


BAYFIELD



 ROCK

 LABEL

 95.36

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STRUCTURE B-04-0029
STA 207+09.50

PLOT NAME :

GENERAL NOTES

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER.

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

SEED, EROSION MAT, AND FERTILIZE ALL SALVAGED TOPSOILED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETED.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATER BODY OR WETLAND.

SEED MIXTURE NO.20 SHALL BE USED THROUGHOUT THE PROJECT.

EROSION CONTROL MEASURES WILL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN. THE EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER. ANY REMOVAL OF ITEMS ARE INCIDENTAL TO THE RESPECTIVE EROSION CONTROL BID ITEM COSTS.

RESHAPE AND SEEDING OF ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS OUTSIDE OF THE ENGINEER DETERMINED CONSTRUCTION LIMITS ARE INCIDENTAL TO THE CONTRACT.

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL BY THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING MOTORISTS AND PEDESTRIANS THAT MAY ENTER THE WORK ZONE FROM POSSIBLE HAZARD.

EXISTING ELEVATIONS SHALL BE VERIFIED IN THE FIELD.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

UTILITY CONTACTS

CHARTER COMMUNICATIONS
2304 SOUTH MAIN STREET
RICE LAKE, WI 54868
ATTN: JAMEY OLDEEN
715-736-0561
jamey.oldeen@charter.com

XCEL ENERGY - ELECTRICITY
2400 FARM ROAD
ASHLAND, WI 54806
ATTN: MURRAY SMERER
715-682-6928
murray.j.smerer@xcelenergy.com

XCEL ENERGY - GAS/PETROLEUM
2400 FARM ROAD
ASHLAND, WI 54806
ATTN:MURRAY SMERER
715-682-6928
murray.j.smerer@xcelenergy.com

CENTURYLINK
20 SOUTH WILSON AVENUE
RICE LAKE, WI 54868
ATTN: MONTY PARKER
715-234-5528
monty.parker@centurylink.com

NORVADO - COMMUNICATION
43750 USH 63
PO BOX 67
CABLE, WI 54821
ATTN: GUY FOLSOM
715) 798-7123
gfolson@norvado.com

WASHBURN MUN WATER AND SEWER UTILITY - WATER
PO BOX 638
WASHBURN, WI 54891-0638
ATTN: BOB ANDERSON
715-373-6171
dpw@cityofwashburn.org

WASHBURN MUN WATER AND SEWER UTILITY - SEWER
PO BOX 638
WASHBURN, WI 54891-0638
ATTN:BOB ANDERSON
715-373-6171
dpw@cityofwashburn.org

* DENOTES NOT A DIGGERS HOTLINE MEMBER



WISDOT DESIGN CONTACT

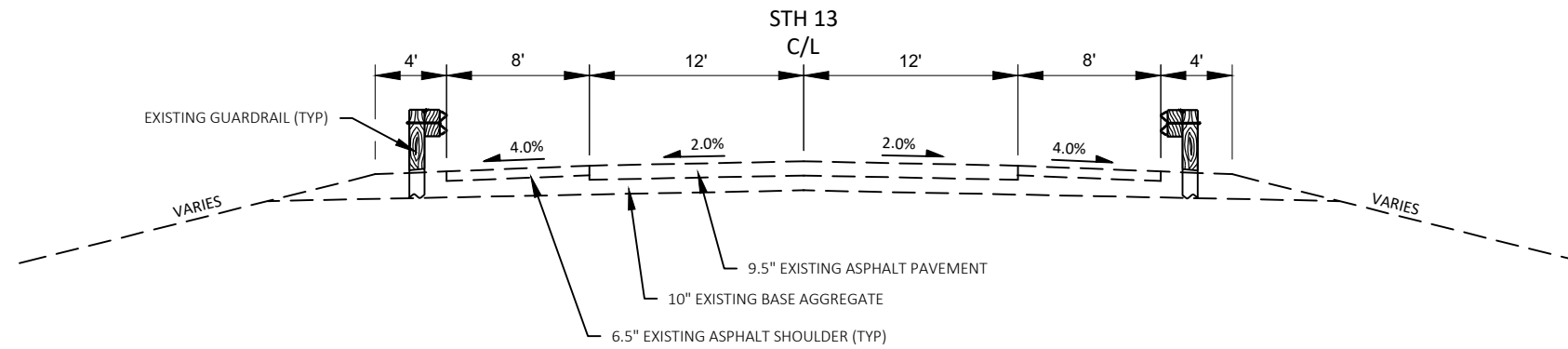
1701 NORTH 4TH STREET
SUPERIOR, WI 54880
ATTN: PHILIP KEPPERS, PE
715-395-3077
philip.keepers@dot.wi.gov

DESIGN CONTACT

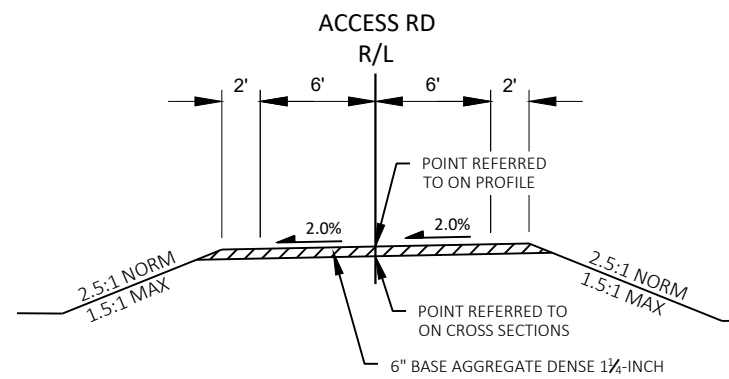
AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: BRETT HOLLISTER, PE
715-834-3161
hollisterb@ayresassociates.com

DNR CONTACT

DNR NORTHERN REGION HQ
810 WEST MAPLE STREET
SPOONER, WI 54801
ATTN: SHAWN HASELEU
715-635-4228
shawn.haseleu@wisconsin.gov



EXISTING TYPICAL SECTION STH 13
STA 202+80.00 - STA 210+86.00



FINISHED TYPICAL SECTION - ACCESS ROAD
STA 27+13.49 - STA 30+70.26

NO. 4 STEEL REINFORCED BAR
FOR BEVEL REINFORCEMENT
INSTALLED ON UPPER PERIPHERY
ONLY

CONCRETE BEVEL

0.5" X 5" X 3" GALVANIZED HOOK BOLTS TO SUPPORT NO. 4
BAR; PLACE HOOK BOLTS 18" ON CENTER OR AS NEEDED TO
MAINTAIN 2" CONCRETE COVER ON NO. 4 BAR; INSTALL HOOK
BOLTS ON UPPER PERIPHERY ONLY.

EXISTING PIPE

SMOOTH LINED CMP
CULVERT LINER

BEVEL REINFORCING DETAIL

1:1 CONCRETE BEVEL BETWEEN
EXISTING PIPE AND TOP OF
LINER PIPE

NO. 4 STEEL REINFORCED BAR
FOR BEVEL REINFORCEMENT

WINGWALL

EXISTING HEADWALL

FILL SLOPE

GROUTING BULKHEAD

EXISTING PIPE

ANNULAR SPACE GROUT

SMOOTH LINED CMP
CULVERT LINER

CONCRETE BEVEL

0.5" X 5" X 3" HOOK BOLT

BEVEL DETAIL
(NORTH AND CENTER
CULVERTS ONLY)

1:1 BEVEL BETWEEN EXISTING
PIPE AND LINER PIPE

BEVEL
REINFORCEMENT
(SEE DETAIL)

NO BEVEL ON SOUTH CULVERT.
INSTALL LINER FLUSH WITH EXISTING
END OF PIPE/HEADWALL

EXISTING UPSTREAM HEADWALL

EXISTING 9.5' DIA. PIPE

EXISTING WINGWALL

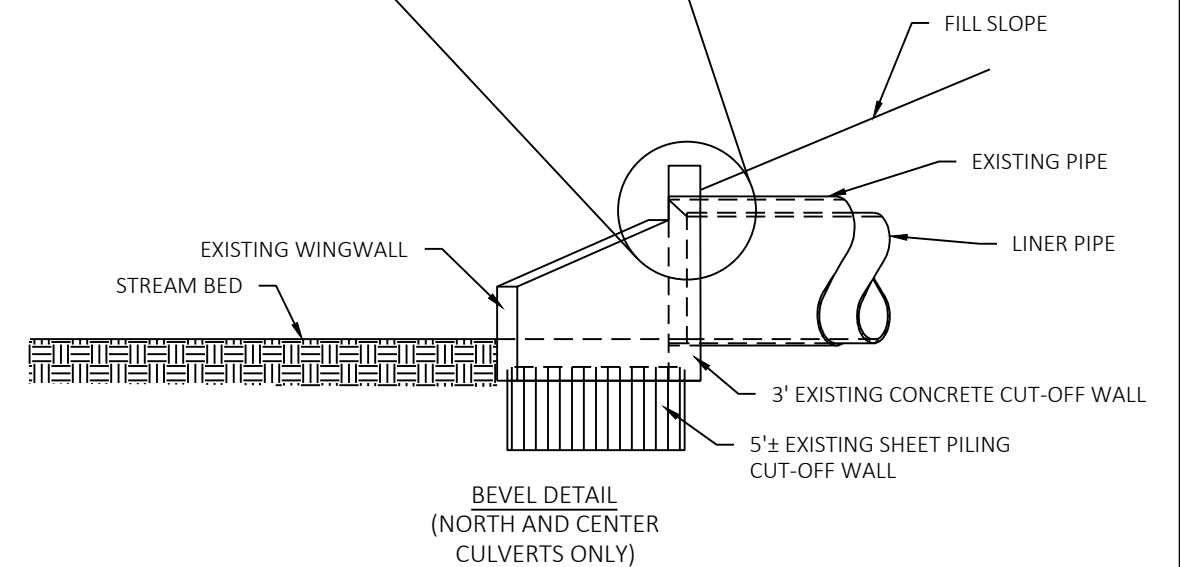
SMOOTH LINED CMP
CULVERT LINER

EXISTING 9.5' DIA. PIPE

5'± EXISTING SHEET PILING
CUT-OFF WALL (TYP)

EXISTING WINGWALL

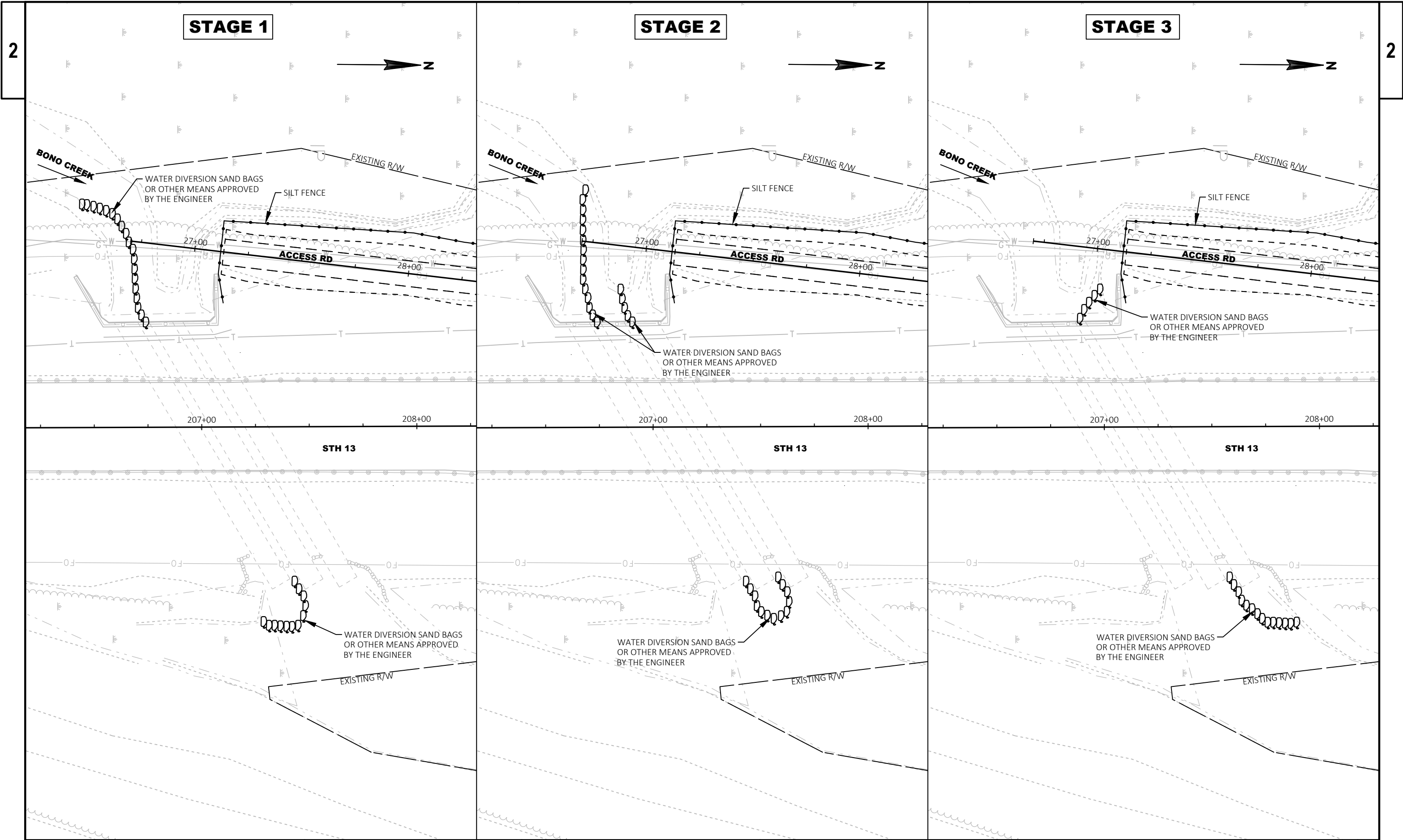
UPSTREAM HEADWALL VIEW

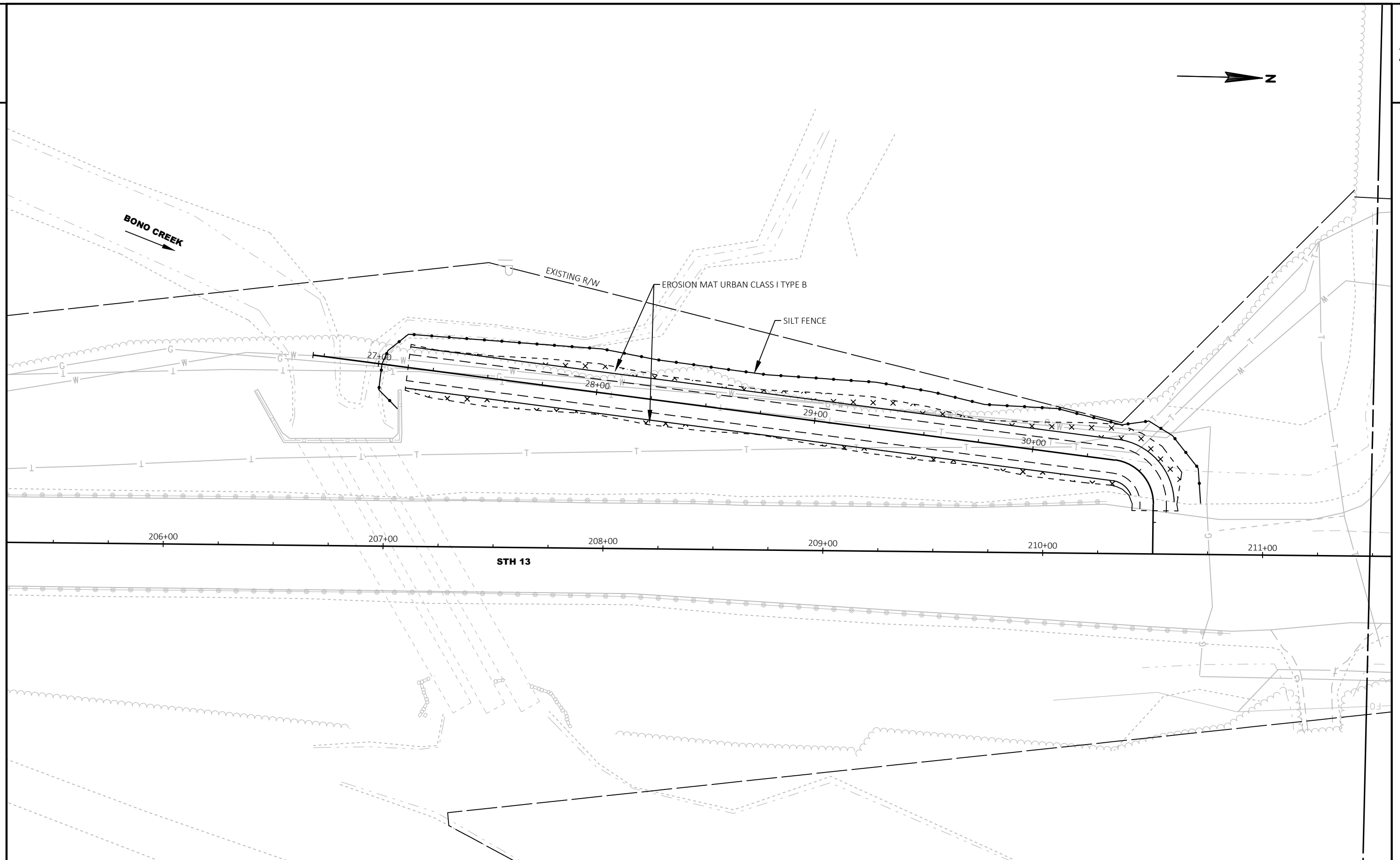


BEVEL DETAIL
(NORTH AND CENTER
CULVERTS ONLY)

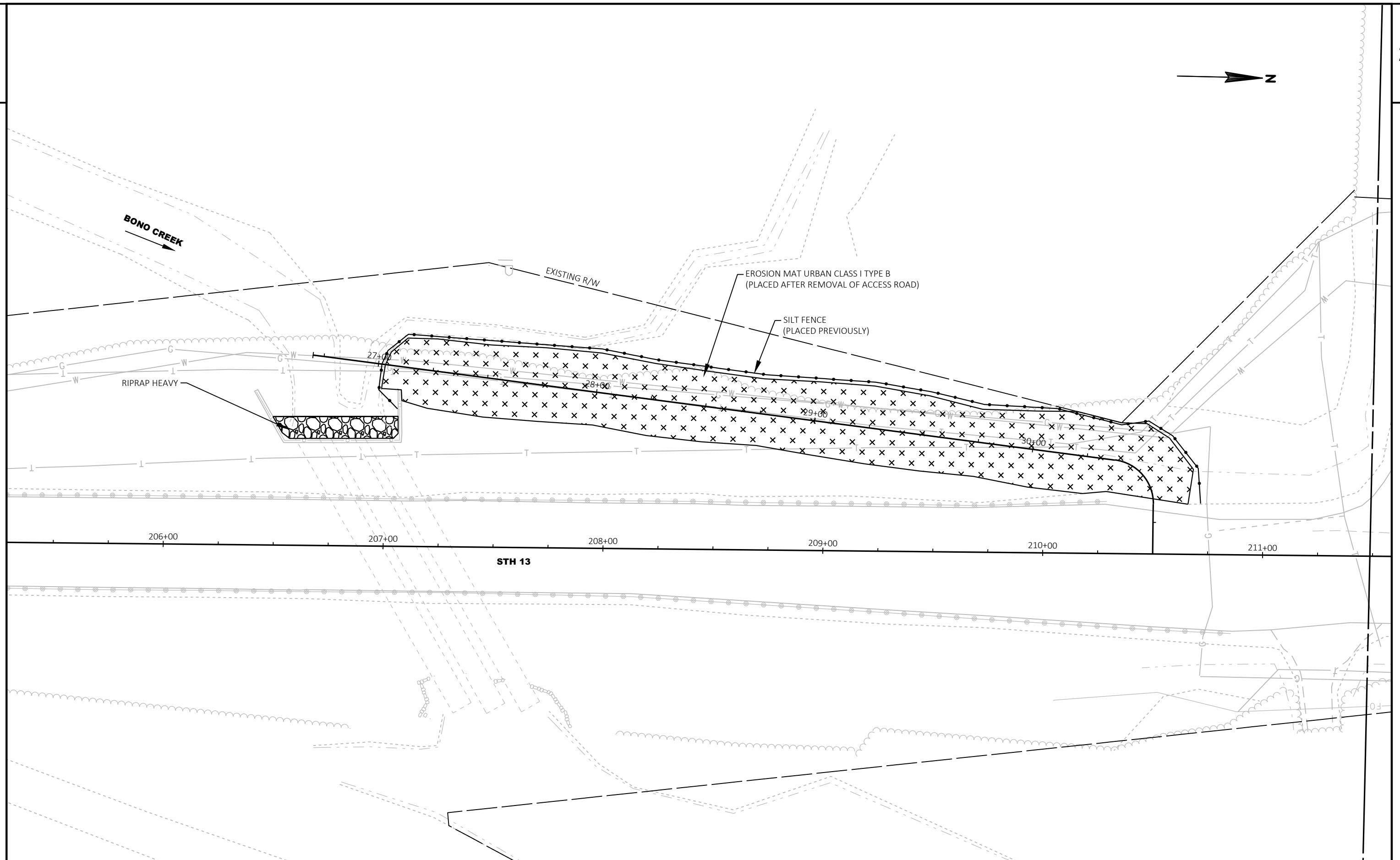
CULVERT PIPE LINER BEVEL DETAILS

NOTE: ON NORTH AND CENTER CULVERT FORM BEVEL BETWEEN EXISTING
PIPE/HEADWALL AND LINER PIPE SUCH THAT THE BEVEL AT THE TOP OF PIPE
IS 1:1. BOTTOM OF LINER PIPE TO BE INSTALLED ON INVERT OF EXISTING PIPE.





PROJECT NO: 8160-01-70	HWY: STH 13	COUNTY: BAYFIELD	EROSION CONTROL (ACCESS ROAD)	SHEET	E
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PROJECT NO: 8160-01-70	HWY: STH 13	COUNTY: BAYFIELD	EROSION CONTROL	SHEET	E
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Estimate Of Quantities

8160-01-70

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	205.0100	Excavation Common	CY	386.000	386.000
0008	208.0100	Borrow	CY	284.000	284.000
0010	213.0100	Finishing Roadway (project) 01. 8160-01-70	EACH	1.000	1.000
0012	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	259.000	259.000
0014	606.0300	Riprap Heavy	CY	40.000	40.000
0016	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8160-01-70	EACH	1.000	1.000
0018	619.1000	Mobilization	EACH	1.000	1.000
0020	624.0100	Water	MGAL	3.900	3.900
0022	625.0500	Salvaged Topsoil	SY	1,042.000	1,042.000
0024	627.0200	Mulching	SY	1,082.000	1,082.000
0026	628.1504	Silt Fence	LF	516.000	516.000
0028	628.1520	Silt Fence Maintenance	LF	516.000	516.000
0030	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0032	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0034	628.2008	Erosion Mat Urban Class I Type B	SY	1,830.000	1,830.000
0036	629.0210	Fertilizer Type B	CWT	1.100	1.100
0038	630.0120	Seeding Mixture No. 20	LB	47.000	47.000
0040	630.0200	Seeding Temporary	LB	24.600	24.600
0042	630.0500	Seed Water	MGAL	20.000	20.000
0044	642.5001	Field Office Type B	EACH	1.000	1.000
0046	643.0420	Traffic Control Barricades Type III	DAY	138.000	138.000
0048	643.0705	Traffic Control Warning Lights Type A	DAY	138.000	138.000
0050	643.0900	Traffic Control Signs	DAY	759.000	759.000
0052	643.5000	Traffic Control	EACH	1.000	1.000
0054	645.0120	Geotextile Type HR	SY	98.000	98.000
0056	650.4500	Construction Staking Subgrade	LF	357.000	357.000
0058	650.5000	Construction Staking Base	LF	357.000	357.000
0060	650.9910	Construction Staking Supplemental Control (project) 8160-01-70	LS	1.000	1.000
0062	650.9920	Construction Staking Slope Stakes	LF	357.000	357.000
0064	SPV.0090	Special 01. Smooth Lined CMP Culvert Liner, 102-Inch	LF	288.000	288.000
0066	SPV.0090	Special 02. CMP Culvert Liner, 102-Inch	LF	144.000	144.000
0068	SPV.0105	Special 01. Temporary Water Diversion (B-04-0029)	LS	1.000	1.000

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105	201.0205
		CLEARING STA	GRUBBING STA
27+00 - 31+00	ACCESS RD	4	4
PROJECT TOTALS		4	4

BASE AGGREGATE DENSE 1 1/4 -INCH

STATION TO STATION	LOCATION	305.0120
		TON
27+13.49 - 30+70.26	ACCESS RD	225
UNDISTRIBUTED		34
PROJECT TOTAL		259

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	(1) 205.0100 EXCAVATION	UNUSABLE PAVEMENT	(3) AVAILABLE	(2) EXPANDED	MASS ORDINATE +/- CY	(4) 208.0100 BORROW
		COMMON CY	MATERIAL CY	MATERIAL CY	FILL CY		FILL CY
27+00 - 30+50	ACCESS ROAD (INSTALL)	51	---	51	258	284	284
27+00 - 30+50	ACCESS ROAD (REMOVE)	335	---	335	---	---	---
PROJECT TOTALS		386		386		284	284

NOTES:
(1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(2) EXPANSION FACTOR = 1.3
(3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(4) BORROW = EXPANDED FILL - AVAILABLE MATERIAL

RIPRAP HEAVY & GEOTEXTILE TYPE HR

STATION	LOCATION	606.0300	645.0120
		HEAVY CY	TYPE HR SY
207+15	LT	40	98
PROJECT TOTALS		40	98

MOBILIZATION

LOCATION	619.1000 EACH
PROJECT LIMITS	1
PROJECT TOTAL	1

TOPSOIL, MULCHING, FERTILIZER, SEEDING & WATER

STATION TO STATION		625.0500	627.0200	629.0210	630.0120	630.0200	630.0500
		SALVAGED TOPSOIL SY	MULCHING SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEEDING TEMPORARY LB	SEED WATER MGAL
27+13.49 - 30+70.26	TEMPORARY	---	---	---	---	22.4	---
27+13.49 - 30+70.26	FINAL	947	984	1.00	42.7	---	18
UNDISTRIBUTED	---	95	98	.10	4.3	2.2	2
PROJECT TOTALS		1042	1082	1.1	47	24.6	20

WATER

STATION TO STATION	LOCATION	624.0100
		MGAL
27+13.49 - 30+70.26	ACCESS RD	3.9
PROJECT TOTAL		3.9

SILT FENCE

STATION TO STATION	LOCATION	628.1504	628.1520
		LF	MAINTENANCE LF
27+00 - 30+65	ACCESS RD	430	430
UNDISTRIBUTED		86	86
PROJECT TOTALS		516	516

EROSION MAT URBAN CLASS I TYPE B

STATION TO STATION	LOCATION	628.2008
		SY
27+25 - 30+75	ACCESS ROAD	191
27+00 - 30+65	ACCESS RD REMOVAL	1334
UNDISTRIBUTED		305
PROJECT TOTAL		1830

MOBILIZATIONS EROSION CONTROL
AND EMERGENCY EROSION CONTROL

PROJECT		628.1905	628.1910
		EACH	EMERGENCY EACH
8160-01-70		4	3
PROJECT TOTALS		4	3

TRAFFIC CONTROL ITEMS

PROJECT	DAYS	643.0420	643.0705	643.0900	643.5000
		BARRICADES TYPE III EACH	WARNING LIGHTS TYPE A DAY	SIGNS EACH	TRAFFIC CONTROL EACH
8160-01-70	69	2	138	2	138
PROJECT TOTALS		138	138	759	1

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

CONSTRUCTION STAKING

	650.4500	650.5000	650.9920
	SUBGRADE	BASE	SLOPE
STATION TO STATION	LF	LF	STAKES
			LF
27+13 - 30+70	357	357	357
PROJECT TOTALS	357	357	357

CONSTRUCTION STAKING
SUPPLEMENTAL CONTROL

PROJECT	650.9910
	LS
PROJECT LIMITS	1

SMOOTH LINED CMP CULVERT LINER, 102-INCH

STATION	SPV.0090.01
	LF
207+09.15	144
207+25.50	144
PROJECT TOTAL	288

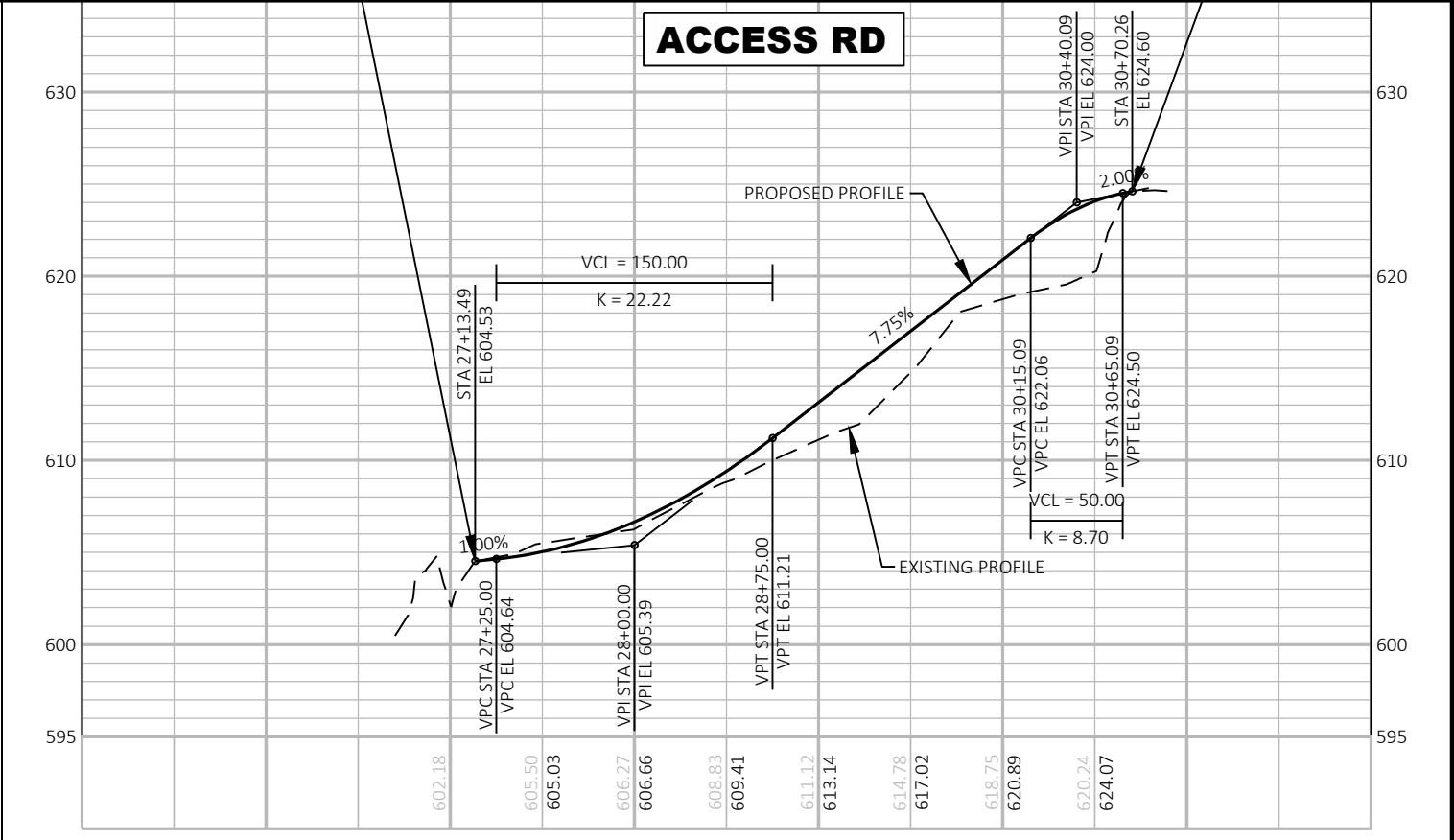
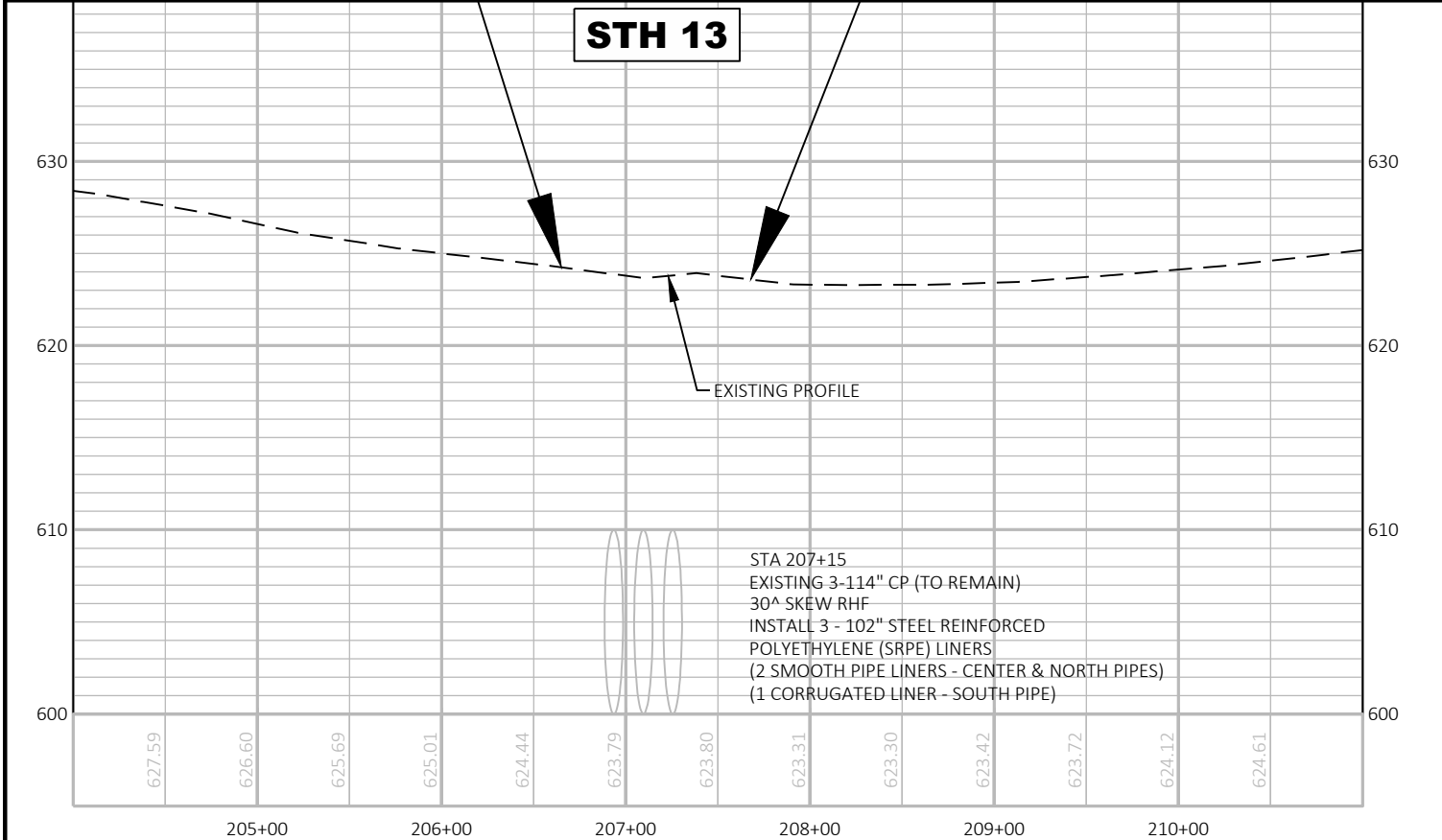
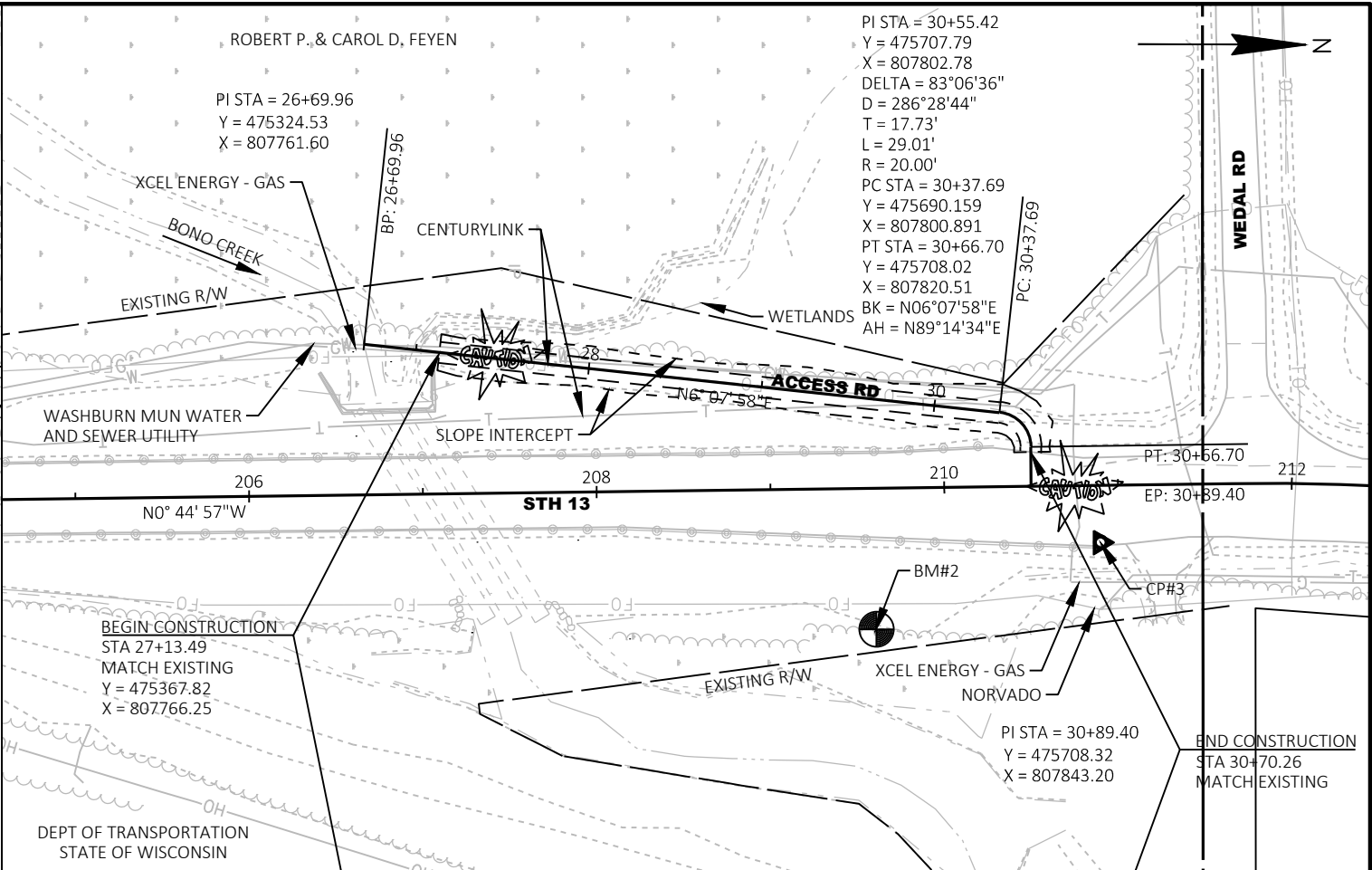
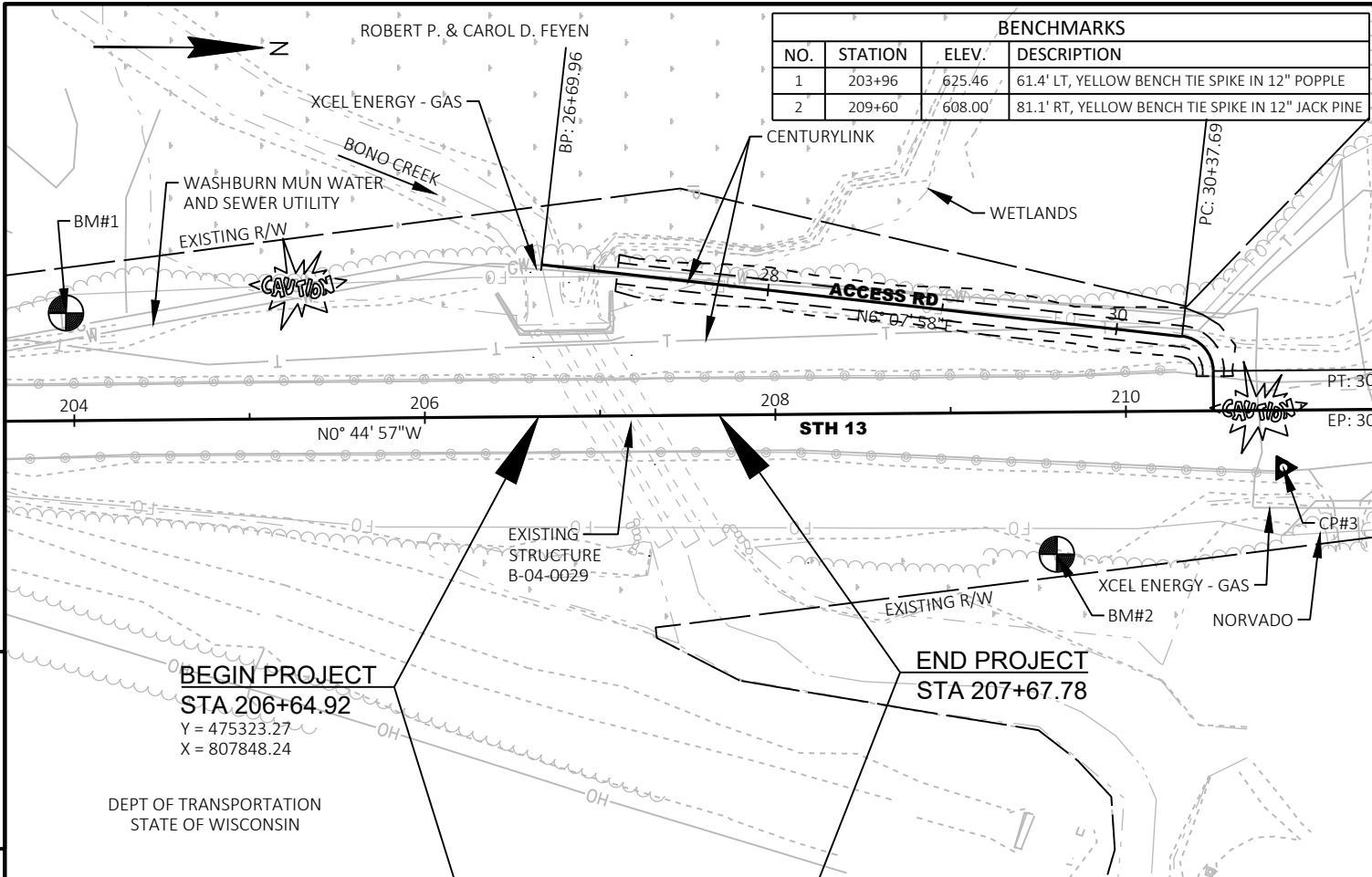
CMP CULVERT LINER, 102-INCH

STATION	SPV.0090.02
	LF
206+93.90	144
PROJECT TOTAL	144

TEMPORARY SAND BAG DIKE (STA 207+15)

LOCATION	SPV.0105.01
	LS
207+15 (CULVERT LINERS)	1

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED



Standard Detail Drawing List

08E09-06	SILT FENCE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D29-05	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
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 <u>4-29-05</u> DATE	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER

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" X 48" UNLESS OTHERWISE NOTED.

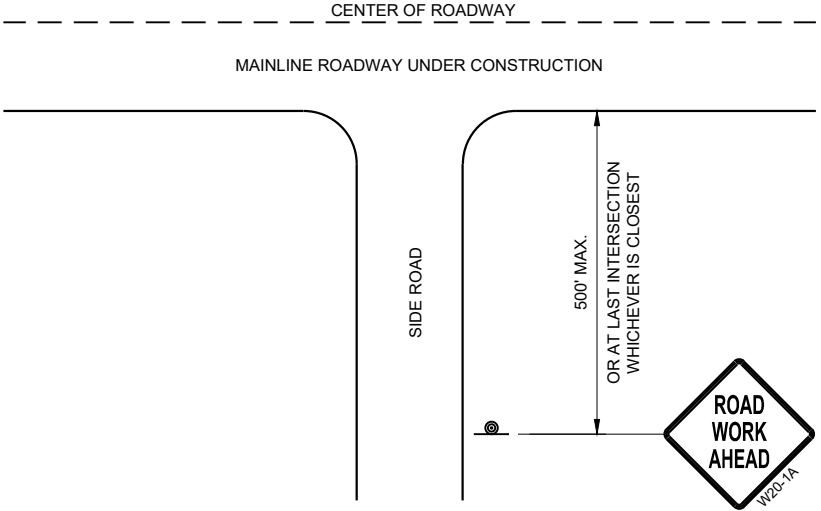
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 REESTABLISHED.

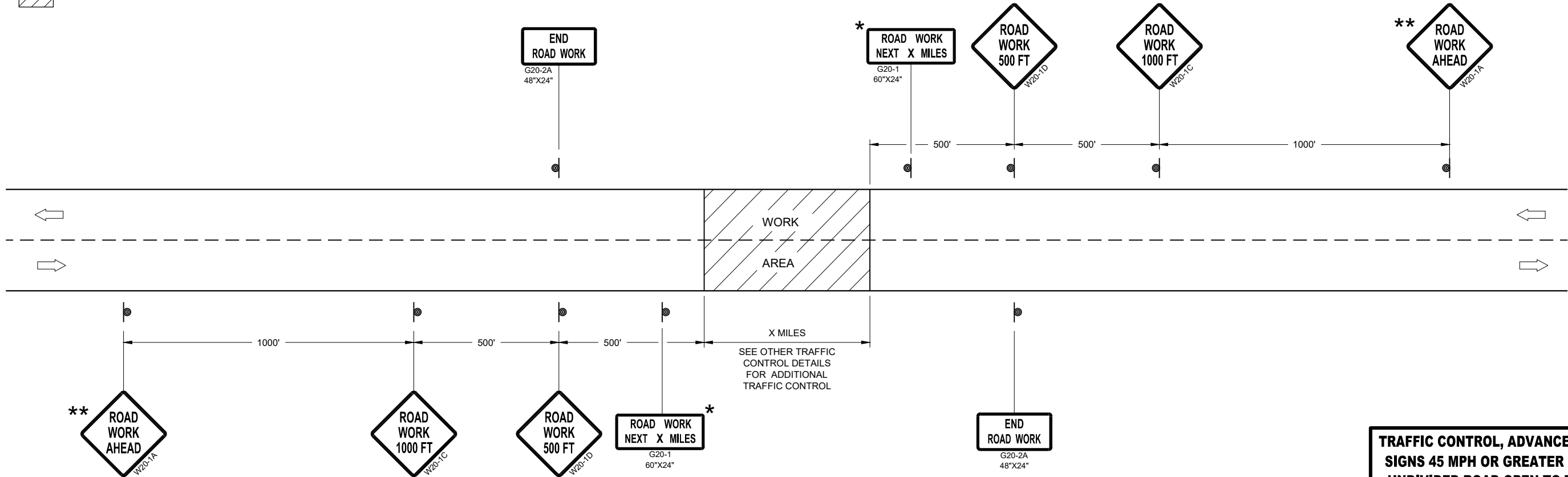
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

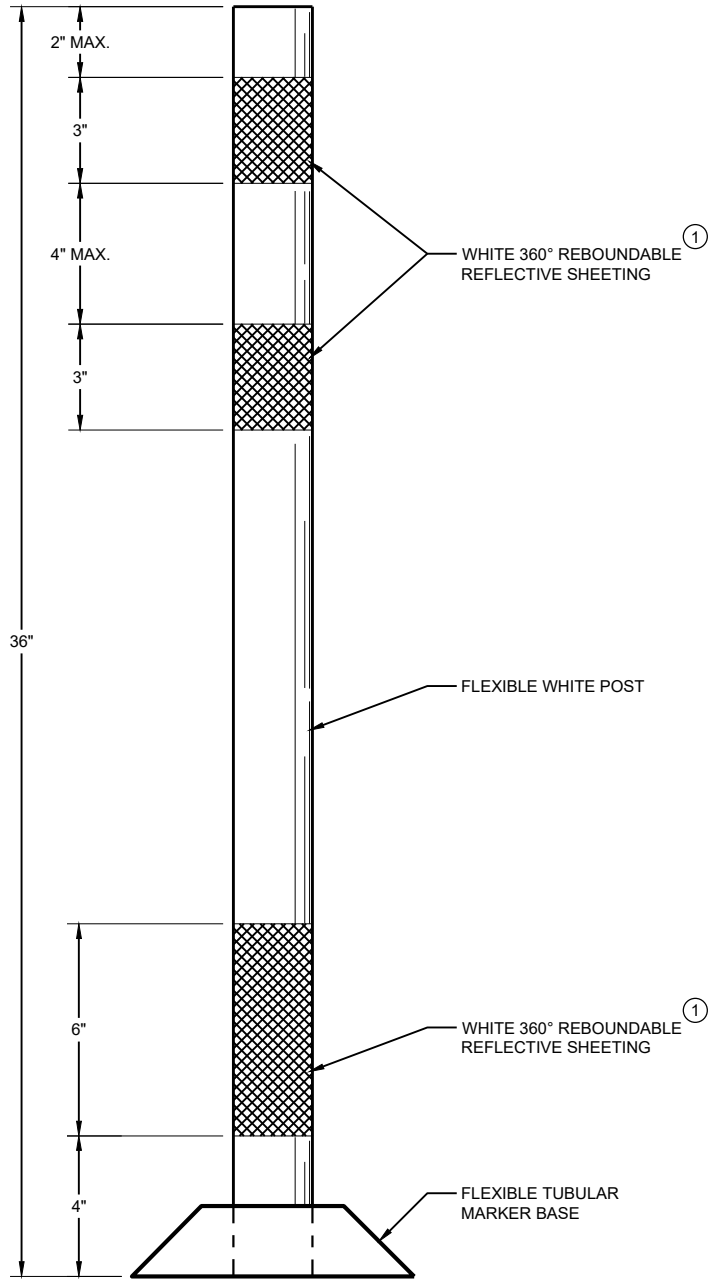


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

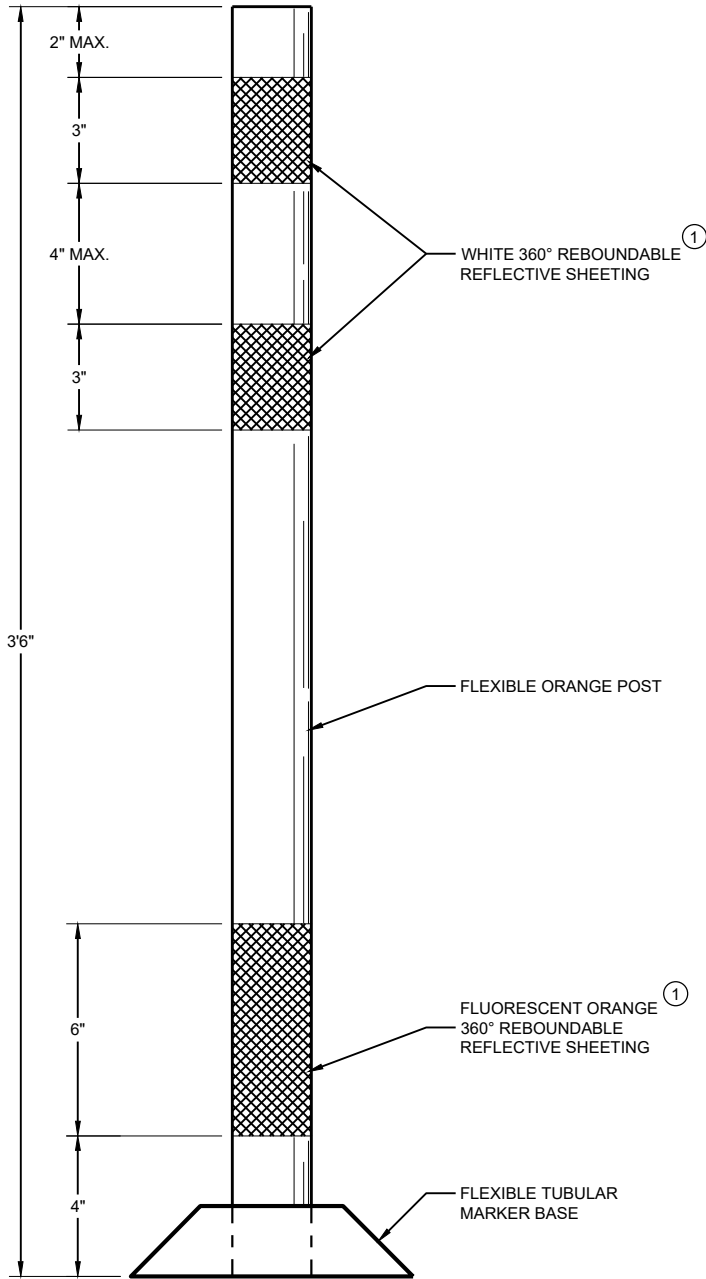
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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

FHWA

LEGEND

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

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.

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

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

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

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

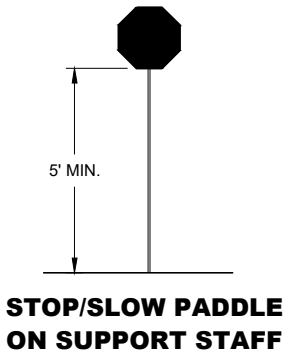
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

- 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 PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.
- FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
 - SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

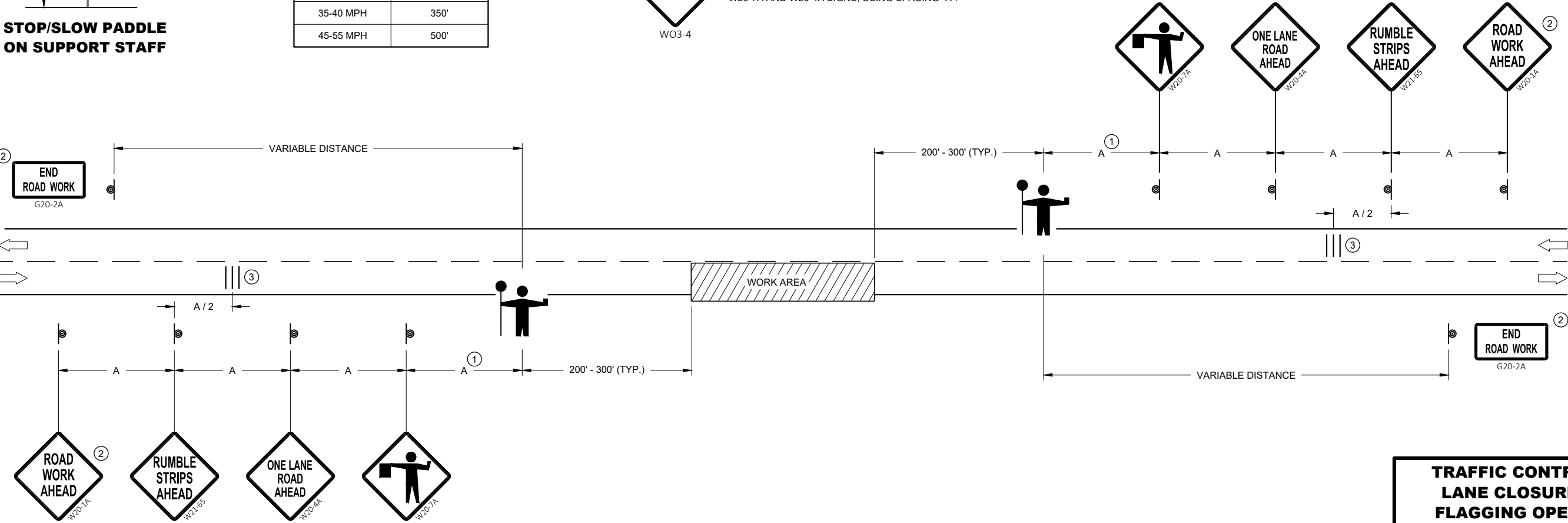


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 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

**TRAFFIC CONTROL FOR
LANE CLOSURE WITH
FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

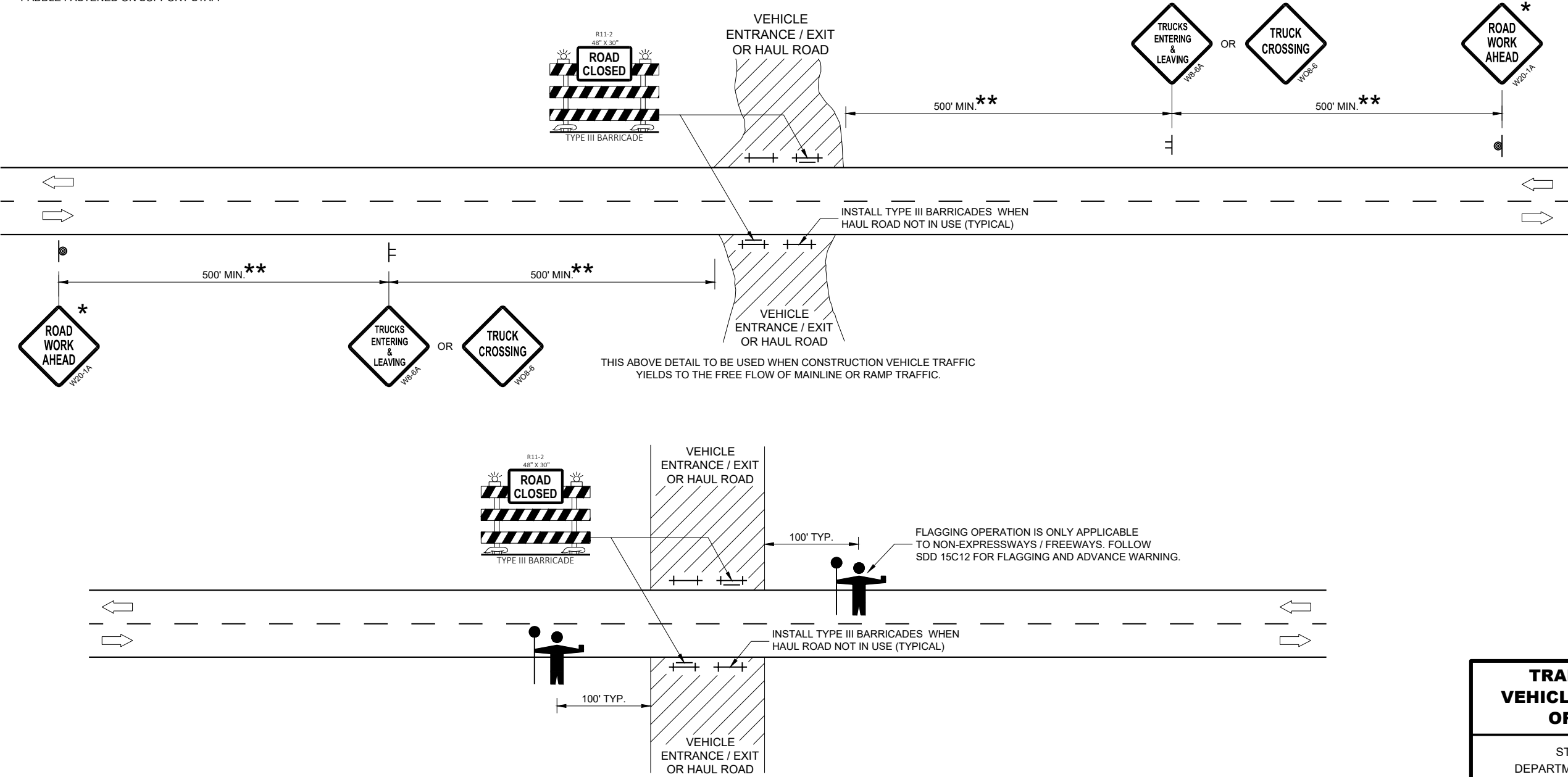
- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.
- WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
- PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.
- * THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.
- ** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 -40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000-1500 FEET FOR EXPRESSWAY / FREEWAY.

6

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SDD 15D29 - 05

SDD 15D29 - 05



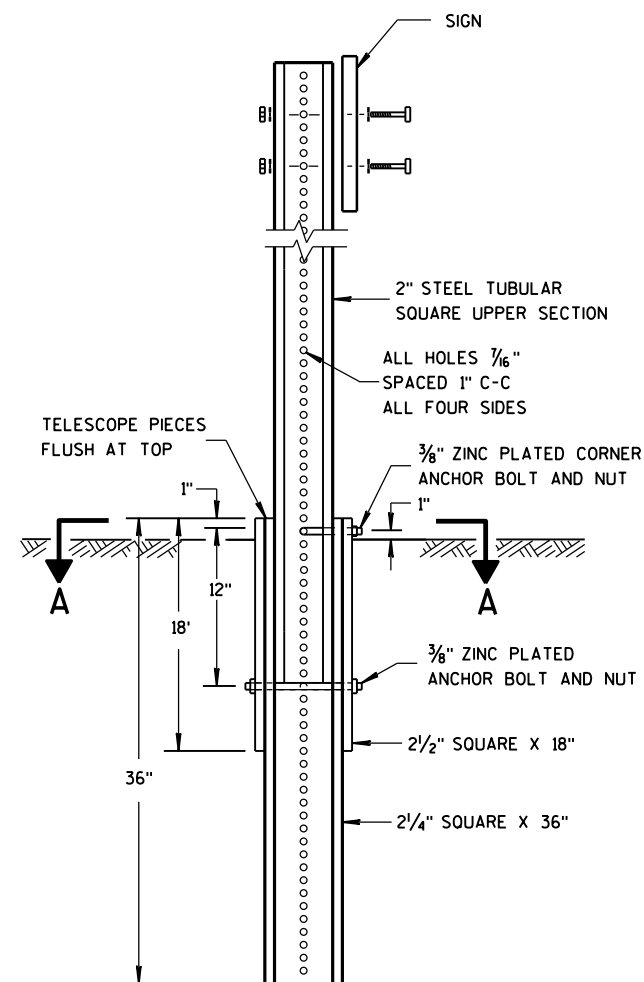
THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

**TRAFFIC CONTROL,
VEHICLE ENTRANCE/EXIT
OR HAUL ROAD**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



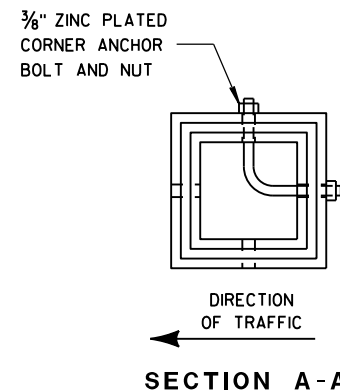
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

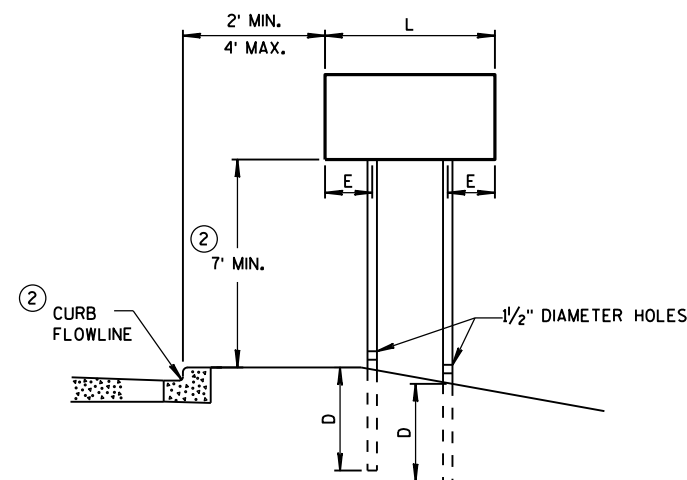
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

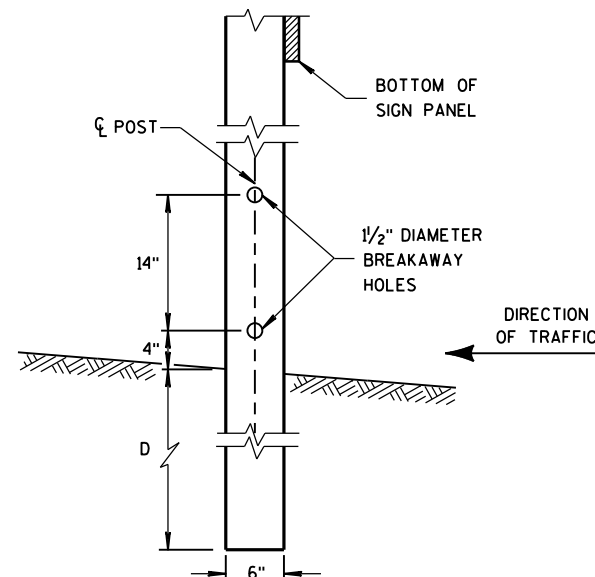


URBAN AREA

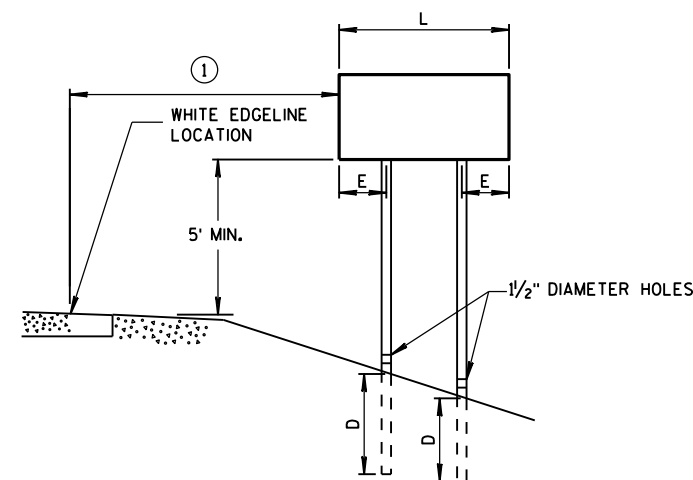
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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

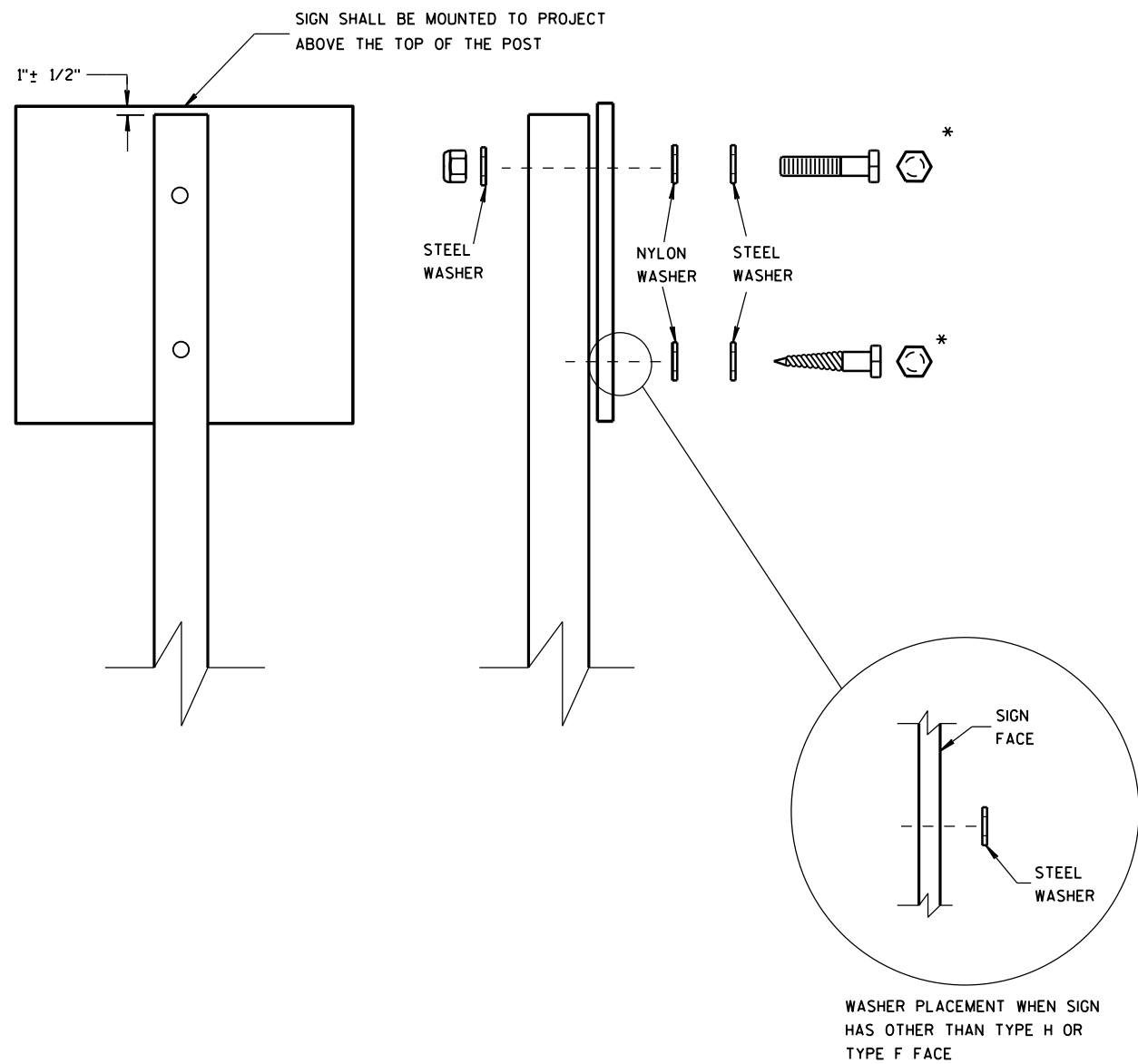
SEE NOTE ③

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

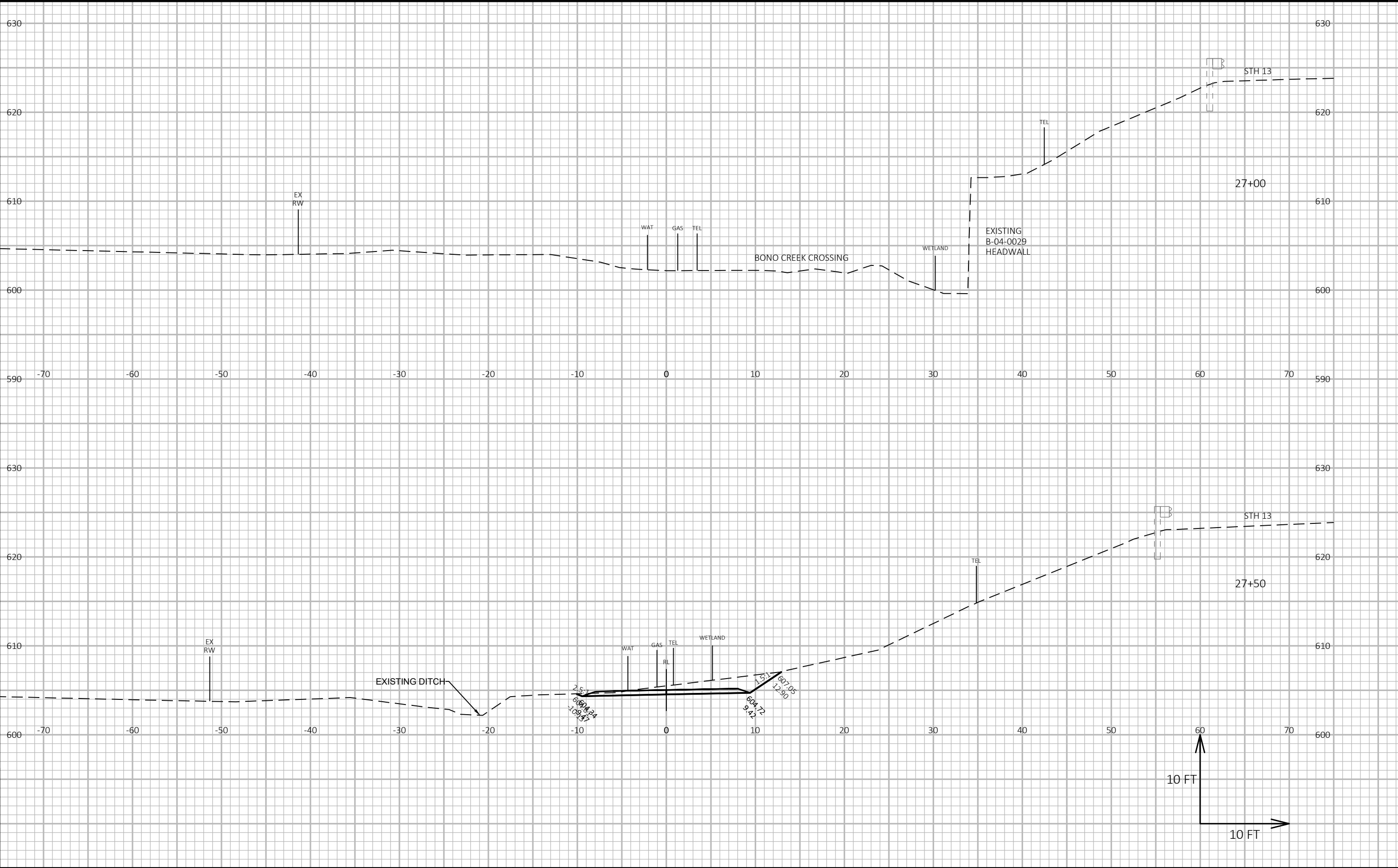
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
 - 1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

* 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.

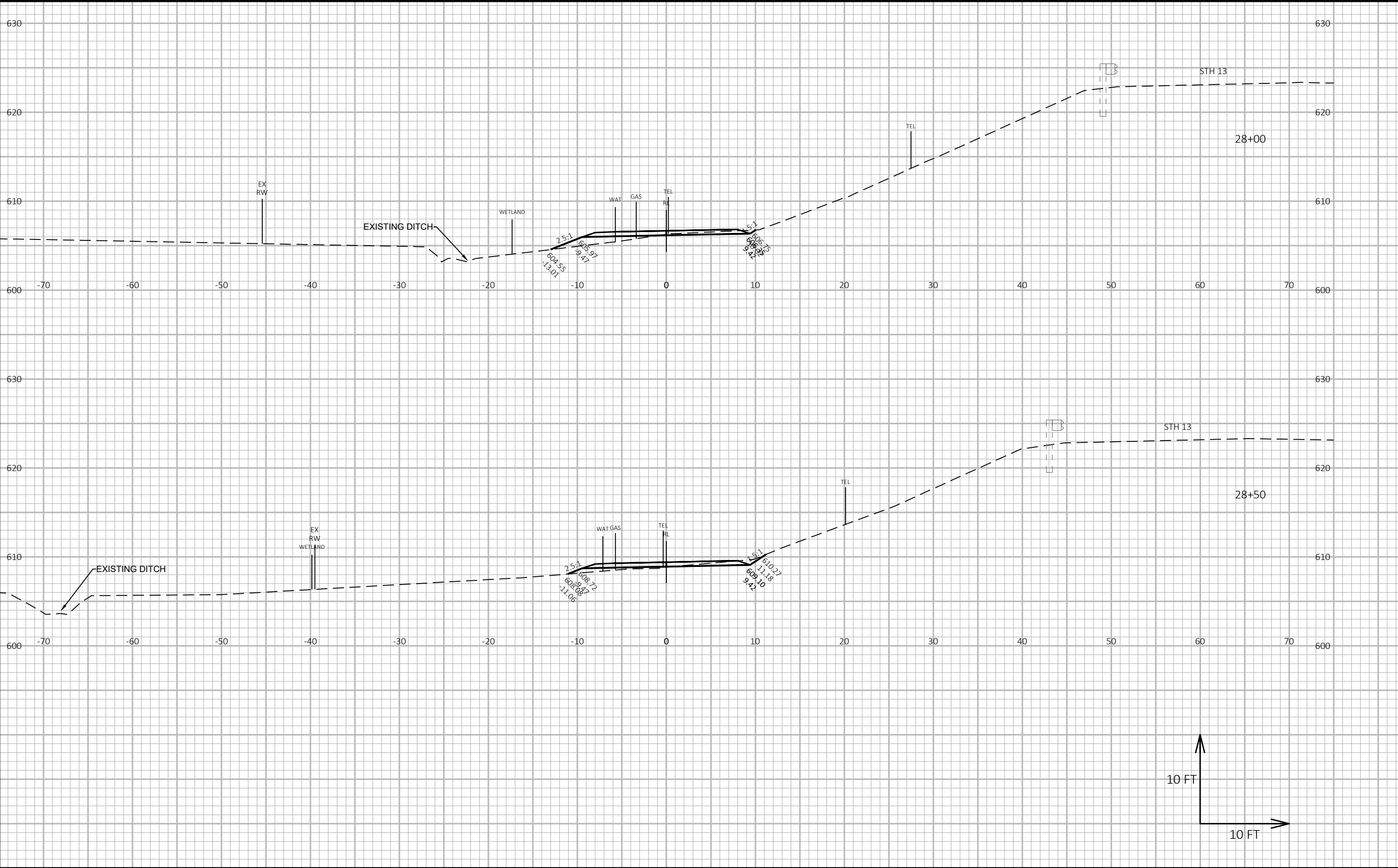
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	

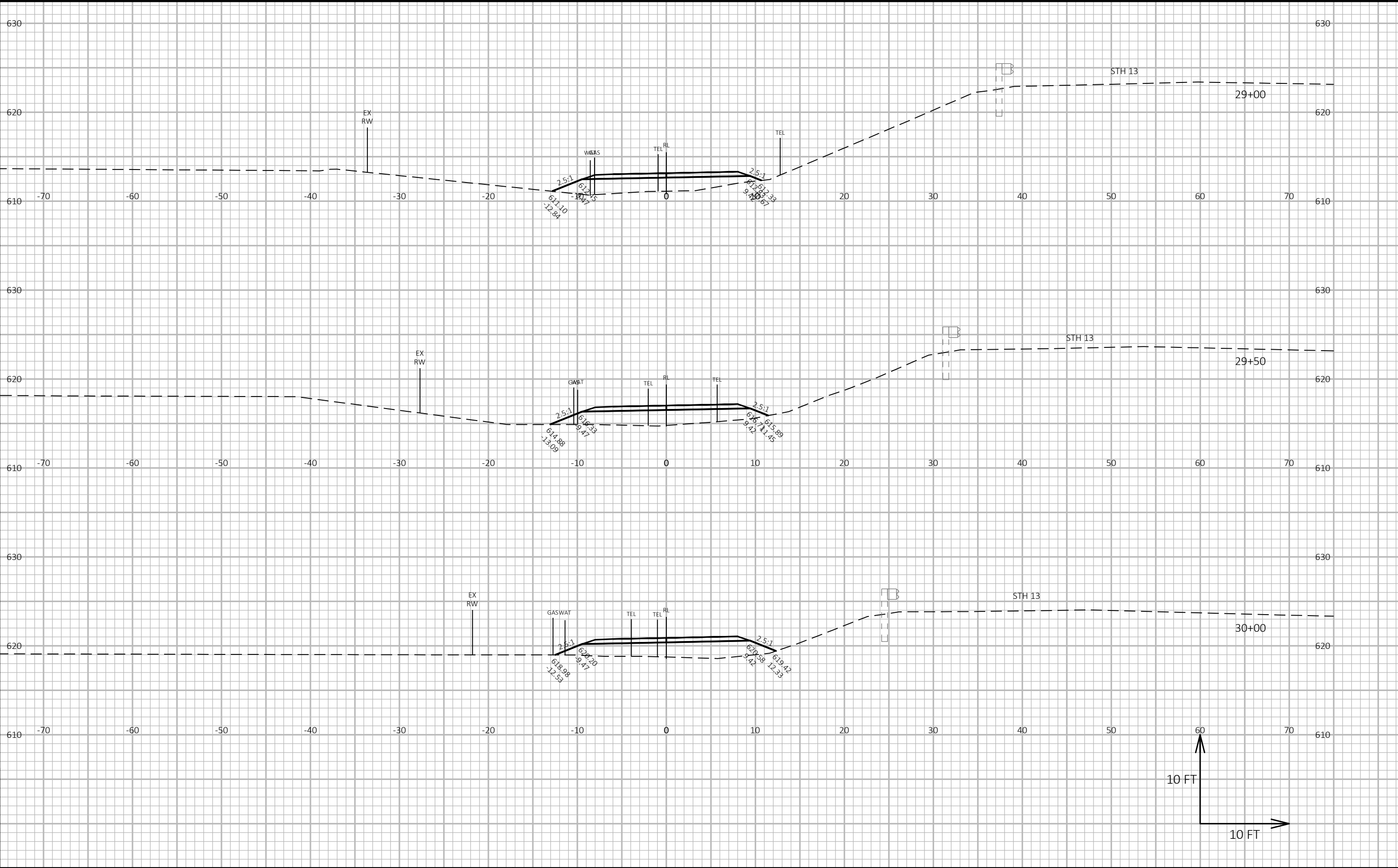
EARTHWORK DATA - ACCESS ROAD

STATION	AREA (SF)		INCR. VOL (CY)		CUMULATIVE VOL (CY)		MASS ORDINATE
	CUT	FILL	CUT	FILL	CUT 1.00	EXP. FILL 1.30	
27+00.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27+50.000	22.06	0.00	20.43	0.00	20.43	0.00	20.43
28+00.000	2.65	6.28	22.88	5.81	43.31	7.55	35.76
28+50.000	2.92	2.93	5.15	8.52	48.46	18.63	29.83
29+00.000	0.00	30.20	2.70	30.67	51.16	58.50	-7.34
29+50.000	0.00	33.11	0.00	58.62	51.16	134.71	-83.55
30+00.000	0.00	35.29	0.00	63.33	51.16	217.04	-165.88
30+50.000	0.00	61.44	0.00	91.05	51.16	335.40	-284.24



PROJECT NO: 8160-01-70	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: ACCESS ROAD	SHEET E
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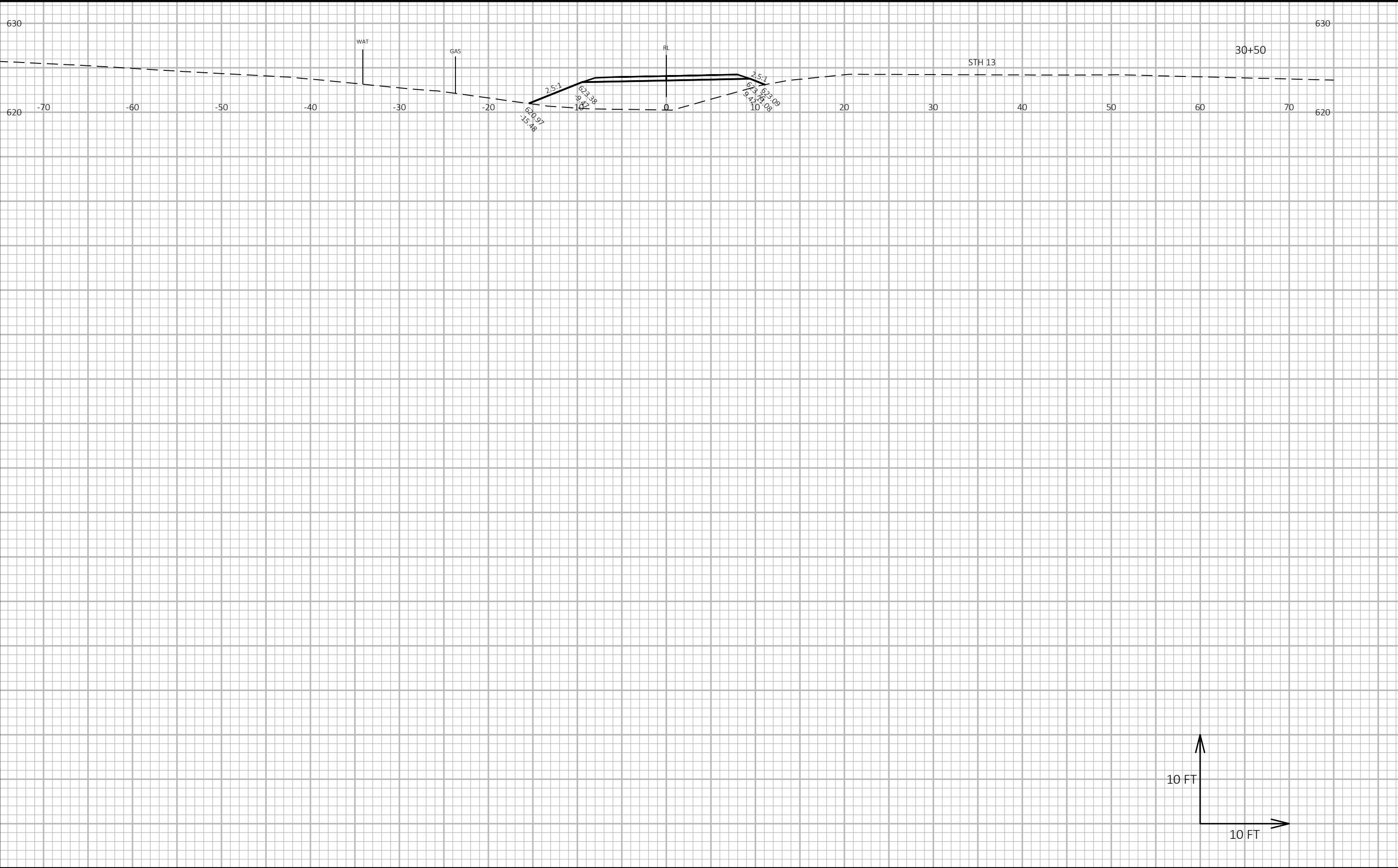




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PROJECT NO: 8160-01-70	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: ACCESS ROAD	SHEET	E
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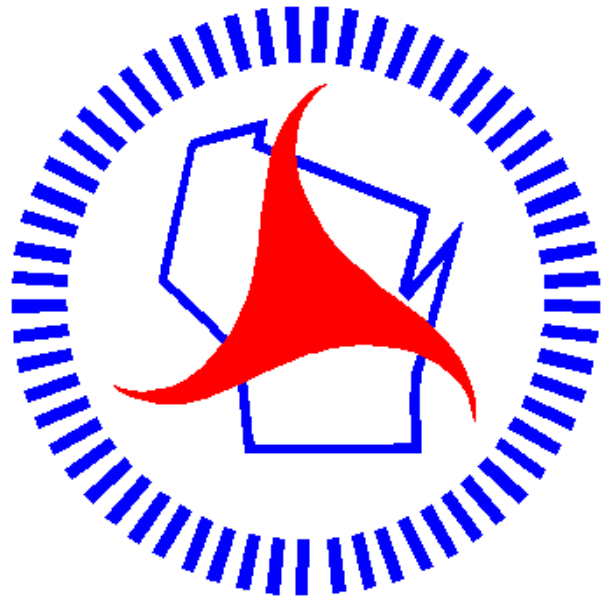


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PROJECT NO: 8160-01-70	HWY: STH 13	COUNTY: BAYFIELD	CROSS SECTIONS: ACCESS ROAD	SHEET E
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Notes



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