

RHI AUGUST 2019

PROJECT ID: 1009-44-60

COUNTY: IRON

WITH:

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 = 70



DESIGN DESIGNATION 1009-44-60

A.A.D.T.	2020	=	4000
A.A.D.T.	2040	=	4500
D.H.V.		=	24.2
D.D.		=	61/39
T.		=	25.7%
DESIGN SPEED		=	60 MPH
ESALS		=	1,588,400

CONVENTIONAL SYMBOLS

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

	ROCK
	LABEL
	95.36
	E
	FO
	G
	SAN
	SS
	T
	W
	95.36
	95.36

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

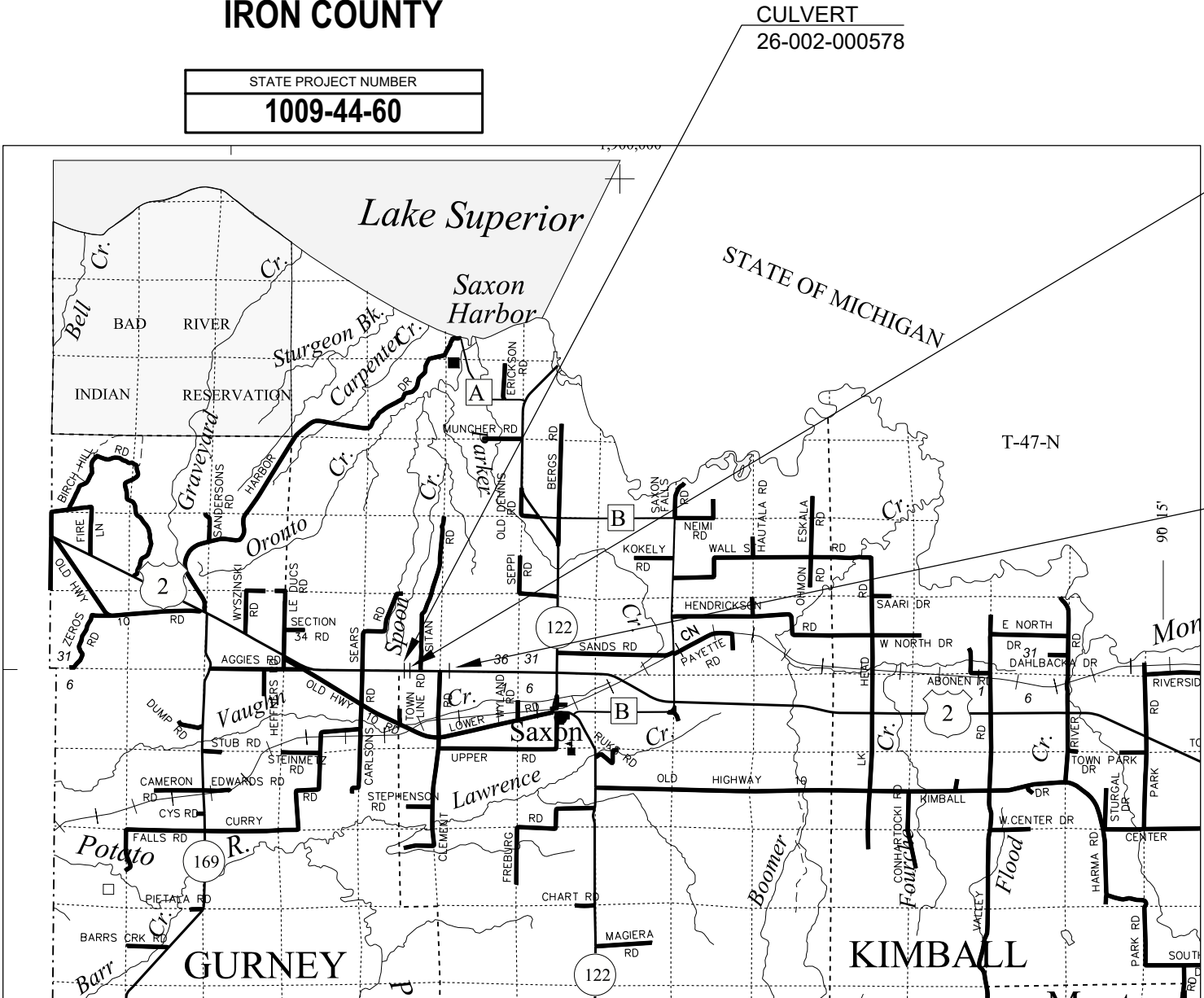
ASHLAND - SAXON

CULVERT REPLACEMENT

USH 2

IRON COUNTY

STATE PROJECT NUMBER
1009-44-60



LAYOUT

SCALE 0 NOT TO SCALE

TOTAL NET LENGTH OF CENTERLINE = 0.21

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, IRON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 2012.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1009-44-60	WISC 2019584	1

CULVERT
26-002-061753

CULVERT
26-002-000581

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	Surveyor
DESIGNER	COLEMAN ENGINEERING
DESIGNER	EVAN A. MAVES
PROJECT MANAGER	DANIEL R. ERVA
REGIONAL EXAMINER	CHERYL L. SIMON
REGIONAL SUPERVISOR	JED P. PETERS
APPROVED FOR THE DEPARTMENT	
DATE: 4/25/19	(Signature)

E

GENERAL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF THE WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

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

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

UTILITIES & OTHER CONTACTS

CENTURYLINK - COMMUNICATION LINE
BEN BAKER
425 ELLINGSON AVENUE
HAWKINS, WI 54530
(715) 585-6303 (OFFICE)
(715) 563-8295 (MOBILE)
BEN.BAKER@CENTURYLINK.COM

MERIT NETWORK INC - COMMUNICATION LINE
DUSTIN LAPOINTE
10514 COUNTY ROAD 612
LEWISTON, MI 49756
(734) 476-6100
DLAPOINT@MERIT.EDU

NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM
KAREN PERREAULT
118 US HWY 41 EAST
NEGAUNEE, MI 49866
(402) 530-3102
KAREN.PERREAULT@NNGCO.COM

XCEL ENERGY - ELECTRICITY
BRENNAN HENRY
1751 LIBERTY STREET
IRONWOOD, MI 49938
(715) 737-3317
BRENNAN.J.HENRY@XCELENERGY.COM



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

WISCONSIN DEPARTMENT
OF NATURAL RESOURCES

NORTH CENTRAL DISTRICT
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
JON SIMONSEN
JONATHON.SIMONSEN@WISCONSIN.GOV
(715) 365-8916

ORDER OF CONSTRUCTION DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION DETAILS
MISCELLANEOUS QUANTITIES
PLAN SHEETS
EARTHWORK QUANTITIES
CROSS SECTIONS

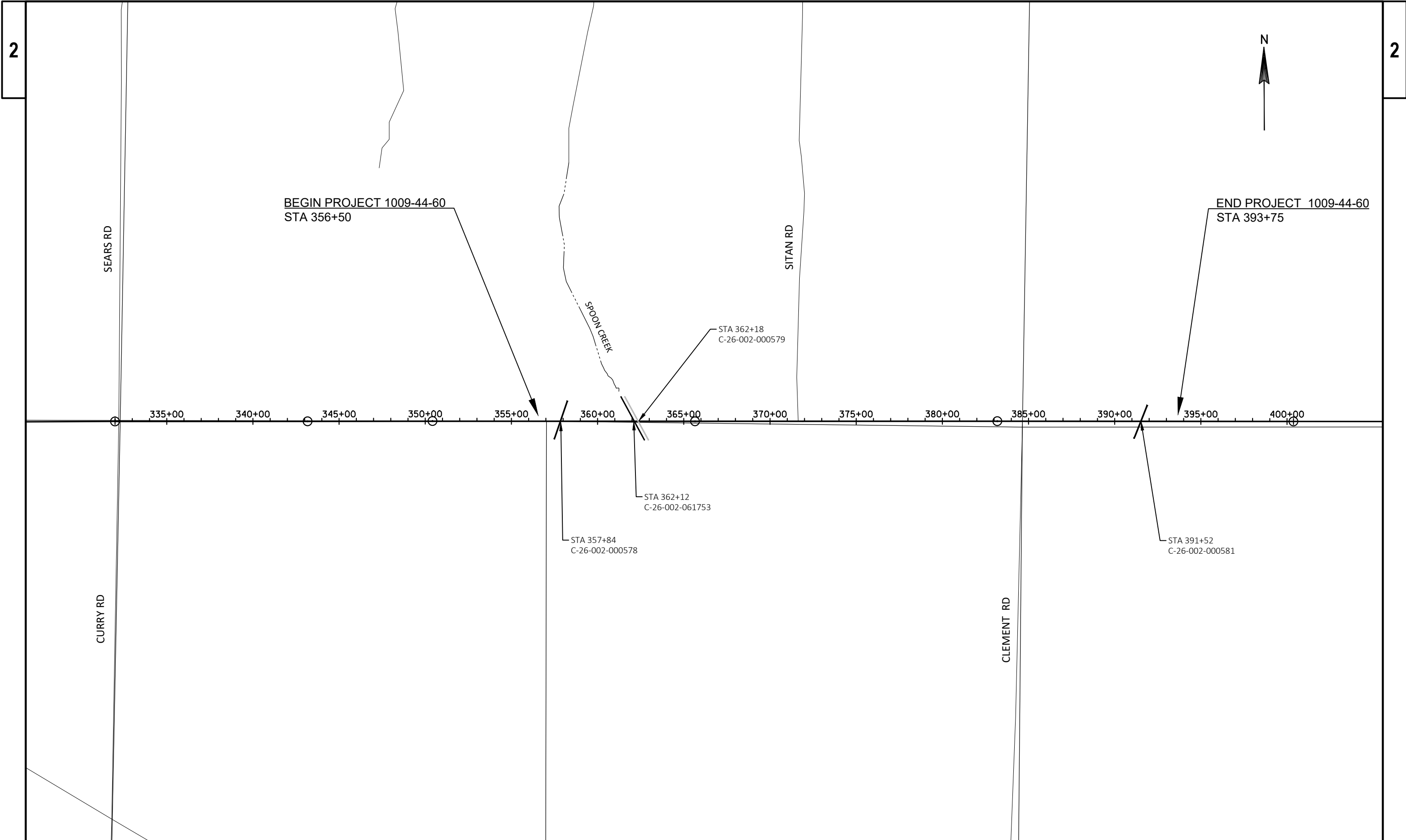
AS-BUILT PLANS USED

DJ 7893
T022-1(7)
T022-1(28)
1181-05-70
1181-08-71
1185-02-70

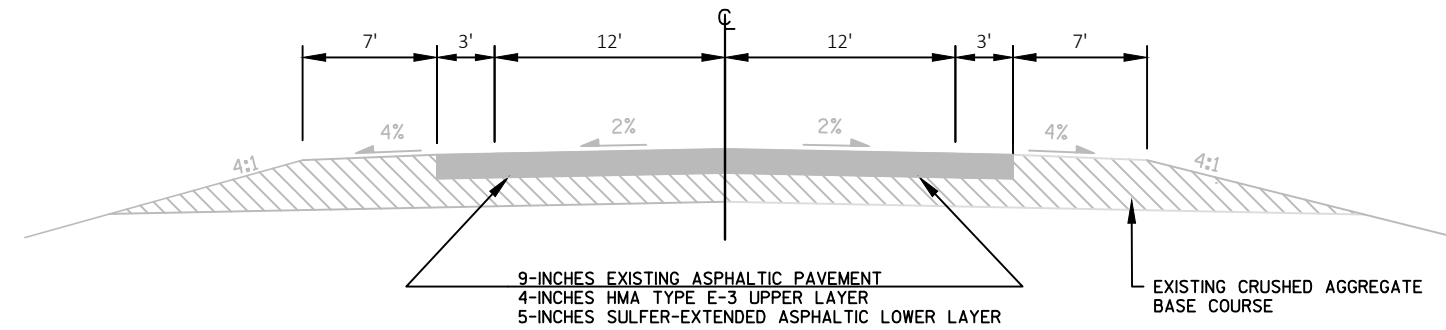
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 3.27 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.52 ACRES

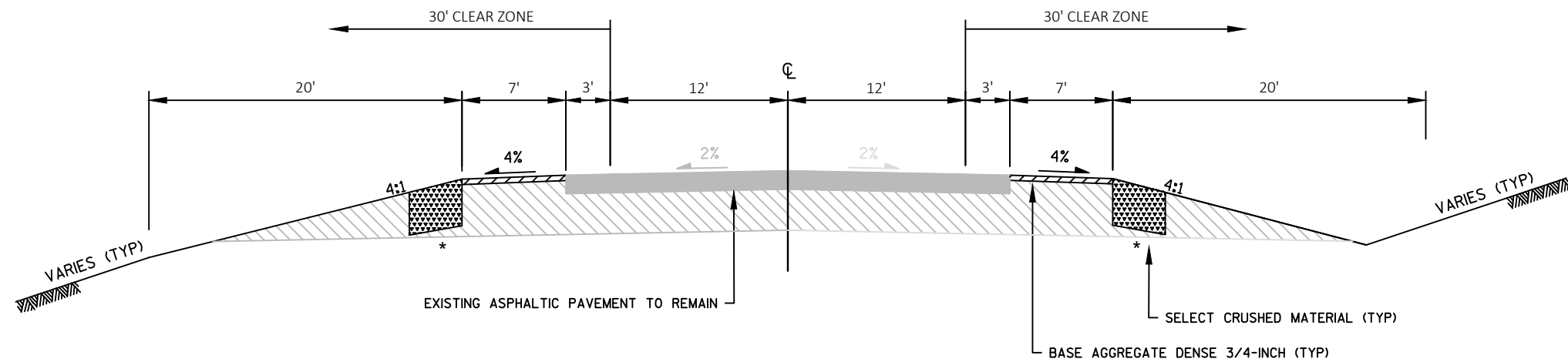


PROJECT NO: 1009-44-60	HWY: USH 2	COUNTY: IRON	PROJECT OVERVIEW	SHEET	E
------------------------	------------	--------------	------------------	-------	---



EXISTING TYPICAL SECTION USH 2

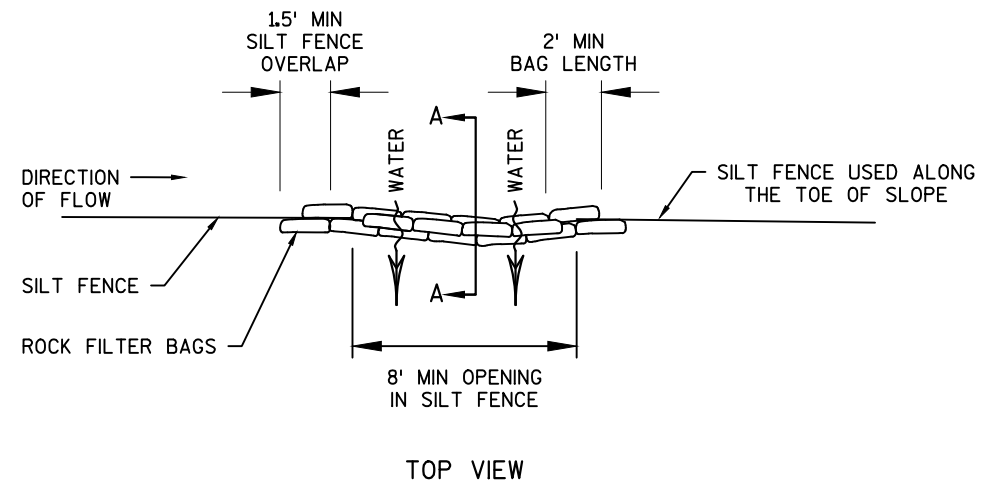
STA 356+50 - STA 363+75
STA 390+00 - STA 393+75



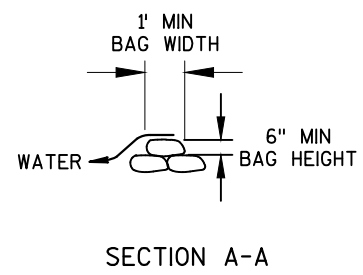
FINISHED TYPICAL SECTION USH 2

STA 356+50 - STA 363+75
STA 390+00 - STA 393+75

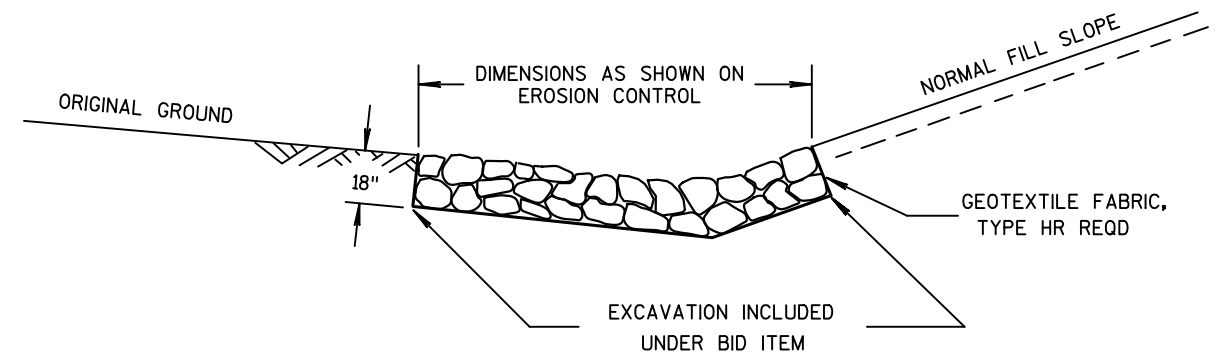
NOTE: *SEE CONSTRUCTION DETAIL SHEETS FOR MORE DETAILS
*SEE EROSION CONTROL SHEETS FOR MORE DETAILS



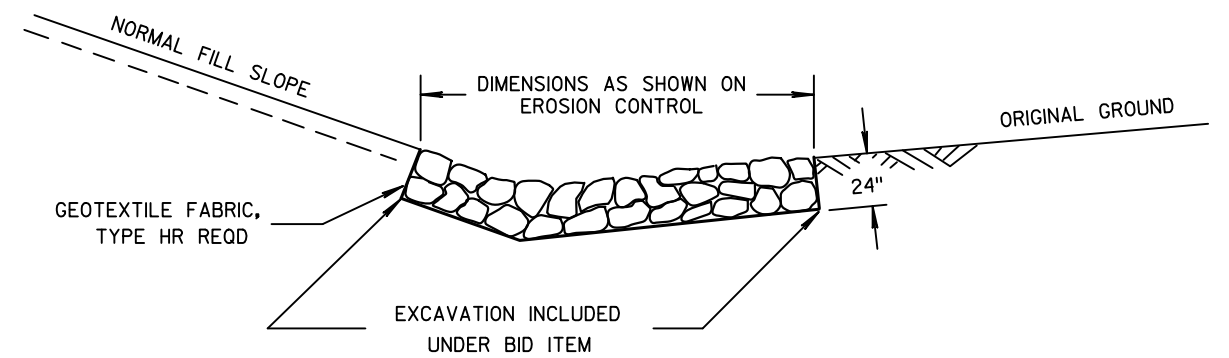
NOTE:
17 ROCK BAGS MINIMUM
PER 8' OPENING



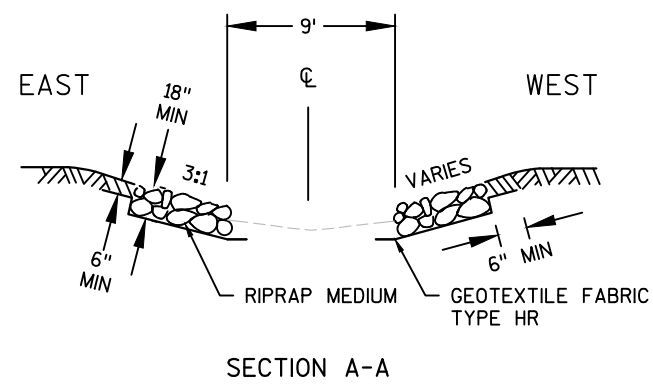
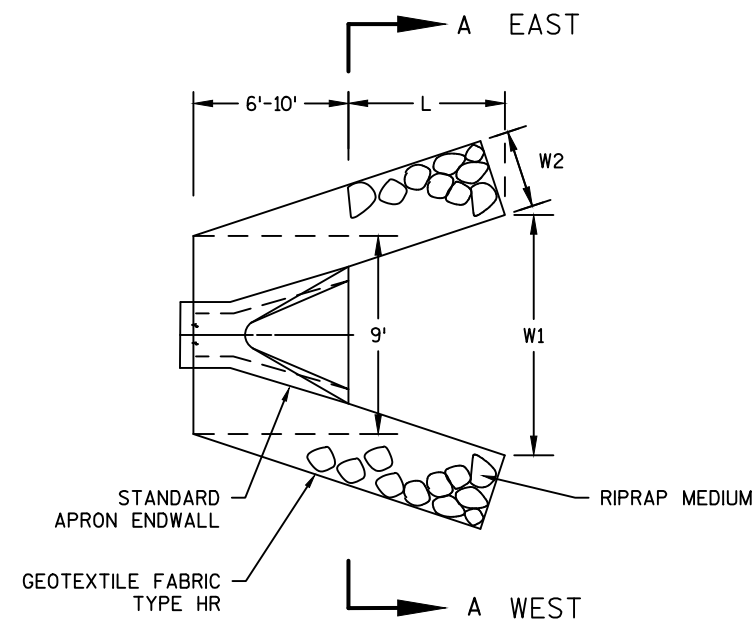
ROCK BAGS USED FOR SILT FENCE RELIEF



DETAIL FOR RIPRAP MEDIUM IN DITCHES

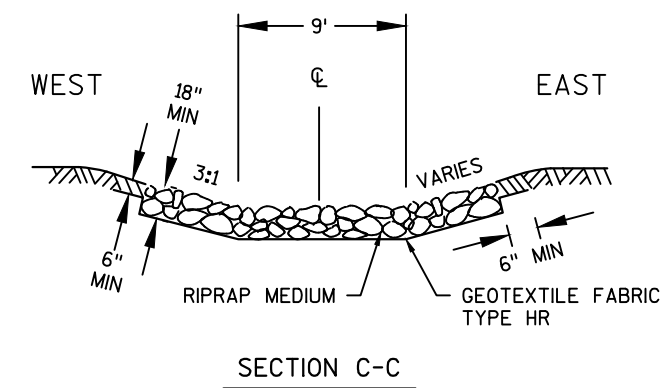
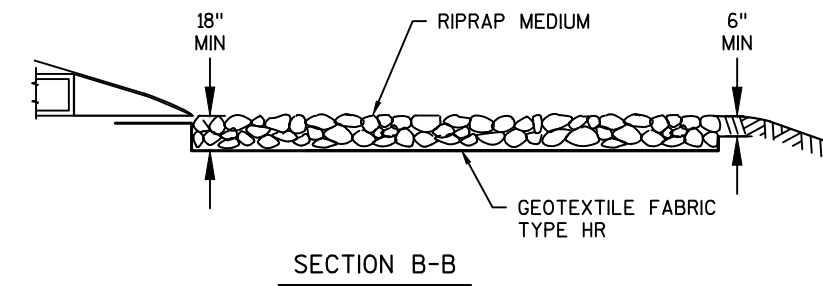
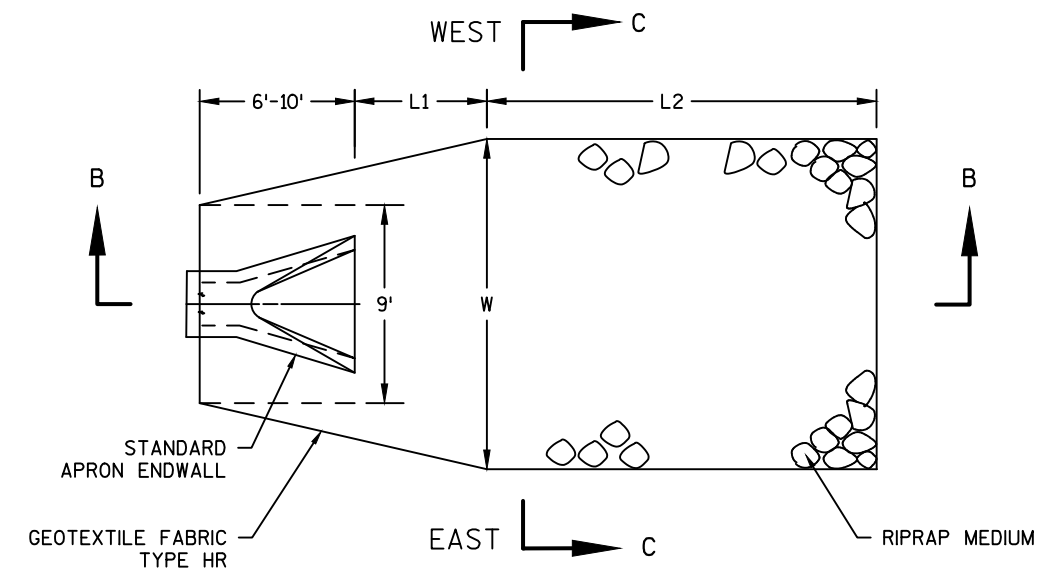


DETAIL FOR RIPRAP HEAVY IN DITCHES



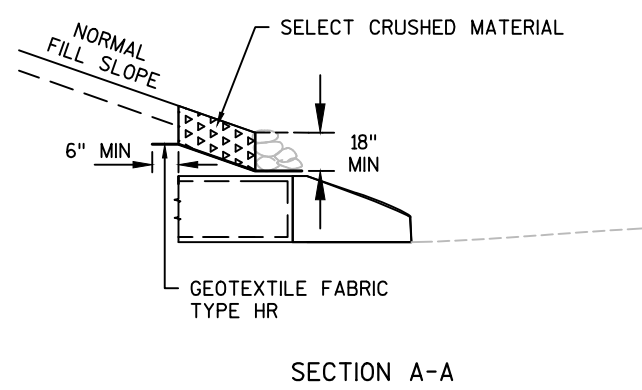
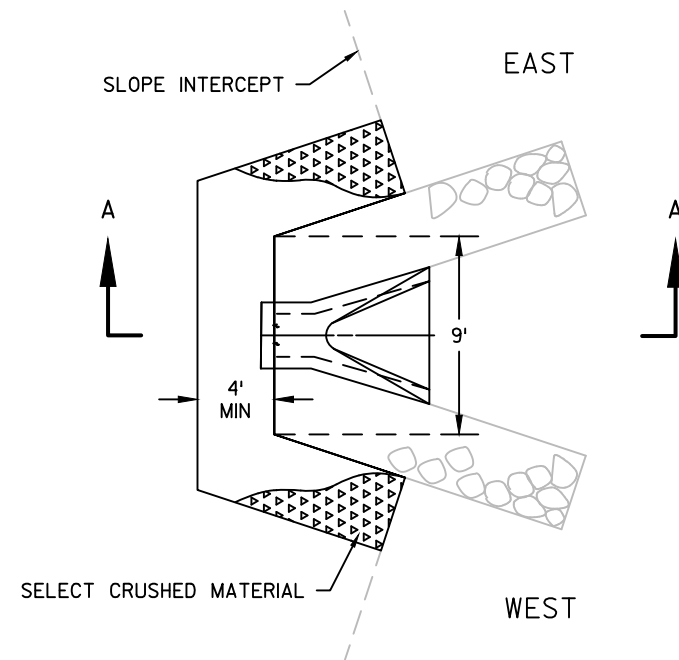
INTLET ENDWALL RIPRAP AND GEOTEXTILE FABRIC DETAIL

STA	OFFSET	W1	W2	L
357+50	99' RT	9'	4'	5'
362+69	103' RT	12'	5'	7'
391+15	94' RT	13'	4'	8'

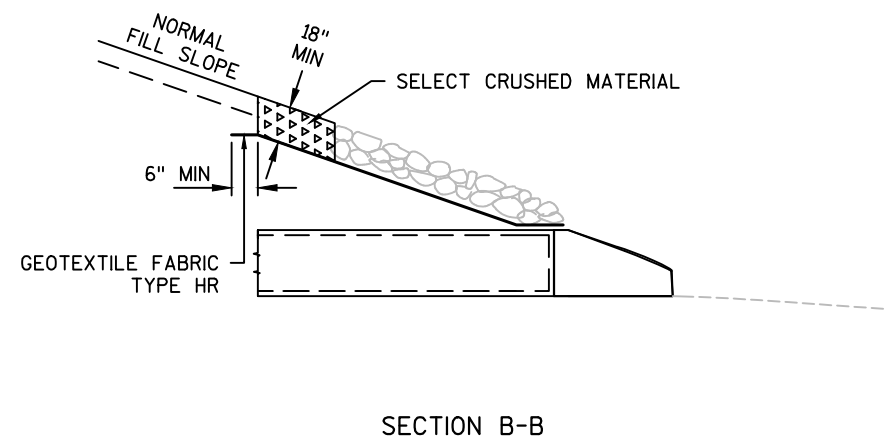
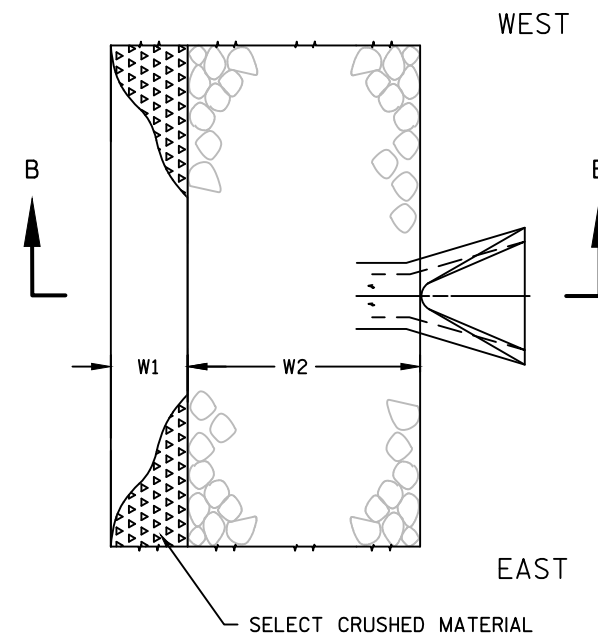


OUTLET ENDWALL RIPRAP AND GEOTEXTILE FABRIC DETAIL

STA	OFFSET	W	L1	L2
358+23	113' LT	13'	4'	9.5'
361+37	135' LT	16'	7'	9'
391+87	89' LT	17'	8'	9'

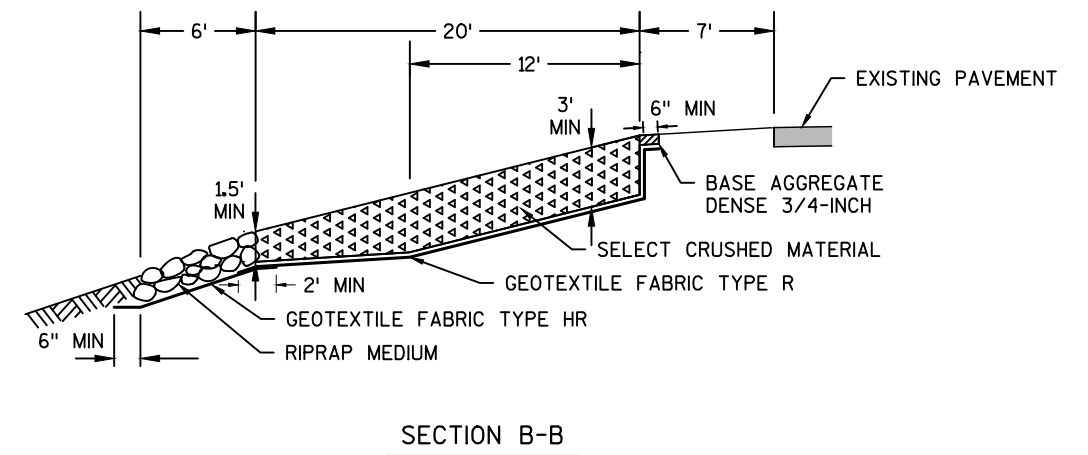
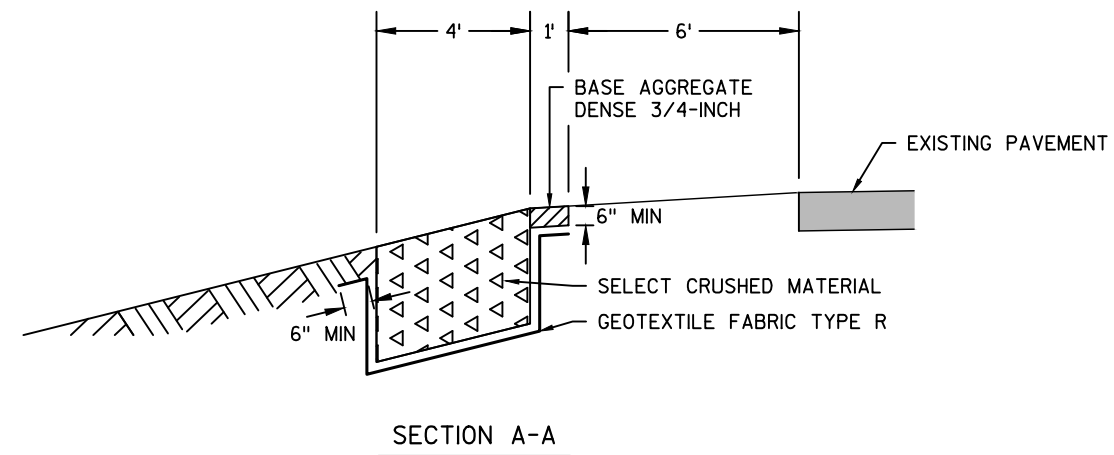
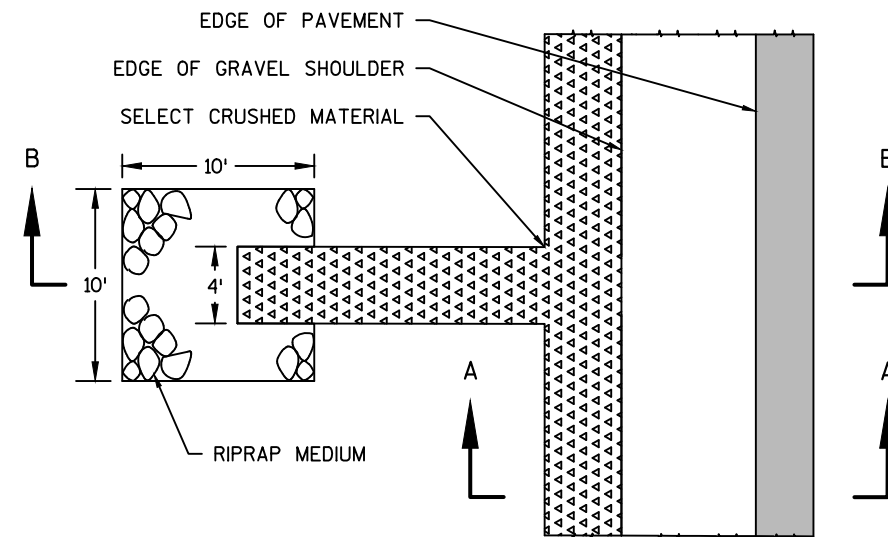


INTLET ENDWALL SELECT CRUSHED MATERIAL SLOPE DRAIN



OUTLET ENDWALL SELECT CRUSHED MATERIAL SLOPE DRAIN

STA	TO	STA	OFFSET	W1	W2
358+18	-	358+31	99' LT	5'	11.5'
360+98	-	361+57	130' LT	4'	5.5'
391+68	-	392+03	88' LT	4'	3'

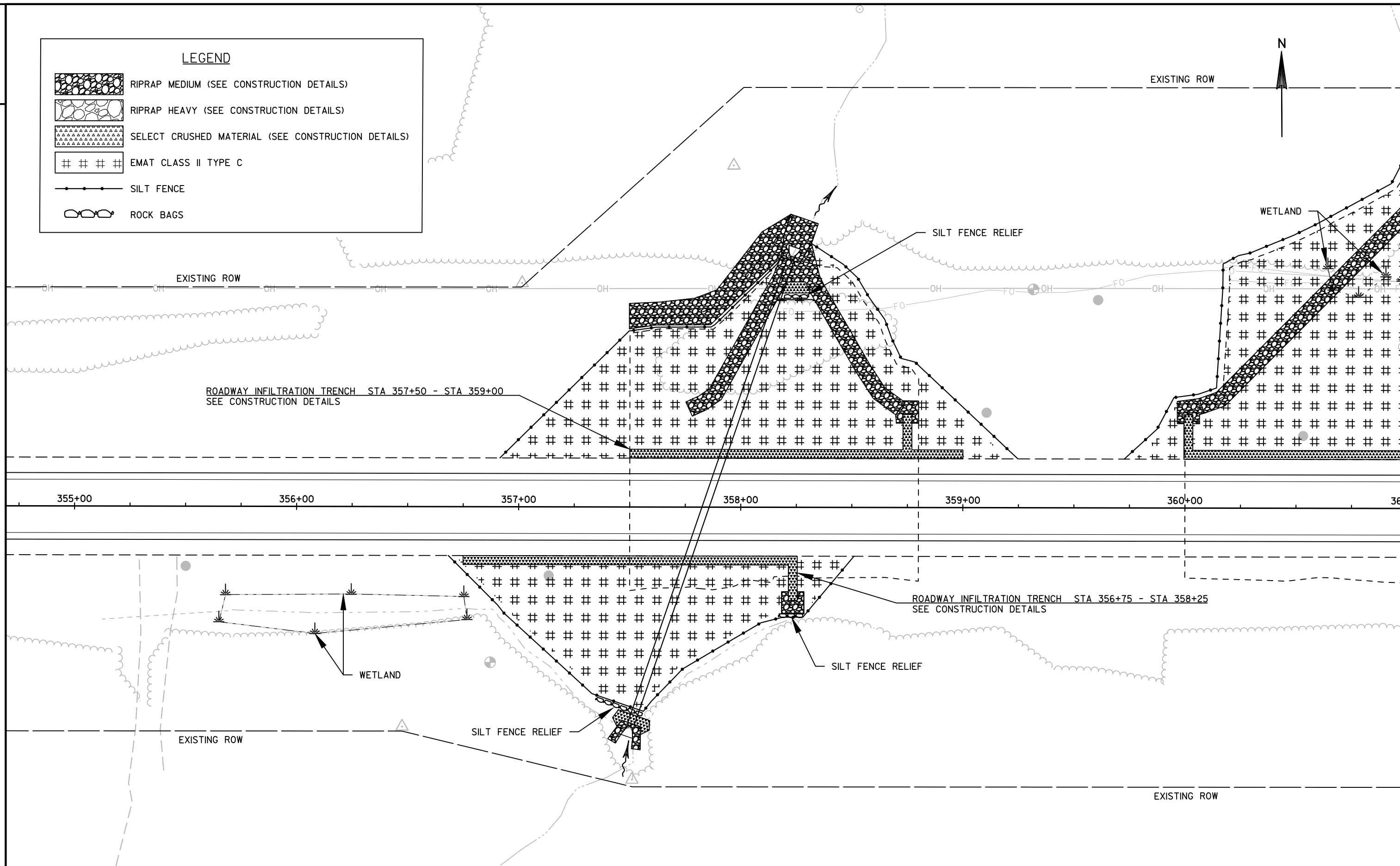


SELECT CRUSHED MATERIAL ROADWAY INFILTRATION TRENCH

SEE EROSION CONTROL SHEETS FOR MORE DETAILS

LEGEND

- | | |
|---|--|
|  | RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS) |
|  | RIPRAP HEAVY (SEE CONSTRUCTION DETAILS) |
|  | SELECT CRUSHED MATERIAL (SEE CONSTRUCTION DETAILS) |
|  | EMAT CLASS II TYPE C |
|  | SILT FENCE |
|  | ROCK BAGS |



PROJECT NO:	1009-44-60
-------------	------------

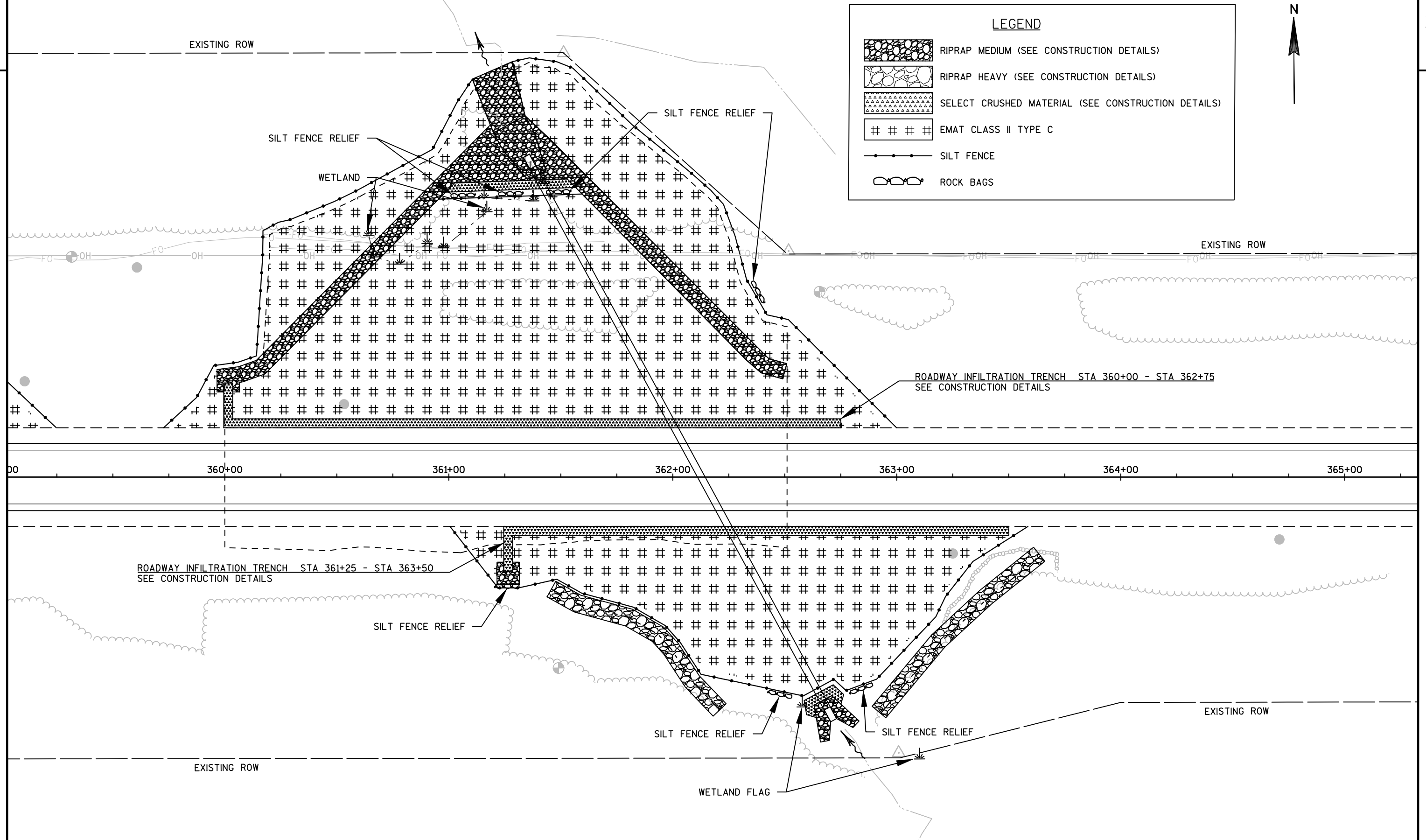
HWY: USH 2

COUNTY: IRON

EROSION CONTROL: CULVERT 26-002-000578

SHEET

--	--



PROJECT NO: 1009-44-60

HWY: USH 2

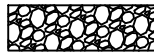
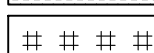
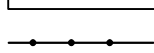
COUNTY: IRON

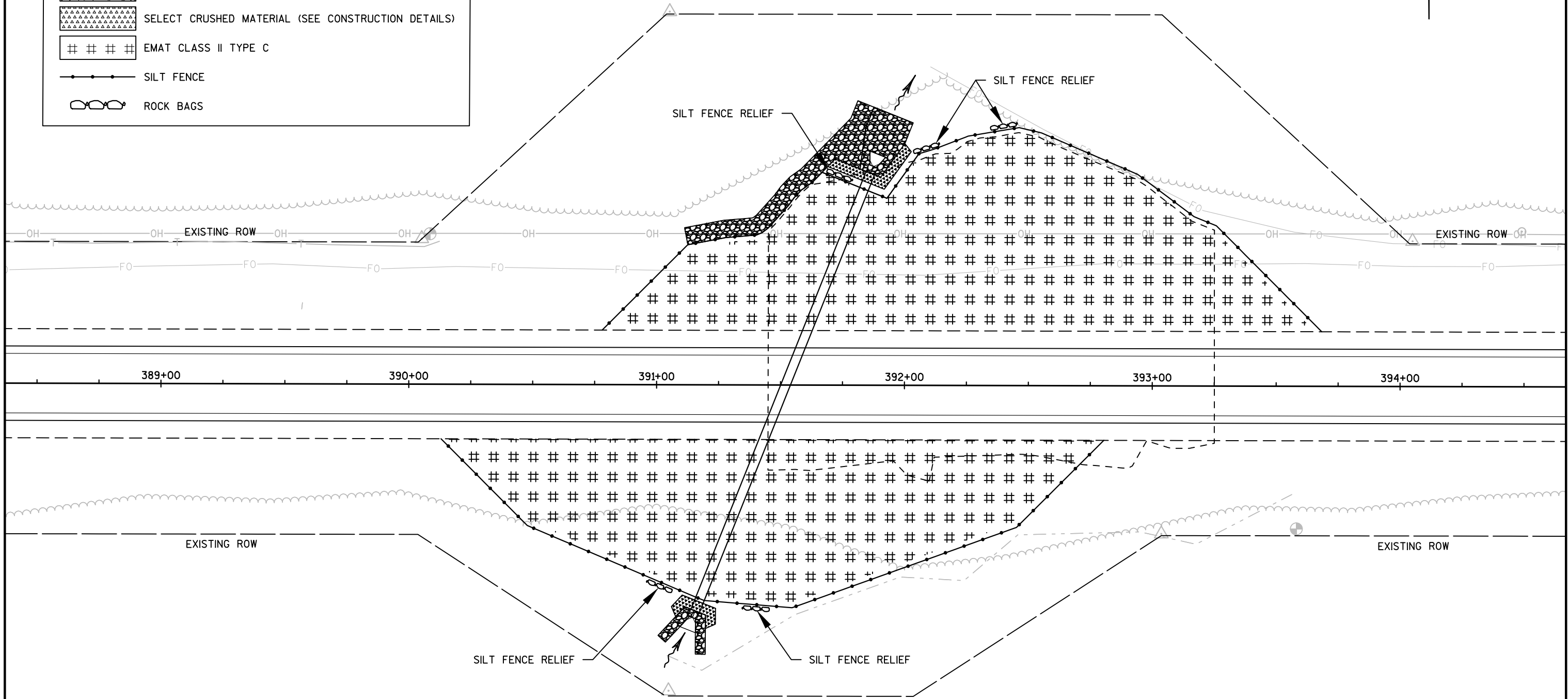
EROSION CONTROL: CULVERT 26-002-061753

SHEET

E

LEGEND

-  RIPRAP MEDIUM (SEE CONSTRUCTION DETAILS)
-  RIPRAP HEAVY (SEE CONSTRUCTION DETAILS)
-  SELECT CRUSHED MATERIAL (SEE CONSTRUCTION DETAILS)
-  EMAT CLASS II TYPE C
-  SILT FENCE
-  ROCK BAGS



Estimate Of Quantities

1009-44-60

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	4.000	4.000
0004	201.0205	Grubbing	STA	4.000	4.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	9,675.000	9,675.000
0010	205.0200	Excavation Rock	CY	101.000	101.000
0012	208.0100	Borrow	CY	7,909.000	7,909.000
0014	213.0100	Finishing Roadway (project) 01. 1009-44-60	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	181.000	181.000
0018	312.0110	Select Crushed Material	TON	600.000	600.000
0020	520.9700.S	Culvert Pipe Liners (size) 01. 27-Inch	LF	224.000	224.000
0022	520.9700.S	Culvert Pipe Liners (size) 02. 30-Inch	LF	197.000	197.000
0024	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	2.000	2.000
0026	606.0200	Riprap Medium	CY	506.000	506.000
0028	606.0300	Riprap Heavy	CY	129.000	129.000
0030	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1009-44-60	EACH	1.000	1.000
0032	619.1000	Mobilization	EACH	1.000	1.000
0034	624.0100	Water	MGAL	0.500	0.500
0036	625.0100	Topsoil	SY	9,021.000	9,021.000
0038	628.1504	Silt Fence	LF	2,333.000	2,333.000
0040	628.1520	Silt Fence Maintenance	LF	583.000	583.000
0042	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0044	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0046	628.2027	Erosion Mat Class II Type C	SY	9,021.000	9,021.000
0048	628.7570	Rock Bags	EACH	380.000	380.000
0050	629.0205	Fertilizer Type A	CWT	5.700	5.700
0052	630.0110	Seeding Mixture No. 10	LB	121.300	121.300
0054	631.0300	Sod Water	MGAL	9.200	9.200
0056	633.5200	Markers Culvert End	EACH	6.000	6.000
0058	642.5001	Field Office Type B	EACH	1.000	1.000
0060	643.0300	Traffic Control Drums	DAY	610.000	610.000
0062	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0064	643.0900	Traffic Control Signs	DAY	240.000	240.000
0066	643.5000	Traffic Control	EACH	1.000	1.000
0068	645.0120	Geotextile Type HR	SY	1,754.000	1,754.000
0070	645.0130	Geotextile Type R	SY	979.000	979.000
0072	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0074	650.9910	Construction Staking Supplemental Control (project) 01. 1009-44-60	LS	1.000	1.000
0076	650.9920	Construction Staking Slope Stakes	LF	561.000	561.000

Estimate Of Quantities

1009-44-60

Line	Item	Item Description	Unit	Total	Qty
0078	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0080	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0082	SPV.0060	Special 01. Grouting Culvert Joints	EACH	41.000	41.000
0084	SPV.0060	Special 02. Slurry Abandoned Culvert Pipe	EACH	1.000	1.000
0086	SPV.0090	Special 01. Grading Shaping and Finishing Ditch	LF	388.000	388.000
0088	SPV.0105	Special 01. Temporary Water Diversion Spoon Creek	LS	1.000	1.000
0090	SPV.0105	Special 02. Jacking and Boring 36-Inch Steel Casing Pipe	LS	1.000	1.000

CLEARING AND GRUBBING

				201.0105	201.0205
				CLEARING	GRUBBING
STATION	TO	STATION	LOCATION	(STA)	(STA)
357+65	-	358+90	LT	2	2
360+25	-	362+25	LT	2	2
TOTALS =				4	4

REMOVING SMALL PIPE CULVERTS

				203.0100	
				(EACH)	REMARKS
STATION	TO	STATION	LOCATION		
361+20	-	361+44	156' LT	1	INCLUDES TWO SECTIONS DISPLACED DOWNSTREAM
TOTALS =				1	

EXCAVATION ROCK

				205.0200
				(CY)
STATION	TO	STATION	LOCATION	
363+20	-	363+72	RT	62
391+12	-	391+81	LT	39
TOTALS =				101

3/4-INCH BASE AGGREGATE DENSE

				305.0110	624.0100	
				BASE AGGREGATE		
				DENSE 3/4-INCH	WATER	
STATION	TO	STATION	LOCATION	(TON)	(MGAL)	REMARKS
356+50	-	359+50	LT	20	---	SHOULDER SURFACE
356+50	-	359+50	RT	20	---	SHOULDER SURFACE
356+75	-	358+25	RT	6	---	INFILTRATION TRENCH
357+50	-	359+00	LT	6	---	INFILTRATION TRENCH
359+50	-	363+75	LT	29	---	SHOULDER SURFACE
359+50	-	363+75	RT	29	---	SHOULDER SURFACE
360+00	-	362+75	LT	11	---	INFILTRATION TRENCH
361+25	-	363+50	RT	9	---	INFILTRATION TRENCH
390+00	-	393+75	LT	26	---	SHOULDER SURFACE
390+00	-	393+75	LT	26	---	SHOULDER SURFACE
UNDISTRIBUTED			LT/RT	---	0.5	
TOTALS =				181	0.5	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK

					205.0100							208.0100			
					EXCAVATION COMMON (1)		UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL (CY)	EXPANDED FILL (6)	MASS ORDINATE +/- (7)	WASTE (CY)	BORROW (CY)		
DIVISION	STATION	TO	STATION	LOCATION	CUT (2)	EBS (3)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	REMARKS	
1	356+75	-	358+25	RT	76	0	0	0	0	0	0	0	0	INFILTRATION TRENCH	
	357+50	-	359+00	LT	76	0	0	0	0	0	0	0	0	INFILTRATION TRENCH	
	357+50	-	358+80	LT	1,411	0	0	0	1,135	1,419	-1,419	0	1,419	SLOPE CUT/FILL	
	360+00	-	362+75	LT	134	0	0	0	0	0	0	0	0	INFILTRATION TRENCH	
	360+00	-	362+51	LT	6,647	0	0	0	4,004	5,005	-5,005	0	5,005	SLOPE CUT/FILL	
	361+25	-	363+50	RT	111	0	0	0	0	0	0	0	0	INFILTRATION TRENCH	
	391+45	-	393+25	LT	1,220	0	0	0	1,188	1,485	-1,485	0	1,485	SLOPE CUT/FILL	
SUBTOTALS =					9,675	0	0	0	6,327	7,909	-7,909	0	7,909		
TOTALS =					9,675							7,909			

- 1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NO. 205.0100.
- 2) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- 3) EBS EXCAVATION TO BE BACKFILLED WITH CUT MATERIAL.
- 4) UNUSABLE PAVEMENT MATERIAL.
- 5) AVAILABLE MATERIAL = CUT - UNUSABLE PAVEMENT MATERIAL.
- 6) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
- 7) MASS ORDINATE = (AVAILABLE MATERIAL) - (EXPANDED FILL).
- PLUS (+) QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION.
- MINUS (-) INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

RIPRAP AND SELECT CRUSHED MATERIAL

312.0110 606.0200 606.0300 645.0120 SELECT CRUSHED MATERIAL RIPRAP MEDIUM RIPRAP HEAVY GEOTEXTILE TYPE HR								
STATION	TO	STATION	LOCATION	(TON)	(CY)	(CY)	(SY)	REMARKS
357+40	-	357+59	RT	8.4	4.6	---	30	C-26-002-000578 INLET ENDWALL
357+50	-	358+22	LT	---	53.9	---	143	RE-GRADED DITCH
357+75	-	358+74	LT	---	67.1	---	194	NEW DITCH
358+18	-	358+35	LT	---	12.1	---	35	C-26-002-000578 OUTLET ENDWALL
358+18	-	358+31	LT	5.7	---	---	8	TOE OF SLOPE
360+06	-	362+51	LT	---	143.2	---	409	NEW DITCH
360+98	-	361+57	LT	22.9	---	---	31	TOE OF SLOPE
361+10	-	361+34	LT	---	24.7	---	65	NEW STREAM BED
361+20	-	361+43	LT	---	18.8	---	52	C-26-002-061753 OUTLET ENDWALL
361+44	-	362+24	RT	---	---	56.8	133	RE-GRADED DITCH
362+58	-	362+83	RT	10.1	9.7	---	46	C-26-002-061753 INTLET ENDWALL
362+89	-	363+66	RT	---	---	59.8	140	RE-GRADED DITCH
391+00	-	391+24	RT	9.9	17.9	---	41	C-26-002-000581 INTLET ENDWALL
391+11	-	391+88	LT	---	70.0	---	121	RE-GRADED DITCH
391+68	-	392+03	LT	16.9	18.8	---	74	C-26-002-000581 OUTLET ENDWALL
TRENCH OUTFALLS			LT/RT	---	18.9	---	72	
UNDISTRIBUTED			LT/RT	8.0	46.0	12.0	160	
TOTAL =				82	506	129	1,754	

(*)
(*) NOTE: ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ROADWAY INFILTRATION TRENCH

312.0110 645.0130 SELECT CRUSHED MATERIAL GEOTEXTILE TYPE R					
STATION	TO	STATION	LOCATION	(TON)	(SY)
356+75	-	358+25	RT	141	189
357+50	-	359+00	LT	140	189
360+00	-	362+75	LT	130	328
361+50	-	363+50	RT	107	273
TOTAL =				518	979
(*)					
(*) NOTE: ADDITIONAL QUANTITIES SHOWN ELSEWHERE					

CROSS DRAIN CULVERTS

520.9700.S.01 520.9700.S.02 522.0360 633.5200 SPV.0060 SPV.0060 SPV.0105 SPV.0105 CULVERT PIPE LINERS CULVERT PIPE LINERS CLEANING CULVERT PIPES FOR LINER VERIFICATION MARKERS CULVERT END SPECIAL 01. GROUTING CULVERT JOINTS SPECIAL 02. SLURRY ABANDONED CULVERT PIPE SPECIAL 01. TEMPORARY WATER DIVERSION SPECIAL 02. JACKING AND BORING 36-INCH STEEL CASING PIPE									
STATION	LOCATION	CULVERT NO.	27-INCH (LF)	30-INCH (LF)	(EACH)	(EACH)	(EACH)	(EACH)	(LS)
357+84	LT/RT	C-26-002-000578	224	---	1	2	41	---	---
362+12	LT/RT	C-26-002-061753	---	---	---	2	---	---	1
362+18	LT/RT	C-26-002-000579	---	---	---	---	---	1	---
391+52	LT/RT	C-26-002-000581	---	197	1	2	---	---	---
TOTALS =			224	197	2	6	41	1	1

GRADING AND SHAPING DITCH

SPV.0090.01 (LF)				
STATION	TO	STATION	LOCATION	(LF)
357+50	-	358+22	LT	95
361+46	-	362+21	RT	96
362+93	-	363+64	RT	101
391+12	-	391+84	LT	96
TOTAL =				388

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EROSION CONTROL

				625.0100	628.1504	628.1520	628.1905	628.1910	628.2008	628.7570	629.0205	630.0110	631.0300
				TOPSOIL (SY)	SILT FENCE (LF)	MAINTENANCE (LF)	EROSION CONTROL (EACH)	EROSION CONTROL (EACH)	CLASS I TYPE B (SY)	ROCK BAGS (EACH)	FERTILIZER TYPE A (CWT)	SEEDING MIXTURE NO. 10 (LB)	SOD WATER (MGAL)
STATION	TO	STATION	LOCATION										
356+68	-	358+51	RT	640	235	59	---	---	640	60	0.40	8.6	0.6
356+91	-	359+25	LT	1,021	319	80	---	---	1,021	20	0.64	13.8	1.0
359+72	-	363+00	LT	2,671	590	148	---	---	2,671	80	1.68	36.1	2.7
361+00	-	363+50	RT	1,050	312	78	---	---	1,050	60	0.66	14.2	1.0
390+13	-	392+81	RT	1,245	309	77	---	---	1,245	40	0.78	16.8	1.2
390+78	-	393+69	LT	1,544	356	89	---	---	1,544	60	0.97	20.8	1.5
UNDISTRIBUTED				---	850	212	53	5	3	850.0	60	0.51	11.0
TOTALS =				9,021	2,333	583	5	3	9,021	380	5.66	121.3	9.2

TRAFFIC CONTROL

		643.0300	643.0310.S		643.0900	643.5000	
			TEMPORARY		PORTABLE	TRAFFIC	
		DURATION	DRUMS		STRIPS	CONTROL	
OPERATIONS		(DAYS)	(EACH)	(DAYS)	(LS)	SIGNS	(EACH)
C-26-002-000578	LT SLOPE CUT & FILL	5	15	75	---	6	30
	RT SLOPE GRADED	2	15	30	---	6	12
	CULVERT LINER INSTALLATION	2	15	30	---	6	12
C-26-002-061753	LT SLOPE CUT & FILL	5	20	100	---	6	30
	RT SLOPE GRADED	3	20	60	---	6	18
	NEW CULVERT JACK & BORING	3	20	60	---	6	18
C-26-002-000581	LT SLOPE CUT & FILL	3	15	45	---	6	18
	RT SLOPE GRADED	2	15	30	---	6	12
	CULVERT LINER INSTALLATION	2	15	30	---	6	12
LT & RT INFILTRATION TRENCH INSTALLATION		10	15	150	---	6	60
PROJECT 1009-44-60		40	---	---	1	6	18
TOTALS =			610	1		240	1

CONSTRUCTION STAKING

				650.6000	650.9910	650.9920
				PIPE CULVERTS (EACH)	SUPPLEMENTAL CONTROL (LS)	SLOPE STAKES (LF)
STATION	TO	STATION	LOCATION			
356+50	-	393+75	USH 2 LT/RT	---	1	---
357+50	-	358+80	LT SLOPE CUT & FILL	---	---	130
360+00	-	362+51	LT SLOPE CUT & FILL	---	---	251
361+35	-	362+72	CULVERT INSTALLATION LT/RT	1	---	---
391+45	-	393+25	LT SLOPE CUT & FILL	---	---	180
TOTALS =				1	1	561

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

BENCHMARK TABLE			
NUMBER	LOCATION	DESCRIPTION	ELEVATION
65417	STA 359+31.62, 98.3' LT	NAIL ON SOUTH SIDE OF POWER POLE	1046.21
65487	STA 356+87.29, 70.1' RT	NAIL ON NORTH SIDE OF 14" HEMLOCK	1041.22



STA 357+50 - STA 358+22
GRADE NEW DITCH LINE

PERMITTED WETLAND IMPACT
0.078 ACRES TYPE AQUATIC BED WETLAND

EXISTING ROW

STA 357+84: REPAIR EXISTING C-26-002-000578
30-INCH REINFORCED CONCRETE PIPE
CLEAN AND GROUT CULVERT JOINTS
INSERT 27-INCH HDPE PIPE LINER

65417
1046.207
BM-7

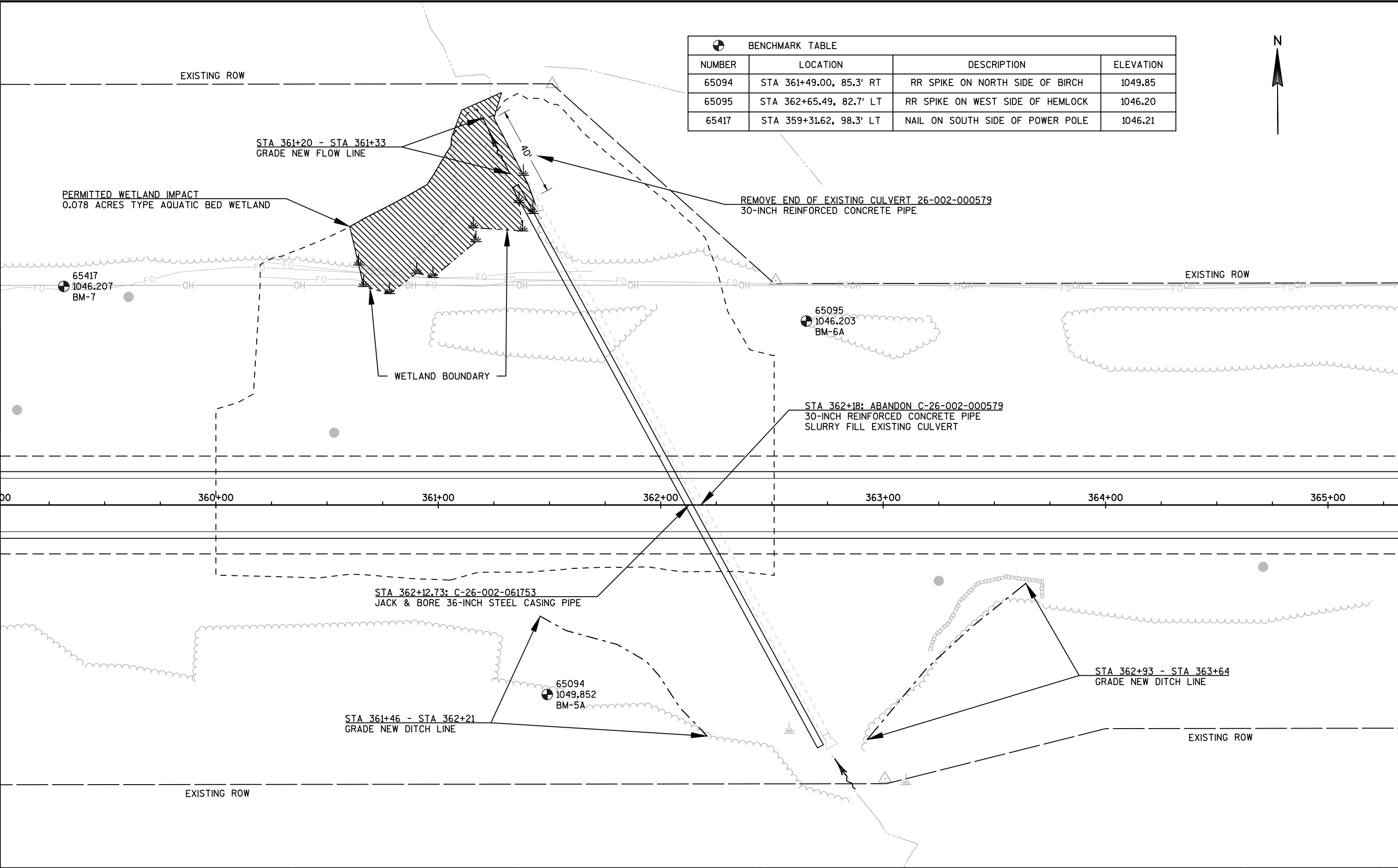
65487
1041.216
BM-8

EXISTING ROW

EXISTING ROW

5

5



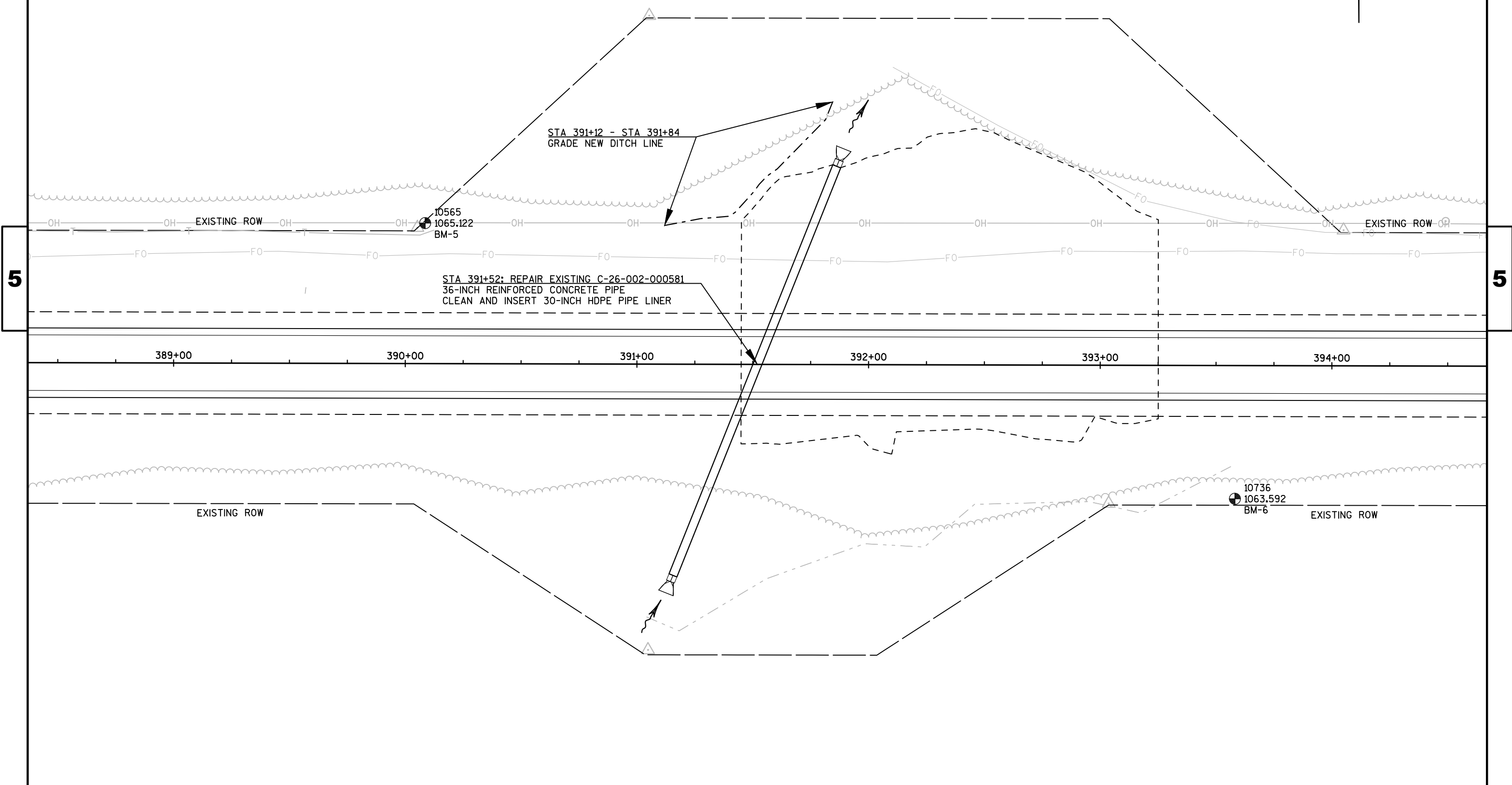
BENCHMARK TABLE			
NUMBER	LOCATION	DESCRIPTION	ELEVATION
65094	STA 361+49.00, 85.3' RT	RR SPIKE ON NORTH SIDE OF BIRCH	1049.85
65095	STA 362+65.49, 82.7' LT	RR SPIKE ON WEST SIDE OF HEMLOCK	1046.20
65417	STA 359+31.62, 98.3' LT	NAIL ON SOUTH SIDE OF POWER POLE	1046.21



5

5

BENCHMARK TABLE			
NUMBER	LOCATION	DESCRIPTION	ELEVATION
10565	STA 390+08.45, 60.7' LT	NAIL ON POWER POLE	1065.12
10736	STA 393+58.29, 57.5' RT	NAIL ON TWIN 12" MAPLE	1063.59

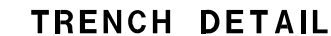


Standard Detail Drawing List

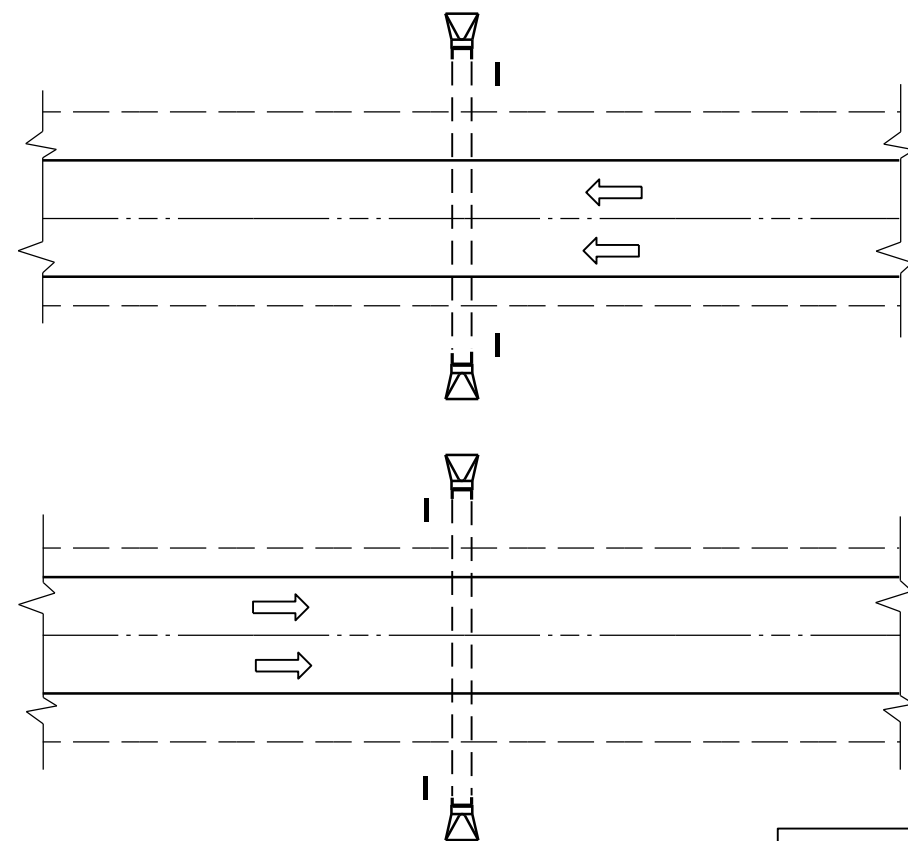
08E09-06	SILT FENCE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
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



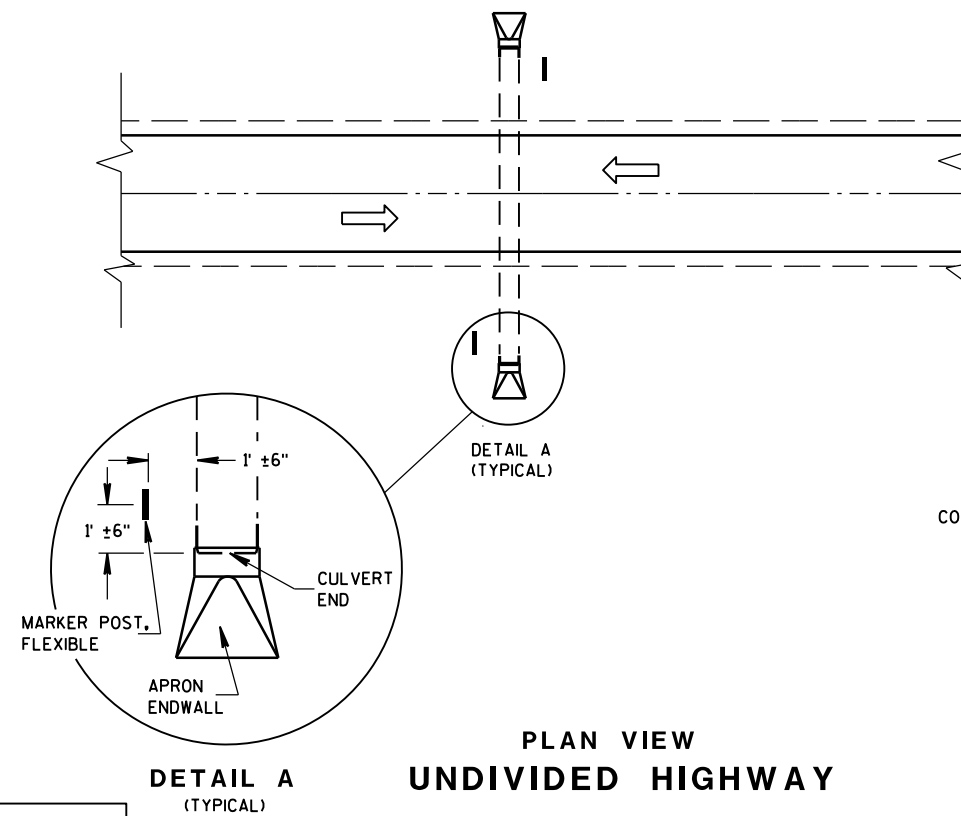
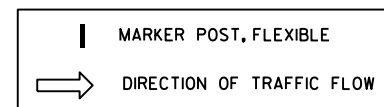
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS 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/ <u>Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
DIVIDED HIGHWAY



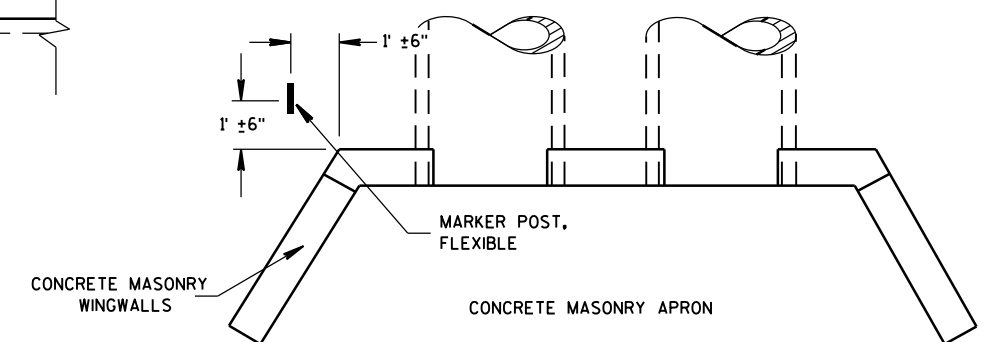
DETAIL A
(TYPICAL)

PLAN VIEW
UNDIVIDED HIGHWAY

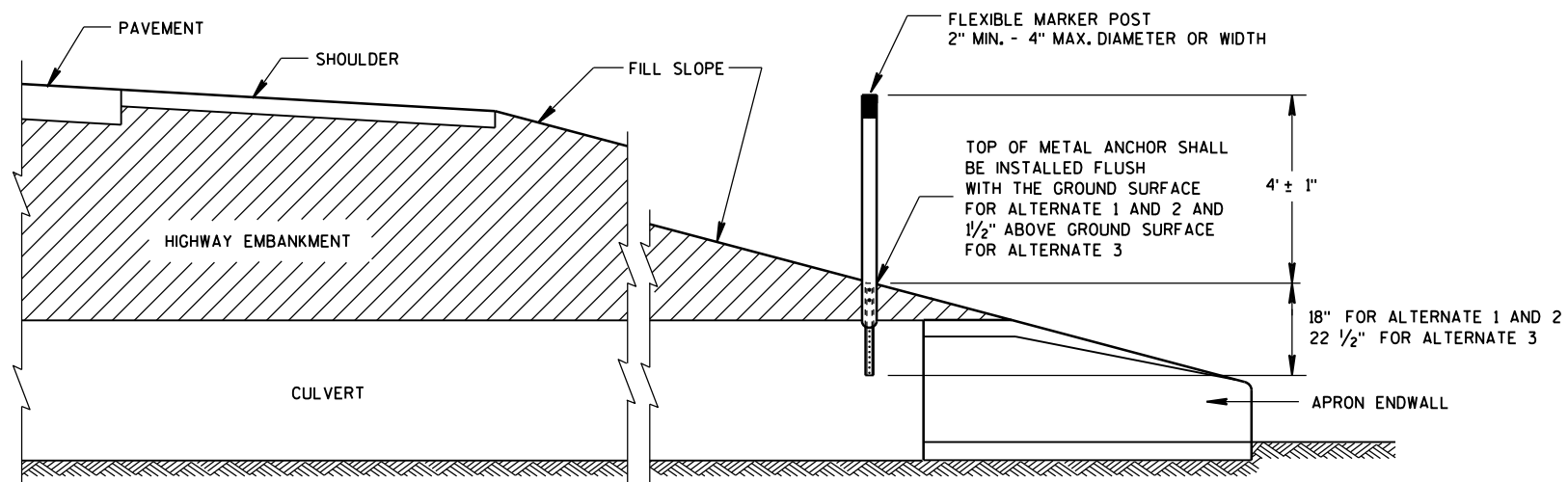
FLEXIBLE MARKER POST LOCATION

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.



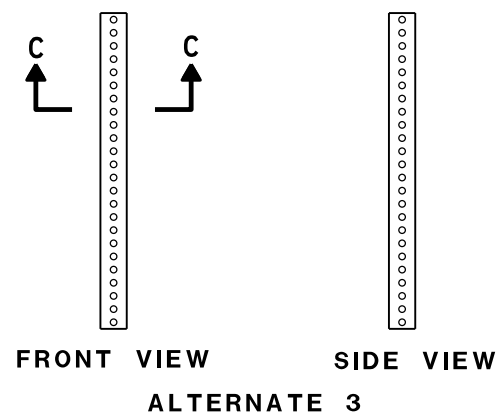
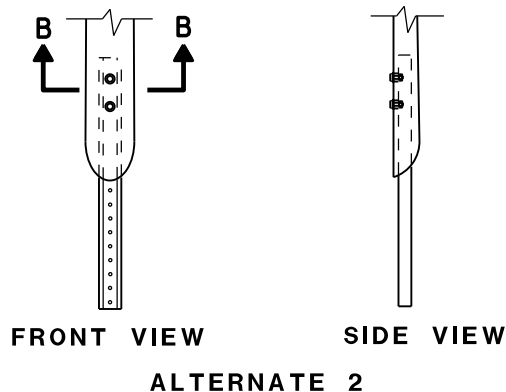
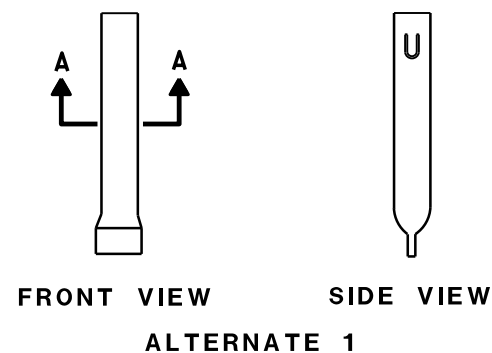
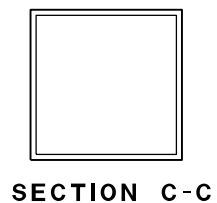
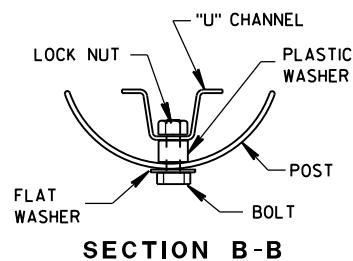
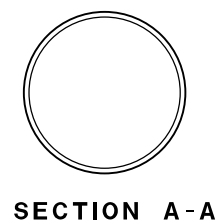
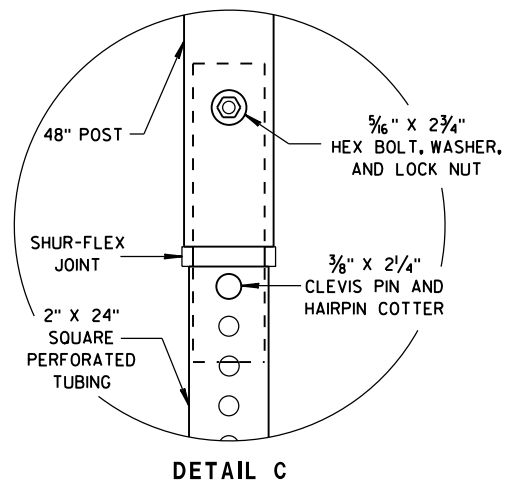
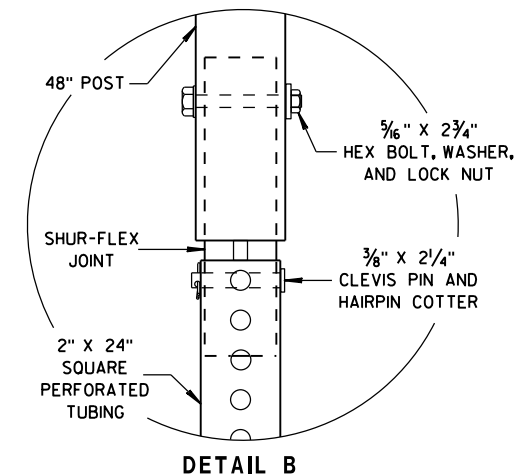
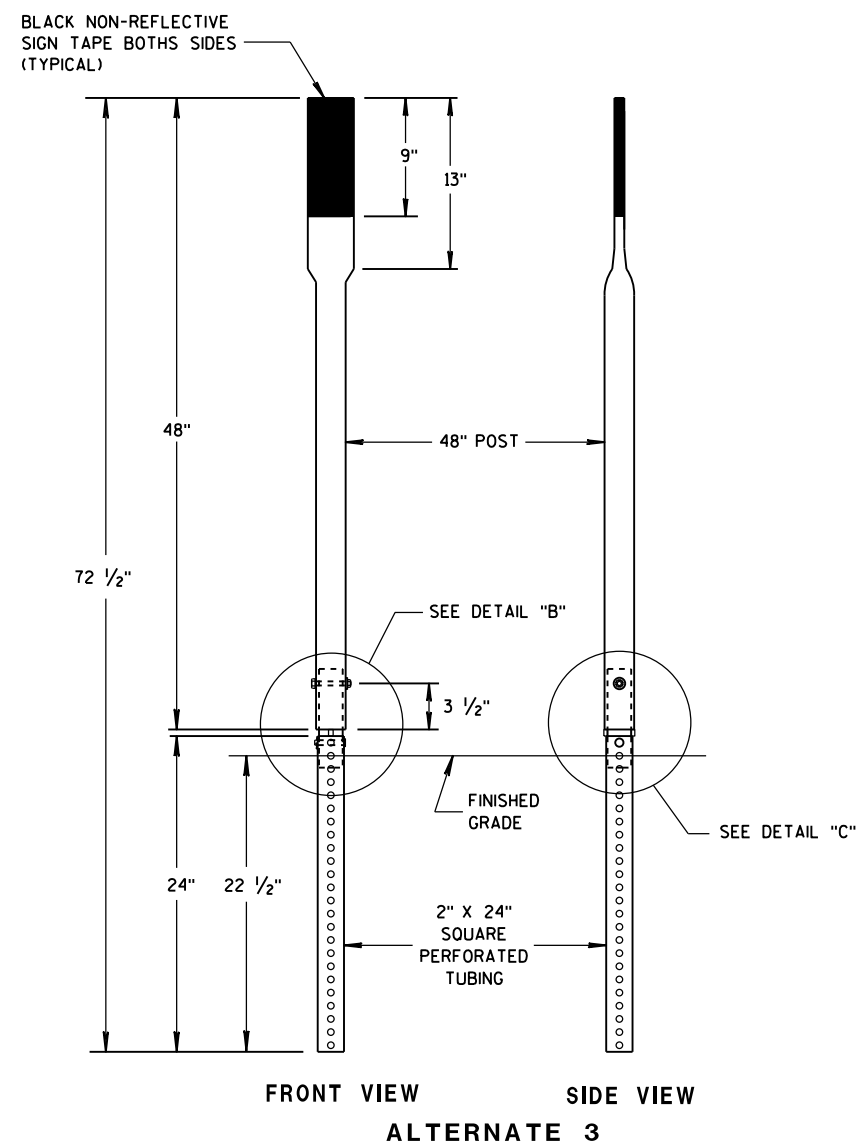
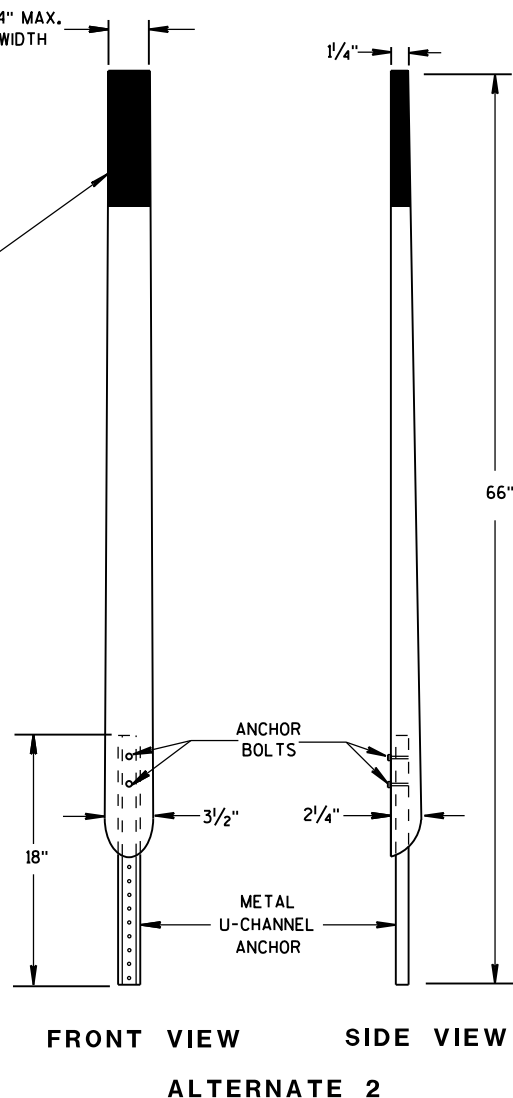
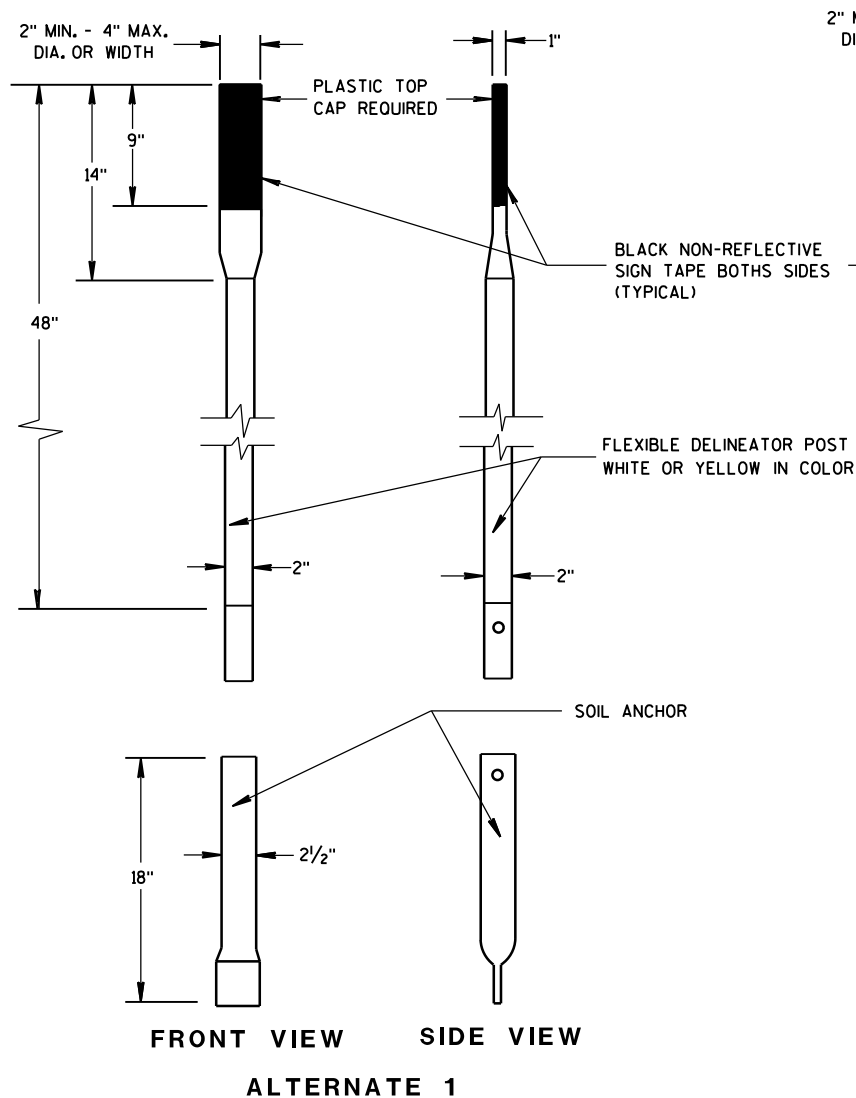
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



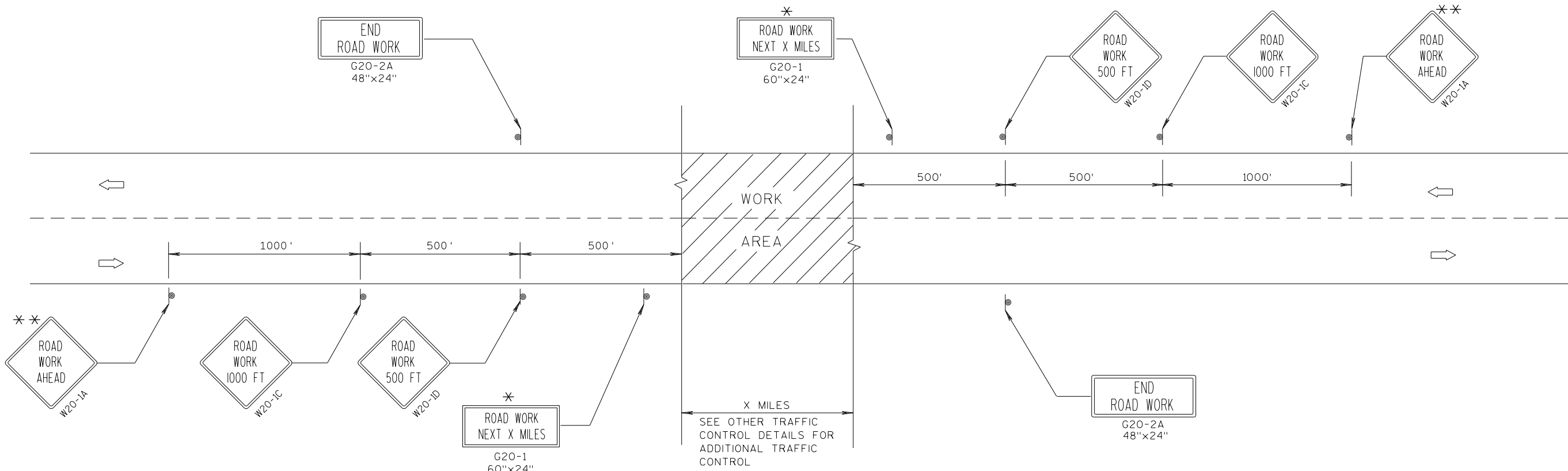
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



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.

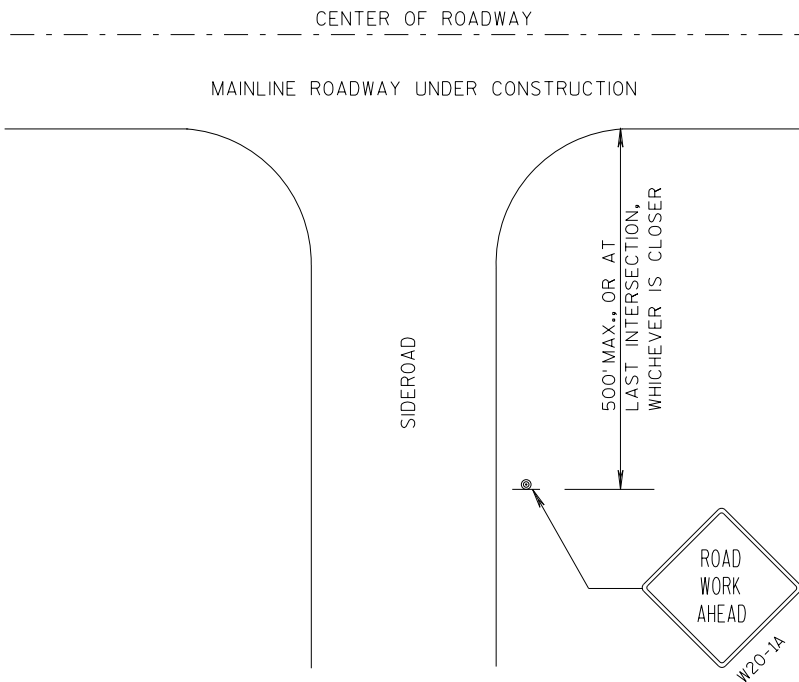
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.



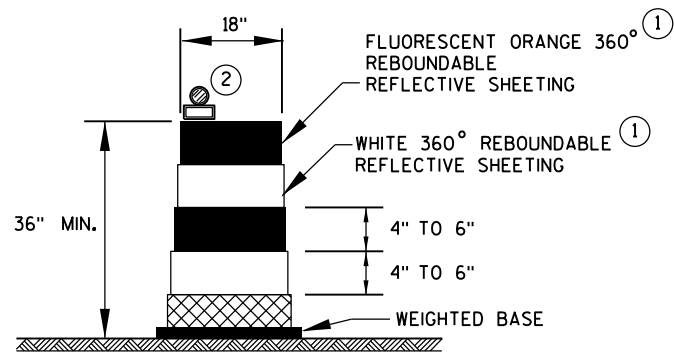
LEGEND

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

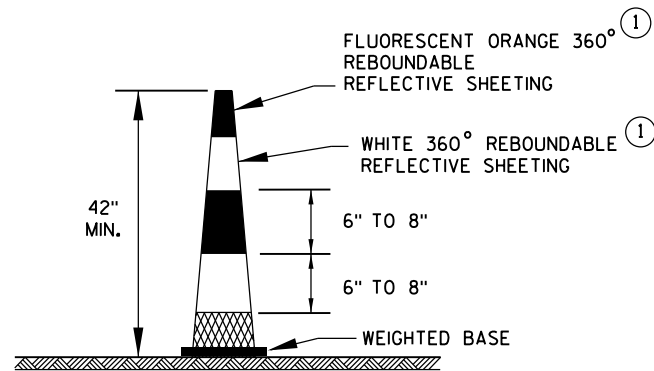
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



DRUM

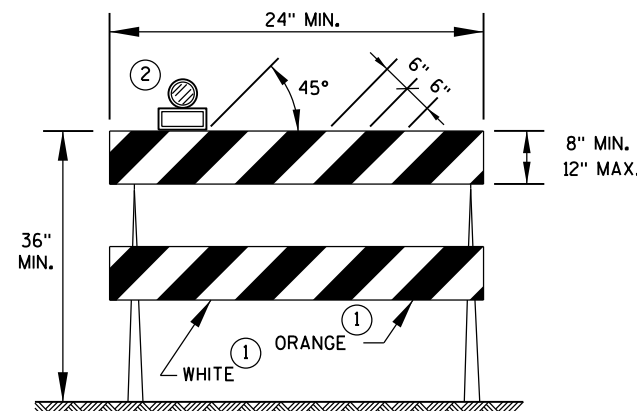


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

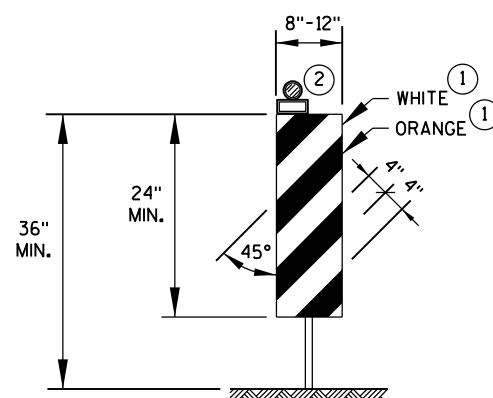
GENERAL NOTES

- 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.



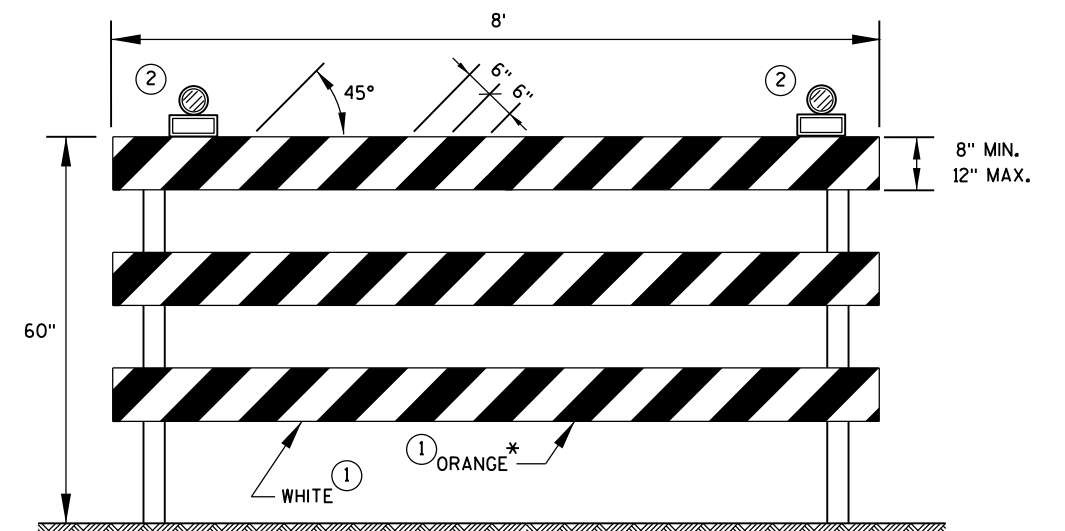
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 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.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

FHWA

/S/ Andrew Heidtke
WORK ZONE ENGINEER

LEGEND

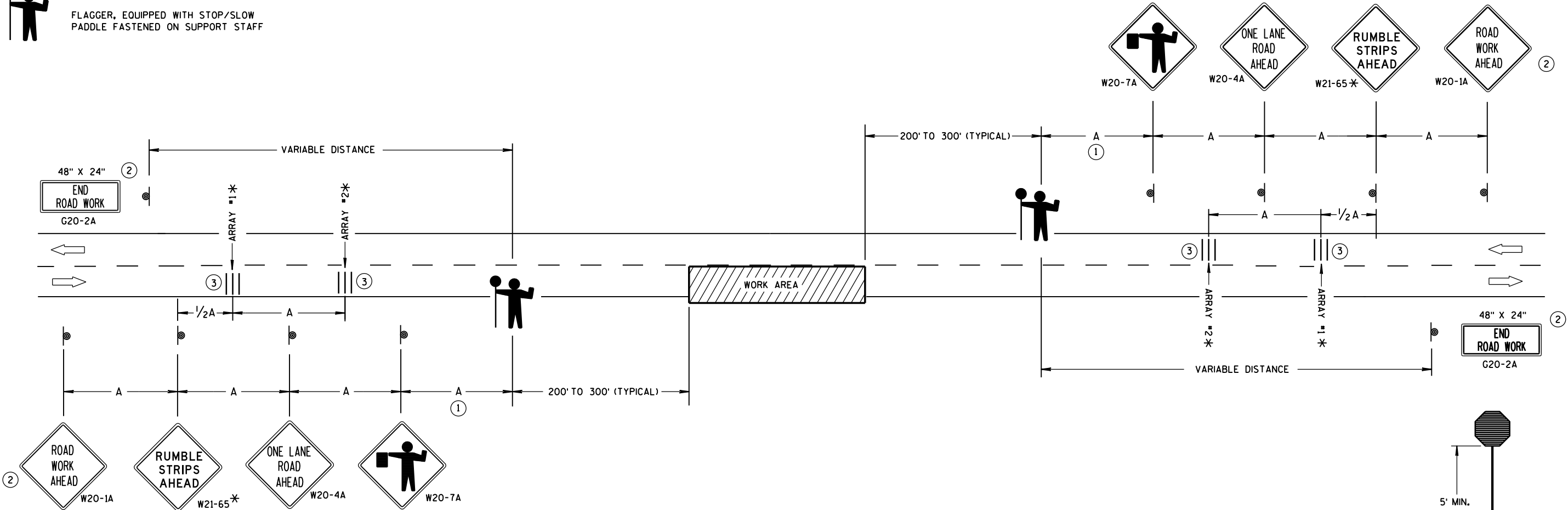
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.



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
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heldtke
DATE WORK ZONE ENGINEER
FHWA

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

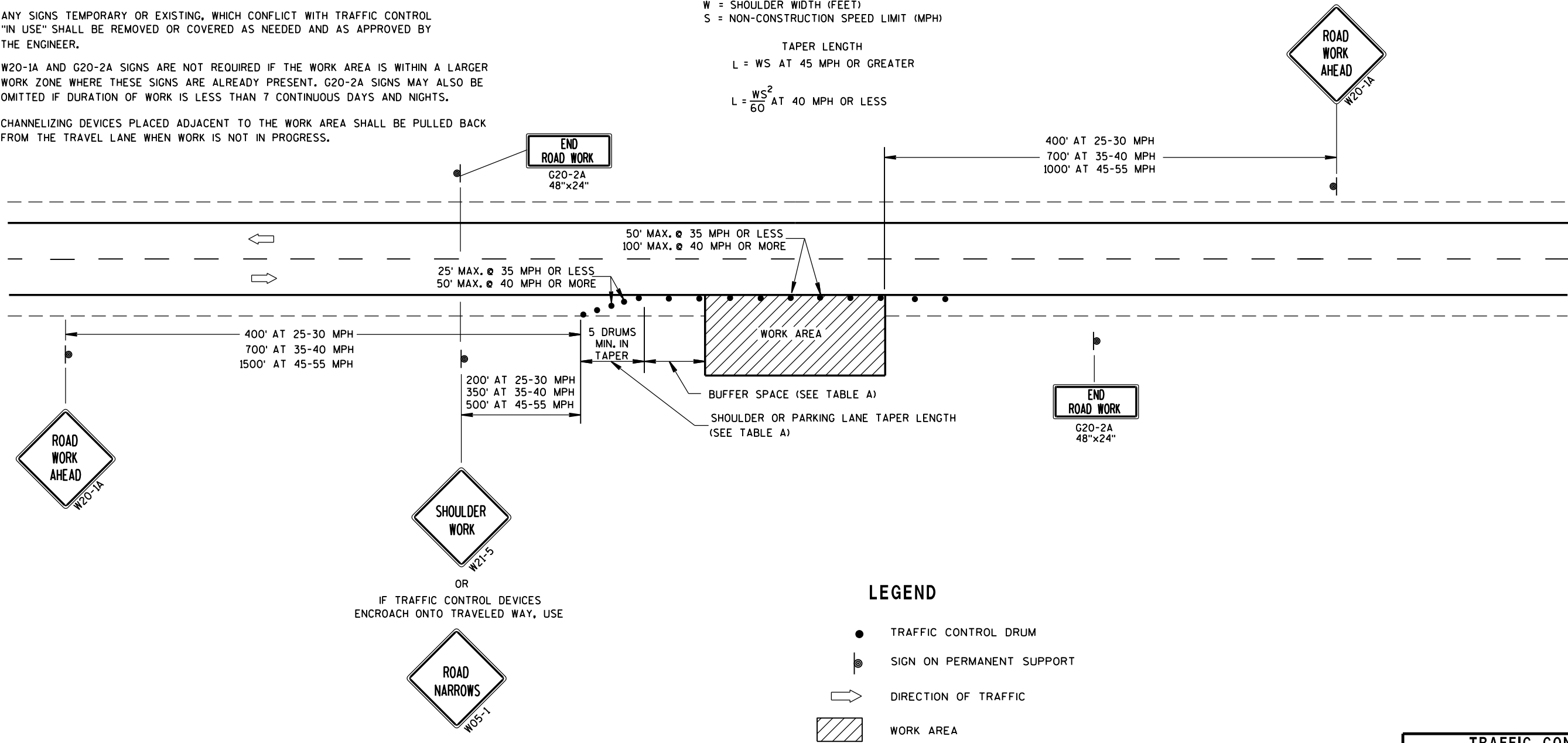
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



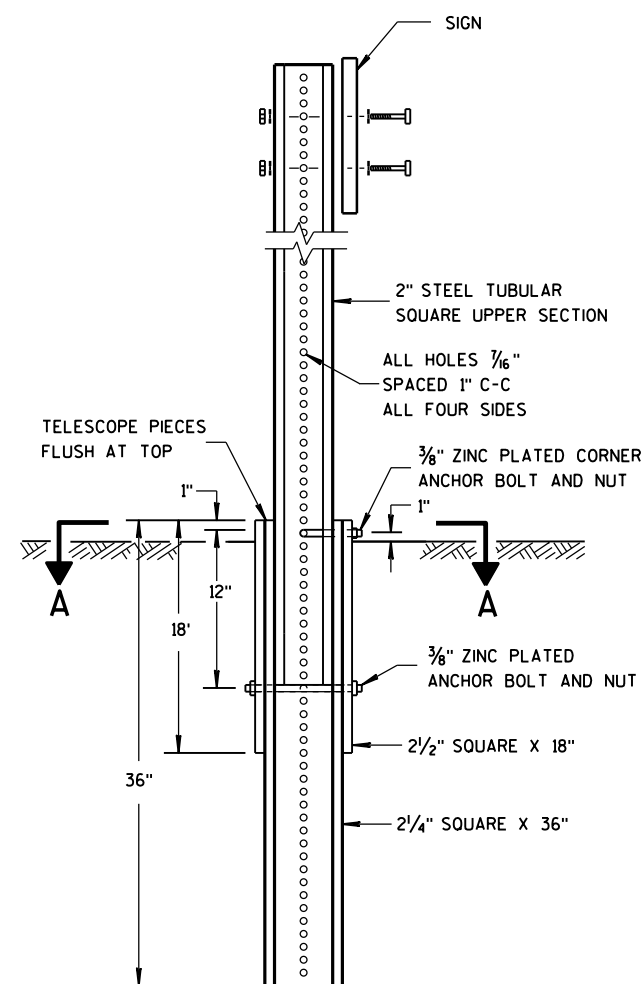
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 14, 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA



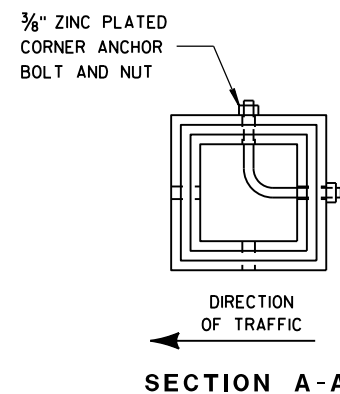
**DETAIL OF TUBULAR
STEEL SIGN POST**

TUBULAR STEEL POSTS

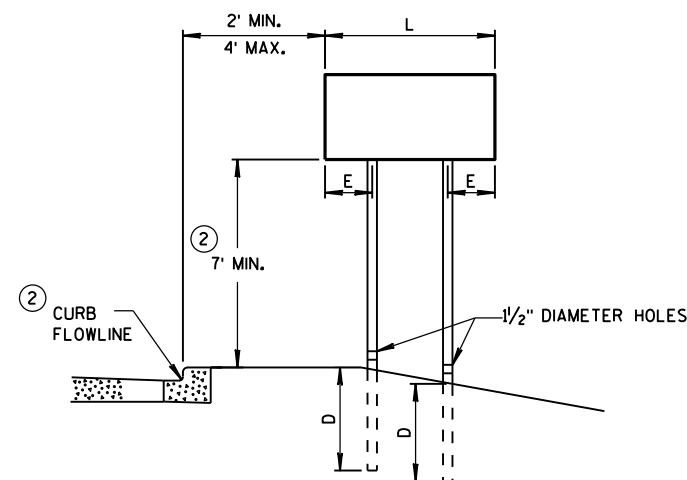
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

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



SECTION A-A

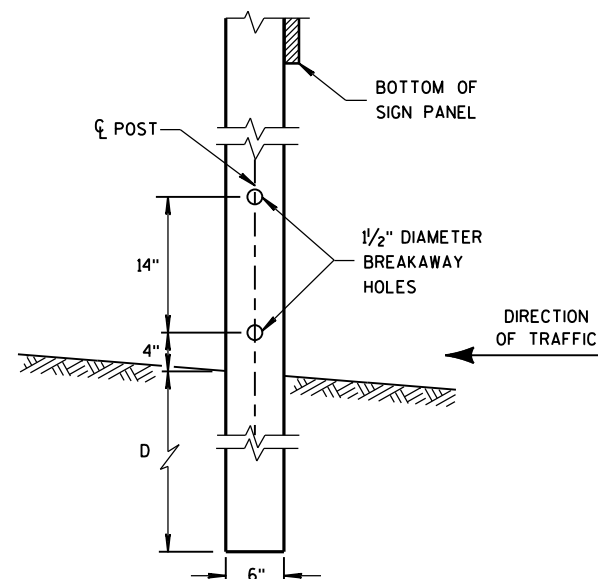


URBAN AREA

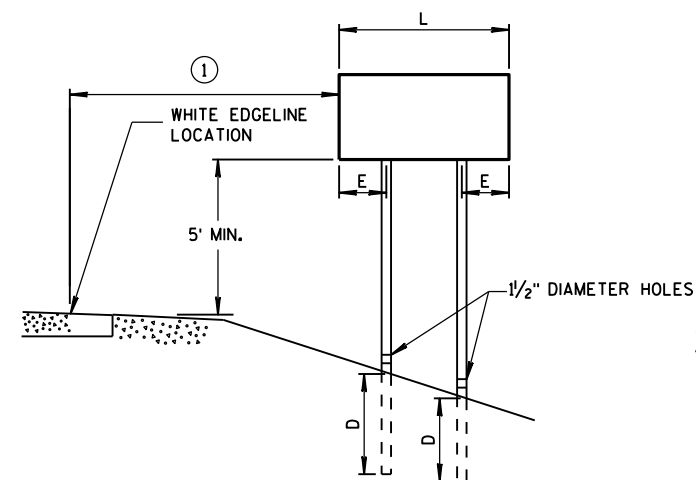
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

**WOOD POST
EMBEDMENT DEPTH**

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



**4"x6" WOOD POST
MODIFICATION**



RURAL AREA

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

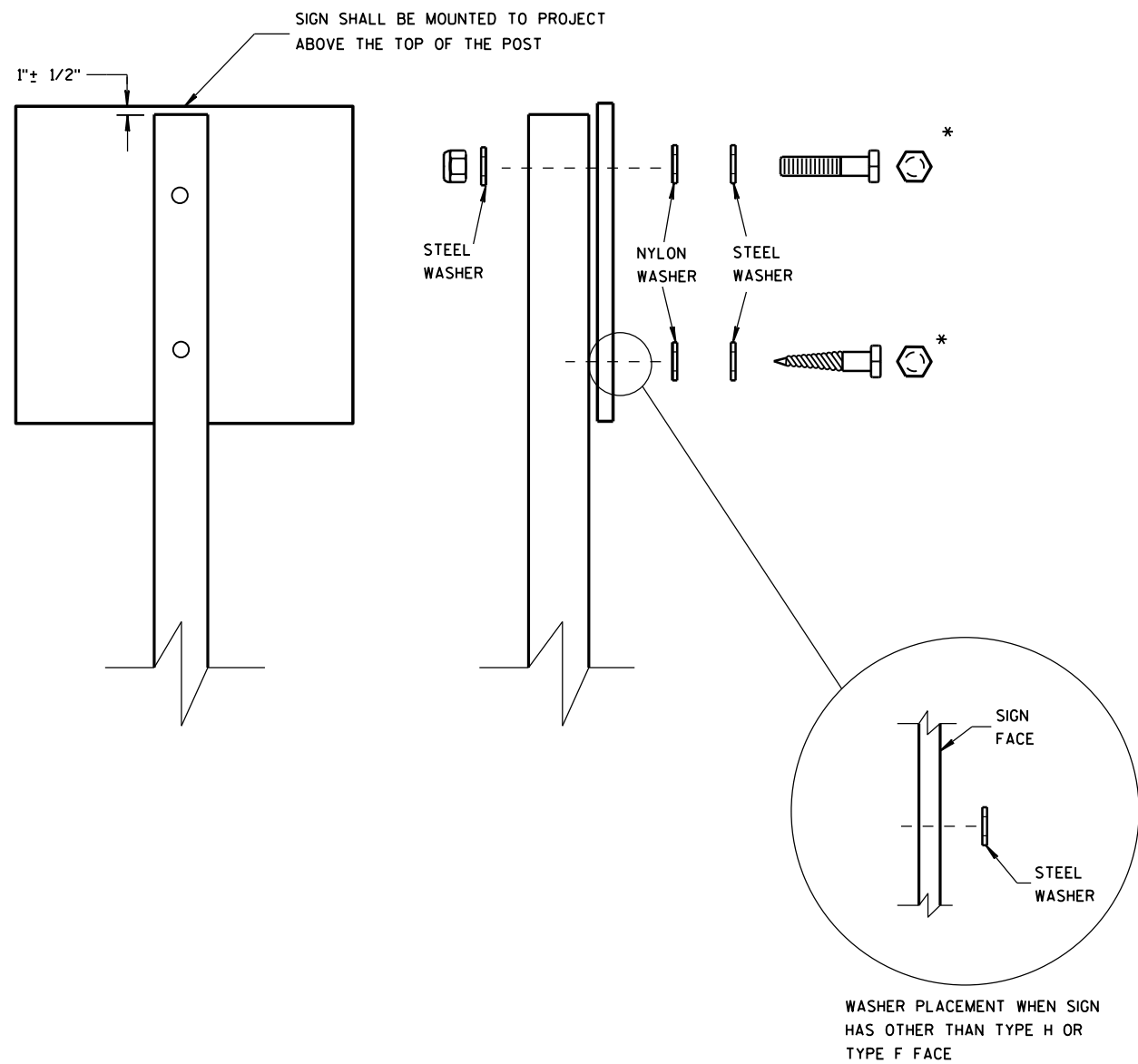
SEE NOTE ③

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.

**TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING**

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

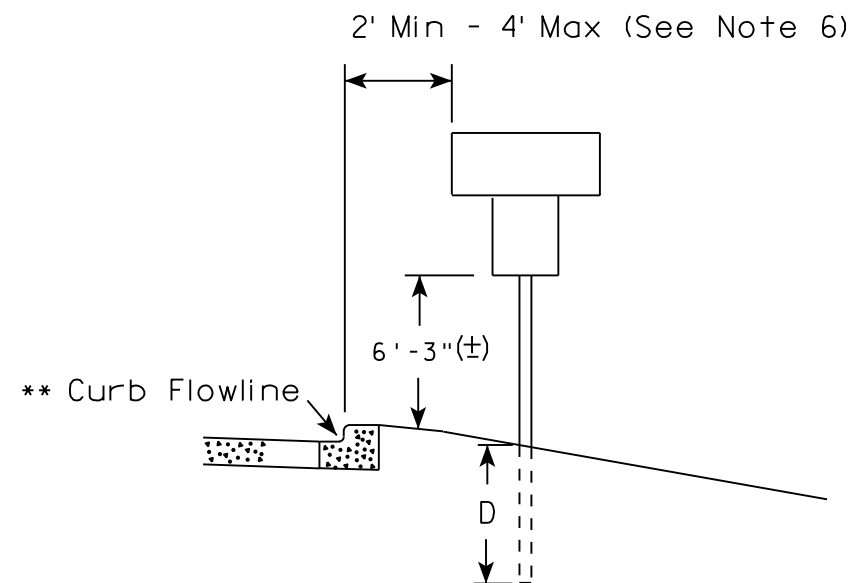
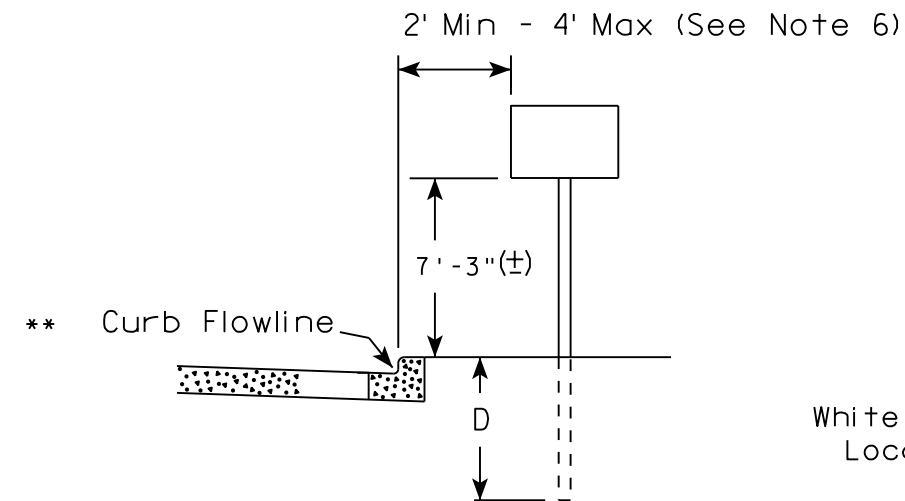
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

- WASHERS (ALL POSTS) -
- 1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
 - 1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

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

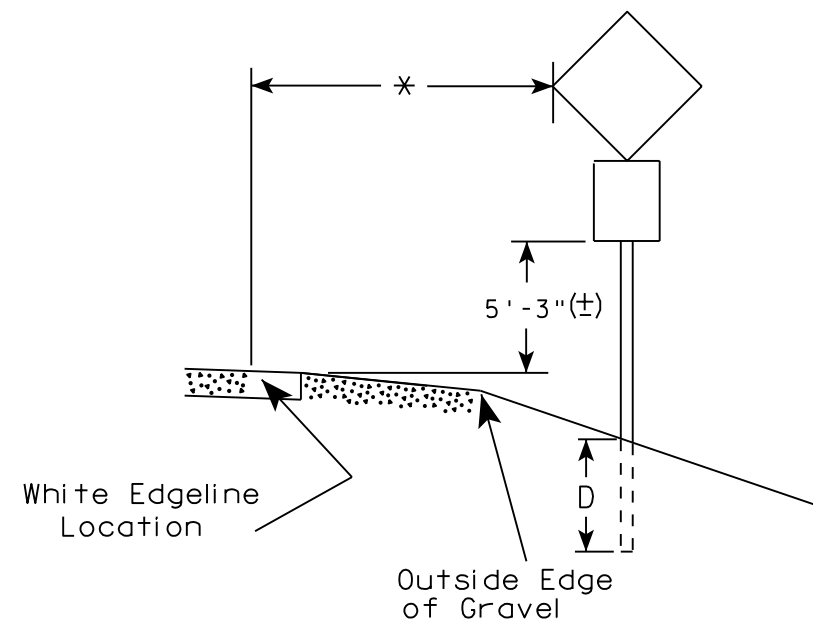
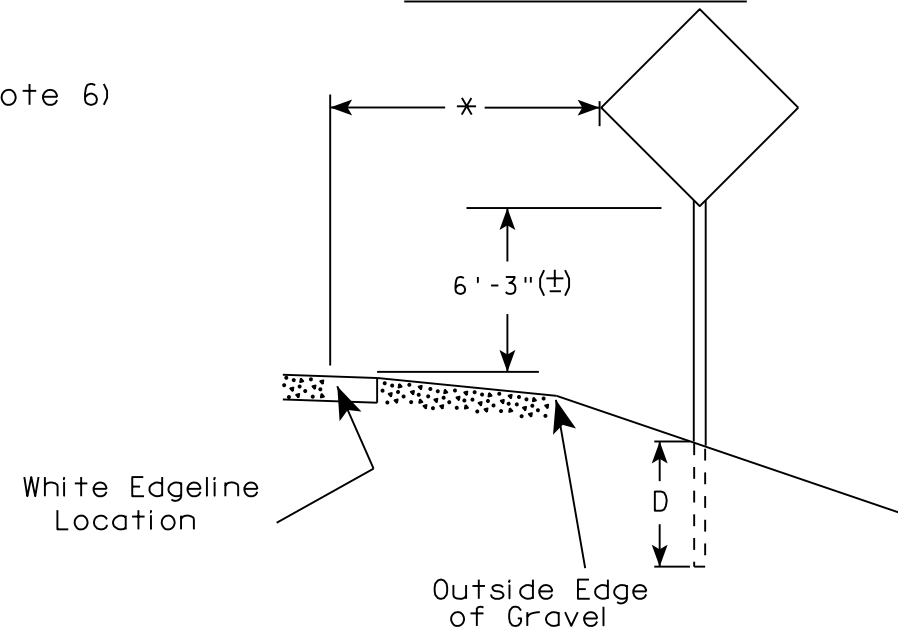
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

URBAN AREA



✱✱ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

RURAL AREA (See Note 2)



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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

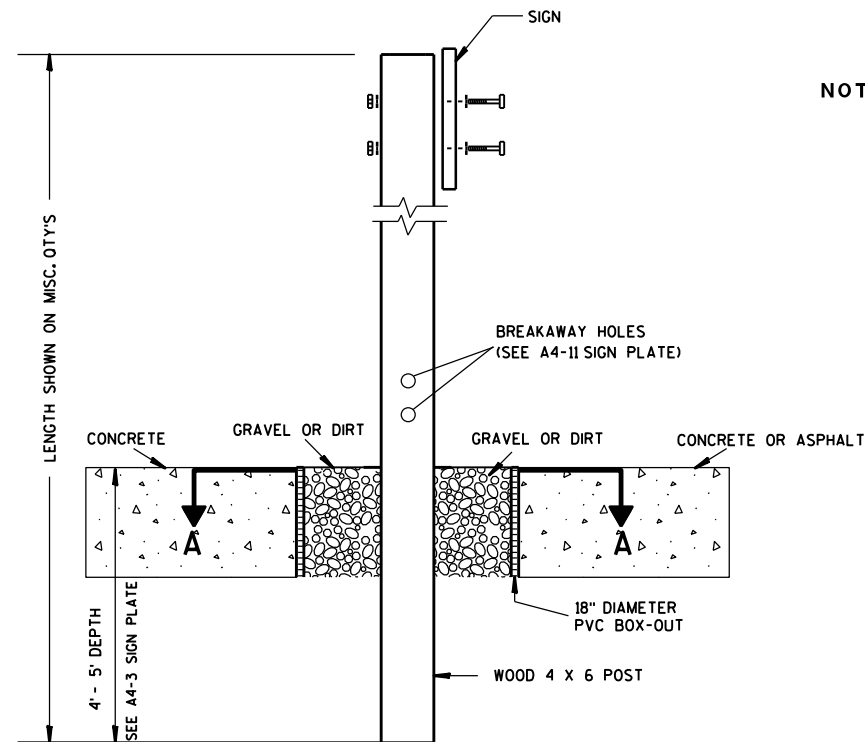
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

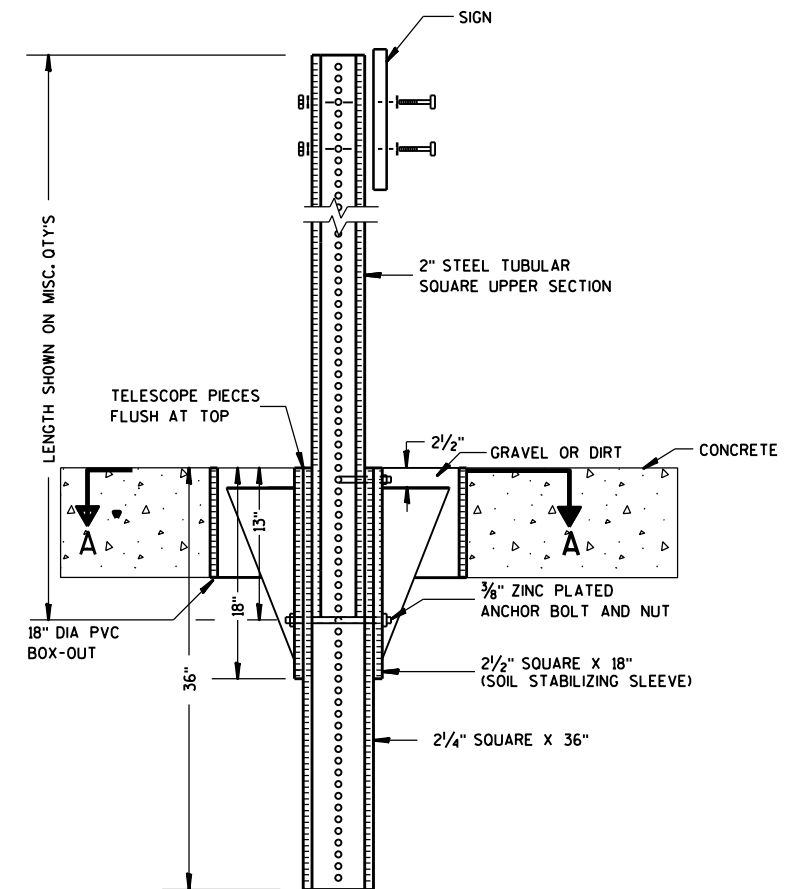
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

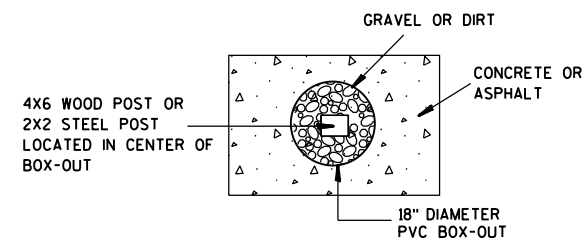
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

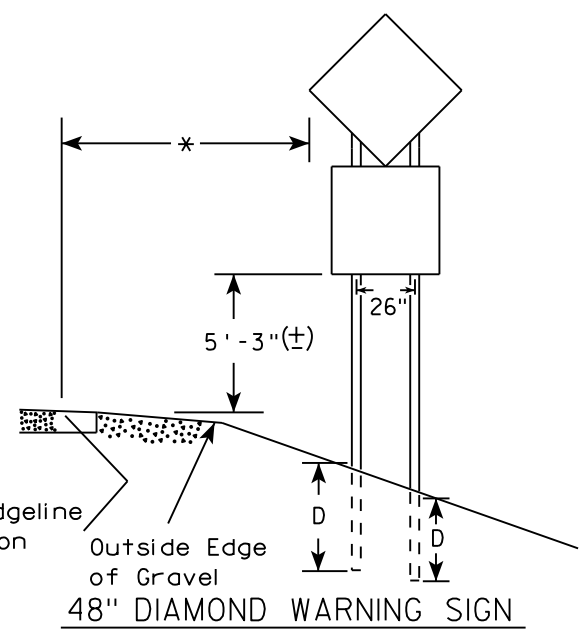
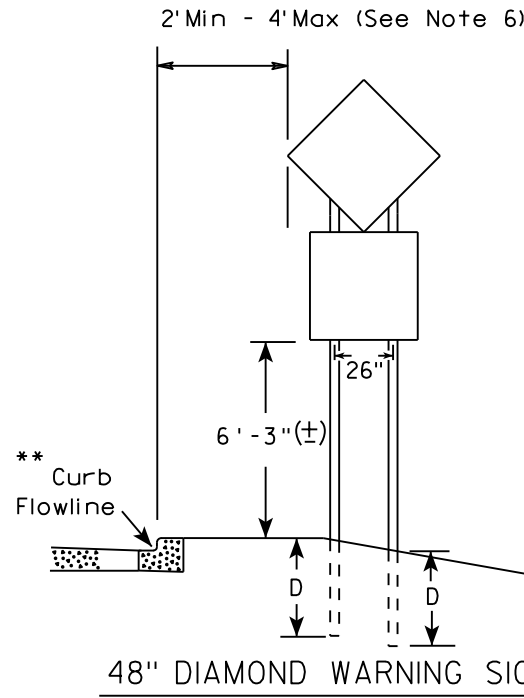
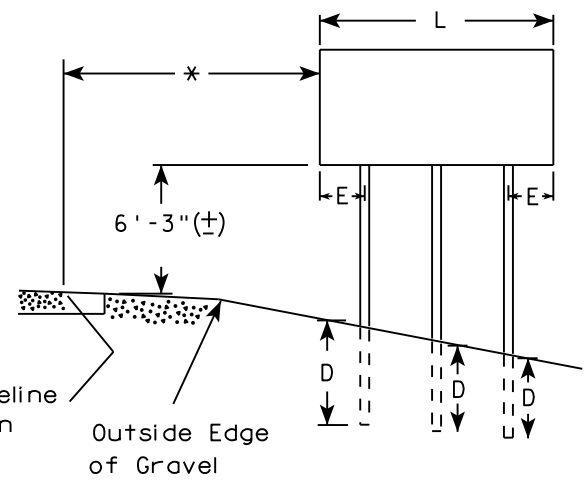
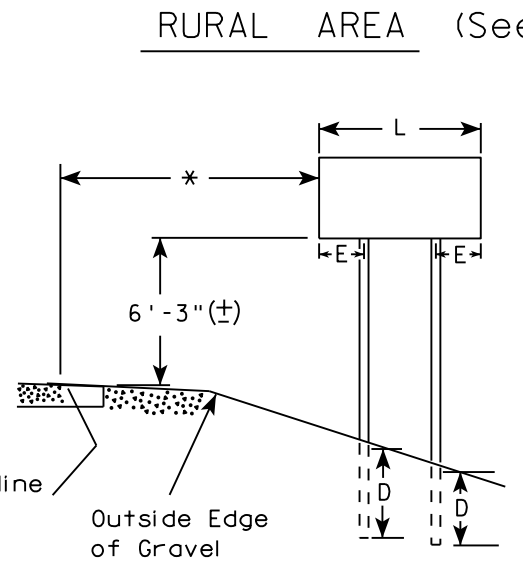
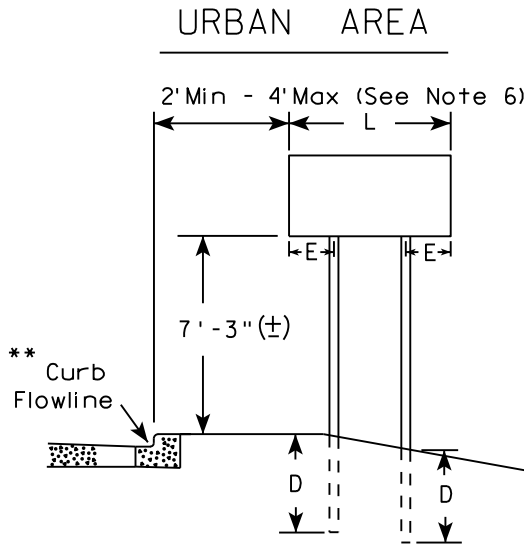
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- GENERAL NOTES
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. J-Assemblies are considered to be one sign for mounting height.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

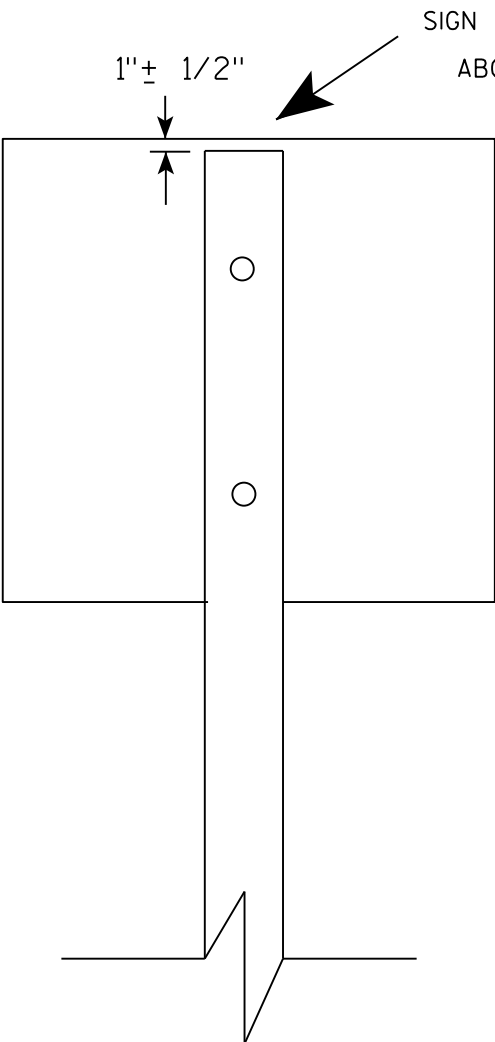
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

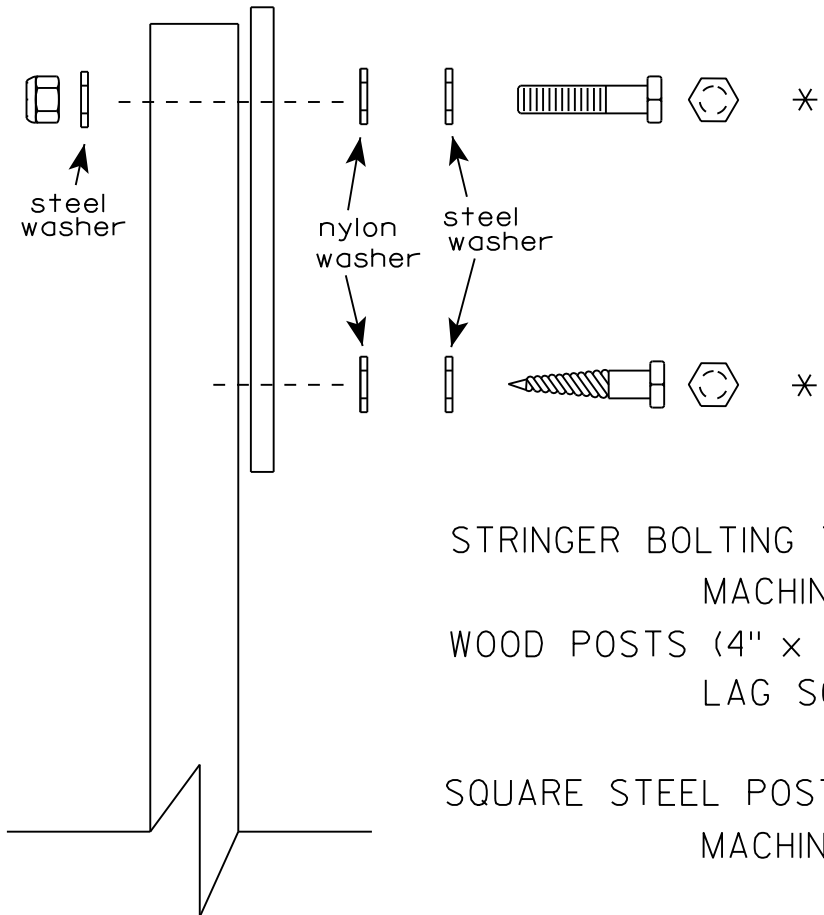
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15



SIGN SHALL BE MOUNTED TO PROJECT
ABOVE THE TOP OF THE POST



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

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

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

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

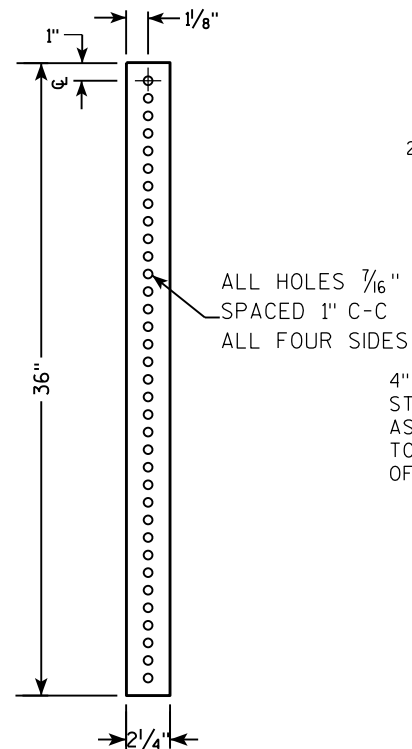
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

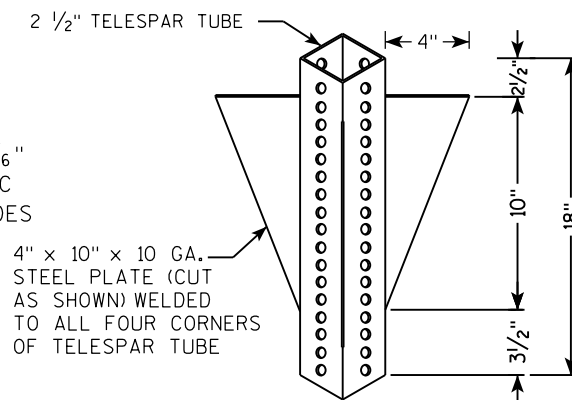
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



LENGTH SHOWN ON MISC. QTY'S

18" DIA SCHEDULE 40 PVC BOX-OUT

TELESCOPE PIECES FLUSH AT TOP

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

2 1/2" GRAVEL OR DIRT

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

36"

18"

13"

LENGTH SHOWN ON MISC. QTY'S

TELESCOPE PIECES FLUSH AT TOP

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

1"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

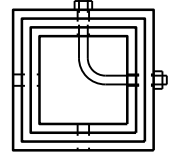
2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

SIGN

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

SECTION A-A

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:

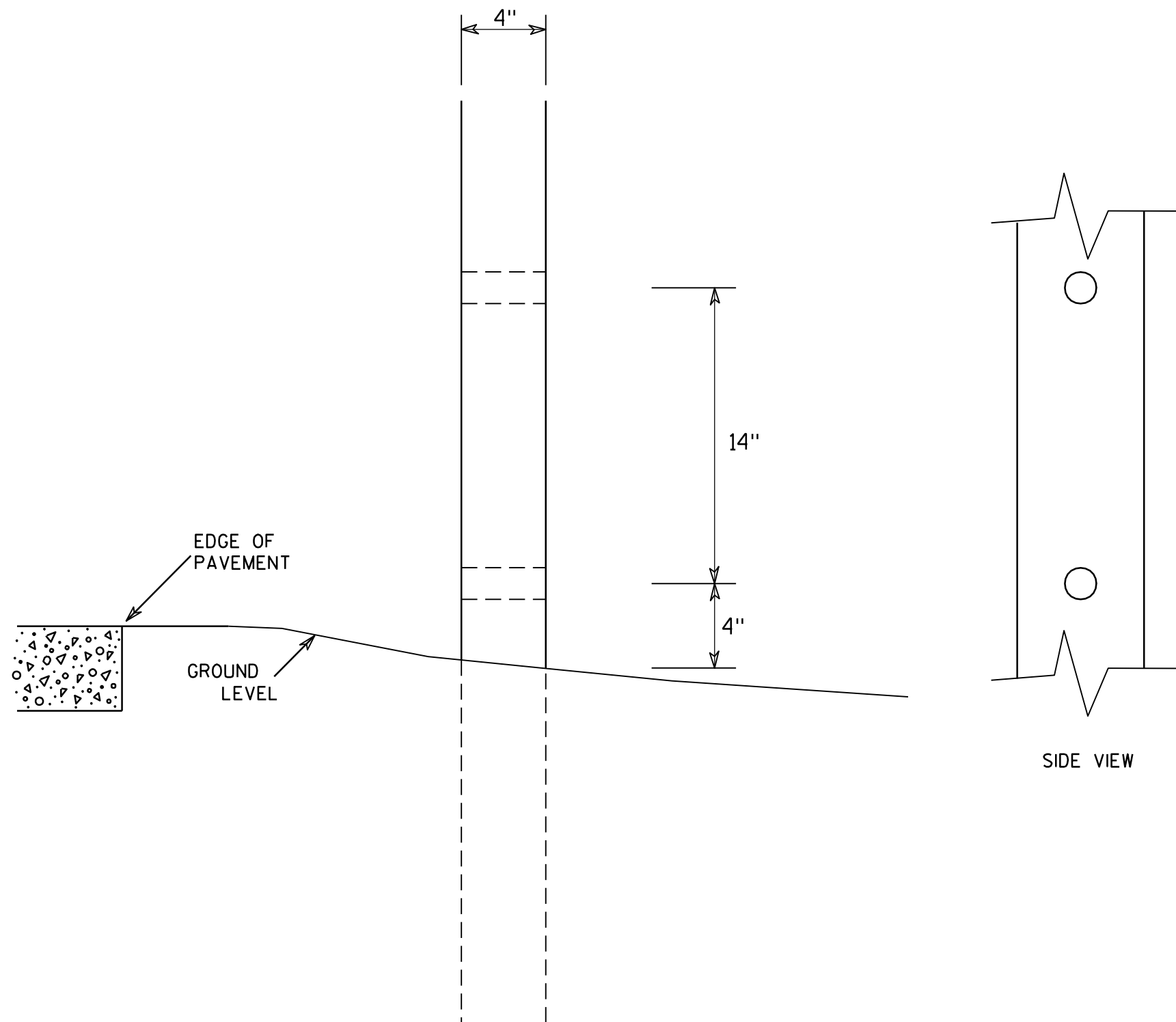
HWY:

COUNTY:

SHEET NO:

11

7

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

**4 X 6 WOOD POST
MODIFICATIONS****WISCONSIN DEPT OF TRANSPORTATION**

APPROVED

Chester J. Spang
for State Traffic EngineerDATE 3/27/97PLATE NO. A4-11.2

PROJECT NO:

HWY:

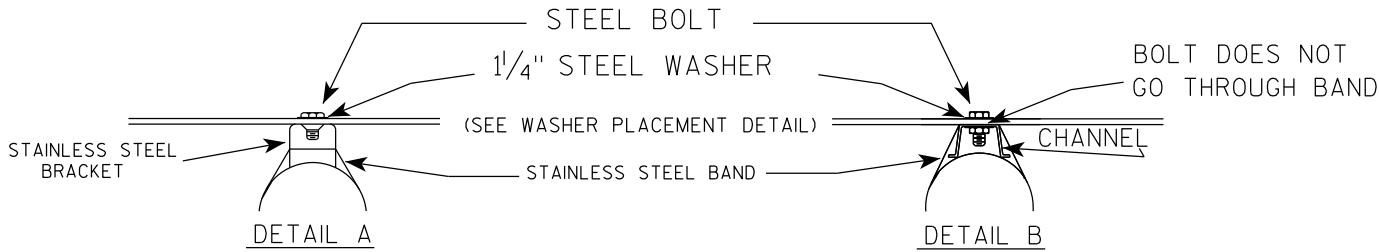
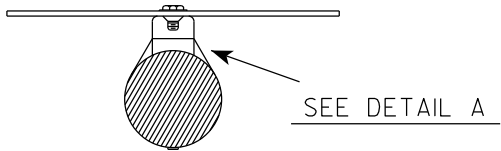
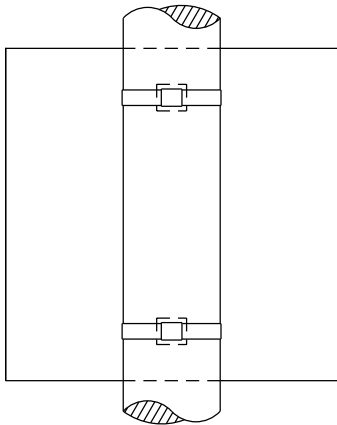
COUNTY:

SHEET NO:

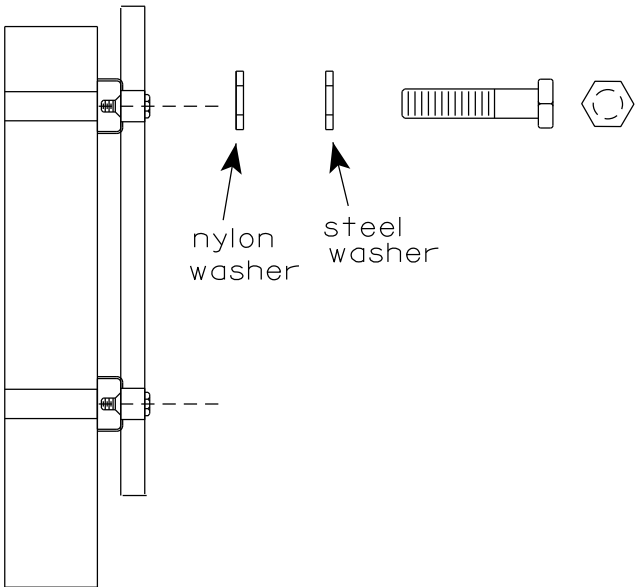
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

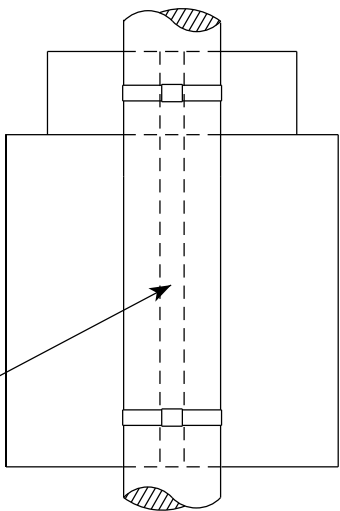


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

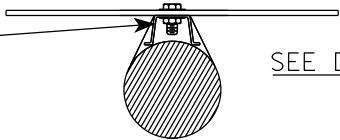
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

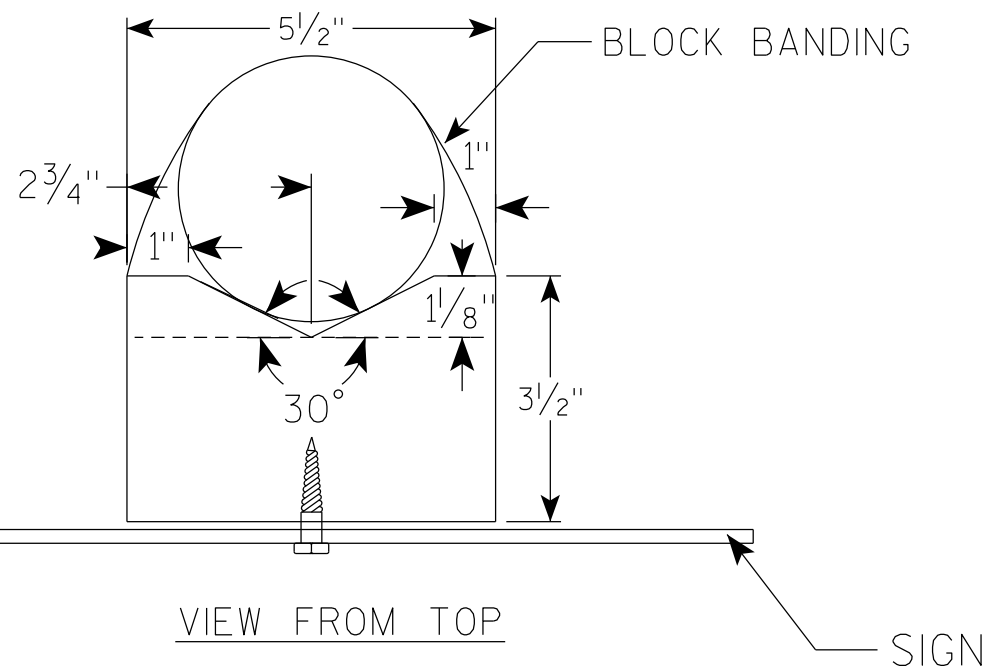
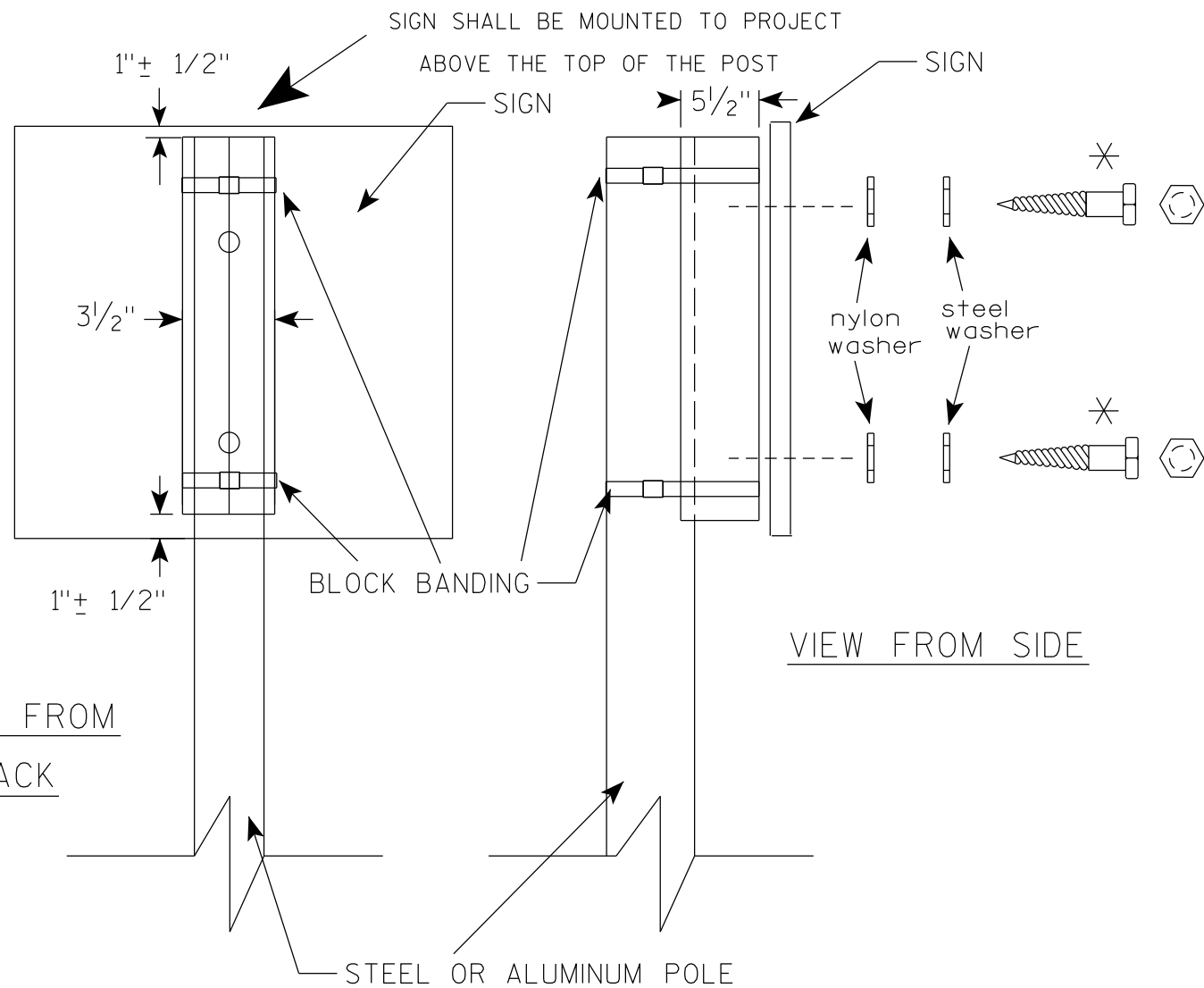


STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

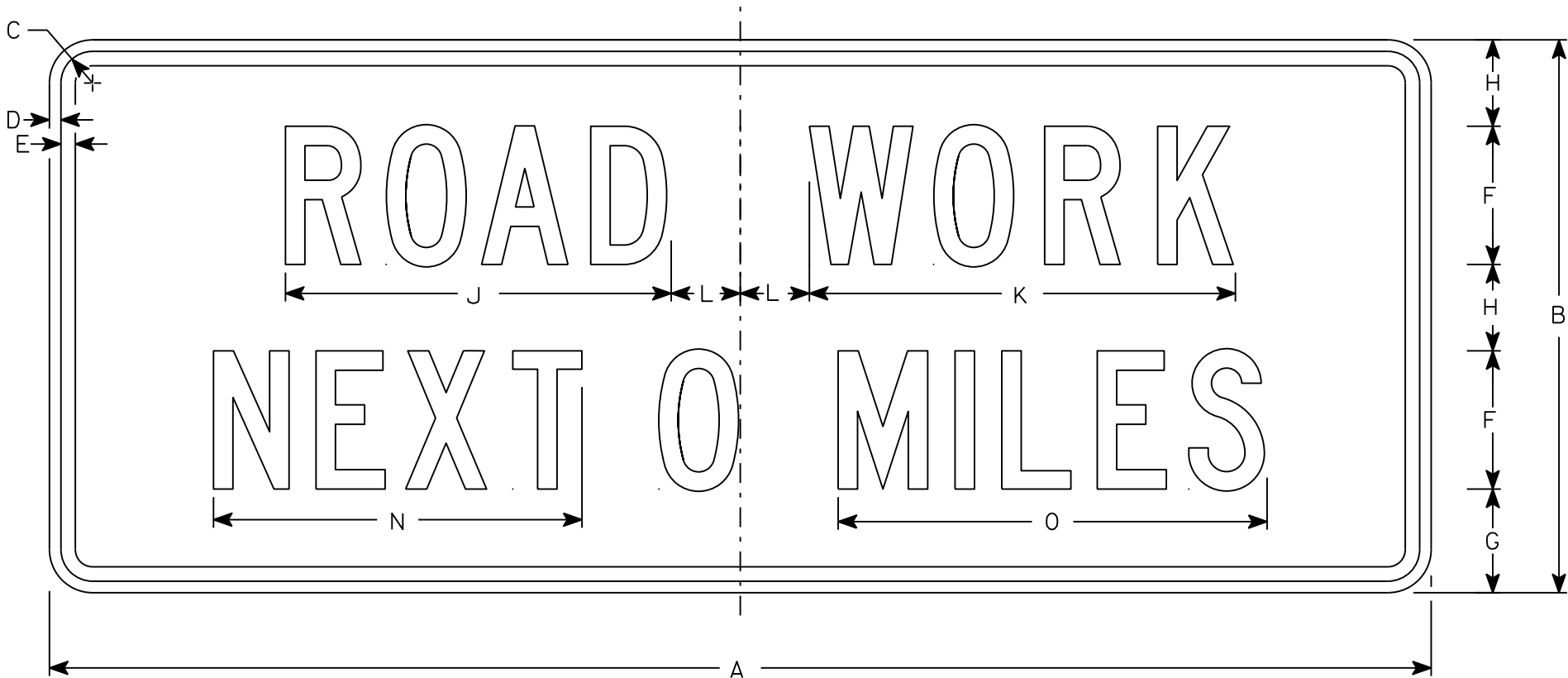
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO:

E

7



G20-1

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10
3																											
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10
5																											

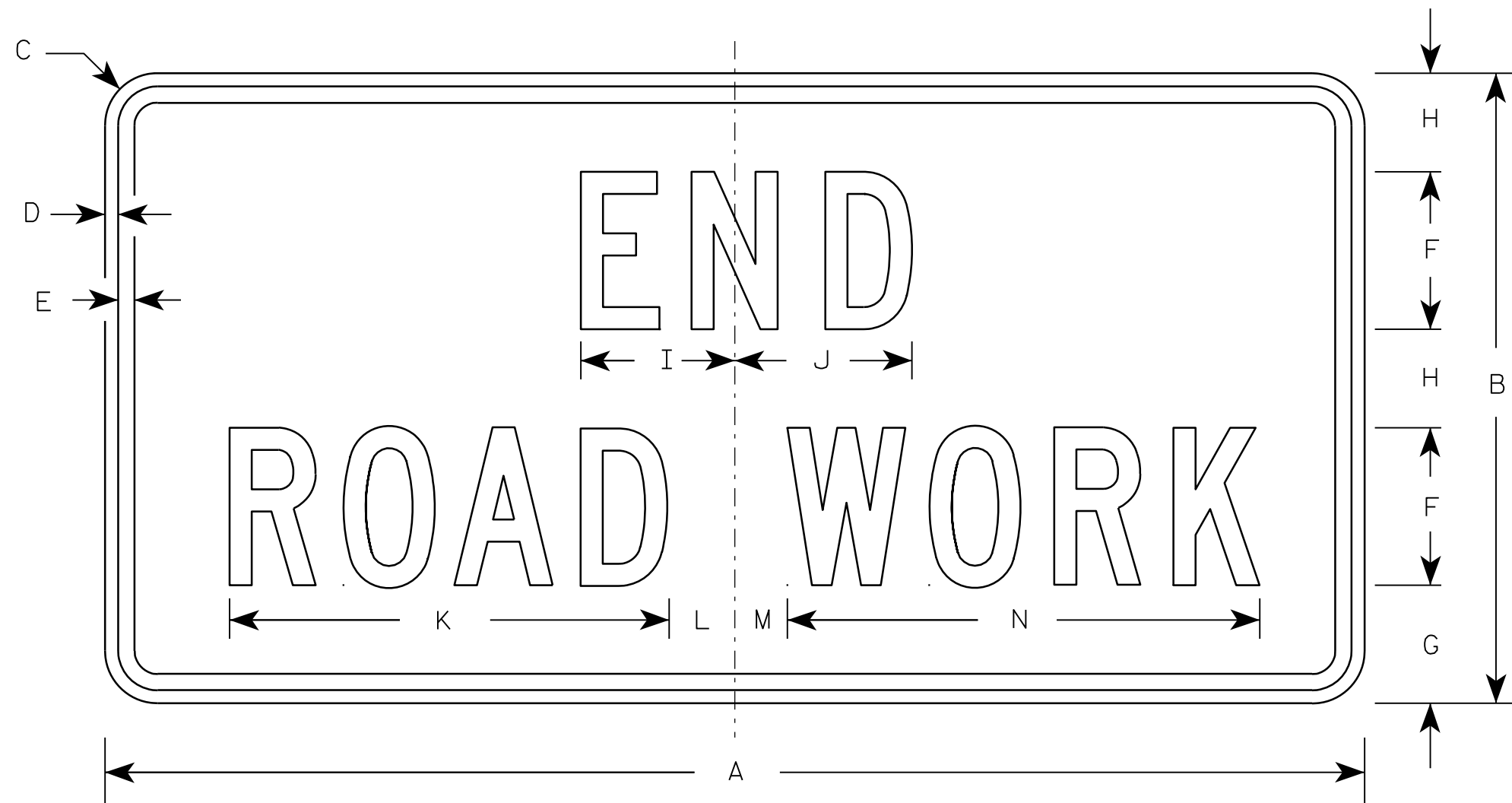
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

7



G20-2A

NOTES

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

Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

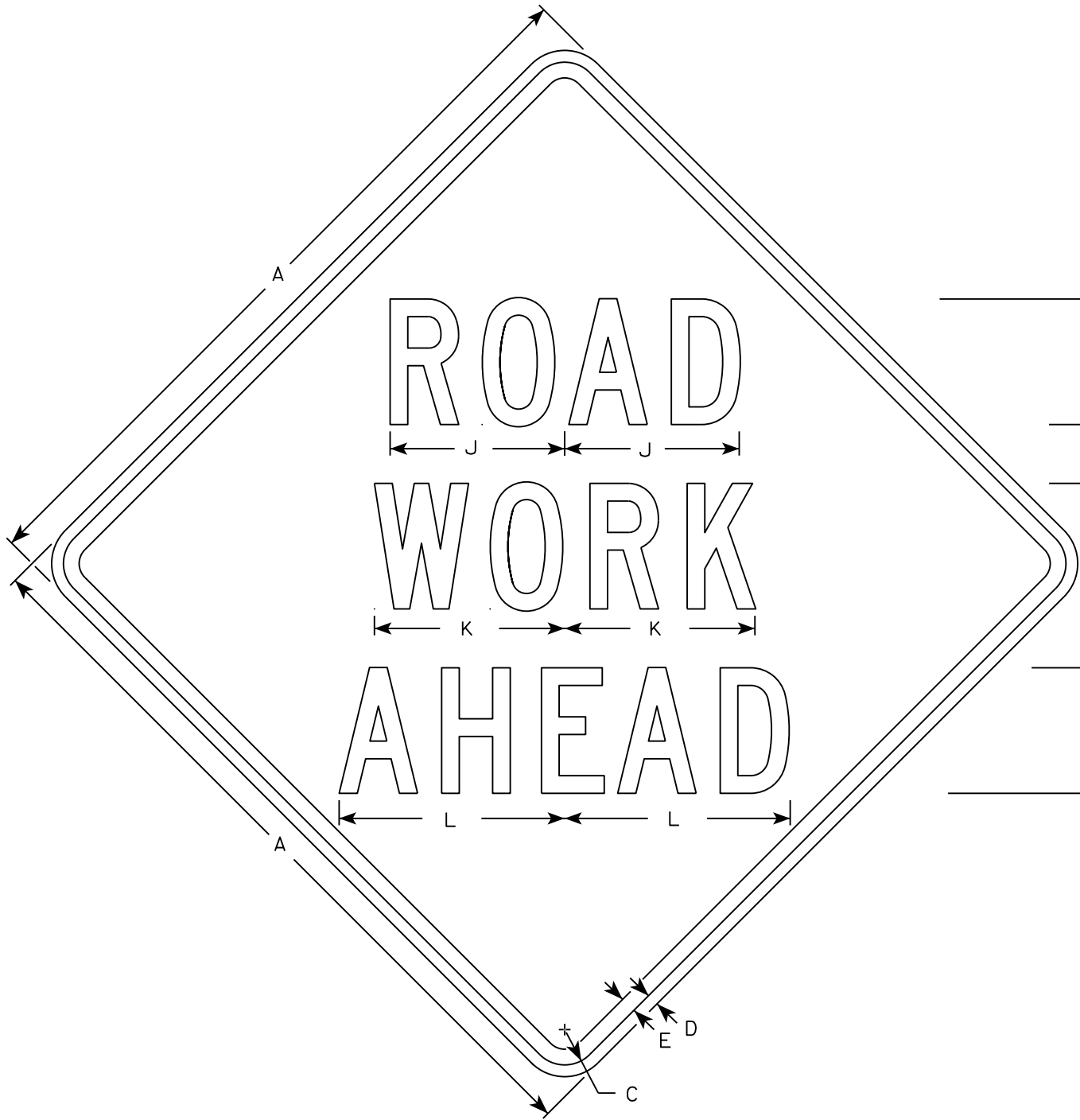
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

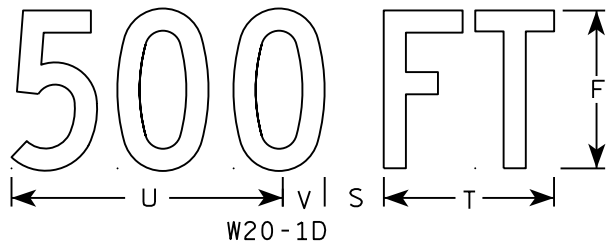
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

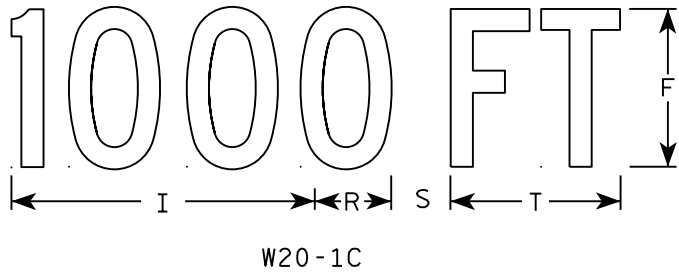
7



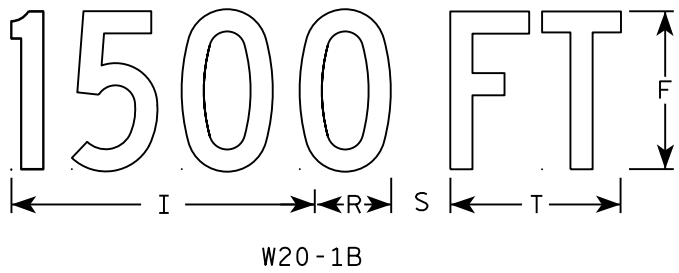
W20-1A



W20-1D



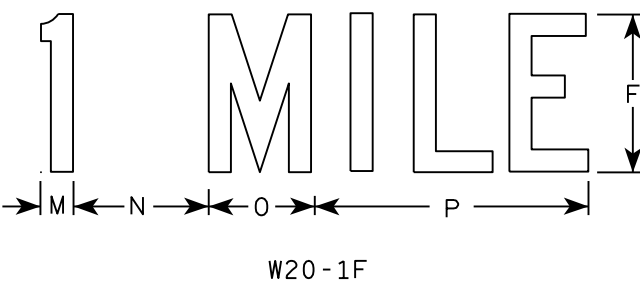
W20-1C



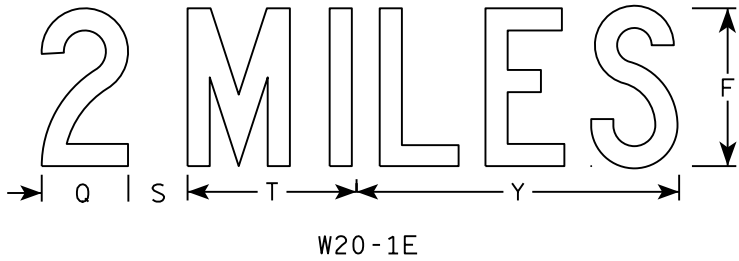
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

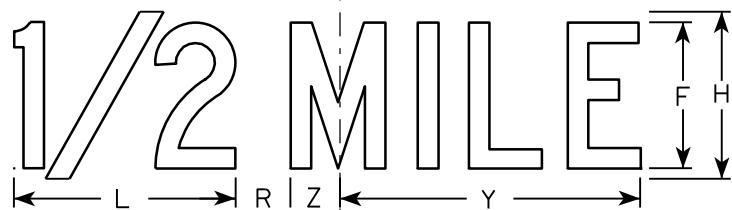
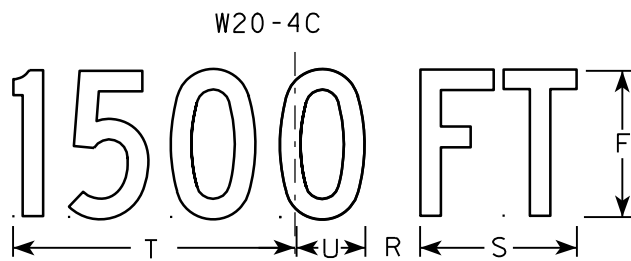
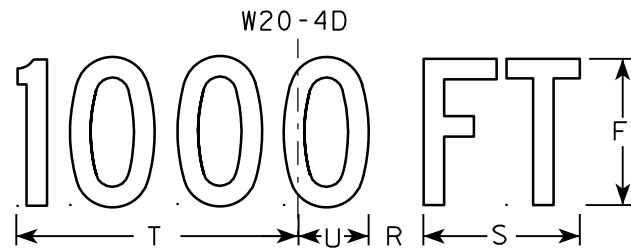
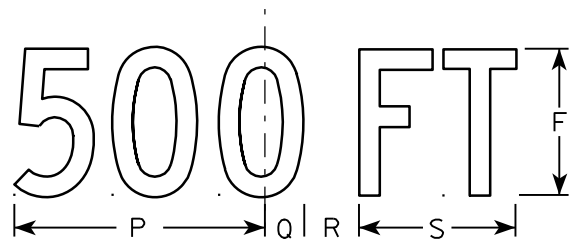
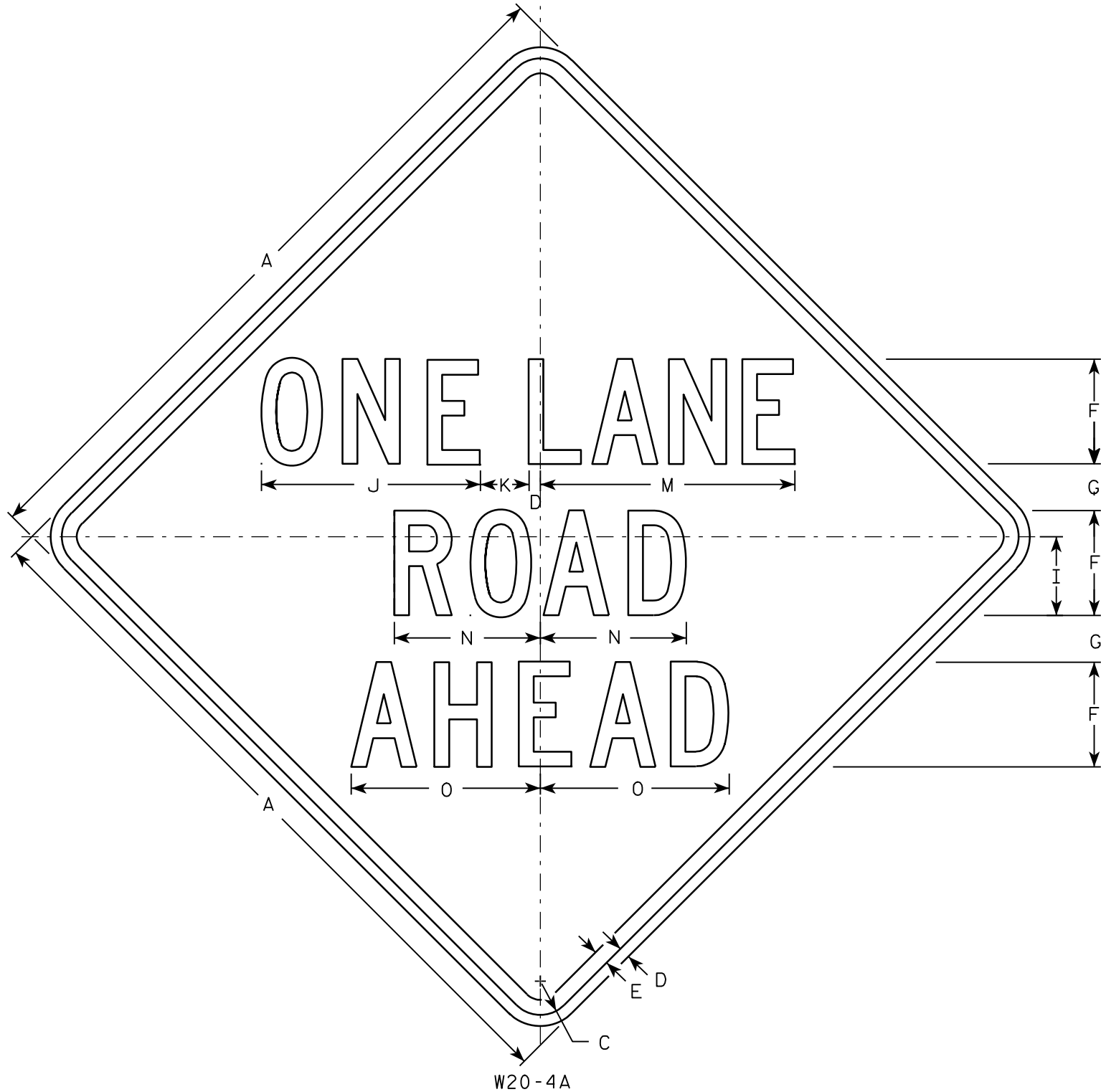
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



NOTES

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

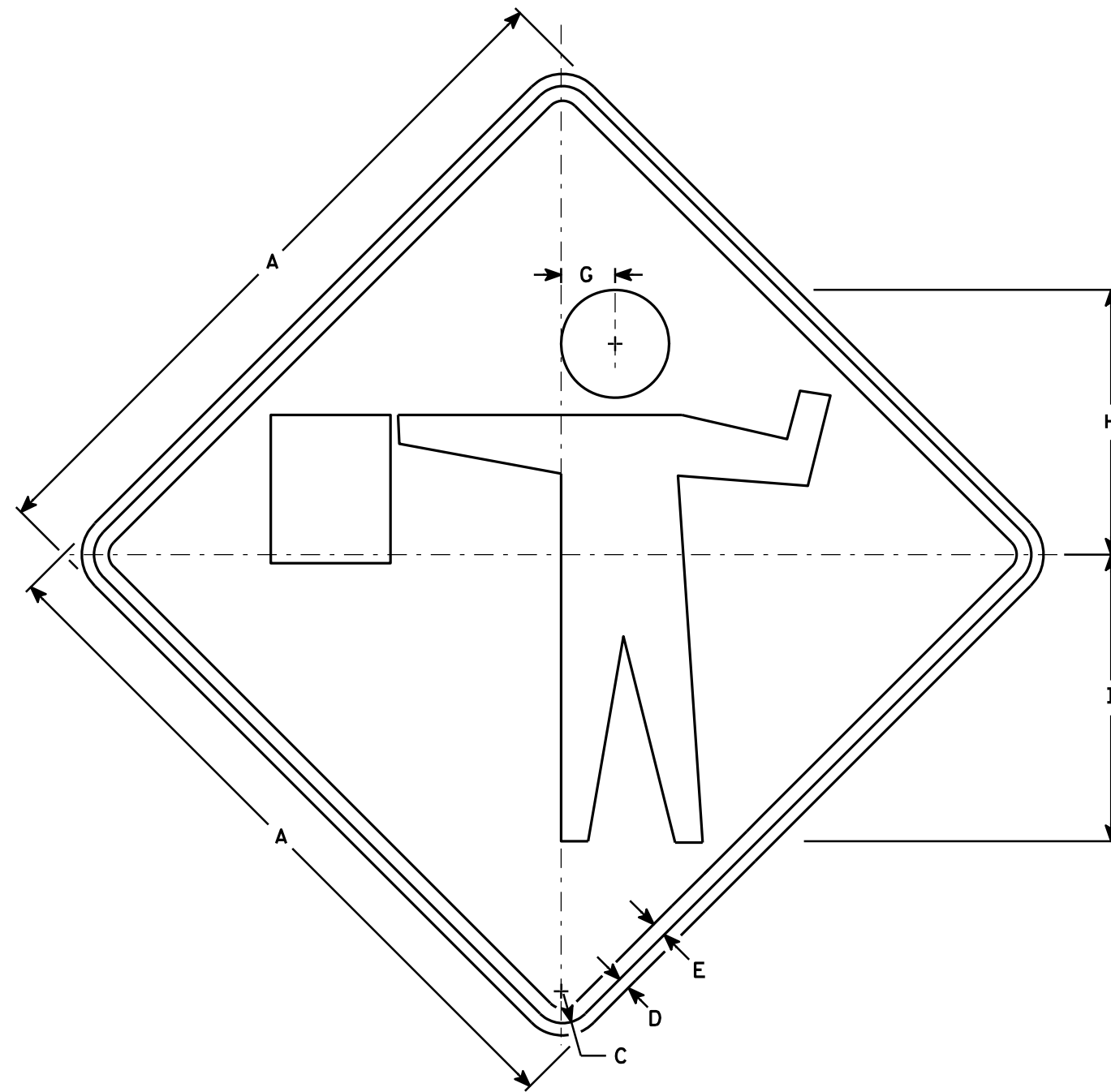
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-4.9



W20-7A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

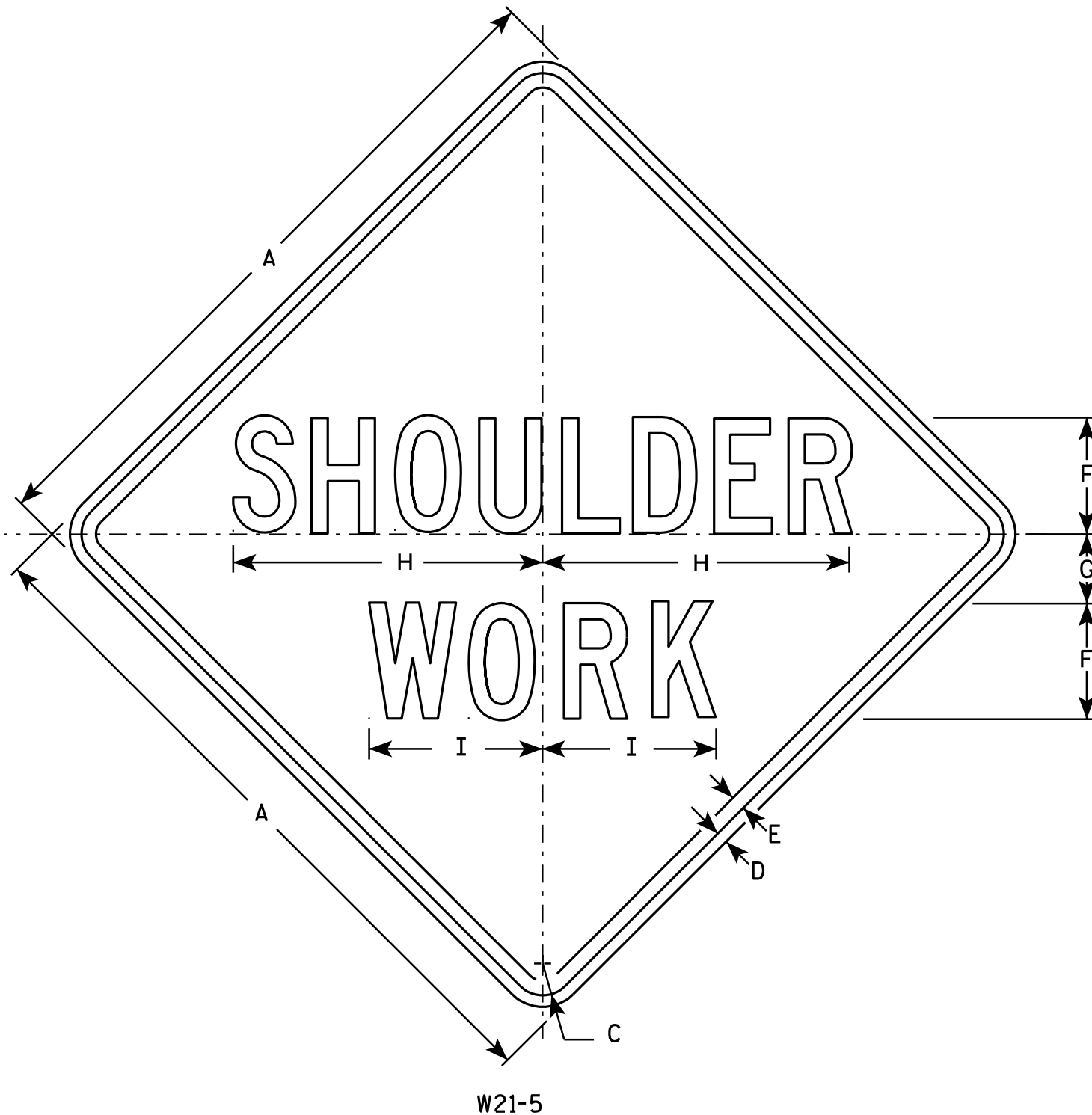
STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

STANDARD SIGN

W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/21/11 PLATE NO. W21-5.5

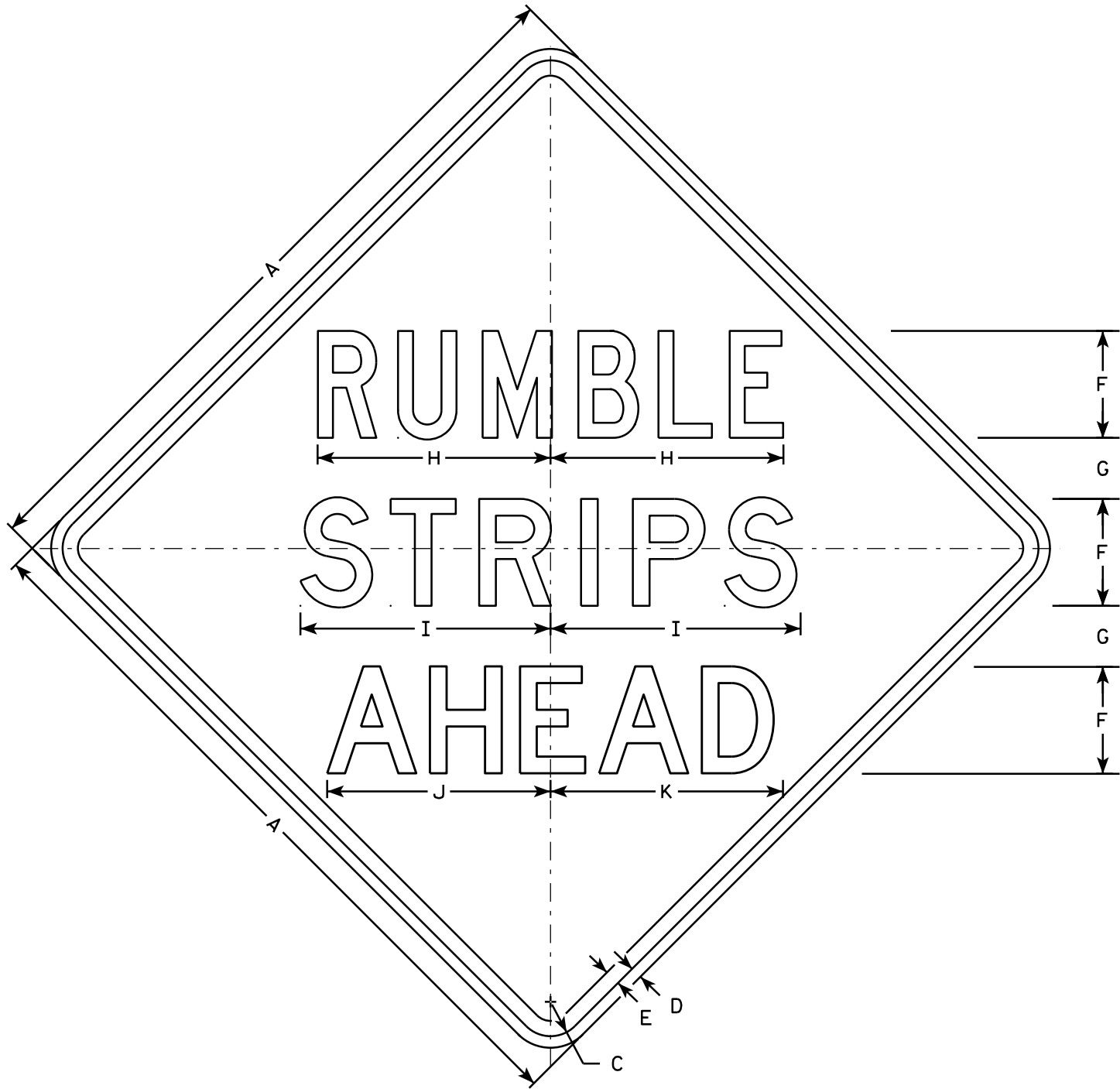
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W21-65

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
Lines 2 and 3 are Series D

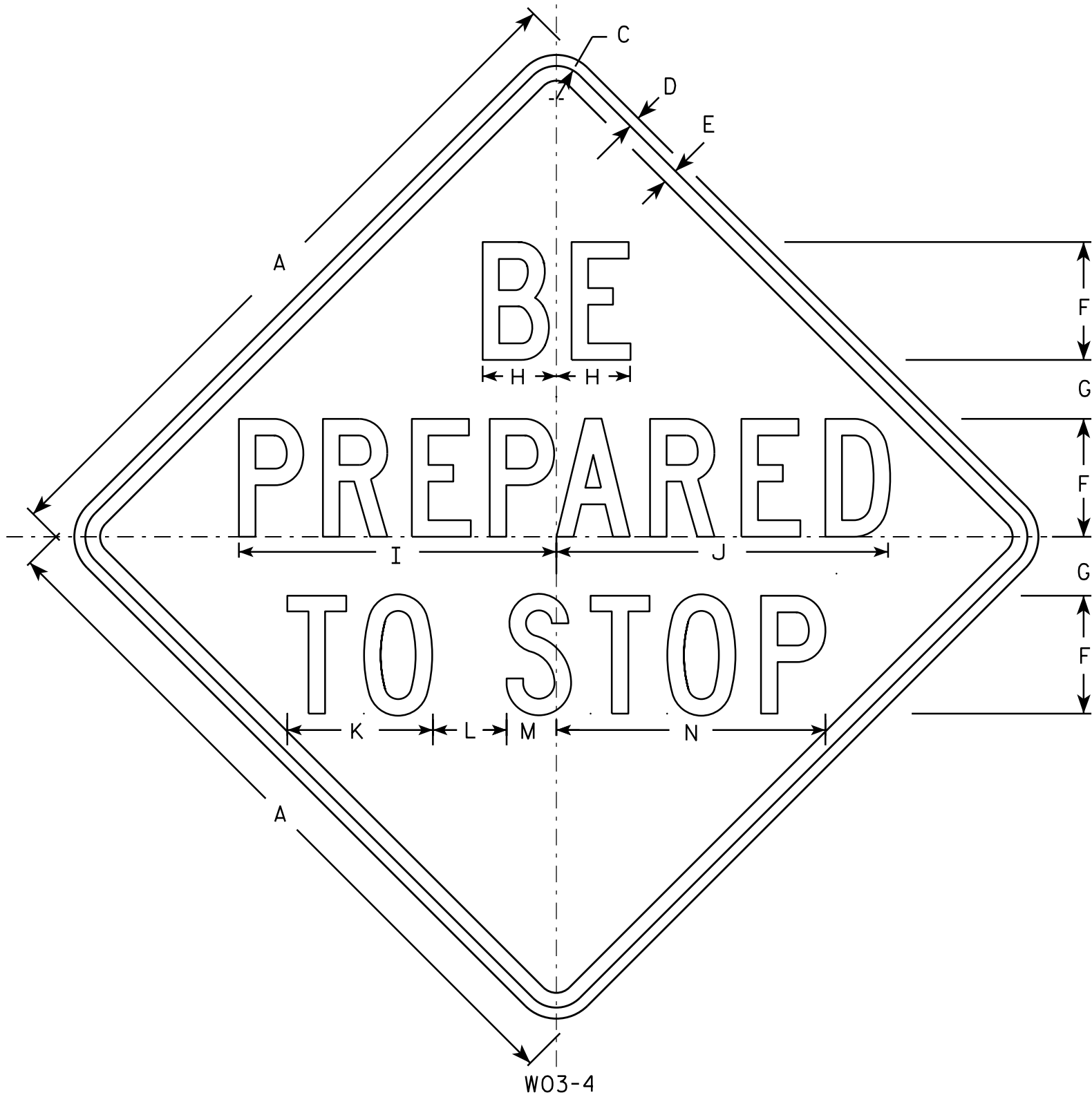
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 1/4	10 7/8	11 5/8	11	11 5/8																9.0
2S	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
2M	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
3	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
4	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
5	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0

STANDARD SIGN
W21-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/28/14 PLATE NO. W21-65.1



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	6	2 1/2	3 3/4	15 7/8	16 7/8	7 3/8	4	2 3/8	13 3/4													9.0
2S	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
2M	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
3	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
4	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
5	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0

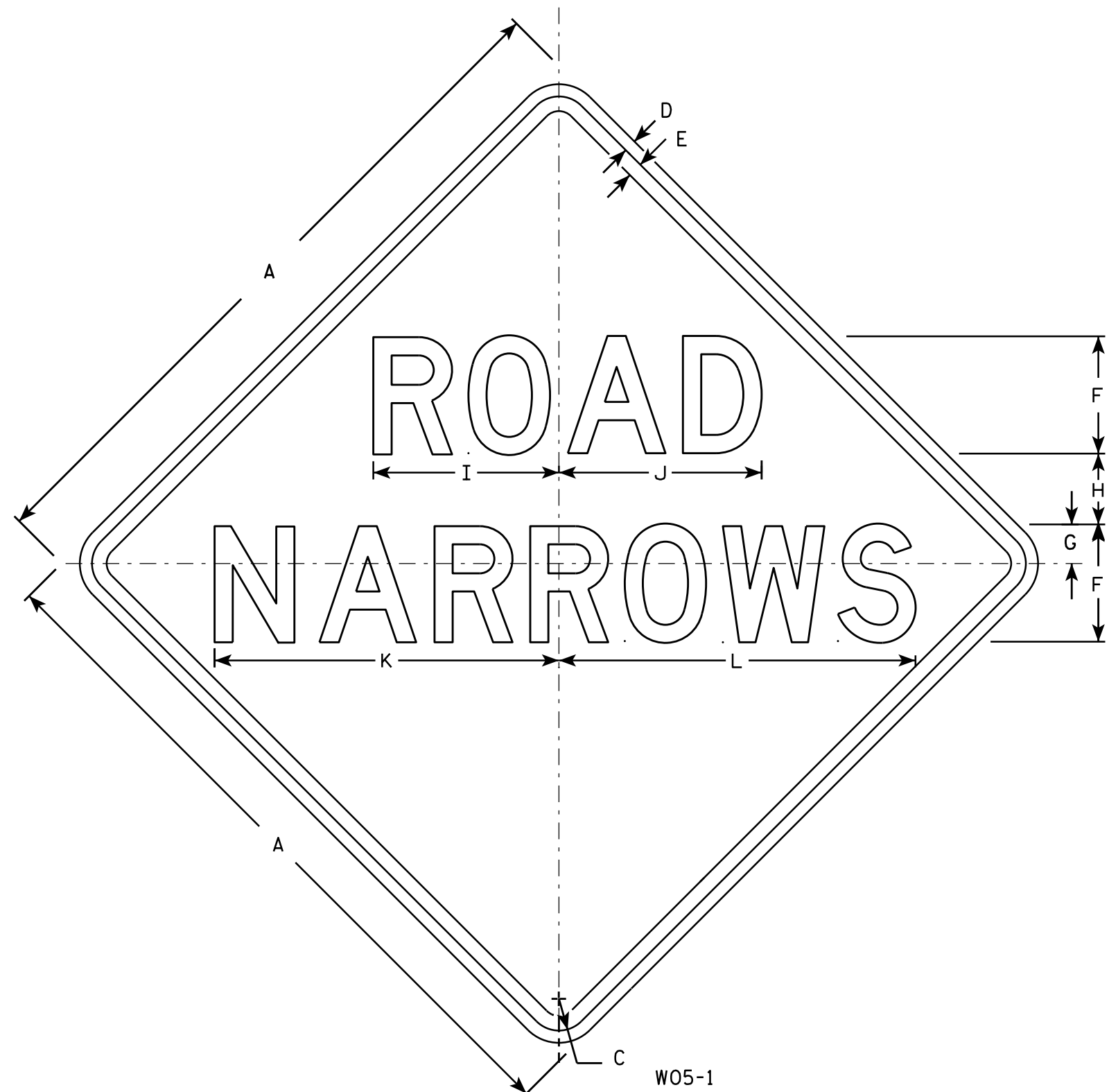
STANDARD SIGN W03-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/02/13 PLATE NO. W03-4.1

PROJECT NO: HWY: COUNTY: SHEET NO: E



W05-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5⁄8	5⁄8	3⁄4	6	2	3 1⁄2	9 1⁄2	10 3⁄8	17 5⁄8	18 1⁄4															9.0
2S	48		2 1⁄4	3⁄4	1	8	3	4	12 3⁄4	13 3⁄4	23 1⁄2	24 3⁄8															16.0
2M	48		2 1⁄4	3⁄4	1	8	3	4	12 3⁄4	13 3⁄4	23 1⁄2	24 3⁄8															16.0
3	48		2 1⁄4	3⁄4	1	8	3	4	12 3⁄4	13 3⁄4	23 1⁄2	24 3⁄8															16.0
4	48		2 1⁄4	3⁄4	1	8	3	4	12 3⁄4	13 3⁄4	23 1⁄2	24 3⁄8															16.0
5	48		2 1⁄4	3⁄4	1	8	3	4	12 3⁄4	13 3⁄4	23 1⁄2	24 3⁄8															16.0

STANDARD SIGN

W05-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W05-1.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
			Cut	Fill	Cut	Fill	X 1.00 Cut	X 1.25 Expanded Fill	Mass Ordinate
357+50	35750.00	0.00	166.50	9.10	0	0	0	0	0
357+55	35755.00	5.00	168.14	8.87	31	2	31	2	29
357+60	35760.00	5.00	173.19	8.70	32	2	63	4	58
357+65	35765.00	5.00	178.13	8.53	33	2	95	6	89
357+70	35770.00	5.00	186.82	8.31	34	2	129	8	121
357+75	35775.00	5.00	192.63	8.05	35	2	164	10	154
357+80	35780.00	5.00	204.52	7.85	37	1	201	12	189
357+85	35785.00	5.00	224.59	8.59	40	2	241	14	227
357+90	35790.00	5.00	256.31	8.07	45	2	285	16	269
357+95	35795.00	5.00	304.64	7.08	52	1	337	17	320
358+00	35800.00	5.00	352.87	6.43	61	1	398	19	379
358+05	35805.00	5.00	383.74	6.21	68	1	466	20	446
358+10	35810.00	5.00	381.45	6.38	71	1	537	22	515
358+15	35815.00	5.00	387.55	6.18	71	1	608	23	585
358+20	35820.00	5.00	409.32	6.57	74	1	682	25	657
358+25	35825.00	5.00	433.58	5.23	78	1	760	26	734
358+30	35830.00	5.00	459.22	5.16	83	1	843	27	815
358+35	35835.00	5.00	475.80	5.31	87	1	929	29	901
358+40	35840.00	5.00	477.59	5.67	88	1	1,018	30	988
358+45	35845.00	5.00	448.37	5.71	86	1	1,103	31	1,072
358+50	35850.00	5.00	393.76	5.79	78	1	1,181	32	1,149
358+55	35855.00	5.00	322.65	5.89	66	1	1,248	34	1,214
358+60	35860.00	5.00	246.01	6.02	53	1	1,300	35	1,265
358+65	35865.00	5.00	175.23	6.15	39	1	1,339	37	1,303
358+70	35870.00	5.00	133.96	6.33	29	1	1,368	38	1,330
358+75	35875.00	5.00	112.08	6.55	23	1	1,391	40	1,351
358+80	35880.00	5.00	103.84	6.82	20	1	1,411	41	1,370

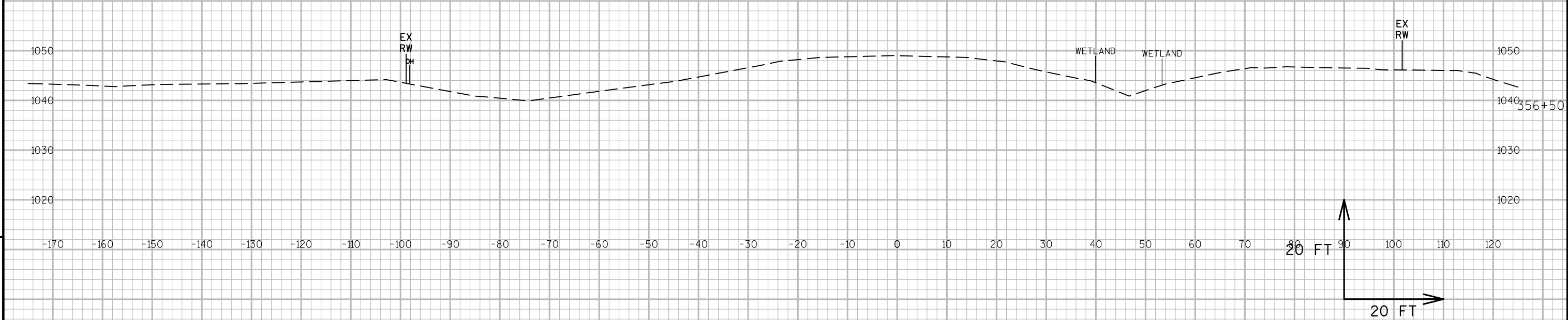
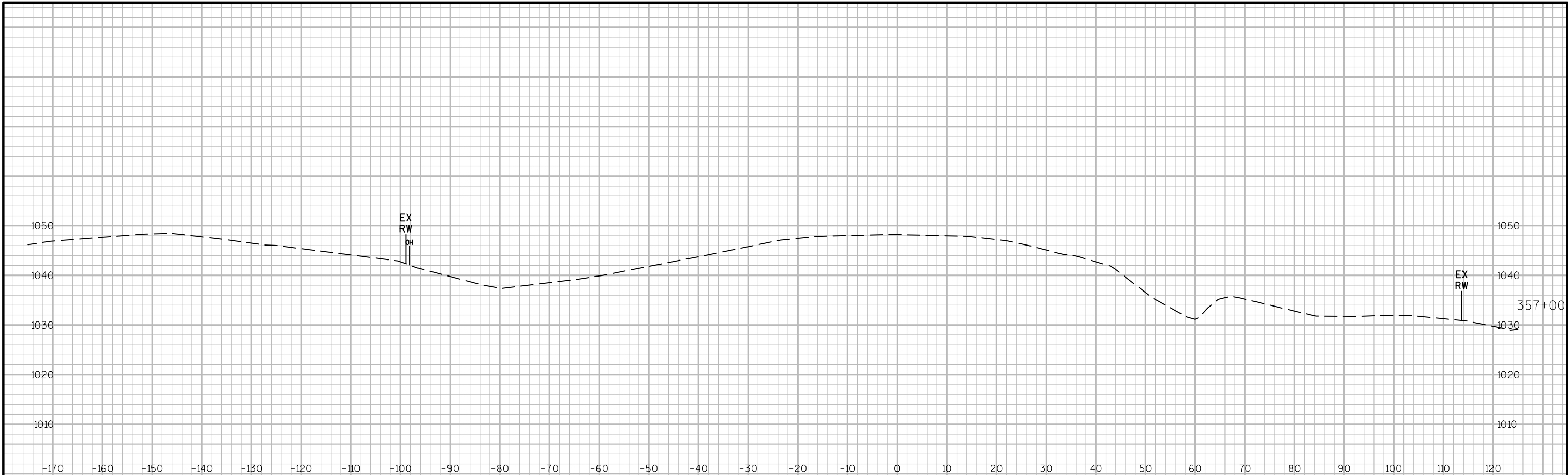
Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
			Cut	Fill	Cut	Fill	X 1.00 Cut	X 1.25 Expanded Fill	Mass Ordinate
357+50	35750.00	0.00	0.00	158.06	0	0	0	0	0
357+55	35755.00	5.00	0.00	156.40	0	29	0	36	-36
357+60	35760.00	5.00	0.00	155.42	0	29	0	72	-72
357+65	35765.00	5.00	0.00	154.36	0	29	0	108	-108
357+70	35770.00	5.00	0.00	151.87	0	28	0	144	-144
357+75	35775.00	5.00	0.00	152.47	0	28	0	179	-179
357+80	35780.00	5.00	0.00	161.11	0	29	0	215	-215
357+85	35785.00	5.00	0.00	173.99	0	31	0	254	-254
357+90	35790.00	5.00	0.00	191.76	0	34	0	296	-296
357+95	35795.00	5.00	0.00	221.22	0	38	0	344	-344
358+00	35800.00	5.00	0.00	253.75	0	44	0	399	-399
358+05	35805.00	5.00	0.00	287.26	0	50	0	462	-462
358+10	35810.00	5.00	0.00	311.21	0	55	0	531	-531
358+15	35815.00	5.00	0.00	328.41	0	59	0	605	-605
358+20	35820.00	5.00	0.00	348.31	0	63	0	683	-683
358+25	35825.00	5.00	0.00	362.46	0	66	0	766	-766
358+30	35830.00	5.00	0.00	354.07	0	66	0	849	-849
358+35	35835.00	5.00	0.00	348.30	0	65	0	930	-930
358+40	35840.00	5.00	0.00	330.97	0	63	0	1,009	-1,009
358+45	35845.00	5.00	0.00	308.61	0	59	0	1,083	-1,083
358+50	35850.00	5.00	0.00	273.73	0	54	0	1,150	-1,150
358+55	35855.00	5.00	0.00	234.40	0	47	0	1,209	-1,209
358+60	35860.00	5.00	0.23	192.77	0	40	0	1,258	-1,258
358+65	35865.00	5.00	0.00	147.00	0	31	0	1,298	-1,298
358+70	35870.00	5.00	0.00	117.97	0	25	0	1,328	-1,328
358+75	35875.00	5.00	0.00	103.96	0	21	0	1,354	-1,354
358+80	35880.00	5.00	0.00	96.65	0	19	0	1,377	-1,377

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
							X 1.25		
			Cut	Fill	Cut	Fill	X 1.00 Cut	Expanded Fill	Mass Ordinate
360+00	36000.00	0.00	67.92	8.28	0	0	0	0	0
360+05	36005.00	5.00	77.19	8.16	13	2	13	2	12
360+10	36010.00	5.00	86.71	8.06	15	2	29	4	25
360+15	36015.00	5.00	105.10	8.00	18	1	46	6	41
360+20	36020.00	5.00	409.00	7.96	48	1	94	7	86
360+25	36025.00	5.00	505.23	7.96	85	1	179	9	169
360+30	36030.00	5.00	580.30	7.99	101	1	279	11	268
360+35	36035.00	5.00	618.39	8.04	111	1	390	13	377
360+40	36040.00	5.00	642.32	8.13	117	1	507	15	492
360+45	36045.00	5.00	661.43	7.89	121	1	628	17	611
360+50	36050.00	5.00	671.23	7.59	123	1	751	19	732
360+55	36055.00	5.00	671.70	7.46	124	1	875	20	855
360+60	36060.00	5.00	665.20	7.54	124	1	999	22	977
360+65	36065.00	5.00	654.54	7.77	122	1	1,121	24	1,098
360+70	36070.00	5.00	654.71	7.99	121	1	1,243	26	1,217
360+75	36075.00	5.00	663.95	8.18	122	1	1,365	27	1,337
360+80	36080.00	5.00	675.47	8.35	124	2	1,489	29	1,459
360+85	36085.00	5.00	686.98	8.49	126	2	1,615	31	1,583
360+90	36090.00	5.00	696.57	8.61	128	2	1,743	33	1,710
360+95	36095.00	5.00	700.53	8.34	129	2	1,872	35	1,837
361+00	36100.00	5.00	777.64	7.62	137	1	2,009	37	1,972
361+05	36105.00	5.00	860.84	6.87	152	1	2,161	39	2,122
361+10	36110.00	5.00	928.69	6.27	166	1	2,327	40	2,286
361+15	36115.00	5.00	984.05	6.84	177	1	2,504	42	2,462
361+20	36120.00	5.00	1049.53	5.81	188	1	2,692	43	2,649
361+25	36125.00	5.00	1133.30	5.70	202	1	2,894	45	2,849
361+30	36130.00	5.00	1195.22	7.15	216	1	3,110	46	3,064
361+35	36135.00	5.00	1228.05	5.55	224	1	3,334	48	3,286
361+40	36140.00	5.00	1181.54	5.45	223	1	3,557	49	3,508
361+45	36145.00	5.00	1199.60	5.35	220	1	3,778	50	3,727
361+50	36150.00	5.00	1204.67	5.20	223	1	4,000	51	3,949
361+55	36155.00	5.00	1182.18	5.10	221	1	4,221	53	4,169
361+60	36160.00	5.00	1154.13	5.05	216	1	4,438	54	4,384
361+65	36165.00	5.00	1122.23	5.09	211	1	4,648	55	4,593
361+70	36170.00	5.00	1073.33	5.11	203	1	4,852	56	4,796
361+75	36175.00	5.00	1023.98	5.12	194	1	5,046	57	4,989
361+80	36180.00	5.00	980.91	5.11	186	1	5,231	58	5,173
361+85	36185.00	5.00	939.06	5.08	178	1	5,409	60	5,350
361+90	36190.00	5.00	894.72	5.04	170	1	5,579	61	5,518
361+95	36195.00	5.00	844.77	4.98	161	1	5,740	62	5,678
362+00	36200.00	5.00	778.23	5.09	150	1	5,890	63	5,827
362+05	36205.00	5.00	694.81	5.28	136	1	6,027	64	5,962
362+10	36210.00	5.00	617.74	5.20	122	1	6,148	66	6,083
362+15	36215.00	5.00	536.41	5.09	107	1	6,255	67	6,188
362+20	36220.00	5.00	442.88	5.02	91	1	6,346	68	6,278
362+25	36225.00	5.00	351.97	4.96	74	1	6,419	69	6,350
362+30	36230.00	5.00	282.28	4.91	59	1	6,478	70	6,408
362+35	36235.00	5.00	230.51	4.84	47	1	6,526	71	6,454
362+40	36240.00	5.00	190.39	4.82	39	1	6,565	72	6,492
362+45	36245.00	5.00	171.39	4.89	33	1	6,598	74	6,525
362+50	36250.00	5.00	160.35	5.05	31	1	6,629	75	6,554

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
							X 1.25		
			Cut	Fill	Cut	Fill	X 1.00 Cut	Expanded Fill	Mass Ordinate
360+00	36000.00	0.00	0.08	64.51	0	0	0	0	0
360+05	36005.00	5.00	0.08	74.64	0	13	0	16	-16
360+10	36010.00	5.00	0.09	82.48	0	15	0	34	-34
360+15	36015.00	5.00	0.10	97.50	0	17	0	55	-55
360+20	36020.00	5.00	0.09	313.37	0	38	0	103	-103
360+25	36025.00	5.00	0.00	316.26	0	58	0	176	-175
360+30	36030.00	5.00	0.00	323.90	0	59	0	250	-250
360+35	36035.00	5.00	0.00	333.86	0	61	0	326	-326
360+40	36040.00	5.00	0.00	345.53	0	63	0	404	-404
360+45	36045.00	5.00	0.00	358.70	0	65	0	486	-486
360+50	36050.00	5.00	0.00	371.96	0	68	0	570	-570
360+55	36055.00	5.00	0.00	384.94	0	70	0	658	-658
360+60	36060.00	5.00	0.00	398.36	0	73	0	749	-749
360+65	36065.00	5.00	0.00	413.54	0	75	0	843	-843
360+70	36070.00	5.00	0.00	431.39	0	78	0	941	-940
360+75	36075.00	5.00	0.00	449.62	0	82	0	1,042	-1,042
360+80	36080.00	5.00	0.00	467.31	0	85	0	1,149	-1,149
360+85	36085.00	5.00	0.00	485.60	0	88	0	1,259	-1,259
360+90	36090.00	5.00	0.00	504.90	0	92	0	1,374	-1,373
360+95	36095.00	5.00	0.00	524.72	0	95	0	1,493	-1,493
361+00	36100.00	5.00	0.00	552.60	0	100	0	1,617	-1,617
361+05	36105.00	5.00	5.27	563.99	0	103	1	1,747	-1,746
361+10	36110.00	5.00	16.83	575.70	2	106	3	1,879	-1,876
361+15	36115.00	5.00	31.37	592.54	4	108	7	2,014	-2,007
361+20	36120.00	5.00	26.00	612.88	5	112	12	2,153	-2,141
361+25	36125.00	5.00	0.55	658.76	2	118	15	2,300	-2,286
361+30	36130.00	5.00	4.60	688.00	0	125	15	2,456	-2,441
361+35	36135.00	5.00	0.97	691.93	1	128	16	2,616	-2,600
361+40	36140.00	5.00	1.74	656.59	0	125	16	2,772	-2,756
361+45	36145.00	5.00	9.47	640.06	1	120	17	2,922	-2,905
361+50	36150.00	5.00	0.19	634.02	1	118	18	3,070	-3,052
361+55	36155.00	5.00	0.06	617.18	0	116	18	3,214	-3,196
361+60	36160.00	5.00	0.00	596.84	0	112	18	3,355	-3,337
361+65	36165.00	5.00	0.00	575.63	0	109	18	3,491	-3,473
361+70	36170.00	5.00	0.00	553.20	0	105	18	3,621	-3,603
361+75	36175.00	5.00	0.00	530.46	0	100	18	3,747	-3,729
361+80	36180.00	5.00	0.00	507.97	0	96	18	3,867	-3,849
361+85	36185.00	5.00	0.00	485.92	0	92	18	3,982	-3,964
361+90	36190.00	5.00	0.00	464.39	0	88	18	4,092	-4,074
361+95	36195.00	5.00	0.00	444.16	0	84	18	4,197	-4,179
362+00	36200.00	5.00	0.00	424.26	0	80	18	4,298	-4,280
362+05	36205.00	5.00	0.00	402.68	0	77	18	4,393	-4,375
362+10	36210.00	5.00	0.00	376.98	0	72	18	4,484	-4,466
362+15	36215.00	5.00	0.00	344.76	0	67	18	4,567	-4,549
362+20	36220.00	5.00	0.00	306.22	0	60	18	4,642	-4,624
362+25	36225.00	5.00	0.00	264.62	0	53	18	4,709	-4,690
362+30	36230.00	5.00	0.00	226.25	0	45	18	4,765	-4,747
362+35	36235.00	5.00	0.00	192.16	0	39	18	4,814	-4,796
362+40	36240.00	5.00	0.00	167.42	0	33	18	4,855	-4,837
362+45	36245.00	5.00	0.00	156.89	0	30	18	4,893	-4,875
362+50	36250.00	5.00	0.00	151.31	0	29	18	4,929	-4,911

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
			Cut	Fill	Cut	Fill	X 1.00 Cut	X 1.25 Expanded Fill	Mass Ordinate
391+45	39145.00	0.00	120.48	9.67	0	0	0	0	0
391+50	39150.00	5.00	117.74	9.66	22	2	22	2	20
391+55	39155.00	5.00	117.25	9.59	22	2	44	4	39
391+60	39160.00	5.00	119.05	9.52	22	2	66	7	59
391+65	39165.00	5.00	124.58	9.33	23	2	88	9	79
391+70	39170.00	5.00	154.03	8.79	26	2	114	11	103
391+75	39175.00	5.00	180.15	8.49	31	2	145	13	132
391+80	39180.00	5.00	194.23	8.14	35	2	180	15	165
391+85	39185.00	5.00	219.79	7.79	38	1	218	17	201
391+90	39190.00	5.00	226.88	7.37	41	1	259	18	241
391+95	39195.00	5.00	230.53	6.97	42	1	302	20	282
392+00	39200.00	5.00	220.79	8.73	42	1	343	22	322
392+05	39205.00	5.00	190.67	9.07	38	2	382	24	358
392+10	39210.00	5.00	180.11	7.25	34	2	416	26	390
392+15	39215.00	5.00	186.24	6.17	34	1	450	27	422
392+20	39220.00	5.00	190.41	6.15	35	1	485	29	456
392+25	39225.00	5.00	196.65	6.35	36	1	521	30	490
392+30	39230.00	5.00	199.20	6.34	37	1	557	32	525
392+35	39235.00	5.00	198.14	7.32	37	1	594	33	561
392+40	39240.00	5.00	199.34	6.79	37	1	631	35	596
392+45	39245.00	5.00	202.81	6.67	37	1	668	37	631
392+50	39250.00	5.00	209.31	6.57	38	1	706	38	668
392+55	39255.00	5.00	220.59	6.15	40	1	746	40	706
392+60	39260.00	5.00	224.11	6.35	41	1	787	41	746
392+65	39265.00	5.00	223.16	6.74	41	1	829	43	786
392+70	39270.00	5.00	221.57	7.07	41	1	870	44	826
392+75	39275.00	5.00	217.40	7.33	41	1	910	46	865
392+80	39280.00	5.00	211.44	7.54	40	1	950	48	903
392+85	39285.00	5.00	203.32	7.69	38	1	989	49	939
392+90	39290.00	5.00	191.57	7.87	37	1	1,025	51	974
392+95	39295.00	5.00	179.32	3.49	34	1	1,059	52	1,007
393+00	39300.00	5.00	171.73	2.45	33	1	1,092	53	1,039
393+05	39305.00	5.00	163.65	2.40	31	0	1,123	54	1,069
393+10	39310.00	5.00	154.81	2.36	29	0	1,152	54	1,098
393+15	39315.00	5.00	145.30	2.30	28	0	1,180	55	1,126
393+20	39320.00	5.00	136.91	2.26	26	0	1,206	55	1,151
393+25	39325.00	5.00	11.69	2.19	14	0	1,220	56	1,164

Station	Real Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
			Cut	Fill	Cut	Fill	X 1.00 Cut	X 1.25 Expanded Fill	Mass Ordinate
391+45	39145.00	0.00	0.00	108.55	0	0	0	0	0
391+50	39150.00	5.00	0.00	112.40	0	20	0	26	-26
391+55	39155.00	5.00	0.00	122.11	0	22	0	53	-53
391+60	39160.00	5.00	0.00	131.34	0	23	0	82	-82
391+65	39165.00	5.00	0.00	139.72	0	25	0	113	-113
391+70	39170.00	5.00	0.00	148.82	0	27	0	147	-147
391+75	39175.00	5.00	0.00	151.67	0	28	0	182	-182
391+80	39180.00	5.00	0.00	153.50	0	28	0	217	-217
391+85	39185.00	5.00	0.00	156.46	0	29	0	253	-253
391+90	39190.00	5.00	0.00	157.84	0	29	0	289	-289
391+95	39195.00	5.00	0.00	161.39	0	30	0	326	-326
392+00	39200.00	5.00	0.00	165.41	0	30	0	364	-364
392+05	39205.00	5.00	0.00	170.36	0	31	0	403	-403
392+10	39210.00	5.00	0.00	173.57	0	32	0	443	-443
392+15	39215.00	5.00	0.00	177.71	0	33	0	483	-483
392+20	39220.00	5.00	0.00	182.61	0	33	0	525	-525
392+25	39225.00	5.00	0.00	189.89	0	34	0	568	-568
392+30	39230.00	5.00	0.00	197.81	0	36	0	613	-613
392+35	39235.00	5.00	0.00	206.51	0	37	0	660	-660
392+40	39240.00	5.00	0.00	213.49	0	39	0	708	-708
392+45	39245.00	5.00	0.01	214.08	0	40	0	758	-758
392+50	39250.00	5.00	0.01	212.68	0	40	0	807	-807
392+55	39255.00	5.00	0.00	212.33	0	39	0	856	-856
392+60	39260.00	5.00	0.00	210.30	0	39	0	905	-905
392+65	39265.00	5.00	0.00	207.30	0	39	0	954	-954
392+70	39270.00	5.00	0.00	205.02	0	38	0	1,001	-1,001
392+75	39275.00	5.00	0.00	201.88	0	38	0	1,049	-1,048
392+80	39280.00	5.00	0.00	198.56	0	37	0	1,095	-1,095
392+85	39285.00	5.00	0.00	194.70	0	36	0	1,140	-1,140
392+90	39290.00	5.00	0.00	188.42	0	35	0	1,185	-1,185
392+95	39295.00	5.00	0.00	180.40	0	34	0	1,227	-1,227
393+00	39300.00	5.00	0.00	171.49	0	33	0	1,268	-1,268
393+05	39305.00	5.00	0.00	161.93	0	31	0	1,307	-1,307
393+10	39310.00	5.00	0.00	152.73	0	29	0	1,343	-1,343
393+15	39315.00	5.00	0.00	146.39	0	28	0	1,378	-1,378
393+20	39320.00	5.00	0.00	140.11	0	27	0	1,411	-1,411
393+25	39325.00	5.00	0.00	12.44	0	14	0	1,429	-1,429



9

9

PROJECT NO: 1009-44-60

HWY: USH 2

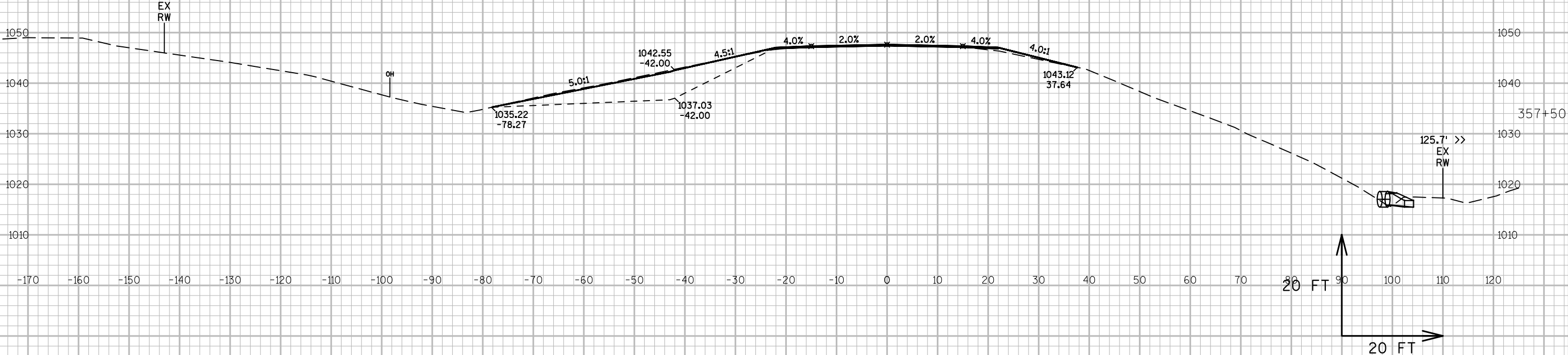
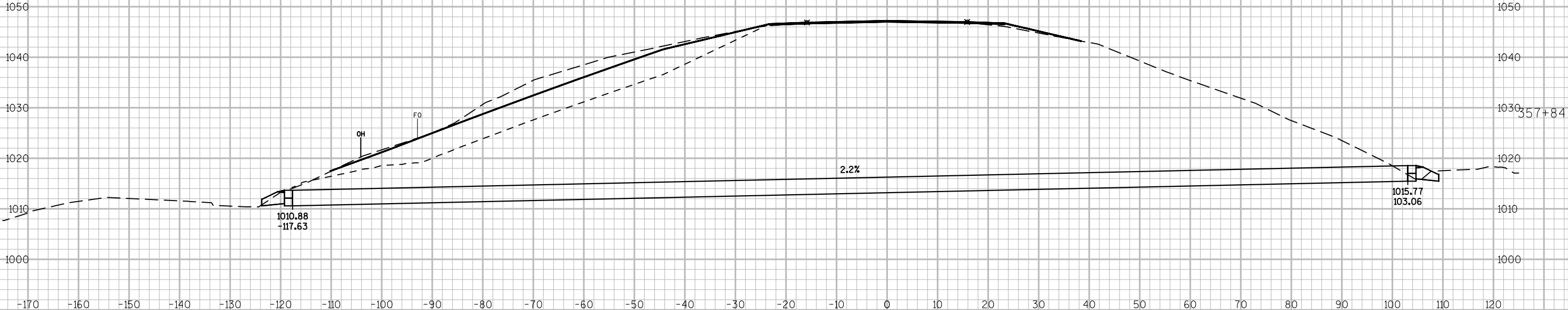
COUNTY: IRON

CROSS SECTIONS: CULVERT 26-002-000578

SHEET

E

CROSS SECTION IS CUT ALONG THE CENTERLINE OF THE CULVERT PIPE
AND IS SKEWED 18.9° CLOCKWISE TO ROADWAY ALIGNMENT



PROJECT NO: 1009-44-60

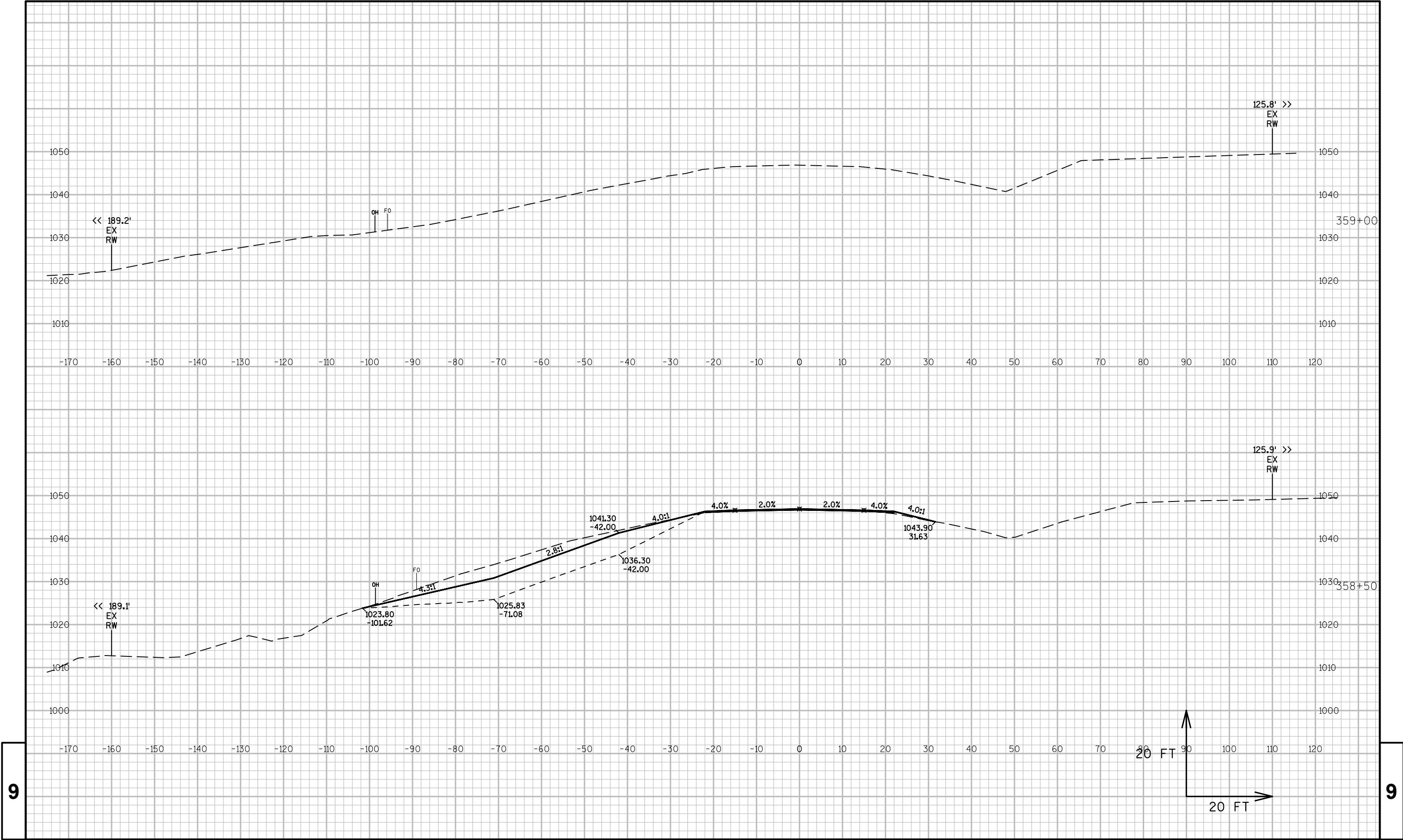
HWY: USH 2

COUNTY: IRON

CROSS SECTIONS: CULVERT 26-002-000578

SHEET

E



PROJECT NO: 1009-44-60

HWY: USH 2

COUNTY: IRON

CROSS SECTIONS: CULVERT 26-002-000578

SHEET

E

FILE NAME : \\RHIRTOP\PLPPI01\N3PUBLIC\PD\N3\10094430\X\090201_XS.DWG
LAYOUT NAME : 04

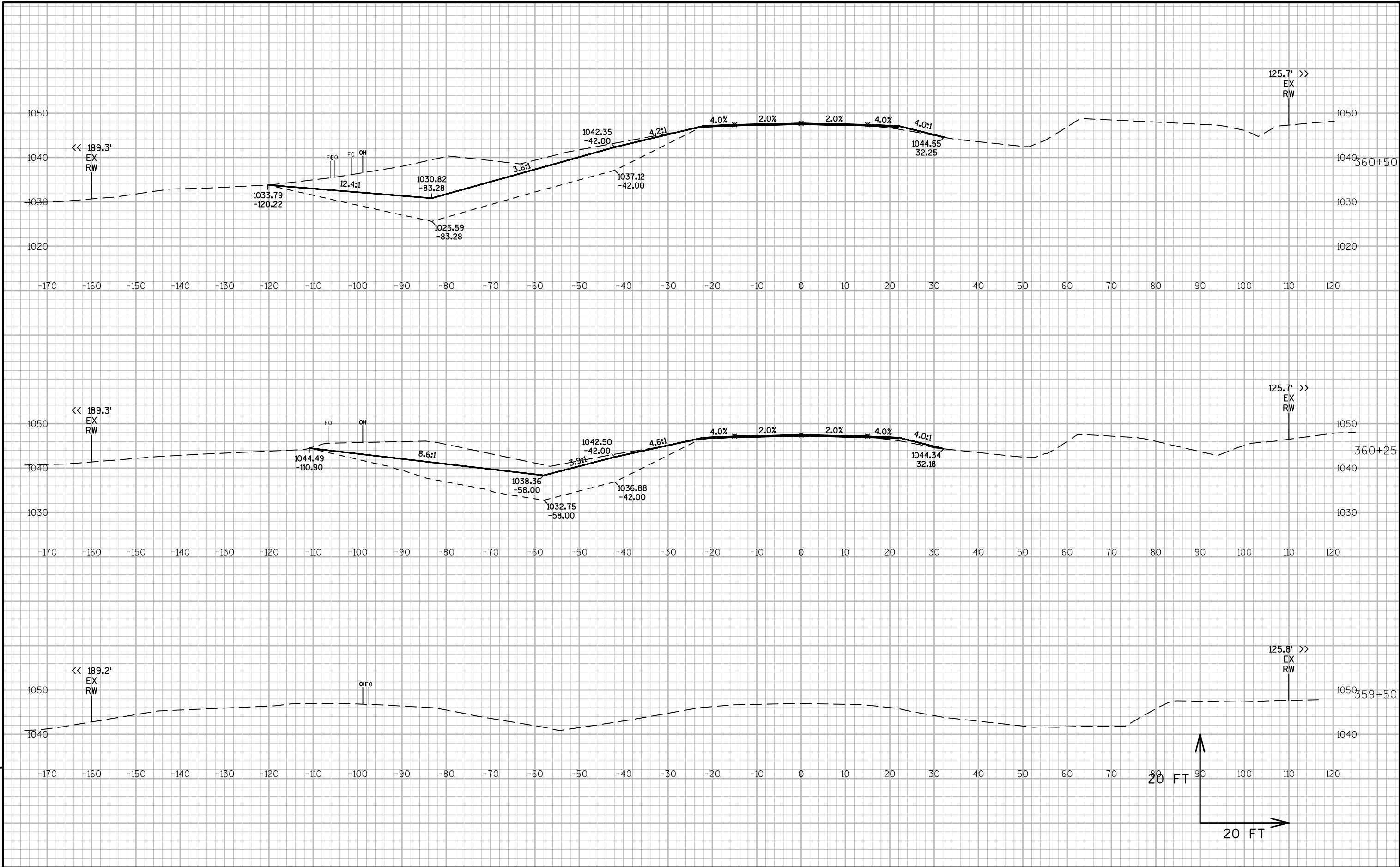
PLOT DATE : 4/25/2019 2:31 PM

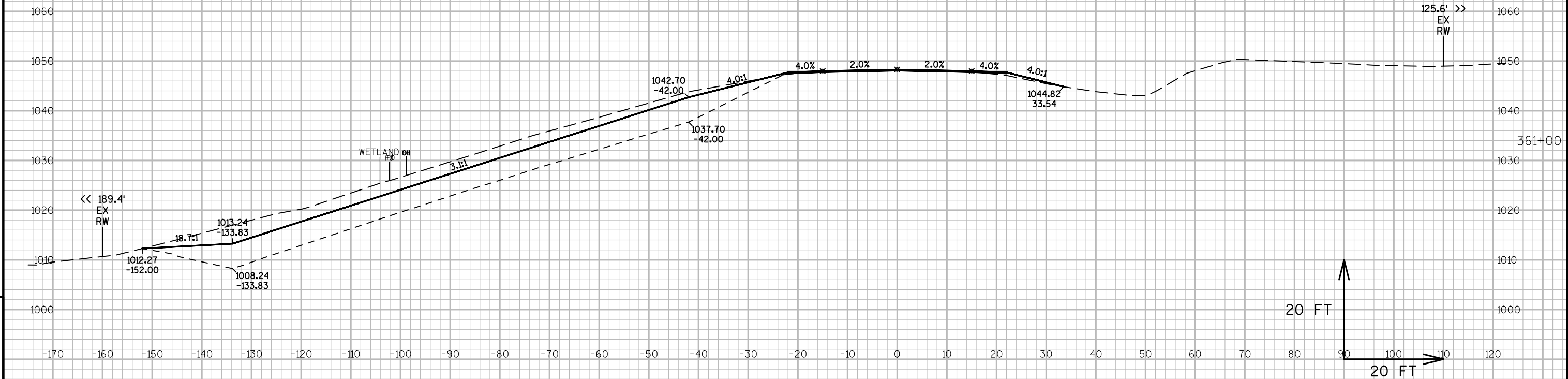
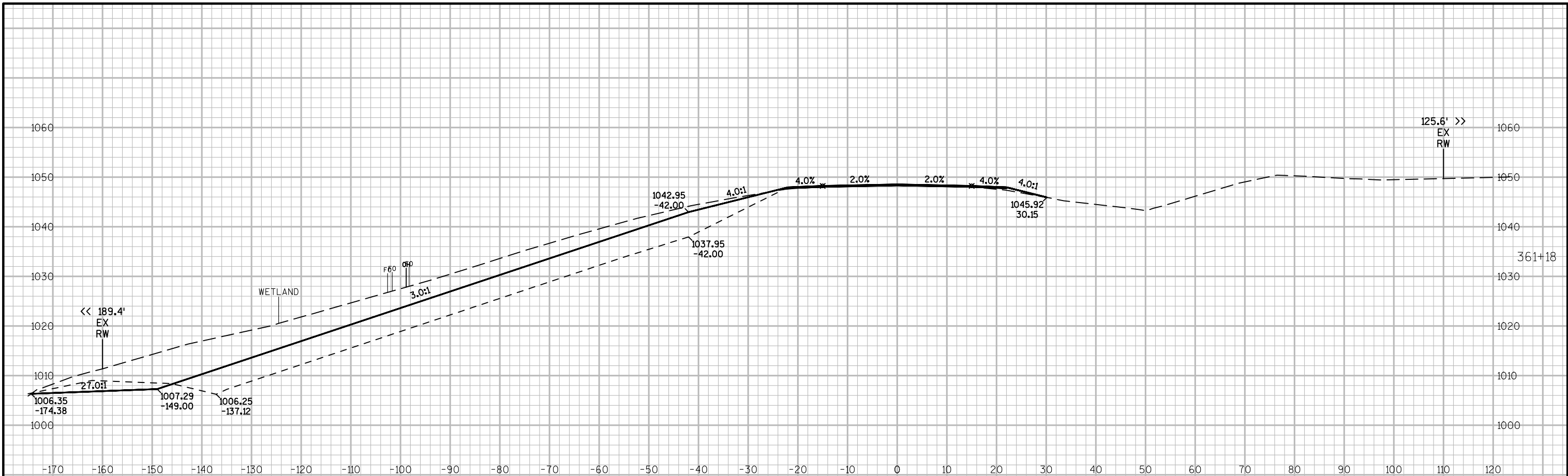
PLOT BY : MAVES, EVAN A

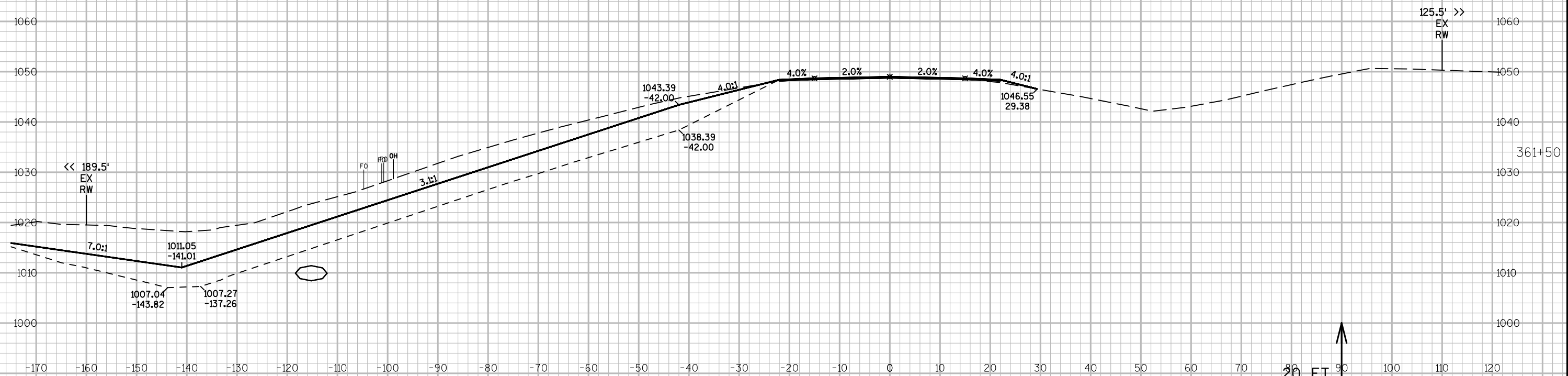
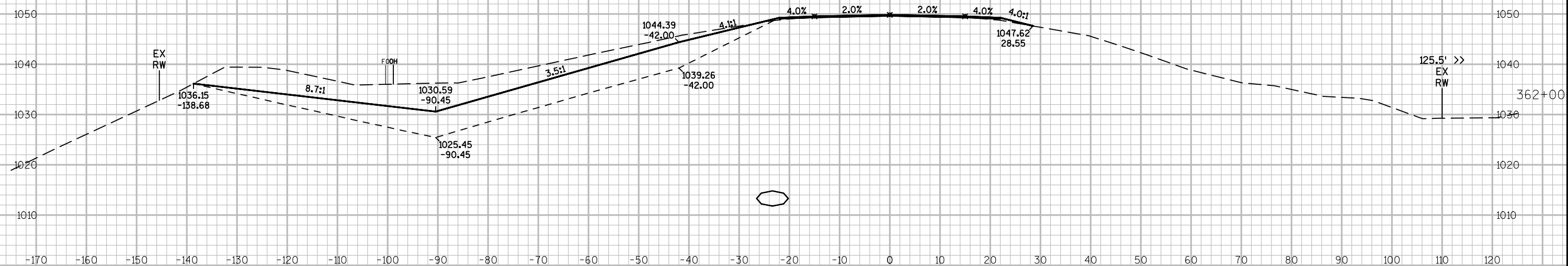
PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADD\ SHEET 49







PROJECT NO: 1009-44-60

HWY: USH 2

COUNTY: IRON

CROSS SECTIONS: CULVERT 26-002-061753

SHEET

E

FILE NAME : \\RHIRTOPFLPPI01\N3PUBLIC\PDS\C3D\10094430\SHEETSP\AN\090201_XS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/25/2019 2:32 PM

PLOT BY : MAVES, EVAN A

PLOT NAME :

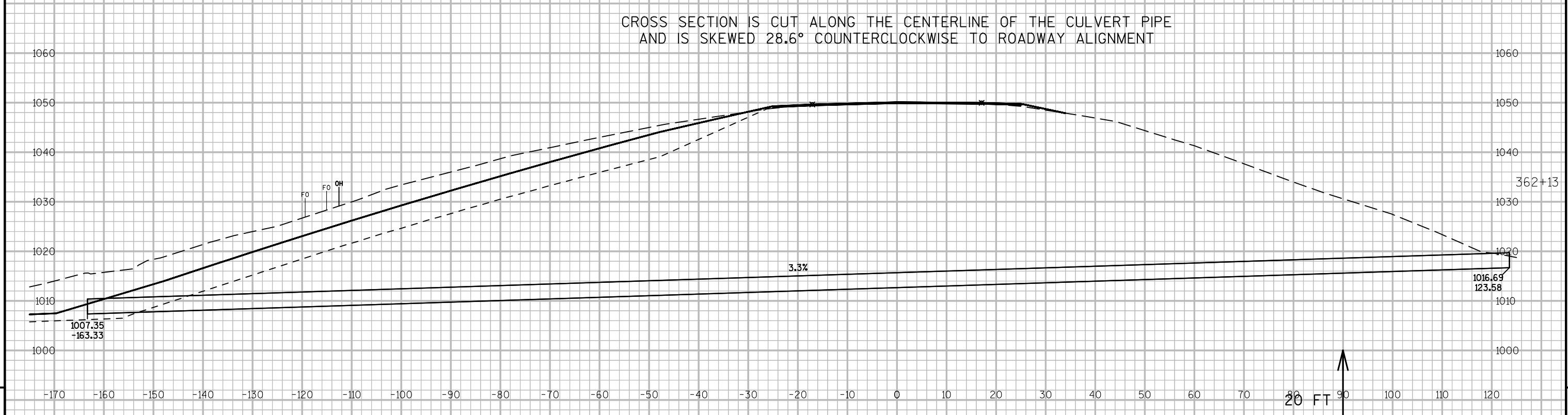
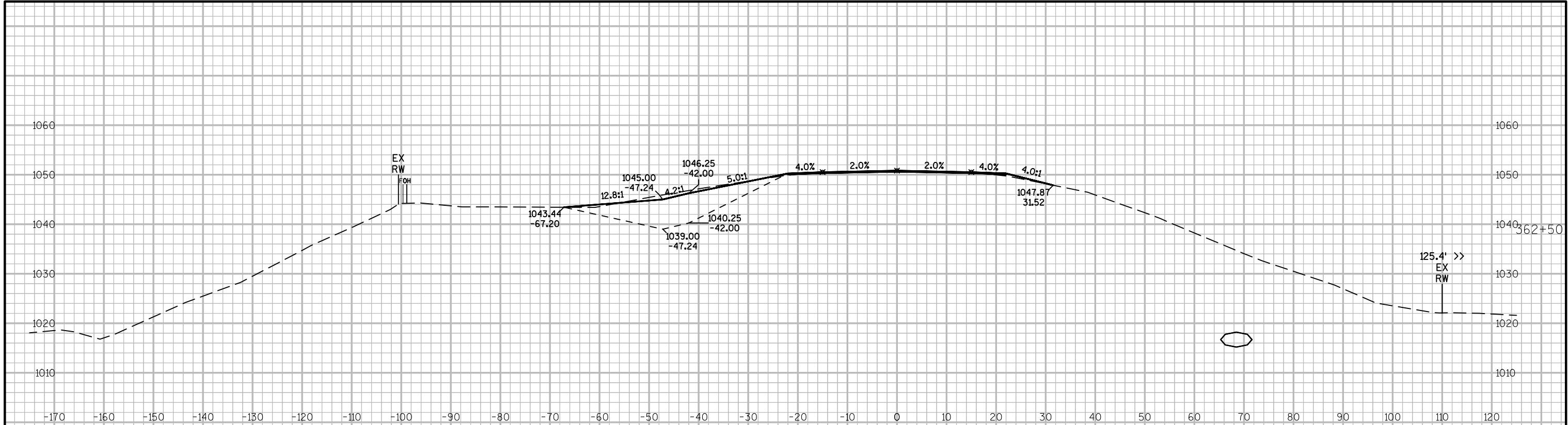
PLOT SCALE : 1 IN:20 FT

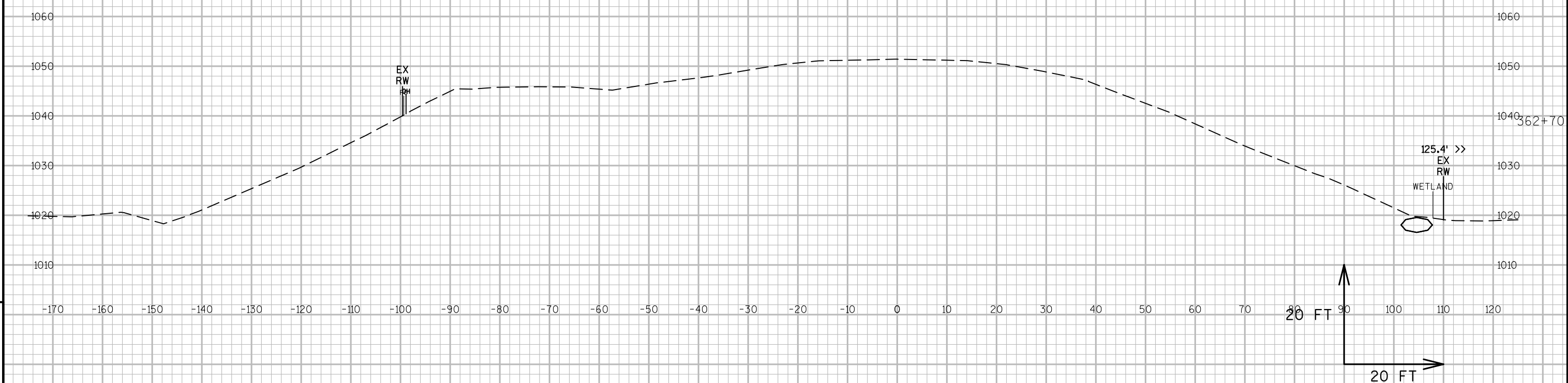
WISDOT/CADDS SHEET 49

Profile view showing elevation (1000 to 1060) versus stationing (-250 to 170). The profile includes a road with a 3.3% grade, a wetland area, and an existing right-of-way (EX RW). Key points include a 1007.35 elevation at station -163.33, a 1016.69 elevation at station 123.58, and a 1050.00 elevation at station 362+13. The profile also shows a 0.8% grade for the wetland area and a 0.8% grade for the road.

9

9

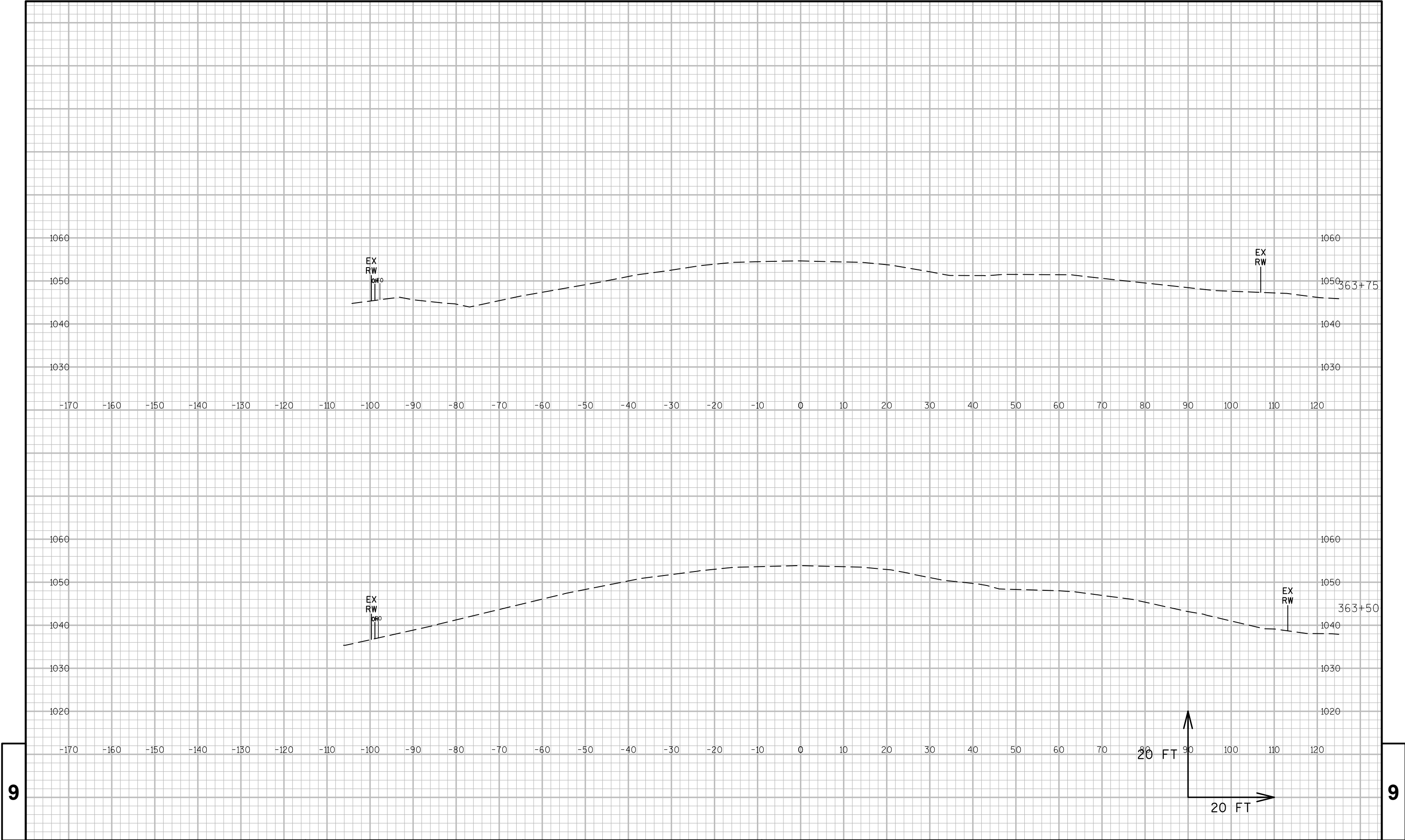


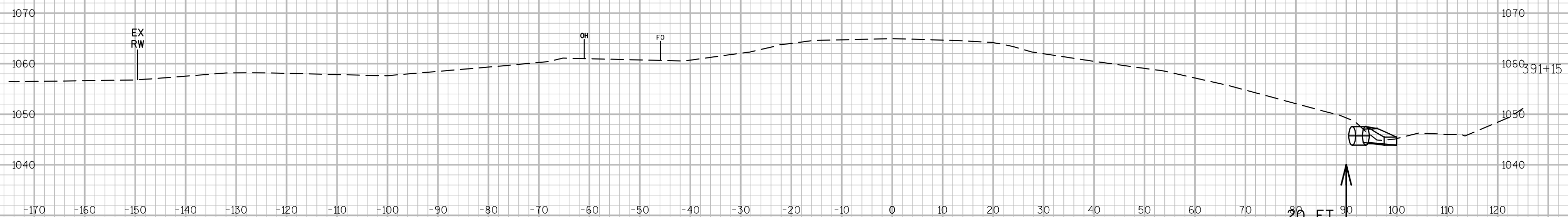
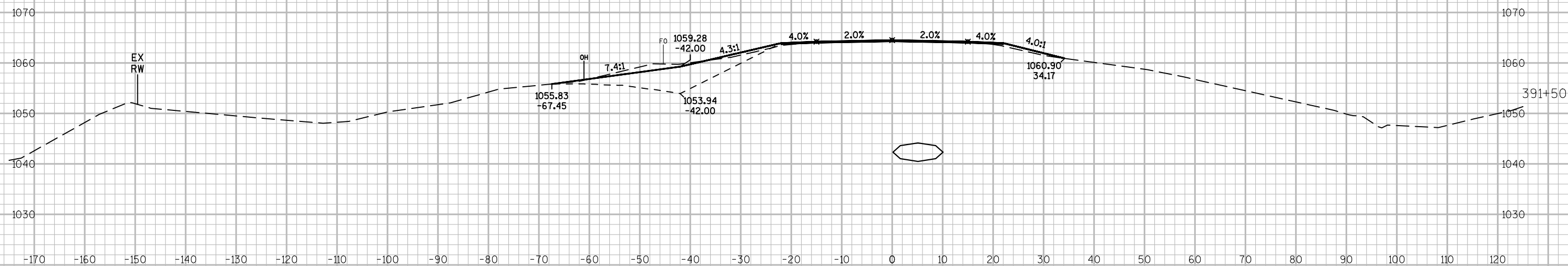


9

9

PROJECT NO: 1009-44-60	HWY: USH 2	COUNTY: IRON	CROSS SECTIONS: CULVERT 26-002-061753	SHEET	E
------------------------	------------	--------------	---------------------------------------	-------	---





PROJECT NO: 1009-44-60

HWY: USH 2

COUNTY: IRON

CROSS SECTIONS: CULVERT 26-002-000581

SHEET

E

FILE NAME : \\RHIRTOPFLPPI01\N3PUBLIC\PDS\C3D\10094430\SHEETSP\AN\090201_XS.DWG
LAYOUT NAME - 13

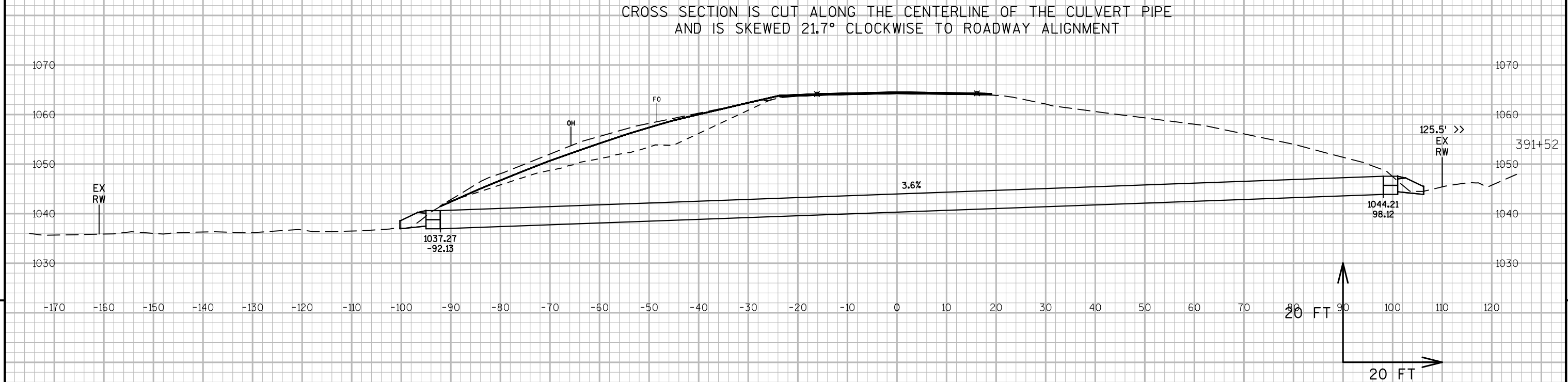
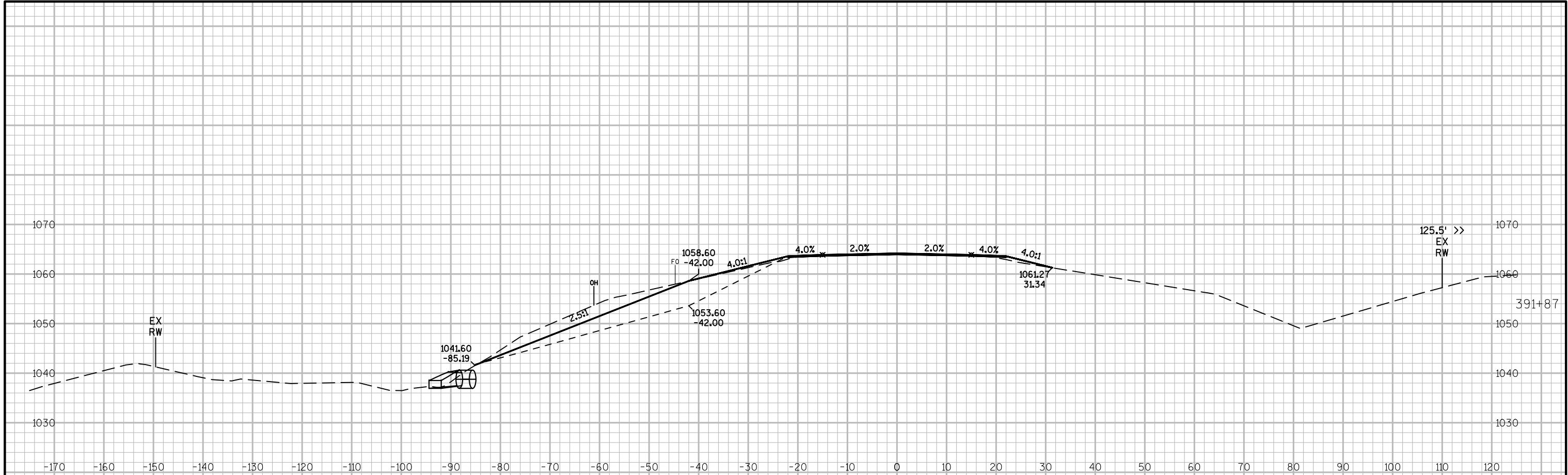
PLOT DATE : 4/25/2019 2:32 PM

PLOT BY : MAVES, EVAN A

PLOT NAME :

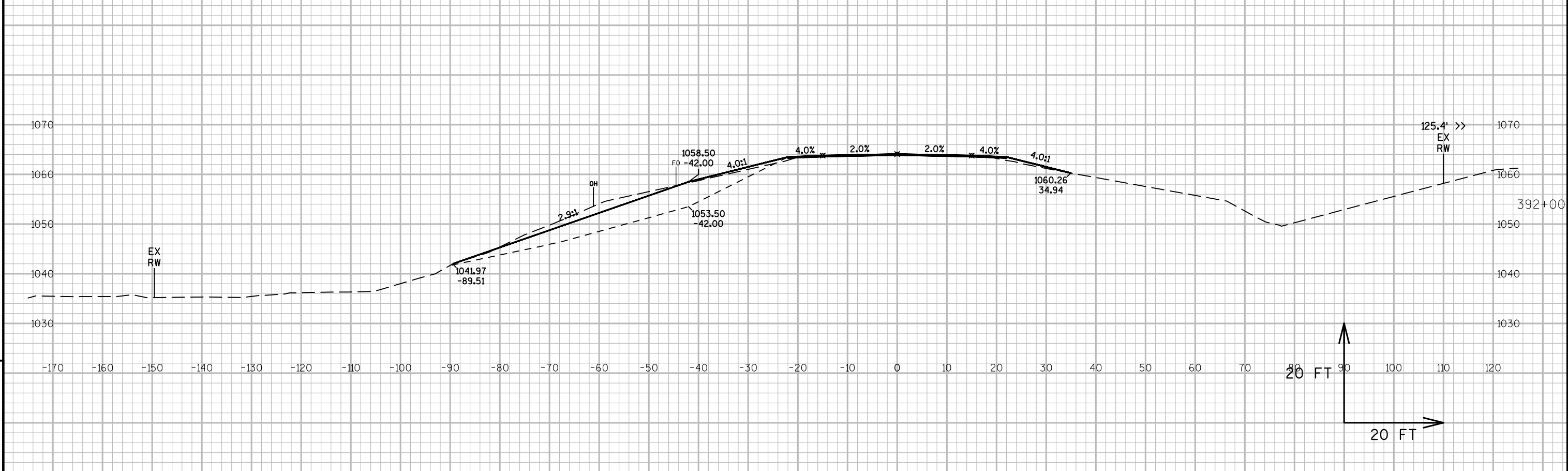
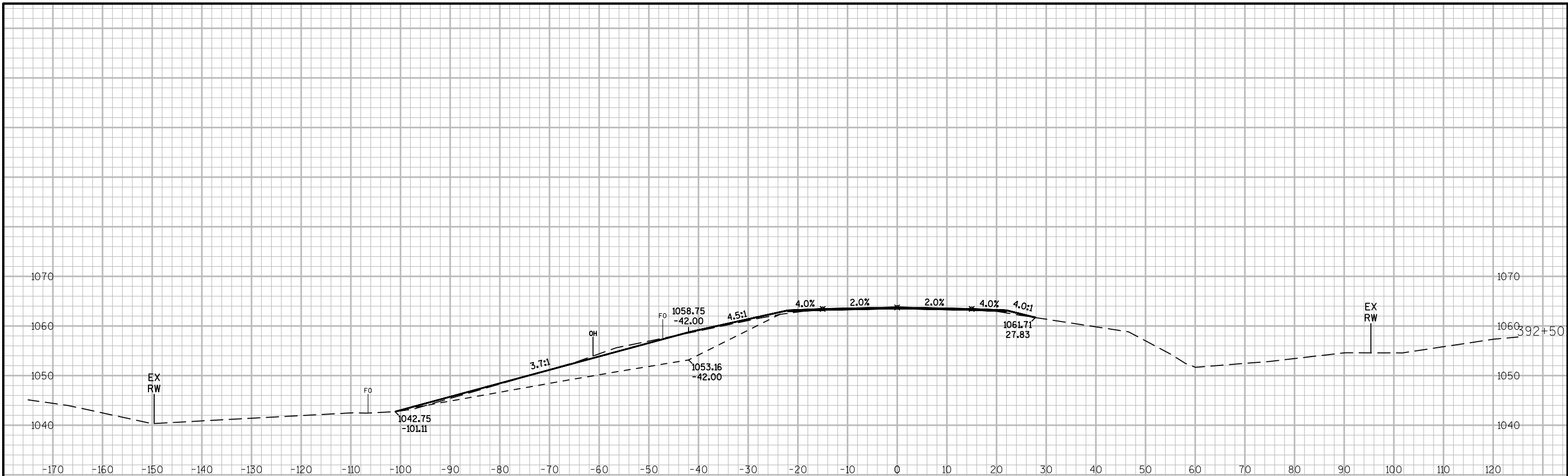
PLOT SCALE : 1 IN:20 FT

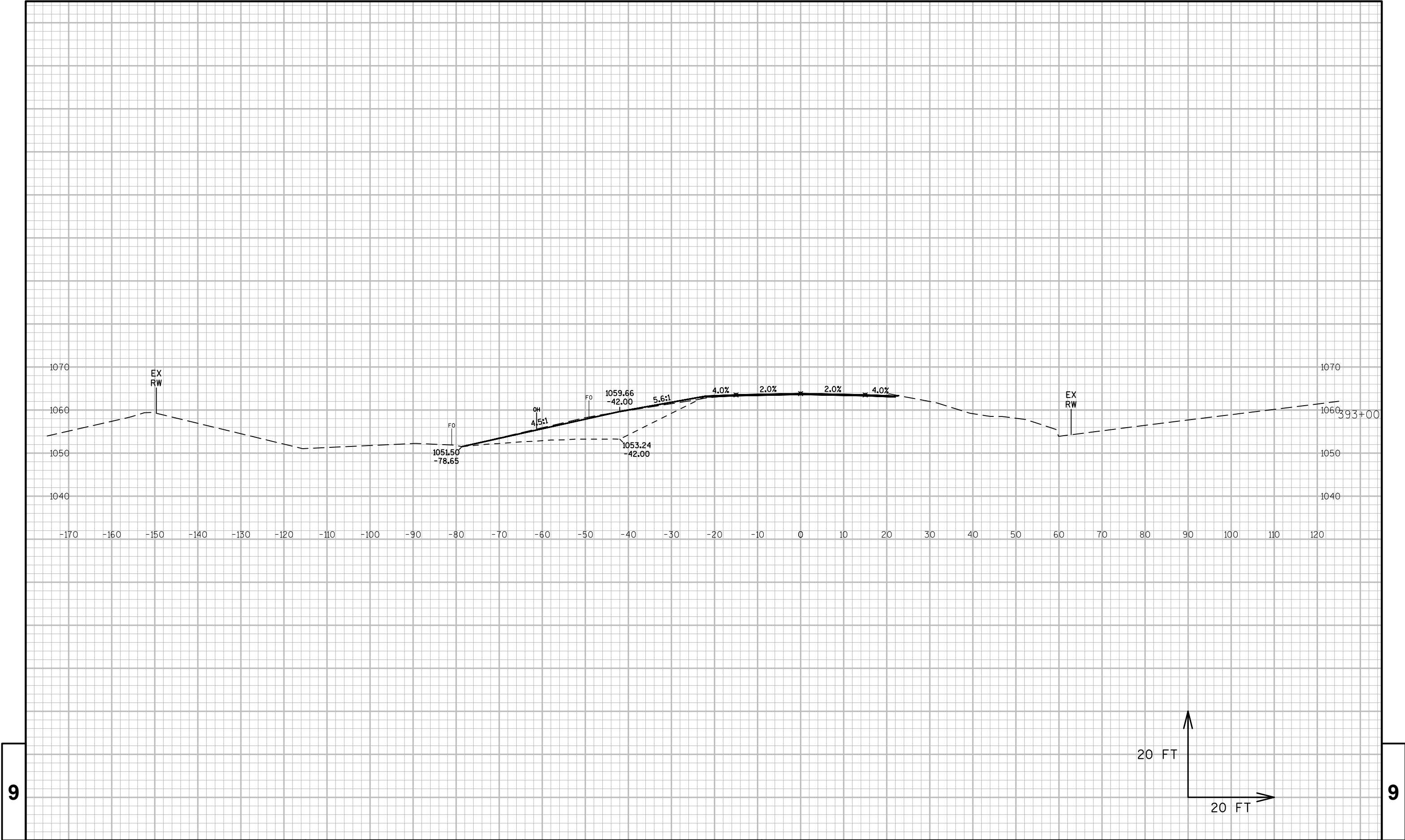
WISDOT/CADDS SHEET 49



9

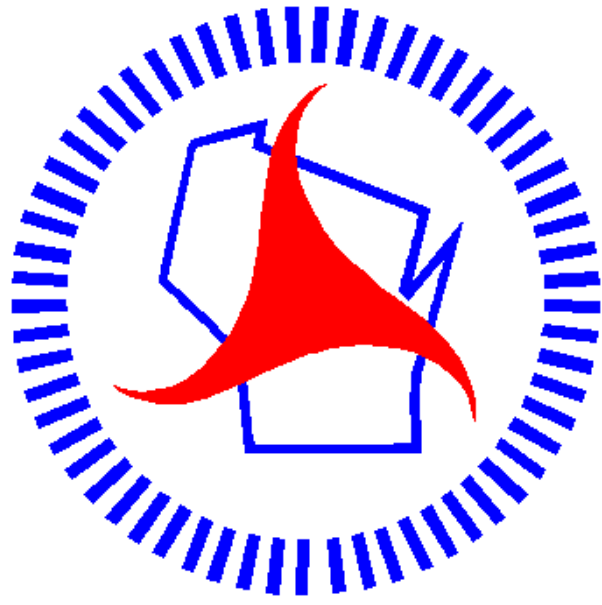
9





9

9



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>