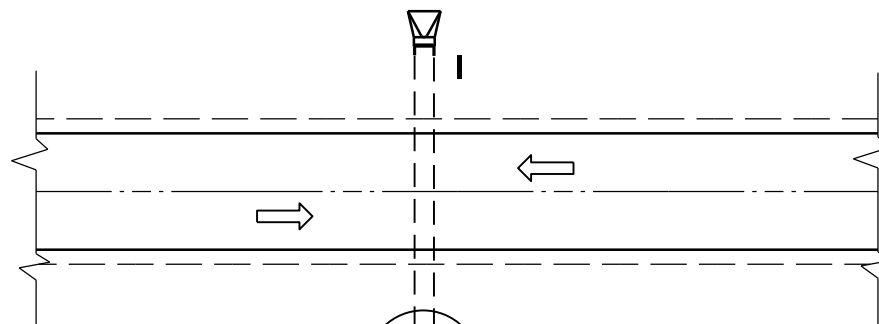
APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR 108
FHWA

PLAN VIEW
DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

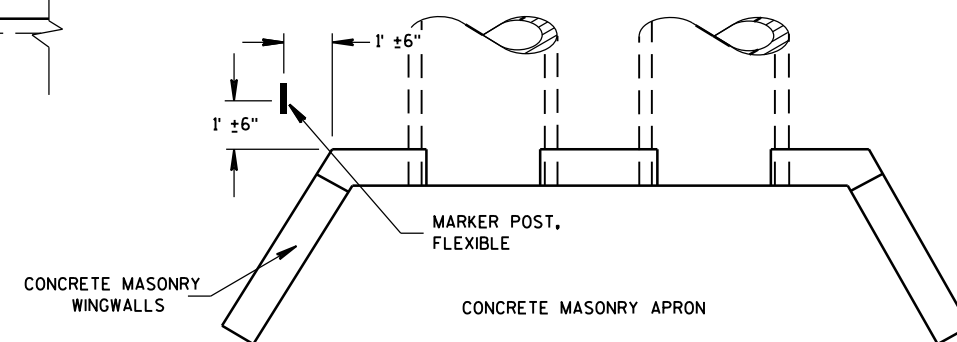
PLAN VIEW
UNDIVIDED HIGHWAY



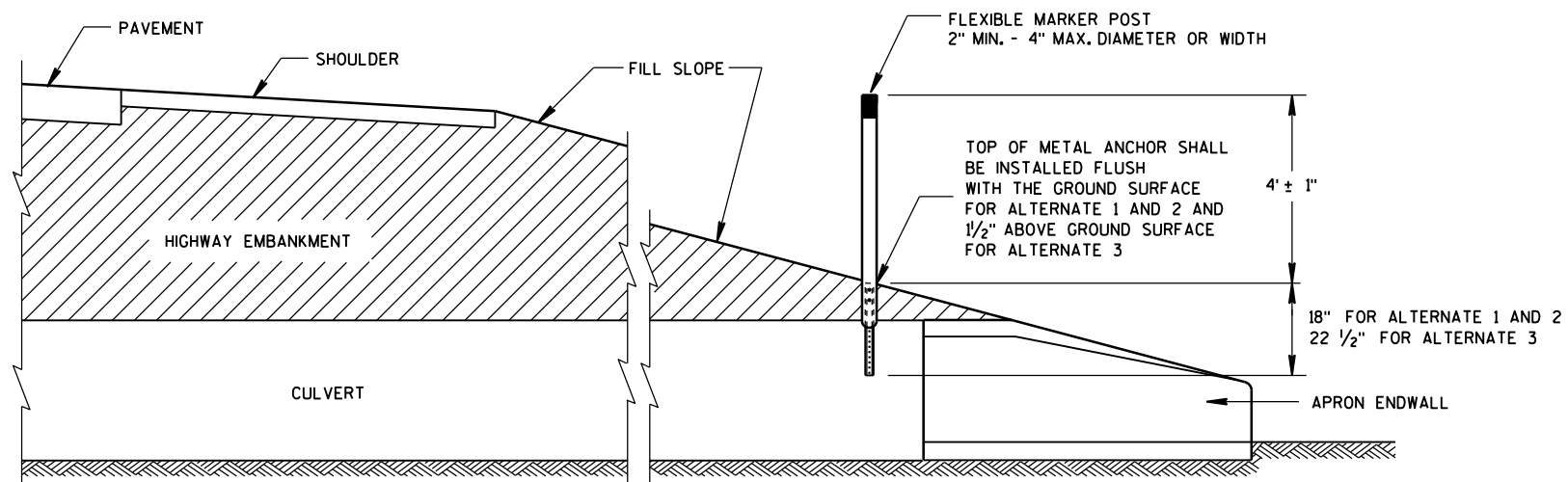
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



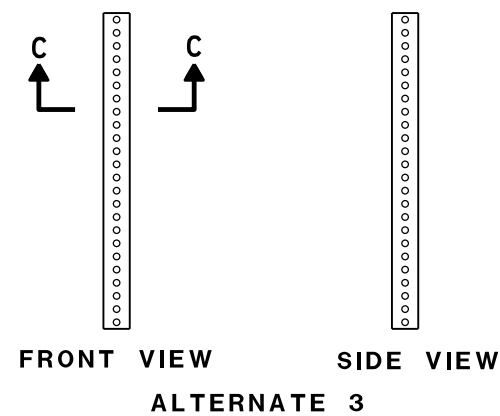
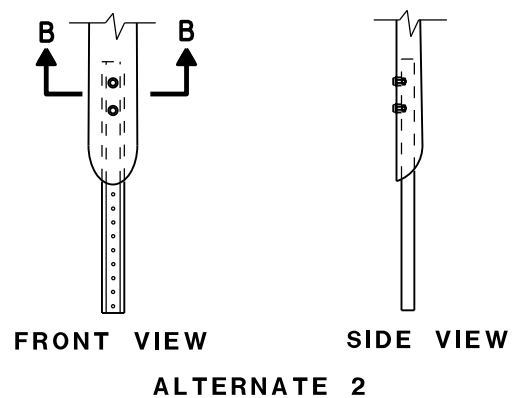
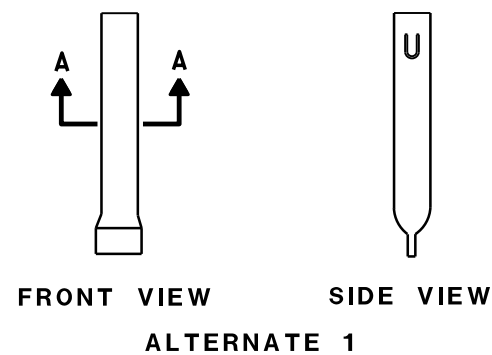
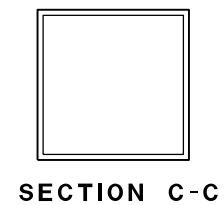
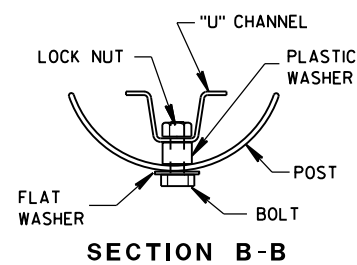
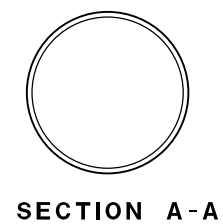
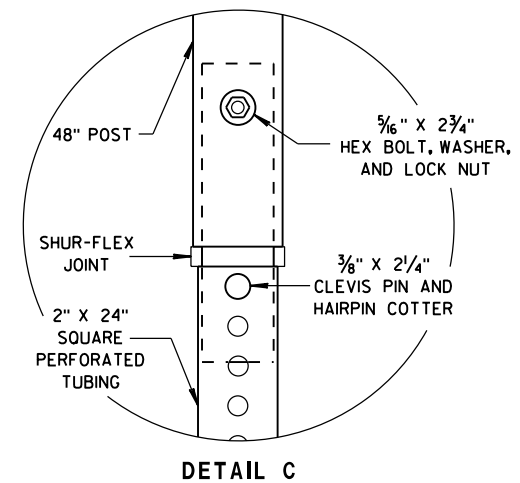
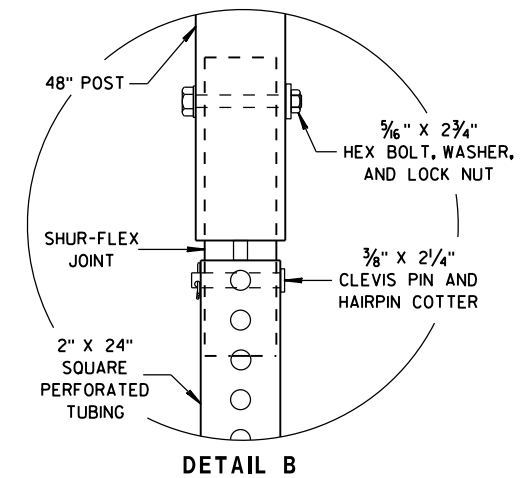
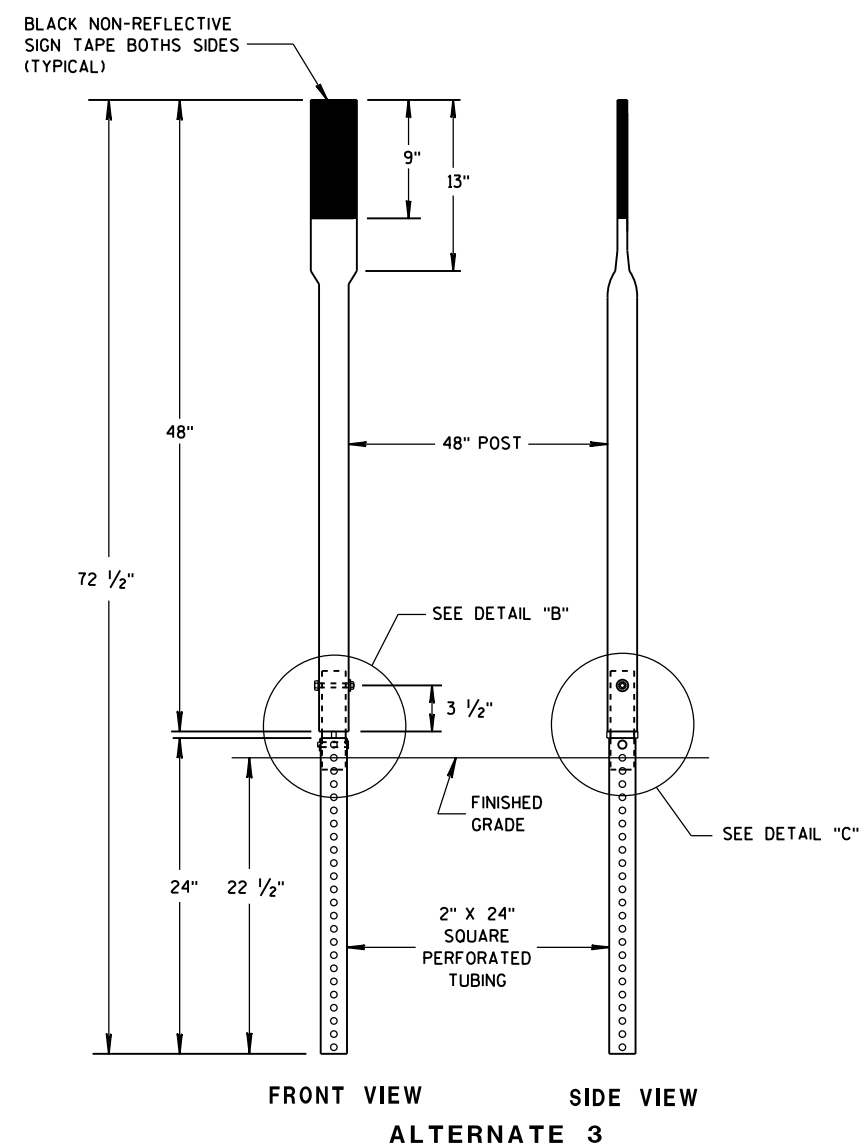
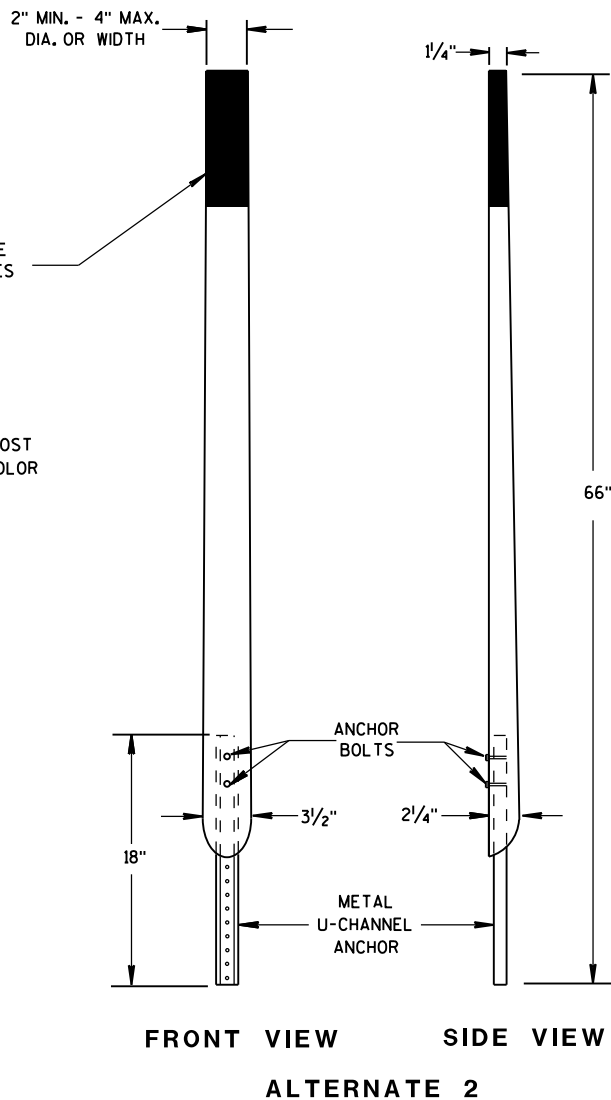
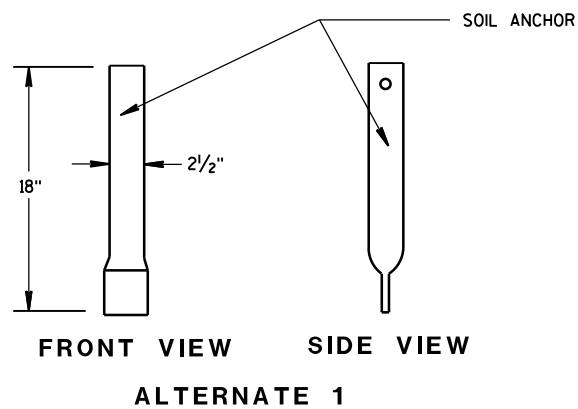
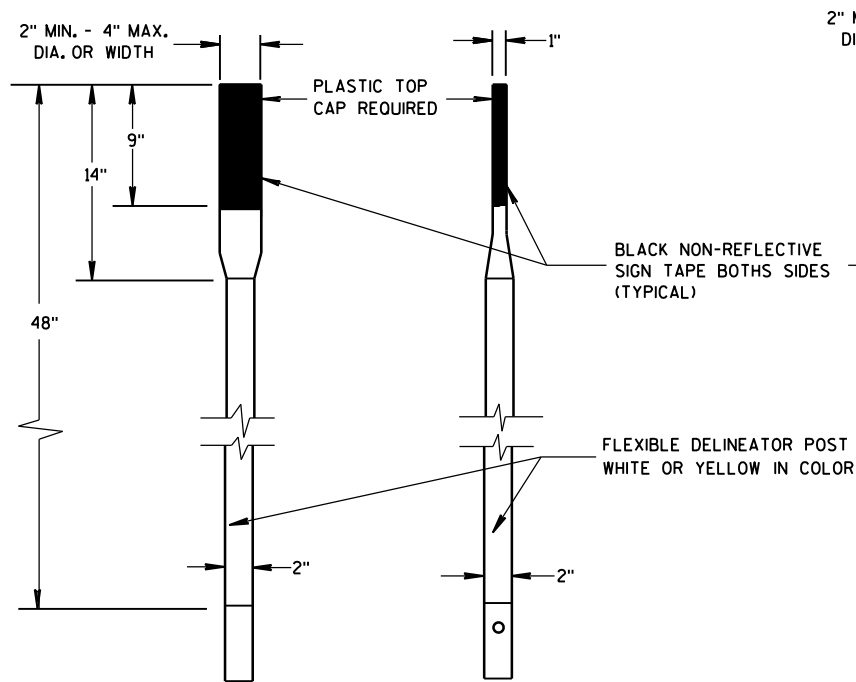
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 109



FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

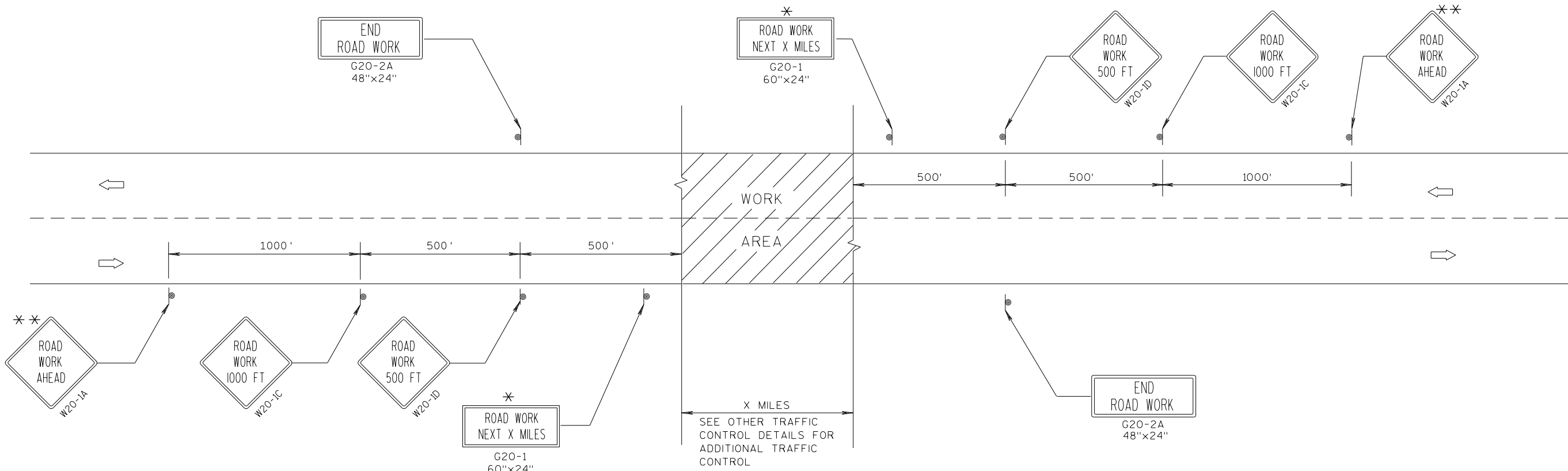
10/1/2012

DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 110

IGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

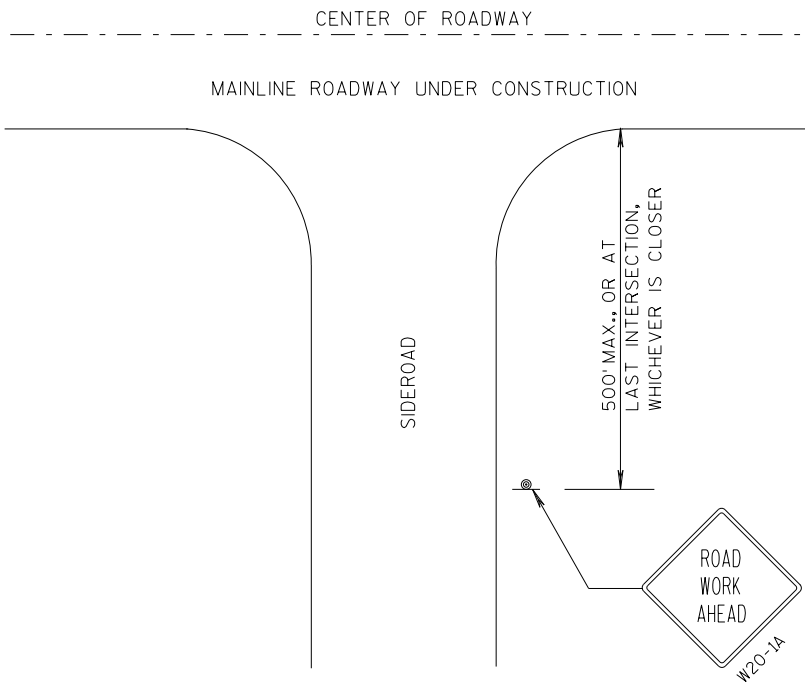
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- * * PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



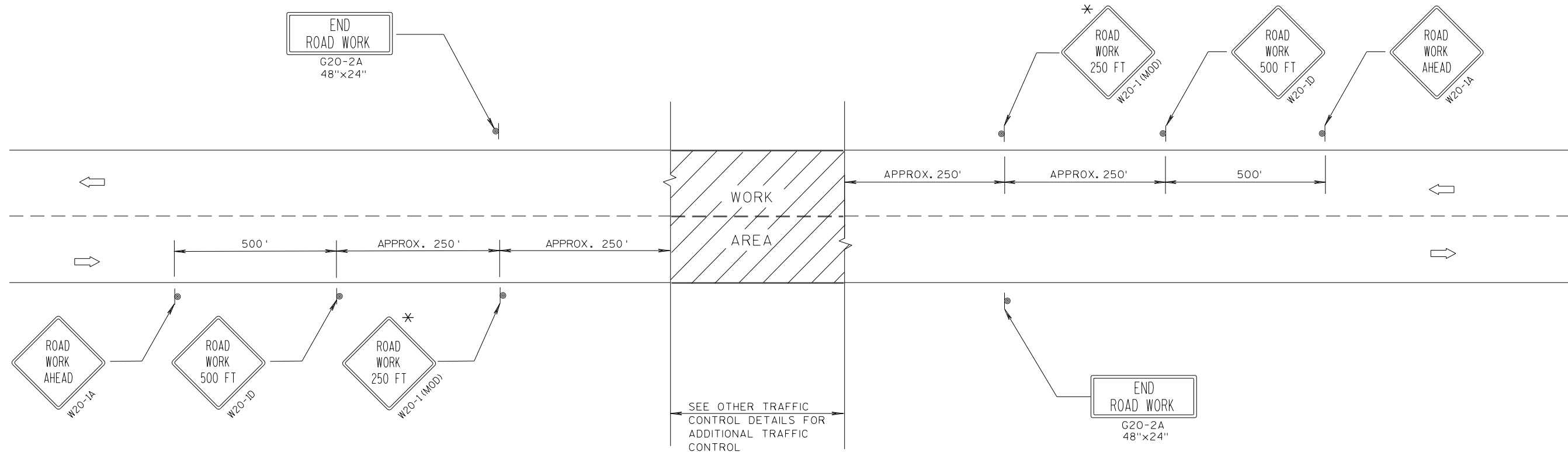
LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGI 111
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

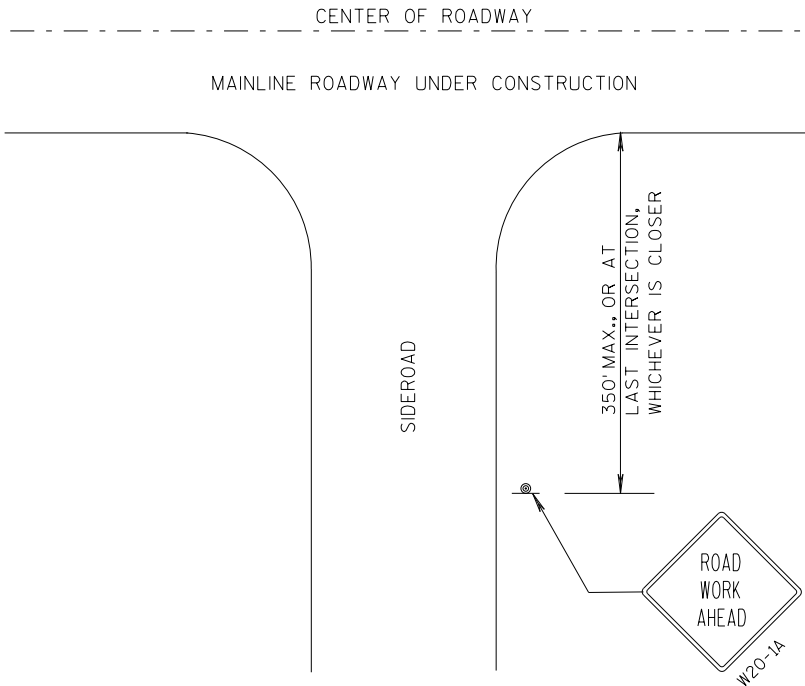
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

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

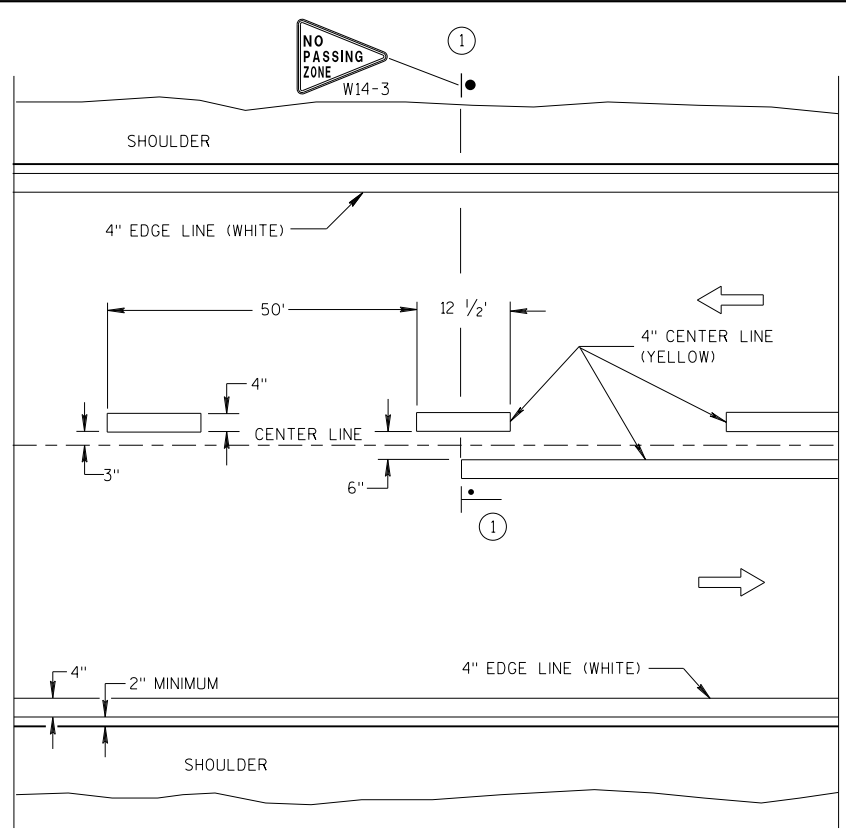
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



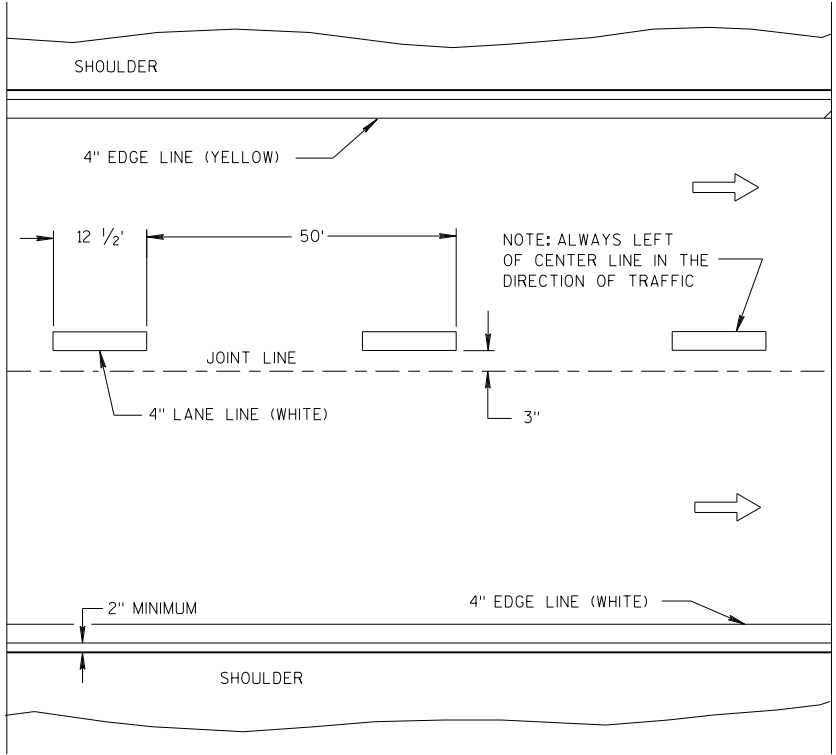
LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGI 112
FHWA	

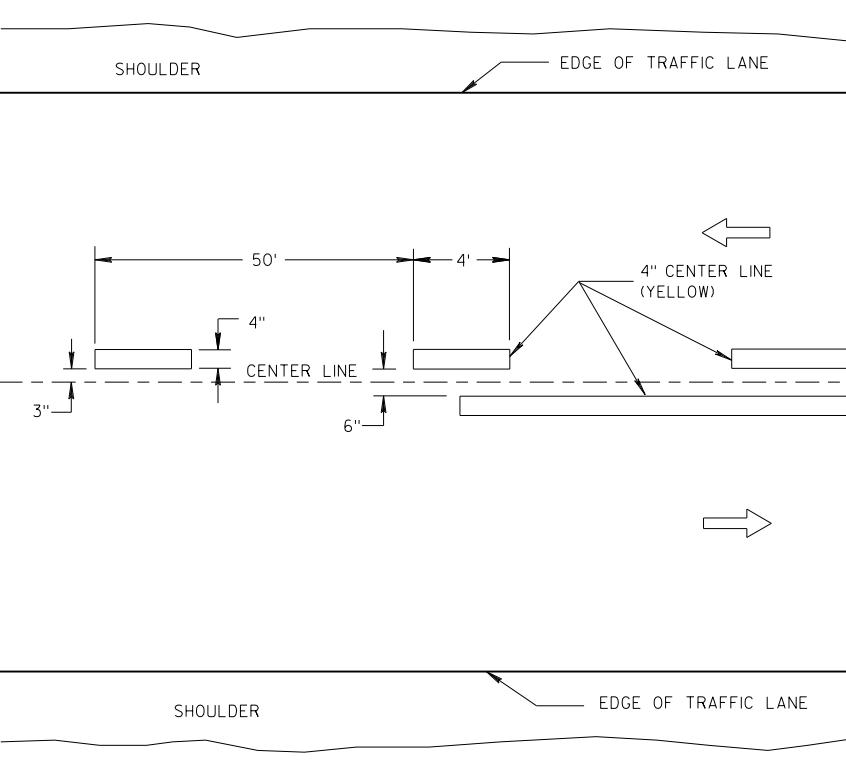


TWO WAY TRAFFIC

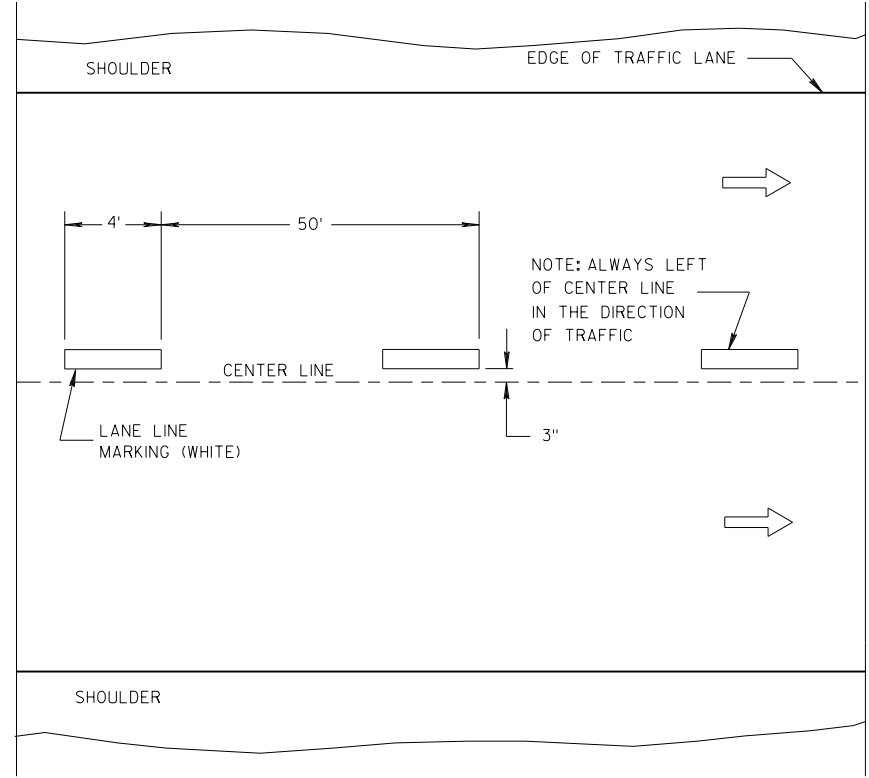


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

1 LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

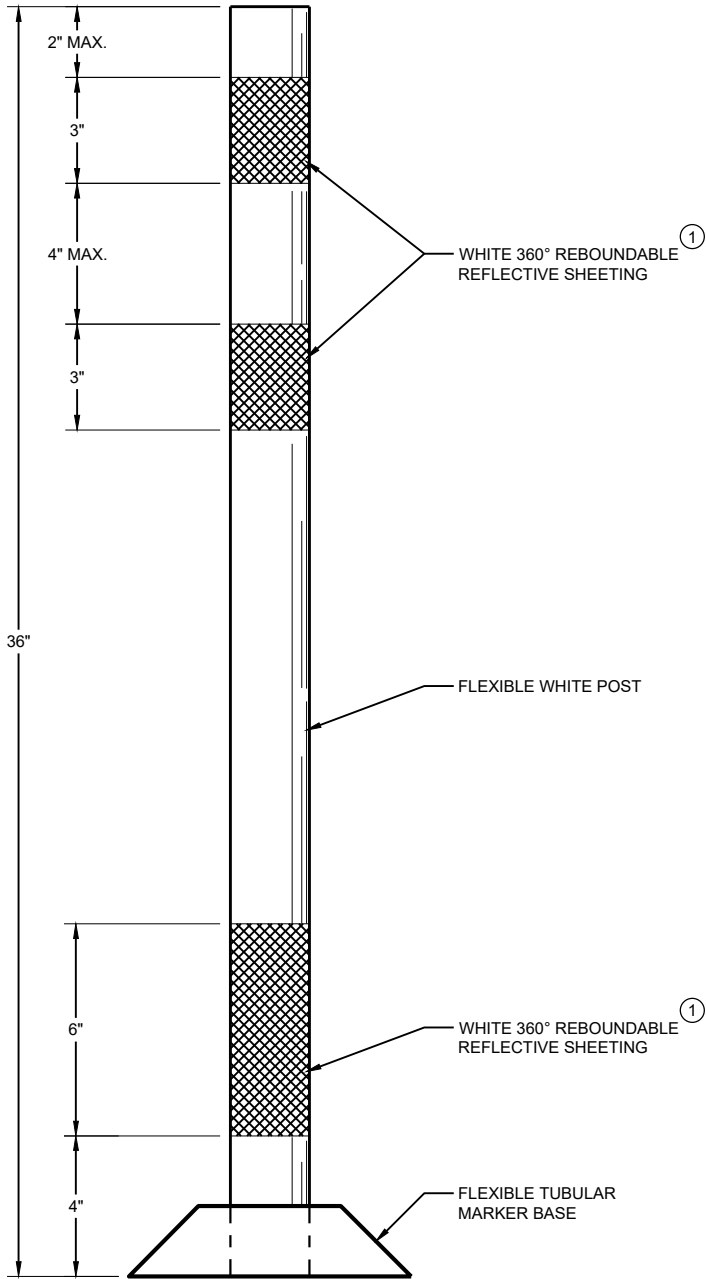
NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

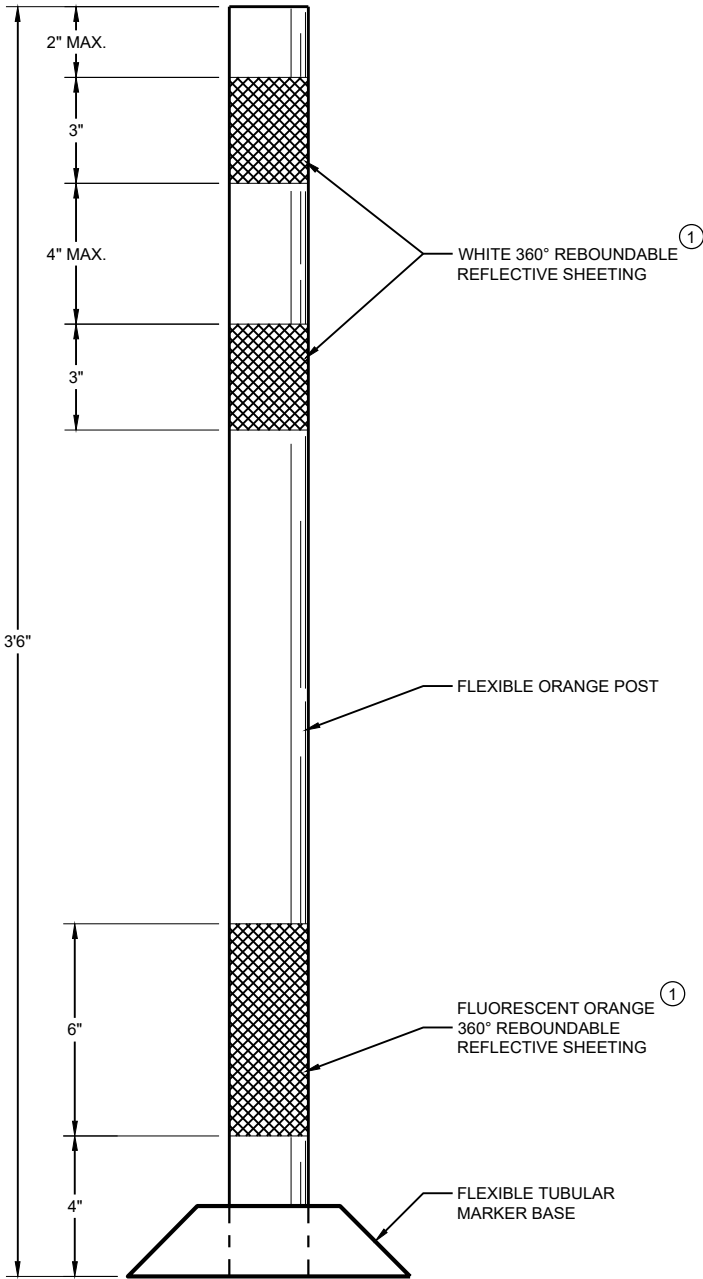
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

LONGITUDINAL MARKING (MAINLINE)			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED			
7/2018	/S/ Matthew R. Rauch		
DATE	STATE SIGNING AND MAR 113		
FHWA	INEER		



FLEXIBLE TUBULAR
MARKER POST
PERMANENT CROSSOVER



FLEXIBLE TUBULAR
MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

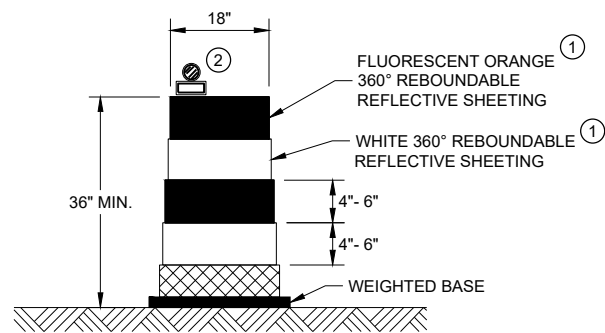
① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

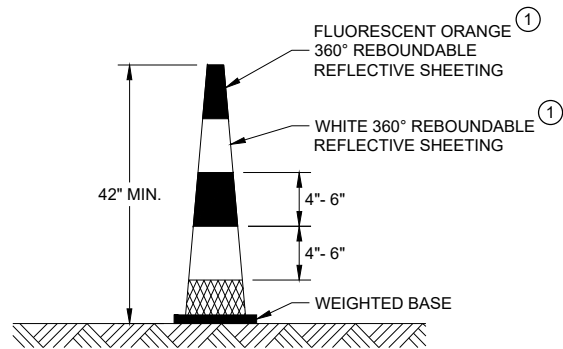
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 114

FHWA

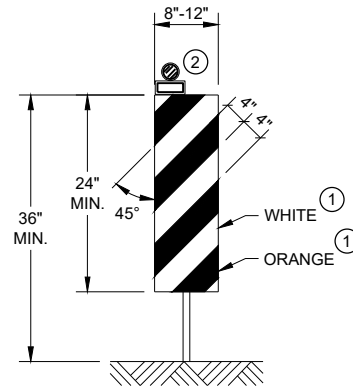


DRUM



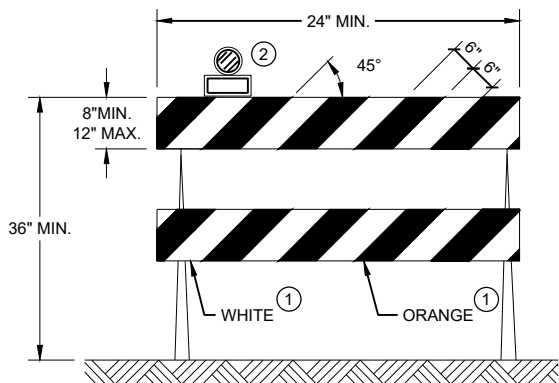
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



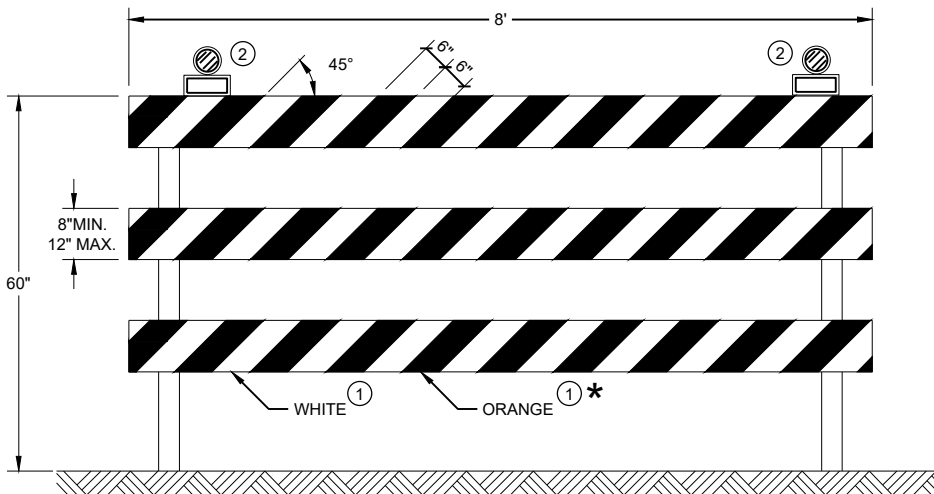
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 115
FHWA

LEGEND

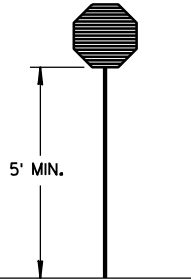
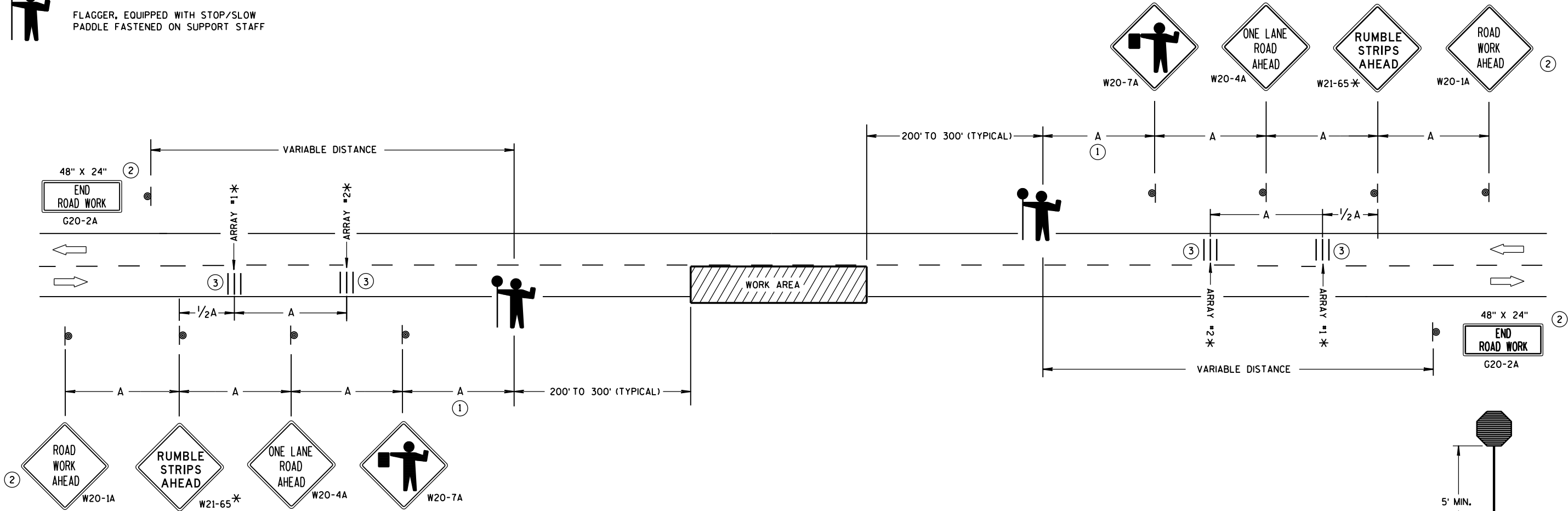
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- ① FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ③ EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

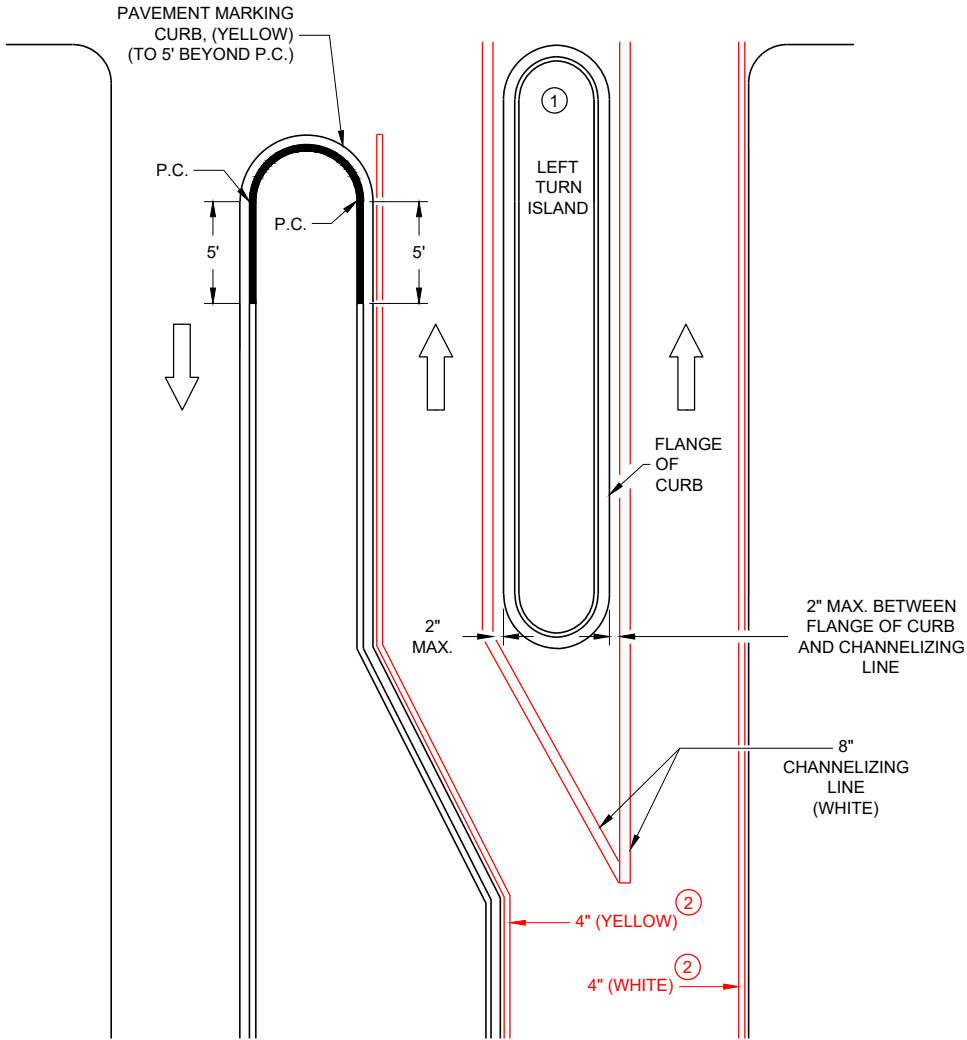
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
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DATE WORK ZONE ENG 116
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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



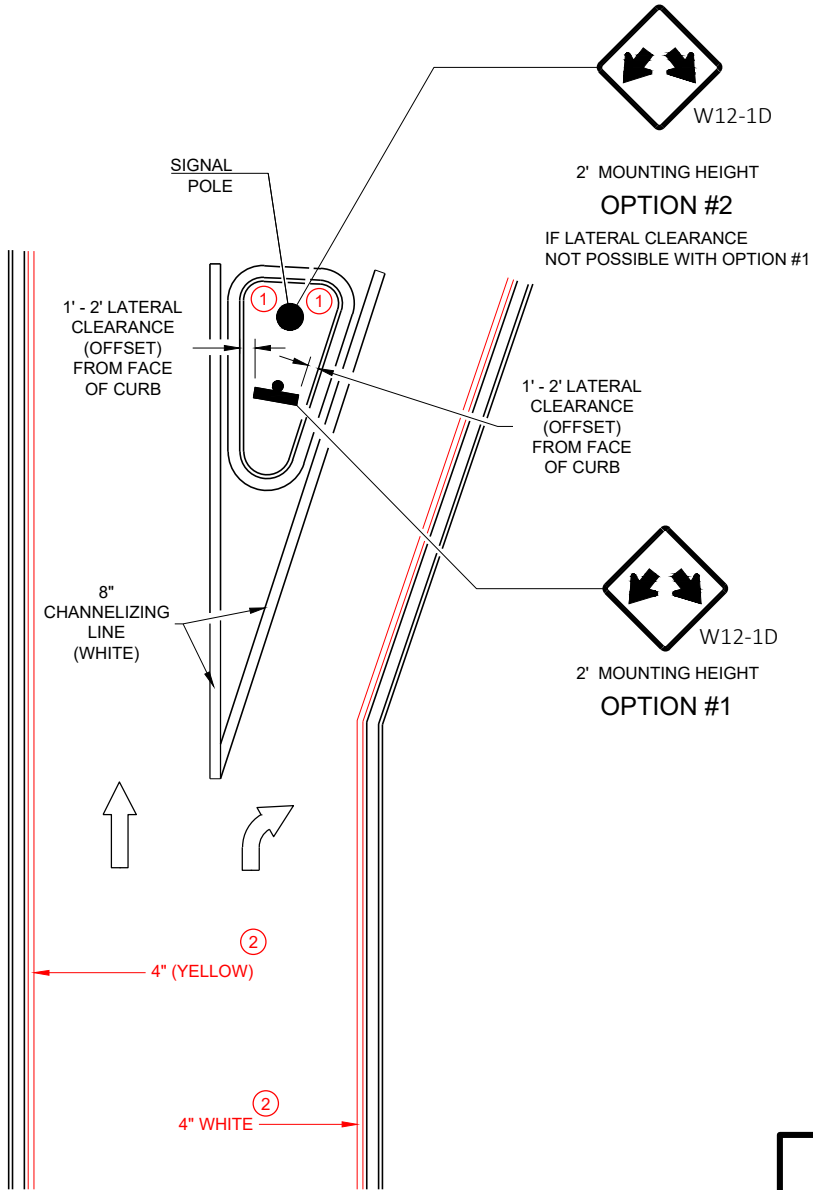
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

- ① MARK CURB NOSES YELLOW.
- ② MARK ACCORDING TO TABLE.

➡ DIRECTION OF TRAVEL

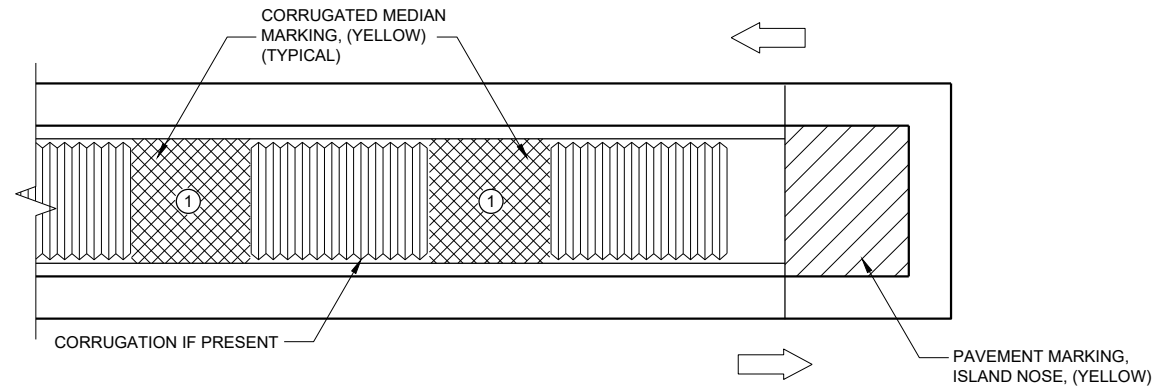


RIGHT TURN ISLAND

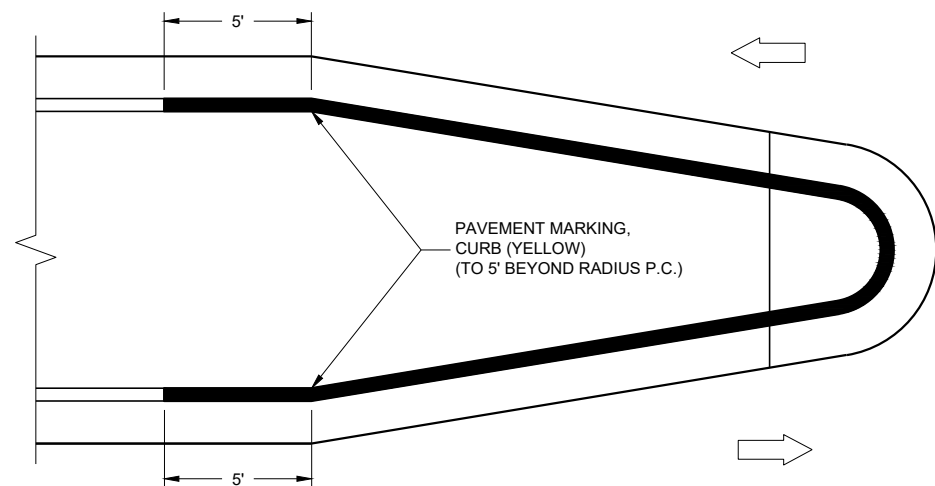
DOUBLE ARROW
WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

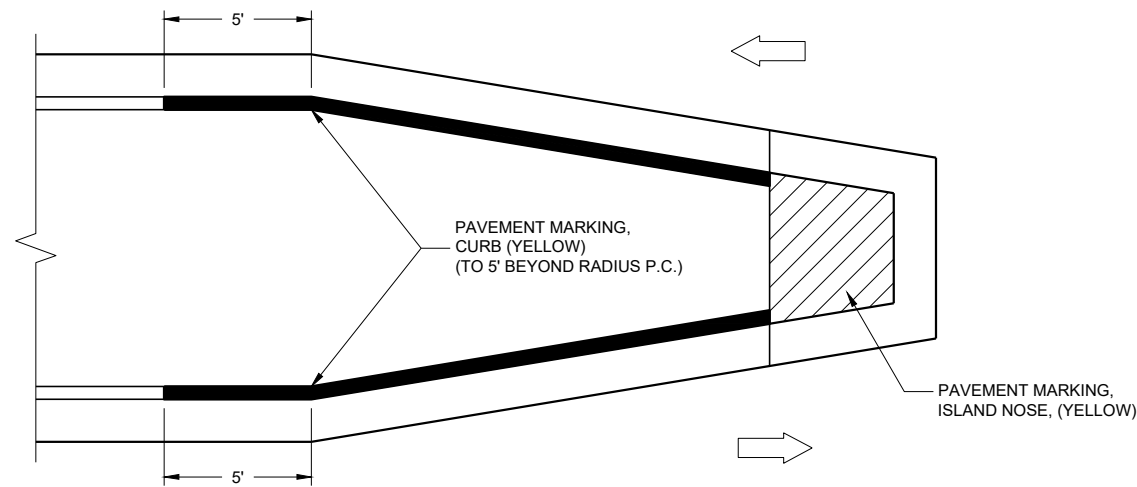
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7/2018 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAP ENGINEER 118
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKINGS
(ISLANDS)

STATE OF WISCONSIN
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**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**

**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**

**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**

**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

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

**STOP LINE AND CROSSWALK
PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

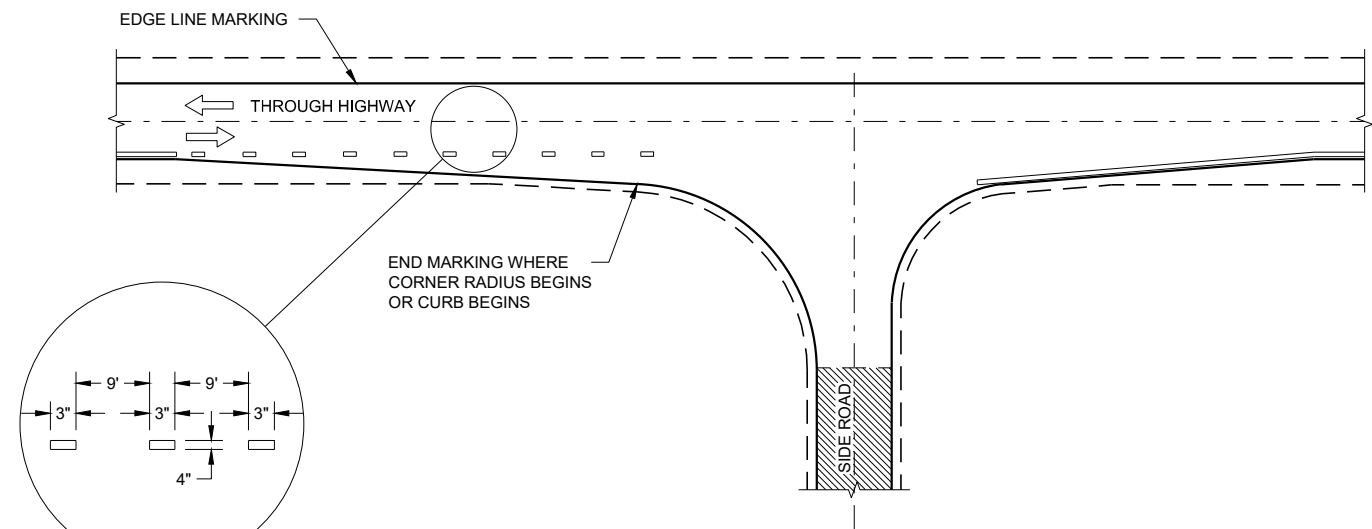
APPROVED

DATE

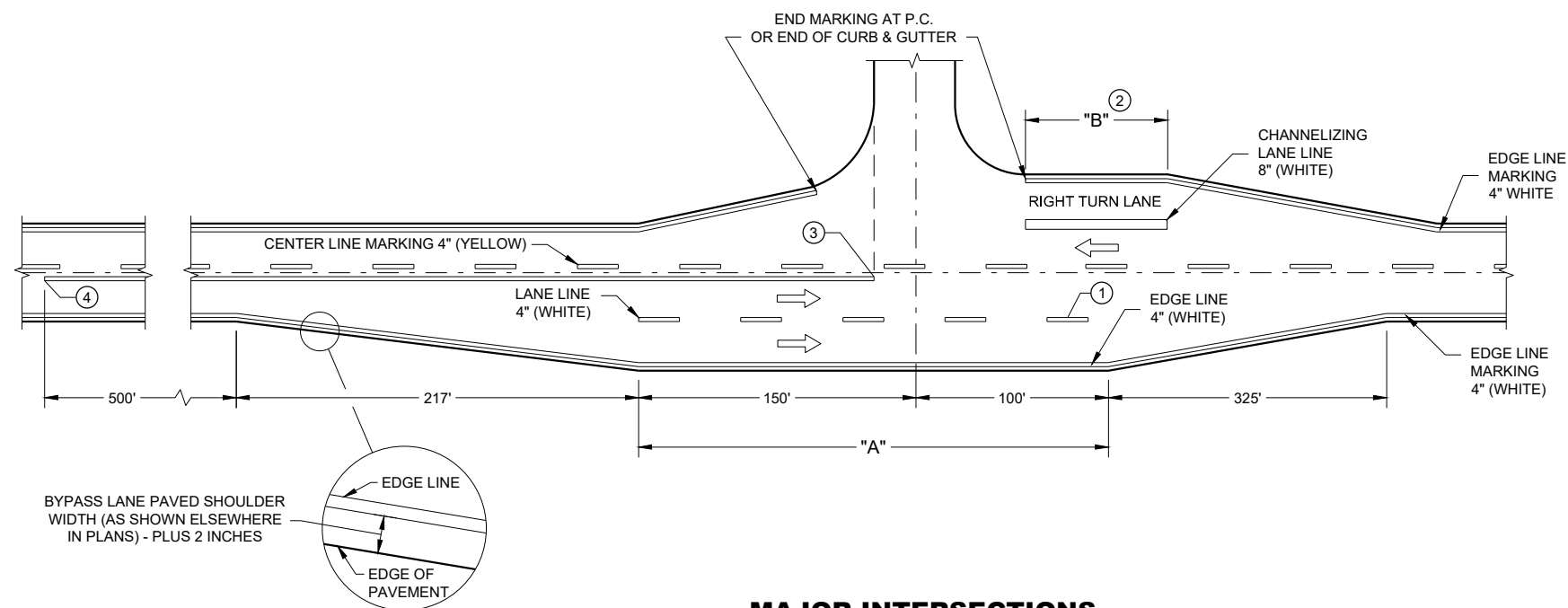
FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 120

YEAR



MINOR INTERSECTION



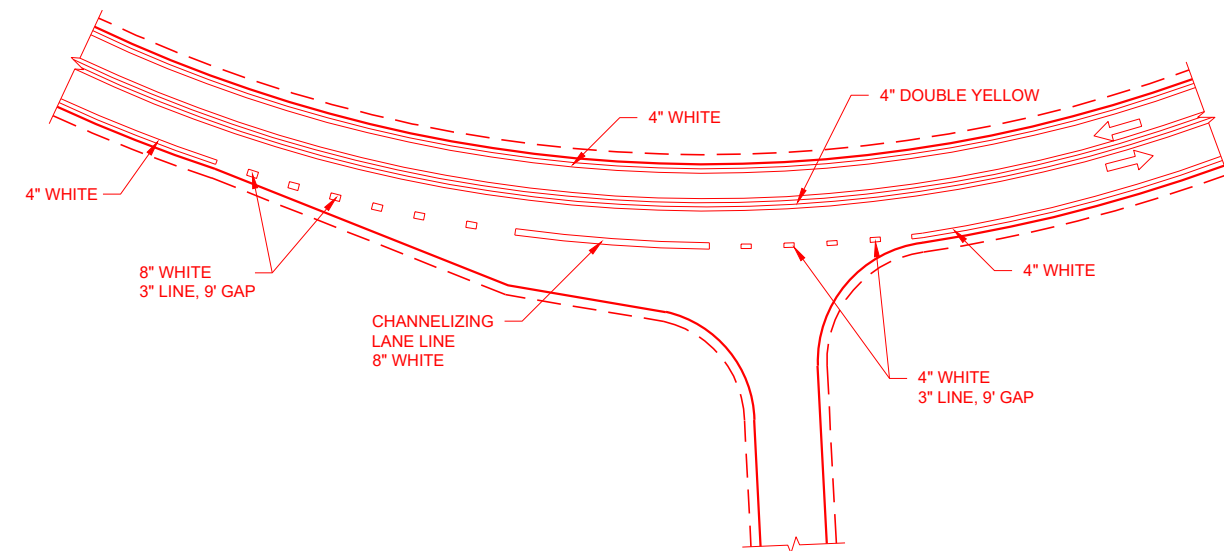
MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 121

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

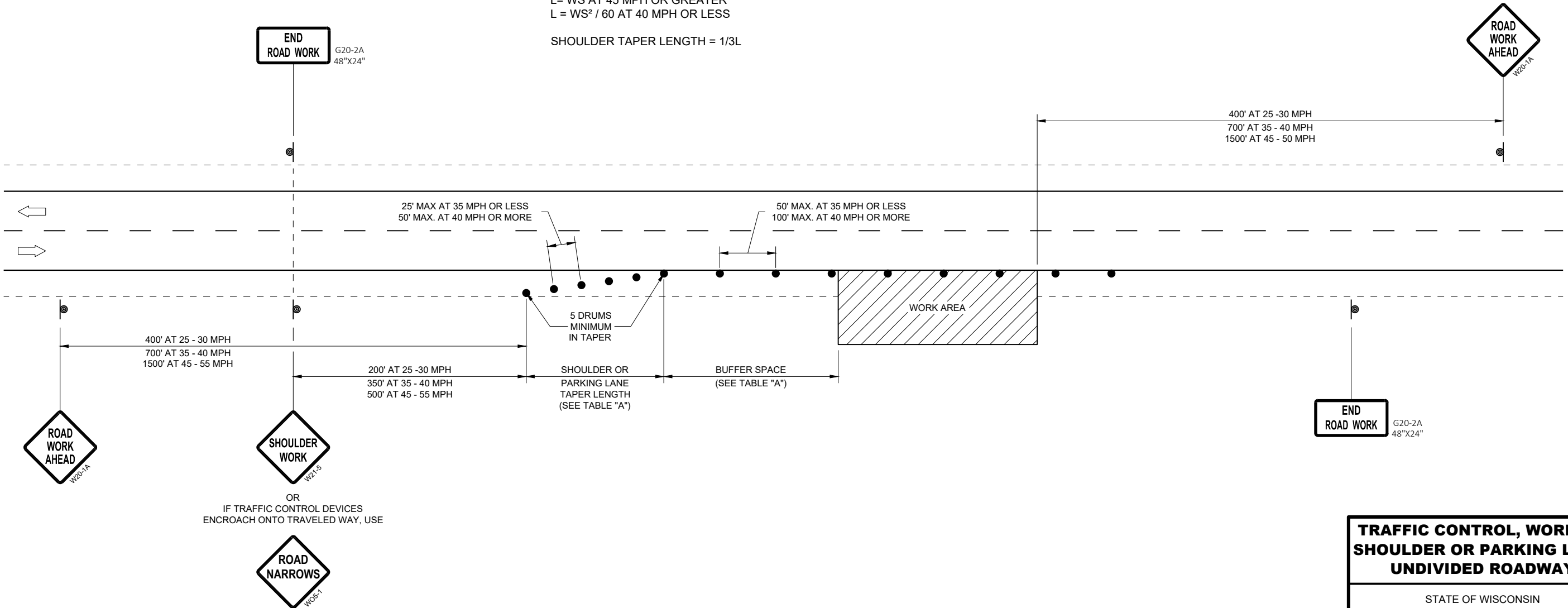
W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6

SDD 15D28 - 03

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TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

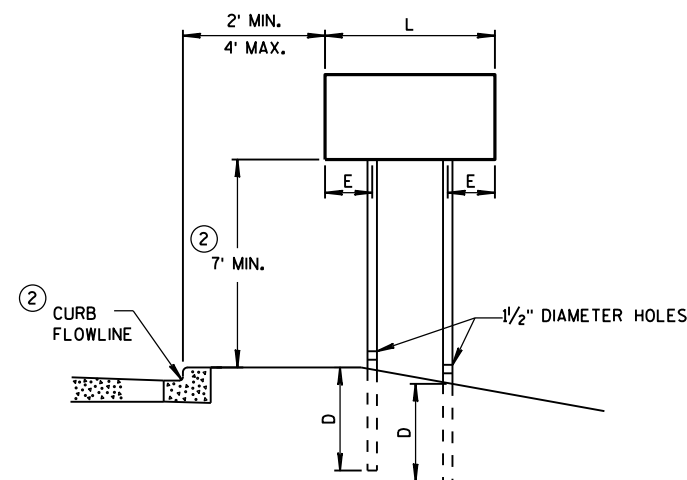
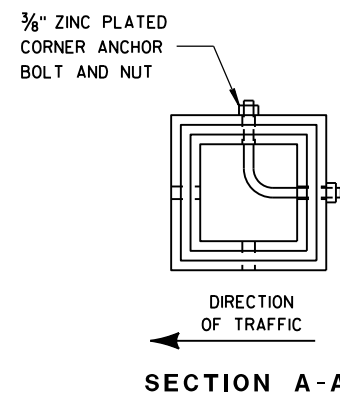
APPROVED
August 2019 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE T
FHWA SAFETY ENGINEER 122



TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS LARGER THAN 27 SQ.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

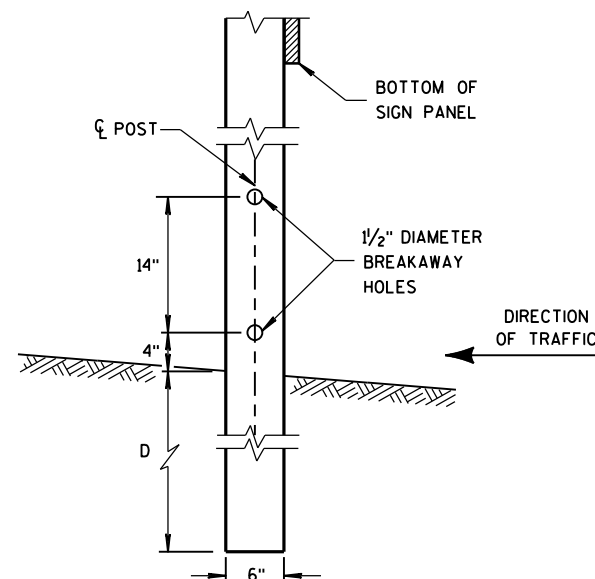


URBAN AREA

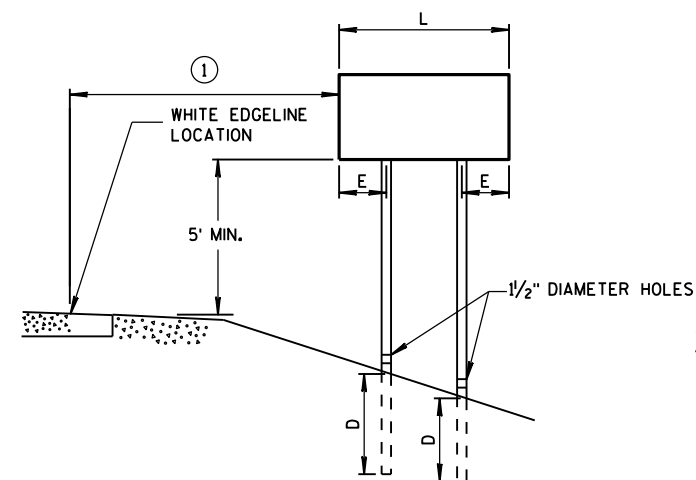
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

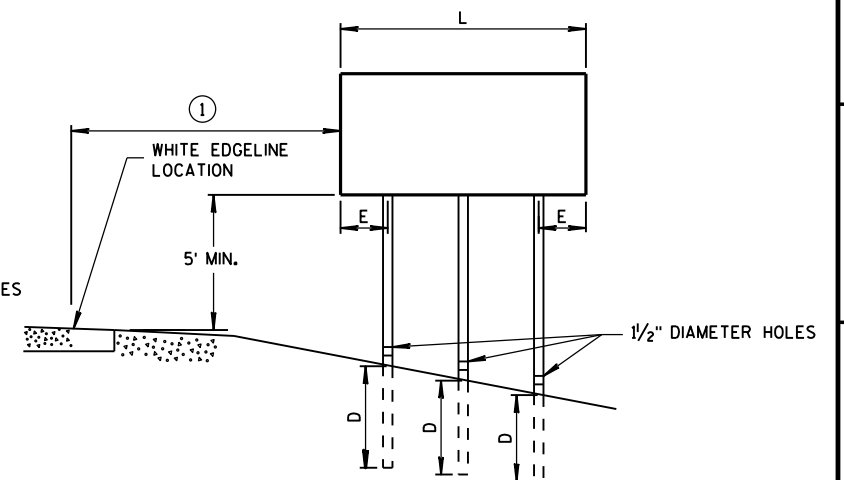
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4" x 6" WOOD POST MODIFICATION



RURAL AREA



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

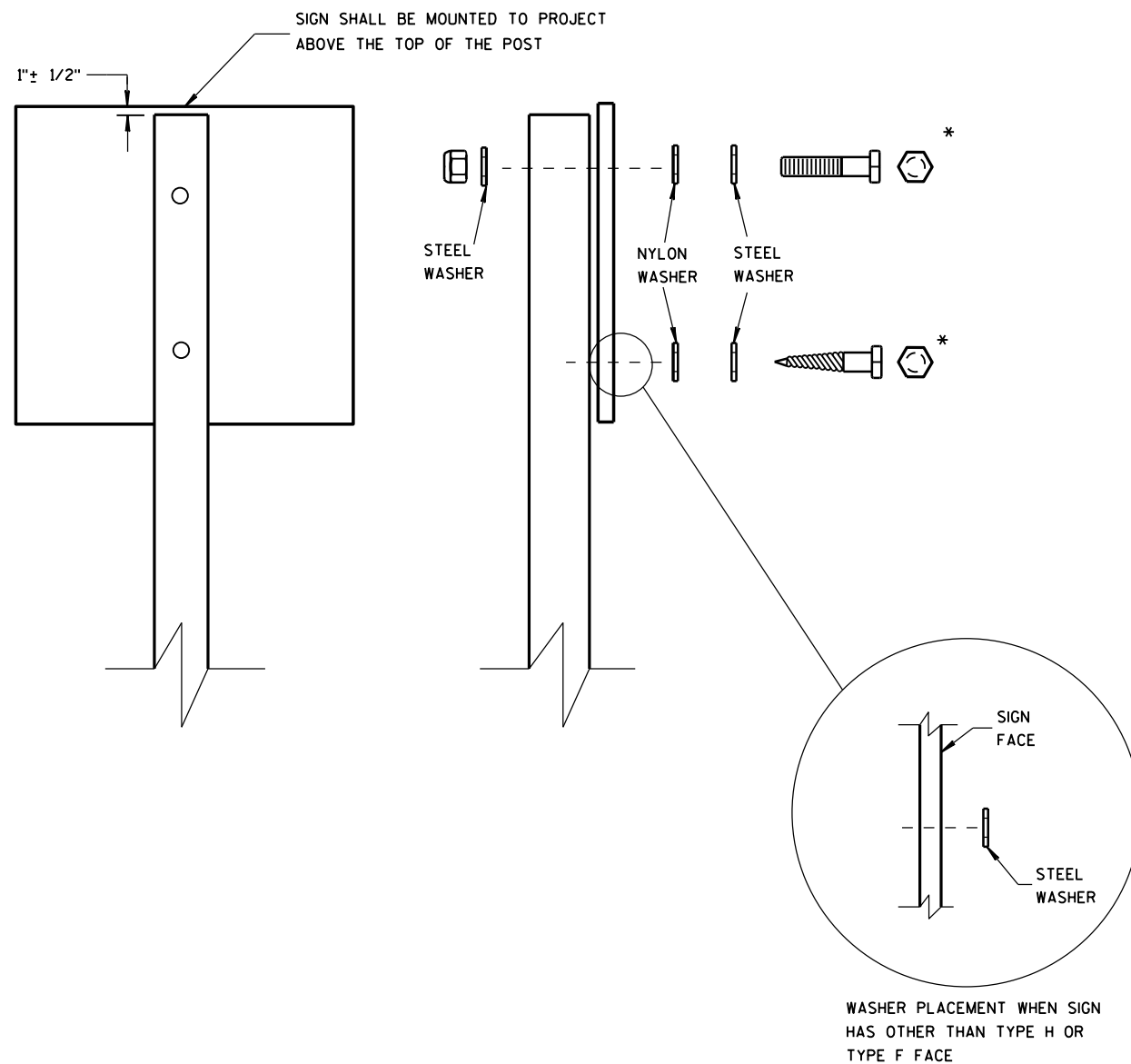
4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 123



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 - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL

1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

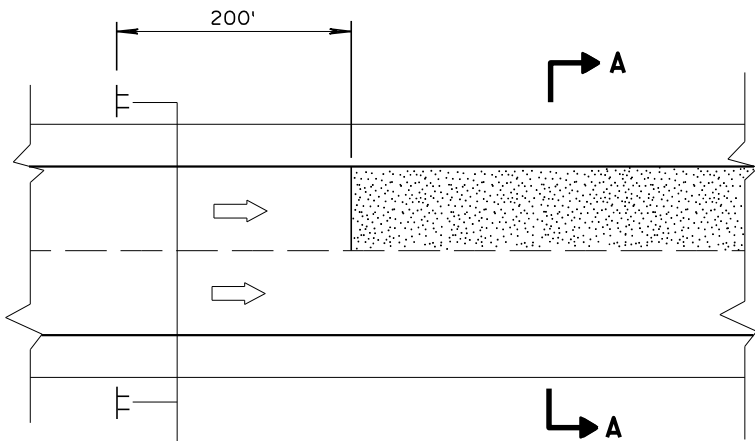
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE EN 124

FHWA

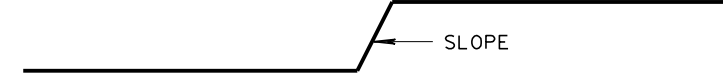


MULTI-LANE

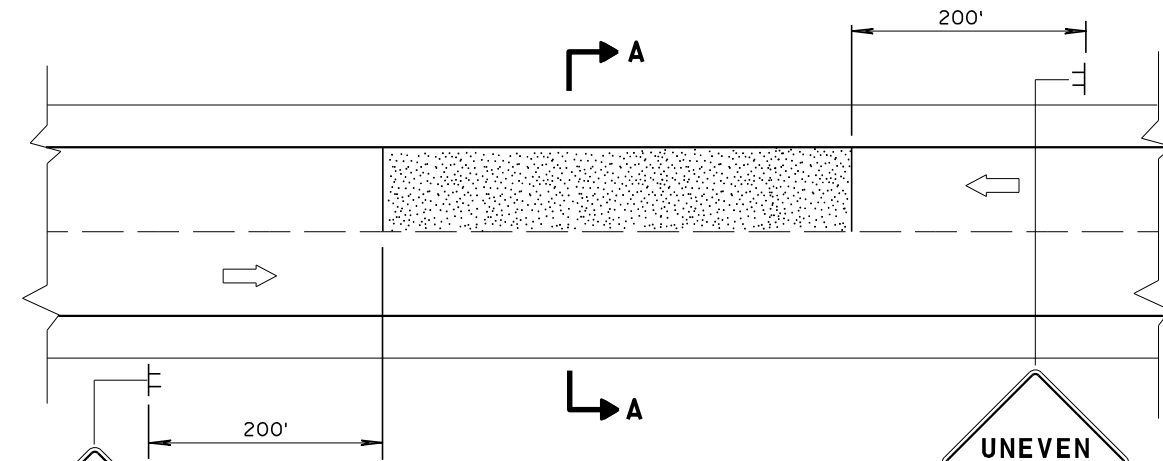


SECTION A-A

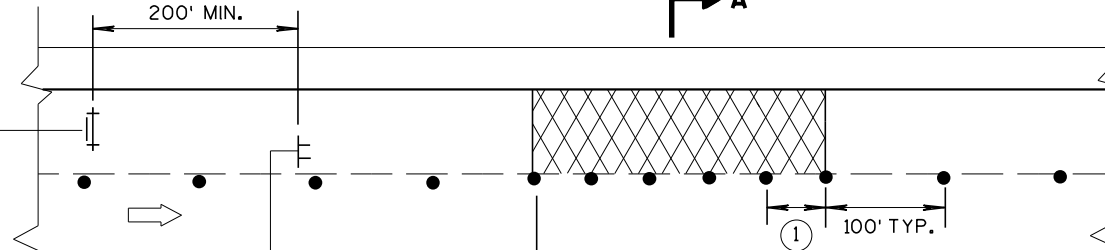
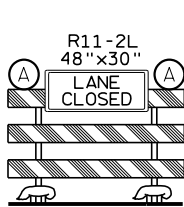
OR



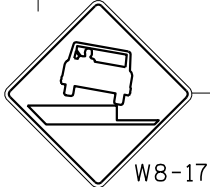
SECTION A-A



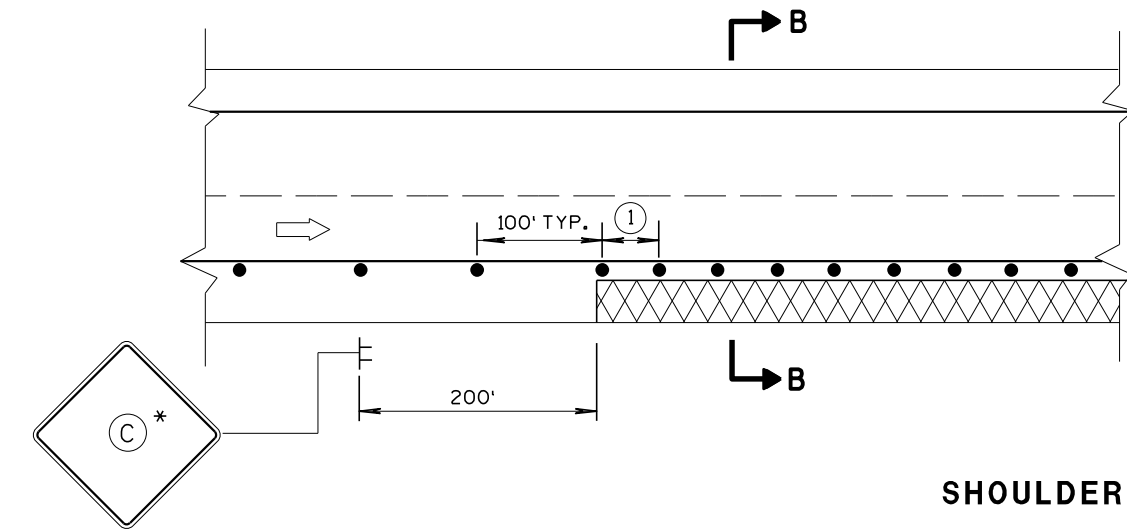
TWO-WAY TWO LANE



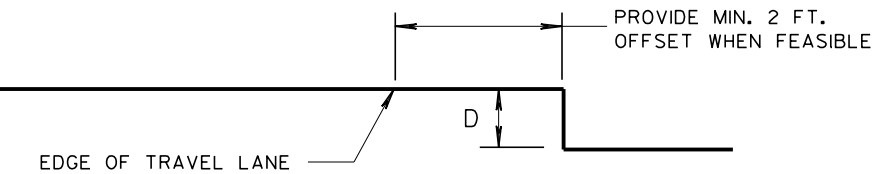
MULTI-LANE BASE PATCHING



ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B-B

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EACH ENTRANCE RAMP.

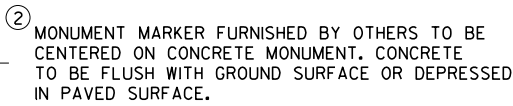
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP-OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

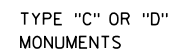
TRAFFIC CONTROL, DROP-OFF SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE	/S/ Andrew H WORK ZONE EN 125
FHWA	



PRECAST



(INCLUDES MARKER)

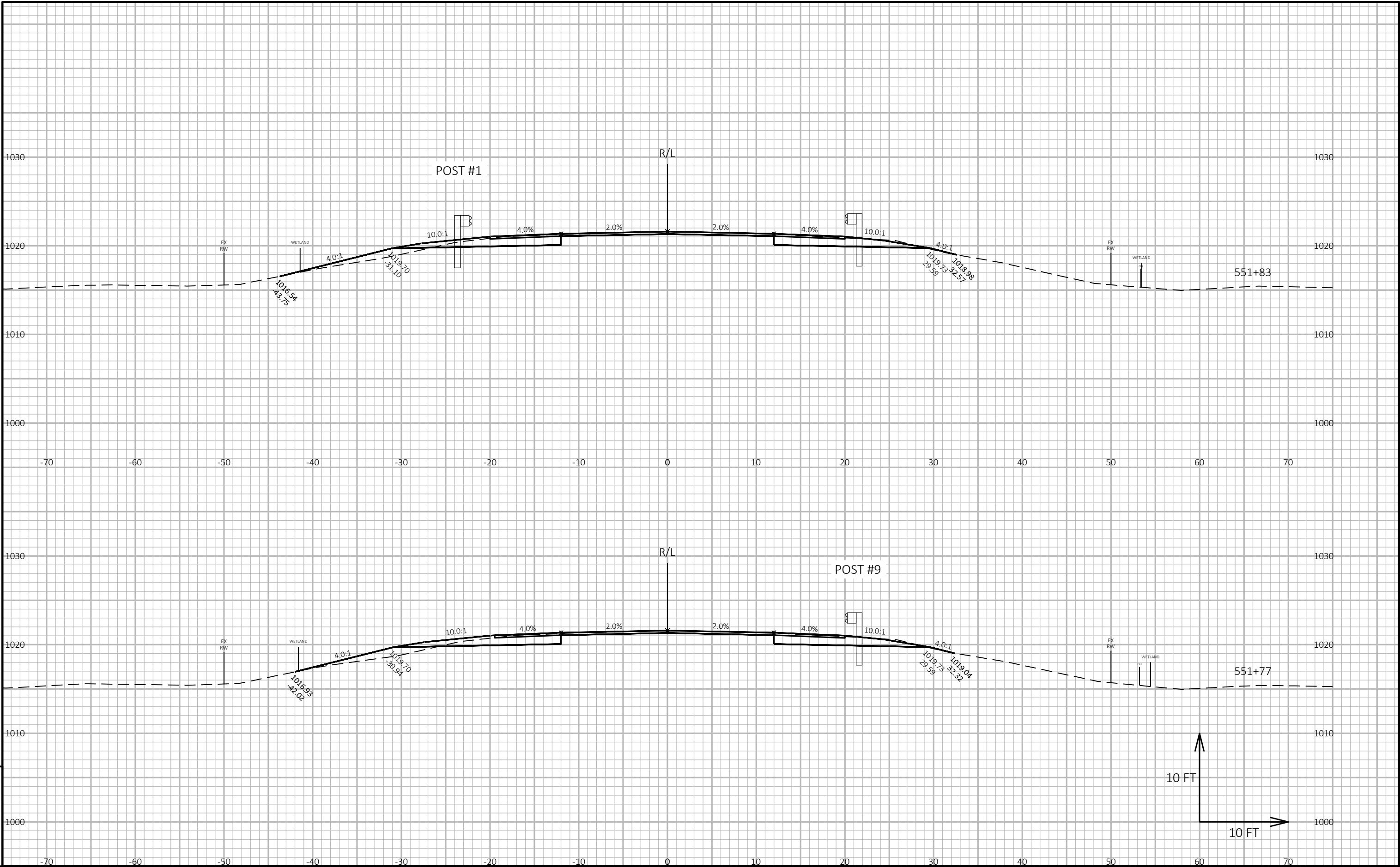


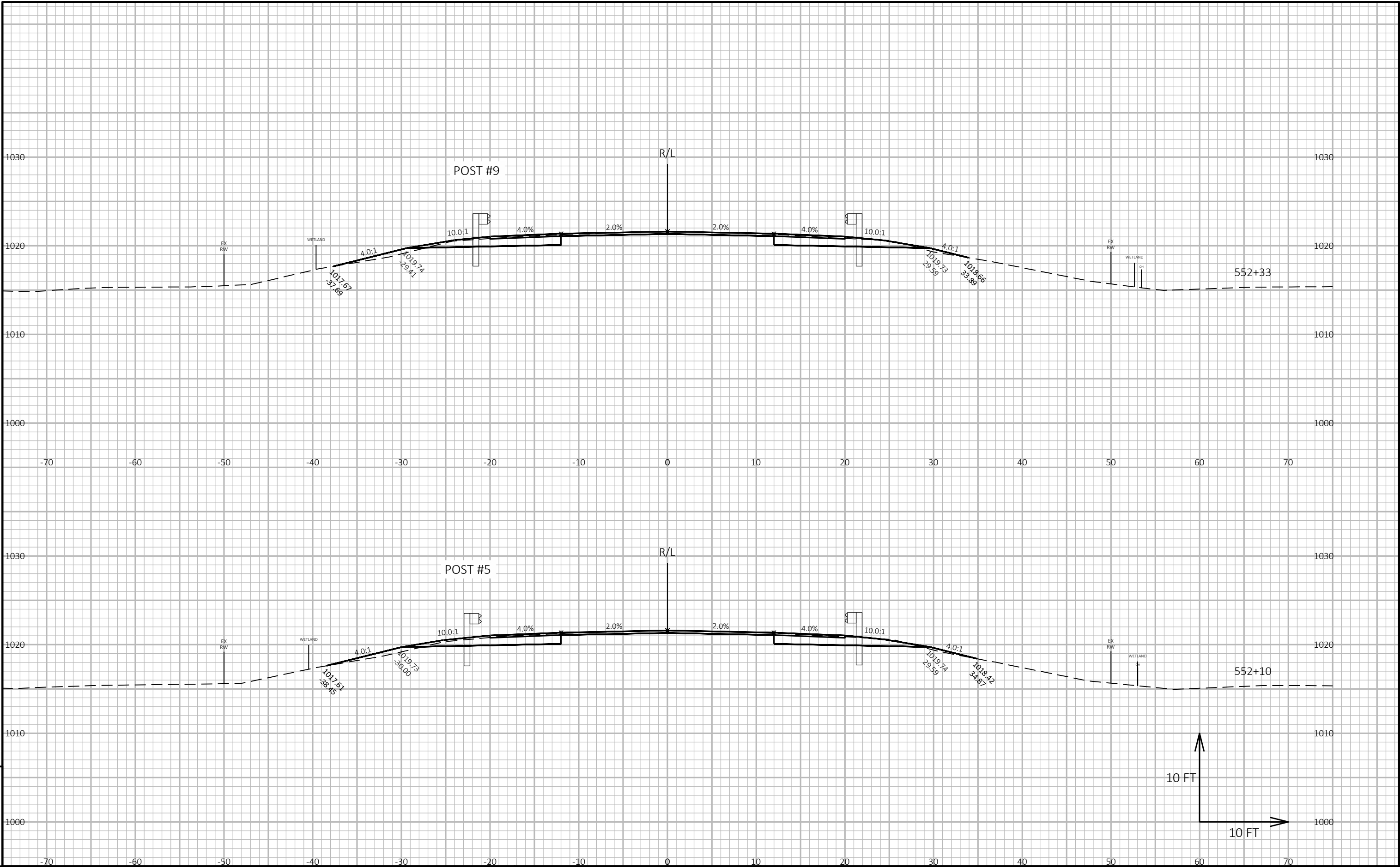
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

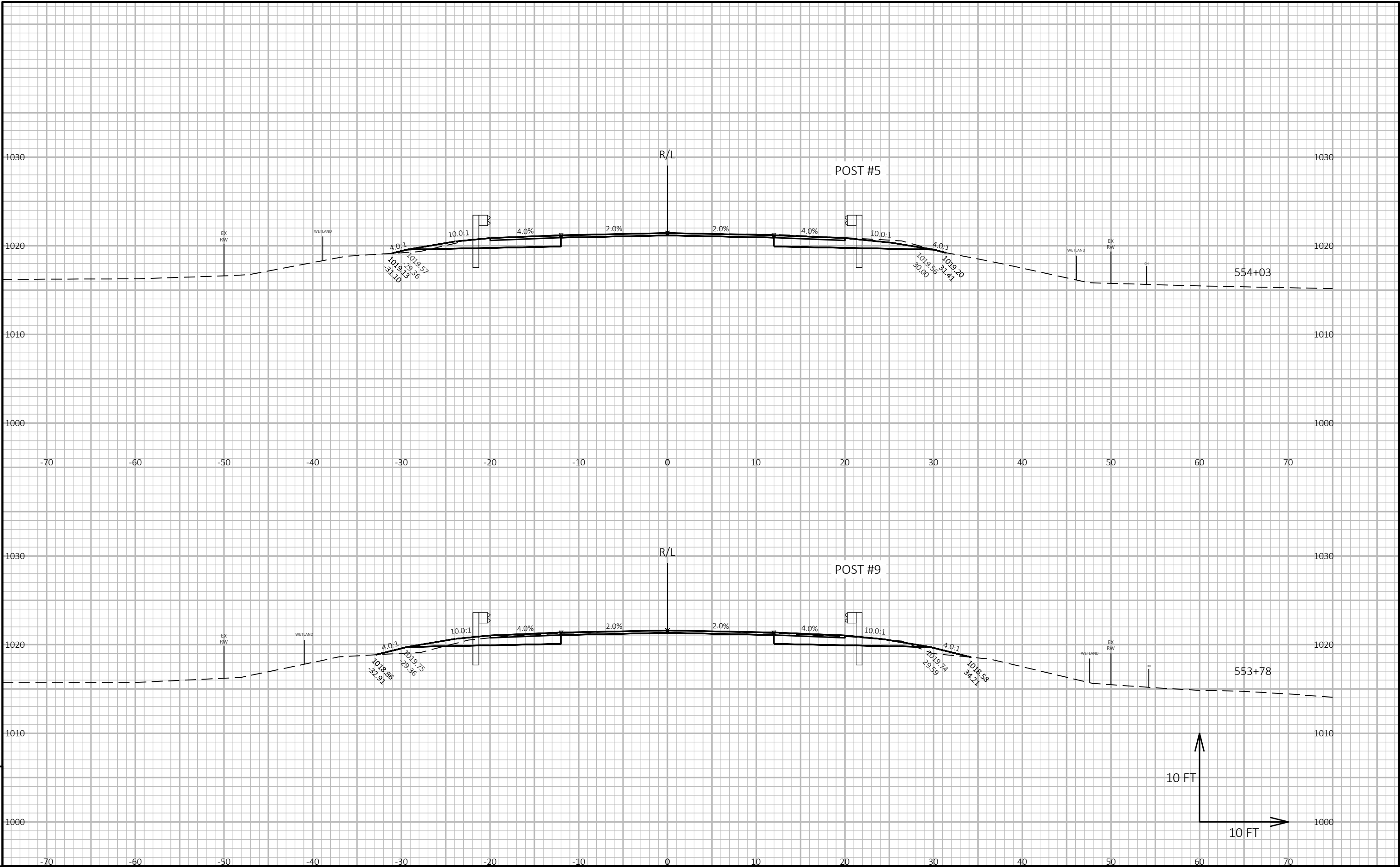


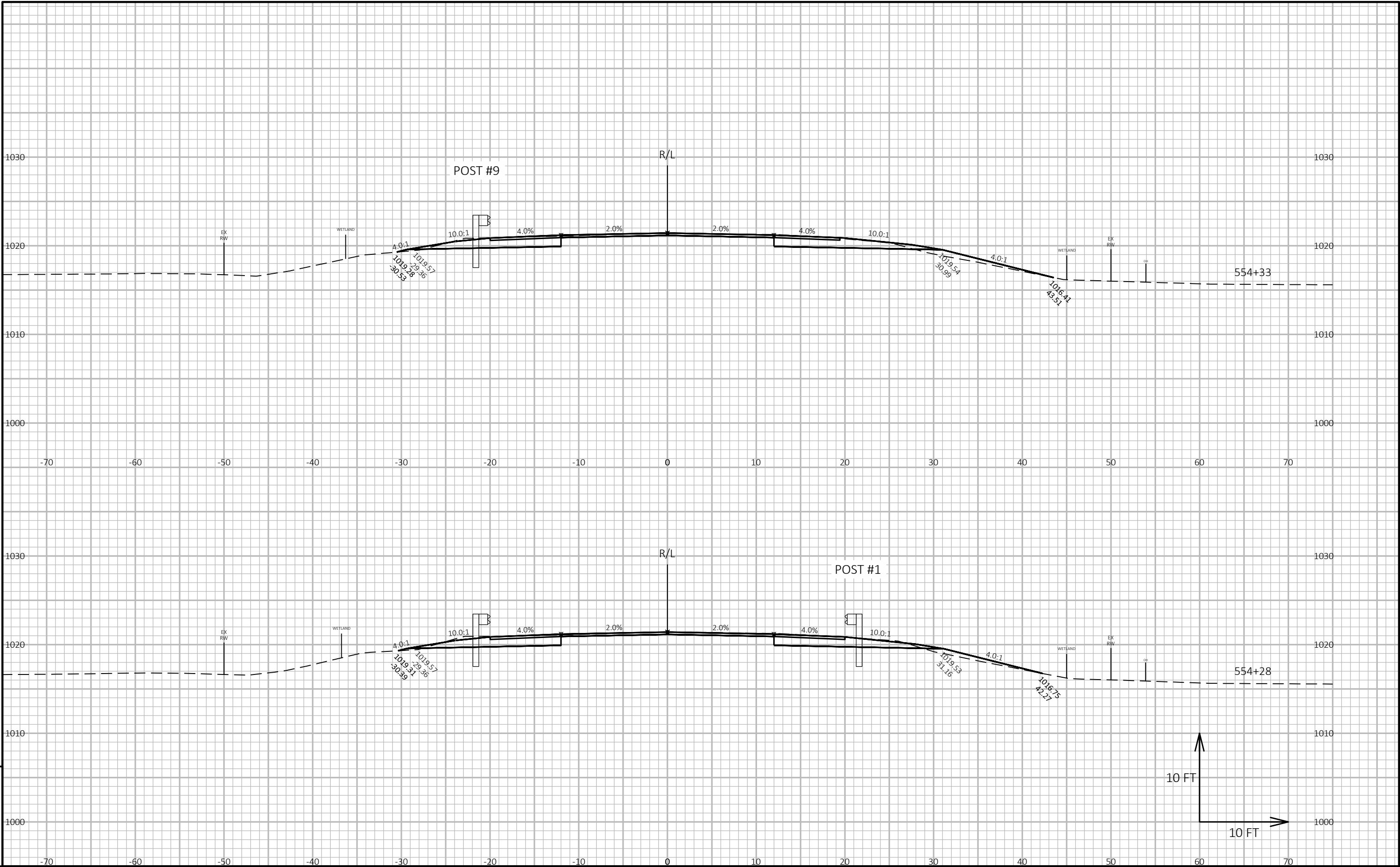
(APPROXIMATE WEIGHT 95 LBS)

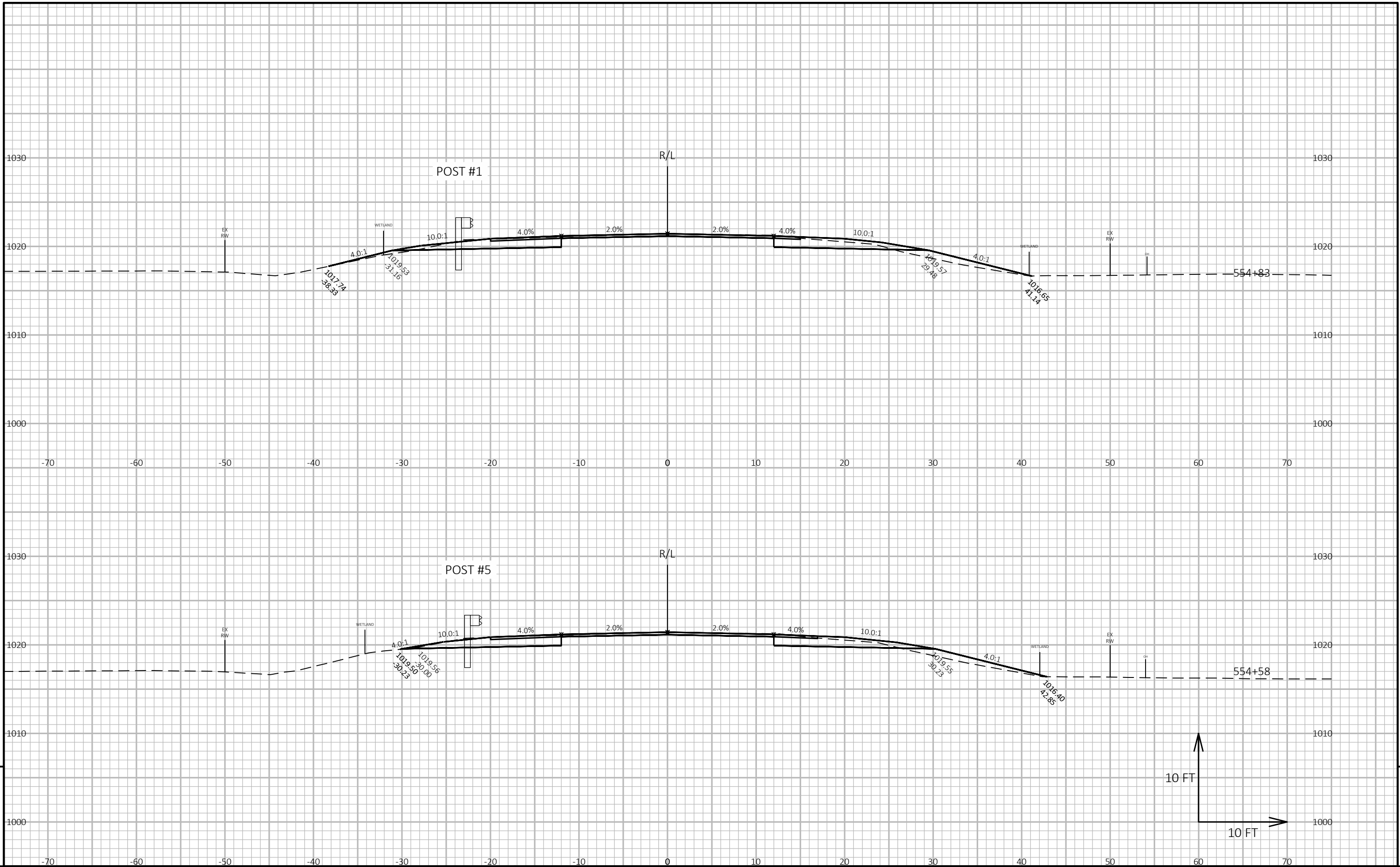
- ① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
- ② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

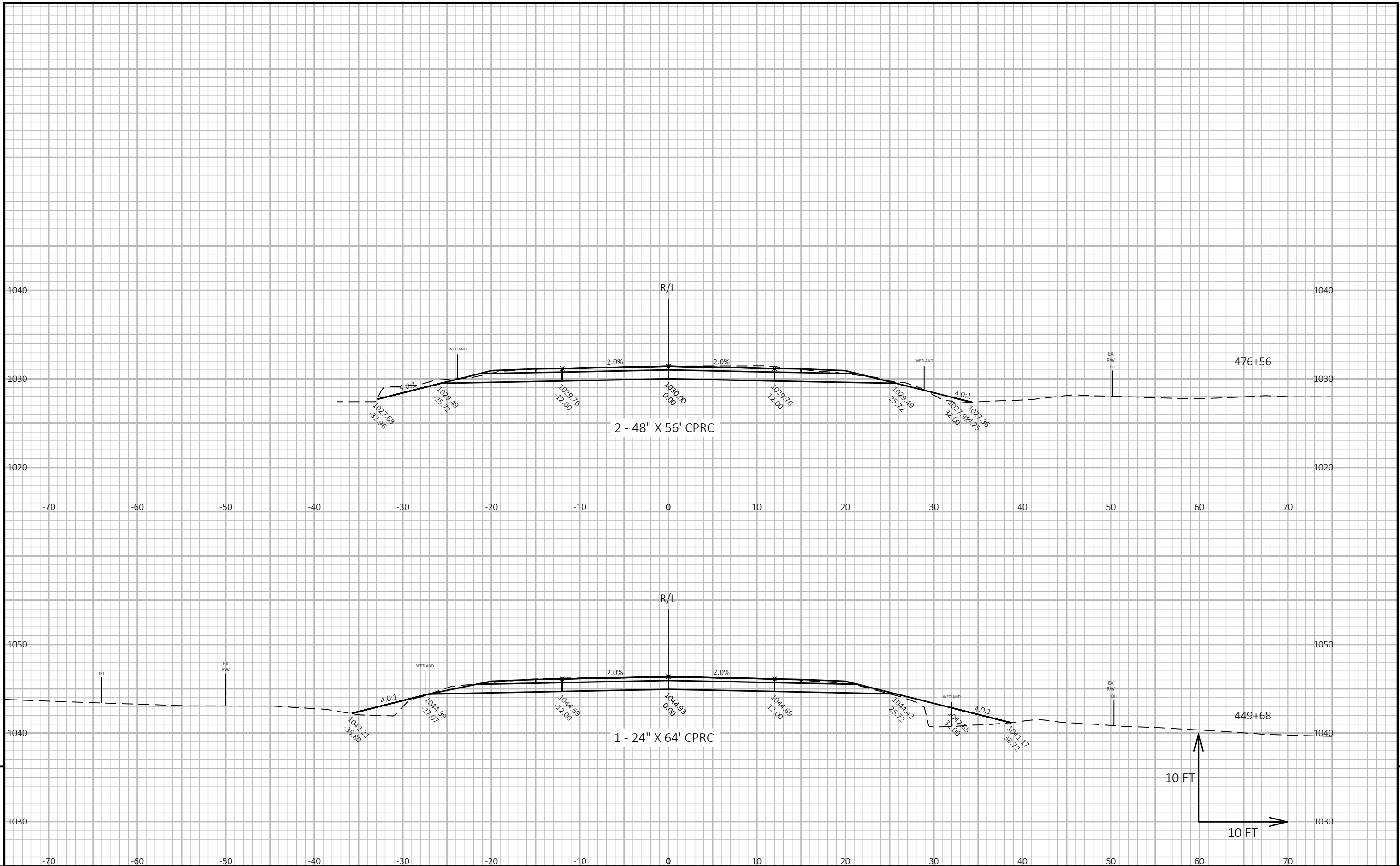


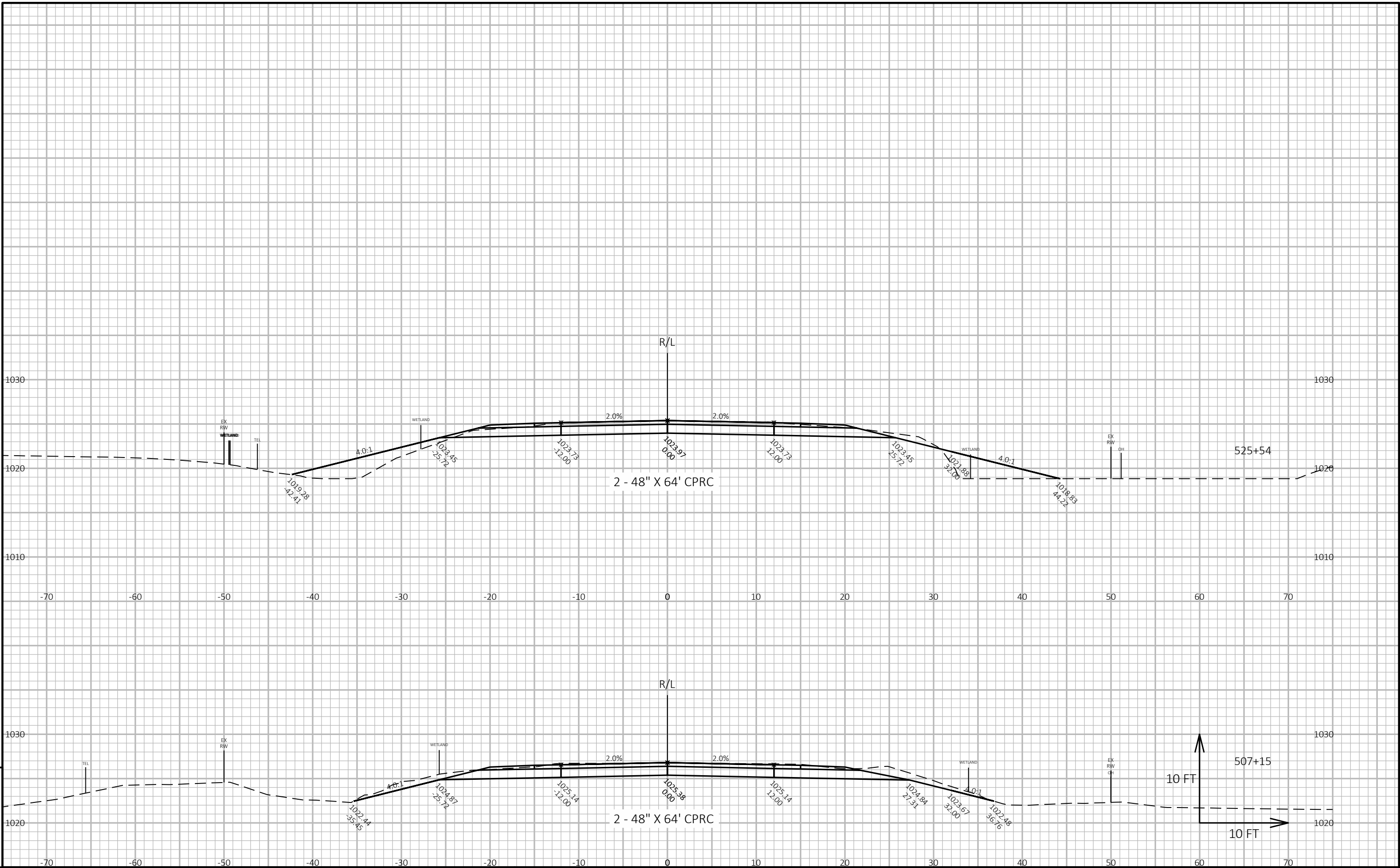


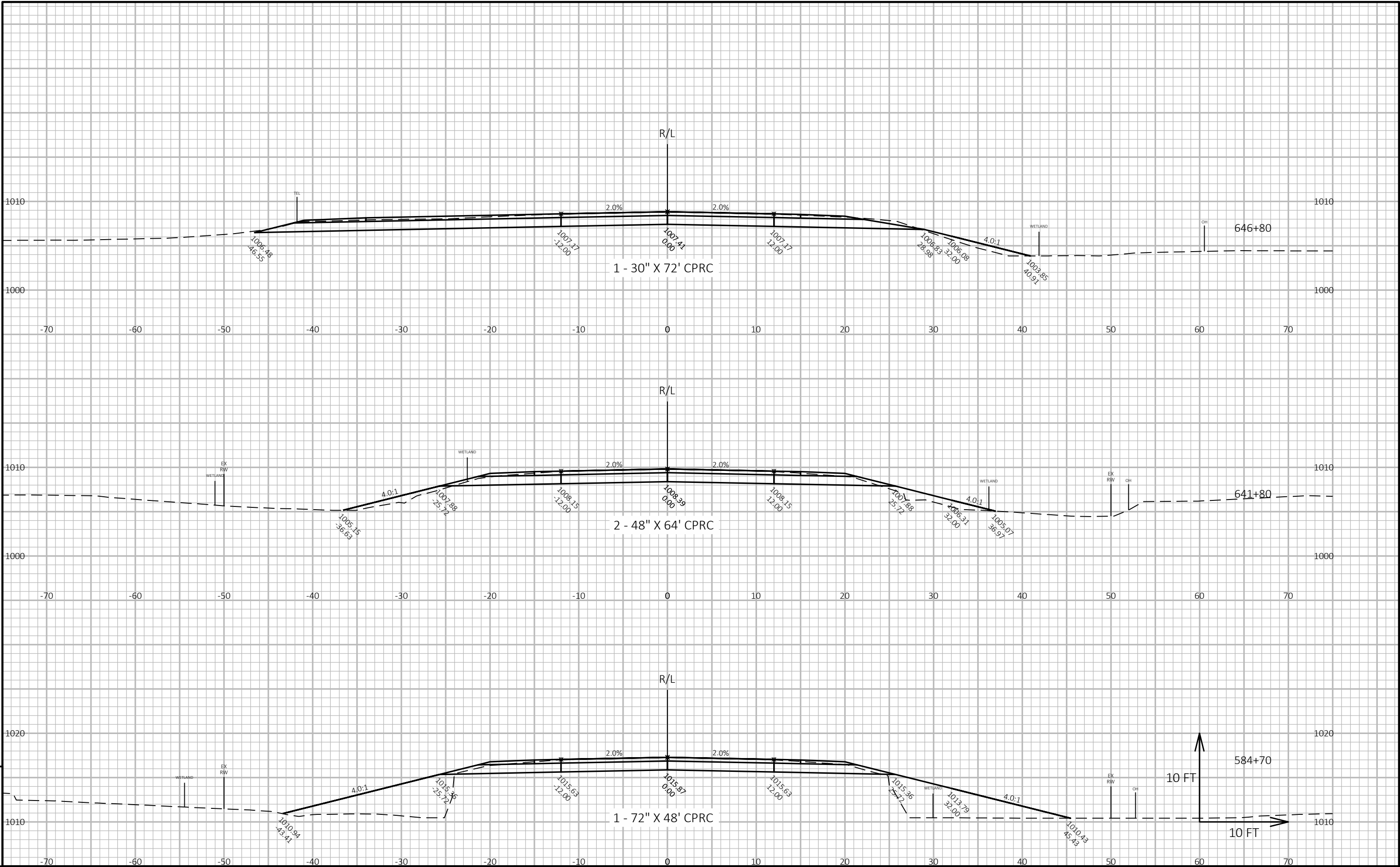


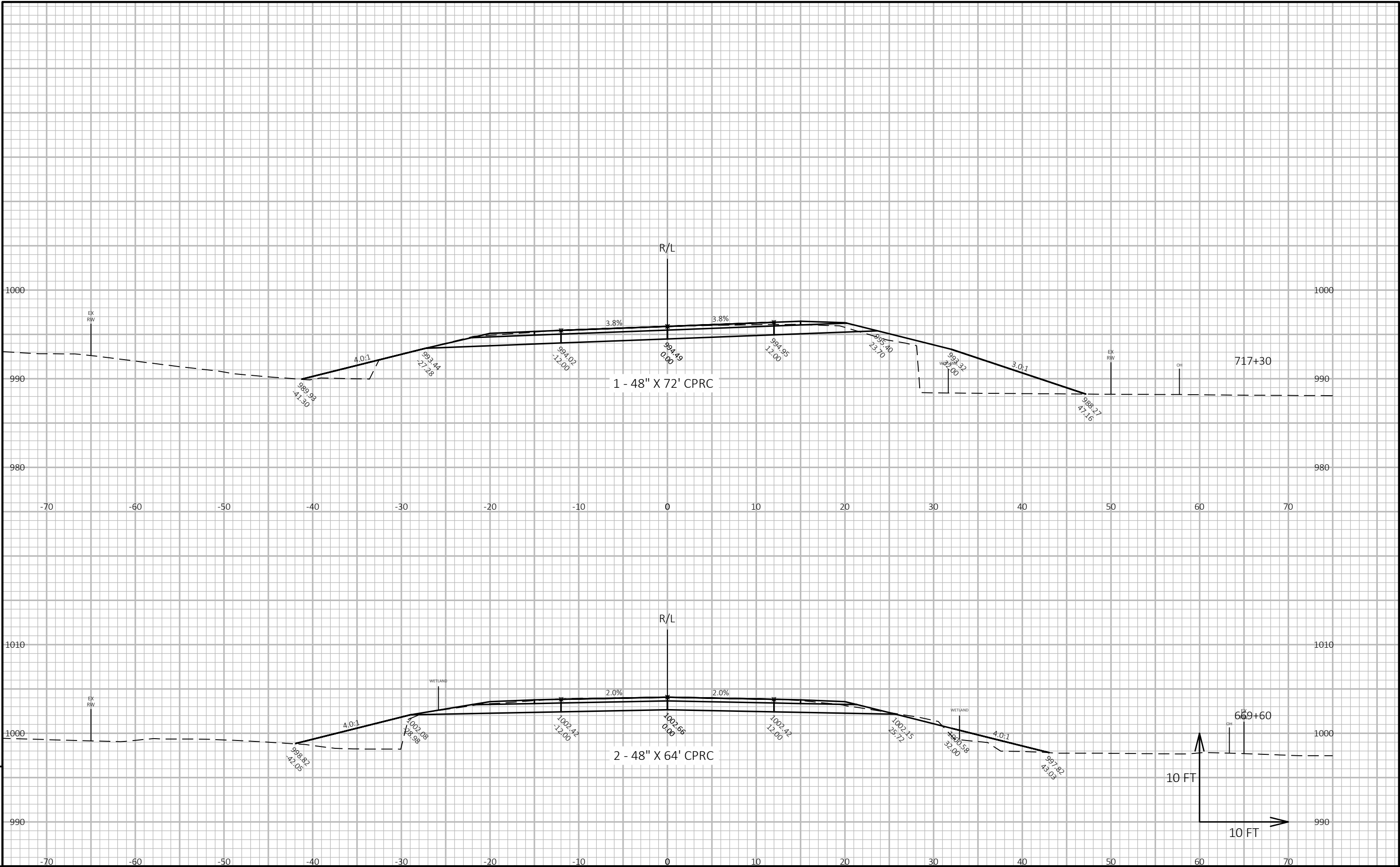


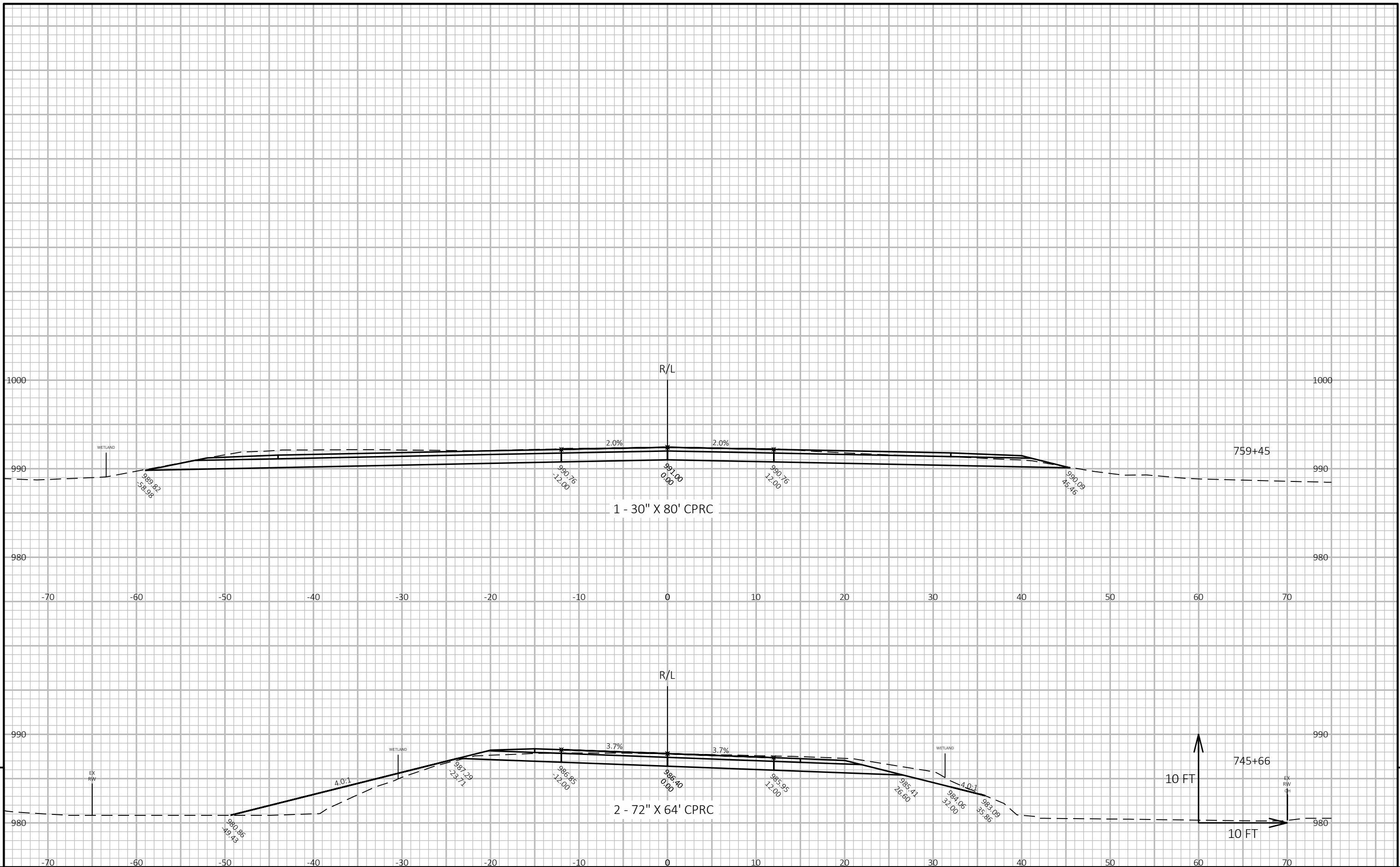


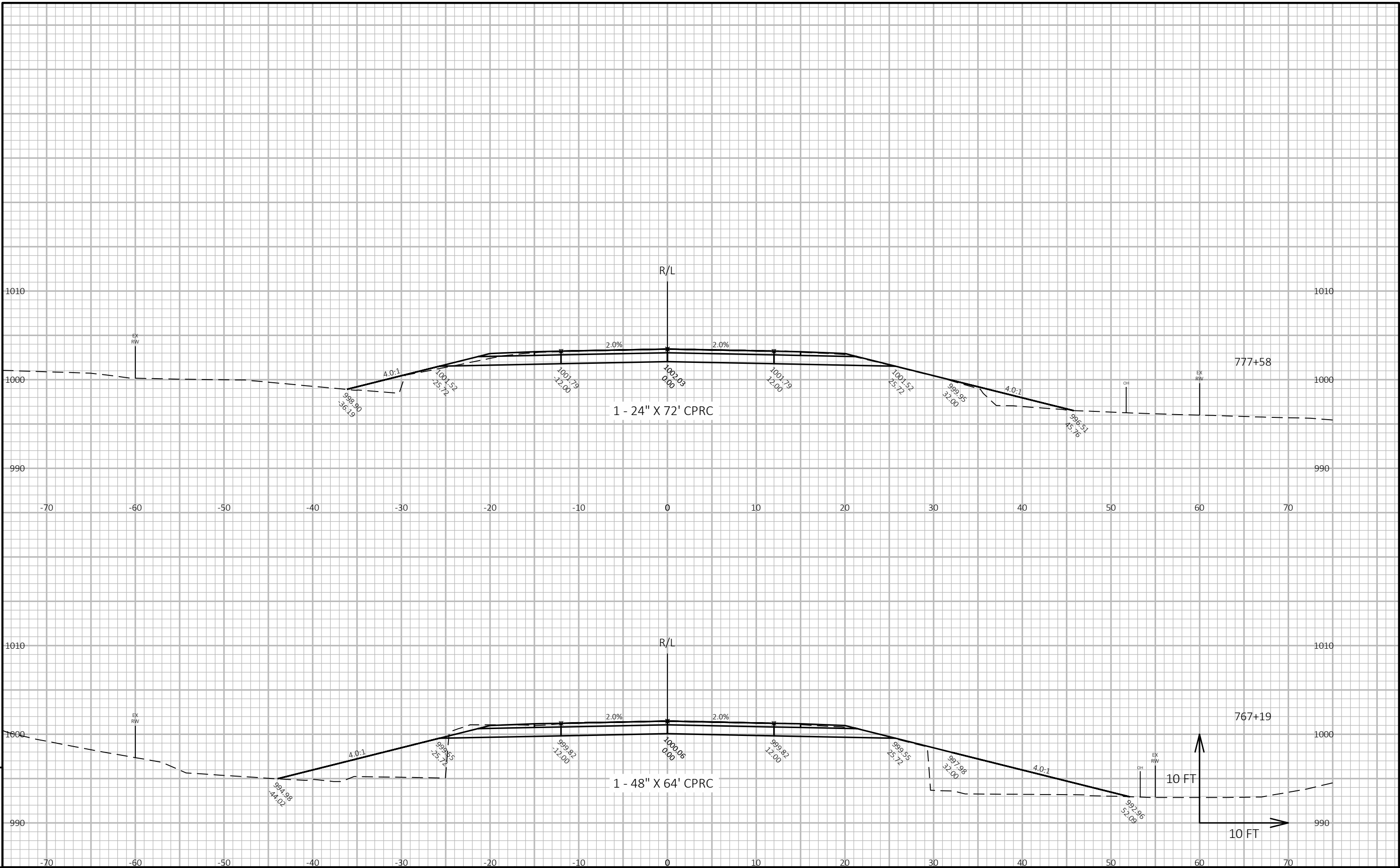


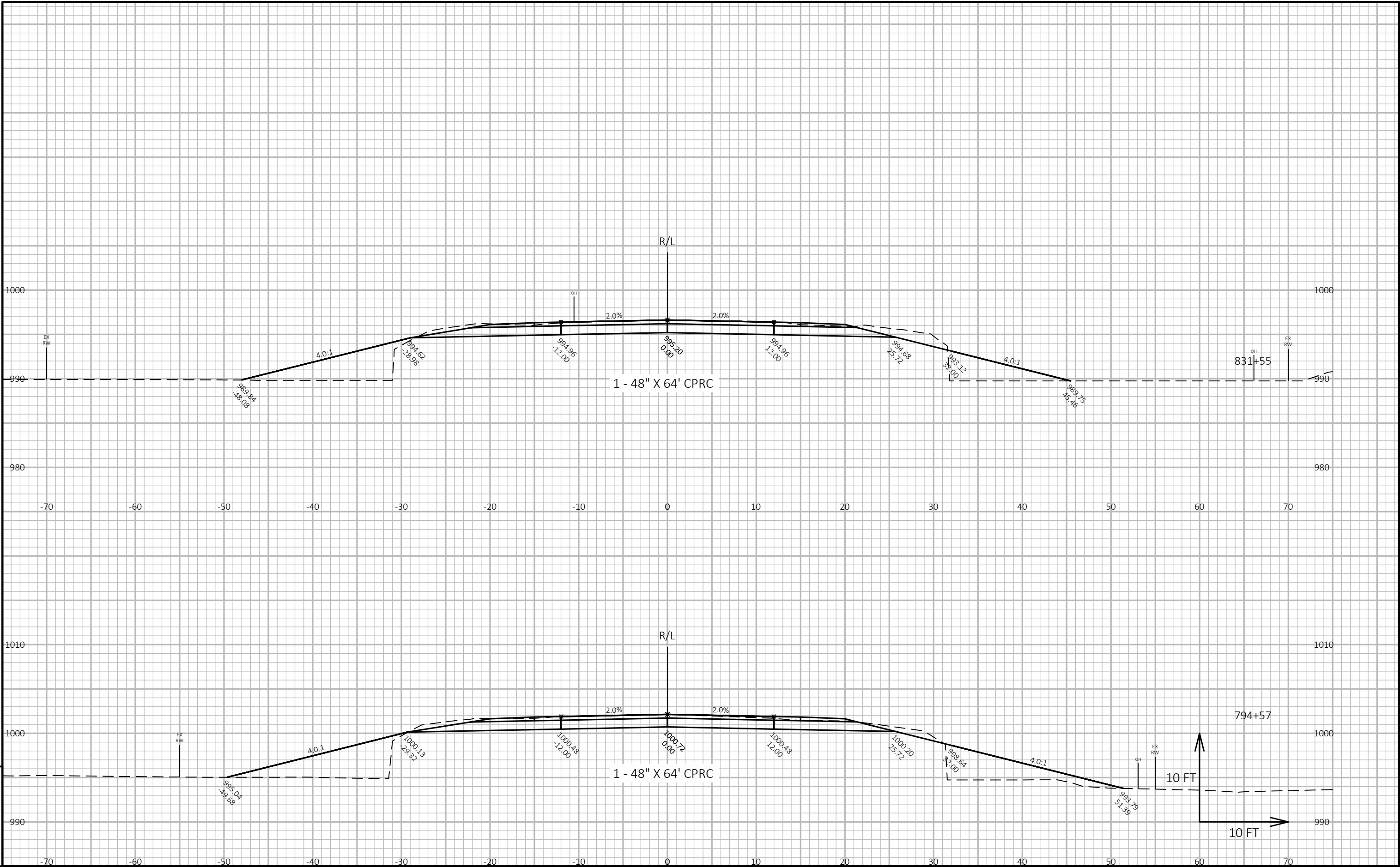




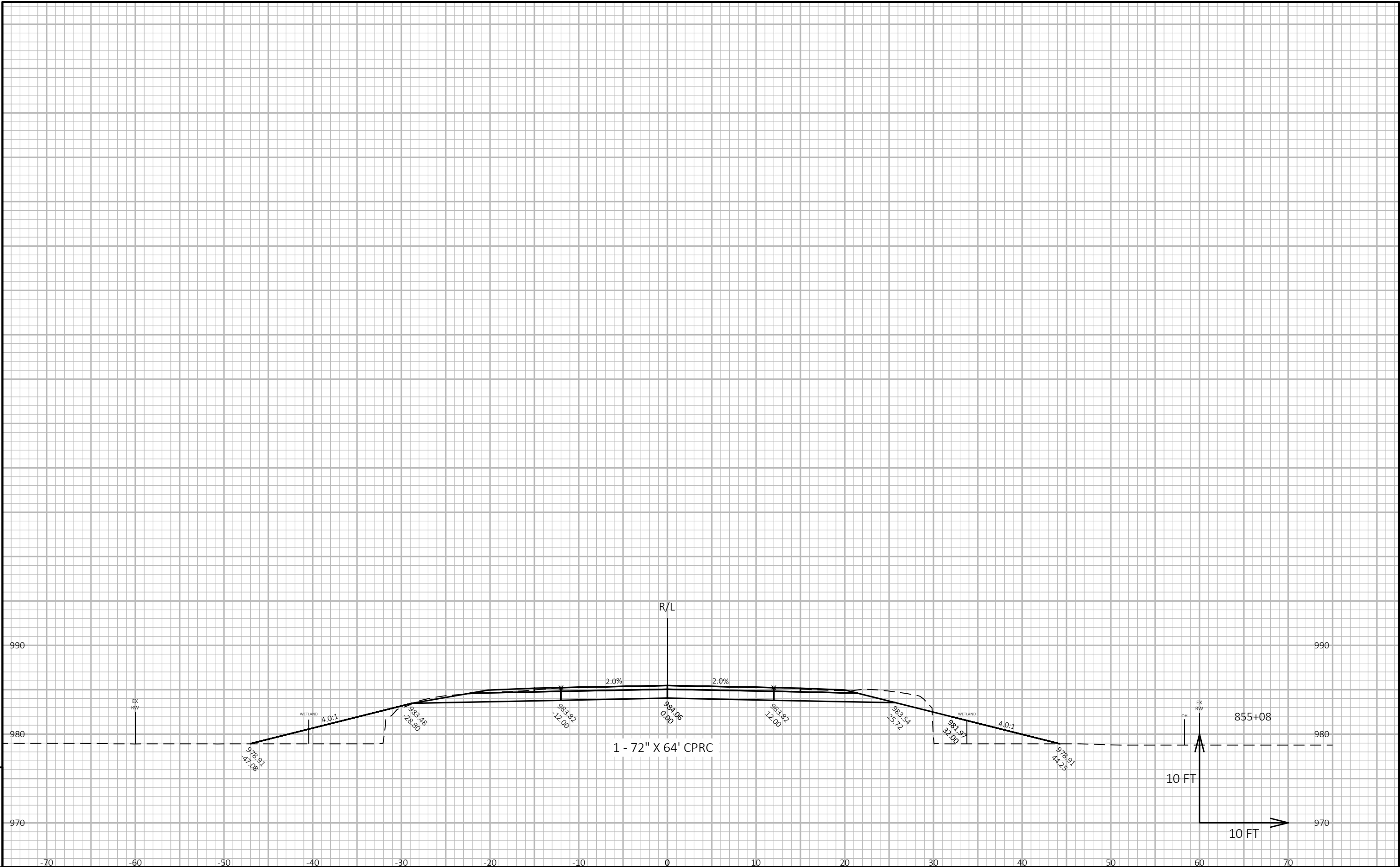






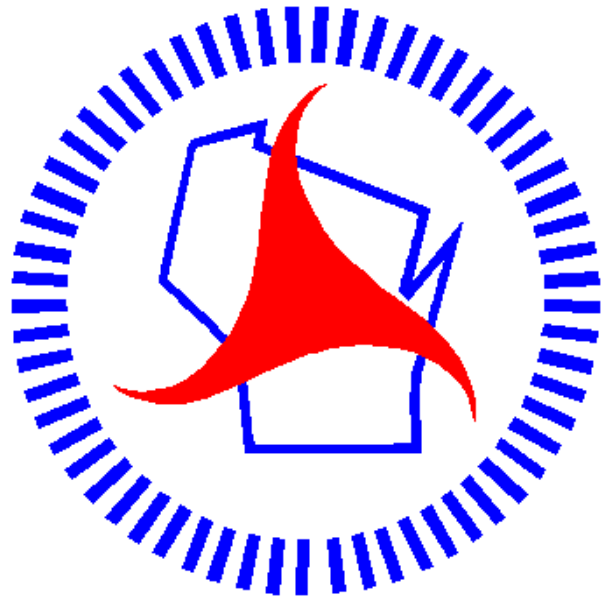


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Notes



Wisconsin Department of Transportation

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